Resource Report 7
Soils

Resource Report No. 7

Soils

Ventura to Farmington A-Line Abandonment and Capacity Replacement Project and Northern Lights 2027 Expansion Project

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RESOURCE REPORT NO. 7 – SOILS
SUMMARY OF FILING INFORMATION

MINIMUM REQUIREMENT	LOCATION ADDRESSED
Identify, describe, and group by milepost the soils affected by the proposed pipeline and aboveground facilities. (§ 380.12(I)(1)) • List the soil associations by milepost and describe their characteristics.	Section 7.1, Appendix 7A - 7B
For aboveground facilities that would occupy sites over 5 acres, determine the acreage of prime farmland soils that would be affected by construction and operation. (§ 380.12(I)(2)) • List the soil series, describe their characteristics and percentages within the site. • Indicate the onsite percentage of each series that would be permanently affected. • Indicate which series are considered "prime or unique farmland".	Section 7.1.1, Section 7.2.2, Section 7.3, Appendix 7A - 7D
Describe by milepost potential impacts on soils. (§ 380.12(I)(3),(4))	Section 7.1.1, Appendix 7A and 7B
Identify proposed mitigation to minimize impact on soils and compare with the staff's *Upland Erosion Control, Revegetation, and Maintenance Plan.* (§ 380.12(I)(5)) • Identify any measures of the Plan that are deemed unnecessary, technically infeasible, or unsuitable and describe alternative measures that will ensure an equal or greater level of protection.	Section 7.4
ADDITIONAL INFORMATION	
If the applicant generally proposes to adopt the Federal Energy Regulatory Commission staff's *Upland Erosion Control, Revegetation, and Maintenance Plan* except at certain locations, identify on a site-specific basis locations where alternative measures are proposed, and describe the alternative measures that will ensure an equal or greater level of protection.	Not applicable
Identify invasive species and/or noxious weeds that occur in the area and measure to prevent the introduction and/or spread of these species (if not addressed in Resource Report 3).	Section 3.2.4 and Appendix 3A of Resource Report 3
Provide documentation of consultation with the U.S. Department of Agriculture's Natural Resources Conservation Service or other applicable agencies regarding seed mixes, erosion control, and invasive species/noxious weeds.	Not applicable; using previous projects' consultation

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Abbreviations and Acronyms

A-line	Northern Natural Gas' 16-inch-diameter M500 A Mainline
BMP	Best Management Practice
D-line	Northern Natural Gas' 30-inch-diameter M500 D line
E-line	Northern Natural Gas' 30-inch-diameter M500 E line
ETWS	Extra temporary workspace
FERC	Federal Energy Regulatory Commission
IDNR	Iowa Department of Natural Resources
MDA	Minnesota Department of Agriculture
MnDOT	Minnesota Department of Transportation
MP	milepost
MPCA	Minnesota Pollution Control Agency
NL27 Project	Northern Lights 2027 Expansion Project
Northern	Northern Natural Gas
NPDES	National Pollutant Discharge Elimination System
NRCS	Natural Resources Conservation Service
Plan	FERC Upland Erosion Control, Revegetation and Maintenance Plan
Procedures	Northern's Wetland and Waterbody Construction and Mitigation Procedures
Projects	Ventura to Farmington A-Line Abandonment and Capacity Replacement and Northern Lights 2027 Expansion Projects
ROW	right of way
SPCC	Spill Prevention, Control and Countermeasures
SSURGO	Soil Survey Geographic
SWCD	Soil and Water Conservation District
SWPPP	Stormwater Pollution Prevention Plan
USDA	U.S. Department of Agriculture
V2F Project	Ventura to Farmington A-Line Abandonment and Capacity Replacement Project
WEG	Wind Erodibility Group

7.0 SOILS

Northern's application is composed of two discrete projects, the V2F Project and the NL27 Project. The two Projects will be built concurrently, and Northern has combined the two Projects into a single Section 7 application due to their geographic overlap and interdependence. Analysis and impacts are generally discussed separately for each Project throughout the environmental report.

Resource Report 7 describes the soils affected by Northern's proposed Projects. The report details soil resources, the effect the Projects will have to soils and mitigation measures proposed to minimize or avoid these impacts.

Northern owns and operates a natural gas transmission pipeline system, including pipeline and associated aboveground facilities in Minnesota and Iowa. Northern is filing an application with FERC pursuant to section 7 of the Natural Gas Act. The V2F Project involves isolation and abandonment in-place of approximately 105.76 miles of 16-inch-diameter pipeline on Northern's M500 A and 25.35 miles of 16-inch-diameter M500 J pipeline systems (collectively referred to as the A-line) from Ventura, Iowa, to Farmington, Minnesota. To replace the capacity, Northern will construct three new pipeline extensions consisting of approximately 17.88 miles of 36-inch- and 30-inch-diameter pipelines and associated aboveground appurtenances in Freeborn, Steele and Dakota counties, Minnesota.

The NL27 Project consists of the installation of ten pipeline extensions totaling 28.43 miles, a compressor station uprate, and associated aboveground appurtenances in Minnesota for firm transportation requirements associated with Northern's customers. The NL27 Project is in Freeborn, Steele, Scott, Carver, Martin, Stearns, Jackson, Watonwan, Isanti, Morrison, and Washington counties, Minnesota.

Since a majority of the soil resources described in Resource Report 7 occur on a regional level, the two Projects are analyzed collectively, except where otherwise noted. Tables 7.0-1 and 7.0-2 provide a list of Project components along with their associated Minnesota or Iowa counties.

Table 7.0-1 V2F Project Facilities and Location

Component	Project Facility	Facility Description	County, State
Lake Mills M500 E-line	8.29-mile pipeline	36-inch-diameter extension	Freeborn, MN
	Lake Mills compressor station	Temporary compression site	Worth, IA
Albert Lea M500 E-line	2.09-mile pipeline	36-inch-diameter extension	Steele, MN
	Owatonna compressor station	Temporary compression site	Steele, MN

Component	Project Facility	Facility Description	County, State
Faribault M500 D-line	7.50-mile pipeline	30-inch-diameter extension	Dakota, MN
	Northfield #1	Temporary compression site	Dakota, MN
A-line Abandonment	Ventura compressor station	Pipeline disconnect site	Hancock, IA
	Farmington compressor station	Pipeline disconnect site	Dakota, MN
	La Crosse BL MNB73201 launcher /ABA05	Temporary compression site	Freeborn, MN

Table 7.0-2 NL27 Project Facilities and Location

Component	Project Facility	Facility Description	County, State
Lake Mills M500 E-line	2.32-mile pipeline	36-inch-diameter extension	Freeborn, MN
Albert Lea M500 E-line	3.42-mile pipeline	36-inch-diameter extension	Steele, MN
Willmar 3rd Branch Line Upstream	1.78-mile pipeline	24-inch-diameter extension	Scott, MN
Willmar 3rd Branch Line Downstream	4.78-mile pipeline	24-inch-diameter extension	Carver, MN
Welcome 2nd Line	1.24-mile pipeline	16-inch-diameter extension	Martin, MN
Paynesville 2nd Branch Line	2.45-mile pipeline	4-inch-diameter extension	Stearns, MN
Worthington 2nd Branch Line	2.17-mile pipeline	8-inch-diameter extension	Jackson, MN
Springfield 2nd Branch Line	7.40-mile pipeline	8-inch-diameter extension	Watonwan, MN
Minnesota Interconnect 2nd Branch Line	1.59-mile pipeline	12-inch-diameter extension	Isanti, MN
Alexandria 2nd Branch Line	1.28-mile pipeline	8-inch-diameter extension	Morrison, MN
Aboveground Facilities			
Hugo Compressor Station Uprate	Hugo compressor station	Turbine switch for newer model with increase of 700 horsepower	Washington, MN

7.1 SOIL RESOURCES

7.1.1 Existing Soil Resources and Descriptions

Soil series, as established by the NRCS, are soils that are grouped together based on similar soil chemistry and physical properties. Each soil series is delineated as a single map unit and represents the dominant soil patterns or characteristics.

V2F Project

Mapped soil series affected by the V2F Project were identified from the NRCS soil surveys of Hancock and Worth counties, Iowa, and Freeborn, Steele, and Dakota counties, Minnesota, and the SSURGO database (USDA NRCS 2025a).

Selected characteristics of the mapped soil series in the V2F Project area are provided in Appendix 7A. The soils, by map unit, are shown on Figure 7-1.

NL27 Project

Mapped soil series affected by the Project were identified from the NRCS soil surveys of Freeborn, Steele, Scott, Carver, Martin, Stearns, Jackson, Watonwan, Isanti, Morrison and Washington counties, Minnesota, and the SSURGO database (USDA NRCS 2025b).

Selected characteristics of the mapped soil series in the Project area are provided in Appendix 7B. The soils, by map unit, are shown on Figure 7-2.

7.1.2 Existing Soil Limitations

V2F Project

Soil types and associated limitations crossed by the V2F Project are identified in Appendix 7C and summarized in Table 7.1-1. The primary soil characteristics and limitations identified along the Project route are prime farmland, compaction prone, corrosive to steel, and revegetation concerns.

NL27 Project

Soil types and associated limitations crossed by the NL27 Project are identified in Appendix 7D and summarized in Table 7.1-2. The primary soil characteristics and limitations identified along the Project route are prime farmland, compaction prone, corrosive to steel, and revegetation concerns.

The uprate at the Hugo compressor station will have minimal impacts on soils as all work will be completed inside an existing Northern facility that has previously been disturbed.

Table 7.1-1 Soil Limitations Affected by the V2F Project

Project Component	Total Ac	Prime Farmland[1]		Farmland of Statewide Importance		Erosion Factor Kw[2]		Wind Erodible[3]		Hydric[4]		Highly Compaction Prone[5]		Highly Corrosive to Steel		Shallow to Bedrock[6]		Revegetation Concerns[7]	
		Ac	%	Ac	%	Ac	%	Ac	%	Ac	%	Ac	%	Ac	%	Ac	%	Ac	%
Three Pipeline Extensions and Appurtenant Facilities																			
Lake Mills M500 E-line	180.86	144.49	79.9	27.54	15.23	0.00	0.0	6.73	3.7	85.80	47.4	101.18	55.9	139.11	76.9	0.00	0.0	84.01	46.5
Albert Lea M500 E-line	43.49	38.30	88.1	3.16	7.27	0.00	0.0	0.92	2.1	15.64	36.0	25.95	59.7	39.44	90.7	0.00	0.0	15.64	36.0
Faribault M500 D-line	171.91	155.96	90.7	15.93	9.27	0.00	0.0	2.72	1.6	62.37	36.3	112.26	65.3	130.24	75.8	0.00	0.0	52.37	30.5
Two A-Line Disconnect Sites																			
Ventura Compressor Station	4.73	4.73	100.0	0.00	0.0	0.00	0.0	0.00	0.0	2.23	47.2	2.42	51.2	4.73	100.0	0.00	0.0	2.23	47.2
Farmington Compressor Station	5.47	5.36	98.0	0.00	0.0	0.00	0.0	0.11	2.0	0.69	12.6	2.43	44.4	5.47	100.0	0.00	0.0	0.69	12.6
Four Temporary Compression Sites																			
Lake Mills Compressor Station	5.29	5.02	94.9	0.27	5.10	0.00	0.0	0.00	0.0	3.11	58.8	5.29	100.0	5.29	100.0	0.00	0.0	3.11	58.8
La Crosse BL MNB73201 Launcher/AB A 05	2.19	2.19	100.0	0.00	0.0	0.00	0.0	0.00	0.0	1.17	53.4	2.19	100.0	2.19	100.0	0.00	0.0	1.17	53.4
Owatonna Compressor Station	4.33	4.33	100.0	0.00	0.0	0.00	0.0	0.00	0.0	2.58	59.6	2.58	59.6	4.33	100.0	0.00	0.0	2.58	59.6
Northfield #1	2.93	2.93	100.0	0.00	0.0	0.00	0.0	0.00	0.0	1.58	53.9	1.58	53.9	2.93	100.	0.00	0.0	1.58	53.9
Totals	**421.20**	**363.31**	**86.3**	**46.90**	**11.1**	**0.00**	**0.0**	**10.48**	**2.5**	**175.17**	**41.6**	**255.88**	**60.8**	**333.73**	**79.2**	**0.00**	**0.0**	**163.38**	**38.8**

[1] Includes 'all areas are prime farmland', 'prime farmland if drained', and 'prime farmland and either protected from flooding or not frequently flooded during the growing season.' Total acres of agricultural land are digitized in GIS based on field observations and desktop review and represent current land use. Prime farmland is based on NRCS soil classifications and may not match actual agricultural land use.
[2] Includes soils that have Erosion Factor Kw rating of 0.40-0.69 (High).
[3] Includes soils that have Wind Erodible Group rating of 1 or 2.
[4] Includes soils that have a Hydric Rating of Hydric or Predominantly Hydric.
[5] Includes soils that have a Compaction Potential rating of High.
[6] Includes soils that have lithic or paralithic bedrock within 60 inches or less of the soil surface.
[7] Revegetation is based on potential for seedling mortality rate class. A seedling mortality rate of high indicates the soil has properties that will decrease the potential for successful revegetation.

Table 7.1-2 Soil Limitations Affected by the NL27 Project

Project Component	Total Ac	Prime Farmland[1]		Farmland of Statewide Importance		Erosion Factor Kw[2]		Wind Erodible[3]		Hydric[4]		Highly Compaction Prone[5]		Highly Corrosive to Steel		Shallow to Bedrock[6]		Revegetation Concerns[7]	
		Ac	%	Ac	%	Ac	%	Ac	%	Ac	%	Ac	%	Ac	%	Ac	%	Ac	%
Ten Pipeline Extensions and Appurtenant Facilities																			
Lake Mills M500 E-line	47.58	21.21	44.6	24.77	52.1	0.00	0.0	0.67	1.4	13.21	27.8	13.72	28.8	21.88	46.0	0.00	0.0	13.21	27.8
Albert Lea M500 E-line	72.63	56.16	77.3	14.01	19.3	0.09	0.1	0.95	1.3	30.56	42.1	34.07	46.9	57.31	78.9	0.00	0.0	30.56	42.1
Willmar 3rd Branch Line Upstream	33.00	13.15	39.9	9.42	28.6	0.00	0.0	0.00	0.0	4.23	12.8	4.23	12.8	12.9	39.1	0.00	0.0	4.23	12.8
Willmar 3rd Branch Line Downstream	110.19	77.73	70.5	28.2	25.6	0.00	0.0	5.58	5.1	35.34	32.1	69.30	62.9	83.31	75.6	0.00	0.0	35.34	32.1
Welcome 2nd Line	28.97	24.88	85.9	4.09	14.1	0.00	0.0	0.00	0.0	18.48	63.8	22.08	76.2	24.88	85.9	0.00	0.0	18.48	63.8
Paynesville 2nd Branch Line	49.31	0.03	0.1	37.57	76.2	0.00	0.0	10.36	21.0	0.83	1.7	0.83	1.7	0.83	1.7	0.00	0.0	0.83	1.7
Worthington 2nd Branch Line	36.15	34.31	94.9	1.84	5.1	0.00	0.0	0.00	0.0	15.56	43.0	16.67	46.1	31.84	88.1	0.00	0.0	15.56	43.0
Springfield 2nd Branch Line	119.89	82.41	68.7	35.98	30.0	0.70	0.6	12.85	10.7	41.14	34.3	53.5	44.6	90.52	75.5	0.00	0.0	41.14	34.3
Minnesota Interconnect 2nd Branch Line	40.07	0.00	0.0	21.04	52.5	0.00	0.0	39.59	98.8	0.02	0.1	3.23	8.1	3.23	8.1	0.00	0.0	0.02	0.1
Alexandria 2nd Branch Line	25.04	23.02	91.9	0.05	0.2	0.00	0.0	0.67	2.7	13.62	54.4	25.04	100	25.04	100	0.00	0.0	25.04	100
Above-Ground Facility																			
Hugo Compressor Station Uprate	4.53	2.10	46.4	0.06	1.3	1.48	32.7	2.37	52.3	0.00	0.0	1.48	32.7	2.2	47.7	0.00	0.0	0.00	0.0
Totals	**567.36**	**335.00**	**59.1**	**177.03**	**31.2**	**2.27**	**0.1**	**73.04**	**12.9**	**172.99**	**30.5**	**244.15**	**43.0**	**353.90**	**62.4**	**0.00**	**0.0**	**184.41**	**32.5**

[1] Includes 'all areas are prime farmland', 'prime farmland if drained', and 'prime farmland and either protected from flooding or not frequently flooded during the growing season.' Total acres of agricultural land are digitized in GIS based on field observations and desktop review and represent current land use. Prime farmland is based on NRCS soil classifications and may not match actual agricultural land use.
[2] Includes soils that have Erosion Factor Kw rating of 0.40-0.69 (High).
[3] Includes soils that have Wind Erodible Group rating of 1 or 2.
[4] Includes soils that have a Hydric Rating of Hydric or Predominantly Hydric.
[5] Includes soils that have a Compaction Potential rating of High.
[6] Includes soils that have lithic or paralithic bedrock within 60 inches or less of the soil surface.
[7] Revegetation is based on potential for seedling mortality rate class. A seedling mortality rate of high indicates the soil has properties that will decrease the potential for successful revegetation.

Selected characteristics for each soil unit crossed by the Projects' routes along with associated mileposts for each unit are summarized in Appendix 7A for the V2F Project and Appendix 7B for the NL27 Project. Appendix 7C contains a detailed breakdown of each soil unit impacted by the Projects' routes along with their limitations for the V2F Project and Appendix 7D contains the same information for the NL27 Project. Northern's mitigation approach to each soil limitation is included in Sections 7.2, 7.3 and 7.4.

Prime Farmland

For both Projects, prime farmland is a special classification of highly productive cropland that is recognized and described by the NRCS and receives special protection under the federal Surface Mining Control and Reclamation Act of 1977. Prime farmland soils are defined by the USDA as those best suited for growing food, feed, forage, fiber, and oilseed crops (USDA NRCS 2025c). Soil map units designated as prime farmland do not have to be actively cultivated to receive this designation.

Farmland of statewide importance is land other than prime or unique farmland that is of statewide or local importance for the production of food, feed, fiber, forage, or oilseed crops. Unique farmland is land other than prime farmland that is used for the production of specific high value food and fiber crops. Unique farmland has the special combination of soil quality, location, growing season, and moisture supply needed to economically produce sustained high quality and/or high yields of a specific crop when treated and managed according to acceptable farming methods. The appropriate state or local government determines statewide important farmland with concurrence from the state conservationist. Generally, these farmlands produce high yields of crops when treated and managed according to acceptable farming methods. In some states or localities, farmlands of statewide importance may include tracts of land that have been designated for agriculture by state law or local ordinance.

V2F Project

The V2F Project crosses five of the farmland classes as defined by the NRCS: (1) farmland of statewide importance, (2) prime farmland, (3) prime farmland (if drained), (4) prime farmland and either protected from flooding or not frequently flooded during the growing season, and (5) not prime farmland.

Within the V2F Project area, the following acres were designated as prime farmland (USDA NRCS 2025a):

- Approximately 144.49 acres of the Lake Mills M500 E-line extension will be temporarily impacted compared to the total 351,308 acres designated as prime farmland within Freeborn County, Minnesota. No prime farmland will be impacted due to aboveground appurtenant facilities.
- Approximately 38.30 acres of the Albert Lea M500 E-line extension will be temporarily impacted compared to the total 220,908 acres designated as prime farmland within Steele County, Minnesota. No prime farmland will be impacted due to aboveground appurtenant facilities.
- Approximately 155.96 acres of the Faribault M500 D-line extension will be temporarily impacted compared to the total 173,020 acres designated as prime farmland within Dakota

County, Minnesota. No prime farmland will be impacted due to aboveground appurtenant facilities.

- Approximately 4.73 acres of the Ventura compressor station disconnect site will be temporarily impacted compared to the total 282,925 acres of prime farmland within Hancock County, Iowa. The facility will not be expanded so there will be no permanent loss of prime farmland.
- Approximately 5.36 acres of the Farmington compressor station disconnect site will be temporarily impacted compared to the total 173,202 acres of prime farmland within Dakota County, Minnesota. The facility will not be expanded so there will be no permanent loss of prime farmland.
- Approximately 5.02 acres of the Lake Mills compressor station temporary compression site will be temporarily impacted compared to the total 216,298 acres of prime farmland within Worth County, Iowa. The facility will not be expanded so there will be no permanent loss of prime farmland.
- Approximately 2.19 acres of the A-line abandonment temporary compression site - La Crosse BL MNB73201 launcher/ABA 05 will be temporarily impacted compared to the total 351,308 acres of prime farmland within Freeborn County, Minnesota. The facility will not be expanded so there will be no permanent loss of prime farmland.
- Approximately 4.33 acres of the Owatonna compressor station temporary compression site will be temporarily impacted compared to the total 220,908 acres of prime farmland within Steele County, Minnesota. The facility will not be expanded so there will be no permanent loss of prime farmland.
- Approximately 2.93 acres of the Northfield #1 temporary compression site will be temporarily impacted compared to the total 173,020 acres of prime farmland within Dakota County, Minnesota. The facility will not be expanded so there will be no permanent loss of prime farmland.

Prime farmland will only be temporarily disturbed by the construction of the proposed pipelines, the disconnect activities and the temporary compression. No permanent loss of prime farmland will occur as a result of the Project.

Approximately 46.90 acres of V2F Project components are designated as farmland of statewide importance. The soils of statewide importance will be temporarily disturbed by the construction of the proposed Project, which will result in no loss of farmland of statewide importance for the Project.

NL27 Project

The NL27 Project crosses five of the farmland classes as defined by the NRCS: (1) farmland of statewide importance, (2) prime farmland, (3) prime farmland (if drained), (4) prime farmland if protected from flooding, and (5) not prime farmland.

Within the NL27 Project area, the following acres were designated as prime farmland:

- Approximately 21.21 acres of the Lake Mills M500 E-line extension will be temporarily impacted compared to the total 351,308 acres designated as prime farmland within Freeborn County, Minnesota. No prime farmland will be permanently impacted due to aboveground appurtenant facilities.
- Approximately 56.16 acres of the Albert Lea M500 E-line extension will be temporarily impacted compared to the total 2219,904 acres designated as prime farmland within Steele

County, Minnesota. Approximately 0.16 acre of prime farmland will be permanently impacted due to aboveground appurtenant facilities.

- Approximately 13.15 acres of the Willmar 3rd branch line upstream extension will be temporarily impacted compared to the total 108,798 acres designated as prime farmland within Scott County, Minnesota. No prime farmland will be permanently impacted due to aboveground appurtenant facilities.
- Approximately 77.73 acres of the Willmar 3rd branch line downstream extension will be temporarily impacted compared to the total 351,308 acres designated as prime farmland within Carver County, Minnesota. Approximately 0.16 acre of prime farmland will be permanently impacted due to aboveground appurtenant facilities.
- Approximately 24.88 acres of the Welcome 2nd line extension will be temporarily impacted compared to the total 140,538 acres designated as prime farmland within Martin County, Minnesota. Approximately 0.01 acre of prime farmland will be permanently impacted due to aboveground appurtenant facilities.
- Approximately 0.03 acre of the Paynesville 2nd branch line extension will be temporarily impacted compared to the total 407,996 acres designated as prime farmland within Stearns County, Minnesota. No prime farmland will be permanently impacted due to aboveground appurtenant facilities.
- Approximately 34.31 acres of the Worthington 2nd branch line extension will be temporarily impacted compared to the total 398,918 acres designated as prime farmland within Jackson County, Minnesota. Approximately 0.24 acre of prime farmland will be permanently impacted due to appurtenant facilities.
- Approximately 82.41 acres of the Springfield 2nd branch line extension will be temporarily impacted compared to the total 236,467 acres designated as prime farmland within Watonwan County, Minnesota. Approximately 0.10 acre of prime farmland will be permanently impacted due to aboveground appurtenant facilities.
- None of the 32,262 acres of prime farmland within Isanti County, Minnesota, will be temporarily or permanently impacted due to the Minnesota Interconnect 2nd branch line extension or aboveground appurtenant facilities.
- Approximately 23.02 acres of the Alexandria 2nd branch line extension will be temporarily impacted compared to the total 138,785 acres designated as prime farmland within Morrison County, Minnesota. Approximately 0.01 acre of prime farmland will be permanently impacted due to aboveground appurtenant facilities.
- Approximately 2.10 acres of the Hugo compressor station uprate will be temporarily impacted compared to the total of 97,108 acres designated as prime farmland within Washington County, Minnesota. This prime farmland has been previously converted to industrial/commercial land use so there will be no new permanent loss of prime farmland.

Prime farmland will predominantly be temporarily disturbed by the construction of the proposed pipelines. Approximately 177.03 acres are designated as farmland of statewide importance, of which all but one acre will be temporarily disturbed. Construction of the proposed pipeline appurtenances and permanent access roads will result in a loss of one acre of farmland of statewide importance.

Highly Erodible Soil (Kw)

For both Projects, a highly erodible rating consists of soils with a NRCS rating of high for the NRCS Soil Erodibility Factor (Kw). Soil Erodibility Factor (Kw) describes the susceptibility of soil

detachment by water runoff or raindrop impact and predicts long-term average soil loss from sheet and rill erosion. The Kw is affected by soil texture, organic matter content, size and stability of soil aggregates, permeability, and depth to a restrictive layer (USDA NRCS 2025a). Soil erosion potential also is influenced by slope and exposure to erosion mechanisms. Soil erosion increases in inverse proportion to the effectiveness of vegetation cover (i.e., soils with denser vegetation cover are less susceptible to erosion). Removal of vegetation associated with construction activities, whether by direct stripping or by other mechanical means, greatly increases erosion potential.

The analysis of erosion potential, which was determined through examination of slope, soil capability class, and wind erodibility group, provides an indication of soil loss by water and wind action.

V2F Project

None of the soils across the three V2F pipeline extensions, disconnect sites, or temporary compression sites are designated as having a high Kw (Kw > 0.40).

NL27 Project

Approximately 2.27 acres of highly erodible soils are mapped within the NL27 Project construction footprint for the Albert Lea M500 E-line, Springfield 2nd branch line, and Hugo compressor station uprate.

Wind Erodibility

For both Projects, a WEG is a grouping of soils that have similar properties affecting their resistance to soil blowing in cultivated areas. The groups indicate the susceptibility to blowing. Soils are placed into WEGs ranging from one to eight on the basis of the properties of the soil surface layer, which correlate to an estimate of potential soil loss ranging from 310 to 380 tons per acre per year, respectively. Wind erodible soils were identified by querying the SSURGO database (USDA NRCS 2025a) for soils that have a WEG rating of one or two, which are highly wind erodible.

V2F Project

Approximately 10.37 acres of the soil mapped within the three V2F pipeline extensions and 0.11 acre at the Farmington compressor station disconnect site were designated as highly wind erodible. No soil designated as highly erodible to wind was mapped within the Ventura compressor station disconnect site or four temporary compression sites.

NL27 Project

Approximately 70.67 acres of soil mapped within seven of the NL27 pipeline extensions and 2.37 acres at the Hugo compressor station uprate were designated as highly wind erodible. No soil designated as highly erodible to wind was mapped within the Willmar 3rd branch line upstream, Welcome 2nd line, and Worthington 2nd branch line component sites.

Drainage Classification and Hydric Soils

For both Projects, drainage class refers to the rate at which water percolates through the soil. Soils that are classified as somewhat excessively drained and excessively drained may be difficult to re-vegetate due to low organic content and low moisture retention. Soils classified as moderately well-drained and well-drained remove water readily but not rapidly. The principal water source is direct precipitation.

Very poorly, poorly, and somewhat poorly drained soils remain saturated for a portion of the growing season. These drainage classes are considered hydric, predominately hydric or partially hydric soils and often support wetlands requiring special consideration, such as construction mitigation. Hydric soils are defined as soils that are saturated, flooded or ponded long enough during the growing seasons to develop anaerobic conditions in the upper part of the soil column (USDA NRCS 2025d).

V2F Project

The drainage classifications and hydric soils crossed by the V2F Project are listed in Appendix 7C and summarized in Table 7.1-1. Hydric soil designation is a direct attribute in the SSURGO database and corresponds to only very poorly drained soils. Based on a query of the database, there are hydric soils and predominantly hydric soils mapped within the proposed construction footprints. Approximately 163.81 acres of the three pipeline extensions, 2.92 acres of the two disconnect sites, and 8.44 acres of the four temporary compression sites are mapped as having hydric or predominantly hydric soils. These predominantly hydric soil units are shown on Figure 7-1.

NL27 Project

The drainage classifications and hydric soils crossed by the NL27 Project are listed in Appendix 7D and summarized in Table 7.1-2. Approximately 172.99 acres of the ten pipeline extensions are mapped as having hydric or predominantly hydric soils. The Hugo compressor station does not contain hydric soil. These predominantly hydric soil units are shown on Figure 7-2.

Compaction Potential

The following compaction potential analysis applies to both Projects. Soils with a high potential for compaction will be affected during construction activities by the repeated movement of machinery across the soil surface. Soils with high shrink-swell potential and poor drainage characteristics tend to be susceptible to compaction, particularly when wet. These soils tend to have high clay content composed of platy particles with water in interstitial spaces. Clay particles will become compacted through repeated stress. Soils with a high silt or sand content tend to be composed of sub-rounded to rounded particles and are less susceptible to compaction. Although surface "crusts" may form on these types of soils when subjected to repeated traffic, upon drying, the compacted particles are often readily separated.

Formation of hardpan is a potential result of repeated traffic over susceptible soils. The formation of hardpan is typically limited to soils with high to very high shrink-swell potential. Hardpan layers tend to form at horizons where there is a significant physical or chemical change in the subsoil, often between the A and B or B and C horizons. Hardpans related to artificial compaction tend to form at relatively shallow depth where mechanical stress is not effectively dissipated by the overlying soil column. Hardpans also commonly form at the base of the plow zone where a change in the soil porosity and permeability may cause perching of water and subsequent physical and chemical changes result in the formation of a hardpan.

V2F Project

Approximately 239.39 acres of the three V2F pipeline extensions, 4.85 acres of the two disconnect sites and 11.64 acres of the four temporary compression sites are highly prone to compaction.

NL27 Project

Approximately 242.67 acres of the ten NL27 pipeline extensions and 1.48 acres of the Hugo compressor station uprate are highly prone to compaction.

Soil pH

For both Projects, soil pH is the numerical designation of acidity or alkalinity in soil. Soil pH is measured on a scale of zero (0.0) to 14 (14.0) with a pH 7.0 described as neutral in reaction because it is neither acidic nor alkaline. Soils with a pH of 3.5 or less are considered ultra-acidic, and soils with a pH of 9.1 or higher are considered very strongly alkaline. Soil pH is an important factor to consider when selecting crops and other plants, evaluating soil amendments for fertility and stabilization, and determining the risk of corrosion. In general, soils that are either highly alkaline or highly acidic are likely to be very corrosive to steel. Soils crossed by the Project range from pH 5.0 (very strongly acidic) to 7.9 (moderately alkaline).

Stony or Rocky Soil

For both Projects, stony or rocky soil contains soil units that are characterized by meeting one of the following criteria:

- Containing a textural class modifier of either a very gravelly, extremely gravelly, cobbley, stony, bouldery, flaggy, or channery
- Containing greater than 5% by weight basis of rock fragments larger than three inches in any layer within the profile (USDA NRCS 2025a).

V2F Project

Northern queried NRCS SSURGO data for the above-listed criteria and a total of 0.55 acre of soil with the "rocky" modifier are present in the Lake Mills M500 E-line and approximately 0.02 acre are present in the Faribault M500 D-line. None of the other V2F Project components contained soils with the "rocky" modifier.

NL27 Project

Northern queried NRCS SSURGO data for the above-listed criteria and no soil types within the NL27 Project components contained rocky or stony soil.

Corrosion Potential

For both Projects, corrosion potential is based on the corrosion of steel rating class. Risk of corrosion pertains to potential soil-induced electrochemical or chemical action that corrodes or weakens uncoated steel or concrete. The rate of corrosion of uncoated steel is related to such factors as soil moisture, particle-size distribution, pH and electrical conductivity of the soil. The risk of corrosion for uncoated steel is expressed as low, moderate or high and is based on soil drainage class, total acidity, electrical resistivity, near field capacity and electrical conductivity of the saturation extract.

V2F Project

Approximately 308.79 acres of the three V2F pipeline extensions, 10.20 acres of the two disconnect sites, and 14.74 acres of the four temporary compression sites are highly corrosive to steel.

NL27 Project

Approximately 351.74 acres of the ten NL27 pipeline extensions and 2.16 acres of the Hugo compressor station uprate are highly corrosive to steel.

Shallow Bedrock

Based on a query of the SSURGO database for both Projects, none of the Project components contained soils identified as having the potential for shallow bedrock.

Depth to Topsoil

For the V2F and NL27 Projects, topsoil depths derived from Web Soil Survey Official Soil Descriptions are included in Appendix 7A and Appendix 7B, respectively. These topsoil depths include organic horizon layers and non-mineral topsoil; actual depths of topsoil are anticipated to vary naturally according to landscape position, slope, land use, and prior disturbances.

V2F Project

According to the Web Soil Survey, the mapped topsoil depths of the three V2F pipeline segments are as follows:

- 7 to 48 inches on the Lake Mills M500 E-line extension
- 6 to 54 inches on the Albert Lea M500 E-line extension
- 6 to 54 inches on the Faribault M500 D-line extension.

Topsoil depths by soil unit and project component are included in Appendix 7A.

NL27 Project

According to the Web Soil Survey, the mapped topsoil depths of the ten NL27 pipeline segments are as follows:

- 7 to 39 inches on the Lake Mills M500 E-line extension
- 6 to 48 inches on the Albert Lea M500 E-line extension
- 2 to 48 inches on the Willmar 3rd branch line upstream extension
- 6 to 39 inches on the Willmar 3rd branch line downstream extension
- 7 to 39 inches on the Welcome 2nd line extension
- 10 to 80 inches on the Paynesville 2nd branch line extension
- 8 to 36 inches on the Worthington 2nd branch line extension
- 7 to 39 inches on the Springfield 2nd branch line extension
- 4 to 8 inches on the Minnesota Interconnect 2nd branch line extension
- 6 to 23 inches on the Alexandria 2nd branch line extension

Topsoil depths by soil unit and project component are included in Appendix 7B.

Revegetation Concerns

For both Projects, revegetation is based on potential for seedling mortality rating class. A seedling mortality rating of high indicates the soil has properties that will decrease the potential for successful revegetation (USDA NRCS 2025a).

V2F Project

Approximately 152.02 acres of the three V2F pipeline extensions, 2.92 acres of the two disconnect sites, and 8.44 acres of the four temporary compression sites are classified with revegetation concerns.

NL27 Project

Approximately 184.41 acres of the ten NL27 pipeline extensions are classified with revegetation concerns. There are no revegetation concerns in the Hugo compressor station.

7.2 CONSTRUCTION/OPERATION IMPACTS

For both Projects, typical soil impacts that may occur during construction include mixing of layers within the soil profile, compaction, rutting, erosion and alteration of drainage characteristics through mixing. Construction activities such as clearing, grading, trench excavation, backfilling, heavy equipment traffic, and restoration along the construction ROW have the potential to adversely affect natural soil characteristics (i.e., infiltration, water storage and routing and nutrient levels). Clearing removes vegetative cover and exposes soil to the impacts of wind, sun, and precipitation. This exposure potentially increases soil erosion and the transport of sediment to sensitive resource areas.

Construction grading and heavy equipment traffic will cause temporary compaction of soil. Compaction reduces porosity and percolation rates, which results in increased runoff potential. Grading activities may mix topsoil with subsoil, potentially limiting vegetation restoration. Trench excavation and backfilling also have the potential to cause mixing of topsoil and subsoil in addition to introducing excavation rock and/or gravel into the soil surface. These potential impacts can result in an increase in operating and labor costs, decreased agricultural productivity, and potential damage to agricultural field equipment.

7.2.1 Pipeline

V2F Project

Based on the properties of soil map units within the Project Area as provided in Table 7.1-1, soil is most likely to be impacted by construction is listed below:

- wind erodible: 10.48 acres of organic (i.e. mucky) or sand-dominated soil that may be susceptible to wind erosion
- hydric soil: 175.17 acres is designated as hydric or predominantly hydric. Construction may impact hydric soil by decreasing drainage rates or increasing saturation and compaction.
    - Hydric soils may comprise a majority of the soils with high corrosion and low revegetation potentials.
- soil compaction: 255.88 acres are designated as highly compaction prone.
    - Compacted soils can limit revegetation, plant root growth, and water infiltration that can lead to water ponding.
- depth to bedrock: None of the V2F Project was identified with the potential for shallow bedrock. Northern does not anticipate mitigation for shallow to bedrock areas.

NL27 Project

Based on the properties of soil map units within the Project Area as provided in Table 7.1-2, soil is most likely to be impacted by construction is listed below:

- water erodibility: Less than one percent (2.27 acres) are characterized as having a "high" soil erosion factor "Kw".
- wind erodible: 73.04 acres of organic (i.e. mucky) or sand-dominated soil within the Project Area are susceptible to wind erosion.
- hydric soil: 172.99 acres are designated as hydric or predominantly hydric. Construction may impact hydric soil by decreasing drainage rates or increasing saturation and compaction.
    - Hydric soils may comprise a majority of the soils with high corrosion and low revegetation potentials.
- soil compaction: 244.15 acres are designated as highly compaction prone.
    - Compacted soils can limit revegetation, plant root growth, and water infiltration that can lead to water ponding.
- depth to bedrock: None of the NL27 Project was identified with the potential for shallow bedrock. Northern does not anticipate mitigation for shallow to bedrock areas.

7.2.2 Aboveground Appurtenant Facilities

V2F Project

A description of the activities associated with the aboveground appurtenant facilities is detailed in Table 1.3-4, Resource Report 1, while the land requirements for the aboveground appurtenant facilities are listed in Table 1.4-1. The design for the Project does not require any facility expansion or any new permanent access roads. Approximately 0.19 acre of facility footprint will be removed and returned to natural conditions.

NL27 Project

A description of the activities associated with the aboveground appurtenant facilities is detailed in Table 1.3-5, Resource Report 1, while the land requirements for the aboveground appurtenant facilities are listed in Table 1.4-2. The design for the Project requires multiple pig receivers and valve settings.

During construction, Northern will install permanent gravel pads within the operational facility footprints for the aboveground facilities. The soil types within the permanent footprint of the proposed aboveground facilities are summarized in Table 7.2-1. Existing facilities are not included in the table as there will be no new soil impacts at these locations.

Table 7.2-1 Soils Impacted by Operation of Aboveground Facilities for the NL27 Project

Aboveground Facility	Map Label	Soil Map Unit Name	Permanent Facility Footprint		Prime Farmland	Area of Permanently Impacted Prime Farmland (acres)
			Acres	Percent		
Lake Mills tie-in valve setting	921C	Clarion-Storden complex, 6 to 10% slopes, moderately eroded	0.06	100	No	0.06
Albert Lea tie-in valve setting	ClB2	Clarion loam, 2 to 6% slopes, moderately eroded	0.12	75.00	Yes	0.12
	L78A	Canisteo clay loam, 0 to 2% slopes	0.04	25.00	Yes	0.04
Willmar 3rd branch line downstream receiver	LA	Le Sueur-Lester complex, 1 to 6% slopes	0.11	73.33	Yes	0.11
	CT	Canisteo clay loam, 0 to 2% slopes	0.04	26.67	Yes	0.04
Willmar 3rd branch line downstream tie-in valve setting	CT	Canisteo clay loam, 0 to 2% slopes	0.01	100.00	Yes	0.01
	LC2	Lester loam, 6 to 10% slopes, moderately eroded	<0.01	<1.00	No	0.00
Welcome tie-over valve setting	L107A	Canisteo-Glencoe complex, 0 to 2% slopes	0.01	100.00	Yes	0.01
Paynesville tie-in valve setting	875B	Estherville-Hawick complex, 2 to 6% slopes	0.01	100.00	No	0.01
Worthington 2nd line MNB87002 Receiver	102B	Clarion loam, 2 to 6% slopes	0.24	100.00	Yes	0.24
Springfield 2nd branch line downstream RMV	L84A	Glencoe clay loam, 0 to 1% slopes	0.03	30.00	Yes	0.03
	L107A	Canisteo-Glencoe complex, 0 to 2% slopes	0.07	70.00	Yes	0.07
Springfield 2nd branch line tie-in valve setting	86	Canisteo clay loam, 0 to 2 percent slopes	<0.01	0.00	Yes	<0.01
	102B	Clarion loam, 2 to 6% slopes	0.10	100.00	Yes	0.10
MIC tie-in valve setting	Gu	Anoka loamy fine sand, 2 to 7% slopes	0.09	100.00	No	0.09

Aboveground Facility	Map Label	Soil Map Unit Name	Permanent Facility Footprint		Prime Farmland	Area of Permanently Impacted Prime Farmland (acres)
			Acres	Percent		
Alexandria 2nd branch line tie-in valve setting	142	Nokay loam	0.01	100.00	Yes	0.01

None of the aboveground facilities for either Project will require permanent stormwater management as the net increase in impervious surfaces is less than one acre.

7.3 CROPLAND AND RESIDENTIAL IMPACTS

For both Projects, areas of active cropland are present and will be affected by pipeline construction. Potential impacts on cropland are described below.

- Mixing topsoil with subsoil, resulting in loss of fertility and productivity
- Increasing density of rock in the topsoil
- Introducing high levels of carbonates or other substances in the subsoils that create an unfavorable environment for plant roots
- Rutting and compaction caused by movement of construction equipment
- Interfering with or damaging agricultural drainage or irrigation systems
- Introducing noxious weeds from construction equipment

Northern will take steps to minimize and mitigate impacts to residences as a result of the V2F and NL27 Projects. Construction of the V2F Project will result in no change in aboveground facility footprints. Additionally, three existing aboveground appurtenant facilities in Minnesota will be removed as part of the V2F Project and the land returned to its natural grade. Their combined footprints total 0.17 acre. Landowners will have the option to farm these areas following removal of the facilities.

Construction of the NL27 Project will result in a small net increase in aboveground facility footprints (0.94 acre). Additionally, four existing aboveground appurtenant facilities in Minnesota will be removed as part of the NL27 Project and the land returned to its natural grade. Their combined footprints total is 0.68 acre. Landowners will have the option to farm these areas following removal of the facilities.

7.4 MITIGATION

Mitigation measures to protect soil resources will be implemented during and after construction.

7.4.1 Agriculture and Prime Farmland

For both Projects, construction in agricultural areas will be conducted in accordance with the Plan and Northern's Procedures. To conserve topsoil, Northern will conduct full ROW topsoil removal in all actively cultivated and rotated cropland and improved pasture. A maximum of 12 inches or the actual depth of the existing topsoil horizon, whichever is less, will be segregated. The topsoil and subsoil will be stored in separate windrows on the construction ROW and will not be allowed to mix. Where the existing topsoil is less than 12 inches, the actual depth of the topsoil will be removed and

segregated. Implementation of proper topsoil segregation will ensure post-construction revegetation success, thereby minimizing the potential for long-term erosion due to lack of vegetation.

Topsoil and subsoil will be tested for compaction following construction in all agricultural areas. Northern will de-compact subsoil in accordance with the soil compaction mitigation procedures described in the Plan. These include using appropriate deep-tillage equipment such as a paraplow or chisel plow. Compaction testing will be conducted on the subsoil to verify compaction is relieved to a level equal to or better than adjacent undisturbed areas. Once decompaction of the subsoil is complete, the segregated topsoil will be returned to the ROW. Decompaction will be completed on the restored topsoil using shallow-ripping tools. Per the Plan, Northern will remove excess rock from the top 12 inches of soil in all cultivated cropland, pastures and hayfields. The final surface will be examined to verify that native rock visible on the surface is similar in size, density and distribution to that in undisturbed areas adjacent to the ROW.

Northern will consult with landowners to identify any known drain tiles. Based on landowner information, drain tiles are present in one area on the Lake Mills M500 E-line (V2F Project) near Milepost 40.8 where the landowner has provided drain tile locations to Northern; these are shown on Figure 8-1. No other known drain tiles are present on either Project. Undocumented drain tiles discovered during grading or trenching also will be flagged at each ROW edge. Survey crews will mark the drain tile locations with highly visible flagging at each ROW edge and the centerline of the pipe, where applicable. Previously undocumented drain tiles discovered during grading or trenching also will be flagged at each ROW edge. Survey data will be collected at the location of the broken tile. If a damaged tile is flowing at the time of discovery, temporary repairs will be completed prior to the end of the workday. If a damaged drain tile is not flowing at the time of discovery, the drain tile will be screened and temporarily repaired within 24 hours. Temporary repairs may be removed to accommodate pipe lowering and backfilling.

Permanent drain tile repairs will be made, based on landowner preference, by a qualified drain tile specialist, the landowner, or a landowner's representative. Drain tile may be scoped or snaked to determine if existing tile within the ROW is damaged. The existing drain tile within the entire width of the ROW will be inspected (i.e., to both edges of the ROW). All damaged, broken or cracked drain tile will be replaced with new tile. The quality, size and flow of replacement tile will equal or exceed that of the damaged tile. The drain tile will be permanently repaired so that its original gradient and alignment are restored. Replacement tile will be supported with a secondary method, such as perforated corrugated steel pipe. All repairs will be inspected prior to backfilling the trench area. Variations to these methods may be employed if requested by the landowner.

Agricultural areas will be restored to agricultural production (where not permanently impacted) after construction is complete. The Plan includes restoration and revegetation measures that include seedbed preparation, fertilization and seeding, to actively promote revegetation in non-agricultural areas. Northern will monitor revegetation after the first and second growing seasons. In agricultural areas, revegetation will be considered successful if crop yields are similar to adjacent undisturbed portions of the same field.

If construction requires the removal of private property features, such as gates or fences, the landowner or tenant will be notified prior to the action. If construction requires the removal of trees, the landowner or tenant will be notified prior to the action. Following completion of construction, the grade will be restored, as close as practicable, to the original contours.

Temporary access roads located within agricultural fields will be restored, as near as practicable, to pre-construction conditions in adherence with the Plan and Northern's Procedures. Specific construction procedures for access roads within agricultural areas include topsoil removal in conjunction with grading activities and subsoil decompaction prior to topsoil replacement. Northern will remove the gravel from the staging area (if installed), decompact subsoil, and restore the topsoil layer (if removed). The original contours of the staging area will be restored to the extent practicable. The prevention of the introduction of noxious weeds into Project workspaces is addressed in Resource Report 3, Appendix 3A.

7.4.2 Topsoil Segregation

For both Projects, Northern will conduct full ROW topsoil removal in agricultural land. Staging area and ETWS in agricultural land will undergo topsoil removal prior to construction. Topsoil will not be removed from existing driveways or improved (i.e., graveled or paved) farm roads. Topsoil depths derived from Web Soil Survey Official Soil Descriptions are included in Appendix 7A and Appendix 7B. These topsoil depths include organic horizon layers and non-mineral topsoil; actual depths of topsoil are anticipated to vary naturally according to landscape position, slope, land use, and prior disturbances.

For both Projects, a maximum of 12 inches or the actual depth of the existing topsoil horizon, whichever is less, will be segregated. The topsoil and subsoil will be stored in separate windrows on the construction ROW and will not be allowed to mix. Where the existing topsoil is less than 12 inches, the actual depth of the topsoil will be removed and segregated. Northern will provide the mapped topsoil depths to its environmental inspection staff. Northern also will have its environmental inspection staff record topsoil depths within Project workspaces.

7.4.3 Soil Erosion

For both Projects, Northern will utilize erosion and sedimentation control measures in accordance with the Project SWPPPs to minimize or avoid potential impacts on soil resources due to erosion and sedimentation. The SWPPPs incorporate BMPs from the Plan and Northern's Procedures and site-specific erosion control devices. A copy of the draft SWPPP for each Project component is included in Appendix 7E. Northern may modify the SWPPPs prior to construction based on anticipated site conditions at the time of construction.

For both Projects, the SWPPPs describe general measures that will be implemented during each Project to minimize or avoid potential impacts on soil resources due to erosion and sedimentation. These measures will include the following:

- Minimizing the quantity and duration of soil exposure;
- Limiting the amount of open trench per Project component to 5,280 feet at any one time for the Project components in Minnesota;
- Installing mulch, temporary seeding, or other protection measures on topsoil and subsoil piles to prevent soil loss;
- Installing silt fence around topsoil and subsoil stockpiles per MPCA and IDNR permit requirements or alternative methods approved by MPCA;
- Implementing dust mitigation practices;
- Reducing the velocity of run-off water and redirecting run off, as appropriate;

- Installing and maintaining erosion and sediment control measures during construction;
- Installing redundant sedimentation controls within 50 feet of wetlands and waterbodies;
- Establishing vegetation following final grading; and
- Inspecting the ROW and maintaining erosion and sediment control as needed until Permit Termination Conditions have been achieved.

To minimize potential for soil erosion from water, Northern will install temporary and permanent erosion control devices as specified in Northern's Plan, the Project-specific SWPPPs, and applicable permits. Temporary erosion control measures, including interceptor diversions (e.g., slope breakers) and sediment filter devices (e.g., straw bales, silt fence, or sediment basins), will be installed immediately following initial ground disturbance. As required, temporary trench breakers will be installed immediately following ditch excavation to reduce runoff velocities in the trench during construction. Mulch or other wildlife-suitable erosion control matting may be used on steep slopes to prevent erosion during construction. Mulch products will not contain synthetic (plastic) fiber additives in areas that drain to Minnesota public waters. Erosion control matting will be limited to bio-netting or natural netting according to Table 3885.2-1 in the 2020 MnDOT standard specifications for construction. Erosion control devices and BMPs will follow engineering technical standards for stormwater management. The temporary erosion control devices will be inspected every seven days and after each rainfall event of 0.5 inch or greater to ensure controls function properly.

The effectiveness of temporary erosion control devices will be inspected and monitored daily by Northern's environmental inspector(s). Any deficiencies will be noted in the inspector's daily reports to Northern. Northern's construction contractor is required to make repairs within 24 hours per the stormwater permit to ensure effective controls. Northern's environmental inspector(s) have the authority to stop activities that violate environmental commitments (the Plan, permits, or landowner agreements) and direct appropriate remedial action.

Following construction, disturbed areas will be seeded and mulched, and permanent erosion controls will be installed, including permanent slope breakers, trench breakers, and diversion outlet structures. The effectiveness of revegetation and permanent erosion control devices will be monitored by Northern's operating personnel during the long-term operation and maintenance of the pipeline system. Erosion control devices will be maintained until the ROW is successfully re-vegetated. Following successful revegetation of construction areas, temporary erosion control devices will be removed. Permanent erosion control devices (e.g., trench breakers, flexible channel liners, turf-reinforcement mats and slope breakers) will be monitored by Northern during the long-term operation and maintenance of the Project. Active agricultural lands will generally not be seeded or mulched, unless specifically requested by the landowner.

High-wind events have the potential to erode disturbed soils. Northern will implement generally accepted BMPs to limit wind erosion during construction and restoration activities. These BMPs include, but are not limited to:

- Water will be applied by means of pressure-type distributors or pipelines equipped with a spray system or hoses and nozzles that will ensure even distribution.
- Mulch or other tackifiers may be applied to exposed soil surfaces, where appropriate.
- All water distribution equipment will be equipped with a positive means of shutoff.
- Inspection of wind erosion control measures will occur daily and be documented weekly.

- Northern will check areas that have been protected to ensure coverage and effectiveness of wind erosion controls; if wind erosion or dust is observed, Northern will immediately reapply or implement additional wind erosion control BMPs.

Dust abatement may be necessary to maintain air quality and to minimize soil loss due to wind. Dust abatement measures will be determined in the field by the environmental inspector and be dependent on weather conditions. Typical dust abatement measures will include the generally accepted BMPs to limit wind erosion listed above with the addition of the following:

- Vehicle speed will be limited to 15 miles per hour within the ETWS and access roads.

7.4.4 Compaction

Compaction for all agricultural land is addressed under Section 7.4.1.

For both Projects, topsoil and subsoil will be tested for compaction following construction in all residential areas. Northern will de-compact subsoil in accordance with the soil compaction mitigation procedures described in the Plan. There is limited residential land on the Project. Where present, Northern will perform soil compaction mitigation in severely compacted residential areas based on coordination with landowners.

7.4.5 Shallow to Bedrock

For both Projects, there are no soils identified with bedrock (lithic or paralithic) within 60 inches or less of the soil surface. Should shallow bedrock be encountered, Northern will implement the following measures to prevent incorporation of rock into the topsoil:

- Segregation and protection of topsoil at excavations; and
- Disposal of excess rock fragments in an approved manner so as not to incorporate rock fragments into topsoil layers.

Rock encountered during excavation will be removed using one of the following techniques: conventional excavation with a backhoe; ripping with a bulldozer followed by backhoe excavation; or hammering with a pointed backhoe attachment or a pneumatic rock hammer, followed by backhoe excavation. The technique selected will be dependent on relative hardness, fracture susceptibility, expected volume, and location. Excess rock that cannot be returned to the existing rock profile within excavated areas will be hauled from Project areas and disposed of in an approved quarry, landfill or recycling facility unless approved for use as slope stabilization, windrowing, or for some other use on the construction work areas as approved by the landowner.

No blasting is currently anticipated for the Project. Blasting is further discussed in Section 1.5.6.8, Resource Report 1.

7.4.6 Rutting

For both Projects, Northern will stabilize access roads using gravel or equipment mats in order to minimize rutting. If rutting to a depth of six inches or greater occurs during construction along ungraded portions of the Project areas, Northern will immediately limit construction activities in that area or implement protective measures (e.g., install equipment mats) to prevent additional rutting. If rutting occurs along access roads, Northern will require its construction contractor(s) to provide maintenance equipment to repair the ruts to pre-construction conditions or better as soon as ground

conditions permit. With implementation of these mitigation measures, the Project will not have an impact on soils due to construction activities under wet conditions.

7.4.7 Soil Contamination

For both Projects, Northern's construction contractor will adhere to the SPCC plan (see Resource Report 2, Appendix 2A), which specifies secondary containment requirements and liquid transfer procedures to prevent spills. The SPCC plan also lists cleanup procedures that will be implemented in the event of soil contamination from spills or leaks of fuels, lubricants, coolants, or other hazardous materials. Should a spill occur, Northern and its contractors will follow the SPCC plan to contain accidental spills of any material that may contaminate soils and to ensure that inadvertent spills of hazardous materials are cleaned up and disposed of in an appropriate manner. In the event contaminated soils are encountered during construction, Northern's contractor will follow the procedures outlined in its SPCC plan.

7.4.8 Consistency with the FERC Upland Erosion Control, Revegetation, and Maintenance Plan

Northern has adopted FERC's current Plan, and no modifications are being requested or have been identified as necessary at this time for either Project.

7.4.9 Revegetation and Restoration

For both Projects, the following applies. Following installation of the aboveground appurtenant facilities, the areas disturbed by construction will be final graded. Original land contours will be restored, as near as practicable, to conform to adjacent areas. Temporary workspace will be re-seeded in accordance with individual landowner requirements, the SWPPP and/or NRCS/SWCD recommendations. Graded areas and other disturbed areas requiring revegetation will be seeded to establish a permanent vegetative cover. Depending on site conditions, revegetation may include soil amendments such as applying lime, fertilizing, seeding and mulching. Seedbed preparation will not be undertaken when excessively wet soil conditions exist. After a relatively smooth seedbed has been prepared, seed will be applied to all areas requiring revegetation using a seed drill or hydroseeder. Mulch will be implemented as needed per the Plan and Northern's Procedures, MNR100001 (NPDES/SDS Construction Stormwater General Permit), and the Iowa Construction Site Erosion Control Manual. The seed mixes and seeding rates will be followed as recommended by state and local regulatory agencies, or as directed by landowner. Northern's preferred seed mixtures include pollinator friendly herbaceous plants. Seeding and mulching will not be completed on cultivated cropland unless requested by the landowner. A wetland restoration plan can be found in Resource Report 2, Appendix 2C.

Private and public property, such as fences, gates, driveways, and roads, disturbed by construction will be restored to original or better condition. Gravel and geotextile fabric will be removed from the staging area and temporary access roads prior to restoration and reseeding. Construction debris will be removed for proper disposal. All construction equipment will be removed following final clean-up activities. Unless otherwise required by the landowner, Northern will restore all areas, as close as practicable, to their pre-construction condition.

7.4.10 Corrosion to Steel

To mitigate corrosion potential, Northern will use a fusion-bonded epoxy coating on its pipelines; further, corrosive potential will be mitigated by installing pipeline cathodic protection technology within one year of construction of the three pipeline extensions, if required. The cathodic protection system will be periodically inspected to ensure proper cathodic protection levels are maintained. Northern will use public roads to gain access to the ROW for maintenance and inspection. Northern will not require mitigation at the disconnect sites or temporary compression sites.

7.5 AGENCY CONSULTATION

For both Projects, Northern will apply for coverage, individually for each Project component in Minnesota, under the General Permit Authorization to Discharge Stormwater Associated with Construction Activity under the NPDES/SDS Program (MNR100001), issued August 1, 2023. The current MPCA permit expires July 31, 2028. Northern will reapply for permit coverage in 2028 as required by MPCA guidance and will comply with the permit requirements included in the general permit. Permanent stormwater water control will not be required at any Project component. The applications also will contain a request to discharge pit trench water to upland areas within each Project component. Northern plans to submit all of these applications early 2027 in order to have approvals by February/March 2027.

For Project components where disturbance is less than 50 acres, or where construction will not require the discharge of stormwater within one mile of a special or impaired water, the application does not need to include the SWPPP for MPCA review.

In Iowa, land disturbance associated with the construction or operation of natural gas transmission facilities do not require a NPDES permit under the federal Oil and Gas Exemption outlined in CFR 122.26 and the Energy Policy Act of 2005. Trench dewatering activities also are covered by the NPDES General Permit No. 2 in Iowa and fall under this exemption. Northern will comply with the conditions in General Permit No. 2.

Northern will submit an application for water appropriation to the MDNR for construction dewatering (e.g., pit trench dewatering, discharge of hydrostatic test water). A water appropriation permit is required for the withdrawal of more than 10,000 gallons of water per day, or one million gallons per year. There are no restrictions on when this application can be submitted; therefore, the application is anticipated to be submitted prior to the issuance of the FERC order. In Iowa, Northern will submit an application for each site for a Water Allocation and Use Permit from IDNR.

Based on multiple previous projects in the same general areas that required consultation with the same agencies, Northern will base their seed mixes and erosion and sediment control standard guidelines based on Board of Water and Soil Resources for components in Minnesota and Iowa Department of Transportation seed mixes for components in Iowa. These mixes were approved by all consulted agencies in previous projects.

On February 17, 2026, Northern submitted its Noxious Weed Control Plan for the Project to the MDA for their review and comment. A copy of all correspondence between Northern and the above-listed agencies are included in Resource Report 3, Appendix 3A; seed mixes, planting density, and application rate recommendations as per the agency recommendations are included as an appendix in each Project SWPPP.

7.6 REFERENCES

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USDA NRCS 2025c. Prime Farmland. Available online at https://www.nrcs.usda.gov/publications/Legend%20and%20Prime%20Farmland%20-%20Query%20by%20Soil%20Survey%20Area.html. Accessed December 2025.

USDA NRCS 2025d. National Soil Survey Handbook, Title 430-VI, available online at http://soils.usda.gov/technical/handbook/. Accessed December 2025.

Resource Report 7
Figures

Figure 7-1
NRCS Soil Series Mapbook for the Project for the V2F Project



Figure No.
7-1

Title
NRCS Soil Series Map
V2F - Disconnect Site Ventura Compressor Station

Client/Project
172608813
Northern Natural Gas
Ventura to Farmington A-Line Abandonment & Capacity Replacement Project

Project Location
Hancock County, Iowa

Prepared by JM on 2025-10-06
TR by JL on 2025-10-27
IR by SK on 2026-01-28

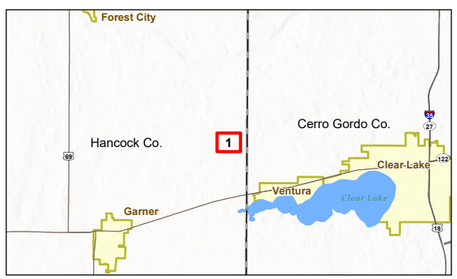
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Legend
- Environmental Survey Boundary
- Extra Temporary Workspace
- Temporary Access Road
- Existing Pipeline

NRCS Soil Survey Data
Hydric Soil Rating
- Hydric
- Predominantly Hydric
- Partially Hydric
- Predominantly Non-Hydric
- Non-Hydric

National Hydrography Dataset
- Perennial Stream
- Intermittent Stream
- Ephemeral Stream
- Canal/Ditch
- Waterbody



Notes
1. Coordinate System: NAD 1983 UTM Zone 15N
2. Data Sources: Stantec, NNG, Esri, USCB, USGS, NRCS
3. Background: 2023 NAIP

Stantec

Northern Natural Gas

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Figure No.
7-1

Title
NRCS Soil Series Map
V2F - Temporary Compression Site Lake Mills Compressor Station

Client/Project 172608813
Northern Natural Gas
Ventura to Farmington A-Line Abandonment & Capacity Replacement Project

Project Location
Worth County, Iowa

Prepared by JM on 2025-10-06
TR by JL on 2025-10-27
IR by SK on 2026-01-28

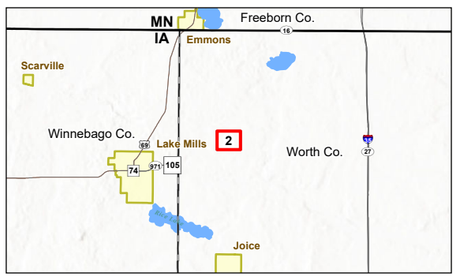
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Legend
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- Extra Temporary Workspace
- Existing Pipeline

NRCS Soil Survey Data
Hydric Soil Rating
- Hydric
- Predominantly Hydric
- Partially Hydric
- Predominantly Non-Hydric
- Non-Hydric

National Hydrography Dataset
- Perennial Stream
- Intermittent Stream
- Ephemeral Stream
- Canal/Ditch
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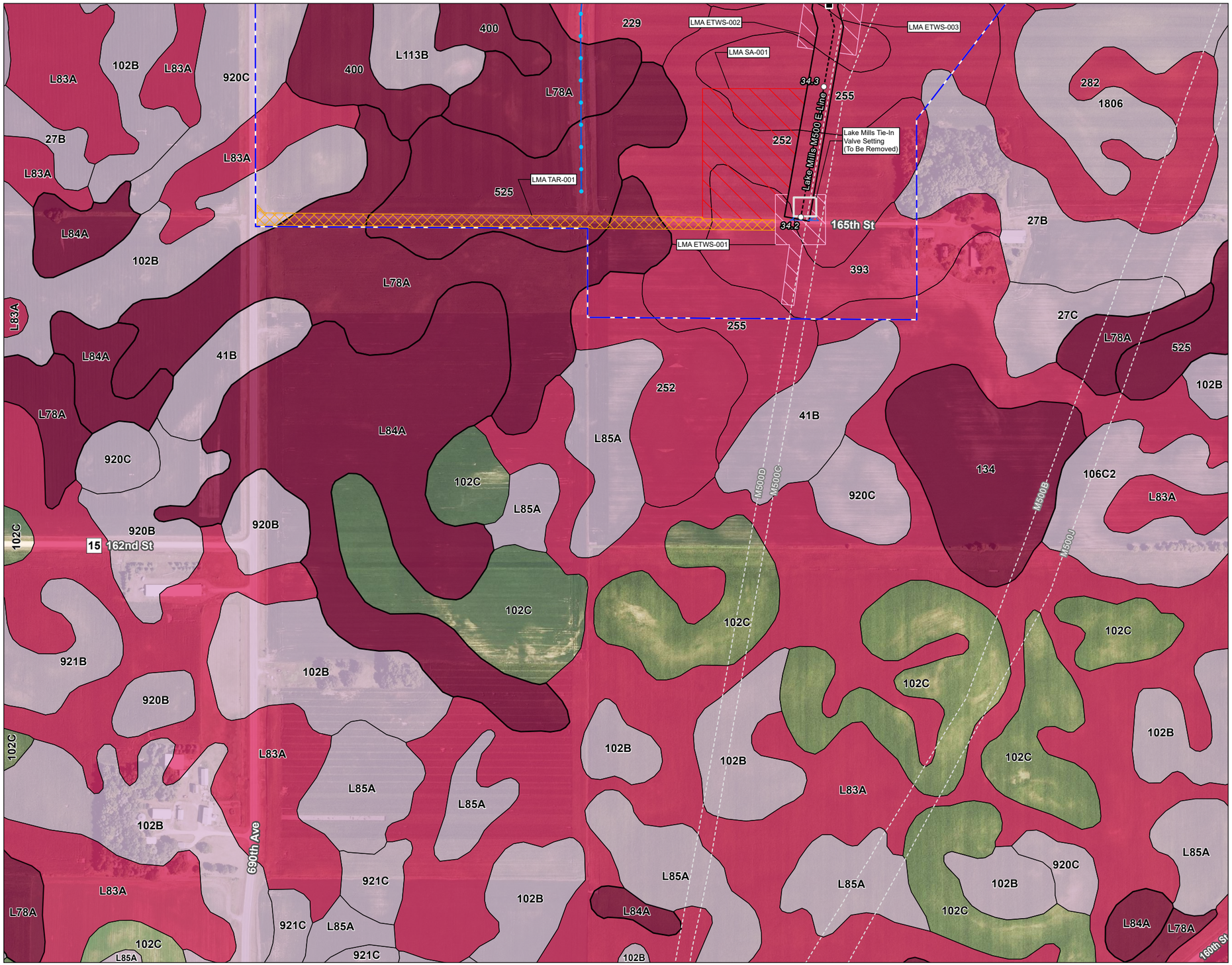


Figure No.
7-1

Title
NRCS Soil Series Map
V2F - Lake Mills M500 E-Line

Client/Project 172608813
Northern Natural Gas
Ventura to Farmington A-Line Abandonment & Capacity Replacement Project

Project Location
Freeborn County, Minnesota

Prepared by JM on 2025-10-06
TR by JL on 2025-10-27
IR by SK on 2026-01-28

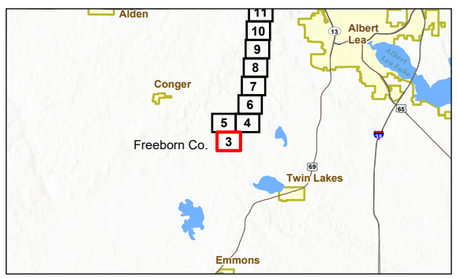
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- Temporary Workspace
- Extra Temporary Workspace
- Staging Area
- Temporary Access Road
- Mile Post
- HDD
- Proposed Pipeline
- Existing Pipeline

NRCS Soil Survey Data
Hydric Soil Rating
- Hydric
- Predominantly Hydric
- Partially Hydric
- Predominantly Non-Hydric
- Non-Hydric

National Hydrography Dataset
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- Ephemeral Stream
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3. Background: 2023 NAIP

Stantec
Northern Natural Gas

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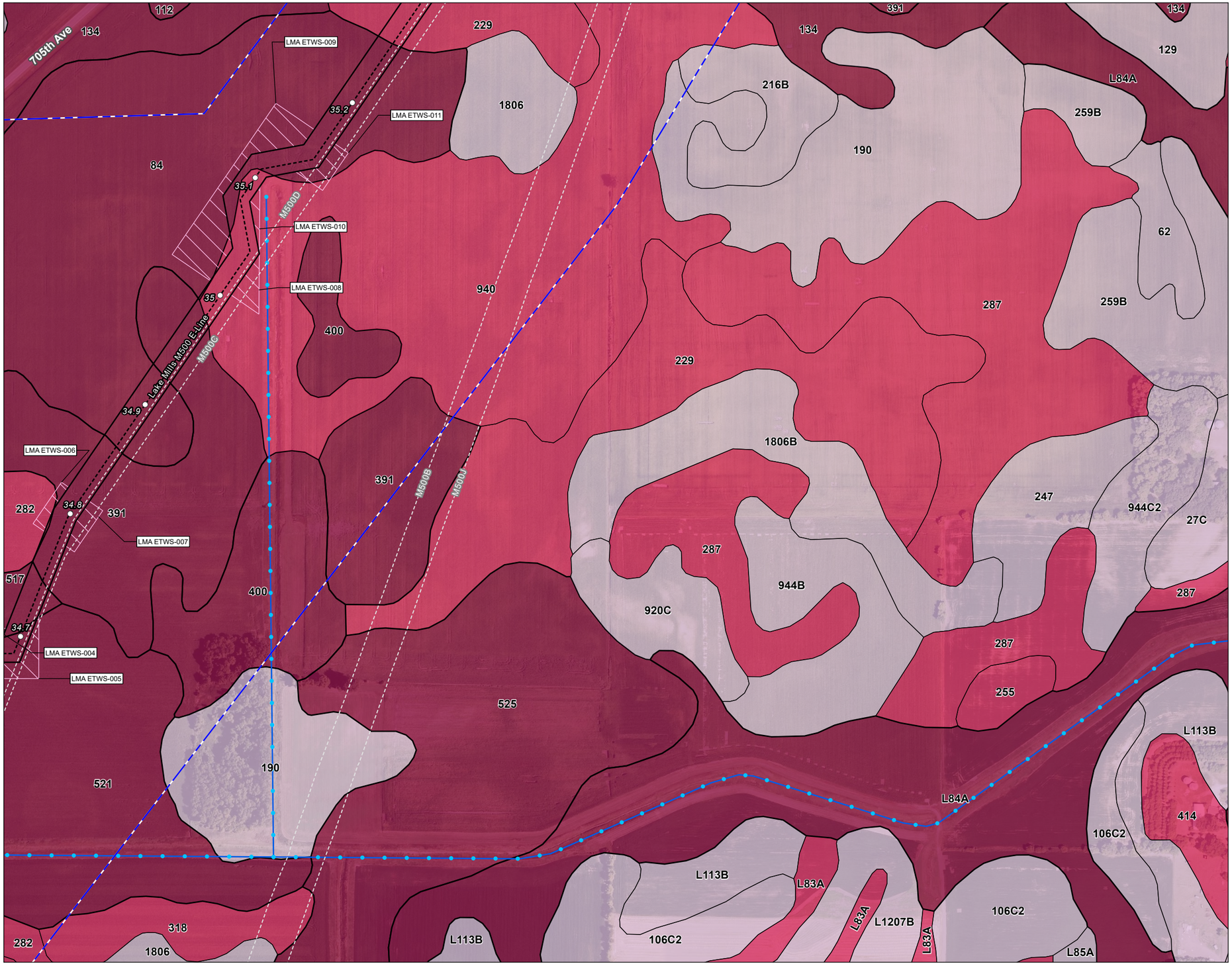


Figure No.

7-1

Title

NRCS Soil Series Map
V2F - Lake Mills M500 E-Line

Client/Project 172608813

Northern Natural Gas
Ventura to Farmington A-Line Abandonment & Capacity Replacement Project

Project Location
Freeborn County, Minnesota

Prepared by JM on 2025-10-06
TR by JL on 2025-10-27
IR by SK on 2026-01-28

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(At original document size of 11x17)
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Legend

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- Extra Temporary Workspace
- Mile Post
- Proposed Pipeline
- Existing Pipeline

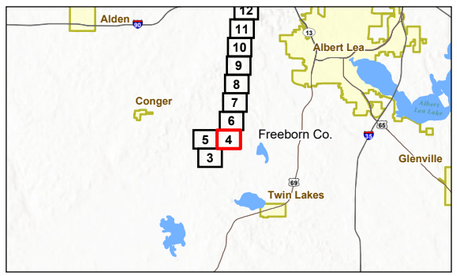
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Hydric Soil Rating

- Hydric
- Predominantly Hydric
- Partially Hydric
- Predominantly Non-Hydric
- Non-Hydric

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Ephemeral Stream
- Canal/Ditch
- Waterbody



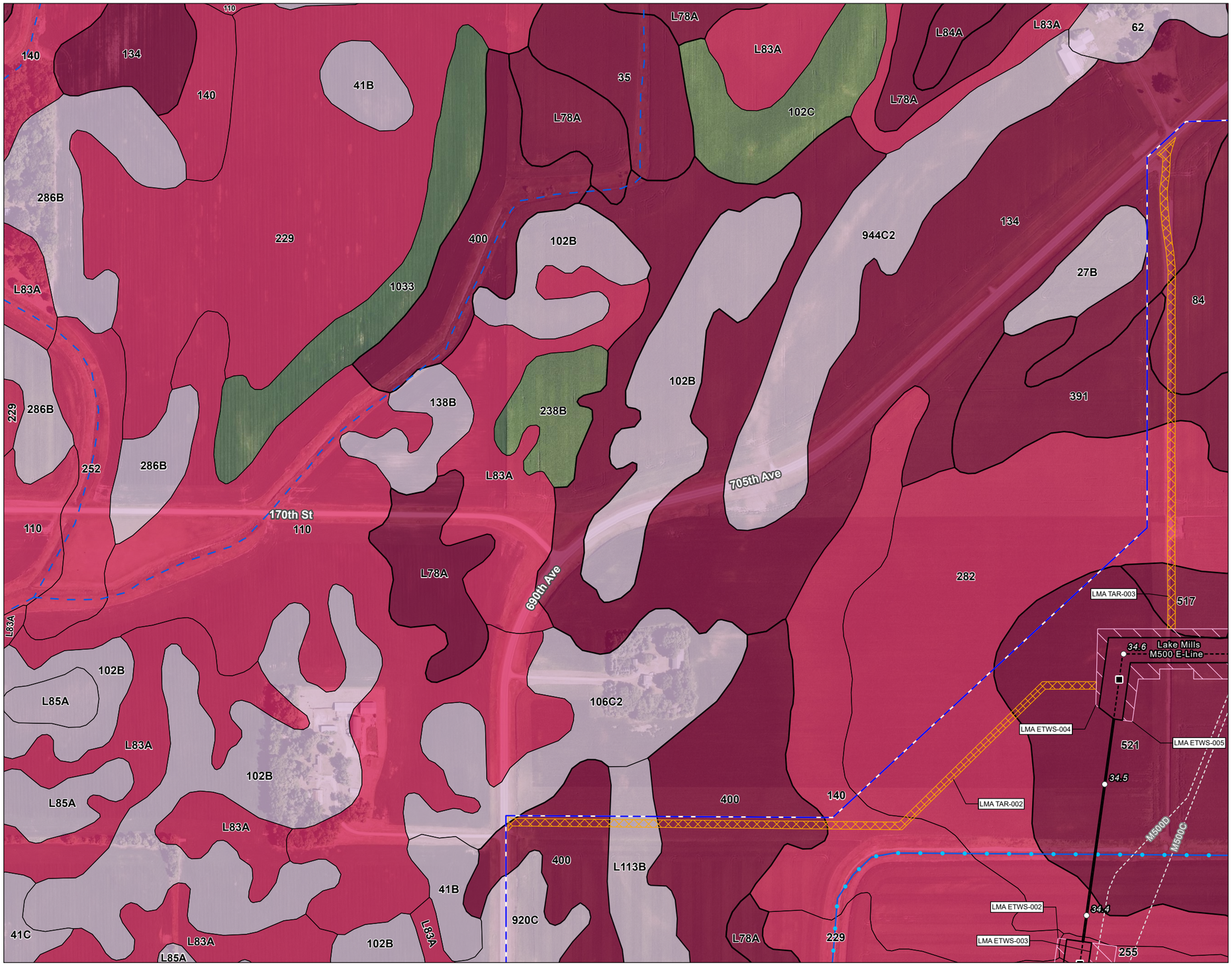
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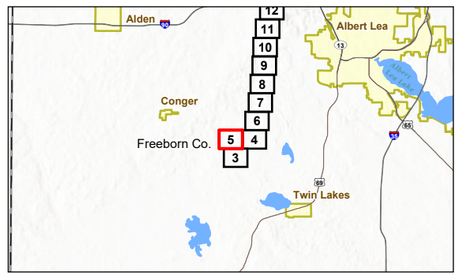


Figure No.
7-1

Title
NRCS Soil Series Map
V2F - Lake Mills M500 E-Line

Client/Project 172608813
Northern Natural Gas
Ventura to Farmington A-Line Abandonment & Capacity Replacement Project

Project Location
Freeborn County, Minnesota

Prepared by JM on 2025-10-06
TR by JL on 2025-10-27
IR by SK on 2026-01-28

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Legend
- Environmental Survey Boundary
- Temporary Workspace
- Extra Temporary Workspace
- Temporary Access Road
- Mile Post
- HDD
- Proposed Pipeline
- Existing Pipeline

NRCS Soil Survey Data
Hydric Soil Rating
- Hydric
- Predominantly Hydric
- Partially Hydric
- Predominantly Non-Hydric
- Non-Hydric

National Hydrography Dataset
- Perennial Stream
- Intermittent Stream
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Stantec

Northern Natural Gas

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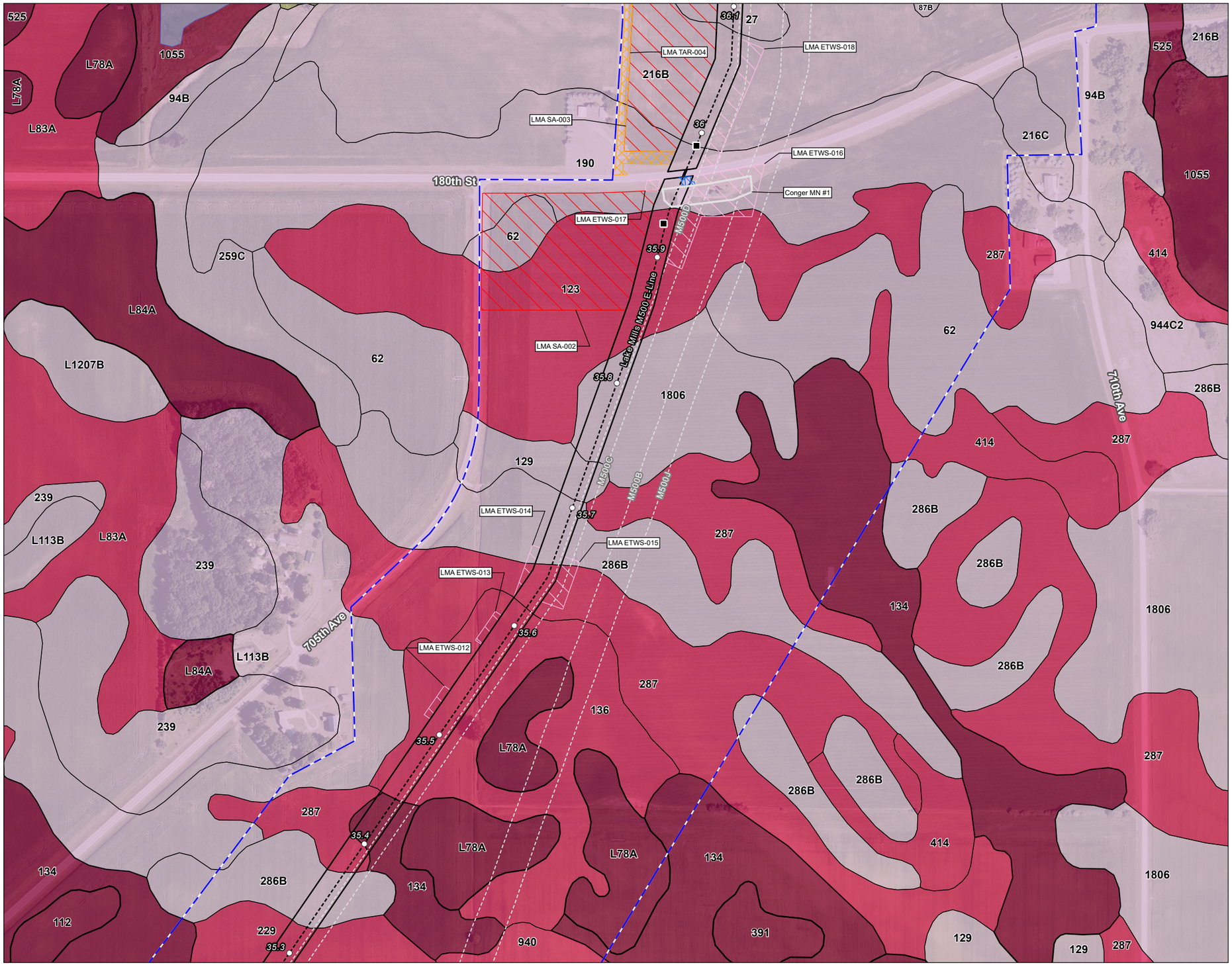


Figure No.

7-1

Title

NRCS Soil Series Map
V2F - Lake Mills M500 E-Line

Client/Project 172608813

Northern Natural Gas
Ventura to Farmington A-Line Abandonment & Capacity Replacement Project

Project Location
Freeborn County, Minnesota

Prepared by JM on 2025-10-06
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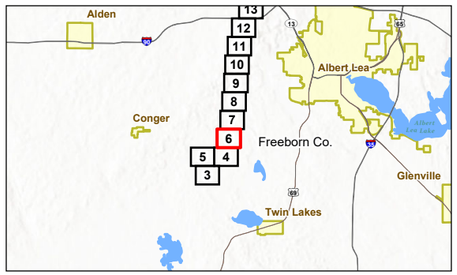
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- Extra Temporary Workspace
- Staging Area
- Temporary Access Road
- Mile Post
- HDD
- Proposed Pipeline
- Existing Pipeline

NRCS Soil Survey Data
Hydric Soil Rating

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National Hydrography Dataset

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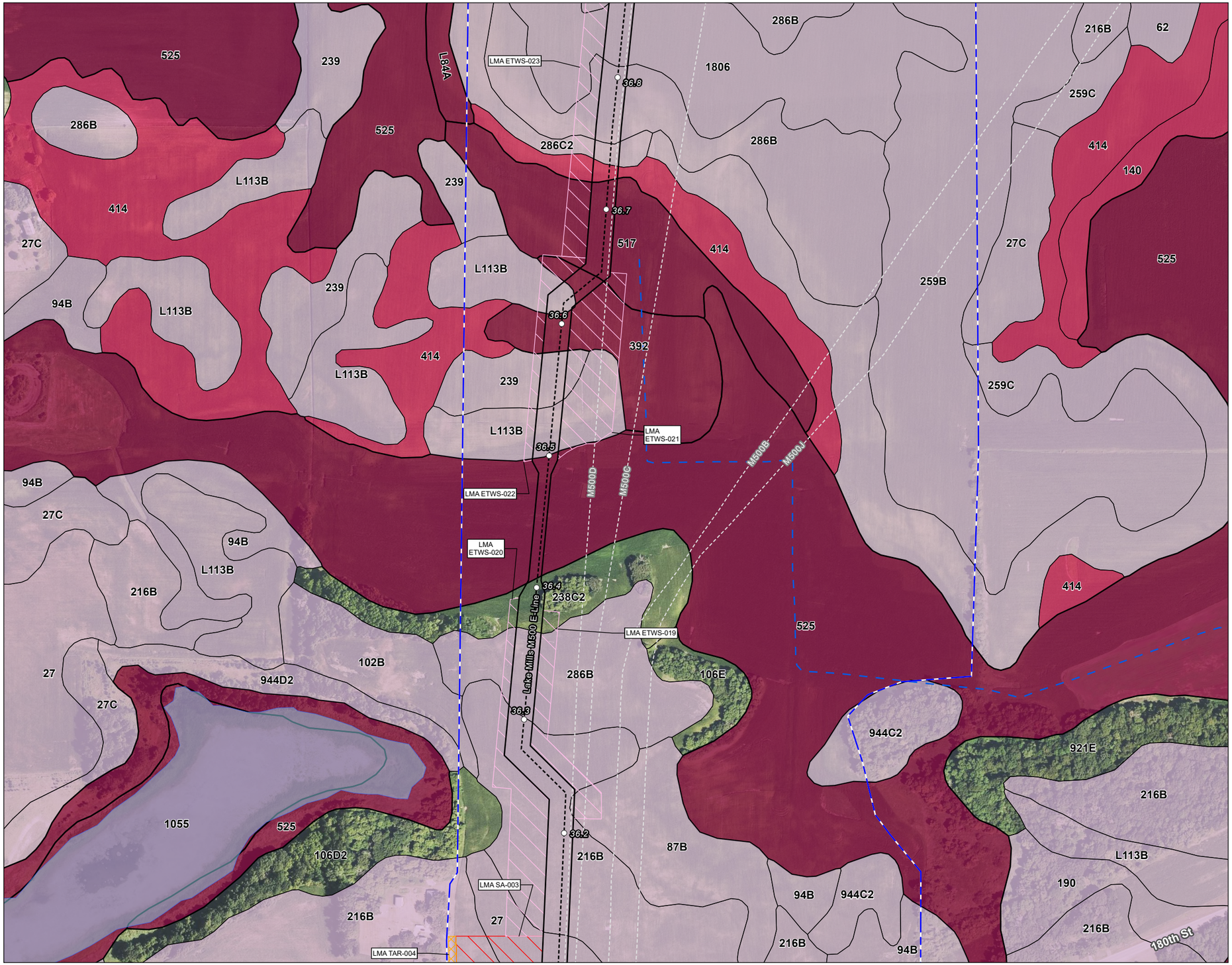


Figure No.
7-1

Title
NRCS Soil Series Map
V2F - Lake Mills M500 E-Line

Client/Project 172608813
Northern Natural Gas
Ventura to Farmington A-Line Abandonment & Capacity Replacement Project

Project Location
Freeborn County, Minnesota

Prepared by JM on 2025-10-06
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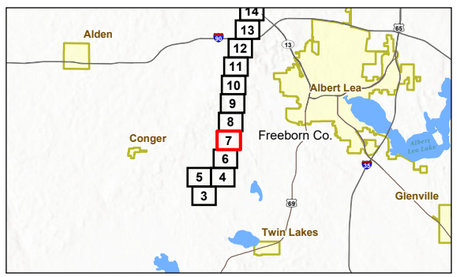
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- Extra Temporary Workspace
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National Hydrography Dataset
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3. Background: 2023 NAIP

Stantec
Northern Natural Gas

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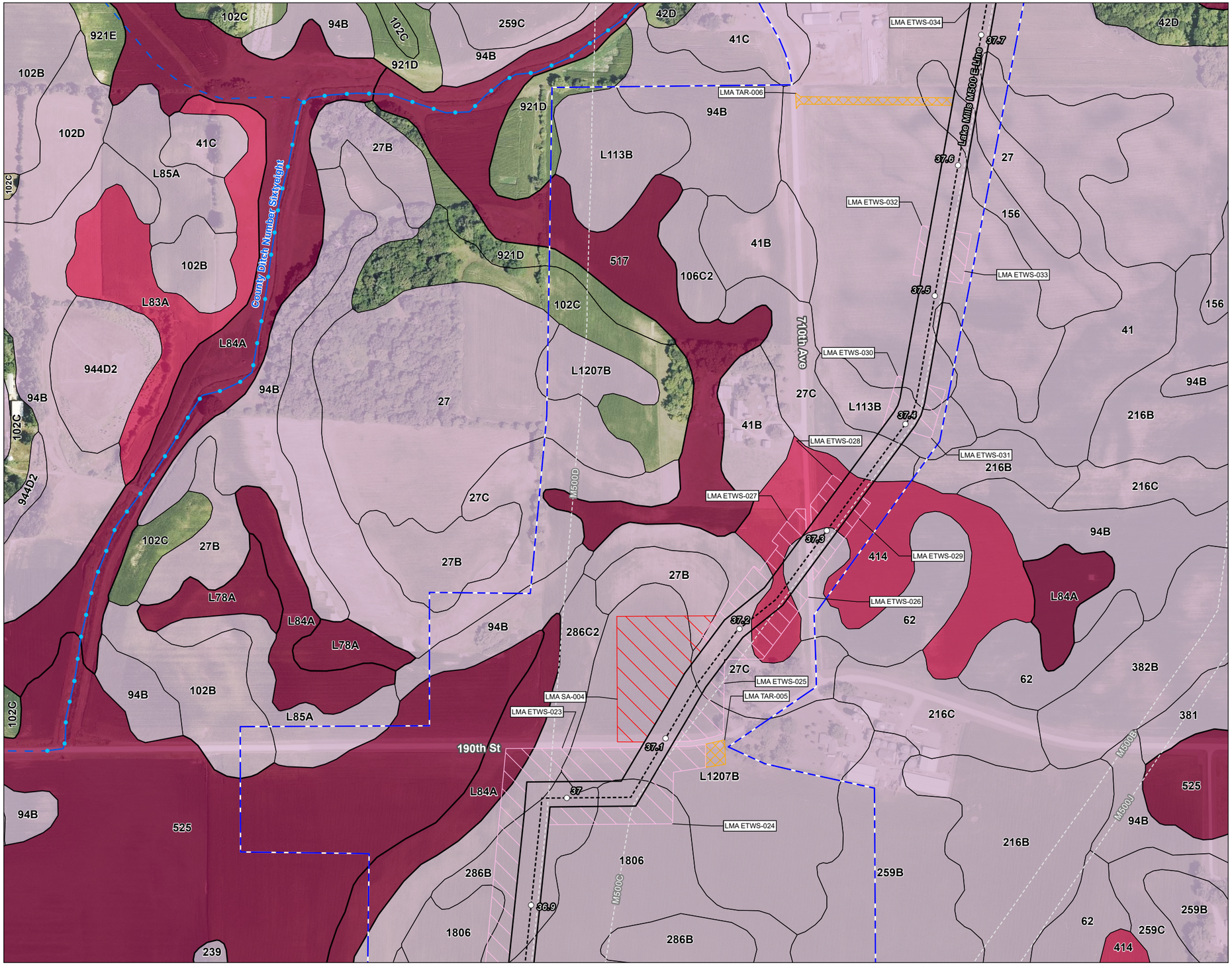


Figure No.

7-1

Title

NRCS Soil Series Map
V2F - Lake Mills M500 E-Line

Client/Project 172608813

Northern Natural Gas
Ventura to Farmington A-Line Abandonment & Capacity Replacement Project

Project Location
Freeborn County, Minnesota

Prepared by JM on 2025-10-06
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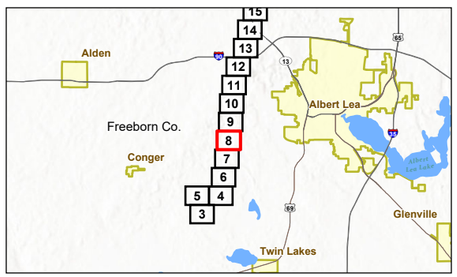
NRCS Soil Survey Data

Hydric Soil Rating

- Hydric
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National Hydrography Dataset

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Northern Natural Gas

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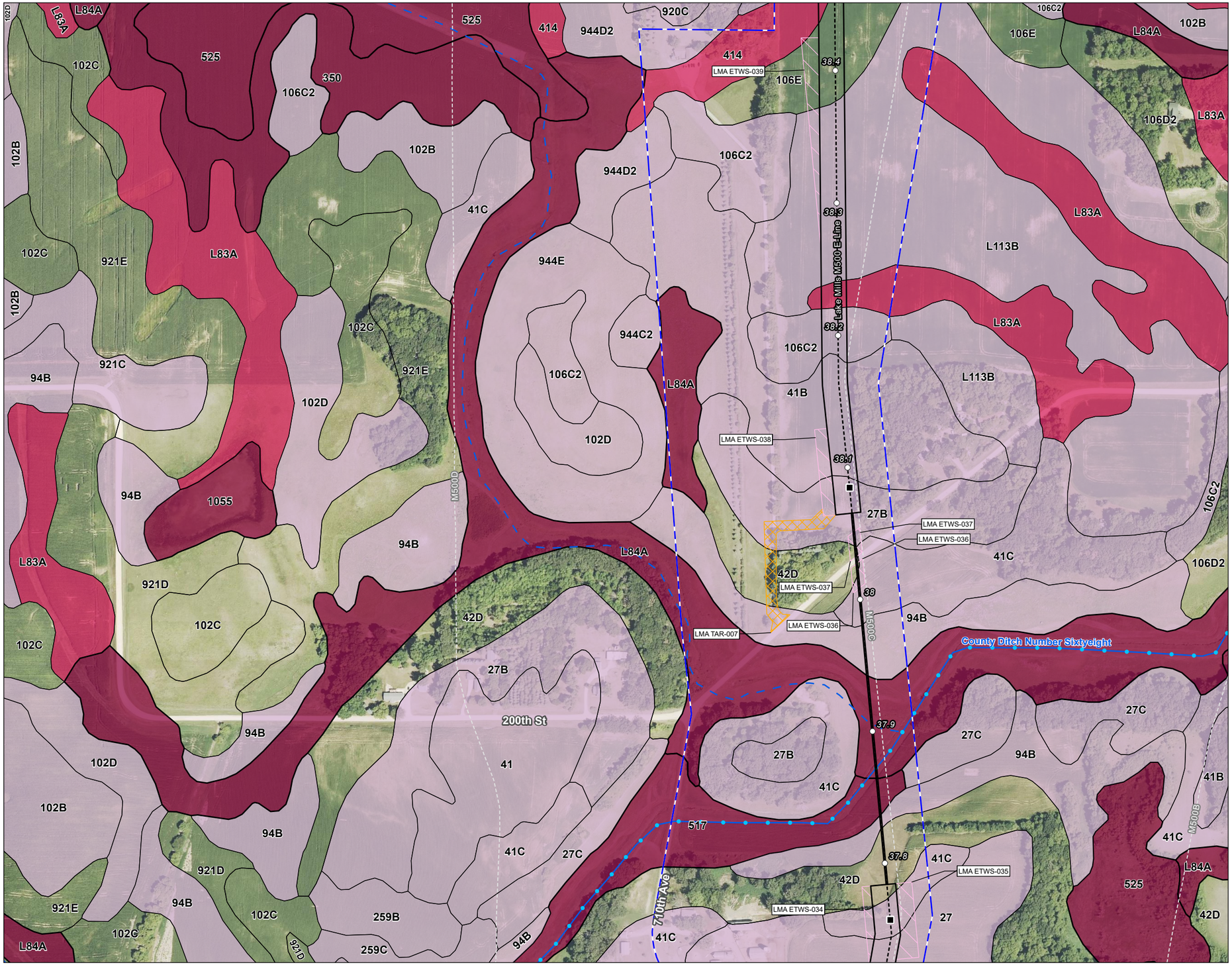


Figure No.

7-1

Title

NRCS Soil Series Map
V2F - Lake Mills M500 E-Line

Client/Project 172608813

Northern Natural Gas
Ventura to Farmington A-Line Abandonment & Capacity Replacement Project

Project Location
Freeborn County, Minnesota

Prepared by JM on 2025-10-06
TR by JL on 2025-10-27
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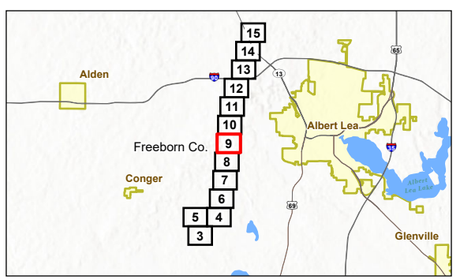
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- Waterbody



Notes
1. Coordinate System: NAD 1983 UTM Zone 15N
2. Data Sources: Stantec, NNG, Esri, USCB, USGS, NRCS
3. Background: 2023 NAIP

Stantec

Northern Natural Gas

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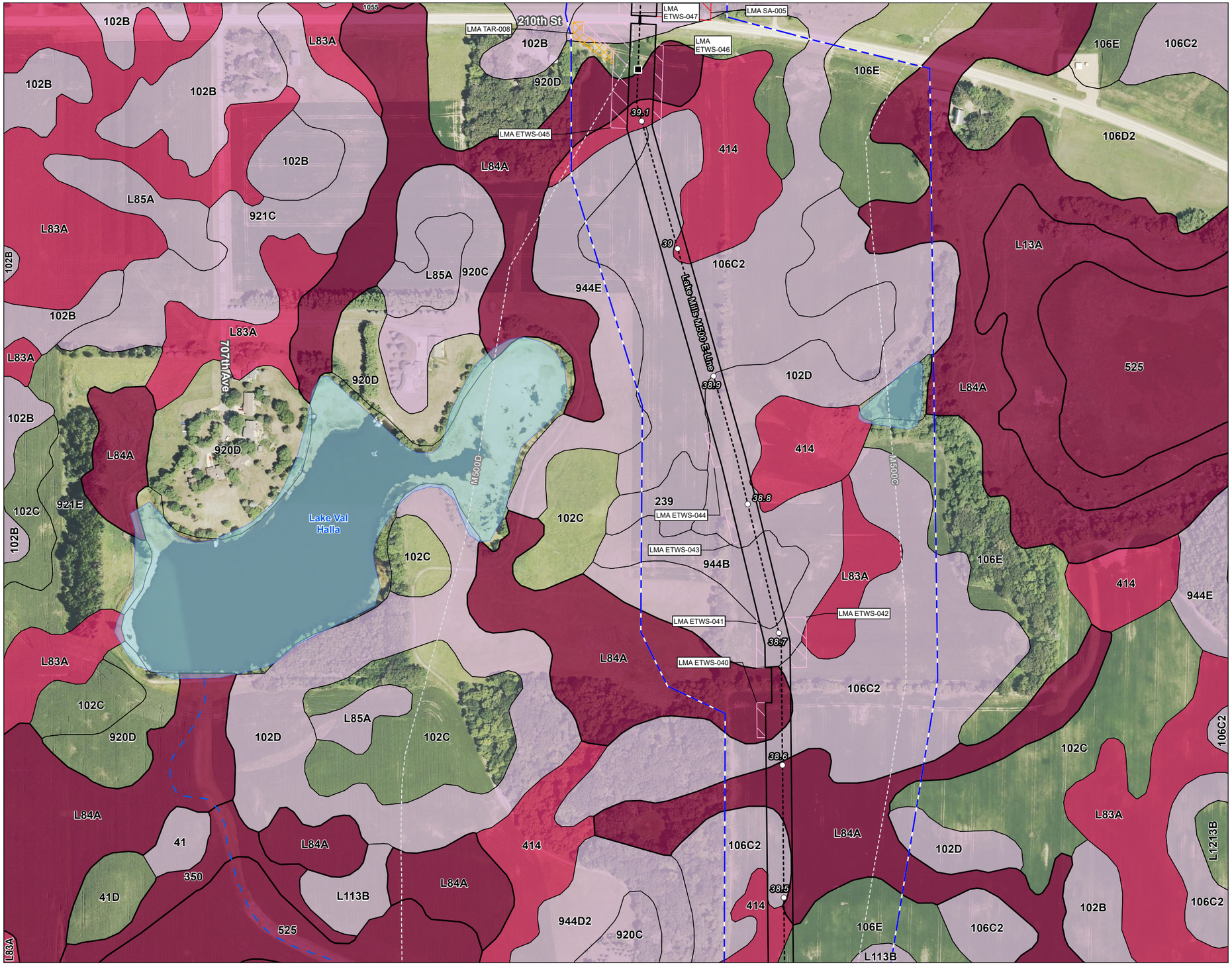


Figure No.
7-1

Title
NRCS Soil Series Map
V2F - Lake Mills M500 E-Line

Client/Project 172608813
Northern Natural Gas
Ventura to Farmington A-Line Abandonment & Capacity Replacement Project

Project Location
Freeborn County, Minnesota

Prepared by JM on 2025-10-06
TR by JL on 2025-10-27
IR by SK on 2026-01-28

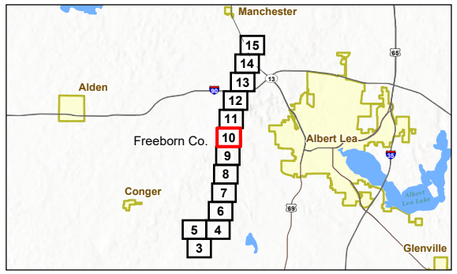
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Legend
- Environmental Survey Boundary
- Temporary Workspace
- Extra Temporary Workspace
- Staging Area
- Temporary Access Road
- Mile Post
- HDD
- Proposed Pipeline
- Existing Pipeline

NRCS Soil Survey Data
Hydric Soil Rating
- Hydric
- Predominantly Hydric
- Partially Hydric
- Predominantly Non-Hydric
- Non-Hydric

National Hydrography Dataset
- Perennial Stream
- Intermittent Stream
- Ephemeral Stream
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Notes
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3. Background: 2023 NAIP

Stantec

Northern Natural Gas

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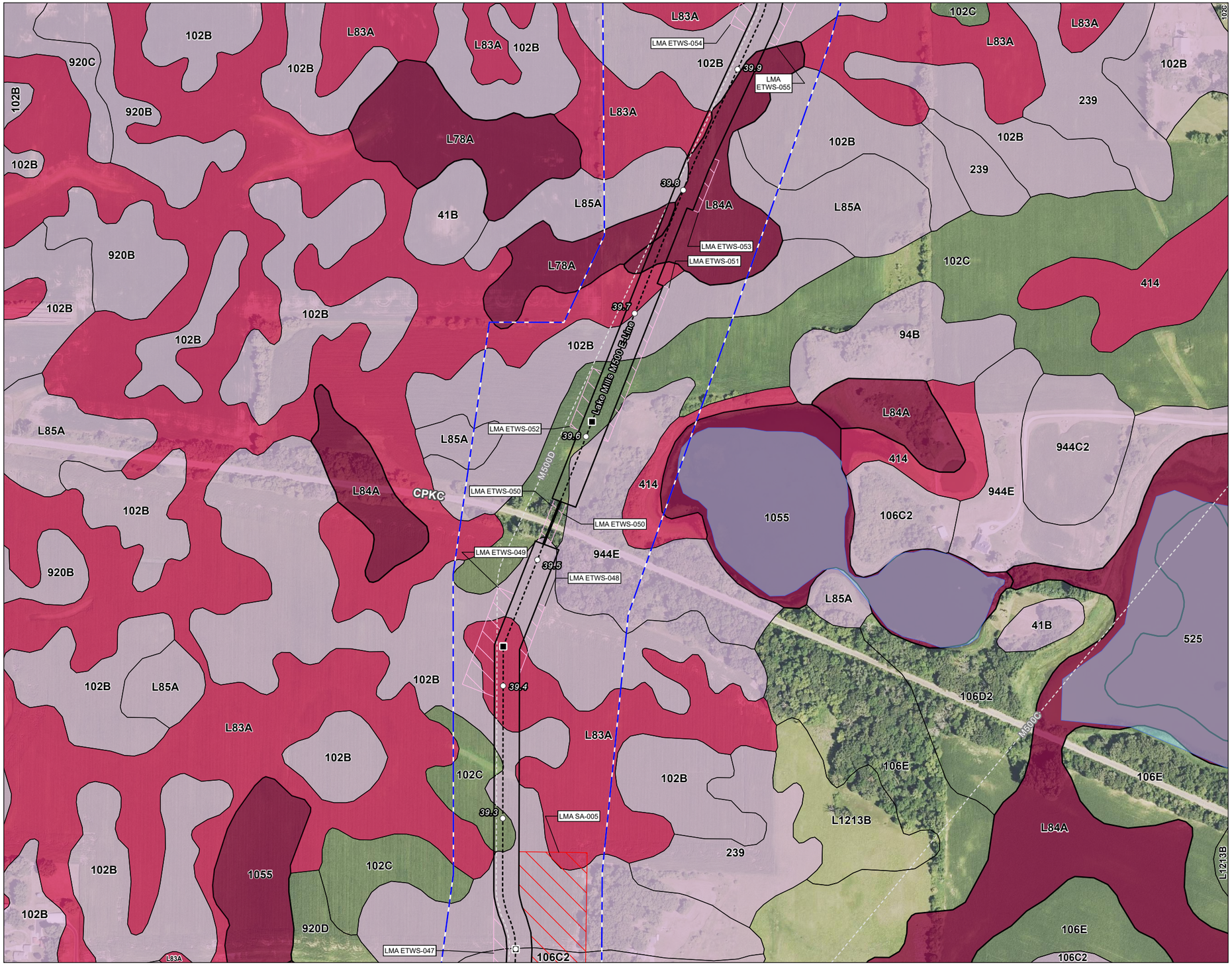


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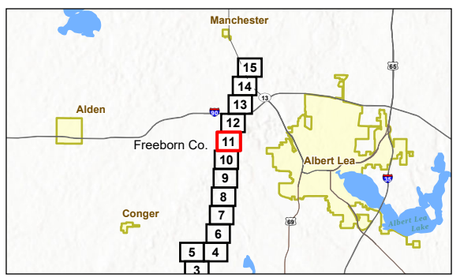
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Northern Natural Gas

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Northern Natural Gas
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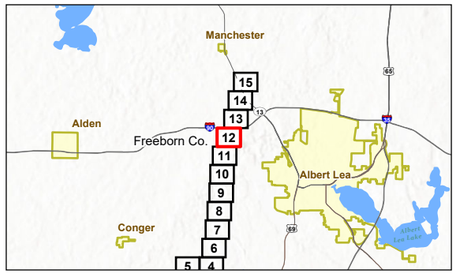
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Stantec
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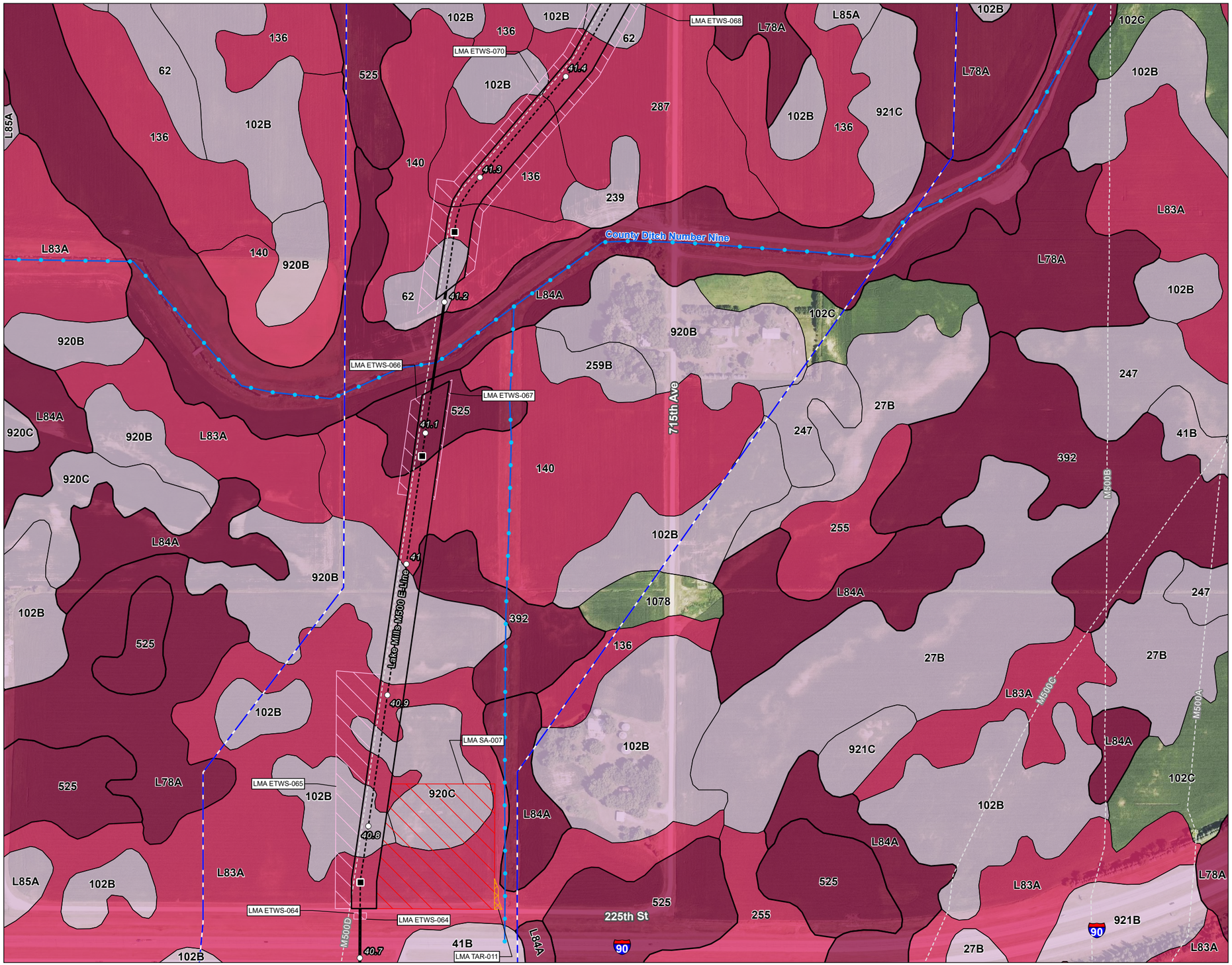


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Client/Project 172608813
Northern Natural Gas
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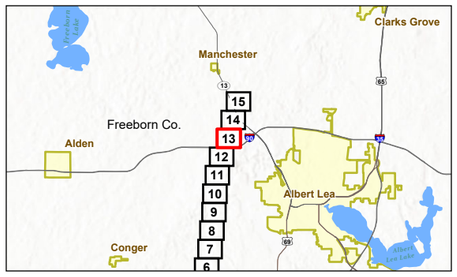
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Northern Natural Gas

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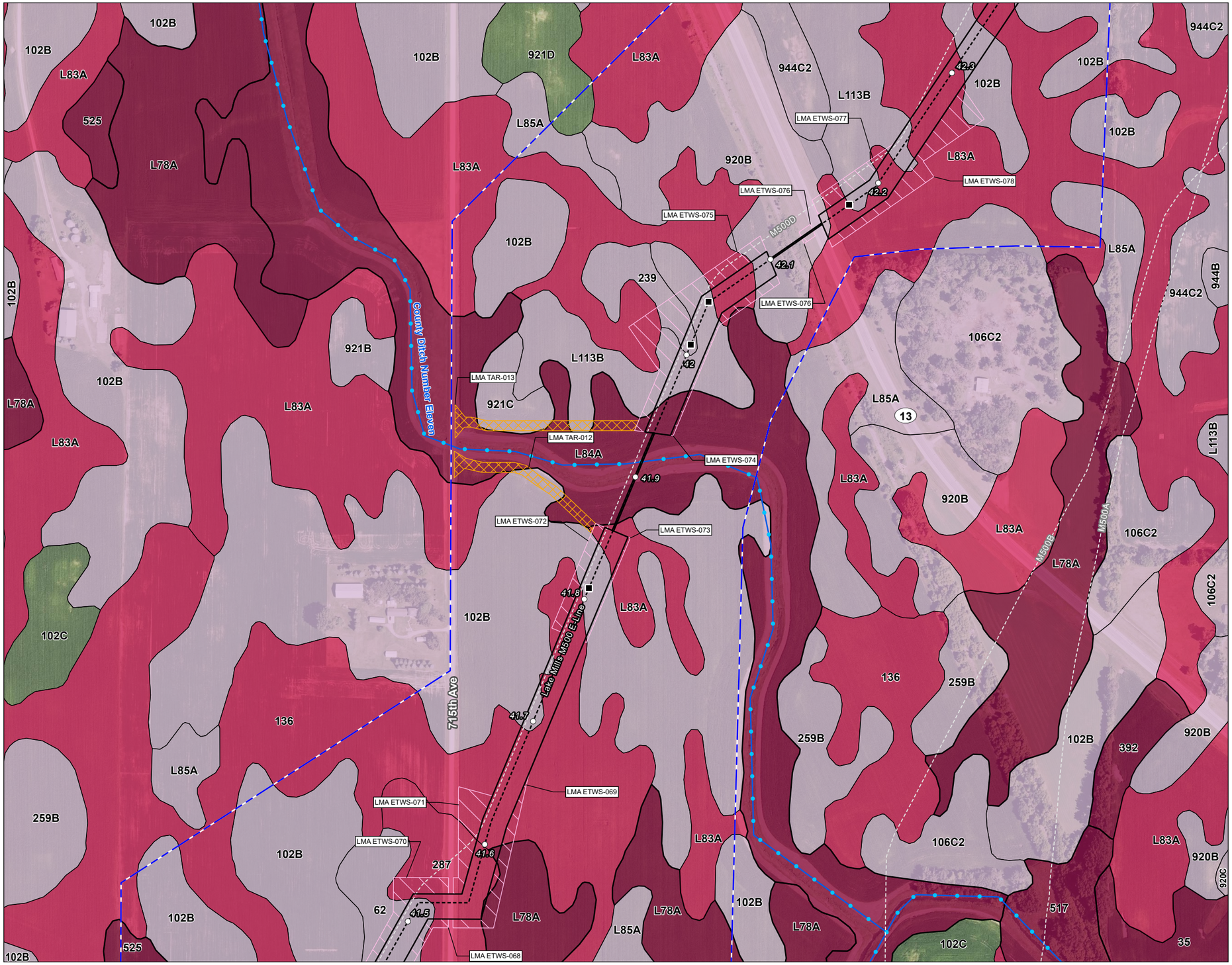


Figure No.

7-1

Title

NRCS Soil Series Map
V2F - Lake Mills M500 E-Line

Client/Project 172608813

Northern Natural Gas
Ventura to Farmington A-Line Abandonment & Capacity Replacement Project

Project Location
Freeborn County, Minnesota

Prepared by JM on 2025-10-06
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Legend

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- Proposed Pipeline
- Existing Pipeline

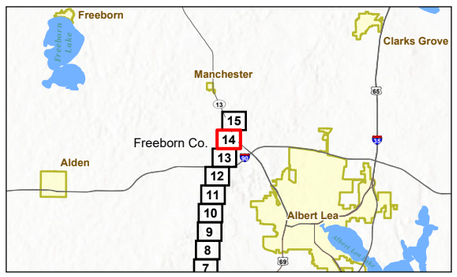
NRCS Soil Survey Data

Hydric Soil Rating

- Hydric
- Predominantly Hydric
- Partially Hydric
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National Hydrography Dataset

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Northern Natural Gas

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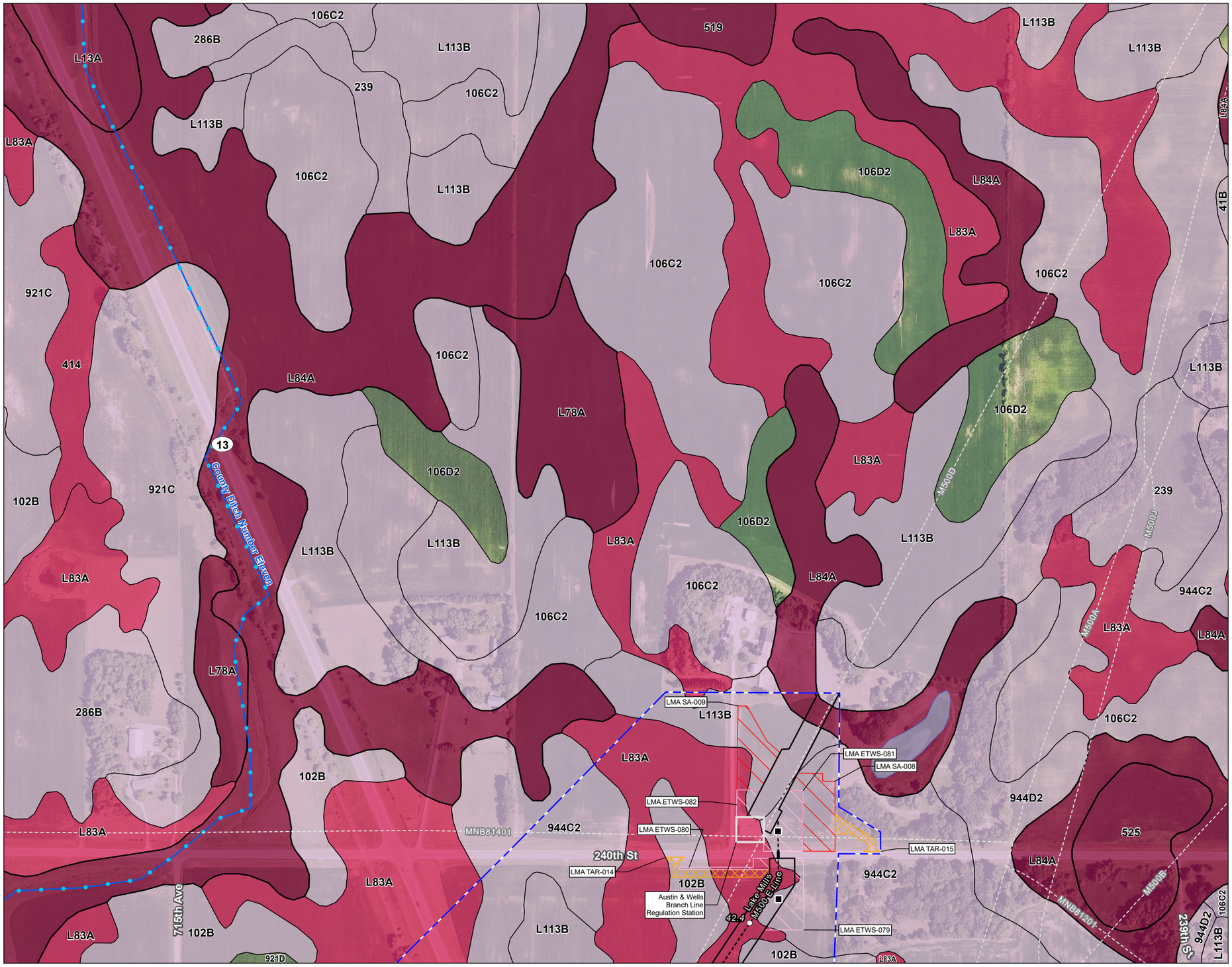


Figure No.

7-1

Title

NRCS Soil Series Map
V2F - Lake Mills M500 E-Line

Client/Project 172608813

Northern Natural Gas
Ventura to Farmington A-Line Abandonment & Capacity Replacement Project

Project Location
Freeborn County, Minnesota

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Legend

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- Mile Post
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- Proposed Pipeline
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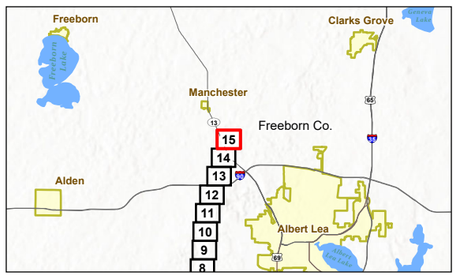
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Northern Natural Gas

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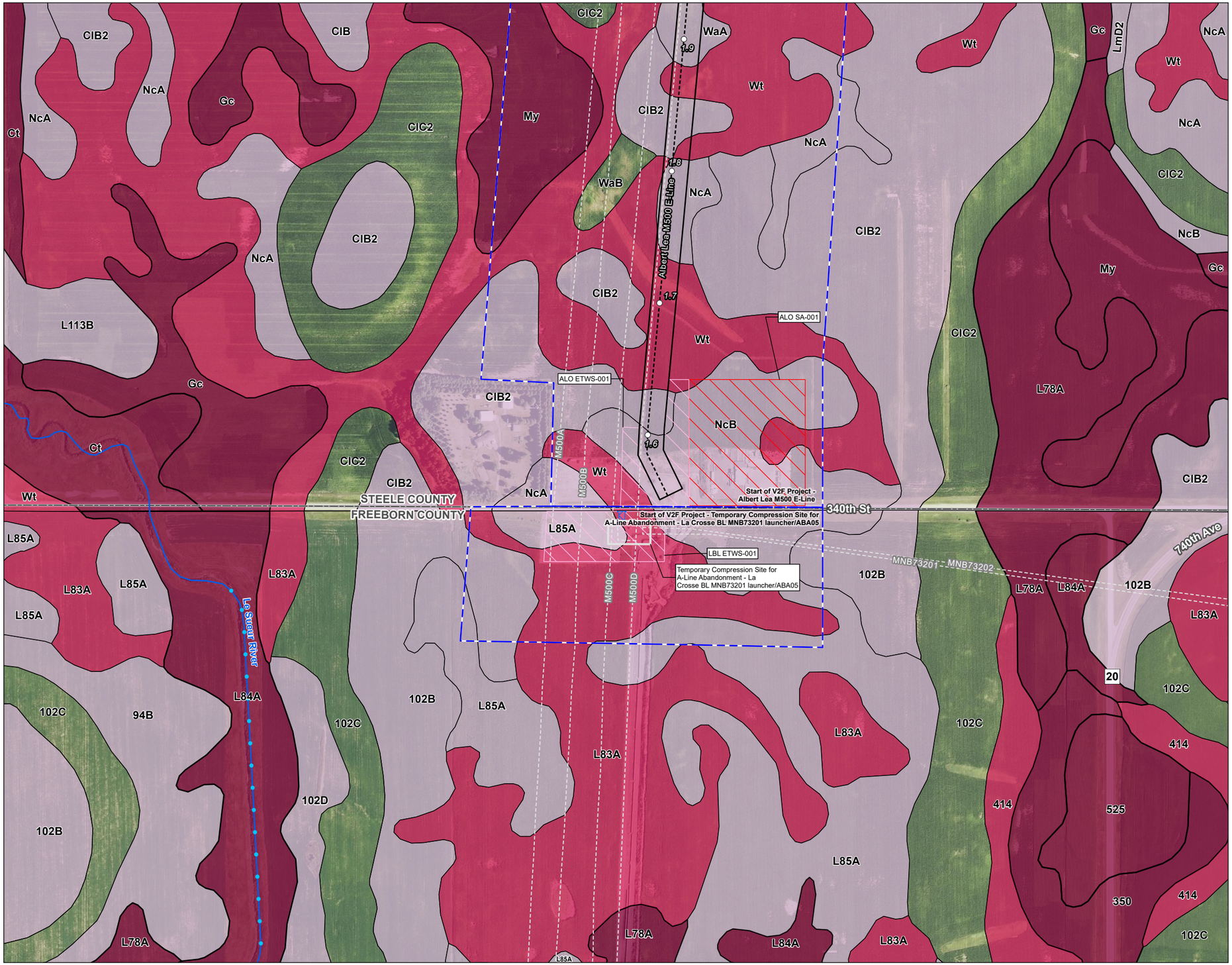


Figure No.

7-1

Title

NRCS Soil Series Map
V2F - Albert Lea M500 E-Line

Client/Project 172608813

Northern Natural Gas
Ventura to Farmington A-Line Abandonment & Capacity Replacement Project

Project Location
Steele County, Minnesota

Prepared by JM on 2025-10-06
TR by JL on 2025-10-27
IR by SK on 2026-01-28

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(At original document size of 11x17)
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Legend

- Environmental Survey Boundary
- Existing Lot
- Existing Access Road
- Temporary Workspace
- Extra Temporary Workspace
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- Mile Post
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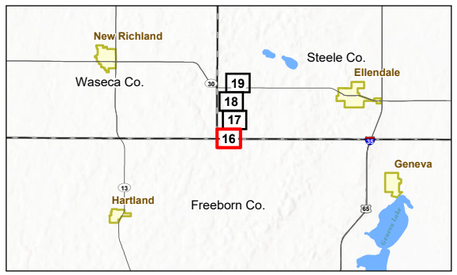
NRCS Soil Survey Data

Hydric Soil Rating

- Hydric
- Predominantly Hydric
- Partially Hydric
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- Non-Hydric

National Hydrography Dataset

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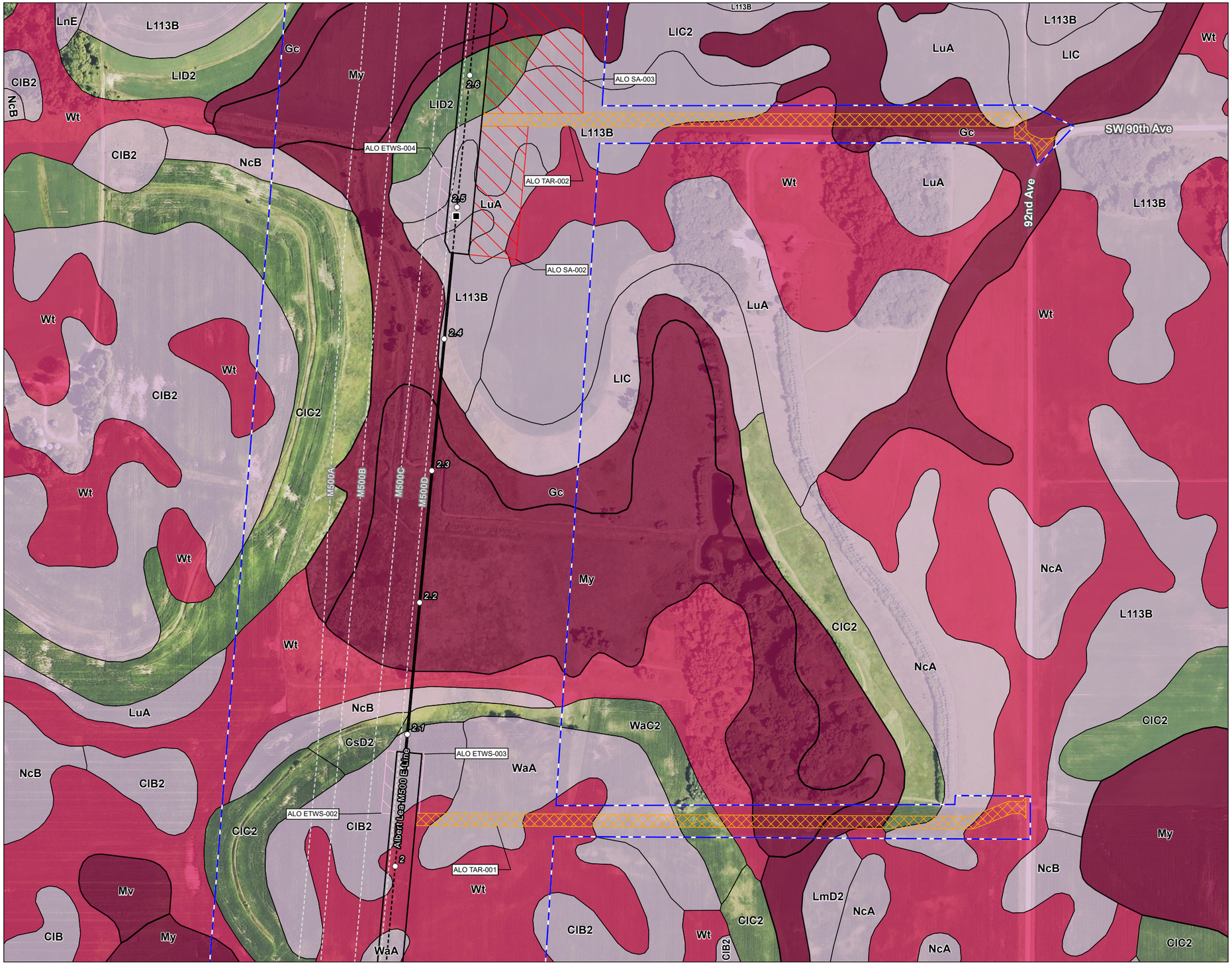


Figure No.
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NRCS Soil Series Map
V2F - Albert Lea M500 E-Line

Client/Project 172608813
Northern Natural Gas
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Project Location
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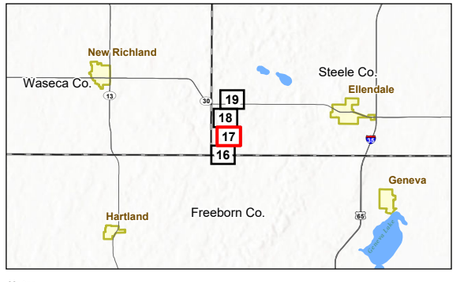
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Northern Natural Gas

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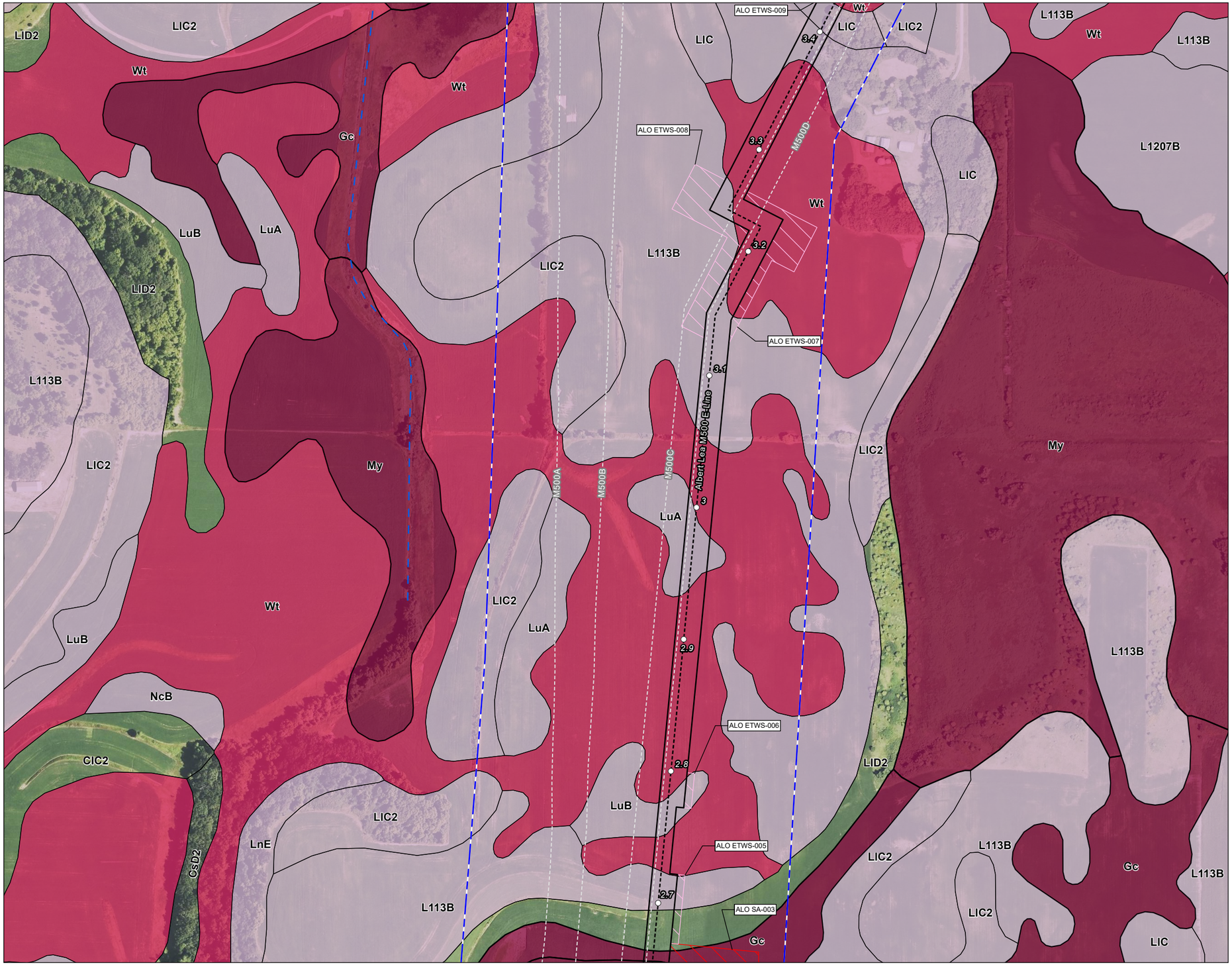


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7-1

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Client/Project 172608813

Northern Natural Gas
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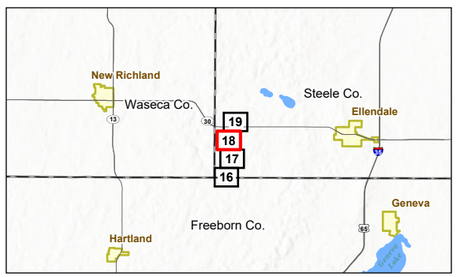
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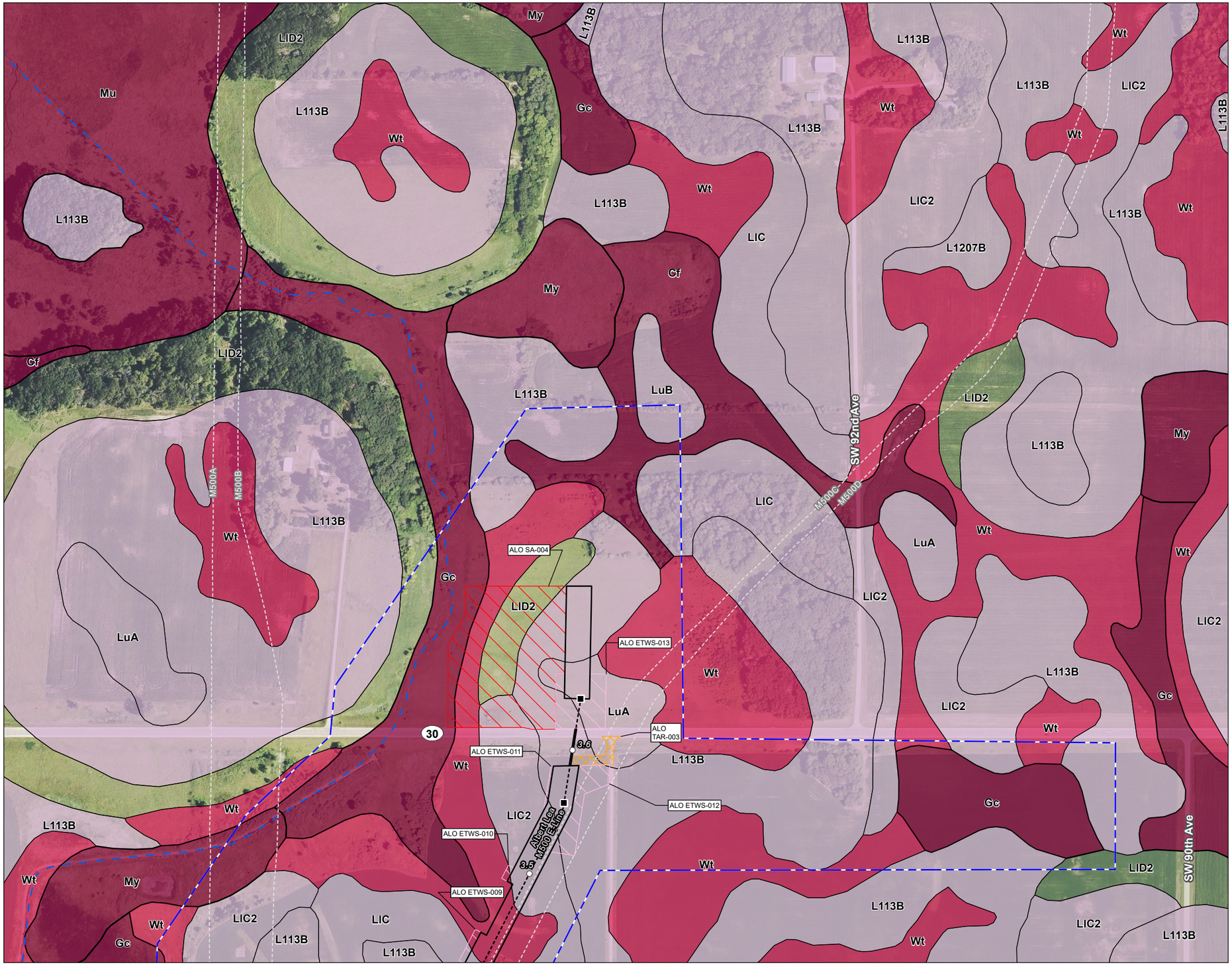


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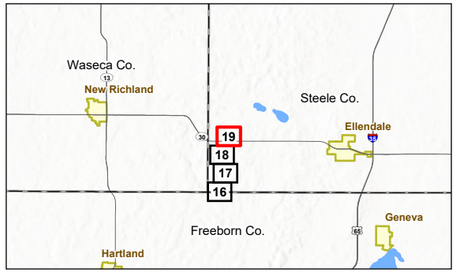
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Northern Natural Gas

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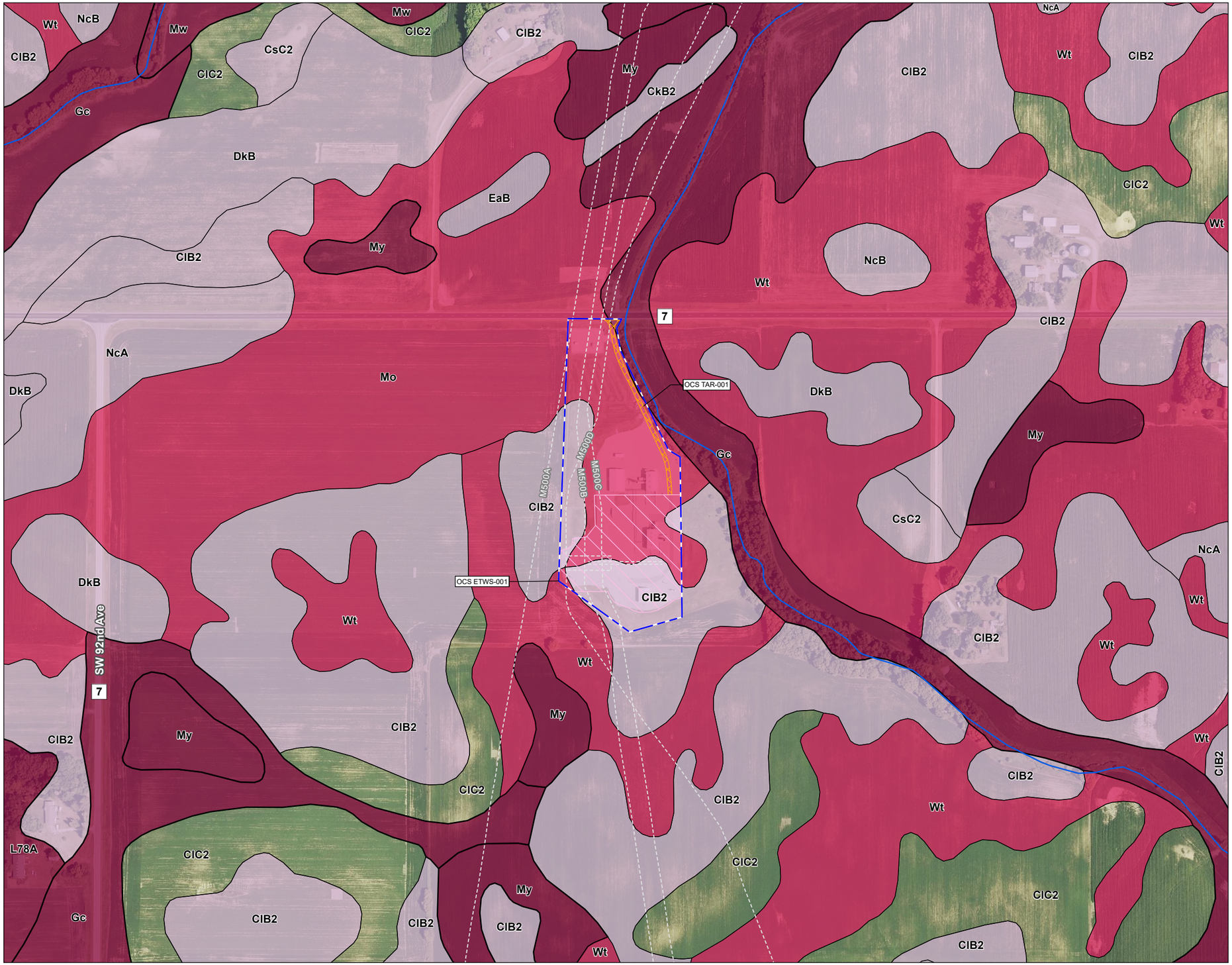


Figure No.

7-1

Title

NRCS Soil Series Map
V2F - Temporary Compression Site Owatonna Compressor Station

Client/Project 172608813

Northern Natural Gas
Ventura to Farmington A-Line Abandonment & Capacity Replacement Project

Project Location
Steele County, Minnesota

Prepared by JM on 2025-10-06
TR by JL on 2025-10-27
IR by SK on 2026-01-28

N

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(At original document size of 11x17)
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Legend

- Environmental Survey Boundary
- Extra Temporary Workspace
- Temporary Access Road
- Existing Pipeline

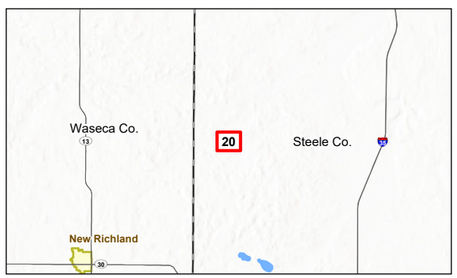
NRCS Soil Survey Data

Hydric Soil Rating

- Hydric
- Predominantly Hydric
- Partially Hydric
- Predominantly Non-Hydric
- Non-Hydric

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Ephemeral Stream
- Canal/Ditch
- Waterbody



Notes
1. Coordinate System: NAD 1983 UTM Zone 15N
2. Data Sources: Stantec, NNG, Esri, USCB, USGS, NRCS
3. Background: 2023 NAIP

Stantec

Northern Natural Gas

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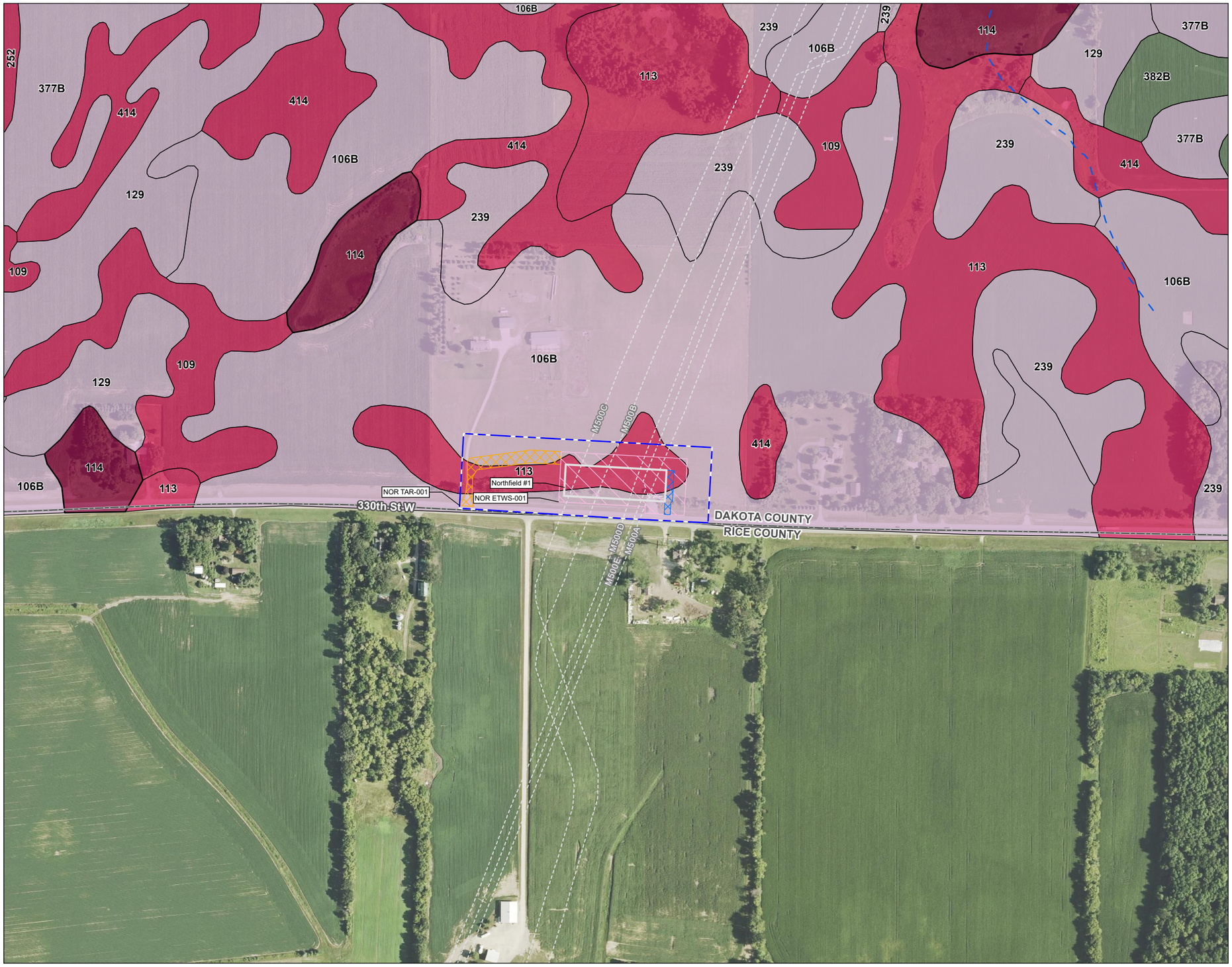


Figure No.
7-1

Title
NRCS Soil Series Map
V2F - Temporary Compression Site Northfield #1

Client/Project 172608813
Northern Natural Gas
Ventura to Farmington A-Line Abandonment & Capacity Replacement Project

Project Location
Dakota County, Minnesota

Prepared by JM on 2025-10-06
TR by JL on 2025-10-27
IR by SK on 2026-01-28

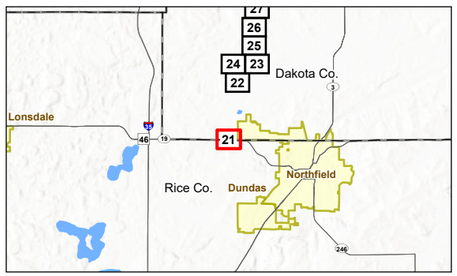
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Legend
- Environmental Survey Boundary
- Existing Lot
- Existing Access Road
- Extra Temporary Workspace
- Temporary Access Road
- Existing Pipeline

NRCS Soil Survey Data
Hydric Soil Rating
- Hydric
- Predominantly Hydric
- Partially Hydric
- Predominantly Non-Hydric
- Non-Hydric

National Hydrography Dataset
- Perennial Stream
- Intermittent Stream
- Ephemeral Stream
- Canal/Ditch
- Waterbody



Notes
1. Coordinate System: NAD 1983 UTM Zone 15N
2. Data Sources: Stantec, NNG, Esri, USCB, USGS, NRCS
3. Background: 2023 NAIP

Stantec

Northern Natural Gas

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Figure No.
7-1

Title
NRCS Soil Series Map
V2F - Faribault M500 D-Line

Client/Project 172608813
Northern Natural Gas
Ventura to Farmington A-Line Abandonment & Capacity Replacement Project

Project Location
Dakota County, Minnesota

Prepared by JM on 2025-10-06
TR by JL on 2025-10-27
IR by SK on 2026-01-28

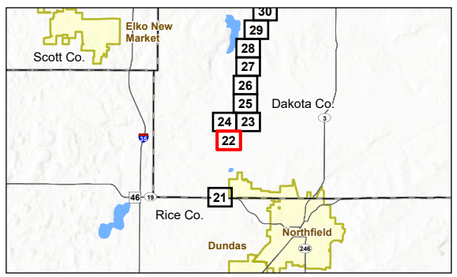
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(At original document size of 11x17)
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Legend
- Environmental Survey Boundary
- Existing Lot
- Existing Access Road
- Temporary Workspace
- Extra Temporary Workspace
- Staging Area
- Temporary Access Road
- Mile Post
- Proposed Pipeline
- Existing Pipeline

NRCS Soil Survey Data
Hydric Soil Rating
- Hydric
- Predominantly Hydric
- Partially Hydric
- Predominantly Non-Hydric
- Non-Hydric

National Hydrography Dataset
- Perennial Stream
- Intermittent Stream
- Ephemeral Stream
- Canal/Ditch
- Waterbody



Notes
1. Coordinate System: NAD 1983 UTM Zone 15N
2. Data Sources: Stantec, NNG, Esri, USCB, USGS, NRCS
3. Background: 2023 NAIP

Stantec
Northern Natural Gas

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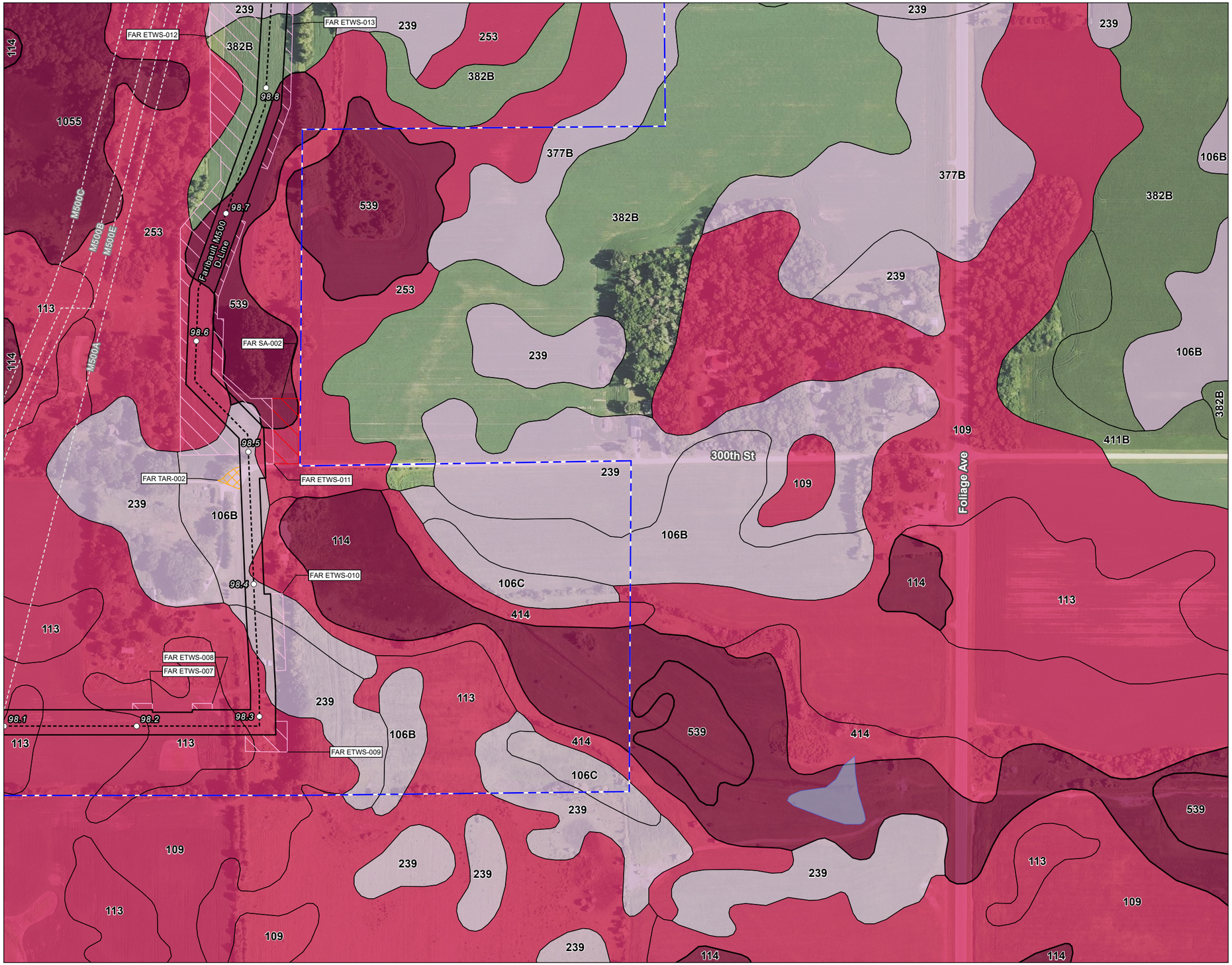


Figure No.
7-1

Title
NRCS Soil Series Map
V2F - Faribault M500 D-Line

Client/Project 172608813
Northern Natural Gas
Ventura to Farmington A-Line Abandonment & Capacity Replacement Project

Project Location
Dakota County, Minnesota

Prepared by JM on 2025-10-06
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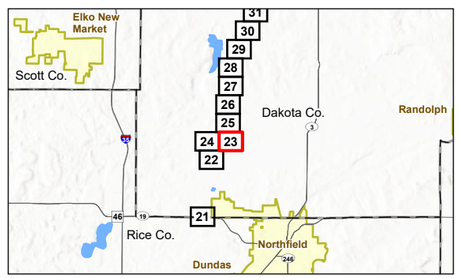
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Legend
- Environmental Survey Boundary
- Temporary Workspace
- Extra Temporary Workspace
- Staging Area
- Temporary Access Road
- Mile Post
- Proposed Pipeline
- Existing Pipeline

NRCS Soil Survey Data
Hydric Soil Rating
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- Partially Hydric
- Predominantly Non-Hydric
- Non-Hydric

National Hydrography Dataset
- Perennial Stream
- Intermittent Stream
- Ephemeral Stream
- Canal/Ditch
- Waterbody



Notes
1. Coordinate System: NAD 1983 UTM Zone 15N
2. Data Sources: Stantec, NNG, Esri, USCB, USGS, NRCS
3. Background: 2023 NAIP

Stantec
Northern Natural Gas

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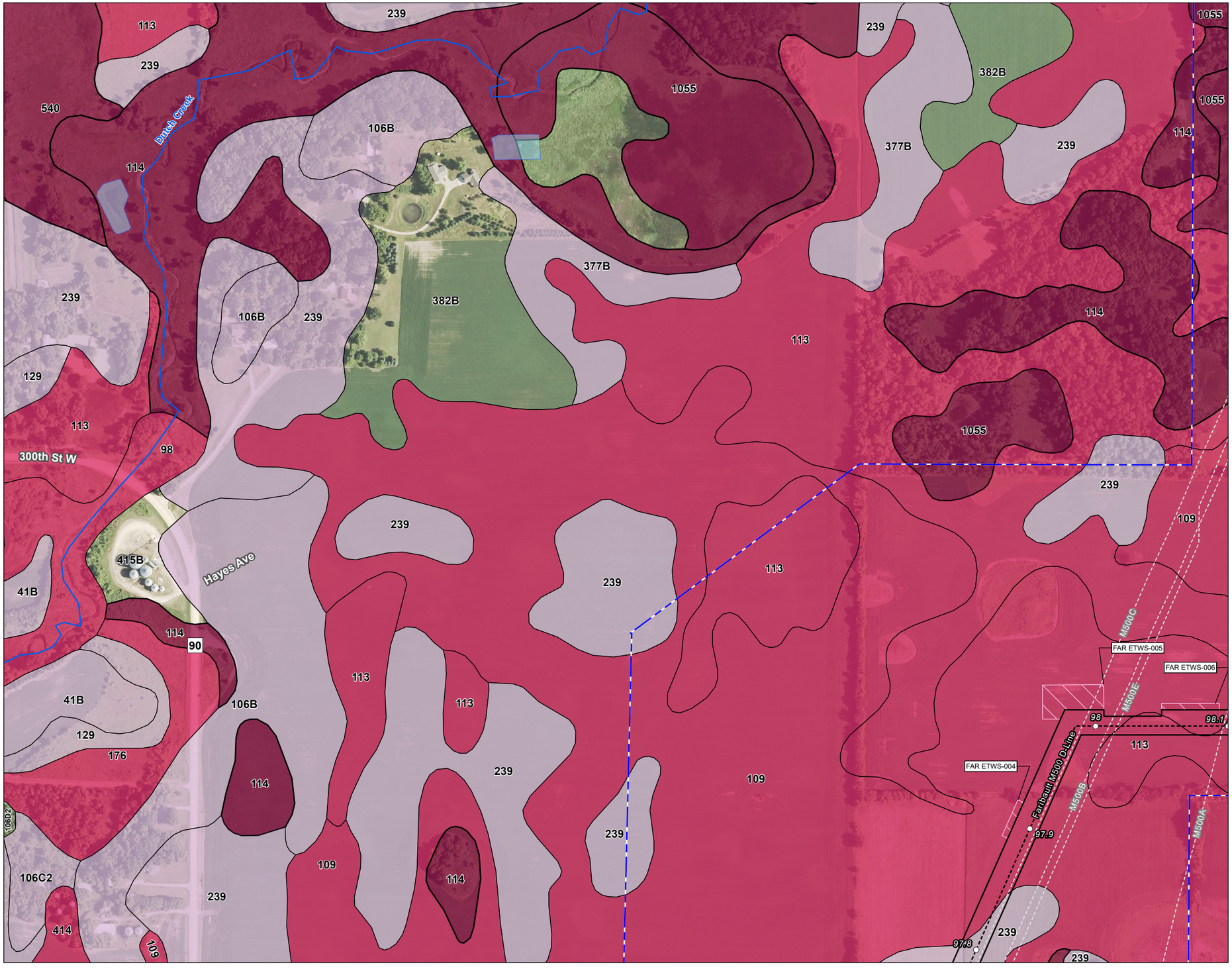


Figure No.

7-1

Title

NRCS Soil Series Map
V2F - Faribault M500 D-Line

Client/Project 172608813

Northern Natural Gas
Ventura to Farmington A-Line Abandonment & Capacity Replacement Project

Project Location
Dakota County, Minnesota

Prepared by JM on 2025-10-06
TR by JL on 2025-10-27
IR by SK on 2026-01-28

N

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(At original document size of 11x17)
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Legend

- Environmental Survey Boundary
- Temporary Workspace
- Extra Temporary Workspace
- Mile Post
- Proposed Pipeline
- Existing Pipeline

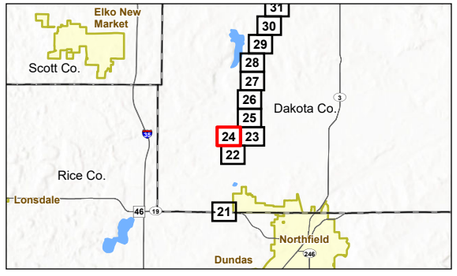
NRCS Soil Survey Data

Hydric Soil Rating

- Hydric
- Predominantly Hydric
- Partially Hydric
- Predominantly Non-Hydric
- Non-Hydric

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Ephemeral Stream
- Canal/Ditch
- Waterbody



Notes
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2. Data Sources: Stantec, NNG, Esri, USCB, USGS, NRCS
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Stantec

Northern Natural Gas

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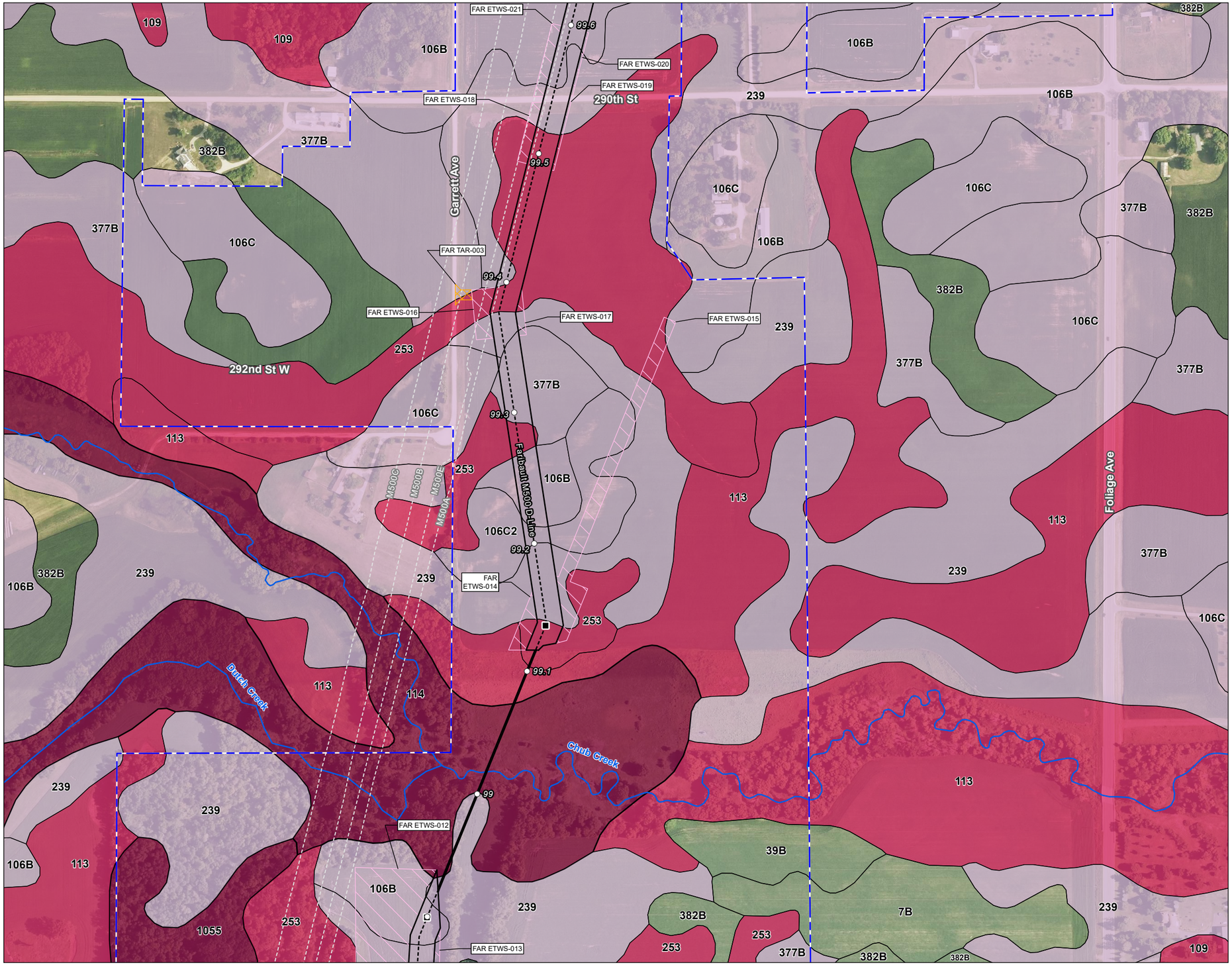


Figure No.
7-1

Title
NRCS Soil Series Map
V2F - Faribault M500 D-Line

Client/Project 172608813
Northern Natural Gas
Ventura to Farmington A-Line Abandonment & Capacity Replacement Project

Project Location
Dakota County, Minnesota

Prepared by JM on 2025-10-06
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IR by SK on 2026-01-28

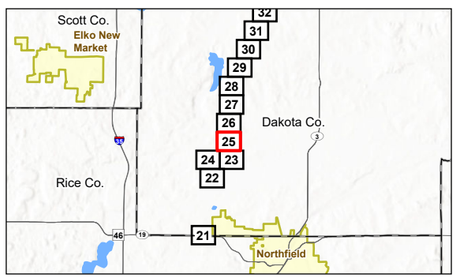
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Legend
- Environmental Survey Boundary
- Temporary Workspace
- Extra Temporary Workspace
- Temporary Access Road
- Mile Post
- HDD
- Proposed Pipeline
- Existing Pipeline

NRCS Soil Survey Data
Hydric Soil Rating
- Hydric
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- Non-Hydric

National Hydrography Dataset
- Perennial Stream
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- Ephemeral Stream
- Canal/Ditch
- Waterbody



Notes
1. Coordinate System: NAD 1983 UTM Zone 15N
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3. Background: 2023 NAIP

Stantec
Northern Natural Gas

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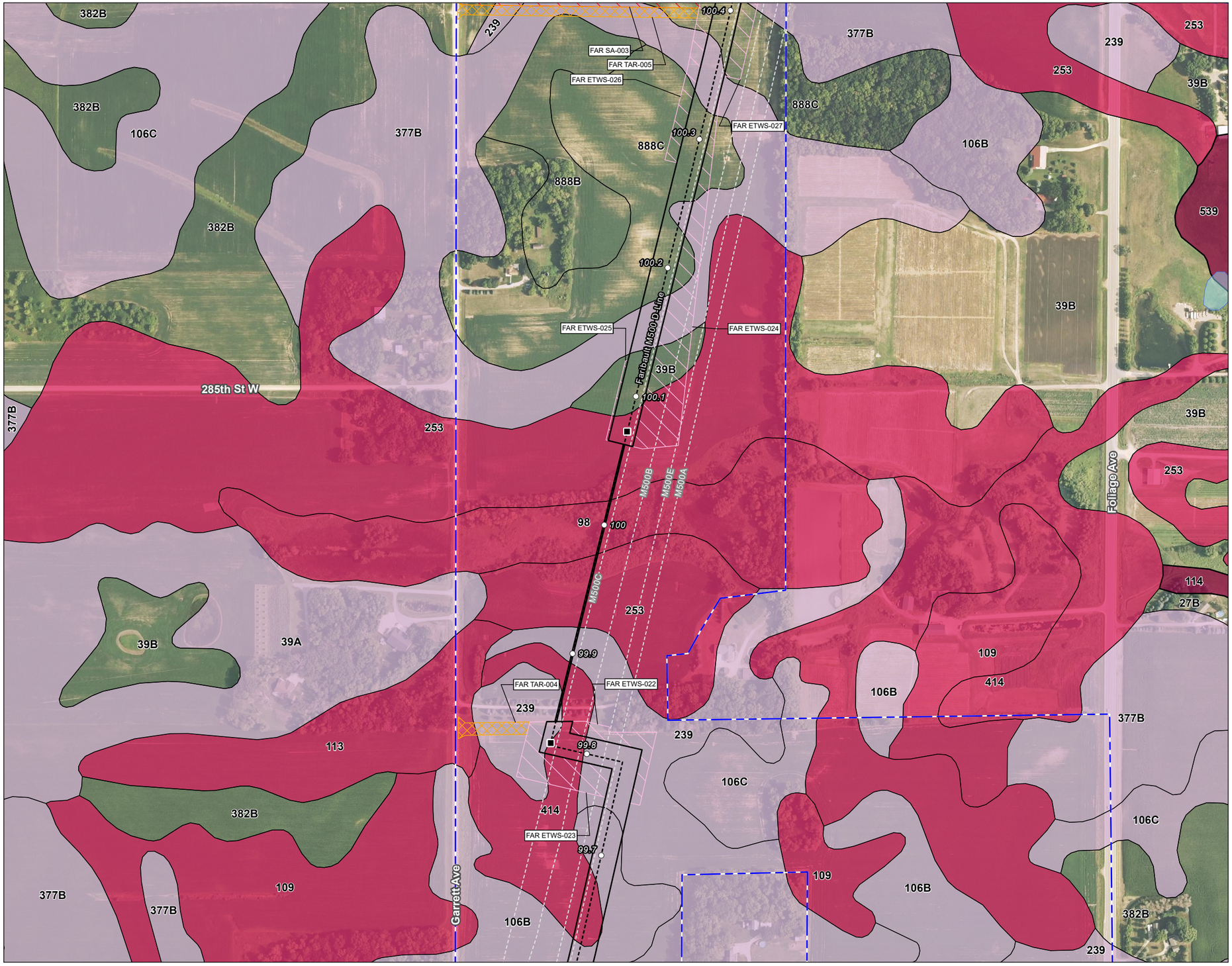


Figure No.
7-1

Title
NRCS Soil Series Map
V2F - Faribault M500 D-Line

Client/Project 172608813
Northern Natural Gas
Ventura to Farmington A-Line Abandonment & Capacity Replacement Project

Project Location
Dakota County, Minnesota

Prepared by JM on 2025-10-06
TR by JL on 2025-10-27
IR by SK on 2026-01-28

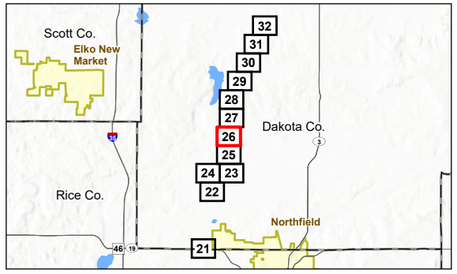
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Legend
- Environmental Survey Boundary
- Temporary Workspace
- Extra Temporary Workspace
- Staging Area
- Temporary Access Road
- Mile Post
- HDD
- Proposed Pipeline
- Existing Pipeline

NRCS Soil Survey Data
Hydric Soil Rating
- Hydric
- Predominantly Hydric
- Partially Hydric
- Predominantly Non-Hydric
- Non-Hydric

National Hydrography Dataset
- Perennial Stream
- Intermittent Stream
- Ephemeral Stream
- Canal/Ditch
- Waterbody



Notes
1. Coordinate System: NAD 1983 UTM Zone 15N
2. Data Sources: Stantec, NNG, Esri, USCB, USGS, NRCS
3. Background: 2023 NAIP

Stantec
Northern Natural Gas

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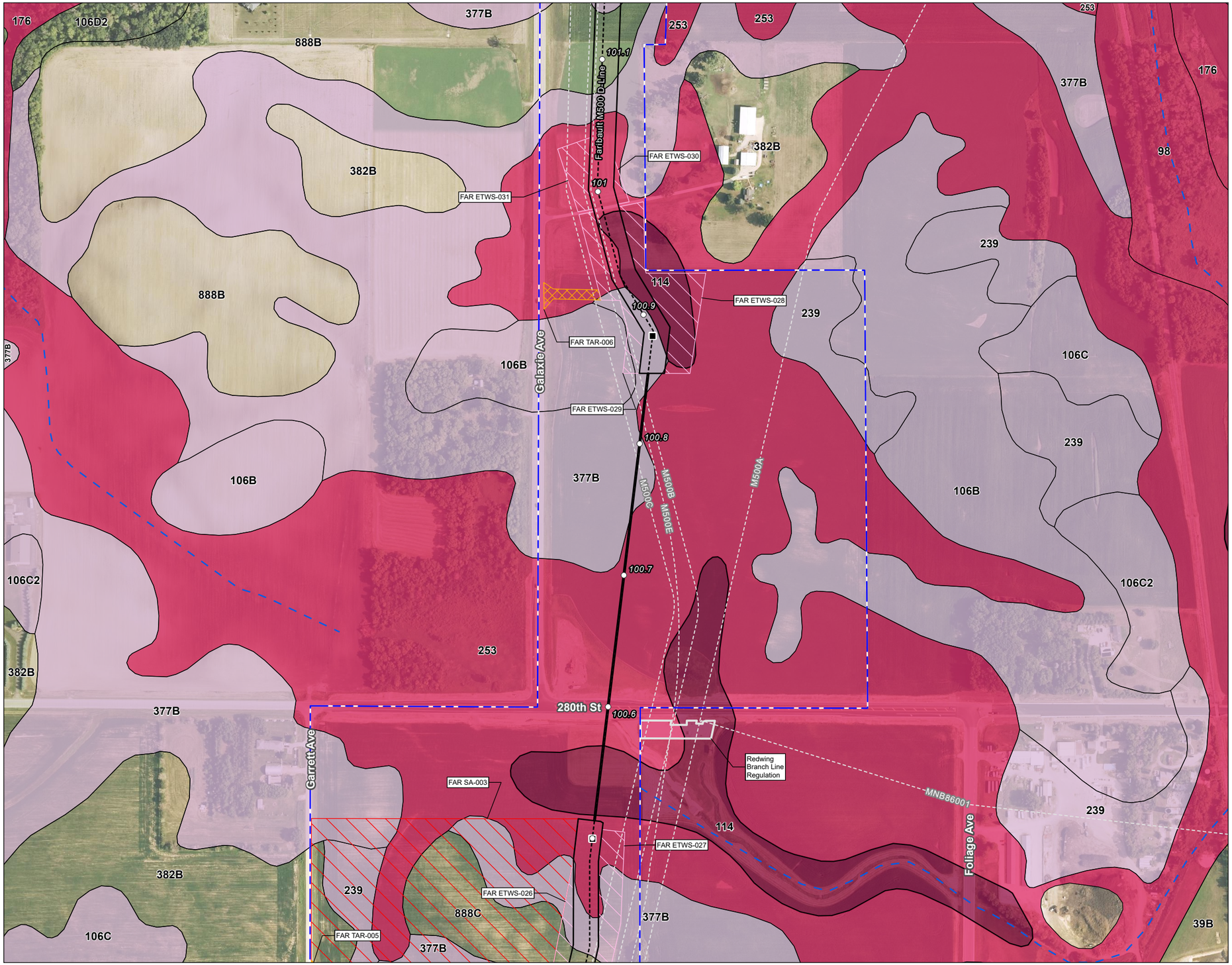


Figure No.

7-1

Title

NRCS Soil Series Map
V2F - Faribault M500 D-Line

Client/Project 172608813

Northern Natural Gas
Ventura to Farmington A-Line Abandonment & Capacity Replacement Project

Project Location
Dakota County, Minnesota

Prepared by JM on 2025-10-06
TR by JL on 2025-10-27
IR by SK on 2026-01-28

N

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(At original document size of 11x17)
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Legend

- Environmental Survey Boundary
- Existing Lot
- Temporary Workspace
- Extra Temporary Workspace
- Staging Area
- Temporary Access Road
- Mile Post
- HDD
- Proposed Pipeline
- Existing Pipeline

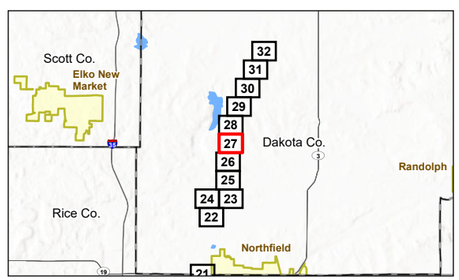
NRCS Soil Survey Data

Hydric Soil Rating

- Hydric
- Predominantly Hydric
- Partially Hydric
- Predominantly Non-Hydric
- Non-Hydric

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Ephemeral Stream
- Canal/Ditch
- Waterbody



Notes
1. Coordinate System: NAD 1983 UTM Zone 15N
2. Data Sources: Stantec, NNG, Esri, USCB, USGS, NRCS
3. Background: 2023 NAIP

Stantec

Northern Natural Gas

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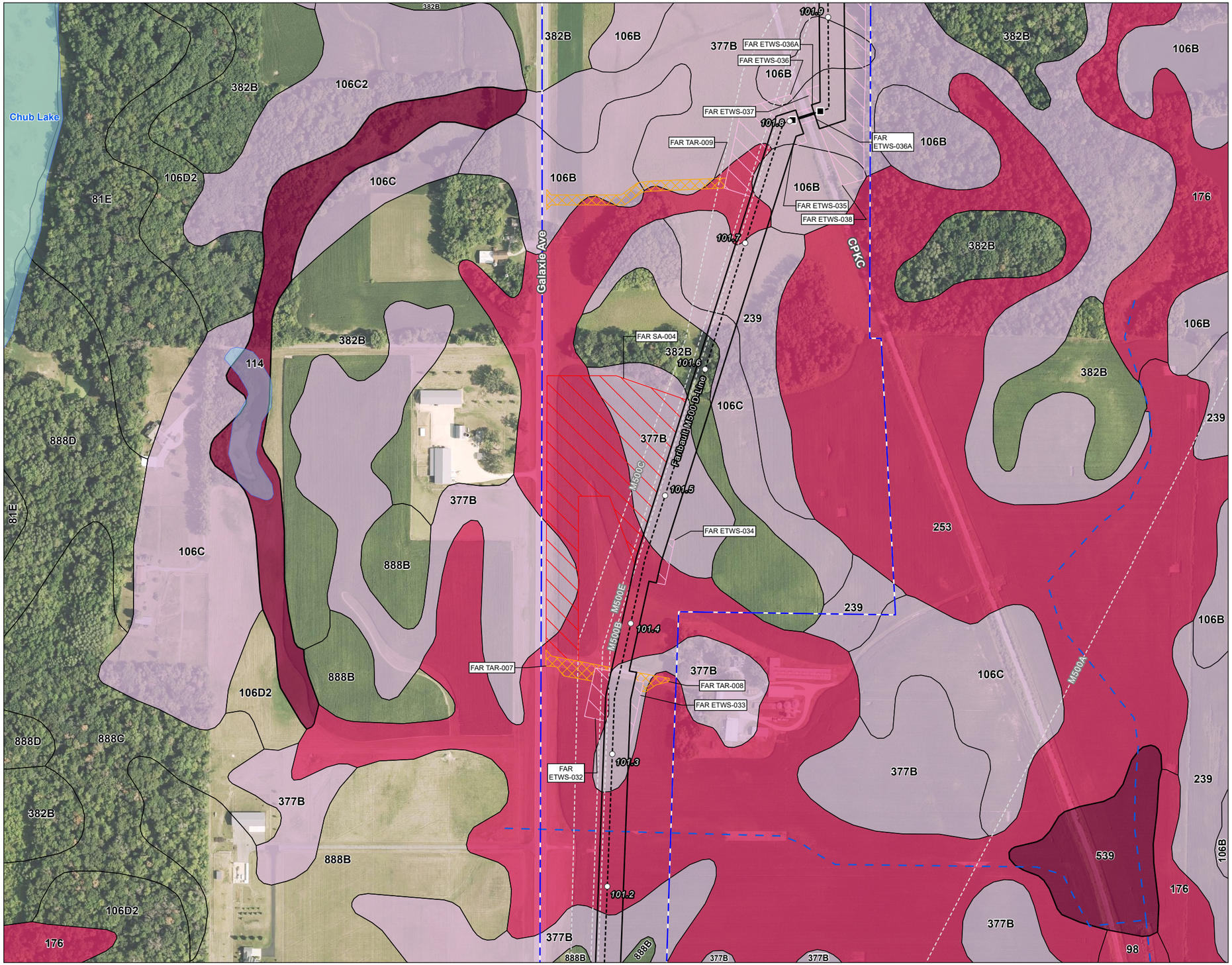


Figure No.

7-1

Title

NRCS Soil Series Map
V2F - Faribault M500 D-Line

Client/Project 172608813

Northern Natural Gas
Ventura to Farmington A-Line Abandonment & Capacity Replacement Project

Project Location
Dakota County, Minnesota

Prepared by JM on 2025-10-06
TR by JL on 2025-10-27
IR by SK on 2026-01-28

N

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(At original document size of 11x17)
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Legend

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- Existing Pipeline

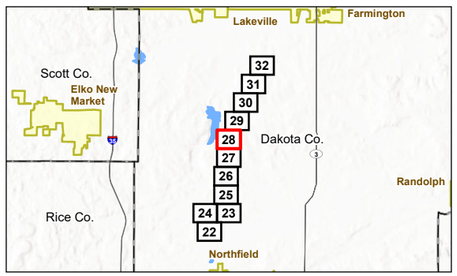
NRCS Soil Survey Data

Hydric Soil Rating

- Hydric
- Predominantly Hydric
- Partially Hydric
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- Non-Hydric

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
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- Waterbody



Notes
1. Coordinate System: NAD 1983 UTM Zone 15N
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3. Background: 2023 NAIP

Stantec

Northern Natural Gas

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Figure No.

7-1

Title

NRCS Soil Series Map
V2F - Faribault M500 D-Line

Client/Project 172608813

Northern Natural Gas
Ventura to Farmington A-Line Abandonment & Capacity Replacement Project

Project Location
Dakota County, Minnesota

Prepared by JM on 2025-10-06
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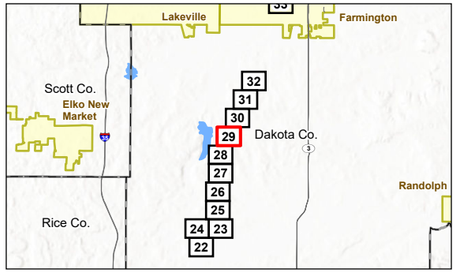
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Legend
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- Temporary Workspace
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- Temporary Access Road
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- Proposed Pipeline
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NRCS Soil Survey Data
Hydric Soil Rating
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National Hydrography Dataset
- Perennial Stream
- Intermittent Stream
- Ephemeral Stream
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- Waterbody



Notes
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Stantec

Northern Natural Gas

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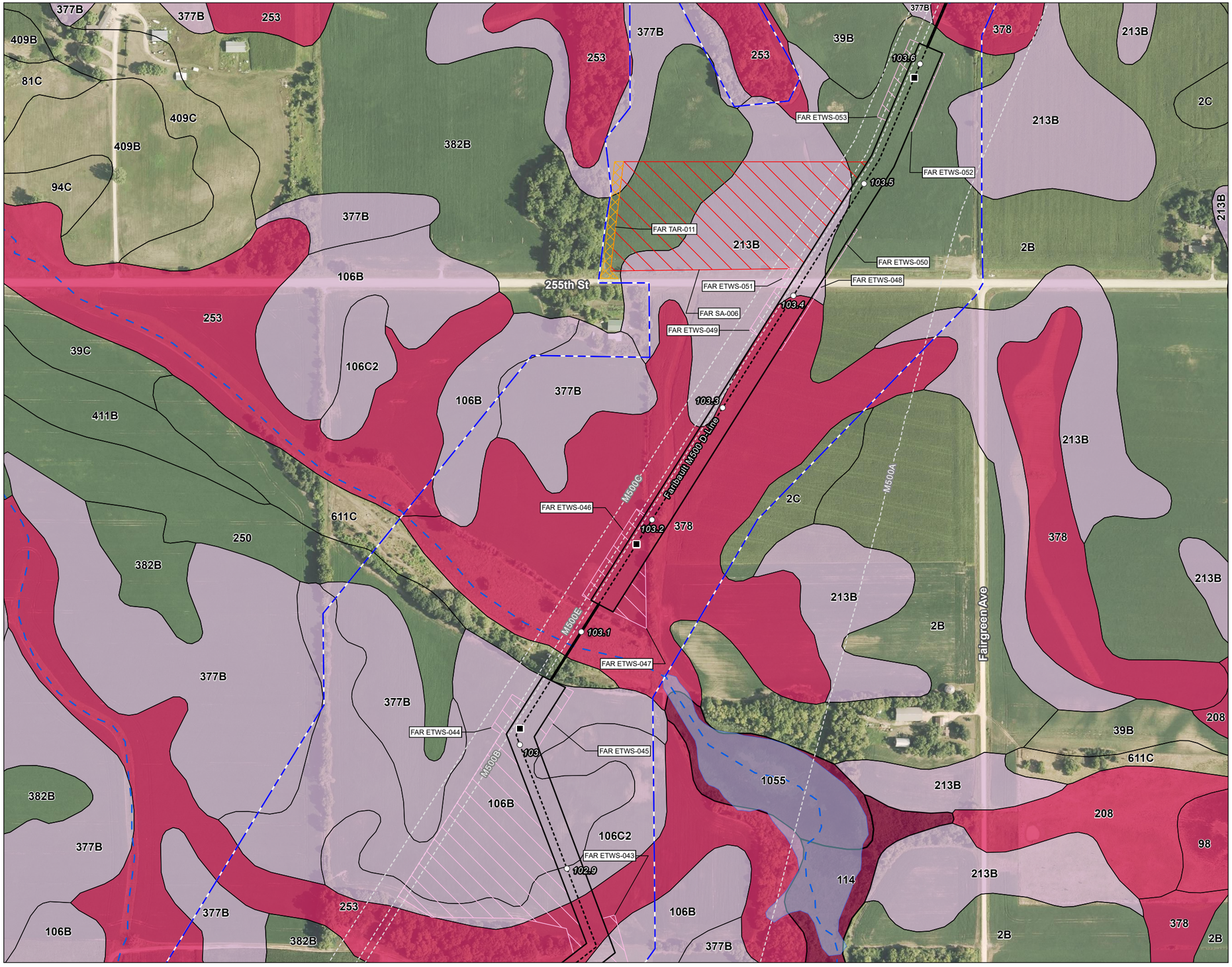


Figure No.

7-1

Title

NRCS Soil Series Map
V2F - Faribault M500 D-Line

Client/Project 172608813

Northern Natural Gas
Ventura to Farmington A-Line Abandonment & Capacity Replacement Project

Project Location
Dakota County, Minnesota

Prepared by JM on 2025-10-06
TR by JL on 2025-10-27
IR by SK on 2026-01-28

N

0 200 400 Feet
(At original document size of 11x17)
1:4,800

Legend

- Environmental Survey Boundary
- Temporary Workspace
- Extra Temporary Workspace
- Staging Area
- Temporary Access Road
- Mile Post
- HDD
- Proposed Pipeline
- Existing Pipeline

NRCS Soil Survey Data

Hydric Soil Rating

- Hydric
- Predominantly Hydric
- Partially Hydric
- Predominantly Non-Hydric
- Non-Hydric

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Ephemeral Stream
- Canal/Ditch
- Waterbody

Notes

1. Coordinate System: NAD 1983 UTM Zone 15N
2. Data Sources: Stantec, NNG, Esri, USCB, USGS, NRCS
3. Background: 2023 NAIP

Stantec

Northern Natural Gas

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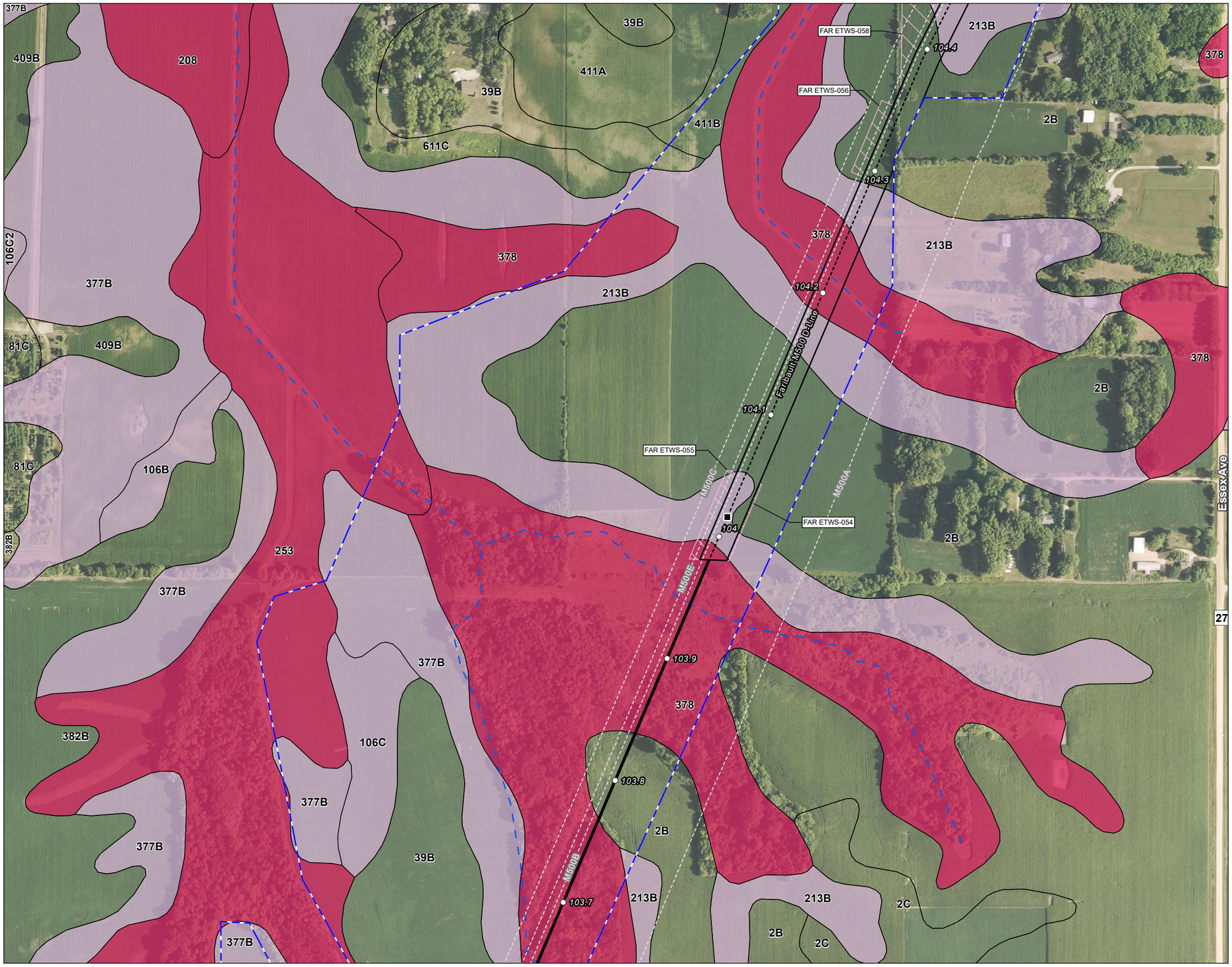


Figure No.

7-1

Title

NRCS Soil Series Map
V2F - Faribault M500 D-Line

Client/Project 172608813

Northern Natural Gas
Ventura to Farmington A-Line Abandonment & Capacity Replacement Project

Project Location
Dakota County, Minnesota

Prepared by JM on 2025-10-06
TR by JL on 2025-10-27
IR by SK on 2026-01-28

N

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(At original document size of 11x17)
1:4,800

Legend

- Environmental Survey Boundary
- Temporary Workspace
- Extra Temporary Workspace
- Mile Post
- HDD
- Proposed Pipeline
- Existing Pipeline

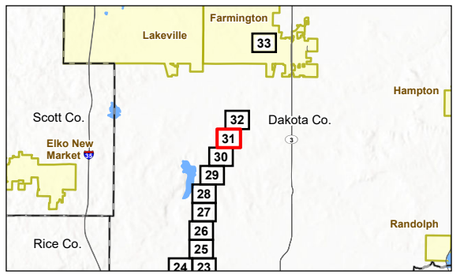
NRCS Soil Survey Data

Hydric Soil Rating

- Hydric
- Predominantly Hydric
- Partially Hydric
- Predominantly Non-Hydric
- Non-Hydric

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Ephemeral Stream
- Canal/Ditch
- Waterbody



Notes
1. Coordinate System: NAD 1983 UTM Zone 15N
2. Data Sources: Stantec, NNG, Esri, USCB, USGS, NRCS
3. Background: 2023 NAIP

Stantec

Northern Natural Gas

U:\172601\172608813\03_data\gis_cad\gis\ArcPro\172608813_NNG_VenturaFarmington_ResourceReports\172608813_NNG_VenturaFarmington_ResourceReports.aprx Revised: 2026-01-29 By: jmarty

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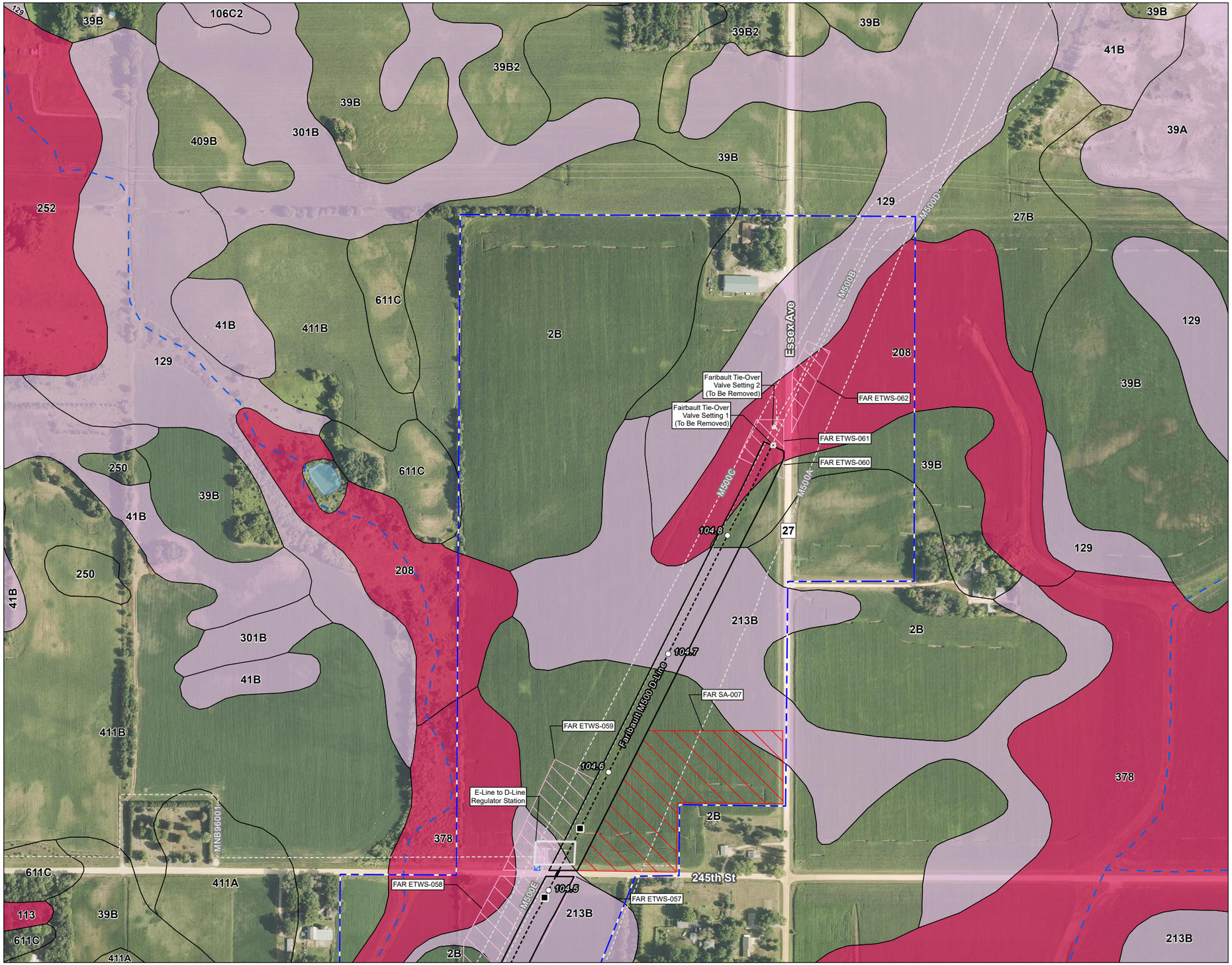


Figure No.

7-1

Title

NRCS Soil Series Map
V2F - Faribault M500 D-Line

Client/Project 172608813

Northern Natural Gas
Ventura to Farmington A-Line Abandonment & Capacity Replacement Project

Project Location
Dakota County, Minnesota

Prepared by JM on 2025-10-06
TR by JL on 2025-10-27
IR by SK on 2026-01-28

N

0 200 400 Feet
(At original document size of 11x17)
1:4,800

Legend

- Environmental Survey Boundary
- Existing Lot
- Existing Access Road
- Temporary Workspace
- Extra Temporary Workspace
- Staging Area
- Mile Post
- HDD
- Proposed Pipeline
- Existing Pipeline

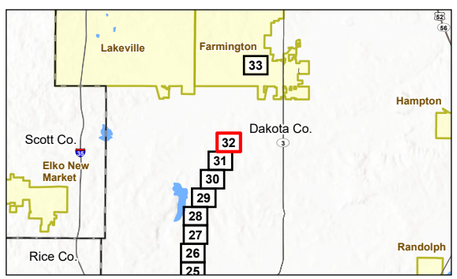
NRCS Soil Survey Data

Hydric Soil Rating

- Hydric
- Predominantly Hydric
- Partially Hydric
- Predominantly Non-Hydric
- Non-Hydric

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Ephemeral Stream
- Canal/Ditch
- Waterbody



Notes
1. Coordinate System: NAD 1983 UTM Zone 15N
2. Data Sources: Stantec, NNG, Esri, USCB, USGS, NRCS
3. Background: 2023 NAIP

Stantec

Northern Natural Gas

U:\172611\172608813\03_data\gis_cad\gis\ArcPro\172608813_NNG_VenturaFarmington_ResourceReports\172608813_NNG_VenturaFarmington_ResourceReports.aprx Revised: 2026-01-29 By: jmarty

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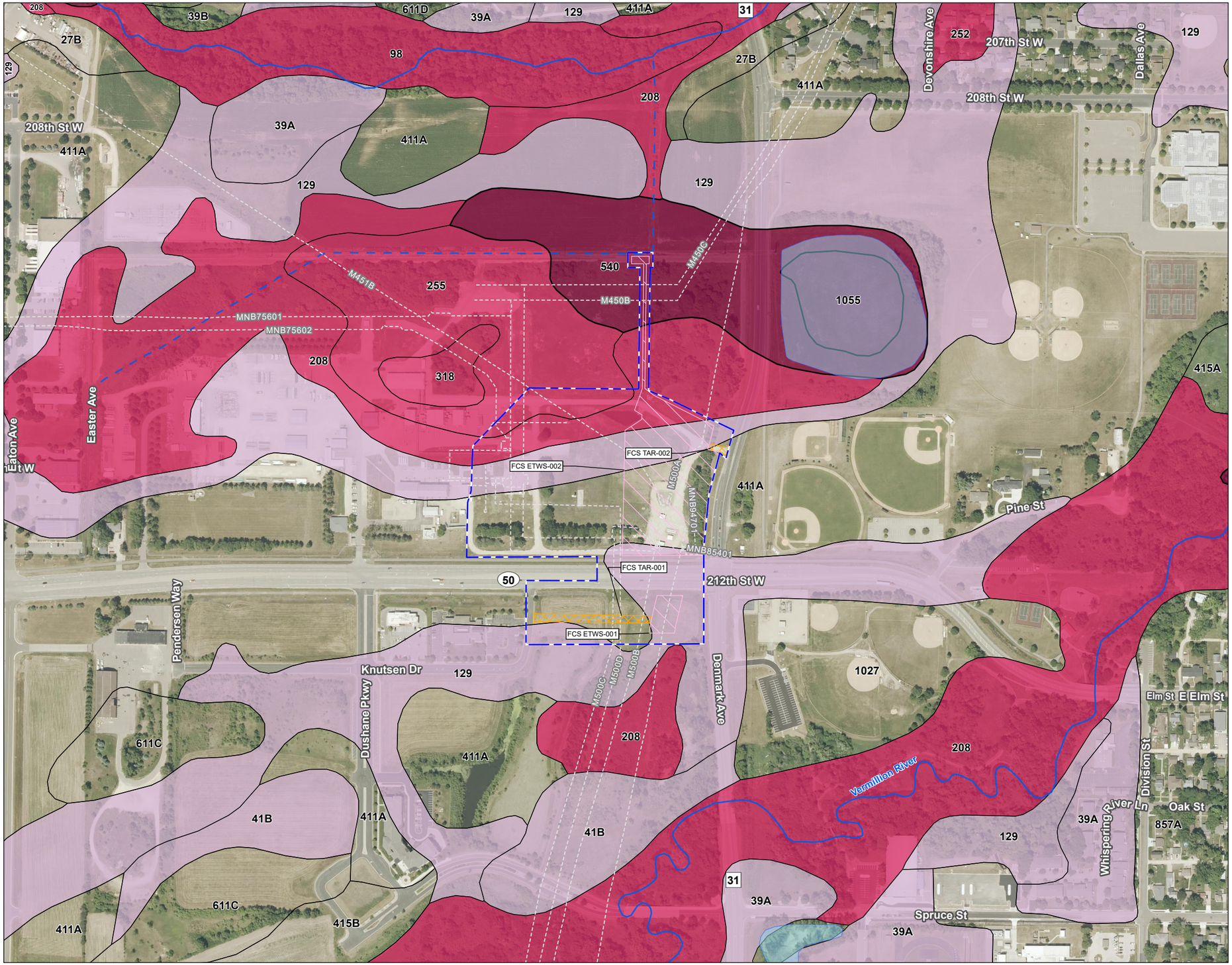


Figure No.

7-1

Title

NRCS Soil Series Map
V2F - Disconnect Site for A-Line Abandonment
Farmington Compressor Station

Client/Project 172608813

Northern Natural Gas
Ventura to Farmington A-Line Abandonment & Capacity Replacement Project

Project Location
Dakota County, Minnesota

Prepared by JM on 2025-10-06
TR by JL on 2025-10-27
IR by SK on 2026-01-28

N

0 200 400 Feet
(At original document size of 11x17)
1:4,800

Legend

- Environmental Survey Boundary
- Extra Temporary Workspace
- Temporary Access Road
- Existing Pipeline

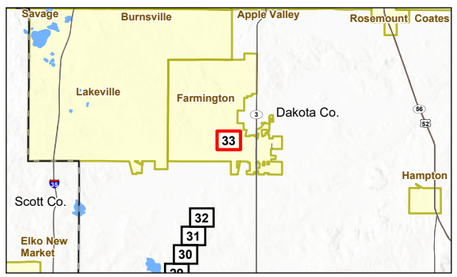
NRCS Soil Survey Data

Hydric Soil Rating

- Hydric
- Predominantly Hydric
- Partially Hydric
- Predominantly Non-Hydric
- Non-Hydric

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Ephemeral Stream
- Canal/Ditch
- Waterbody



Notes
1. Coordinate System: NAD 1983 UTM Zone 15N
2. Data Sources: Stantec, NNG, Esri, USCB, USGS, NRCS
3. Background: 2023 NAIP

Stantec

Northern Natural Gas

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Figure 7-2
NRCS Soil Series Mapbook for the Project for the NL27 Project

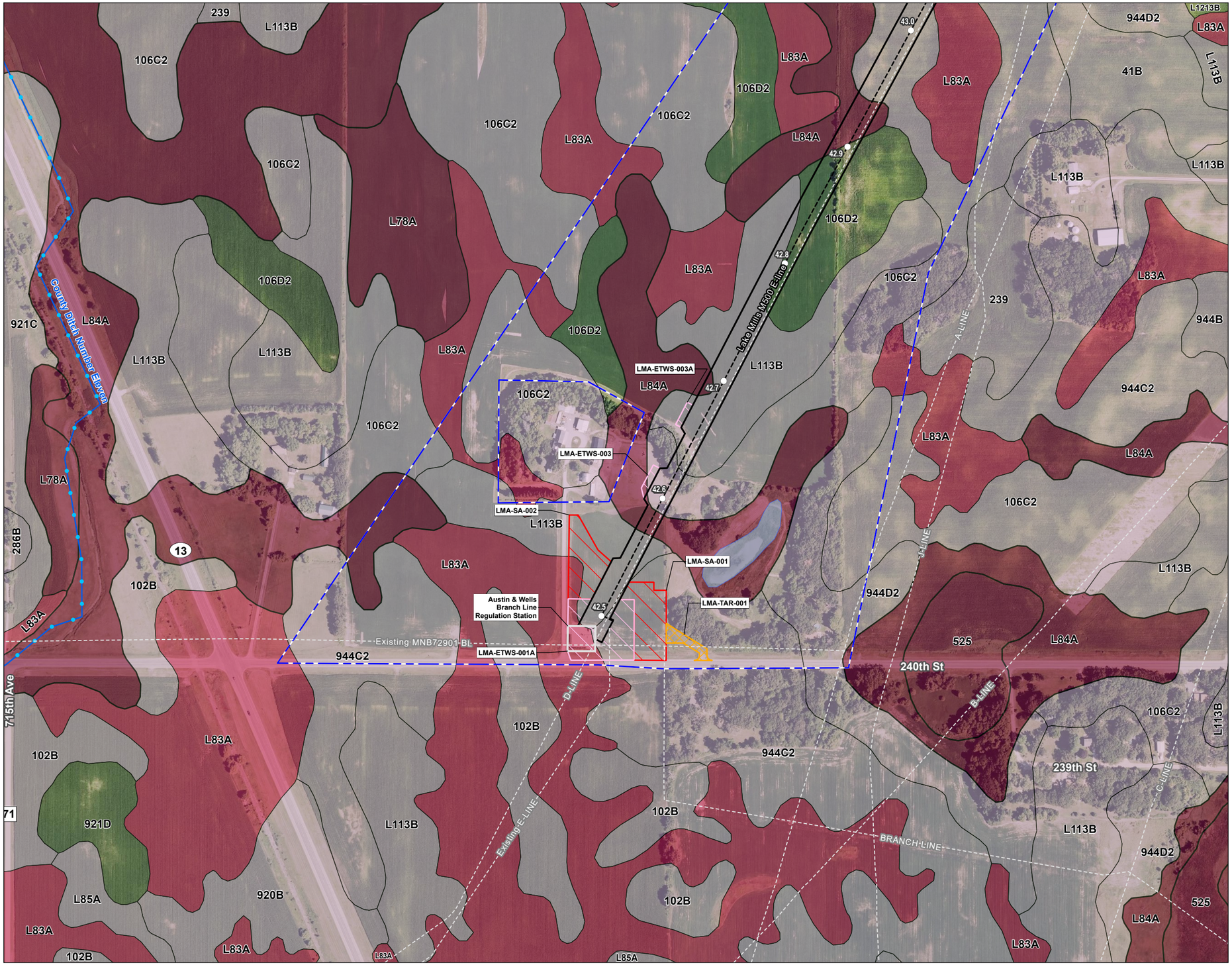


Figure No.

7-2

Title

NRCS Soil Series Map
NL27 - Lake Mills M500 E-line

Client/Project 172609138

Northern Natural Gas
Northern Lights 2027 Expansion Project

Project Location
Freeborn County, Minnesota

Prepared by JM on 2025-12-15
TR by SF on 2026-01-15
IR by SK on 2026-02-04

N

0 200 400 Feet
(At original document size of 11x17)
1:4,800

Legend

- Environmental Survey Boundary
- Existing Facility
- Temporary Workspace
- Extra Temporary Workspace
- Temporary Access Road
- Staging Area
- Proposed Pipeline
- Existing Pipeline
- Mile Post

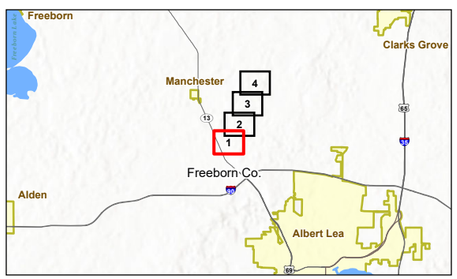
NRCS Soil Survey Data

Hydric Soil Rating

- Hydric
- Predominantly Hydric
- Partially Hydric
- Predominantly Non-Hydric
- Non-Hydric

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



Notes
1. Coordinate System: NAD 1983 UTM Zone 15N
2. Data Sources: Stantec, Northern Natural Gas, Esri, USCB, USGS, NRCS
3. Background: 2023 NAIP

Stantec

Northern Natural Gas

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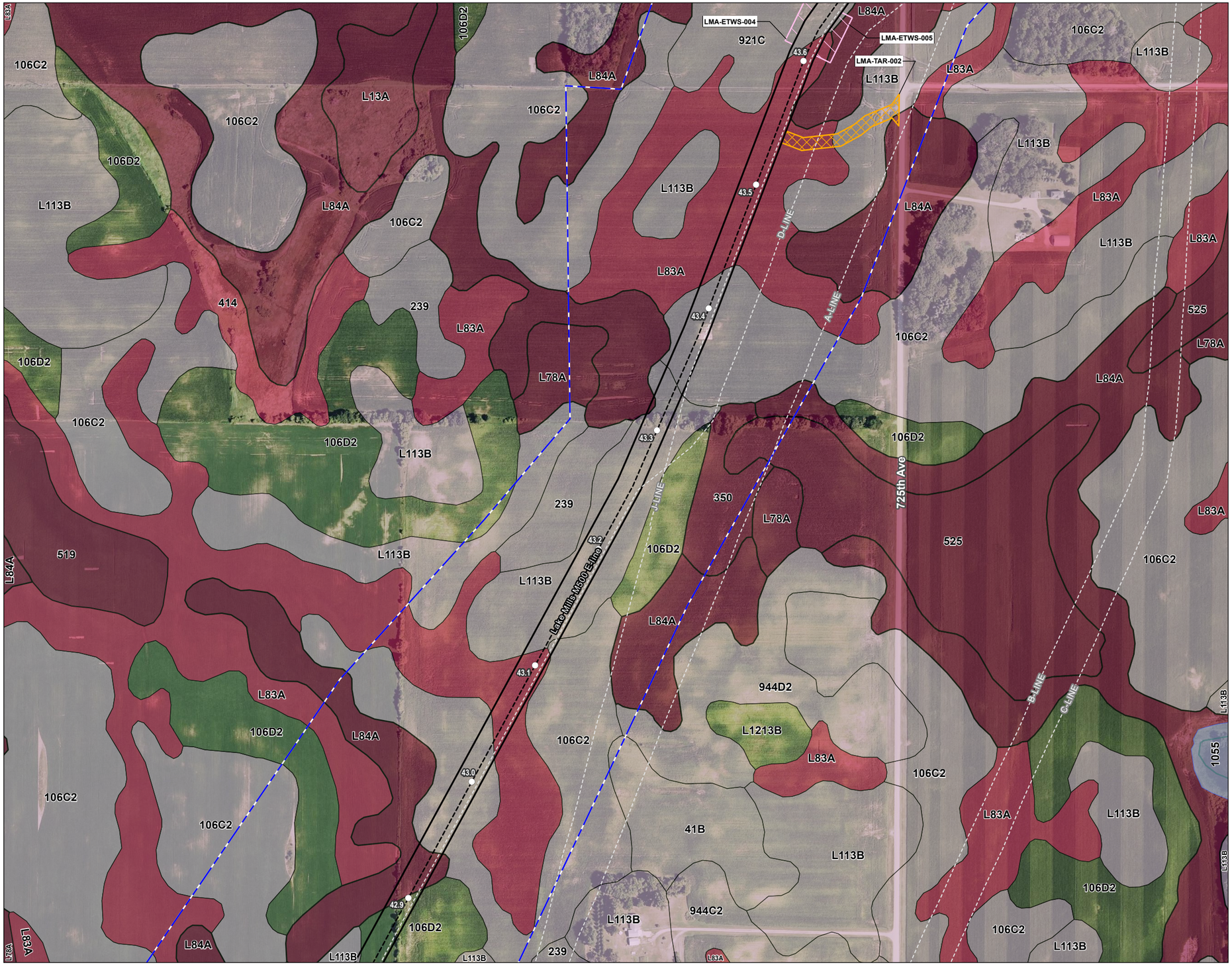


Figure No.

7-2

Title

NRCS Soil Series Map
NL27 - Lake Mills M500 E-line

Client/Project 172609138

Northern Natural Gas
Northern Lights 2027 Expansion Project

Project Location
Freeborn County, Minnesota

Prepared by JM on 2025-12-15
TR by SF on 2026-01-15
IR by SK on 2026-02-04

N

0 200 400 Feet
(At original document size of 11x17)
1:4,800

Legend

- Environmental Survey Boundary
- Temporary Workspace
- Extra Temporary Workspace
- Temporary Access Road
- Proposed Pipeline
- Existing Pipeline
- Mile Post

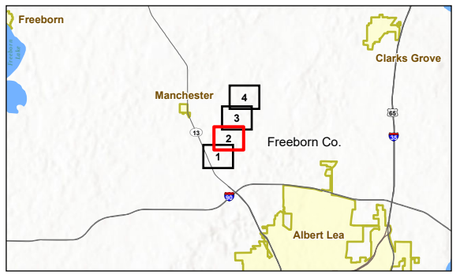
NRCS Soil Survey Data

Hydric Soil Rating

- Hydric
- Predominantly Hydric
- Partially Hydric
- Predominantly Non-Hydric
- Non-Hydric

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



Notes
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2. Data Sources: Stantec, Northern Natural Gas, Esri, USCB, USGS, NRCS
3. Background: 2023 NAIP

Stantec

Northern Natural Gas

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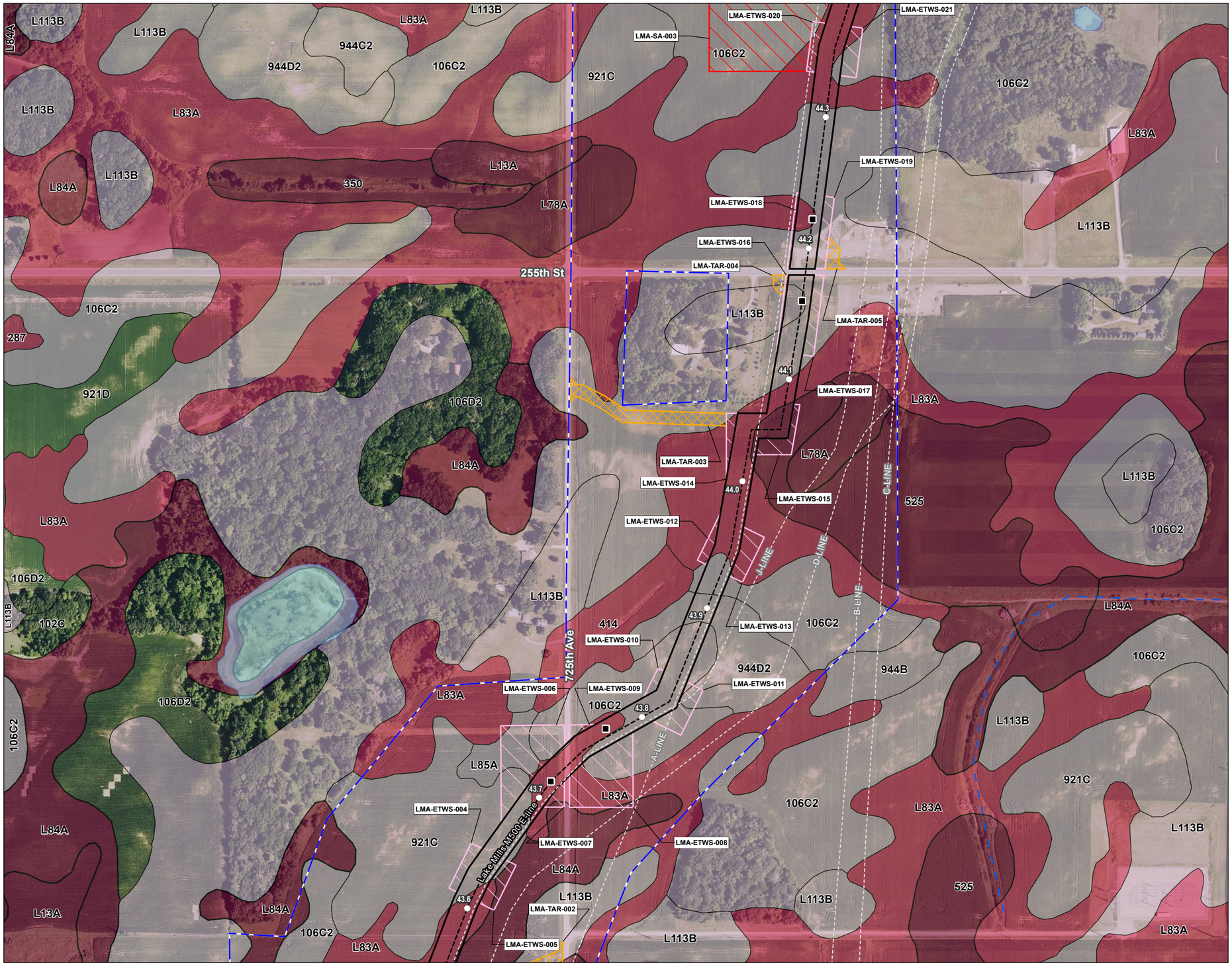


Figure No.

7-2

Title

NRCS Soil Series Map
NL27 - Lake Mills M500 E-line

Client/Project 172609138

Northern Natural Gas
Northern Lights 2027 Expansion Project

Project Location
Freeborn County, Minnesota

Prepared by JM on 2025-12-15
TR by SF on 2026-01-15
IR by SK on 2026-02-04

N

0 200 400 Feet
(At original document size of 11x17)
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Legend

- Environmental Survey Boundary
- Temporary Workspace
- Extra Temporary Workspace
- Temporary Access Road
- Staging Area
- Proposed Pipeline
- Existing Pipeline
- Mile Post
- HDD

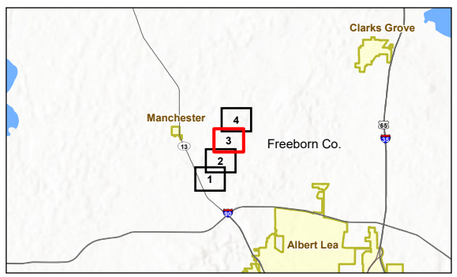
NRCS Soil Survey Data

Hydric Soil Rating

- Hydric
- Predominantly Hydric
- Partially Hydric
- Predominantly Non-Hydric
- Non-Hydric

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



Notes
1. Coordinate System: NAD 1983 UTM Zone 15N
2. Data Sources: Stantec, Northern Natural Gas, Esri, USCB, USGS, NRCS
3. Background: 2023 NAIP

Stantec

Northern Natural Gas

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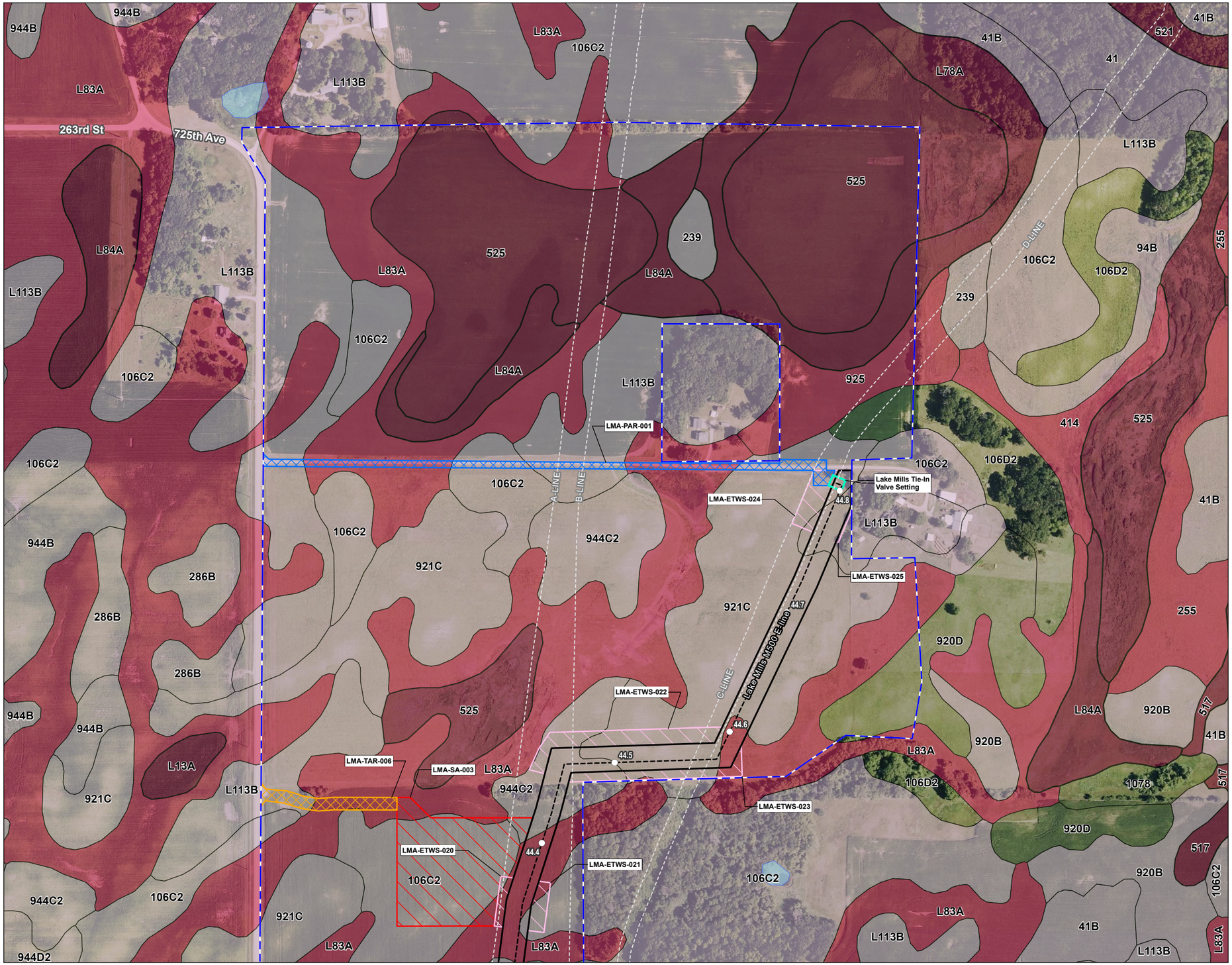


Figure No.

7-2

Title

NRCS Soil Series Map
NL27 - Lake Mills M500 E-line

Client/Project 172609138

Northern Natural Gas
Northern Lights 2027 Expansion Project

Project Location
Freeborn County, Minnesota

Prepared by JM on 2025-12-15
TR by SF on 2026-01-15
IR by SK on 2026-02-04

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(At original document size of 11x17)
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Legend

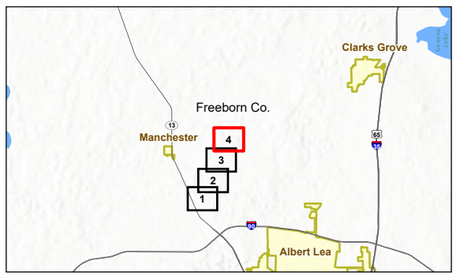
- Environmental Survey Boundary
- Proposed Facility
- Permanent Access Road
- Temporary Workspace
- Extra Temporary Workspace
- Temporary Access Road
- Staging Area
- Proposed Pipeline
- Existing Pipeline
- Mile Post

NRCS Soil Survey Data
Hydric Soil Rating

- Hydric
- Predominantly Hydric
- Partially Hydric
- Predominantly Non-Hydric
- Non-Hydric

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



Notes
1. Coordinate System: NAD 1983 UTM Zone 15N
2. Data Sources: Stantec, Northern Natural Gas, Esri, USCB, USGS, NRCS
3. Background: 2023 NAIP

Stantec

Northern Natural Gas

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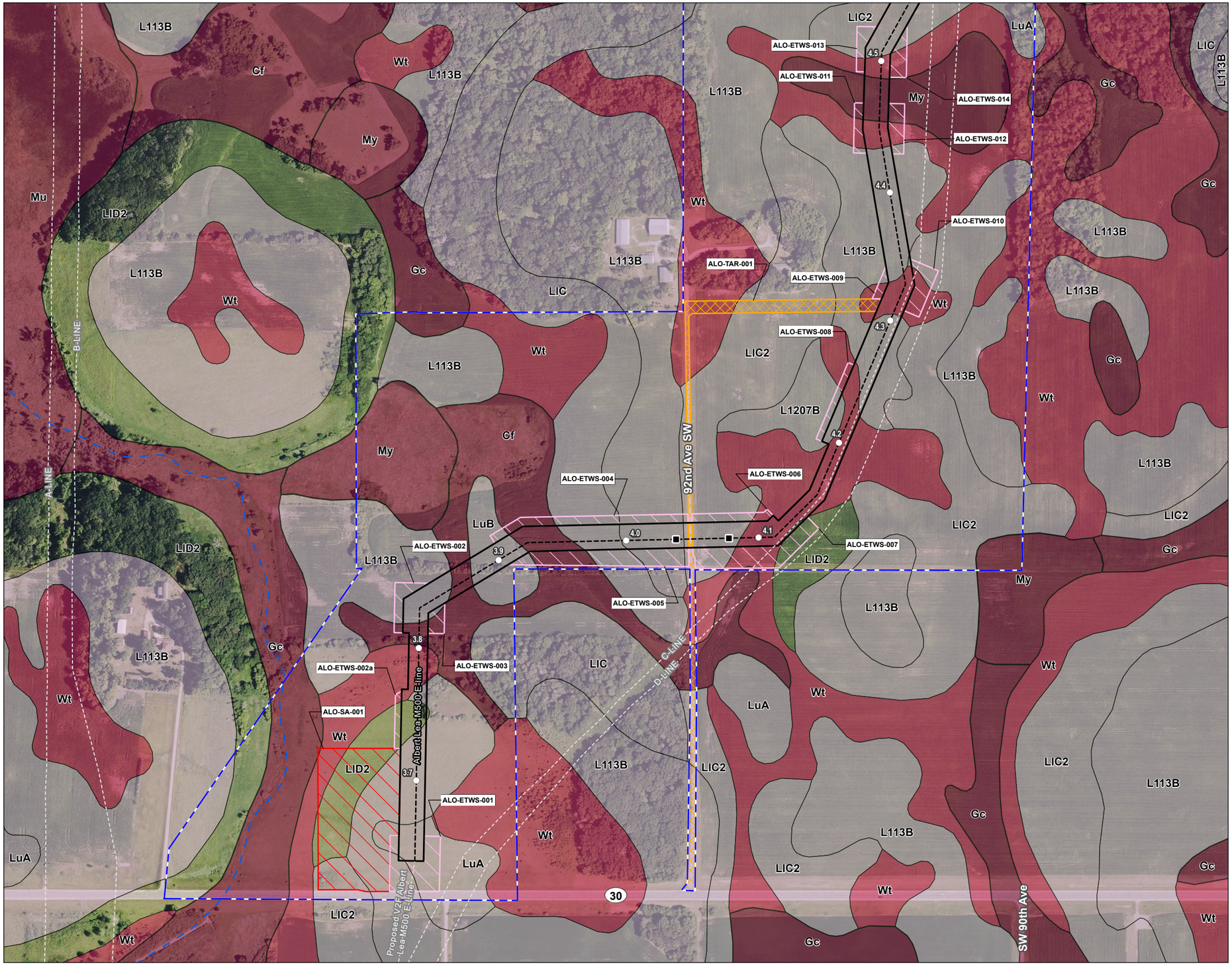


Figure No.

7-2

Title

NRCS Soil Series Map
NL27 - Albert Lea M500 E-line

Client/Project 172609138

Northern Natural Gas
Northern Lights 2027 Expansion Project

Project Location
Steele County, Minnesota

Prepared by JM on 2025-12-15
TR by SF on 2026-01-15
IR by SK on 2026-02-04

N

0 200 400 Feet
(At original document size of 11x17)
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Legend

- Environmental Survey Boundary
- Temporary Workspace
- Extra Temporary Workspace
- Temporary Access Road
- Staging Area
- Proposed Pipeline
- Existing Pipeline
- Mile Post
- HDD

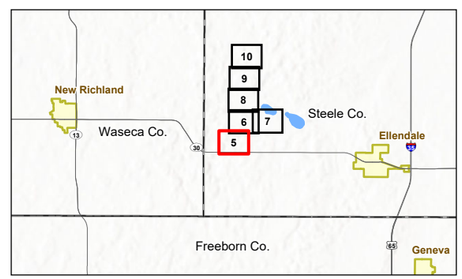
NRCS Soil Survey Data

Hydric Soil Rating

- Hydric
- Predominantly Hydric
- Partially Hydric
- Predominantly Non-Hydric
- Non-Hydric

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



Notes
1. Coordinate System: NAD 1983 UTM Zone 15N
2. Data Sources: Stantec, Northern Natural Gas, Esri, USCB, USGS, NRCS
3. Background: 2023 NAIP

Stantec

Northern Natural Gas

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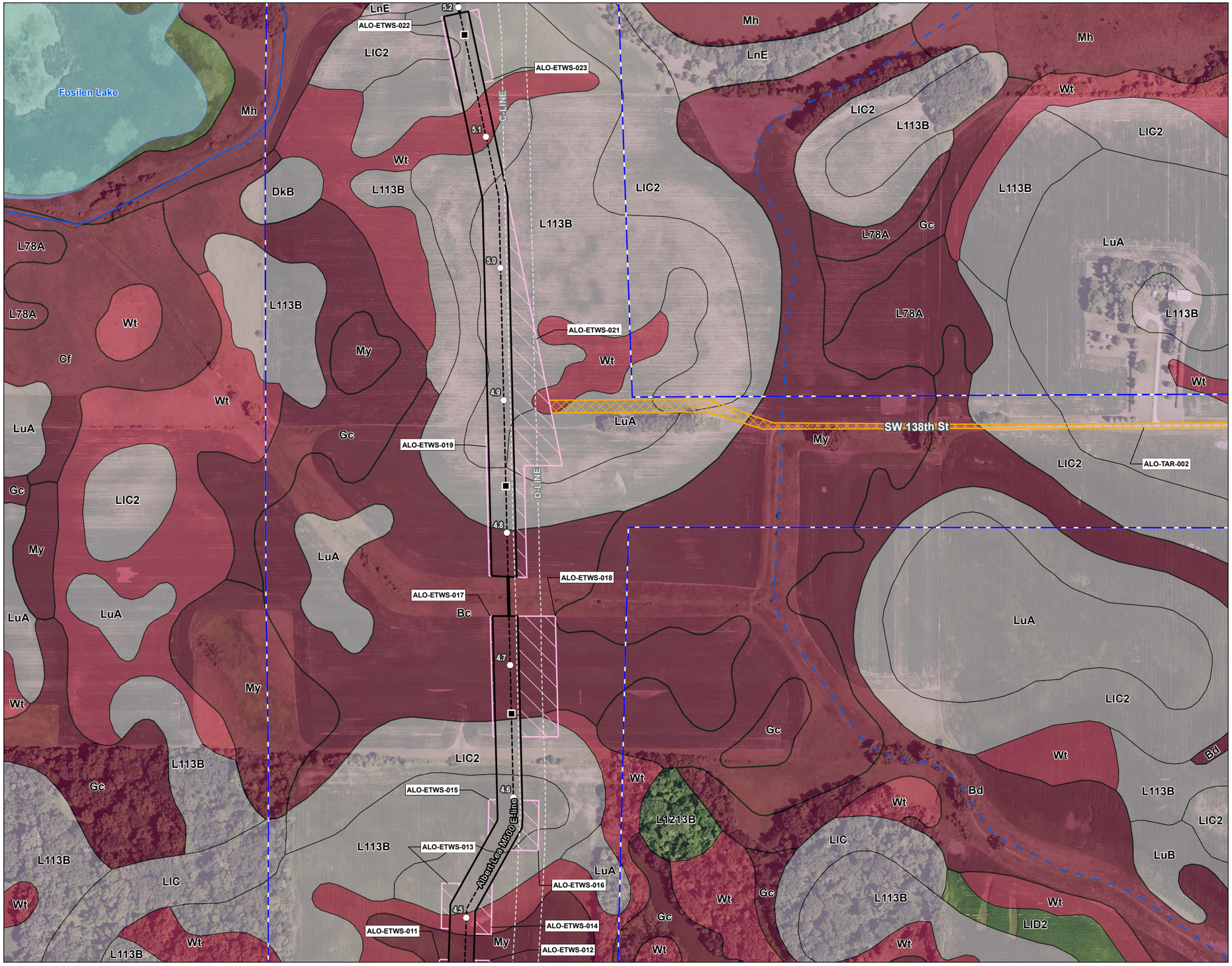


Figure No.

7-2

Title

NRCS Soil Series Map
NL27 - Albert Lea M500 E-line

Client/Project 172609138

Northern Natural Gas
Northern Lights 2027 Expansion Project

Project Location
Steele County, Minnesota

Prepared by JM on 2025-12-15
TR by SF on 2026-01-15
IR by SK on 2026-02-04

N

0 200 400 Feet
(At original document size of 11x17)
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Legend

- Environmental Survey Boundary
- Temporary Workspace
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- Proposed Pipeline
- Existing Pipeline
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- HDD

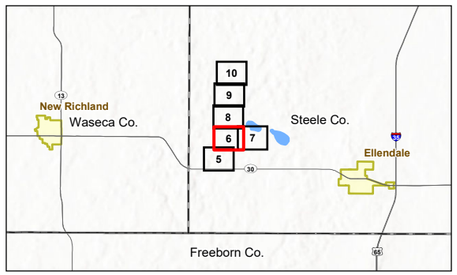
NRCS Soil Survey Data

Hydric Soil Rating

- Hydric
- Predominantly Hydric
- Partially Hydric
- Predominantly Non-Hydric
- Non-Hydric

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



Notes

1. Coordinate System: NAD 1983 UTM Zone 15N
2. Data Sources: Stantec, Northern Natural Gas, Esri, USCB, USGS, NRCS
3. Background: 2023 NAIP

Stantec

Northern Natural Gas

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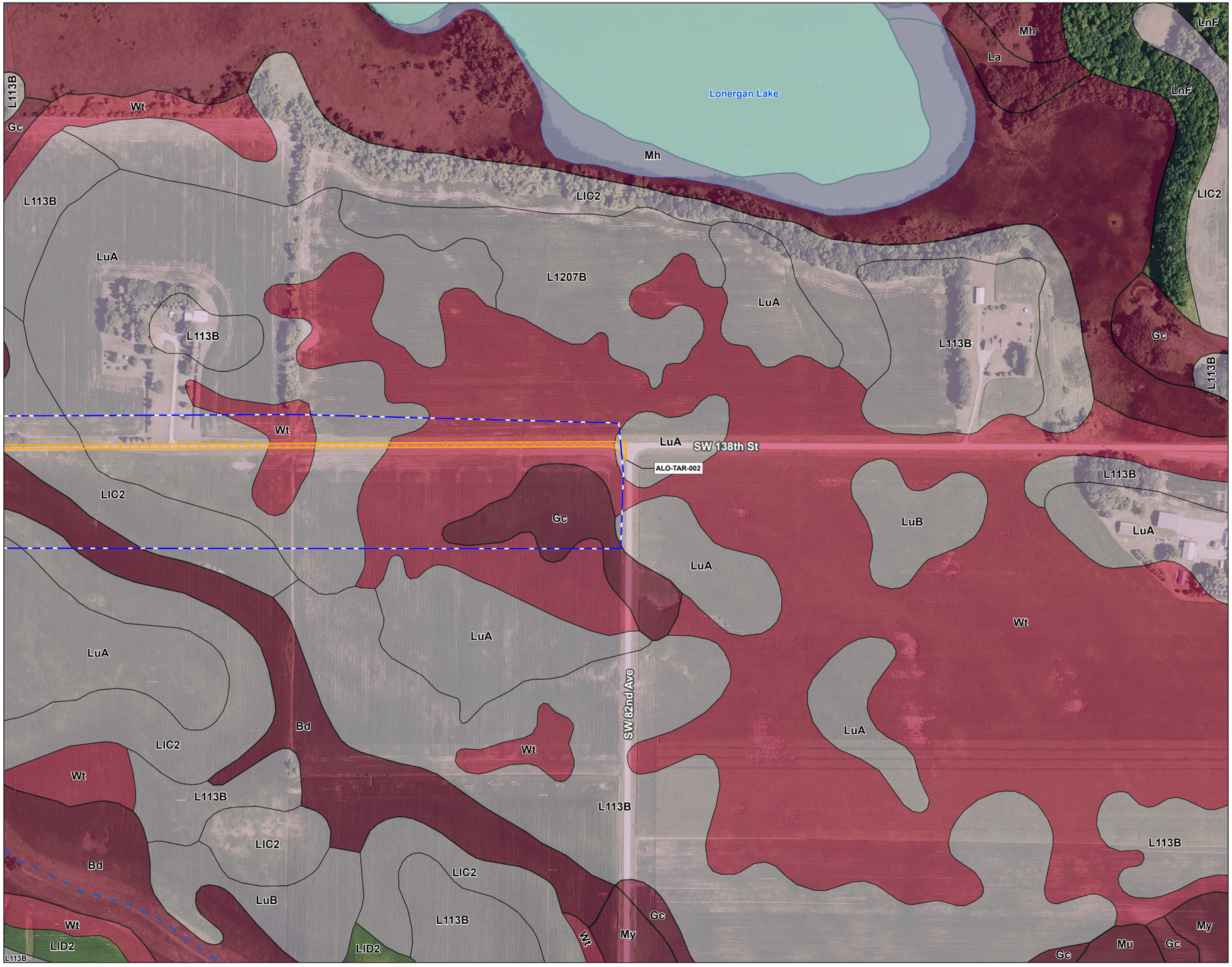


Figure No.

7-2

Title

NRCS Soil Series Map
NL27 - Albert Lea M500 E-line

Client/Project 172609138

Northern Natural Gas
Northern Lights 2027 Expansion Project

Project Location
Steele County, Minnesota

Prepared by JM on 2025-12-15
TR by SF on 2026-01-15
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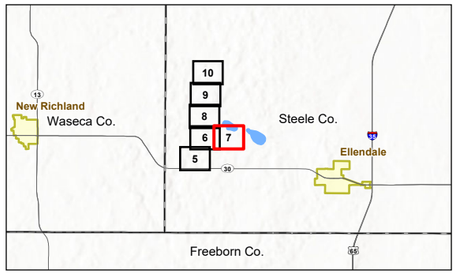
Legend

Environmental Survey Boundary
Temporary Access Road

NRCS Soil Survey Data

Hydric Soil Rating
- Hydric
- Predominantly Hydric
- Partially Hydric
- Predominantly Non-Hydric
- Non-Hydric

National Hydrography Dataset
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- Waterbody



Notes
1. Coordinate System: NAD 1983 UTM Zone 15N
2. Data Sources: Stantec, Northern Natural Gas, Esri, USCB, USGS, NRCS
3. Background: 2023 NAIP

Stantec

Northern Natural Gas

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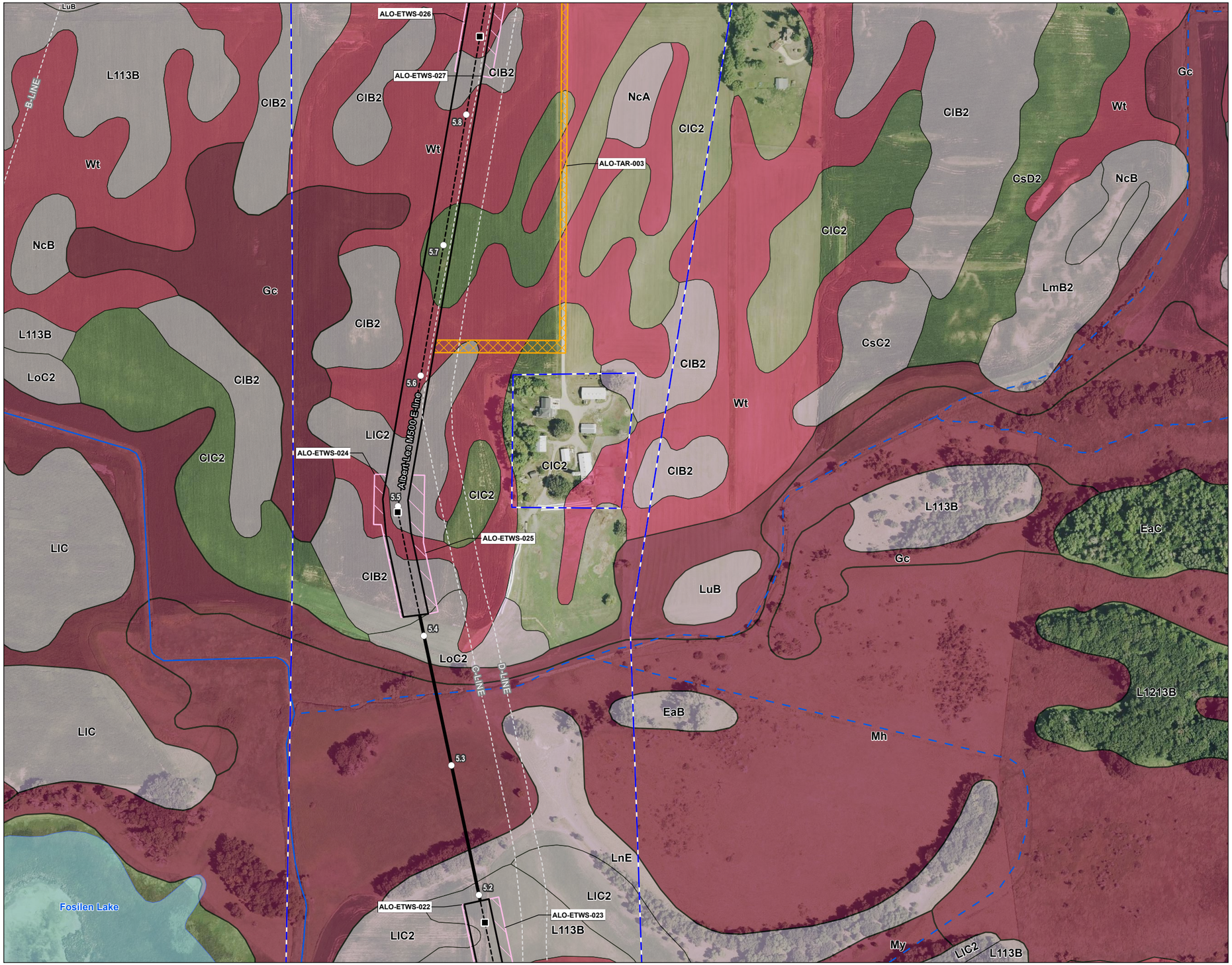


Figure No.
7-2

Title
NRCS Soil Series Map
NL27 - Albert Lea M500 E-line

Client/Project 172609138
Northern Natural Gas
Northern Lights 2027 Expansion Project

Project Location
Steele County, Minnesota

Prepared by JM on 2025-12-15
TR by SF on 2026-01-15
IR by SK on 2026-02-04

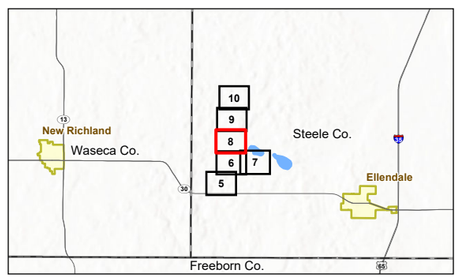
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(At original document size of 11x17)
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Legend
- Environmental Survey Boundary
- Temporary Workspace
- Extra Temporary Workspace
- Temporary Access Road
- Proposed Pipeline
- Existing Pipeline
- Mile Post
- HDD

NRCS Soil Survey Data
Hydric Soil Rating
- Hydric
- Predominantly Hydric
- Partially Hydric
- Predominantly Non-Hydric
- Non-Hydric

National Hydrography Dataset
- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



Notes
1. Coordinate System: NAD 1983 UTM Zone 15N
2. Data Sources: Stantec, Northern Natural Gas, Esri, USCB, USGS, NRCS
3. Background: 2023 NAIP

Stantec
Northern Natural Gas

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Figure No.
7-2

Title
NRCS Soil Series Map
NL27 - Albert Lea M500 E-line

Client/Project 172609138
Northern Natural Gas
Northern Lights 2027 Expansion Project

Project Location
Steele County, Minnesota

Prepared by JM on 2025-12-15
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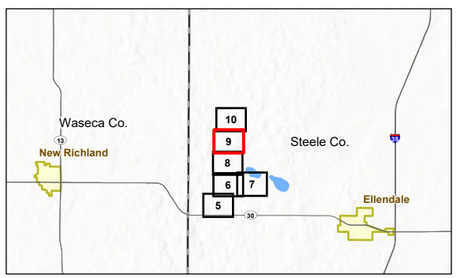
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Legend
- Environmental Survey Boundary
- Temporary Workspace
- Extra Temporary Workspace
- Temporary Access Road
- Staging Area
- Proposed Pipeline
- Existing Pipeline
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- HDD

NRCS Soil Survey Data
Hydric Soil Rating
- Hydric
- Predominantly Hydric
- Partially Hydric
- Predominantly Non-Hydric
- Non-Hydric

National Hydrography Dataset
- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



Notes
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Northern Natural Gas

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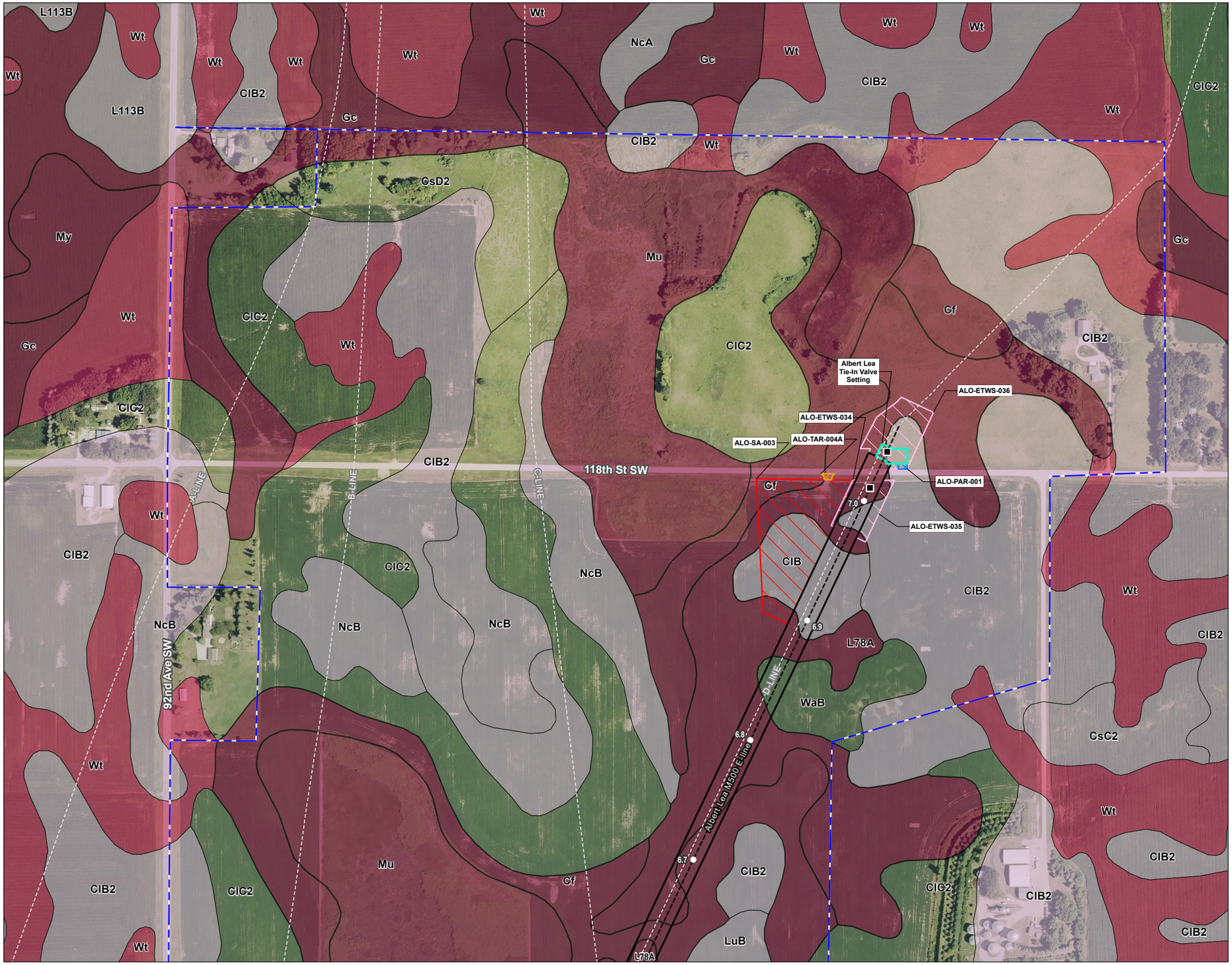


Figure No.

7-2

Title

NRCS Soil Series Map
NL27 - Albert Lea M500 E-line

Client/Project 172609138

Northern Natural Gas
Northern Lights 2027 Expansion Project

Project Location
Steele County, Minnesota

Prepared by JM on 2025-12-15
TR by SF on 2026-01-15
IR by SK on 2026-02-04

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(At original document size of 11x17)
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Legend

- Environmental Survey Boundary
- Proposed Facility
- Permanent Access Road
- Temporary Workspace
- Extra Temporary Workspace
- Temporary Access Road
- Staging Area
- Proposed Pipeline
- Existing Pipeline
- Mile Post
- HDD

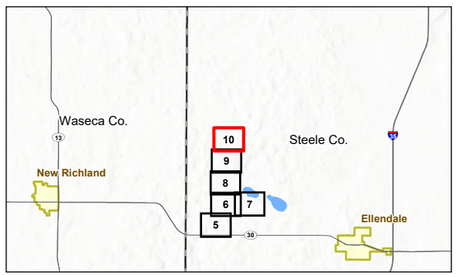
NRCS Soil Survey Data

Hydric Soil Rating

- Hydric
- Predominantly Hydric
- Partially Hydric
- Predominantly Non-Hydric
- Non-Hydric

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



Notes
1. Coordinate System: NAD 1983 UTM Zone 15N
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3. Background: 2023 NAIP

Stantec

Northern Natural Gas

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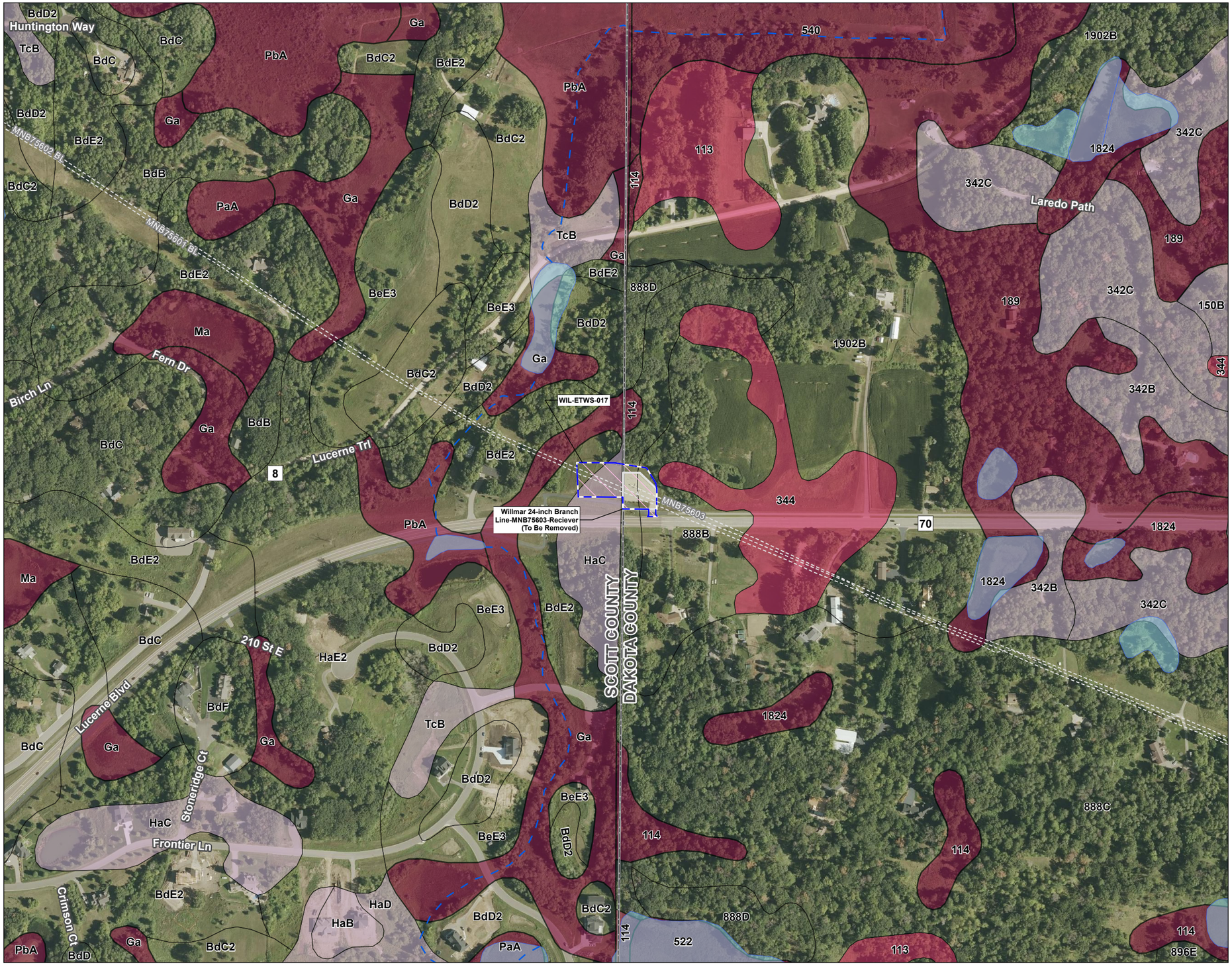


Figure No.
7-2

Title
NRCS Soil Series Map
NL27 - Willmar 3rd Branch Line Upstream

Client/Project 172609138
Northern Natural Gas
Northern Lights 2027 Expansion Project

Project Location
Scott County, Minnesota

Prepared by JM on 2025-12-15
TR by SF on 2026-01-15
IR by SK on 2026-02-04

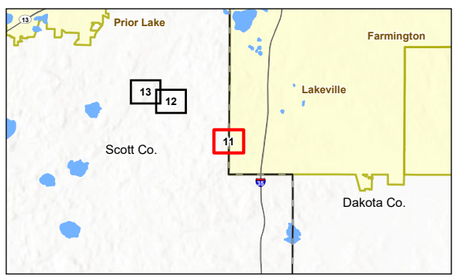
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Legend
- Environmental Survey Boundary
- Existing Facility
- Extra Temporary Workspace
- Existing Pipeline

NRCS Soil Survey Data
Hydric Soil Rating
- Hydric
- Predominantly Hydric
- Partially Hydric
- Predominantly Non-Hydric
- Non-Hydric

National Hydrography Dataset
- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



Notes
1. Coordinate System: NAD 1983 UTM Zone 15N
2. Data Sources: Stantec, Northern Natural Gas, Esri, USCB, USGS, NRCS
3. Background: 2023 NAIP

Stantec
Northern Natural Gas

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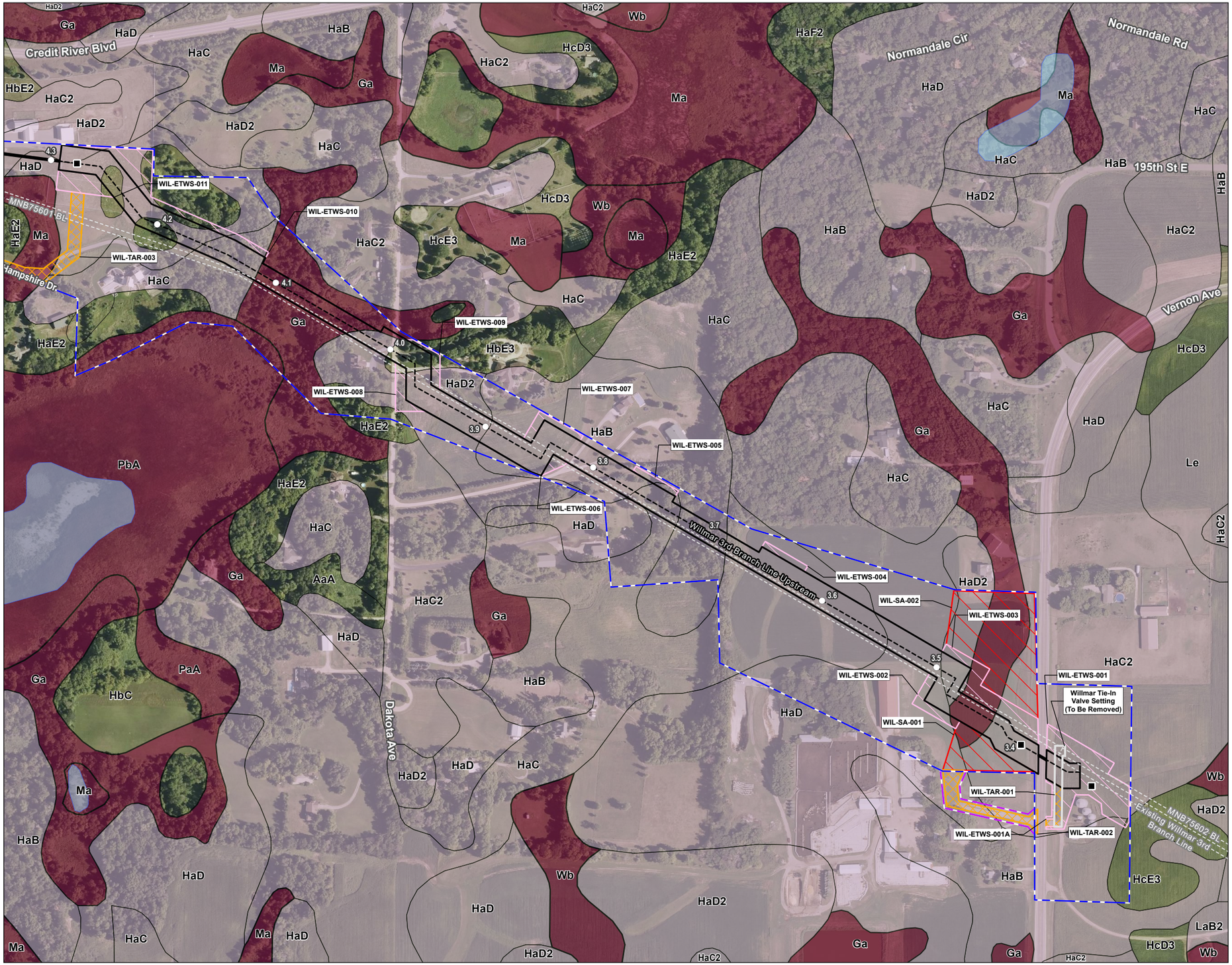


Figure No.

7-2

Title

NRCS Soil Series Map
NL27 - Willmar 3rd Branch Line Upstream

Client/Project 172609138

Northern Natural Gas
Northern Lights 2027 Expansion Project

Project Location
Scott County, Minnesota

Prepared by JM on 2025-12-15
TR by SF on 2026-01-15
IR by SK on 2026-02-04

N

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(At original document size of 11x17)
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Legend

- Environmental Survey Boundary
- Environmental Survey Boundary To Be Surveyed
- Existing Facility
- Temporary Workspace
- Extra Temporary Workspace
- Temporary Access Road
- Staging Area
- Proposed Pipeline
- Existing Pipeline
- Mile Post
- HDD

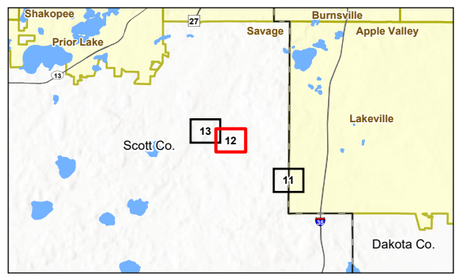
NRCS Soil Survey Data

Hydric Soil Rating

- Hydric
- Predominantly Hydric
- Partially Hydric
- Predominantly Non-Hydric
- Non-Hydric

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



Notes
1. Coordinate System: NAD 1983 UTM Zone 15N
2. Data Sources: Stantec, Northern Natural Gas, Esri, USCB, USGS, NRCS
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Figure No.

7-2

Title

NRCS Soil Series Map
NL27 - Willmar 3rd Branch Line Upstream

Client/Project 172609138

Northern Natural Gas
Northern Lights 2027 Expansion Project

Project Location
Scott County, Minnesota

Prepared by JM on 2025-12-15
TR by SF on 2026-01-15
IR by SK on 2026-02-04

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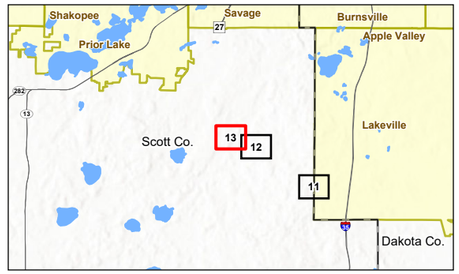
- Environmental Survey Boundary
- Existing Facility
- Temporary Workspace
- Extra Temporary Workspace
- Temporary Access Road
- Staging Area
- Proposed Pipeline
- Existing Pipeline
- Mile Post
- HDD

NRCS Soil Survey Data
Hydric Soil Rating

- Hydric
- Predominantly Hydric
- Partially Hydric
- Predominantly Non-Hydric
- Non-Hydric

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Canal/Ditch
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Notes
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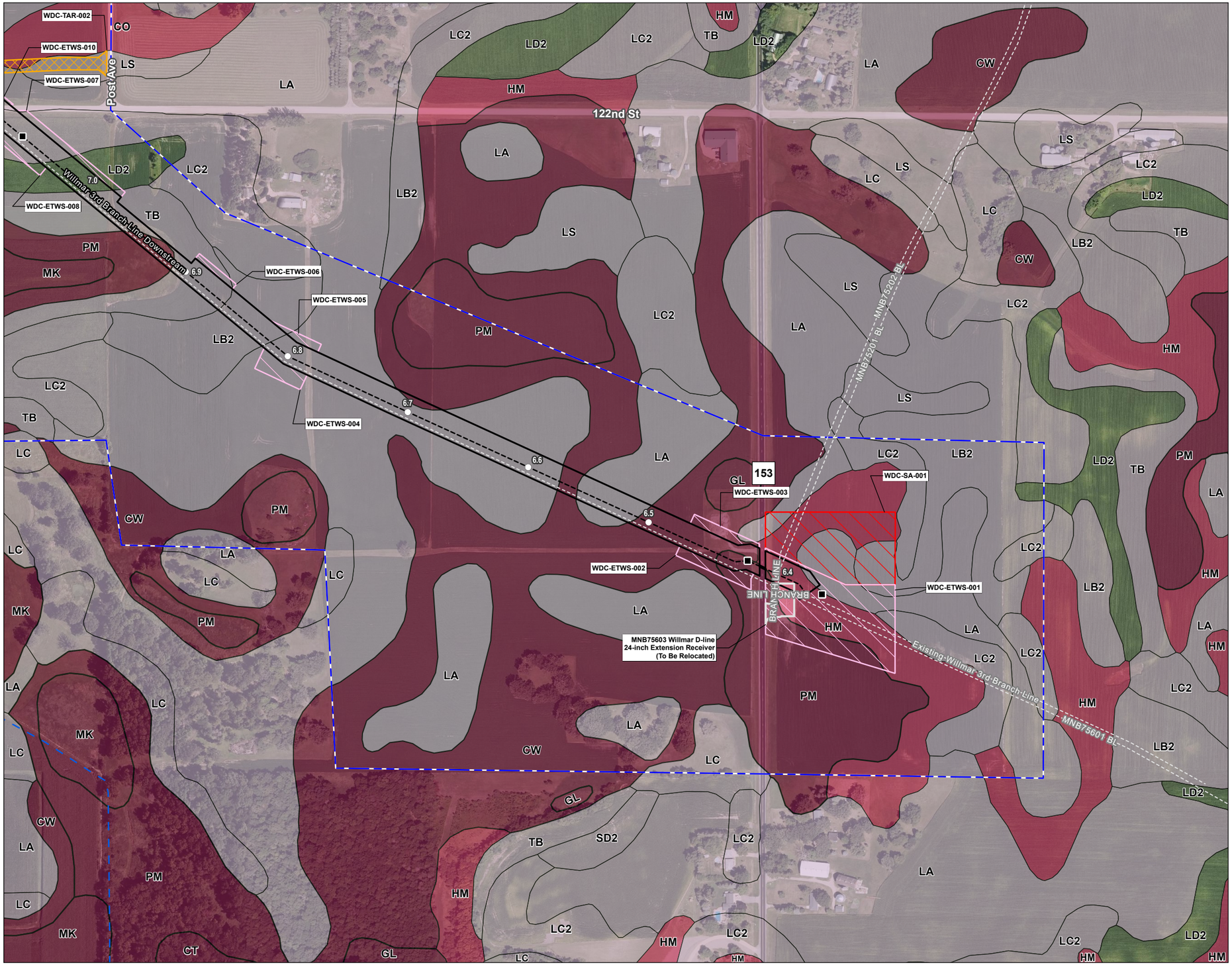


Figure No.

7-2

Title

NRCS Soil Series Map
NL27 - Willmar 3rd Branch Line Downstream

Client/Project 172609138

Northern Natural Gas
Northern Lights 2027 Expansion Project

Project Location
Carver County, Minnesota

Prepared by JM on 2025-12-15
TR by SF on 2026-01-15
IR by SK on 2026-02-04

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Legend

- Environmental Survey Boundary
- Existing Facility
- Temporary Workspace
- Extra Temporary Workspace
- Temporary Access Road
- Staging Area
- Proposed Pipeline
- Existing Pipeline
- Mile Post
- HDD

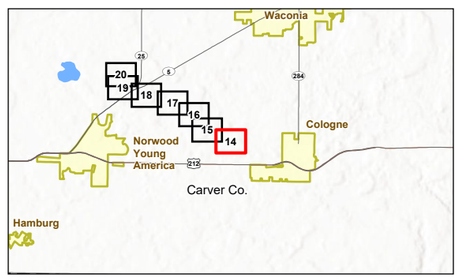
NRCS Soil Survey Data

Hydric Soil Rating

- Hydric
- Predominantly Hydric
- Partially Hydric
- Predominantly Non-Hydric
- Non-Hydric

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



Notes
1. Coordinate System: NAD 1983 UTM Zone 15N
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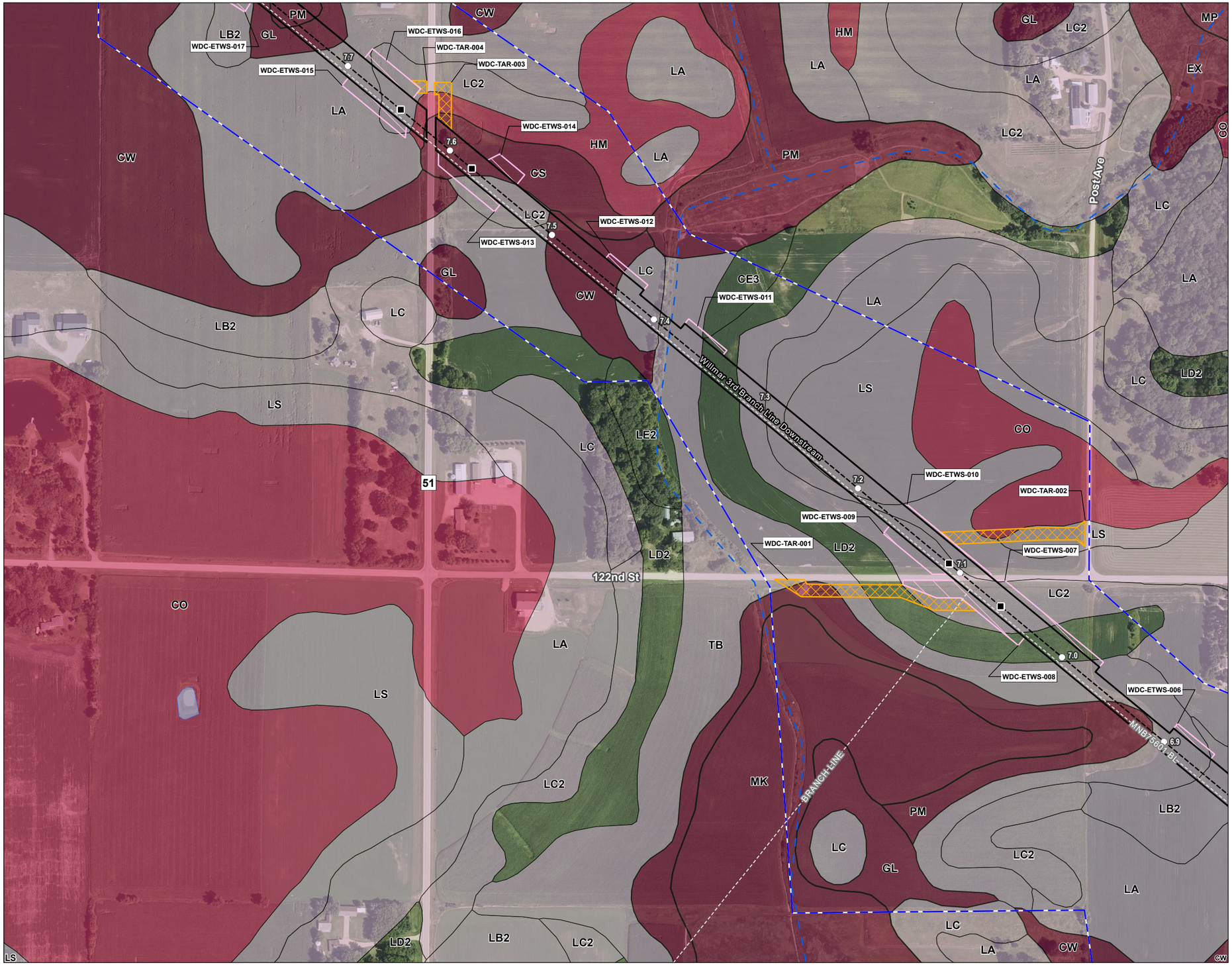


Figure No.

7-2

Title

NRCS Soil Series Map
NL27 - Willmar 3rd Branch Line Downstream

Client/Project 172609138

Northern Natural Gas
Northern Lights 2027 Expansion Project

Project Location
Carver County, Minnesota

Prepared by JM on 2025-12-15
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Legend

- Environmental Survey Boundary
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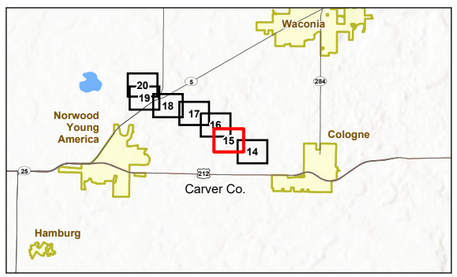
NRCS Soil Survey Data

Hydric Soil Rating

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National Hydrography Dataset

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Notes
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Stantec

Northern Natural Gas

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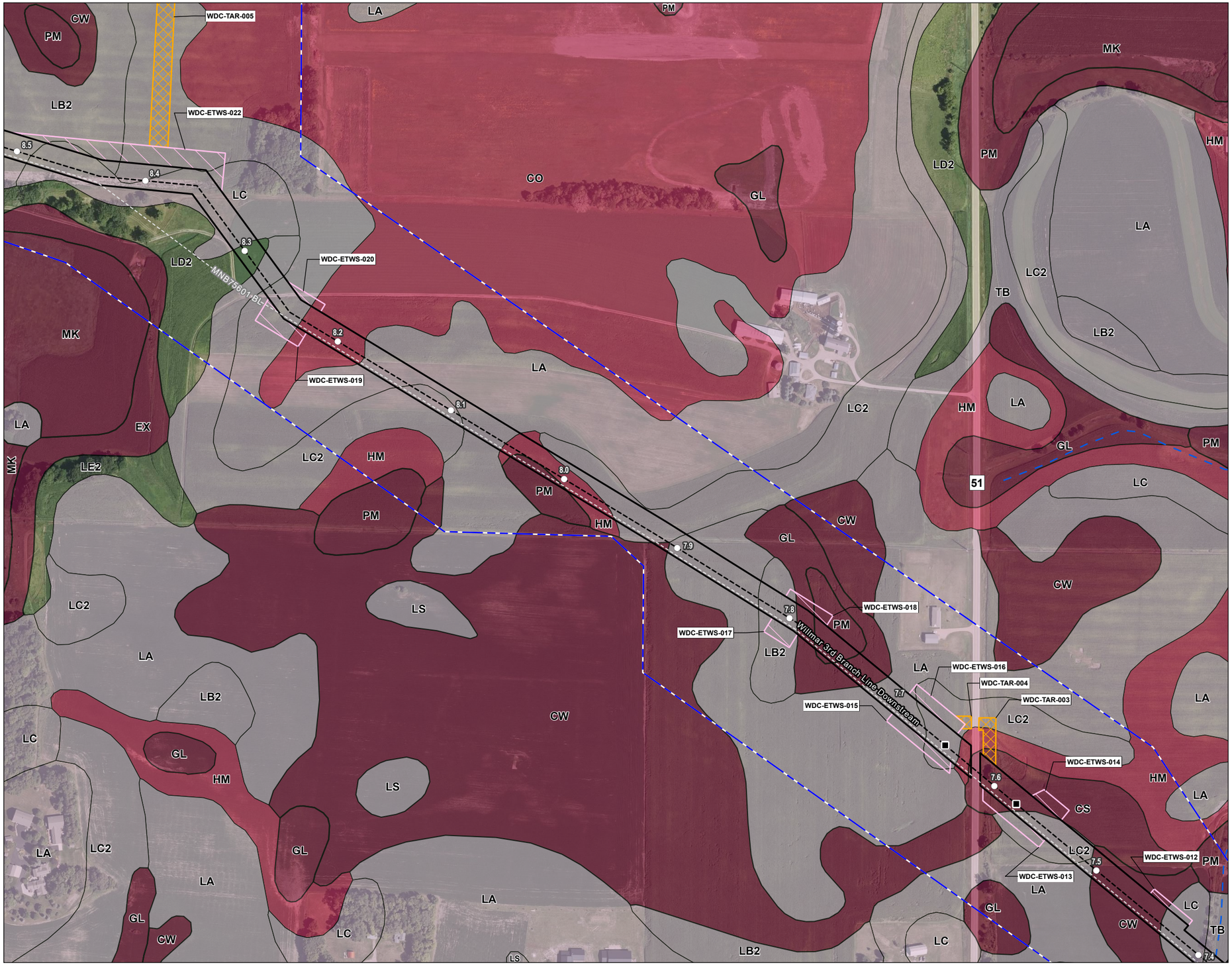


Figure No.

7-2

Title

NRCS Soil Series Map
NL27 - Willmar 3rd Branch Line Downstream

Client/Project 172609138

Northern Natural Gas
Northern Lights 2027 Expansion Project

Project Location
Carver County, Minnesota

Prepared by JM on 2025-12-15
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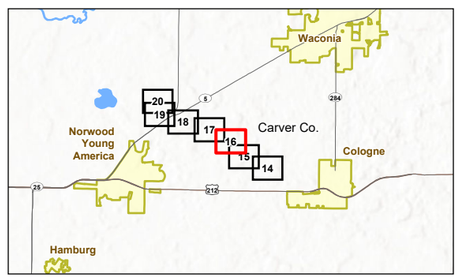
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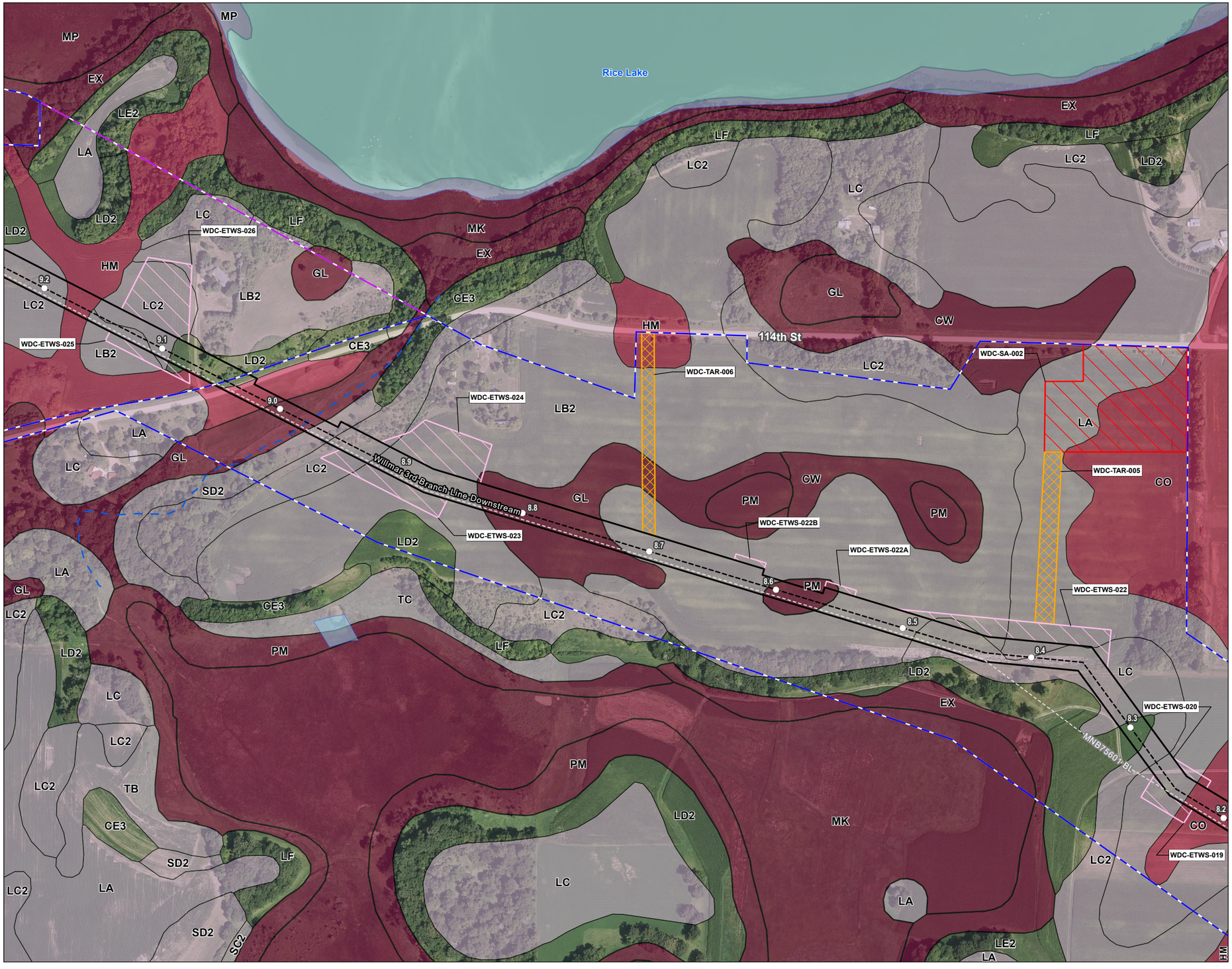


Figure No.

7-2

Title

NRCS Soil Series Map
NL27 - Willmar 3rd Branch Line Downstream

Client/Project 172609138

Northern Natural Gas
Northern Lights 2027 Expansion Project

Project Location
Carver County, Minnesota

Prepared by JM on 2025-12-15
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Legend

- Environmental Survey Boundary
- Environmental Survey Boundary To Be Surveyed
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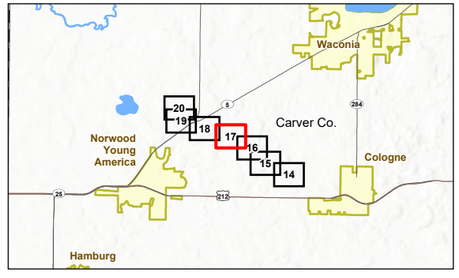
NRCS Soil Survey Data

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National Hydrography Dataset

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- Waterbody



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Northern Natural Gas

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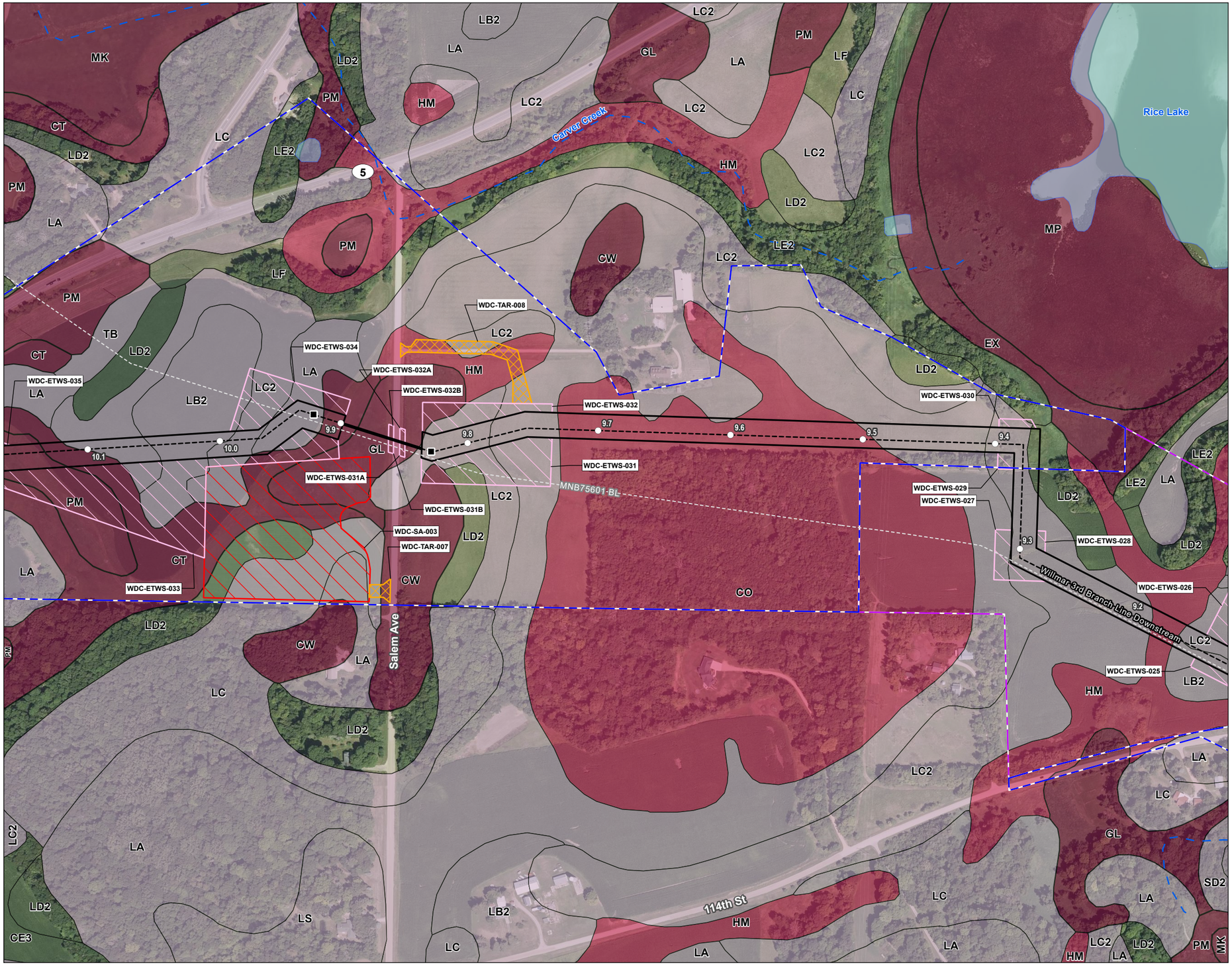


Figure No.

7-2

Title

NRCS Soil Series Map
NL27 - Willmar 3rd Branch Line Downstream

Client/Project 172609138

Northern Natural Gas
Northern Lights 2027 Expansion Project

Project Location
Carver County, Minnesota

Prepared by JM on 2025-12-15
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1:4,800

Legend

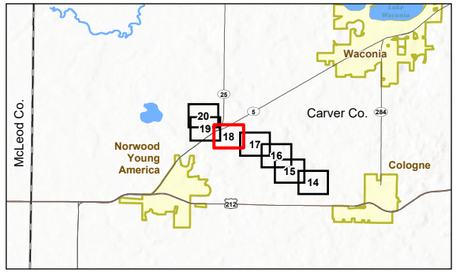
- Environmental Survey Boundary
- Environmental Survey Boundary To Be Surveyed
- Temporary Workspace
- Extra Temporary Workspace
- Temporary Access Road
- Staging Area
- Proposed Pipeline
- Existing Pipeline
- Mile Post
- HDD

NRCS Soil Survey Data
Hydric Soil Rating

- Hydric
- Predominantly Hydric
- Partially Hydric
- Predominantly Non-Hydric
- Non-Hydric

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



Notes
1. Coordinate System: NAD 1983 UTM Zone 15N
2. Data Sources: Stantec, Northern Natural Gas, Esri, USCB, USGS, NRCS
3. Background: 2023 NAIP

Stantec

Northern Natural Gas

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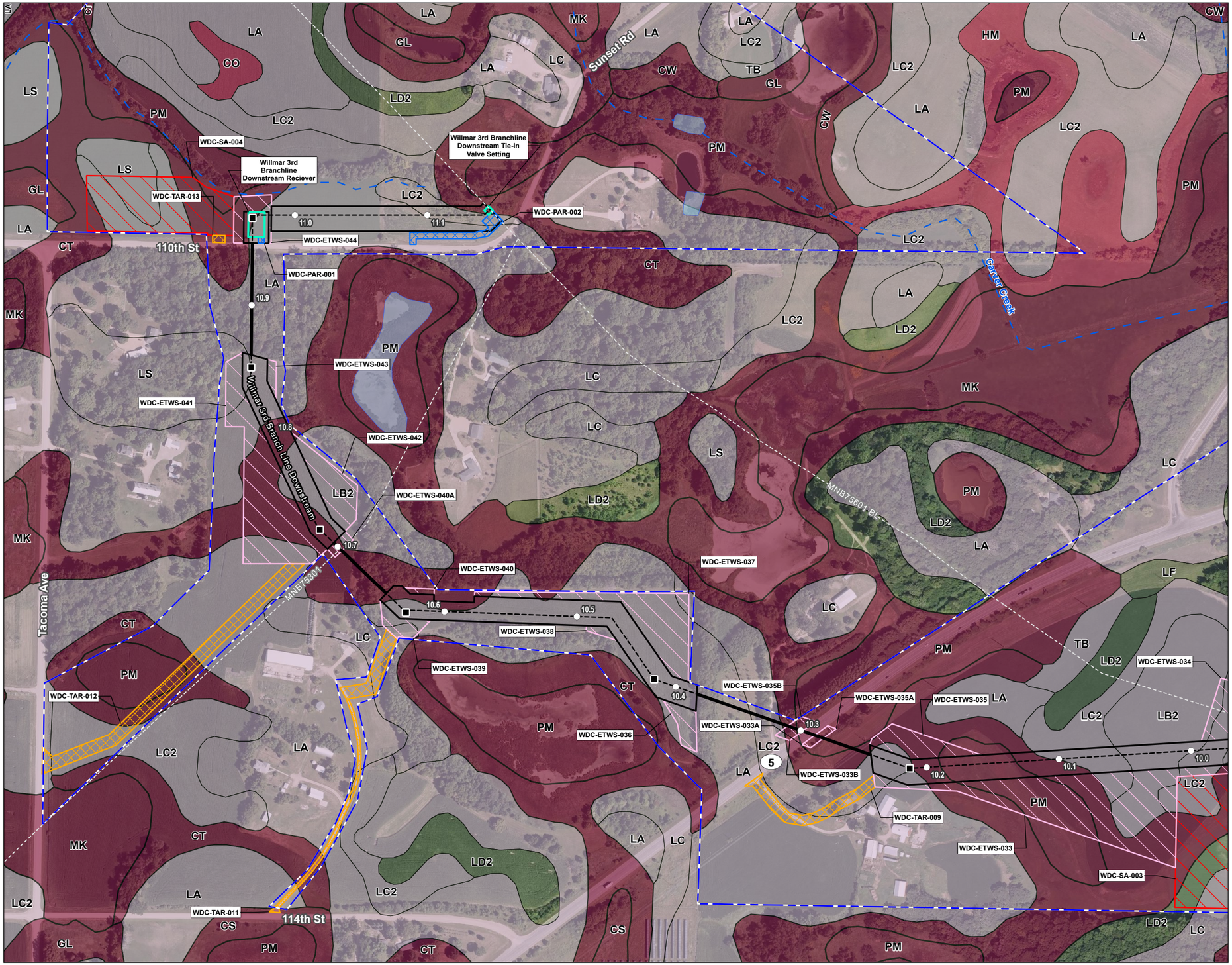


Figure No.

7-2

Title

NRCS Soil Series Map
NL27 - Willmar 3rd Branch Line Downstream

Client/Project 172609138

Northern Natural Gas
Northern Lights 2027 Expansion Project

Project Location
Carver County, Minnesota

Prepared by JM on 2025-12-15
TR by SF on 2026-01-15
IR by SK on 2026-02-04

N

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(At original document size of 11x17)
1:4,800

Legend

- Environmental Survey Boundary
- Proposed Facility
- Permanent Access Road
- Temporary Workspace
- Extra Temporary Workspace
- Temporary Access Road
- Staging Area
- Proposed Pipeline
- Existing Pipeline
- Mile Post
- HDD

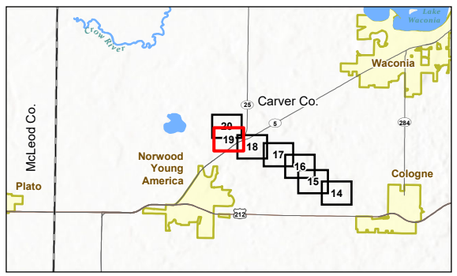
NRCS Soil Survey Data

Hydric Soil Rating

- Hydric
- Predominantly Hydric
- Partially Hydric
- Predominantly Non-Hydric
- Non-Hydric

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



Notes
1. Coordinate System: NAD 1983 UTM Zone 15N
2. Data Sources: Stantec, Northern Natural Gas, Esri, USCB, USGS, NRCS
3. Background: 2023 NAIP

Stantec

Northern Natural Gas

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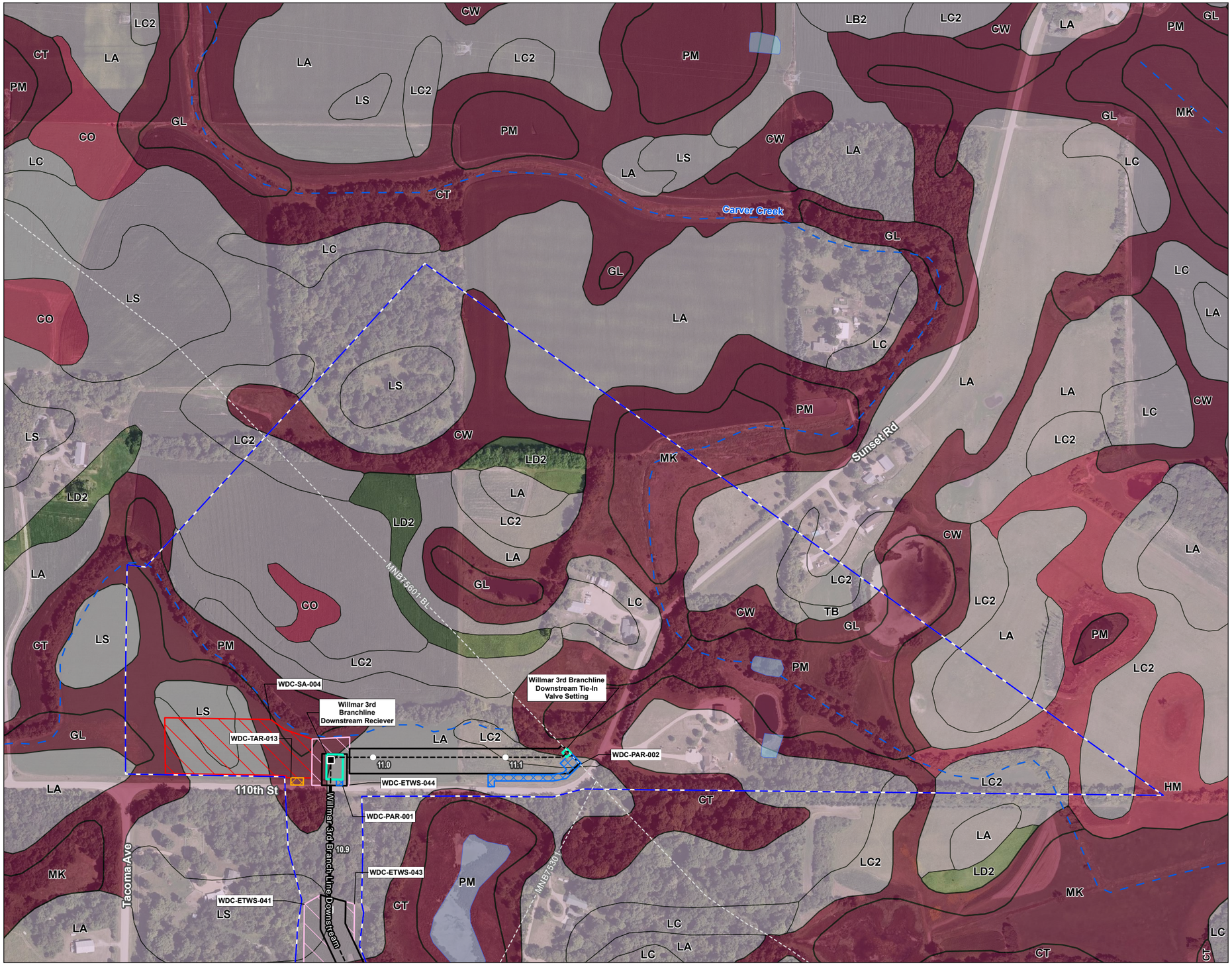


Figure No.
7-2

Title
NRCS Soil Series Map
NL27 - Willmar 3rd Branch Line Downstream

Client/Project 172609138
Northern Natural Gas
Northern Lights 2027 Expansion Project

Project Location
Carver County, Minnesota

Prepared by JM on 2025-12-15
TR by SF on 2026-01-15
IR by SK on 2026-02-04

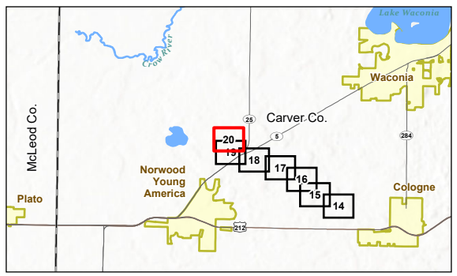
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Legend
- Environmental Survey Boundary
- Proposed Facility
- Permanent Access Road
- Temporary Workspace
- Extra Temporary Workspace
- Temporary Access Road
- Staging Area
- Proposed Pipeline
- Existing Pipeline
- Mile Post
- HDD

NRCS Soil Survey Data
Hydric Soil Rating
- Hydric
- Predominantly Hydric
- Partially Hydric
- Predominantly Non-Hydric
- Non-Hydric

National Hydrography Dataset
- Perennial Stream
- Intermittent Stream
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Notes
1. Coordinate System: NAD 1983 UTM Zone 15N
2. Data Sources: Stantec, Northern Natural Gas, Esri, USCB, USGS, NRCS
3. Background: 2023 NAIP

Stantec
Northern Natural Gas

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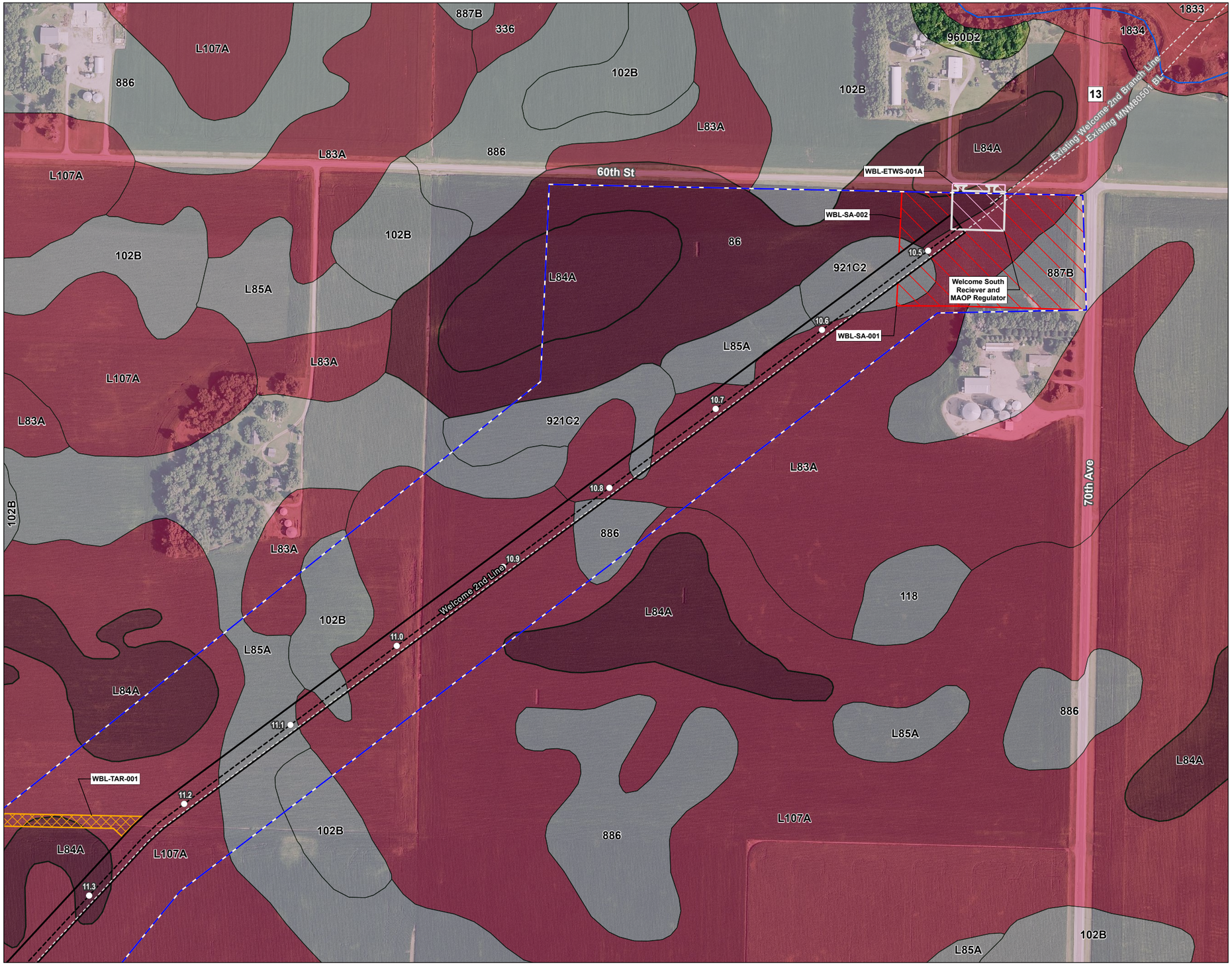


Figure No.
7-2

Title
NRCS Soil Series Map
NL27 - Welcome 2nd Line

Client/Project 172609138
Northern Natural Gas
Northern Lights 2027 Expansion Project

Project Location
Martin County, Minnesota

Prepared by JM on 2025-12-15
TR by SF on 2026-01-15
IR by SK on 2026-02-04

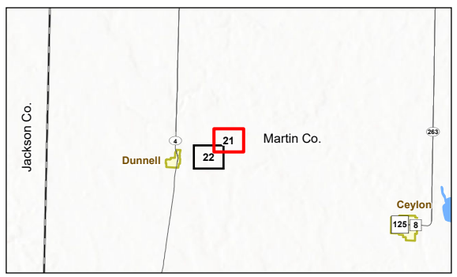
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Legend
- Environmental Survey Boundary
- Existing Facility
- Temporary Workspace
- Extra Temporary Workspace
- Temporary Access Road
- Staging Area
- Proposed Pipeline
- Existing Pipeline
- Mile Post

NRCS Soil Survey Data
Hydric Soil Rating
- Hydric
- Predominantly Hydric
- Partially Hydric
- Predominantly Non-Hydric
- Non-Hydric

National Hydrography Dataset
- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



Notes
1. Coordinate System: NAD 1983 UTM Zone 15N
2. Data Sources: Stantec, Northern Natural Gas, Esri, USCB, USGS, NRCS
3. Background: 2023 NAIP

Stantec
Northern Natural Gas

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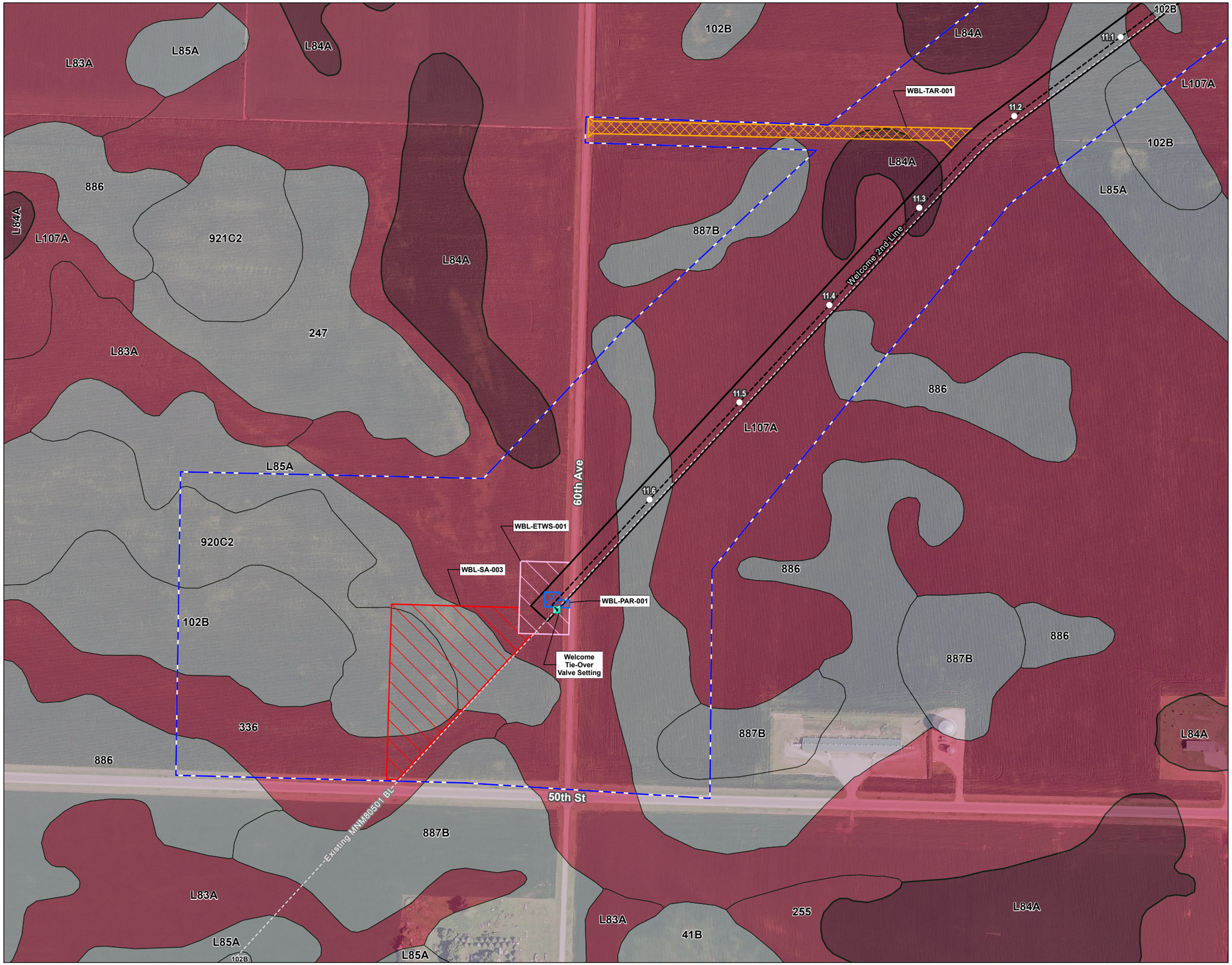


Figure No.
7-2

Title
NRCS Soil Series Map
NL27 - Welcome 2nd Line

Client/Project 172609138
Northern Natural Gas
Northern Lights 2027 Expansion Project

Project Location
Martin County, Minnesota

Prepared by JM on 2025-12-15
TR by SF on 2026-01-15
IR by SK on 2026-02-04

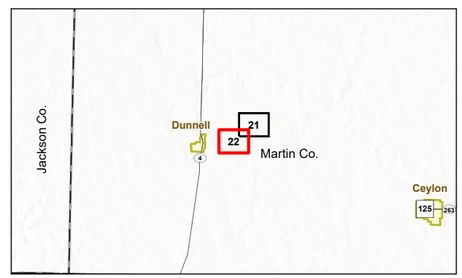
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Legend
- Environmental Survey Boundary
- Proposed Facility
- Permanent Access Road
- Temporary Workspace
- Extra Temporary Workspace
- Temporary Access Road
- Staging Area
- Proposed Pipeline
- Existing Pipeline
- Mile Post

NRCS Soil Survey Data
Hydric Soil Rating
- Hydric
- Predominantly Hydric
- Partially Hydric
- Predominantly Non-Hydric
- Non-Hydric

National Hydrography Dataset
- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



Notes
1. Coordinate System: NAD 1983 UTM Zone 15N
2. Data Sources: Stantec, Northern Natural Gas, Esri, USCB, USGS, NRCS
3. Background: 2023 NAIP

Stantec
Northern Natural Gas

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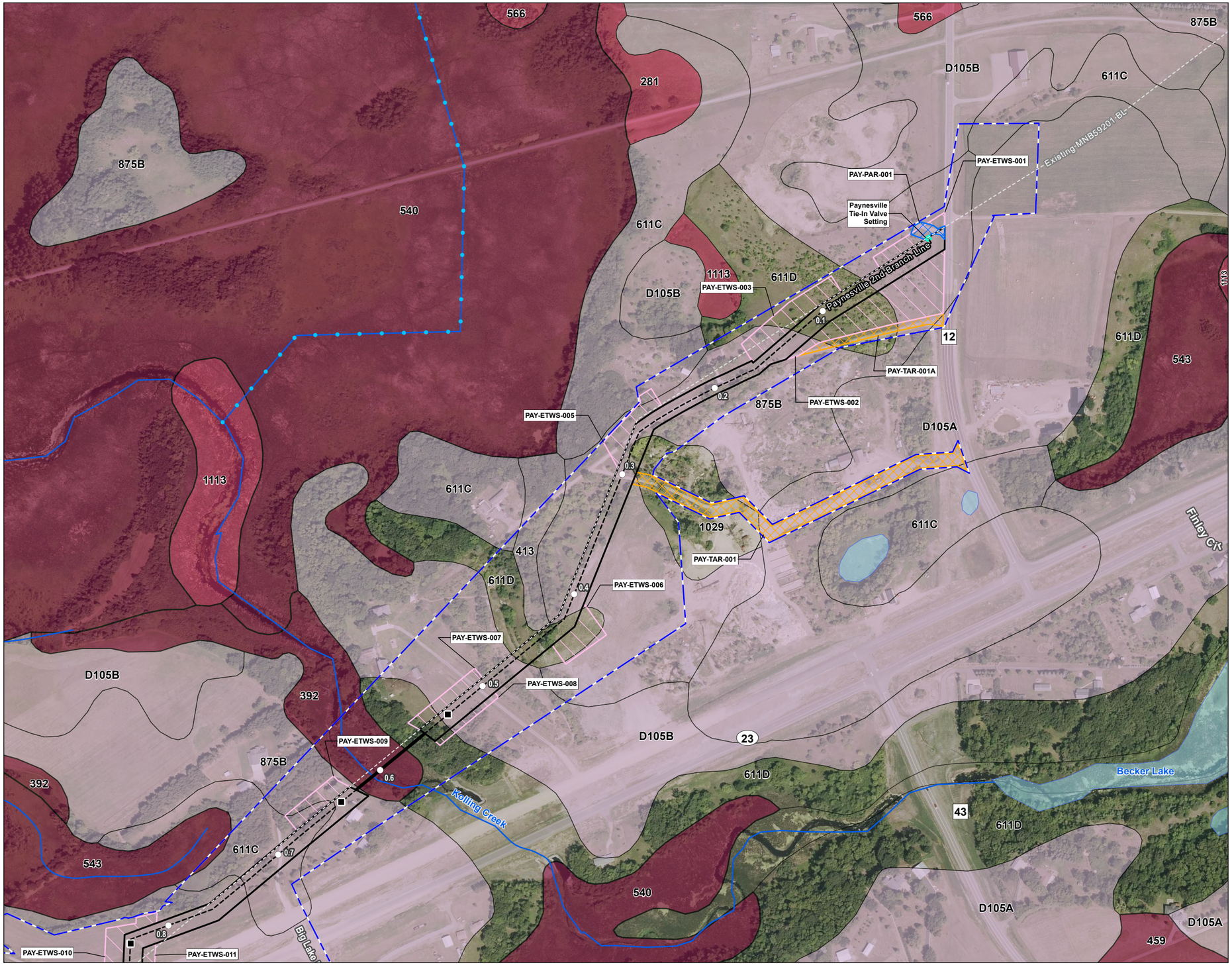


Figure No.

7-2

Title

NRCS Soil Series Map
NL27 - Paynesville 2nd Branch Line

Client/Project 172609138

Northern Natural Gas
Northern Lights 2027 Expansion Project

Project Location
Stearns County, Minnesota

Prepared by JM on 2025-12-15
TR by SF on 2026-01-15
IR by SK on 2026-02-04

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Legend

- Environmental Survey Boundary
- Proposed Facility
- Permanent Access Road
- Temporary Workspace
- Extra Temporary Workspace
- Temporary Access Road
- Proposed Pipeline
- Existing Pipeline
- Mile Post
- HDD

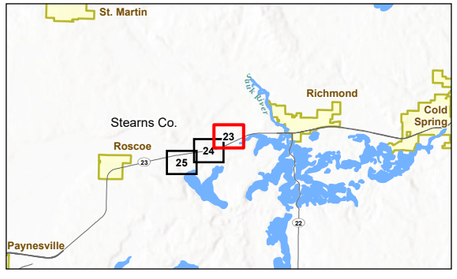
NRCS Soil Survey Data

Hydric Soil Rating

- Hydric
- Predominantly Hydric
- Partially Hydric
- Predominantly Non-Hydric
- Non-Hydric

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



Notes
1. Coordinate System: NAD 1983 UTM Zone 15N
2. Data Sources: Stantec, Northern Natural Gas, Esri, USCB, USGS, NRCS
3. Background: 2023 NAIP

Stantec

Northern Natural Gas

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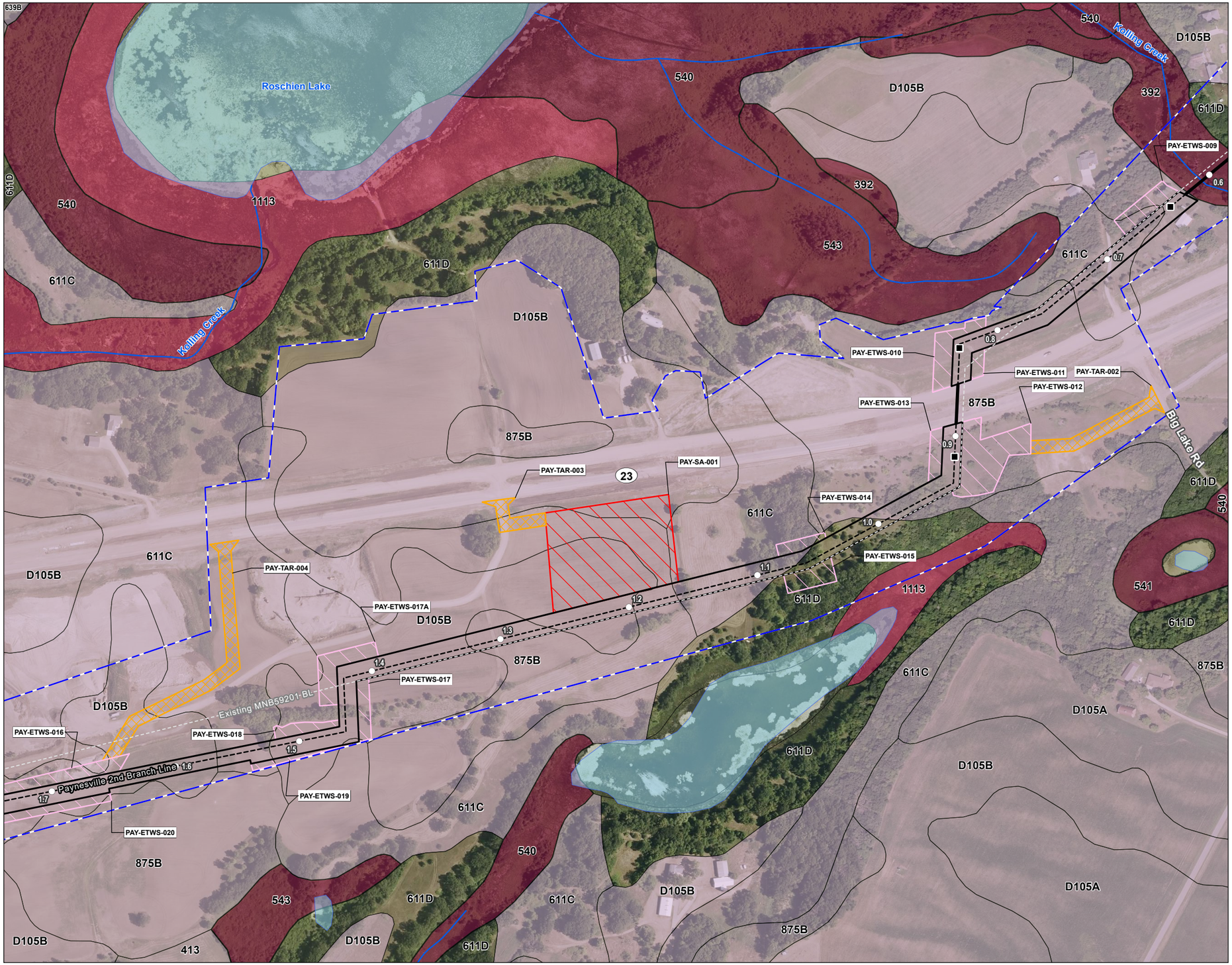


Figure No.

7-2

Title

NRCS Soil Series Map
NL27 - Paynesville 2nd Branch Line

Client/Project 172609138

Northern Natural Gas
Northern Lights 2027 Expansion Project

Project Location
Stearns County, Minnesota

Prepared by JM on 2025-12-15
TR by SF on 2026-01-15
IR by SK on 2026-02-04

N

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(At original document size of 11x17)
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Legend

- Environmental Survey Boundary
- Temporary Workspace
- Extra Temporary Workspace
- Temporary Access Road
- Staging Area
- Proposed Pipeline
- Existing Pipeline
- Mile Post
- HDD

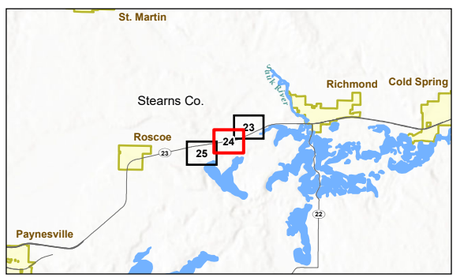
NRCS Soil Survey Data

Hydric Soil Rating

- Hydric
- Predominantly Hydric
- Partially Hydric
- Predominantly Non-Hydric
- Non-Hydric

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



Notes
1. Coordinate System: NAD 1983 UTM Zone 15N
2. Data Sources: Stantec, Northern Natural Gas, Esri, USCB, USGS, NRCS
3. Background: 2023 NAIP

Stantec

Northern Natural Gas

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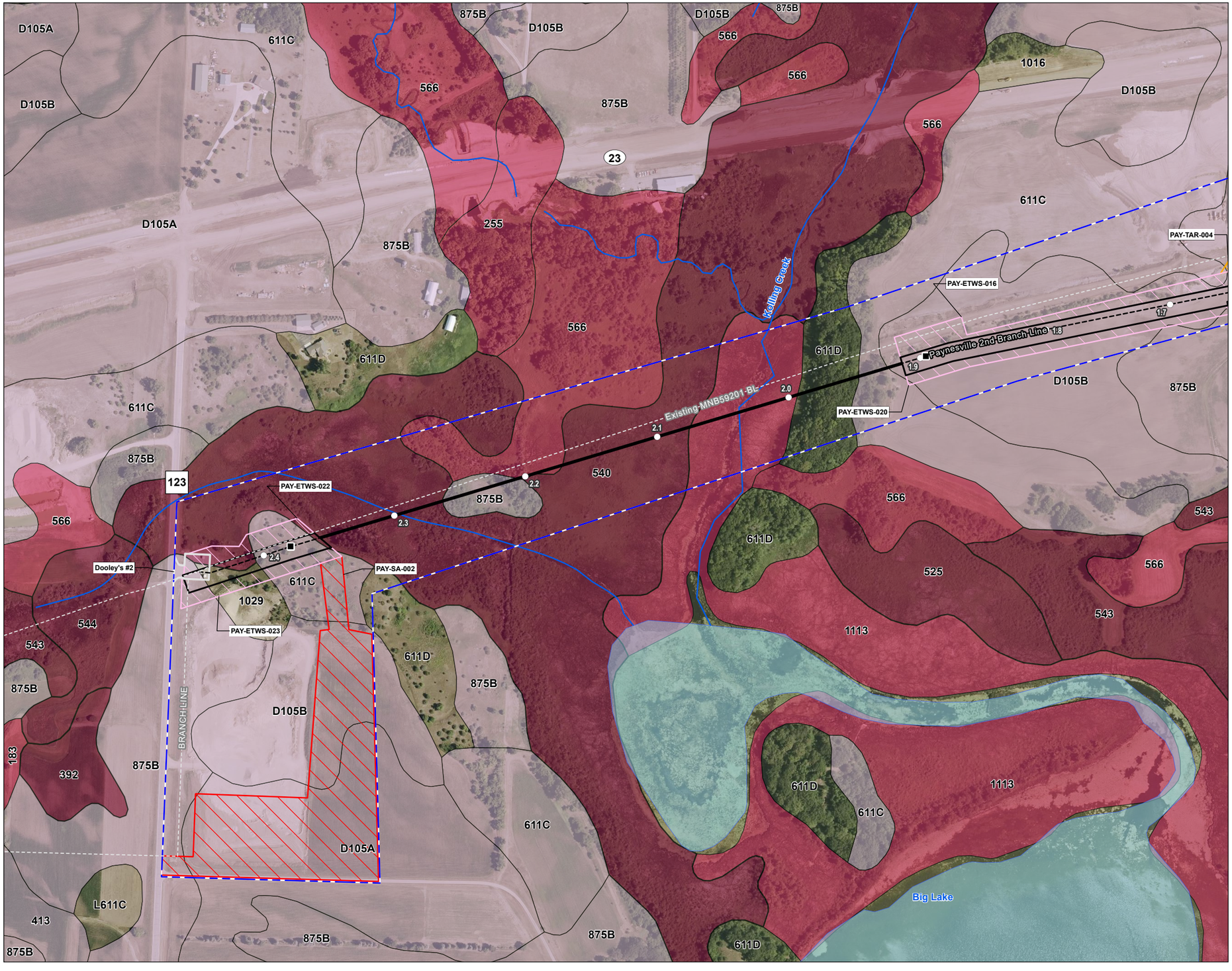


Figure No.

7-2

Title

NRCS Soil Series Map
NL27 - Paynesville 2nd Branch Line

Client/Project 172609138

Northern Natural Gas
Northern Lights 2027 Expansion Project

Project Location
Stearns County, Minnesota

Prepared by JM on 2025-12-15
TR by SF on 2026-01-15
IR by SK on 2026-02-04

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Legend

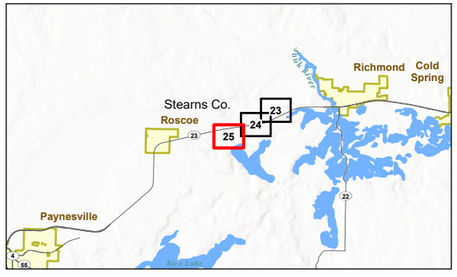
- Environmental Survey Boundary
- Existing Facility
- Temporary Workspace
- Extra Temporary Workspace
- Temporary Access Road
- Staging Area
- Proposed Pipeline
- Existing Pipeline
- Mile Post
- HDD

NRCS Soil Survey Data
Hydric Soil Rating

- Hydric
- Predominantly Hydric
- Partially Hydric
- Predominantly Non-Hydric
- Non-Hydric

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



Notes
1. Coordinate System: NAD 1983 UTM Zone 15N
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3. Background: 2023 NAIP

Stantec

Northern Natural Gas

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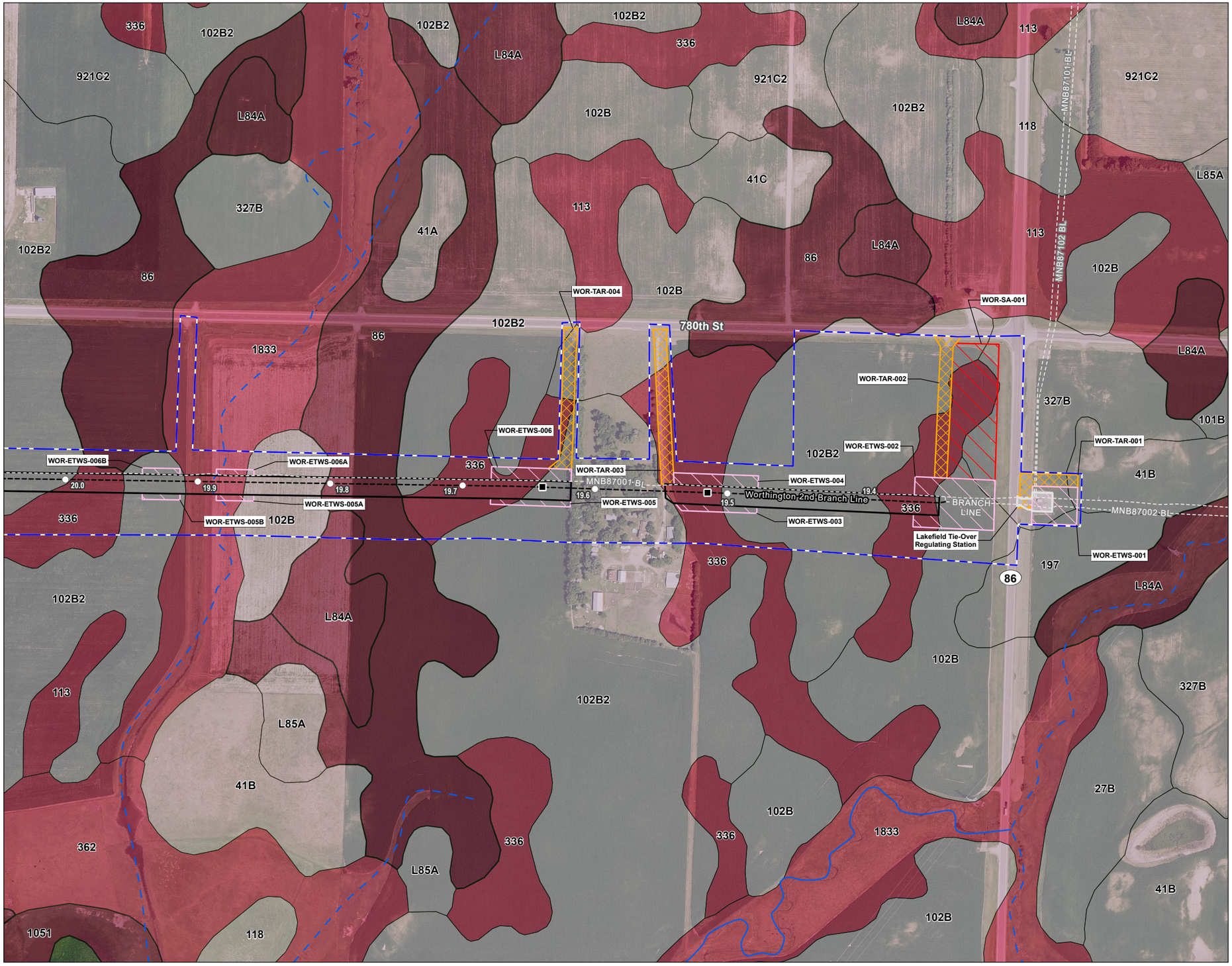


Figure No.
7-2

Title
NRCS Soil Series Map
NL27 - Worthington 2nd Branch Line

Client/Project 172609138
Northern Natural Gas
Northern Lights 2027 Expansion Project

Project Location
Jackson County, Minnesota

Prepared by JM on 2025-12-15
TR by SF on 2026-01-15
IR by SK on 2026-02-04

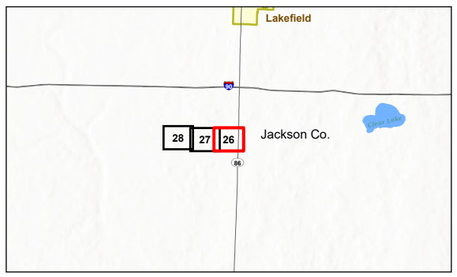
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Legend
- Environmental Survey Boundary
- Existing Facility
- Temporary Workspace
- Extra Temporary Workspace
- Temporary Access Road
- Staging Area
- Proposed Pipeline
- Existing Pipeline
- Mile Post
- HDD

NRCS Soil Survey Data
Hydric Soil Rating
- Hydric
- Predominantly Hydric
- Partially Hydric
- Predominantly Non-Hydric
- Non-Hydric

National Hydrography Dataset
- Perennial Stream
- Intermittent Stream
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Notes
1. Coordinate System: NAD 1983 UTM Zone 15N
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Stantec
Northern Natural Gas

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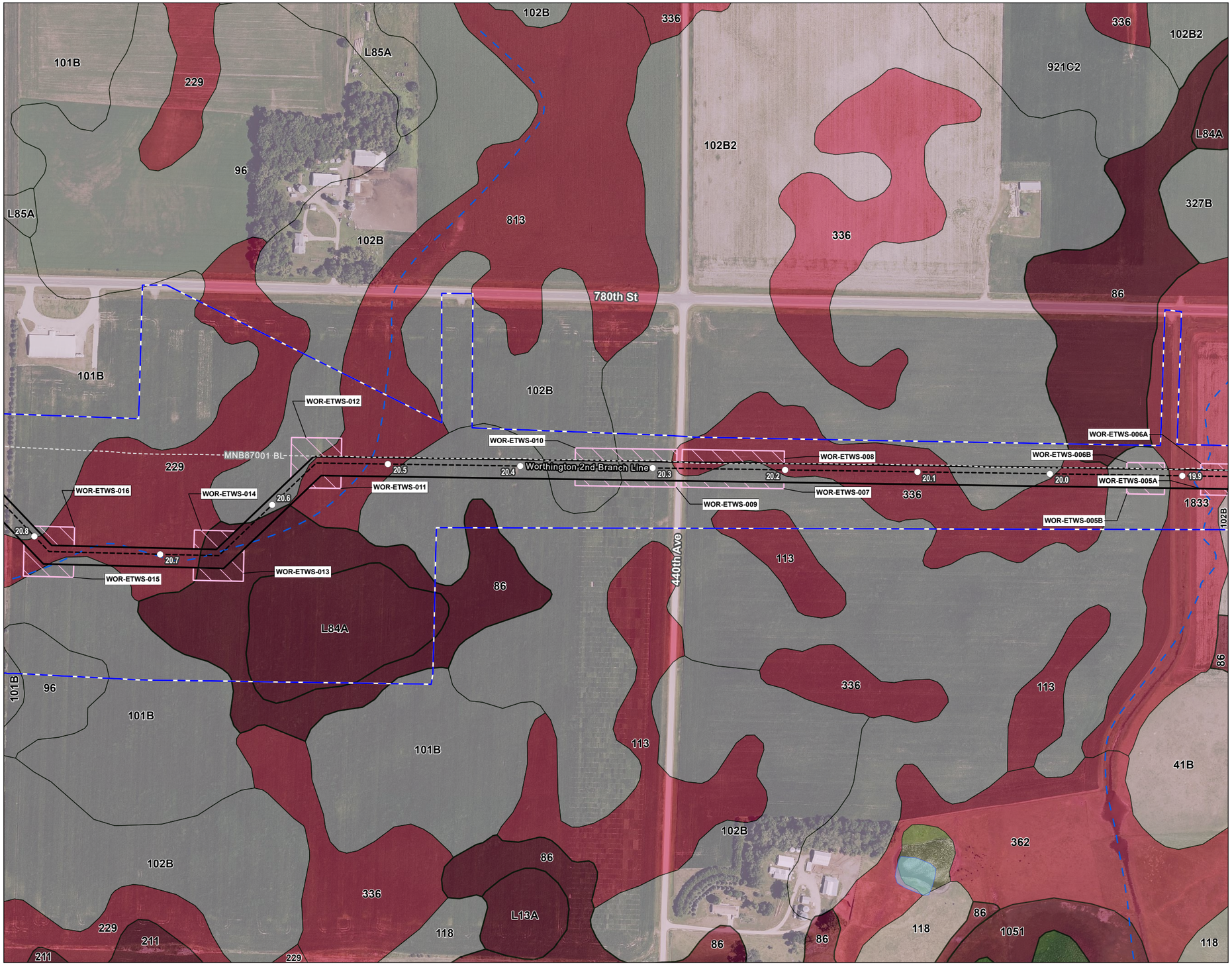


Figure No.

7-2

Title

NRCS Soil Series Map
NL27 - Worthington 2nd Branch Line

Client/Project 172609138

Northern Natural Gas
Northern Lights 2027 Expansion Project

Project Location
Jackson County, Minnesota

Prepared by JM on 2025-12-15
TR by SF on 2026-01-15
IR by SK on 2026-02-04

N

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Legend

- Environmental Survey Boundary
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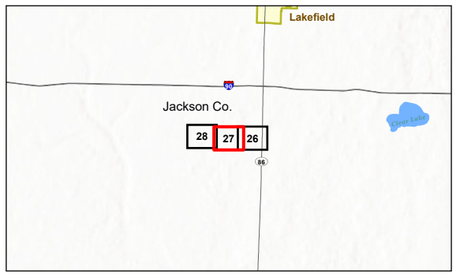
NRCS Soil Survey Data

Hydric Soil Rating

- Hydric
- Predominantly Hydric
- Partially Hydric
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National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
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Notes
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3. Background: 2023 NAIP

Stantec

Northern Natural Gas

Revised: 2026-02-17 By: jmarly
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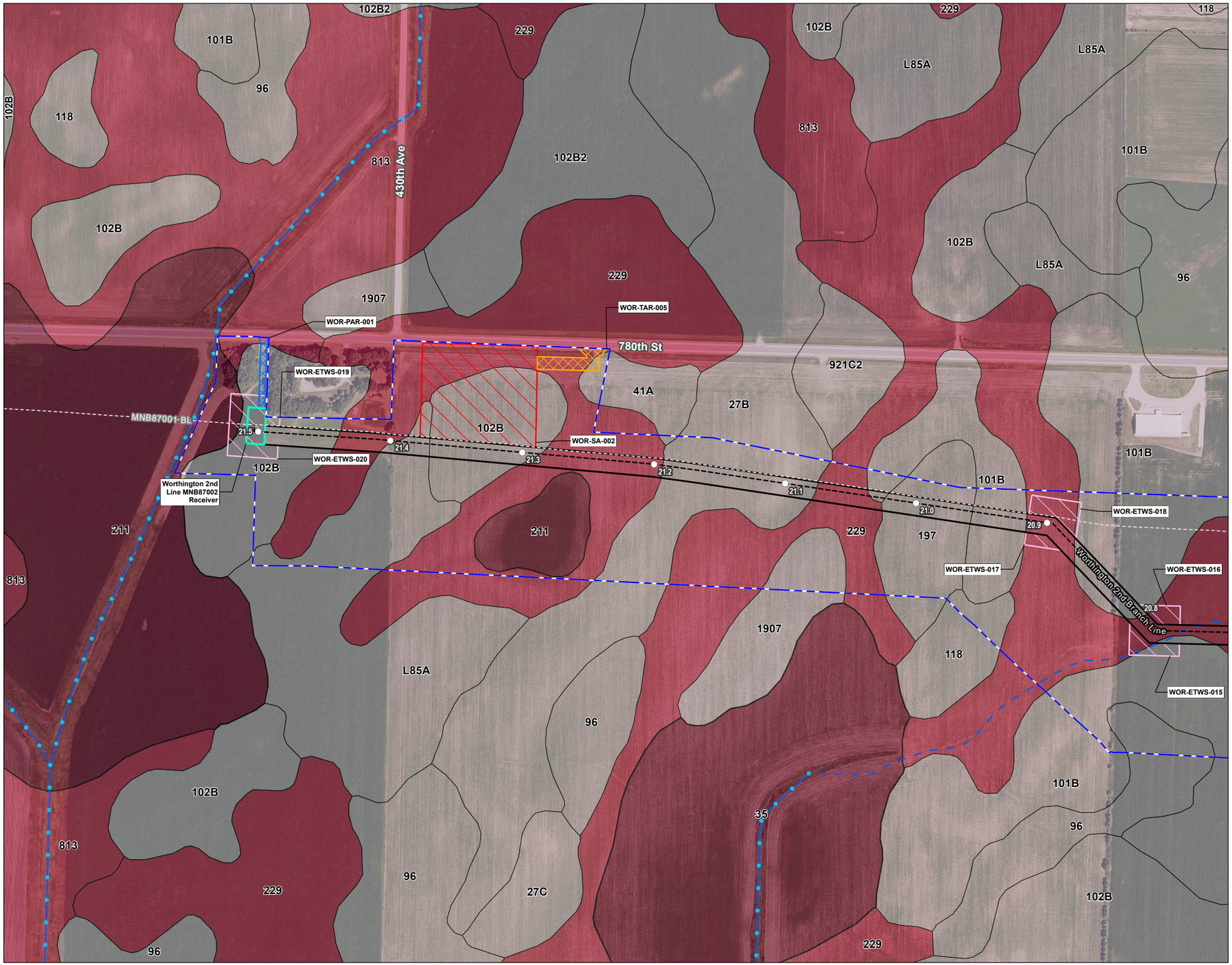


Figure No.

7-2

Title

NRCS Soil Series Map
NL27 - Worthington 2nd Branch Line

Client/Project 172609138

Northern Natural Gas
Northern Lights 2027 Expansion Project

Project Location
Jackson County, Minnesota

Prepared by JM on 2025-12-15
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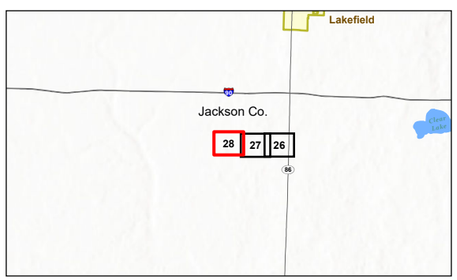
NRCS Soil Survey Data

Hydric Soil Rating

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- Predominantly Hydric
- Partially Hydric
- Predominantly Non-Hydric
- Non-Hydric

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



Notes
1. Coordinate System: NAD 1983 UTM Zone 15N
2. Data Sources: Stantec, Northern Natural Gas, Esri, USCB, USGS, NRCS
3. Background: 2023 NAIP

Stantec

Northern Natural Gas

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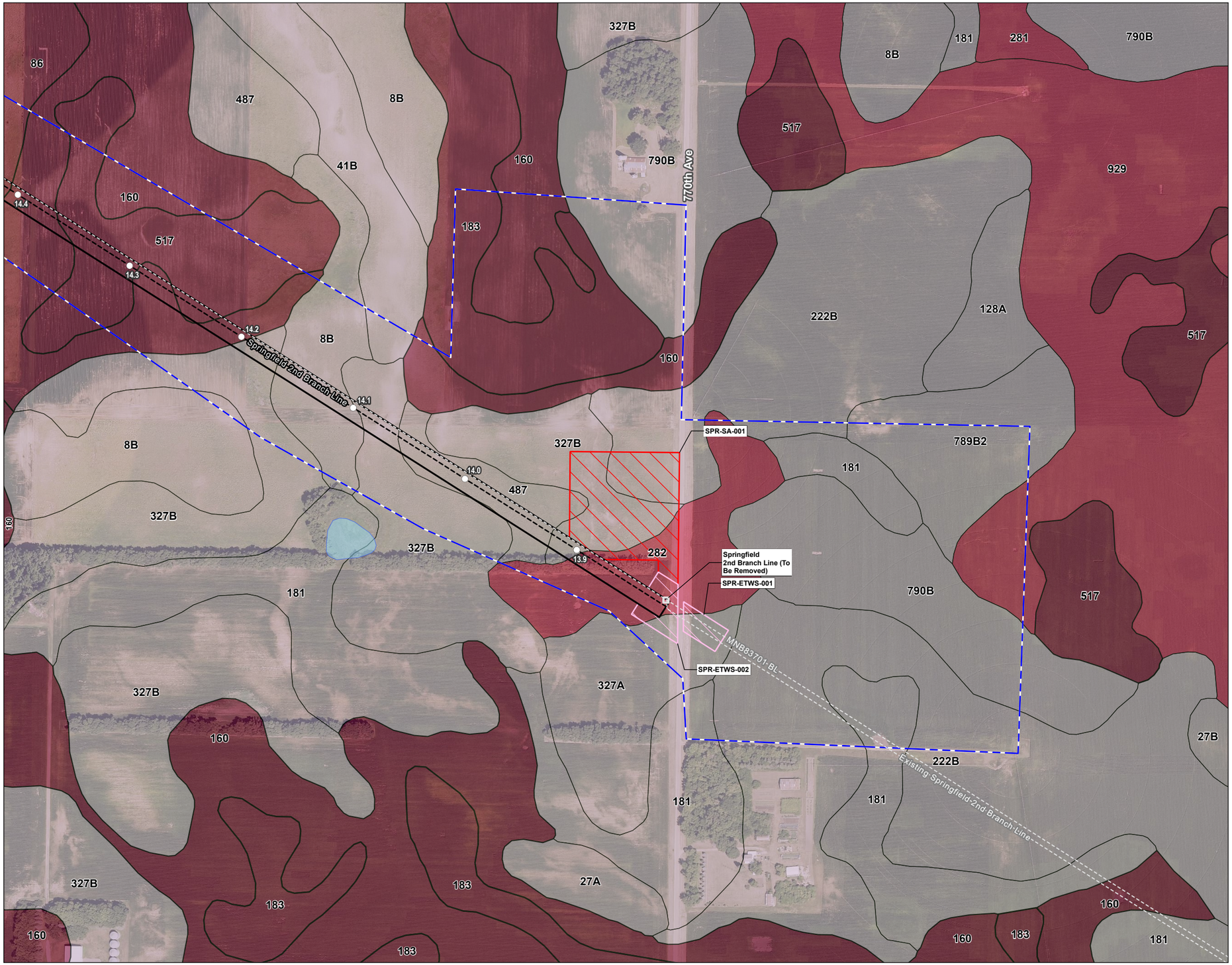


Figure No.

7-2

Title

NRCS Soil Series Map
NL27 - Springfield 2nd Branch Line

Client/Project 172609138

Northern Natural Gas
Northern Lights 2027 Expansion Project

Project Location
Watonwan County, Minnesota

Prepared by JM on 2025-12-15
TR by SF on 2026-01-15
IR by SK on 2026-02-04

N

0 200 400 Feet
(At original document size of 11x17)
1:4,800

Legend

- Environmental Survey Boundary
- Existing Facility
- Temporary Workspace
- Extra Temporary Workspace
- Staging Area
- Proposed Pipeline
- Existing Pipeline
- Mile Post

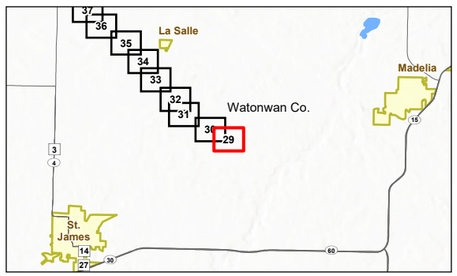
NRCS Soil Survey Data

Hydric Soil Rating

- Hydric
- Predominantly Hydric
- Partially Hydric
- Predominantly Non-Hydric
- Non-Hydric

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



Notes
1. Coordinate System: NAD 1983 UTM Zone 15N
2. Data Sources: Stantec, Northern Natural Gas, Esri, USCB, USGS, NRCS
3. Background: 2023 NAIP

Stantec

Northern Natural Gas

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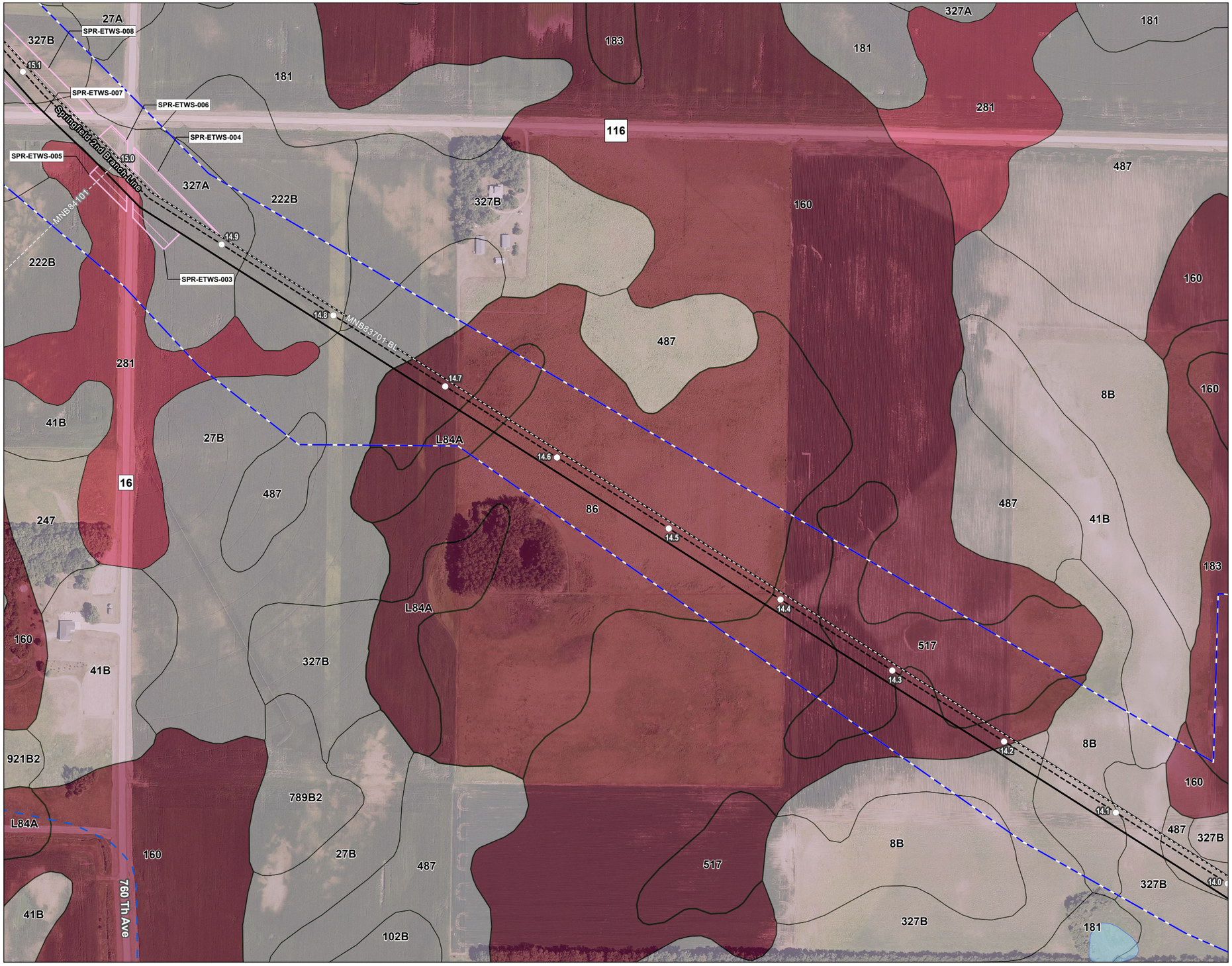


Figure No.
7-2

Title
NRCS Soil Series Map
NL27 - Springfield 2nd Branch Line

Client/Project
Northern Natural Gas
Northern Lights 2027 Expansion Project

172609138

Project Location
Watonwan County, Minnesota

Prepared by JM on 2025-12-15
TR by SF on 2026-01-15
IR by SK on 2026-02-04

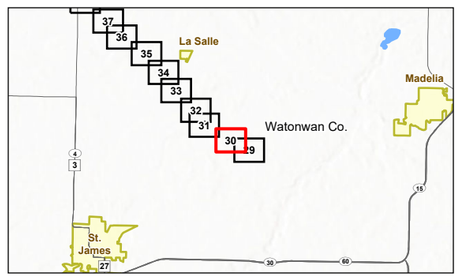
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Legend
- Environmental Survey Boundary
- Temporary Workspace
- Extra Temporary Workspace
- Proposed Pipeline
- Existing Pipeline
- Mile Post

NRCS Soil Survey Data
Hydric Soil Rating
- Hydric
- Predominantly Hydric
- Partially Hydric
- Predominantly Non-Hydric
- Non-Hydric

National Hydrography Dataset
- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



Notes
1. Coordinate System: NAD 1983 UTM Zone 15N
2. Data Sources: Stantec, Northern Natural Gas, Esri, USCB, USGS, NRCS
3. Background: 2023 NAIP

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Northern Natural Gas

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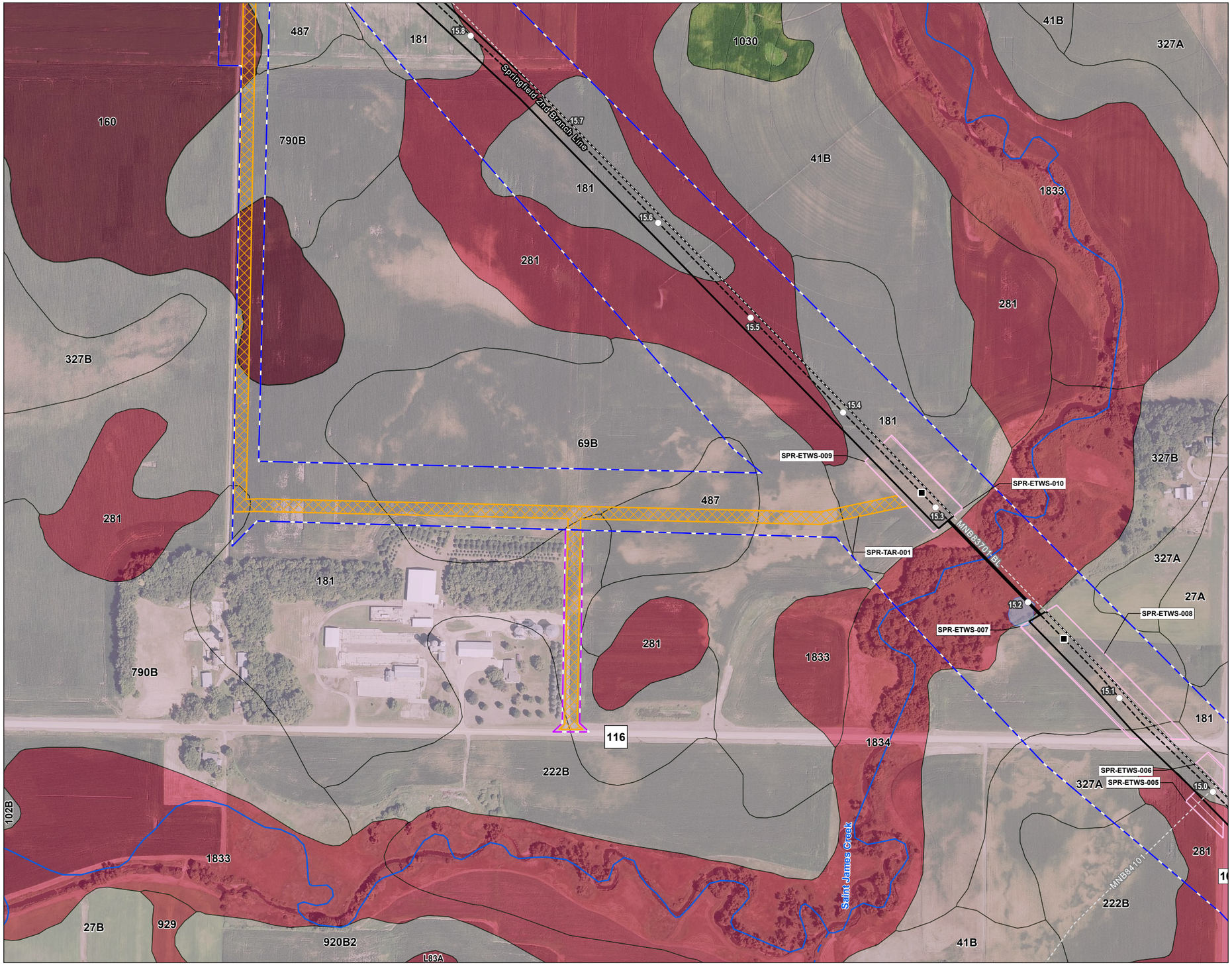


Figure No.
7-2

Title
NRCS Soil Series Map
NL27 - Springfield 2nd Branch Line

Client/Project
172609138
Northern Natural Gas
Northern Lights 2027 Expansion Project

Project Location
Watonwan County, Minnesota

Prepared by JM on 2025-12-15
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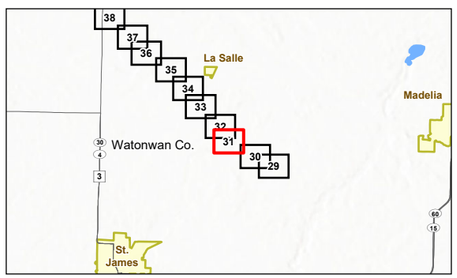
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Legend
- Environmental Survey Boundary
- Environmental Survey Boundary To Be Surveyed
- Temporary Workspace
- Extra Temporary Workspace
- Temporary Access Road
- Proposed Pipeline
- Existing Pipeline
- Mile Post
- HDD

NRCS Soil Survey Data
Hydric Soil Rating
- Hydric
- Predominantly Hydric
- Partially Hydric
- Predominantly Non-Hydric
- Non-Hydric

National Hydrography Dataset
- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



Notes
1. Coordinate System: NAD 1983 UTM Zone 15N
2. Data Sources: Stantec, Northern Natural Gas, Esri, USCB, USGS, NRCS
3. Background: 2023 NAIP

Stantec
Northern Natural Gas

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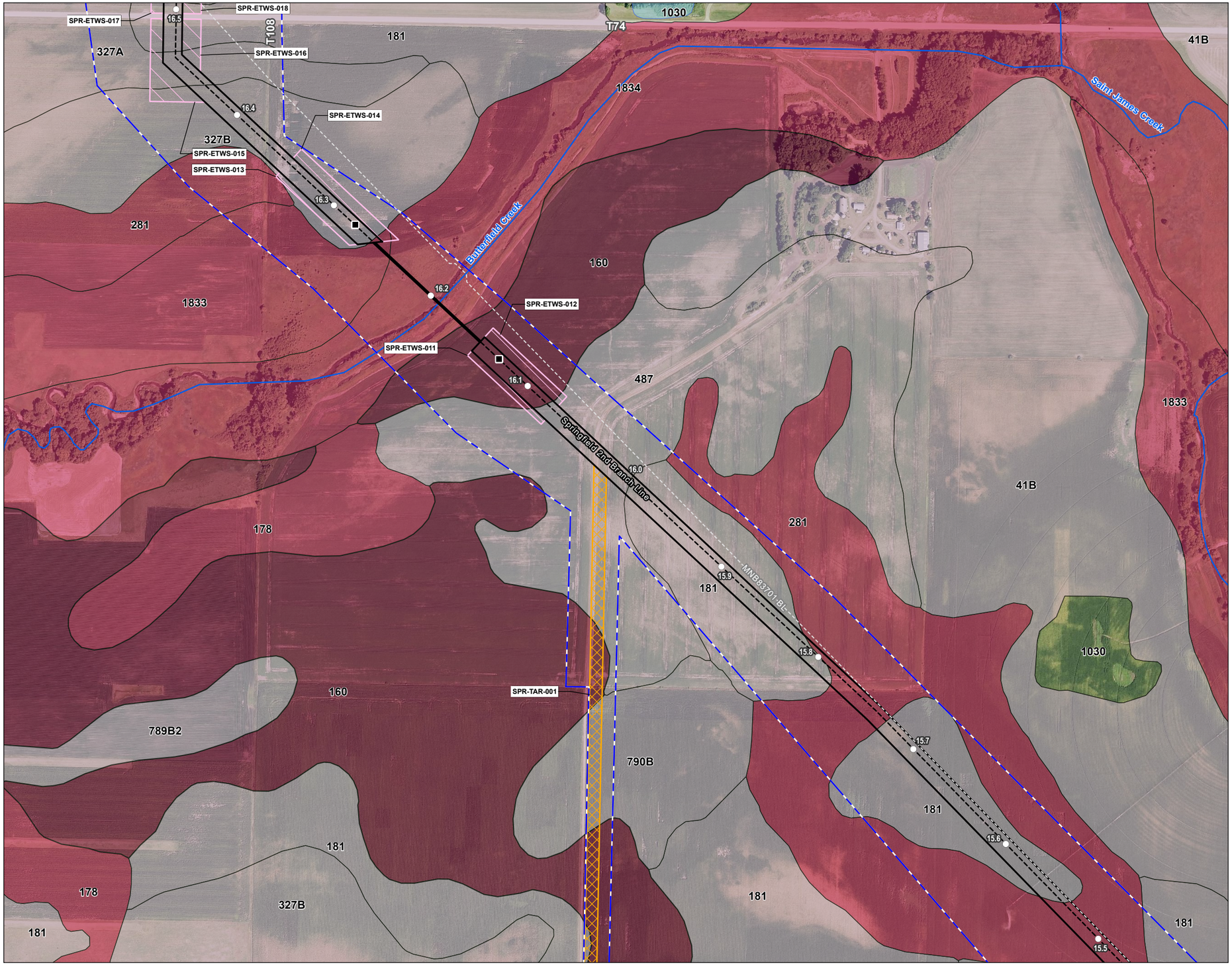


Figure No.

7-2

Title

NRCS Soil Series Map
NL27 - Springfield 2nd Branch Line

Client/Project 172609138

Northern Natural Gas
Northern Lights 2027 Expansion Project

Project Location
Watonwan County, Minnesota

Prepared by JM on 2025-12-15
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IR by SK on 2026-02-04

N

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(At original document size of 11x17)
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Legend

- Environmental Survey Boundary
- Temporary Workspace
- Extra Temporary Workspace
- Temporary Access Road
- Proposed Pipeline
- Existing Pipeline
- Mile Post
- HDD

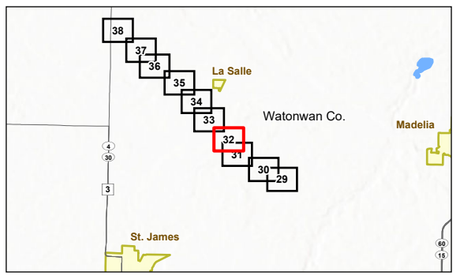
NRCS Soil Survey Data

Hydric Soil Rating

- Hydric
- Predominantly Hydric
- Partially Hydric
- Predominantly Non-Hydric
- Non-Hydric

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



Notes
1. Coordinate System: NAD 1983 UTM Zone 15N
2. Data Sources: Stantec, Northern Natural Gas, Esri, USCB, USGS, NRCS
3. Background: 2023 NAIP

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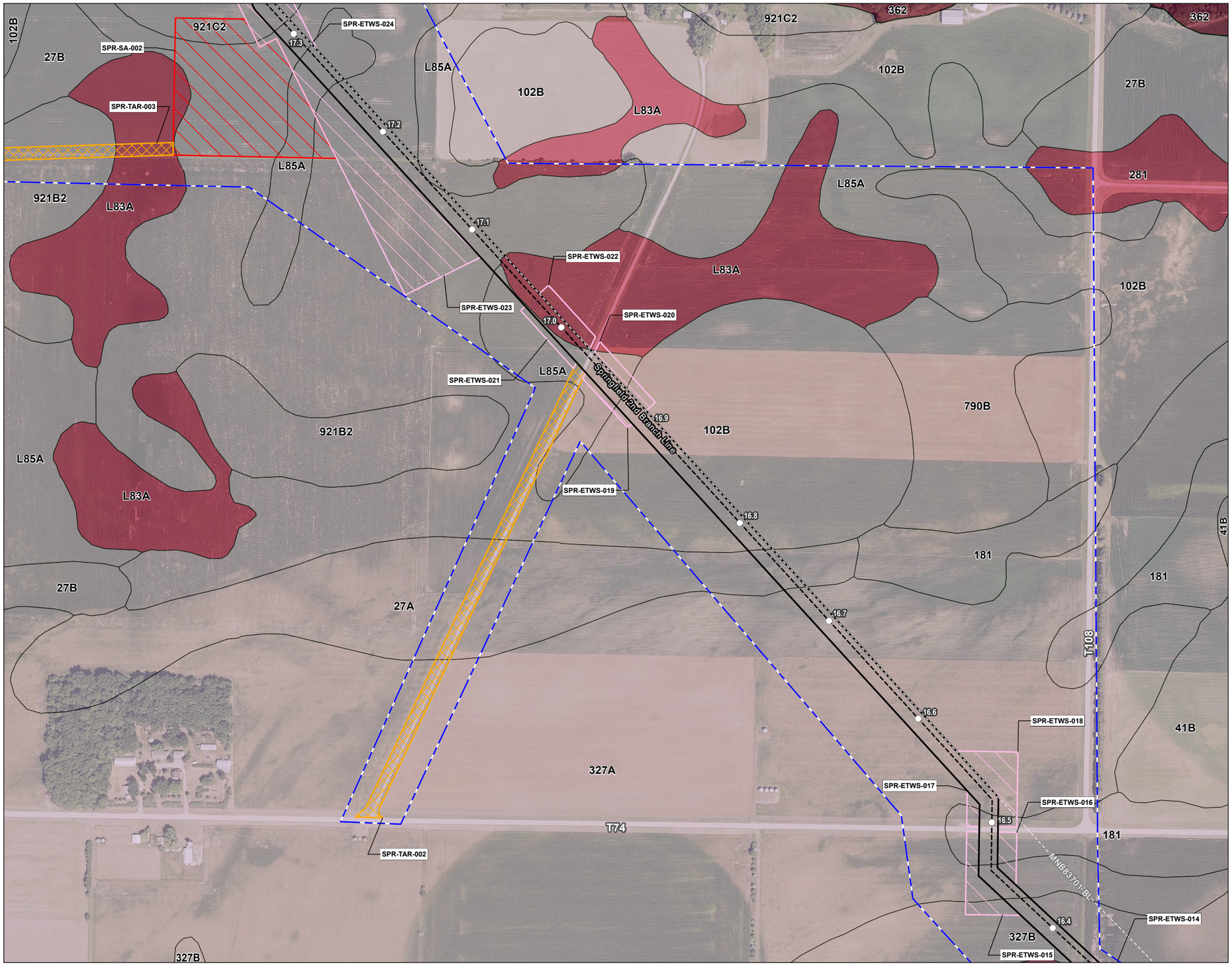


Figure No.

7-2

Title

NRCS Soil Series Map
NL27 - Springfield 2nd Branch Line

Client/Project 172609138

Northern Natural Gas
Northern Lights 2027 Expansion Project

Project Location
Watonwan County, Minnesota

Prepared by JM on 2025-12-15
TR by SF on 2026-01-15
IR by SK on 2026-02-04

N

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(At original document size of 11x17)
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Legend

- Environmental Survey Boundary
- Temporary Workspace
- Extra Temporary Workspace
- Temporary Access Road
- Staging Area
- Proposed Pipeline
- Existing Pipeline
- Mile Post

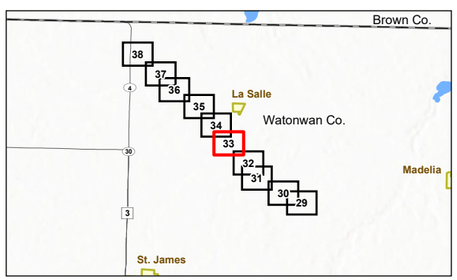
NRCS Soil Survey Data

Hydric Soil Rating

- Hydric
- Predominantly Hydric
- Partially Hydric
- Predominantly Non-Hydric
- Non-Hydric

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



Notes
1. Coordinate System: NAD 1983 UTM Zone 15N
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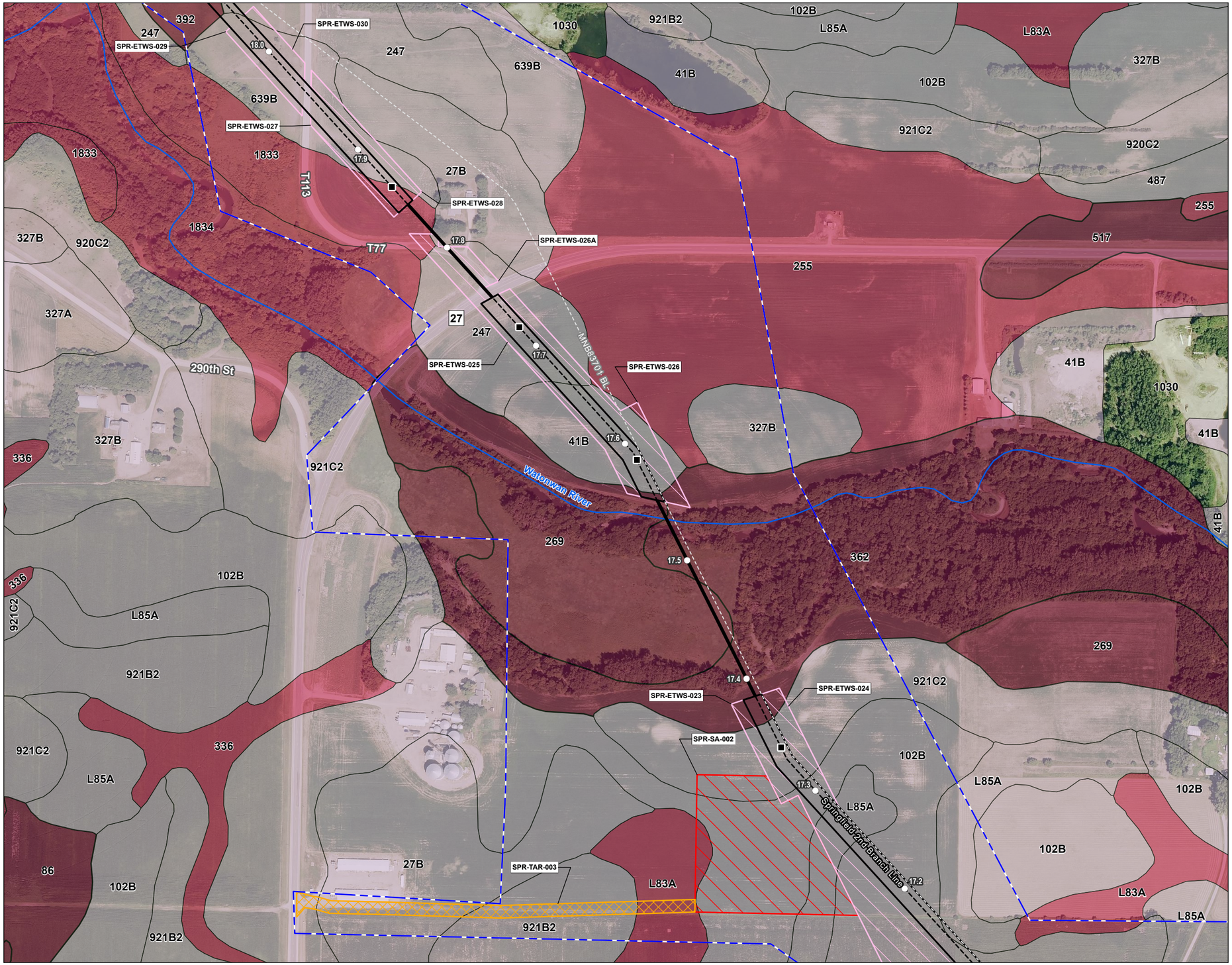


Figure No.
7-2

Title
NRCS Soil Series Map
NL27 - Springfield 2nd Branch Line

Client/Project
Northern Natural Gas
Northern Lights 2027 Expansion Project
172609138

Project Location
Watonwan County, Minnesota

Prepared by JM on 2025-12-15
TR by SF on 2026-01-15
IR by SK on 2026-02-04

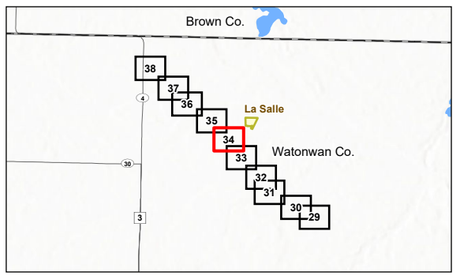
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Legend
- Environmental Survey Boundary
- Temporary Workspace
- Extra Temporary Workspace
- Temporary Access Road
- Staging Area
- Proposed Pipeline
- Existing Pipeline
- Mile Post
- HDD

NRCS Soil Survey Data
Hydric Soil Rating
- Hydric
- Predominantly Hydric
- Partially Hydric
- Predominantly Non-Hydric
- Non-Hydric

National Hydrography Dataset
- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



Notes
1. Coordinate System: NAD 1983 UTM Zone 15N
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Northern Natural Gas

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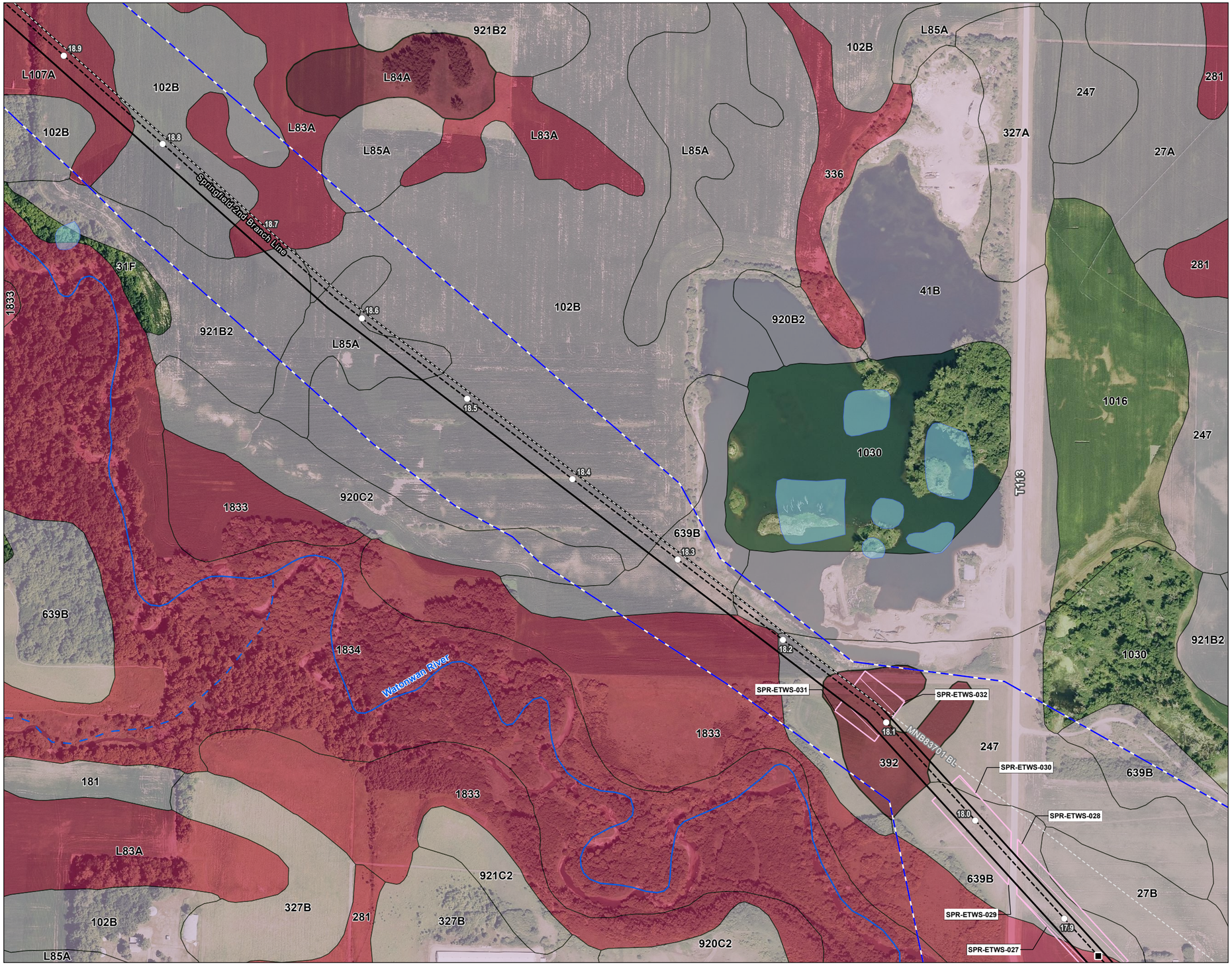


Figure No.

7-2

Title

NRCS Soil Series Map
NL27 - Springfield 2nd Branch Line

Client/Project 172609138

Northern Natural Gas
Northern Lights 2027 Expansion Project

Project Location
Watonwan County, Minnesota

Prepared by JM on 2025-12-15
TR by SF on 2026-01-15
IR by SK on 2026-02-04

N

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(At original document size of 11x17)
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Legend

- Environmental Survey Boundary
- Temporary Workspace
- Extra Temporary Workspace
- Proposed Pipeline
- Existing Pipeline
- Mile Post
- HDD

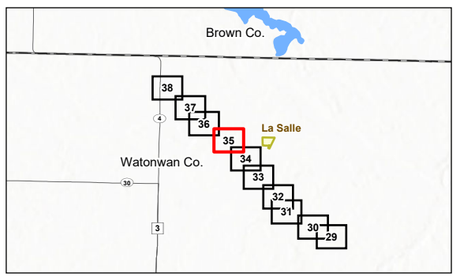
NRCS Soil Survey Data

Hydric Soil Rating

- Hydric
- Predominantly Hydric
- Partially Hydric
- Predominantly Non-Hydric
- Non-Hydric

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



Notes
1. Coordinate System: NAD 1983 UTM Zone 15N
2. Data Sources: Stantec, Northern Natural Gas, Esri, USCB, USGS, NRCS
3. Background: 2023 NAIP

Stantec

Northern Natural Gas

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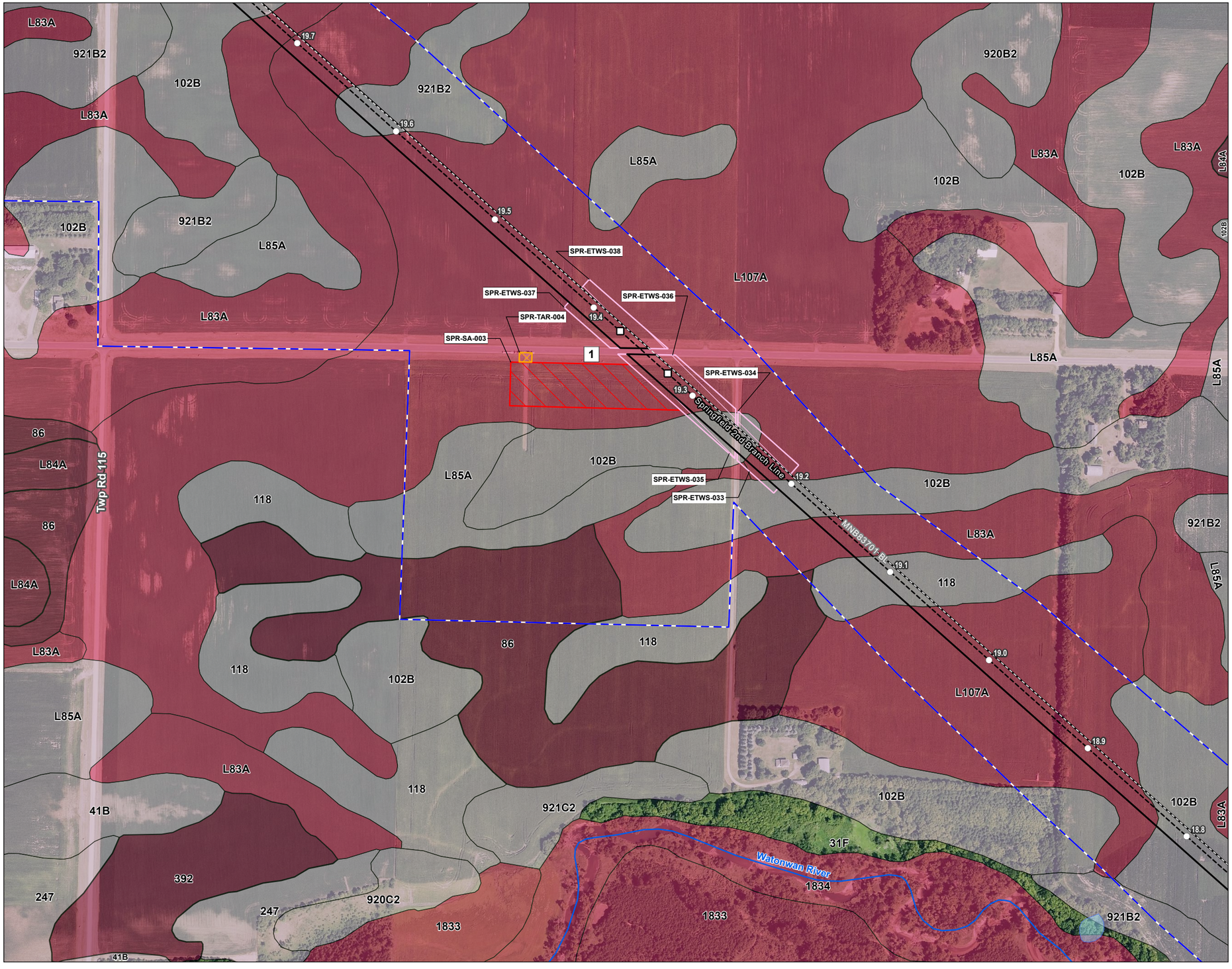


Figure No.
7-2

Title
NRCS Soil Series Map
NL27 - Springfield 2nd Branch Line

Client/Project 172609138
Northern Natural Gas
Northern Lights 2027 Expansion Project

Project Location
Watonwan County, Minnesota

Prepared by JM on 2025-12-15
TR by SF on 2026-01-15
IR by SK on 2026-02-04

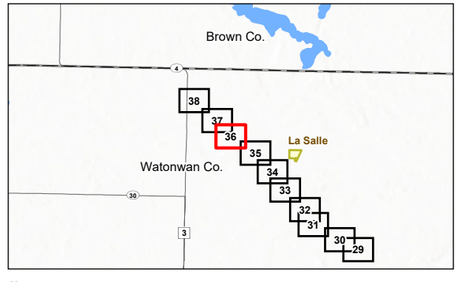
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Legend
- Environmental Survey Boundary
- Temporary Workspace
- Extra Temporary Workspace
- Temporary Access Road
- Staging Area
- Proposed Pipeline
- Existing Pipeline
- Mile Post
- Auger Bore

NRCS Soil Survey Data
Hydric Soil Rating
- Hydric
- Predominantly Hydric
- Partially Hydric
- Predominantly Non-Hydric
- Non-Hydric

National Hydrography Dataset
- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



Notes
1. Coordinate System: NAD 1983 UTM Zone 15N
2. Data Sources: Stantec, Northern Natural Gas, Esri, USCB, USGS, NRCS
3. Background: 2023 NAIP

Stantec
Northern Natural Gas

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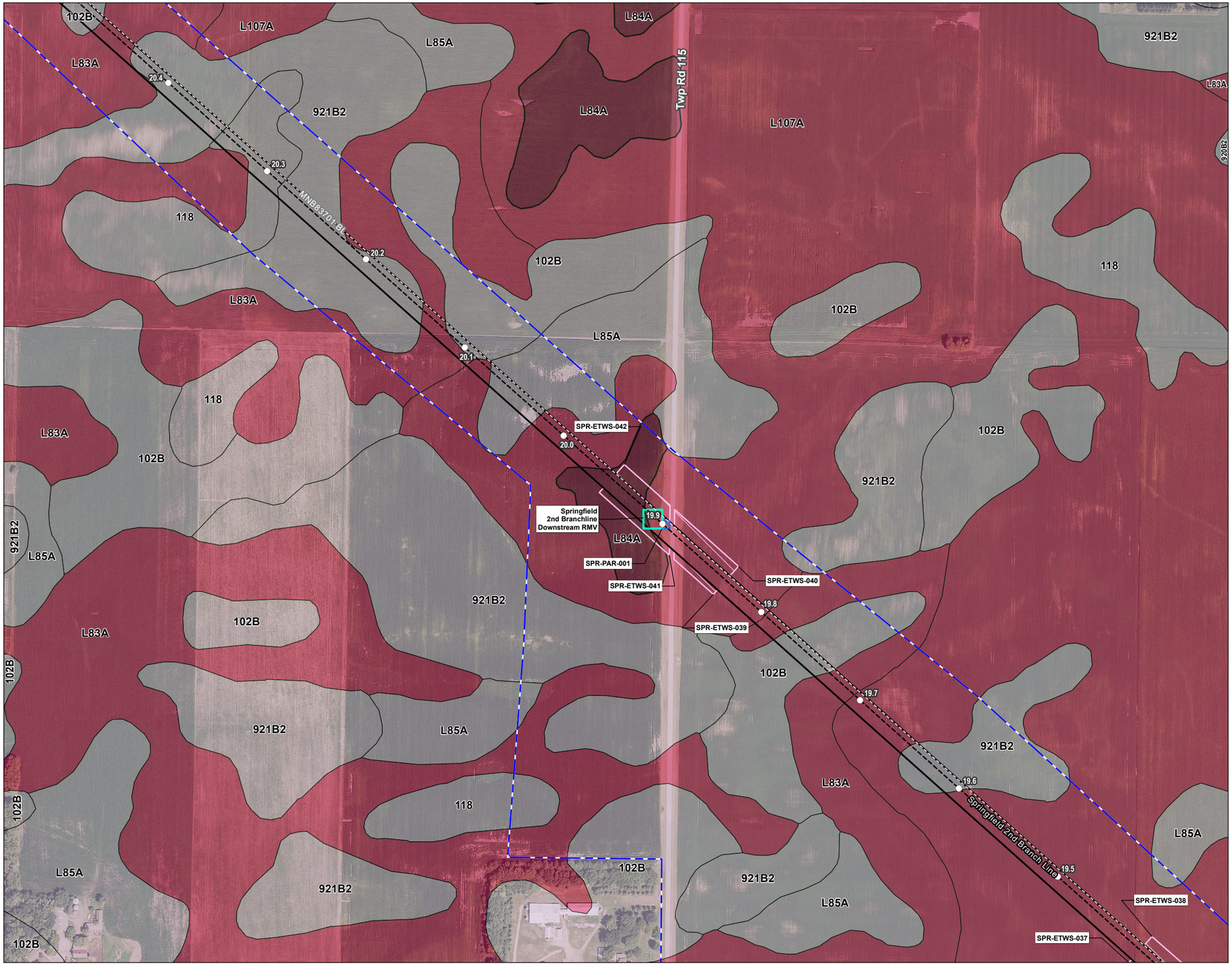


Figure No.

7-2

Title

NRCS Soil Series Map
NL27 - Springfield 2nd Branch Line

Client/Project 172609138

Northern Natural Gas
Northern Lights 2027 Expansion Project

Project Location
Watonwan County, Minnesota

Prepared by JM on 2025-12-15
TR by SF on 2026-01-15
IR by SK on 2026-02-04

N

0 200 400 Feet
(At original document size of 11x17)
1:4,800

Legend

- Environmental Survey Boundary
- Proposed Facility
- Permanent Access Road
- Temporary Workspace
- Extra Temporary Workspace
- Proposed Pipeline
- Existing Pipeline
- Mile Post

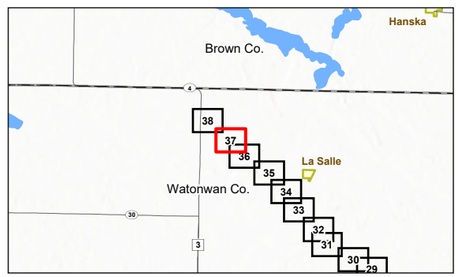
NRCS Soil Survey Data

Hydric Soil Rating

- Hydric
- Predominantly Hydric
- Partially Hydric
- Predominantly Non-Hydric
- Non-Hydric

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



Notes
1. Coordinate System: NAD 1983 UTM Zone 15N
2. Data Sources: Stantec, Northern Natural Gas, Esri, USCB, USGS, NRCS
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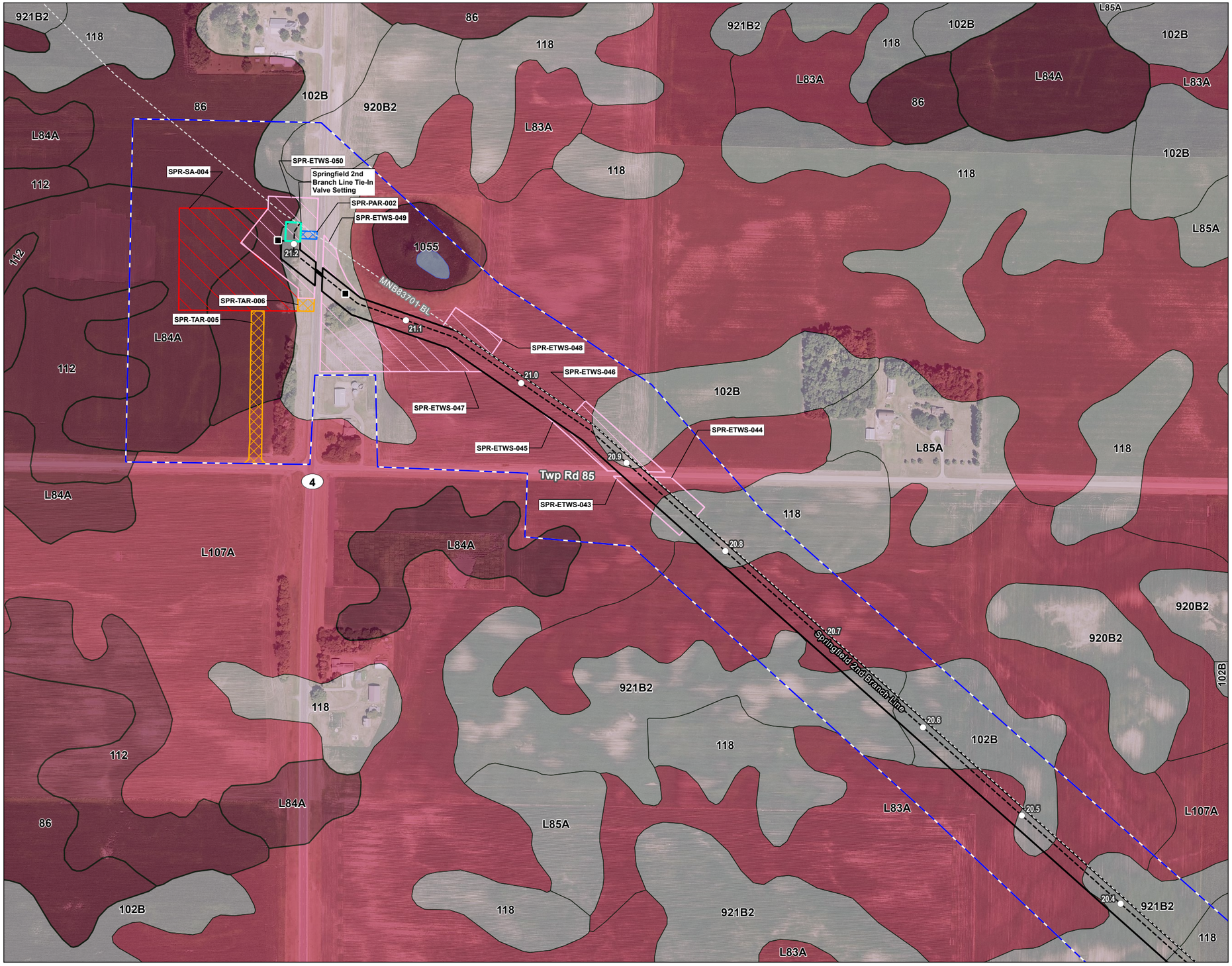


Figure No.
7-2

Title
NRCS Soil Series Map
NL27 - Springfield 2nd Branch Line

Client/Project
172609138
Northern Natural Gas
Northern Lights 2027 Expansion Project

Project Location
Watonwan County, Minnesota

Prepared by JM on 2025-12-15
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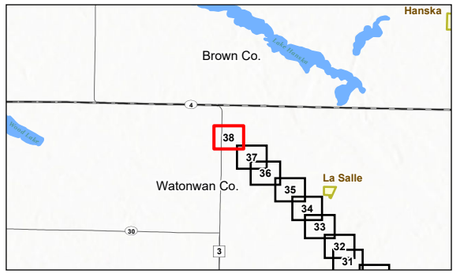
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Legend
- Environmental Survey Boundary
- Proposed Facility
- Permanent Access Road
- Temporary Workspace
- Extra Temporary Workspace
- Temporary Access Road
- Staging Area
- Proposed Pipeline
- Existing Pipeline
- Mile Post
- HDD

NRCS Soil Survey Data
Hydric Soil Rating
- Hydric
- Predominantly Hydric
- Partially Hydric
- Predominantly Non-Hydric
- Non-Hydric

National Hydrography Dataset
- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



Notes
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2. Data Sources: Stantec, Northern Natural Gas, Esri, USCB, USGS, NRCS
3. Background: 2023 NAIP

Stantec
Northern Natural Gas

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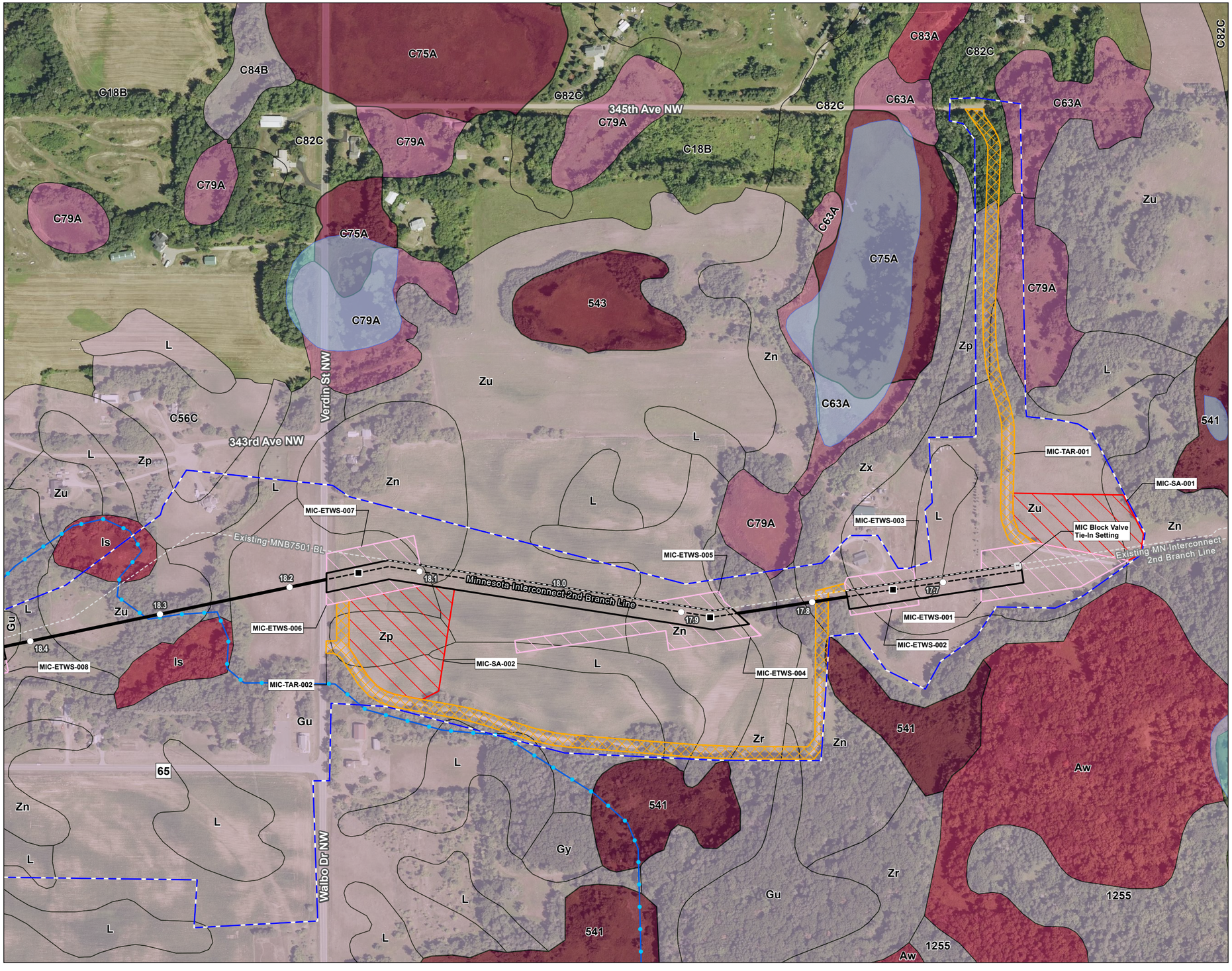


Figure No.

7-2

Title

NRCS Soil Series Map
NL27 - Minnesota Interconnect 2nd Branch Line

Client/Project 172609138
Northern Natural Gas
Northern Lights 2027 Expansion Project

Project Location
Isanti County, Minnesota

Prepared by JM on 2025-12-15
TR by SF on 2026-01-15
IR by SK on 2026-02-04

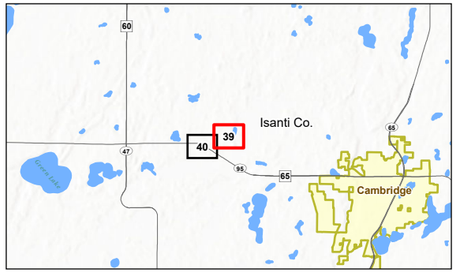
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Legend
- Environmental Survey Boundary
- Existing Facility
- Temporary Workspace
- Extra Temporary Workspace
- Temporary Access Road
- Staging Area
- Proposed Pipeline
- Existing Pipeline
- Mile Post
- HDD

NRCS Soil Survey Data
Hydric Soil Rating
- Hydric
- Predominantly Hydric
- Partially Hydric
- Predominantly Non-Hydric
- Non-Hydric

National Hydrography Dataset
- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



Notes
1. Coordinate System: NAD 1983 UTM Zone 15N
2. Data Sources: Stantec, Northern Natural Gas, Esri, USCB, USGS, NRCS
3. Background: 2023 NAIP

Stantec

Northern Natural Gas

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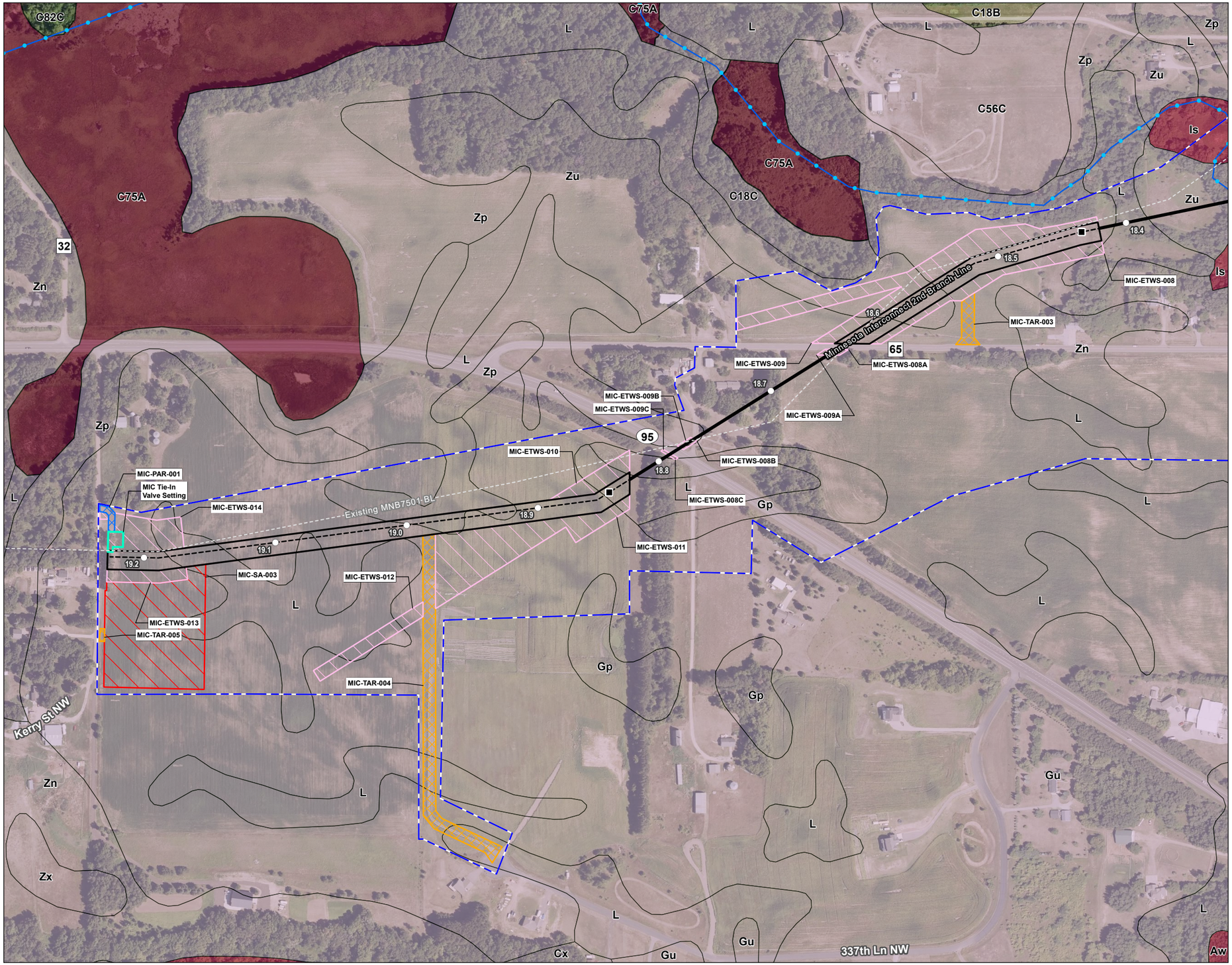


Figure No.

7-2

Title

NRCS Soil Series Map
NL27 - Minnesota Interconnect 2nd Branch Line

Client/Project 172609138

Northern Natural Gas
Northern Lights 2027 Expansion Project

Project Location
Isanti County, Minnesota

Prepared by JM on 2025-12-15
TR by SF on 2026-01-15
IR by SK on 2026-02-04

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Legend

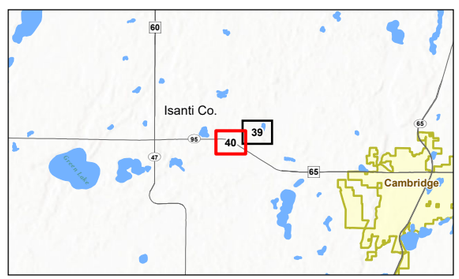
- Environmental Survey Boundary
- Proposed Facility
- Permanent Access Road
- Temporary Workspace
- Extra Temporary Workspace
- Temporary Access Road
- Staging Area
- Proposed Pipeline
- Existing Pipeline
- Mile Post
- HDD

NRCS Soil Survey Data
Hydric Soil Rating

- Hydric
- Predominantly Hydric
- Partially Hydric
- Predominantly Non-Hydric
- Non-Hydric

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



Notes
1. Coordinate System: NAD 1983 UTM Zone 15N
2. Data Sources: Stantec, Northern Natural Gas, Esri, USCB, USGS, NRCS
3. Background: 2023 NAIP

Stantec

Northern Natural Gas

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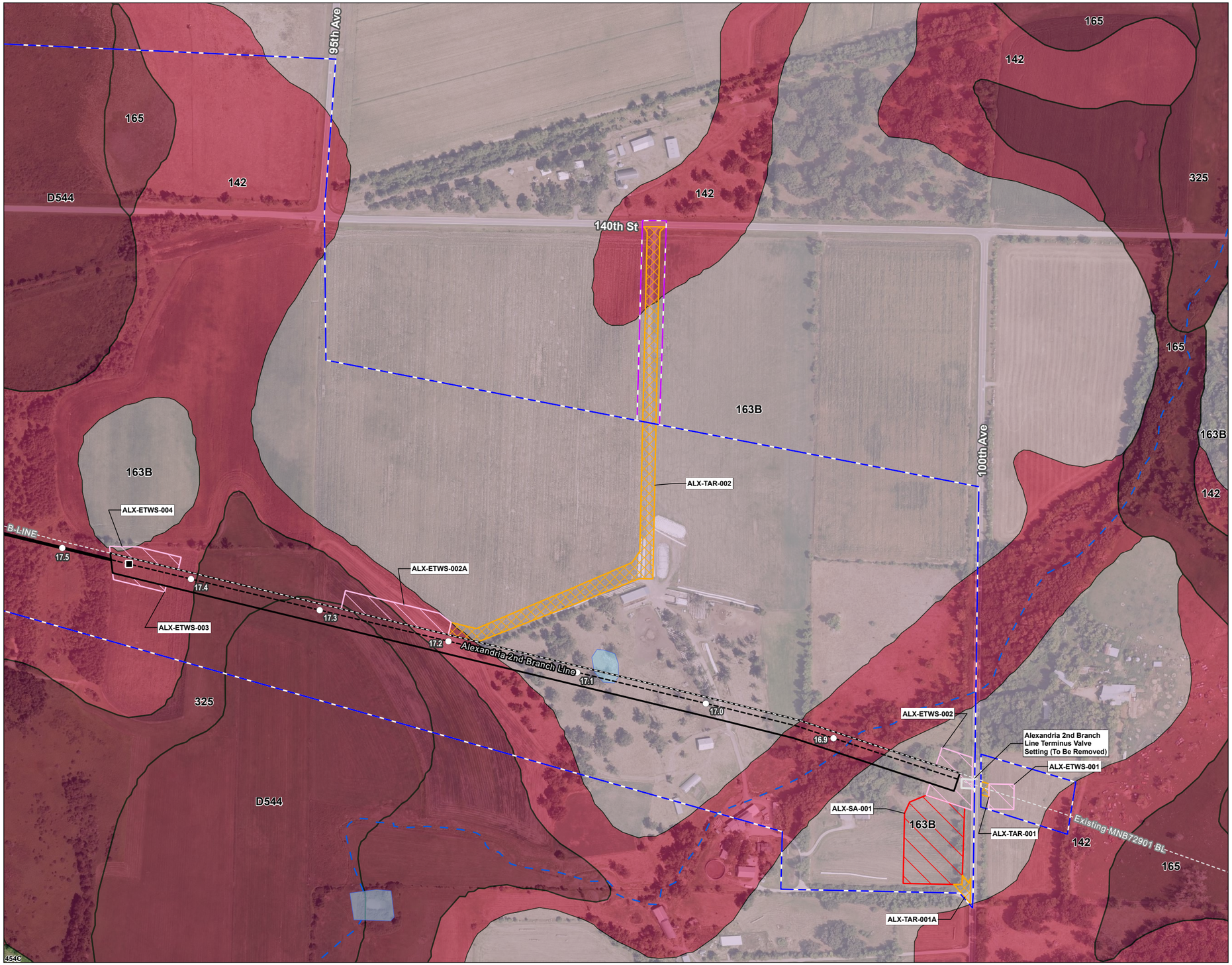


Figure No.
7-2

Title
NRCS Soil Series Map
NL27 - Alexandria 2nd Branch Line

Client/Project 172609138
Northern Natural Gas
Northern Lights 2027 Expansion Project

Project Location
Morrison County, Minnesota

Prepared by JM on 2025-12-15
TR by SF on 2026-01-15
IR by SK on 2026-02-04

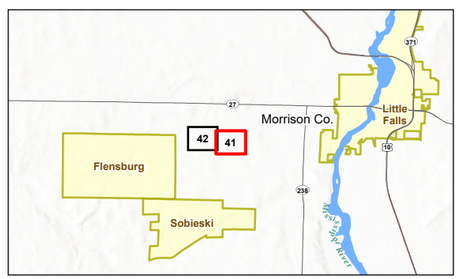
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Legend
- Environmental Survey Boundary
- Environmental Survey Boundary To Be Surveyed
- Existing Facility
- Temporary Workspace
- Extra Temporary Workspace
- Temporary Access Road
- Staging Area
- Proposed Pipeline
- Existing Pipeline
- Mile Post
- HDD

NRCS Soil Survey Data
Hydric Soil Rating
- Hydric
- Predominantly Hydric
- Partially Hydric
- Predominantly Non-Hydric
- Non-Hydric

National Hydrography Dataset
- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



Notes
1. Coordinate System: NAD 1983 UTM Zone 15N
2. Data Sources: Stantec, Northern Natural Gas, Esri, USCB, USGS, NRCS
3. Background: 2023 NAIP

Stantec
Northern Natural Gas

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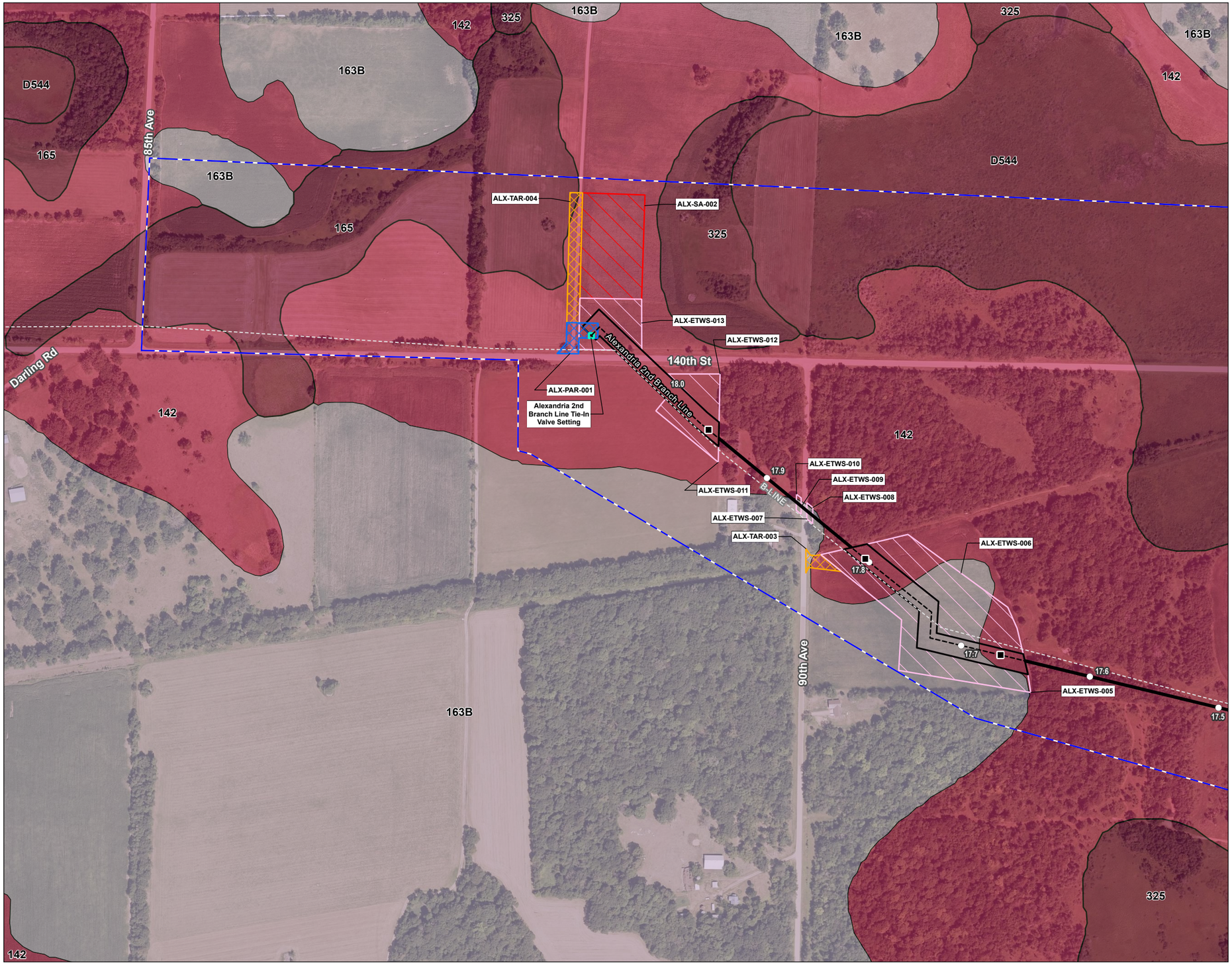


Figure No.

7-2

Title

NRCS Soil Series Map
NL27 - Alexandria 2nd Branch Line

Client/Project 172609138

Northern Natural Gas
Northern Lights 2027 Expansion Project

Project Location
Morrison County, Minnesota

Prepared by JM on 2025-12-15
TR by SF on 2026-01-15
IR by SK on 2026-02-04

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(At original document size of 11x17)
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Legend

- Environmental Survey Boundary
- Proposed Facility
- Permanent Access Road
- Temporary Workspace
- Extra Temporary Workspace
- Temporary Access Road
- Staging Area
- Proposed Pipeline
- Existing Pipeline
- Mile Post
- HDD

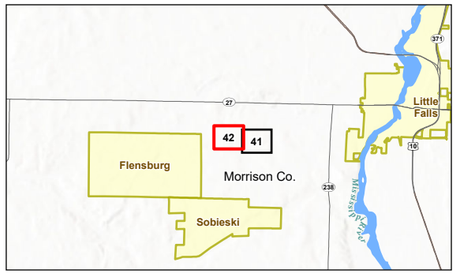
NRCS Soil Survey Data

Hydric Soil Rating

- Hydric
- Predominantly Hydric
- Partially Hydric
- Predominantly Non-Hydric
- Non-Hydric

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



Notes
1. Coordinate System: NAD 1983 UTM Zone 15N
2. Data Sources: Stantec, Northern Natural Gas, Esri, USCB, USGS, NRCS
3. Background: 2023 NAIP

Stantec

Northern Natural Gas

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Figure No.

7-2

Title

NRCS Soil Series Map
NL27 - Hugo Compressor Station

Client/Project 172609138

Northern Natural Gas
Northern Lights 2027 Expansion Project

Project Location
Washington County, Minnesota

Prepared by JM on 2025-12-15
TR by SF on 2026-01-15
IR by SK on 2026-02-04

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(At original document size of 11x17)
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Legend

- Environmental Survey Boundary
- Existing Facility
- Existing Pipeline

NRCS Soil Survey Data

Hydric Soil Rating

- Hydric
- Predominantly Hydric
- Partially Hydric
- Predominantly Non-Hydric
- Non-Hydric

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



Notes
1. Coordinate System: NAD 1983 UTM Zone 15N
2. Data Sources: Stantec, Northern Natural Gas, Esri, USCB, USGS, NRCS
3. Background: 2023 NAIP

Stantec

Northern Natural Gas

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Appendix 7A
Selected Characteristics of the Soil Map Units Within the V2F Project Area

Appendix 7A - Selected Characteristics of the Soil Map Units Within the V2F Project Area

Map Label	Mile Post		Soil Map Unit Name	Local Component Phase	Component Percent	Percent Slope	Depth of A Horizon (in)	Surface Texture	Drainage Class	Permeability	Landforms
	From	To									
Lake Mills M500 E-line											
27	36.08 37.42 37.65	36.12 37.61 37.74	Dickinson fine sandy loam, 0 to 2 percent slopes	Dickinson	88-98	1	10	Fine sandy loam	Well drained	High	Outwash plains
62	37.25 41.19 41.44	37.30 41.25 41.53	Barrington silt loam, 1 to 3 percent slopes	Barrington	90-98	2	15	Silt loam	Moderately well drained	Moderately high	Flats
84	34.86 35.11	34.93 35.25	Brownton silty clay loam, 0 to 2 percent slopes	Brownton	85-95	1	15	Silty clay loam	Poorly drained	Moderately low	Flats
123	35.83	35.94	Dundas silt loam, 0 to 2 percent slopes	Dundas	75-95	1	10	Silt loam	Poorly drained	Moderately high	Ground moraines
129	35.71	35.74	Cylinder loam, 0 to 2 percent slopes	Cylinder	75-95	1	19	Loam	Somewhat poorly drained	Moderately high	Outwash plains
134	35.40	35.44	Okoboji silty clay loam, 0 to 1 percent slopes	Okoboji	75-95	0	33	Silty clay loam	Very poorly drained	Moderately low	Depressions
136	35.44 41.27 41.60 41.72	35.62 41.38 41.69 41.80	Madelia silty clay loam, 0 to 2 percent slopes	Madelia	75-95	1	19	Silty clay loam	Poorly drained	Moderately high	Flats
140	41.00 41.25	41.08 41.27	Spicer silty clay loam, 0 to 2 percent slopes	Spicer	80-95	1	16	Silty clay loam	Poorly drained	Moderately high	Flats
156	37.61	37.65	Fairhaven loam, 0 to 2 percent slopes	Fairhaven	85-95	1	14	Loam	Well drained	Moderately high	Outwash plains
190	35.94	35.99	Hayfield silt loam, 1 to 3 percent slopes	Hayfield	75-95	2	9	Silt loam	Somewhat poorly drained	Moderately high	Outwash plains
229	35.25	35.32	Waldorf silty clay loam, 0 to 2 percent slopes	Waldorf	75-95	1	20	Silty clay loam	Poorly drained	Moderately low	Flats
239	36.54 42.00	36.58 42.02	Le Sueur loam, 1 to 3 percent slopes	Le Sueur	65-90	2	14	Loam	Somewhat poorly drained	Moderately high	Not rated

Map Label	Mile Post		Soil Map Unit Name	Local Component Phase	Component Percent	Percent Slope	Depth of A Horizon (in)	Surface Texture	Drainage Class	Permeability	Landforms
	From	To									
252	34.20 34.32	34.27 34.36	Marshan silt loam	Marshan	70-100	1	15	Silt loam	Poorly drained	Moderately high	Drainageways
255	34.27 34.36	34.32 34.38	Mayer loam, 0 to 2 percent slopes	Mayer	75-95	1	21	Loam	Poorly drained	Moderately high	Outwash plains
282	34.38	34.42	Hanska loam, 0 to 2 percent slopes	Hanksa	75-95	1	19	Loam	Poorly drained	Moderately high	Outwash plains
287	35.37 35.62 41.38 41.53	35.40 35.65 41.44 41.60	Minnetonka silty clay loam	Minnetonka	85-95	1	16	Silty clay loam	Poorly drained	Moderately high	Flats
391	34.74 34.93	34.86 34.98	Spicer silt loam, depressional	Spicer-depressional	90-98	1	20	Silt loam	Very poorly drained	Moderately high	Drainageways
392	36.58 36.63	36.61 36.65	Biscay clay loam, 0 to 2 percent slopes	Biscay	75-95	1	20	Clay loam	Poorly drained	Moderately high	Outwash plains
414	36.72 37.21 37.30 38.46 38.99 39.09	36.73 37.25 37.35 38.49 39.01 39.12	Hamel loam, 0 to 2 percent slopes	Hamel	75-95	1	24	Loam	Poorly drained	Moderately high	Ground moraines
517	34.71 36.65 37.84	34.74 36.72 37.86	Shandep loam	Shandep	95-99	1	38	Loam	Very poorly drained	Moderately high	Outwash plains
521	34.42	34.71	Medo muck, depressional, 0 to 1 percent slopes	Medo-depressional	80-100	0	48	Muck	Very poorly drained	High	Depressions
525	36.41 41.08	36.50 41.14	Muskego soils, 0 to 1 percent slopes	Muskego-drained	15-85	0	28*	Muck	Very poorly drained	High	Depressions
940	34.98	35.11	Maxcreek-Barbert complex	Maxcreek	60-70	1	21	Silty clay loam	Poorly drained	Moderately high	Moraines
1806	35.74 36.81 37.02	35.83 36.87 37.06	Lerdal silty clay loam, silty substratum, 0 to 2 percent slopes	Lerdal-silty substratum	85-95	1	11	Silty clay loam	Somewhat poorly drained	Moderately high	Flats
102B	39.20 39.31 39.34 39.45	39.27 39.34 39.37 39.52	Clarion loam, 2 to 6 percent slopes	Clarion	70-95	3	16	Loam	Moderately well drained	Moderately high	Ground moraines

Map Label	Mile Post		Soil Map Unit Name	Local Component Phase	Component Percent	Percent Slope	Depth of A Horizon (in)	Surface Texture	Drainage Class	Permeability	Landforms
	From	To									
	39.66 39.88 39.98 40.17 40.78 41.69 41.80 42.31	39.70 39.96 40.15 40.20 40.83 41.72 41.84 42.34									
102C	39.27 39.34 39.52 39.59 40.22	39.31 39.34 39.57 39.66 40.28	Clarion loam, 6 to 10 percent slopes	Clarion	70-95	8	13	Loam	Well drained	Moderately high	Ground moraines
102D	38.68 38.77	38.71 38.90	Clarion loam, 12 to 18 percent slopes	Clarion	85-95	14	14	Loam	Well drained	Moderately high	Till plains
106C2	38.18 38.50 38.60 38.67 38.90 39.01 39.16	38.22 38.56 38.63 38.68 38.99 39.08 39.20	Lester loam, 6 to 10 percent slopes, moderately eroded	Lester-moderately eroded	75-90	8	6	Loam	Well drained	Moderately high	Ground moraines
106E	38.38	38.46	Lester loam, 10 to 22 percent slopes	Lester	75-90	20	9	Loam	Well drained	Moderately high	Not rated
216B	35.99 36.12	36.08 36.30	Lamont fine sandy loam, 2 to 6 percent slopes	Lamont	85-95	4	9	Fine sandy loam	Well drained	High	Outwash plains
238C2	36.37	36.41	Kilkenny clay loam, 6 to 10 percent slopes, moderately eroded	Kilkenny-moderately eroded	80-95	8	7	Clay loam	Moderately well drained	Moderately high	Not rated
27B	38.04	38.09	Dickinson fine sandy loam, 2 to 6 percent slopes	Dickinson	88-98	3	10	Fine sandy loam	Well drained	High	Not rated
27C	37.15 37.35	37.21 37.38	Dickinson fine sandy loam 6 to 16 percent slopes	Dickinson	88-98	8	10	Fine sandy loam	Well drained	High	Till plains
286B	35.32 35.65 36.30 36.75	35.37 35.71 36.37 36.81	Shorewood silty clay loam, 1 to 6 percent slopes	Shorewood	85-95	4	8	Silty clay loam	Moderately well drained	Moderately high	Not rated

Map Label	Mile Post		Soil Map Unit Name	Local Component Phase	Component Percent	Percent Slope	Depth of A Horizon (in)	Surface Texture	Drainage Class	Permeability	Landforms
	From	To									
	36.87 36.98	36.98 37.02									
286C2	36.73 36.98	36.75 36.98	Shorewood silty clay loam, 6 to 12 percent slopes, eroded	Shorewood-eroded	85-95	8	8	Silty clay loam	Moderately well drained	Moderately high	Knolls
41B	38.09	38.18	Estherville sandy loam, 2 to 6 percent slopes	Estherville	75-95	4	13	Sandy loam	Somewhat excessively drained	High	Outwash plains
41C	37.74 37.98	37.77 38.02	Esterville sandy loam, 6 to 12 percent slopes	Estherville	85-98	8	12	Sandy loam	Somewhat excessively drained	High	Not rated
42D	37.77 38.02	37.83 38.04	Hawick gravelly sandy loam, 12 to 20 percent slopes	Hawick	85-95	16	7	Gravelly sandy loam	Excessively drained	High	Outwash plains
920B	40.91 42.08	41.00 42.15	Clarion-Estherville complex, 2 to 6 percent slopes	Clarion	40-50	3	16	Loam	Moderately well drained	Moderately high	Ground moraines
920C	40.85	40.87	Clarion-Storden-Pilot Grove complex, 6 to 10 percent slopes, moderately eroded	Clarion-moderately eroded	35-50	8	8	Loam	Well drained	Moderately high	Ground moraines
920D	39.14	39.16	Omsrud-Storden-Pilot Grove complex, 10 to 16 percent slopes, moderately eroded	Omsrud-moderately eroded	35-50	12	9	Loam	Well drained	Moderately high	Ground moraines
944B	38.71	38.77	Lester-Estherville complex, 2 to 6 percent slopes	Lester	60-70	4	7	Loam	Well drained	Moderately high	Till plains
944C2	42.41 42.45	42.43 42.49	Lester-Estherville	Lester-eroded	60-70	8	7	Loam	Well drained	Moderately high	Till plains

Map Label	Mile Post		Soil Map Unit Name	Local Component Phase	Component Percent	Percent Slope	Depth of A Horizon (in)	Surface Texture	Drainage Class	Permeability	Landforms
	From	To									
			complex, 6 to 12 percent slopes, eroded								
944E	39.08 39.57	39.09 39.59	Lester-Estherville complex, 18 to 24 percent slopes	Lester	55-65	22	7	Loam	Well drained	Moderately high	Not rated
94B	37.83 37.94	37.84 37.98	Terril loam, 2 to 6 percent slopes	Terril	70-95	3	34	Loam	Well drained	Moderately high	Ground moraines
L113B	36.50 36.61 37.38 38.24 41.96 42.02 42.17 42.22	36.54 36.63 37.42 38.38 42.00 42.05 42.20 42.24	Reedslake-Le Sueur complex, 1 to 6 percent slopes	Reedslake	40-80	4	15	Loam	Moderately well drained	Moderately high	Hillslopes
L1207B	37.06	37.15	Le Sueur-Reedslake-Cordova complex, 0 to 5 percent slopes	Le Sueur	30-70	2	11	Clay loam	Somewhat poorly drained	Moderately high	Hillslopes
L83A	38.22 39.37 39.70 39.96 40.15 40.20 40.28 40.83 40.87 41.84 42.05 42.15 42.20 42.24 42.34 42.43	38.24 39.45 39.74 39.98 40.17 40.22 40.78 40.85 40.91 41.86 42.08 42.17 42.22 42.31 42.41 42.45	Webster clay loam, 0 to 2 percent slopes	Webster	75-95	1	20	Clay loam	Poorly drained	Moderately high	Ground moraines
L84A	37.86 38.49 38.56 38.63 39.12	37.94 38.50 38.60 38.67 39.14	Glencoe clay loam, 0 to 1 percent slopes	Glencoe	65-95	0	39	Clay loam	Very poorly drained	Moderately high	Depressions

Map Label	Mile Post		Soil Map Unit Name	Local Component Phase	Component Percent	Percent Slope	Depth of A Horizon (in)	Surface Texture	Drainage Class	Permeability	Landforms
	From	To									
	39.74 39.81 41.14 41.86	39.80 39.88 41.19 41.96									
L85A	39.80	39.81	Nicollet clay loam, 1 to 3 percent slopes	Nicollet	75-95	2	17	Clay loam	Somewhat poorly drained	Moderately high	Ground moraines
Albert Lea M500 E-line											
ClB2	1.60 1.81 2.04	1.63 1.86 2.10	Clarion loam, 2 to 6 percent slopes, moderately eroded	Clarion-moderately eroded	70-95	3	8	Loam	Moderately well drained	Moderately high	Ground moraines
CsD2	2.12	2.12	Omsrud-Storden complex, 10 to 16 percent slopes, moderately eroded	Omsrud-moderately eroded	40-60	12	9	Loam	Well drained	Moderately high	Ground moraines
Gc	2.35 2.62 2.66	2.37 2.63 2.66	Glencoe clay loam, 0 to 1 percent slopes	Glencoe	65-95	0	39	Clay loam	Poorly drained	Moderately high	Depressions
L113B	2.37 2.55 2.69 3.05 3.24 3.38 3.54	2.48 2.56 2.72 3.17 3.26 3.40 3.63	Reedslake-Le Sueur complex, 1 to 6 percent slopes	Reedslake	40-80	4	15	Loam	Moderately well drained	Moderately high	Hillslopes
LlC	3.40	3.42	Lester loam, 6 to 10 percent slopes	Lester	65-90	7	9	Loam	Well drained	Moderately high	Ground moraines
LlC2	3.47	3.54	Lester loam, 6 to 10 percent slopes, moderately eroded	Lester-moderately eroded	75-90	8	6	Loam	Well drained	Moderately high	Ground moraines
LlD2	2.56 2.66	2.62 2.69	Lester loam, 10 to 16 slopes, moderately eroded	Lester-moderately eroded	75-90	14	6	Loam	Well drained	Moderately high	Not rated
LuA	2.48 2.94 3.63	2.55 3.00 3.64	Le Sueur loam, 1 to 3 percent slopes	Le Sueur	65-90	2	14	Loam	Somewhat poorly drained	Moderately high	Not rated

Map Label	Mile Post		Soil Map Unit Name	Local Component Phase	Component Percent	Percent Slope	Depth of A Horizon (in)	Surface Texture	Drainage Class	Permeability	Landforms
	From	To									
LuB	2.75	2.78	Le Sueur clay loam, 2 to 4 percent slopes	Le Sueur	85	3	14	Loam	Moderately well drained	Moderately high	Rises
My	2.15 2.63	2.35 2.66	Kloosner muck, 0 to 1 percent slopes	Klossner-drained	85-95	0	46*	Muck	Very poorly drained	High	Depressions
NcA	1.74	1.81	Nicollet clay loam, 1 to 3 percent slopes	Nicollet	75-95	2	17	Clay loam	Somewhat poorly drained	Moderately high	Ground moraines
NcB	1.55 2.12	1.60 2.14	Nicollet clay loam, 2 to 4 percent slopes	Nicollet	85	3	17	Clay loam	Somewhat poorly drained	Moderately high	Rises
WaA	1.88	1.95	Wadena loam, 0 to 2 percent slopes	Wadena	75-95	1	17	Loam	Well drained	Moderately high	Outwash plains
WaC2	2.10	2.12	Wadena loam, 6 to 12 percent slopes, moderately eroded	Wadena-moderately eroded	75-95	8	14	Loam	Well drained	Moderately high	Outwash plains
Wt	1.63 1.81 1.86 1.95 2.14 2.72 2.78 3.00 3.17 3.26 3.42	1.74 1.81 1.88 2.04 2.15 2.75 2.94 3.05 3.24 3.38 3.47	Webster clay loam, 0 to 2 percent slopes	Webster	75-95	1	20	Clay loam	Poorly drained	Moderately high	Ground moraines
Faribault M500 D-line											
98	99.98	100.02	Colo silt loam, occasionally flooded	Colo-occasionally flooded	85	1	54	Silt loam	Poorly drained	Moderately high	Floodplains
109	97.40 97.63 97.83 98.06 98.13 98.28	97.62 97.73 98.02 98.10 98.21 98.35	Cordova clay loam, 0 to 2 percent slopes	Cordova	75-90	1	54	Clay loam	Poorly drained	Moderately high	Ground moraines

Map Label	Mile Post		Soil Map Unit Name	Local Component Phase	Component Percent	Percent Slope	Depth of A Horizon (in)	Surface Texture	Drainage Class	Permeability	Landforms
	From	To									
113	97.37 97.62 97.73 98.02 98.10 98.21 99.07	97.40 97.63 97.77 98.06 98.13 98.28 99.10	Webster clay loam, 0 to 2 percent slopes	Webster	75-95	1	20	Clay loam	Poorly drained	Moderately high	Ground moraines
114	98.93 99.00 100.52 100.92 100.94 100.96	98.95 99.07 100.57 100.93 100.94 100.98	Glencoe silty clay loam, 0 to 1 percent slopes	Glencoe	65-95	0	40	Silty clay loam	Very poorly drained	Moderately high	Depressions
208	104.84	104.88	Kato silty clay loam	Kato	95	0.5	23	Silty clay loam	Poorly drained	Moderately high	Flats
239	97.77 98.35 98.85 98.91 98.95 99.14 99.35 99.40 99.52 99.73 99.83 99.89 101.64	97.83 98.38 98.88 98.93 99.00 99.20 99.38 99.42 99.55 99.80 99.87 99.92 101.70	Le Sueur loam, 1 to 3 percent slopes	Le Sueur	65-90	2	14	Loam	Somewhat poorly drained	Moderately high	Not rated

Map Label	Mile Post		Soil Map Unit Name	Local Component Phase	Component Percent	Percent Slope	Depth of A Horizon (in)	Surface Texture	Drainage Class	Permeability	Landforms
	From	To									
253	98.53 99.10 99.27 99.38 99.42 99.92 100.02 100.44 100.57 100.81 100.93 100.94 100.98 101.18 101.37 101.70 102.14 102.33 102.59 102.79	98.64 99.14 99.29 99.40 99.52 99.98 100.09 100.52 100.74 100.84 100.94 100.96 101.06 101.27 101.46 101.73 102.25 102.36 102.65 102.88	Maxcreek silty clay loam	Maxcreek	90	1	17	Silty clay loam	Poorly drained	Moderately high	Swales
378	103.08 103.63 103.84 104.19	103.40 103.77 103.99 104.25	Maxfield silty clay loam	Maxfield	90	1	21	Silty clay loam	Poorly drained	Moderately high	Swales
414	98.40 99.63 99.80 99.87	98.42 99.68 99.83 99.89	Hamel loam, 0 to 2 percent slopes	Hamel	75-95	1	24	Loam	Poorly drained	Moderately high	Ground moraines
539	98.64	98.72	Klossner muck, 0 to 1 percent slopes	Klossner-drained	89-95	0	46	Muck	Very poorly drained	High	Depressions
106B	98.38 98.42 98.88 99.21 99.55 99.68 101.73 101.86 102.90	98.40 98.53 98.91 99.27 99.63 99.73 101.78 101.90 103.06	Lester loam, 2 to 6 percent slopes	Lester	65-90	4	9	Loam	Well drained	Moderately high	Not rated
106C	101.62 101.93	101.64 102.00	Lester loam, 6 to 10 percent slopes	Lester	65-90	7	9	Loam	Well drained	Moderately high	Ground moraines

Map Label	Mile Post		Soil Map Unit Name	Local Component Phase	Component Percent	Percent Slope	Depth of A Horizon (in)	Surface Texture	Drainage Class	Permeability	Landforms
	From	To									
106C2	99.20 102.02 102.88	99.21 102.13 102.90	Lester loam, 6 to 10 percent slopes, moderately eroded	Lester-moderately eroded	75-90	8	6	Loam	Well drained	Moderately high	Ground moraines
213B	103.40 103.99 104.15 104.25 104.42 104.69	103.47 104.05 104.19 104.29 104.53 104.79	Klinger silt loam, 1 to 5 percent slopes	Klinger	90	3	13	Silt loam	Somewhat poorly drained	Moderately high	Moraines
2B	103.47 103.77 104.05 104.29 104.53	103.63 103.84 104.15 104.42 104.69	Ostrander loam, 1 to 6 percent slopes	Ostrander	85	4	17	Loam	Well drained	Moderately high	Moraines
377B	99.29 100.14 100.23 100.32 100.41 100.74 100.84 101.06 101.13 101.27 101.46 101.78 101.90 102.00 102.25 102.36 102.76	99.35 100.18 100.25 100.37 100.44 100.81 100.92 101.08 101.18 101.37 101.56 101.86 101.93 102.02 102.33 102.51 102.79	Merton silt loam, 1 to 6 percent slopes	Merton	90	3	15	Silt loam	Somewhat poorly drained	Moderately high	Moraines
382B	98.72 101.56 102.13 102.51 102.65	98.85 101.62 102.14 102.59 102.76	Blooming silt loam, 1 to 6 percent slopes	Blooming	90	3	9	Silt loam	Well drained	Moderately high	Moraines
39B	100.09 104.79	100.14 104.84	Wadena loam, 2 to 6 percent slopes	Wadena	75-95	3	17	Loam	Well drained	Moderately high	Outwash plains
611C	103.06	103.08	Hawick gravelly sandy loam, 6 to 12 percent slopes	Hawick	85-95	8	7	Gravelly sandy loam	Excessively drained	High	Outwash plains

Map Label	Mile Post		Soil Map Unit Name	Local Component Phase	Component Percent	Percent Slope	Depth of A Horizon (in)	Surface Texture	Drainage Class	Permeability	Landforms
	From	To									
888B	101.08	101.13	Kingsley-Lester complex, 2 to 6 percent slopes	Kingsley	55	4	8	Sandy loam	Well drained	Moderately high	Moraines
888C	100.18 100.25 100.37	100.23 100.32 100.41	Kingsley-Lester complex, 6 to 12 percent slopes	Kingsley	55	9	8	Sandy loam	Well drained	Moderately high	Moraines
There are no soil impacts correlating to a mile post number. Soils proposed to be impacted are displayed in Appendix 7C.											

* Topsoil depth includes organic (O) horizon layers; includes non-mineral topsoil.

Appendix 7B
Selected Characteristics of the Soil Map Units Within the NL27 Project Area

Appendix 7B - Selected Characteristics of the Soil Map Units Within the NL27 Project Area

Map Label	Mile Post		Soil Map Unit Name	Local Component Phase	Component Percent	Percent Slope	Depth of A Horizon (in)	Surface Texture	Drainage Class	Permeability	Landforms
	From	To									
Lake Mills M500 E-line											
106C2	42.59 42.94 43.34 43.76 43.91 44.10 44.17 44.23 44.33	42.63 43.03 43.43 43.89 43.94 44.15 44.22 44.31 44.34	Lester loam, 6 to 10 percent slopes, moderately eroded	Lester-moderately eroded	75-90	8	7	Loam	Well drained	Moderately High	Ground moraines
106D2	42.77	42.90	Lester loam, 10 to 16 percent slopes, moderately eroded	Lester-moderately eroded	75-90	8	7	Loam	Well drained	Moderately High	<Null>
525	44.04	44.08	Muskego soils, 0 to 1 percent slopes	Muskego-drained	15-85	0	30	Muck	Very poorly drained	High	Depressions
921C	43.62 44.5 44.61 44.79	43.69 44.58 44.75 44.81	Clarion-Storden complex, 6 to 10 percent slopes, moderately eroded	Clarion-moderately eroded	40-50	8	7	Loam	Well drained	Moderately High	Ground moraines
944C2	42.49 44.41	42.50 44.5	Lester-Estherville complex, 6 to 12 percent slopes, eroded	Lester-eroded	60-70	8	7	Loam	Well drained	Moderately High	Till plains
944D2	43.89	43.91	Lester-Estherville complex, 12 to 18 percent slopes, eroded	Lester-eroded	60-70	14	7	Loam	Well drained	Moderately High	<Null>
L83A	42.43 43.03 43.43 43.69 43.94 44.08 44.22 44.31 44.34	42.45 43.11 43.62 43.76 44.04 44.10 44.23 44.33 44.41	Webster clay loam, 0 to 2 percent slopes	Webster	75-95	1	20	Clay loam	Poorly drained	Moderately High	Ground moraines

Map Label	Mile Post		Soil Map Unit Name	Local Component Phase	Component Percent	Percent Slope	Depth of A Horizon (in)	Surface Texture	Drainage Class	Permeability	Landforms
	From	To									
	44.58	44.61									
L84A	42.57 42.90	42.59 42.94	Glencoe clay loam, 0 to 1 percent slopes	Glencoe	65-95	0	39	Clay loam	Very poorly drained	Moderately high	Depressions
L113B	42.50 42.63 43.11 44.15 44.75	42.57 42.77 43.34 44.17 44.79	Reedslake-Le Sueur complex, 1 to 6 percent slopes	Reedslake	40-80	4	12	Loam	Moderately well drained	Moderately High	Hillslopes
Albert Lea M500 E-line											
Bc	4.66	4.80	Biscay clay loam, 0 to 2 percent slopes	Biscay	75-95	1	20	Clay loam	Poorly drained	Moderately High	Outwash Plains
Cf	3.80 3.86 3.92 6.45 6.63 6.68	3.82 3.88 3.96 6.53 6.65 6.73	Canisteo clay loam, depressional, 0 to 1 percent slopes	Canisteo-depressional	75-95	0	23	Clay loam	Very poorly drained	Moderately High	Depressions
ClB	6.89	6.96	Clarion loam, 2 to 6 percent slopes	Clarion	70-95	3	16	Loam	Moderately well drained	Moderately High	Ground Moraines
ClB2	5.41 5.81 5.90 6.13 6.39 6.53 6.98 7.04	5.46 5.84 5.96 6.2 6.45 6.55 7.00 7.06	Clarion loam, 2 to 6 percent slopes, moderately eroded	Clarion-moderately eroded	70-95	3	8	Loam	Moderately well drained	Moderately Low	Ground Moraines
ClC2	5.66 5.96 6.22 6.35	5.73 6.04 6.27 6.39	Clarion loam, 6 to 10 percent slopes, moderately eroded	Clarion-moderately eroded	75-90	8	8	Loam	Well drained	Moderately High	Ground Moraines
Gc	5.36	5.38	Glencoe clay loam, 0 to 1 percent slopes	Glencoe	65-95	0	39	Clay loam	Very poorly drained	Moderately High	Depressions
LnE	5.21	5.23	Lester and Hayden loams, 18 to 25 percent slopes	Lester	50	22	10	Loam	Well drained	Moderately Low	Moraines

Map Label	Mile Post		Soil Map Unit Name	Local Component Phase	Component Percent	Percent Slope	Depth of A Horizon (in)	Surface Texture	Drainage Class	Permeability	Landforms
	From	To									
LoC2	5.38	5.41	Lester-Storden complex, 6 to 10 percent slopes, moderately eroded	Lester-moderately eroded	50-70	8	6	Loam	Well drained	Moderately High	<Null>
LuA	3.64	3.67	Le Sueur loam, 1 to 3 percent slopes	Le Sueur	65-90	2	17	Loam	Somewhat poorly drained	Moderately High	<Null>
LuB	3.88	3.92	Le Sueur clay loam, 2 to 4 percent slopes	Le Sueur	85	3	17	Loam	Moderately well drained	Moderately High	rises
LlC	3.96	4.00	Lester loam, 6 to 10 percent slopes	Lester	65-90		7	Loam	Well drained	Moderately High	Ground moraines
LlC2	4.04 4.50 4.62 4.80 5.07 5.48 5.56	4.09 4.56 4.66 4.85 5.09 5.55 5.58	Lester loam, 6 to 10 percent slopes, moderately eroded	Lester-moderately eroded	75-90	8	6	Loam	Well drained	Moderately High	Ground moraines
LlD2	3.74	3.76	Lester loam, 10 to 16 percent slopes, moderately eroded	Lester-moderately eroded	75-90	14	6	Loam	Well drained	Moderately High	<Null>
L78A	6.55 6.65 6.73 6.87 6.96 7.00	6.63 6.68 6.83 6.89 6.98 7.04	Canisteo clay loam, 0 to 2 percent slopes	Canisteo	65-90	1	16	Clay loam	Poorly drained	Moderately Low	<Null>
L113B	3.67 3.76 3.82 4.00 4.24 4.34 4.56 4.85 5.13	3.74 3.77 3.86 4.04 4.31 4.43 4.62 5.07 5.21	Reedslake-Le Sueur complex, 1 to 6 percent slopes	Reedslake	40-80	4	12	Loam	Moderately well drained	Moderately High	Hillslopes
Mh	5.23	5.36	Marsh	Marsh-ponded	90	1	na	Coprogenous mucky silt loam	Very poorly drained	Moderately Low	Depressions

Map Label	Mile Post		Soil Map Unit Name	Local Component Phase	Component Percent	Percent Slope	Depth of A Horizon (in)	Surface Texture	Drainage Class	Permeability	Landforms
	From	To									
My	4.45	4.49	Klossner muck, 0 to 1 percent slopes	Klossner-drained	85-95	0	48	Muck	Very poorly drained	High	Depressions
NcB	6.20	6.22	Nicollet clay loam, 2 to 4 percent slopes	Nicollet	85	3	17	Clay loam	Somewhat poorly drained	Moderately High	Rises
WaB	6.83	6.87	Wadena loam, 2 to 6 percent slopes	Wadena	75-95	3	13	Loam	Well drained	Moderately High	Outwash plains
Wt	3.77 4.09 4.31 4.43 4.49 5.09 5.46 5.55 5.58 5.73 5.84 6.04 6.27	3.8 4.24 4.34 4.45 4.5 5.13 5.48 5.56 5.66 5.81 5.90 6.13 6.35	Webster clay loam, 0 to 2 percent slopes	Webster	75-95	1	20	Clay loam	Poorly drained	Moderately High	Ground moraines
Willmar 3rd Branch Line Upstream											
Ga	3.43 4.03 4.42 4.90	3.46 4.12 4.47 4.97	Glencoe silty clay loam, 0 to 1 percent slopes	Glencoe	65-95	0	40	Silty clay loam	Very poorly drained	Moderately High	Depressions
HaB	3.68 3.76 5.01	3.73 3.90 5.08	Hayden loam, 2 to 6 percent slopes	Hayden	75-90	4	9	Loam	Well drained	Moderately High	Ground moraines
HaC	3.54 3.73 4.12	3.68 3.76 4.16	Hayden loam, 6 to 10 percent slopes	Hayden	75-90	8	2	Loam	Well drained	Moderately High	Ground moraines
HaC2	3.35 4.36 5.10	3.43 4.37 5.12	Hayden loam, 6 to 10 percent slopes, moderately eroded	Hayden	75-90	8	9	Loam	Well drained	Moderately High	Ground moraines
HaD	3.50 4.16 4.21 4.26 4.29	3.54 4.19 4.24 4.28 4.32	Hayden loam, 10 to 22 percent slopes	Hayden	75-90	14	2	Loam	Well drained	Moderately High	Ground moraines

Map Label	Mile Post		Soil Map Unit Name	Local Component Phase	Component Percent	Percent Slope	Depth of A Horizon (in)	Surface Texture	Drainage Class	Permeability	Landforms
	From	To									
HaD2	3.46 3.90 4.00 4.28 4.32 4.83 4.97	3.5 3.97 4.03 4.29 4.36 4.85 5.01	Hayden loam, 10 to 22 percent slopes, moderately eroded	Hayden-moderately eroded	75-90	14	9	Loam	Well drained	Moderately High	Ground moraines
HbB2	4.47	4.49	Hayden sandy loam, 0 to 6 percent slopes, moderately eroded	Hayden-moderately eroded	85	4	8	Sandy loam	Well drained	High	Moraines
HbE2	4.37	4.42	Hayden sandy loam, 18 to 25 percent slopes	Hayden-moderately eroded	85	20	8	Sandy loam	Well drained	High	Moraines
HbE3	3.97	4.00	Hayden sandy clay loam, 18 to 25 percent slopes	Hayden-severely eroded	85	20	8	Sandy clay loam	Well drained	Moderately High	Moraines
HcE3	4.85	4.88	Hayden soils, 18 to 25 percent slopes	Hayden-severely eroded	85	20	8	Clay loam	Well drained	Moderately High	Moraines
INT	4.19	4.21	Water, intermittent	Water-intermittent	100	<Null>	na	<Null>	<null>	<Null>	<Null>
LaA	4.56	4.70	Wadena loam, 0 to 2 percent slopes	Wadena	75-95	1	13	Loam	Well drained	Moderately High	Outwash plains
LaB	4.51	4.56	Estherville loam, 2 to 6 percent slopes	Estherville	90	3	13	Loam	Somewhat excessively drained	High	Outwash plains
LbD	4.49	4.51	Estherville-Burnsville complex, 12 to 50 percent slopes	Estherville	55	25	13	Sandy loam	Somewhat excessively drained	High	Outwash plains
LcB	5.12	5.13	Lester loam, 2 to 6 percent slopes	Lester	65-90	4	9	Loam	Well drained	Moderately High	<Null>
LcB2	4.70	4.83	Lester loam, 2 to 6 percent slopes, moderately eroded	Lester-moderately eroded	75-90	4	6	Loam	Well drained	Moderately High	<Null>
TcB	4.88 4.97	4.90 4.97	Terril loam, 2 to 6 percent slopes	Terril	70-95	3	34	Loam	Well drained	Moderately High	Ground moraines

Map Label	Mile Post		Soil Map Unit Name	Local Component Phase	Component Percent	Percent Slope	Depth of A Horizon (in)	Surface Texture	Drainage Class	Permeability	Landforms
	From	To									
Wb	5.08	5.10	Webster-Glencoe silty clay loams	Webster	70	1	20	Silty clay loam	Poorly drained	Moderately High	Swales
Willmar 3rd Branch Line Downstream											
CO	8.18 9.49	8.23 9.73	Cordova clay loam, 0 to 2 percent slopes	Cordova	75-90	1	18	Clay loam	Poorly drained	Moderately High	Ground moraines
CS	7.57	7.62	Canisteo clay loam, depressional, 0 to 1 percent slopes	Canisteo-depressional	75-95	0	23	Clay loam	Very poorly drained	Moderately High	Depressions
CT	9.89 10.10 10.19 10.25 10.30 10.64 10.78 10.96 11.14	9.91 10.13 10.21 10.26 10.32 10.74 10.81 10.98 11.16	Canisteo clay loam, 0 to 2 percent slopes	Canisteo	65-90	1	20	Clay loam	Poorly drained	Moderately High	<Null>
CW	6.44 6.56 7.44 7.91	6.51 6.57 7.50 7.91	Cordova-Webster complex	Cordova	65	1	13	Loam	Poorly drained	Moderately High	Moraines
GL	7.72 7.78 8.73 8.97 9.84	7.75 7.79 8.83 9.01 9.89	Glencoe clay loam, 0 to 1 percent slopes	Glencoe	65-95	0	39	Clay loam	Very poorly drained	Moderately High	Depressions
HM	6.38 7.62 7.96 9.01 9.16	6.40 7.64 8.05 9.04 9.18	Hamel loam, 0 to 2 percent slopes	Hamel	75-95	1	24	Loam	Poorly drained	Moderately High	Ground moraines

Map Label	Mile Post		Soil Map Unit Name	Local Component Phase	Component Percent	Percent Slope	Depth of A Horizon (in)	Surface Texture	Drainage Class	Permeability	Landforms
	From	To									
	6.51	6.56	Le Sueur-Lester complex, 1 to 6 percent slopes	Le Sueur	40-65	2	14	Loam	Somewhat poorly drained	Moderately High	<Null>
	6.57	6.82									
	7.17	7.18									
	7.27	7.29									
	7.5	7.51									
	7.67	7.72									
	7.83	7.91									
	8.05	8.09									
	8.14	8.18									
	8.23	8.27									
	8.40	8.42									
	9.41	9.49									
	9.73	9.78									
	9.91	9.97									
	10.34	10.64									
	10.81	10.96									
LA	10.98	11.10									
	6.82	6.86	Lester loam, 2 to 6 percent slopes	Lester	65-90	4	9	Loam	Well drained	Moderately High	<Null>
	7.79	7.83									
	8.49	8.56									
	8.61	8.73									
	8.83	8.92									
	9.11	9.14									
	9.15	9.16									
	9.99	10.05									
LB2	10.74	10.78									
	7.4	7.44	Lester loam, 6 to 10 percent slopes	Lester	65-90	7	9	Loam	Well drained	Moderately High	Ground moraines
	8.30	8.40									
LC	8.42	8.49									
	7.03	7.17	Lester loam, 6 to 10 percent slopes, moderately eroded	Lester-moderately eroded	75-90	8	6	Loam	Well drained	Moderately High	Ground moraines
	7.29	7.32									
	7.51	7.57									
	7.64	7.67									
	7.91	7.96									
	8.09	8.14									
	8.27	8.28									
	8.92	8.95									
	9.09	9.11									
	9.14	9.15									
	9.18	9.41									
	9.78	9.84									
	9.97	9.99									
	10.05	10.10									
	10.21	10.25									
	10.32	10.34									
LC2	11.10	11.14									

Map Label	Mile Post		Soil Map Unit Name	Local Component Phase	Component Percent	Percent Slope	Depth of A Horizon (in)	Surface Texture	Drainage Class	Permeability	Landforms
	From	To									
LD2	6.99 7.32 8.28 9.04	7.03 7.35 8.3 9.09	Lester loam, 10 to 16 percent slopes, moderately eroded	Lester-moderately eroded	75-90	14	6	Loam	Well drained	Moderately High	<Null>
LS	7.18	7.27	Le Sueur loam, 1 to 3 percent slopes	Le Sueur	65-90	2	14	Loam	Somewhat poorly drained	Moderately High	<Null>
PM	6.40 6.91 7.75 8.56 10.13 10.26	6.44 6.95 7.78 8.61 10.19 10.30	Klossner muck, 0 to 1 percent slopes	Klossner-drained	85-95	0	27	Muck	Very poorly drained	High	Depressions
SD2	8.95	8.97	Lester-Storden complex, 10 to 16 percent slopes, moderately eroded	Lester-moderately eroded	55-75	14	6	Loam	Well drained	Moderately High	<Null>
TB	6.86 6.95 7.35	6.91 6.99 7.40	Terril loam, 2 to 6 percent slopes	Terril	70-95	3	34	Loam	Well drained	Moderately High	Ground moraines
Welcome 2nd Line											
102B	11.05	11.07	Clarion loam, 2 to 6 percent slopes	Clarion	70-95	3	16	Loam	Moderately well drained	Moderately High	Ground moraines
886	10.81 11.58	10.83 11.63	Nicollet-Crippin complex	Nicollet	50	2	17	Clay loam	Somewhat poorly drained	Moderately High	Rises
921C2	10.50 10.76	10.59 10.78	Clarion-Storden complex, 6 to 10 percent slopes, moderately eroded	Clarion-moderately eroded	40-50	8	7	Loam	Well drained	Moderately High	Ground moraines
L83A	10.47 10.59 10.67 10.78	10.50 10.66 10.76 10.81	Webster clay loam, 0 to 2 percent slopes	Webster	75-95	1	20	Clay loam	Poorly drained	Moderately High	Ground moraines
L84A	11.27	11.32	Glencoe clay loam, 0 to 1 percent slopes	Glencoe	65-95	0	39	Clay loam	Very poorly drained	Moderately High	Depressions

Map Label	Mile Post		Soil Map Unit Name	Local Component Phase	Component Percent	Percent Slope	Depth of A Horizon (in)	Surface Texture	Drainage Class	Permeability	Landforms
	From	To									
L85A	10.66 11.09	10.67 11.17	Nicollet clay loam, 1 to 3 percent slopes	Nicollet	75-95	2	17	Clay loam	Somewhat poorly drained	Moderately High	Ground moraines
L107A	10.83 11.07 11.17 11.32 11.63	11.05 11.09 11.27 11.58 11.71	Canisteo-Glencoe complex, 0 to 2 percent slopes	Canisteo	40-55	1	20	Clay loam	Poorly drained	Moderately High	<Null>
Paynesville 2nd Branch Line											
392	0.58	0.62	Biscay loam	Biscay	90	1	20	Loam	Poorly drained	Moderately High	Drainageways
540	2.06 2.26 2.41	2.16 2.36 2.43	Seelyeville-Seelyeville, ponded, complex, 0 to 1 percent slopes	Seelyeville	50-85	0.5	80	Muck	Very poorly drained	High	Depressions
566	2.16	2.20	Regal loam	Regal	90	1	14	Loam	Poorly drained	Moderately High	Swales
611C	0.64 1.07 1.52 1.91 2.36	0.73 1.16 1.56 1.93 2.41	Sandberg loamy sand, 2 to 12 percent slopes	Sandberg	50-85	9	12	Loamy sand	Excessively drained	High	<Null>
611D	0.06 0.42 0.54 0.99 1.93	0.12 0.47 0.58 1.07 1.98	Sandberg loamy coarse sand, 6 to 30 percent slopes	Sandberg	60-85	22	12	Loamy coarse sand	Excessively drained	High	<Null>
875B	0.00 0.12 0.29 0.62 0.73 1.16 1.26 2.20	0.06 0.28 0.42 0.64 0.99 1.20 1.32 2.26	Estherville-Hawick complex, 2 to 6 percent slopes	Estherville	55	3	13	Sandy loam	Somewhat excessively drained	High	<Null>
1029	0.28 2.43	0.29 2.45	Pits, gravel	Pits-gravel	100	25	na	<Null>	<Null>	<Null>	Stream terraces
1113	1.98	2.06	Haslie, Seelyeville, and Cathro soils, frequently ponded, 0 to 1 percent slopes	Haslie-frequently ponded	0-100	0.5	30	Muck	Very poorly drained	High	Depressions

Map Label	Mile Post		Soil Map Unit Name	Local Component Phase	Component Percent	Percent Slope	Depth of A Horizon (in)	Surface Texture	Drainage Class	Permeability	Landforms
	From	To									
D105B	0.47 1.20 1.32 1.56	0.54 1.26 1.52 1.91	Arvilla sandy loam, 2 to 6 percent slopes	Arvilla	70-95	4	10	Sandy loam	Somewhat excessively drained	High	Hillslopes
Worthington 2nd Branch Line											
27B	21.08	21.19	Dickinson sandy loam, 1 to 6 percent slopes	Dickinson	90	4	14	Sandy loam	Well drained	High	Moraines
86	19.75 20.26	19.80 20.67	Canisteo clay loam, 0 to 2 percent slopes	Canisteo	65-90	1	18	Clay loam	Poorly drained	Moderately High	<Null>
101B	20.80 20.92 21.02	20.87 20.96 21.03	Truman silt loam, 2 to 6 percent slopes	Truman	80-95	4	14	Silt loam	Well drained	Moderately High	Flats
102B	19.34 19.80 20.33 20.57 21.29 21.44	19.34 19.86 20.38 20.62 21.37 21.51	Clarion loam, 2 to 6 percent slopes	Clarion	70-95	3	16	Loam	Moderately well drained	Moderately High	Ground moraines
102B2	19.38 19.55 19.73 19.91 20.00 20.21 20.28 20.38	19.50 19.65 19.75 19.96 20.07 20.25 20.33 20.49	Clarion loam, 2 to 6 percent slopes, moderately eroded	Clarion-moderately eroded	70-95	3	8	Loam	Moderately well drained	Moderately High	Ground moraines
197	20.96	21.02	Kingston silty clay loam, 1 to 3 percent slopes	Kingston	80-95	2	16	Silty clay loam	Somewhat poorly drained	Moderately High	<Null>
229	20.67 20.87 21.03 21.19 21.39	20.8 20.92 21.08 21.29 21.44	Waldorf silty clay loam, 0 to 2 percent slopes	Waldorf	75-95	1	20	Silty clay loam	Poorly drained	Moderately Low	Flats
336	19.34 19.50 19.65 19.96 20.07 20.25	19.38 19.55 19.73 20.00 20.21 20.28	Delft clay loam, 0 to 2 percent slopes	Delft	75-95	1	29	Clay loam	Poorly drained	Moderately High	Ground moraines
813	20.49	20.57	Spicer-Lura complex	Spicer	40	1	23	Silty clay loam	Poorly drained	Moderately High	Flats

Map Label	Mile Post		Soil Map Unit Name	Local Component Phase	Component Percent	Percent Slope	Depth of A Horizon (in)	Surface Texture	Drainage Class	Permeability	Landforms
	From	To									
1833	19.86	19.91	Coland clay loam, 0 to 2 percent slopes, occasionally flooded	Coland-occasionally flooded	85-95	1	36	Clay loam	Poorly drained	Moderately High	Flood plains
L85A	21.37	21.39	Nicollet clay loam, 1 to 3 percent slopes	Nicollet	75-95	2	17	Clay loam	Somewhat poorly drained	Moderately High	Ground moraines
Springfield 2nd Branch Line											
8B	14.10	14.17	Sparta loamy sand, 1 to 6 percent slopes	Sparta	90	3.5	16	Loamy sand	Excessively drained	High	Outwash plains
27A	16.73	16.77	Dickinson fine sandy loam, 0 to 2 percent slopes	Dickinson	90	1	14	Fine sandy loam	Well drained	High	Outwash plains
27B	14.73 17.80	14.78 17.82	Dickinson fine sandy loam, 2 to 6 percent slopes	Dickinson	90	4	14	Fine sandy loam	Well drained	High	Outwash plains
41B	17.56 18.21	17.66 18.25	Estherville sandy loam, 2 to 6 percent slopes	Estherville	75-95	4	13	Sandy loam	Somewhat excessively drained	High	Outwash plains
86	14.41 14.68	14.65 14.73	Canisteo clay loam, 0 to 2 percent slopes	Canisteo	65-90	1	16	Clay loam	Poorly drained	Moderately High	<Null>
102B	16.77 17.07 17.28 18.32 18.58 18.63 18.72 19.16 19.24 19.73 20.09 20.47 20.55 20.89 21.13	16.93 17.25 17.31 18.53 18.60 18.65 18.83 19.20 19.28 19.78 20.12 20.50 20.63 20.93 21.22	Clarion loam, 2 to 6 percent slopes	Clarion	70-95	3	16	Loam	Moderately well drained	Moderately High	Ground moraines
118	19.06 20.29 20.78	19.12 20.35 20.86	Crippin loam, 1 to 3 percent slopes	Crippin	70-90	2	16	Loam	Somewhat poorly drained	Moderately High	Ground moraines

Map Label	Mile Post		Soil Map Unit Name	Local Component Phase	Component Percent	Percent Slope	Depth of A Horizon (in)	Surface Texture	Drainage Class	Permeability	Landforms
	From	To									
160	14.20 14.26 14.36 16.08	14.22 14.29 14.41 16.17	Fieldon loam, 0 to 2 percent slopes	Fieldon	75-95	1	19	Loam	Poorly drained	Moderately High	<Null>
181	15.28 15.54 15.79 16.47	15.43 15.73 15.99 16.51	Litchfield loamy fine sand	Litchfield	90	2	20	Loamy fine sand	Moderately well drained	High	Outwash plains
222B	14.79	14.88	Lasa loamy fine sand, 1 to 6 percent slopes	Lasa	90	3	18	Loamy fine sand	Well drained	High	Outwash plains
247	17.66 18.04 18.16	17.80 18.05 18.20	Linder sandy loam	Linder	90	2	13	Sandy loam	Somewhat poorly drained	Moderately High	Outwash plains
269	17.43 17.54	17.48 17.56	Millington clay loam, occasionally flooded	Millington-occasionally flooded	90	1	26	Clay loam	Poorly drained	Moderately High	Flood plains
281	15.43 15.73	15.54 15.79	Darfur fine sandy loam	Darfur	90	1	19	Fine sandy loam	Poorly drained	Moderately High	Outwash plains
282	13.82	13.90	Hanska loam, 0 to 2 percent slopes	Hanska	75-95	1	19	Loam	Poorly drained	Moderately High	Outwash plains
327A	14.88 16.43 16.51	15.07 16.47 16.73	Dickman sandy loam, 0 to 2 percent slopes	Dickman	85-95	1	12	Sandy loam	Somewhat excessively drained	High	<Null>
327B	13.90 14.06 14.17 14.78 15.07 16.26	13.92 14.10 14.20 14.79 15.19 16.43	Dickman sandy loam, 2 to 6 percent slopes	Dickman	85-95	4	12	Sandy loam	Somewhat excessively drained	High	Terraces
362	17.36 17.48	17.43 17.54	Millington clay loam, frequently flooded	Millington-frequently flooded	90	1	26	Clay loam	Poorly drained	Moderately High	Flood plains
392	18.05	18.16	Biscay clay loam, 0 to 2 percent slopes	Biscay	75-95	1	20	Clay loam	Poorly drained	Moderately High	Outwash plains
487	13.92 15.99	14.06 16.08	Hoopeston fine sandy loam	Hoopeston	90	2	14	Fine sandy loam	Somewhat poorly drained	High	Outwash plains
517	14.22 14.29	14.26 14.36	Shandep clay loam	Shandep	90	0.5	22	Clay loam	Very poorly drained	Moderately High	Outwash plains

Map Label	Mile Post		Soil Map Unit Name	Local Component Phase	Component Percent	Percent Slope	Depth of A Horizon (in)	Surface Texture	Drainage Class	Permeability	Landforms
	From	To									
639B	17.87 18.25	18.04 18.32	Ridgeport sandy loam, 1 to 6 percent slopes	Ridgeport	90	4	16	Sandy loam	Somewhat excessively drained	High	Outwash plains
921B2	18.65 19.60 20.14 20.35 20.63	18.68 19.65 20.29 20.44 20.67	Clarion-Swanlake complex, 2 to 6 percent slopes	Clarion	50-70	3	16	Loam	Moderately well drained	Moderately High	Ground moraines
921C2	17.31	17.36	Clarion-Storden complex, 6 to 10 percent slopes, moderately eroded	Clarion-moderately eroded	40-50	8	7	Loam	Well drained	Moderately High	Ground moraines
1833	16.24 17.82 18.20	16.26 17.87 18.21	Coland clay loam, 0 to 2 percent slopes, occasionally flooded	Coland-occasionally flooded	85-95	1	36	Clay loam	Poorly drained	Moderately High	Flood plains
1834	15.19 16.17	15.28 16.24	Coland clay loam, 0 to 2 percent slopes, frequently flooded	Coland-frequently flooded	75-95	1	36	Clay loam	Poorly drained	Moderately High	Flood plains
L83A	16.98 18.68 19.12 19.71 19.78 20.12 20.44 20.50 20.67	17.07 18.72 19.16 19.73 19.80 20.14 20.47 20.55 20.78	Webster clay loam, 0 to 2 percent slopes	Webster	75-95	1	20	Clay loam	Poorly drained	Moderately High	Ground moraines
L84A	14.65 19.92	14.68 19.96	Glencoe clay loam, 0 to 1 percent slopes	Glencoe	65-95	0	39	Clay loam	Very poorly drained	Moderately High	Depressions
L85A	16.93 17.25 18.53 18.60 20.02	16.98 17.28 18.58 18.63 20.07	Nicollet clay loam, 1 to 3 percent slopes	Nicollet	75-95	2	17	Clay loam	Somewhat poorly drained	Moderately High	Ground moraines

Map Label	Mile Post		Soil Map Unit Name	Local Component Phase	Component Percent	Percent Slope	Depth of A Horizon (in)	Surface Texture	Drainage Class	Permeability	Landforms
	From	To									
L107A	18.83 19.20 19.28 19.65 19.80 19.96 20.07 20.86 20.93	19.06 19.24 19.60 19.71 19.92 20.02 20.09 20.89 21.13	Canisteo-Glencoe complex, 0 to 2 percent slopes	Canisteo	40-55	1	20	Clay loam	Poorly drained	Moderately High	<Null>
Minnesota Interconnect 2nd Branch Line											
Gp	18.79	18.82	Anoka loamy fine sand, 7 to 12 percent slopes	Anoka	95	10	8	Loamy fine sand	Well drained	High	Outwash plains
Gu	18.09 18.41 18.60 18.78 18.85 18.94 18.99 19.08 19.18	18.25 18.55 18.76 18.79 18.92 18.96 19.07 19.14 19.23	Anoka loamy fine sand, 2 to 7 percent slopes	Anoka	95	4	8	Loamy fine sand	Well drained	High	Outwash plains
L	17.70 18.25 18.38 18.76 18.82 18.92 18.96 19.07 19.14	17.72 18.26 18.41 18.78 18.85 18.94 18.99 19.08 19.18	Lino loamy fine sand	Lino	95	1	4	Loamy fine sand	Somewhat poorly drained	High	Outwash plains
Zn	17.81 17.86 18.08	17.83 17.94 18.09	Zimmerman fine sand, 6 to 12 percent slopes	Zimmerman	80-95	9	8	Fine sand	Somewhat excessively drained	Very High	Rises
Zp	18.55	18.6	Zimmerman loamy fine sand and fine sand, 7 to 12 percent slopes	Zimmerman	95	10	5	Loamy fine sand	Excessively drained	High	Outwash plains
Zr	17.83	17.86	Zimmerman loamy fine sand and fine sand, 12 to 18 percent slopes	Zimmerman	95	16	5	Loamy fine sand	Excessively drained	High	Outwash plains

Map Label	Mile Post		Soil Map Unit Name	Local Component Phase	Component Percent	Percent Slope	Depth of A Horizon (in)	Surface Texture	Drainage Class	Permeability	Landforms
	From	To									
Zu	17.64 17.72 17.94 18.26	17.70 17.76 18.08 18.38	Zimmerman fine sand, 1 to 6 percent slopes	Zimmerman	80-95	4	8	Fine sand	Somewhat excessively drained	Very High	Rises
Zx	17.76	17.81	Zimmerman fine sand, 12 to 18 percent slopes, moderately eroded	Zimmerman-moderately eroded	95	15	5	Fine sand	Excessively drained	High	Outwash plains
Alexandria 2nd Branch Line											
142	16.86 17.17 17.40 17.77 17.88	16.93 17.22 17.69 17.85 18.08	Nokay loam	Nokay	90	1	6	Loam	Poorly drained	Moderately High	Drumlins
325	17.22 17.33	17.27 17.40	Prebish loam	Prebish	90	1	16	Loam	Very poorly drained	Moderately High	Depressions
163B	16.80 16.93 17.69 17.85	16.86 17.17 17.77 17.88	Brainerd sandy loam, 1 to 4 percent slopes	Brainerd	85	3	6	Sandy loam	Somewhat poorly drained	High	Hillslopes
D544	17.27	17.33	Cathro muck, occasionally ponded, 0 to 1 percent slopes	Cathro-occasionally ponded	75-95	0.5	23	Muck	Very poorly drained	High	Depressions

There are no soil impacts correlating to a mile post number. Soils proposed to be impacted are displayed in Appendix 7D.

* Topsoil depth includes organic (O) horizon layers; includes non-mineral topsoil; and were taken from Official NRCS Soil Series Descriptions or Web Soil Survey-SSURGO Database data.

Appendix 7C
Soils Impacted by the Proposed Project and Their Limitations Within the V2F Project Area

Appendix 7C Soils Impacted by the Proposed Project and Their Limitations Within the V2F Project Area

Map Label	Soil Map Unit Name	Area (ac)	Prime Farmland	Erosion Factor Kw[1]	Wind Erodible	Compact Potential[2]	Hydric Soil Rating[3]	Drainage Class	Corrosive to Steel[4]	pH[5]	Depth to Bedrock (in)[6]	Reveg. Potential[7]
Lake Mills M500 E-line												
27	Dickinson fine sandy loam, 0 to 2 percent slopes	6.17	All areas are prime farmland	0.2	3	Low	Predominantly Non-Hydric	Well drained	Low	6.5	>78	Low
41	Estherville sandy loam, 0 to 2 percent slopes	0.08	Farmland of statewide importance	0.15	3	Low	Predominantly Non-Hydric	Somewhat excessively drained	Low	6.5	>78	Low
62	Barrington silt loam, 1 to 3 percent slopes	4.64	All areas are prime farmland	0.37	6	Moderate	Predominantly Non-Hydric	Moderately well drained	High	6.5	>78	Low
84	Brownton silty clay loam, 0 to 2 percent slopes	5.24	Prime farmland if drained	0.32	4L	High	Hydric	Poorly drained	High	7.5	>78	High
123	Dundas silt loam, 0 to 2 percent slopes	6.2	Prime farmland if drained	0.37	6	High	Predominantly Hydric	Poorly drained	High	6.2	>78	High
129	Cylinder loam, 0 to 2 percent slopes	0.38	All areas are prime farmland	0.2	6	High	Predominantly Non-Hydric	Somewhat poorly drained	High	6.4	>78	Moderate
134	Okoboji silty clay loam, 0 to 1 percent slopes	0.89	Prime farmland if drained	0.32	4	High	Hydric	Very poorly drained	High	6.8	>78	High
136	Madelia silty clay loam, 0 to 2 percent slopes	7.28	Prime farmland if drained	0.32	6	High	Predominantly Hydric	Poorly drained	High	6.7	>78	High
140	Spicer silty clay loam, 0 to 2 percent slopes	2.17	Prime farmland if drained	0.37	4L	High	Predominantly Hydric	Poorly drained	High	7.9	>78	High
156	Fairhaven loam, 0 to 2 percent slopes	0.47	All areas are prime farmland	0.2	6	Low	Predominantly Non-Hydric	Well drained	High	6.5	>78	Low
190	Hayfield silt loam, 1 to 3 percent slopes	4.02	All areas are prime farmland	0.28	6	High	Predominantly Non-Hydric	Somewhat poorly drained	High	6.1	>78	Low
229	Waldorf silty clay loam, 0 to 2 percent slopes	0.84	Prime farmland if drained	0.32	4	High	Predominantly Hydric	Poorly drained	High	6.7	>78	High
239	Le Sueur loam, 1 to 3 percent slopes	1.39	All areas are prime farmland	0.28	6	High	Predominantly Non-Hydric	Somewhat poorly drained	High	6.2	>78	Moderate
252	Marshan silt loam	4.45	Prime farmland if drained	0.24	4L	High	Predominantly Hydric	Poorly drained	High	6.5	>78	High
255	Mayer loam, 0 to 2 percent slopes	2.45	Prime farmland if drained	0.24	4L	High	Predominantly Hydric	Poorly drained	High	7.6	>78	High
282	Hanska loam, 0 to 2 percent slopes	0.97	Prime farmland if drained	0.28	5	High	Predominantly Hydric	Poorly drained	High	6.8	>78	High
287	Minnetonka silty clay loam	4.14	Prime farmland if drained	0.24	6	High	Predominantly Hydric	Poorly drained	High	6.5	>78	High
391	Spicer silt loam, depressional	2.45	Farmland of statewide importance	0.37	4L	High	Hydric	Very poorly drained	High	7.9	>78	High
392	Biscay clay loam, 0 to 2 percent slopes	2.12	Prime farmland if drained	0.24	6	High	Hydric	Poorly drained	High	6.9	>78	High

Map Label	Soil Map Unit Name	Area (ac)	Prime Farmland	Erosion Factor Kw[1]	Wind Erodible	Compact Potential[2]	Hydric Soil Rating[3]	Drainage Class	Corrosive to Steel[4]	pH[5]	Depth to Bedrock (in)[6]	Reveg. Potential[7]
393	Udolpho silt loam	1.88	Prime farmland if drained	0.28	6	High	Predominantly Hydric	Poorly drained	High	6.5	>78	High
400	Wacousta silt loam	0.75	Prime farmland if drained	0.37	4L	High	Hydric	Very poorly drained	High	7	>78	High
414	Hamel loam, 0 to 2 percent slopes	3.85	Prime farmland if drained	0.24	6	High	Predominantly Hydric	Poorly drained	High	6.5	>78	High
517	Shandep loam	2.64	Prime farmland if drained	0.24	6	High	Hydric	Very poorly drained	High	6.7	>78	High
521	Medo muck, depressional, 0 to 1 percent slopes	3.65	Farmland of statewide importance	<Null>	2	High	Hydric	Very poorly drained	High	6.7	>78	High
525	Muskego soils, 0 to 1 percent slopes	2.76	Farmland of statewide importance	<Null>	2	High	Hydric	Very poorly drained	High	6.7	>78	High
940	Maxcreek-Barbert complex	1.79	Prime farmland if drained	0.24	6	High	Predominantly Hydric	Poorly drained	High	6.7	>78	Moderate
1806	Lerdal silty clay loam, silty substratum, 0 to 2 percent slopes	3.64	All areas are prime farmland	0.37	6	High	Predominantly Non-Hydric	Somewhat poorly drained	High	5.8	>78	Moderate
102B	Clarion loam, 2 to 6 percent slopes	13.98	All areas are prime farmland	0.24	6	Moderate	Predominantly Non-Hydric	Moderately well drained	High	6.2	>78	Low
102C	Clarion loam, 6 to 10 percent slopes	3.48	Farmland of statewide importance	0.24	6	Low	Non-Hydric	Well drained	Moderate	6.2	>78	Low
102D	Clarion loam, 12 to 18 percent slopes	2.36	Not prime farmland	0.2	6	Low	Predominantly Non-Hydric	Well drained	Low	6.5	>78	Low
106C2	Lester loam, 6 to 10 percent slopes, moderately eroded	5.73	Farmland of statewide importance	0.32	6	Low	Predominantly Non-Hydric	Well drained	Moderate	6.6	>78	Low
106E	Lester loam, 10 to 22 percent slopes	1.35	Not prime farmland	0.24	6	Low	Non-Hydric	Well drained	Low	6.6	>78	Low
216B	Lamont fine sandy loam, 2 to 6 percent slopes	10.62	All areas are prime farmland	0.17	3	Low	Predominantly Non-Hydric	Well drained	Low	6.2	>78	Low
238C2	Kilkenny clay loam, 6 to 10 percent slopes, moderately eroded	0.64	Farmland of statewide importance	0.32	6	Moderate	Non-Hydric	Moderately well drained	High	6.1	>78	Low
27B	Dickinson fine sandy loam, 2 to 6 percent slopes	1.1	All areas are prime farmland	0.2	3	Low	Predominantly Non-Hydric	Well drained	Low	6.5	>78	Low
27C	Dickinson fine sandy loam, 6 to 16 percent slopes	2.22	Not prime farmland	0.2	3	Low	Predominantly Non-Hydric	Well drained	Low	6.5	>78	Low
286B	Shorewood silty clay loam, 1 to 6 percent slopes	7.26	All areas are prime farmland	0.2	6	Moderate	Predominantly Non-Hydric	Moderately well drained	High	6.5	>78	Low
286C2	Shorewood silty clay loam, 6 to 12 percent slopes, eroded	1.36	Farmland of statewide importance	0.2	6	Moderate	Predominantly Non-Hydric	Moderately well drained	High	6.5	>78	Low

Map Label	Soil Map Unit Name	Area (ac)	Prime Farmland	Erosion Factor Kw[1]	Wind Erodible	Compact Potential[2]	Hydric Soil Rating[3]	Drainage Class	Corrosive to Steel[4]	pH[5]	Depth to Bedrock (in)[6]	Reveg. Potential[7]
41B	Estherville sandy loam, 2 to 6 percent slopes	1.4	Farmland of statewide importance	0.2	3	Low	Predominantly Non-Hydric	Somewhat excessively drained	Low	5.9	>78	Low
41C	Estherville sandy loam, 6 to 12 percent slopes	0.78	Not prime farmland	0.15	3	Low	Predominantly Non-Hydric	Somewhat excessively drained	Low	6.5	>78	Low
42D	Hawick gravelly sandy loam, 12 to 20 percent slopes	0.55	Not prime farmland	0.05	5	Low	Non-Hydric	Excessively drained	Low	7	>78	Moderate
87B	Chelsea loamy fine sand, 4 to 10 percent slopes	0.32	Not prime farmland	0.2	2	Low	Predominantly Non-Hydric	Excessively drained	Low	6.5	>78	Low
920B	Clarion-Estherville complex, 2 to 6 percent slopes	1.65	Farmland of statewide importance	0.24	6	Moderate	Predominantly Non-Hydric	Moderately well drained	High	6.2	>78	Low
920C	Clarion-Storden-Pilot Grove complex, 6 to 10 percent slopes, moderately eroded	2.51	Farmland of statewide importance	0.28	6	Low	Predominantly Non-Hydric	Well drained	Moderate	6.2	>78	Low
920D	Omsrud-Storden-Pilot Grove complex, 10 to 16 percent slopes, moderately eroded	0.6	Not prime farmland	0.28	6	Low	Non-Hydric	Well drained	Moderate	6.2	>78	Low
921C	Clarion-Storden complex, 6 to 10 percent slopes, moderately eroded	0.25	Farmland of statewide importance	0.28	6	Low	Predominantly Non-Hydric	Well drained	Moderate	6.2	>78	Low
944B	Lester-Estherville complex, 2 to 6 percent slopes	0.8	Farmland of statewide importance	0.28	6	Low	Predominantly Non-Hydric	Well drained	Moderate	6.5	>78	Low
944C2	Lester-Estherville complex, 6 to 12 percent slopes, eroded	0.78	Farmland of statewide importance	0.28	6	Low	Predominantly Non-Hydric	Well drained	Low	6.5	>78	Low
944E	Lester-Estherville complex, 18 to 24 percent slopes	0.65	Not prime farmland	0.28	6	Low	Predominantly Non-Hydric	Well drained	Low	6.5	>78	Moderate
94B	Terril loam, 2 to 6 percent slopes	0.14	All areas are prime farmland	0.28	6	Low	Predominantly Non-Hydric	Well drained	High	6.2	>78	Low
L113B	Reedslake-Le Sueur complex, 1 to 6 percent slopes	7.79	All areas are prime farmland	0.24	6	Moderate	Predominantly Non-Hydric	Moderately well drained	High	6.6	>78	Low
L1207B	Le Sueur-Reedslake-Cordova complex, 0 to 5 percent slopes	5.84	All areas are prime farmland	0.28	6	High	Predominantly Non-Hydric	Somewhat poorly drained	High	6.2	>78	Moderate
L78A	Canisteo clay loam, 0 to 2 percent slopes	1.1	Prime farmland if drained	0.28	4L	High	Hydric	Poorly drained	High	7.5	>78	High
L83A	Webster clay loam, 0 to 2 percent slopes	22.56	Prime farmland if drained	0.28	6	High	Predominantly Hydric	Poorly drained	High	6.5	>78	High
L84A	Glencoe clay loam, 0 to 1 percent slopes	5.62	Prime farmland if drained	0.28	6	High	Hydric	Very poorly drained	High	7	>78	High
L85A	Nicollet clay loam, 1 to 3 percent slopes	0.11	All areas are prime farmland	0.28	6	High	Predominantly Non-Hydric	Somewhat poorly drained	High	6.2	>78	Moderate
Lake Mills M500 E-line subtotal		**180.86**										

Map Label	Soil Map Unit Name	Area (ac)	Prime Farmland	Erosion Factor Kw[1]	Wind Erodible	Compact Potential[2]	Hydric Soil Rating[3]	Drainage Class	Corrosive to Steel[4]	pH[5]	Depth to Bedrock (in)[6]	Reveg. Potential[7]
Albert Lea M500 E-line												
ClB2	Clarion loam, 2 to 6 percent slopes, moderately eroded	1.92	All areas are prime farmland	0.28	6	Moderate	Predominantly Non-Hydric	Moderately well drained	High	6.2	>78	Low
ClC2	Clarion loam, 6 to 10 percent slopes, moderately eroded	0.16	Farmland of statewide importance	0.28	6	Low	Non-Hydric	Well drained	Moderate	6.2	>78	Low
CsD2	Omsrud-Storden complex, 10 to 16 percent slopes, moderately eroded	0.00	Not prime farmland	0.28	6	Low	Non-Hydric	Well drained	Moderate	6.2	>78	Low
Gc	Glencoe clay loam, 0 to 1 percent slopes	2.8	Prime farmland if drained	0.28	6	High	Hydric	Very poorly drained	High	7	>78	High
L113B	Reedslake-Le Sueur complex, 1 to 6 percent slopes	9.33	All areas are prime farmland	0.24	6	Moderate	Predominantly Non-Hydric	Moderately well drained	High	6.6	>78	Low
LlC	Lester loam, 6 to 10 percent slopes	0.32	Farmland of statewide importance	0.28	6	Low	Predominantly Non-Hydric	Well drained	Moderate	6.6	>78	Low
LlC2	Lester loam, 6 to 10 percent slopes, moderately eroded	1.54	Farmland of statewide importance	0.32	6	Low	Predominantly Non-Hydric	Well drained	Moderate	6.6	>78	Low
LlD2	Lester loam, 10 to 16 percent slopes, moderately eroded	2.03	Not prime farmland	0.32	6	Low	Non-Hydric	Well drained	Moderate	6.6	>78	Low
LuA	Le Sueur loam, 1 to 3 percent slopes	2.58	All areas are prime farmland	0.28	6	High	Predominantly Non-Hydric	Somewhat poorly drained	High	6.2	>78	Moderate
LuB	Le Sueur clay loam, 2 to 4 percent slopes	0.40	All areas are prime farmland	0.28	6	Moderate	Predominantly Non-Hydric	Moderately well drained	High	6.2	>78	Moderate
My	Klossner muck, 0 to 1 percent slopes	0.92	Farmland of statewide importance	<Null>	2	High	Hydric	Very poorly drained	High	6.7	>78	High
NcA	Nicollet clay loam, 1 to 3 percent slopes	1.12	All areas are prime farmland	0.28	6	High	Predominantly Non-Hydric	Somewhat poorly drained	High	6.2	>78	Moderate
NcB	Nicollet clay loam, 2 to 4 percent slopes	6.61	All areas are prime farmland	0.28	6	High	Predominantly Non-Hydric	Somewhat poorly drained	High	6.2	>78	Moderate
WaA	Wadena loam, 0 to 2 percent slopes	1.62	All areas are prime farmland	0.28	6	Low	Predominantly Non-Hydric	Well drained	High	5.9	>78	Low
WaC2	Wadena loam, 6 to 12 percent slopes, moderately eroded	0.22	Farmland of statewide importance	0.28	6	Low	Non-Hydric	Well drained	High	5.9	>78	Low
Wt	Webster clay loam, 0 to 2 percent slopes	11.92	Prime farmland if drained	0.28	6	High	Predominantly Hydric	Poorly drained	High	6.5	>78	High
	Albert Lea M500 E-line subtotal	**43.49**										
Faribault M500 D-line												
98	Colo silt loam, occasionally flooded	0.03	Prime farmland if protected from flooding or not	0.32	6	High	Predominantly Hydric	Poorly drained	High	6.5	>78	High

Map Label	Soil Map Unit Name	Area (ac)	Prime Farmland	Erosion Factor Kw[1]	Wind Erodible	Compact Potential[2]	Hydric Soil Rating[3]	Drainage Class	Corrosive to Steel[4]	pH[5]	Depth to Bedrock (in)[6]	Reveg. Potential[7]
			frequently flooded during the growing season									
109	Cordova clay loam, 0 to 2 percent slopes	16.43	Prime farmland if drained	0.28	6	High	Predominantly Hydric	Poorly drained	High	6.2	>78	High
113	Webster clay loam, 0 to 2 percent slopes	3.33	Prime farmland if drained	0.28	6	High	Predominantly Hydric	Poorly drained	High	6.5	>78	High
114	Glencoe silty clay loam, 0 to 1 percent slopes	2.36	Prime farmland if drained	0.28	6	High	Hydric	Very poorly drained	High	7	>78	High
129	Cylinder loam, 0 to 2 percent slopes	0.09	All areas are prime farmland	0.2	6	High	Predominantly Non-Hydric	Somewhat poorly drained	High	6.4	>78	Moderate
208	Kato silty clay loam	1.30	Prime farmland if drained	0.24	6	High	Predominantly Hydric	Poorly drained	High	7	>78	High
239	Le Sueur loam, 1 to 3 percent slopes	10.95	All areas are prime farmland	0.28	6	High	Predominantly Non-Hydric	Somewhat poorly drained	High	6.2	>78	Moderate
253	Maxcreek silty clay loam	29.10	Prime farmland if drained	0.24	6	High	Predominantly Hydric	Poorly drained	High	6.7	>78	High
378	Maxfield silty clay loam	5.62	Prime farmland if drained	0.24	6	High	Predominantly Hydric	Poorly drained	High	7	>78	High
414	Hamel loam, 0 to 2 percent slopes	1.48	Prime farmland if drained	0.24	6	High	Predominantly Hydric	Poorly drained	High	6.5	>78	High
539	Klossner muck, 0 to 1 percent slopes	2.72	Farmland of statewide importance	<Null>	2	High	Hydric	Very poorly drained	High	6.7	>78	High
106B	Lester loam, 2 to 6 percent slopes	16.10	All areas are prime farmland	0.28	6	Low	Predominantly Non-Hydric	Well drained	High	6.6	>78	Low
106C	Lester loam, 6 to 10 percent slopes	1.49	Farmland of statewide importance	0.28	6	Low	Predominantly Non-Hydric	Well drained	Moderate	6.6	>78	Low
106C2	Lester loam, 6 to 10 percent slopes, moderately eroded	3.41	Farmland of statewide importance	0.32	6	Low	Predominantly Non-Hydric	Well drained	Moderate	6.6	>78	Low
213B	Klinger silt loam, 1 to 5 percent slopes	12.98	All areas are prime farmland	0.28	6	High	Predominantly Non-Hydric	Somewhat poorly drained	High	6.2	>78	Moderate
2B	Ostrander loam, 1 to 6 percent slopes	15.19	All areas are prime farmland	0.2	6	Low	Non-Hydric	Well drained	Low	6.5	>78	Low
377B	Merton silt loam, 1 to 6 percent slopes	25.87	All areas are prime farmland	0.24	6	High	Predominantly Non-Hydric	Somewhat poorly drained	High	6.5	>78	Moderate
382B	Blooming silt loam, 1 to 6 percent slopes	12.54	All areas are prime farmland	0.28	6	Low	Non-Hydric	Well drained	Low	6.1	>78	Low
39B	Wadena loam, 2 to 6 percent slopes	1.88	All areas are prime farmland	0.28	6	Low	Non-Hydric	Well drained	High	5.9	>78	Low

Map Label	Soil Map Unit Name	Area (ac)	Prime Farmland	Erosion Factor Kw[1]	Wind Erodible	Compact Potential[2]	Hydric Soil Rating[3]	Drainage Class	Corrosive to Steel[4]	pH[5]	Depth to Bedrock (in)[6]	Reveg. Potential[7]
611C	Hawick gravelly sandy loam, 6 to 12 percent slopes	0.02	Not prime farmland	0.05	5	Low	Non-Hydric	Excessively drained	Low	7	>78	Moderate
888B	Kingsley-Lester complex, 2 to 6 percent slopes	0.71	All areas are prime farmland	0.24	3	Low	Non-Hydric	Well drained	Low	6.1	>78	Low
888C	Kingsley-Lester complex, 6 to 12 percent slopes	8.31	Farmland of statewide importance	0.24	3	Low	Non-Hydric	Well drained	Low	6.1	>78	Low
Farmington M500 D-line subtotal		**171.91**										
Ventura compressor station – A-line Disconnect Site												
6	Okoboji silty clay loam, 0 to 1 percent slopes	0.00	Farmland of statewide importance	0.32	4	High	Hydric	Very poorly drained	High	6.8	>78	High
55	Nicollet clay loam, 1 to 3 percent slopes	0.19	All areas are prime farmland	0.28	6	High	Predominantly Non-Hydric	Somewhat poorly drained	High	6.2	>78	Moderate
95	Harps clay loam, 0 to 2 percent slopes	0.11	Prime farmland if drained	0.24	4L	High	Hydric	Poorly drained	High	7.5	>78	High
107	Webster clay loam, 0 to 2 percent slopes	1.88	Prime farmland if drained	0.28	6	High	Predominantly Hydric	Poorly drained	High	6.5	>78	High
507	Canisteo clay loam, 0 to 2 percent slopes	0.24	Prime farmland if drained	0.28	4L	High	Hydric	Poorly drained	High	7.5	>78	High
138B	Clarion loam, 2 to 6 percent slopes	2.31	All areas are prime farmland	0.24	6	Moderate	Predominantly Non-Hydric	Moderately well drained	High	6.2	>78	Low
Ventura compressor station subtotal		**4.73**										
Farmington compressor station – A-line Disconnect Site												
129	Cylinder loam, 0 to 2 percent slopes	1.74	All areas are prime farmland	0.2	6	High	Predominantly Non-Hydric	Somewhat poorly drained	High	6.4	>78	Moderate
208	Kato silty clay loam	0.58	Prime farmland if drained	0.24	6	High	Predominantly Hydric	Poorly drained	High	7	>78	High
540	Seelyeville muck	0.11	Not prime farmland	<Null>	2	High	Hydric	Very poorly drained	High	<Null>	>78	High
411A	Waukegan silt loam, 0 to 1 percent slopes	3.04	All areas are prime farmland	0.32	6	Low	Non-Hydric	Well drained	High	6.5	>78	Low
Farmington compressor station subtotal		**5.47**										
Lake Mills Compressor Station – Temporary Compression Location												
6	Okoboji silty clay loam, 0 to 1 percent slopes	0.27	Farmland of statewide importance	0.32	4	High	Hydric	Very poorly drained	High	6.8	>78	High
55	Nicollet clay loam, 1 to 3 percent slopes	2.18	All areas are prime farmland	0.28	6	High	Predominantly Non-Hydric	Somewhat poorly drained	High	6.2	>78	Moderate
107	Webster clay loam, 0 to 2 percent slopes	2.37	Prime farmland if drained	0.28	6	High	Predominantly Hydric	Poorly drained	High	6.5	>78	High

Map Label	Soil Map Unit Name	Area (ac)	Prime Farmland	Erosion Factor Kw[1]	Wind Erodible	Compact Potential[2]	Hydric Soil Rating[3]	Drainage Class	Corrosive to Steel[4]	pH[5]	Depth to Bedrock (in)[6]	Reveg. Potential[7]
507	Canisteo clay loam, 0 to 2 percent slopes	0.47	Prime farmland if drained	0.28	4L	High	Hydric	Poorly drained	High	7.5	>78	High
Lake Mills compressor station subtotal		**5.29**										
A-line Abandonment Temporary Compression Location - La Crosse BL MNB73201 Launcher/ABA 05												
L83A	Webster clay loam, 0 to 2 percent slopes	1.17	Prime farmland if drained	0.28	6	High	Predominantly Hydric	Poorly drained	High	6.5	>78	High
L85A	Nicollet clay loam, 1 to 3 percent slopes	1.02	All areas are prime farmland	0.28	6	High	Predominantly Non-Hydric	Somewhat poorly drained	High	6.2	>78	Moderate
La Crosse BL MNB73201 launcher/ABA 05 subtotal		**2.19**										
Owatonna Compressor Station - Temporary Compression Location												
ClB2	Clarion loam, 2 to 6 percent slopes, moderately eroded	1.75	All areas are prime farmland	0.28	6	Moderate	Predominantly Non-Hydric	Moderately well drained	High	6.2	>78	Low
Gc	Glencoe clay loam, 0 to 1 percent slopes	0.01	Prime farmland if drained	0.28	6	High	Hydric	Very poorly drained	High	7	>78	High
Mo	Mayer loam, 0 to 2 percent slopes	2.51	Prime farmland if drained	0.24	4L	High	Predominantly Hydric	Poorly drained	High	7.6	>78	High
Wt	Webster clay loam, 0 to 2 percent slopes	0.06	Prime farmland if drained	0.28	6	High	Predominantly Hydric	Poorly drained	High	6.5	>78	High
Owatonna compressor station subtotal		**4.33**										
Northfield #1 - Temporary Compression Location												
113	Webster clay loam, 0 to 2 percent slopes	1.58	Prime farmland if drained	0.28	6	High	Predominantly Hydric	Poorly drained	High	6.5	>78	High
106B	Lester loam, 2 to 6 percent slopes	1.35	All areas are prime farmland	0.28	6	Low	Predominantly Non-Hydric	Well drained	High	6.6	>78	Low
Northfield #1 subtotal		**2.93**										
Project Total		**421.20**										

[1] Erosion Factor Kw indicates the susceptibility of a whole soil to sheet and rill erosion by water, and is a function of percent silt, sand, organic matter, soil structure, and hydraulic conductivity (Ksat). Values range from 0.02 and 0.69. A rating of 0.0-0.24 is Low, a rating of 0.25-0.40 is Moderate, and a rating of 0.40-0.69 is High. Organic soils are Not rated.
[2] Compaction potential is based on drainage classification. Highly compaction prone soils include soils with a drainage class of poorly drained and very poorly drained.
[3] Hydric rating is based on composition of hydric components. Categories are hydric, predominantly hydric, partially hydric, and non-hydric.
[4] Corrosion potential is based on the corrosion of steel rating class. Risk of corrosion pertains to potential soil-induced electrochemical or chemical action that corrodes or weakens uncoated steel. A rating of high indicates the soil has numerous properties that are likely to increase the potential for corrosion.
[5] Soil pH is based on the pH (1 to 1 water) rating class. The 1:1 water method is the most common soil laboratory measurement of pH. See table 7.1-2 for pH ranges and reaction classes.
[6] Depth to bedrock is based on depth to the restrictive feature listed for each soil series.
[7] Revegetation is based on potential for seedling mortality rating class. A rating of low indicates the soil has properties that will decrease the potential for successful revegetation.

Appendix 7D
Soils Impacted by the Proposed Project and Their Limitations Within the NL27 Project Area

Appendix 7D Soils Impacted by the Proposed Project and Their Limitations Within the NL27 Project Area

Map Label	Soil Map Unit Name	Area (ac)	Prime Farmland	Erosion Factor Kw[1]	Wind Erodible	Compact Potential[2]	Hydric Soil Rating[3]	Drainage Class	Corrosive to Steel[4]	pH[5]	Depth to Bedrock (in)[6]	Reveg. Potential[7]
Lake Mills M500 E-line												
525	Muskego soils, 0 to 1 percent slopes	0.67	Farmland of statewide importance	(blank)	2	High	Hydric	Very poorly drained	High	6.7	>78	Low
106C2	Lester loam, 6 to 10 percent slopes, moderately eroded	14.12	Farmland of statewide importance	0.32	6	Low	Predominantly Non-Hydric	Well drained	Moderate	6.6	>78	Moderate
106D2	Lester loam, 10 to 16 percent slopes, moderately eroded	1.19	Not prime farmland	0.32	6	Low	Non-Hydric	Well drained	Moderate	6.6	>78	Moderate
921C	Clarion-Storden complex, 6 to 10 percent slopes, moderately eroded	6.38	Farmland of statewide importance	0.28	6	Low	Predominantly Non-Hydric	Well drained	Moderate	6.2	>78	Moderate
944C2	Lester-Estherville complex, 6 to 12 percent slopes, eroded	3.60	Farmland of statewide importance	0.28	6	Low	Predominantly Non-Hydric	Well drained	Low	6.5	>78	Moderate
944D2	Lester-Estherville complex, 12 to 18 percent slopes, eroded	0.41	Not prime farmland	0.28	6	Low	Predominantly Non-Hydric	Well drained	Low	6.5	>78	Moderate
L113B	Reedslake-Le Sueur complex, 1 to 6 percent slopes	8.16	All areas are prime farmland	0.24	6	Moderate	Predominantly Non-Hydric	Moderately well drained	High	6.6	>78	Moderate
L83A	Webster clay loam, 0 to 2 percent slopes	11.51	Prime farmland if drained	0.28	6	High	Predominantly Hydric	Poorly drained	High	6.5	>78	Low
L84A	Glencoe clay loam, 0 to 1 percent slopes	1.03	Prime farmland if drained	0.28	6	High	Hydric	Very poorly drained	High	7	>78	Low
L85A	Nicollet clay loam, 1 to 3 percent slopes	0.51	All areas are prime farmland	0.28	6	High	Predominantly Non-Hydric	Somewhat poorly drained	High	6.2	>78	Moderate
	Lake Mills M500 E-line subtotal	**47.58**										
Albert Lea M500 E-line												
Bc	Biscay clay loam, 0 to 2 percent slopes	3.10	Prime farmland if drained	0.24	6	High	Hydric	Poorly drained	High	6.9	>78	Low
Bd	Biscay clay loam, depressional, 0 to 1 percent slopes	0.08	Not prime farmland	0.24	6	High	Hydric	Very poorly drained	High	6.9	>78	Low
Cf	Canisteo clay loam, depressional, 0 to 1 percent slopes	4.44	Prime farmland if drained	0.28	4L	High	Hydric	Very poorly drained	High	7.5	>78	Low
ClB	Clarion loam, 2 to 6 percent slopes	2.45	All areas are prime farmland	0.24	6	Moderate	Predominantly Non-Hydric	Moderately well drained	High	6.2	>78	Moderate
ClB2	Clarion loam, 2 to 6 percent slopes, moderately eroded	5.88	All areas are prime farmland	0.28	6	Moderate	Predominantly Non-Hydric	Moderately well drained	High	6.2	>78	Moderate
ClC2	Clarion loam, 6 to 10 percent slopes, moderately eroded	4.85	Farmland of statewide importance	0.28	6	Low	Non-Hydric	Well drained	Moderate	6.2	>78	Moderate
Gc	Glencoe clay loam, 0 to 1 percent slopes	0.01	Prime farmland if drained	0.28	6	High	Hydric	Very poorly drained	High	7	>78	Low

Map Label	Soil Map Unit Name	Area (ac)	Prime Farmland	Erosion Factor Kw[1]	Wind Erodible	Compact Potential[2]	Hydric Soil Rating[3]	Drainage Class	Corrosive to Steel[4]	pH[5]	Depth to Bedrock (in)[6]	Reveg. Potential[7]
L113B	Reedslake-Le Sueur complex, 1 to 6 percent slopes	13.36	All areas are prime farmland	0.24	6	Moderate	Predominantly Non-Hydric	Moderately well drained	High	6.6	>78	Moderate
L1207B	Le Sueur-Reedslake-Cordova complex, 0 to 5 percent slopes	0.29	All areas are prime farmland	0.28	6	High	Predominantly Non-Hydric	Somewhat poorly drained	High	6.2	>78	Moderate
L78A	Canisteo clay loam, 0 to 2 percent slopes	5.58	Prime farmland if drained	0.28	4L	High	Hydric	Poorly drained	High	7.5	>78	Low
LlC	Lester loam, 6 to 10 percent slopes	0.96	Farmland of statewide importance	0.28	6	Low	Predominantly Non-Hydric	Well drained	Moderate	6.6	>78	Moderate
LlC2	Lester loam, 6 to 10 percent slopes, moderately eroded	7.21	Farmland of statewide importance	0.32	6	Low	Predominantly Non-Hydric	Well drained	Moderate	6.6	>78	Moderate
LlD2	Lester loam, 10 to 16 percent slopes, moderately eroded	2.24	Not prime farmland	0.32	6	Low	Non-Hydric	Well drained	Moderate	6.6	>78	Moderate
LnE	Lester and Hayden loams, 18 to 25 percent slopes	0.02	Not prime farmland	0.32	6	Low	Predominantly Non-Hydric	Well drained	Low	6.5	>78	Moderate
LoC2	Lester-Storden complex, 6 to 10 percent slopes, moderately eroded	0.04	Farmland of statewide importance	0.32	6	Low	Predominantly Non-Hydric	Well drained	Moderate	6.6	>78	Moderate
LuA	Le Sueur loam, 1 to 3 percent slopes	2.88	All areas are prime farmland	0.28	6	High	Predominantly Non-Hydric	Somewhat poorly drained	High	6.2	>78	High
LuB	Le Sueur clay loam, 2 to 4 percent slopes	1.12	All areas are prime farmland	0.28	6	Moderate	Predominantly Non-Hydric	Moderately well drained	High	6.2	>78	High
Mh	Marsh	0.09	Not prime farmland	0.49	8	High	Hydric	Very poorly drained	High	7.5	>78	Low
My	Klossner muck, 0 to 1 percent slopes	0.95	Farmland of statewide importance	(Blank)	2	High	Hydric	Very poorly drained	High	6.7	>78	Low
NcB	Nicollet clay loam, 2 to 4 percent slopes	0.34	All areas are prime farmland	0.28	6	High	Predominantly Non-Hydric	Somewhat poorly drained	High	6.2	>78	Moderate
WaB	Wadena loam, 2 to 6 percent slopes	0.43	All areas are prime farmland	0.28	6	Low	Non-Hydric	Well drained	High	5.9	>78	Moderate
Wt	Webster clay loam, 0 to 2 percent slopes	16.31	Prime farmland if drained	0.28	6	High	Predominantly Hydric	Poorly drained	High	6.5	>78	Low
	Albert Lea M500 E-line subtotal	**72.63**										
Willmar 3rd Branch Line Upstream												
888B	Kingsley-Lester complex, 2 to 6 percent slopes	0.27	All areas are prime farmland	0.24	3	Low	Non-Hydric	Well drained	Low	6.1	>78	Moderate
888C	Kingsley-Lester complex, 6 to 12 percent slopes	0.25	Farmland of statewide importance	0.24	3	Low	Non-Hydric	Well drained	Low	6.1	>78	Moderate
BdE2	Kingsley, Mahtomedi and Hayden complex, 18 to 25 percent slopes	0.15	Not prime farmland	0.37	5	Low	Non-Hydric	Well drained	Low	6.1	>78	Moderate

Map Label	Soil Map Unit Name	Area (ac)	Prime Farmland	Erosion Factor Kw[1]	Wind Erodible	Compact Potential[2]	Hydric Soil Rating[3]	Drainage Class	Corrosive to Steel[4]	pH[5]	Depth to Bedrock (in)[6]	Reveg. Potential[7]
Df	Dundas silt loam, 0 to 2 percent slopes	0.52	Prime farmland if drained	0.37	6	High	Predominantly Hydric	Poorly drained	High	6.2	>78	Low
Ga	Glencoe silty clay loam, 0 to 1 percent slopes	3.31	Prime farmland if drained	0.28	6	High	Hydric	Very poorly drained	High	7	>78	Low
HaB	Hayden loam, 2 to 6 percent slopes	3.66	All areas are prime farmland	0.28	6	Low	Predominantly Non-Hydric	Well drained	High	6.6	>78	Moderate
HaC	Hayden loam, 6 to 10 percent slopes	3.17	Farmland of statewide importance	0.24	6	Low	Predominantly Non-Hydric	Well drained	Moderate	6.6	>78	Moderate
HaC2	Hayden loam, 6 to 10 percent slopes, moderately eroded	5.20	Farmland of statewide importance	0.32	6	Low	Predominantly Non-Hydric	Well drained	Moderate	6.6	>78	Moderate
HaD	Hayden loam, 10 to 22 percent slopes	3.63	Not prime farmland	0.24	6	Low	Predominantly Non-Hydric	Well drained	Moderate	6.6	>78	Moderate
HaD2	Hayden loam, 10 to 22 percent slopes, moderately eroded	3.96	Not prime farmland	0.32	6	Low	Predominantly Non-Hydric	Well drained	Moderate	6.6	>78	Moderate
HaE2	Hayden loam, 18 to 25 percent slopes	0.25	Not prime farmland	0.32	6	Low	Non-Hydric	Well drained	Moderate	6.5	>78	Moderate
HbB2	Hayden sandy loam, 0 to 6 percent slopes, moderately eroded	0.16	All areas are prime farmland	0.24	3	Low	Non-Hydric	Well drained	Moderate	6.5	>78	Moderate
HbD	Hayden sandy loam, 12 to 18 percent slopes	0.07	Not prime farmland	0.24	3	Low	Non-Hydric	Well drained	Low	6.5	>78	Moderate
HbD3	Hayden sandy clay loam, 12 to 18 percent slopes, severely eroded	0.13	Not prime farmland	0.2	5	Low	Non-Hydric	Well drained	Low	6.5	>78	Moderate
HbE2	Hayden sandy loam, 18 to 25 percent slopes	0.66	Not prime farmland	0.24	3	Low	Non-Hydric	Well drained	Low	6.5	>78	Moderate
HbE3	Hayden sandy clay loam, 18 to 25 percent slopes	0.46	Not prime farmland	0.17	5	Low	Non-Hydric	Well drained	Moderate	6.5	>78	Moderate
HcE3	Hayden soils, 18 to 25 percent slopes	0.04	Not prime farmland	0.32	6	Low	Non-Hydric	Well drained	Moderate	6.5	>78	Moderate
INT	Water, intermittent	0.76	Not prime farmland	(blank)	8	(blank)	(blank)	(blank)	Not Rated	(blank)	>78	Not rated
LaA	Wadena loam, 0 to 2 percent slopes	2.22	All areas are prime farmland	0.28	6	Low	Predominantly Non-Hydric	Well drained	High	5.9	>78	Moderate
LaB	Estherville loam, 2 to 6 percent slopes	0.80	Farmland of statewide importance	0.32	5	Low	Predominantly Non-Hydric	Somewhat excessively drained	Low	6.5	>78	Moderate
LbD	Estherville-Burnsville complex, 12 to 50 percent slopes	0.14	Not prime farmland	0.24	3	Low	Predominantly Non-Hydric	Somewhat excessively drained	Low	6.5	>78	Moderate
LcB	Lester loam, 2 to 6 percent slopes	0.52	All areas are prime farmland	0.28	6	Low	Predominantly Non-Hydric	Well drained	High	6.6	>78	Moderate
LcB2	Lester loam, 2 to 6 percent slopes, moderately eroded	2.25	All areas are prime farmland	0.32	6	Low	Non-Hydric	Well drained	High	6.6	>78	Moderate
Ma	Marsh	0.18	Not prime farmland	(blank)	8	High	Hydric	Very poorly drained	High	(blank)	>78	Low

Map Label	Soil Map Unit Name	Area (ac)	Prime Farmland	Erosion Factor Kw[1]	Wind Erodible	Compact Potential[2]	Hydric Soil Rating[3]	Drainage Class	Corrosive to Steel[4]	pH[5]	Depth to Bedrock (in)[6]	Reveg. Potential[7]
TcB	Terril loam, 2 to 6 percent slopes	0.02	All areas are prime farmland	0.28	6	Low	Predominantly Non-Hydric	Well drained	High	6.2	>78	Moderate
Wb	Webster-Glencoe silty clay loams	0.22	Prime farmland if drained	0.28	6	High	Hydric	Poorly drained	High	7	>78	Low
Willmar 3rd Branch Line Upstream subtotal		**33.00**										
Willmar 3rd Branch Line Downstream												
CE3	Lester clay loam, 18 to 25 percent slopes, severely eroded	0.01	Not prime farmland	0.2	6	Low	(blank)	Well drained	Low	6.5	>78	Moderate
CO	Cordova clay loam, 0 to 2 percent slopes	5.95	Prime farmland if drained	0.28	6	High	Predominantly Hydric	Poorly drained	High	6.2	>78	Low
CS	Canisteo clay loam, depressional, 0 to 1 percent slopes	0.97	Prime farmland if drained	0.28	4L	High	Hydric	Very poorly drained	High	7.5	>78	Low
CT	Canisteo clay loam, 0 to 2 percent slopes	10.21	Prime farmland if drained	0.28	4L	High	Hydric	Poorly drained	High	7.5	>78	Low
CW	Cordova-Webster complex	2.74	Prime farmland if drained	0.28	6	High	Hydric	Poorly drained	High	6.7	>78	Low
GL	Glencoe clay loam, 0 to 1 percent slopes	4.36	Prime farmland if drained	0.28	6	High	Hydric	Very poorly drained	High	7	>78	Low
HM	Hamel loam, 0 to 2 percent slopes	5.53	Prime farmland if drained	0.24	6	High	Predominantly Hydric	Poorly drained	High	6.5	>78	Low
LA	Le Sueur-Lester complex, 1 to 6 percent slopes	31.43	All areas are prime farmland	0.28	6	High	Predominantly Non-Hydric	Somewhat poorly drained	High	6.2	>78	High
LB2	Lester loam, 2 to 6 percent slopes	12.15	All areas are prime farmland	0.28	6	Low	Predominantly Non-Hydric	Well drained	High	6.6	>78	Moderate
LC	Lester loam, 6 to 10 percent slopes	4.87	Farmland of statewide importance	0.28	6	Low	Predominantly Non-Hydric	Well drained	Moderate	6.6	>78	Moderate
LC2	Lester loam, 6 to 10 percent slopes, moderately eroded	17.75	Farmland of statewide importance	0.32	6	Low	Predominantly Non-Hydric	Well drained	Moderate	6.6	>78	Moderate
LD2	Lester loam, 10 to 16 percent slopes, moderately eroded	4.07	Not prime farmland	0.32	6	Low	(blank)	Well drained	Moderate	6.6	>78	Moderate
LE2	Lester loam, 10 to 22 percent slopes, moderately eroded	0.01	Not prime farmland	0.32	6	Low	(blank)	Well drained	Low	6.6	>78	Moderate
LS	Le Sueur loam, 1 to 3 percent slopes	2.53	All areas are prime farmland	0.28	6	High	Predominantly Non-Hydric	Somewhat poorly drained	High	6.2	>78	High
PM	Klossner muck, 0 to 1 percent slopes	5.58	Farmland of statewide importance	(blank)	2	High	Hydric	Very poorly drained	High	6.7	>78	Low
SD2	Lester-Storden complex, 10 to 16 percent slopes, moderately eroded	0.17	Not prime farmland	0.32	6	Low	Predominantly Non-Hydric	Well drained	Moderate	6.6	>78	Moderate
TB	Terril loam, 2 to 6 percent slopes	1.86	All areas are prime farmland	0.28	6	Low	Predominantly Non-Hydric	Well drained	High	6.2	>78	Moderate
Willmar 3rd Branch Line Downstream subtotal		**110.19**										

Map Label	Soil Map Unit Name	Area (ac)	Prime Farmland	Erosion Factor Kw[1]	Wind Erodible	Compact Potential[2]	Hydric Soil Rating[3]	Drainage Class	Corrosive to Steel[4]	pH[5]	Depth to Bedrock (in)[6]	Reveg. Potential[7]
Welcome 2nd Line												
86	Canisteo clay loam, 0 to 2 percent slopes	1.35	Prime farmland if drained	0.28	4L	High	Hydric	Poorly drained	High	7.5	>78	Low
336	Delft clay loam, 0 to 2 percent slopes	0.58	Prime farmland if drained	0.28	6	High	Predominantly Hydric	Poorly drained	High	7.4	>78	Low
886	Nicollet-Crippin complex	0.80	All areas are prime farmland	0.24	6	High	Predominantly Non-Hydric	Somewhat poorly drained	High	7.5	>78	Moderate
102B	Clarion loam, 2 to 6 percent slopes	0.25	All areas are prime farmland	0.24	6	Moderate	Predominantly Non-Hydric	Moderately well drained	High	6.2	>78	Moderate
887B	Clarion-Swanlake complex, 2 to 6 percent slopes	2.55	All areas are prime farmland	0.24	6	Moderate	Predominantly Non-Hydric	Moderately well drained	High	6.2	>78	Moderate
920C2	Clarion-Storden-Pilot Grove complex, 6 to 10 percent slopes, moderately eroded	2.45	Farmland of statewide importance	0.28	6	Low	Predominantly Non-Hydric	Well drained	Moderate	6.2	>78	Moderate
921C2	Clarion-Storden complex, 6 to 10 percent slopes, moderately eroded	1.64	Farmland of statewide importance	0.28	6	Low	Predominantly Non-Hydric	Well drained	Moderate	6.2	>78	Moderate
L107A	Canisteo-Glencoe complex, 0 to 2 percent slopes	10.63	Prime farmland if drained	0.28	4L	High	Predominantly Hydric	Poorly drained	High	7.5	>78	Low
L83A	Webster clay loam, 0 to 2 percent slopes	5.23	Prime farmland if drained	0.28	6	High	Predominantly Hydric	Poorly drained	High	6.5	>78	Low
L84A	Glencoe clay loam, 0 to 1 percent slopes	0.69	Prime farmland if drained	0.28	6	High	Hydric	Very poorly drained	High	7	>78	Low
L85A	Nicollet clay loam, 1 to 3 percent slopes	2.80	All areas are prime farmland	0.28	6	High	Predominantly Non-Hydric	Somewhat poorly drained	High	6.2	>78	Moderate
Welcome 2nd Line subtotal		**28.97**										
Paynesville 2nd Branch line												
392	Biscay loam	0.03	Prime farmland if drained	0.28	6	High	Hydric	Poorly drained	High	7	>78	Low
413	Osakis loam, 0 to 2 percent slopes	0.01	Farmland of statewide importance	0.28	5	Moderate	Predominantly Non-Hydric	Moderately well drained	Low	6.3	>78	Moderate
540	Seelyeville-Seelyeville, ponded, complex, 0 to 1 percent slopes	0.72	Not prime farmland	(blank)	2	High	Hydric	Very poorly drained	High	(blank)	>78	Low
566	Regal loam	0.02	Not prime farmland	0.24	4L	High	Predominantly Hydric	Poorly drained	High	7.5	>78	Low
1029	Pits, gravel	1.27	Not prime farmland	(blank)	(blank)	(blank)	Non-Hydric	(blank)	Not Rated	(blank)	>78	Not rated
1113	Haslie, Seelyeville, and Cathro soils, frequently ponded, 0 to 1 percent slopes	0.06	Not prime farmland	(blank)	8	High	Predominantly Hydric	Very poorly drained	High	(blank)	>78	Low
611C	Sandberg loamy sand, 2 to 12 percent slopes	5.34	Not prime farmland	0.1	2	Low	Predominantly Non-Hydric	Excessively drained	Low	5.4	>78	Moderate

Map Label	Soil Map Unit Name	Area (ac)	Prime Farmland	Erosion Factor Kw[1]	Wind Erodible	Compact Potential[2]	Hydric Soil Rating[3]	Drainage Class	Corrosive to Steel[4]	pH[5]	Depth to Bedrock (in)[6]	Reveg. Potential[7]
611D	Sandberg loamy coarse sand, 6 to 30 percent slopes	4.30	Not prime farmland	0.15	2	Low	Non-Hydric	Excessively drained	Low	5.8	>78	Moderate
875B	Estherville-Hawick complex, 2 to 6 percent slopes	14.10	Farmland of statewide importance	0.24	3	Low	Predominantly Non-Hydric	Somewhat excessively drained	Low	6.5	>78	Moderate
D105A	Arvilla sandy loam, 0 to 2 percent slopes	7.66	Farmland of statewide importance	0.2	3	Low	Predominantly Non-Hydric	Somewhat excessively drained	Low	6.3	>78	Moderate
D105B	Arvilla sandy loam, 2 to 6 percent slopes	15.80	Farmland of statewide importance	0.2	3	Low	Predominantly Non-Hydric	Somewhat excessively drained	Low	6.3	>78	Moderate
Paynesville 2nd Branch Line subtotal		**49.31**										
Worthington 2nd Branch Line												
86	Canisteo clay loam, 0 to 2 percent slopes	1.52	Prime farmland if drained	0.28	4L	High	Hydric	Poorly drained	High	7.5	>78	Low
197	Kingston silty clay loam, 1 to 3 percent slopes	0.72	All areas are prime farmland	0.32	6	High	Predominantly Non-Hydric	Somewhat poorly drained	High	6.7	>78	High
211	Lura silty clay, 0 to 1 percent slopes	0.18	Prime farmland if drained	0.28	4	High	Hydric	Very poorly drained	High	6.8	>78	Low
229	Waldorf silty clay loam, 0 to 2 percent slopes	5.74	Prime farmland if drained	0.32	4	High	Predominantly Hydric	Poorly drained	High	6.7	>78	Low
336	Delft clay loam, 0 to 2 percent slopes	6.67	Prime farmland if drained	0.28	6	High	Predominantly Hydric	Poorly drained	High	7.4	>78	Low
813	Spicer-Lura complex	0.91	Prime farmland if drained	0.32	4L	High	Predominantly Hydric	Poorly drained	High	7.9	>78	Low
1833	Coland clay loam, 0 to 2 percent slopes, occasionally flooded	0.54	Prime farmland if protected from flooding or not frequently flooded during the growing season	0.32	6	High	Predominantly Hydric	Poorly drained	High	6.7	>78	Low
101B	Truman silt loam, 2 to 6 percent slopes	1.41	All areas are prime farmland	0.37	6	Low	Predominantly Non-Hydric	Well drained	Moderate	6.5	>78	High
102B	Clarion loam, 2 to 6 percent slopes	8.39	All areas are prime farmland	0.24	6	Moderate	Predominantly Non-Hydric	Moderately well drained	High	6.2	>78	Moderate
102B2	Clarion loam, 2 to 6 percent slopes, moderately eroded	6.78	All areas are prime farmland	0.28	6	Moderate	Predominantly Non-Hydric	Moderately well drained	High	6.2	>78	Moderate
27B	Dickinson sandy loam, 1 to 6 percent slopes	1.06	All areas are prime farmland	0.2	3	Low	Predominantly Non-Hydric	Well drained	Low	6.7	>78	Moderate
327B	Dickman sandy loam, 2 to 6 percent slopes	1.69	Farmland of statewide importance	0.2	3	Low	Predominantly Non-Hydric	Somewhat excessively drained	Low	6.3	>78	Moderate
41A	Estherville sandy loam, 0 to 2 percent slopes	0.05	Farmland of statewide importance	0.24	3	Low	Predominantly Non-Hydric	Somewhat excessively drained	Low	6.7	>78	Moderate

Map Label	Soil Map Unit Name	Area (ac)	Prime Farmland	Erosion Factor Kw[1]	Wind Erodible	Compact Potential[2]	Hydric Soil Rating[3]	Drainage Class	Corrosive to Steel[4]	pH[5]	Depth to Bedrock (in)[6]	Reveg. Potential[7]
41B	Estherville sandy loam, 2 to 6 percent slopes	0.10	Farmland of statewide importance	0.2	3	Low	Predominantly Non-Hydric	Somewhat excessively drained	Low	5.9	>78	Moderate
L85A	Nicollet clay loam, 1 to 3 percent slopes	0.39	All areas are prime farmland	0.28	6	High	Predominantly Non-Hydric	Somewhat poorly drained	High	6.2	>78	Moderate
Worthington 2nd Brach Line subtotal		**36.15**										
Springfield 2nd Branch Line												
86	Canisteo clay loam, 0 to 2 percent slopes	5.25	Prime farmland if drained	0.28	4L	High	Hydric	Poorly drained	High	7.5	>78	Low
118	Crippin loam, 1 to 3 percent slopes	1.92	All areas are prime farmland	0.24	4L	High	Predominantly Non-Hydric	Somewhat poorly drained	High	7.5	>78	Moderate
160	Fieldon loam, 0 to 2 percent slopes	3.29	Prime farmland if drained	0.28	4L	High	Hydric	Poorly drained	High	7.8	>78	Low
181	Litchfield loamy fine sand	8.77	Farmland of statewide importance	0.1	2	Moderate	Predominantly Non-Hydric	Moderately well drained	High	6.2	>78	Moderate
247	Linder sandy loam	3.00	All areas are prime farmland	0.2	3	High	Predominantly Non-Hydric	Somewhat poorly drained	High	6.7	>78	High
255	Mayer loam, 0 to 2 percent slopes	0.06	Prime farmland if drained	0.24	4L	High	Predominantly Hydric	Poorly drained	High	7.6	>78	Low
269	Millington clay loam, occasionally flooded	0.15	Prime farmland if protected from flooding or not frequently flooded during the growing season	0.24	4L	High	Hydric	Poorly drained	High	7.9	>78	Low
281	Darfur fine sandy loam	2.12	Prime farmland if drained	0.2	3	High	Predominantly Hydric	Poorly drained	High	6.7	>78	Low
282	Hanska loam, 0 to 2 percent slopes	1.79	Prime farmland if drained	0.28	5	High	Predominantly Hydric	Poorly drained	High	6.8	>78	Low
362	Millington clay loam, frequently flooded	0.70	Not prime farmland	0.24	4L	High	Hydric	Poorly drained	High	7.9	>78	Low
392	Biscay clay loam, 0 to 2 percent slopes	1.51	Prime farmland if drained	0.24	6	High	Hydric	Poorly drained	High	6.9	>78	Low
487	Hoopeston fine sandy loam	3.65	All areas are prime farmland	0.24	3	High	Predominantly Non-Hydric	Somewhat poorly drained	High	5.8	>78	High
517	Shandep clay loam	0.87	Prime farmland if drained	0.24	6	High	Hydric	Very poorly drained	High	6.7	>78	Low
1833	Coland clay loam, 0 to 2 percent slopes, occasionally flooded	0.75	Prime farmland if protected from flooding or not frequently flooded	0.32	6	High	Predominantly Hydric	Poorly drained	High	6.7	>78	Low

Map Label	Soil Map Unit Name	Area (ac)	Prime Farmland	Erosion Factor Kw[1]	Wind Erodible	Compact Potential[2]	Hydric Soil Rating[3]	Drainage Class	Corrosive to Steel[4]	pH[5]	Depth to Bedrock (in)[6]	Reveg. Potential[7]
			during the growing season									
1834	Coland clay loam, 0 to 2 percent slopes, frequently flooded	0.14	Not prime farmland	0.32	6	High	Predominantly Hydric	Poorly drained	High	6.7	>78	Low
102B	Clarion loam, 2 to 6 percent slopes	22.90	All areas are prime farmland	0.24	6	Moderate	Predominantly Non-Hydric	Moderately well drained	High	6.2	>78	Moderate
222B	Lasa loamy fine sand, 1 to 6 percent slopes	2.02	Farmland of statewide importance	0.2	2	Low	Predominantly Non-Hydric	Well drained	Low	6.5	>78	Moderate
27A	Dickinson fine sandy loam, 0 to 2 percent slopes	0.97	All areas are prime farmland	0.24	3	Low	Predominantly Non-Hydric	Well drained	Low	6.5	>78	Moderate
27B	Dickinson fine sandy loam, 2 to 6 percent slopes	1.23	All areas are prime farmland	0.24	3	Low	Predominantly Non-Hydric	Well drained	Low	6.5	>78	Moderate
327A	Dickman sandy loam, 0 to 2 percent slopes	7.72	Farmland of statewide importance	0.2	3	Low	Predominantly Non-Hydric	Somewhat excessively drained	Low	6.3	>78	Moderate
327B	Dickman sandy loam, 2 to 6 percent slopes	8.06	Farmland of statewide importance	0.2	3	Low	Predominantly Non-Hydric	Somewhat excessively drained	Low	6.3	>78	Moderate
41B	Estherville sandy loam, 2 to 6 percent slopes	2.39	Farmland of statewide importance	0.2	3	Low	Predominantly Non-Hydric	Somewhat excessively drained	Low	5.9	>78	Moderate
639B	Ridgeport sandy loam, 1 to 6 percent slopes	3.61	Farmland of statewide importance	0.2	3	Low	Predominantly Non-Hydric	Somewhat excessively drained	Low	6.5	>78	Moderate
69B	Fedji loamy fine sand, 1 to 6 percent slopes	1.40	Farmland of statewide importance	0.15	2	Low	Predominantly Non-Hydric	Well drained	High	6.1	>78	Moderate
790B	Grogan-Dickinson complex, 1 to 4 percent slopes	0.70	All areas are prime farmland	0.43	5	Low	Predominantly Non-Hydric	Well drained	Moderate	6.5	>78	High
8B	Sparta loamy sand, 1 to 6 percent slopes	0.66	Not prime farmland	0.17	2	Low	Predominantly Non-Hydric	Excessively drained	Low	6.2	>78	Moderate
921B2	Clarion-Swanlake complex, 2 to 6 percent slopes	3.95	All areas are prime farmland	0.24	6	Moderate	Predominantly Non-Hydric	Moderately well drained	High	6.2	>78	Moderate
921C2	Clarion-Storden complex, 6 to 10 percent slopes, moderately eroded	2.01	Farmland of statewide importance	0.28	6	Low	Predominantly Non-Hydric	Well drained	Moderate	6.2	>78	Moderate
L107A	Canisteo-Glencoe complex, 0 to 2 percent slopes	16.38	Prime farmland if drained	0.28	4L	High	Predominantly Hydric	Poorly drained	High	7.5	>78	Low
L83A	Webster clay loam, 0 to 2 percent slopes	5.01	Prime farmland if drained	0.28	6	High	Predominantly Hydric	Poorly drained	High	6.5	>78	Low
L84A	Glencoe clay loam, 0 to 1 percent slopes	3.12	Prime farmland if drained	0.28	6	High	Hydric	Very poorly drained	High	7	>78	Low
L85A	Nicollet clay loam, 1 to 3 percent slopes	3.79	All areas are prime farmland	0.28	6	High	Predominantly Non-Hydric	Somewhat poorly drained	High	6.2	>78	Moderate
	Springfield 2nd Branch Line subtotal	**119.89**										

Map Label	Soil Map Unit Name	Area (ac)	Prime Farmland	Erosion Factor Kw[1]	Wind Erodible	Compact Potential[2]	Hydric Soil Rating[3]	Drainage Class	Corrosive to Steel[4]	pH[5]	Depth to Bedrock (in)[6]	Reveg. Potential[7]
Minnesota Interconnect 2nd Branch Line												
541	Rifle and Seelyeville soils	0.02	Not prime farmland	(blank)	5	High	Hydric	Very poorly drained	High	(blank)	>78	Low
C79A	Talmoon-Alstad-Bluffton, frequently ponded, loams, 0 to 2 percent slopes	0.00	Not prime farmland	0.32	5	High	Partially Hydric	Poorly drained	High	6	>78	Low
C82C	Cushing, moderately eroded-Branstad loams, 2 to 15 percent slopes	0.46	Farmland of statewide importance	0.32	5	Low	Non-Hydric	Well drained	Low	5.5	>78	Moderate
Gp	Anoka loamy fine sand, 7 to 12 percent slopes	0.12	Not prime farmland	0.24	2	Low	Predominantly Non-Hydric	Well drained	Low	6.1	>78	Moderate
Gu	Anoka loamy fine sand, 2 to 7 percent slopes	20.58	Farmland of statewide importance	0.24	2	Low	Predominantly Non-Hydric	Well drained	Low	6.1	>78	Moderate
L	Lino loamy fine sand	3.21	Not prime farmland	0.24	2	High	Predominantly Non-Hydric	Somewhat poorly drained	High	5.6	>78	Moderate
Zn	Zimmerman fine sand, 6 to 12 percent slopes	2.99	Not prime farmland	0.1	1	Low	Predominantly Non-Hydric	Somewhat excessively drained	Low	6	>78	Moderate
Zp	Zimmerman loamy fine sand and fine sand, 7 to 12 percent slopes	3.88	Not prime farmland	0.24	2	Low	Predominantly Non-Hydric	Excessively drained	Low	5.8	>78	Moderate
Zr	Zimmerman loamy fine sand and fine sand, 12 to 18 percent slopes	0.37	Not prime farmland	0.24	2	Low	Predominantly Non-Hydric	Excessively drained	Low	5.8	>78	Moderate
Zu	Zimmerman fine sand, 1 to 6 percent slopes	8.05	Not prime farmland	0.1	1	Low	Predominantly Non-Hydric	Somewhat excessively drained	Low	6	>78	Moderate
Zx	Zimmerman fine sand, 12 to 18 percent slopes, moderately eroded	0.39	Not prime farmland	0.1	1	Low	Predominantly Non-Hydric	Excessively drained	Low	5.8	>78	Moderate
Minnesota Interconnect 2nd Branch Line subtotal		**40.07**										
Alexandria 2nd Branch Line												
142	Nokay loam	11.60	Prime farmland if drained	0.32	5	High	Predominantly Hydric	Poorly drained	High	5	>78	<Null>
165	Parent loam	0.05	Farmland of statewide importance	0.2	5	High	Hydric	Poorly drained	High	6.5	>78	<Null>
325	Prebish loam	1.30	Not prime farmland	0.28	6	High	Hydric	Very poorly drained	High	6.5	>78	<Null>
163B	Brainerd sandy loam, 1 to 4 percent slopes	11.42	All areas are prime farmland	0.24	3	High	Predominantly Non-Hydric	Somewhat poorly drained	High	5.3	>78	<Null>
D544	Cathro muck, occasionally ponded, 0 to 1 percent slopes	0.67	Not prime farmland	(blank)	2	High	Hydric	Very poorly drained	High	(blank)	>78	<Null>
Alexandria 2nd Branch Line subtotal		**25.04**										

Map Label	Soil Map Unit Name	Area (ac)	Prime Farmland	Erosion Factor Kw[1]	Wind Erodible	Compact Potential[2]	Hydric Soil Rating[3]	Drainage Class	Corrosive to Steel[4]	pH[5]	Depth to Bedrock (in)[6]	Reveg. Potential[7]
Aboveground Facilities												
Hugo Compressor Station Uprate												
507	Poskin silt loam	1.48	Prime farmland if drained	0.43	5	High	Predominantly Non-Hydric	Somewhat poorly drained	High	6.1	>78	High
155B	Chetek sandy loam, 1 to 6 percent slopes	0.06	Farmland of statewide importance	0.24	3	Low	Non-Hydric	Somewhat excessively drained	High	6.5	>78	Moderate
302B	Rosholt sandy loam, 2 to 6 percent slopes	0.62	All areas are prime farmland	0.28	3	Low	Non-Hydric	Well drained	High	5.8	>78	Moderate
454B	Mahtomedi loamy sand, 0 to 6 percent slopes	2.37	Not prime farmland	0.1	2	Low	Non-Hydric	Excessively drained	Low	5.8	>78	Moderate
Hugo Compressor Station Uprate subtotal		**4.53**										
Project Total		**567.36**										

[1] Erosion Factor Kw indicates the susceptibility of a whole soil to sheet and rill erosion by water, and is a function of percent silt, sand, organic matter, soil structure, and hydraulic conductivity (Ksat). Values range from 0.02 and 0.69. A rating of 0.0-0.24 is Low, a rating of 0.25-0.40 is Moderate, and a rating of 0.40-0.69 is High. Organic soils are Not rated.
[2] Compaction potential is based on drainage classification. Highly compaction prone soils include soils with a drainage class of poorly drained and very poorly drained.
[3] Hydric rating is based on composition of hydric components. Categories are hydric, predominantly hydric, partially hydric, and non-hydric.
[4] Corrosion potential is based on the corrosion of steel rating class. Risk of corrosion pertains to potential soil-induced electrochemical or chemical action that corrodes or weakens uncoated steel. A rating of high indicates the soil has numerous properties that are likely to increase the potential for corrosion.
[5] Soil pH is based on the pH (1 to 1 water) rating class. The 1:1 water method is the most common soil laboratory measurement of pH. See table 7.1-2 for pH ranges and reaction classes.
[6] Depth to bedrock is based on depth to the restrictive feature listed for each soil series.
[7] Revegetation is based on potential for seedling mortality rating class. A rating of low indicates the soil has properties that will decrease the potential for successful revegetation.

Appendix 7E
Draft SWPPPs for V2F and NL27 Projects

Lake Mills M500 E-line

Stormwater Pollution Prevention Plan

Ventura to Farmington A-line Abandonment and Capacity Replacement Project –Lake Mills M500 E-line

Northern Natural Gas

Freeborn County, Minnesota

February 2026

Project Number: 172608813

FERC Docket CP26- -000

CERTIFICATION STATEMENT

In accordance with Northern Natural Gas and Minnesota National Pollutant Discharge Elimination System (NPDES)/State Disposal System (SDS) General Permit No. MNR100001, all contractors and subcontractors identified in this Stormwater Pollution Prevention Plan will sign a copy of the following certification statement before conducting any professional service at the Project area:

> I certify under penalty of law that I understand the terms and conditions of the Minnesota NPDES/SDS general permit that authorizes the storm water discharges associated with construction activity from the project site as part of this certification. Further, by my signature, I understand that I am becoming a co-permittee, along with the owner(s) and other contractors and subcontractors signing such certifications, to the Minnesota Pollution Control Agency NPDES/SDS General Permit No. MNR100001 for "Stormwater Associated with Construction Activity" at the identified site. As a co-permittee, I understand that I, and my company, are legally required under the Clean Water Act and the Code of Minnesota, to ensure compliance with the terms and conditions of the storm water pollution prevention plan developed under this NPDES/SDS permit and the terms of this NPDES/SDS permit.
>
> I certify under penalty of law that I have reviewed, understand and will comply with this document, the NPDES/SDS permit, and all attachments. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Authorized Signature	Authorized Signature
Date	Date
TBD	TBD
Name – Contractor’s Contact	Name – Contractor’s Contact
Title	Title
Company Name	Company Name
Address	Address
Telephone Number	Telephone Number

Stormwater Pollution Prevention Plan (SWPPP)
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ATTACHMENT A: Project Location Map
ATTACHMENT B: Soils Map
ATTACHMENT C: Erosion Control Map
ATTACHMENT D: Northern's Engineering Standard 7507
ATTACHMENT E: NRCS Mapped Soils Table
ATTACHMENT F: Spill Prevention, Containment, and Countermeasure Plan
ATTACHMENT G: SWPPP Inspection & Maintenance Report and Rainfall Inspection Chart
ATTACHMENT H: Upland Erosion Control, Revegetation, and Maintenance Plan
ATTACHMENT I: Wetland and Waterbody Construction and Mitigation Procedures
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ATTACHMENT K: MPCA Authorization Request for NPDES Coverage Under MNR100001 - Pending
ATTACHMENT L: MPCA Authorization Letter - Pending
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ATTACHMENT O: Erosion Control Certification Documentation for Northern Natural Gas Environmental Inspection Staff – Pending Selection of Environmental Inspector
ATTACHMENT P: Northern's Horizontal Directional Drill Monitoring, Inadvertent Return Response, and Contingency Plan (included by reference only)
ATTACHMENT Q: Noxious Weed Plan (included by reference only)
ATTACHMENT R: Steep Slopes Table
ATTACHMENT S: NRCS/Minnesota Board of Water and Soil Resources (BWSR) seed mix

INTRODUCTION

The following documents and related information are incorporated by reference to comprise the Northern Natural Gas (Northern) Stormwater Pollution Prevention Plan (SWPPP). This Plan and the referenced materials must be retained at the construction site from the date of project initiation to the date of permit termination conditions and provided to the Minnesota Pollution Control Agency (MPCA), U.S. Environmental Protection Agency (EPA) or other regulatory agency upon request to satisfy the requirements of MPCA's Stormwater Permit for Construction Activity (MNR100001). The MPCA has approval to administer the EPA's National Pollutant Discharge Elimination System (NPDES) program and the Minnesota State Disposal System (SDS). As needed, this SWPPP will be amended to reflect any changes in design, construction, operation, or maintenance.

1. PROJECT LOCATION AND DESCRIPTION

1. PROJECT LOCATION

Northern proposes to construct and operate an approximately 8.29-mile extension of its E-line pipeline in Freeborn County, Minnesota. The proposed extension will be tied in below ground at the current terminus of the E-line on the north side of 165th Street in Section 33, T102N, R22W, Freeborn County, Minnesota. At this location, Northern will remove the hot tap fitting on its existing 30-inch diameter D-line and tie over from the M500 E-line to the M500 D-line at the take off to remove the existing connection. The valve setting at this location also will be removed. The terminus of the proposed extension will continue below ground into the south end of the NL27 Lake Mills M500 E-line on the north side of 240th Street in Section 23, T103N, R22W, Freeborn County, Minnesota. Northern also will install a new block valve and associated valves and piping within its expanded Conger MN #1, located on the south side of 180th Street in Section 27, T102N, R22W, Freeborn County, Minnesota. This work is known as the Lake Mills M500 E-Line Extension Project (Project).

To minimize methane venting to the atmosphere during tie-in activities, Northern will utilize temporary compression to evacuate gas from the D- and E-lines to adjacent mainlines prior to the tie-ins. The location for the temporary compression is the Lake Mills compressor station, located south of 465th Street, Sections 32 and 33, T100N, R22W, Worth County, Iowa. No ground disturbance will occur as part of the venting, so this component is not discussed further in this SWPPP.

A Project location map is included in Attachment A.

2. PROJECT DESCRIPTION

As described above, The Project will involve the installation of a pipeline extension of Northern's E-line. Additionally, this Project will involve the removal of a hot tap fitting and valve setting at the existing 30-inch diameter D-line at the valve known as the Lake Mills tie-over valve setting. The existing lot measures 90 feet by 75 feet and the existing permanent access roads each measure 15 feet by 20 feet. The total facility footprint is 0.16 acre. The work at this location will also involve the removal of piping, valves, guard rail, and gravel. The land associated with the Lake Mills tie-over valve setting will be returned to original grade.

Northern also will install a new block valve and associated valves and piping within its expanded Conger MN #1. Northern will utilize the existing station access road without

modification. No modifications to the existing facility footprint or easements will be required to install the new block valve. The existing facility footprint measures 100 feet by 375 feet along with a permanent access road measuring 15 feet by 30 feet. The facility footprint including the permanent access road will total 0.64 acre.

There will be no facility at the north end of the V2F Lake Mills M500 E-line. There will be a below-grade continuation to the NL27 Lake Mills M500 E-line.

The Project will generally be installed parallel, utilizing a 25-foot offset, to existing Northern mainlines. The pipeline will be installed within a 100-foot-wide nominal construction corridor in uplands and a 75-foot-wide construction corridor in a wetland except in LMA-W013 where Northern will neck down to 50 feet. In addition to the construction corridor, Northern will utilize temporary workspace (TWS), extra temporary workspace (ETWS), existing driveways and farm roads, temporary access roads (TAR), and staging areas during construction.

The purpose of this Project is to enhance the safety, reliability, security, and operational efficiency of Northern's pipeline system and to serve the firm transportation requirements of Northern's customers associated with increased energy needs in Minnesota.

Northern will utilize its existing Lake Mills compressor station for temporary compression. Approximately three portable natural-gas fired 300-horsepower (HP) units will be utilized for about 87 hours to reduce the pressure to approximately 10 to 15 psig. Northern will then vent the remaining gas to the atmosphere, approximately 1.5 M standard cubic feet of natural gas. Through temporary compression, Northern will reduce its venting by approximately 77.0 M standard cubic feet of natural gas. No land disturbing activities are planned at the Lake Mills compressor station as part of this project; therefore, Northern is not including a SWPPP for this separate location in Iowa.

Northern plans to construct the Project components in accordance with the Federal Energy Regulatory Commission's (FERC) requirements for Section 7 authorizations. The Project duration will be approximately seven months and is scheduled to begin in spring 2027, or as soon as all required permits are obtained.

The proposed Project workspaces and additional features are shown on the attached maps (Attachments A-C).

Construction activities will include: clearing, grading, excavation, installation of the pipeline (via horizontal directional drill (HDD) and open trench), valve setting removal, block valve installation, pressure testing, backfilling, clean up and site restoration. The Project workspace will be returned, as near as practicable, to pre-existing conditions.

The Project will include approximately 180.86 acres of temporary disturbance. No permanent impacts are included with this project. Approximately 0.16 acre of impervious surface will be removed within the Project area. There are approximately 2.30 acres of existing impervious surface within the Project area. The Project will result in 0.0 acre of new impervious surface within the Project area.

Project Acreage Summary	
Existing Impervious Area	Approximately 2.30 acres
Post Construction New Impervious Area	0.0 acre
Post Construction Total Impervious Area	2.30 acres
Total Potentially Disturbed Area	180.86 acres

2. SWPPP AND TRAINING DOCUMENTATION

1. POSTING NOTIFICATION

A copy of the NPDES/SDS Certification by the MPCA will be posted on-site or available in the SWPPP within 72 hours upon MPCA request.

2. LOCATION OF THE SWPPP

A copy of the SWPPP will be provided to the contractor prior to construction. The SWPPP (original or copies), all changes and amendments to it, and inspections and maintenance records will be kept at the site or electronically available during construction by the contractor who has operational control of that portion of the site and by Northern's environmental inspector (EI). The SWPPP will be available either electronically, in the field, or an on-site vehicle during normal working hours.

3. TRAINING AND/OR CERTIFICATION DOCUMENTATION

The MPCA requires stormwater training for certain individuals for construction projects. The content and extent of training must be commensurate with the individual's job duties and responsibilities with regard to activities covered under the NPDES/SDS permit for the Project. At least one individual present on the permitted project site (or available to the project site in 72 hours) must be trained in the job duties described below.

This SWPPP has been prepared under the direction of and reviewed by Chad Johnson at Stantec Consulting Services Inc. (Stantec). Mr. Johnson holds the following state and national certifications relevant to SWPPP design:

- University of Minnesota – SWPPP Design and Site Management Certification http://www.erosion.umn.edu
- Certified Professional in Erosion and Sediment Control (#3797)
- Certified Professional in Storm Water Quality (#476)
- Certified Erosion, Sediment and Storm Water Inspector (#195)

Northern company and third-party inspection personnel associated with this Project have been trained in accordance with the permit's training requirements through the University of Minnesota's Erosion and Sediment Control Program. Northern's on-site EIs have been trained and are certified in the areas of construction stormwater inspector/installer. The EIs are supervised by Northern's Project environmental specialist who has been trained and is certified in the areas of SWPPP design, construction stormwater site management and inspector/installer.

Mr. Terry Plucker, Environmental Compliance Manager, holds the following state certifications relevant to SWPPP design:

- University of Minnesota – SWPPP Design and Site Management Certification http://www.erosion.umn.edu
- Professional Geoscientist – Soil Science Texas (#11893)

Northern's contractor personnel responsible for performing or supervising the installation of erosion and sediment control devices best management practices (BMPs) are required to provide proof of training in accordance with the permit requirements prior to construction activities. Prior to construction, Northern will review the requirements of the Minnesota NPDES/SDS permit number MNR100001 and this SWPPP with the contractor. Copies of the EI's training certifications will be included in Attachment O.

4. SWPPP IMPLEMENTATION OR AMENDMENTS

The contractor is responsible for providing trained and knowledgeable personnel to implement the SWPPP. Northern's EIs will be responsible for conducting the required inspections every seven days or within 24 hours after each rain event 0.5 inch or greater. Northern will provide the contractor with the results of the inspections and corrective actions that may be required. It will be Northern's responsibility to provide adequate documentation in the SWPPP.

5. BMP INSTALLATION, MAINTENANCE OR REPAIR

The contractor is also responsible for providing trained and knowledgeable personnel responsible for the installation, maintenance, or repair of the erosion and sediment control BMPs described in the SWPPP, Project plans or Project specifications. It will be the contractor's responsibility to provide appropriate documentation in the SWPPP prior to construction. A notification roster for this SWPPP is included in Attachment N.

3. RESPONSIBLE PARTIES

The Project is owned by:
Northern Natural Gas
1111 South 103rd Street
Omaha, Nebraska 68124
Contact: Mr. Terry Plucker, Environmental Compliance Manager
402-398-7226

Northern has developed a chain of responsibility with all operators on the site to ensure that the SWPPP will be implemented and stay in effect until construction of the Project is complete, the entire site has achieved permit termination conditions, and a Notice of Termination (NOT) has been submitted to the MPCA. The following responsibilities have been assigned for this Project:

- SWPPP development: Stantec on behalf of Northern
- Oversee SWPPP implementation/amendments: Northern
- Conduct required inspections: Northern
- Conduct BMP installation, maintenance and repair: contractor – to be determined

4. RECEIVING WATERS

The following list of receiving waters are located within 1-mile of the Project and have the potential to receive stormwater runoff from the Project site. Receiving waters were

identified using U.S. Geological Survey topographic maps, National Hydrography Dataset (NHD), National Wetland Inventory (NWI) data, aerial photography, Minnesota Public Waters Inventory (PWI), National Resources Conservation Service (NRCS) soils data and field survey (within the Project area).

Based on the wetland and waterbody determination and delineation surveys, eight waterways are located with the ESB for the Project. Of the eight waterways identified, only five waterways will be crossed by the Project. The following is a list of waterways crossed by the Project:

Unique Waterway Identifier	MP	Waterbody Type	Crossing Width (feet)	Crossing Method
LMA-S01	34.45	Intermittent	30.2	HDD
LMA-S03	37.87	Perennial (County Ditch 68/Shoff Creek)	15.5	HDD
LMA-S04	37.91	Intermittent	6.4	HDD
LMA-S07	41.15	Perennial – Wedges Creek; County Ditch #9	23.5	HDD
LMA-S08	41.92	Perennial – County Ditch 11	7.2	HDD

An additional 26 NHD mapped waterways are located within a 1-mile radius of the project. Three of these waterways, Wedge Creek, County Ditch 9 and County Ditch 66, are listed on the MPCA Impaired Waters List for fish bioassessments. As required by the Minnesota NPDES/SDS permit number MNR100001, Northern will implement additional BMPs to further reduce the potential for Project runoff to these waterways. No other special or protected waterways are located within 1-mile that require additional BMPs per Minnesota NPDES/SDS Permit No. MNR100001. No impacts to the waterways are anticipated from construction stormwater runoff

Based on the wetland and waterbody determination and delineation surveys, two waterbodies are located with the ESB for the Project. No waterbodies will be crossed by the project. An additional 17 NHD mapped waterbodies are located within 1-mile of the Project, but none are listed as impaired or a special waterbody. No impacts on the waterbodies are anticipated from construction stormwater runoff.

Based on the wetland and waterbody determination and delineation surveys, 48 wetlands are located with the ESB for the Project. Of the 48 wetlands identified, only 14 wetlands will be crossed by the Project. The following is a list of wetlands crossed by the Project:

Unique Wetland Identifier	**MP**		**Field Determined Wetland Classification[1]**	**Length of Crossing (feet)[2]**	**Area Affected by Construction (acres)**
	From	**To**			
LMA-W12	35.54	35.56	Seasonally flooded basin/farmed wetland / PEM1Af	118	0.18

Unique Wetland Identifier	MP		Field Determined Wetland Classification[1]	Length of Crossing (feet)[2]	Area Affected by Construction (acres)
	From	To			
LMA-W13	36.41	36.49	Seasonally flooded basin/farmed wetland / PEM1Af	425	0.49
LMA-W14	36.67	36.69	Seasonally flooded basin/farmed wetland / PEM1Af	133	0.17
LMA-W20	37.84	37.84	Seasonally flooded basin/farmed wetland / PEM1Af	10	<0.00[8,9]
LMA-W21	37.90	37.90	Degraded wet meadow / PEM1B	22	<0.00[8,9]
LMA-W26	38.82	38.82	Seasonally flooded basin/farmed wetland / PEM1Af	30	0.05
LMA-W27	38.86		Degraded wet meadow / PEM1B	N/A	0.01
LMA-W31	39.12	39.13	Seasonally flooded basin/farmed wetland / PEM1Af	37	0.13
LMA-W34	39.75	39.76	Seasonally flooded basin/farmed wetland / PEM1Af	77	0.15[6]
LMA-W37	40.19		Seasonally flooded basin/farmed wetland / PEM1Af	N/A	0.03[6]
LMA-W40	40.31	40.33	Degraded wet meadow / PEM1B	114	0.16
LMA-W41	40.66	40.66	Degraded wet meadow / PEM1B	26	<0.00[8,9]
LMA-W42	40.73	40.73	Degraded wet meadow / PEM1B	18	<0.00[8,9]
LMA-W44	42.11	42.11	Degraded wet meadow / PEM1B	28	<0.00[8,9]
Total					**1.37**

[1] Wetland Classification based on Cowardin, Classification of Wetlands and Deepwater Habitats: PFO1A – Palustrine Forested – broad leaved deciduous – temporarily flooded (Hardwood Forest, Floodplain Forest), PSS1C – Palustrine Scrub-Shrub - broad-leaved deciduous - seasonally flooded (Shrub-Carr), PSS1B – Palustrine Scrub-Shrub - broad-leaved deciduous - saturated (Shrub-Carr), PEM1Af - Palustrine Emergent – temporarily flooded - farmed (Seasonally Flooded/Farmed), PEM1B - Palustrine Emergent – seasonally saturated (Wet Meadow / Disturbed wet meadow), PEM1Bf - Palustrine Emergent – seasonally saturated - farmed (Wet Meadow / Disturbed wet meadow / Farmed), PEM1C - Palustrine Emergent – persistent - seasonally flooded (Willow Marsh), PEM1Cf - Palustrine Emergent – persistent - seasonally flooded - farmed (Willow Marsh / Farmed), PUBH – Palustrine Unconsolidated Bottom –permanently flooded (Willow Open Water) – The listed classification represents the wetland community at the crossing locations.

[2] Wetland crossing lengths of pipeline.

[3] Area required to be cleared at a frequency necessary to maintain the ROW in an herbaceous state.

[4] Wetlands crossed by the Project via HDD. Northern will not conduct maintenance between the entry and exit pits; therefore, no impacts on the wetland will occur during operation.

[5] Wetland impacts will occur from routine mowing operations; however, the wetland currently consist of a PEM community, therefore no community type conversion will occur.

[6] Construction related wetland impacts will not include below ground impacts

[8] Impacts are less than 0.01 acre in size

[9] Impacts will be limited to foot traffic within a six-foot-wide travel lane between the HDD entry and exit points.

Several additional NWI mapped wetlands occur within a mile radius of the project, however no impacts to these wetlands are anticipated from construction stormwater runoff. The Project will result in 1.37 acres of temporary wetland impacts during construction. No permanent fill or conversion will occur.

Northern will implement BMPs throughout the Project area and redundant BMPs within 50 feet of the wetland boundaries to reduce potential for additional Project impacts on wetland and waterways. See information on the location of erosion and sediment control locations in the erosion control map (attachment C).

Discharge of test water and construction trench water will be conducted in accordance with issued NPDES permits, including the use of meters to control flow rates, and will employ an energy-dissipating device such as a straw bale dewatering structure. Discharge rates will be controlled to prevent erosion, scouring and sedimentation, flooding, or the introduction of foreign or toxic substances into adjacent waterbodies. Hydrostatic test waters will be transported offsite for disposal at an approved facility. Dewatering discharges will be inspected and photographed at the beginning of dewatering operations and at least once every 24 hours during operation.

During trench dewatering, water will be pumped from the trench via a submersible pump equipped with a float and screen and then discharged through a geotextile filter bag and/or straw bale dewatering structure to a well-vegetated upland area. Dewatering rates will be controlled through the use of meters and will be conducted to avoid the flow of silt-laden water directly into waterbodies.

5. SOILS AND SLOPES INFORMATION

Soil units mapped within the Project area by the NRCS are identified in detail within a table, located in Attachment E. A map indicating the typical soil types within the Project area has been provided as Attachment B.

Steep slopes within the Project area were characterized into three categories, slopes between 5% and 15%, greater than 15% and less than 30%, and greater than 30%. Steep slope categories are identified by milepost in a table located in Attachment R.

At a minimum, the contractor will install temporary and permanent slope breakers every 300 feet on slopes ranging between 5% and 15%, every 200 feet on slopes ranging between greater than 15% and less than 30%, and every 100 feet on slopes greater than 30%. Temporary and permanent slope breakers are discussed further in Section 8.

The contractor also will install hydro mulch, or comparable alternative for temporary and permanent stabilization on all slopes greater than 15% within non-agricultural areas. Hydro mulch is discussed further in Section 8.

6. PERMANENT STORMWATER MANAGEMENT

The Project will not result in any new impervious surface; therefore, infiltration or other volume reduction practices are not required.

7. SEQUENCE OF CONSTRUCTION ACTIVITIES

All sediment control measures will be in place prior to any removal or grading work and will be maintained until the potential for erosion has been eliminated. Additional information on sequencing can be found in the attached Engineering Standard 7507 in Attachment D. The Project will generally follow the sequencing identified below.

1. Preconstruction meeting. Prior to construction, a pre-construction meeting will be held at which the EI will provide environmental compliance training for all personnel working on the Project.
2. Staking. A Northern contractor will stake the construction boundaries, sensitive areas boundaries, and proposed facility locations.
3. The contractor will obtain soil samples in areas to be seeded for agronomic testing. Soils will be analyzed for nitrogen, phosphorus, potassium, and lime amendment recommendations.
4. Install necessary perimeter controls and temporary erosion and sediment controls. Prior to the start of any ground disturbing activities at any given location, the contractor will install soil erosion and sedimentation control measures within the temporary construction footprint in accordance with this SWPPP. The SWPPP incorporates the FERC Upland Erosion Control, Revegetation, and Maintenance Plan (Plan) and the Wetland and Waterbody Construction and Mitigation procedures (Procedures) requirements, recommendations from the Minnesota Department of Transportation (DOT) and site-specific erosion control information.
    a. The contractor will install and maintain temporary sediment barriers, such as silt fences and/or straw bales at areas as indicated in Northern's Procedures or direction of the Project EI. As directed, these sediment barriers will be left in place after final clean up to provide protection until a vegetative cover is established. The contractor will be responsible for maintaining erosion control devices until adequate re-vegetation has been established for a period of up to 24 months and removing erosion control devices after adequate re-vegetation has been established as determined by a Northern representative. Once original erosion control devices have been placed, the cost to replace and maintain original devices will be the responsibility of contractor.
    b. The contractor will provide an environmental crew as required to install and maintain erosion control devices through the duration and following completion of the Project. Erosion control devices will be installed under the direction of the environmental inspector.
5. Clear and grade the workspaces. Large obstacles such as trees and rocks will be removed, and grading will be performed as required to provide a safe, level working surface for construction activities. A maximum of 12 inches or the actual depth of the existing topsoil horizon, whichever is less, will be segregated. The topsoil and subsoil will be stored in separate windrows on the construction ROW and will not be allowed to mix.
6. Install pipeline. Construction materials and equipment will be transported throughout the Project workspaces. Additional sediment and erosion control BMPs will be installed as field conditions warrant during construction and the request of the EI or as the contractor deems necessary.
    a. The contractor and contractor's subcontractor(s) will each be responsible for complying with the appropriate State One Call System regulations before any excavation activities begin. Contractor and contractor's subcontractor(s) will each display a copy of the One Call documentation on-site. Contractor and contractor's

subcontractor will each be responsible for locating, supporting, protecting, and repairing any foreign lines, cables, or other facilities located or exposed during excavation.

b. The contractor must comply with all state and local regulations when transporting equipment including the breaking down of equipment for relocation.

c. Construction site practices will follow FERC regulatory procedures, including the Plan and Procedures, except for the project-specific modifications identified in the table below. These plans are included in Attachments H and I.

Lake Mills M500 E-line					
MP	**Wetland Type**	**Temporary Impact on Wetland (Acres)**	**Description**	**Alternatives to Procedures**	**Justification**
35.54	Seasonally flooded basin/farmed wetland	0.19	100-foot wide ROW through wetland LMA-W12	VI.A.3	Wetland does not extend across the TWS. Necking down in this wetland would not reduce wetland impacts as it only extends into the spoil side
36.67	Seasonally flooded basin/farmed wetland	0.18	100-foot wide ROW through wetland LMA-W14	VI.A.3	
38.82	Seasonally flooded basin/farmed wetland	0.05	100-foot wide ROW through wetland LMA-W26	VI.A.3	
38.86	Degraded wet meadow	0.02	100-foot wide ROW through wetland LMA-W27	VI.A.3	
39.12	Seasonally flooded basin/farmed wetland	0.13	100-foot wide ROW through wetland LMA-W31	VI.A.3	

d. ALL CONSTRUCTION OPERATIONS ARE TO BE CONFINED TO DEFINED CORRIDORS, ACCESS ROADS, STAGING AREAS, TEMPORARY WORKSPACES, AND EXTRA TEMPRAORY WORKAPCES. THE CONTRACTOR WILL NOT USE ANY ADDITIONAL WORKSPACE, ACCESS ROADS OR STAGING AREAS FOR THIS PROJECT UNLESS APPROVED BY THE COMPANY'S REPRESENTATIVE. THE CONTRACTOR WILL NOT GO BEYOND DEFINED WORK AREAS AND ACCESS ROADS AS STATED BY THE COMPANY. NO EQUIPMENT MAY BE MOVED TO THESE AREAS UNTIL THE COMPANY'S REPRESENTATIVE HAS RECEIVED ENVIRONMENTAL CLEARANCES. NONCOMPLIANCE WILL BE CONSIDERED A BREACH OF THIS AGREEMENT.

e. Open Cut / Trenching. The open cut trench method will be the primary technique used to install pipeline throughout the Project. During construction, the contractor will not open more trench area than they can reasonably install BMPs on, stabilize or restore within a 24-hour period.

   The Minnesota CWA Section 401 Water Quality Certification program will limit the amount of open trench to less than 5,280 feet at any one time to limit the potential for unforeseen weather events to cause erosion and discharges to Waters of the United States. Northern will restrict the amount of open trench per individual project component to less than 5,280 feet. The 5,280 feet of open trench will be a 'moving mile'; as the contractor removes topsoil and excavates trench on the front end of the mile, they will backfill and restore the area on the back end of the trench so no more than one mile of trench will be open at any one time. Final restoration will be required as they move; therefore, final restoration activities will be conducted concurrently with the installation of the next section of pipeline.

f. HDD: Ten HDDs will be utilized to install pipeline across wetlands, waterways, roadways, and a railroad.

g. Sediment buildup on paved surfaces will be monitored. Sediment must be swept off the road at the end of each working day. Dewatering will be conducted in accordance with the FERC Procedure, Minnesota Department of Natural Resources (MDNR), and MPCA requirement. All BMPs will be maintained throughout Project construction and follow-up restoration until the site is considered stabilized and permits are closed out.

7. Conduct Hydrostatic Testing. Northern will conduct hydrostatic testing of the new pipeline and transport it off-site to disposal facility or discharged in an upland area onsite in accordance with the state discharge permits.

8. Erect aboveground facilities. Northern will install a new block valve and associated valves and piping within its expanded Conger MN #1. No modifications to the existing facility footprint or easements will be required to install the new block valve.

9. Restore contours. Site restoration will be based on the degree of disturbance caused by construction activities, the ecological setting of the site, and the preferences of the affected landowner/land manager. Final grading of the Project area will begin immediately upon completion of construction within a given area. Within agricultural lands, topsoil and subsoil will be tested for compaction following construction and abandonment in agricultural areas. Northern's contractor will de-compact subsoil in accordance with the soil compaction mitigation procedures described in the FERC Plan. Final grading will occur to match preconstruction conditions, with the exception of steep slopes requiring permanent slope breaks.

10. Perform final restoration activities. Clean and restore Project area in accordance with the Engineering Standard 7507 (Attachment D), NPDES/SDS permit number MNR100001, and FERC requirements. Complete final grading and seed and mulch with grass or applicable vegetation per landowner specifications or NRCS/Minnesota Board of Water and Soil Resources (BWSR) seed mix (Attachment S). Per Northern's Engineering Standard 7507 (Attachment D), drill seeding or hydroseeding

should be applied for all disturbed upland areas larger than 500 square feet. Any area seeded after October 1 will be seeded with a temporary seed mix, and the contractor will be required to remobilize the following spring to complete permanent seeding and fertilization. Remove temporary erosion control devices, where appropriate.

8. SWPPP BEST MANAGEMENT PRACTICES

Prior to the start of any ground disturbing activities within the Project, Northern's contractor will implement appropriate erosion and sediment control BMPs. Potential BMPs are identified below.

1. Erosion control

a. Preservation of Existing Vegetation: The contractor will preserve existing vegetation and vegetative buffer strips to the extent possible.

b. Mulch: Mulch such as wood chips, straw, or compost can be used independently as a temporary soil stabilization practice or in conjunction with seeding activities. Mulch should not be installed in active agricultural lands. Mulch, if used, will not contain synthetic (plastic) fiber additives in areas that drain to a Minnesota public water.

c. Erosion Control Blankets: Erosion control blankets are available in a variety of natural and synthetic materials (i.e., coconut fiber, jute, straw, hay or wood excelsior). Erosion control blankets will be installed to the manufacturer's instruction, FERC Plan and Procedures and Northern's instruction. Erosion control blankets will be used for temporary permanent stabilization in areas of concentrated flow in non-agricultural areas. Erosion control mesh, if used, will be limited to bio-netting or natural netting, specifically Category 3N or 4N in the 2016 and 2018 Minnesota DOT standards. Additional guidance on types of erosion control materials is included in Attachment D.

d. Hydro Mulch: Hydro mulch typically consists of applying a mixture of wood fiber, seed, fertilizer, and stabilizing emulsion with hydro mulch equipment. Equipment should be equipped with either an auger-type agitator or jet spray. The agitator must be used at all times to ensure a uniform seed coverage. Hydro mulch should be applied at a rate of 3,000 pounds per acre or per manufacturer guidelines. Do not apply mulch to standing water or in wetlands. Hydro mulch will be used in place of erosion control blanket on steep slopes per Northern's Engineering Standard 7507: Erosion and Sediment Control Technical Standards.

e. Dust Control: To abate dust resulting from construction activities, the contractor will employ dust control measures such as watering access roads, storage piles, and disturbed surfaces during construction to minimize fugitive emissions, where necessary. Additional measures include vehicle speed restrictions on unpaved roadways to 15 miles per hour, use of gravel or asphalt at site exit points to remove dirt from tires and tracks and replanting disturbed areas as quickly as possible after construction.

f. Temporary Stabilization: Soil stabilization measures will be initiated by the following workday whenever earth-disturbing activities have temporarily ceased on any portion of the site. Temporary stabilization must be completed as soon as practicable, but no later than seven calendar days after stabilization measures have

been initiated. Temporary seeding will occur as a part of the temporary stabilization. Seed disturbed areas in accordance with seed mixes, rates, and dates obtained from previous coordination with the NRCS, BWSR, or as requested by the landowner. Seeding is not required in cultivated croplands unless requested by the landowner.

g. Permanent Stabilization: Soil stabilization measures will be initiated by the following workday whenever earth-disturbing activities have permanently ceased on any portion of the site. Typical establishment practices are provided within Northern's Engineering Standard 7507 (Attachment D). Per Northern's Engineering Standard 7507, drill seeding or hydroseeding should be applied for all disturbed upland areas larger than 500 square feet. Any area seeded after October 1 will be seeded with a temporary seed mix, and the contractor will be required to remobilize the following spring to complete permanent seeding and fertilization.

2. Sediment Control

a. Construction Entrance/Exit: Stabilized temporary construction entrances will be installed, as appropriate, for portions of this Project where existing roadways do not exist. Additionally, sediment tracked off-site onto paved surfaces will be removed at the end of each workday. The contractor will employ standard pipeline construction practices to protect the roadside ditches and water flow, if present.

b. Storm Drain Inlet Protection: There are no known stormwater inlets or culverts on this Project which require inlet protection. If storm drain inlets are present along the existing access roads, protection will be determined by the Project EI. Inlet protection may be removed to alleviate documented flooding but will be replaced upon completion of the rain event.

c. Stockpile Protection: Any portion of a stockpile (topsoil or subsoil) for this Project that will not be touched for seven days will be temporarily stabilized with a temporary cover seed. In addition, silt fence or other effective sediment controls will be placed at the base of all stockpiles on the downgradient perimeter prior to the initiation of stockpiling. Downstream silt fence will be in place above all wetland and waterbody areas to protect runoff from stockpiles. Stockpiles will be located outside of natural buffers or surface waters.

d. Silt fence, Straw bales, and Fiber Logs: Silt fence, straw bales, or fiber logs can be used as a perimeter control down-gradient of exposed soils during construction. Straw bales and fiber logs alone are not considered an adequate or effective sediment control device and should only be used in conjunction with silt fence. Silt fence will be installed prior to initial grading activities and will remain in place until final site stabilization has occurred. Silt fence will be held in place with 2-inch by 2-inch posts not to exceed 10-foot spacing and the base of the fence will be buried 6 inches in the ground. Once construction has begun, the site will be analyzed to determine whether additional silt fencing is required. Fiber logs or straw bales are used as a sediment and storm water velocity control device. Straw bales should be excavated the width of a bale and the length of the proposed barrier to a minimum depth of four inches. The trench must be deep

enough to remove all grass and other material which might allow underflow. After the bales are staked (two stakes per bale) and chinked (filled by wedging), the excavated soil should be backfilled against the barrier. Fiber Logs are tubes of plastic netting or biodegradable burlap material filled with straw, rice straw, or coconut fiber. If straw bales or fiber logs are used, they should be Certified Weed Free.

e. Berms: Berms are a dike of material (topsoil, sub soil, compost, rock, etc.) that is placed perpendicular to sheet flow runoff to control erosion in disturbed areas and retain sediment. Berms can be used in place of a traditional sediment and erosion control tool such as a silt fence. If topsoil is used in a berm, subsoil cannot be mixed in, and the berm cannot be driven over with equipment.

f. Trench Breakers: Trench breakers are intended to slow the flow of subsurface water along the trench. Trench breakers may be constructed of materials such as sandbags or polyurethane foam. Do not use topsoil in trench breakers. Trench breakers should be installed per the following spacing:

Slope (%)	Spacing (feet)
5-15	300
>15-30	200
> 30	100

At a minimum, trench breakers should be installed at the base of slopes greater than 5%, where the base of the slope is less than 50 feet from a waterbody or wetland, and at each wetland and waterbody that is crossed via open cut methods, as specified in the FERC Procedures. Do not install trench breakers within a wetland.

g. Slope Breakers: Slope breakers are intended to reduce runoff velocity and divert water off the construction ROW. Temporary slope breakers may be constructed of materials such as soil, silt fence, staked hay or straw bales, or sandbags; whereas, permanent slope breakers consist of soil. The outfall of each slope breaker should be directed to a stable, well vegetated upland area or construct an energy-dissipating device at the end of the slope breaker and off the construction ROW. The outfall of each slope breaker should be positioned to prevent sediment discharge into wetlands, waterbodies, or other sensitive environmental resource areas. Slope breakers should be installed per the following spacing:

Slope (%)	Spacing (feet)
5-15	300
>15-30	200
> 30	100

h. Redundant Sediment Controls: Where the preservation of a natural 50-foot-wide buffer is infeasible, redundant sediment controls will be installed when a wetland or waterbody is within 50 feet of the Project's earth disturbances and stormwater flows to the surface water. Northern will install perimeter sediment controls at least five feet apart unless limited by lack of available space. Natural buffers are not required adjacent to road ditches, judicial ditches, county ditches, stormwater

conveyance channels, storm drain inlets, and sediment basins. If preserving the buffer is infeasible, Northern will document the reason why in the SWPPP.

i. Dewatering Activities: Discharge from pit trench dewatering will be completed in accordance with FERC Plan and Procedures, MDNR water appropriation permit, and NPDES General Permit NPDES/SDS Permit MNR100001. Dewatering must occur in a manner that does not cause erosion. Dewatering structures must be removed as soon as possible after the completion of dewatering activities. All pumps will be equipped with a float and screen or a functional equivalent to maintain the intake above the trench bottom. Water will be discharged through geotextiles, and hay or straw bales. Dewatering will be conducted to avoid the flow of silt-laden water directly into waterbodies, wetlands or other surface water features. Dewatering discharges will be inspected and photographed at the beginning of dewatering operations and at least once every 24 hours during operation.

   For areas where consistent dewatering is anticipated, the contractor may implement a dewatering structure, consisting of a double row of weed-free strawbales, with offset cracks, as a de-watering structure. The water will be discharged via a non-woven geotextile filter bag within a straw bale dewatering/filtering structure. If needed, a polymer sock may be added in the filter bag to regulate Total Suspended Solids limits to below permit threshold, the contractor to coordinate with Northern before the use a polymer.

j. Hydrostatic Test Activities: Hydrostatic test activities are planned for the Project. Water may be re-used for hydrostatic testing between the new pipeline segments. The test water is expected to only contact new pipe, and no additives or chemicals will be added to the test water. The hydrostatic test water will be hauled off for disposal at an approved facility or discharged in an upland area onsite in accordance with the state discharge permits. No chemicals will be used after testing (e.g., to dry the pipe).

3. Temporary Clear-Span Bridge (TCSB)

No TCSBs are planned for the Project.

4. Pollution Prevention

a. Engine Degreasing: No engine degreasing will occur at the Project site. A copy of Northern's standard Spill Prevention, Containment, and Countermeasure (SPCC) plan is included in Attachment F.

b. Concrete Washout: All liquid and solid wastes generated by concrete washout operations will be confined in a containment basin lined with impermeable plastic. The liquid and solid wastes must not contact the ground and there must not be runoff from the concrete washout area. Concrete may only be washed out at designated areas approved by Northern's EI greater than 100 feet from a wetland, waterbody or designated municipal watershed area. The wash out stations will be removable and will be hauled off site at Project completion. The washout stations will be marked by a large sign stating, "concrete washout."

c. Material Storage: Northern place building products (including pesticides, fertilizers and treatment chemicals) and landscape materials under cover (e.g., plastic sheeting or temporary roofs) or protect them by similarly effective means designed to minimize contact with stormwater. Northern may choose to not to cover or protect products which are either not a source of contamination to stormwater or are designed to be exposed to stormwater.

d. Toilet Facility Project: Northern will position portable toilets so they are secure and will not tip or be knocked over and will properly dispose sanitary waste in accordance with Minn. R. ch. 7041.

e. Solid Waste: All solid waste generated from the Project site will be properly disposed of according to state and local requirements.

f. Inadvertent Release Plan: In the event of an inadvertent release during hydrostatic testing or other construction activity, Northern's Inadvertent Release Plan will be followed. The Plan is included in Attachment P.

g. Hazardous Material Management: In general, no hazardous material will be stored on the jobsite which requires secondary containment. However, should hazardous materials such as fuels and hydraulic fluid be stored on site, they must be stored in secondary containment. Spill kits or other suitable emergency action procedures to handle small chemical, petroleum, hazardous, or other non-stormwater material which has the potential to contaminate groundwater or surface waters must be properly contained and mitigated by the contractor.

    1. In Minnesota, any hazardous spills above 5 gallons will be reported to the Minnesota State Duty Officer (1-800-422-0798). Spill kits or other suitable emergency action procedures to handle small chemical, petroleum, hazardous, or other non-stormwater material which has the potential to contaminate groundwater or surface waters must be properly contained and mitigated by the contractor. Reporting of spills will also be in accordance with Minn. Stat 115.061.
    2. Fueling Exclusion Zones: Refueling for equipment and vehicles or storage of hazardous liquids will not take place within 100 feet of a waterbody or wetland, within 200 feet of private wells and 400 feet of public water supplies. Wells and exclusion zones are shown on Figure 3 in Attachment C. These zones will be clearly marked in the field as 'No Refueling Beyond This Point'. Due to the nature of the construction operation, certain equipment cannot be moved for refueling and may therefore be located within a fueling exclusion zone. In cases where refueling needs to occur within the fueling exclusion zone, Northern will have an EI present for the operation and will have spill response equipment onsite and readily available. Specific procedures are provided in the SPCC plan.

9. SITE-SPECIFIC EROSION CONTROL PLAN

Northern has completed an estimate of the total erosion control devices that may be utilized during construction of the Project - see Attachment C. The following estimate will be amended, and erosion control devices installed per the discretion of the trained EIs. The actual total number, type, and location will be determined in the field by the EIs.

Potential Erosion Control Devices – Preferred Route	**Estimated Number/Volume Anticipated during Construction**
Temporary	
Silt Fence, Straw Bales, or Fiber Logs	Approximately 78,000 linear feet
Timber Mats	950 linear feet
Hydro mulch/Mulch (certified weed free)	7.94 acres
Erosion Blanket	0.72 acre
Seeding – Upland	8.66 acres [1]
Temporary Slope Breakers	16
Construction Entrances	34
Permanent	
Hydro mulch/Mulch (certified weed free)	7.94 acres
Upland Seeding	8.66 acres [1]
Restoration of Agricultural land[2]	168.53 acres
Erosion Blanket	0.72 acre
Trench Breakers	16
Permanent Slope Breakers	16

[1] Acreage represents non-agricultural areas within the Project area where gravel will not be permanently installed.
[2] Seeding will be completed per landowner requirements due to predominance of agricultural cropland within the Project area.
[3] Trench breakers should be installed at the same locations at Permanent Slope Breakers, as determined by Northern based on field conditions.

10. TEMPORARY SEDIMENT BASINS

This Project does not require a temporary sediment basin, according to the MPCA, as the project will sequence work to not disturb five or more acres of soils that drain to one common location at one time; therefore, this Project does not require a temporary sediment basin. Should Northern's EI determine that a temporary sediment basin or additional BMPs are needed, the SWPPP should be modified to reflect the additional measures taken.

11. INSPECTION AND MAINTENANCE

Northern's EI's will inspect disturbed areas that have not reached permit termination conditions, structural control measures, and locations where vehicles enter or exit the ROW at least once per week and within 24 hours of a storm event of 0.5 inch of rain or greater during active construction. Where parts of the Project site have permanent cover, but work remains on other parts of the site, inspections of the areas with permanent cover will be reduced to once per month. Inspections will be temporarily suspended during winter at the onset of frozen ground conditions where construction activities have ceased and will resume at the onset of spring runoff, in accordance with Part 11.11 of the general permit (MNR100001).

EIs will conduct inspections to ensure erosion and sediment control measures have been installed and are maintained properly, and to identify ineffective measures needing contractor repairs. EI's will prepare reports documenting construction activities such as dates when major grading occurs, dates when construction activities temporarily or permanently cease on a portion of the site, and dates when stabilization measures are initiated.

1. Inspections will be performed every seven days and within 24 hours of a 0.5-inch or greater rainfall event. An example SWPPP Inspection & Maintenance Report is included as Attachment G.
2. Maintenance will be performed within the timeframes of the NPDES permit when the following site conditions indicate:
    a. Silt fence and other BMP repairs should be made when it becomes non-functional or sediment reaches half the height of the device.
    b. Tracked sediment must be removed within 24 hours of discovery of off-site tracking onto paved surfaces.
    c. BMPs in disrepair must be repaired, replaced or supplemented by the end of the next business day after discovery or before the next storm event, which ever comes first, as field conditions allow.
    d. The contractor is responsible for maintaining all BMPs until work has been completed, site has achieved final termination conditions, and the NOT has been submitted to the MPCA.

12. POST CONSTRUCTION SITE CONDITIONS

No new aboveground facilities will be required; therefore no permanent stormwater management is required as the net increase of impervious surface is less than one acre.

13. RESTORATION

The contractor will remove all rock or concrete from paths, walkways, driveways, parking areas or other paved areas.

The contractor will level and grade the site after all facilities have been installed and equipment has been removed from the Project site. The contractor will level and grade disturbed areas to match the surrounding elevations. The contractor will restore topsoil with seven days of backfill of the trench. As per the MPCA requirements, soil stabilization is to commence as soon as practicable ("immediately"), but no later than seven days from when land-disturbing activities have temporarily or permanently ceased. As such, the contractor must seed and mulch restored areas (as required) once topsoil restoration has occurred. In ditch bottoms with little to no slope (e.g., less than 2%), mulch may be disc-anchored in lieu of installing erosion control blanket. If disc-anchoring is found to be inadequate at minimizing erosion from ditches or swales, another more effective BMP must be utilized. The contractor will provide soil or suitable material for areas that require fill material. The top one foot of imported fill must consist of topsoil. All imported fill material must be approved by Northern prior to arriving on-site. Imported fill will be adequately compacted to prevent settling.

After grading has been completed, contractor to seed Project site with a grass seed mixture specified by Northern or restored per landowner's requirement. The contractor will apply fertilizer and soil amendments based upon agronomic testing recommendations obtained at the start of the Project. Seed disturbed areas in accordance with seed mixes,

rates, and dates obtained from previous coordination with NRCS, BWSR, or as requested by the landowner.

14. UPDATING AND MODIFYING THE SWPPP

Northern can revise the SWPPP at any time; however, prior to revisions, all BMPs will be selected, installed and maintained in accordance with the manufacturer's specifications and accepted engineering practices. All SWPPP changes will be done by a.) Individuals preparing the SWPPP for the Project; b.) Individuals overseeing implementation of, revising and/or amending the SWPPP and individuals performing inspections for the Project; c.) Individuals performing or supervising the installation, maintenance and repair of BMPs; or d.) Another qualified individual. If less stringent BMPs are proposed in the revision, justification in effectiveness of the replacement BMP will be provided.

Northern will amend the SWPPP as necessary and within seven days to correct problems identified or address situations whenever:

1. There is a change in design, construction, operation, maintenance, weather or seasonal conditions that has a significant effect on the discharge of pollutants to surface waters or underground waters.
2. Inspections or investigations by site operators, local, state or federal officials indicate the SWPPP is not effective in eliminating or significantly minimizing the discharge of pollutants to surface waters or underground waters or that the discharges are causing water quality standard exceedances.
3. The SWPPP is not achieving the general objectives of controlling pollutants in stormwater discharges associated with construction activity, or the SWPPP is not consistent with the terms and conditions of this permit.
4. At any time after permit coverage is effective, the MPCA determines that the Project's stormwater discharges may cause, have reasonable potential to cause, or contribute to non-attainment of any applicable water quality standard, or that the SWPPP does not incorporate the requirements in an approved Total Maximum Daily Load (TMDL) Implementation Plan approved after the Project starts that contains construction stormwater related requirements. The permit requirements provide the protection required for no net increase in pollutant loading.

SWPPP amendments will be documented in Attachment M.

15. NOTICE OF TERMINATION

Compliance NPDES/SDS Permit No. MNR100001 is required until a NOT is submitted. The owner and contractor authorization to discharge under this permit terminates at midnight on the day the NOT is signed.

The owner and contractor must submit a NOT within 30 days after one or more of the following conditions have been met:

1. Permit termination conditions will be considered achieved on all portions of the site for which the contractor is responsible when land is restored to pre-construction agricultural use or achieved permanent uniform perennial vegetative cover at 70% of its expected final growth. At that time, all temporary BMPs such as silt fence, straw

bales, and fiber logs must be removed. When submitting the NOT either ground or aerial photographs showing the NOT requirements have been met must be included.

2. Another owner or contractor has assumed control over all areas of the site that have not been finally stabilized.

16. CERTIFICATION OF COMPLIANCE WITH FEDERAL, STATE, AND LOCAL REGULATIONS

This SWPPP was prepared in accordance with the NPDES general permit for stormwater discharge associated with a construction activity. Northern operates under strict compliance with the rules and regulations of the FERC. Construction site practices follow FERC regulatory procedures, including the Upland Erosion Control, Revegetation, and Maintenance Plan and the Wetland and Waterbody Construction and Mitigation Procedures, except for the modifications identified in the table located in section 7.6(c). The plan and procedures are included in Attachments H and I. Other sections of this SWPPP include specific practices utilized by Northern to ensure compliance with the general FERC procedures and federal NPDES/SDS standards.

All other applicable federal, state, or local requirements for erosion and sediment control site plans (or permits), or stormwater management site plans (or permits) have been taken into account and will be met. A copy of the Minnesota Permit authorizing Stormwater discharge associated with Construction Activities on Northern's pipeline routes (MNR100001) is included as Attachment J. A copy of Northern's Notice of Intent submittal for coverage under the MPCA NPDES Permit Number MNR100001 will be included in Attachment K in the final SWPPP. MPCA's authorization letter for coverage under Permit Number MNR100001 will be included in Attachment L in the final SWPPP.

17. RECORD RETENTION

A copy of the SWPPP will be kept on-site for the entire duration of the Project. The materials included in the SWPPP will include documentation of any changes, inspection and maintenance records, permanent operation and maintenance agreements, and calculations for design of both temporary and permanent stormwater management systems. Copies of the SWPPP and all inspection reports will be forwarded to Northern and kept on file for a period of three years.

ATTACHMENT A

PROJECT LOCATION MAP

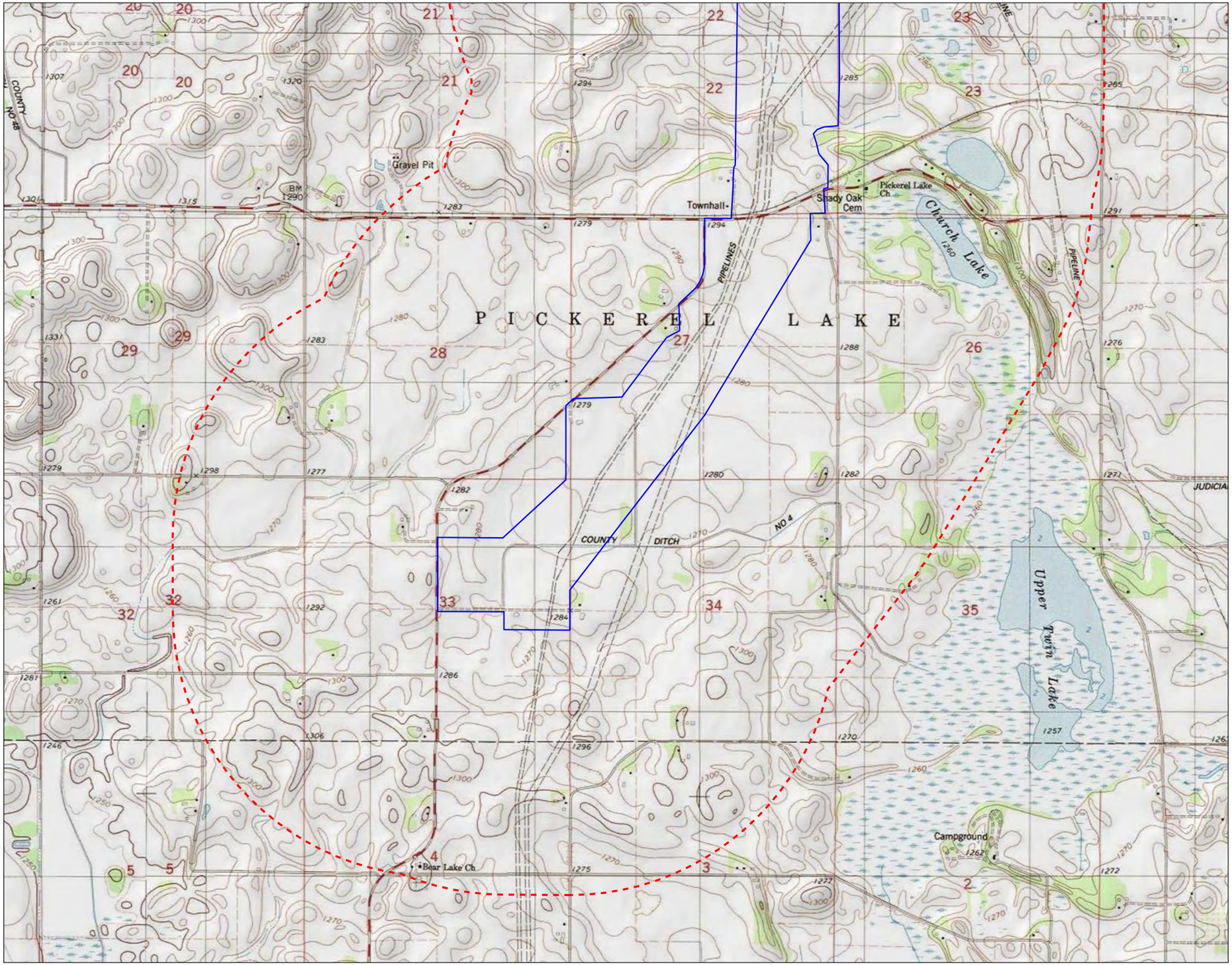


Figure No.

1

Title

Project Location & Topography
V2F - Lake Mills M500 E-Line

Client/Project

172608813

Northern Natural Gas
Ventura to Farmington A-Line Abandonment & Capacity Replacement Project

Project Location

Freeborn County, Minnesota

Prepared by JM on 2025-10-24
TR by JL on 2025-10-27
IR by SK on 2026-01-29

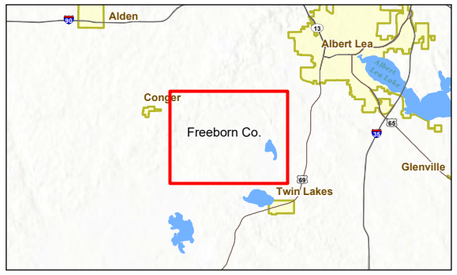
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Legend

- Environmental Survey Boundary
- 1-Mile Buffer



Notes

1. Coordinate System: NAD 1983 UTM Zone 15N
2. Data Sources: Stantec, NNG, Esri, USCB, USGS
3. Background: USGS 7.5' Topographic Quadrangles

Stantec

Northern Natural Gas

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Figure No.

1

Title

Project Location & Topography
V2F - Lake Mills M500 E-Line

Client/Project 172608813

Northern Natural Gas
Ventura to Farmington A-Line Abandonment & Capacity Replacement Project

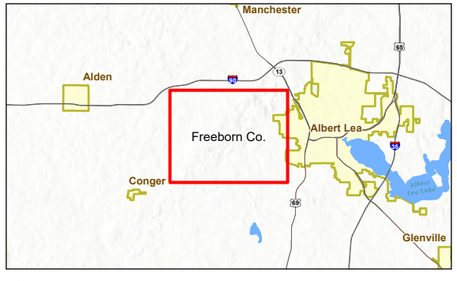
Project Location
Freeborn County, Minnesota

Prepared by JM on 2025-10-24
TR by JL on 2025-10-27
IR by SK on 2026-01-29

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(At original document size of 11x17)
1:24,000

Legend
- Environmental Survey Boundary
- 1-Mile Buffer



Notes
1. Coordinate System: NAD 1983 UTM Zone 15N
2. Data Sources: Stantec, NNG, Esri, USCB, USGS
3. Background: USGS 7.5' Topographic Quadrangles

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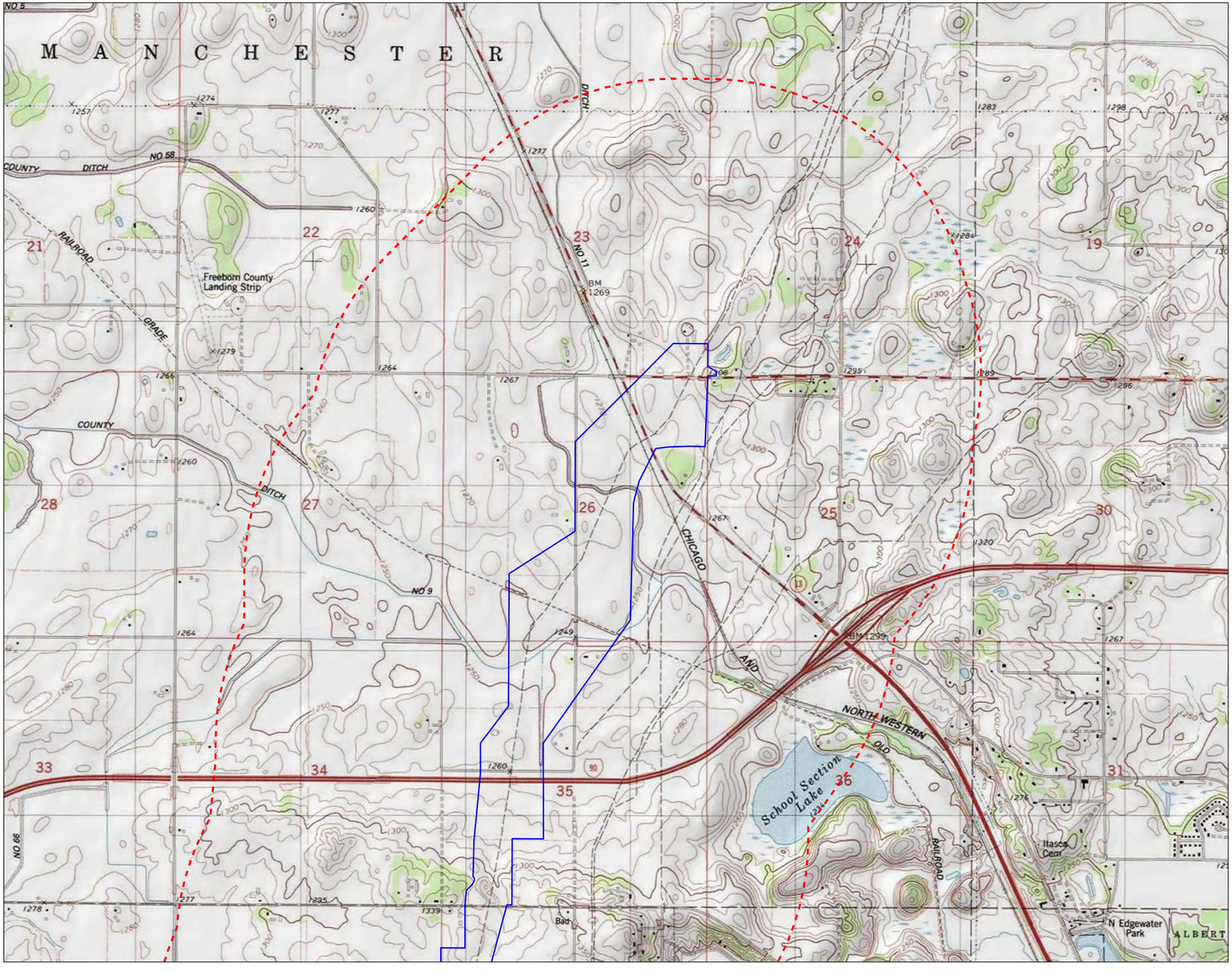


Figure No.

1

Title

Project Location & Topography
V2F - Lake Mills M500 E-Line

Client/Project 172608813

Northern Natural Gas
Ventura to Farmington A-Line Abandonment & Capacity Replacement Project

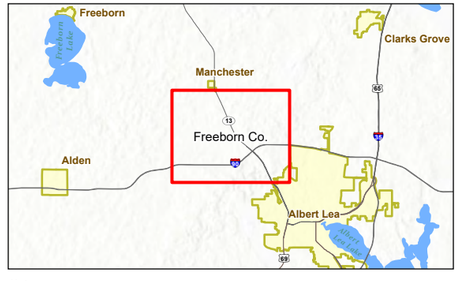
Project Location
Freeborn County, Minnesota

Prepared by JM on 2025-10-24
TR by JL on 2025-10-27
IR by SK on 2026-01-29

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(At original document size of 11x17)
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Legend
- Environmental Survey Boundary
- 1-Mile Buffer



Notes
1. Coordinate System: NAD 1983 UTM Zone 15N
2. Data Sources: Stantec, NNG, Esri, USCB, USGS
3. Background: USGS 7.5' Topographic Quadrangles

Stantec

Northern Natural Gas

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ATTACHMENT B

SOILS MAP

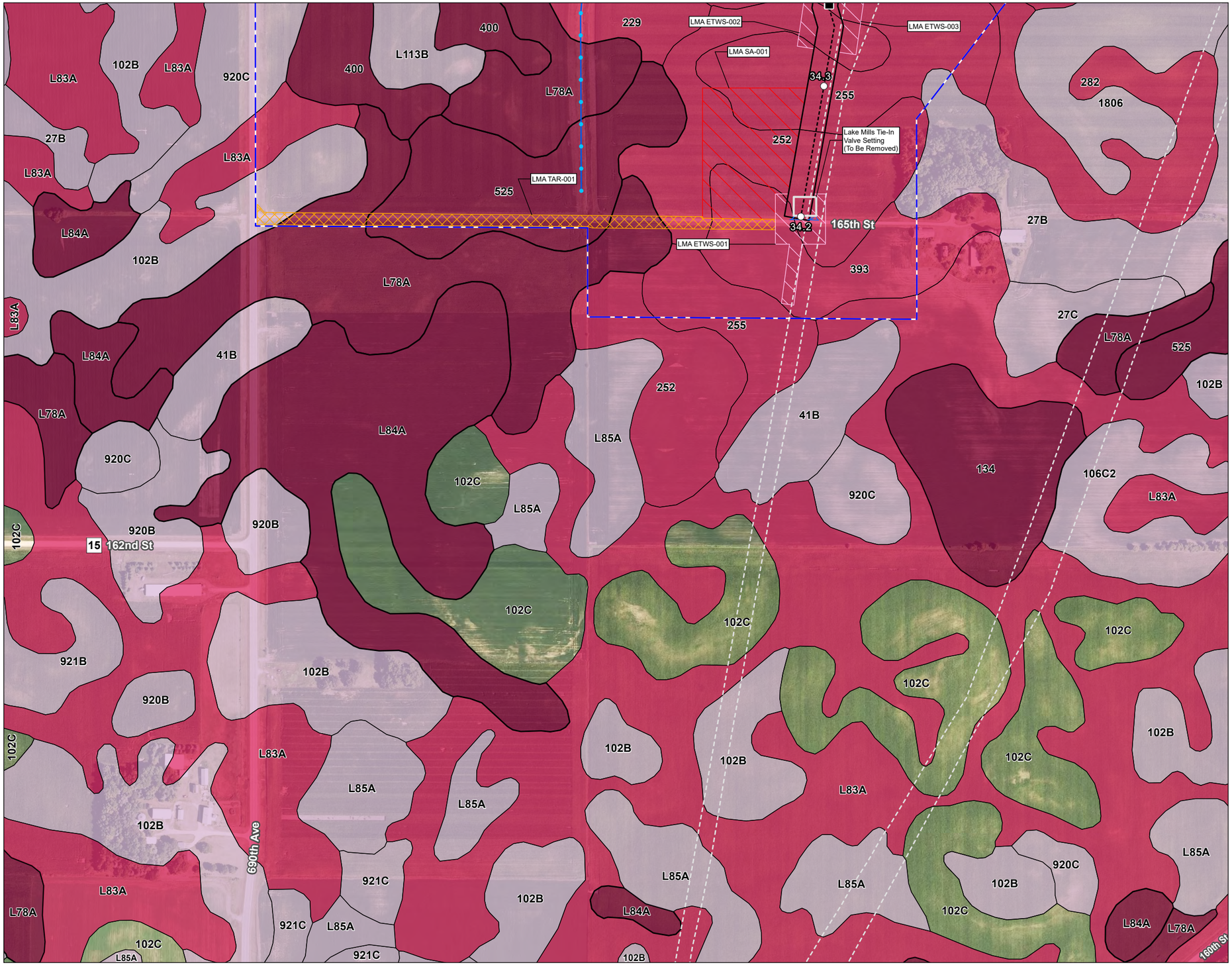


Figure No.

2

Title

NRCS Soil Series Map
V2F - Lake Mills M500 E-Line

Client/Project 172608813

Northern Natural Gas
Ventura to Farmington A-Line Abandonment & Capacity Replacement Project

Project Location
Freeborn County, Minnesota

Prepared by JM on 2025-10-24
TR by JL on 2025-10-27
IR by SK on 2026-01-29

N

0 200 400 Feet
(At original document size of 11x17)
1:4,800

Legend

- Environmental Survey Boundary
- Existing Lot
- Existing Access Road
- Temporary Workspace
- Extra Temporary Workspace
- Staging Area
- Temporary Access Road
- Proposed Pipeline
- Existing Pipeline
- Mile Post
- HDD

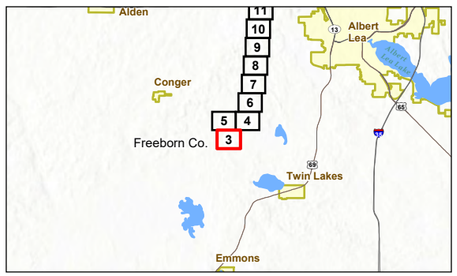
NRCS Soil Survey Data

Hydric Soil Rating

- Hydric
- Predominantly Hydric
- Partially Hydric
- Predominantly Non-Hydric
- Non-Hydric

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Ephemeral Stream
- Canal/Ditch
- Waterbody



Notes
1. Coordinate System: NAD 1983 UTM Zone 15N
2. Data Sources: Stantec, NNG, Esri, USCB, USGS, NRCS
3. Background: 2023 NAIP

Stantec

Northern Natural Gas

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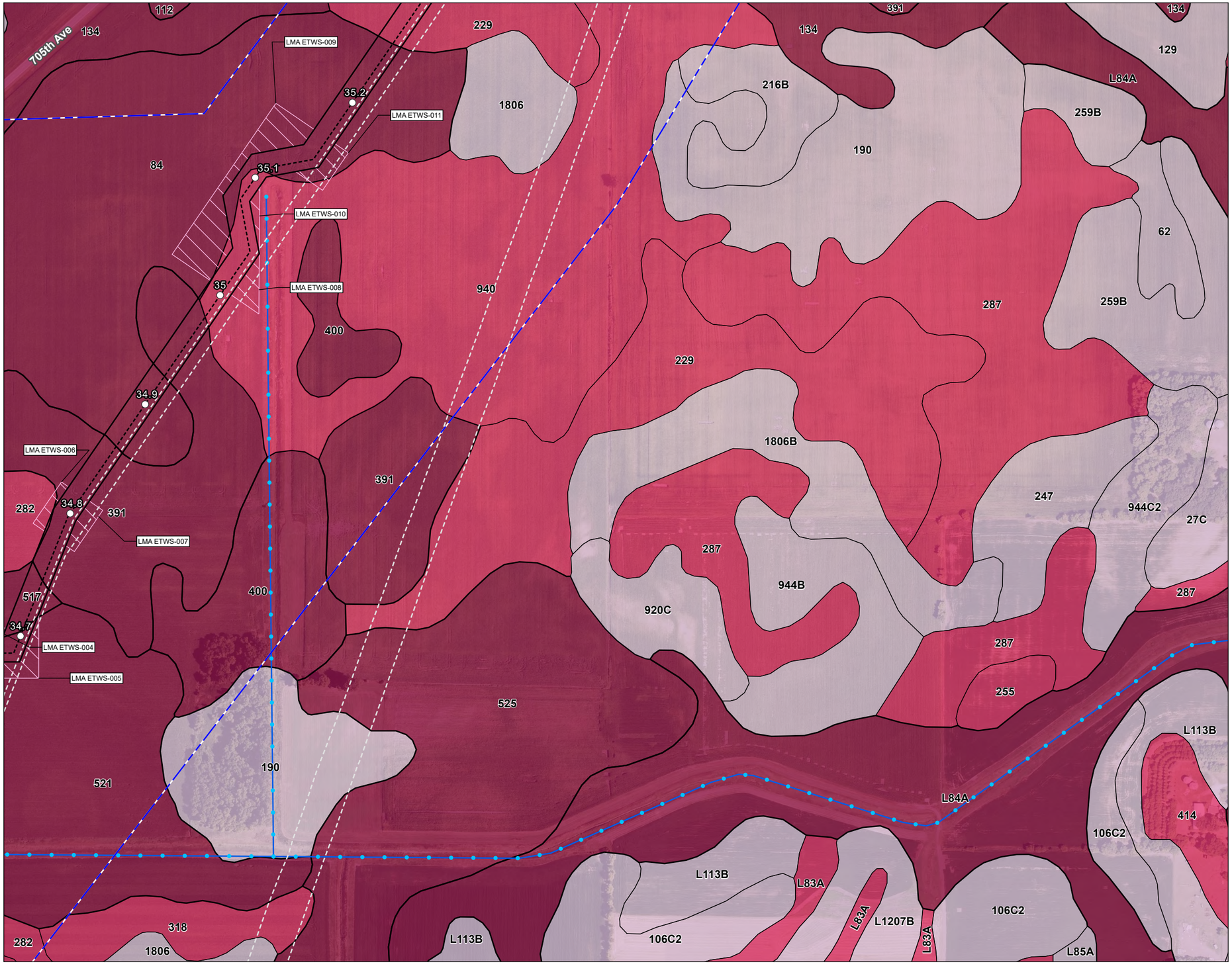


Figure No.

2

Title

NRCS Soil Series Map
V2F - Lake Mills M500 E-Line

Client/Project

172608813

Northern Natural Gas
Ventura to Farmington A-Line Abandonment & Capacity Replacement Project

Project Location

Freeborn County, Minnesota

Prepared by JM on 2025-10-24
TR by JL on 2025-10-27
IR by SK on 2026-01-29

N

0 200 400 Feet

(At original document size of 11x17)
1:4,800

Legend

- Environmental Survey Boundary
- Temporary Workspace
- Extra Temporary Workspace
- Proposed Pipeline
- Existing Pipeline
- Mile Post

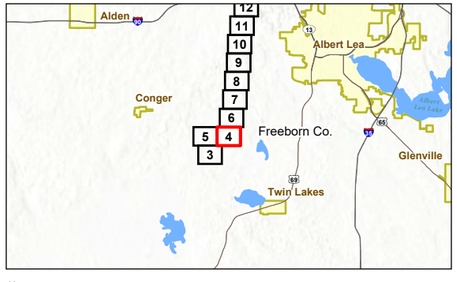
NRCS Soil Survey Data

Hydric Soil Rating

- Hydric
- Predominantly Hydric
- Partially Hydric
- Predominantly Non-Hydric
- Non-Hydric

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Ephemeral Stream
- Canal/Ditch
- Waterbody



Notes

1. Coordinate System: NAD 1983 UTM Zone 15N
2. Data Sources: Stantec, NNG, Esri, USCB, USGS, NRCS
3. Background: 2023 NAIP

Stantec

Northern Natural Gas

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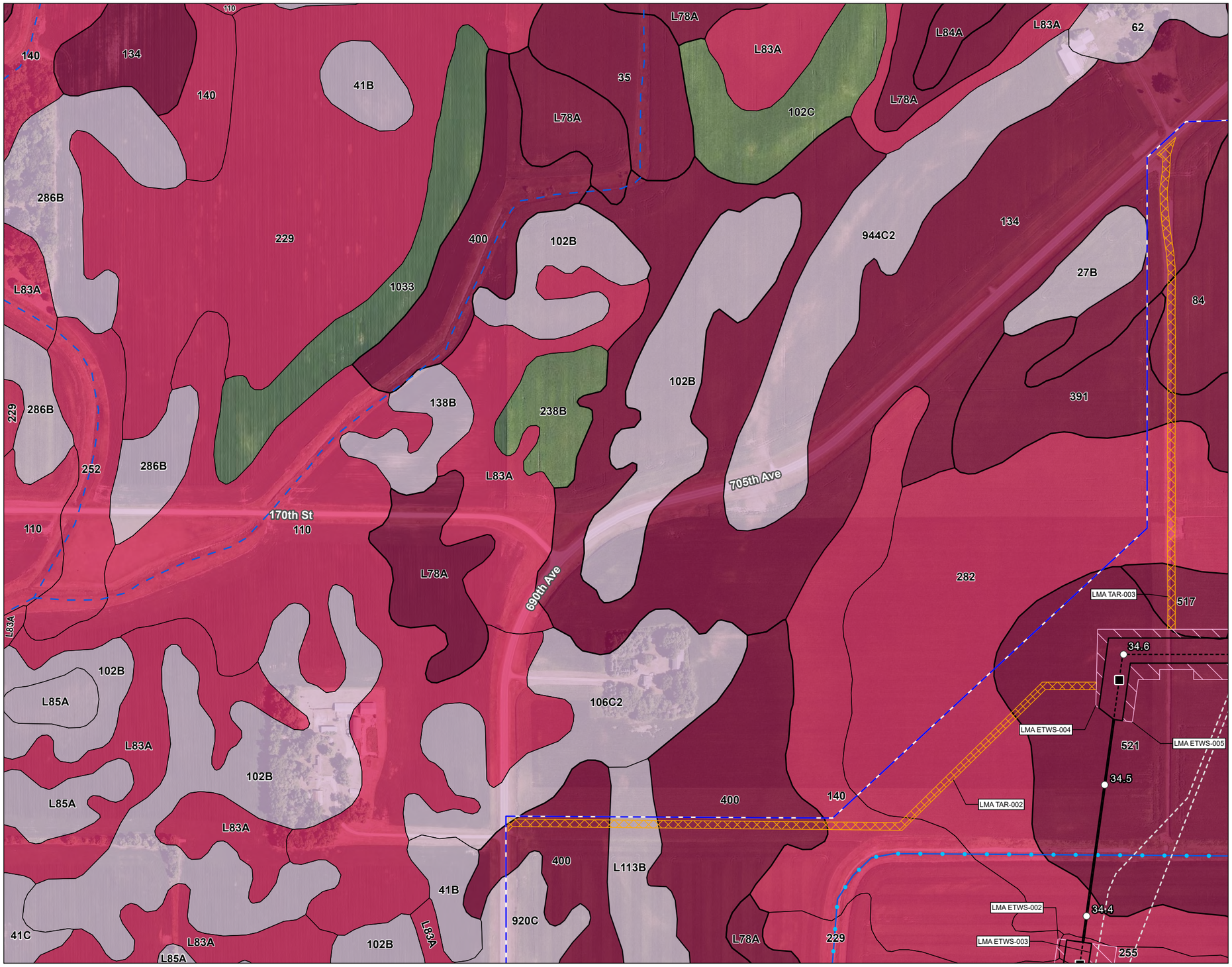


Figure No.

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NRCS Soil Series Map
V2F - Lake Mills M500 E-Line

Client/Project 172608813

Northern Natural Gas
Ventura to Farmington A-Line Abandonment & Capacity Replacement Project

Project Location
Freeborn County, Minnesota

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Legend

- Environmental Survey Boundary
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- Existing Pipeline
- Mile Post
- HDD

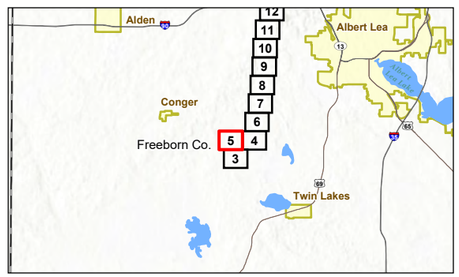
NRCS Soil Survey Data

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- Non-Hydric

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Notes
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3. Background: 2023 NAIP

Stantec

Northern Natural Gas

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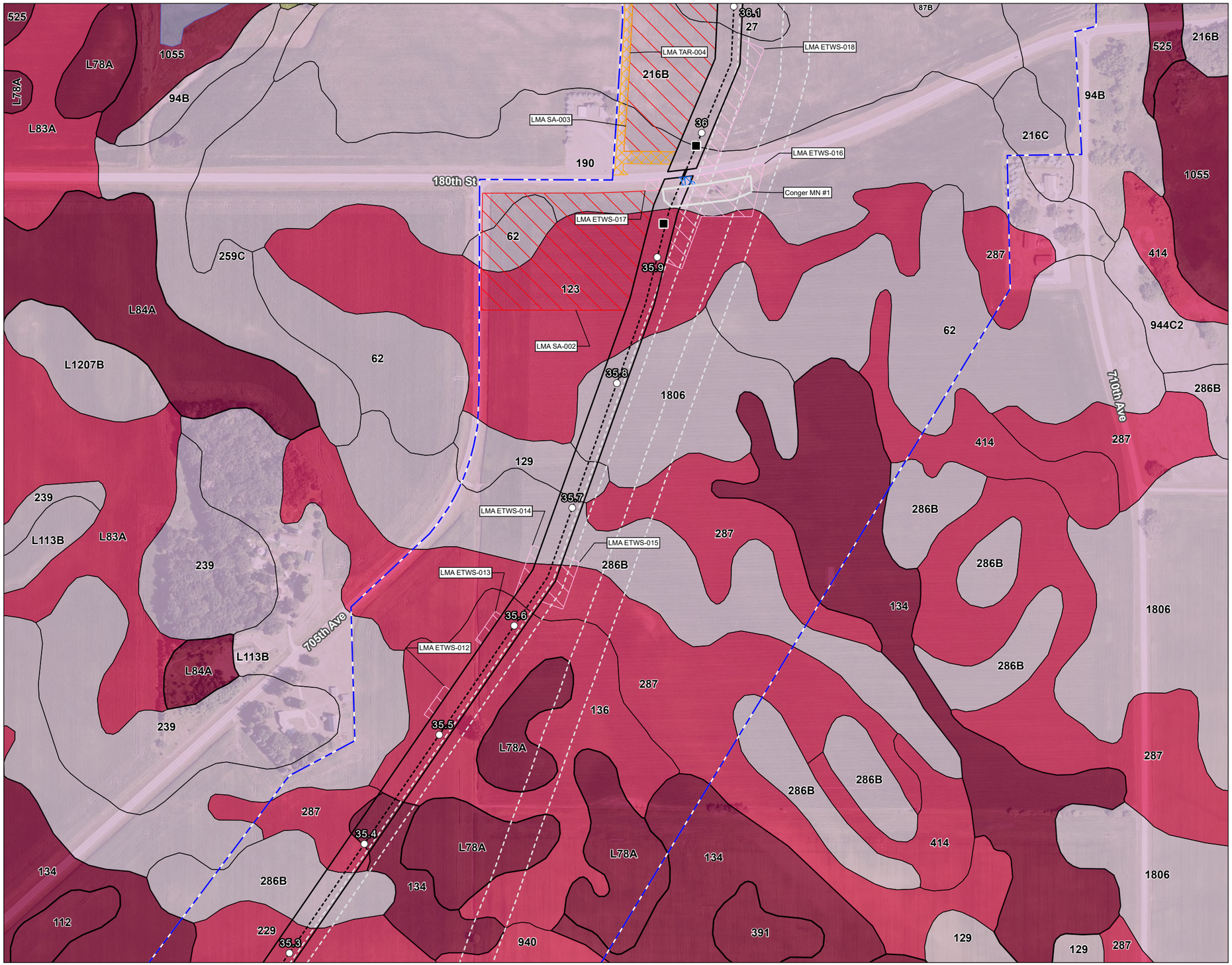


Figure No.

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Title

NRCS Soil Series Map
V2F - Lake Mills M500 E-Line

Client/Project 172608813

Northern Natural Gas
Ventura to Farmington A-Line Abandonment & Capacity Replacement Project

Project Location
Freeborn County, Minnesota

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Legend

- Environmental Survey Boundary
- Existing Lot
- Existing Access Road
- Temporary Workspace
- Extra Temporary Workspace
- Staging Area
- Temporary Access Road
- Proposed Pipeline
- Existing Pipeline
- Mile Post
- HDD

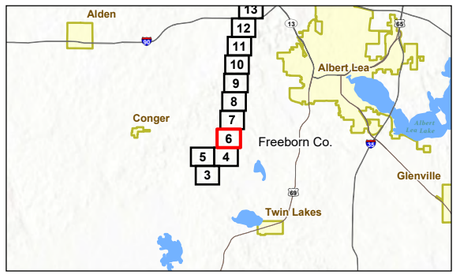
NRCS Soil Survey Data

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National Hydrography Dataset

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Northern Natural Gas

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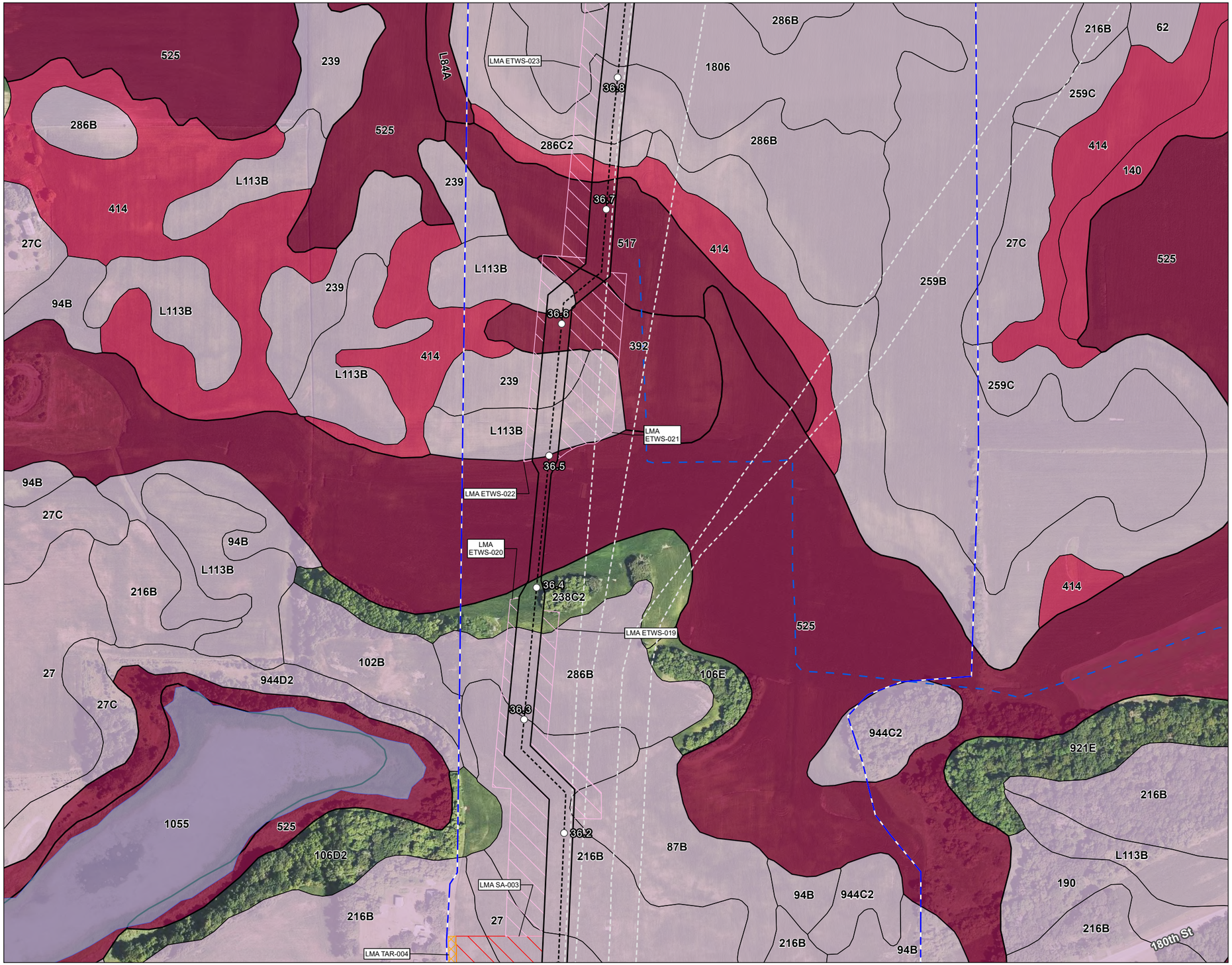


Figure No.

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NRCS Soil Series Map
V2F - Lake Mills M500 E-Line

Client/Project 172608813

Northern Natural Gas
Ventura to Farmington A-Line Abandonment & Capacity Replacement Project

Project Location
Freeborn County, Minnesota

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TR by JL on 2025-10-27
IR by SK on 2026-01-29

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Legend

- Environmental Survey Boundary
- Temporary Workspace
- Extra Temporary Workspace
- Staging Area
- Temporary Access Road
- Proposed Pipeline
- Existing Pipeline
- Mile Post

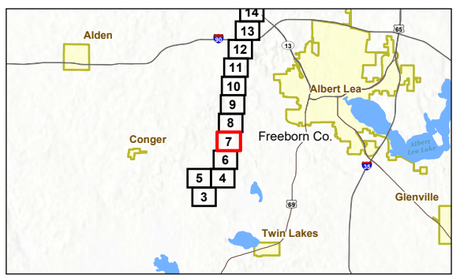
NRCS Soil Survey Data

Hydric Soil Rating

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- Partially Hydric
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- Non-Hydric

National Hydrography Dataset

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3. Background: 2023 NAIP

Stantec

Northern Natural Gas

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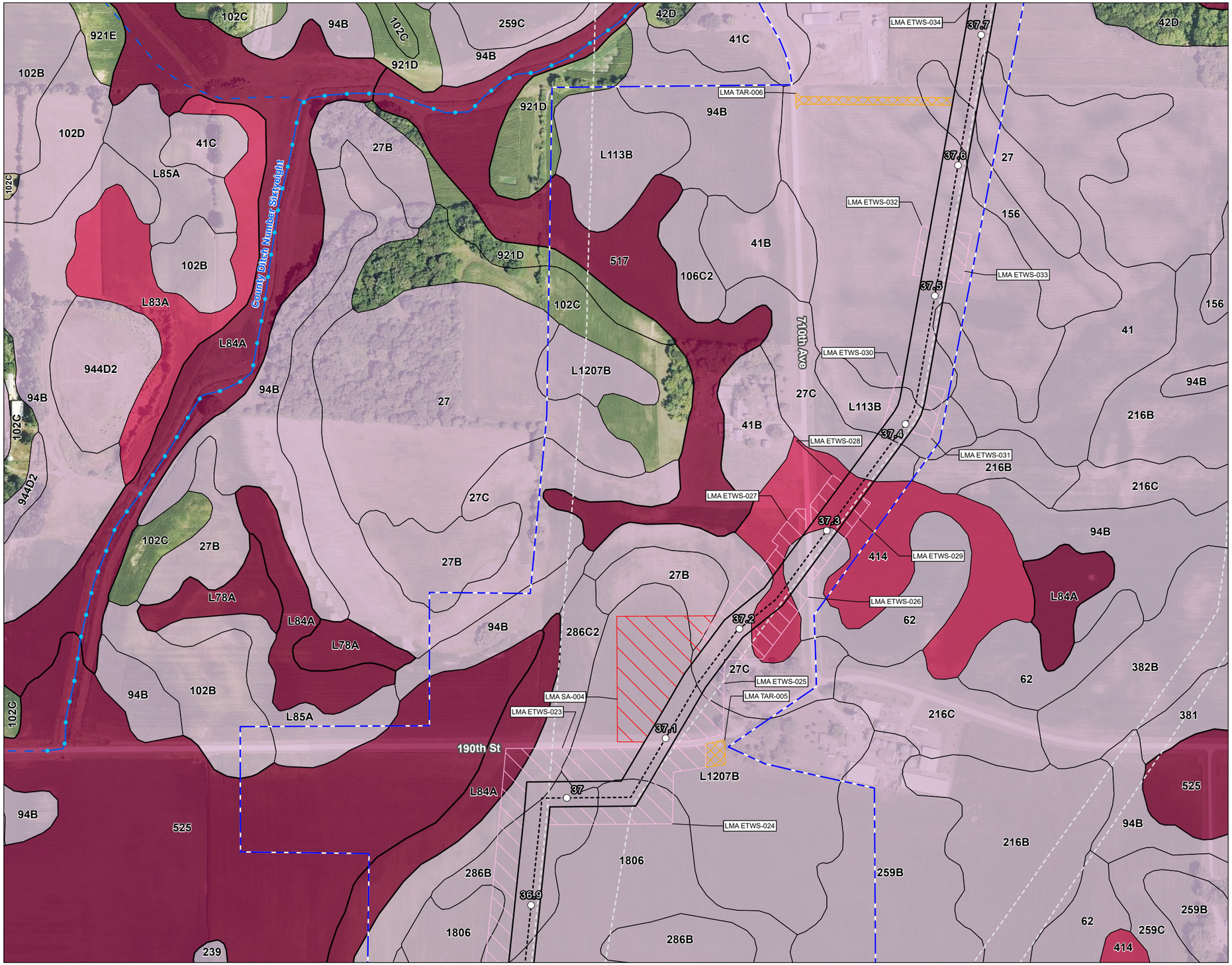


Figure No.

2

Title

NRCS Soil Series Map
V2F - Lake Mills M500 E-Line

Client/Project 172608813

Northern Natural Gas
Ventura to Farmington A-Line Abandonment & Capacity Replacement Project

Project Location
Freeborn County, Minnesota

Prepared by JM on 2025-10-24
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Legend

- Environmental Survey Boundary
- Temporary Workspace
- Extra Temporary Workspace
- Staging Area
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- Proposed Pipeline
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NRCS Soil Survey Data

Hydric Soil Rating

- Hydric
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- Partially Hydric
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National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
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Notes
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2. Data Sources: Stantec, NNG, Esri, USCB, USGS, NRCS
3. Background: 2023 NAIP

Stantec

Northern Natural Gas

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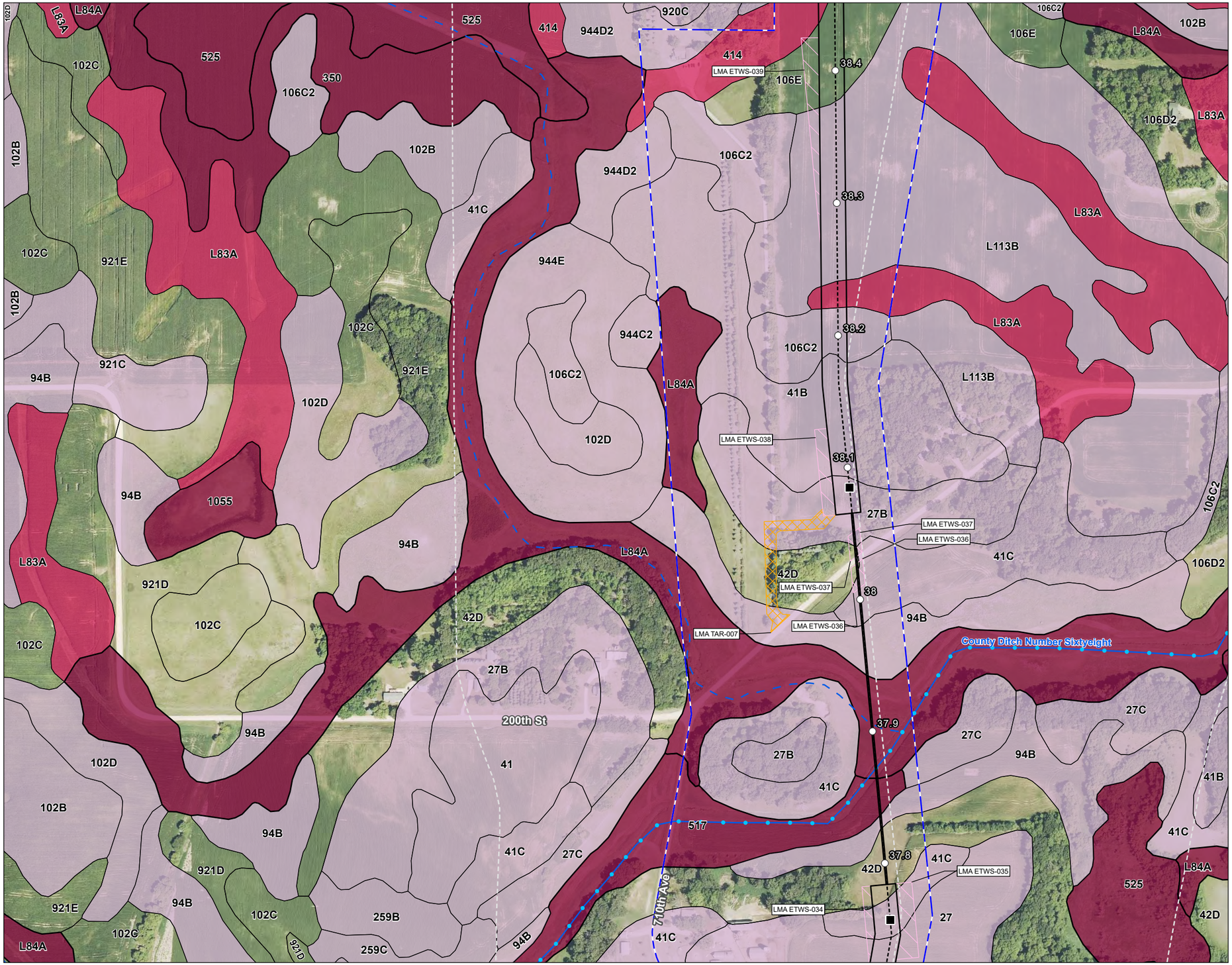


Figure No.

2

Title

NRCS Soil Series Map
V2F - Lake Mills M500 E-Line

Client/Project 172608813

Northern Natural Gas
Ventura to Farmington A-Line Abandonment & Capacity Replacement Project

Project Location
Freeborn County, Minnesota

Prepared by JM on 2025-10-24
TR by JL on 2025-10-27
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N

0 200 400 Feet
(At original document size of 11x17)
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Legend

- Environmental Survey Boundary
- Temporary Workspace
- Extra Temporary Workspace
- Temporary Access Road
- Proposed Pipeline
- Existing Pipeline
- Mile Post
- HDD

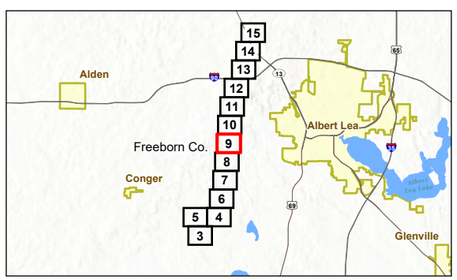
NRCS Soil Survey Data

Hydric Soil Rating

- Hydric
- Predominantly Hydric
- Partially Hydric
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- Non-Hydric

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Ephemeral Stream
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Notes
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Stantec

Northern Natural Gas

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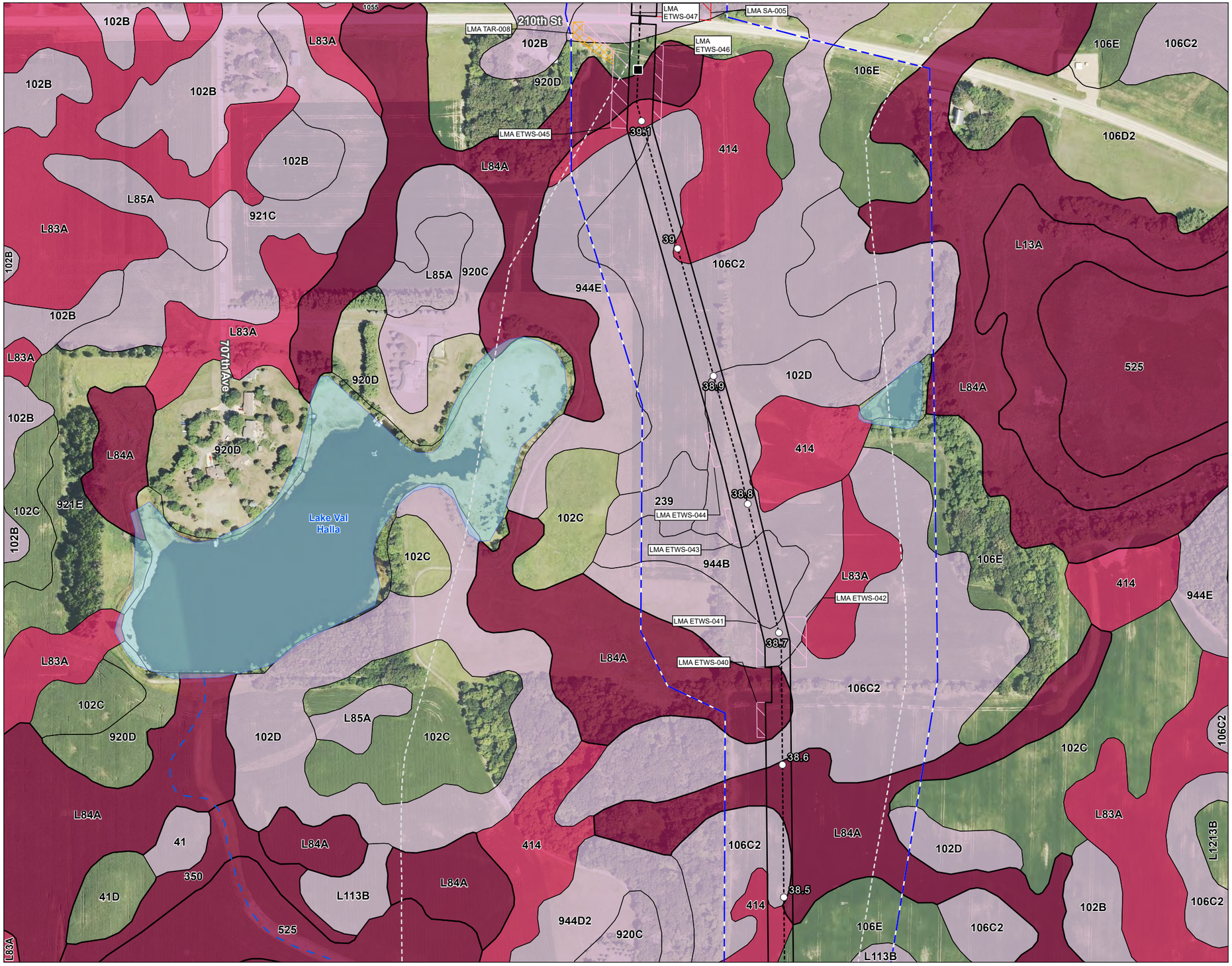


Figure No.
2

Title
NRCS Soil Series Map
V2F - Lake Mills M500 E-Line

Client/Project
172608813
Northern Natural Gas
Ventura to Farmington A-Line Abandonment & Capacity Replacement Project

Project Location
Freeborn County, Minnesota

Prepared by JM on 2025-10-24
TR by JL on 2025-10-27
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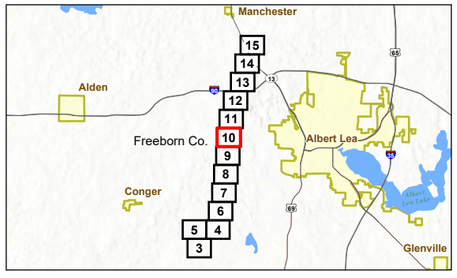
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(At original document size of 11x17)
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Legend
- Environmental Survey Boundary
- Temporary Workspace
- Extra Temporary Workspace
- Staging Area
- Temporary Access Road
- Proposed Pipeline
- Existing Pipeline
- Mile Post
- HDD

NRCS Soil Survey Data
Hydric Soil Rating
- Hydric
- Predominantly Hydric
- Partially Hydric
- Predominantly Non-Hydric
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National Hydrography Dataset
- Perennial Stream
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Notes
1. Coordinate System: NAD 1983 UTM Zone 15N
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3. Background: 2023 NAIP

Stantec
Northern Natural Gas

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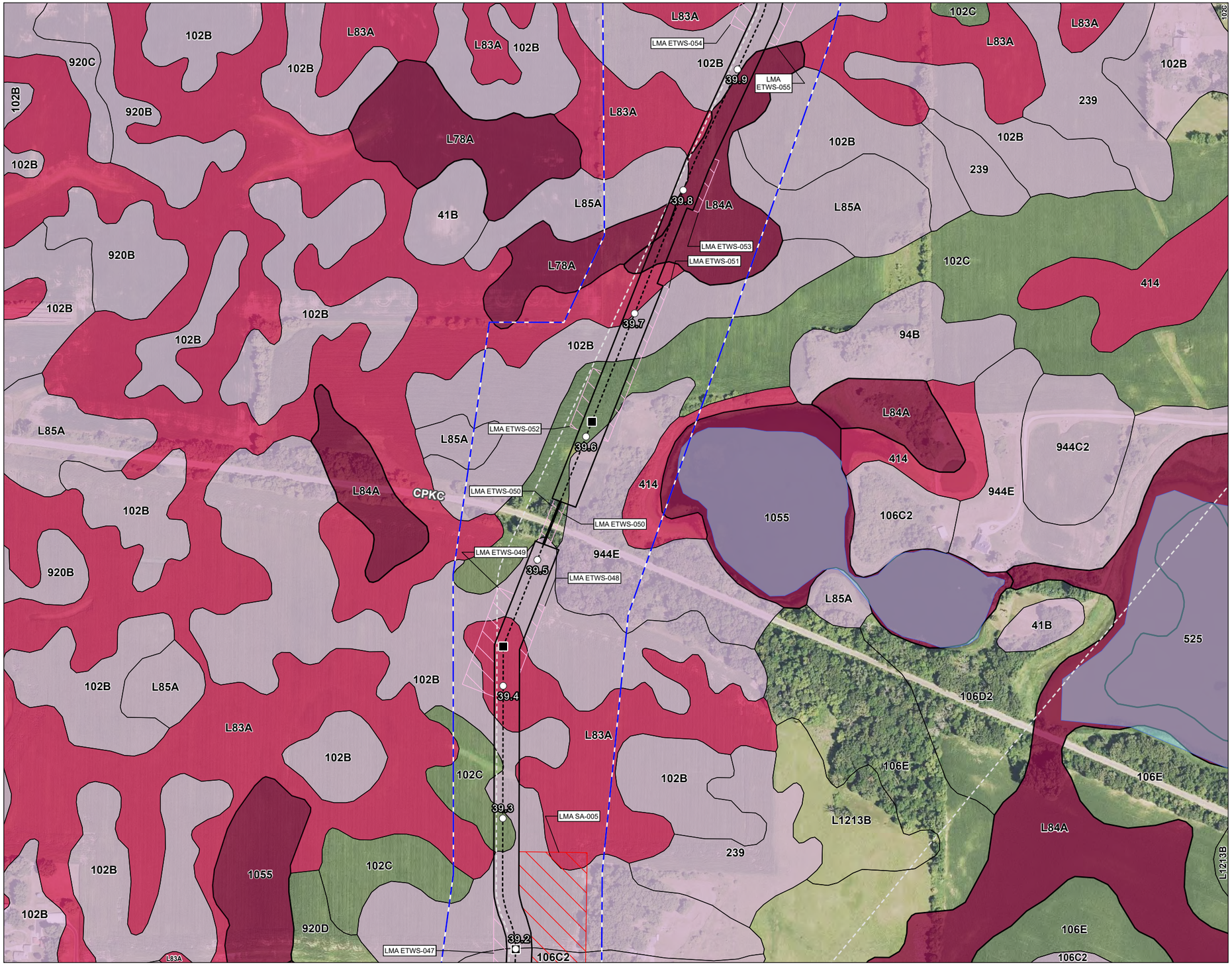


Figure No.

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Title

NRCS Soil Series Map
V2F - Lake Mills M500 E-Line

Client/Project 172608813

Northern Natural Gas
Ventura to Farmington A-Line Abandonment & Capacity Replacement Project

Project Location
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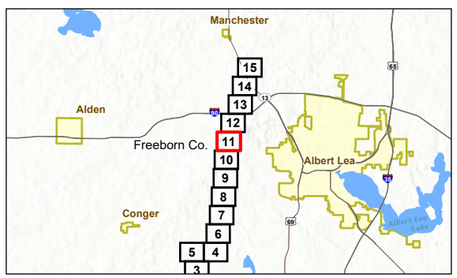
NRCS Soil Survey Data

Hydric Soil Rating

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National Hydrography Dataset

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Stantec

Northern Natural Gas

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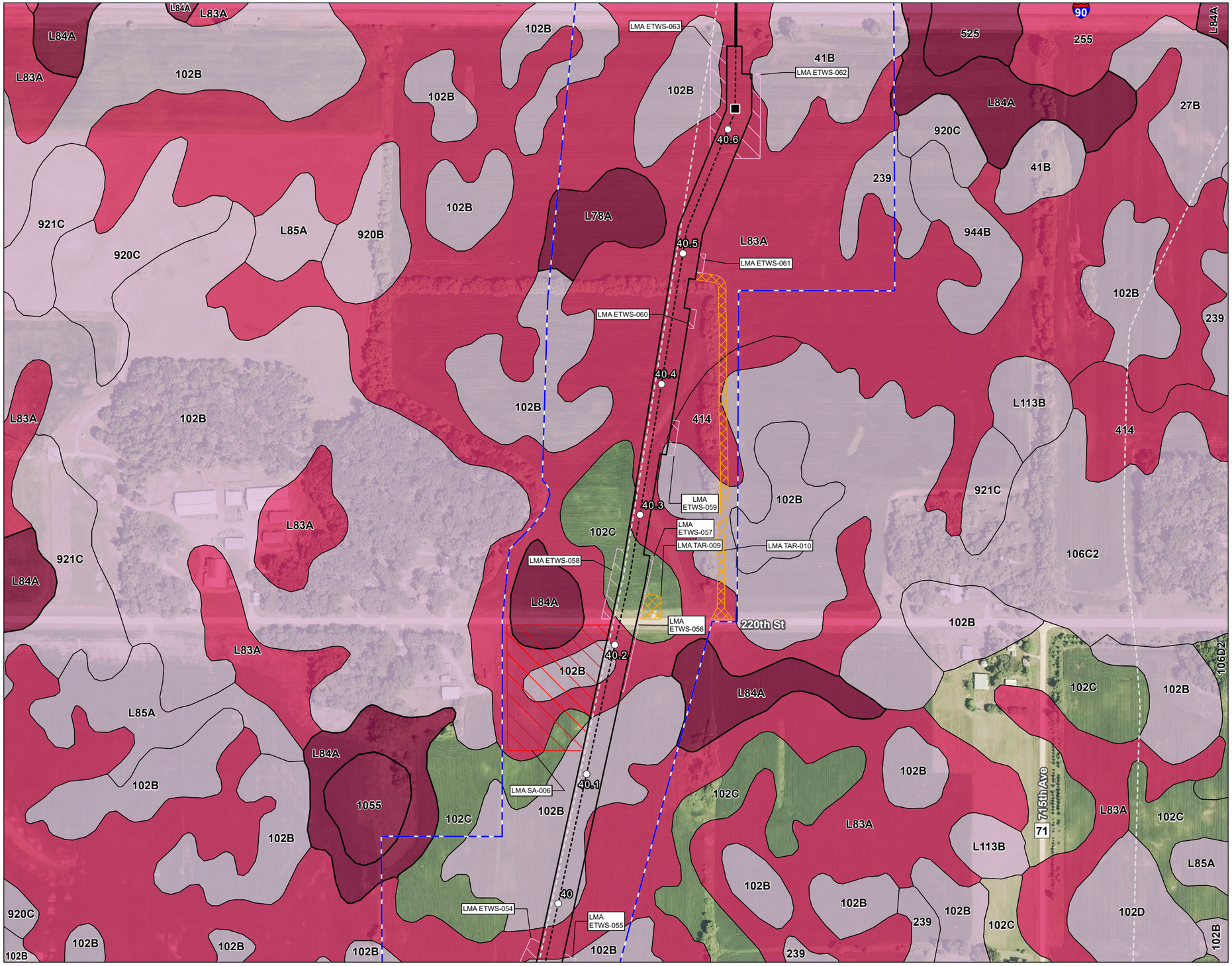


Figure No.

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Title

NRCS Soil Series Map
V2F - Lake Mills M500 E-Line

Client/Project 172608813

Northern Natural Gas
Ventura to Farmington A-Line Abandonment & Capacity Replacement Project

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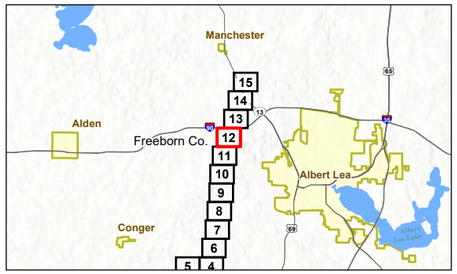
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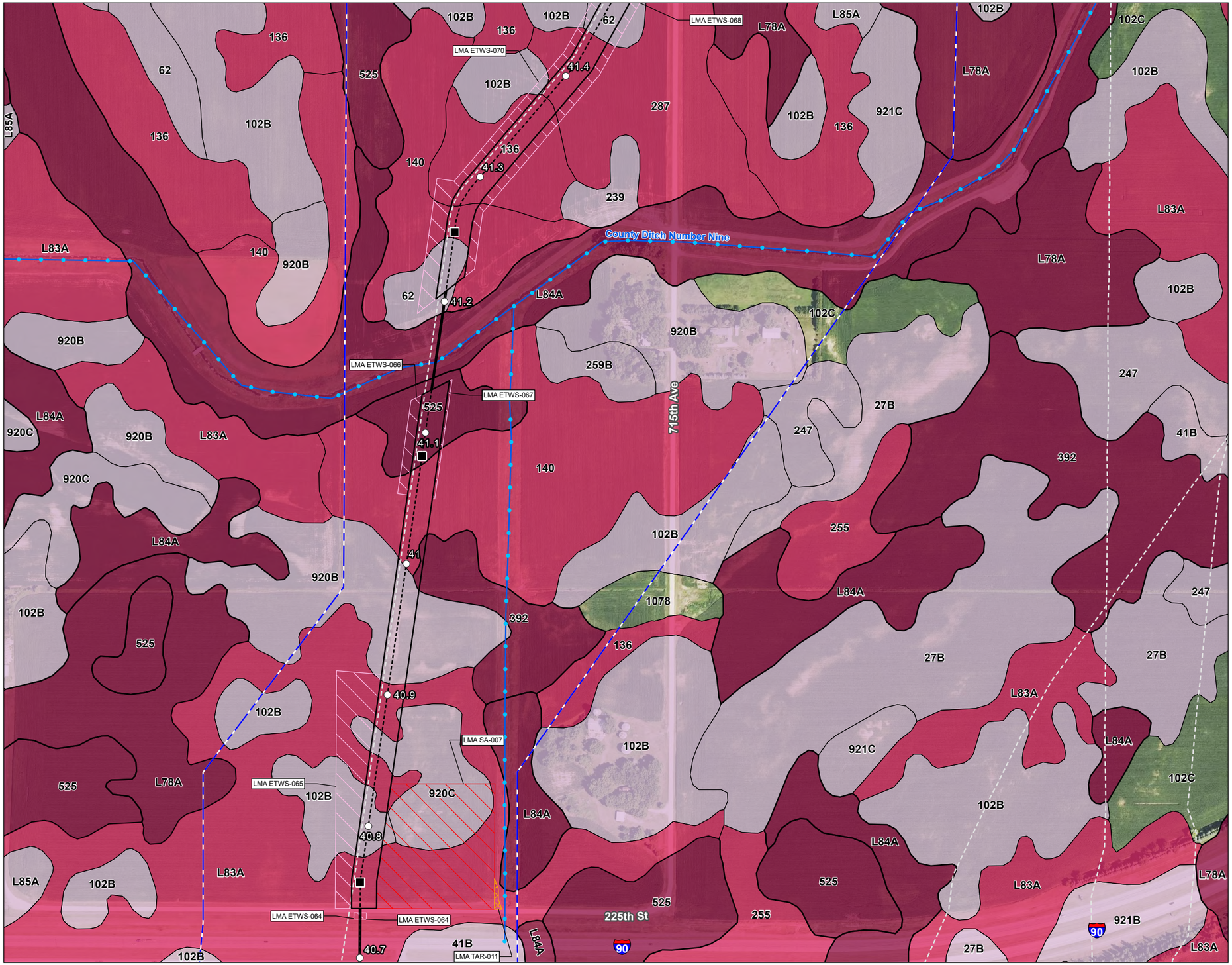


Figure No.

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Title

NRCS Soil Series Map
V2F - Lake Mills M500 E-Line

Client/Project 172608813

Northern Natural Gas
Ventura to Farmington A-Line Abandonment & Capacity Replacement Project

Project Location
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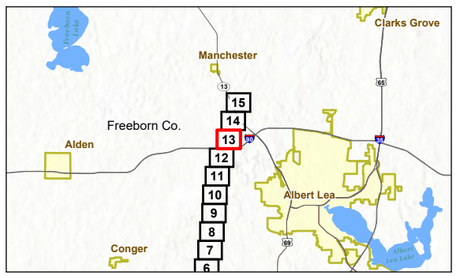
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Northern Natural Gas

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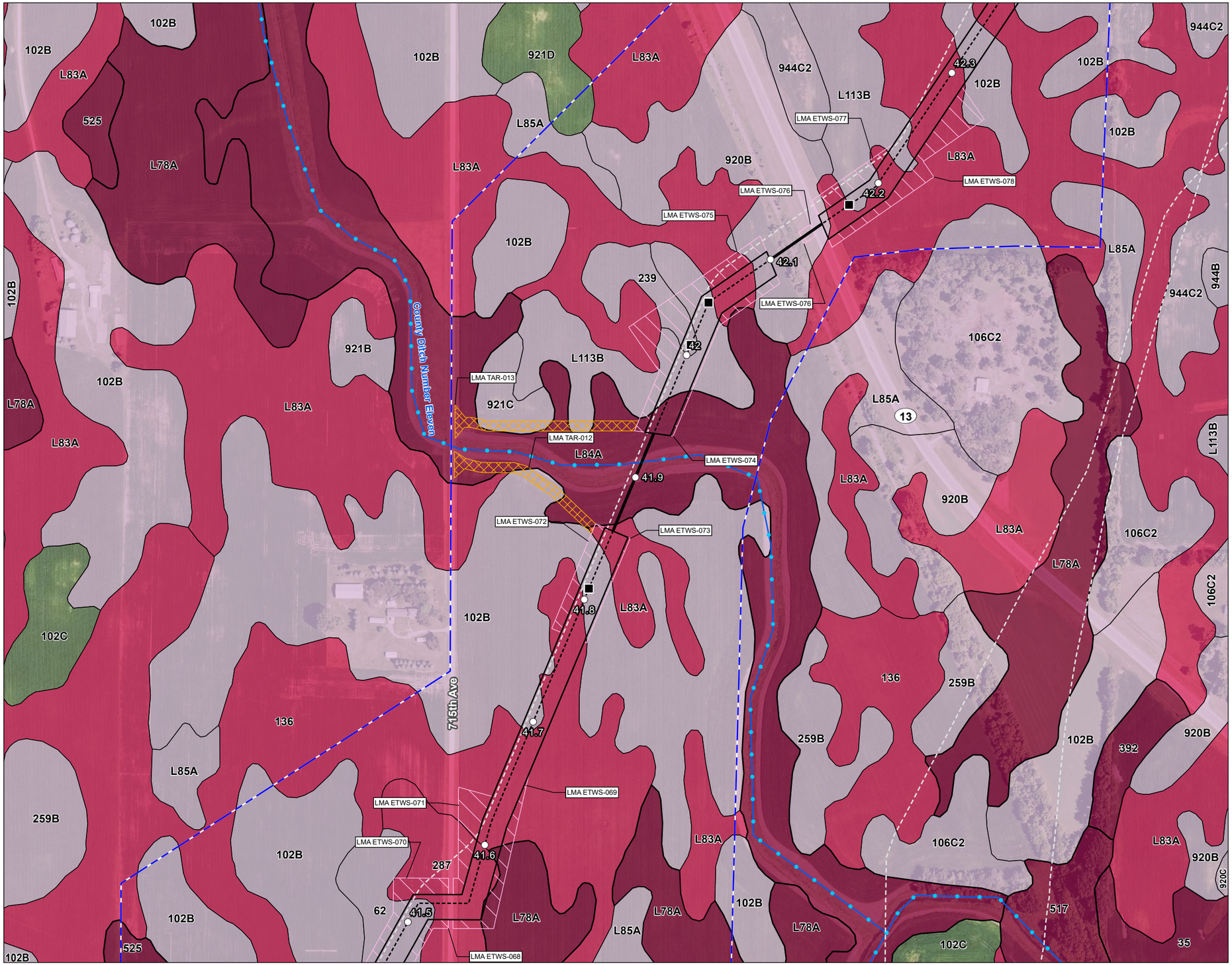


Figure No.

2

Title

NRCS Soil Series Map
V2F - Lake Mills M500 E-Line

Client/Project 172608813

Northern Natural Gas
Ventura to Farmington A-Line Abandonment & Capacity Replacement Project

Project Location
Freeborn County, Minnesota

Prepared by JM on 2025-10-24
TR by JL on 2025-10-27
IR by SK on 2026-01-29

N

0 200 400 Feet
(At original document size of 11x17)
1:4,800

Legend

- Environmental Survey Boundary
- Temporary Workspace
- Extra Temporary Workspace
- Temporary Access Road
- Proposed Pipeline
- Existing Pipeline
- Mile Post
- HDD

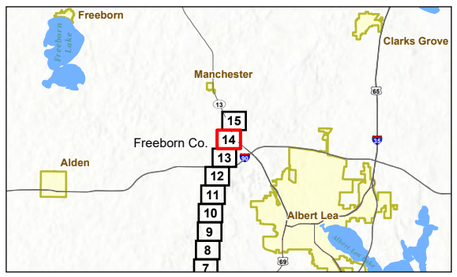
NRCS Soil Survey Data

Hydric Soil Rating

- Hydric
- Predominantly Hydric
- Partially Hydric
- Predominantly Non-Hydric
- Non-Hydric

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Ephemeral Stream
- Canal/Ditch
- Waterbody



Notes
1. Coordinate System: NAD 1983 UTM Zone 15N
2. Data Sources: Stantec, NNG, Esri, USCB, USGS, NRCS
3. Background: 2023 NAIP

Stantec

Northern Natural Gas

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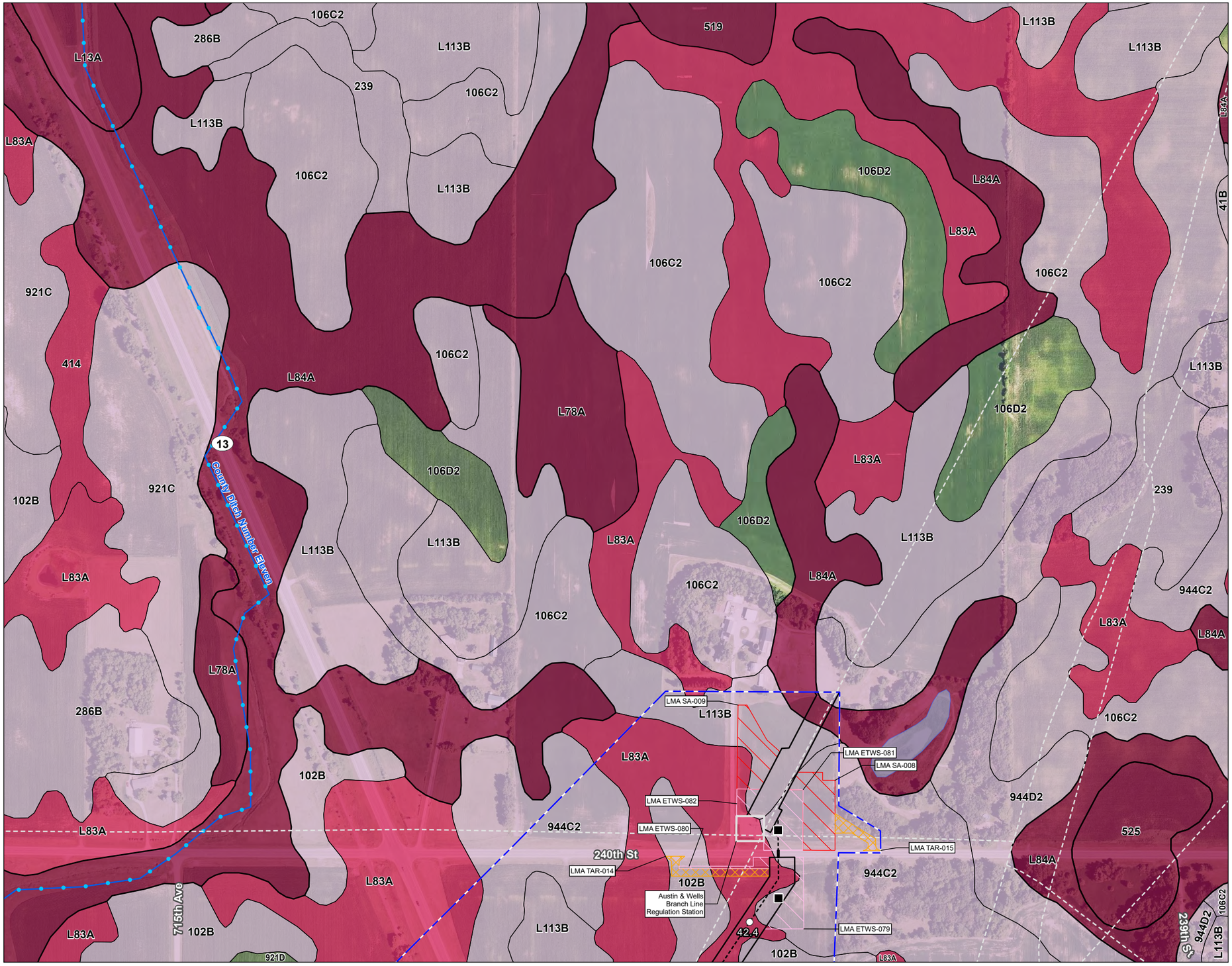


Figure No.

2

Title

NRCS Soil Series Map
V2F - Lake Mills M500 E-Line

Client/Project 172608813

Northern Natural Gas
Ventura to Farmington A-Line Abandonment & Capacity Replacement Project

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Freeborn County, Minnesota

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N

0 200 400 Feet

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Legend

- Environmental Survey Boundary
- Existing Lot
- Temporary Workspace
- Extra Temporary Workspace
- Staging Area
- Temporary Access Road
- Proposed Pipeline
- Existing Pipeline
- Mile Post
- HDD

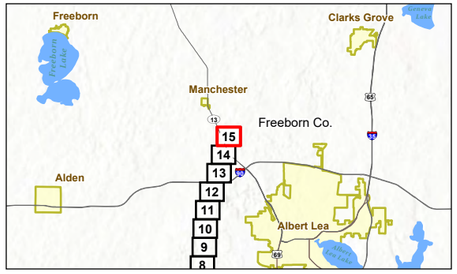
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- Non-Hydric

National Hydrography Dataset

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Stantec

Northern Natural Gas

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ATTACHMENT C

EROSION CONTROL MAP



Figure No.

1

Title

Erosion Control Plan
V2F - Lake Mills M500 E-Line

Client/Project 172608813

Northern Natural Gas
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Legend

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- Staging Area
- Temporary Access Road
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- Existing Pipeline
- Mile Post
- HDD
- HDD Segment
- 1' Elevation Contour
- Field Delineated Waterway
- Silt Fence
- Redundant Silt Fence
- Tracking Pad
- Hazardous Liquid Storage Exclusion Zone
- Wellhead Protection Area
- Drinking Water Supply Management Area

FEMA Flood Hazard Areas

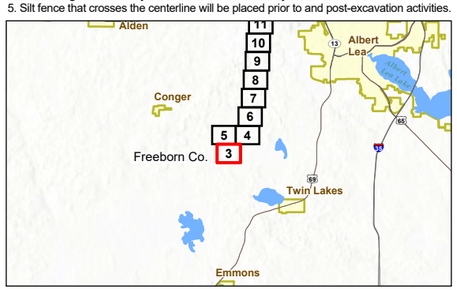
- Floodway
- 100-Year Floodplain
- 500-Year Floodplain

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody

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Figure No.
1

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V2F - Lake Mills M500 E-Line

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Northern Natural Gas
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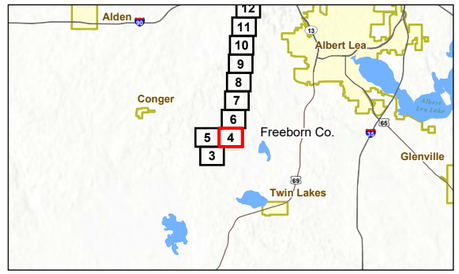
- Environmental Survey Boundary
- Temporary Workspace
- Extra Temporary Workspace
- Proposed Pipeline
- Existing Pipeline
- Mile Post
- 1' Elevation Contour
- Culvert
- Field Delineated Waterway
- Field Delineated Wetland
- Silt Fence
- Hazardous Liquid Storage Exclusion Zone
- Wellhead Protection Area
- Drinking Water Supply Management Area

FEMA Flood Hazard Areas
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- 100-Year Floodplain
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V2F - Lake Mills M500 E-Line

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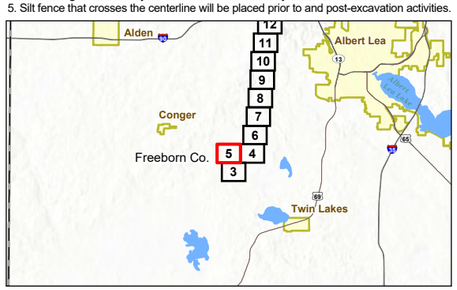
Legend
- Environmental Survey Boundary
- Temporary Workspace
- Extra Temporary Workspace
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- Proposed Pipeline
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- HDD
- HDD Segment
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- Field Delineated Wetland
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Figure No.

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Erosion Control Plan
V2F - Lake Mills M500 E-Line

Client/Project 172608813

Northern Natural Gas
Ventura to Farmington A-Line Abandonment & Capacity Replacement Project

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Freeborn County, Minnesota

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- Existing Pipeline
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- HDD
- HDD Segment
- 1' Elevation Contour
- Culvert
- Field Delineated Wetland
- Well Location
- Redundant Silt Fence
- 5+ Percent Slope*
- Tracking Pad
- Hazardous Liquid Storage Exclusion Zone
- Wellhead Protection Area
- Drinking Water Supply Management Area

FEMA Flood Hazard Areas

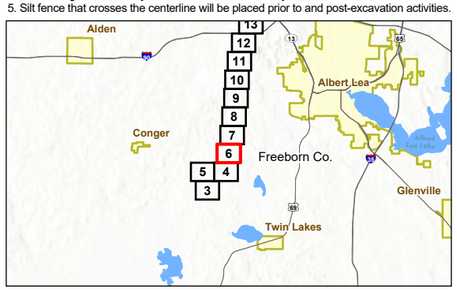
- Floodway
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National Hydrography Dataset

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Northern Natural Gas

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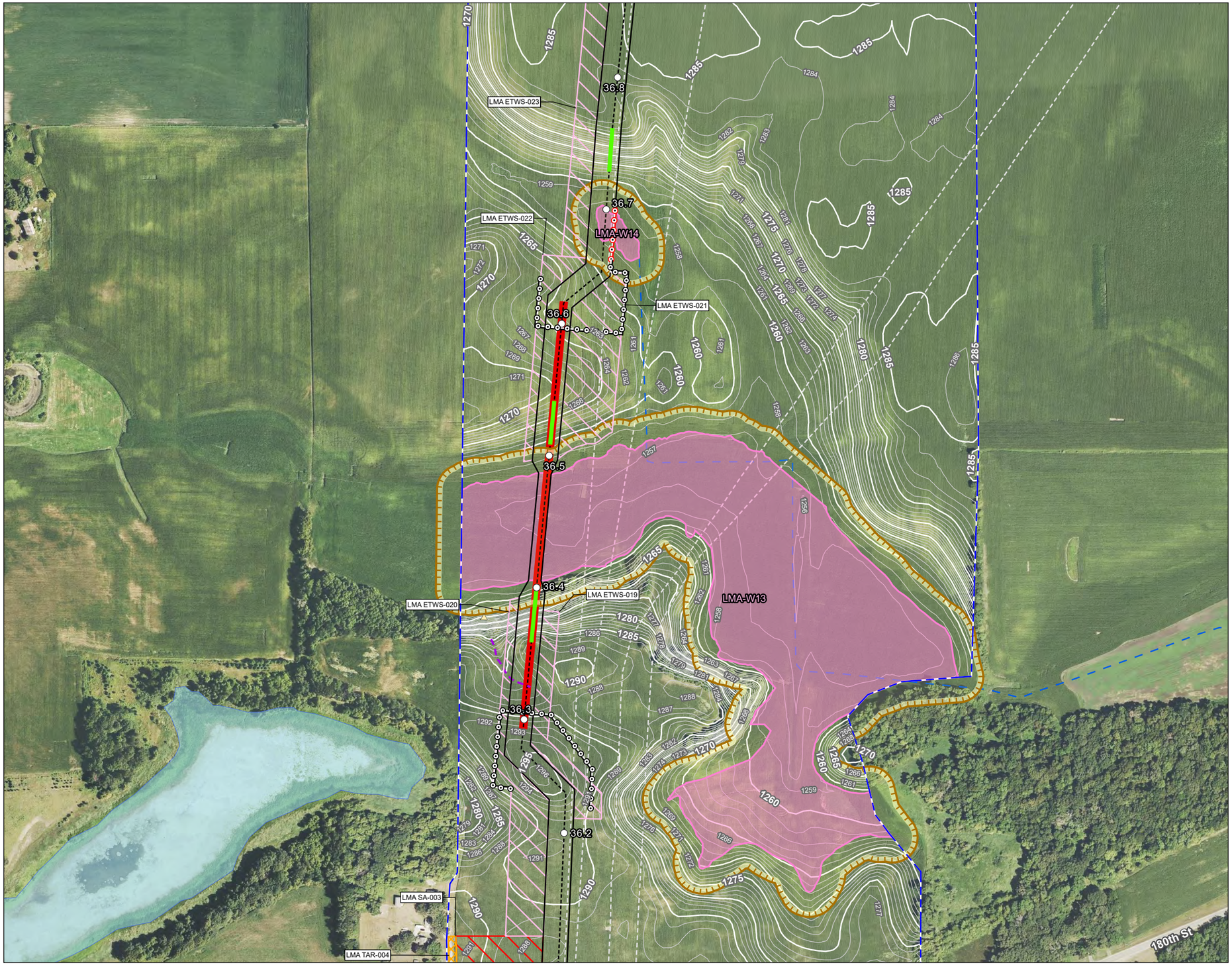


Figure No.

1

Title

Erosion Control Plan
V2F - Lake Mills M500 E-Line

Client/Project 172608813

Northern Natural Gas
Ventura to Farmington A-Line Abandonment & Capacity Replacement Project

Project Location
Freeborn County, Minnesota

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TR by JL on 2025-10-27
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N

0 200 400 Feet
(At original document size of 11x17)
1:4,800

Legend

- Environmental Survey Boundary
- Temporary Workspace
- Extra Temporary Workspace
- Staging Area
- Temporary Access Road
- Proposed Pipeline
- Existing Pipeline
- Mile Post
- HDD Segment
- 1' Elevation Contour
- Culvert
- Upland Drainage Feature
- Field Delineated Wetland
- Silt Fence
- Redundant Silt Fence
- 5+ Percent Slope*
- Hazardous Liquid Storage Exclusion Zone
- Wellhead Protection Area
- Drinking Water Supply Management Area

FEMA Flood Hazard Areas

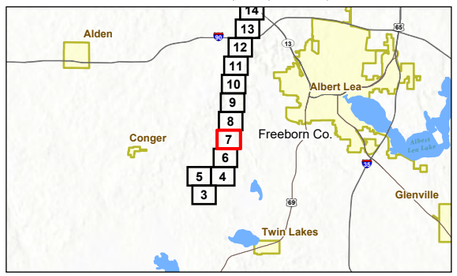
- Floodway
- 100-Year Floodplain
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National Hydrography Dataset

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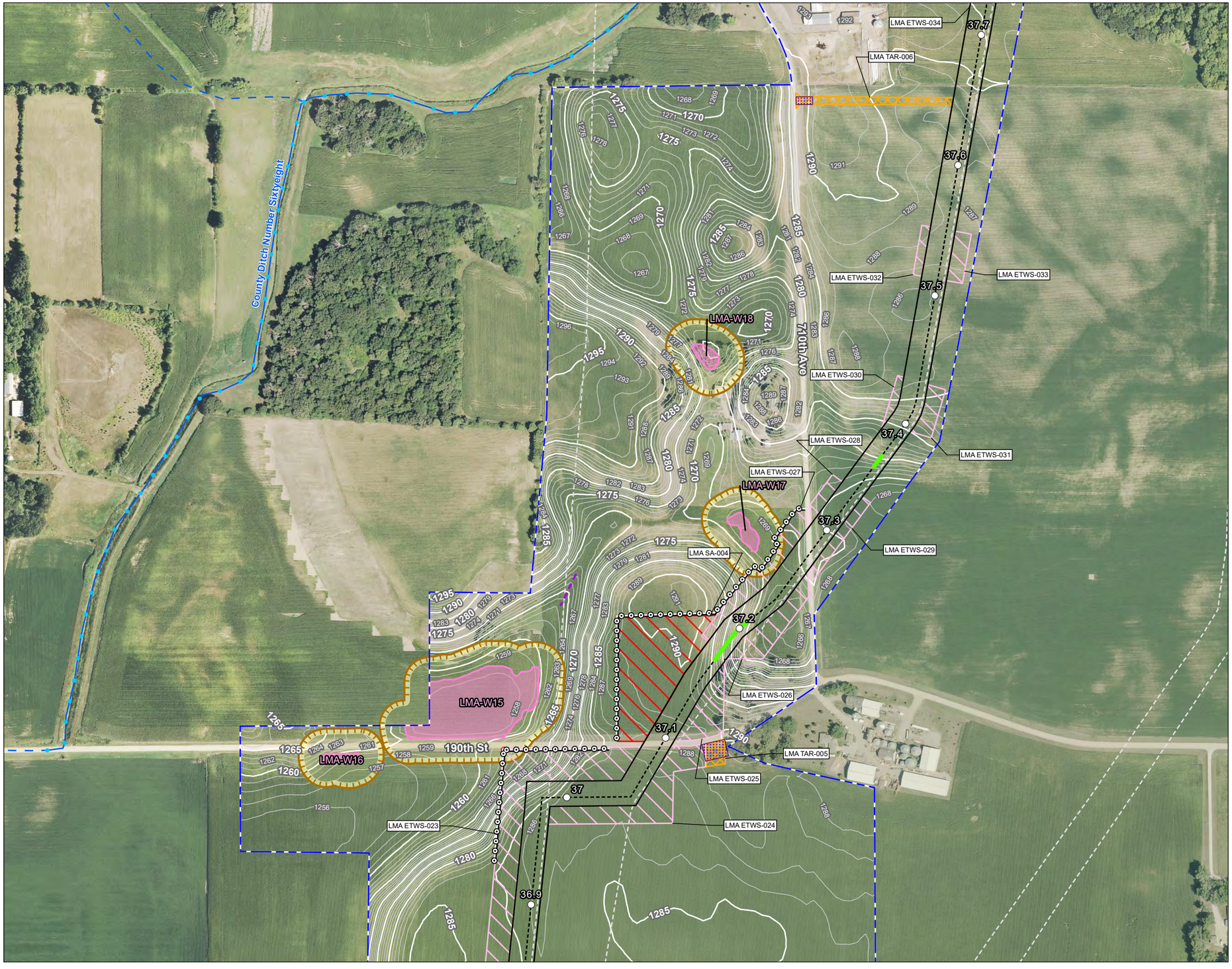


Figure No.
1

Title
Erosion Control Plan
V2F - Lake Mills M500 E-Line

Client/Project 172608813
Northern Natural Gas
Ventura to Farmington A-Line Abandonment & Capacity Replacement Project

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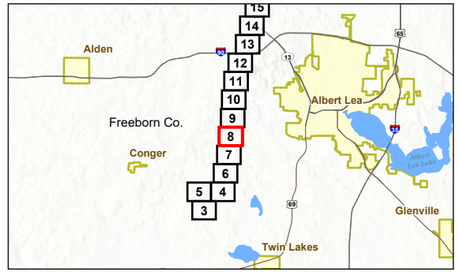
Legend
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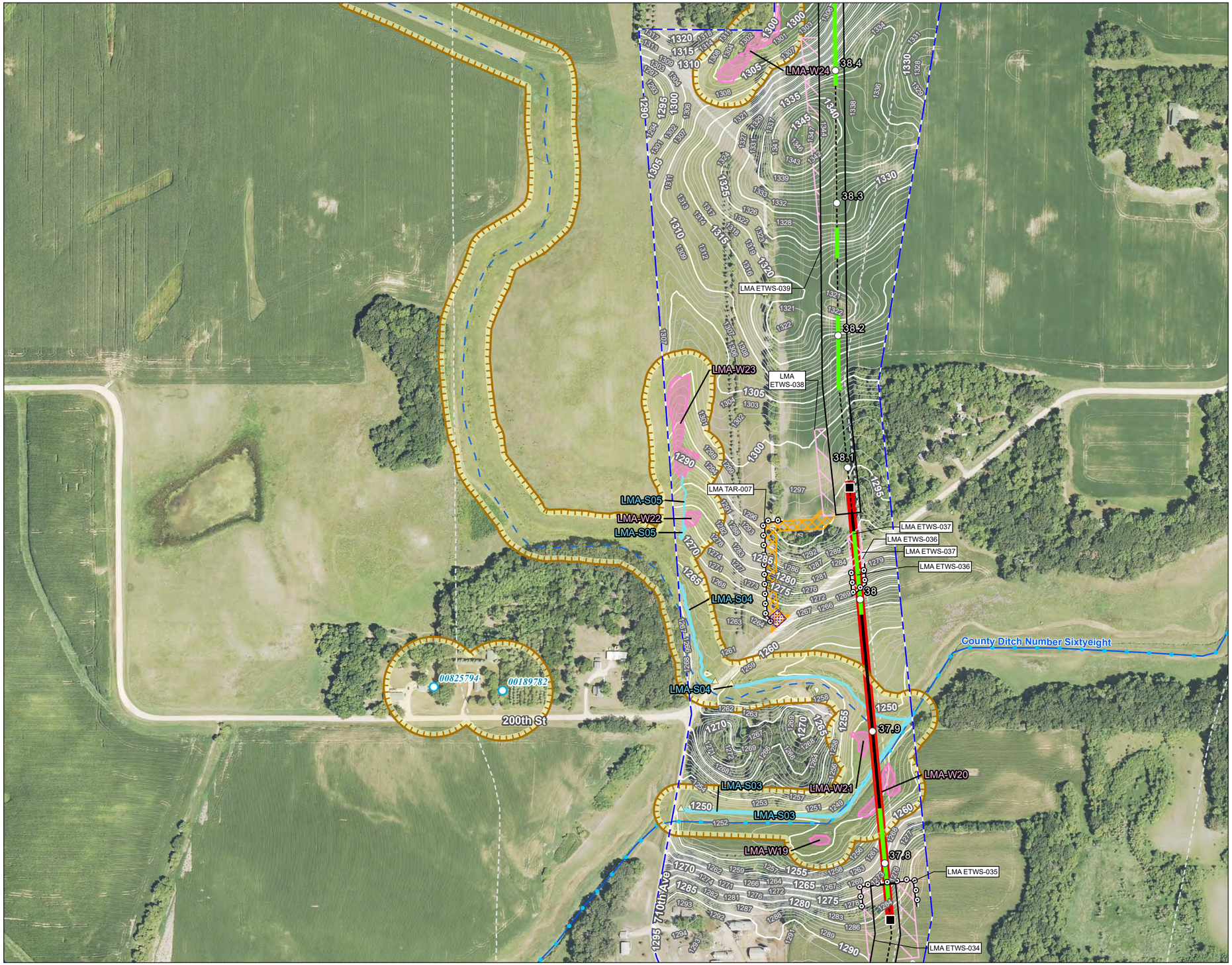


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Erosion Control Plan
V2F - Lake Mills M500 E-Line

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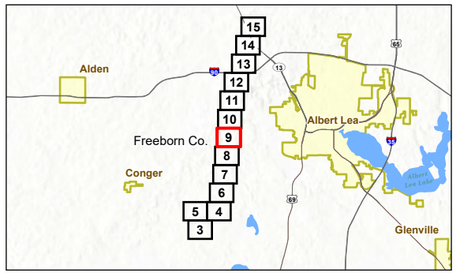
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- HDD Segment
- 1' Elevation Contour
- Upland Drainage Feature
- Field Delineated Open Water
- Field Delineated Wetland
- Well Location
- Silt Fence
- Redundant Silt Fence
- 5+ Percent Slope*
- Tracking Pad
- Hazardous Liquid Storage Exclusion Zone
- Wellhead Protection Area
- Drinking Water Supply Management Area

FEMA Flood Hazard Areas

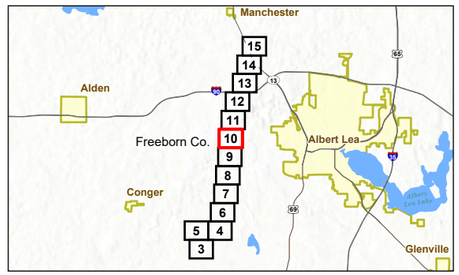
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IR by SK on 2026-01-29

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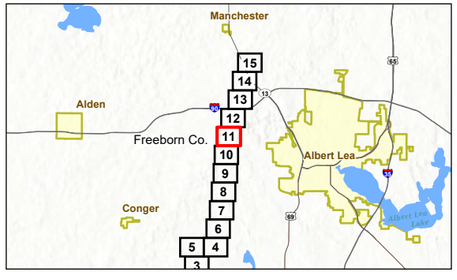
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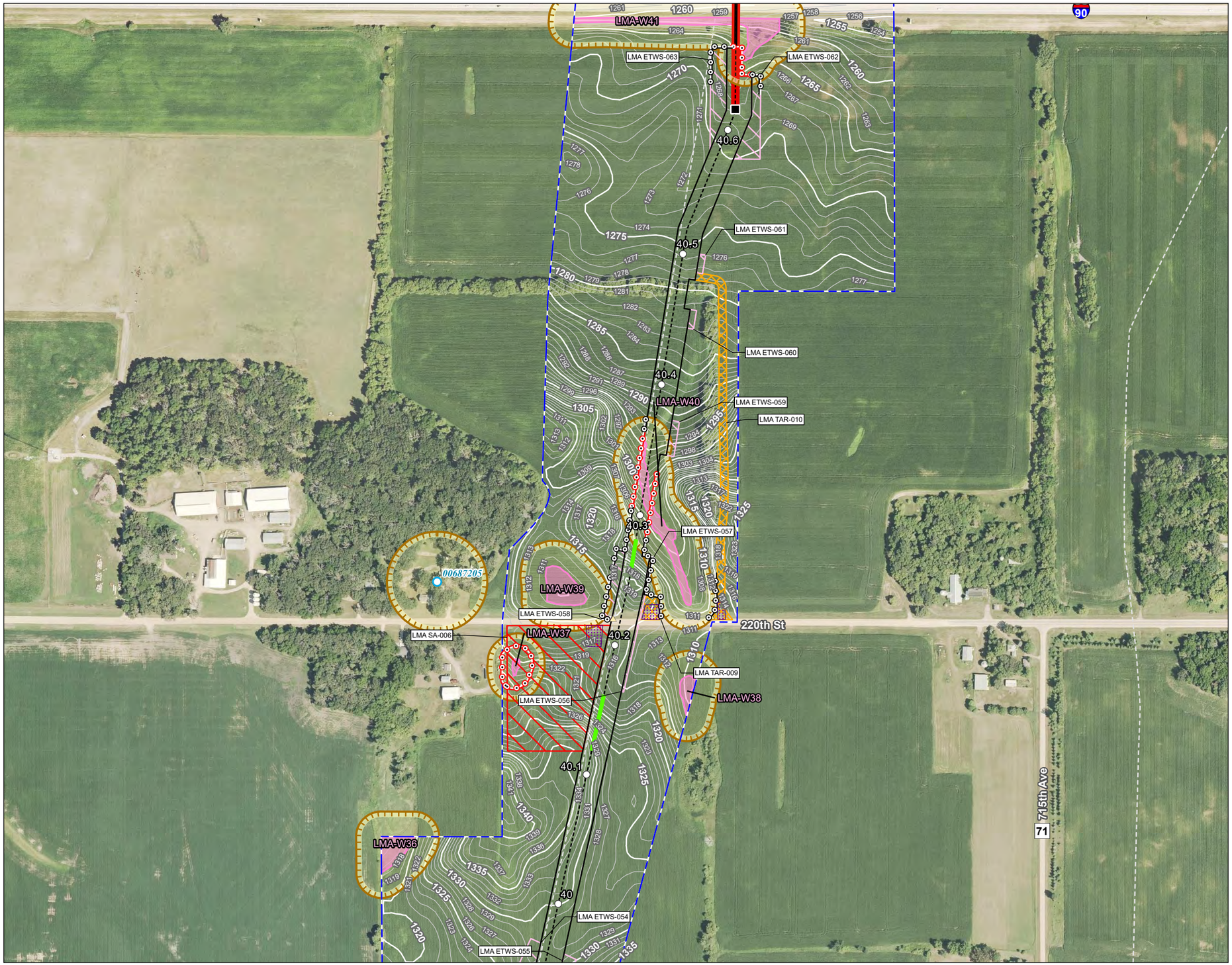


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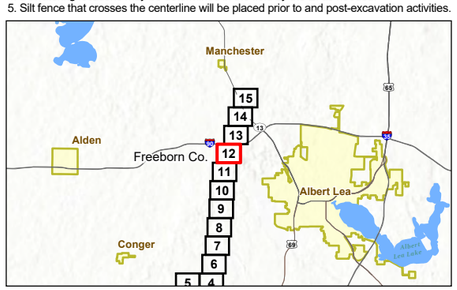
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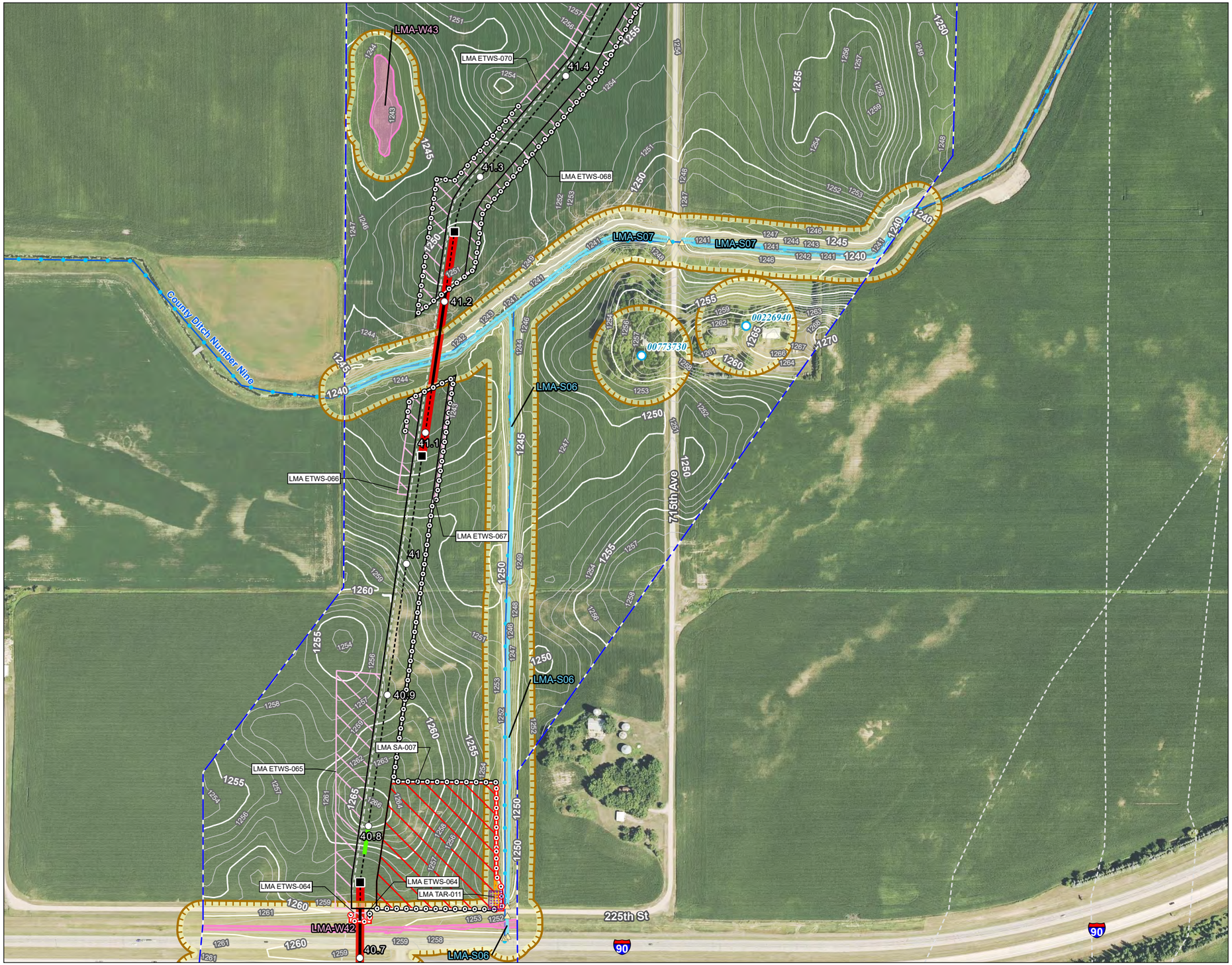


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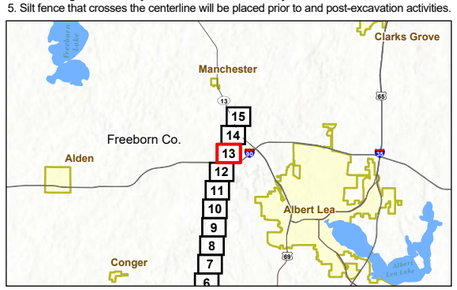
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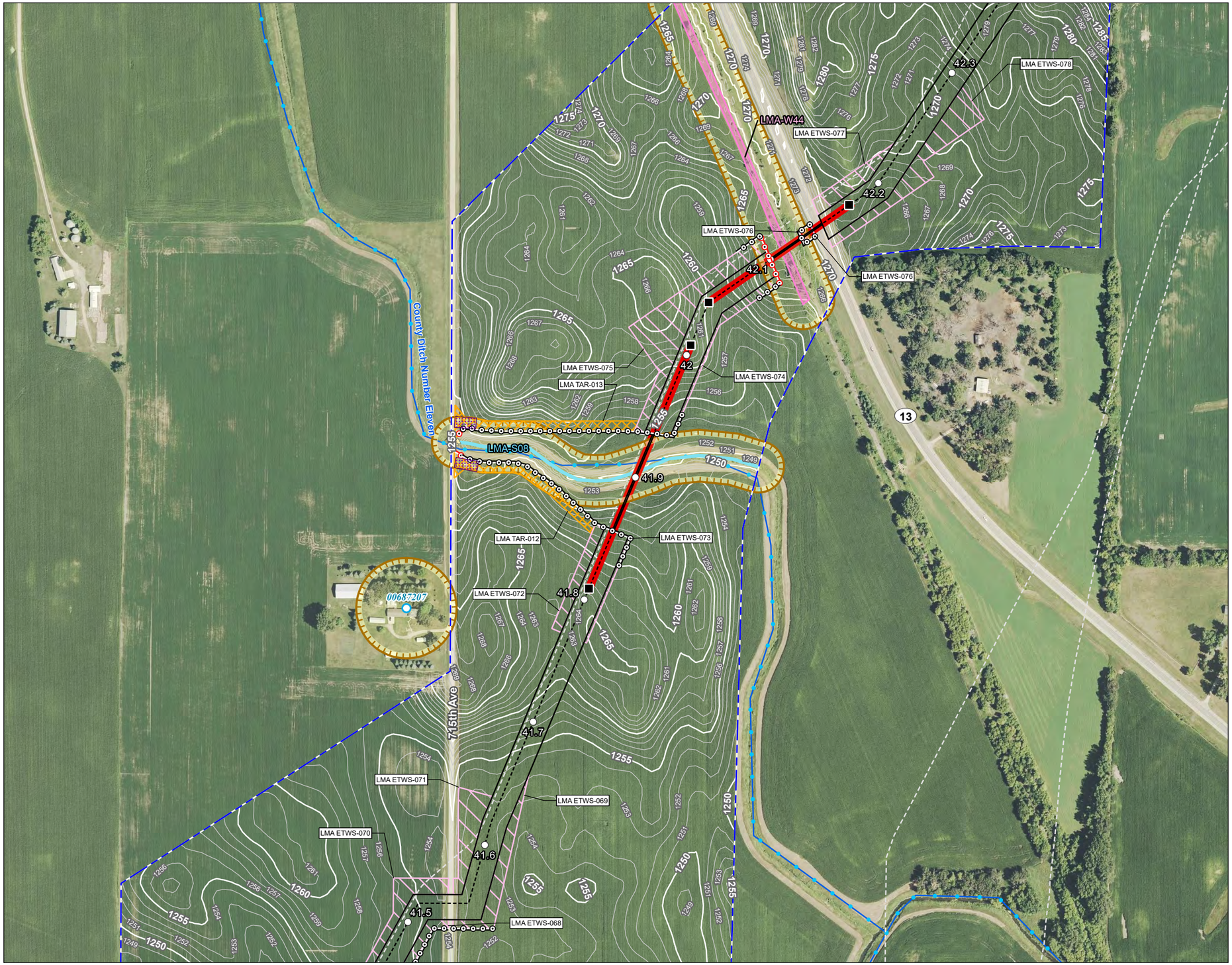


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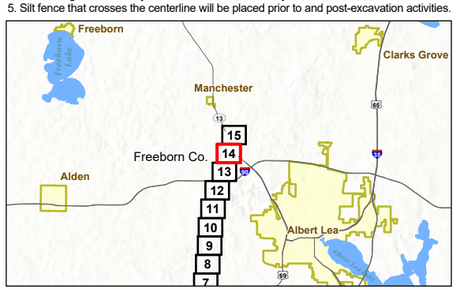
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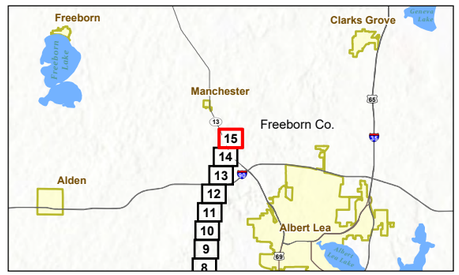
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ATTACHMENT D

NORTHERN'S ENGINEERING STANDARD 7507

Stantec



Northern Natural Gas Company

Erosion and Sediment Control

Technical Standards

Engineering Standard 7507

December 2025

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Abbreviations and Acronyms

BMPs	Best Management Practices
Company	Northern Natural Gas Company
Contractor	Prime Contractor
ECB	Erosion Control Blanket
EI	Environmental Inspector
FERC	Federal Energy Regulatory Commission
HI	Hand Installed
MS	Machine Sliced
NPDES/SDS	National Pollutant Discharge Elimination System
PA	Pre-Assembled
Plan	FERC's Upland Erosion Control, Revegetation, and Maintenance Plan
Procedures	FERC's Wetland and Waterbody Construction and Mitigation Procedures
SD	Super Duty
SDS	Safety Data Sheet
SPCC	Spill Prevention, Containment, and Countermeasure Plan
Spec.	Specifications
SWPPP	Stormwater Pollution Prevention Plan

ENVIRONMENTAL REQUIREMENTS

1 GENERAL

These technical standards identify the minimum controls and practices to be implemented by Contractors working on projects owned and operated by Company. Additionally, the technical standards provide the Company's contractor with material options for erosion prevention and sediment controls to meet requirements of the federal NPDES program, state and local-level pollution control programs, and the FERC Plan and Procedures. The contractor retains liability and responsibility for compliance with the NPDES requirements until all conditions, including final stabilization, have been met and any applicable permit(s) have been closed. Project specific plans may be more restrictive than and supersede this standard.

The Contractor will schedule and conduct construction operations to prevent, control, minimize, or abate pollution of air, land, and water in accordance with all applicable permits, agency consultation, mitigation plans and the FERC Plan and Procedures. In the event of non-compliance with any of the standards, Contractor will immediately provide verbal notification to Company and provide written notification within 24 hours.

1.1 Environmental Items

Company has identified environmental materials to be used as erosion prevention and sediment control and implementation will be governed based upon the terms of the Capital Construction Agreement and/or Work Offer for the project. Contractor is required to provide the material, equipment, installation, maintenance, and removal of each item.

1.1.1 Environmental Items

a. Sediment Control Log: Maintenance of the sediment log includes removal and disposal of trapped sediment.
b. Silt Fence: Maintenance of silt fence includes removal and disposal of trapped sediment.
c. Silt Curtain: Maintenance of the silt curtain includes removal and disposal of trapped sediment.
d. Straw Bales-Certified Weed-Free (per bale): Maintenance of the straw bales includes removal and disposal of trapped sediment. Used straw bales may be broken up and used as mulch onsite, where allowable.
e. Slope Breakers Permanent: Permanent slope breakers are not to be removed upon final stabilization.
f. Filter Berms: Installation of the topsoil filter berm includes immediate seed and mulch. Installation for rock or rock weeper filter berm when converted from temporary to permanent conditions, as applicable, includes modification of the berm dimensions. Temporary filter berms will be removed upon final stabilization.
g. Storm Drain Inlet Protection: Maintenance of the inlet protection devices includes the removal and disposal of trapped sediment or sediment deposited in or plugging drainage systems protected by the devices.
h. Mats: Mats to be installed are to be clean and free of debris.
i. Construction Exit Controls: Rock access pads will be maintained to mitigate track out onto public roads. Place synthetic fabric beneath the rock to aid in recovery during restoration.

j. Filter Bags: Filter bags must be replaced/removed when they have reached their limit of use, are no longer functional, damaged, and/or otherwise require replacement.
k. Erosion Control Blanket (square yards): Installation includes the erosion control blanket, trenching and staking.
l. Mulch-Certified Weed-Free, Slash Mulch (per acre): Includes crimping or anchoring to prevent loss due to wind and water.
m. Seeding: Temporary and permanent seeding includes soil bed preparation, soil amendments and reseeding, as necessary.

1.2 Environmental Training Requirements

Environmental training is provided to increase awareness of the environmental requirements applicable to the project, to prevent incidents of environmental non-compliance and damage, and to meet state-specific requirements. Issues addressed in environmental training include but are not limited to approved project work areas; erosion and sediment control; material storage and disposal; spill prevention, control, countermeasures, and reporting; and environmental requirements contained in project permits and approvals. The Contractor staff will complete the required training in VeriForce. Environmental training is required of project personnel before they can enter the project site or related work areas, per Environmental Procedure 380.201.

Contractor staff must provide proof of completion of all VeriForce training at the start of the project. Upon verification of training, each staff is issued an environmental training sticker and card. All Contractor personnel must display the sticker or card.

The Contractor will provide workers with sufficient skill and experience to perform the Work assigned to them. Upon request by Company, the Contractor will submit evidence of qualification for any person engaged in special work requiring professional training or certification; including, but not limited to, the state-specific requirements for Erosion Prevention and Sediment Control Practices installation and/or Erosion Control Supervisor.

1.2.1 Erosion Prevention and Sediment Control Practices Installer

The Contractor will provide a certified installer (crew supervisor or laborer), as required by the respective state, to install or to direct installations, maintenance, repairs, or removals of erosion prevention or sediment control practices. Documentation of applicable certification from at least one installer will be provided to Company prior to initiation of construction activities.

1.2.2 Erosion Control Supervisor

The Contractor will provide an Erosion Control Supervisor with a valid state-specific Erosion and Stormwater Construction Site Management certification, where applicable, The Erosion Control Supervisor will be authorized to represent the Contractor and meeting contractual requirements for Erosion and Stormwater Management. The certification must be obtained from state agency approved provider, where required.

The Erosion Control Supervisor will be required to be available to respond to the work site within 72 hours of initial disturbance, or as required by the state, and at the site daily when work is taking

place until final stabilization. The following list describes the duties of the Erosion Control Supervisor:

1) Ensures quality control when implementing application plans and permit conditions.

2) Ensures proper installation, functionality, and maintenance, clean-up, and removal of all erosion prevention and non-biodegradable sediment control BMPs and in accordance with manufacturer's recommendations.

3) Implements the erosion and sediment control schedule.

4) Coordinates the work of subcontractors and ensures the full execution of erosion and sediment control measures for each operation and stage of work.

5) Oversees the work of subcontractors and ensures the subcontractors undertake erosion and sediment preventive measures at each stage of the work.

6) Attends construction meetings to discuss the erosion and sediment control schedule.

7) Provides for erosion and sediment control methods for temporary work not shown on the plans.

8) Ensures activities are completed in compliance with all applicable permits.

9) Ensures the full installation of erosion and sediment control devices before suspension of any work.

10) Ensures that proper cleanup occurs from vehicle tracking on paved surfaces and in other locations where sediment migrates and accumulates outside of the approved workspace.

11) Ensures that all non-biodegradable erosion and sediment controls are removed upon final stabilization of the Project.

12) Ensures that installers of erosion and sediment control have proper certifications.

13) The Erosion Control Supervisor is authorized to install, fix, or repair erosion or sediment control practices when a certified installer is unavailable, as applicable.

2 APPROVED WORK AREAS AND SITE ACCESS

Project-related ground disturbance will be limited to the construction right of way, extra workspace areas, pipe storage yards, borrow and disposal areas, access roads, and other areas approved by the Company. Any project-related ground disturbing activities outside these areas will require prior approval. This requirement does not apply to activities needed to comply with the FERC Plan and Procedures, Environmental Procedures 380.201a and 380.201b respectively, (i.e., slope breakers, energy-dissipating devices, dewatering structures, drain tile system repairs). All construction or restoration activities outside of authorized areas are subject to all applicable survey and permit requirements, and landowner easement agreements.

2.1 Approved Work Area

Per the FERC Plan and Procedures, the Company will establish the right of way boundaries and construction limits confining construction operations. Signs and highly visible flagging per colors specified in engineering procedure 7000.100A2 will be installed marking the boundaries of sensitive resource areas, waterbodies, wetlands, or areas with special requirements along the construction work area. Wetland boundaries and buffers must be clearly marked in the field with signs and/or highly visible flagging until construction-related ground disturbing activities are complete. Once established, the Contractor is responsible for maintaining all markings installed by civil survey and/or the environmental inspector throughout construction.

All extra work areas (such as staging areas and additional spoil storage areas) will be sited at least 50 feet away from wetland boundaries, except where the adjacent upland consists of cultivated or rotated cropland or other disturbed land and/or where site-specific approval from the FERC has been obtained.

2.2 Access Roads and Right of Way Access

The Contractor will implement efforts to control unauthorized off-road vehicle use throughout the life of the project. The Contractor will maintain signs, gates, and roads as necessary, per the FERC Plan and Procedures.

A combination of 50-foot-long crushed stone access pads (or as indicated in project documents), matting, and culverts will be installed at ingresses and egresses to access roads and at road crossings, as necessary, as determined by the EI, to minimize the tracking of mud onto roads. If crushed stone access pads are used, place the stone on synthetic fabric to facilitate removal, or follow requirements from state or local authorities. Crushed stone is not to be placed in waterbodies or wetlands. If mud is tracked onto a road, it must be shoveled or swept off the road immediately.

The Contractor will provide clean equipment prior to entering new workspaces to reduce the potential for invasion or spread of undesirable or noxious vegetation. The EI will inspect tracked equipment to confirm the adequacy of cleaning and will not allow equipment to be brought on-site unless the inspection is satisfactory.

If purple loosestrife or other noxious weed is encountered in the approved work area at any time, equipment will be thoroughly cleaned as described above prior to exiting the area of purple loosestrife, even if cleaning must occur in a wetland or within 500 feet of a wetland or waterbody. In such cases, equipment may be cleaned within containment on the right-of-way, as approved by the EI. Soil and vegetative debris resulting from cleaning will be immediately collected and disposed of at a licensed facility, per state regulations and the project noxious weed management plan.

In wetlands that cannot be appropriately stabilized, all construction equipment other than that needed to install the wetland crossing will use access roads located in upland areas. See FERC Plan and Procedures for additional details.

3 MATERIALS HANDLING AND DISPOSAL

3.1 General

Company's materials handling and disposal requirements must be implemented during construction of a project. Company's SPCC Plan, Environmental Procedure 380.201d, includes procedures for disposal of any soil or materials contaminated by a fuel or chemical spill.

Construction debris must be collected as needed and placed in solid waste storage containers to keep the project area tidy.

The Contractor will provide on-site sanitary facilities as needed for personnel, including inspectors and subcontractors. The facilities must be sited in an upland area away from wetlands, waterbodies, stormwater conveyances, curb and gutter, and storm sewers. It must be securely anchored, and it must be within secondary containment.

3.2 Hazardous Materials and Petroleum Products Management

The Contractor will provide the Company a list of petroleum products, hazardous materials and chemicals brought on-site and a copy of the SDS for each. No such material will be brought on-site without prior consent by the Company. The Contractor will retain each SDS on site in accordance with Company's Safety Procedure 110.180. The Contractor will make its SDSs available to the Company.

Petroleum products and potentially hazardous chemicals/materials on-site must be stored in accordance with Environmental Procedures 380.201d and 390.104.

3.3 Hazardous and Liquid Waste Disposal

If hazardous wastes are generated by the Contractor, the Contractor will follow Company's Environmental Procedures 390 series.

3.4 Non-Hazardous Solid Wastes

Construction debris must be collected as needed and placed in solid waste storage containers to keep the project area tidy. Contractor will provide adequate on-site containers with proper labels for secure storage of rubbish and wastes. Contractor will label waste containers, regardless of size. Non-biodegradable sediment controls left onsite after final stabilization are considered construction waste and are the responsibility of the Contractor to remove within 14 days of final stabilization.

3.4.1 Non-Combustible Wastes

Non-woody construction waste (e.g., trash, used filter bags, used silt fence, pallets, metal bindings, welding rods, epoxy coating, abrasive blasting waste, excess rock, excess drilling mud, and drill cuttings) will be removed from the right-of-way by Contractor and be disposed of in existing solid waste landfill/recycling facilities operating under a valid permit. Construction waste must be disposed of by Contractor according to applicable state and local requirements.

If desired, excess rock may be disposed of at an existing commercial facility, such as a gravel pit, provided Contractor obtains written permission from the facility and provides a copy of the permission to Company prior to disposal. If a landowner requests that excess rock be left on their property, the Contractor will notify the Company of the request. The Company, in its sole discretion, will determine whether such a request will be authorized. The Company's decision on the matter will be final. If authorization is granted, the Contractor will be responsible for ensuring rock is stored within the approved work area, but outside of the post-construction permanent right-of-way.

3.4.2 Chipping Procedures for Woody Vegetation

Non-merchantable timber, slash, and stumps may be chipped and used as mulch in upland areas, if approved by the landowner or land-managing agency. Contractor may request permission from Company to use wood chips as mulch, provided Contractor has obtained written permission from the landowner or land-managing agency. Company, in its sole discretion, will determine whether such a request will be authorized. Company's decision on the matter will be final.

If slash, brush, and timber generated during wetland clearing are to be chipped, the material must be removed from the wetland and chipped in an upland area, unless specifically authorized by project authorizations.

4 CLEARING, GRADING, AND TOPSOIL SEGREGATION

4.1.1 Noxious and Invasive Weeds

Contractor will follow all requirements of the state's noxious and invasive weed laws with regards to treatment and movement of noxious and invasive weeds located within the construction limits. Each state within Company's pipeline system issues a state noxious weed list.

The Contractor will provide clean equipment prior to entering new workspaces to reduce the potential for invasion or spread of undesirable or noxious vegetation. The EI will inspect tracked equipment to confirm the adequacy of cleaning and will not allow equipment to be brought on-site unless the inspection is satisfactory.

If purple loosestrife or other noxious weed is encountered in the approved work area at any time, equipment will be thoroughly cleaned as described above prior to exiting the area of purple loosestrife, even if cleaning must occur in a wetland or within 500 feet of a wetland or waterbody. In such cases, equipment may be cleaned within containment on the right-of-way, as approved by the EI. Soil and vegetative debris resulting from cleaning will be immediately collected and disposed of at a licensed facility, per state regulations and the project noxious weed management plan.

Contractor will adhere to all plant pest quarantine orders imposed by each respective state. Common requirements include, but are not limited to:

a. Untreated wood from areas known to have plant pest is prohibited from entering non-infested areas;

b. Movement of materials or equipment out of quarantine areas is prohibited without inspection and/or compliance agreements; and

c. Wood may not be offered as firewood or otherwise to an industry or individual without compliance agreements.

The Contractor will:

a. Dispose of quarantined wood in accordance with existing quarantine requirements;

b. Salvage topsoil in accordance with the FERC Plan and Procedures;

c. Where project phasing and/or exclusion areas and/or buffers have been identified, the Contractor will isolate those areas using temporary fence, and perform clearing and grubbing operations in a manner that will not damage or jeopardize the surrounding plant life and property; and

Contractor will prune branches for the following reasons, and only with DES approval:

a. For pedestrian, vehicle, and infrastructure clearance;

b. To reduce risk of branch failure; and

c. To improve a site line and sign visibility.

4.1.2 Quarantined Wood

Contractor will follow all species-specific quarantine regulation posted by the respective state agency. Contractor will not market quarantined trees to the wood-using industries or individuals without having a compliance agreement from the respective state agency. No wood with bark attached will be made available to the public for use as firewood from the quarantined area. Do not remove any part of the quarantined tree, including roots, outside of a quarantined county without fulfilling the requirements of a compliance agreement from the respective state agency. Contractor may chip quarantined wood through a chipping machine or tub grinder to create wood mulch for use within the construction limits, as allowed by state regulations.

Contractor will dispose of quarantined trees, brush, stumps, roots, and debris by chipping or tub grinding and using the mulch within the construction limits for erosion control, construction of exit pads or landscaping purposes. No mulch may be placed in wetland areas.

Contractor will dispose of stumps, roots, and debris from oak wilt infected oak trees by chipping or tub grinding and using the mulch within the construction limits for erosion control, construction of exit pads or landscaping purposes.

4.2 Grading and Topsoil Segregation

Contractor shall comply with all provisions of the FERC Plan and Procedures.

4.3 ***Excess Vegetation Removal**

Excess vegetation may require mowing or cutting prior to topsoil segregation. Crops and dense grass over 18 inches in height should be segregated and removed from the right of way as construction waste to avoid impeding revegetation efforts and anerobic breakdown within topsoil piles.*

5 SEDIMENT CONTROLS

Sediment control practices are designed to prevent or minimize loss of eroded soil at a site and/or discharges of sediment laden water into surface waters or stormwater conveyances. Sediment control practices may be constructed of materials such as silt fence, fiber logs, staked hay or straw bales, compacted earth (e.g., drivable berms across travel ways), sandbags, or other appropriate materials. The section has been developed based on the FERC Plan and Procedures and the NPDES regulations and additional, more stringent requirements associated with permit conditions or mitigations plans may be applicable based on the state. In this case, the most stringent requirement will apply.

Contractor will install temporary sediment barriers during clearing and grading activities. Temporary sediment barriers will be installed and maintained as directed by the EI at the following locations:

1) Across the entire width of the approved work area at approaches to waterbodies and at the base of slopes adjacent to wetlands and roads;

2) Along the edge of the approved work area where waterbodies and wetlands are bordering the approved work area;

3) Where necessary to contain spoil and sediment within the approved work area (e.g., on steep side slopes or in saturated wetlands);

4) At other locations as directed by the EI.

Sediment barriers located across the active portion of the work area may be removed during the day when work is being conducted but must be replaced each night or at the onset of inclement weather (e.g., rainstorm). Sediment barriers will be inspected daily in areas of active construction and repaired as needed throughout construction.

5.1.1.1 Winter Construction

*When construction will either extend into or be suspended through the winter months, contractor shall submit to Northern a winter construction plan in writing for approval prior to conducting work or demobilizing from the project in winter conditions. The winter construction plan should cover methods of erosion and sediment control to be employed, plan to address maintenance of the controls, snow removal, worker safety, and restoration of subsoil and topsoil to alleviate compaction and settlement. These methods must address the remaining scope of the project and must achieve environmental compliance in frozen conditions.

During frozen conditions, sediment controls and stabilization must be installed during active construction and prior to cessation of construction activities.* Contractor may establish a packed snow berm in areas with sufficient winter snow that will act as a temporary sediment barrier during construction. This temporary sediment barrier will be established and maintained as needed along the edge of the disturbed work areas, access roads, and extra work areas to prevent sediment runoff.

During frozen conditions, if the snow berms are ineffective or if sediment discharge off the right-of-way is observed, Contractor will attempt to install silt fence, staked straw bales and/or other types of sediment barrier in those areas to prevent further offsite sedimentation. Installation of silt fence can be accomplished using a ditch-witch trencher and backfilled with saturated organic soil that will freeze and anchor the silt fence to the wetland surface. Straw bales can be used alone or in conjunction with silt fence, following state-specific standards. These will be anchored to the ground with rebar. Contractor will attempt to retrieve the sediment, as practicable, without disturbing the surface of the approved work areas.

Temporary sediment barriers will remain in place until permanent vegetation has become successfully reestablished as determined by Company. Once permanent vegetation has become successfully reestablished, the barriers will be removed and disposed of as construction waste. During frozen conditions, remove temporary sediment barriers at the completion of construction only if the area will be inaccessible after spring thaw precluding proper retrieval of the barriers, and if so, approved by the EI.

5.2 Installation, Maintenance and Removal of Sediment Control Practices

5.2.1.1 Installation

1) Install sediment controls on all downgradient perimeters of the site and downgradient areas of the site that drain to any surface water, including curb and gutter systems. Contractors must locate sediment control practices **upgradient** of any buffer zones.
2) Contractors must install sediment control practices **before any upgradient land-disturbing activities begin** and must keep the sediment control practices in place and in functional condition until they establish permanent cover.
3) Contractors must provide silt fence or other effective sediment controls at the base of stockpiles on the downgradient perimeter.
4) The Contractor must preserve a **50-foot natural buffer** or, if a buffer is infeasible on the site, provide **redundant (double) perimeter sediment controls** when a surface water is located within 50 feet of the project's earth disturbances and stormwater flows to the surface water. {Natural buffers are not required adjacent to road ditches, judicial ditches, county ditches, stormwater conveyance channels, storm drain inlets, and sediment basins.} Larger buffer zones may be required but will be noted in the SWPPP.
5) When redundant sediment controls are required, the Contractor will install them at least **5 feet apart** unless otherwise noted on the SWPPP or directed by the on-site EI.
6) If downgradient sediment controls are overloaded, based on frequent failure or excessive maintenance requirements, contractors must install additional up-gradient sediment control practices or redundant BMPs to eliminate the overloading and amend the SWPPP to identify these additional practices as required.
7) Measures will be installed, maintained, and repaired per applicable permit conditions.

8) The contractor will recover any sediment lost from the project site, restore property to the pre-existing conditions for loss of sediment off the project, or both at no additional cost to the Company. If sediment is lost in a water of the state, applicable regulatory authorization must be obtained by the Company before removing the sediment.

5.2.1.2 Maintenance

1) All nonfunctional BMPs must be repaired, replaced, or supplemented immediately, but no later than 24 hours, after discovery unless a more stringent time frame is specified in site specific plans. All perimeter control devices, which have become **nonfunctional,** or **sediment has reached 1/2 of the height of the device** must be repaired, replaced or supplemented immediately, but no later than 24 hours, after discovery unless a more stringent time frame is specified in site specific plans.
2) Sediment tracked onto public roadways must be removed immediately.

5.2.1.3 Removal

1) Remove temporary sediment controls (unless biodegradable) after permanent restoration has been achieved. All removed materials become the property of the Contractor.
2) Remove the silt curtain upon completion of instream work. All instream work requirements still apply while removing silt curtains.
3) Remove sediment control logs upon permanent restoration. For compost logs, the outer shell material, if not biodegradable (i.e., jute), must be removed completely and contents of logs may be left in place and spread out over the ground to decay.

5.3 Sediment Control Practices

5.3.1 Vegetated Buffers

Incorporating an existing vegetated buffer along the perimeter of the site and upslope of structural perimeter controls provides an effective and inexpensive sediment control. Maintaining a buffer zone during clearing and grubbing operations may provide sediment controls prior to the installation of structural controls.

5.3.2 Sediment Control Log

Sediment control logs may be used as perimeter control, ditch checks, and as part of dewatering structures. Installation of the sediment control log is provided below by type and Table 5.2.2-1 provides the material specifications for the sediment control logs.

Table 5.2.2-1
Sediment Control Logs Material Specifications

Material	Material Specification	Netting	Diameter (inches)	Material make-up	Dry Weight	Biodegradable
Straw Logs	Refer to State Specification	Encased in photodegradable synthetic or natural netting with a service life from 6 months to 9 months and with openings ½ inch × ½ inch	8 to 9	Consisting of at least 80% of the fiber material at least 3 in long	2 to 4 lbs. per cu. ft.	No

Wood Fiber Logs	Refer to State Specification	Encased in a photodegradable synthetic or natural netting with a service life from 6 to 9 months and with openings ½ inch × ½ inch	6 to 8	Consisting of at least 80% of the fiber material at least 6 in long	1.4 lbs per cu. ft. to 5.7 lbs per cu. ft.	No
Wood Chip Logs	Refer to State Specification	Encased in a photodegradable synthetic or natural fiber casing with 1/8 to 3/8 openings with a service life from 12 months to 24 months.	8 to 10	NA	NA	Yes
Compost Logs	Refer to State Specification	Encased in photodegradable synthetic woven or natural fiber casing with 1/8 to 3/8 in. openings, with a target service life from 12 to 24 months.	7 to 9	30-40% compost/p60-70% - wood chip	NA	Yes
Rock Logs	Refer to State Specification	Encased in a geotextile material with a minimum grab tensile strength of 130 lb. ASTM D6818 and a minimum Mullen Burst Strength of 175 psi	4 to 6	NA	NA	No

5.3.2.1 Installation of Straw and Wood Fiber Logs

Place logs on smooth prepped soils and prepare a shallow, less than 1/4 of the total height of the log, trench for the sediment control log to be placed. Backfill and compact the upgrade side of the sediment control log with soil. Stake logs through the back half of the log at a 45-degree angle with the top of the stake pointed upstream. Stakes will be spaced every 2 feet. If using more than one sediment control log for length, overlap the ends 6 inches and stake both ends. See typical drawing Figure S-5B in Appendix B.

5.3.2.2 Wood Fiber, Wood Chip, Compost, and Rock Logs

Place logs on smooth, prepped soils or paved surfaces and ensure no gaps are between logs and soil or paved surface. Install logs along contours with ends turned up slope in a J-hook manner. Compost and wood chip logs are considered biodegradable if the netting is biodegradable. Contractor will need approval from the Company prior to onsite spreading of wood chips to ensure compliance with all applicable permits. See typical drawing Figure S-5B in Appendix B.

5.3.3 Ditch Checks

Ditch checks are practices placed in ditches and other stormwater conveyances designed to slow the flow of water.

If used as a ditch check without erosion control blanket: Follow installation above for sediment control log type Wood Fiber, Wood Chip, Compost, or Rock and place perpendicular to flow and in a crescent shape with ends facing upstream. Use logs with a center section of the ditch check one log diameter lower than the ends. Space stakes every 1 foot. Provide 2 stakes in a crisscross pattern at each location with the sediment control log.

If used as a ditch check with erosion control blankets: Install a wood fiber ECB as show in plan, at least one role width, and perpendicular to the ditch flow. Burry the leading edge in a trench 4 inches deep and 4 inches wide. Backfill and compact the trench with soil. Staple the ECB at spacing no greater than 1 foot on center. Place the Wood Fiber log without the trench, on top of the ECB. If using more than one sediment control log for length, overlap the ends 6 inches and stake both ends. See typical drawing Figure S-5B in Appendix B.

5.3.3.1 Anchoring

Provide wood stakes for straw and wood fiber logs with the following dimensions: 1 inch × 2 inches and 22 inches to 24 inches long with a pointed end.

5.3.3.2 Removal

Upon final stabilization of the right of way, the contractor will remove all sediment control logs. The exception are compost logs with biodegradable netting. If the netting is not biodegradable, it may be removed, and the compost left onsite to decompose.

5.3.4 Silt Fence

Silt fence is the most commonly used perimeter control. It can also be used as slope breakers and/or ditch checks in low flow areas. Four types of silt fence are presented below.

1) **Machine Sliced (MS)/ Hand Installed (HI)** high flow **silt fence**: consists of a woven geotextile fabric installed by machine or hand supported by wood posts and geotextile is attached using three staples. A typical installation Figure S-1 is provided in Appendix B.

2) **Machine Sliced (MS)/ Hand Installed (HI) wire backed silt fence**: consists of a woven geotextile fabric mesh fence fabric will be standard woven wire fence fabric installed by machine/hand and supported by steel backed by Wire posts and geotextile is attached using three zip ties. A typical installation Figure S-2 is provided in Appendix B.

3) **Super Duty (SD) silt fence:** consists of concrete jersey barriers with fabric wrapped around the front face of the barrier. The Contractor may provide woven or non-woven geotextile fabric or poly/poly-reinforced sheeting.

Silt Fence Material Specifications

Table 5.2.4-1 provides the material specifications for the silt fence.

Table 5.2.4-1
Silt Fence Material Specifications

Silt Fence Type [a]	Width (inches)	Grab Tensile (machine direction), lb.	Apparent Opening Size	Puncture Strength (ASTM D 4833)	Maximum Permittivity (ASTM D 4491)	Flow Rates (gpm/sq. ft)
Machine Sliced /Hand Installed (MS/HI), high flow geotextile [b]	36	130	No. 30 sieve	NA	1.0 s−1	100
Wire backed silt fence	36	NA	No. 30 sieve	NA	NA	100
Super Duty (SD), woven or non-woven geotextile [c]	36	100	No. 30 sieve	NA	NA	NA

[a] UV Stability 500h must be 70% and meet ASTM D 4355.
[b] Provide MS, HI woven geotextile with monofilament in both directions. Do not make substitutions.
[c] The Contractor may use poly/poly-reinforced sheeting with a thickness of at least 6 mil or an equivalent.

A. Fasteners

Provide fasteners with a tensile strength of at least 50 lbs. Use a minimum of three staples to fasten geotextile to wooden posts on MS/HI applications. Use wire ties or plastic ties to fasten geotextile to anchor points on SD applications.

B. Fabric Requirements:

1) Provide geotextiles from Table 5.2.4-1

2) Provide fabric meeting the following requirements and characteristics:

   a. Uniform in texture

   b. Uniform in appearance

   c. Contains no defects, flaws, or tears affecting the physical properties

   d. Contains UV inhibitors and stabilizers providing a minimum service life of at least 2 years during outdoor exposure, and meets the requirements specified in the table 5.2.4-1

5.3.4.1 Supports

Company only allows hardwood posts which is a variance from Department of Transportation specifications, see Table 5.2.4-2 below. However, steel t-posts may be required in manufacturer's specifications for wire backed silt fence. In this case manufacturer's specifications will be followed.

Table 5.2.4-2 Silt Fence Post Requirements	
Characteristic	**Requirement**
Type	Hardwood
Weight	≥ 2 in × 2 in
Length	≥ 4.0 ft
Embedment	≥ 18 in
Post Spacing	<5.0 ft

5.3.4.2 Installation of Silt Fence

A trench is excavated, or machine sliced to a depth between 6 inches (HI) or 8 to 12 inches (MS/PA). The stakes are installed on the downslope side from the site and are embedded to a minimum depth of 2 feet. The excavated material is backfilled over the geotextile fabric and compacted. Spacing of stakes is typically 5-foot minimum and 6-foot maximum.

5.3.4.3 Installation of Portable Precast Concrete Jersey Barriers (Super Duty)

Place the bottom edge of the geotextile fabric 4 to 6 inches under the face of the median barrier. Place barriers end to end to minimize any gap in the barrier. The geotextile fabric should be attached to the face of the barrier with wire or plastic zip ties and secured to each cable ring on the barrier.

5.3.5 Flotation Silt Curtain

Flotation silt curtain may be used as a primary sediment control, only while in-water work is occurring. Once work within the water feature is completed, perimeter control should be installed on the adjacent upland to keep material out of the water. Flotation silt curtain is not considered a sediment control once in-water work is completed. It can be used in moving or still water and is used to contain suspended sediment and floating debris in open water and must meet the following requirements and characteristics:

a. Made of fabric fastened to a flotation carrier

b. Weighted along the bottom edge

c. Depth as shown on the plans and typical Figure S-3 (Appendix B) and referring to the dimension of the curtain fabric extending below the flotation portion of the curtain

d. Material must be disinfected prior to coming onsite and must be disinfected and dried prior to removing the material offsite

e. If the surface water has invasive species and the material is moved offsite for disinfection a state transport permit may be required

Material specifications for flotation silt curtain is provided in Table 5.2.5-1 below.

Table 5.2.5-1
Flotation Silt Curtain Requirements

Characteristic	Type	
	Light Duty	Heavy Duty
Curtain fabric materials type	Impermeable, vinyl-nylon laminate	Impermeable, vinyl-coated nylon
Weight (oz per sq. yd)	18	0.22
Grab tensile strength, lbs	300	500
Depth of curtain [a]	2 ft – 10 ft	2ft – 10 ft
Flotation (in)	6 diameter marine quality expanded polystyrene	8 diameter marine quality expanded polystyrene
Net buoyancy, lb. per ft	13	20
Top load carrying components	Fabric only	Fabric plus 5/16 in [8 mm] galvanized steel cable at least 9,800 lb. break strength
Ballast	≥0.7 lb per ft [1.0 kg per m] enclosed ¼ in [6 mm] galvanized chain	≥1.1 lb per ft [1.6 kg per m] enclosed 5/16 in [8 mm] galvanized chain
Connections between Sections	Laced grommets	Aluminum collar reinforced quick disconnects

[a] Minimum average roll value meeting the requirements of ASTM D 4632.

5.3.6 Filter Berms

Filter berms are an economical option for sediment control; typically constructed from materials readily available on site. Filter berms are used as perimeter control, slope breakers and ditch checks.

5.3.6.1 Filter Berms Material Specification

Table 5.2.6-1 below provides the material and construction specifications for each of the four types presented which include compost, slash mulch, topsoil, and rock. For high flow or high velocity areas, rock is the strongest of the options.

Table 5.2.6-1
Filter Berm Specifications

Type	Material	Shape and Base	Height	Side Slopes
Compost	Refer to State Specification	Trapezoidal shape with 5 ft. base width	Min. height 2 ft. in loose volume, and	2:1 (V:H) side slopes
Slash Mulch	Refer to State Specification	Trapezoidal shape with 5 ft. base width	2:1 (V:H) side slopes	2:1 (V:H) side slopes
Topsoil	Refer to State Specification	Trapezoid shape with 7 ft. base width	Min. height 2 ft.	2:1 (V:H) side slopes
Type 4	Refer to State Specification	Trapezoid shape with 5 ft. base width	Max. Height 2.0 ft., and	2:1 (V:H) side slopes

5.3.6.2 Installation of Filter Berms

For use as perimeter control, or a slope breaker, filter berms should be installed along the contour of the slope and perpendicular to sheet flow. “J-hooks” should be included at the beginning and end of the berm. Refer to typical Figure ERO-13, Appendix B.

As a ditch check, in very low flow areas, slash mulch may be used, if allowed by the applicable regulatory agency. Neither compost nor topsoil should be used as a ditch check.

5.3.7 Temporary Down Drains

Temporary down drains may be used to convey concentrated runoff down the face of a slope to reduce the potential for erosion on the slope.

5.3.7.1 Installation of a Temporary Down Drain

Temporary down drains are effective at isolating overland flow on disturbed slopes. Provide a minimum slope on pipe of 3%.

5.3.7.2 Temporary Down Drain Material Specification

Table 5.2.7-1 below provides the suggested pipe diameter based on the drainage area. The maximum allowable drainage area is 5 acres per slope drain.

Table 5.2.7-1
Temporary Down Drains
Slope Drain Sizing

Drainage Area, acres	Pipe Diameter, inches
0-0.5	12
>0.5-1.5	18
>1.5-2.5	21
>2.5-3.5	24

At the top of the slope, prepare a channel to direct flow into the mouth of the pipe (e.g., earthen dike, sandbags, curb). Provide a dike made of compacted Class V, dirt, or sandbags to channel the flow to the temporary slope drain. The top of the dike should be 1 foot higher than the top of the inlet pipe. The pipe should be anchored along the slope with the spacing no greater than 8 feet apart. A watertight connection should be used to attach the flared end section to the inlet end of drainpipe. Extend the pipe beyond the toe of slope and terminate in a 4-foot level section where practicable. Install a dewatering structure at the base to collect the water leaving the pipe. Refer to typical Figure S-7, Appendix B.

5.3.8 Storm Drain Inlet Protection

Inlet protection devices are used as a preventative measure from allowing sediment-laden water from entering a storm drain. The inlet protection device must meet the following criteria:

1) All inlet devices must have an emergency overflow or bypass feature equivalent in size to the grate opening size,
2) Devices may include using rock logs (with local governmental approval); or
3) Filtering devices housed inside the catch basin (drop-in prefabricated units).

5.3.8.1 Installation of a Storm Drain Inlet Protection

Inlet protection must be installed prior to disturbing soils that will drain directly to the inlet. The protection device should fit the inlet properly with no gaps. Refer to typical Figure ERO-16, Appendix B.

5.3.8.2 Maintenance of Storm Drain Inlet Protection

1) Inspect and clean out devices regularly.
2) Inlet protection may be removed for a particular inlet if a specific safety concern (e.g., freeze or flood event) has been identified. They may not be pulled during winter construction unless approved by the appropriate stormwater regulatory agency.

5.3.9 Triangular Silt Dikes

Triangular Silt Dikes (TSD) are an alternative sediment control measure for use in site-specific conditions. They consist of urethane foam and geotextile fabric and are typically designed with protective aprons on one or both sides of the barrier. They are typically used in areas where the staking of materials into surfaces (e.g., pavement) is not possible. They are reusable, and easily relocated and installed. **Per manufacturers specifications, these are not a drivable barrier.** These must be used and installed per manufacturer's specifications. The TSD typically comes in three sizes and one option with steel mesh as indicated in Table 5.2.9-1 below.

Table 5.2.9-1
Triangular Silt Dike Use and Specifications

Size	Use	Design
10-inch foam	Ditch check dams Diversion Dikes Drop Inlet Protection Temporary Ditch Liner Stream & Pond Protection	Designed to be used in multiple configurations. Protective aprons on both sides of the barrier with one sewn seam (on the front upstream side).
8-inch foam	Curb Protection Continuous Barrier Diversion Dikes Drop Inlet Protection Stream & Pond Protection Installations on Concrete and Asphalt	Typically designed for smaller development areas where vehicle traffic is greater. Protective aprons on both sides and has the front and back apron sewn into the barrier. With both aprons sewn, it allows this product to be easily installed on concrete and asphalt.
5-inch foam	Along Curbs in Developments Diversion Dikes Inlet Protection Continuous Barrier Small Surface Drainage Areas Roadway Shoulder Protection Installations on Concrete and Asphalt	Typically used in areas with lower runoff. designed It has a protective apron on the front or upstream side of the barrier and no protective apron on the backside or down- stream side. Backside should be installed along curbs or on hard surfaces where overtopping the barrier will not cause erosion on the backside.
Reinforced Steel	Ditch check dams Diversion Dikes Drop Inlet Protection Temporary Ditch Liner Stream & Pond Protection	Can be used where drainage are is limited to 0.25 acre per 100 linear feet of dike. Filter dike is a self-contained silt fence consisting of filter fabric wrapped around welded wire fabric and shaped into a triangular cross section.

5.3.9.1 Installation of Triangular Silt Dikes

Installation method will vary based on the size of the silt dike, the proposed use, and the manufacturer of the materials. The Contractor shall use and install this product in compliance with the manufacturer's specifications. Refer to typical Figure S-5A, Appendix B.

5.3.10 Construction Exit Controls

All construction exits onto paved surfaces must be stabilized with appropriate controls to minimize vehicle tracking of sediment from the project onto paved surfaces. The Contractor will:

1) Maintain safe and accessible conditions at all road crossings and access points during construction.
2) Minimize the use of tracked equipment on public roadways. Remove any soil or gravel spilled or tracked onto roadways immediately to maintain safe road conditions. Repair any damages to roadway surfaces, shoulders, and bar ditches.

5.3.10.1 Materials for Construction Exit Controls

There are a variety of acceptable materials for use in construction exit controls. The appropriate material will be based on the project site conditions, soil type, vehicle size, amount of vehicle traffic, time of year, and duration of use. The vehicle tracking pad should be at least 50-foot-long but longer pads may be required to adequately clean tires. All materials must be removed upon achieving final stabilization of the project.

Examples of acceptable materials for construction exit controls include the following:

- Crushed rock
- Slash mulch
- Temporary paving
- Timber mats
- Floating reusable mats
- Rumble pad
- Wheel wash-off

5.3.10.2 Installation of Construction Exit Controls

1) If crushed stone access pads are used place the stone on synthetic fabric to facilitate removal.
2) The size and depth of the aggregate will be dependent on the project site conditions. In general, aggregate used is 1.5 to 3 inches in size and placed in a layer approximately 6 inches thick. However, coarser aggregate materials (2 to 6 inches in size) may be more effective.
3) A sediment control measure may be required at the entrance to the construction exit, in addition to the stabilization measure. Optional sediment controls may include a small rock berm, compost log, or other sediment control designed as a drivable control and approved by the Company on a project specific basis. Triangular silt dikes are not a drivable sediment control.
4) Refer to Typical Figure ERO-12 in Appendix B.

6 EROSION CONTROLS

Erosion control practices are designed to reduce the erosion potential of the soil as a result of construction activities. Erosion controls are key to minimizing the amount of sediment produced from a site. Erosion controls may consist of both temporary and permanent measures. Temporary measures are required throughout construction and are subject to specific time frames required by permits or construction plans. A good erosion control installation begins with appropriate site preparation to provide good contact with the soil and the erosion control measures.

Temporary cover is the most efficient means of erosion control and is typically accomplished with the application of a temporary seed mix and disk-anchored mulch. This section has been developed based on the FERC Plan and Procedures and the state NPDES regulations. Additional, more stringent requirements associated with permit conditions or mitigations plans may be applicable. In this case, the most stringent requirement will apply.

Prior to the installation of temporary or permanent erosion control measures, the Contractor will complete site preparation by grading the area to remove clods of soil greater than 3 inches diameter and any ruts, erosion rills, or washouts that are deeper than 3 inches.

6.1 Installation and Maintenance of Erosion Control Practices

6.1.1.1 Installation

1) Temporary erosion controls must be properly maintained throughout construction (on a daily basis) and reinstalled as necessary (such as after backfilling of the trench) until replaced by permanent erosion controls or restoration is complete.
2) Project plans and permits may require that disturbance on steep slopes must be minimized, when steep slopes must be disturbed, contractors must use techniques such as phasing and stabilization practices designed for steep slopes (e.g., slope draining and terracing). **Refer to SWPPP.**
3) Project plans and permits may require that all exposed soil areas, including stockpiles must be stabilized. Stabilization must be **initiated immediately** to limit soil erosion when construction activity has **permanently or temporarily ceased on any portion of the site** and **will not resume for a period exceeding 14 calendar days. Timelines may vary from state to state, refer to SWPPP.**
4) Stabilization must be completed **no later than 14 calendar days** after the construction activity has ceased. Stabilization is not required on constructed base components of roads, parking lots and similar surfaces. Stabilization is not required on temporary stockpiles without significant silt, clay, or organic components (e.g., clean aggregate stockpiles, demolition concrete stockpiles, sand stockpiles) but contractors must provide sediment controls at the base of the stockpile. **Timelines may vary from state to state, refer to SWPPP.**
5) Contractors must stabilize the **normal wetted perimeter of the last 200 linear feet** of temporary or permanent drainage ditches or swales that drain water from the site **within 24 hours** after connecting to a surface water or property edge. Contractors must complete stabilization of remaining portions of temporary or permanent ditches or swales within **14**

calendar days after connecting to a surface water or property edge and construction in that portion of the ditch temporarily or permanently ceases. **Timelines may vary from state to state, refer to SWPPP.**

6) Contractors must **not** use mulch, hydromulch, tackifier, polyacrylamide or similar erosion prevention practices within any portion of the normal wetted perimeter of a temporary or **permanent drainage ditch or swale section with a continuous slope of greater than 2 percent**. **Requirements may vary from state to state, refer to SWPPP.**
7) The Contractor must not disturb more land (i.e., phasing) than can be effectively inspected and maintained in accordance with the NPDES permit or other applicable state or federal permits.
8) Install erosion control fabric or a functional equivalent on waterbody banks at the time of final bank recontouring. Do not use synthetic monofilament mesh/netted erosion control materials in areas designated as sensitive wildlife habitat unless the product is specifically designed to minimize harm to wildlife. Anchor erosion control fabric with staples or other appropriate devices. **Requirements may vary from state to state, refer to SWPPP.**
9) Contractors must provide silt fence or other effective sediment controls at the base of stockpiles on the downgradient perimeter.

6.1.1.2 Maintenance

1) All nonfunctional BMPs must be repaired, replaced, or supplemented immediately, but no later than **24 hours of discovery unless another time frame is specified** in the SWPPP. **Requirements may vary from state to state, refer to SWPPP.**
2) Sediment tracked onto public roadways must be removed immediately. **Requirements may vary from state to state, refer to SWPPP.**

6.2 Erosion Control Practices

6.2.1 Horizontal Slope Grading

Horizontal slope grading or cat tracking reduces erosion potential by creating horizontal groves on exposed slopes. This is achieved by driving tracked equipment vertically up and down the slope, resulting in the tracks being oriented horizontally. This provides support for mulch and seed to stay in place during rain events.

6.2.1.1 Implementation of Horizontal Slope Grading

On all slopes 1:3 and greater with a length of 50 feet or more, tracking may be done at the end of each day the slope is worked. This is not as efficient on clay soils. Refer to typical Figure E-1, Appendix B.

6.2.2 Temporary Slope Breakers

Temporary slope breakers may be used to reduce runoff velocity and divert water off the construction right of way.

6.2.2.1 Temporary Slope Breakers Material Specifications

Temporary slope breakers may be constructed using soil, silt fence, staked hay or straw bales or sandbags.

6.2.2.2 Installation of Temporary Slope Breakers

Temporary slope breakers may be installed, as necessary, on all disturbed areas to avoid excessive erosion by slowing overland flow and diverting it to well-vegetated areas.

1) Temporary slope breakers must be installed on slopes greater than 5 percent where the base of the slope is less than 50 feet from waterbodies, wetlands, and road crossings. The following space is a guidance, however, closer spacing will be used if necessary.

Slope %	Spacing (feet)
5 – 15	300
>15 – 30	200
>30	100

2) Outfalls will be directed to a stable, well vegetated area or a constructed energy dissipation device at the end of the slope breaker and off the construction right of way.

3) Temporary slope breaker outfalls will be positioned to prevent sediment discharge into wetlands, waterbodies, or other sensitive environmental resource areas.

6.2.3 Mulch

Mulch is used as both a temporary and permanent erosion control measure. Temporary mulch follows the same requirements as permanent mulch, although the application timing is different. Temporary mulch is typically used to stabilize spoil piles, construction areas where construction activities have ceased for 14 days or more, or within 7 days if within a mile of an impaired or special water. Mulch shall be applied as soon as construction ceases with no plan to resume construction, but no later than the seventh or fourteenth day as required under the FERC Plan, or the project permits.

Mulch may consist of weed-free straw or hay, slash mulch, or prairie hay.

6.2.3.1 Mulch Material Specifications

Table 6.2.3-1 below identifies four types of mulch, acceptable for use on Company projects.

Table 6.2.3-1
Mulch Material Specifications

Type	Material	Conditions	Application Rate
Certified Noxious weed-free Straw	Clean agricultural grain straw (wheat, oats, rye, barley) or clean straw harvested from native grass production fields.	1.Certified as noxious-weed free with inspection tag. 2.Free of cattail, reed canary grass, birds-foot trefoil, and crown vetch. 3. Bales are in an air-dried condition at the time of delivery.	2 Tons per acre, unless otherwise noted in construction plans.

Table 6.2.3-1
Mulch Material Specifications

Type	Material	Conditions	Application Rate
Certified Noxious weed-free Straw- with Overspray	Clean agricultural grain straw (wheat, oats, rye, barley) or clean straw harvested from native grass production fields. Overspray with hydraulic fiber matrix	1.Certified as noxious-weed free with inspection tag. 2.Free of cattail, reed canary grass, birds-foot trefoil, and crown vetch. 3. Bales are in an air-dried condition at the time of delivery. 4. Hydraulic fiber matrix will be used to overspray straw in lieu of disc anchoring.	1.5 Tons per acre with overspray of hydraulic fiber matrix at 750 lbs per acre.
Slash Mulch	Raw wood slash from hard or soft timber harvested during clearing and grubbing operations on the project.	1.Raw wood slash from hard or soft timber harvested during clearing and grubbing operations on the project or hauled in; 2.Maximum length of individual pieces will not exceed 20 in. 3.Maximum width of individual pieces will not exceed 2 in. 4. Must come from an area outside any quarantine area.	Project specific
Prairie hay	Prairie hay	1.Has not been thrashed to remove seeds so it consists of directly bailed material. 2.Has not been thrashed to remove seeds so it consists of directly bailed material. 3.Free of noxious weeds as defined by MNDA. 4.Free of cattail, reed canary grass, birds-foot trefoil, and crown vetch.	2 Tons per Acre

6.2.3.2 Application Requirements

1) Apply mulch on all slopes (except in cultivated cropland) concurrent with or immediately after seeding, where necessary to stabilize the soil surface and to reduce wind and water erosion. Spread mulch uniformly over the area to cover at least 90 percent of the ground surface at a rate of 2 tons/acre of straw or its equivalent, unless the local soil conservation authority, landowner, or land managing agency approves otherwise in writing.
2) Mulch all disturbed upland areas (except cultivated cropland) before seeding if:

    a. final grading and installation of permanent erosion control measures will not be completed in an area within 20 days after the trench in that area is backfilled (10 days in residential areas), as required in section V.A.1 of the FERC Plan; or
    b. construction or restoration activity is interrupted for extended periods, such as when seeding cannot be completed due to seeding period restrictions.

3) If mulching before seeding, increase mulch application on all slopes within 100 feet of waterbodies and wetlands to a rate of 3 tons/acre of straw or equivalent.

4) If wood chips are used as mulch, do not use more than 1 ton/acre, and add the equivalent of 11 lbs/acre available nitrogen (at least 50 percent of which is slow release).

6.2.3.3 Installation of Mulch Materials

1) Apply mulch material at a rate which provides approximately 90 percent uniform distribution over all exposed soils. Mulch shall be reapplied any time the combined coverage of non-nuisance vegetation and mulch falls below 70 percent.
2) Even application will be completed, where too little or too much has been applied, re-mulch area or remove the excess coverage.
3) Do not operate mulch-blowing equipment on slopes steeper than 1:2.5 (V:H) on slopes where rutting will occur or where wind velocities are greater than 15 miles per hour.

6.2.3.3.1 Straw Mulch/Prairie Hay

1) Disk anchor immediately after placement unless otherwise approved.
2) Reduce application rate and overspray with tackifier in lieu of disk anchoring.

6.2.3.4 Winter Application

1) Place mulch on bare frozen ground.
2) At temperatures above 20 degrees F., apply mulch at a reduced rated of 1.5 tons per acre and overspray with a natural tackifier or hydraulic fiber matrix in lieu of disc anchoring.
3) At temperatures below 20 degrees F., delay mulching if possible until ground is snow covered, perform mulching over the snow and crimp in with tracked equipment.

6.2.4 Erosion Control Blankets

Erosion control blankets are used to control erosion, aid the establishment of vegetation, reinforce vegetation, and temporarily reinforce slopes, ditch bottoms, and shorelines. Blanket materials must provide netting opening dimensions large enough to germinate plants, reduce animal entanglement, and keep fill material intact.

Erosion control blankets are typically used wherever mulch would be ineffective, including but not limited to; slopes steeper than 1:3, areas where the mulch would blow away and areas of concentrated water flows (e.g., ditch bottoms or banks). All slopes requiring revegetation with a slope of greater than 15% must be stabilized with either an erosion control blanket or hydraulically applied bonded fiber matrix product per manufacturers specifications. The preferred method is to utilize appropriate hydraulically applied erosion control products, as detailed in Section 6.2.5.

Erosion control blankets are comprised of a fill material and netting or stitching and have a wide range of target service life.

6.2.4.1 Application of Erosion Control Blankets

a. **Type 1** – Flat areas, very low flow ditch bottoms.
b. **Type 2** – Moderate slopes, ditch bottoms less than 3% grade.
c. **Type 3** – Steep slopes; higher flowing ditches up to 4% grade.
d. **Type 4** – Steeper slopes and higher flowing ditch bottoms.

6.2.4.2 Erosion Control Blanket Material Specification

Table 6.2.4-1 identifies four categories of erosion control blankets authorized for Company projects.

Table 6.2.4-1
Erosion Control Blanket Material Specifications

		Type 1		Type 2		Type 3		Type 4	
		Wood Cellulose	Wood Fiber	Straw	Wood Fiber	Straw-Coconut	Wood Fiber	Straw-Coconut	Wood Fiber
Target Service Life		**< 3 months**	**< 3 months**	**1 growing season**	**1 growing season**	**2 years**	**2 years**	**3 years**	**3 years**
Fill	Fiber Length	80% > 0.5 in.	80% > 6 in.	80% > 3 in.	80% > 6 in.	80% > 3 in.	80% > 6 in.	80% > 3 in.	80% > 6 in.
	Material	100% wood cellulose	100% Excelsior	100% Straw	100% Excelsior	70% Straw 30% Coconut	100% Excelsior	70% Straw 30% Coconut	100% Excelsior
Netting/ Stitching	Location	1S	Stitching only	2S	2S	2S	2S	3S	3S
	Material	Degradable	Degradable/Glue	Degradable/ Synthetic or Natural	Degradable/ Synthetic or Natural	Degradable/ Synthetic or Natural	Degradable /Synthetic or Natural	Black UV Stabilized polypropylene	Black UV Stabilized polypropylene

1S: Netting on one side, **2S**: Netting on 2 sides, **3S**: Netting forms 3-idmensional matrix

Table 6.2.4-2 identifies the staples/anchors for use with the erosion control blankets.

Table 6.2.4-2
Erosion Control Blanket Anchors

Blanket Category	Materials	Type	Min. Length
Type 1	Biodegradable	Stake	5 in.
Type 2 and 3	Steel wire	11 Gauge	6 in.
Type 4	Steel wire	11 Gauge	8 in.

6.2.4.3 Installation of Erosion Control Blankets

1) Complete site grading to ensure that the soil surface is free of soil clods 3-inches or greater and/or ruts 3-inches or greater.
2) Blankets should be installed flat and parallel to the direction of water flow. If the blanket has netting on 2 sides, place the side with the majority of the stitching on the bottom.
3) The uphill edge of the blanket must be buried and stapled into a 6-inch-deep by 6-inch-wide check slot or glued in place. The soil should be tamped back over the check slot.
4) Shingle and/or overlap the edges parallel to the water flow by at least 4 inches. Edges perpendicular to water flow should overlap by 7 inches.
5) Staple pattern should be based on the steepness of the slope or the ditch bottom. Follow the manufacturer's recommendations for staple installation.
6) The blanket should be installed within 24 hours of seeding.
7) Refer to typical installation Figures E-2A and E-2B in Appendix B.

6.2.4.4 Winter Stabilization

1) Blankets may be used for winter stabilization. Remove the snow from the area prior to placing the blanket and use appropriate anchors.

6.2.5 Hydraulic Erosion Control Products

Hydraulic erosion control products are hydraulically applied tackifiers (glue) or mulch materials with a tackifier added. These are comprised of a tackifier, a hydraulic matrix, and are applied using a water stream. Temporary or permanent seed mixes may be included in the matrix or applied prior to the matrix. These are used for areas where equipment cannot easily access (spoil piles), areas of steep slopes but should never be used in areas with concentrated water flows. All slopes requiring revegetation with a slope of greater than 15% must be stabilized with either an erosion control blanket or hydraulically applied bonded fiber matrix product per manufacturers specifications. Hydromulch may also be utilized for spoil pile stabilization and is preferred because it is less likely to require reapplication. The preferred method is to utilize appropriate hydraulically applied bonded fiber matrix or reinforced fiber matrix products, as detailed below.

6.2.5.1 Hydraulic Erosion Control Products Material Specification

Table 6.2.5-1 below provides the material specifications for approved hydraulic erosion control products.

Table 6.2.5-1
Hydraulic Erosion Control Products

Type	Matrix	Application	Performance Time Frame	Application Rate
Natural Tackifier	Water soluble natural proteins, vegetable gums, guar gums, starch, psyllium, or a water-soluble blend of hydrophilic polymers, sticking aids or other gums	1. Used as overspray with straw mulch. 2. Combined with matrices below. 3. Do not apply within 24 hours of a rain event or freeze.	Provides erosion control performance for no greater than 3 months	Per Manufacturers specifications.
Synthetic tackifier	Organic, biodegradable, nonpolluting, non-toxic materials, water soluble, remains flexible, does not inhibit water infiltration	1. May be used as overspray or part of matrices below. 2. Cures within 48 hours.	Provides erosion control performance for no greater than 18 months.	Per Manufacturers specifications.
Hydromulch	Blend of shredded wood paper fibers, natural fibers, or both along with 2.5-5% tackifier by weight.	1. Used as temporary cover on steep slopes. 2. Applied with or without seed. 3. Can be used as permanent mulch in flat areas without concentrated flow.	Functional for up to 3 months.	Per Manufacturers specifications (typically 2,500 lbs/acre)
Bonded Fiber Matrix (BFM)	Composed of wood or wood byproducts. Contains 10% blended hydrocolloid crosslinked polymers by volume and up to 2% fertilizer by volume.	1. Primarily used on inaccessible steep slopes. 2. Seed should be applied before the application of BFM.	Functional at least 6 months	Per Manufacturers specifications. (Typically, 3,500 lbs/acre)

Table 6.2.5-1 Hydraulic Erosion Control Products				
Type	**Matrix**	**Application**	**Performance Time Frame**	**Application Rate**
	Binder and crosslinked polymers do not dissolve or disperse upon rewetting	3. Applied in two stages, allow first stage to dewater before applying second.		
Reinforced Fiber Matrix (RFM)	Defibrated organic fibers, cross-linked insoluble or linear hydro-colloidal tackifiers, reinforcing natural or synthetic fibers.	1. Cure time is within 2 hours.	Functional for at least 12 months.	Per Manufacturers specifications (typically 3,900 lbs/acre)

6.2.5.2 Application of Hydraulic Erosion Control Products

1) Application of this material should be 100% ground coverage, with no shadowing visible.
2) Application should not be made within 24 hours of a rain event or freeze.
3) Apply seed per manufacturer's recommendation. If seed is applied with the hydraulic product, an agitator will be used to maintain the seed in the material stream for even application.
4) Do not apply in water bearing soils or by itself in ditch bottoms carrying concentrated flows.
5) Contractor will apply per the manufacturer's specification.

6.2.6 Poly Sheeting and Geotextile

Poly sheeting and geotextile may be used as an erosion prevention method to cover exposed soils. It is typically used to cover stockpiles when the establishment of vegetation on the stockpile is not preferred. Poly sheeting may also be used as a cover on potentially contaminated soil piles.

6.2.6.1 Poly Sheeting and Geotextile Material Specification

Table 6.2.6-1 below provides the material specifications for approved hydraulic erosion control products. Refer to typical Figures ERO-17a and ERO-17b, Appendix B.

Table 6.2.6-1 Poly Sheeting and Geotextile Material for Stockpile Coverage			
Type	**Material**	**Targeted Lifespan**	**Acceptable Anchors**
Poly Sheeting	Must be at least 6 mil. thick and may be composed of either reinforced polyethylene sheeting or reinforced polyester tarps.	6 months	No-puncture type anchor weights, sandbags with cords, chain link fence, metal posts, wood. Stockpiles must have perimeter control in addition to cover.
Geotextile Fabric	Should meet requirements under AASHTO M-288-06 for Class 3 Stabilization and Separation.	NA	No-puncture type anchor weights, sandbags with cords, chain link fence, metal posts, wood. Stockpiles must have perimeter control in addition to cover.

6.2.6.2 Installation of Poly Sheeting and Geotextile

1) Cover exposed soil with poly sheeting or geotextile fabric.
2) Secure material tightly in place using an anchoring system.
3) If applicable, trench material at the top of slope.
4) Provide a water diversion to direct water away from the stockpile.
5) Install perimeter controls around stockpile.

6.2.7 Rapid Stabilization

Rapid stabilization measures, as identified by the Department of Transportation, are optional materials to be used to temporarily stabilize an area quickly. Do not use these measures in wetlands. Optional measures are provided in Table 6.2.7-1 below. Please note the appropriate measure should be selected based on site conditions and agency requirements. Variations to the seed mixes may be required based on site-specific conditions and timing.

Table 6.2.7-1
Rapid Stabilization

Method	Materials
1	Straw mulch placed at a rate of 2 ton per acre with disc anchoring.
2	Straw mulch placed at a rate of 1.5 ton per acre. Hydromulch, placed at a rate of 750 lbs per acre.
3	Hydromulch, placed at 330 lb. per 1000 gal. of slurry mix. Seed mixture 22-111 placed at a rate of 10 lb. per 1,000 gal. of slurry mix. Type 3 slow-release fertilizer 10-10-10 placed at a rate of 50 lb. per 1000 gal. of slurry mix. Water placed at a rate of 875 gal per 1,000 gal of slurry mix. Apply mixture at a rate of 6000 gal per acre.
4	Natural net erosion control blanket. Seed mixture 22-111 placed at a rate of 2 lb. per 100 sq. yd. Type 3 Slow-Release Fertilizer 10-10-10 placed at a rate of 8 lb. per 100 sq. yd.
5	Rip Rap Class II Geotextile Type III

7 WATER MANAGEMENT, TRENCHING AND EXCAVATION

7.1 Construction Dewatering

Dewatering may be required at construction excavations to remove accumulated stormwater or groundwater. Regulation of dewatering activities may vary from state to state and project specific documents will be reviewed to determine if more restrictive conditions apply.

1) Dewatering may occur through pumping water out of a trench or pumping water using well points to lower the ground water table. Dewatering is also a state regulated activity requiring a permit. Specific dewatering requirements, such as measuring and recording water volumes, will be provided in project authorizations.
2) Intake hoses will be raised above the bottom of the excavation to avoid the uptake of sediments from the excavation.
3) Surface water pump intakes must be screened to prevent fish from being drawn into the system.

4) All equipment used within surface waters must be free of prohibited invasive species and aquatic plants prior to be transporting into or within the site.
5) All materials used in surface waters must be decontaminated prior to leaving the site and/or if transported for offsite decontamination, a transport permit may be required.
6) Each installation will be equipped with a flow meter and the actual amount of water withdrawn will be recorded and reported per the state-specific requirements.
7) Suspension of appropriations may be required during periods of low flow; refer to project specific documentation.
8) Surface water appropriations will be sampled at the time of appropriation.

7.1.1.1 Dewatering Procedures

During trench dewatering, Contractor will suspend the intake hose above the bottom of the trench to minimize sediment uptake. Water will be discharged through a dewatering structure into a stable, well vegetated upland area at least 100 feet from wetlands and waterbodies. Trench discharge containing high sediment content must not be allowed to flow into any wetland, waterbody, ditch, or stormwater conveyance. Contractor will monitor dewatering operations to ensure that discharge rates and sediment loads do not exceed the capacity of the dewatering devices. If filter bags are used, one filter bag is required per dewatering pump. Sediment trapped by dewatering devices may be worked into the subsoil of an upland area or disposed of with the spent dewatering device at an appropriate facility. Operation and refueling of dewatering pumps will also be accomplished in accordance with Company's SPCC Plan.

Typically, water discharges will be made onto the non-working side of the Company's right-of-way and confined to the approved work area. If filtering devices prove to be ineffective due to freezing water, conduct dewatering activities in a manner that will best minimize sediment runoff. The discharge rate and volume will be monitored to prevent scouring of the right-of-way and to prevent sediment discharge off approved working areas. Dewatering activities will be conducted in a manner that does not result in erosion on or off right of way. Dewatering activities will be monitored to ensure that deposition of sediment into sensitive environmental resource areas, including but not limited to wetlands, waterbodies, cultural resource sites, and sensitive species habitats. If deposition occurs, dewatering will cease, and the design of the dewatering measures revised to prevent reoccurrence.

Dewatering structures will be removed as soon as practicable after completion of discharge activities. Sampling protocols may be required and will be provided in the project authorizations. In winter conditions, dewatering activities may be adjusted to account for the lack of infiltration.

Discharged water will be confined to the approved work area unless both Company and the impacted landowner or land-managing agency provide prior written approval to Contractor stating that water may leave the approved work area on their property. At no time will the discharge event result in a state-defined "Nuisance Conditions."

7.1.1.2 Dewatering Structure Material Specifications

Dewatering activities will include at least two of the following best management practices per discharge event as provided in Table 7.2-1.

Table 7.2-1 Dewatering Structure			
Type	**Materials**	**Application**	**Supplement BMP**
Vegetative Filter	Existing grassy buffer	1. Water will be discharged to dewatering structure/bag located within a well-vegetated upland area. 2. Cropland is not considered a well-vegetated area. 3. Discharge rates will be managed to ensure no scouring at the discharge location or flow path.	1. Sediment logs may be incorporated to slow the path of the water. 2. If scouring occurs along the flow path, erosion control blanket may be installed to minimize the potential for erosion.
Straw Bale Structure	Certified noxious weed free straw bales, geotextile fabric, wooden stakes.	1. Dewatering structure will be sized appropriately for the maximum discharge rate and water volume.	1. A geotextile filter bag may be incorporated into the structure to provide additional sediment control.
Dewatering Filter Bag	Nonwoven geotextile bag	1. One hose may be used per bag. 2. The hose will be secured in the bag. 3. The bag will be monitored for maintenance needs and/or flow rate.	1. Dewatering bags may be used in well-vegetated upland areas or with a straw bale dewatering structure.

7.1.1.3 Winter Construction

Construction dewatering relies on infiltration of water along the discharge path as part of the best management practices. In winter conditions, frozen soils will minimize infiltration and may create flooding conditions. Discharge locations will be sited to account for reduced infiltration.

7.1.1.4 Coagulation and Flocculation Aids

Construction dewatering through filter bags and dewatering structures may not achieve the required water quality results. With division environmental specialist approval, it may be beneficial to utilize a coagulant, polymer, or flocculant aid in the dewatering structure and/or hose to facilitate settling of fine clay particles within the structure/bag. Polyacrylamides cannot be used for any discharges reaching wetlands, waterbodies, or storm drains. Other non-toxic polymers and chitosan are permissible for use, with approval from or at the direction of the division environmental specialist.

7.2 Upland Trenching

Trenching in uplands will be completed in accordance with the FERC Plan. Excavated materials will be stockpiled within the approved construction right of way and separation will be maintained between the subsoil and topsoil stockpiles.

In Minnesota, the Contractor may not have more than one mile of open trench at any one time, as required in project authorizations.

7.2.1 Trench Breakers

Trench breakers will be installed to protect against subsurface water flow along the pipe. Trench breakers may be constructed of bags filled with rock-free subsoil or sand, or foam trench breakers may be used with Company's approval. Topsoil may not be used for trench breakers.

7.2.1.1 Trench Breaker Installation

1) Trench breakers will be installed at the base of slopes greater than 5 percent where the base of the slope is less than 50 feet from a waterbody or wetland and where needed to avoid draining a waterbody or wetland.
2) Trench breakers will be installed as required in the FERC Plan and Procedures.
3) Trench breakers will not be installed within a wetland.
4) Spacing will be determined by an engineer or will follow the spacing of slope breakers as indicated in section 6.2.2.(1).
5) *Trench breakers will fully encircle the pipe by a minimum of 6 inches.
6) Trench breakers must be keyed into the walls and bottom of the trench a minimum of 6 inches deep and 12 inches along the pipe.*

7.3 Drain Tiles

Contractor will furnish materials, labor, equipment and supervision for the repair and replacement of drain tile. Contractor's cost for such repair and replacement of drain tile will be included in the applicable unit prices set forth in the Agreement with Company.

For new pipelines in areas where drain tiles exist or are planned, ensure that the depth of cover over the pipeline is sufficient to avoid interference with drain tile systems. For adjacent pipeline loops in agricultural areas, install the new pipeline with at least the same depth of cover as the existing pipeline(s) and so that a minimum of *one foot* of clearance is present between the repaired section of tile and the top of the pipeline.

Contractor will probe tile systems cut by trenching to determine if damage has occurred during construction and repair/replace damaged tiles to this specification. A qualified specialist must be used for drain tile repairs and to adequately probe and test repaired drainage systems. Filter-covered drain tiles will not be used unless approved by the local soil conservation authority or at the landowner's or land-managing agency's request.

Drain tile replacement or repairs will be performed such that:

a. Repair damaged drain tiles to their original or better condition.
b. Broken or crushed tile will be removed for a sufficient distance from the trench to provide satisfactory drainage, joints, and adequate support.
c. Drain tile furnished by Contractor for replacement purposes will be of the rigid type, either vitrified clay or schedule 40 P.V.C. perforated pipe, unless the landowner or land-managing agency requests otherwise.
d. Replacement tile will be of a quality and size at least equal to that of the tile being replaced;
e. Drain tile will be replaced so that its former gradient and alignment are restored; and
f. The soil beneath and around replaced tile lines will be firmly compacted.

When tile lines are cut during trenching operations, Contractor will:

1) Make immediate temporary repairs so that the tile system can continue to function until permanent repairs can be made after the pipe is lowered into the trench; unless prior written

consent is obtained from the landowner or land-managing agency and Contractor requests from Company permission to interrupt flow or usability; and

2) Make permanent replacements in accordance with directions from a qualified drain tile specialist and the following requirements, if clay drain tiles or flexible drain duct are used in the repair:

    a. a single continuous supporting member will be placed across the trench as a trough in which to lay replaced tile;
    b. the supporting member will be placed across the trench with at least two feet solid bearing under the ends; and
    c. Contractor will fabricate and weld the supporting member material into shapes and lengths to properly support the tile line.

3) In cases where the original tile line is intersected at an angle, the tile line will be replaced for some distance on both sides of the trench to insure adequate tile performance.

    a. Before completing permanent tile replacements, Contractor will examine by suitable means the adjacent tile located beneath the working side of the approved work area to assure that drainage tile has not been crushed, plugged, misaligned, or otherwise disturbed as a result of Contractor's activities.

4) When the tile lines are otherwise damaged by Contractor's operation, regardless of location, Contractor will make repairs necessary to satisfy the tenant, landowner, or land-managing agency at no additional expense to Company.
5) Contractor will be responsible for damages resulting from improper functioning of tile when caused by Contractor's failure to keep such tile in good repair and to keep tile lines free from clogging.
6) Tile replacements will be documented and approved by Company prior to placing backfill over tile lines.

7.4 Pipe Coating Wastes, Pipe Cutting and Removal of Pipe

Pipeline coating (including asphalt or asbestos wrap coating, epoxy, or paint) may need to be removed and re-applied for projects such as digs, tie-ins, or pipe replacements. Pipe coating along portions of Company's pipeline is presumed, by the Company, to contain non-friable asbestos. Methods for removal and disposal of pipe coating must be in accordance with applicable regulations and Company's Environmental Procedures.

Asbestos-containing pipe coating materials must be removed using the wet method technique, prior to abrasive blasting. After the pipe coating has been removed, the pipe may be cleaned using an abrasive blasting technique. Procedures for blast waste collection and disposal are described in Company's Environmental Procedure 340.102.

In some situations, blast wastes may be defined as hazardous wastes under state and federal law. If the structure to be blasted includes paint made with metals such as lead, chromium, zinc, or cadmium or other hazardous waste characteristics, specific procedures may be required of the

Contractor. Procedures for managing blast paint waste are described in Company's Environmental Procedure 340.102.

Overspray and overspill from pipe coating / painting activities are considered construction waste and must be collected, stored, and disposed of accordingly. Where in-service pipe must be cut or removed, liquids and other materials encountered in the in-service pipe will be contained and stored as hazardous waste. Company will test the liquids and other materials to determine if they are non-hazardous. Any materials contaminated by the liquids will be managed as appropriate for such contamination. Procedures for managing liquids encountered when cutting pipe and procedures for removal of pipe are described in Company's Environmental Procedure 320.300.

8 STREAM AND RIVER CROSSINGS

8.1 General Planning and Site Preparation

Contractor will provide the EI six-work-day prior notification of construction across any waterbody. Temporary sediment barriers will be installed and maintained near waterbodies (i.e., rivers, streams, or drain) as specified in Section 5.

Contractor will not store hazardous materials, chemicals, fuels, lubricating oils, or equipment; or perform concrete coating or concrete weight manufacturing within 100 feet of waterbodies or wetlands as specified in Section 3. Refueling within 100 feet of waterbodies and wetlands will be conducted as specified in the FERC Procedures.

8.2 Bridges

Construction equipment, including clearing crews, must cross waterbodies on bridges. Clearing equipment will not be allowed to ford waterbodies, unless specifically authorized by Company. Where bridges are used, single-span, solid deck equipment bridges will be installed across the waterbodies above the top of bank. Temporary culverts or concrete supports may be used for spans over 20 feet in length, **if provided for in project authorizations**. Bridges, culverts, and supports must be sized and placed to allow highest water flow during construction. Bridges will be installed with geotextile below the bridge deck wrapped over the sides and sediment controls installed at the toe boards to prevent sediment from entering the waterbody. Timber mat bridges will be anchored on one side to allow for the bridge to swing, but remain anchored, during flood events. Soil exposed during bridge installation will be covered with erosion control fabric. Where bridges are not installed, Contractor will move equipment around the waterbodies on approved access roads. Contractor will not install bridges across horizontally directionally drilled waterbodies, unless specifically permitted.

Contractor will remove bridges at the earliest time possible after construction, or as indicated in project authorizations, provided the bridge is not needed to access other parts of the right-of-way for final grading, clean-up, seeding, hydrostatic testing, or other project activities. Once bridges are removed, they may not be reinstalled.

8.3 Clearing and Grading

Grassy vegetation and root stock will be left intact within 100 feet of waterbodies until just before construction across the waterbody begins, except as necessary to install an equipment bridge across the waterbody. Where waterbodies are crossed using the horizontal directional drill technique, no clearing or access is allowed on the stream side of the workspace for the drill entry and exit holes, except for civil survey manual line-of-sight clearing, sensor grid installation and removal, and water appropriation. Fencing, orange construction or silt fence will be installed and maintained across the entry and exit hole to prevent unauthorized access to the waterbody.

8.4 In-Stream Work

Construction across waterbodies will be conducted using the techniques specified in project authorizations, project alignment sheets, drawings, and/or the project line lists. In the absences of specific crossing techniques, Contractor will use the flume technique to construct across cold water fisheries and cool water and warm water fisheries considered significant by the state that are less than or equal to 10 feet wide. Contractor may request permission from Company to use alternate techniques (e.g., the dam-and-pump technique). Company, in its sole discretion, will determine whether such a request will be authorized and the Company's decision on the matter will be final. Other waterbodies may be open cut in the absence of specific crossing techniques, if permitted.

8.4.1 Flume Crossing Method

Where the flume technique is implemented, properly sized, and aligned flume pipe(s) will be placed in the waterbody to allow water to flow through the pipe(s) and across the construction site. The flume pipe(s) will be installed prior to trenching, but after blasting if blasting is required. Flume pipe(s) will not be removed until after the in-stream trench is backfilled and the waterbody banks are seeded and stabilized.

Sand or pea gravel bags will be installed in the waterbody at the upstream end of the flume pipe to dam the waterbody and funnel the water into the flume. After installing sand or pea gravel bags on the upstream end, bags also will be installed on the downstream end. Contractor will ensure that dams spaced far enough apart, and the flume pipe(s) are long enough to allow adequate room for excavating the trench in the waterbody bed.

Adequate water flow through the flume pipe(s) must be maintained to protect aquatic life, provide for alternative uses of the stream, and provide for downstream withdrawals of water by users. Stand-by pumps, within secondary containment structures, and hoses will be readily available during flume crossing construction.

Prior to in-stream excavation, Contractor will create a dry work area by pumping standing water from between the dams into a stable, well vegetated upland area or a dewatering device (e.g., filter bag or straw bale structure) located at least 100 feet away from the waterbody banks in accordance with project authorizations.

In-stream work where the flume technique is implemented will be conducted from equipment positioned on the waterbody banks or bridge. Equipment will not be allowed to ford, drive into, or work from within the waterbody.

8.4.2 Dam and Pump Crossing Method

For waterbodies where the dam-and-pump technique is implemented, sand or pea gravel bags will be installed in the waterbody at the upstream and downstream ends of the proposed trench. Contractor will ensure that dams are spaced far enough apart to allow adequate room for excavating the trench in the waterbody bed.

Using an adequate size and number of water pumps within secondary containment structures, water will be pumped from the upstream dam around the work area to the downstream side. The intake hose will be suspended above the waterbody bed and screened to minimize the intake of sediment and prevent entrainment of fish. Water pumped across the work area will be discharged onto an energy dissipation device (e.g., plywood boards or a splash pup) to prevent scouring of the waterbody bed on the downstream end.

Adequate water flow through the pumps must be maintained to protect aquatic life, provide for alternative uses of the stream, and provide for downstream withdrawals of water by users. Stand-by pumps, within secondary containment structures, and hoses will be readily available at times during dam-and-pump crossing construction. A pump watch must be maintained if pumps will run outside of working hours.

Prior to in-stream excavation, Contractor will create a dry work area by pumping standing water from between the dams into a stable, well-vegetated upland area or dewatering device (e.g., filter bag or straw bale structure) located at least 100 feet away from the waterbody banks in accordance with project authorizations.

In-stream work where the dam-and-pump technique is implemented will be conducted from equipment positioned on the waterbody banks or bridge. Equipment will not be allowed to ford, drive into, or work from within the waterbody.

8.4.3 Open Cut Crossing Method

For waterbodies less than or equal to 10 feet wide that are not crossed using a dry construction technique (e.g., flume or dam-and-pump), complete work in the waterbody (not including blasting) within 24 hours, except as otherwise specified in the project authorizations and the FERC Procedures, the project alignment sheets, and/or the project line lists. Where blasting is required, the time frame for completing work in the waterbody commences immediately after blasting. In-stream work will be conducted from equipment positioned on the waterbody banks or bridge. Equipment will not be allowed to ford, drive into, or work from within the waterbody.

For waterbodies greater than 10 feet wide and less than or equal to 100 feet wide that are not crossed using a dry construction technique (e.g., flume or dam-and-pump), complete work in the waterbody (not including blasting) within 48 hours, except as otherwise specified in the project authorizations, the project alignment sheets, drawings, and/or the project line lists. Where blasting

is required, the time frame for completing work in the waterbody commences immediately after blasting. Equipment operating in the waterbody will be limited to that needed to construct the crossing. Other equipment must cross on an equipment bridge or move around the waterbody on approved access roads.

Waterbodies greater than 100 feet wide must be crossed as specified in the project authorizations, the project alignment sheets, drawings, and/or the project line lists.

8.5 Spoil Storage, and Restoration

During construction across waterbodies, spoil from in-stream excavation will be stored a minimum of 10 feet from the waterbody banks, or greater based on project authorizations. A silt fence and/or straw bale containment structure or redundant BMPs will be used as necessary to contain spoil in the approved work area and prevent sediment runoff into the waterbody. Until installation of pipe, an earthen plug will be left in place in the trench on both banks of the waterbodies to separate the waterbody trench from upland trench and prevent water from the upland trench from flowing into the waterbody trench. During backfilling, Contractor will backfill waterbody trenches with native spoil so that the waterbody bottom is restored to its original contour. In cold water fisheries, clean, washed, non-limestone gravel or native cobbles will be used for the upper one foot of backfill.

Final grading will begin immediately after backfilling by restoring waterbody banks to their preconstruction contours. For removal of larger diameter pipes, the Contractor will need to haul in acceptable fill material to restore the contours. Bank stabilization must be considered in design and permitting. Banks will be seeded immediately following final grading. Erosion control fabric will be placed on top of the seed and will be anchored with staples, metal stakes, or other appropriate devices. Final grading, seeding, and bank stabilization will be completed no later than 24 hours after backfilling waterbody trench, weather and soil conditions permitting.

Trench breakers and permanent slope breakers will be installed at the base of slopes adjacent to waterbodies, and mulch will be applied in accordance with Sections 5 and 6. For waterbodies crossed using a dry construction technique (e.g., flume or dam-and-pump), bank stabilization will be completed before returning flow to the waterbody channel per the FERC Procedures.

9 WETLANDS

9.1 General Planning and Site Preparation

Temporary sediment barriers will be installed and maintained in and near wetlands as specified in Section 5.

Contractor will not store hazardous materials, chemicals, fuels, lubricating oils, or equipment; or perform concrete coating or concrete weight manufacturing within 100 feet of wetlands as specified in Section 3. Refueling within 100 feet of waterbodies and wetlands will be conducted as specified in the FERC Procedures and Environmental Procedure 380.201d.

Construction equipment operating in wetlands will be limited to the amount necessary to construct the crossing. Construction equipment not used to construct the crossing will use approved access

roads to move around wetlands to the maximum extent practicable. Where the use of approved access roads does not provide adequate access around a wetland, each piece of equipment used to construct the crossing may pass through the wetland only once, unless otherwise specified in project authorizations, the project alignment sheets, drawings, and/or the project line lists. Equipment operating from mats may cross on the mats more than once, if permitted.

9.2 Ground Stabilization

If a wetland cannot support construction equipment, and low-ground-pressure equipment is not used, Contractor will use a temporary platform of equipment mats to stabilize the right-of-way. Equipment mats will be removed from wetlands following construction and will be disposed of or reused. Duration of matting may be restricted by wetland permits. Tree stumps, brush riprap, imported dirt and rock fill may not be used to stabilize the approved work area in wetlands.

9.3 Grading, Trench Excavation, Backfilling

Contractor will not grade or remove stumps or root systems from the approved work area in wetlands, except over the ditch line. If Contractor believes that there is an adverse safety impact from this restriction, Contractor may request permission from Company to remove stumps and root systems from other areas in the approved work area. Company, in its sole discretion, will determine whether such a request will be authorized. Company's decision on the matter will be final.

Contractor will segregate topsoil from subsoil over the trench line as specified the FERC Plan and Procedures, except where saturated soils or ponded water make this impractical. Upland spoil or spoil from another wetland may not be imported into or stored in a wetland.

Contractor will minimize the duration of construction-related disturbance in wetlands to the maximum extent practicable. Where wetland conditions allow, the pipeline will be assembled in an upland area and pushed or pulled into place. Prior to backfilling, trench breakers will be installed at the base of slopes adjacent to wetlands and where an unmitigated trench poses a risk of draining a wetland in accordance with the FERC Procedures. During backfilling, segregated topsoil will be replaced to the top of the trench. Where wetlands overlie weathered bedrock, clean sand padding may be imported to the wetland trench to protect the pipe. Only the amount of padding necessary to protect the pipe may be imported to the wetland trench. In no case may sand padding be backfilled above the bedrock profile.

9.4 Restoration

Final grading will begin within six days of backfilling by restoring wetlands to their preconstruction contours, leaving no crown over the trench, or as required in the applicable permits, whichever is more restrictive. Wetlands will be seeded in accordance with Section 10.3. Fertilizer, lime, and mulch will not be applied in wetlands. Permanent slope breakers will be installed at the base of slopes adjacent to wetlands in accordance with Section 7. Timber riprap, equipment mats, pipe skids, and other construction debris will be removed from wetlands upon completion of construction. Existing culverts will be restored to their pre-construction condition after construction, including elevation, diameter, and length.

10 BACKFILLING, CLEAN-UP, AND FINAL RESTORATION

10.1 Backfilling

Prior to backfilling, Contractor will install trench breakers in the pipeline trench as directed by the EI, or absent directions from the EI, immediately up-slope of every temporary slope breaker, at the base of slopes adjacent to wetlands and waterbodies, and where the pipeline trench poses a risk of draining a wetland. Trench breakers will be constructed of materials such as sandbags (no topsoil) and will be notched into the sidewalls of the trench. Topsoil must be restored within 20 days of backfill. A travel lane may remain for access but must be restored as soon as access is no longer needed. In Minnesota, no more than one mile of trench may be open at any time, accelerating the backfill schedule.

In residential areas, the trench will be backfilled as soon as possible after the pipe is lowered in the trench. Topsoil must be restored within 10 days of backfill in residential areas.

Topsoil will not be used to pad the pipe during backfilling. In areas where topsoil has been segregated, the subsoil will be replaced first, and the topsoil will be spread over the area from which it was removed. Contractor may request from Company permission to import and use topsoil in lieu of topsoil separation and replacement. Company, in its sole discretion, will determine whether such a request will be authorized. Company's decision on the matter will be final and require compliance with Environmental Procedure 400.105. Blast rock may be used to backfill the trench to the top of the natural bedrock profile provided adequate padding is placed around the pipe in accordance with technical specifications. A twelve-inch earth crown will be constructed over the trench line (except in wetlands) to allow for future settling of the backfill material, per engineering standards ES-7503 or ES-7510 as appropriate. Cross drains will be left in the crown at 100-foot intervals, in swales and drains, and immediately up-slope of slope breakers.

10.2 Clean-up

Contractor will make every effort to complete final clean-up (including final grading) within twenty days after the trench is backfilled and complete installation of permanent erosion control measures within six days of topsoil restoration, or as required in the applicable permits, whichever is more restrictive and weather and soil conditions permitting. Debris will be disposed of in accordance with Section 3, and original ground contours will be restored, except for a crown over the trench in upland areas.

A travel lane, including bridges over waterbodies, will be left open during final grading and clean-up to allow for construction equipment access. This travel lane must be restored when access is no longer necessary.

10.3 Final Restoration and Revegetation

All compacted or rutted upland areas must be decompacted during restoration with a para-plow or other deep tillage implement. If plowing is employed, the stripped construction right-of-way will be decompacted first followed by replacement of the segregated topsoil. Where necessary, additional plowing of the topsoil will be performed to alleviate subsurface compaction. If

subsequent grading and clean-up activities result in further compaction, additional plowing will be required. If frozen conditions preclude plowing activities, remediation of compacted or rutted areas may need to be conducted after spring thaw occurs.

To aid in revegetation, remove excess rock from the top 12 inches of soil within the approved work area such that the size, density, and distribution of rock within the work area is similar to adjacent areas not disturbed by construction. If a landowner requests excess rock be left on their property, Contractor will notify Company of the request from the landowner for storage of rock within the approved work area outside of the post-construction permanent right-of-way. Company, in its sole discretion, will determine whether such a request will be authorized. Company's decision on the matter will be final. If authorization is granted, Contractor will be responsible for ensuring rock is stored within an upland area of the approved work area, but outside of the post-construction permanent right-of-way.

Permanent slope breakers will be installed and maintained in locations similar to temporary slope breakers as described in Sections 5 and 6 and as directed by the EI. Permanent slope breakers must be constructed of soil compacted to a minimum height of 1.5 feet, 4 feet in bottom width, and have an eight-foot-wide parabolic channel on the up-slope side. The down-slope angle and outfall will be the same as temporary slope breakers.

Fences and all-terrain-vehicle barriers removed during construction must be repaired or replaced during restoration. New all-terrain-vehicle barriers requested by landowners or land-managing agencies must be installed during restoration. Barriers will be constructed using stumps, boulders, or blast rock collected on land within the approved work area or other material as requested by landowners or land-managing agencies. Barriers will extend across the entire width of the approved work area and will be positioned in such a manner to prevent vehicle passage through or around the barrier. Barrier material will be sufficient type, size, and placement to prevent removal by all-terrain-vehicle users.

Contractor will be responsible for successful revegetation of the right-of-way. Disturbed areas will be seeded as required in permit authorizations, weather and soil conditions permitting. Slopes steeper than 33 percent and stream banks will be seeded immediately following final grading.

10.4 Seeding

Temporary and permanent seeding of the right-of-way will be completed within the recommended seeding dates as specified in agency consultations, the project alignment sheets, drawings, and/or the project line lists. If seeding cannot be completed during the recommended seeding period, temporary seed and mulch will be applied to disturbed areas except wetlands. Permanent seeding will be initiated at the beginning of the next seeding season. Typical temporary seed mixes include annual rye, oats, barley, and/or wheat. If dormant seeding, do not seed when ground is frozen or snow-covered.

10.4.1 Seeding Preparation

Prior to seeding, remove construction debris and grade the right-of-way to leave the soil in the proper condition for seedbed preparation. Excessive depth of mulch or vegetative debris must be

avoided to support proper germination. Prepare the seedbed to a depth of three to four inches using appropriate equipment to provide a firm uniform seedbed free of excess rock and large soil clods. If the right-of-way will be hydroseeded, the seedbed will be scarified to facilitate seed lodging and germination. If seeding is temporary and at locations (e.g., spoil stockpiles) where site prep access is not available, seed bed preparation is not expected.

10.4.2 Soil Amendments

Contractor will complete a soil test prior to seeding to determine the appropriate soil additives (i.e., fertilizer and/or lime) for the Project, as directed by Company or as requested by the landowner or land-managing agency. All Company SWPPPs will require testing for nitrogen, phosphorus, potassium, and lime amendments. In the absence of a SWPPP, the contractor shall apply 50 lbs of nitrogen/Acre of a 10-10-10 fertilizer where half of the nitrogen is a slow-release variety. Where soil additives are required, incorporate the fertilizer and/or lime into the top two inches of soil as soon as possible after application. Use of lime and fertilizer are prohibited in wetland areas.

10.4.3 Seeding

Uplands and wetlands will be seeded with mixes and at rates as specified in the project authorizations, the project alignment sheets, drawings, and/or the project line lists. Final seeding and restoration must occur with six days of backfill. Active cropland will not be seeded, unless requested by the landowner. In the absence of specific seed mixes for the Project the state-specific seeding guide published by the USDA Natural Resources Conservation service or state Department of Transportation may be utilized. *Northern's preference is to utilize pollinator/monarch butterfly seed mixtures to implement provisions of voluntary species habitat agreements.* Any area seeded after October 1 will be seeded with a temporary seed mix, and the contractor will be required to remobilize the following spring to complete permanent seeding and fertilization. Wetlands will be seeded with annual ryegrass at a rate of 40 lbs/acre in the absence of specific seed mixes for wetlands. Seed must be purchased in accordance with pure live seed specifications and be certified weed free. Seed will be used within nine months of testing. Any legumes in the seed mix will be treated with inoculants specific to the species. For conventional seeding, use four times the manufacturer's recommended rate of inoculants, and ten times the recommended rate if hydro-seeding methods are used.

Seed will be uniformly applied and incorporated into the top one inch of soil. For areas greater than 500 ft^2 either drill seeding or hydroseeding is required in uplands. A seed drill equipped with a culti-packer is the preferred method of seeding, however, if the seed is broadcast or applied using a hydro-seeder, the seed will be applied at double the recommended seeding rate. Where seed is broadcast, the seed will be incorporated into the soil by raking or dragging. Where a hydro-seeder is used, the seed bed will be scarified prior to application to allow the seeds to lodge and germinate.

Immediately after or concurrent with seeding, mulch will be uniformly applied to cover 90 percent of the ground surface at a rate of two tons per acre of straw except those areas located in actively cultivated croplands, and other areas at the EI's discretion. Mulch specifications are discussed in Section 6. Mulch will not be applied in wetlands.

After seeding, Contractor will restore turf, ornamental trees and shrubs and other landscaping in residential areas in accordance with the landowner's request or compensation will be made to the landowner. Restoration work will be performed by Contractor personnel familiar with local horticultural and turf establishment practices. In addition, Contractor may be required to install vegetative visual screening at critical viewpoints in the project area in accordance with the project authorizations, the project alignment sheets, drawings, and/or the project line lists. Vegetative visual screening will involve planting native shrub and tree species within the approved work area at naturally occurring densities and distributions (not on a grid) to blend with the surrounding landscape.

Revegetation will be considered successful when the surface of the approved work area is similar to adjacent undisturbed lands in terms of species richness and density, or at least 70 percent perennial vegetation.

10.4.4 Post-Construction Monitoring and Maintenance

Contractor will be responsible for maintaining erosion and sediment controls, making repairs on the right of way, and success of any vegetation, including trees, until final stabilization has been achieved. Company expects and requires the Contractor to respond to repairs such as BMP repair and/or replacement, reseeding, regrading, removal of non-biodegradable BMPs in a timely manner and within the time frame outlined in any application project authorizations (e.g., construction stormwater permit). Upon achieving final stabilization, Contractor will walk the Project and remove any construction waste (e.g., mats) and non-biodegradable sediment controls.

11 REVISION HISTORY:

Responsibility for Procedure:

Address all questions on this procedure to the director of environmental.

Revisions:

Rev. 0	04/01/21	
Rev. 1	07/21/21	Revised to require the use of erosion control blankets or hydraulically applied bonded fiber matrix on all slopes 15% or greater, that require revegetation.
Rev. 2	05/04/23	Revised to include paragraph on coagulation/flocculation aids.
Rev. 3	12/08/23	Revised to include soil testing requirements and editorial/style changes.
Rev. 4	07/23/25	Changes to required seeding methods.
Rev. 5	12/05/25	Clarified trench breaker, excess vegetation disposal, and expectations for winter construction plans. Corrected minimum drain tile offset from pipe. Stated preference for pollinator seed mix.

Appendix A

380.203b SWPPP Inspection and Maintenance Report

NORTHERN NATURAL GAS
STORMWATER INSPECTION AND MAINTENANCE FORM

Project Name:		**Work Order #:**	**Inspection Date:** **Inspection Time:**
Project Description:			**Stormwater Permit Agency:**
Nearest Town, County and State:			**Stormwater Permit Authorization #:**
GPS Lat:	**GPS Long:**		**Initial Grading Date:** **Final Grading Date:**
Full Contractor Company Name:			**Final Seeding Date:**
Contractor Contact Info (Name/Phone):			**Final Stabilization Date:**
Inspection Event:	☐ Routine ☐ Rain Event ☐ Maintenance		
Inspection Schedule (IL, IA, MI, MN, OK, SD, WI)	☐ Every 7 days and within 24 hours of a rain event 0.5 inches or greater (inches of rain)		
Inspection Schedule (KS, NE, OK, SD)	☐ Every 14 days and within 24 hours of a rain event 0.5 inches or greater (inches of rain)		
Inspection Schedule (NM and all EPA permits)	☐ Every 7 days or every 14 days and within 24 hours of a rain event 0.25 inches or greater (inches)		
Reduced Inspection Schedule and Reason Behind Reduced Schedule (Must follow stormwater permit authorization requirements, which may vary per state/project.)	☐ Every 30 days	☐ Site temporarily stabilized and winter conditions ☐ Arid, semi-arid or drought stricken area ☐ Frozen conditions ☐ Other, explain:	
Current Weather and Site Conditions (i.e., 66°F and dry):			
Construction Phase:	☐ **Active** ☐ **Suspended** ☐ **Post-Construction**		

SUBMITTED TO: (Enter names and email addresses below.)

Project Manager: Click here to enter text.
Construction Coordinator: Click here to enter text.
Field Operations Contact: Click here to enter text.
Division Environmental Specialist (DES): Click here to enter text.
Construction Environmental Compliance Contact: Christa Webber

NORTHERN NATURAL GAS
STORMWATER INSPECTION AND MAINTENANCE FORM

Table 1.0 – Inspection Observations and Corrective Actions

Stormwater Inspection Item	**Maintenance Required:** If yes, complete columns to the right.	**Observations:** Describe locations where controls require maintenance or additional controls are needed.	**Recommended Corrective Actions:** Describe actions taken while on-site, and/or recommendations to resolve observed issues. Update items with notes to detail status, including ongoing communications to ensure progress toward resolution.	**Assigned to:**	**Repair Status**	**Completion Date[1]**
Contract Yards and Storage Areas	☐ Yes ☐ No ☐ N/A				☐ Pending ☐ In progress ☐ Complete	
Vehicle Exit Points	☐ Yes ☐ No ☐ N/A				☐ Pending ☐ In progress ☐ Complete	
Sediment Controls	☐ Yes ☐ No ☐ N/A				☐ Pending ☐ In progress ☐ Complete	
Erosion Controls	☐ Yes ☐ No ☐ N/A				☐ Pending ☐ In progress ☐ Complete	
Disturbed Areas Stabilization	☐ Yes ☐ No ☐ N/A				☐ Pending ☐ In progress ☐ Complete	
Dewatering Activities and Structures	☐ Yes ☐ No ☐ N/A				☐ Pending ☐ In progress ☐ Complete	
Material Storage (e.g., containment, spill kits, etc.)	☐ Yes ☐ No ☐ N/A				☐ Pending ☐ In progress ☐ Complete	
Final Restoration Activities	☐ Yes ☐ No ☐ N/A				☐ Pending ☐ In progress ☐ Complete	

[1]Action items that were dated complete on the previous report should not appear on subsequent reports.

SUBMITTED TO: (Enter names and email addresses below.)

Project Manager: Click here to enter text.
Construction Coordinator: Click here to enter text.
Field Operations Contact: Click here to enter text.
Division Environmental Specialist (DES): Click here to enter text.
Construction Environmental Compliance Contact: Christa Webber

Table 2.0 – Erosion Control Devices (Separately list each area where ECDs have been either temporarily or permanently installed.)

Exact location of erosion/sediment control inspected *(Ex. east road-side ditch of HWY 20)*	**Temporary (T) or Permanent (P)**	**Type of erosion/sediment control** *(Ex. hay bales, silt fence, wattles, slope breakers, erosion blankets, construction entrances, electric/barbed-wire fence, dewatering devices/structures, etc.)*	**Date Installed**	**Date Removed**	**Dates and Comments Regarding Completed Repair/Maintenance Activities**

Table 3.0 – Revegetation (Separately list each area where revegetation is required to report status toward "final stabilization", as defined by the respective permit.)

Location	**Status**	**Land Use**	**Seed/Over-seed Date(s)**	**Comments**

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Project Manager: Click here to enter text.
Construction Coordinator: Click here to enter text.
Field Operations Contact: Click here to enter text.
Division Environmental Specialist (DES): Click here to enter text.
Construction Environmental Compliance Contact: Christa Webber

NORTHERN NATURAL GAS
STORMWATER INSPECTION AND MAINTENANCE FORM

General Observations:	
Is there a violation affecting water quality?	
☐ Yes, and I immediately called the environmental specialist for instruction.	☐ No: No further action required.
Has the entire site achieved Final Stabilization per the permit requirements and have all temporary ECDs have been removed.	
☐ Yes, and I immediately called the environmental specialist for instruction.	☐ No: The next SWPPP inspection is due on or before this date:

Certification: I certify that: (1) the information contained in this report is true, accurate and complete; (2) I am qualified to complete this inspection based on my training and knowledge of the principles and practice of erosion and sediment controls; and (3) the project is in compliance with the SWPPP. I understand the terms and conditions of the general National Pollutant Discharge Elimination System (NPDES) permit authorization for this project, which authorizes the storm water discharges associated with industrial activity from the construction site identified as part of this certification.	
Inspector Printed Name:	
Inspector Signature:	**Date:**
Certification: I certify that: (1) the information contained in this report is true, accurate and complete; (2) I understand that I am required to take the listed corrective actions within 24 hours of this notification, or as soon as possible if field conditions prevent access, under the conditions of the National Pollutant Discharge Elimination System (NPDES) permit authorization for this project and the FERC Plan and Procedures; and (3) the project is in compliance with the SWPPP. I understand the terms and conditions of the general National Pollutant Discharge Elimination System (NPDES) permit authorization for this project, which authorizes the storm water discharges associated with industrial activity from the construction site identified as part of this certification.	
Contractor Environmental Lead Printed Name:	
Contractor Environmental Lead Signature:	**Date:**

SUBMITTED TO: (Enter names and email addresses below.)

Project Manager: Click here to enter text.
Construction Coordinator: Click here to enter text.
Field Operations Contact: Click here to enter text.
Division Environmental Specialist (DES): Click here to enter text.
Construction Environmental Compliance Contact: Christa Webber

INSPECTION PHOTOS

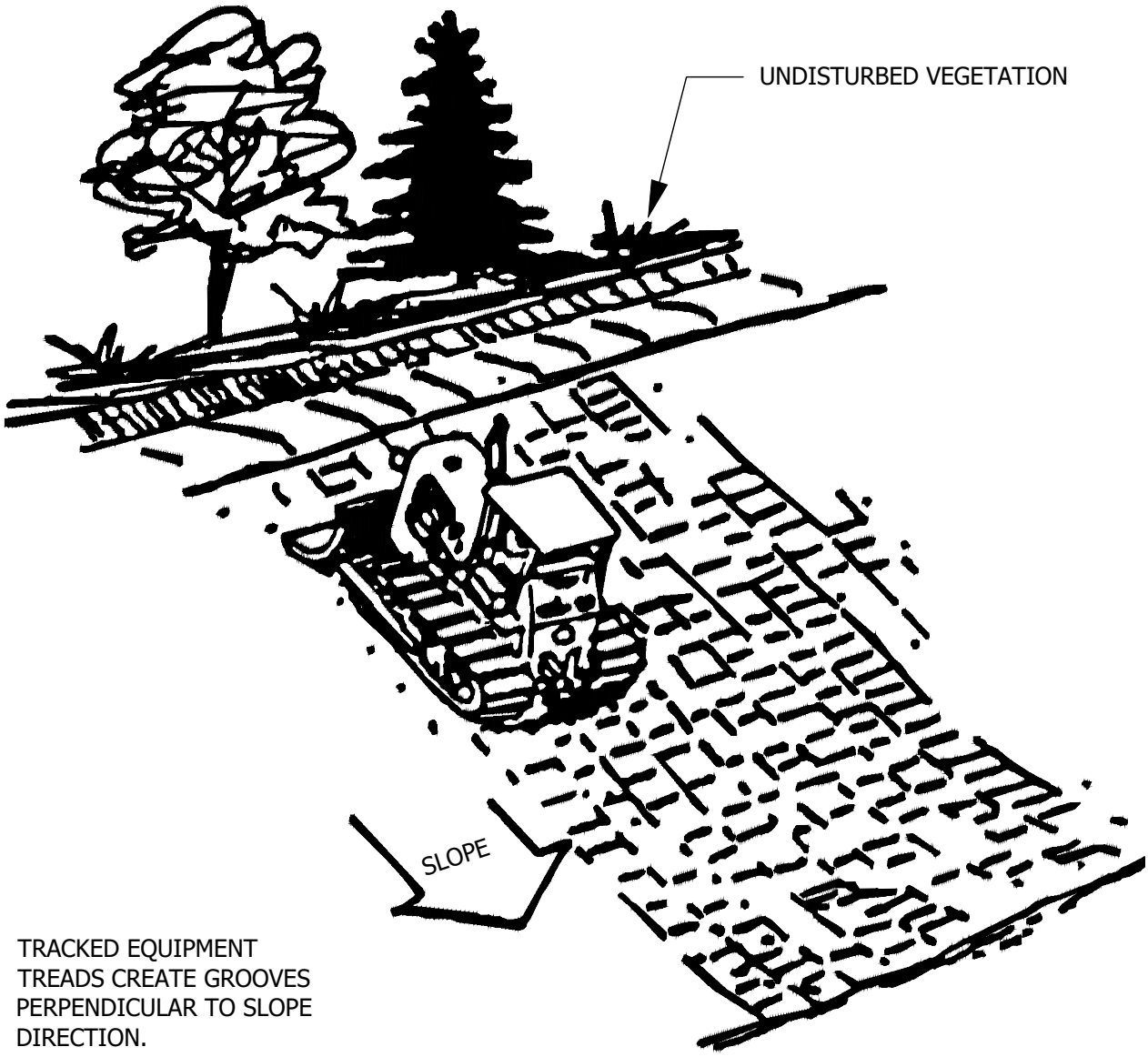
(Insert a minimum of two to three photos on the next pages, followed directly by captions detailing: 1) direction of view, 2) location within the temporary workspace, and 3) other significant information to reference the information noted above. Photos must be provided for any areas noted above as requiring maintenance. If those areas were corrected during the inspection, simply include photos showing the corrected concern.)

SUBMITTED TO: (Enter names and email addresses below.)

Project Manager: Click here to enter text.
Construction Coordinator: Click here to enter text.
Field Operations Contact: Click here to enter text.
Division Environmental Specialist (DES): Click here to enter text.
Construction Environmental Compliance Contact: Christa Webber

Appendix B

Typical Erosion and Sediment Control Details



TRACKED EQUIPMENT
TREADS CREATE GROOVES
PERPENDICULAR TO SLOPE
DIRECTION.

NOTE:
ALL SLOPES WITH A GRADE EQUAL TO OR STEEPER THAN 3:1 REQUIRE SLOPE TRACKING. SLOPES WITH A GRADE MORE GRADUAL THAN 3:1 REQUIRE SLOPE TRACKING IF THE STABILIZATION METHOD IS EROSION CONTROL BLANKET OR HYDROMULCH.

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PL#. N/A		CONST. YR 2019
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DRAWN		1/7/2020
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SCALE: N/A		

Northern Natural Gas

HORIZONTAL SLOPE GRADING

Figure E-1

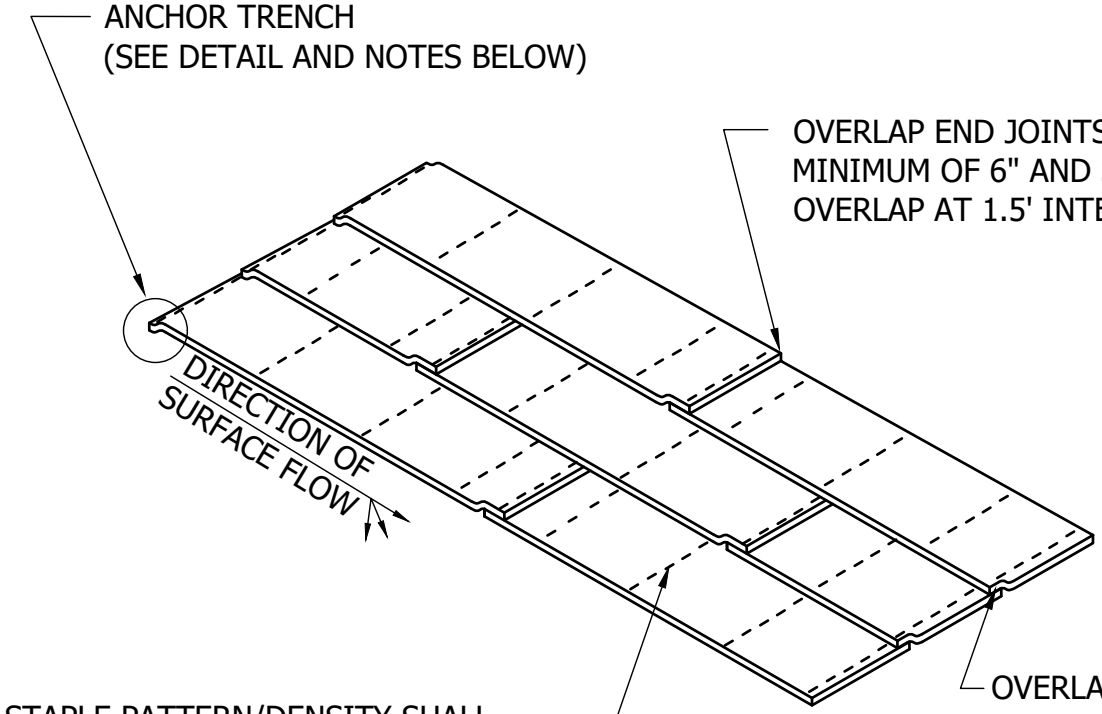
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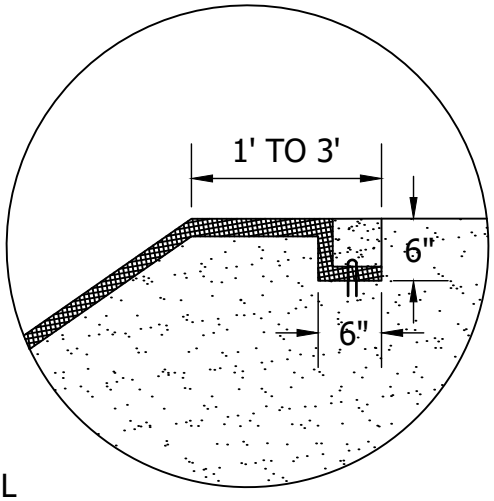
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ANCHOR TRENCH

1. DIG 6" X 6" TRENCH
2. LAY BLANKET IN TRENCH
3. STAPLE AT 1.5' INTERVALS
4. BACKFILL WITH NATURAL SOIL AND COMPACT
5. BLANKET LENGTH SHALL NOT EXCEED 100' WITHOUT AN ANCHOR TRENCH

NOTE:

1. SLOPE SURFACE SHALL BE FREE OF ROCKS, SOIL CLUMPS, STICKS, VEHICLE IMPRINTS, AND GRASS. BLANKETS SHALL HAVE GOOD SOIL CONTACT.
2. EROSION CONTROL BLANKET TYPE TO BE SPECIFIED BY ENGINEER.

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SCALE: N/A		

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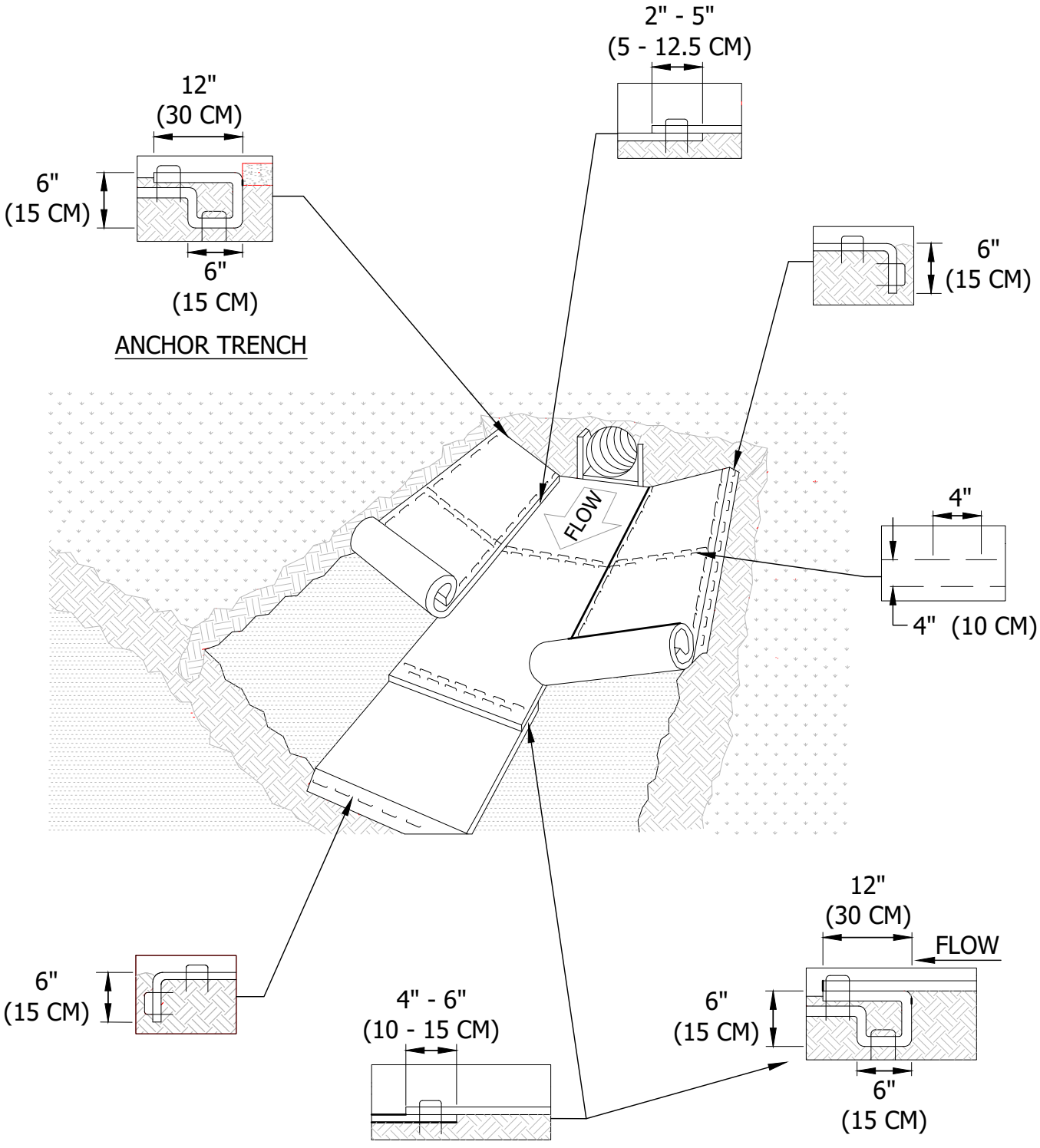
EROSION CONTROL BLANKET INSTALLATION

Figure E-2A

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NOTE:
EROSION CONTROL CHANNEL BLANKET TYPE TO BE SPECIFIED BY ENGINEER.

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FILE NO.: N/A		
SCALE: N/A		

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EROSION CONTROL BLANKET CHANNEL INSTALLATION

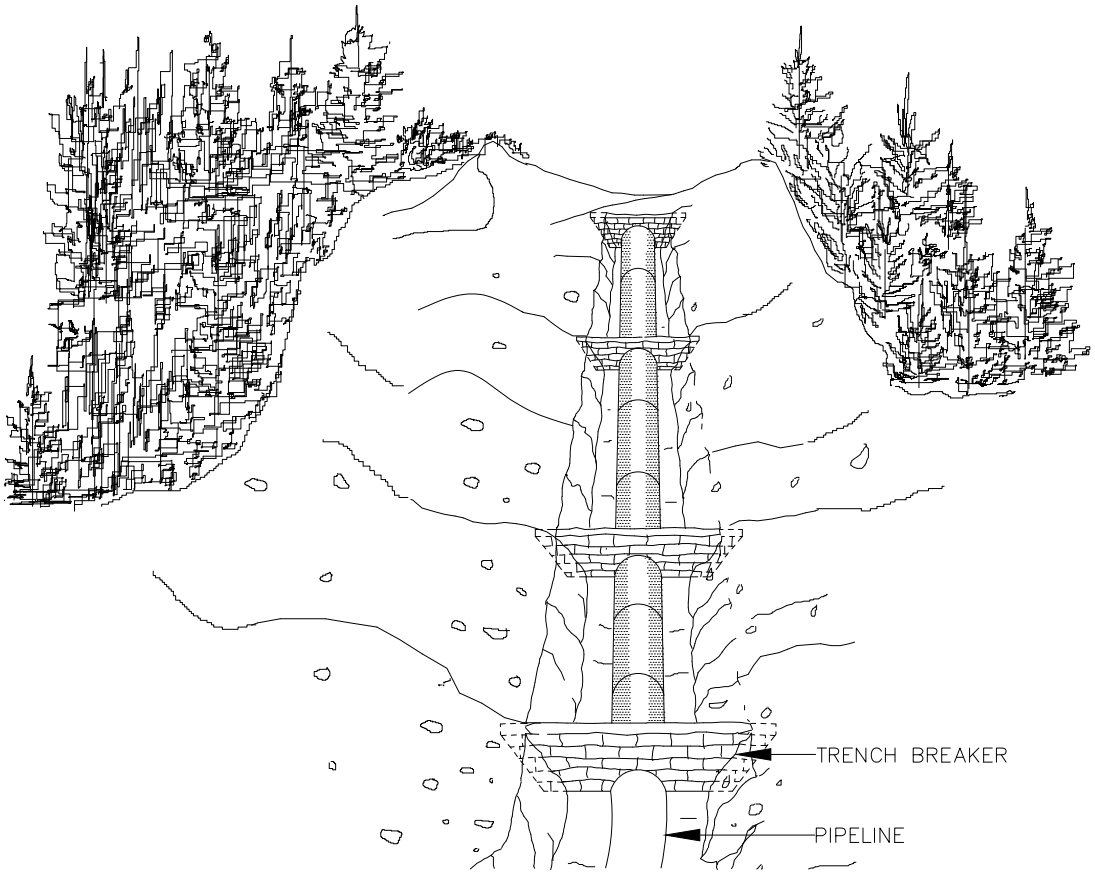
Figure E-2B

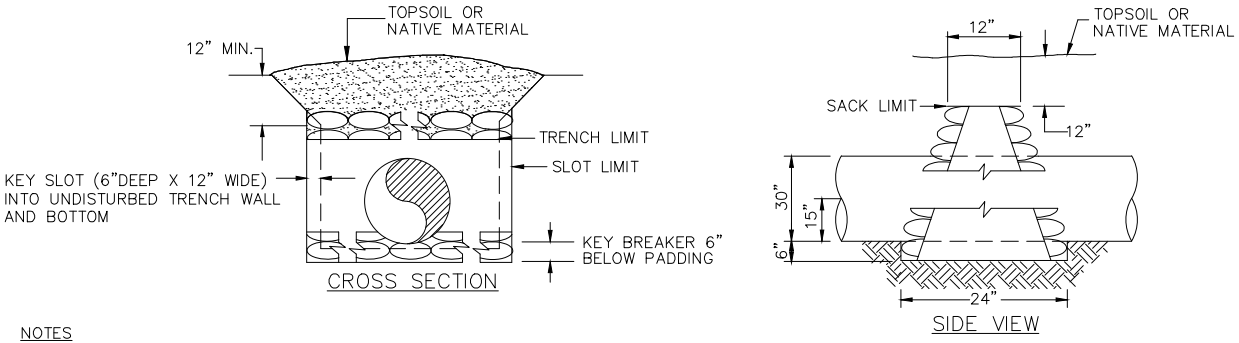
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NOTES

1. TRENCH BREAKERS SHALL BE INSTALLED:
   - ON SLOPES ALONG THE TRENCH LINE WHERE THE NATURAL DRAINAGE PATTERN, PROFILE, AND TYPE OF BACKFILL MATERIAL MAY RESULT IN LOSS OF BACKFILL MATERIAL OR ALTERATION OF THE NATURAL PATTERN;
   - AT THE BASE OF SLOPES ADJACENT TO WATERBODIES AND WETLANDS;
   - WHERE NEEDED TO AVOID DRAINING A WETLAND;
   - ON UPLAND SLOPES, AT THE SAME SPACING AS SLOPE BREAKERS AND UP SLOPE OF SLOPE BREAKERS;
   - IN CULTIVATED LAND AND RESIDENTIAL AREAS WHERE PERMANENT SLOPE BREAKERS ARE NOT TYPICALLY INSTALLED, AT THE SAME SPACING AS IF PERMANENT SLOPE BREAKERS WHERE REQUIRED.
2. OPEN WEAVE HEMP OR JUTE SACKS SHALL BE FILLED WITH A MINIMUM OF 55lbs. MIXTURE OF 1 PART CEMENT TO 6 PARTS SAND OR SUBSOIL SO THAT NATURAL GROUND WATER WILL PERMIT MIXTURE TO EXUDE AND BOND SACKS TOGETHER. FOAM MAY REPLACE MIXTURE.
3. BREAKER SPACING AND CONFIGURATION MAY BE CHANGED AS DIRECTED BY COMPANY. DEPTH OF DITCH MAY VARY WITH SITE CONDITIONS. SEE FERC'S PLANS AND PROCEDURES, FOR TYPICAL SPACING.
4. ALL MATERIALS SHALL BE SUPPLIED BY CONTRACTOR.
5. TRENCH BREAKERS MUST FULLY ENCIRCLE THE PIPE.

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SCALE: NTS		

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TYPICAL TRENCH BREAKER REQUIREMENTS

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PROJECT NO.

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FIGURE 6

F

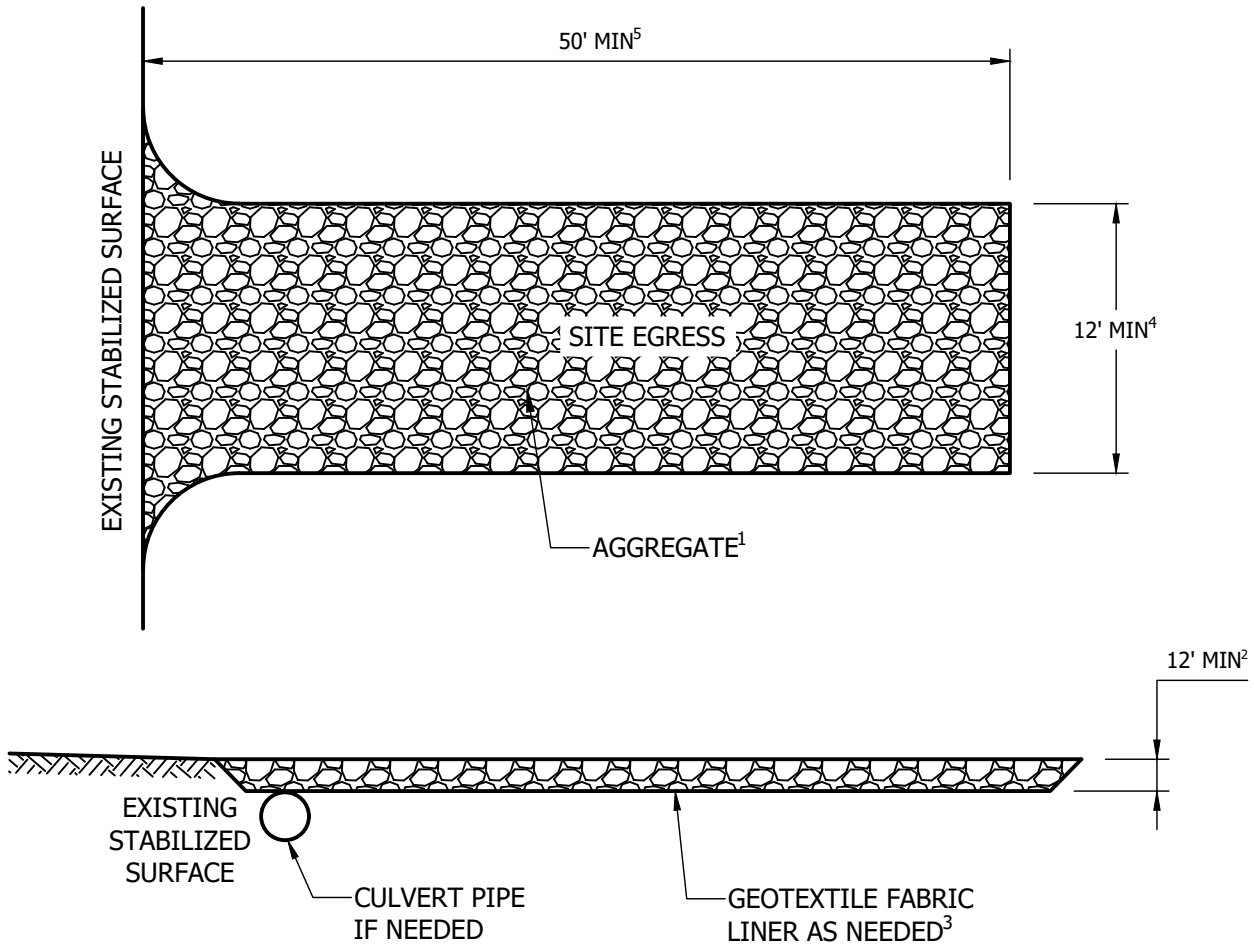


Table 1. Gradation for stone tracking pads	
Sieve Size	Percent by weight passing
3"	100
2-1/2"	90-100
1-1/2"	25-60
3/4"	0-20
3/8"	0-5

NOTE

1. USE HARD, DURABLE, ANGULAR STONE OR RECYCLED CONCRETE MEETING THE GRADATION IN TABLE 1. WHERE THIS GRADATION IS NOT AVAILABLE, MEET THE GRADATION IN WISCONSIN DEPARTMENT OF TRANSPORTATION (DOT) 2018 STANDARD SPECIFICATIONS, SECTION 312, SELECT CRUSHED MATERIAL.
2. SLOPE THE STONE TRACKING PAD IN A MANNER TO DIRECT RUNOFF TO AN APPROVED TREATMENT PLACE.
3. SELECT FABRIC TYPE BASED ON SOIL CONDITIONS AND VEHICLES LOADING.
4. INSTALL TRACKING PAD ACROSS FULL WIDTH OF THE ACCESS POINT, OR RESTRICT EXISTING TRAFFIC TO A DEDICATED EGRESS LAND A LEAST 12 FEET WIDE ACROSS THE TOP OF THE PAD.
5. IF A 50' PAD LENGTH IS NOT POSSIBLE DUE TO SITE GEOMETRY, INSTALL THE MAXIMUM LENGTH PRACTICABLE AND SUPPLEMENT WITH ADDITIONAL PRACTICES AS NEEDED.

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ASBUILT		
FILE NO.: N/A		
SCALE: N/A		

Northern Natural Gas

CONSTRUCTION ENTRANCE

Figure ERO-12

PROJECT NO. N/A

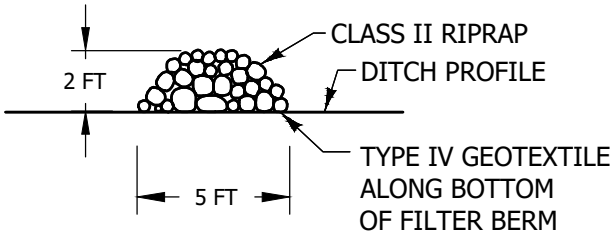
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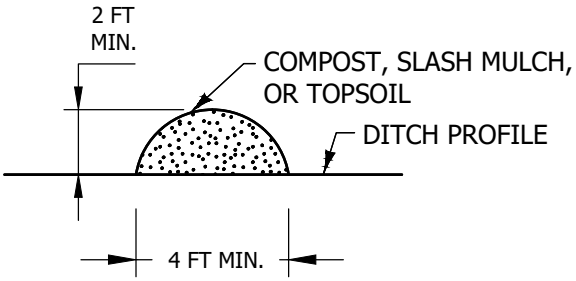
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TYPE 5 (ROCK)



TYPE 1 (COMPOST), TYPE 2 (SLASH MULCH), OR TYPE 4 (TOPSOIL)

NOTE

1. FOR PERMANENT DITCH CHECK REDUCE THE HEIGHT TO 16 IN. AND MODIFY THE 1:2 (V:H) SIDE SLOPE TO 1:6 (V:H).

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SCALE: N/A			

Northern Natural Gas

SEDIMENT CONTROL FILTER BERM

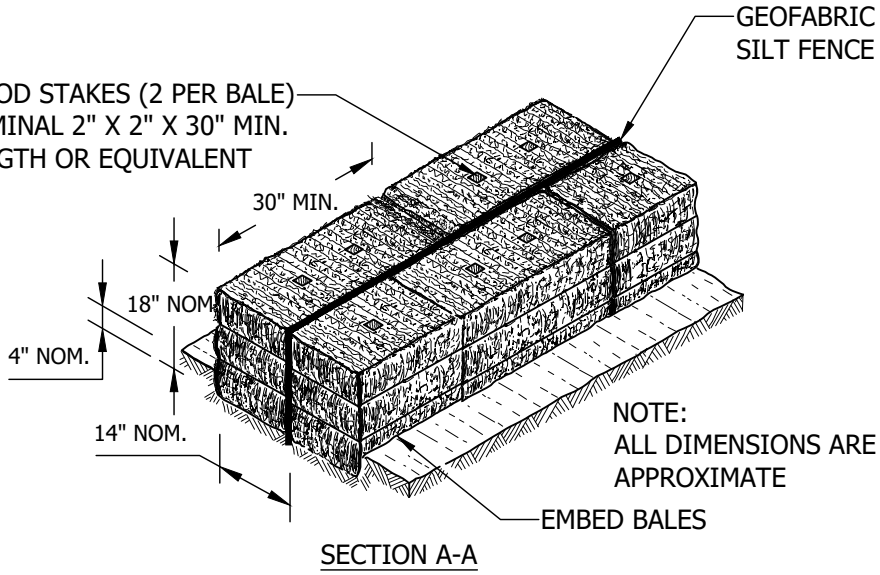
Figure ERO-13

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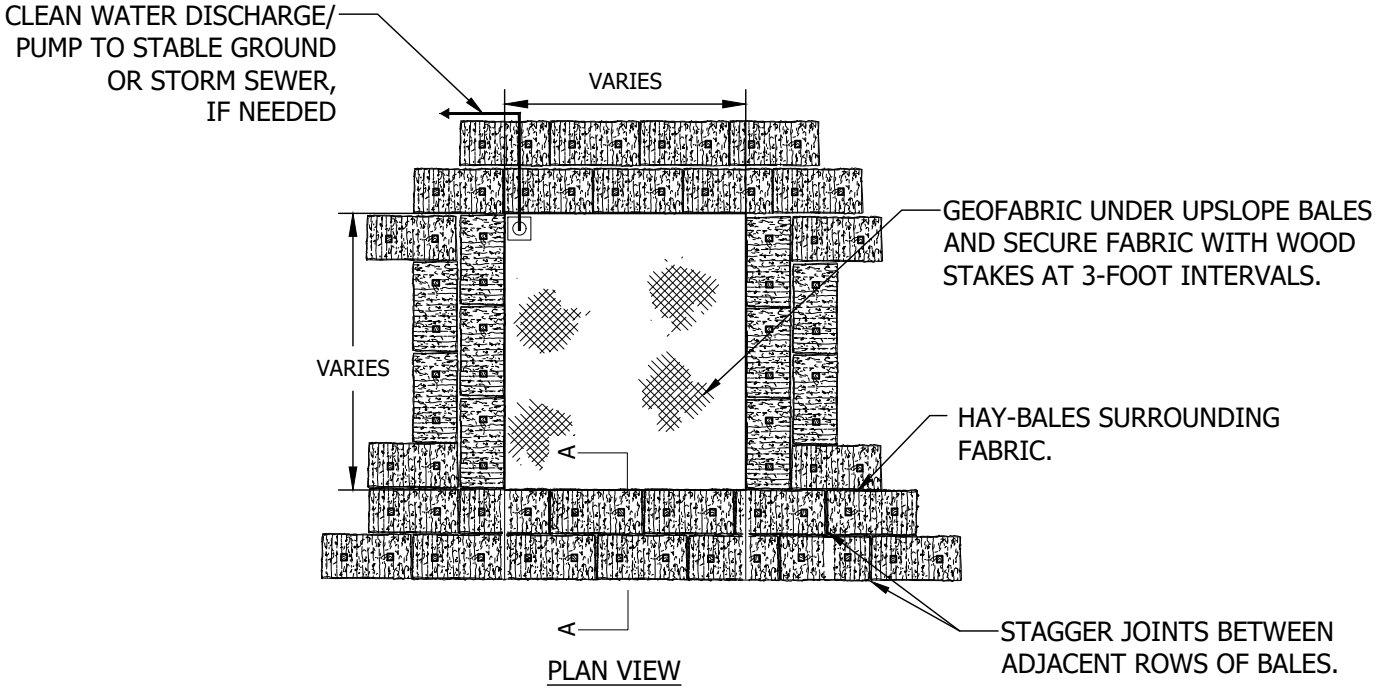
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SECTION A-A



PLAN VIEW

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PL#. N/A		CONST. YR 2019
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DESIGN		1/8/2020
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SCALE: N/A		

Northern Natural Gas

STRAW BALE DEWATERING STRUCTURE

Figure ERO-14

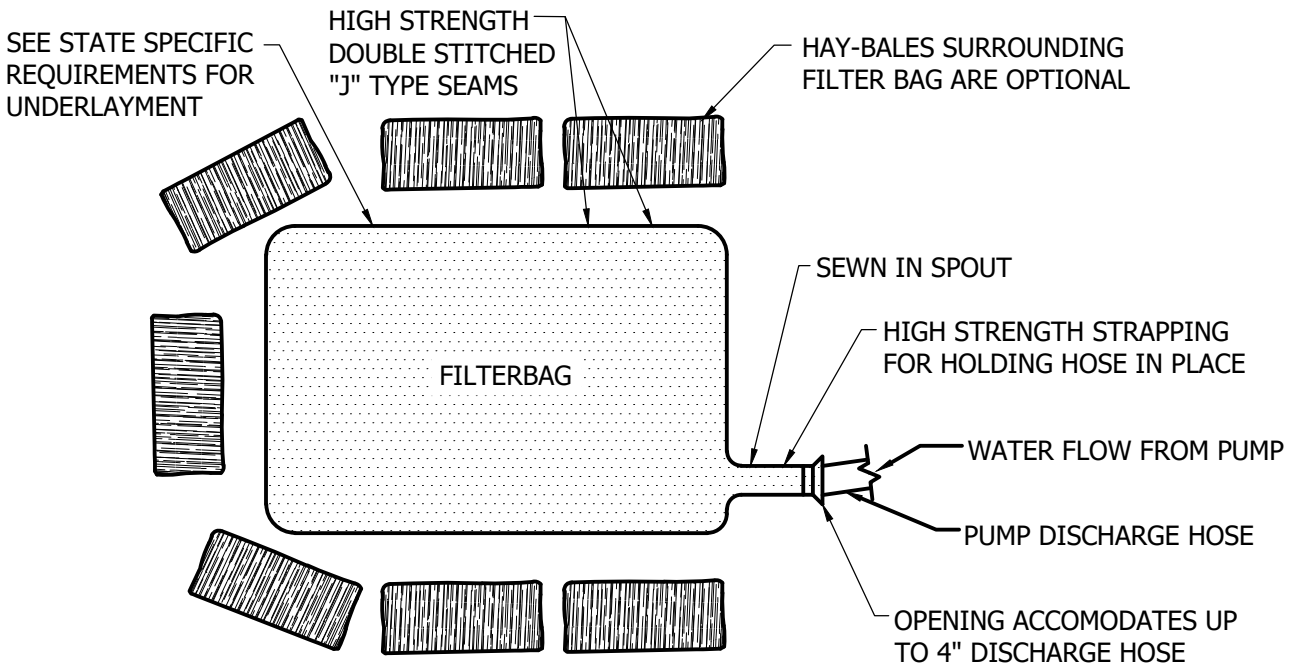
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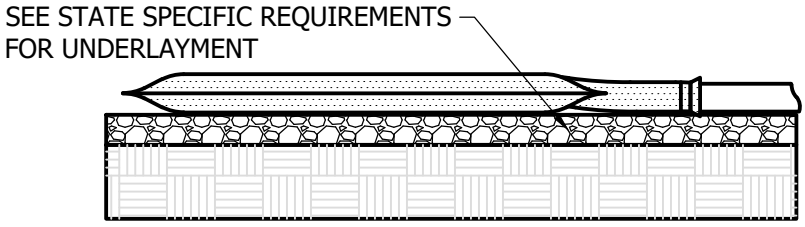
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TOP VIEW



SIDE VIEW

FAC. CODE: N/A		REL. W.O. N/A
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FILE NO.: N/A		
SCALE: N/A		

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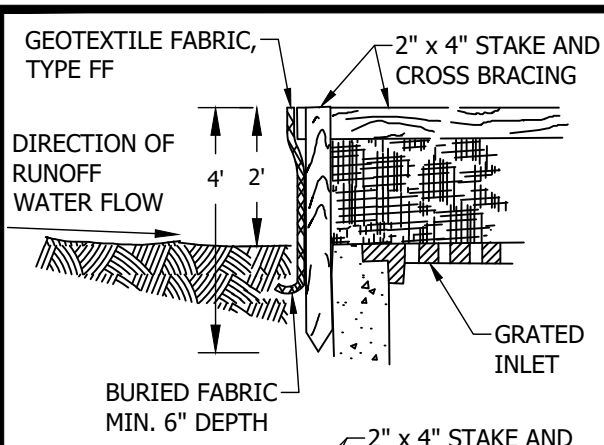
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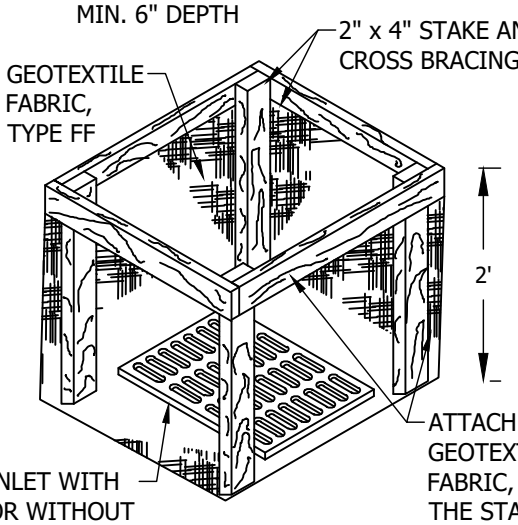
Figure ERO-15

PROJECT NO.
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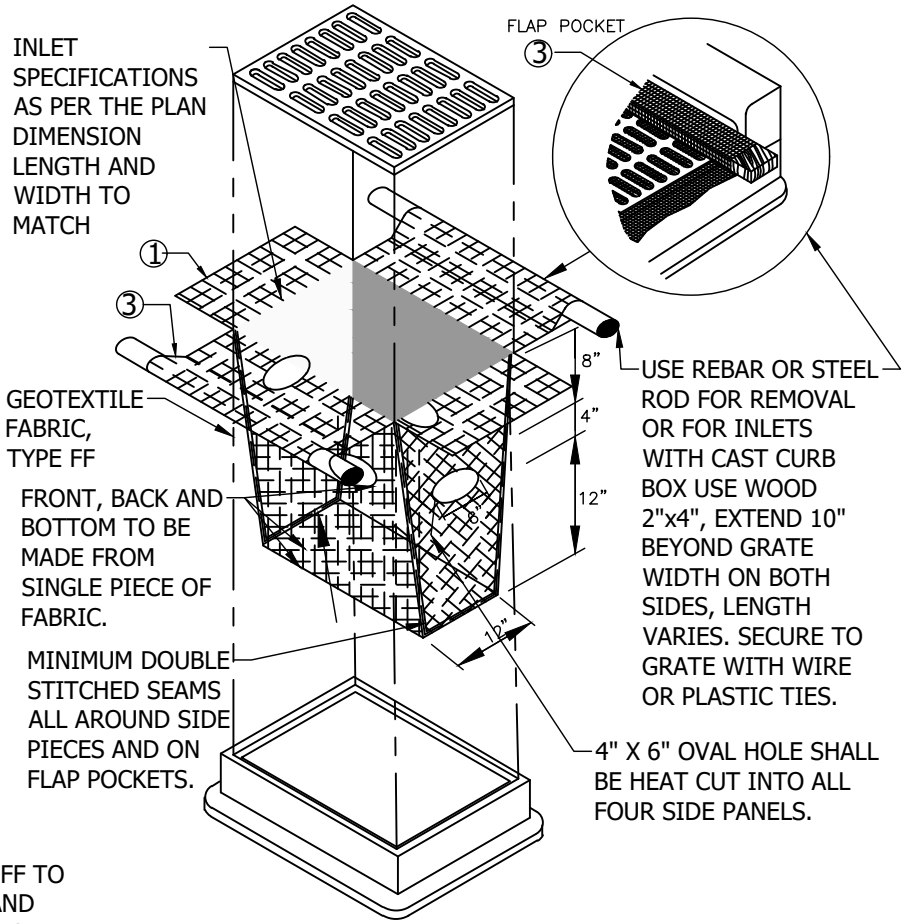
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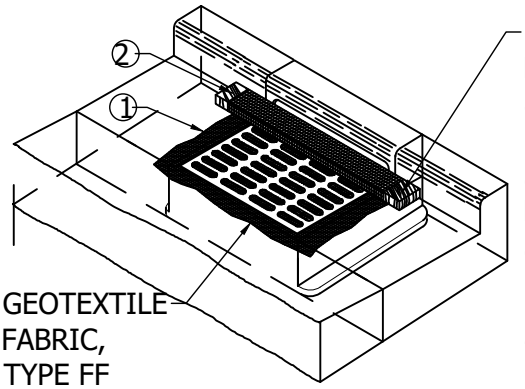




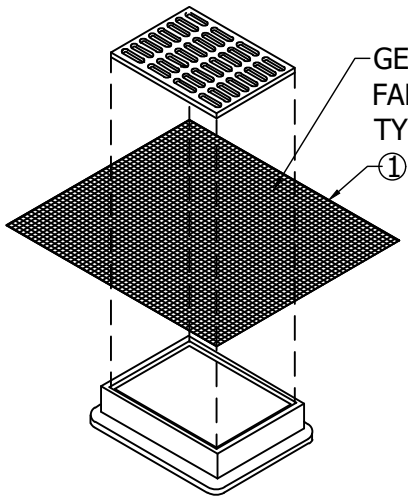
INLET PROTECTION, TYPE A



INLET PROTECTION, TYPE D
(CAN BE INSTALLED IN ANY INLET TYPE WITH OR WITHOUT A CURB BOX AS PER NOTE ②)



INLET PROTECTION, TYPE C (WITH CURB BOX)



INLET PROTECTION, TYPE B (WITHOUT CURB BOX)
(CAN BE INSTALLED IN ANY INLET WITHOUT A CURB BOX)

1. FINISHED SIZE, INCLUDING FLAP POCKETS WHERE REQUIRED, SHALL EXTEND A MINIMUM OF 10" AROUND THE PERIMETER TO FACILITATE MAINTENANCE OR REMOVAL.
2. FOR INLET PROTECTION, TYPE C (WITH CURB BOX), AN ADDITIONAL 18" OF FABRIC IS WRAPPED AROUND THE WOOD AND SECURED WITH STAPLES. THE WOOD SHALL NOT BLOCK THE ENTIRE HEIGHT OF THE CURB BOX OPENING.
3. FLAP POCKETS SHALL BE LARGE ENOUGH TO ACCEPT WOOD 2X4.

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ASBUILT			
FILE NO.: N/A			
SCALE: N/A			

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INLET PROTECTION DROP-IN BAG

Figure ER0-16

PROJECT NO. N/A

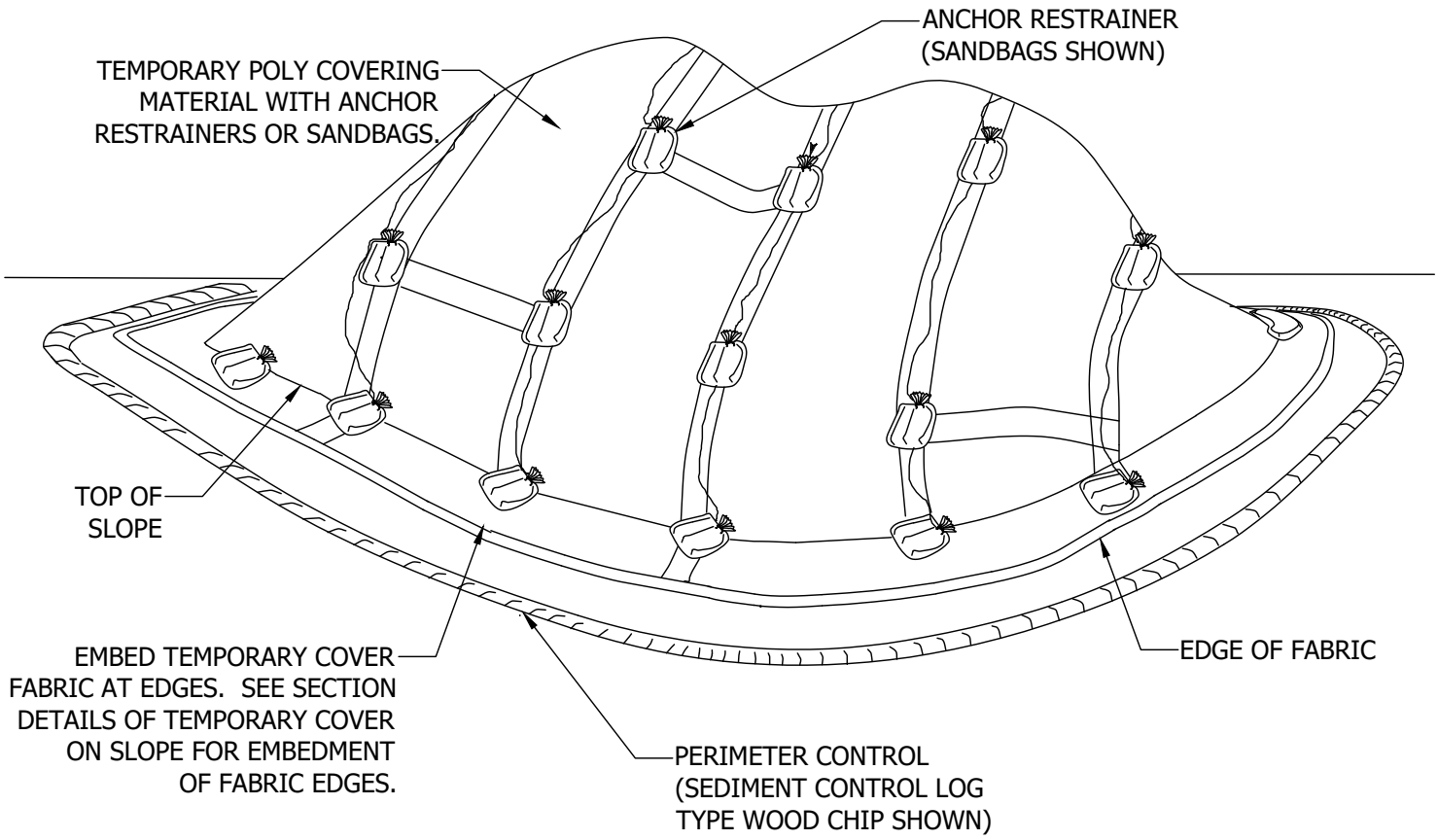
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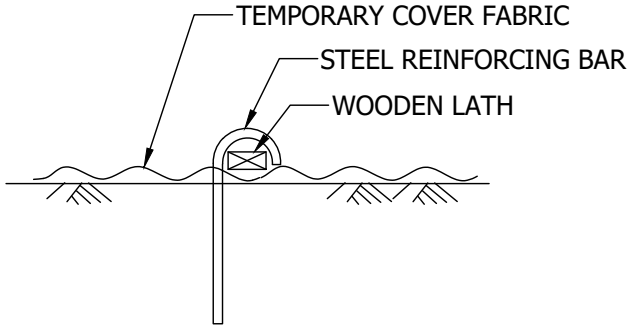
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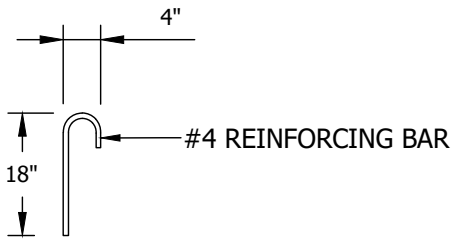
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ANCHOR RESTRAINER
(STEEL BAR AND WOODEN LATH OPTION)



STEEL REINFORCING BAR DETAIL

NOTES

1. ANCHOR RESTRAINERS: TYPE, QUANTITY, AND SPACING ARE INCIDENTAL TO POLY COVER. PROVIDE ON CORNERS AND SEAMS OF POLY COVER MATERIAL TO KEEP FROM BLOWING OFF. NO MINIMUM SPACING REQUIRED.
2. PERIMETER CONTROL: USE SEDIMENT CONTROL LOGS TYPE WOOD CHIP OR COMPOST, INCIDENTAL.

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ASBUILT		
FILE NO.: N/A		
SCALE: N/A		

Northern Natural Gas

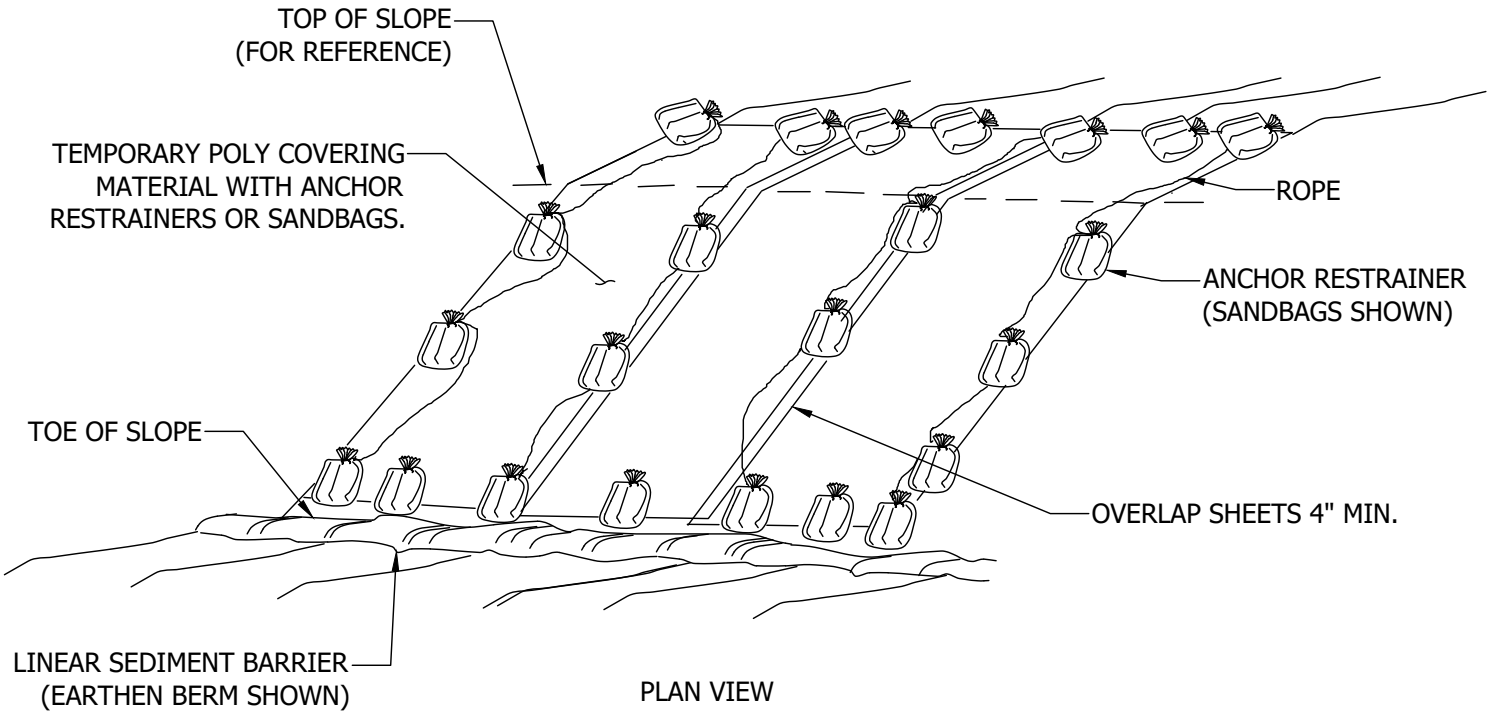
POLY COVER ON SLOPE

Figure ERO-17a

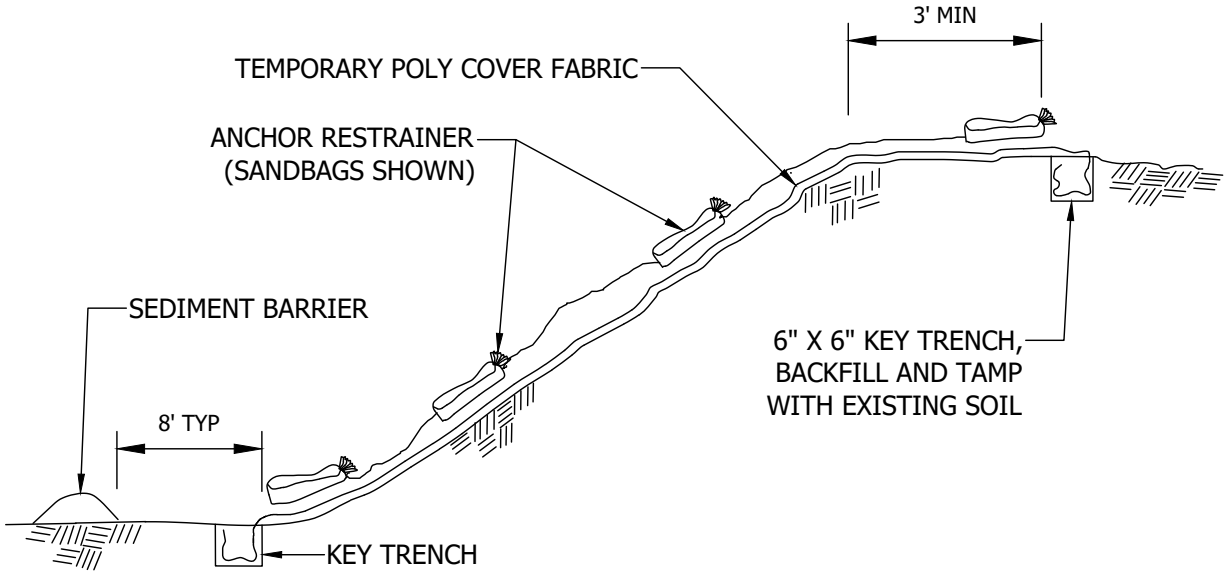
PROJECT NO.
N/A

DWG. NO.
TYP1
SHT. 1 OF 1

A



PLAN VIEW



ELEVATION VIEW

NOTES

1. ANCHOR RESTRAINERS: TYPE, QUANTITY, AND SPACING ARE INCIDENTAL TO POLY COVER. PROVIDE ON CORNERS AND SEAMS OF POLY COVER MATERIAL TO KEEP FROM BLOWING OFF. NO MINIMUM SPACING REQUIRED.
2. PERIMETER CONTROL: USE SEDIMENT CONTROL LOGS TYPE WOOD CHIP OR COMPOST, INCIDENTAL.

FAC. CODE: N/A		REL. W.O. N/A	
PL#. N/A		CONST. YR 2019	
STA# N/A			
	BY	DATE	
DESIGN		1/8/2020	
DRAWN		1/8/2020	
ASBUILT			
FILE NO.: N/A			
SCALE: N/A			

Northern Natural Gas

POLY COVER ON STOCKPILE

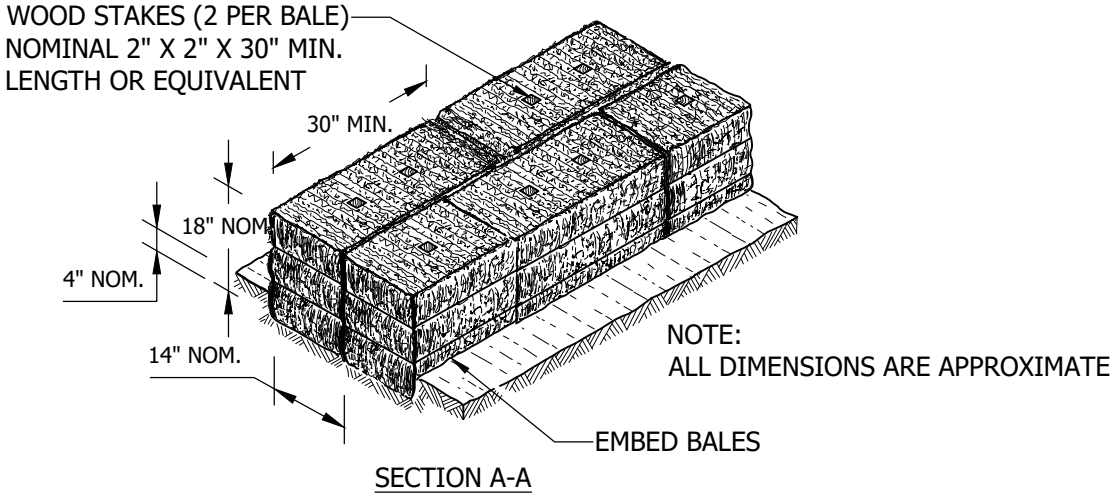
Figure ERO-17b

PROJECT NO.
N/A

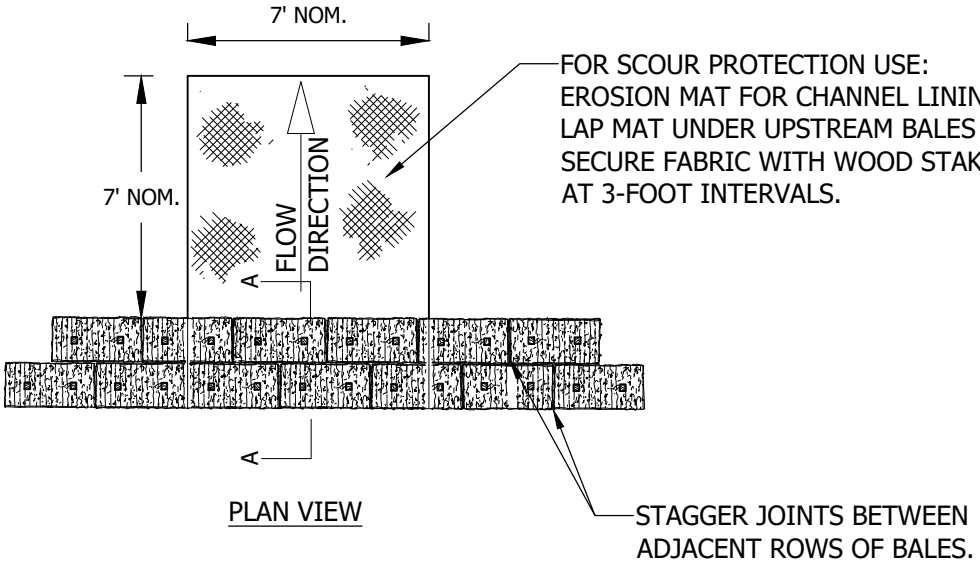
DWG. NO.
TYP1
SHT. 1 OF 1

A

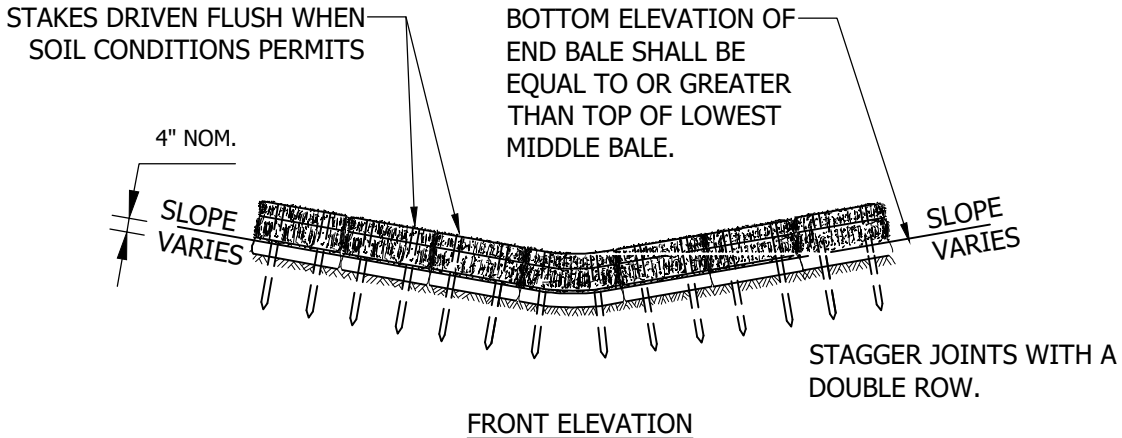
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SECTION A-A



PLAN VIEW



FRONT ELEVATION

FAC. CODE: N/A		REL. W.O. N/A
PL#. N/A		CONST. YR 2019
STA# N/A		
	BY	DATE
DESIGN		1/15/2020
DRAWN		1/15/2020
ASBUILT		
FILE NO.: N/A		
SCALE: N/A		

Northern Natural Gas

BALE BARRIER DITCH CHECK

Figure ERO-19

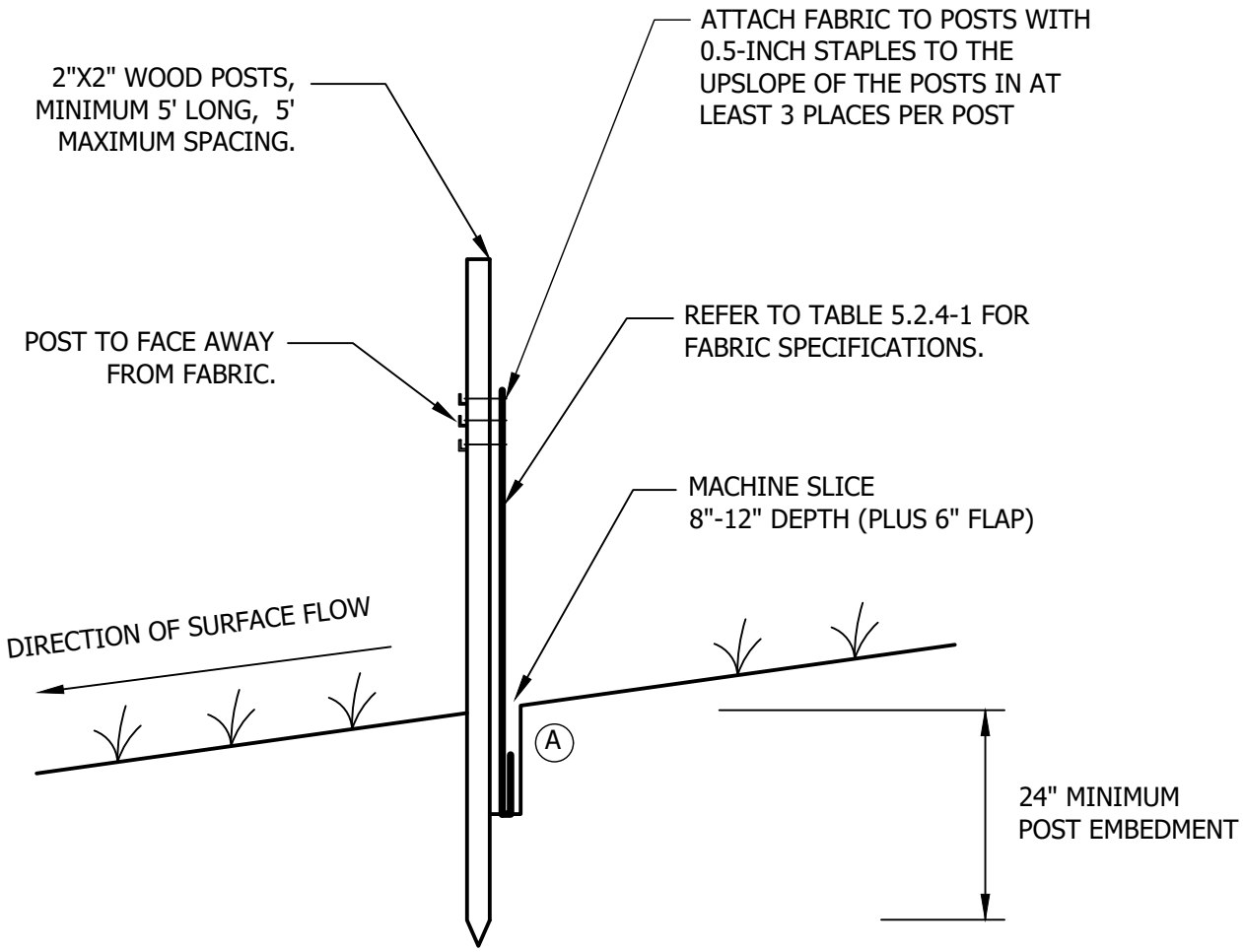
PROJECT NO. N/A

DWG. NO. TYP1

SHT. 1 OF 1

A

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NOTE:
THE MACHINE SLICED METHOD (THIS DETAIL) IS THE STANDARD SILT FENCE INSTALLATION METHOD. HEAVY-DUTY (S-2) SILT FENCE INSTALLATION METHODS SHOULD ONLY BE USED WHEN APPROVED OR DIRECTED BY THE NORTHERN NATURAL GAS.

(A) COMPACTION:
AFTER "SLICING" IN THE FABRIC AND *BEFORE* INSTALLATION OF WOOD POSTS, DRIVE INSTALLATION EQUIPMENT OVER THE "SLICE" WHILE FABRIC IS LAYING ON THE GROUND. *THEN* INSTALL WOOD POSTS AND PULL UP FABRIC TO ATTACH AT A UNIFORM HEIGHT.

FAC. CODE: N/A		REL. W.O. N/A
PL#. N/A		CONST. YR 2019
STA# N/A		
	BY	DATE
DESIGN		12/20/2019
DRAWN		1/7/2020
ASBUILT		
FILE NO.: N/A		
SCALE: N/A		

Northern Natural Gas

SILT FENCE MACHINE SLICED

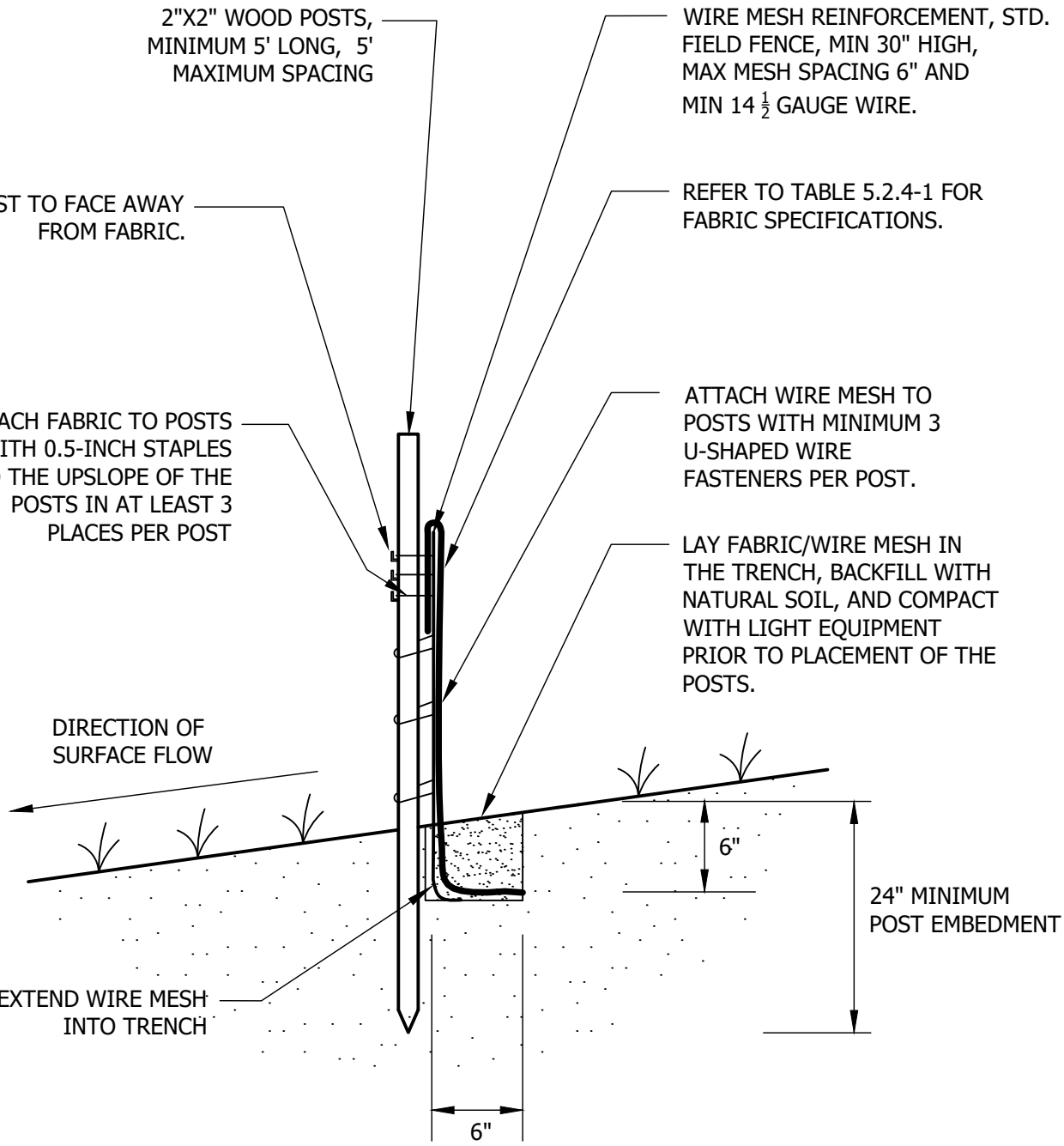
Figure S-1

PROJECT NO.
N/A

DWG. NO.
TYP1
SHT. 1 OF 1

A

Vande Boom, Jill 1/10/2020 5:02 AM U:\193707292\05_REPORT_DELIV\DRAFT_DOC\DETAILS\ERO-01A



FAC. CODE: N/A		REL. W.O. N/A
PL#. N/A		CONST. YR 2019
STA# N/A		
	BY	DATE
DESIGN		12/21/2019
DRAWN		1/7/2020
ASBUILT		
FILE NO.: N/A		
SCALE: N/A		

Northern Natural Gas

SILT FENCE WIRE BACKED (HEAVY-DUTY)

Figure S-2

PROJECT NO. N/A

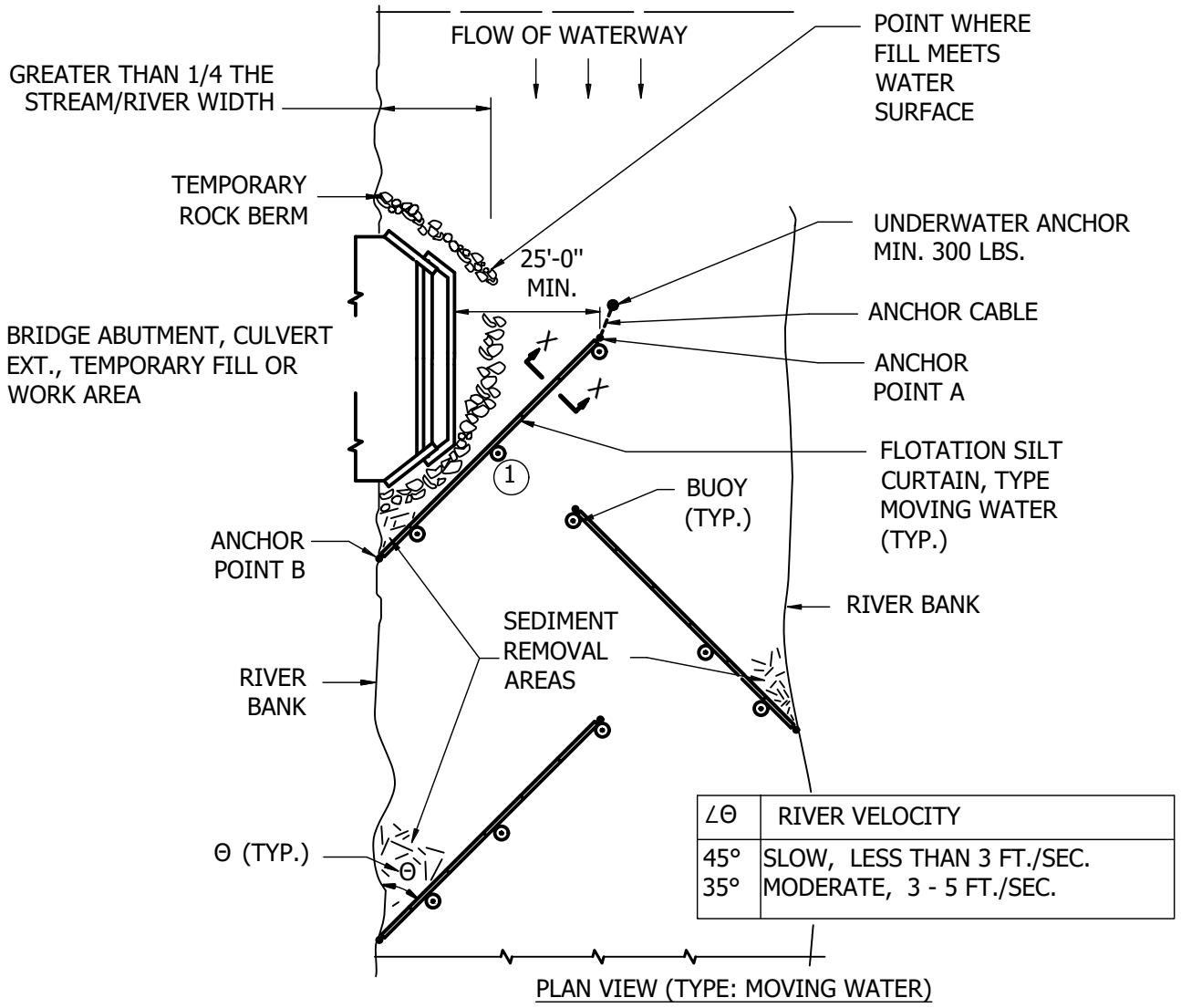
DWG. NO. TYP1

SHT. 1 OF 1

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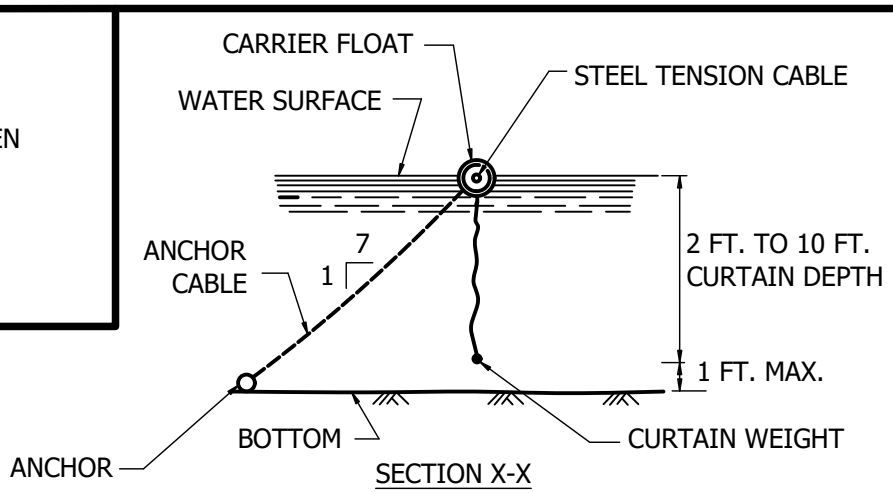
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∠Θ	RIVER VELOCITY
45°	SLOW, LESS THAN 3 FT./SEC.
35°	MODERATE, 3 - 5 FT./SEC.

PLAN VIEW (TYPE: MOVING WATER)

NOTE:
1 100 FT. MAX. SPACING BETWEEN ANCHORS. ANCHORS WEIGH MIN. 40 LBS.



SECTION X-X

FAC. CODE: N/A		REL. W.O. N/A	
PL#. N/A		CONST. YR 2019	
STA# N/A			
	BY	DATE	
DESIGN		12/22/2019	
DRAWN		1/7/2020	
ASBUILT			
FILE NO.: N/A			
SCALE: N/A			

Northern Natural Gas

FLOATATION SILT CURTAIN IN MOVING WATER

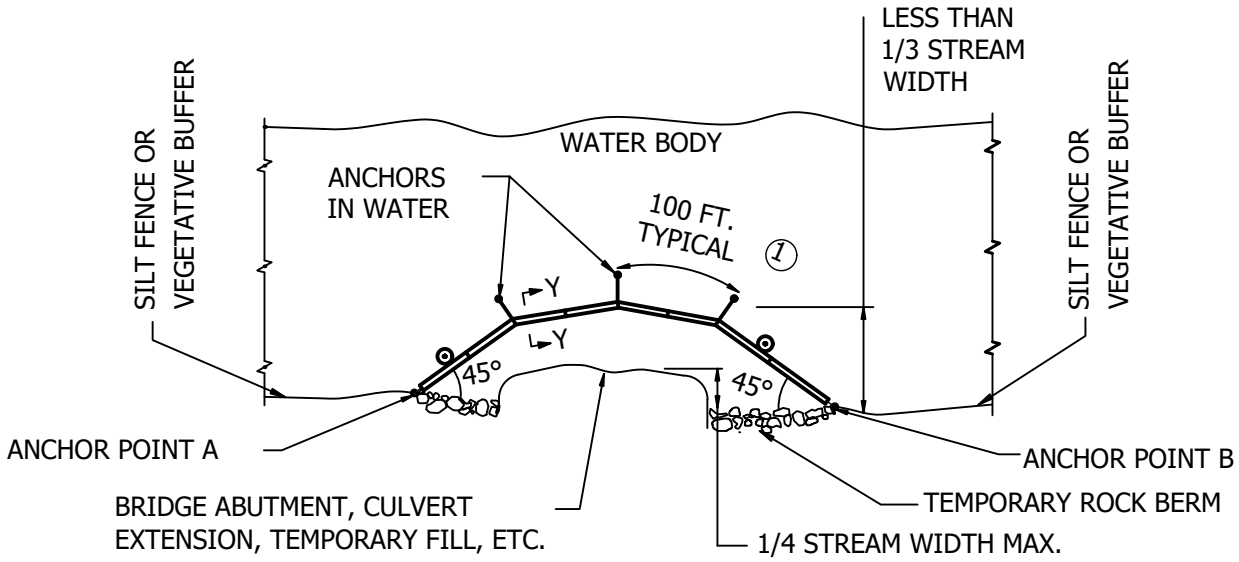
Figure S-3A

PROJECT NO. N/A

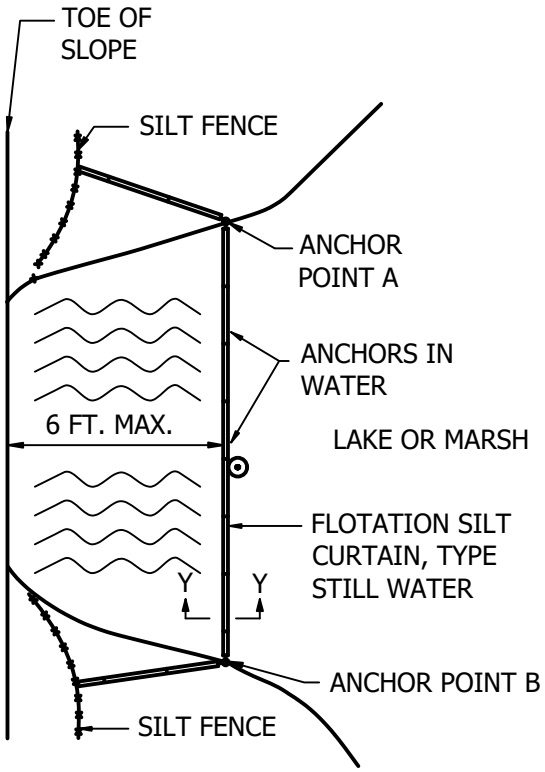
DWG. NO. TYP1

SHT. 1 OF 1

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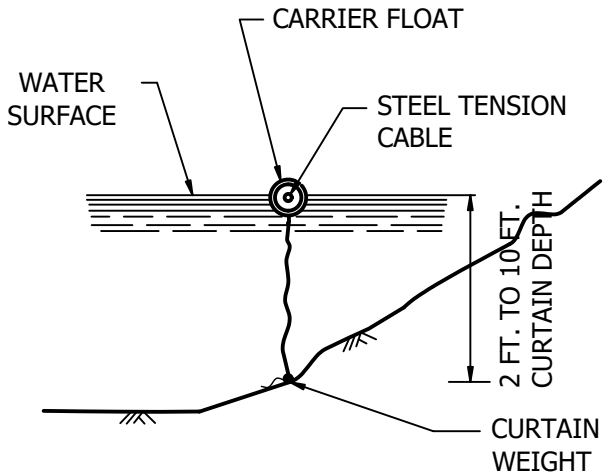
PLAN VIEW (TYPE: WORK AREA)



PLAN VIEW (TYPE: STILL WATER)

NOTES:

1. 100 FT. MAX. SPACING BETWEEN ANCHORS. ANCHORS WEIGH MIN. 40 LBS.



SECTION Y-Y

FAC. CODE: N/A		REL. W.O. N/A	
PL#. N/A		CONST. YR 2019	
STA# N/A			
	BY	DATE	
DESIGN		12/22/2019	
DRAWN		1/7/2020	
ASBUILT			
FILE NO.: N/A			
SCALE: N/A			

Northern Natural Gas

FLOATATION SILT CURTAIN IN STILL WATER

Figure S-3B

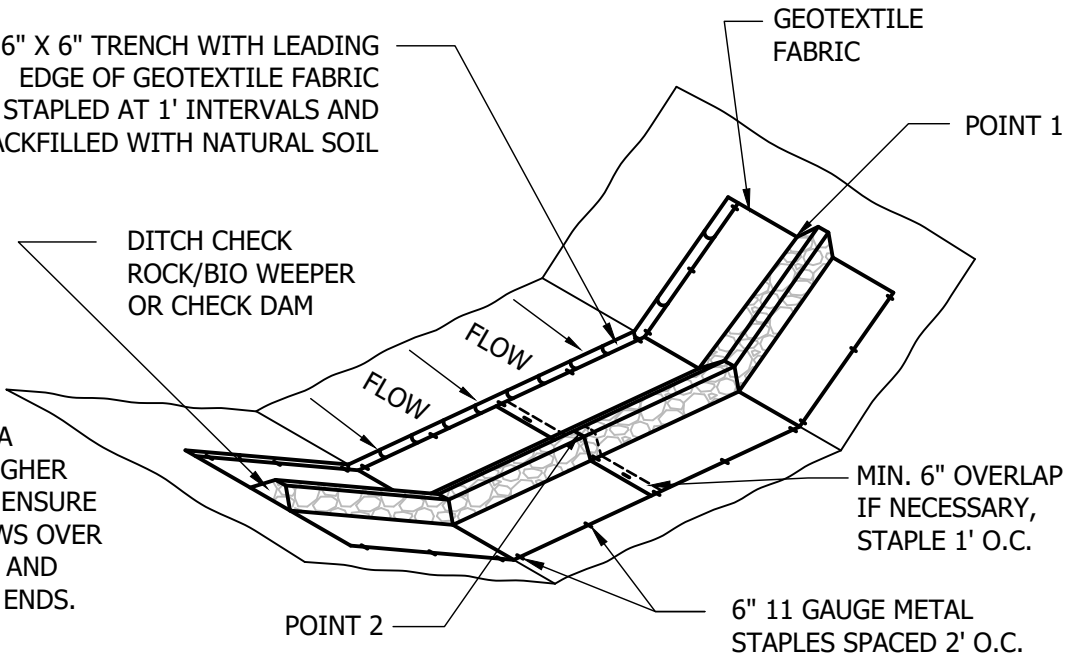
PROJECT NO. N/A

DWG. NO. TYP1

SHT. 1 OF 1

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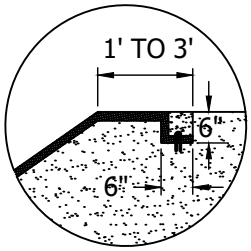
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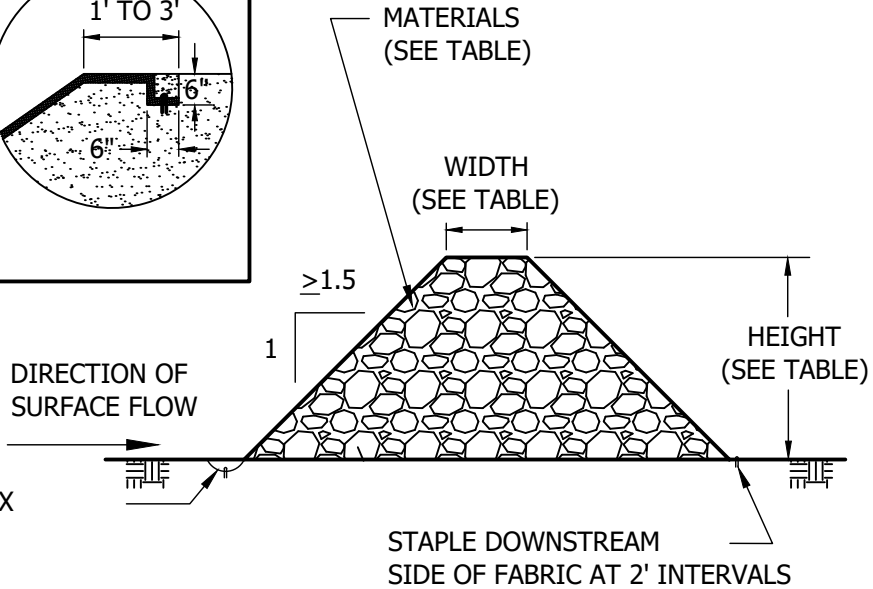


NOTE:
POINT 1 MUST BE A MINIMUM OF 6" HIGHER THAN POINT 2 TO ENSURE THAT WATER FLOWS OVER THE DITCH CHECK AND NOT AROUND THE ENDS.

	HEIGHT (INCHES)	WIDTH (INCHES)	MATERIAL
SMALL CHECK	24	12 - 18	2"-12" ANGULAR WASHED ROCK
LARGE CHECK	36	24 - 30	3"-18" ANGULAR WASHED ROCK
ROCK WEEPER	18	6 - 12	1 1/2" WASHED ROCK

ANCHOR TRENCH
1. DIG 6" X 6" TRENCH
2. LAY BLANKET IN TRENCH
3. STAPLE AT 1.5' INTERVALS
4. BACKFILL WITH NATURAL SOIL AND COMPACT





GEOTEXTILE FABRIC ANCHORED IN 6" X 6" TRENCH WITH 6", 11 GAUGE METAL STAPLES AT 1' INTERVALS

FAC. CODE: N/A		REL. W.O. N/A	
PL#. N/A		CONST. YR 2019	
STA# N/A			
	BY	DATE	
DESIGN		12/23/2019	
DRAWN		1/7/2020	
ASBUILT			
FILE NO.: N/A			
SCALE: N/A			

Northern Natural Gas

ROCK DITCH CHECK/WEEPER SIZING & MATERIALS

Figure S-4

PROJECT NO.
N/A

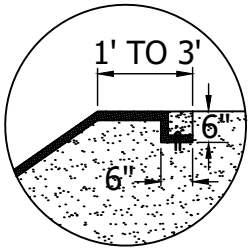
DWG. NO.
TYP1
SHT. 1 OF 1

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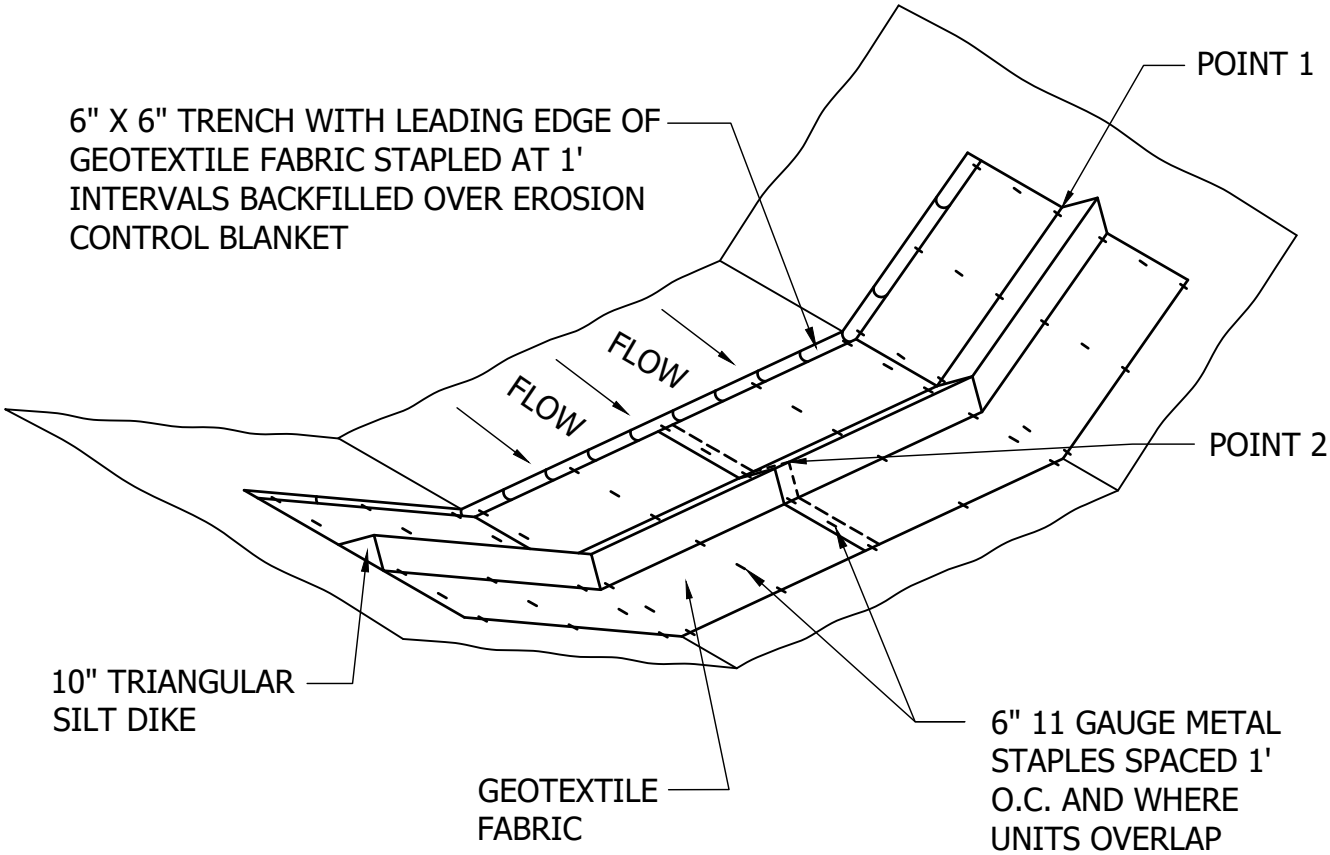
ANCHOR TRENCH

1. DIG 6" X 6" TRENCH
2. LAY BLANKET IN TRENCH
3. STAPLE AT 1.5' INTERVALS
4. BACKFILL WITH NATURAL SOIL AND COMPACT



NOTE:
STAPLE DENSITY SHALL CONFORM TO MANUFACTURERS SPECIFICATIONS.

NOTE:
POINT 1 MUST BE A MINIMUM OF 6" HIGHER THAN POINT 2 TO ENSURE THAT WATER FLOWS OVER THE DIKE AND NOT AROUND THE ENDS.



FAC. CODE: N/A		REL. W.O. N/A	
PL#. N/A		CONST. YR 2019	
STA# N/A			
	BY	DATE	
DESIGN		12/23/2019	
DRAWN		1/7/2020	
ASBUILT			
FILE NO.: N/A			
SCALE: N/A			

Northern Natural Gas

DITCH CHECK
TRIANGULAR SILT DIKE

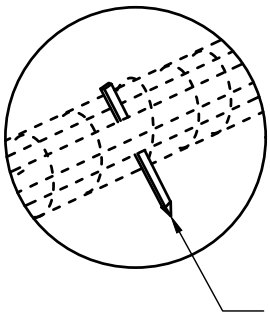
Figure S-5A

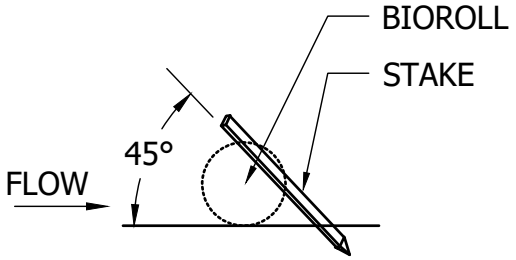
PROJECT NO.
N/A

DWG. NO.
TYP1
SHT. 1 OF 1

A

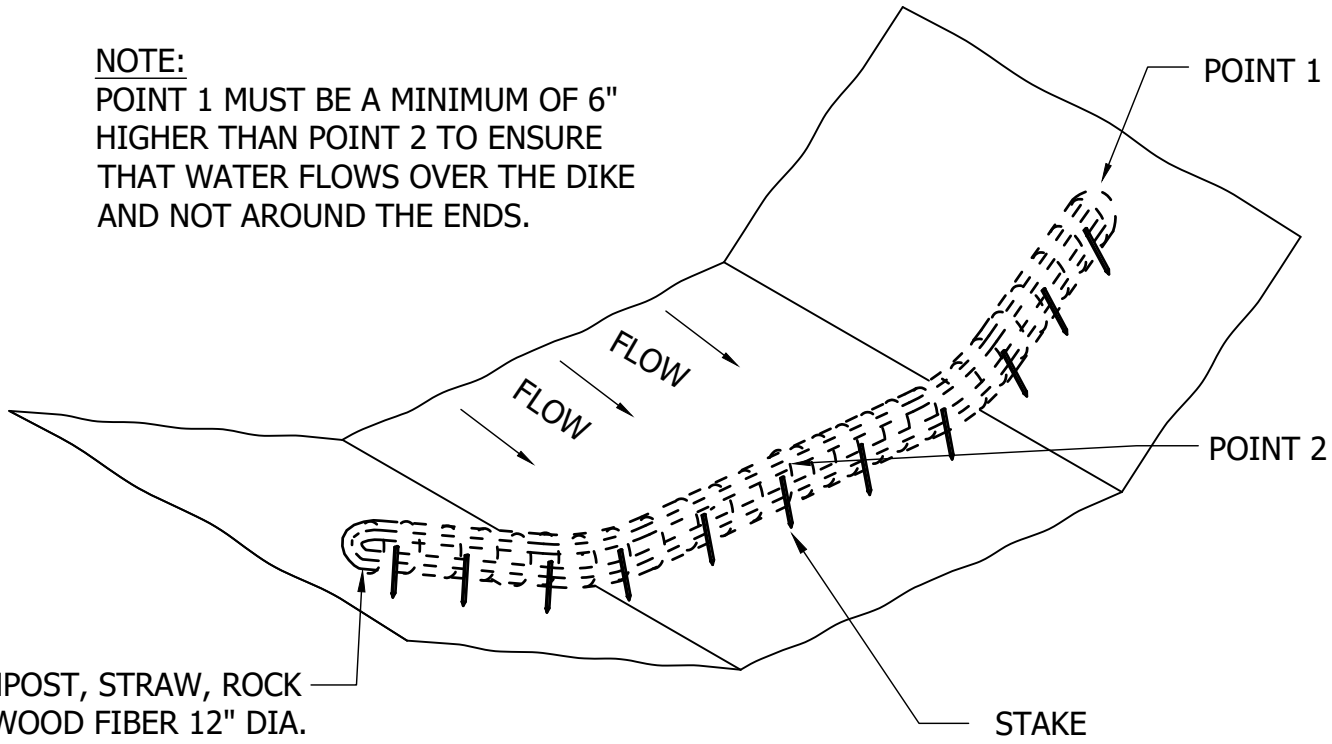
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2" x 2" x 16" LONG WOODEN STAKES AT 1'-0" SPACING . STAKES SHALL BE DRIVEN THROUGH THE BACK HALF OF THE FILTER LOG AT AN ANGLE OF 45° WITH THE TOP OF THE STAKE POINTING UPSTREAM.

NOTE:
POINT 1 MUST BE A MINIMUM OF 6" HIGHER THAN POINT 2 TO ENSURE THAT WATER FLOWS OVER THE DIKE AND NOT AROUND THE ENDS.



COMPOST, STRAW, ROCK OR WOOD FIBER 12" DIA. ROLL ENCLOSED IN POLYPROPYLENE NETTING OR A GEOTEXTILE BAG.

FAC. CODE: N/A		REL. W.O. N/A
PL#. N/A		CONST. YR 2019
STA# N/A		
	BY	DATE
DESIGN		12/24/2019
DRAWN		1/7/2020
ASBUILT		
FILE NO.: N/A		
SCALE: N/A		

Northern Natural Gas

FILTER LOG DITCH CHECK

Figure S-5B

PROJECT NO. N/A

DWG. NO. TYP1

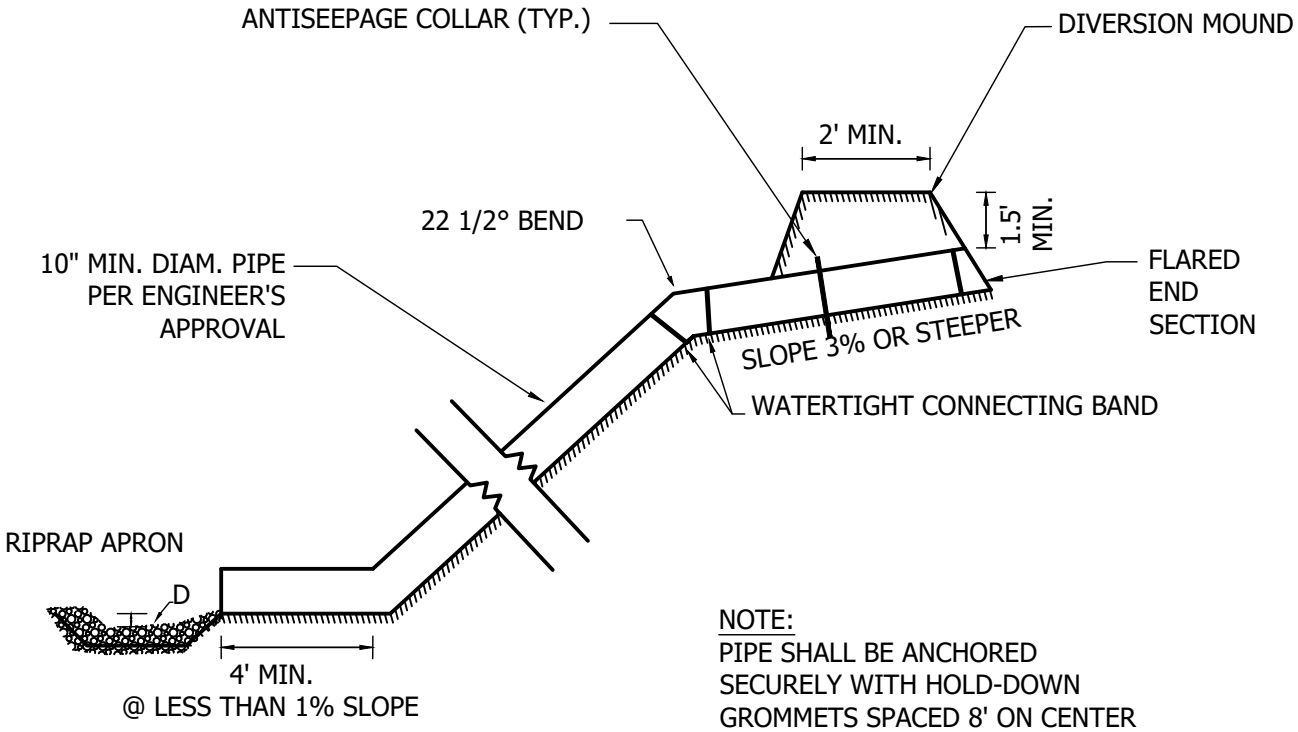
SHT. 1 OF 1

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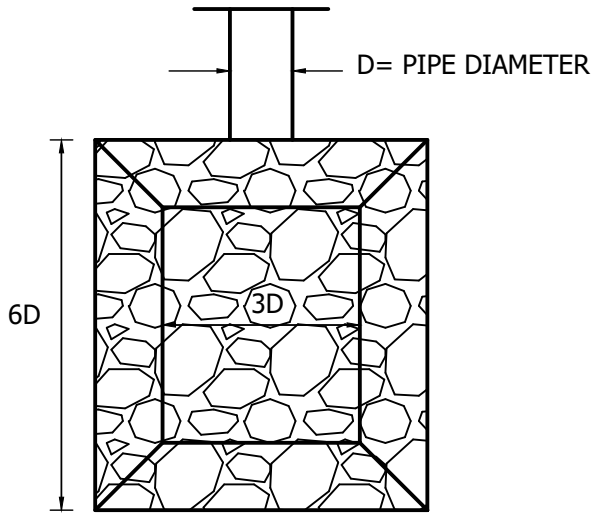
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PROFILE VIEW

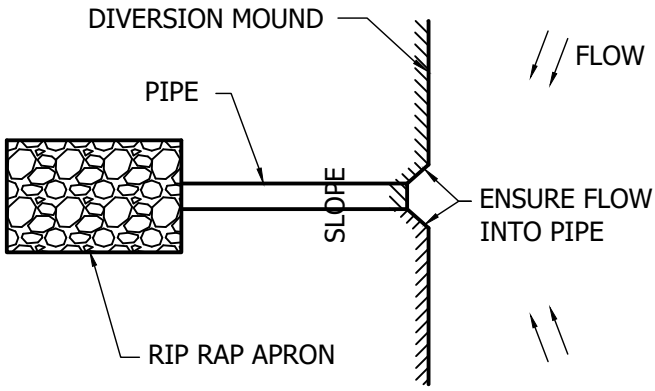


NOTE:
PIPE SHALL BE ANCHORED SECURELY WITH HOLD-DOWN GROMMETS SPACED 8' ON CENTER

RIPRAP APRON PLAN



PLAN VIEW



FAC. CODE: N/A		REL. W.O. N/A	
PL#. N/A		CONST. YR 2019	
STA# N/A			
	BY	DATE	
DESIGN		12/25/2019	
DRAWN		1/7/2020	
ASBUILT			
FILE NO.: N/A			
SCALE: N/A			

Northern Natural Gas

DIVERSION MOUND AND TEMPORARY PIPE DOWNDRAIN

Figure S-7

PROJECT NO. N/A

DWG. NO. TYP1

SHT. 1 OF 1

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Appendix C

State DOT Cross Reference Table

Control Type	BMP	Typical Detail	Illinois	Iowa	Michigan	Minnesota	Nebraska	New Mexico	Oklahoma	South Dakota	Texas	Wisconsin
Sediment	**Straw Logs Log**	Figure S-5B	N/A	IA DOT Spec 4169.12A	MI DTMB Spec ES32	MN DOT Spec 3882- Type 3 Mulch	NDOT Spec 806.02 (1); NDOT Spec 806.02 (1.); 812.02	N/A	N/A	SD DOT Spec 734.2.B.2	TX DOT Item 506 (2.10)	WI DOT Temporary ditch check- Bid Item 628.7504
Sediment	**Wood Fiber Log**	Figure S-5B	IL DOT CSSWPC Spec 41-3.01(d)	IA DOT Spec 4169.12A	MI DTMB Spec ES32	Excelsior wood fibers	NDOT Spec 806.02 (1); NE DOT Spec 806.02 (1.); 812/02	N/A	N/A	SD DOT Spec 734.2.B.2	TX DOT Item 506 (2.10)	WI DOT Temporary ditch check- Bid Item 628.7504
Sediment	**Wood Chip Log**	Figure S-5B	N/A	N/A	MI DTMB Spec ES32	MN DOT Spec 3882- Type 6 Mulch	NDOT Spec 806.02 (1); NDOT Spec 806.02 (1.); 812.02	N/A	N/A	N/A	TX DOT Item 506 (2.10)	WI DOT Temporary ditch check- Bid Item 628.7504
Sediment	**Compost/Wood Chip blend Log**	Figure S-5B	N/A	IA DOT Spec 4169.12B	MI DTMB Spec ES32	MN DOT Spec 3890-Grade 2 Compost MN DOT Spec 3882- Type 6 Mulch Consisting of the following blend of compost and wood chips: (a) From 30% to 40%, Grade 2 compost in accordance with MN DOT Spec 3890, "Compost" with at least 70% compost retained on the ⅜ in. sieve, (b) From 60% to 70%, Type 6 mulch in accordance to MN DOT Spec 3882, "Mulch Material"	NDOT Spec 807.02 (d.); 812.02	NM DOT Spec 603.2.6 and 632.2.6	N/A	N/A	TX DOT Item 506 (2.10)	N/A
Sediment	**Rock Log**	Figure S-5B	N/A	N/A	N/A	MN DOT Spec 3137 - Washed 3/4 in to 1 ½ in, Class A, B, C, or D rock	NDOT Spec 812.02	N/A	N/A	N/A	N/A	N/A
Sediment	**Machine Sliced /Hand Installed (MS/HI), high flow geotextile[2]**	Figure S-1	IL DOT CSSWPC Spec 41-3.01(b)	N/A	MI DTMB Spec S51 with post spacing modified to a maximum of 6 foot	MN DOT Spec 3886-modified to use only wooden posts	NDOT Spec 810.02; 811.02	N/A	OK DOT Spec 221.04C and 712.06	N/A	N/A	N/A
Sediment	**Machine Sliced /Hand Installed (MS/HI), wire backed.**	Figure S-2	N/A	N/A	N/A	N/A	NDOT Spec 810.02; 811.02	N/A	N/A	SD DOT Spec 734.2.B.1	TX DOT Item 506 (2.9)	N/A
Sediment	**Pre-Assembled (PA), woven geotextile**	N/A	N/A	N/A	N/A	MN DOT Spec 3886-modified to use only wooden posts	NDOT Spec 810.02; 811.02	N/A	N/A	N/A	N/A	N/A
Sediment	**Super Duty (SD), woven or non-woven geotextile3**	N/A	N/A	N/A	N/A	MN DOT Spec 3886	NDOT Spec 810.02; 811.02	N/A	N/A	N/A	N/A	N/A
Sediment	**Flotation Silt Curtain**	Figures S-3A and S3B	N/A	N/A	MI DTMB Spec S61	MN DOT Spec 3887	NDOT Spec 812.02; 820.02	N/A	N/A	N/A	N/A	WI DOT 1070; 1069
Sediment	**Compost Filter Berms**	Figure ERO-13	N/A	N/A	N/A	MN DOT Spec 3874 (A) MN DOT Spec 3890 (Grade 2)	NDOT Spec 813.02	N/A	N/A	N/A	N/A	WI DOT 1066
Sediment	**Slash Mulch Filter Berms**	Figure ERO-13	N/A	N/A	N/A	MN DOT Spec 3874 (B) MN DOT Spec 3882 (Type 5)	NDOT Spec 813.02	N/A	OK DOT Spec 221.04F	N/A	N/A	WI DOT 1066; 1058
Sediment	**Topsoil Berm**	Figure ERO-13	N/A	N/A	N/A	MN DOT Spec 3874 (D) MN DOT Spec 2105	NDOT Spec 813.02	N/A	OK DOT Spec 221.04F	N/A	N/A	WI DOT 1066
Sediment	**Rock Berm**	Figure ERO-13	IL DOT Spec 1005.01 IL DOT Spec 1005.02	N/A	MI DTMB Spec ES32	MN DOT Spec 3874 (E) MN DOT Spec 3733 (liner) MN DOT Spec 3601 (Class II riprap)	NDOT Spec Table 905.02; 814.02	N/A	OK DOT Spec 221.04G	N/A	TX DOT Item 506 (2.1)	N/A
Sediment	**Down Drains**	Figure S-7	IL DOT CSSWPC Spec 41-2.04(b)	N/A	MI DTMB Spec E15	MN DOT Spec 3892	NDOT Spec 814.02	NM DOT Spec 603.2.2	OK DOT Spec 221.02A	N/A	TX DOT Item 506 (2.2)	N/A
Erosion	**Horizontal Slope Grading**	Figure E-1	N/A	N/A	MI DTMB Spec E3	N/A	NDOT Spec 818.02	N/A	N/A	N/A	N/A	N/A
Erosion/Sediment	**Ditch Checks**	Figure S-4 or Figure ERO-19	IL DOT CSSWPC Spec 41-3.03(a)	N/A	MI DTMB Spec ES31	N/A	NDOT 814.02	N/A	N/A	N/A	TX DOT Item 506 (2.2)	N/A

Control Type	BMP	Typical Detail	Illinois	Iowa	Michigan	Minnesota	Nebraska	New Mexico	Oklahoma	South Dakota	Texas	Wisconsin
Erosion	**Certified Noxious weed free: agricultural grain straw (wheat, oats, rye, barley) or clean straw harvested from native grass production fields.**	N/A	IL DOT CSSWPC Spec 41-2.02(a)	IA DOT Spec 4169.07A	MI DTMB Spec E6	MN DOT Spec 3882.3(D) Type 3	NDOT Spec 810.02	N/A	N/A	SD DOT Spec 732.2.A	TX DOT Item 164 (3.2)	WI DOT 1058
Erosion	**Certified Noxious weed free: agricultural grain straw with hydraulic fiber matrix overspray**	N/A	IL DOT CSSWPC Spec 41-2.02(a)	N/A	MI DTMB Spec E6	MN DOT Spec 3882.3(D) Type 3 MN DOT Spec 3884	NDOT Spec 810.02	N/A	N/A	N/A	N/A	WI DOT 1058
Erosion	**Wood Mulch**	N/A	N/A	N/A	MI DTMB Spec E6	MN DOT Spec 3882.3(E/F) Type 5/6	NDOT Spec 806.02	N/A	N/A	N/A	N/A	WI DOT 1058
Erosion	**Prairie Hay**	N/A	N/A	N/A	N/A	MN DOT Spec 3882.3(H) Type 8	NDOT Spec 806.02	N/A	N/A	SD DOT Spec 732.2.A	TX DOT Item 164 (3.2)	WI DOT 1055
Erosion	**Type 1-erosion control blanket**	Figures E-2A and E-2B	IL DOT CSSWPC Spec 41-2.02(d)	IA DOT Spec 4169.10B1	MI DTMB Spec E9	MN DOT Spec 2575 MN DOT Spec 3885 (Category 0)	NDOT Spec 810.02	NM DOT Spec 603.2.3.2	N/A	SD DOT Spec 734.2.C.1	TX DOT Item 169 (2.1.1)	WI DOT Erosion mat Class I Types A and B - Bid Items 628.2002,628.2004 , 628.2006, and 628.2008
Erosion	**Type 2-erosion control blanket**	Figures E-2A and E-2B	N/A	IA DOT Spec 4169.10C1	N/A	MN DOT Spec 2575 MN DOT Spec 3885 (Category 3)	NDOT Spec 810.02	N/A	N/A	N/A	TX DOT Item 169 (2.1.2)	WI DOT Erosion mat Class II Types B and C - Bid Items 628.2023, and 628.2027
Erosion	**Type 3- erosion control blanket**	Figures E-2A and E-2B	N/A	IA DOT Spec 4169.10B2 and 4169.10C2	N/A	MN DOT Spec 2575 MN DOT Spec 3885 (Category 4)	NDOT Spec 810.02	N/A	N/A	N/A	TX DOT Item 169 (2.1.3 and 2.1.4)	WI DOT Erosion mat Class III Types A - D - Bid Items 628.2031,628.2033 , 628.2037, and 628.2039
Erosion	**Type 4-erosion control blanket**	Figures E-2A and E-2B	N/A	IA DOT Spec 4169.10E	N/A	MN DOT Spec 2575 MN DOT Spec 3885 (Category 6)	NDOT Spec 810.02	N/A	OK DOT Spec 228.04	SD DOT Spec 734.2.C.2	TX DOT Item 169 (2.2)	N/A
Erosion	**Natural Tackifier**	N/A	N/A	N/A	N/A	MN DOT Spec 2575.3.E	NDOT Spec 807.02 (b) Type HM2	N/A	N/A	N/A	N/A	N/A
Erosion	**Synthetic Tackifier**	N/A	IL DOT CSSWPC Spec 41-2.03	N/A	N/A	MN DOT Spec 2575.3.E	NDOT Spec 807.02 (c) Type HM3	N/A	N/A	N/A	N/A	N/A
Erosion	**Hydromulch**	N/A	IL DOT CSSWPC Spec 41-2.02(b)	IA DOT Spec 4169.07B1	N/A	MN DOT Spec 3884.3-B.2	NDOT Spec 807.02 (b.,c.,and d.)	N/A	N/A	SD DOT Spec 732.2.B	TX DOT Item 164 (3.3)	WI DOT Soil Stabilizer Type B Bid Item 628.6510
Erosion	**Bonded Fiber Matrix**	N/A	N/A	IA DOT Spec 4169.07B2	N/A	MN DOT Spec 3884.3-B.4	NDOT spec 811.02	N/A	N/A	SD DOT Spec 732.2.C	N/A - considered as direct substitute for blankets by TX DOT	WI DOT Soil Stabilizer Type A Bid Item 628.6505
Erosion	**Reinforced Fiber Matrix**	N/A	N/A	IA DOT Spec 4169.07B3	N/A	MN DOT Spec 3884.3-B.5	NDOT spec 811.02	N/A	N/A	SD DOT Spec 732.2.D	N/A - considered as direct substitute for blankets by TX DOT	N/A
Erosion	**Poly Sheeting**	Figures ERO-17a and ERO-17b	N/A	N/A	MI DTMB Spec E18	MN DOT Spec 2575.518 MN DOT Spec 3888	NDOT spec 811.02	N/A	N/A	N/A	N/A	N/A

Control Type	BMP	Typical Detail	Illinois	Iowa	Michigan	Minnesota	Nebraska	New Mexico	Oklahoma	South Dakota	Texas	Wisconsin
Erosion	**Geotextile Fabric**	N/A	N/A	IA DOT Spec 4169.11	N/A	MN DOT Spec: Type V	NDOT spec 811.02	N/A	N/A	N/A	N/A	N/A
Erosion/Sediment	**Straw Bale Dewatering Structure**	Figure ERO-14	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	WI DOT 1061
Erosion/Sediment	**Geotextile Filter Bag**	Figure ERO-15	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	WI DOT 1061
Sediment	**Inlet Protection-Drop-in Bag**	Figure ERO-16	IL DOT CSSWPC Spec 41-3.02(a)	N/A	MI DTMB Spec S58	N/A	N/A	N/A	N/A	N/A	N/A	WI DOT Inlet Protection Type A - Bid Item 628.7005
Sediment	**Triangular Silt Dike**	Figure S-5A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	WI DOT Temporary ditch check- Bid Item 628.7504

This table is provided for cross reference only to aid the contractor in obtaining materials. For installation specifications refer to the body of Northern Natural Gas Company's Erosion and Sediment Control Technical Standards. The standards are not intended to address every situation, project specific permits and site conditions may require alteration of the Stormwater Pollution Prevention Plan or practices not outlined in the Technical Standards.

ATTACHMENT E

NRCS MAPPED SOIL TABLE

Attachment E- NRCS Mapped Soils

Map Label	Mile Post		Soil Map Unit Name	Local Component Phase	Component Percent	Percent Slope	Depth of A Horizon (in)	Surface Texture	Drainage Class	Permeability	Landforms
	From	To									
Lake Mills M500 E-line Extension											
27	36.08 37.42 37.65	36.12 37.61 37.74	Dickinson fine sandy loam, 0 to 2 percent slopes	Dickinson	88-98	1	10	Fine sandy loam	Well drained	High	Outwash plains
62	37.25 41.19 41.44	37.30 41.25 41.53	Barrington silt loam, 1 to 3 percent slopes	Barrington	90-98	2	15	Silt loam	Moderately well drained	Moderately high	Flats
84	34.86 35.11	34.93 35.25	Brownton silty clay loam, 0 to 2 percent slopes	Brownton	85-95	1	15	Silty clay loam	Poorly drained	Moderately low	Not rated
123	35.83	35.94	Dundas silt loam, 0 to 2 percent slopes	Dundas	75-95	1	10	Silt loam	Poorly drained	Moderately high	Ground moraines
129	35.71	35.74	Cylinder loam, 0 to 2 percent slopes	Cylinder	75-95	1	19	Loam	Somewhat poorly drained	Moderately high	Outwash plains
134	35.40	35.44	Okoboji silty clay loam, 0 to 1 percent slopes	Okoboji	75-95	0	33	Silty clay loam	Very poorly drained	Moderately low	Depressions
136	35.44 41.27 41.60 41.72	35.62 41.38 41.69 41.80	Madelia silty clay loam, 0 to 2 percent slopes	Madelia	75-95	1	19	Silty clay loam	Poorly drained	Moderately high	Not rated
140	41.00 41.25	41.08 41.27	Spicer silty clay loam, 0 to 2 percent slopes	Spicer	80-95	1	16	Silty clay loam	Poorly drained	Moderately high	Not rated
156	37.61	37.65	Fairhaven loam, 0 to 2 percent slopes	Fairhaven	85-95	1	14	Loam	Well drained	Moderately high	Outwash plains
190	35.94	35.99	Hayfield silt loam, 1 to 3 percent slopes	Hayfield	75-95	2	9	Silt loam	Somewhat poorly drained	Moderately high	Outwash plains
229	35.25	35.32	Waldorf silty clay loam, 0 to 2 percent slopes	Waldorf	75-95	1	20	Silty clay loam	Poorly drained	Moderately low	Not rated
239	36.54 42.00	36.58 42.02	Le Sueur loam, 1 to 3 percent slopes	Le Sueur	65-90	2	14	Loam	Somewhat poorly drained	Moderately high	Not rated

Map Label	Mile Post		Soil Map Unit Name	Local Component Phase	Component Percent	Percent Slope	Depth of A Horizon (in)	Surface Texture	Drainage Class	Permeability	Landforms
	From	To									
252	34.20 34.32	34.27 34.36	Marshan silt loam	Marshan	70-100	1	15	Silt loam	Poorly drained	Moderately high	Drainageways
255	34.27 34.36	34.32 34.38	Mayer loam, 0 to 2 percent slopes	Mayer	75-95	1	21	Loam	Poorly drained	Moderately high	Drainageways
282	34.38	34.42	Hanska loam, 0 to 2 percent slopes	Hanksa	75-95	1	19	Loam	Poorly drained	Moderately high	Outwash plains
287	35.37 35.62 41.38 41.53	35.40 35.65 41.44 41.60	Minnetonka silty clay loam	Minnetonka	85-95	1	16	Silty clay loam	Poorly drained	Moderately high	Drainageways
391	34.74 34.93	34.86 34.98	Spicer silt loam, depressional	Spicer-depressional	90-98	1	20	Silt loam	Very poorly drained	Moderately high	Drainageways
392	36.58 36.63	36.61 36.65	Biscay clay loam, 0 to 2 percent slopes	Biscay	75-95	1	20	Clay loam	Poorly drained	Moderately high	Outwash plains
414	36.72 37.21 37.30 38.46 38.99 39.09	36.73 37.25 37.35 38.49 39.01 39.12	Hamel loam, 0 to 2 percent slopes	Hamel	75-95	1	24	Loam	Poorly drained	Moderately high	Ground moraines
517	34.71 36.65 37.84	34.74 36.72 37.86	Shandep loam	Shandep	95-99	1	38	Loam	Very poorly drained	Moderately high	Outwash plains
521	34.42	34.71	Medo muck, depressional, 0 to 1 percent slopes	Medo-depressional	80-100	0	48	Muck	Very poorly drained	High	Depressions
525	36.41 41.08	36.50 41.14	Muskego soils, 0 to 1 percent slopes	Muskego-drained	15-85	0	28*	Muck	Very poorly drained	High	Depressions
940	34.98	35.11	Maxcreek-Barbert complex	Maxcreek	60-70	1	21	Silty clay loam	Poorly drained	Moderately high	Moraines
1806	35.74 36.81 37.02	35.83 36.87 37.06	Lerdal silty clay loam, silty substratum, 0 to 2 percent slopes	Lerdal-silty substratum	85-95	1	11	Silty clay loam	Somewhat poorly drained	Moderately high	Flats
102B	39.20 39.31 39.34 39.45	39.27 39.34 39.37 39.52	Clarion loam, 2 to 6 percent slopes	Clarion	70-95	3	16	Loam	Moderately well drained	Moderately high	Ground moraines

Map Label	Mile Post		Soil Map Unit Name	Local Component Phase	Component Percent	Percent Slope	Depth of A Horizon (in)	Surface Texture	Drainage Class	Permeability	Landforms
	From	To									
	39.66 39.88 39.98 40.17 40.78 41.69 41.80 42.31	39.70 39.96 40.15 40.20 40.83 41.72 41.84 42.34									
102C	39.27 39.34 39.52 39.59 40.22	39.31 39.34 39.57 39.66 40.28	Clarion loam, 6 to 10 percent slopes	Clarion	70-95	8	13	Loam	Well drained	Moderately high	Ground moraines
102D	38.68 38.77	38.71 38.90	Clarion loam, 12 to 18 percent slopes	Clarion	85-95	14	14	Loam	Well drained	Moderately high	Till plains
106C2	38.18 38.50 38.60 38.67 38.90 39.01 39.16	38.22 38.56 38.63 38.68 38.99 39.08 39.20	Lester loam, 6 to 10 percent slopes, moderately eroded	Lester-moderately eroded	75-90	8	6	Loam	Well drained	Moderately high	Ground moraines
106E	38.38	38.46	Lester loam, 10 to 22 percent slopes	Lester	75-90	20	9	Loam	Well drained	Moderately high	Not rated
216B	35.99 36.12	36.08 36.30	Lamont fine sandy loam, 2 to 6 percent slopes	Lamont	85-95	4	9	Fine sandy loam	Well drained	High	Outwash plains
238C2	36.37	36.41	Kilkenny clay loam, 6 to 10 percent slopes, moderately eroded	Kilkenny-moderately eroded	80-95	8	7	Clay loam	Moderately well drained	Moderately high	Not rated
27B	38.04	38.09	Dickinson fine sandy loam, 2 to 6 percent slopes	Dickinson	88-98	3	10	Fine sandy loam	Well drained	High	Not rated
27C	37.15 37.35	37.21 37.38	Dickinson fine sandy loam 6 to 16 percent slopes	Dickinson	88-98	8	10	Fine sandy loam	Well drained	High	Till plains
286B	35.32 35.65 36.30 36.75	35.37 35.71 36.37 36.81	Shorewood silty clay loam, 1 to 6 percent slopes	Shorewood	85-95	4	8	Silty clay loam	Moderately well drained	Moderately high	Not rated

Map Label	Mile Post		Soil Map Unit Name	Local Component Phase	Component Percent	Percent Slope	Depth of A Horizon (in)	Surface Texture	Drainage Class	Permeability	Landforms
	From	To									
	36.87 36.98	36.98 37.02									
286C2	36.73 36.98	36.75 36.98	Shorewood silty clay loam, 6 to 12 percent slopes, eroded	Shorewood-eroded	85-95	8	8	Silty clay loam	Moderately well drained	Moderately high	Knolls
41B	38.09	38.18	Estherville sandy loam, 2 to 6 percent slopes	Estherville	75-95	4	13	Sandy loam	Somewhat excessively drained	High	Outwash plains
41C	37.74 37.98	37.77 38.02	Esterville sandy loam, 6 to 12 percent slopes	Estherville	85-98	8	12	Sandy loam	Somewhat excessively drained	High	Not rated
42D	37.77 38.02	37.83 38.04	Hawick gravelly sandy loam, 12 to 20 percent slopes	Hawick	85-95	16	7	Gravelly sandy loam	Excessively drained	High	Outwash plains
920B	40.91 42.08	41.00 42.15	Clarion-Estherville complex, 2 to 6 percent slopes	Clarion	40-50	3	16	Loam	Moderately well drained	Moderately high	Ground moraines
920C	40.85	40.87	Clarion-Storden-Pilot Grove complex, 6 to 10 percent slopes, moderately eroded	Clarion-moderately eroded	35-50	8	8	Loam	Well drained	Moderately high	Ground moraines
920D	39.14	39.16	Omsrud-Storden-Pilot Grove complex, 10 to 16 percent slopes, moderately eroded	Omsrud-moderately eroded	35-50	12	9	Loam	Well drained	Moderately high	Ground moraines
944B	38.71	38.77	Lester-Estherville complex, 2 to 6 percent slopes	Lester	60-70		7	Loam	Well drained	Moderately high	Till plains
944C2	42.41 42.51	42.43 42.49	Lester-Estherville	Lester-eroded	60-70		7	Loam	Well drained	Moderately high	Till plains

Map Label	Mile Post		Soil Map Unit Name	Local Component Phase	Component Percent	Percent Slope	Depth of A Horizon (in)	Surface Texture	Drainage Class	Permeability	Landforms
	From	To									
			complex, 6 to 12 percent slopes, eroded								
944E	39.08 39.57	39.09 39.59	Lester-Estherville complex, 18 to 24 percent slopes	Lester	55-65	22	7	Loam	Well drained	Moderately high	Not rated
94B	37.83 37.94	37.84 37.98	Terril loam, 2 to 6 percent slopes	Terril	70-95		34	Loam	Well drained	Moderately high	Ground moraines
L113B	36.50 36.61 37.38 38.24 41.96 42.02 42.17 42.22	36.54 36.63 37.42 38.38 42.00 42.05 42.20 42.24	Reedslake-Le Sueur complex, 1 to 6 percent slopes	Reedslake	40-80	4	15	Loam	Moderately well drained	Moderately high	Hillslopes
L1207B	37.06	37.15	Le Sueur-Reedslake-Cordova complex, 0 to 5 percent slopes	Le Sueur	30-70	2	11	Clay loam	Somewhat poorly drained	Moderately high	Hillslopes
L83A	38.22 39.37 39.70 39.96 40.15 40.20 40.28 40.83 40.87 41.84 42.05 42.15 42.20 42.24 42.34 42.43	38.24 39.45 39.74 39.98 40.17 40.22 40.78 40.85 40.91 41.86 42.08 42.17 42.22 42.31 42.41 42.45	Webster clay loam, 0 to 2 percent slopes	Webster	75-95	1	20	Clay loam	Poorly drained	Moderately high	Ground moraines
L84A	37.86 38.49 38.56 38.63 39.12 39.74	37.94 38.50 38.60 38.67 39.14 39.80	Glencoe clay loam, 0 to 1 percent slopes	Glencoe	65-95	0	39	Clay loam	Poorly drained	Moderately high	Ground moraines

Map Label	Mile Post		Soil Map Unit Name	Local Component Phase	Component Percent	Percent Slope	Depth of A Horizon (in)	Surface Texture	Drainage Class	Permeability	Landforms
	From	To									
	39.81 41.14 41.86	39.88 41.19 41.96									
L85A	39.80	39.80	Nicollet clay loam, 1 to 3 percent slopes	Nicollet	75-95	2	17	Clay loam	Somewhat poorly drained	Moderately high	Ground moraines

* Topsoil depth includes organic (O) horizon layers; includes non-mineral topsoil.

ATTACHMENT F

SPILL PREVENTION, CONTAINMENT, AND COUNTERMEASURE PLAN

Stantec

Northern Natural Gas
Spill Prevention, Control and Countermeasure (SPCC) Plan
For Construction Projects

Introduction

This SPCC Plan describes planning, prevention and control measures to minimize impacts resulting from spills of fuels, petroleum products, or other regulated substances as a result of pipeline facility construction. These measures will be implemented by the contractor, unless otherwise indicated, during Northern Natural Gas (Northern) pipeline facility construction projects. This SPCC Plan was developed in accordance with the Federal Energy Regulatory Commission's Wetland and Waterbody Construction and Mitigation Procedures (FERC Procedures) and satisfies the requirements for SPCC Plans described therein. This plan must remain on-site.

1 Planning and Prevention

Northern requires its contractors to implement proper planning and preventative measures to minimize the likelihood of spills, and to quickly and successfully clean up a spill should one occur. Northern developed this SPCC Plan to set forth the minimum standards for handling and storing regulated substances, and for cleaning up spills. Potential sources of construction-related spills include storage tank leaks, machinery and equipment failure, and fuel handling and transfer accidents. The contractor will be responsible for implementing, at a minimum, the following planning and prevention measures.

1.1 Roles and Responsibilities:

Contractor Spill Coordinator

1.1.1 A contractor spill coordinator shall be designated and employed by the contractor, subject to approval by Northern on projects where outside contractors are used for construction. The spill coordinator may also be a designated Northern employee.

1.1.2 The contractor spill coordinator shall notify the environmental inspector (EI) immediately of any spill, regardless of volume. If the EI is not available, the contractor spill coordinator shall notify Northern's Operations Communication Center (OCC) at 888-367-6671 within 30 minutes of the occurrence.

1.1.3 The contractor spill coordinator shall mobilize on-site personnel, equipment, and materials for containment and/or clean-up commensurate with the extent of the spill.

1.1.4 The contractor spill coordinator will assist the EI in completion of the Spill Release/Report form (environmental procedure 320.101a, Appendix A: Spill/Release Report Form).

1.1.5 The contractor spill coordinator will identify available emergency response contractors. The emergency response contractors will be subject to Northern's approval.

1.1.6 The contractor spill coordinator shall assist the emergency response contractor and monitor containment activities to ensure the actions are consistent with the requirements of this SPCC Plan.

1.1.7 The contractor spill coordinator, in consultation with the Division Environmental Specialist (DES), on-site Northern representative or appropriate agencies, will assist in determining when it is necessary to evacuate spill sites to safeguard human health.

1.1.8 The contractor spill coordinator should **not** contact any agency regarding a spill without authorization from Northern's environmental department.

Environmental Inspector (EI)

1.1.9 The EI may be a designated Northern employee or a third-party inspector assigned to monitor environmental compliance on the project.

1.1.10 The EI will monitor the contractor's compliance with the provisions of this SPCC Plan.

1.1.11 The EI will immediately report all spills to the OCC at 888-367-6671, the construction coordinator and other Northern personnel, as required.

1.1.12 The EI, with assistance from the contractor spill coordinator, is responsible for completing a Spill Release/Report Form and submitting it to the DES within 24 hours of the occurrence for all spills, regardless of volume.

1.1.13 Both the contractor spill coordinator and the EI, in conjunction with the DES or appropriate agencies, will assist in determining when it is necessary to evacuate spill sites to safeguard human health.

1.1.14 The EI should not contact any agency regarding a spill without authorization from the DES.

Construction Coordinator

1.1.15 The construction coordinator is a designated Northern representative who is responsible for the management of construction activities on the project.

1.1.16 The construction coordinator is responsible for documenting the general information regarding any spills such as, work stoppages, injuries, fires and the extent of exposure to on-site personnel.

1.1.17 The construction coordinator, in consultation with the DES or appropriate agencies, will assist in determining when it is necessary to evacuate spill sites to safeguard human health.

1.1.18 The construction coordinator is responsible for coordinating any emergency response services that may be required such as the Fire Department, the Sherriff's Department, or for contacting emergency response contractors.

Authorized Personnel

1.1.19 Authorized personnel are representatives of the contractor who are designated to handle fuel, lubricants or other regulated substances.

1.1.20 Authorized personnel shall be familiar with the requirements of this SPCC Plan and the consequences of non-compliance.

Contractor's Construction Superintendent

1.1.21 The contractor's construction superintendent, or representative, must immediately notify the EI of any spill of any liquid, (i.e. a petroleum product, hazardous liquid, water, casing wax, etc.), regardless of volume.

1.1.22 The contractor's construction superintendent is ultimately responsible for ensuring that construction personnel understand and comply with this SPCC Plan.

Construction Personnel

1.1.23 Construction personnel are representatives of the contractor involved with installation of the pipeline facility.

1.1.24 Construction personnel shall notify the crew foreman and/or contractor's spill coordinator immediately of any spill of any liquid (i.e. a petroleum product or hazardous liquid, water, casing wax, etc.), regardless of volume.

1.1.25 Construction personnel are responsible for beginning the initial spill containment and clean-up.

Environmental Specialist

1.1.26 The environmental specialist is a designated Northern employee who is responsible for the management of environmental compliance on the project.

1.1.27 The environmental specialist is the EI's initial point of contact when a spill occurs and will assist in determining the containment measures that may be required.

1.1.28 The environmental specialist will promptly report spills to appropriate Federal, State, and local agencies as required.

1.1.29 The environmental specialist will coordinate with these agencies regarding contacting additional parties or agencies.

1.1.30 The environmental specialist will promptly notify the U.S. Coast Guard National Response Center of spills, regardless of size, that enter lakes, streams or other standing or flowing waters. (The National Response Center phone number is listed in section 4.2 of this SPCC Plan).

1.1.31 The environmental specialist, in consultation with appropriate agencies, will assist in determining when spill sites will be evacuated, as necessary, to safeguard human health.

1.2 Training:

1.2.1 The contractor spill coordinator shall train all employees handling fuels and other regulated substances to follow and comply with this SPCC Plan.

1.2.2 The contractor's construction superintendent will be responsible for ensuring that such training is received prior to construction activities.

1.2.3 The EI will specifically address compliance with this SPCC Plan while delivering Environmental Training-Construction, environmental training Type B to contractor personnel and/or while reviewing safety procedure 110.180b, Contractor Orientation Checklist and Roster with contractor personnel. (See

environmental procedure 380.201, Environmental Compliance for Construction Projects, for training program requirements.)

1.3 Equipment:

1.3.1 All equipment must be thoroughly cleaned prior to arrival on-site. Equipment with existing fluid leaks will not be allowed on-site.

1.3.2 All equipment repairs and maintenance must be completed offsite. In the event that a repair is required to remove the equipment, or removing the equipment is more likely to cause a spill than an onsite repair, adequate liquid storage must be utilized in addition to secondary containment to contain any liquids during the repair. Ensure the capacity of existing secondary containment is adequate for the repair.

1.3.3 Each piece of self-propelled equipment (i.e. dozers, excavators, side booms, etc.) must be equipped with a spill kit. At a minimum, the spill kit must include sufficient absorbent pads and plastic lining material to contain spills resulting from mechanical failure.

1.3.4 Directional drilling rigs must be equipped with a spill kit of appropriate size to contain any potential spills. At a minimum, spill kits must include absorbent pads, booms, a temporary disposal bag, disposable nitrile gloves and plastic lining material to contain spills resulting from mechanical failure.

1.3.5 Each piece of stationary equipment, excluding directional drilling rigs, (i.e. generators, air compressors, water pumps, etc.) must have access to a spill kit. The spill kit must be located in the immediate vicinity of the stationary equipment and in an easily accessible area no farther than 100 yards. At a minimum, spill kits must include absorbent pads, booms, a temporary disposal bag, disposable nitrile gloves and plastic lining material to contain spills resulting from mechanical failure. The appropriate quantities will depend on the number of pieces of stationary equipment and are subject to approval by the on-site Northern representatives.

1.3.6 Each piece of stationary equipment, including drilling rigs, must be parked inside appropriately sized and constructed secondary containment. Any self-propelled equipment parked for more than 24 hours is considered stationary.

1.3.7 Each contractor vehicle must be equipped with a catch pan and a spill kit containing a sufficient quantity of absorbent and barrier materials to adequately contain and recover foreseeable spills. These kits may include, but are not limited to absorbent pads, straw bales, absorbent clay, sawdust, floor-drying agents, spill containment barriers, plastic sheeting, skimmer pumps and holding tanks.

1.3.8 For personal vehicles driven by contractor personnel and parked daily at construction project contractor yards, the contractor spill coordinator must provide on-site spill kits of adequate size to be stationed in easily accessible areas in the event of a spill resulting from a personal vehicle.

1.3.9 All fuel and service vehicles shall carry materials that are adequate to control foreseeable spills. Such material may include, but is not limited to, absorbent pads, commercial absorbent material, plastic bags with ties and a shovel.

1.3.10 Suitable plastic lining materials must also be available for placement below and on top of temporarily stored contaminated soils and materials.

1.3.11 The contractor spill coordinator will make known to authorized personnel, construction personnel, and the EI, the locations of spill control equipment and materials and have them readily accessible during construction activity. Spill kits must be replenished following each spill clean-up.

1.3.12 Construction equipment shall not be parked overnight or fueled within 200 feet of residential water wells, within 400 feet of municipal or community water wells, or within 100 feet of a wetland or waterbody. These activities may occur closer only if the EI finds, in advance, no reasonable alternative and the contractor has taken appropriate steps to prevent spills. These steps include secondary containment structures.

1.3.13 All fuel nozzles shall be equipped with functional automatic shut-offs.

1.3.14 In large wetlands where no upland site is available for refueling, auxiliary fuel tanks on construction equipment are recommended.

1.3.15 Fuel trucks transporting fuel to on-site construction equipment shall travel only on approved access roads.

1.4 Supervision and Inspection:

1.4.1 Prior to construction, the contractor spill coordinator, or designee, shall perform an inspection and test of all equipment to ensure that it is in good condition and free of leaks.

1.4.2 During construction, the contractor spill coordinator, or designee, shall perform daily inspections on hoses, hydraulic cylinders, fluid reservoirs, hydraulic connections, valves, pipes and tanks to ensure equipment is free of leaks.

1.4.3 On a daily basis, prior to commencing construction activities, the contractor spill coordinator, or designee, must complete Northern's Daily Equipment Spill Prevention Checklist (environmental procedure 380.201c, Daily Equipment Spill Prevention Checklist) and provide the original copy to the on-site EI or a Northern representative. The EI maintains these documents in a file for the course of a week. If a spill occurs within the week, this document is attached to the Spill/Release Report Form.

2 Liquid Transfer Plans:

2.1 The contractor spill coordinator will prepare a site-specific liquid transfer plan prior to the transfer of any liquids for construction activities which require manipulation of valves or removal of plugs (e.g., pipeline liquids, hydrostatic test water, fuel, glycol or oil) where spills can occur.

2.2 The liquid transfer plan must also address any other activities that have potential to result in a liquid release without proper planning (e.g., pipeline cutting pig launching/removing or draining of drips).

2.2.1 For pipeline cutting activities, the liquid transfer plan must include step-by-step instructions with diagramed drawings for how to check for liquids prior to performing any cutting activities.

2.3 At a minimum, the liquid transfer plan must include detail for the correct location of secondary containment and positioning of all valves, plugs and hoses prior to, during and at the completion of the liquid transfer process.

2.4 The liquid transfer plan must be reviewed by the EI prior to execution of any liquid transfer. In the EI's absence, the chief inspector will review the liquid transfer plan.

2.5 The liquid transfer plan must be maintained by contractor personnel responsible for the respective liquid transfer process and updated as needed when procedures or processes change.

2.6 Contractor personnel will review the status of liquid transfer configurations during shift changes to ensure proper communication between crews.

3 Storage and Handling of Fuels/Hazardous Liquids

3.1 Typical Fuels, Lubricant and Hazardous Liquids:

3.1.1 The following table identifies fuels, lubricants and coolants generally present on pipeline construction spreads and identifies typical total volumes, storage and transportation methods. Contractors will have appropriate Safety Data Sheets (SDS) on-site, as required by the Occupation Safety and Health Administration (OSHA).

Typical Petroleum Storage and Handling Volumes on a Construction Spread

	Fluids	Typical Amounts	Storage	Typical Transport Mode
Fuels	Diesel	6,000-12,000 Gallons	1-3 Tanks or Tankers stored at contractor yard 5 gallon cans, 100 gallon storage in pickups, etc.	1-3 Fuel Trucks 1-3 "Fuel Skids"
	Military Aviation Kerosene [1]	6,000-12,000 Gallons		
	Kerosene [1]	6,000-12,000 Gallons		
	Gasoline	5,000 Gallons		
Lubricant	Engine Oil	< 500 Gallons	Bulk Storage or Retail Packaging at contractor yard warehouse	1-3 "Grease" Trucks
	Transmission/ Drive Train Oil	< 500 Gallons		
	Hydraulic Oil	< 500 Gallons		
	Gear Oil	< 500 Gallons		
	Lubricating Grease	20-30 cases of 24 cans per case		
Coolants	Ethylene Glycol	100 Gallons		
	Propylene Glycol	100 Gallons		

[1] Used straight or as additives only in extremely cold weather.

3.2 Storage of Fuel and Hazardous Liquids – General:

3.2.1 The contractor shall follow proper storage practices for fuels and hazardous liquids including, but not limited to, the following:

3.2.1.1 Fuel storage shall be at contractor yards only, or as approved by Northern.

3.2.1.2 Tools and materials to stop the flow of leaking tanks and pipes shall be kept on-site. Such equipment must include, but not be limited to, plugs of various sizes, a hammer, assorted sizes of metal screws with rubber washers, a screwdriver and plastic tape.

3.2.1.3 Fuels, lubricants, waste oil and any other regulated substances shall be stored in aboveground tanks only.

3.2.1.4 Storage tanks and containers must conform to all applicable industry codes.

3.2.1.5 A suitable secondary containment structure must be utilized at each fuel storage site. Portable secondary containment structures are preferred over site-constructed structures. If portable structures are not available, the site-constructed structures must be lined with seamless plastic sheeting. All structures must provide a minimum containment volume equal to the volume of the largest storage vessel; and provide at least 1 foot of freeboard.

3.2.1.6 If earthen containment dikes are used, they shall be constructed with slopes no steeper than 3:1 (horizontal to vertical) to limit erosion and provide structural stability.

3.2.1.7 It is the contractor's responsibility to remove all secondary containment structures at the conclusion of the project. The contractor is also responsible for returning the storage impoundment area to its original contour and appearance upon completion of the project.

3.2.1.8 Secondary containment areas must not have drains. If visual inspection indicates that no spillage has occurred in the secondary containment structure, accumulated water may be drawn off and sprayed on the surrounding upland areas in accordance with applicable permits. If spillage has occurred in the structure, accumulated waste shall be drawn off and pumped into drum storage for disposal. Water with a visible sheen must not be discharged on-site and must be hauled out for proper disposal.

3.2.1.9 Vehicle wastes resulting from equipment failure, including used oils and other fluids, shall be handled and managed by personnel trained in the procedures outlined in this Plan. Vehicle wastes will be stored and disposed of in accordance with section 6.0 of this SPCC Plan.

3.3 Refueling:

3.3.1 Fuels shall be dispensed by authorized personnel only. The contractor must provide adequate lighting for refueling after dark.

3.3.2 Personnel shall be actively holding the nozzle during all refueling. Absorbent pads shall be within reaching distance in the event of a nozzle malfunction.

3.3.3 Refueling shall not occur within 100 feet of a wetland or waterbody. These activities may occur closer only if the EI finds, in advance, no reasonable alternative and the contractor has taken appropriate steps to prevent spills. These steps include secondary containment structures.

3.3.4 Refueling shall not occur within 200 feet of residential water wells or within 400 feet of municipal or community water wells.

3.4 Refueling and Fuel Storage near Wetlands, Waterbodies or Rural Residences:

3.4.1 Northern requires that the storage of petroleum products, refueling and lubricating operations take place in upland areas that are more than 100 feet from wetlands, streams, and waterbodies (including drainage ditches), and 200 feet of residential water wells or within 400 feet of municipal or community water wells. In addition, the contractor must store hazardous materials, chemicals, fuel and lubricating oils, and perform concrete coating activities outside of these areas. Auxiliary fuel tanks solidly attached to construction equipment or pumps are not considered storage and are acceptable.

3.4.2 In certain instances, refueling or fuel storage may be unavoidable due to site-specific conditions or unique construction requirements. Examples include continuously operating pumps and temporary stationary equipment associated with horizontal directional drilling (HDD) activities. These locations must be approved in advance by the EI. In addition to those practices described above, the following precautions will be taken when refueling within 100 feet of streams, wetlands, and waterbodies; within 200 feet of private water wells; or within 400 feet of municipal or community water wells:

3.4.2.1 Adequate amounts of absorbent materials and containment booms must be kept on-site by each construction crew to enable the rapid containment and clean-up of a spill incident.

3.4.2.2 If fuel must be stored within wetlands or near streams for refueling of continuously operating pumps, secondary containment must be provided.

3.4.2.3 A suitable secondary containment structure must be utilized at each fuel storage site. Portable secondary containment structures are preferred over site-constructed structures. If portable structures are not available, the site-constructed structures must be lined with seamless plastic sheeting. All structures must provide a minimum

containment volume equal to the volume of the largest storage vessel; and provide at least 1 foot of freeboard.

3.4.2.4 Procedures regarding excavation and disposal of contaminated soil material from wetlands or near waterbodies are described in section 6.3 of this SPCC Plan.

3.4.2.5 Equipment operating within wetlands must be manned continuously or placed within proper secondary containment.

4 Initial Spill Management

4.1 Immediate Response:

4.1.1 Immediately upon learning of any fuel, oil, hazardous material or other regulated substance spill, or upon learning of conditions that will lead to an imminent spill, the person discovering the situation must:

4.1.1.1 Initiate actions to contain the fluid that has spilled or is about to spill, and initiate action to eliminate the source of the spill to the maximum extent that is safely possible.

4.1.1.2 Notify the contractor spill coordinator and the EI, and provide them with the following information:

4.1.1.2.1 Location and cause of the spill

4.1.1.2.2 The type and amount of material that has spilled

4.1.1.2.3 Whether the spill has reached, or is likely to reach, any surface water

4.1.1.3 Upon learning of a spill or a potential spill the contractor spill coordinator shall:

4.1.1.3.1 Assess the situation and determine the need for further action.

4.1.1.3.2 Direct subsequent activities and/or further assign responsibilities to other personnel.

4.1.1.3.3 Notify the EI

4.1.2 The EI will notify the OCC at 888-367-6671 and the construction coordinator.

4.2 Mobilization:

4.2.1 The contractor spill coordinator shall mobilize on-site personnel, equipment, and materials for containment and/or clean-up commensurate with the extent of the spill and notify the EI.

4.2.2 The DES will work with the EI and contractor spill coordinator to determine if a spill is reportable to an agency.

4.2.3 If the contractor spill coordinator and/or the EI determine that a spill is beyond the scope of on-site equipment and personnel, the contractor spill coordinator and/or the EI will immediately notify the contractor construction superintendent that an emergency response contractor is needed to contain

and/or clean up the spill. The contractor is responsible for obtaining the services of an emergency response contractor.

4.2.4 The contractor spill coordinator shall assist the emergency response contractor and monitor containment procedures to ensure that the actions are consistent with the requirements of this SPCC Plan.

5 Spill Notification Responsibilities

5.1 The EI will immediately report all spills, regardless of volume, to Northern's OCC at 888-367-6671. The EI, or an applicable company representative, will participate on the OCC call to assess the spill. An environmental department representative will determine any requirements for further agency notification(s).

5.2 Spill Release/Report Form:

5.2.1 The EI, with assistance from the contractor spill coordinator, shall complete a Spill Release/Report Form for each release of a regulated substance, regardless of volume. The Spill Release/Report Form must be submitted to the DES within 24 hours of the occurrence of the spill.

5.2.2 All associated laboratory analysis and other documentation that may be required separately, on a case-specific basis, will be the responsibility of the contractor and should be provided to the EI. The EI will forward the information to the DES.

5.3 Agency Notification:

5.3.1 In the event of a reportable spill the DES will determine who is responsible for any required agency notification(s).

5.3.2 For projects in Minnesota, if there is any discharge of any substance or material, including hazardous materials, which, if not recovered, may cause pollution to waters of the state, the Minnesota Duty Officer shall be notified immediately. The Minnesota Duty Officer's phone numbers are 651-649-5451 and 800-422-0798.

5.3.3 For any spills that are determined to be the responsibility of Northern, the DES will promptly notify the appropriate Federal, State, and/or local agencies.

5.3.4 For any spills that are determined to be the responsibility of the contractor, the DES will request that the contractor spill coordinator promptly notify the appropriate Federal, State and/or local agencies.

5.3.5 The DES will promptly notify the National Response Center (NRC) at 800-424-8802 for all spills that impact streams, lakes or other waterbodies containing standing or flowing water.

5.3.6 The contractor spill coordinator will provide the EI and/or the Northern on-site representative all Spill Release/Report forms and associated information resulting from agency contact no later than 24 hours from the receipt of such documentation.

5.3.7 Northern's DESs and construction compliance personnel are listed below.

Name	Office Phone	Cell Phone
Kelly Henry	651-456-1712	612-759-8287
Naomi Cavalieri	402-398-7847	531-301-1176
*Steve San Miguel	402-398-7305	402-595-8554*
Michelle Brown	402-530-3502	806-231-4960
Christa Webber	402-398-7980	402-810-3769
Terry Plucker	402-398-7226	402-332-7081

6 Spill Containment and Clean-Up

6.1 In the event of a spill, the contractor will abide by applicable Federal, State and local regulations, in respect to cleaning up the spill. All clean-up and other construction related spill activities must be completed by, and costs assumed by, the contractor. Specific control and clean-up measures for both upland and wetland/waterbody spills are described below.

6.2 Spill Control and Clean-Up for Upland Areas:

6.2.1 If a spill should occur during refueling operations, **STOP** the operation until the spill can be controlled and the situation corrected.

6.2.1.1 Spill sources must be immediately identified and contained.

6.2.1.2 For large spills on land, the spills must be contained and pumped immediately into tank trucks. The contractor or, if necessary, an emergency response contractor, shall excavate the contaminated soil. It is the responsibility of the contractor to obtain Northern's approval prior to activities if waste vendors other than those approved by Northern (Clean Harbors and Safety-Kleen) may be used.

6.2.1.3 Spilled material and contaminated soil must be treated and/or disposed of in accordance with applicable Federal, State, and local requirements (section 6.0) and Northern's procedures.

6.2.1.4 Smaller spills on land shall be cleaned up with absorbent materials. Contaminated soil or other materials associated with these releases shall also be collected and disposed of in accordance with applicable regulations (section 6.0) and Northern's procedures.

6.2.1.5 Flowing spills must be contained and/or absorbed before reaching surface waters or wetlands.

6.2.1.6 Absorbent material(s) shall be placed over spills to minimize spreading and to reduce penetration into the soil.

6.2.1.7 The contractor spill coordinator and/or the DES, in consultation with appropriate agencies, shall determine when spill sites will be evacuated, as necessary, to safeguard human health. Evacuation parameters shall include consideration for the potential of fire, explosion, and hazardous gases.

6.3 Spill Control and Clean-Up for Wetlands and Waterbodies:

6.3.1 In addition to the measures described previously in this SPCC Plan, the following conditions shall apply if a spill, regardless of size, occurs near or into a stream, wetland or other waterbody:

6.3.1.1 If a spill should occur during refueling operations, **STOP** the operation until the spill can be controlled and the situation corrected.

6.3.1.2 For spills into streams, lakes or other waterbodies containing standing or flowing water, the contractor spill coordinator will immediately notify the nearest Northern representative and the OCC at 888-367-6671. The DES will promptly notify the NRC. (The NRC phone number is listed in section 4.2 of this SPCC Plan).

6.3.1.3 For spills in standing water floating booms, skimmer pumps and holding tanks shall be on-hand and used by the contractor to recover and contain released materials on the surface of the water.

6.3.1.4 If deemed necessary for large spills in waterbodies, the contractor must secure an emergency response contractor to further contain and clean up the spill. All contractors must be approved by Northern prior to construction.

6.3.1.5 Contaminated soils in wetlands must be excavated, and placed on, and covered by, plastic sheeting in bermed areas a minimum of 100 feet away from the wetland. Dispose of contaminated soil as soon as possible in accordance with section 6.0 of this SPCC Pan and Northern's procedures.

6.4 Inadvertent Mud Releases:

6.4.1 In the event of a drilling mud release (i.e., frac-out) to a sensitive resource area, including a waterbody, the contractor shall follow environmental procedure 380.203i, Appendix I: Plan for Inadvertent Release of Drilling Mud.

7 Storage and Disposal of Contaminated Materials

7.1 Environmental procedure 390.107, Approved Disposal Facilities, describes that all selected wastes generated at Northern facilities must be disposed of at Northern-approved waste facilities. The procedure also lists the locations of each Northern-approved disposal facility.

7.2 All contaminated soils, absorbent materials, and other wastes shall be stored and properly disposed by the contractor in accordance with applicable Federal and State regulations and Northern's procedures.

7.3 Only approved and licensed waste vendors and carriers may be used to transport contaminated material from the site to a Northern-approved disposal facility.

7.4 Used oil, glycol or hazardous wastes must be disposed by a Northern-approved contractor.

7.5 Environmental procedures regarding hazardous waste are located in the 390.000, Hazardous Waste Management, series of Northern's environmental operating procedures manual. The series includes procedures on manifesting and other transport requirements for off-site disposal.

7.6 Disposal of domestic wastes must be determined by the contractor and the information provided to the EI.

7.7 If it is necessary to temporarily store excavated soils on-site, these materials shall be 1) contained in plastic bags or, 2) placed on and covered by plastic sheeting. In addition, the perimeter of the storage area must include a berm to prevent and contain runoff.

8 REVISION HISTORY:

Responsibility for Procedure:

Address all questions on this procedure to the director of environmental.

Revisions:

Rev. 0	05/17/11	Initial procedure released.
Rev. 1	08/15/12	Changed Northern employee to Northern representative in section 1.1, Roles and Responsibilities, under Construction Coordinator. Updated information regarding spill kits in section 1.3, Equipment. Referenced Environmental Training-Construction. Included Minnesota Duty Officer contact information. Stated that the contractor shall follow Northern's Inadvertent Mud Release Plan for frac-outs. Added requirement for all contractor vehicles to be equipped with a catch pan. Updated formatting.
Rev. 2	12/14/12	Publish Only: Updated DES contact information.
Rev. 3	02/26/14	Added a section for liquid transfer planning and updated environmental department staff contact information.
Rev. 4	08/19/15	Publish Only: Updated DES and construction compliance personnel contact information.
Rev. 5	01/30/19	Publish Only: Division environmental specialists and construction compliance personnel contact information were updated in this procedure revision.
Rev. 6	01/06/21	Publish Only: Added section 1.3.5 stating existing practice for secondary containment for stationary equipment.
Rev. 7	02/17/21	Publish Only: Stated requirements for equipment repairs and maintenance.
Rev. 8	02/01/22	Publish Only: Division environmental specialist contact information was updated.

ATTACHMENT G

SWPPP INSPECTION AND MAINTENANCE REPORT AND RAINFALL INSPECTION CHART

NORTHERN NATURAL GAS
STORMWATER INSPECTION AND MAINTENANCE FORM

Project Name:	**Work Order #:**	**Inspection Date:**	**Inspection Time:**
Project Description:		**Stormwater Permit Agency:**	
Nearest Town, County and State:		**Stormwater Permit Authorization #:**	
GPS Lat:	**GPS Long:**	**Initial Grading Date:**	**Final Grading Date:**
Full Contractor Company Name:		**Final Seeding Date:**	
Contractor Contact Info (Name/Phone):		**Final Stabilization Date:**	

Inspection Event:	☐ Routine ☐ Rain Event ☐ Maintenance	
Inspection Schedule (IL, IA, MI, MN, OK, SD, WI)	☐ Every 7 days and within 24 hours of a rain event 0.5 inches or greater (inches of rain)	
Inspection Schedule (KS, NE, OK, SD)	☐ Every 14 days and within 24 hours of a rain event 0.5 inches or greater (inches of rain)	
Inspection Schedule (NM and all EPA permits)	☐ Every 7 days or every 14 days and within 24 hours of a rain event 0.25 inches or greater (inches)	
Reduced Inspection Schedule and Reason Behind Reduced Schedule (Must follow stormwater permit authorization requirements, which may vary per state/project.)	☐ Every 30 days	☐ Site temporarily stabilized and winter conditions ☐ Arid, semi-arid or drought stricken area ☐ Frozen conditions ☐ Other, explain:
Current Weather and Site Conditions (i.e., 66°F and dry):		
Construction Phase:	☐ **Active** ☐ **Suspended** ☐ **Post-Construction**	

SUBMITTED TO: (Enter names and email addresses below.)

Project Manager: Click here to enter text.
Construction Coordinator: Click here to enter text.
Field Operations Contact: Click here to enter text.
Division Environmental Specialist (DES): Click here to enter text.
Construction Environmental Compliance Contact: Christa Webber

NORTHERN NATURAL GAS
STORMWATER INSPECTION AND MAINTENANCE FORM

Table 1.0 – Inspection Observations and Corrective Actions

Stormwater Inspection Item	**Maintenance Required:** If yes, complete columns to the right.	**Observations:** Describe locations where controls require maintenance or additional controls are needed.	**Recommended Corrective Actions:** Describe actions taken while on-site, and/or recommendations to resolve observed issues. Update items with notes to detail status, including ongoing communications to ensure progress toward resolution.	**Assigned to:**	**Repair Status**	**Completion Date[1]**
Contract Yards and Storage Areas	☐ Yes ☐ No ☐ N/A				☐ Pending ☐ In progress ☐ Complete	
Vehicle Exit Points	☐ Yes ☐ No ☐ N/A				☐ Pending ☐ In progress ☐ Complete	
Sediment Controls	☐ Yes ☐ No ☐ N/A				☐ Pending ☐ In progress ☐ Complete	
Erosion Controls	☐ Yes ☐ No ☐ N/A				☐ Pending ☐ In progress ☐ Complete	
Disturbed Areas Stabilization	☐ Yes ☐ No ☐ N/A				☐ Pending ☐ In progress ☐ Complete	
Dewatering Activities and Structures	☐ Yes ☐ No ☐ N/A				☐ Pending ☐ In progress ☐ Complete	
Material Storage (e.g., containment, spill kits, etc.)	☐ Yes ☐ No ☐ N/A				☐ Pending ☐ In progress ☐ Complete	
Final Restoration Activities	☐ Yes ☐ No ☐ N/A				☐ Pending ☐ In progress ☐ Complete	

[1]Action items that were dated complete on the previous report should not appear on subsequent reports.

SUBMITTED TO: (Enter names and email addresses below.)

Project Manager: Click here to enter text.
Construction Coordinator: Click here to enter text.
Field Operations Contact: Click here to enter text.
Division Environmental Specialist (DES): Click here to enter text.
Construction Environmental Compliance Contact: Christa Webber

NORTHERN NATURAL GAS
STORMWATER INSPECTION AND MAINTENANCE FORM

Table 2.0 – Erosion Control Devices (Separately list each area where ECDs have been either temporarily or permanently installed.)

Exact location of erosion/sediment control inspected *(Ex. east road-side ditch of HWY 20)*	**Temporary (T) or Permanent (P)**	**Type of erosion/sediment control** *(Ex. hay bales, silt fence, wattles, slope breakers, erosion blankets, construction entrances, electric/barbed-wire fence, dewatering devices/structures, etc.)*	**Date Installed**	**Date Removed**	**Dates and Comments Regarding Completed Repair/Maintenance Activities**

Table 3.0 – Revegetation (Separately list each area where revegetation is required to report status toward "final stabilization", as defined by the respective permit.)

Location	**Status**	**Land Use**	**Seed/Over-seed Date(s)**	**Comments**

SUBMITTED TO: (Enter names and email addresses below.)

Project Manager: Click here to enter text.
Construction Coordinator: Click here to enter text.
Field Operations Contact: Click here to enter text.
Division Environmental Specialist (DES): Click here to enter text.
Construction Environmental Compliance Contact: Christa Webber

NORTHERN NATURAL GAS
STORMWATER INSPECTION AND MAINTENANCE FORM

General Observations:

Is there a violation affecting water quality?	
☐ Yes, and I immediately called the environmental specialist for instruction.	☐ No: No further action required.
Has the entire site achieved Final Stabilization per the permit requirements and have all temporary ECDs have been removed.	
☐ Yes, and I immediately called the environmental specialist for instruction.	☐ No: The next SWPPP inspection is due on or before this date:

Certification: I certify that: (1) the information contained in this report is true, accurate and complete; (2) I am qualified to complete this inspection based on my training and knowledge of the principles and practice of erosion and sediment controls; and (3) the project is in compliance with the SWPPP. I understand the terms and conditions of the general National Pollutant Discharge Elimination System (NPDES) permit authorization for this project, which authorizes the storm water discharges associated with industrial activity from the construction site identified as part of this certification.	
Inspector Printed Name:	
Inspector Signature:	**Date:**
Certification: I certify that: (1) the information contained in this report is true, accurate and complete; (2) I understand that I am required to take the listed corrective actions within 24 hours of this notification, or as soon as possible if field conditions prevent access, under the conditions of the National Pollutant Discharge Elimination System (NPDES) permit authorization for this project and the FERC Plan and Procedures; and (3) the project is in compliance with the SWPPP. I understand the terms and conditions of the general National Pollutant Discharge Elimination System (NPDES) permit authorization for this project, which authorizes the storm water discharges associated with industrial activity from the construction site identified as part of this certification.	
Contractor Environmental Lead Printed Name:	
Contractor Environmental Lead Signature:	**Date:**

SUBMITTED TO: (Enter names and email addresses below.)

Project Manager: Click here to enter text.
Construction Coordinator: Click here to enter text.
Field Operations Contact: Click here to enter text.
Division Environmental Specialist (DES): Click here to enter text.
Construction Environmental Compliance Contact: Christa Webber

INSPECTION PHOTOS

(Insert a minimum of two to three photos on the next pages, followed directly by captions detailing: 1) direction of view, 2) location within the temporary workspace, and 3) other significant information to reference the information noted above. Photos must be provided for any areas noted above as requiring maintenance. If those areas were corrected during the inspection, simply include photos showing the corrected concern.)

SUBMITTED TO: (Enter names and email addresses below.)

Project Manager: Click here to enter text.
Construction Coordinator: Click here to enter text.
Field Operations Contact: Click here to enter text.
Division Environmental Specialist (DES): Click here to enter text.
Construction Environmental Compliance Contact: Christa Webber

ATTACHMENT H

UPLAND EROSION CONTROL, REVEGETATION, AND MAINTENANCE PLAN

Stantec

UPLAND EROSION CONTROL, REVEGETATION, AND MAINTENANCE PLAN

MAY 2013 VERSION

UPLAND EROSION CONTROL, REVEGETATION, AND MAINTENANCE PLAN

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UPLAND EROSION CONTROL, REVEGETATION, AND MAINTENANCE PLAN (PLAN)

I. APPLICABILITY

A. The intent of this Plan is to assist project sponsors by identifying baseline mitigation measures for minimizing erosion and enhancing revegetation. Project sponsors shall specify in their applications for a new FERC authorization and in prior notice and advance notice filings, any individual measures in this Plan they consider unnecessary, technically infeasible, or unsuitable due to local conditions and fully describe any alternative measures they would use. Project sponsors shall also explain how those alternative measures would achieve a comparable level of mitigation.

Once a project is authorized, project sponsors can request further changes as variances to the measures in this Plan (or the applicant's approved plan). The Director of the Office of Energy Projects (Director) will consider approval of variances upon the project sponsor's written request, if the Director agrees that a variance:

1. provides equal or better environmental protection;

2. is necessary because a portion of this Plan is infeasible or unworkable based on project-specific conditions; or

3. is specifically required in writing by another federal, state, or Native American land management agency for the portion of the project on its land or under its jurisdiction.

Sponsors of projects planned for construction under the automatic authorization provisions in the FERC's regulations must receive written approval for any variances in advance of construction.

Project-related impacts on wetland and waterbody systems are addressed in the staff's Wetland and Waterbody Construction and Mitigation Procedures (Procedures).

II. SUPERVISION AND INSPECTION

A. ENVIRONMENTAL INSPECTION

1. At least one Environmental Inspector is required for each construction spread during construction and restoration (as defined by section V). The number and experience of Environmental Inspectors assigned to each construction spread shall be appropriate for the length of the construction spread and the number/significance of resources affected.

2. Environmental Inspectors shall have peer status with all other activity inspectors.

3. Environmental Inspectors shall have the authority to stop activities that violate the environmental conditions of the FERC's Orders, stipulations of other environmental permits or approvals, or landowner easement agreements; and to order appropriate corrective action.

B. RESPONSIBILITIES OF ENVIRONMENTAL INSPECTORS

At a minimum, the Environmental Inspector(s) shall be responsible for:

1. Inspecting construction activities for compliance with the requirements of this Plan, the Procedures, the environmental conditions of the FERC's Orders, the mitigation measures proposed by the project sponsor (as approved and/or modified by the Order), other environmental permits and approvals, and environmental requirements in landowner easement agreements.

2. Identifying, documenting, and overseeing corrective actions, as necessary to bring an activity back into compliance;

3. Verifying that the limits of authorized construction work areas and locations of access roads are visibly marked before clearing, and maintained throughout construction;

4. Verifying the location of signs and highly visible flagging marking the boundaries of sensitive resource areas, waterbodies, wetlands, or areas with special requirements along the construction work area;

5. Identifying erosion/sediment control and soil stabilization needs in all areas;

6. Ensuring that the design of slope breakers will not cause erosion or direct water into sensitive environmental resource areas, including cultural resource sites, wetlands, waterbodies, and sensitive species habitats;

7. Verifying that dewatering activities are properly monitored and do not result in the deposition of sand, silt, and/or sediment into sensitive environmental resource areas, including wetlands, waterbodies, cultural resource sites, and sensitive species habitats; stopping dewatering activities if such deposition is occurring and ensuring the design of the discharge is changed to prevent reoccurrence; and verifying that dewatering structures are removed after completion of dewatering activities;

8. Ensuring that subsoil and topsoil are tested in agricultural and residential areas to measure compaction and determine the need for corrective action;

9. Advising the Chief Construction Inspector when environmental conditions (such as wet weather or frozen soils) make it advisable to restrict or delay construction activities to avoid topsoil mixing or excessive compaction;

10. Ensuring restoration of contours and topsoil;

11. Verifying that the soils imported for agricultural or residential use are certified as free of noxious weeds and soil pests, unless otherwise approved by the landowner;

12. Ensuring that erosion control devices are properly installed to prevent sediment flow into sensitive environmental resource areas (e.g., wetlands, waterbodies, cultural resource sites, and sensitive species habitats) and onto roads, and determining the need for additional erosion control devices;

13. Inspecting and ensuring the maintenance of temporary erosion control measures at least:

    a. on a daily basis in areas of active construction or equipment operation;

    b. on a weekly basis in areas with no construction or equipment operation; and

    c. within 24 hours of each 0.5 inch of rainfall;

14. Ensuring the repair of all ineffective temporary erosion control measures within 24 hours of identification, or as soon as conditions allow if compliance with this time frame would result in greater environmental impacts;

15. Keeping records of compliance with the environmental conditions of the FERC's Orders, and the mitigation measures proposed by the project sponsor in the application submitted to the FERC, and other federal or state environmental permits during active construction and restoration;

16. Identifying areas that should be given special attention to ensure stabilization and restoration after the construction phase; and

17. Verifying that locations for any disposal of excess construction materials for beneficial reuse comply with section III.E.

III. PRECONSTRUCTION PLANNING

The project sponsor shall do the following before construction:

A. CONSTRUCTION WORK AREAS

1. Identify all construction work areas (e.g., construction right-of-way, extra work space areas, pipe storage and contractor yards, borrow and disposal areas, access roads) that would be needed for safe construction. The project sponsor must ensure that appropriate cultural resources and biological surveys are conducted, as determined necessary by the appropriate federal and state agencies.

2. Project sponsors are encouraged to consider expanding any required cultural resources and endangered species surveys in anticipation of the need for activities outside of authorized work areas.

3. Plan construction sequencing to limit the amount and duration of open trench sections, as necessary, to prevent excessive erosion or sediment flow into sensitive environmental resource areas.

B. DRAIN TILE AND IRRIGATION SYSTEMS

1. Attempt to locate existing drain tiles and irrigation systems.

2. Contact landowners and local soil conservation authorities to determine the locations of future drain tiles that are likely to be installed within 3 years of the authorized construction.

3. Develop procedures for constructing through drain-tiled areas, maintaining irrigation systems during construction, and repairing drain tiles and irrigation systems after construction.

4. Engage qualified drain tile specialists, as needed to conduct or monitor repairs to drain tile systems affected by construction. Use drain tile specialists from the project area, if available.

C. GRAZING DEFERMENT

Develop grazing deferment plans with willing landowners, grazing permittees, and land management agencies to minimize grazing disturbance of revegetation efforts.

D. ROAD CROSSINGS AND ACCESS POINTS

Plan for safe and accessible conditions at all roadway crossings and access points during construction and restoration.

E. DISPOSAL PLANNING

Determine methods and locations for the regular collection, containment, and disposal of excess construction materials and debris (e.g., timber, slash, mats, garbage, drill cuttings and fluids, excess rock) throughout the construction process. Disposal of materials for beneficial reuse must not result in adverse environmental impact and is subject to compliance with all applicable survey, landowner or land management agency approval, and permit requirements.

F. AGENCY COORDINATION

The project sponsor must coordinate with the appropriate local, state, and federal agencies as outlined in this Plan and/or required by the FERC's Orders.

1. Obtain written recommendations from the local soil conservation authorities or land management agencies regarding permanent erosion control and revegetation specifications.

2. Develop specific procedures in coordination with the appropriate agencies to prevent the introduction or spread of invasive species, noxious weeds, and soil pests resulting from construction and restoration activities.

3. Develop specific procedures in coordination with the appropriate agencies and landowners, as necessary, to allow for livestock and wildlife movement and protection during construction.

4. Develop specific blasting procedures in coordination with the appropriate agencies that address pre- and post-blast inspections; advanced public notification; and mitigation measures for building foundations, groundwater wells, and springs. Use appropriate methods (e.g., blasting mats) to prevent damage to nearby structures and to prevent debris from entering sensitive environmental resource areas.

G. SPILL PREVENTION AND RESPONSE PROCEDURES

The project sponsor shall develop project-specific Spill Prevention and Response Procedures, as specified in section IV of the staff's Procedures. A copy must be filed with the Secretary of the FERC (Secretary) prior to construction and made available in the field on each construction spread. The filing requirement does not apply to projects constructed under the automatic authorization provisions in the FERC's regulations.

H. RESIDENTIAL CONSTRUCTION

For all properties with residences located within 50 feet of construction work areas, project sponsors shall: avoid removal of mature trees and landscaping within the construction work area unless necessary for safe operation of construction equipment, or as specified in landowner agreements; fence the edge of the construction work area for a distance of 100 feet on either side of the residence; and restore all lawn areas and landscaping immediately following clean up operations, or as specified in landowner agreements. If seasonal or other weather conditions prevent compliance with these time frames, maintain and monitor temporary erosion controls (sediment barriers and mulch) until conditions allow completion of restoration.

I. WINTER CONSTRUCTION PLANS

If construction is planned to occur during winter weather conditions, project sponsors shall develop and file a project-specific winter construction plan with the FERC application. This filing requirement does not apply to projects constructed under the automatic authorization provisions of the FERC's regulations.

The plan shall address:

1. winter construction procedures (e.g., snow handling and removal, access road construction and maintenance, soil handling under saturated or frozen conditions, topsoil stripping);

2. stabilization and monitoring procedures if ground conditions will delay restoration until the following spring (e.g., mulching and erosion controls, inspection and reporting, stormwater control during spring thaw conditions); and

3. final restoration procedures (e.g., subsidence and compaction repair, topsoil replacement, seeding).

IV. INSTALLATION

A. APPROVED AREAS OF DISTURBANCE

1. Project-related ground disturbance shall be limited to the construction right-of-way, extra work space areas, pipe storage yards, borrow and disposal areas, access roads, and other areas approved in the FERC's Orders. Any project-related ground disturbing activities outside these areas will require prior Director approval. This requirement does not apply to activities needed to comply with the Plan and Procedures (i.e., slope breakers, energy-dissipating devices, dewatering structures, drain tile system repairs) or minor field realignments and workspace shifts per landowner needs and requirements that do not affect other landowners or sensitive environmental resource areas. All construction or restoration activities outside of authorized areas are subject to all applicable survey and permit requirements, and landowner easement agreements.

2. The construction right-of-way width for a project shall not exceed 75 feet or that described in the FERC application unless otherwise modified by a FERC Order. However, in limited, non-wetland areas, this construction right-of-way width may be expanded by up to 25 feet without Director approval to accommodate full construction right-of-way topsoil segregation and to ensure safe construction where topographic conditions (e.g., side-slopes) or soil limitations require it. Twenty-five feet of extra construction right-of-way width may also be used in limited, non-wetland or non-forested areas for truck turn-arounds where no reasonable alternative access exists.

   Project use of these additional limited areas is subject to landowner or land management agency approval and compliance with all applicable survey and permit requirements. When additional areas are used, each one shall be identified and the need explained in the weekly or biweekly construction reports to the FERC, if required. The following material shall be included in the reports:

   a. the location of each additional area by station number and reference to previously filed alignment sheets, or updated alignment sheets showing the additional areas;

   b. identification of the filing at FERC containing evidence that the additional areas were previously surveyed; and

c. a statement that landowner approval has been obtained and is available in project files.

Prior written approval of the Director is required when the authorized construction right-of-way width would be expanded by more than 25 feet.

B. TOPSOIL SEGREGATION

1. Unless the landowner or land management agency specifically approves otherwise, prevent the mixing of topsoil with subsoil by stripping topsoil from either the full work area or from the trench and subsoil storage area (ditch plus spoil side method) in:

   a. cultivated or rotated croplands, and managed pastures;

   b. residential areas;

   c. hayfields; and

   d. other areas at the landowner's or land managing agency's request.

2. In residential areas, importation of topsoil is an acceptable alternative to topsoil segregation.

3. Where topsoil segregation is required, the project sponsor must:

   a. segregate at least 12 inches of topsoil in deep soils (more than 12 inches of topsoil); and

   b. make every effort to segregate the entire topsoil layer in soils with less than 12 inches of topsoil.

4. Maintain separation of salvaged topsoil and subsoil throughout all construction activities.

5. Segregated topsoil may not be used for padding the pipe, constructing temporary slope breakers or trench plugs, improving or maintaining roads, or as a fill material.

6. Stabilize topsoil piles and minimize loss due to wind and water erosion with use of sediment barriers, mulch, temporary seeding, tackifiers, or functional equivalents, where necessary.

C. DRAIN TILES

1. Mark locations of drain tiles damaged during construction.

2. Probe all drainage tile systems within the area of disturbance to check for damage.

3. Repair damaged drain tiles to their original or better condition. Do not use filter-covered drain tiles unless the local soil conservation authorities and the landowner agree. Use qualified specialists for testing and repairs.

4. For new pipelines in areas where drain tiles exist or are planned, ensure that the depth of cover over the pipeline is sufficient to avoid interference with drain tile systems. For adjacent pipeline loops in agricultural areas, install the new pipeline with at least the same depth of cover as the existing pipeline(s).

D. IRRIGATION

Maintain water flow in crop irrigation systems, unless shutoff is coordinated with affected parties.

E. ROAD CROSSINGS AND ACCESS POINTS

1. Maintain safe and accessible conditions at all road crossings and access points during construction.

2. If crushed stone access pads are used in residential or agricultural areas, place the stone on synthetic fabric to facilitate removal.

3. Minimize the use of tracked equipment on public roadways. Remove any soil or gravel spilled or tracked onto roadways daily or more frequent as necessary to maintain safe road conditions. Repair any damages to roadway surfaces, shoulders, and bar ditches.

F. TEMPORARY EROSION CONTROL

Install temporary erosion controls immediately after initial disturbance of the soil. Temporary erosion controls must be properly maintained throughout construction (on a daily basis) and reinstalled as necessary (such as after backfilling of the trench) until replaced by permanent erosion controls or restoration is complete.

1. Temporary Slope Breakers

   a. Temporary slope breakers are intended to reduce runoff velocity and divert water off the construction right-of-way. Temporary slope

breakers may be constructed of materials such as soil, silt fence, staked hay or straw bales, or sand bags.

b. Install temporary slope breakers on all disturbed areas, as necessary to avoid excessive erosion. Temporary slope breakers must be installed on slopes greater than 5 percent where the base of the slope is less than 50 feet from waterbody, wetland, and road crossings at the following spacing (closer spacing shall be used if necessary):

Slope (%)	Spacing (feet)
5 - 15	300
>15 - 30	200
>30	100

c. Direct the outfall of each temporary slope breaker to a stable, well vegetated area or construct an energy-dissipating device at the end of the slope breaker and off the construction right-of-way.

d. Position the outfall of each temporary slope breaker to prevent sediment discharge into wetlands, waterbodies, or other sensitive environmental resource areas.

2. Temporary Trench Plugs

Temporary trench plugs are intended to segment a continuous open trench prior to backfill.

a. Temporary trench plugs may consist of unexcavated portions of the trench, compacted subsoil, sandbags, or some functional equivalent.

b. Position temporary trench plugs, as necessary, to reduce trenchline erosion and minimize the volume and velocity of trench water flow at the base of slopes.

3. Sediment Barriers

Sediment barriers are intended to stop the flow of sediments and to prevent the deposition of sediments beyond approved workspaces or into sensitive resources.

a. Sediment barriers may be constructed of materials such as silt fence, staked hay or straw bales, compacted earth (e.g., driveable berms across travelways), sand bags, or other appropriate materials.

b. At a minimum, install and maintain temporary sediment barriers across the entire construction right-of-way at the base of slopes greater than 5 percent where the base of the slope is less than 50 feet from a waterbody, wetland, or road crossing until revegetation is successful as defined in this Plan. Leave adequate room between the base of the slope and the sediment barrier to accommodate ponding of water and sediment deposition.

c. Where wetlands or waterbodies are adjacent to and downslope of construction work areas, install sediment barriers along the edge of these areas, as necessary to prevent sediment flow into the wetland or waterbody.

4. Mulch

a. Apply mulch on all slopes (except in cultivated cropland) concurrent with or immediately after seeding, where necessary to stabilize the soil surface and to reduce wind and water erosion. Spread mulch uniformly over the area to cover at least 75 percent of the ground surface at a rate of 2 tons/acre of straw or its equivalent, unless the local soil conservation authority, landowner, or land managing agency approves otherwise in writing.

b. Mulch can consist of weed-free straw or hay, wood fiber hydromulch, erosion control fabric, or some functional equivalent.

c. Mulch all disturbed upland areas (except cultivated cropland) before seeding if:

(1) final grading and installation of permanent erosion control measures will not be completed in an area within 20 days after the trench in that area is backfilled (10 days in residential areas), as required in section V.A.1; or

(2) construction or restoration activity is interrupted for extended periods, such as when seeding cannot be completed due to seeding period restrictions.

d. If mulching before seeding, increase mulch application on all slopes within 100 feet of waterbodies and wetlands to a rate of 3 tons/acre of straw or equivalent.

e. If wood chips are used as mulch, do not use more than 1 ton/acre and add the equivalent of 11 lbs/acre available nitrogen (at least 50 percent of which is slow release).

f. Ensure that mulch is adequately anchored to minimize loss due to wind and water.

g. When anchoring with liquid mulch binders, use rates recommended by the manufacturer. Do not use liquid mulch binders within 100 feet of wetlands or waterbodies, except where the product is certified environmentally non-toxic by the appropriate state or federal agency or independent standards-setting organization.

h. Do not use synthetic monofilament mesh/netted erosion control materials in areas designated as sensitive wildlife habitat, unless the product is specifically designed to minimize harm to wildlife. Anchor erosion control fabric with staples or other appropriate devices.

V. RESTORATION

A. CLEANUP

1. Commence cleanup operations immediately following backfill operations. Complete final grading, topsoil replacement, and installation of permanent erosion control structures within 20 days after backfilling the trench (10 days in residential areas). If seasonal or other weather conditions prevent compliance with these time frames, maintain temporary erosion controls (i.e., temporary slope breakers, sediment barriers, and mulch) until conditions allow completion of cleanup.

   If construction or restoration unexpectedly continues into the winter season when conditions could delay successful decompaction, topsoil replacement, or seeding until the following spring, file with the Secretary for the review and written approval of the Director, a winter construction plan (as specified in section III.I). This filing requirement does not apply to projects constructed under the automatic authorization provisions of the FERC's regulations.

2. A travel lane may be left open temporarily to allow access by construction traffic if the temporary erosion control structures are installed as specified in section IV.F. and inspected and maintained as specified in sections II.B.12 through 14. When access is no longer required the travel lane must be removed and the right-of-way restored.

3. Rock excavated from the trench may be used to backfill the trench only to the top of the existing bedrock profile. Rock that is not returned to the trench shall be considered construction debris, unless approved for use as mulch or for some other use on the construction work areas by the landowner or land managing agency.

4. Remove excess rock from at least the top 12 inches of soil in all cultivated or rotated cropland, managed pastures, hayfields, and residential areas, as well as other areas at the landowner's request. The size, density, and distribution of rock on the construction work area shall be similar to adjacent areas not disturbed by construction. The landowner or land management agency may approve other provisions in writing.

5. Grade the construction right-of-way to restore pre-construction contours and leave the soil in the proper condition for planting.

6. Remove construction debris from all construction work areas unless the landowner or land managing agency approves leaving materials onsite for beneficial reuse, stabilization, or habitat restoration.

7. Remove temporary sediment barriers when replaced by permanent erosion control measures or when revegetation is successful.

B. PERMANENT EROSION CONTROL DEVICES

1. Trench Breakers

a. Trench breakers are intended to slow the flow of subsurface water along the trench. Trench breakers may be constructed of materials such as sand bags or polyurethane foam. Do not use topsoil in trench breakers.

b. An engineer or similarly qualified professional shall determine the need for and spacing of trench breakers. Otherwise, trench breakers shall be installed at the same spacing as and upslope of permanent slope breakers.

c. In agricultural fields and residential areas where slope breakers are not typically required, install trench breakers at the same spacing as if permanent slope breakers were required.

d. At a minimum, install a trench breaker at the base of slopes greater than 5 percent where the base of the slope is less than 50 feet from a waterbody or wetland and where needed to avoid draining a waterbody or wetland. Install trench breakers at wetland boundaries, as specified in the Procedures. Do not install trench breakers within a wetland.

2. Permanent Slope Breakers

a. Permanent slope breakers are intended to reduce runoff velocity, divert water off the construction right-of-way, and prevent sediment deposition into sensitive resources. Permanent slope breakers may be constructed of materials such as soil, stone, or some functional equivalent.

b. Construct and maintain permanent slope breakers in all areas, except cultivated areas and lawns, unless requested by the landowner, using spacing recommendations obtained from the local soil conservation authority or land managing agency.

In the absence of written recommendations, use the following spacing unless closer spacing is necessary to avoid excessive erosion on the construction right-of-way:

Slope (%)	Spacing (feet)
5 - 15	300
>15 - 30	200
>30	100

c. Construct slope breakers to divert surface flow to a stable area without causing water to pool or erode behind the breaker. In the absence of a stable area, construct appropriate energy-dissipating devices at the end of the breaker.

d. Slope breakers may extend slightly (about 4 feet) beyond the edge of the construction right-of-way to effectively drain water off the disturbed area. Where slope breakers extend beyond the edge of the construction right-of-way, they are subject to compliance with all applicable survey requirements.

C. SOIL COMPACTION MITIGATION

1. Test topsoil and subsoil for compaction at regular intervals in agricultural and residential areas disturbed by construction activities. Conduct tests on the same soil type under similar moisture conditions in undisturbed areas to approximate preconstruction conditions. Use penetrometers or other appropriate devices to conduct tests.

2. Plow severely compacted agricultural areas with a paraplow or other deep tillage implement. In areas where topsoil has been segregated, plow the subsoil before replacing the segregated topsoil.

If subsequent construction and cleanup activities result in further compaction, conduct additional tilling.

3. Perform appropriate soil compaction mitigation in severely compacted residential areas.

D. REVEGETATION

1. General

a. The project sponsor is responsible for ensuring successful revegetation of soils disturbed by project-related activities, except as noted in section V.D.1.b.

b. Restore all turf, ornamental shrubs, and specialized landscaping in accordance with the landowner's request, or compensate the landowner. Restoration work must be performed by personnel familiar with local horticultural and turf establishment practices.

2. Soil Additives

Fertilize and add soil pH modifiers in accordance with written recommendations obtained from the local soil conservation authority, land management agencies, or landowner. Incorporate recommended soil pH modifier and fertilizer into the top 2 inches of soil as soon as practicable after application.

3. Seeding Requirements

a. Prepare a seedbed in disturbed areas to a depth of 3 to 4 inches using appropriate equipment to provide a firm seedbed. When hydroseeding, scarify the seedbed to facilitate lodging and germination of seed.

b. Seed disturbed areas in accordance with written recommendations for seed mixes, rates, and dates obtained from the local soil conservation authority or the request of the landowner or land management agency. Seeding is not required in cultivated croplands unless requested by the landowner.

c. Perform seeding of permanent vegetation within the recommended seeding dates. If seeding cannot be done within those dates, use appropriate temporary erosion control measures discussed in section IV.F and perform seeding of permanent vegetation at the beginning of the next recommended seeding season. Dormant seeding or temporary

seeding of annual species may also be used, if necessary, to establish cover, as approved by the Environmental Inspector. Lawns may be seeded on a schedule established with the landowner.

d. In the absence of written recommendations from the local soil conservation authorities, seed all disturbed soils within 6 working days of final grading, weather and soil conditions permitting, subject to the specifications in section V.D.3.a through V.D.3.c.

e. Base seeding rates on Pure Live Seed. Use seed within 12 months of seed testing.

f. Treat legume seed with an inoculant specific to the species using the manufacturer's recommended rate of inoculant appropriate for the seeding method (broadcast, drill, or hydro).

g. In the absence of written recommendations from the local soil conservation authorities, landowner, or land managing agency to the contrary, a seed drill equipped with a cultipacker is preferred for seed application.

Broadcast or hydroseeding can be used in lieu of drilling at double the recommended seeding rates. Where seed is broadcast, firm the seedbed with a cultipacker or roller after seeding. In rocky soils or where site conditions may limit the effectiveness of this equipment, other alternatives may be appropriate (e.g., use of a chain drag) to lightly cover seed after application, as approved by the Environmental Inspector.

VI. OFF-ROAD VEHICLE CONTROL

To each owner or manager of forested lands, offer to install and maintain measures to control unauthorized vehicle access to the right-of-way. These measures may include:

A. signs;

B. fences with locking gates;

C. slash and timber barriers, pipe barriers, or a line of boulders across the right-of-way; and

D. conifers or other appropriate trees or shrubs across the right-of-way.

VII. POST-CONSTRUCTION ACTIVITIES AND REPORTING

A. MONITORING AND MAINTENANCE

1. Conduct follow-up inspections of all disturbed areas, as necessary, to determine the success of revegetation and address landowner concerns. At a minimum, conduct inspections after the first and second growing seasons.

2. Revegetation in non-agricultural areas shall be considered successful if upon visual survey the density and cover of non-nuisance vegetation are similar in density and cover to adjacent undisturbed lands. In agricultural areas, revegetation shall be considered successful when upon visual survey, crop growth and vigor are similar to adjacent undisturbed portions of the same field, unless the easement agreement specifies otherwise.

   Continue revegetation efforts until revegetation is successful.

3. Monitor and correct problems with drainage and irrigation systems resulting from pipeline construction in agricultural areas until restoration is successful.

4. Restoration shall be considered successful if the right-of-way surface condition is similar to adjacent undisturbed lands, construction debris is removed (unless otherwise approved by the landowner or land managing agency per section V.A.6), revegetation is successful, and proper drainage has been restored.

5. Routine vegetation mowing or clearing over the full width of the permanent right-of-way in uplands shall not be done more frequently than every 3 years. However, to facilitate periodic corrosion/leak surveys, a corridor not exceeding 10 feet in width centered on the pipeline may be cleared at a frequency necessary to maintain the 10-foot corridor in an herbaceous state. In no case shall routine vegetation mowing or clearing occur during the migratory bird nesting season between April 15 and August 1 of any year unless specifically approved in writing by the responsible land management agency or the U.S. Fish and Wildlife Service.

6. Efforts to control unauthorized off-road vehicle use, in cooperation with the landowner, shall continue throughout the life of the project. Maintain signs, gates, and permanent access roads as necessary.

B. REPORTING

1. The project sponsor shall maintain records that identify by milepost:

   a. method of application, application rate, and type of fertilizer, pH modifying agent, seed, and mulch used;

   b. acreage treated;

   c. dates of backfilling and seeding;

   d. names of landowners requesting special seeding treatment and a description of the follow-up actions;

   e. the location of any subsurface drainage repairs or improvements made during restoration; and

   f. any problem areas and how they were addressed.

2. The project sponsor shall file with the Secretary quarterly activity reports documenting the results of follow-up inspections required by section VII.A.1; any problem areas, including those identified by the landowner; and corrective actions taken for at least 2 years following construction.

   The requirement to file quarterly activity reports with the Secretary does not apply to projects constructed under the automatic authorization, prior notice, or advanced notice provisions in the FERC's regulations.

ATTACHMENT I

WETLAND AND WATERBODY CONSTRUCTION AND MITIGATION PROCEDURES

Stantec

WETLAND AND WATERBODY CONSTRUCTION AND MITIGATION PROCEDURES

MAY 2013 VERSION

WETLAND AND WATERBODY CONSTRUCTION AND MITIGATION PROCEDURES

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WETLAND AND WATERBODY
CONSTRUCTION AND MITIGATION PROCEDURES (PROCEDURES)

I. APPLICABILITY

A. The intent of these Procedures is to assist project sponsors by identifying baseline mitigation measures for minimizing the extent and duration of project-related disturbance on wetlands and waterbodies. Project sponsors shall specify in their applications for a new FERC authorization, and in prior notice and advance notice filings, any individual measures in these Procedures they consider unnecessary, technically infeasible, or unsuitable due to local conditions and fully describe any alternative measures they would use. Project sponsors shall also explain how those alternative measures would achieve a comparable level of mitigation.

Once a project is authorized, project sponsors can request further changes as variances to the measures in these Procedures (or the applicant's approved procedures). The Director of the Office of Energy Projects (Director) will consider approval of variances upon the project sponsor's written request, if the Director agrees that a variance:

1. provides equal or better environmental protection;

2. is necessary because a portion of these Procedures is infeasible or unworkable based on project-specific conditions; or

3. is specifically required in writing by another federal, state, or Native American land management agency for the portion of the project on its land or under its jurisdiction.

Sponsors of projects planned for construction under the automatic authorization provisions in the FERC's regulations must receive written approval for any variances in advance of construction.

Project-related impacts on non-wetland areas are addressed in the staff's Upland Erosion Control, Revegetation, and Maintenance Plan (Plan).

B. DEFINITIONS

1. "Waterbody" includes any natural or artificial stream, river, or drainage with perceptible flow at the time of crossing, and other permanent waterbodies such as ponds and lakes:

   a. "minor waterbody" includes all waterbodies less than or equal to 10 feet wide at the water's edge at the time of crossing;

   b. "intermediate waterbody" includes all waterbodies greater than 10 feet wide but less than or equal to 100 feet wide at the water's edge at the time of crossing; and

   c. "major waterbody" includes all waterbodies greater than 100 feet wide at the water's edge at the time of crossing.

2. "Wetland" includes any area that is not in actively cultivated or rotated cropland and that satisfies the requirements of the current federal methodology for identifying and delineating wetlands.

II. PRECONSTRUCTION FILING

A. The following information must be filed with the Secretary of the FERC (Secretary) prior to the beginning of construction, for the review and written approval by the Director:

1. site-specific justifications for extra work areas that would be closer than 50 feet from a waterbody or wetland; and

2. site-specific justifications for the use of a construction right-of-way greater than 75-feet-wide in wetlands.

B. The following information must be filed with the Secretary prior to the beginning of construction. These filing requirements do not apply to projects constructed under the automatic authorization provisions in the FERC's regulations:

1. Spill Prevention and Response Procedures specified in section IV.A;

2. a schedule identifying when trenching or blasting will occur within each waterbody greater than 10 feet wide, within any designated coldwater fishery, and within any waterbody identified as habitat for federally-listed threatened or endangered species. The project sponsor will revise the schedule as necessary to provide FERC staff at least 14 days advance notice. Changes within this last 14-day period must provide for at least 48 hours advance notice;

3. plans for horizontal directional drills (HDD) under wetlands or waterbodies, specified in section V.B.6.d;

4. site-specific plans for major waterbody crossings, described in section V.B.9;

5. a wetland delineation report as described in section VI.A.1, if applicable; and

6. the hydrostatic testing information specified in section VII.B.3.

III. ENVIRONMENTAL INSPECTORS

A. At least one Environmental Inspector having knowledge of the wetland and waterbody conditions in the project area is required for each construction spread. The number and experience of Environmental Inspectors assigned to each construction spread shall be appropriate for the length of the construction spread and the number/significance of resources affected.

B. The Environmental Inspector's responsibilities are outlined in the Upland Erosion Control, Revegetation, and Maintenance Plan (Plan).

IV. PRECONSTRUCTION PLANNING

A. The project sponsor shall develop project-specific Spill Prevention and Response Procedures that meet applicable requirements of state and federal agencies. A copy must be filed with the Secretary prior to construction and made available in the field on each construction spread. This filing requirement does not apply to projects constructed under the automatic authorization provisions in the FERC's regulations.

1. It shall be the responsibility of the project sponsor and its contractors to structure their operations in a manner that reduces the risk of spills or the accidental exposure of fuels or hazardous materials to waterbodies or wetlands. The project sponsor and its contractors must, at a minimum, ensure that:

a. all employees handling fuels and other hazardous materials are properly trained;

b. all equipment is in good operating order and inspected on a regular basis;

c. fuel trucks transporting fuel to on-site equipment travel only on approved access roads;

d. all equipment is parked overnight and/or fueled at least 100 feet from a waterbody or in an upland area at least 100 feet from a wetland boundary. These activities can occur closer only if the Environmental Inspector determines that there is no reasonable alternative, and the

project sponsor and its contractors have taken appropriate steps (including secondary containment structures) to prevent spills and provide for prompt cleanup in the event of a spill;

e. hazardous materials, including chemicals, fuels, and lubricating oils, are not stored within 100 feet of a wetland, waterbody, or designated municipal watershed area, unless the location is designated for such use by an appropriate governmental authority. This applies to storage of these materials and does not apply to normal operation or use of equipment in these areas;

f. concrete coating activities are not performed within 100 feet of a wetland or waterbody boundary, unless the location is an existing industrial site designated for such use. These activities can occur closer only if the Environmental Inspector determines that there is no reasonable alternative, and the project sponsor and its contractors have taken appropriate steps (including secondary containment structures) to prevent spills and provide for prompt cleanup in the event of a spill;

g. pumps operating within 100 feet of a waterbody or wetland boundary utilize appropriate secondary containment systems to prevent spills; and

h. bulk storage of hazardous materials, including chemicals, fuels, and lubricating oils have appropriate secondary containment systems to prevent spills.

2. The project sponsor and its contractors must structure their operations in a manner that provides for the prompt and effective cleanup of spills of fuel and other hazardous materials. At a minimum, the project sponsor and its contractors must:

a. ensure that each construction crew (including cleanup crews) has on hand sufficient supplies of absorbent and barrier materials to allow the rapid containment and recovery of spilled materials and knows the procedure for reporting spills and unanticipated discoveries of contamination;

b. ensure that each construction crew has on hand sufficient tools and material to stop leaks;

c. know the contact names and telephone numbers for all local, state, and federal agencies (including, if necessary, the U. S. Coast Guard and the National Response Center) that must be notified of a spill; and

d. follow the requirements of those agencies in cleaning up the spill, in excavating and disposing of soils or other materials contaminated by a spill, and in collecting and disposing of waste generated during spill cleanup.

B. AGENCY COORDINATION

The project sponsor must coordinate with the appropriate local, state, and federal agencies as outlined in these Procedures and in the FERC's Orders.

V. WATERBODY CROSSINGS

A. NOTIFICATION PROCEDURES AND PERMITS

1. Apply to the U.S. Army Corps of Engineers (COE), or its delegated agency, for the appropriate wetland and waterbody crossing permits.

2. Provide written notification to authorities responsible for potable surface water supply intakes located within 3 miles downstream of the crossing at least 1 week before beginning work in the waterbody, or as otherwise specified by that authority.

3. Apply for state-issued waterbody crossing permits and obtain individual or generic section 401 water quality certification or waiver.

4. Notify appropriate federal and state authorities at least 48 hours before beginning trenching or blasting within the waterbody, or as specified in applicable permits.

B. INSTALLATION

1. Time Window for Construction

Unless expressly permitted or further restricted by the appropriate federal or state agency in writing on a site-specific basis, instream work, except that required to install or remove equipment bridges, must occur during the following time windows:

a. coldwater fisheries - June 1 through September 30; and

b. coolwater and warmwater fisheries - June 1 through November 30.

2. Extra Work Areas

a. Locate all extra work areas (such as staging areas and additional spoil storage areas) at least 50 feet away from water's edge, except where

the adjacent upland consists of cultivated or rotated cropland or other disturbed land.

b. The project sponsor shall file with the Secretary for review and written approval by the Director, site-specific justification for each extra work area with a less than 50-foot setback from the water's edge, except where the adjacent upland consists of cultivated or rotated cropland or other disturbed land. The justification must specify the conditions that will not permit a 50-foot setback and measures to ensure the waterbody is adequately protected.

c. Limit the size of extra work areas to the minimum needed to construct the waterbody crossing.

3. General Crossing Procedures

a. Comply with the COE, or its delegated agency, permit terms and conditions.

b. Construct crossings as close to perpendicular to the axis of the waterbody channel as engineering and routing conditions permit.

c. Where pipelines parallel a waterbody, maintain at least 15 feet of undisturbed vegetation between the waterbody (and any adjacent wetland) and the construction right-of-way, except where maintaining this offset will result in greater environmental impact.

d. Where waterbodies meander or have multiple channels, route the pipeline to minimize the number of waterbody crossings.

e. Maintain adequate waterbody flow rates to protect aquatic life, and prevent the interruption of existing downstream uses.

f. Waterbody buffers (e.g., extra work area setbacks, refueling restrictions) must be clearly marked in the field with signs and/or highly visible flagging until construction-related ground disturbing activities are complete.

g. Crossing of waterbodies when they are dry or frozen and not flowing may proceed using standard upland construction techniques in accordance with the Plan, provided that the Environmental Inspector verifies that water is unlikely to flow between initial disturbance and final stabilization of the feature. In the event of perceptible flow, the project sponsor must comply with all applicable Procedure requirements for "waterbodies" as defined in section I.B.1.

4. Spoil Pile Placement and Control

   a. All spoil from minor and intermediate waterbody crossings, and upland spoil from major waterbody crossings, must be placed in the construction right-of-way at least 10 feet from the water's edge or in additional extra work areas as described in section V.B.2.

   b. Use sediment barriers to prevent the flow of spoil or silt-laden water into any waterbody.

5. Equipment Bridges

   a. Only clearing equipment and equipment necessary for installation of equipment bridges may cross waterbodies prior to bridge installation. Limit the number of such crossings of each waterbody to one per piece of clearing equipment.

   b. Construct and maintain equipment bridges to allow unrestricted flow and to prevent soil from entering the waterbody. Examples of such bridges include:

      (1) equipment pads and culvert(s);
      (2) equipment pads or railroad car bridges without culverts;
      (3) clean rock fill and culvert(s); and
      (4) flexi-float or portable bridges.

      Additional options for equipment bridges may be utilized that achieve the performance objectives noted above. Do not use soil to construct or stabilize equipment bridges.

   c. Design and maintain each equipment bridge to withstand and pass the highest flow expected to occur while the bridge is in place. Align culverts to prevent bank erosion or streambed scour. If necessary, install energy dissipating devices downstream of the culverts.

   d. Design and maintain equipment bridges to prevent soil from entering the waterbody.

   e. Remove temporary equipment bridges as soon as practicable after permanent seeding.

   f. If there will be more than 1 month between final cleanup and the beginning of permanent seeding and reasonable alternative access to the right-of-way is available, remove temporary equipment bridges as soon as practicable after final cleanup.

g. Obtain any necessary approval from the COE, or the appropriate state agency for permanent bridges.

6. Dry-Ditch Crossing Methods

a. Unless approved otherwise by the appropriate federal or state agency, install the pipeline using one of the dry-ditch methods outlined below for crossings of waterbodies up to 30 feet wide (at the water's edge at the time of construction) that are state-designated as either coldwater or significant coolwater or warmwater fisheries, or federally-designated as critical habitat.

b. Dam and Pump

(1) The dam-and-pump method may be used without prior approval for crossings of waterbodies where pumps can adequately transfer streamflow volumes around the work area, and there are no concerns about sensitive species passage.

(2) Implementation of the dam-and-pump crossing method must meet the following performance criteria:

(i) use sufficient pumps, including on-site backup pumps, to maintain downstream flows;
(ii) construct dams with materials that prevent sediment and other pollutants from entering the waterbody (e.g., sandbags or clean gravel with plastic liner);
(iii) screen pump intakes to minimize entrainment of fish;
(iv) prevent streambed scour at pump discharge; and
(v) continuously monitor the dam and pumps to ensure proper operation throughout the waterbody crossing.

c. Flume Crossing

The flume crossing method requires implementation of the following steps:

(1) install flume pipe after blasting (if necessary), but before any trenching;

(2) use sand bag or sand bag and plastic sheeting diversion structure or equivalent to develop an effective seal and to divert stream flow through the flume pipe (some modifications to the stream bottom may be required to achieve an effective seal);

(3) properly align flume pipe(s) to prevent bank erosion and streambed scour;

(4) do not remove flume pipe during trenching, pipelaying, or backfilling activities, or initial streambed restoration efforts; and

(5) remove all flume pipes and dams that are not also part of the equipment bridge as soon as final cleanup of the stream bed and bank is complete.

d. Horizontal Directional Drill

For each waterbody or wetland that would be crossed using the HDD method, file with the Secretary for the review and written approval by the Director, a plan that includes:

(1) site-specific construction diagrams that show the location of mud pits, pipe assembly areas, and all areas to be disturbed or cleared for construction;

(2) justification that disturbed areas are limited to the minimum needed to construct the crossing;

(3) identification of any aboveground disturbance or clearing between the HDD entry and exit workspaces during construction;

(4) a description of how an inadvertent release of drilling mud would be contained and cleaned up; and

(5) a contingency plan for crossing the waterbody or wetland in the event the HDD is unsuccessful and how the abandoned drill hole would be sealed, if necessary.

The requirement to file HDD plans does not apply to projects constructed under the automatic authorization provisions in the FERC's regulations.

7. Crossings of Minor Waterbodies

Where a dry-ditch crossing is not required, minor waterbodies may be crossed using the open-cut crossing method, with the following restrictions:

a. except for blasting and other rock breaking measures, complete instream construction activities (including trenching, pipe installation, backfill, and restoration of the streambed contours) within 24 hours.

Streambanks and unconsolidated streambeds may require additional restoration after this period;

b. limit use of equipment operating in the waterbody to that needed to construct the crossing; and

c. equipment bridges are not required at minor waterbodies that do not have a state-designated fishery classification or protected status (e.g., agricultural or intermittent drainage ditches). However, if an equipment bridge is used it must be constructed as described in section V.B.5.

8. Crossings of Intermediate Waterbodies

Where a dry-ditch crossing is not required, intermediate waterbodies may be crossed using the open-cut crossing method, with the following restrictions:

a. complete instream construction activities (not including blasting and other rock breaking measures) within 48 hours, unless site-specific conditions make completion within 48 hours infeasible;

b. limit use of equipment operating in the waterbody to that needed to construct the crossing; and

c. all other construction equipment must cross on an equipment bridge as specified in section V.B.5.

9. Crossings of Major Waterbodies

Before construction, the project sponsor shall file with the Secretary for the review and written approval by the Director a detailed, site-specific construction plan and scaled drawings identifying all areas to be disturbed by construction for each major waterbody crossing (the scaled drawings are not required for any offshore portions of pipeline projects). This plan must be developed in consultation with the appropriate state and federal agencies and shall include extra work areas, spoil storage areas, sediment control structures, etc., as well as mitigation for navigational issues. The requirement to file major waterbody crossing plans does not apply to projects constructed under the automatic authorization provisions of the FERC's regulations.

The Environmental Inspector may adjust the final placement of the erosion and sediment control structures in the field to maximize effectiveness.

10. Temporary Erosion and Sediment Control

Install sediment barriers (as defined in section IV.F.3.a of the Plan) immediately after initial disturbance of the waterbody or adjacent upland.

Sediment barriers must be properly maintained throughout construction and reinstalled as necessary (such as after backfilling of the trench) until replaced by permanent erosion controls or restoration of adjacent upland areas is complete. Temporary erosion and sediment control measures are addressed in more detail in the Plan; however, the following specific measures must be implemented at stream crossings:

a. install sediment barriers across the entire construction right-of-way at all waterbody crossings, where necessary to prevent the flow of sediments into the waterbody. Removable sediment barriers (or driveable berms) must be installed across the travel lane. These removable sediment barriers can be removed during the construction day, but must be re-installed after construction has stopped for the day and/or when heavy precipitation is imminent;

b. where waterbodies are adjacent to the construction right-of-way and the right-of-way slopes toward the waterbody, install sediment barriers along the edge of the construction right-of-way as necessary to contain spoil within the construction right-of-way and prevent sediment flow into the waterbody; and

c. use temporary trench plugs at all waterbody crossings, as necessary, to prevent diversion of water into upland portions of the pipeline trench and to keep any accumulated trench water out of the waterbody.

11. Trench Dewatering

Dewater the trench (either on or off the construction right-of-way) in a manner that does not cause erosion and does not result in silt-laden water flowing into any waterbody. Remove the dewatering structures as soon as practicable after the completion of dewatering activities.

C. RESTORATION

1. Use clean gravel or native cobbles for the upper 1 foot of trench backfill in all waterbodies that contain coldwater fisheries.

2. For open-cut crossings, stabilize waterbody banks and install temporary sediment barriers within 24 hours of completing instream construction activities. For dry-ditch crossings, complete streambed and bank stabilization before returning flow to the waterbody channel.

3. Return all waterbody banks to preconstruction contours or to a stable angle of repose as approved by the Environmental Inspector.

4. Install erosion control fabric or a functional equivalent on waterbody banks at the time of final bank recontouring. Do not use synthetic monofilament

mesh/netted erosion control materials in areas designated as sensitive wildlife habitat unless the product is specifically designed to minimize harm to wildlife. Anchor erosion control fabric with staples or other appropriate devices.

5. Application of riprap for bank stabilization must comply with COE, or its delegated agency, permit terms and conditions.

6. Unless otherwise specified by state permit, limit the use of riprap to areas where flow conditions preclude effective vegetative stabilization techniques such as seeding and erosion control fabric.

7. Revegetate disturbed riparian areas with native species of conservation grasses, legumes, and woody species, similar in density to adjacent undisturbed lands.

8. Install a permanent slope breaker across the construction right-of-way at the base of slopes greater than 5 percent that are less than 50 feet from the waterbody, or as needed to prevent sediment transport into the waterbody. In addition, install sediment barriers as outlined in the Plan.

   In some areas, with the approval of the Environmental Inspector, an earthen berm may be suitable as a sediment barrier adjacent to the waterbody.

9. Sections V.C.3 through V.C.7 above also apply to those perennial or intermittent streams not flowing at the time of construction.

D. POST-CONSTRUCTION MAINTENANCE

1. Limit routine vegetation mowing or clearing adjacent to waterbodies to allow a riparian strip at least 25 feet wide, as measured from the waterbody's mean high water mark, to permanently revegetate with native plant species across the entire construction right-of-way. However, to facilitate periodic corrosion/leak surveys, a corridor centered on the pipeline and up to 10 feet wide may be cleared at a frequency necessary to maintain the 10-foot corridor in an herbaceous state. In addition, trees that are located within 15 feet of the pipeline that have roots that could compromise the integrity of the pipeline coating may be cut and removed from the permanent right-of-way. Do not conduct any routine vegetation mowing or clearing in riparian areas that are between HDD entry and exit points.

2. Do not use herbicides or pesticides in or within 100 feet of a waterbody except as allowed by the appropriate land management or state agency.

3. Time of year restrictions specified in section VII.A.5 of the Plan (April 15 – August 1 of any year) apply to routine mowing and clearing of riparian areas.

VI. WETLAND CROSSINGS

A. GENERAL

1. The project sponsor shall conduct a wetland delineation using the current federal methodology and file a wetland delineation report with the Secretary before construction. The requirement to file a wetland delineation report does not apply to projects constructed under the automatic authorization provisions in the FERC's regulations.

   This report shall identify:

   a. by milepost all wetlands that would be affected;

   b. the National Wetlands Inventory (NWI) classification for each wetland;

   c. the crossing length of each wetland in feet; and

   d. the area of permanent and temporary disturbance that would occur in each wetland by NWI classification type.

   The requirements outlined in this section do not apply to wetlands in actively cultivated or rotated cropland. Standard upland protective measures, including workspace and topsoiling requirements, apply to these agricultural wetlands.

2. Route the pipeline to avoid wetland areas to the maximum extent possible. If a wetland cannot be avoided or crossed by following an existing right-of-way, route the new pipeline in a manner that minimizes disturbance to wetlands. Where looping an existing pipeline, overlap the existing pipeline right-of-way with the new construction right-of-way. In addition, locate the loop line no more than 25 feet away from the existing pipeline unless site-specific constraints would adversely affect the stability of the existing pipeline.

3. Limit the width of the construction right-of-way to 75 feet or less. Prior written approval of the Director is required where topographic conditions or soil limitations require that the construction right-of-way width within the boundaries of a federally delineated wetland be expanded beyond 75 feet. Early in the planning process the project sponsor is encouraged to identify site-specific areas where excessively wide trenches could occur and/or where spoil piles could be difficult to maintain because existing soils lack adequate unconfined compressive strength.

4. Wetland boundaries and buffers must be clearly marked in the field with signs and/or highly visible flagging until construction-related ground disturbing activities are complete.

5. Implement the measures of sections V and VI in the event a waterbody crossing is located within or adjacent to a wetland crossing. If all measures of sections V and VI cannot be met, the project sponsor must file with the Secretary a site-specific crossing plan for review and written approval by the Director before construction. This crossing plan shall address at a minimum:

   a. spoil control;

   b. equipment bridges;

   c. restoration of waterbody banks and wetland hydrology;

   d. timing of the waterbody crossing;

   e. method of crossing; and

   f. size and location of all extra work areas.

6. Do not locate aboveground facilities in any wetland, except where the location of such facilities outside of wetlands would prohibit compliance with U.S. Department of Transportation regulations.

B. INSTALLATION

1. Extra Work Areas and Access Roads

   a. Locate all extra work areas (such as staging areas and additional spoil storage areas) at least 50 feet away from wetland boundaries, except where the adjacent upland consists of cultivated or rotated cropland or other disturbed land.

   b. The project sponsor shall file with the Secretary for review and written approval by the Director, site-specific justification for each extra work area with a less than 50-foot setback from wetland boundaries, except where adjacent upland consists of cultivated or rotated cropland or other disturbed land. The justification must specify the site-specific conditions that will not permit a 50-foot setback and measures to ensure the wetland is adequately protected.

   c. The construction right-of-way may be used for access when the wetland soil is firm enough to avoid rutting or the construction right-of-way has been appropriately stabilized to avoid rutting (e.g., with timber riprap, prefabricated equipment mats, or terra mats).

      In wetlands that cannot be appropriately stabilized, all construction equipment other than that needed to install the wetland crossing shall

use access roads located in upland areas. Where access roads in upland areas do not provide reasonable access, limit all other construction equipment to one pass through the wetland using the construction right-of-way.

d. The only access roads, other than the construction right-of-way, that can be used in wetlands are those existing roads that can be used with no modifications or improvements, other than routine repair, and no impact on the wetland.

2. Crossing Procedures

a. Comply with COE, or its delegated agency, permit terms and conditions.

b. Assemble the pipeline in an upland area unless the wetland is dry enough to adequately support skids and pipe.

c. Use “push-pull” or “float” techniques to place the pipe in the trench where water and other site conditions allow.

d. Minimize the length of time that topsoil is segregated and the trench is open. Do not trench the wetland until the pipeline is assembled and ready for lowering in.

e. Limit construction equipment operating in wetland areas to that needed to clear the construction right-of-way, dig the trench, fabricate and install the pipeline, backfill the trench, and restore the construction right-of-way.

f. Cut vegetation just above ground level, leaving existing root systems in place, and remove it from the wetland for disposal.

The project sponsor can burn woody debris in wetlands, if approved by the COE and in accordance with state and local regulations, ensuring that all remaining woody debris is removed for disposal.

g. Limit pulling of tree stumps and grading activities to directly over the trenchline. Do not grade or remove stumps or root systems from the rest of the construction right-of-way in wetlands unless the Chief Inspector and Environmental Inspector determine that safety-related construction constraints require grading or the removal of tree stumps from under the working side of the construction right-of-way.

h. Segregate the top 1 foot of topsoil from the area disturbed by trenching, except in areas where standing water is present or soils are

saturated. Immediately after backfilling is complete, restore the segregated topsoil to its original location.

i. Do not use rock, soil imported from outside the wetland, tree stumps, or brush riprap to support equipment on the construction right-of-way.

j. If standing water or saturated soils are present, or if construction equipment causes ruts or mixing of the topsoil and subsoil in wetlands, use low-ground-weight construction equipment, or operate normal equipment on timber riprap, prefabricated equipment mats, or terra mats.

k. Remove all project-related material used to support equipment on the construction right-of-way upon completion of construction.

3. Temporary Sediment Control

Install sediment barriers (as defined in section IV.F.3.a of the Plan) immediately after initial disturbance of the wetland or adjacent upland. Sediment barriers must be properly maintained throughout construction and reinstalled as necessary (such as after backfilling of the trench). Except as noted below in section VI.B.3.c, maintain sediment barriers until replaced by permanent erosion controls or restoration of adjacent upland areas is complete. Temporary erosion and sediment control measures are addressed in more detail in the Plan.

a. Install sediment barriers across the entire construction right-of-way immediately upslope of the wetland boundary at all wetland crossings where necessary to prevent sediment flow into the wetland.

b. Where wetlands are adjacent to the construction right-of-way and the right-of-way slopes toward the wetland, install sediment barriers along the edge of the construction right-of-way as necessary to contain spoil within the construction right-of-way and prevent sediment flow into the wetland.

c. Install sediment barriers along the edge of the construction right-of-way as necessary to contain spoil and sediment within the construction right-of-way through wetlands. Remove these sediment barriers during right-of-way cleanup.

4. Trench Dewatering

Dewater the trench (either on or off the construction right-of-way) in a manner that does not cause erosion and does not result in silt-laden water flowing into any wetland. Remove the dewatering structures as soon as practicable after the completion of dewatering activities.

C. RESTORATION

1. Where the pipeline trench may drain a wetland, construct trench breakers at the wetland boundaries and/or seal the trench bottom as necessary to maintain the original wetland hydrology.

2. Restore pre-construction wetland contours to maintain the original wetland hydrology.

3. For each wetland crossed, install a trench breaker at the base of slopes near the boundary between the wetland and adjacent upland areas. Install a permanent slope breaker across the construction right-of-way at the base of slopes greater than 5 percent where the base of the slope is less than 50 feet from the wetland, or as needed to prevent sediment transport into the wetland. In addition, install sediment barriers as outlined in the Plan. In some areas, with the approval of the Environmental Inspector, an earthen berm may be suitable as a sediment barrier adjacent to the wetland.

4. Do not use fertilizer, lime, or mulch unless required in writing by the appropriate federal or state agency.

5. Consult with the appropriate federal or state agencies to develop a project-specific wetland restoration plan. The restoration plan shall include measures for re-establishing herbaceous and/or woody species, controlling the invasion and spread of invasive species and noxious weeds (e.g., purple loosestrife and phragmites), and monitoring the success of the revegetation and weed control efforts. Provide this plan to the FERC staff upon request.

6. Until a project-specific wetland restoration plan is developed and/or implemented, temporarily revegetate the construction right-of-way with annual ryegrass at a rate of 40 pounds/acre (unless standing water is present).

7. Ensure that all disturbed areas successfully revegetate with wetland herbaceous and/or woody plant species.

8. Remove temporary sediment barriers located at the boundary between wetland and adjacent upland areas after revegetation and stabilization of adjacent upland areas are judged to be successful as specified in section VII.A.4 of the Plan.

D. POST-CONSTRUCTION MAINTENANCE AND REPORTING

1. Do not conduct routine vegetation mowing or clearing over the full width of the permanent right-of-way in wetlands. However, to facilitate periodic corrosion/leak surveys, a corridor centered on the pipeline and up to 10 feet wide may be cleared at a frequency necessary to maintain the 10-foot corridor in an herbaceous state. In addition, trees within 15 feet of the pipeline with roots that could compromise the integrity of pipeline coating may be selectively cut and removed from the permanent right-of-way. Do not conduct any routine vegetation mowing or clearing in wetlands that are between HDD entry and exit points.

2. Do not use herbicides or pesticides in or within 100 feet of a wetland, except as allowed by the appropriate federal or state agency.

3. Time of year restrictions specified in section VII.A.5 of the Plan (April 15 – August 1 of any year) apply to routine mowing and clearing of wetland areas.

4. Monitor and record the success of wetland revegetation annually until wetland revegetation is successful.

5. Wetland revegetation shall be considered successful if all of the following criteria are satisfied:

    a. the affected wetland satisfies the current federal definition for a wetland (i.e., soils, hydrology, and vegetation);

    b. vegetation is at least 80 percent of either the cover documented for the wetland prior to construction, or at least 80 percent of the cover in adjacent wetland areas that were not disturbed by construction;

    c. if natural rather than active revegetation was used, the plant species composition is consistent with early successional wetland plant communities in the affected ecoregion; and

    d. invasive species and noxious weeds are absent, unless they are abundant in adjacent areas that were not disturbed by construction.

6. Within 3 years after construction, file a report with the Secretary identifying the status of the wetland revegetation efforts and documenting success as defined in section VI.D.5, above. The requirement to file wetland restoration reports with the Secretary does not apply to projects constructed under the automatic authorization, prior notice, or advance notice provisions in the FERC's regulations.

    For any wetland where revegetation is not successful at the end of 3 years after construction, develop and implement (in consultation with a

professional wetland ecologist) a remedial revegetation plan to actively revegetate wetlands. Continue revegetation efforts and file a report annually documenting progress in these wetlands until wetland revegetation is successful.

VII. HYDROSTATIC TESTING

A. NOTIFICATION PROCEDURES AND PERMITS

1. Apply for state-issued water withdrawal permits, as required.

2. Apply for National Pollutant Discharge Elimination System (NPDES) or state-issued discharge permits, as required.

3. Notify appropriate state agencies of intent to use specific sources at least 48 hours before testing activities unless they waive this requirement in writing.

B. GENERAL

1. Perform 100 percent radiographic inspection of all pipeline section welds or hydrotest the pipeline sections, before installation under waterbodies or wetlands.

2. If pumps used for hydrostatic testing are within 100 feet of any waterbody or wetland, address secondary containment and refueling of these pumps in the project's Spill Prevention and Response Procedures.

3. The project sponsor shall file with the Secretary before construction a list identifying the location of all waterbodies proposed for use as a hydrostatic test water source or discharge location. This filing requirement does not apply to projects constructed under the automatic authorization provisions of the FERC's regulations.

C. INTAKE SOURCE AND RATE

1. Screen the intake hose to minimize the potential for entrainment of fish.

2. Do not use state-designated exceptional value waters, waterbodies which provide habitat for federally listed threatened or endangered species, or waterbodies designated as public water supplies, unless appropriate federal, state, and/or local permitting agencies grant written permission.

3. Maintain adequate flow rates to protect aquatic life, provide for all waterbody uses, and provide for downstream withdrawals of water by existing users.

4. Locate hydrostatic test manifolds outside wetlands and riparian areas to the maximum extent practicable.

D. DISCHARGE LOCATION, METHOD, AND RATE

1. Regulate discharge rate, use energy dissipation device(s), and install sediment barriers, as necessary, to prevent erosion, streambed scour, suspension of sediments, or excessive streamflow.

2. Do not discharge into state-designated exceptional value waters, waterbodies which provide habitat for federally listed threatened or endangered species, or waterbodies designated as public water supplies, unless appropriate federal, state, and local permitting agencies grant written permission.

ATTACHMENT J

MINNESOTA NPDES/SDS PERMIT
NO. MNR100001

Stantec

MINNESOTA POLLUTION CONTROL AGENCY

AUTHORIZATION TO DISCHARGE

STORMWATER ASSOCIATED WITH CONSTRUCTION ACTIVITY

UNDER THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)/

STATE DISPOSAL SYSTEM (SDS) PROGRAM

MNR100001

Permittee:	Multiple
Project Name:	Construction Stormwater General Permit
Issuance date:	August 1, 2023
Expiration date:	July 31, 2028

The state of Minnesota, on behalf of its citizens through the Minnesota Pollution Control Agency (MPCA), authorizes the Permittee(s) named above seeking coverage under this general permit to discharge stormwater associated with construction activity to waters of the state of Minnesota in accordance with the requirements of this permit.

The goal of this permit is to reduce pollutant levels in point source discharges and protect water quality in accordance with the U.S. Clean Water Act, Minnesota statutes and rules, and federal laws and regulations.

This permit is effective on the issuance date identified above. This permit expires at midnight on the expiration date identified above.

Signature: Ryan Anderson

This document has been electronically signed.

for the Minnesota Pollution Control Agency

Ryan Anderson
Manager
Stormwater Section
Municipal Division

Permit application:
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1.1	**Permit Coverage**. [Minn. R. 7090]
1.2	This permit is required for construction activity that results in land disturbance of equal to or greater than one (1) acre or if a project is part of a common plan of development or sale that ultimately will disturb greater than one (1) acre, and authorizes, subject to the terms and conditions of this permit, the discharge of stormwater associated with construction activity. [Minn. R. 7090]
1.3	Construction activity covered by this permit cannot commence until coverage under this permit is effective as described in item 3.3 through 3.4 or, if applicable, until the Minnesota Pollution Control Agency (MPCA) has issued an individual National Pollutant Discharge Elimination System (NPDES)/State Disposal System (SDS) construction stormwater permit for the project. [Minn. R. 7090]
1.4	This permit covers all areas of the State of Minnesota except land wholly within the boundaries of a federally recognized Indian Reservation owned by a tribe or a tribal member or land held in trust by the federal government for a tribe or tribal member. [Minn. R. 7090]
1.5	Coverage under this permit is not required when all stormwater from construction activity is routed directly to and treated by a "treatment works," as defined in Minn. Stat. Section 115.01, subd. 21, operated under an individual NPDES/SDS permit with a Total Suspended Solids (TSS) effluent limit. [Minn. R. 7090]
1.6	This permit covers ongoing projects covered under any previous construction stormwater permit that are not complete on the issuance date of this permit. Permittees must either remain in compliance with the previous permit and terminate coverage within 18 months of the issuance date of this permit or comply with this permit, including updating the Stormwater Pollution Prevention Plan (SWPPP), within the 18-month period. Permittees of previously permitted projects are not required to incorporate any additional requirements regarding the permanent stormwater treatment system included in this reissued permit. [Minn. R. 7090]
1.7	Coverage for projects that extend beyond the expiration date of this permit remains effective for a grace period of 18 months. If Permittees cannot complete projects during the grace period, the MPCA will extend coverage under the next permit and permittees must comply with the requirements of the new permit including updating the SWPPP. Permittees are not required to follow changes to the permanent stormwater treatment section of the next permit. [Minn. R. 7090]
2.1	**Prohibitions and Limitations of Coverage**. [Minn. R. 7090]
2.2	The owner must develop a complete and accurate SWPPP that complies with item 5.2 prior to submitting the application for coverage and starting construction activity. Failure to prepare a SWPPP prior to submitting the application may result in permit revocation. [Minn. R. 7090]
2.3	This permit prohibits discharges of any material other than stormwater treated in compliance with this permit and discharges from dewatering or basin draining activities in accordance with Section 10. Prohibited discharges include, but are not limited to, wastewater from washout of concrete, stucco, paint, form release oils, curing compounds and other construction materials, fuels, oils, or other pollutants used in vehicle and equipment operation and maintenance, soaps or solvents used in vehicle and equipment washing and maintenance, and other hazardous substances or wastes. [Minn. R. 7090]
2.4	This permit does not authorize stormwater discharges related to the placement of fill into waters of the state requiring local, state or federal authorizations (such as U.S. Army Corps of Engineers Section 404 permits, Minnesota Department of Natural Resources (DNR) Public Waters Work permits or local governmental unit (LGU) Wetland Conservation Act replacement plans or determinations). [Minn. R. 7090]
2.5	This permit does not authorize stormwater discharges associated with industrial activity except for construction activity. Permittees must obtain coverage for discharges associated with industrial activity under a separate NPDES/SDS permit once day-to-day operational activities commence even if construction is ongoing. [Minn. R. 7090]
2.6	This permit does not authorize discharges from non-point source agricultural and silvicultural activities excluded from NPDES permit requirements under 40 CFR pt. 122.3(e). [Minn. R. 7090]
2.7	This permit does not authorize stormwater discharges to Prohibited, Restricted, Special or Impaired waters unless permittees follow the additional stormwater requirements in Section 23. [Minn. R. 7090]
2.8	This permit does not replace or satisfy any environmental review requirements including those under the Minnesota Environmental Policy Act or the National Environmental Policy Act. The owner must verify completion of any environmental review required by law, including any required Environmental Assessment Work Sheets or Environmental Impact Statements, Federal environmental review, or other required review prior to applying for coverage under this permit. If any part of your common plan of development or sale requires environmental review, coverage under this permit cannot be

	obtained until such environmental review is complete. [Minn. R. 7090]
2.9	This permit does not replace or satisfy any review requirements for discharges adversely impacting State or Federally designated endangered or threatened species or a designated critical habitat. The owner must comply with the National Historic Preservation Act and conduct all required review and coordination related to historic preservation, including significant anthropological sites and any burial sites, with the Minnesota Historic Preservation Officer. [Minn. R. 7090]
2.10	This permit does not authorize discharges to wetlands unless the permittee complies with the requirements in Section 22. Coverage under this permit cannot be issued until the requirements for wetland permits, decisions, other determinations, or the mitigative sequence required in section 22 have been finalized and documented. [Minn. R. 7050.0186]
3.1	**Application and Coverage Effective Date**. [Minn. R. 7090]
3.2	The owner and operator must submit a complete and accurate on-line application with the appropriate fee to the MPCA for each project that disturbs one (1) or more acres of land or for a common plan of development or sale that will ultimately disturb one (1) or more acres. [Minn. R. 7090]
3.3	For projects or common plans of development or sale that disturb less than 50 acres or do not discharge stormwater within 1 mile (aerial radius measurement) of a special or impaired water, permittees do not need to submit the SWPPP with the application. Permit coverage for these projects is effective upon application and completing the payment process. [Minn. R. 7090]
3.4	For certain projects or common plans of development or sale disturbing 50 acres or more, the complete SWPPP must be included with the application and submitted at least 30 days before the start of construction activity. This applies if there is a discharge point on the project within one mile (aerial radius measurement) of, and flows to, a special water listed in item 23.3 through 23.6 or an impaired water as described in item 23.7. Permit coverage for these projects is effective upon submitting the application and complete SWPPP, completing the payment process and receiving a determination from the MPCA that the review of the SWPPP is complete. The determination may take longer than 30 days if the SWPPP is incomplete. If the MPCA fails to contact the permittees within 30 days of application receipt, coverage is effective 30 days after completing the payment process. [Minn. R. 7090]
3.5	The application requires listing all persons meeting the definition of owner and operator as permittees. The owner is responsible for compliance with all terms and conditions of this permit. The operator is responsible for compliance with Sections 3, 4, 6-22, 24 and applicable requirements for construction activity in Section 23. [Minn. R. 7090]
3.6	Permittees will receive coverage notification in a manner determined by the MPCA. [Minn. R. 7090]
3.7	For construction projects where the owner or operator changes (e.g., an original developer sells portions of the property to various homebuilders or sells the entire site to a new owner), the current owner and the new owner or operator must submit a complete permit modification form provided by the MPCA. The current owner and the new owner or operator must submit the form prior to the new owner or operator commencing construction activity or no later than 30 days after taking ownership of the property. [Minn. R. 7090]
3.8	For construction projects where the owner or operator changes, the current owner must provide a SWPPP to the new owner and operator that specifically addresses the remaining construction activity. The new owner or operator can implement the original SWPPP, modify the SWPPP, or develop a new SWPPP. Permittees must ensure their activities do not render another party's erosion prevention and sediment control BMPs ineffective. [Minn. R. 7090]
4.1	**Termination of Coverage**. [Minn. R. 7090]
4.2	Permittees must submit a NOT within 30 days after all termination conditions listed in Section 13 are complete. [Minn. R. 7090]
4.3	Permittees must submit a NOT within 30 days after selling or otherwise legally transferring the entire site, including permit responsibility for roads (e.g., street sweeping) and stormwater infrastructure final clean out, or transferring portions of a site to another party. The permittees' coverage under this permit terminates at midnight on the submission date of the NOT. [Minn. R. 7090]
4.4	Permittees may terminate permit coverage prior to completion of all construction activity if they meet all of the following conditions: a. construction activity has ceased for at least 90 days; and b. at least 90 percent (by area) of all originally proposed construction activity has been completed and permanent cover has been established on those areas; and c. on areas where construction activity is not complete, permanent cover has been established; and d. the site complies with item 13.3 through 13.7.

	After permit coverage is terminated under this item, any subsequent development on the remaining portions of the site will require permit coverage if the subsequent development itself or as part of the remaining common plan of development or sale will result in land disturbing activities of one (1) or more acres in size. [Minn. R. 7090]
4.5	Permittees may terminate coverage upon MPCA approval after submitting information documenting the owner cancelled the project. [Minn. R. 7090]
5.1	**Stormwater Pollution Prevention Plan (SWPPP) Content**. [Minn. R. 7090]
5.2	The owner must develop and implement a SWPPP. The SWPPP must include items 5.3 through 5.26. [Minn. R. 7090]
5.3	The SWPPP must incorporate specific Best Management Practices (BMP) used to comply with the requirements of this permit. [Minn. R. 7090]
5.4	The SWPPP must include a narrative describing the timing for installation of all erosion prevention and sediment control BMPs and a description of the permanent stormwater treatment systems. [Minn. R. 7090]
5.5	The SWPPP must include the location and type of all temporary and permanent erosion prevention and sediment control BMPs along with procedures used to establish additional temporary BMPs as necessary for the site conditions during construction. Standard details and/or specifications for BMPs must be included in the final plans and specifications for the project. [Minn. R. 7090]
5.6	The SWPPP must include the calculations and other information used for the design of temporary sediment basins and any of the permanent stormwater treatment systems required in Section 15. [Minn. R. 7090]
5.7	The SWPPP must include estimated quantities anticipated at the start of the project for the life of the project for all erosion prevention and sediment control BMPs (e.g., linear feet of silt fence or square feet of erosion control blanket). [Minn. R. 7090]
5.8	The SWPPP must include the number of acres of impervious surface for both pre- and post-construction. [Minn. R. 7090]
5.9	The SWPPP must include a site map with existing and final grades, including drainage area boundaries, directions of flow and all discharge points where stormwater is leaving the site or entering a surface water. The site map must indicate the areas of steep slopes. The site map must also include impervious surfaces, soil types and locations of potential pollutant-generating activities as identified in Section 12. [Minn. R. 7090]
5.10	The SWPPP must include a map of all surface waters, existing wetlands, and stormwater ponds or basins that can be identified on maps such as United States Geological Survey 7.5-minute quadrangle maps, the National Wetland Inventory map or equivalent maps and are within one mile (aerial radius measurement) from the project boundaries that will receive stormwater from the construction site, during or after construction. The SWPPP must identify if the surface waters are special or impaired waters. [Minn. R. 7090]
5.11	The SWPPP must include a site map showing construction activity areas that are adjacent to and drain to Public Waters for which the DNR has promulgated "work in water restrictions" during specified fish spawning time frames. [Minn. R. 7090]
5.12	Permittees must identify locations of 50' buffer zones as required in item 9.17 and 100' permanent buffer zones as required in item 23.11, on plan sheets in the SWPPP. [Minn. R. 7090]
5.13	If permittees determine compliance with the following requirements is infeasible, they must document the determination in the SWPPP: a. temporary sediment basins as described in Section 14; and b. for linear projects, if the permanent stormwater treatment system cannot be constructed within the right-of-way, a reasonable attempt must be made to obtain additional right-of-way (item 15.9); and c. buffer zones as described in item 9.17 and item 23.11. [Minn. R. 7090]
5.14	If permittees determine that a temporary sediment basin is infeasible as described in item 14.10, the SWPPP must describe the alternative BMPs used. [Minn. R. 7090]
5.15	Where systems cannot meet the full volume reduction requirement on-site, (e.g., the site has infiltration prohibitions, see item 16.14 through item 16.21) the permittee must document the reasons in the SWPPP. [Minn. R. 7090]
5.16	The SWPPP must include any stormwater mitigation measures proposed to be part of the final project in any environmental review document, endangered species review, archeological or other required local, state or federal review conducted for the project. For purposes of this permit, mitigation measures mean actions necessary to avoid, minimize, or mitigate for impacts related to erosion prevention, sediment control, the permanent stormwater treatment system, pollution prevention management measures and discharges associated with the project's construction activity. [Minn. R. 7090]

5.17	The SWPPP must describe the methods used for permanent cover of all exposed soil areas. [Minn. R. 7090]
5.18	Permittees must identify the locations of areas where construction will be phased to minimize the duration of exposed soil areas in the SWPPP. [Minn. R. 7090]
5.19	For projects with a discharge point on the project within one (1) mile (aerial radius measurement) of and which flows to an impaired water, permittees must identify the impaired water(s), and any United States Environmental Protection Agency (USEPA)-approved Total Maximum Daily Load (TMDL) for the pollutant(s) or stressor(s) described in item 23.7. Permittees' identification must include those TMDLs approved at any time prior to permit application submittal and are still in effect. [Minn. R. 7090]
5.20	Permittees must document in the SWPPP, all trained individuals identified in item 21.2. Documentation must include: a. names of personnel required to be trained; and b. dates of training and name of instructor(s) and entity providing training; and c. content of training course. If permittees do not know the names of the individuals at the time of application, the permittees must ensure they document training before construction activity commences. [Minn. R. 7090]
5.21	The SWPPP must identify a person knowledgeable and experienced in the application of erosion prevention and sediment control BMPs who will coordinate with all contractors, subcontractors, and operators on-site to oversee the implementation of the SWPPP. [Minn. R. 7090]
5.22	The SWPPP must describe any specific chemicals and chemical treatment systems used for enhancing the sedimentation process and how it achieves compliance with item 9.19. [Minn. R. 7090]
5.23	The SWPPP must identify the person(s), organizations, or entities responsible for long-term operation and maintenance of permanent stormwater treatment systems. [Minn. R. 7090]
5.24	The SWPPP must describe methods to minimize soil compaction and preserve topsoil. Minimizing soil compaction is not required where the function of a specific area dictates compaction. [Minn. R. 7090]
5.25	The SWPPP must include any site assessments for groundwater or soil contamination required in item 16.15. [Minn. R. 7090]
5.26	The SWPPP must account for the following factors in designing temporary erosion prevention and sediment control BMPs: a. the expected amount, frequency, intensity, and duration of precipitation; and b. the nature of stormwater runoff and run-on at the site, including factors such as expected flow from impervious surfaces, slopes, and site drainage features; and c. the stormwater volume, velocity, and peak flowrates to minimize discharge of pollutants in stormwater and to minimize channel and streambank erosion and scour in the immediate vicinity of discharge points; and d. the range of soil particle sizes expected to be present. [Minn. R. 7090]
6.1	**SWPPP Amendments**. [Minn. R. 7090]
6.2	One of the individuals described in item 21.2.a or item 21.2.b or another qualified individual must complete all SWPPP changes. Changes involving the use of a less stringent BMP must include a justification describing how the replacement BMP is effective for the site characteristics. [Minn. R. 7090]
6.3	Permittees must amend the SWPPP within 7 days to include additional or modified BMPs whenever there is a change in design, construction, operation, maintenance, weather or seasonal conditions having a significant effect on the discharge of pollutants to surface waters or groundwater. [Minn. R. 7090]
6.4	Permittees must amend the SWPPP within 7 days to include additional or modified BMPs whenever inspections or investigations by the site owner or operator, USEPA or MPCA officials indicate the SWPPP is not effective in eliminating or significantly minimizing the discharge of pollutants to surface waters or groundwater or the discharges are causing water quality standard exceedances (e.g., nuisance conditions as defined in Minn. R. 7050.0210, subp. 2) or the SWPPP is not consistent with the objectives of a USEPA approved TMDL. [Minn. R. 7050.0210]
7.1	**BMP Selection and Stormwater Management**. [Minn. R. 7090]
7.2	Permittees must select, install, and maintain the BMPs identified in the SWPPP and in this permit in an appropriate and functional manner and in accordance with relevant manufacturer specifications and accepted engineering practices to minimize the discharge of pollutants in stormwater from construction activities. Examples of stormwater management practices for this section include but are not limited to wet sedimentation basins, temporary depressions to hold

	stormwater, stormwater routing, dikes, berms, pumping, and stormwater treatment BMPs. Permittees must phase and incorporate stormwater management principles as the construction progresses. Unless infeasible, temporary or permanent wet sedimentation basins (when required, see section 14 and 15) should be constructed as a first step in the process and stormwater routed to these. [Minn. R. 7090]
7.3	Permittees must not disturb more land (i.e., phasing) than can be effectively inspected and maintained in accordance with Section 11. [Minn. R. 7090]
7.4	If permittees will be using some type of erosion control netting on the site as part of the soil stabilization techniques, permittees are encouraged to use products that have been shown to minimize impacts on wildlife. The U.S. Fish & Wildlife Service recommends using types of netting practices that are considered "wildlife friendly," including those that use natural fiber or 100 percent biodegradable materials and that use a loose weave with a non-welded, movable jointed netting. Products that are not wildlife friendly include square plastic netting that are degradable (e.g., photodegradable, UV-degradable, oxo-degradable), netting made from polypropylene, nylon, polyethylene, or polyester. Other recommendations include removing the netting product when it is no longer needed. More information may be found at: https://www.fws.gov/initiative/protecting-wildlife/make-change-wildlife-friendly-erosion-control-products. There also may be State, Tribal, or local requirements about using wildlife friendly erosion control products. See Minnesota Department of Transportation requirements at: https://www.mndot.org/environment/erosion/rolled-erosion-prevention-products.html. [Minn. R. 7050]
8.1	**Erosion Prevention Practices**. [Minn. R. 7090]
8.2	Before work begins, permittees must delineate the location of areas not to be disturbed. [Minn. R. 7090]
8.3	Permittees must minimize the need for disturbance of portions of the project with steep slopes. When steep slopes must be disturbed, permittees must use techniques such as phasing and stabilization practices designed for steep slopes (e.g., slope draining and terracing). [Minn. R. 7090]
8.4	Permittees must stabilize all exposed soil areas, including stockpiles. Stabilization must be initiated immediately to limit soil erosion when construction activity has permanently or temporarily ceased on any portion of the site and will not resume for a period exceeding 14 calendar days (7 days for sites discharging to special or impaired waters, see section 24). Stabilization must be completed no later than 14 calendar days after the construction activity has ceased. Stabilization is not required on constructed base components of roads, parking lots and similar surfaces. Stabilization is not required on temporary stockpiles without significant silt, clay or organic components (e.g., clean aggregate stockpiles, demolition concrete stockpiles, sand stockpiles) but permittees must provide sediment controls at the base of the stockpile. [Minn. R. 7090]
8.5	For Public Waters that the Minnesota DNR has promulgated "work in water restrictions" during specified fish spawning time frames, permittees must complete stabilization of all exposed soil areas within 200 feet of the water's edge, and that drain to these waters, within 24 hours during the restriction period. [Minn. R. 7090]
8.6	Permittees must stabilize the normal wetted perimeter of the last 200 linear feet of temporary or permanent drainage ditches or swales that drain water from the site within 24 hours after connecting to a surface water or property edge. Permittees must complete stabilization of remaining portions of temporary or permanent ditches or swales within 14 calendar days (7 days for sites discharging to special or impaired waters, see section 24) after connecting to a surface water or property edge and construction in that portion of the ditch temporarily or permanently ceases. [Minn. R. 7090]
8.7	Temporary or permanent ditches or swales being used as a sediment containment system during construction (with properly designed rock-ditch checks, bio rolls, silt dikes, etc.) do not need to be stabilized. Permittees must stabilize these areas within 24 hours after their use as a sediment containment system ceases. [Minn. R. 7090]
8.8	Permittees must not use mulch, hydromulch, tackifier, polyacrylamide or similar erosion prevention practices within any portion of the normal wetted perimeter of a temporary or permanent drainage ditch or swale section with a continuous slope of greater than 2 percent. Examples of acceptable erosion prevention practices include blankets, poly, riprap, etc. [Minn. R. 7090]
8.9	Permittees must provide temporary or permanent energy dissipation at all pipe outlets within 24 hours after connection to a surface water or permanent stormwater treatment system. [Minn. R. 7090]
9.1	**Sediment Control Practices**. [Minn. R. 7090]
9.2	Permittees must establish sediment control BMPs on all downgradient perimeters of the site and downgradient areas of the site that drain to any surface water, including curb and gutter systems. Permittees must locate sediment control practices upgradient of any buffer zones. Permittees must install sediment control practices before any upgradient land-disturbing activities begin and must keep the sediment control practices in place until they establish permanent cover. [Minn. R. 7090]
9.3	If downgradient sediment controls are overloaded, based on frequent failure or excessive maintenance requirements,

	permittees must install additional upgradient sediment control practices or redundant BMPs to eliminate the overloading and amend the SWPPP to identify these additional practices as required in item 6.3. [Minn. R. 7090]
9.4	Temporary or permanent drainage ditches and sediment basins designed as part of a sediment containment system (e.g., ditches with rock-check dams) require sediment control practices only as appropriate for site conditions. [Minn. R. 7090]
9.5	A floating silt curtain placed in the water is not a sediment control BMP to satisfy item 9.2 except when working on a shoreline or below the waterline. Immediately after the construction activity (e.g., installation of rip rap along the shoreline) in that area is complete, permittees must install an upland perimeter control practice if exposed soils still drain to a surface water. [Minn. R. 7090]
9.6	Permittees must re-install all sediment control practices adjusted or removed to accommodate short-term activities such as clearing or grubbing, or passage of vehicles, immediately after the short-term activity is completed. Permittees must re-install sediment control practices before the next precipitation event even if the short-term activity is not complete. [Minn. R. 7090]
9.7	Permittees must protect all storm drain inlets using appropriate BMPs during construction until they establish permanent cover on all areas with potential for discharging to the inlet. [Minn. R. 7090]
9.8	Permittees may remove inlet protection for a particular inlet if a specific safety concern (e.g. street flooding/freezing) is identified by the permittees or the jurisdictional authority (e.g., city/county/township/Minnesota Department of Transportation engineer). Permittees must document the need for removal in the SWPPP. [Minn. R. 7090]
9.9	Permittees must provide silt fence or other effective sediment controls at the base of stockpiles on the downgradient perimeter prior to the initiation of stockpiling. Sediment controls must be managed in accordance with section 9.6. [Minn. R. 7090]
9.10	Permittees must locate stockpiles outside of natural buffers or surface waters, including stormwater conveyances such as curb and gutter systems unless there is a bypass in place for the stormwater. [Minn. R. 7090]
9.11	Permittees must install a vehicle tracking BMP to minimize the track out of sediment from the construction site or onto paved roads within the site. [Minn. R. 7090]
9.12	Permittees must use street sweeping in addition to vehicle tracking BMPs if vehicle tracking BMPs alone are not adequate to prevent sediment tracking onto the street. [Minn. R. 7090]
9.13	Permittees must install temporary sediment basins as required in Section 14. [Minn. R. 7090]
9.14	In any areas of the site where final vegetative stabilization will occur, permittees must restrict vehicle and equipment use to minimize soil compaction. [Minn. R. 7090]
9.15	Permittees must preserve topsoil on the site, unless infeasible. [Minn. R. 7090]
9.16	Permittees must direct discharges from BMPs to vegetated areas unless infeasible. [Minn. R. 7090]
9.17	Permittees must preserve a 50-foot natural buffer or, if a buffer is infeasible on the site, provide redundant (double) perimeter sediment controls when a surface water is located within 50 feet of the project's earth disturbances and stormwater flows to the surface water. Permittees must install perimeter sediment controls at least 5 feet apart unless limited by lack of available space. Natural buffers are not required adjacent to road ditches, judicial ditches, county ditches, stormwater conveyance channels, storm drain inlets, and sediment basins. If preserving the buffer is infeasible, permittees must document the reasons in the SWPPP. Sheet piling and other impermeable barriers installed in a manner that retains all stormwater are considered redundant perimeter control. [Minn. R. 7090]
9.18	Any sediment control made of soil must be temporarily or permanently stabilized within 24 hours. [Minn. R. 7090]
9.19	Permittees must use polymers, flocculants, or other sedimentation treatment chemicals in accordance with accepted engineering practices, dosing specifications and sediment removal design specifications provided by the manufacturer or supplier. The permittees must use conventional erosion and sediment controls prior to chemical addition and must direct treated stormwater to a sediment control system for filtration or settlement of the floc prior to discharge. [Minn. R. 7090]
10.1	**Dewatering and Basin Draining**. [Minn. R. 7090]
10.2	Permittees must not cause nuisance conditions (see Minn. R. 7050.0210, subp. 2) in surface waters from dewatering and basin draining (e.g., pumped discharges, trench/ditch cuts for drainage) discharges. Permittees must discharge turbid or sediment-laden waters related to dewatering or basin draining to a sediment control (e.g. sediment trap or basin, filter bag) designed to prevent discharges with visual turbidity. To the extent feasible, use well-vegetated (e.g., grassy or wooded), upland areas of the site to infiltrate dewatering water before discharge. Permittees are prohibited from using receiving waters as part of the treatment area. Permittees must visually check and photograph the discharge at the beginning and at least once every 24 hours of operation to ensure adequate treatment has been obtained and nuisance conditions will not

	result from the discharge. [Minn. R. 7050.0210]
10.3	If nuisance conditions result from the discharge, Permittees must cease dewatering immediately and corrective actions must occur before dewatering is resumed. Nuisance conditions includes, but is not limited to, a sediment plume in the discharge or the discharge appears cloudy, or opaque, or has a visible contrast, or has a visible oil film, or has aquatic habitat degradation that can be identified by an observer. [Minn. R. 7050.0210]
10.4	If permittees must discharge water containing oil or grease, they must use an oil-water separator or suitable filtration device (e.g., cartridge filters, absorbents pads) prior to discharge. [Minn. R. 7090]
10.5	Permittees must discharge all water from dewatering or basin-draining activities in a manner that does not cause erosion or scour in the immediate vicinity of discharge points or inundation of wetlands in the immediate vicinity of discharge points that causes significant adverse impact to the wetland. [Minn. R. 7090]
10.6	If permittees use filters with backwash water, they must haul the backwash water away for disposal, return the backwash water to the beginning of the treatment process, or incorporate the backwash water into the site in a manner that does not cause erosion. [Minn. R. 7090]
11.1	**Inspections and Maintenance**. [Minn. R. 7090]
11.2	Permittees must ensure a trained person, as identified in item 21.2.b, will inspect the entire construction site at least once every seven (7) days during active construction and within 24 hours after a rainfall event greater than 1/2 inch in 24 hours. [Minn. R. 7090]
11.3	Permittees must inspect and maintain all permanent stormwater treatment BMPs. [Minn. R. 7090]
11.4	Permittees must inspect all erosion prevention and sediment control BMPs and Pollution Prevention Management Measures to ensure integrity and effectiveness. Permittees must repair, replace or supplement all nonfunctional BMPs with functional BMPs by the end of the next business day after discovery unless another time frame is specified in item 11.5 or 11.6. Permittees may take additional time if field conditions prevent access to the area. [Minn. R. 7090]
11.5	During each inspection, permittees must inspect areas adjacent to the project, surface waters, including drainage ditches and conveyance systems but not curb and gutter systems, for evidence of erosion and sediment deposition. Permittees must remove all deltas and sediment deposited in areas adjacent to the project, surface waters, including drainage ways, catch basins, and other drainage systems and restabilize the areas where sediment removal results in exposed soil. Permittees must complete removal and stabilization within seven (7) calendar days of discovery unless precluded by legal, regulatory, or physical access constraints. Permittees must use all reasonable efforts to obtain access. If precluded, removal and stabilization must take place within seven (7) days of obtaining access. Permittees are responsible for contacting all local, regional, state and federal authorities and receiving any applicable permits, prior to conducting any work in surface waters. [Minn. R. 7090]
11.6	Permittees must inspect construction site vehicle exit locations, streets and curb and gutter systems within and adjacent to the project for sedimentation from erosion or tracked sediment from vehicles. Permittees must remove sediment from all paved surfaces within one (1) calendar day of discovery or, if applicable, within a shorter time to avoid a safety hazard to users of public streets. [Minn. R. 7090]
11.7	Permittees must repair, replace or supplement all perimeter control devices when they become nonfunctional or the sediment reaches 1/2 of the height of the device. [Minn. R. 7090]
11.8	Permittees must drain temporary and permanent sedimentation basins and remove the sediment when the depth of sediment collected in the basin reaches 1/2 the storage volume within 72 hours of discovery. [Minn. R. 7090]
11.9	Permittee's must inspect and photograph dewatering discharges at the beginning and at least once every 24 hours during operation. Dewatering discharges that only last for minutes, as opposed to hours, and do not reach a surface water, do not require photographs or documentation. [Minn. R. 7090]
11.10	Permittees must ensure that at least one individual present on the site (or available to the project site in three (3) calendar days) is trained in the job duties described in item 21.2.b. [Minn. R. 7090]
11.11	Permittees may adjust the inspection schedule described in item 11.2 as follows: a. inspections of areas with permanent cover can be reduced to once per month, even if construction activity continues on other portions of the site; or b. where sites have permanent cover on all exposed soil and no construction activity is occurring anywhere on the site, inspections can be reduced to once per month and, after 12 months, may be suspended completely until construction activity resumes. The MPCA may require inspections to resume if conditions warrant; or c. where construction activity has been suspended due to frozen ground conditions, inspections may be suspended.

	Inspections must resume within 24 hours of runoff occurring, or upon resuming construction, whichever comes first. d. for projects where a pollinator habitat or native prairie type vegetated cover is being established, inspections may be reduced to once per month if the site has temporary vegetation with a density of 70% temporary uniform cover. If after 24 months no significant erosion problems are observed, inspections may be suspended completely until the termination requirements in section 13 have been met. [Minn. R. 7090]
11.12	Permittees must record all inspections and maintenance activities within 24 hours of being conducted and these records must be retained with the SWPPP. These records must include: a. date and time of inspections; and b. name of persons conducting inspections; and c. accurate findings of inspections, including the specific location where corrective actions are needed; and d. corrective actions taken (including dates, times, and party completing maintenance activities); and e. date of all rainfall events greater than 1/2 inches in 24 hours, and the amount of rainfall for each event. Permittees must obtain rainfall amounts by either a properly maintained rain gauge installed on-site, a weather station that is within one (1) mile of your location, or a weather reporting system that provides site specific rainfall data from radar summaries; and f. if permittees observe a discharge during the inspection, they must record and should photograph and describe the location of the discharge (i.e., color, odor, settled or suspended solids, oil sheen, and other obvious indicators of pollutants); and g. any amendments to the SWPPP proposed as a result of the inspection must be documented as required in Section 6 within seven (7) calendar days; and h. all photographs of dewatering activities and documentation of nuisance conditions resulting from dewatering activities as described in section 10. [Minn. R. 7090]
12.1	**Pollution Prevention Management Measures**. [Minn. R. 7090]
12.2	Permittees must place construction materials and landscape materials under cover (e.g., plastic sheeting or temporary roofs) or protect them by similarly effective means designed to minimize contact with stormwater. Permittees are not required to cover or protect products which are either not a source of contamination to stormwater or are designed to be exposed to stormwater. [Minn. R. 7090]
12.3	Permittees must place pesticides, fertilizers and treatment chemicals under cover (e.g., plastic sheeting or temporary roofs) or protect them by similarly effective means designed to minimize contact with stormwater. [Minn. R. 7090]
12.4	Permittees must store hazardous materials and toxic waste, (including oil, diesel fuel, gasoline, hydraulic fluids, paint solvents, petroleum-based products, wood preservatives, additives, curing compounds, and acids) in sealed containers to prevent spills, leaks or other discharge. Storage and disposal of hazardous waste materials must be in compliance with Minn. R. ch. 7045 including secondary containment as applicable. [Minn. R. 7090]
12.5	Permittees must properly store, collect and dispose solid waste in compliance with Minn. R. ch. 7035. [Minn. R. 7035]
12.6	Permittees must position portable toilets so they are secure and will not tip or be knocked over. Permittees must properly dispose sanitary waste in accordance with Minn. R. ch. 7041. [Minn. R. 7041]
12.7	Permittees must take reasonable steps to prevent the discharge of spilled or leaked chemicals, including fuel, from any area where chemicals or fuel will be loaded or unloaded including the use of drip pans or absorbents unless infeasible. Permittees must ensure adequate supplies are available at all times to clean up discharged materials and that an appropriate disposal method is available for recovered spilled materials. Permittees must report and clean up spills immediately as required by Minn. Stat. 115.061, using dry clean up measures where possible. [Minn. Stat. 115.061]
12.8	Permittees must limit vehicle exterior washing and equipment to a defined area of the site. Permittees must contain runoff from the washing area in a sediment basin or other similarly effective controls and must dispose waste from the washing activity properly. Permittees must properly use and store soaps, detergents, or solvents. [Minn. R. 7090]
12.9	Permittees must provide effective containment for all liquid and solid wastes generated by washout operations (e.g., concrete, stucco, paint, form release oils, curing compounds and other construction materials) related to the construction activity. Permittees must prevent liquid and solid washout wastes from contacting the ground and must design the containment so it does not result in runoff from the washout operations or areas. Permittees must properly dispose liquid and solid wastes in compliance with MPCA rules. Permittees must install a sign indicating the location of the washout facility. [Minn. R. 7035, Minn. R. 7090]
13.1	**Permit Termination Conditions**. [Minn. R. 7090]
13.2	Permittees must complete all construction activity and must install permanent cover over all areas prior to submitting the NOT. Vegetative cover must consist of a uniform perennial vegetation with a density of 70 percent of its expected final

	growth. Vegetation is not required where the function of a specific area dictates no vegetation, such as impervious surfaces or the base of a sand filter. [Minn. R. 7090]
13.3	Permittees must clean the permanent stormwater treatment system of any accumulated sediment and must ensure the system meets all applicable requirements in Section 15 through 19 and is operating as designed. [Minn. R. 7090]
13.4	Permittees must remove all sediment from conveyance systems prior to submitting the NOT. [Minn. R. 7090]
13.5	Permittees must remove all temporary synthetic erosion prevention and sediment control BMPs prior to submitting the NOT. Permittees may leave BMPs designed to decompose on-site in place. [Minn. R. 7090]
13.6	For residential construction only, permit coverage terminates on individual lots if the lot is sold to the homeowner, structures are finished, and permanent cover has been established. For lots that are sold to the homeowner where permanent cover has not been established, coverage terminates if temporary erosion prevention and downgradient perimeter control is properly installed and the permittee distributes the MPCA's "Homeowner Fact Sheet" to the homeowner. [Minn. R. 7090]
13.7	For construction projects on agricultural land (e.g., pipelines across cropland), permittees must return the disturbed land to its preconstruction agricultural use prior to submitting the NOT. [Minn. R. 7090]
13.8	When submitting the NOT, Permittees must include either ground or aerial photographs showing the requirements of 13.2 have been met. Permittees are not required to take photographs of every distinct part of the site, however the conditions portrayed must be substantially similar to those areas that are not photographed. Photographs must be clear and in focus and must include the date the photo was taken. [Minn. R. 7090]
14.1	**Temporary Sediment Basins**. [Minn. R. 7090]
14.2	Where ten (10) or more acres of disturbed soil (5 acres for sites discharging to special or impaired waters, see section 24) drain to a common location, permittees must provide a temporary sediment basin to provide treatment of the runoff before it leaves the construction site or enters surface waters. Permittees may convert a temporary sediment basin to a permanent basin after construction is complete. The temporary basin is no longer required when permanent cover has reduced the acreage of disturbed soil to less than ten (10) acres draining to a common location. [Minn. R. 7090]
14.3	The temporary basin must provide live storage for a calculated volume of runoff from a two (2)-year, 24-hour storm from each acre drained to the basin or 1,800 cubic feet of live storage per acre drained, whichever is greater. [Minn. R. 7090]
14.4	Where permittees have not calculated the two (2)-year, 24-hour storm runoff amount, the temporary basin must provide 3,600 cubic feet of live storage per acre of the basins' drainage area. [Minn. R. 7090]
14.5	Permittees must design basin outlets to prevent short-circuiting and the discharge of floating debris. [Minn. R. 7090]
14.6	Permittees must design the outlet structure to withdraw water from the surface to minimize the discharge of pollutants. Permittees may temporarily suspend the use of a surface withdrawal mechanism during frozen conditions. The basin must include a stabilized emergency overflow to prevent failure of pond integrity. [Minn. R. 7090]
14.7	Permittees must provide energy dissipation for the basin outlet within 24 hours after connection to a surface water. [Minn. R. 7090]
14.8	Permittees must locate temporary basins outside of surface waters and any buffer zone required in item 23.11. [Minn. R. 7090]
14.9	Permittees must construct the temporary basins prior to disturbing 10 or more acres of soil draining to a common location. [Minn. R. 7090]
14.10	Where a temporary sediment basin meeting the requirements of item 14.3 through 14.9 is infeasible, permittees must install effective sediment controls such as smaller sediment basins and/or sediment traps, silt fences, vegetative buffer strips or any appropriate combination of measures as dictated by individual site conditions. In determining whether installing a sediment basin is infeasible, permittees must consider public safety and may consider factors such as site soils, slope, and available area on-site. Permittees must document this determination of infeasibility in the SWPPP. [Minn. R. 7090]
15.1	**Permanent Stormwater Treatment System**. [Minn. R. 7090]
15.2	Permittees must design and implement the project so all stormwater discharged from the project during and after construction activities does not cause a violation of state water quality standards, including nuisance conditions, erosion in receiving channels or on downslope properties, or a significant adverse impact to wetlands caused by inundation or decrease of flow. [Minn. R. 7090]
15.3	Permittees must design and construct a permanent stormwater treatment system to treat the water quality volume if the project's ultimate development replaces vegetation and/or other pervious surfaces creating a net increase of one (1) or

	more acres of cumulative impervious surface. [Minn. R. 7090]
15.4	Permittees must calculate the water quality volume as one (1) inch times the net increase of impervious surfaces created by the project. [Minn. R. 7090]
15.5	Permittees must first consider volume reduction practices on-site (e.g., infiltration or other) when designing the permanent stormwater treatment system. If this permit prohibits infiltration as described in item 16.14 through item 16.21, permittees may consider a wet sedimentation basin, filtration basin or regional pond. This permit does not consider wet sedimentation basins and filtration systems to be volume reduction practices. [Minn. R. 7090]
15.6	For projects where the full volume reduction requirement cannot be met on-site, (e.g., the site has infiltration prohibitions), permittees must document the reasons in the SWPPP. [Minn. R. 7090]
15.7	Permittees must discharge the water quality volume to a permanent stormwater treatment system prior to discharge to a surface water. For purposes of this item, surface waters do not include man-made drainage systems that convey stormwater to a permanent stormwater treatment system. [Minn. R. 7090]
15.8	Where the proximity to bedrock precludes the installation of any of the permanent stormwater treatment practices required by Sections 15 through 19, permittees must install other treatment such as grassed swales, smaller ponds, or grit chambers, prior to the discharge of stormwater to surface waters. [Minn. R. 7090]
15.9	For linear projects where permittees cannot treat the entire water quality volume within the existing right-of-way, permittees must make a reasonable attempt to obtain additional right-of-way, easement or other permission for stormwater treatment during the project planning process. Documentation of these attempts must be in the SWPPP. Permittees must still consider volume reduction practices first as described in item 15.5. If permittees cannot obtain additional right-of-way, easement or other permission, they must maximize the treatment of the water quality volume prior to discharge to surface waters. [Minn. R. 7090]
16.1	**Infiltration Systems**. [Minn. R. 7090]
16.2	Infiltration options include, but are not limited to: infiltration basins, infiltration trenches, rainwater gardens, bioretention areas without underdrains, swales with impermeable check dams, and natural depressions. If permittees utilize an infiltration system to meet the requirements of this permit, they must incorporate the design parameters in item 16.3 through item 16.21. Permittees must follow the infiltration prohibition in item 16.14 anytime an infiltration system is designed, including those not required by this permit. [Minn. R. 7090]
16.3	Permittees must design infiltration systems such that pre-existing hydrologic conditions of wetlands in the vicinity are not impacted (e.g., inundation or breaching a perched water table supporting a wetland). [Minn. R. 7090]
16.4	Permittees must not excavate infiltration systems to final grade, or within three (3) feet of final grade, until the contributing drainage area has been constructed and fully stabilized unless they provide rigorous erosion prevention and sediment controls (e.g., diversion berms) to keep sediment and runoff completely away from the infiltration area. [Minn. R. 7090]
16.5	When excavating an infiltration system to within three (3) feet of final grade, permittees must stake off and mark the area so heavy construction vehicles or equipment do not compact the soil in the infiltration area. [Minn. R. 7090]
16.6	Permittees must use a pretreatment device such as a vegetated filter strip, forebay, or water quality inlet (e.g., grit chamber) to remove solids, floating materials, and oil and grease from the runoff, to the maximum extent practicable, before the system routes stormwater to the infiltration system. [Minn. R. 7090]
16.7	Permittees must design infiltration systems to provide a water quality volume (calculated as an instantaneous volume) of one (1) inch of runoff, or one (1) inch minus the volume of stormwater treated by another system on the site, from the net increase of impervious surfaces created by the project. [Minn. R. 7090]
16.8	Permittees must design the infiltration system to discharge all stormwater (including stormwater in excess of the water quality volume) routed to the system through the uppermost soil surface or engineered media surface within 48 hours. Permittees must route additional flows that cannot infiltrate within 48 hours to bypass the system through a stabilized discharge point. [Minn. R. 7090]
16.9	Permittees must provide a means to visually verify the infiltration system is discharging through the soil surface or filter media surface within 48 hours or less. [Minn. R. 7090]
16.10	Permittees must provide at least one soil boring, test pit or infiltrometer test in the location of the infiltration practice for determining infiltration rates. [Minn. R. 7090]
16.11	For design purposes, permittees must divide field measured infiltration rates by 2 as a safety factor or permittees can use soil-boring results with the infiltration rate chart in the Minnesota Stormwater Manual to determine design infiltration rates. When soil borings indicate type A soils, permittees should perform field measurements to verify the rate is not above

	8.3 inches per hour. This permit prohibits infiltration if the field measured infiltration rate is above 8.3 inches per hour. [Minn. R. 7090]
16.12	Permittees must employ appropriate on-site testing to ensure a minimum of three (3) feet of separation from the seasonally saturated soils (or from bedrock) and the bottom of the proposed infiltration system. [Minn. R. 7090]
16.13	Permittees must design a maintenance access, typically eight (8) feet wide, for the infiltration system. [Minn. R. 7090]
16.14	This permit prohibits permittees from constructing infiltration systems that receive runoff from vehicle fueling and maintenance areas including construction of infiltration systems not required by this permit. [Minn. R. 7090]
16.15	This permit prohibits permittees from constructing infiltration systems where infiltrating stormwater may mobilize high levels of contaminants in soil or groundwater. Permittees must either complete the MPCA's contamination screening checklist or conduct their own assessment to determine the suitability for infiltration. Permittees must retain the checklist or assessment with the SWPPP. For more information and to access the MPCA's "contamination screening checklist" see the Minnesota Stormwater Manual. [Minn. R. 7090]
16.16	This permit prohibits permittees from constructing infiltration systems in areas where soil infiltration rates are field measured at more than 8.3 inches per hour unless they amend soils to slow the infiltration rate below 8.3 inches per hour. [Minn. R. 7090]
16.17	This permit prohibits permittees from constructing infiltration systems in areas with less than three (3) feet of separation distance from the bottom of the infiltration system to the elevation of the seasonally saturated soils or the top of bedrock. [Minn. R. 7090]
16.18	This permit prohibits permittees from constructing infiltration systems in areas of predominately Hydrologic Soil Group type D soils (clay). [Minn. R. 7090]
16.19	This permit prohibits permittees from constructing infiltration systems within a Drinking Water Supply Management Area (DWSMA) as defined in Minn. R. 4720.5100, subp. 13, if the system will be located: a. in an Emergency Response Area (ERA) within a DWSMA classified as having high or very high vulnerability as defined by the Minnesota Department of Health; or b. in an ERA within a DWSMA classified as moderate vulnerability unless a regulated MS4 Permittee performed or approved a higher level of engineering review sufficient to provide a functioning treatment system and to prevent adverse impacts to groundwater; or c. outside of an ERA within a DWSMA classified as having high or very high vulnerability, unless a regulated MS4 Permittee performed or approved a higher level of engineering review sufficient to provide a functioning treatment system and to prevent adverse impacts to groundwater. See "higher level of engineering review" in the Minnesota Stormwater Manual for more information. [Minn. R. 7090]
16.20	This permit prohibits permittees from constructing infiltration systems in areas within 1,000 feet upgradient or 100 feet downgradient of active karst features. [Minn. R. 7090]
16.21	This permit prohibits permittees from constructing infiltration systems in areas that receive runoff from the following industrial facilities not authorized to infiltrate stormwater under the NPDES stormwater permit for industrial activities: wood preserving facilities; automobile salvage yards; scrap recycling and waste recycling facilities; hazardous waste treatment, storage, or disposal facilities; or air transportation facilities that conduct deicing activities. [Minn. R. 7090]
17.1	**Filtration Systems**. [Minn. R. 7090]
17.2	Filtration options include but are not limited to: sand filters with underdrains, biofiltration areas, swales using underdrains with impermeable check dams and underground sand filters. If permittees utilize a filtration system to meet the permanent stormwater treatment requirements of this permit, they must comply with items 17.3 through 17.11. [Minn. R. 7090]
17.3	Permittees must not install filter media until they construct and fully stabilize the contributing drainage area unless they provide rigorous erosion prevention and sediment controls (e.g., diversion berms) to keep sediment and runoff completely away from the filtration area. [Minn. R. 7090]
17.4	Permittees must design filtration systems to remove at least 80 percent of TSS. [Minn. R. 7090]
17.5	Permittees must use a pretreatment device such as a vegetated filter strip, small sedimentation basin, water quality inlet, forebay or hydrodynamic separator to remove settleable solids, floating materials, and oils and grease from the runoff, to the maximum extent practicable, before runoff enters the filtration system. [Minn. R. 7090]

17.6	Permittees must design filtration systems to treat a water quality volume (calculated as an instantaneous volume) of one (1) inch of runoff, or one (1) inch minus the volume of stormwater treated by another system on the site, from the net increase of impervious surfaces created by the project. [Minn. R. 7090]
17.7	Permittees must design the filtration system to discharge all stormwater (including stormwater in excess of the water quality volume) routed to the system through the uppermost soil surface or engineered media surface within 48 hours. Additional flows that the system cannot filter within 48 hours must bypass the system or discharge through an emergency overflow. [Minn. R. 7090]
17.8	Permittees must design the filtration system to provide a means to visually verify the system is discharging through the soil surface or filter media within 48 hours. [Minn. R. 7090]
17.9	Permittees must employ appropriate on-site testing to ensure a minimum of three (3) feet of separation between the seasonally saturated soils (or from bedrock) and the bottom of the proposed filtration system. [Minn. R. 7090]
17.10	Permittees must ensure that filtration systems with less than three (3) feet of separation between seasonally saturated soils or from bedrock are constructed with an impermeable liner. [Minn. R. 7090]
17.11	The permittees must design a maintenance access, typically eight (8) feet wide, for the filtration system. [Minn. R. 7090]
18.1	**Wet Sedimentation Basin**. [Minn. R. 7090]
18.2	Permittees using a wet sedimentation basin to meet the permanent stormwater treatment requirements of this permit must incorporate the design parameters in item 18.3 through 18.10. [Minn. R. 7090]
18.3	Permittees must design the basin to have a permanent volume of 1,800 cubic feet of storage below the outlet pipe for each acre that drains to the basin. The basin's permanent volume must reach a minimum depth of at least three (3) feet and must have no depth greater than 10 feet. Permittees must configure the basin to minimize scour or resuspension of solids. [Minn. R. 7090]
18.4	Permittees must design the basin to provide live storage for a water quality volume (calculated as an instantaneous volume) of one (1) inch of runoff, or one (1) inch minus the volume of stormwater treated by another system on the site, from the net increase in impervious surfaces created by the project. [Minn. R. 7090]
18.5	Permittees must design basin outlets so the water quality volume discharges at no more than 5.66 cubic feet per second (cfs) per acre of surface area of the basin. [Minn. R. 7090]
18.6	Permittees must design basin outlets to prevent short-circuiting and the discharge of floating debris. Basin outlets must have energy dissipation. [Minn. R. 7090]
18.7	Permittees must design the basin to include a stabilized emergency overflow to accommodate storm events in excess of the basin's hydraulic design. [Minn. R. 7090]
18.8	Permittees must design a maintenance access, typically eight (8) feet wide, for the basin. [Minn. R. 7090]
18.9	Permittees must locate basins outside of surface waters and any buffer zone required in item 23.11. Permittees must design basins to avoid draining water from wetlands unless the impact to the wetland complies with the requirements of Section 22. [Minn. R. 7090]
18.10	Permittees must design basins using an impermeable liner if located within active karst terrain. [Minn. R. 7090]
19.1	**Regional Wet Sedimentation Basins**. [Minn. R. 7090]
19.2	When the entire water quality volume cannot be treated by volume reduction practices on-site, permittees can use or create regional wet sedimentation basins provided they are constructed basins, not a natural wetland or water body, (wetlands used as regional basins must be mitigated for, see Section 22). The owner must ensure the regional basin conforms to all requirements for a wet sedimentation basin as described in items 18.3 through 18.10 and must be large enough to account for the entire area that drains to the regional basin. Permittees must verify that the regional basin will discharge at no more than 5.66 cfs per acre of surface area of the basin and must provide a live storage volume of one-inch times all the impervious area draining to the basin. Permittees cannot significantly degrade waterways between the project and the regional basin. The owner must obtain written authorization from the applicable LGU or private entity that owns and maintains the regional basin. [Minn. R. 7090]
20.1	**SWPPP Availability**. [Minn. R. 7090]
20.2	Permittees must keep the SWPPP on-site, or electronically available on-site, during normal working hours with personnel who have operational control over the applicable portion of the site, including all changes to the SWPPP, inspections, and maintenance records. [Minn. R. 7090]
21.1	**Training Requirements**. [Minn. R. 7090]

21.2	Permittees must ensure all of the following individuals receive training and the content and extent of the training is commensurate with the individual's job duties and responsibilities with regard to activities covered under this permit: a. Individuals preparing the SWPPP for the project. b. Individuals overseeing implementation of, revising and/or amending the SWPPP and individuals performing inspections for the project. One of these individuals must be available for an on-site inspection within 72 hours upon request by the MPCA. c. Individuals performing or supervising the installation, maintenance and repair of BMPs. [Minn. R. 7090]
21.3	Permittees must ensure individuals identified in Section 21 receive training from local, state, federal agencies, professional organizations, or other entities with expertise in erosion prevention, sediment control, permanent stormwater treatment and the Minnesota NPDES/SDS Construction Stormwater permit. Permittees must ensure these individuals attend a refresher-training course every three (3) years. [Minn. R. 7090]
22.1	**Requirements for Discharges to Wetlands**. [Minn. R. 7050.0186]
22.2	If the project has any discharges with the potential for significant adverse impacts to a wetland, (e.g., conversion of a natural wetland to a stormwater pond) permittees must demonstrate that the wetland mitigative sequence has been followed in accordance with items 22.3 or 22.4. [Minn. R. 7050.0186]
22.3	If the potential adverse impacts to a wetland on a specific project site are addressed by permits or other approvals from an official statewide program (U.S. Army Corps of Engineers 404 program, Minnesota Department of Natural Resources, or the State of Minnesota Wetland Conservation Act) that are issued specifically for the project and project site, permittees may use the permit, decision or other determination issued by these agencies to show the potential adverse impacts are addressed. For purposes of this permit, deminimus actions are determinations by the permitting agency that address the project impacts, whereas a non-jurisdictional determination does not address project impacts. [Minn. R. 7090]
22.4	If there are impacts from the project not addressed in one of the permits, decisions or other determinations discussed in item 22.3 (e.g., permanent inundation or flooding of the wetland, significant degradation of water quality, excavation, filling, draining), permittees must minimize all adverse impacts to wetlands by utilizing appropriate measures. Permittees must use measures based on the nature of the wetland, its vegetative community types and the established hydrology. These measures include in order of preference: a. avoid all significant adverse impacts to wetlands from the project and post-project discharge; b. minimize any unavoidable impacts from the project and post-project discharge; c. provide compensatory mitigation when the permittees determine(s) that there is no reasonable and practicable alternative to having a significant adverse impact on a wetland. For compensatory mitigation, wetland restoration or creation must be of the same type, size and whenever reasonable and practicable in the same watershed as the impacted wetland. [Minn. R. 7050.0186]
23.1	**Additional Requirements for Discharges to Special (Prohibited, Restricted, Other) and Impaired Waters**. [Minn. R. 7090]
23.2	The BMPs identified for each special or impaired water are required for those areas of the project draining to a discharge point on the project that is within one mile (aerial radius measurement) of special or impaired water and flows to that special or impaired water. [Minn. R. 7090]
23.3	Discharges to the following special waters identified as Prohibited in Minn. R. 7050.0335 subp. 3 must incorporate the BMPs outlined in items 23.9, 23.10, 23.11, 23.13 and 23.14: a. Boundary Waters Canoe Area Wilderness; Voyageurs National Park; Kettle River from the site of the former dam at Sandstone to its confluence with the Saint Croix River; Rum River from Ogechie Lake spillway to the northernmost confluence with Lake Onamia. b. Those portions of Lake Superior North of latitude 47 degrees, 57 minutes, 13 seconds, East of Hat Point, South of the Minnesota-Ontario boundary, and West of the Minnesota-Michigan boundary; c. Scientific and Natural Areas identified as in Minn. R. 7050.0335 Subp. 3: Boot Lake, Anoka County; Kettle River in sections 15, 22, 23, T 41 N, R 20, Pine County; Pennington Bog, Beltrami County; Purvis Lake-Ober Foundation, Saint Louis County; waters within the borders of Itasca Wilderness Sanctuary, Clearwater County; Iron Springs Bog, Clearwater County; Wolsfeld Woods, Hennepin County; Green Water Lake, Becker County; Blackdog Preserve, Dakota County; Prairie Bush Clover, Jackson County; Black Lake Bog, Pine County; Pembina Trail Preserve, Polk County; and Falls Creek, Washington County. [Minn. R. 7050.0335, subp. 3]
23.4	Discharges to the following special waters identified as Restricted in Minn. R. 7050.0335 subp.1 must incorporate the BMPs

	outlined in items 23.9, 23.10 and 23.11: a. Lake Superior, except those portions identified as prohibited in item 23.3.b; b. Mississippi River in those portions from Lake Itasca to the southerly boundary of Morrison County that are included in the Mississippi Headwaters Board comprehensive plan dated February 12, 1981; c. Scenic or Recreational River Segments: Saint Croix River, entire length; Cannon River from northern city limits of Faribault to its confluence with the Mississippi River; North Fork of the Crow River from Lake Koronis outlet to the Meeker-Wright county line; Kettle River from north Pine County line to the site of the former dam at Sandstone; Minnesota River from Lac que Parle dam to Redwood County State Aid Highway 11; Mississippi River from County State Aid Highway 7 bridge in Saint Cloud to northwestern city limits of Anoka; and Rum River from State Highway 27 bridge in Onamia to Madison and Rice streets in Anoka; d. Lake Trout Lakes identified in Minn. R. 7050.0335 including lake trout lakes inside the boundaries of the Boundary Waters Canoe Area Wilderness and Voyageurs National Park; e. Calcareous Fens listed in Minn. R. 7050.0335, subp. 1. [Minn. R. 7050.0335, subp. 1]
23.5	Discharges to the Trout Lakes (other special water) identified in Minn. R. 6264.0050, subp. 2 and Minn. R. 7050.0420 must incorporate the BMPs outlined in items 23.9, 23.10 and 23.11. [Minn. R. 6264.0050, subp. 2, Minn. R. 7050]
23.6	Discharges to the Trout Streams (other special water) listed in Minn. R. 6264.0050, subp. 4 and Minn. R. 7050.0420 must incorporate the BMPs outlined in items 23.9, 23.10, 23.11 and 23.12. [Minn. R. 6264.0050, subp. 4, Minn. R. 7050]
23.7	Discharges to impaired waters or a water with an USEPA approved TMDL for any of the impairments listed in this item must incorporate the BMPs outlined in items 23.9 and 23.10. Impaired waters are waters identified as impaired under section 303 (d) of the federal Clean Water Act for phosphorus (nutrient eutrophication biological indicators, nutrients), turbidity, TSS, dissolved oxygen or aquatic biota (fish bioassessment, aquatic plant bioassessment and aquatic macroinvertebrate bioassessment, benthic macroinvertebrate bioassessment). Terms used for the pollutants or stressors in this item are subject to change. [Minn. R. 7090]
23.8	Where the additional BMPs in this Section conflict with requirements elsewhere in this permit, items 23.9 through 23.14 take precedence. [Minn. R. 7090]
23.9	Permittees must immediately initiate stabilization of exposed soil areas, as described in item 8.5 & 8.8, and complete the stabilization within seven (7) calendar days after the construction activity in that portion of the site temporarily or permanently ceases. [Minn. R. 7090]
23.10	Permittees must provide a temporary sediment basin as described in Section 14 for common drainage locations that serve an area with five (5) or more acres disturbed at one time. [Minn. R. 7090]
23.11	Permittees must include an undisturbed buffer zone of not less than 100 linear feet from a special water (not including tributaries) and must maintain this buffer zone at all times, both during construction and as a permanent feature post construction, except where a water crossing or other encroachment is necessary to complete the project. Permittees must fully document the circumstance and reasons the buffer encroachment is necessary in the SWPPP and include restoration activities. This permit allows replacement of existing impervious surface within the buffer. Permittees must minimize all potential water quality, scenic and other environmental impacts of these exceptions by the use of additional or redundant (double) BMPs and must document this in the SWPPP for the project. [Minn. R. 7090]
23.12	Permittees must design the permanent stormwater treatment system so the discharge from the project minimizes any increase in the temperature of trout streams resulting from the one (1) and two (2) year 24-hour precipitation events. This includes all tributaries of designated trout streams located within the same Public Land Survey System (PLSS) Section. Permittees must incorporate one or more of the following measures, in order of preference: a. Provide stormwater infiltration or other volume reduction practices as described in item 15.4 and 15.5, to reduce runoff. Infiltration systems must discharge all stormwater routed to the system within 24 hours. b. Provide stormwater filtration as described in Section 17. Filtration systems must discharge all stormwater routed to the system within 24 hours. c. Minimize the discharge from connected impervious surfaces by discharging to vegetated areas, or grass swales, and through the use of other non-structural controls. d. If ponding is used, the design must include an appropriate combination of measures such as shading, vegetated swale discharges or constructed wetland treatment cells that limit temperature increases. The pond must be designed as a dry pond and should draw down in 24 hours or less. e. Other methods that minimize any increase in the temperature of the trout stream. [Minn. R. 7090]

23.13	Permittees must conduct routine site inspections once every three (3) days as described in item 11.2 for projects that discharge to prohibited waters. [Minn. R. 7090]
23.14	If discharges to prohibited waters cannot provide volume reduction equal to one (1) inch times the net increase of impervious surfaces as required in item 15.4 and 15.5, permittees must develop a permanent stormwater treatment system design that will result in no net increase of TSS or phosphorus to the prohibited water. Permittees must keep the plan in the SWPPP for the project. [Minn. R. 7090]
24.1	**General Provisions**. [Minn. R. 7090]
24.2	If the MPCA determines that an individual permit would more appropriately regulate the construction activity, the MPCA may require an individual permit to continue the construction activity. Coverage under this general permit will remain in effect until the MPCA issues an individual permit. [Minn. R. 7001.0210, subp. 6]
24.3	If the permittee cannot meet the terms and conditions of this general permit, an owner may request an individual permit, in accordance with Minn. R. 7001.0210 subp. 6. [Minn. R. 7001.0210, subp. 6]
24.4	Any interested person may petition the MPCA to require an individual NPDES/SDS permit in accordance with 40 CFR 122.28(b)(3). [40 CFR 122.28(b)(3)]
24.5	In addition to the requirement found in section 20, permittees must make the SWPPP, including all inspection reports, maintenance records, training records and other information required by this permit, available to federal, state, and local officials within three (3) days upon request for the duration of the permit and for three (3) years following the NOT. [Minn. R. 7090]
24.6	Permittees may not assign or transfer this permit except when the transfer occurs in accordance with the applicable requirements of item 3.7 and 3.8. [Minn. R. 7090]
24.7	Nothing in this permit must be construed to relieve the permittees from civil or criminal penalties for noncompliance with the terms and conditions provided herein. Nothing in this permit must be construed to preclude the initiation of any legal action or relieve the permittees from any responsibilities, liabilities, or penalties to which the permittees is/are or may be subject to under Section 311 of the Clean Water Act and Minn. Stat. Section 115 and 116, as amended. Permittees are not liable for permit requirements for activities occurring on those portions of a site where the permit has been transferred to another party as required in item 3.7 or the permittees have submitted the NOT as required in Section 4. [Minn. R. 7090]
24.8	The provisions of this permit are severable. If any provision of this permit or the application of any provision of this permit to any circumstances is held invalid, the application of such provision to other circumstances, and the remainder of this permit must not be affected thereby. [Minn. R. 7090]
24.9	The permittees must comply with the provisions of Minn. R. 7001.0150, subp. 3 and Minn. R. 7001.1090, subp. 1(A), 1(B), 1(C), 1(H), 1(I), 1(J), 1(K), and 1(L). [Minn. R. 7001]
24.10	The permittees must allow access as provided in 40 CFR 122.41(i) and Minn. Stat. Section 115.04. The permittees must allow representatives of the MPCA or any member, employee or agent thereof, when authorized by it, upon presentation of credentials, to enter upon any property, public or private, for the purpose of obtaining information or examination of records or conducting surveys or investigations. [40 CFR 122.41(i)]
24.11	For the purposes of Minn. R. 7090 and other documents that reference specific sections of this permit, "Stormwater Discharge Design Requirements" corresponds to Sections 5, 6 and 14 through 21; "Construction Activity Requirements" corresponds to Sections 7 through 13; and "Appendix A" corresponds to Sections 22 and 23. [Minn. R. 7090]
25.1	**Definitions**. [Minn. R. 7090]
25.2	"Active karst" means a terrain having distinctive landforms and hydrology created primarily from the dissolution of soluble rocks within 50 feet of the land surface. [Minn. R. 7090]
25.3	"Aerial radius measurement" means the shortest straight line distance measurement between the point of stormwater discharge from a project construction site to the nearest edge of the water body receiving the stormwater. This measurement does not follow the meander flow path. [Minn. R. 7090]
25.4	"Best Management Practices (BMPs)" means the most effective and practicable means of erosion prevention and sediment control, and water quality management practices that are the most effective and practicable means of to control, prevent, and minimize degradation of surface water, including avoidance of impacts, construction-phasing, minimizing the length of time soil areas are exposed, prohibitions, pollution prevention through good housekeeping, and other management practices published by state or designated area-wide planning agencies. [Minn. R. 7090]
25.5	"Common Plan of Development or Sale" means one proposed plan for a contiguous area where multiple separate and distinct land-disturbing activities may be taking place at different times, on different schedules, but under one proposed

	plan. One plan is broadly defined to include design, permit application, advertisement or physical demarcation indicating that land-disturbing activities may occur. [Minn. R. 7090]
25.6	"Construction Activity" means activities including clearing, grading, and excavating, that result in land disturbance of equal to or greater than one acre, including the disturbance of less than one acre of total land area that is part of a larger common plan of development or sale if the larger common plan will ultimately disturb equal to or greater than one acre. This includes a disturbance to the land that results in a change in the topography, existing soil cover, both vegetative and nonvegetative, or the existing soil topography that may result in accelerated stormwater runoff that may lead to soil erosion and movement of sediment. Construction activity does not include a disturbance to the land of less than five acres for the purpose of routine maintenance performed to maintain the original line and grade, hydraulic capacity, and original purpose of the facility. Routine maintenance does not include activities such as repairs, replacement and other types of non-routine maintenance. Pavement rehabilitation that does not disturb the underlying soils (e.g., mill and overlay projects) is not construction activity. [Minn. R. 7090]
25.7	"Dewatering" means the removal of surface or ground water to dry and/or solidify a construction site to enable construction activity. Dewatering may require a Minnesota Department of Natural Resources water appropriation permit and, if dewatering water is contaminated, discharge of such water may require an individual MPCA NPDES/SDS permit. [Minn. R. 7090]
25.8	"Energy Dissipation" means methods employed at pipe outlets to prevent erosion caused by the rapid discharge of water scouring soils. [Minn. R. 7090]
25.9	"Erosion Prevention" means measures employed to prevent erosion such as soil stabilization practices, permanent cover or construction phasing. [Minn. R. 7090]
25.10	"General Contractor" means the party who signs the construction contract with the owner to construct the entire project described in the final plans and specifications. Where the construction project involves more than one contractor, the general contractor is the party responsible for managing the entire project on behalf of the owner. In some cases, the owner is the general contractor. In these cases, the owner signs the permit application as the operator and becomes the sole permittee. [Minn. R. 7090]
25.11	"Groundwater" means the water contained below the surface of the earth in the saturated zone including, without limitation, all waters whether under confined, unconfined, or perched conditions, in near surface unconsolidated sediment or regolith, or in rock formations deeper underground. [Minn. R. 7060]
25.12	"Homeowner Fact Sheet" means an MPCA fact sheet available on the MPCA Construction Stormwater website for permittees to give to homeowners at the time of sale. [Minn. R. 7090]
25.13	"Infeasible" means not technologically possible or not economically practicable and achievable in light of the best industry practices. [Minn. R. 7090]
25.14	"Initiated immediately" means taking an action to commence soil stabilization as soon as practicable, but no later than the end of the workday, following the day when the land-disturbing activities temporarily or permanently cease, if the permittees know that construction work on that portion of the site will be temporarily ceased for 14 or more additional calendar days or 7 calendar days where item 23.9 applies. Permittees can initiate stabilization by: a. prepping the soil for vegetative or non-vegetative stabilization; or b. applying mulch or other non-vegetative product to the exposed soil area; or c. seeding or planting the exposed area; or d. starting any of the activities in a - c on a portion of the area to be stabilized, but not on the entire area; or e. finalizing arrangements to have stabilization product fully installed in compliance with the applicable deadline for completing stabilization. [Minn. R. 7090]
25.15	"Impervious Surface" means a constructed hard surface that either prevents or retards the entry of water into the soil and causes water to run off the surface in greater quantities and at an increased rate of flow than prior to development. Examples include rooftops, driveways, parking lots, and concrete, asphalt, or gravel roads. Bridges over surface waters are considered impervious surfaces. Recreational trails that are distinctly set apart from a roadway (i.e. not parallel) and intended for non-motorized recreational uses are not considered impervious surfaces. Sidewalks that are parallel to a roadway (or generally following alongside a roadway) must still be included as impervious surfaces. [Minn. R. 7090]
25.16	"National Pollutant Discharge Elimination System (NPDES)" means the program for issuing, modifying, revoking, reissuing, terminating, monitoring, and enforcing permits under the Clean Water Act, as amended (33 U.S.C. 1251 et seq. Section 1342 and 40 CFR parts 122, 123, 124 and 450). [Minn. R. 7001.1020]
25.17	"Natural Buffer" means an area of undisturbed cover surrounding surface waters within which construction activities are

	restricted. Natural buffer includes the vegetation, exposed rock, or barren ground that exists prior to commencement of earth-disturbing activities. [Minn. R. 7090]
25.18	"Normal Wetted Perimeter" means the area of a conveyance, such as a ditch or channel, that is in contact with water during flow events that are expected to occur from a two-year, 24-hour storm event. [Minn. R. 7090]
25.19	"Notice of Termination (NOT)" means the form (electronic or paper) required for terminating coverage under the Construction General permit. [Minn. R. 7090]
25.20	"Operator" means the person (usually the general contractor), firm, governmental agency, or other entity designated by the owner who has day to day operational control and/or the ability to modify project plans and specifications related to the SWPPP. The permit application must list the operator as a permittee. Subcontractors hired by and under supervision of the general contractor are not operators. [Minn. R. 7090]
25.21	"Owner" means the person, firm, governmental agency, or other entity possessing the title of the land on which the construction activities will occur or, if the construction activity is for a lease, easement, or mineral rights license holder, the party or individual identified as the lease, easement or mineral rights license holder; or the contracting government agency responsible for the construction activity. [Minn. R. 7090]
25.22	"Permanent Cover" means surface types that will prevent soil failure under erosive conditions. Examples include: gravel, concrete, perennial cover, or other landscaped material that will permanently arrest soil erosion. Permittees must establish a uniform perennial vegetative cover (i.e., evenly distributed, without large bare areas) with a density of 70 percent of the vegetative cover native to local undisturbed areas on all areas not covered by permanent structures, or equivalent permanent stabilization measures. Permanent cover does not include temporary BMPs such as wood fiber blanket, mulch, and rolled erosion control products. [Minn. R. 7090]
25.23	"Permittee(s)" means the person(s), firm, governmental agency, or other entity identified as the owner and operator on the application submitted to the MPCA and are responsible for compliance with the terms and conditions of this permit. [Minn. R. 7090]
25.24	"Project(s)" means all construction activity planned and/or conducted under a particular permit. The project occurs on the site or sites described in the permit application, the SWPPP and in the associated plans, specifications and contract documents. [Minn. R. 7090]
25.25	"Public Waters" means all water basins and watercourses described in Minn. Stat. Section 103G.005 subd. 15. [Minn. Stat. 103G.005, subd.15]
25.26	"Redoximorphic Features" means a color pattern in soil, formed by oxidation and reduction process of iron and/or manganese in seasonally saturated soil. [Minn. R. 7090]
25.27	"Section" includes all item numbers of the same whole number. For example, "Section 3" of the permit refers to items 3.1 through 3.8. [Minn. R. 7090]
25.28	"Seasonally Saturated Soil" means the highest seasonal elevation in the soil in a reduced chemical state because of soil voids filled with water causing anaerobic conditions. Seasonally saturated soil is evidenced by the presence of redoximorphic features or other information determined by scientifically established methods or empirical field measurements. [Minn. R. 7090]
25.29	"Sediment Control" means methods employed to prevent suspended sediment in stormwater from leaving the site (e.g. silt fences, compost logs and storm drain inlet protection). [Minn. R. 7090]
25.30	"Stabilize", "Stabilized", "Stabilization" means the exposed ground surface has been covered by appropriate materials such as mulch, staked sod, riprap, erosion control blanket, mats or other material that prevents erosion from occurring. Grass seeding, agricultural crop seeding or other seeding alone is not stabilization. Mulch materials must achieve approximately 90 percent ground coverage (typically 2 ton/acre). [Minn. R. 7090]
25.31	"Stormwater" means precipitation runoff, stormwater runoff, snowmelt runoff, and any other surface runoff and drainage. [Minn. R. 7090]
25.32	"Steep Slopes" means slopes that are 1:3 (V:H) (33.3 percent) or steeper in grade. [Minn. R. 7090]
25.33	"Storm Water Pollution Prevention Plan (SWPPP)" means a plan for stormwater discharge that includes all required content under in Section 5 that describes the erosion prevention, sediment control and waste control BMPs and permanent stormwater treatment systems. [Minn. R. 7090]
25.34	"Surface Water or Waters" means all streams, lakes, ponds, marshes, wetlands, reservoirs, springs, rivers, drainage systems, waterways, watercourses, and irrigation systems whether natural or artificial, public or private, except that surface waters do not include stormwater treatment systems constructed from upland. This permit does not consider stormwater

	treatment systems constructed in wetlands and mitigated in accordance with Section 22 as surface waters. [Minn. R. 7090]
25.35	"Waters of the State" means all streams, lakes, ponds, marshes, watercourses, waterways, wells, springs, reservoirs, aquifers, irrigation systems, drainage systems and all other bodies or accumulations of water, surface or underground, natural or artificial, public or private, which are contained within, flow through, or border upon the state or any portion thereof. [Minn. Stat. 115.01, subd. 22]
25.36	"Water Quality Volume" means one (1) inch of runoff from the net increase in impervious surfaces created by the project (calculated as an instantaneous volume). [Minn. R. 7090]
25.37	"Wetlands" means those areas that are inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support, and under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas. Constructed wetlands designed for wastewater treatment are not waters of the state. Wetlands must have the following attributes: a. a predominance of hydric soils; and b. inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support a prevalence of hydrophytic vegetation typically adapted for life in a saturated soil condition; and c. under normal circumstances support a prevalence of such vegetation. [Minn. R. 7050.0186, subp. 1(a)B]

ATTACHMENT K

MPCA AUTHORIZATION REQUEST FOR NPDES COVERAGE UNDER MNR100001 -PENDING

ATTACHMENT L

MPCA AUTHORIZATION LETTER - PENDING

ATTACHMENT M

SWPPP AMENDMENTS

Stantec

ATTACHMENT N

NOTIFICATION ROSTER

Notification Roster - Spill Response

Company	Name	Role	Phone Number	Email
Northern Natural Gas	Terry Plucker	Environmental Compliance Manager	402-332-7081	Terry.Plucker@nngco.com
Northern Natural Gas	Christa Webber	Environmental Specialist	402-398-7980	Christa.Webber@nngco.com

Contractor

State

Minnesota State Duty Officer	800-422-0798

Notification Roster - SWPPP

Company	Name	Role	Phone Number	Email
Northern Natural Gas	Terry Plucker	Environmental Compliance Manager	402-332-7081	Terry.Plucker@nngco.com
Northern Natural Gas	Christa Webber	Environmental Specialist	402-398-7980	Christa.Webber@nngco.com

Contractor

State

Minnesota State Duty Officer			800-422-0798	
Minnesota State Duty Officer			800-422-0798	

ATTACHMENT O

EROSION CONTROL CERTIFICATION DOCUMENTATION FOR NORTHERN NATURAL GAS ENVIRONMENTAL INSPECTION STAFF -PENDING SELECTION OF ENVIRONMENTAL INSPECTOR

Stantec

ATTACHMENT P

NORTHERN'S HORIZONTAL DIRECTIONAL DRILL MONITORING, INADVERTENT RETURN RESPONSE, AND CONTINGENCY PLAN

FOUND UNDER THE "NORTHERN SUBMISSIONS TO FERC"
TAP ON NORTHERN'S WEBSITE:

HTTPS://WWW.NORTHERNNATURALGAS.COM/EXPANSIONPROJECTS

Stantec

ATTACHMENT Q

NOXIOUS WEED PLAN

FOUND UNDER THE “NORTHERN SUBMISSIONS TO FERC”
TAP ON NORTHERN’S WEBSITE:

HTTPS://WWW.NORTHERNNATURALGAS.COM/EXPANSIONPROJECTS

ATTACHMENT R

STEEP SLOPES TABLE

Attachment R Steep Slopes Within the Project Area

MP Begin	MP End	Slope Category[1]	Length (feet)
Lake Mills M500 E-Line			
35.58	35.61	5-15	154
36.36	36.40	5-15	204[2]
36.51	36.54	5-15	150[2]
36.73	36.76	5-15	201
37.17	37.21	5-15	228
37.36	37.37	5-15	79
37.77	37.84	5-15	375[2]
37.99	38.05	5-15	363[2]
38.16	38.22	5-15	313
38.26	38.28	5-15	89
38.39	38.46	5-15	367
38.60	38.72	5-15	634
38.78	38.81	5-15	154
38.85	38.87	5-15	86
39.00	39.02	5-15	92
39.06	39.10	5-15	243
39.13	39.18	5-15	261[2]
39.23	39.25	5-15	103
39.53	39.55	5-15	66[2]
40.12	40.16	5-15	184
40.26	40.28	5-15	104
40.78	40.80	5-15	116
42.41	42.42	5-15	70

[1]Slopes were obtained from civil survey data.

[2]Area is within a drill or bore.

ATTACHMENT S

NRCS/MINNESOTA BOARD OF WATER AND SOIL RESOURCES (BWSR) SEED MIX

From: Bartsch, Zachary
Sent: Thursday, December 21, 2023 12:57 PM
To: Blount, Veronica - NRCS, Sparta, WI
Subject: 2023 Seed mixes
Attachments: 484_WI_CPS_Mulching_2016.pdf; Standard_Mix_Calc2020-30-11.xlsm

Hello Veronica,

I hope 2023 has treated you well. I am reaching out again for a similar project to the one you helped me with in 2022.

This project is located in Monroe County, and will disturbing cropland, forest, and grass ditches/right of ways. Are the two resources you provided in 2022 (attached) still acceptable for use to plan seed mixes and erosion control practices?

Thank you,

Zach Bartsch
Soil Scientist

Mobile: 701-318-9364
zachary.bartsch@stantec.com

Stantec
3303 Fiechtner Drive Suite 100
Fargo ND 58103

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From: Blount, Veronica - NRCS, Sparta, WI <veronica.blount@usda.gov>
Sent: Wednesday, January 12, 2022 8:19 AM
To: Bartsch, Zachary <zachary.bartsch@stantec.com>
Subject: RE: [External Email]Seed mixes

Zach,

I apologize for the delay; this one got away from me!

I've attached:

1. The standard mix NRCS seed calculator. You'll need to Enable Macros in the yellow ribbon at the top, then:
    a. For sites where erosion control is the main concern, select "342" in STEP 1. For a habitat/wildlife concern, select "327."
    b. Then, for STEP 2, select "Introduced"
    c. For STEP 3, select a mix from the alternatives listed. On the "342Mixes" tab, you can see the Moisture Regimes they are designed for (Column N)

2. NRCS Standard 484, Mulching. This will describe soil coverage/erosion control considerations.

I hope this is helpful,
Veronica

Veronica Blount | District Conservationist (Acting)| Onalaska & Sparta Field Offices
U.S. Department of Agriculture | Natural Resources Conservation Service
Onalaska Office 608-433-7365 | Sparta Office 608-269-8136 x. 113 | Cell 608-633-8780

From: Bartsch, Zachary <zachary.bartsch@stantec.com>
Sent: Friday, January 7, 2022 9:49 AM
To: Blount, Veronica - NRCS, Sparta, WI <veronica.blount@usda.gov>
Subject: [External Email]Seed mixes

[External Email]
If this message comes from an **unexpected sender** or references a **vague/unexpected topic;**
Use caution before clicking links or opening attachments.
Please send any concerns or suspicious messages to: Spam.Abuse@usda.gov

Veronica,

Apologies for the wait, I had a meeting come up.

One thing I forgot to follow up with was if your office (or Monroe Co) has any erosion control practice guidelines that it would want the project to follow or use?

Thanks,

Zach Bartsch
Soil Scientist

Mobile: 701-318-9364
zachary.bartsch@stantec.com

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3303 Fiechtner Drive Suite 100
Fargo ND 58103



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TABLE 1 - GUIDE[1] TO MULCH MATERIALS, RATES, AND USES

Mulch Material	Quality Standards	Applicable Rate	Depth of Application	Remarks
Organic Mulches				
Grass Hay or Cereal Grain Straw[2]	Air dried; free of undesirable seeds, coarse material and moldy chunks	1.5 – 2 tons / acre	Lightly cover 75 – 90% of surface	Use where mulch effect is to be maintained for more than three months. Subject to blowing unless kept moist or anchored.
Wood Fiber Hydromulch	Natural wood fiber with green dye and dispersing agent added	0.75 – 1 ton / acre	Lightly cover 100% of the surface	Apply with hydromulcher, on 0-2% slopes. Use material with tacking agent for anchoring.
Wood Fiber / Paper Blend hydromulch	Blend of natural wood fiber and paper	0.75 – 1 ton / acre	Lightly cover 100% of the surface	Apply with hydromulcher, on 0-2% slopes. Use material with tacking agent for anchoring.
Wood Long-Fiber Excelsior	Air dried burred wood fibers, 4” or longer	1 – 2 tons / acre		Effective for erosion control. Anchoring usually not required except on critical areas or sites subject to high winds.
Compost	Commonly made from yard waste (leaves, branches, etc.) or manure	Cover 100% of the ground	2 inches	Applied with a blower truck. Anchoring is not required. Excellent for water infiltration and moisture conservation.
Manure	Well shredded, free of coarse materials	8 – 10 tons / acre		May create a problem with weeds. Excellent moisture conserver. Resistant to wind blowing. Do not use manure for water erosion control because surface water may be contaminated. Anchoring is required.

Mulch Material	Quality Standards	Applicable Rate	Depth of Application	Remarks
Organic Mulches				
Sawdust and ground corn cobs	Green or composted, free from weed seeds, trash and coarse materials.	5 tons / acre	2 – 7 inches	Sawdust from hardwood species is preferred to avoid possible toxicity from pitch or resins contained in conifers. Most effective as mulch around ornamentals, small fruits and other nursery stock. Special application rates: fruit trees 5-7"; blueberries 6", vegetables and flowers, 2-3", blackberries and raspberries 4-7"; strawberries 3". Resistance to blowing. Requires 30-35 lbs. N/ton to prevent nitrogen deficiency during decay. Rate based on weight of 24 lbs./cubic foot. Anchoring is required.
Wood Chips or Bark, Shavings	Green or air dried; free of weed seeds, trash and coarse material	10 – 20 tons / acre	2 – 7 inches	Chips or shavings from hardwood species are preferred to avoid possible toxicity from pitch or resins contained in conifers. Has same use and application as sawdust. Requires 20-25 lbs. N/ton to prevent nitrogen deficiency during decay. Resistant to blowing. Decomposes slowly. Anchoring not required.
Cornstalks, shredded or chopped	Air dried; shredded into 8” to 12” lengths	4 – 6 tons/ acre		Effective for erosion control. Slow to decompose. Excellent mulch for field crops. Resistant to wind blowing. Anchoring not required.
Non-Organic Mulches				
Gravel, crushed stone or slag	Washed	90% ground cover	2-3 inches	Use for permanent erosion control; on short slopes; around woody plants and ornamentals.

Mulch Material	Quality Standards	Applicable Rate	Depth of Application	Remarks
Non-Organic Mulches				
Plastic	2-4 mils	Apply according to manufacturer's specifications	Thickness of one layer	Use black for weed control and white for seedling establishment without organic mulch. Release plastic after seeding is established. Effective moisture conservation and weed control for small fruits. Large areas should have holes or slits cut to let rainfall percolate. Anchoring is required.
1. This table is not all-inclusive. There may be additional mulch materials or variations of the materials listed here that would be equivalent to achieve the intended effect.				
2. Mulch used on native seedings should not consist of pasture hay containing introduced species. Use grain straw mulches only.				

TABLE 2- GUIDE TO MULCH ANCHORING MATERIALS		
Anchoring Method or Material	**Kind of Mulch to be Anchored**	**How to Apply**
Mechanical		
Mulch Anchoring Tool or Disk	Grass hay, straw or manure	Apply mulch and pull the mulch anchoring tool or disk over mulch. Use equipment with serrated straight disks spaced 6-10" apart or other suitable equipment. Operate as close to the contour as possible. Mulch material should be tucked into the soil surface 2-3 inches. Use on areas of concentrated flow when velocity is less than approximately 4 feet per second.
Tackifier or Binder	Grass hay, straw, Hydromulch materials	Method and rate of application shall be according to manufacturers' recommendation. Use on areas without concentrated flow. Usually applied with a hydromulcher after seeding has been completed.
Wood Hydromulch Fibers	Grass, hay, straw	Use on areas without concentrated flow. Apply with hydromulcher immediately after seeding. Use 3000 lbs. Of mulch material and apply 750 lbs. of wood fiber with tacking agent per acre.
Asphalt Spray (Emulsion)	Grass hay, straw, compost, wood chips, wood shavings	Apply with suitable equipment to spray asphalt into the mulch as it is applied. Materials shall conform to the requirements of ASTM Specifications D 977. Application rate is 0.05 gallons per square yard (242 gallons per acres). Material shall be non-toxic to plant life. Use on areas without concentrated flow.
Manual		
Polypropylene plastic netting	Grass hay, straw, compost, wood shavings, wood long-fiber excelsior.	Apply plastic netting over mulch immediately after mulching and staple with 11 gauge or heavier wire staples. Installation is the same as for fiber blankets, mats and netting. Use when concentrated flow velocity is less than 4 feet per second.[1]
Wood Excelsior Fiber Blanket: interlocking web of excelsior fibers with netting on one or both sides. 80% of fibers are 8 inches or longer.	Use without additional mulch.	Anchor per manufacturer's specifications. Effective for erosion control on steep slopes and areas of concentrated flow.[1]

Anchoring Method or Material	Kind of Mulch to be Anchored	How to Apply
Chopped straw or straw and coconut fiber blanket: Uniform agricultural wheat straw or straw and coconut fiber between photodegradable or biodegradable netting.	Use without additional mulch.	Anchor per manufacturer's specifications. Effective for erosion control on moderate or steep slopes and low flow channels.[1]
Peg and twine	Grass hay, straw, wood shavings, wood long-fiber excelsior	After mulching, divide the area into blocks approximately 1 square yard in size. Drive 4-6 pegs per block to within 2-3" of soil surface. Anchor mulch by stretching twine between pegs in a criss-cross pattern on each block. Secure twin around each peg with two or more turns. Where mowing is planned, drive pegs flush with the soil surface.
Spade	Grass hay, straw, wood shavings, wood long-fiber excelsior	Cut mulch into soil surface with square edge spade. Make cuts in contour rows spaced 18 inches apart.
Soil and Stones	Plastic	Bury edge of plastic in a trench 6 inches deep. Firm soil over plastic. Use stones to hold plastic down in other places as needed.

1. Placing and anchoring Blankets, Mats and Netting: In areas of concentrated flow, lay the mat parallel to the direction of water flow, with netting on top. Spread blankets evenly without stretching so fibers are in direct contact with the soil. Adjacent strip edges shall be overlapped 2-4 inches. Strip ends shall overlap a minimum of 10 inches with the upgrade strip on top. The upgrade end of each blanket shall be buried at least 6 inches in a vertical slot with the soil pressed firmly against the embedded mat. Additional check slots at 50-foot intervals may be desirable on steep grades or long flow patterns. Strip ends and end overlaps shall be stapled with not more than 12 inches between staples. All other joints and edges shall be stapled at 4 foot intervals. Additional staples shall be placed down the center of each blanket in a diamond pattern at a maximum of 4-foot intervals. Where velocities exceed 5 cfs, place edge and center staples at 2-foot intervals. All staples shall be inserted flush with the ground surface. Staples shall be 11 gauge or heavier U shaped with a 1-2 inch crown. Staple length shall be determined by soil conditions as follows: Highly compacted soils – 6 inch: Friable soils – 8 inches; Loose or sandy soils – 10 inch.

2. In areas of broad sheet flow, mats may be placed either parallel or perpendicular to slope direction. Spread blankets evenly without stretching so fibers are in direct contact with the soil. Adjacent strip edges shall be overlapped 2-4 inches with upgrade strip on top. Ends of each mat shall be stapled with not more than 12 inches between staples. All other edges and mat centers shall be stapled to hold the mat in place with not more than 4-6 feet between staples. All staples shall be inserted flush with the ground surface. Staples shall be 11 gauge or heavier, U shaped with a 1-2 inch crown. Staple length shall be determined by soil condition as listed above.

USDA NRCS
Natural Resources Conservation Service

SEEDING PLAN
Standard and CRP Mixes

Ver. 1/2015

Landowner:	
TRACT #:	
Field(s):	
Plan by:	
County:	
Date:	
Total Acres:	

○ 327 ○ 342 ○ 512 ○ CRP NRCS STD.

Mix Type: ○ Introduced ○ Native

Mix #

GRASSES					
Common Name	Scientific Name	Intro/ Native	PLS (lbs / Acre)	Total Lbs.	
TOTAL GRASSES:			0.0	0.0	

FORBS/LEGUMES						
Common Name	Scientific Name	Intro/ Native	PLS (lbs / Acre)	Total Lbs.	PLS (oz./Acre)	Total Oz.

USDA NRCS
Natural Resources Conservation Service

SEEDING PLAN
Standard and CRP Mixes

Ver. 1/2015

Landowner:
TRACT #:
Field(s):
Plan by:
County:
Date:
Total Acres:

○ 327 ○ 342 ○ 512 ○ CRP — NRCS STD.
Mix Type: ○ Introduced ○ Native
Mix #

TOTAL FORBS/LEGUMES:						

SEEDING DATES	Spring Seeding	Late Summer	Fall Dormant Seeding		Frost Seeding Allowed?

		lbs/acre	Total lbs.	*OR*	Bu./Acre	Total Bu.
Temporary Cover Crop:						
Companion Crop: ○ YES ○ NO **You must pick Yes or No**						

Fertilizer & Lime		Lbs./Acre	Total Needed (lbs)
80-89 Lime		N/R	
Nitrogen		N/R	
Phosphate (P205)		N/R	
Potash (K20)		N/R	

☐ **General**
☐ **Soil Test**
☐ Fert./Lime Not Needed

N/R=Not Recommended for Pure Native Mixes

Seeding was completed on: _____ **according to the above requirements.**
(Date)

STANDARD 327 MIXES

REVISION DATE: 12/14/2012

criteria: 0

STD	Mix #	std-mix	Common Name	Scientific Name	PLS (oz./A)	PLS (lbs./A)	Seeds/Square Foot	Type	Intro / Native	Poll. (Y/N)		Mix No.	MR	Mix Components
327	(D)-1-Sgrod-Ycone-PPclover-BB-LE	327-(D)-1-Sgrod-Ycone-PPclover	Stiff Goldenrod	Oligoneuron rigidum	1	0.06	1	Forb	N	N		1	D	Sgrod-Ycone-PPclover-BB-LB-Indian-Sgrama
327	(D)-1-Sgrod-Ycone-PPclover-BB-LE	327-(D)-1-Sgrod-Ycone-PPclover	Yellow Coneflower	Ratibida pinnata	1	0.06	0.6	Forb	N	N		1	D	Sgrod-Ycone-PPclover-BB-LB-Indian-Sgrama
327	(D)-1-Sgrod-Ycone-PPclover-BB-LE	327-(D)-1-Sgrod-Ycone-PPclover	Purple Prairie Clover	Dalea purpurea	2	0.13	0.9	Legume	N	N		1	D	Sgrod-Ycone-PPclover-BB-LB-Indian-Sgrama
327	(D)-1-Sgrod-Ycone-PPclover-BB-LE	327-(D)-1-Sgrod-Ycone-PPclover	Big Bluestem	Andropogon gerardii	16	1	3.8	Grass	N	N		1	D	Sgrod-Ycone-PPclover-BB-LB-Indian-Sgrama
327	(D)-1-Sgrod-Ycone-PPclover-BB-LE	327-(D)-1-Sgrod-Ycone-PPclover	Little Bluestem	Schizachyrium scoparium	28	1.75	9.6	Grass	N	N		1	D	Sgrod-Ycone-PPclover-BB-LB-Indian-Sgrama
327	(D)-1-Sgrod-Ycone-PPclover-BB-LE	327-(D)-1-Sgrod-Ycone-PPclover	Indiangrass	Sorghastrum nutans	16	1	4.4	Grass	N	N		1	D	Sgrod-Ycone-PPclover-BB-LB-Indian-Sgrama
327	(D)-1-Sgrod-Ycone-PPclover-BB-LE	327-(D)-1-Sgrod-Ycone-PPclover	Sideoats Grama	Bouteloua curtipendula	28	1.75	5.1	Grass	N	N		1	D	Sgrod-Ycone-PPclover-BB-LB-Indian-Sgrama
327	(DM)-2-LB-Indian-Sgrama-BB-Swit	327-(DM)-2-LB-Indian-Sgrama-B	Little Bluestem	Schizachyrium scoparium	24	1.5	8.2	Grass	N	N		2	DM	LB-Indian-Sgrama-BB-Switch-PPclover-Berg-Y
327	(DM)-2-LB-Indian-Sgrama-BB-Swit	327-(DM)-2-LB-Indian-Sgrama-B	Indiangrass	Sorghastrum nutans	16	1	4	Grass	N	N		2	DM	LB-Indian-Sgrama-BB-Switch-PPclover-Berg-Y
327	(DM)-2-LB-Indian-Sgrama-BB-Swit	327-(DM)-2-LB-Indian-Sgrama-B	Sideoats Grama	Bouteloua curtipendula	16	1	2.9	Grass	N	N		2	DM	LB-Indian-Sgrama-BB-Switch-PPclover-Berg-Y
327	(DM)-2-LB-Indian-Sgrama-BB-Swit	327-(DM)-2-LB-Indian-Sgrama-B	Big Bluestem	Andropogon gerardii	8	0.5	1.5	Grass	N	N		2	DM	LB-Indian-Sgrama-BB-Switch-PPclover-Berg-Y
327	(DM)-2-LB-Indian-Sgrama-BB-Swit	327-(DM)-2-LB-Indian-Sgrama-B	Switchgrass	Panicum virgatum	8	0.5	4.5	Grass	N	N		2	DM	LB-Indian-Sgrama-BB-Switch-PPclover-Berg-Y
327	(DM)-2-LB-Indian-Sgrama-BB-Swit	327-(DM)-2-LB-Indian-Sgrama-B	Purple Prairie Clover	Dalea purpurea	2	0.13	0.9	Legume	N	N		2	DM	LB-Indian-Sgrama-BB-Switch-PPclover-Berg-Y
327	(DM)-2-LB-Indian-Sgrama-BB-Swit	327-(DM)-2-LB-Indian-Sgrama-B	Bergamot	Monarda fistulosa	1	0.06	1.8	Forb	N	N		2	DM	LB-Indian-Sgrama-BB-Switch-PPclover-Berg-Y
327	(DM)-2-LB-Indian-Sgrama-BB-Swit	327-(DM)-2-LB-Indian-Sgrama-B	Yellow Coneflower	Ratibida pinnata	1	0.06	0.6	Forb	N	N		2	DM	LB-Indian-Sgrama-BB-Switch-PPclover-Berg-Y
327	(M)-3-LB-BB-Cwrye-Indian-Switch-	327-(M)-3-LB-BB-Cwrye-Indian-	Little Bluestem	Schizachyrium scoparium	20	1.25	6.8	Grass	N	N		3	M	LB-BB-Cwrye-Indian-Switch-Berg-Besus-Ycon
327	(M)-3-LB-BB-Cwrye-Indian-Switch-	327-(M)-3-LB-BB-Cwrye-Indian-	Big Bluestem	Andropogon gerardii	16	1	3.8	Grass	N	N		3	M	LB-BB-Cwrye-Indian-Switch-Berg-Besus-Ycon
327	(M)-3-LB-BB-Cwrye-Indian-Switch-	327-(M)-3-LB-BB-Cwrye-Indian-	Canada Wildrye	Elymus canadensis	16	1	2.5	Grass	N	N		3	M	LB-BB-Cwrye-Indian-Switch-Berg-Besus-Ycon
327	(M)-3-LB-BB-Cwrye-Indian-Switch-	327-(M)-3-LB-BB-Cwrye-Indian-	Indiangrass	Sorghastrum nutans	16	1	4	Grass	N	N		3	M	LB-BB-Cwrye-Indian-Switch-Berg-Besus-Ycon
327	(M)-3-LB-BB-Cwrye-Indian-Switch-	327-(M)-3-LB-BB-Cwrye-Indian-	Switchgrass	Panicum virgatum	8	0.5	4.5	Grass	N	N		3	M	LB-BB-Cwrye-Indian-Switch-Berg-Besus-Ycon
327	(M)-3-LB-BB-Cwrye-Indian-Switch-	327-(M)-3-LB-BB-Cwrye-Indian-	Bergamot	Monarda fistulosa	1	0.06	1.8	Forb	N	N		3	M	LB-BB-Cwrye-Indian-Switch-Berg-Besus-Ycon
327	(M)-3-LB-BB-Cwrye-Indian-Switch-	327-(M)-3-LB-BB-Cwrye-Indian-	Black-Eyed Susan	Rudbeckia hirta	1	0.06	2.2	Forb	N	N		3	M	LB-BB-Cwrye-Indian-Switch-Berg-Besus-Ycon
327	(M)-3-LB-BB-Cwrye-Indian-Switch-	327-(M)-3-LB-BB-Cwrye-Indian-	Yellow Coneflower	Ratibida pinnata	1	0.06	0.6	Forb	N	N		3	M	LB-BB-Cwrye-Indian-Switch-Berg-Besus-Ycon
327	(WM)-4-BB-Indian-Switch-Vwrye-P	327-(WM)-4-BB-Indian-Switch-V	Big Bluestem	Andropogon gerardii	24	1.5	5.7	Grass	N	N		4	WM	BB-Indian-Switch-Vwrye-Pcord-Berg-NEaster
327	(WM)-4-BB-Indian-Switch-Vwrye-P	327-(WM)-4-BB-Indian-Switch-V	Indiangrass	Sorghastrum nutans	16	1	4	Grass	N	N		4	WM	BB-Indian-Switch-Vwrye-Pcord-Berg-NEaster
327	(WM)-4-BB-Indian-Switch-Vwrye-P	327-(WM)-4-BB-Indian-Switch-V	Switchgrass	Panicum virgatum	16	1	9	Grass	N	N		4	WM	BB-Indian-Switch-Vwrye-Pcord-Berg-NEaster
327	(WM)-4-BB-Indian-Switch-Vwrye-P	327-(WM)-4-BB-Indian-Switch-V	Virginia Wildrye	Elymus virginicus	16	1	1.5	Grass	N	N		4	WM	BB-Indian-Switch-Vwrye-Pcord-Berg-NEaster
327	(WM)-4-BB-Indian-Switch-Vwrye-P	327-(WM)-4-BB-Indian-Switch-V	Prairie Cordgrass	Spartina pectinata	8	0.5	0.6	Grass	N	N		4	WM	BB-Indian-Switch-Vwrye-Pcord-Berg-NEaster
327	(WM)-4-BB-Indian-Switch-Vwrye-P	327-(WM)-4-BB-Indian-Switch-V	Bergamot	Monarda fistulosa	1	0.06	1.8	Forb	N	N		4	WM	BB-Indian-Switch-Vwrye-Pcord-Berg-NEaster
327	(WM)-4-BB-Indian-Switch-Vwrye-P	327-(WM)-4-BB-Indian-Switch-V	New England Aster	Symphyotrichum novae-angliae	1	0.06	1.6	Forb	N	N		4	WM	BB-Indian-Switch-Vwrye-Pcord-Berg-NEaster
327	(WM)-4-BB-Indian-Switch-Vwrye-P	327-(WM)-4-BB-Indian-Switch-V	Yellow Coneflower	Ratibida pinnata	1	0.06	0.6	Forb	N	N		4	WM	BB-Indian-Switch-Vwrye-Pcord-Berg-NEaster
327	(W)-5-Ciron-Cup-Bvervain-Switch-P	327-(W)-5-Ciron-Cup-Bvervain-S	Common Ironweed	Vernonia fasciculata	1	0.06	0.5	Forb	N	N		5	W	Ciron-Cup-Bvervain-Switch-Pcord-BB-Indian-V
327	(W)-5-Ciron-Cup-Bvervain-Switch-P	327-(W)-5-Ciron-Cup-Bvervain-S	Cupplant	Silphium perfoliatum	2	0.13	0.1	Forb	N	N		5	W	Ciron-Cup-Bvervain-Switch-Pcord-BB-Indian-V
327	(W)-5-Ciron-Cup-Bvervain-Switch-P	327-(W)-5-Ciron-Cup-Bvervain-S	Blue Vervain	Verbena hastata	1	0.06	2.1	Forb	N	N		5	W	Ciron-Cup-Bvervain-Switch-Pcord-BB-Indian-V
327	(W)-5-Ciron-Cup-Bvervain-Switch-P	327-(W)-5-Ciron-Cup-Bvervain-S	Switchgrass	Panicum virgatum	16	1	8.9	Grass	N	N		5	W	Ciron-Cup-Bvervain-Switch-Pcord-BB-Indian-V
327	(W)-5-Ciron-Cup-Bvervain-Switch-P	327-(W)-5-Ciron-Cup-Bvervain-S	Prairie Cordgrass	Spartina pectinata	8	0.5	1.2	Grass	N	N		5	W	Ciron-Cup-Bvervain-Switch-Pcord-BB-Indian-V
327	(W)-5-Ciron-Cup-Bvervain-Switch-P	327-(W)-5-Ciron-Cup-Bvervain-S	Big Bluestem	Andropogon gerardii	16	1	3.8	Grass	N	N		5	W	Ciron-Cup-Bvervain-Switch-Pcord-BB-Indian-V
327	(W)-5-Ciron-Cup-Bvervain-Switch-P	327-(W)-5-Ciron-Cup-Bvervain-S	Indiangrass	Sorghastrum nutans	16	1	4.4	Grass	N	N		5	W	Ciron-Cup-Bvervain-Switch-Pcord-BB-Indian-V
327	(W)-5-Ciron-Cup-Bvervain-Switch-P	327-(W)-5-Ciron-Cup-Bvervain-S	Virginia Wildrye	Elymus virginicus	20	1.25	1.9	Grass	N	N		5	W	Ciron-Cup-Bvervain-Switch-Pcord-BB-Indian-V
327	(D)-6-Pcinque-SilkAster-Lplant-Smi	327-(D)-6-Pcinque-SilkAster-Lpl	Prairie Cinquefoil	Potentilla arguta	0.5	0.03	2.3	Forb	N	N		6	D	Pcinque-SilkAster-Lplant-Smint-Ptick-Sgrod-H
327	(D)-6-Pcinque-SilkAster-Lplant-Smi	327-(D)-6-Pcinque-SilkAster-Lpl	Silky Aster	Symphyotrichum sericeum	1	0.06	1.3	Forb	N	N		6	D	Pcinque-SilkAster-Lplant-Smint-Ptick-Sgrod-H
327	(D)-6-Pcinque-SilkAster-Lplant-Smi	327-(D)-6-Pcinque-SilkAster-Lpl	Leadplant	Amorpha canescens	1	0.06	0.4	Legume	N	N		6	D	Pcinque-SilkAster-Lplant-Smint-Ptick-Sgrod-H
327	(D)-6-Pcinque-SilkAster-Lplant-Smi	327-(D)-6-Pcinque-SilkAster-Lpl	Spotted Mint	Monarda punctata	0.5	0.03	1.1	Forb	N	N		6	D	Pcinque-SilkAster-Lplant-Smint-Ptick-Sgrod-H
327	(D)-6-Pcinque-SilkAster-Lplant-Smi	327-(D)-6-Pcinque-SilkAster-Lpl	Prairie Tickseed	Coreopsis palmata	1	0.06	0.3	Forb	N	N		6	D	Pcinque-SilkAster-Lplant-Smint-Ptick-Sgrod-H
327	(D)-6-Pcinque-SilkAster-Lplant-Smi	327-(D)-6-Pcinque-SilkAster-Lpl	Stiff Goldenrod	Oligoneuron rigidum	1	0.06	1	Forb	N	N		6	D	Pcinque-SilkAster-Lplant-Smint-Ptick-Sgrod-H
327	(D)-6-Pcinque-SilkAster-Lplant-Smi	327-(D)-6-Pcinque-SilkAster-Lpl	Hoary Vervain	Verbena stricta	1	0.06	0.7	Forb	N	N		6	D	Pcinque-SilkAster-Lplant-Smint-Ptick-Sgrod-H
327	(D)-6-Pcinque-SilkAster-Lplant-Smi	327-(D)-6-Pcinque-SilkAster-Lpl	Yellow Coneflower	Ratibida pinnata	1	0.06	0.6	Forb	N	N		6	D	Pcinque-SilkAster-Lplant-Smint-Ptick-Sgrod-H
327	(D)-6-Pcinque-SilkAster-Lplant-Smi	327-(D)-6-Pcinque-SilkAster-Lpl	Spiderwort	Tradescantia ohiensis	2	0.13	0.4	Forb	N	N		6	D	Pcinque-SilkAster-Lplant-Smint-Ptick-Sgrod-H
327	(D)-6-Pcinque-SilkAster-Lplant-Smi	327-(D)-6-Pcinque-SilkAster-Lpl	Purple Prairie Clover	Dalea purpurea	4	0.25	1.8	Legume	N	N		6	D	Pcinque-SilkAster-Lplant-Smint-Ptick-Sgrod-H
327	(D)-6-Pcinque-SilkAster-Lplant-Smi	327-(D)-6-Pcinque-SilkAster-Lpl	Big Bluestem	Andropogon gerardii	4	0.25	1	Grass	N	N		6	D	Pcinque-SilkAster-Lplant-Smint-Ptick-Sgrod-H
327	(D)-6-Pcinque-SilkAster-Lplant-Smi	327-(D)-6-Pcinque-SilkAster-Lpl	Sideoats Grama	Bouteloua curtipendula	24	1.5	4.4	Grass	N	N		6	D	Pcinque-SilkAster-Lplant-Smint-Ptick-Sgrod-H
327	(D)-6-Pcinque-SilkAster-Lplant-Smi	327-(D)-6-Pcinque-SilkAster-Lpl	Little Bluestem	Schizachyrium scoparium	24	1.5	8.3	Grass	N	N		6	D	Pcinque-SilkAster-Lplant-Smint-Ptick-Sgrod-H

327	(D)-6-Pcinque-SilkAster-Lplant-Smi	327-(D)-6-Pcinque-SilkAster-Lpl	Indiangrass	Sorghastrum nutans	8	0.5	2.2	Grass	N	N		6	D	Pcinque-SilkAster-Lplant-Smint-Ptick-Sgrod-H
327	(D)-6-Pcinque-SilkAster-Lplant-Smi	327-(D)-6-Pcinque-SilkAster-Lpl	Prairie Junegrass	Koeleria macrantha	2	0.13	6.6	Grass	N	N		6	D	Pcinque-SilkAster-Lplant-Smint-Ptick-Sgrod-H
327	(D)-6-Pcinque-SilkAster-Lplant-Smi	327-(D)-6-Pcinque-SilkAster-Lpl	Sand Dropseed	Sporobolus cryptandrus	2	0.13	15.3	Grass	N	N		6	D	Pcinque-SilkAster-Lplant-Smint-Ptick-Sgrod-H
327	(DM)-7-LB-Sgrama-Indian-Switch-P	327-(DM)-7-LB-Sgrama-Indian-S	Little Bluestem	Schizachyrium scoparium	24	1.5	8.2	Grass	N	N		7	DM	LB-Sgrama-Indian-Switch-PPclover-RHbushclo
327	(DM)-7-LB-Sgrama-Indian-Switch-P	327-(DM)-7-LB-Sgrama-Indian-S	Sideoats Grama	Bouteloua curtipendula	24	1.5	4.4	Grass	N	N		7	DM	LB-Sgrama-Indian-Switch-PPclover-RHbushclo
327	(DM)-7-LB-Sgrama-Indian-Switch-P	327-(DM)-7-LB-Sgrama-Indian-S	Indiangrass	Sorghastrum nutans	8	0.5	2	Grass	N	N		7	DM	LB-Sgrama-Indian-Switch-PPclover-RHbushclo
327	(DM)-7-LB-Sgrama-Indian-Switch-P	327-(DM)-7-LB-Sgrama-Indian-S	Switchgrass	Panicum virgatum	4	0.25	2.2	Grass	N	N		7	DM	LB-Sgrama-Indian-Switch-PPclover-RHbushclo
327	(DM)-7-LB-Sgrama-Indian-Switch-P	327-(DM)-7-LB-Sgrama-Indian-S	Purple Prairie Clover	Dalea purpurea	3	0.19	1.4	Legume	N	N		7	DM	LB-Sgrama-Indian-Switch-PPclover-RHbushclo
327	(DM)-7-LB-Sgrama-Indian-Switch-P	327-(DM)-7-LB-Sgrama-Indian-S	Round-Headed Bushclover	Lespedeza capitata	3	0.19	0.8	Legume	N	N		7	DM	LB-Sgrama-Indian-Switch-PPclover-RHbushclo
327	(DM)-7-LB-Sgrama-Indian-Switch-P	327-(DM)-7-LB-Sgrama-Indian-S	Prairie Junegrass	Koeleria macrantha	2	0.13	6.6	Grass	N	N		7	DM	LB-Sgrama-Indian-Switch-PPclover-RHbushclo
327	(DM)-7-LB-Sgrama-Indian-Switch-P	327-(DM)-7-LB-Sgrama-Indian-S	Prairie Dropseed	Sporobolus heterolepis	2	0.13	0.6	Grass	N	N		7	DM	LB-Sgrama-Indian-Switch-PPclover-RHbushclo
327	(DM)-7-LB-Sgrama-Indian-Switch-P	327-(DM)-7-LB-Sgrama-Indian-S	Bergamot	Monarda fistulosa	1	0.06	1.8	Forb	N	N		7	DM	LB-Sgrama-Indian-Switch-PPclover-RHbushclo
327	(DM)-7-LB-Sgrama-Indian-Switch-P	327-(DM)-7-LB-Sgrama-Indian-S	Leadplant	Amorpha canescens	1	0.06	0.4	Legume	N	N		7	DM	LB-Sgrama-Indian-Switch-PPclover-RHbushclo
327	(DM)-7-LB-Sgrama-Indian-Switch-P	327-(DM)-7-LB-Sgrama-Indian-S	Silky Aster	Symphyotrichum sericeum	1	0.06	0.6	Forb	N	N		7	DM	LB-Sgrama-Indian-Switch-PPclover-RHbushclo
327	(DM)-7-LB-Sgrama-Indian-Switch-P	327-(DM)-7-LB-Sgrama-Indian-S	Spiderwort	Tradescantia ohiensis	1	0.06	0.2	Forb	N	N		7	DM	LB-Sgrama-Indian-Switch-PPclover-RHbushclo
327	(DM)-7-LB-Sgrama-Indian-Switch-P	327-(DM)-7-LB-Sgrama-Indian-S	Stiff Goldenrod	Oligoneuron rigidum	1	0.06	1	Forb	N	N		7	DM	LB-Sgrama-Indian-Switch-PPclover-RHbushclo
327	(DM)-7-LB-Sgrama-Indian-Switch-P	327-(DM)-7-LB-Sgrama-Indian-S	Yellow Coneflower	Ratibida pinnata	1	0.06	0.6	Forb	N	N		7	DM	LB-Sgrama-Indian-Switch-PPclover-RHbushclo
327	(DM)-7-LB-Sgrama-Indian-Switch-P	327-(DM)-7-LB-Sgrama-Indian-S	Rough Blazing Star	Liatris aspera	0.5	0.03	0.2	Forb	N	N		7	DM	LB-Sgrama-Indian-Switch-PPclover-RHbushclo
327	(DM)-7-LB-Sgrama-Indian-Switch-P	327-(DM)-7-LB-Sgrama-Indian-S	Prairie Cinquefoil	Potentilla arguta	0.25	0.02	1.1	Forb	N	N		7	DM	LB-Sgrama-Indian-Switch-PPclover-RHbushclo
327	(M)-8-LB-BB-Indian-Cwrye-Switch-	327-(M)-8-LB-BB-Indian-Cwrye-	Little Bluestem	Schizachyrium scoparium	24	1.5	8.2	Grass	N	N		8	M	LB-BB-Indian-Cwrye-Switch-Oxeyesun-Pblzsta
327	(M)-8-LB-BB-Indian-Cwrye-Switch-	327-(M)-8-LB-BB-Indian-Cwrye-	Big Bluestem	Andropogon gerardii	16	1	3.8	Grass	N	N		8	M	LB-BB-Indian-Cwrye-Switch-Oxeyesun-Pblzsta
327	(M)-8-LB-BB-Indian-Cwrye-Switch-	327-(M)-8-LB-BB-Indian-Cwrye-	Indiangrass	Sorghastrum nutans	16	1	4	Grass	N	N		8	M	LB-BB-Indian-Cwrye-Switch-Oxeyesun-Pblzsta
327	(M)-8-LB-BB-Indian-Cwrye-Switch-	327-(M)-8-LB-BB-Indian-Cwrye-	Canada Wildrye	Elymus canadensis	8	0.5	1.3	Grass	N	N		8	M	LB-BB-Indian-Cwrye-Switch-Oxeyesun-Pblzsta
327	(M)-8-LB-BB-Indian-Cwrye-Switch-	327-(M)-8-LB-BB-Indian-Cwrye-	Switchgrass	Panicum virgatum	8	0.5	4.5	Grass	N	N		8	M	LB-BB-Indian-Cwrye-Switch-Oxeyesun-Pblzsta
327	(M)-8-LB-BB-Indian-Cwrye-Switch-	327-(M)-8-LB-BB-Indian-Cwrye-	Ox-eye Sunflower	Heliopsis helianthoides	1	0.06	0.1	Forb	N	N		8	M	LB-BB-Indian-Cwrye-Switch-Oxeyesun-Pblzsta
327	(M)-8-LB-BB-Indian-Cwrye-Switch-	327-(M)-8-LB-BB-Indian-Cwrye-	Prairie Blazing Star	Liatris pycnostachya	1	0.06	0.3	Forb	N	N		8	M	LB-BB-Indian-Cwrye-Switch-Oxeyesun-Pblzsta
327	(M)-8-LB-BB-Indian-Cwrye-Switch-	327-(M)-8-LB-BB-Indian-Cwrye-	Purple Prairie Clover	Dalea purpurea	1	0.06	0.5	Legume	N	N		8	M	LB-BB-Indian-Cwrye-Switch-Oxeyesun-Pblzsta
327	(M)-8-LB-BB-Indian-Cwrye-Switch-	327-(M)-8-LB-BB-Indian-Cwrye-	Rosinweed	Silphium integrifolium	1	0.06	0.1	Forb	N	N		8	M	LB-BB-Indian-Cwrye-Switch-Oxeyesun-Pblzsta
327	(M)-8-LB-BB-Indian-Cwrye-Switch-	327-(M)-8-LB-BB-Indian-Cwrye-	Bergamot	Monarda fistulosa	0.5	0.03	0.9	Forb	N	N		8	M	LB-BB-Indian-Cwrye-Switch-Oxeyesun-Pblzsta
327	(M)-8-LB-BB-Indian-Cwrye-Switch-	327-(M)-8-LB-BB-Indian-Cwrye-	Black-Eyed Susan	Rudbeckia hirta	0.5	0.03	1.1	Forb	N	N		8	M	LB-BB-Indian-Cwrye-Switch-Oxeyesun-Pblzsta
327	(M)-8-LB-BB-Indian-Cwrye-Switch-	327-(M)-8-LB-BB-Indian-Cwrye-	New England Aster	Symphyotrichum novae-angliae	0.5	0.03	0.8	Forb	N	N		8	M	LB-BB-Indian-Cwrye-Switch-Oxeyesun-Pblzsta
327	(M)-8-LB-BB-Indian-Cwrye-Switch-	327-(M)-8-LB-BB-Indian-Cwrye-	Sky-Blue Aster	Symphyotrichum oolentangiense	0.5	0.03	0.9	Forb	N	N		8	M	LB-BB-Indian-Cwrye-Switch-Oxeyesun-Pblzsta
327	(M)-8-LB-BB-Indian-Cwrye-Switch-	327-(M)-8-LB-BB-Indian-Cwrye-	Yellow Coneflower	Ratibida pinnata	0.5	0.03	0.3	Forb	N	N		8	M	LB-BB-Indian-Cwrye-Switch-Oxeyesun-Pblzsta
327	(M)-8-LB-BB-Indian-Cwrye-Switch-	327-(M)-8-LB-BB-Indian-Cwrye-	Culver's Root	Veronicastrum virginicum	0.25	0.02	4.3	Forb	N	N		8	M	LB-BB-Indian-Cwrye-Switch-Oxeyesun-Pblzsta
327	(WM)-9-BB-Cwrye-Switch-Indian-C	327-(WM)-9-BB-Cwrye-Switch-I	Big Bluestem	Andropogon gerardii	20	1.25	4.8	Grass	N	N		9	WM	BB-Cwrye-Switch-Indian-Cup-Pcord-WWIndig
327	(WM)-9-BB-Cwrye-Switch-Indian-C	327-(WM)-9-BB-Cwrye-Switch-I	Canada Wildrye	Elymus canadensis	16	1	2.5	Grass	N	N		9	WM	BB-Cwrye-Switch-Indian-Cup-Pcord-WWIndig
327	(WM)-9-BB-Cwrye-Switch-Indian-C	327-(WM)-9-BB-Cwrye-Switch-I	Switchgrass	Panicum virgatum	16	1	9	Grass	N	N		9	WM	BB-Cwrye-Switch-Indian-Cup-Pcord-WWIndig
327	(WM)-9-BB-Cwrye-Switch-Indian-C	327-(WM)-9-BB-Cwrye-Switch-I	Indiangrass	Sorghastrum nutans	12	0.75	3	Grass	N	N		9	WM	BB-Cwrye-Switch-Indian-Cup-Pcord-WWIndig
327	(WM)-9-BB-Cwrye-Switch-Indian-C	327-(WM)-9-BB-Cwrye-Switch-I	Cupplant	Silphium perfoliatum	4	0.25	0.1	Forb	N	N		9	WM	BB-Cwrye-Switch-Indian-Cup-Pcord-WWIndig
327	(WM)-9-BB-Cwrye-Switch-Indian-C	327-(WM)-9-BB-Cwrye-Switch-I	Prairie Cordgrass	Spartina pectinata	4	0.25	0.6	Grass	N	N		9	WM	BB-Cwrye-Switch-Indian-Cup-Pcord-WWIndig
327	(WM)-9-BB-Cwrye-Switch-Indian-C	327-(WM)-9-BB-Cwrye-Switch-I	White Wild Indigo	Baptisia alba	1.5	0.09	0.1	Legume	N	N		9	WM	BB-Cwrye-Switch-Indian-Cup-Pcord-WWIndig
327	(WM)-9-BB-Cwrye-Switch-Indian-C	327-(WM)-9-BB-Cwrye-Switch-I	Bergamot	Monarda fistulosa	1	0.06	1.8	Forb	N	N		9	WM	BB-Cwrye-Switch-Indian-Cup-Pcord-WWIndig
327	(WM)-9-BB-Cwrye-Switch-Indian-C	327-(WM)-9-BB-Cwrye-Switch-I	Black-Eyed Susan	Rudbeckia hirta	1	0.06	2.2	Forb	N	N		9	WM	BB-Cwrye-Switch-Indian-Cup-Pcord-WWIndig
327	(WM)-9-BB-Cwrye-Switch-Indian-C	327-(WM)-9-BB-Cwrye-Switch-I	Common Ironweed	Vernonia fasciculata	1	0.06	0.4	Forb	N	N		9	WM	BB-Cwrye-Switch-Indian-Cup-Pcord-WWIndig
327	(WM)-9-BB-Cwrye-Switch-Indian-C	327-(WM)-9-BB-Cwrye-Switch-I	Golden Alexanders	Zizia aurea	1	0.06	0.2	Forb	N	N		9	WM	BB-Cwrye-Switch-Indian-Cup-Pcord-WWIndig
327	(WM)-9-BB-Cwrye-Switch-Indian-C	327-(WM)-9-BB-Cwrye-Switch-I	New England Aster	Symphyotrichum novae-angliae	1	0.06	1.6	Forb	N	N		9	WM	BB-Cwrye-Switch-Indian-Cup-Pcord-WWIndig
327	(WM)-9-BB-Cwrye-Switch-Indian-C	327-(WM)-9-BB-Cwrye-Switch-I	Prairie Blazing Star	Liatris pycnostachya	1	0.06	0.4	Forb	N	N		9	WM	BB-Cwrye-Switch-Indian-Cup-Pcord-WWIndig
327	(WM)-9-BB-Cwrye-Switch-Indian-C	327-(WM)-9-BB-Cwrye-Switch-I	Yellow Coneflower	Ratibida pinnata	1	0.06	0.6	Forb	N	N		9	WM	BB-Cwrye-Switch-Indian-Cup-Pcord-WWIndig
327	(WM)-9-BB-Cwrye-Switch-Indian-C	327-(WM)-9-BB-Cwrye-Switch-I	Great St. John's Wort	Hypericum ascyron	0.25	0.02	1.1	Forb	N	N		9	WM	BB-Cwrye-Switch-Indian-Cup-Pcord-WWIndig
327	(W)-10-Croot-Ciron-Cup-MM-Jpye-	327-(W)-10-Croot-Ciron-Cup-M	Culver's Root	Veronicastrum virginicum	0.25	0.02	4.3	Forb	N	N		10	W	Croot-Ciron-Cup-MM-Jpye-Bvervain-Shwgroo
327	(W)-10-Croot-Ciron-Cup-MM-Jpye-	327-(W)-10-Croot-Ciron-Cup-M	Common Ironweed	Vernonia fasciculata	0.5	0.03	0.2	Forb	N	N		10	W	Croot-Ciron-Cup-MM-Jpye-Bvervain-Shwgroo
327	(W)-10-Croot-Ciron-Cup-MM-Jpye-	327-(W)-10-Croot-Ciron-Cup-M	Cupplant	Silphium perfoliatum	2	0.13	0.1	Forb	N	N		10	W	Croot-Ciron-Cup-MM-Jpye-Bvervain-Shwgroo
327	(W)-10-Croot-Ciron-Cup-MM-Jpye-	327-(W)-10-Croot-Ciron-Cup-M	Marsh Milkweed	Asclepias incarnata	2	0.13	0.2	Forb	N	N		10	W	Croot-Ciron-Cup-MM-Jpye-Bvervain-Shwgroo
327	(W)-10-Croot-Ciron-Cup-MM-Jpye-	327-(W)-10-Croot-Ciron-Cup-M	Joe-Pye Weed	Eutrochium maculatum	1	0.06	2.2	Forb	N	N		10	W	Croot-Ciron-Cup-MM-Jpye-Bvervain-Shwgroo
327	(W)-10-Croot-Ciron-Cup-MM-Jpye-	327-(W)-10-Croot-Ciron-Cup-M	Blue Vervain	Verbena hastata	2	0.13	4.3	Forb	N	N		10	W	Croot-Ciron-Cup-MM-Jpye-Bvervain-Shwgroo
327	(W)-10-Croot-Ciron-Cup-MM-Jpye-	327-(W)-10-Croot-Ciron-Cup-M	Showy Tick Trefoil	Desmodium canadense	3	0.19	0.3	Forb	N	N		10	W	Croot-Ciron-Cup-MM-Jpye-Bvervain-Shwgroo
327	(W)-10-Croot-Ciron-Cup-MM-Jpye-	327-(W)-10-Croot-Ciron-Cup-M	Boneset	Eupatorium perfoliatum	0.5	0.03	1.8	Forb	N	N		10	W	Croot-Ciron-Cup-MM-Jpye-Bvervain-Shwgroo

327	(W)-10-Croot-Ciron-Cup-MM-Jpye-	327-(W)-10-Croot-Ciron-Cup-M	Golden Alexanders	Zizia aurea	2	0.13	0.5	Forb	N	N		10	W	Croot-Ciron-Cup-MM-Jpye-Bvervain-Shwgroc
327	(W)-10-Croot-Ciron-Cup-MM-Jpye-	327-(W)-10-Croot-Ciron-Cup-M	Switchgrass	Panicum virgatum	8	0.5	4.5	Grass	N	N		10	W	Croot-Ciron-Cup-MM-Jpye-Bvervain-Shwgroc
327	(W)-10-Croot-Ciron-Cup-MM-Jpye-	327-(W)-10-Croot-Ciron-Cup-M	Prairie Cordgrass	Spartina pectinata	4	0.25	0.6	Grass	N	N		10	W	Croot-Ciron-Cup-MM-Jpye-Bvervain-Shwgroc
327	(W)-10-Croot-Ciron-Cup-MM-Jpye-	327-(W)-10-Croot-Ciron-Cup-M	Big Bluestem	Andropogon gerardii	4	0.25	1	Grass	N	N		10	W	Croot-Ciron-Cup-MM-Jpye-Bvervain-Shwgroc
327	(W)-10-Croot-Ciron-Cup-MM-Jpye-	327-(W)-10-Croot-Ciron-Cup-M	Canada Wildrye	Elymus canadensis	8	0.5	1	Grass	N	N		10	W	Croot-Ciron-Cup-MM-Jpye-Bvervain-Shwgroc
327	(W)-10-Croot-Ciron-Cup-MM-Jpye-	327-(W)-10-Croot-Ciron-Cup-M	Indiangrass	Sorghastrum nutans	4	0.25	1.1	Grass	N	N		10	W	Croot-Ciron-Cup-MM-Jpye-Bvervain-Shwgroc
327	(W)-10-Croot-Ciron-Cup-MM-Jpye-	327-(W)-10-Croot-Ciron-Cup-M	Fowl Mannagrass	Glyceria striata	4	0.25	14.7	Grass	N	N		10	W	Croot-Ciron-Cup-MM-Jpye-Bvervain-Shwgroc
327	(W)-10-Croot-Ciron-Cup-MM-Jpye-	327-(W)-10-Croot-Ciron-Cup-M	Fox Sedge	Carex vulpinoidea	4	0.25	9.2	Sedge	N	N		10	W	Croot-Ciron-Cup-MM-Jpye-Bvervain-Shwgroc
327	(DM)-11-Pcinque-Lplant-SilkAster-I	327-(DM)-11-Pcinque-Lplant-Sil	Prairie Cinquefoil	Potentilla arguta	0.5	0.03	2.2	Forb	N	N		11	DM	Pcinque-Lplant-SilkAster-PPclover-Rblzstar-W
327	(DM)-11-Pcinque-Lplant-SilkAster-I	327-(DM)-11-Pcinque-Lplant-Sil	Leadplant	Amorpha canescens	1	0.06	0.4	Legume	N	N		11	DM	Pcinque-Lplant-SilkAster-PPclover-Rblzstar-W
327	(DM)-11-Pcinque-Lplant-SilkAster-I	327-(DM)-11-Pcinque-Lplant-Sil	Silky Aster	Symphyotrichum sericeum	1	0.06	1.3	Forb	N	N		11	DM	Pcinque-Lplant-SilkAster-PPclover-Rblzstar-W
327	(DM)-11-Pcinque-Lplant-SilkAster-I	327-(DM)-11-Pcinque-Lplant-Sil	Purple Prairie Clover	Dalea purpurea	4	0.25	1.8	Legume	N	N		11	DM	Pcinque-Lplant-SilkAster-PPclover-Rblzstar-W
327	(DM)-11-Pcinque-Lplant-SilkAster-I	327-(DM)-11-Pcinque-Lplant-Sil	Rough Blazing Star	Liatris aspera	1	0.06	0.3	Forb	N	N		11	DM	Pcinque-Lplant-SilkAster-PPclover-Rblzstar-W
327	(DM)-11-Pcinque-Lplant-SilkAster-I	327-(DM)-11-Pcinque-Lplant-Sil	Wild Lupine	Lupinus perennis	6	0.38	0.1	Legume	N	N		11	DM	Pcinque-Lplant-SilkAster-PPclover-Rblzstar-W
327	(DM)-11-Pcinque-Lplant-SilkAster-I	327-(DM)-11-Pcinque-Lplant-Sil	Bergamot	Monarda fistulosa	0.5	0.03	0.9	Forb	N	N		11	DM	Pcinque-Lplant-SilkAster-PPclover-Rblzstar-W
327	(DM)-11-Pcinque-Lplant-SilkAster-I	327-(DM)-11-Pcinque-Lplant-Sil	Yellow Coneflower	Ratibida pinnata	1	0.06	0.6	Forb	N	N		11	DM	Pcinque-Lplant-SilkAster-PPclover-Rblzstar-W
327	(DM)-11-Pcinque-Lplant-SilkAster-I	327-(DM)-11-Pcinque-Lplant-Sil	Stiff Goldenrod	Oligoneuron rigidum	1	0.06	1.1	Forb	N	N		11	DM	Pcinque-Lplant-SilkAster-PPclover-Rblzstar-W
327	(DM)-11-Pcinque-Lplant-SilkAster-I	327-(DM)-11-Pcinque-Lplant-Sil	Pale Purple Coneflower	Echinacea pallida	2	0.13	0.2	Forb	N	N		11	DM	Pcinque-Lplant-SilkAster-PPclover-Rblzstar-W
327	(DM)-11-Pcinque-Lplant-SilkAster-I	327-(DM)-11-Pcinque-Lplant-Sil	Sideoats Grama	Bouteloua curtipendula	20	1.25	3.7	Grass	N	N		11	DM	Pcinque-Lplant-SilkAster-PPclover-Rblzstar-W
327	(DM)-11-Pcinque-Lplant-SilkAster-I	327-(DM)-11-Pcinque-Lplant-Sil	Little Bluestem	Schizachyrium scoparium	24	1.5	8.3	Grass	N	N		11	DM	Pcinque-Lplant-SilkAster-PPclover-Rblzstar-W
327	(DM)-11-Pcinque-Lplant-SilkAster-I	327-(DM)-11-Pcinque-Lplant-Sil	Indiangrass	Sorghastrum nutans	8	0.5	2.2	Grass	N	N		11	DM	Pcinque-Lplant-SilkAster-PPclover-Rblzstar-W
327	(DM)-11-Pcinque-Lplant-SilkAster-I	327-(DM)-11-Pcinque-Lplant-Sil	Prairie Junegrass	Koeleria macrantha	1	0.06	3.3	Grass	N	N		11	DM	Pcinque-Lplant-SilkAster-PPclover-Rblzstar-W
327	(DM)-11-Pcinque-Lplant-SilkAster-I	327-(DM)-11-Pcinque-Lplant-Sil	Prairie Dropseed	Sporobolus heterolepis	2	0.13	0.7	Grass	N	N		11	DM	Pcinque-Lplant-SilkAster-PPclover-Rblzstar-W
327	(DM)-11-Pcinque-Lplant-SilkAster-I	327-(DM)-11-Pcinque-Lplant-Sil	Switchgrass	Panicum virgatum	4	0.25	2.2	Grass	N	N		11	DM	Pcinque-Lplant-SilkAster-PPclover-Rblzstar-W
327	(DM)-12-LB-Sgrama-0-Swort-PPclo	327-(DM)-12-LB-Sgrama-0-Swo	Little Bluestem	Schizachyrium scoparium	16	1	5.5	Grass	N	Y		12	DM	LB-Sgrama-0-Swort-PPclover-Ycone-Pblzstar-
327	(DM)-12-LB-Sgrama-0-Swort-PPclo	327-(DM)-12-LB-Sgrama-0-Swo	Sideoats Grama	Bouteloua curtipendula	16	1	2.2	Grass	N	Y		12	DM	LB-Sgrama-0-Swort-PPclover-Ycone-Pblzstar-
327	(DM)-12-LB-Sgrama-0-Swort-PPclo	327-(DM)-12-LB-Sgrama-0-Swo	Illinois Tick Trefoil	Desmodium illinoense	5	0.31	0.5	Legume	N	Y		12	DM	LB-Sgrama-0-Swort-PPclover-Ycone-Pblzstar-
327	(DM)-12-LB-Sgrama-0-Swort-PPclo	327-(DM)-12-LB-Sgrama-0-Swo	Spiderwort	Tradescantia ohiensis	5	0.31	0.9	Forb	N	Y		12	DM	LB-Sgrama-0-Swort-PPclover-Ycone-Pblzstar-
327	(DM)-12-LB-Sgrama-0-Swort-PPclo	327-(DM)-12-LB-Sgrama-0-Swo	Purple Prairie Clover	Dalea purpurea	6	0.38	2.7	Legume	N	Y		12	DM	LB-Sgrama-0-Swort-PPclover-Ycone-Pblzstar-
327	(DM)-12-LB-Sgrama-0-Swort-PPclo	327-(DM)-12-LB-Sgrama-0-Swo	Yellow Coneflower	Ratibida pinnata	1	0.06	0.6	Forb	N	Y		12	DM	LB-Sgrama-0-Swort-PPclover-Ycone-Pblzstar-
327	(DM)-12-LB-Sgrama-0-Swort-PPclo	327-(DM)-12-LB-Sgrama-0-Swo	Prairie Blazing Star	Liatris pycnostachya	3	0.19	0.8	Forb	N	Y		12	DM	LB-Sgrama-0-Swort-PPclover-Ycone-Pblzstar-
327	(DM)-12-LB-Sgrama-0-Swort-PPclo	327-(DM)-12-LB-Sgrama-0-Swo	Rattlesnake Master	Eryngium yuccifolium	6	0.38	1.1	Forb	N	Y		12	DM	LB-Sgrama-0-Swort-PPclover-Ycone-Pblzstar-
327	(DM)-12-LB-Sgrama-0-Swort-PPclo	327-(DM)-12-LB-Sgrama-0-Swo	Showy Goldenrod	Solidago speciosa	4	0.25	8.7	Forb	N	Y		12	DM	LB-Sgrama-0-Swort-PPclover-Ycone-Pblzstar-
327	(DM)-12-LB-Sgrama-0-Swort-PPclo	327-(DM)-12-LB-Sgrama-0-Swo	Stiff Goldenrod	Oligoneuron rigidum	3	0.19	3.2	Forb	N	Y		12	DM	LB-Sgrama-0-Swort-PPclover-Ycone-Pblzstar-
327	(DM)-12-LB-Sgrama-0-Swort-PPclo	327-(DM)-12-LB-Sgrama-0-Swo	Smooth Blue Aster	Symphyotricum laeve	2	0.13	2.2	Forb	N	Y		12	DM	LB-Sgrama-0-Swort-PPclover-Ycone-Pblzstar-
327	(DM)-12-LB-Sgrama-0-Swort-PPclo	327-(DM)-12-LB-Sgrama-0-Swo	Prairie Cinquefoil	Potentilla arguta	2	0.13	9.2	Forb	N	Y		12	DM	LB-Sgrama-0-Swort-PPclover-Ycone-Pblzstar-
327	(M)-13-LB-Sgrama-Fbtongue-Swort-	327-(M)-13-LB-Sgrama-Fbtongu	Little Bluestem	Schizachyrium scoparium	16	1	5.5	Grass	N	Y		13	M	LB-Sgrama-Fbtongue-Swort-Galex-Ycone-PPc
327	(M)-13-LB-Sgrama-Fbtongue-Swort-	327-(M)-13-LB-Sgrama-Fbtongu	Sideoats Grama	Bouteloua curtipendula	16	1	2.2	Grass	N	Y		13	M	LB-Sgrama-Fbtongue-Swort-Galex-Ycone-PPc
327	(M)-13-LB-Sgrama-Fbtongue-Swort-	327-(M)-13-LB-Sgrama-Fbtongu	Foxglove Beardtongue	Penstemon digitalis	4	0.25	10.6	Forb	N	Y		13	M	LB-Sgrama-Fbtongue-Swort-Galex-Ycone-PPc
327	(M)-13-LB-Sgrama-Fbtongue-Swort-	327-(M)-13-LB-Sgrama-Fbtongu	Spiderwort	Tradescantia ohiensis	6	0.38	1.1	Forb	N	Y		13	M	LB-Sgrama-Fbtongue-Swort-Galex-Ycone-PPc
327	(M)-13-LB-Sgrama-Fbtongue-Swort-	327-(M)-13-LB-Sgrama-Fbtongu	Golden Alexanders	Zizia aurea	6	0.38	1.5	Forb	N	Y		13	M	LB-Sgrama-Fbtongue-Swort-Galex-Ycone-PPc
327	(M)-13-LB-Sgrama-Fbtongue-Swort-	327-(M)-13-LB-Sgrama-Fbtongu	Yellow Coneflower	Ratibida pinnata	1	0.06	0.6	Forb	N	Y		13	M	LB-Sgrama-Fbtongue-Swort-Galex-Ycone-PPc
327	(M)-13-LB-Sgrama-Fbtongue-Swort-	327-(M)-13-LB-Sgrama-Fbtongu	Purple Prairie Clover	Dalea purpurea	6	0.38	2.7	Legume	N	Y		13	M	LB-Sgrama-Fbtongue-Swort-Galex-Ycone-PPc
327	(M)-13-LB-Sgrama-Fbtongue-Swort-	327-(M)-13-LB-Sgrama-Fbtongu	Prairie Blazing Star	Liatris pycnostachya	4	0.25	1.1	Forb	N	Y		13	M	LB-Sgrama-Fbtongue-Swort-Galex-Ycone-PPc
327	(M)-13-LB-Sgrama-Fbtongue-Swort-	327-(M)-13-LB-Sgrama-Fbtongu	Rattlesnake Master	Eryngium yuccifolium	6	0.38	1.1	Forb	N	Y		13	M	LB-Sgrama-Fbtongue-Swort-Galex-Ycone-PPc
327	(M)-13-LB-Sgrama-Fbtongue-Swort-	327-(M)-13-LB-Sgrama-Fbtongu	New England Aster	Symphyotrichum novae-angliae	3	0.19	4.8	Forb	N	Y		13	M	LB-Sgrama-Fbtongue-Swort-Galex-Ycone-PPc
327	(M)-13-LB-Sgrama-Fbtongue-Swort-	327-(M)-13-LB-Sgrama-Fbtongu	Stiff Goldenrod	Oligoneuron rigidum	3	0.19	3.2	Forb	N	Y		13	M	LB-Sgrama-Fbtongue-Swort-Galex-Ycone-PPc
327	(M)-13-LB-Sgrama-Fbtongue-Swort-	327-(M)-13-LB-Sgrama-Fbtongu	Smooth Blue Aster	Symphyotrichum laeve	3	0.19	3.3	Forb	N	Y		13	M	LB-Sgrama-Fbtongue-Swort-Galex-Ycone-PPc
327	(WM)-14-BB-Indian-Fbtongue-Swor	327-(WM)-14-BB-Indian-Fbtong	Big Bluestem	Andropogon gerardii	16	1	3.8	Grass	N	Y		14	WM	BB-Indian-Fbtongue-Swort-Galex-Ycone-Pblz
327	(WM)-14-BB-Indian-Fbtongue-Swor	327-(WM)-14-BB-Indian-Fbtong	Indiangrass	Sorghastrum nutans	16	1	4.4	Grass	N	Y		14	WM	BB-Indian-Fbtongue-Swort-Galex-Ycone-Pblz
327	(WM)-14-BB-Indian-Fbtongue-Swor	327-(WM)-14-BB-Indian-Fbtong	Foxglove Beardtongue	Penstemon digitalis	4	0.25	10.6	Forb	N	Y		14	WM	BB-Indian-Fbtongue-Swort-Galex-Ycone-Pblz
327	(WM)-14-BB-Indian-Fbtongue-Swor	327-(WM)-14-BB-Indian-Fbtong	Spiderwort	Tradescantia ohiensis	6	0.38	1.1	Forb	N	Y		14	WM	BB-Indian-Fbtongue-Swort-Galex-Ycone-Pblz
327	(WM)-14-BB-Indian-Fbtongue-Swor	327-(WM)-14-BB-Indian-Fbtong	Golden Alexanders	Zizia aurea	5	0.31	1.3	Forb	N	Y		14	WM	BB-Indian-Fbtongue-Swort-Galex-Ycone-Pblz
327	(WM)-14-BB-Indian-Fbtongue-Swor	327-(WM)-14-BB-Indian-Fbtong	Yellow Coneflower	Ratibida pinnata	1	0.06	0.6	Forb	N	Y		14	WM	BB-Indian-Fbtongue-Swort-Galex-Ycone-Pblz
327	(WM)-14-BB-Indian-Fbtongue-Swor	327-(WM)-14-BB-Indian-Fbtong	Prairie Blazing Star	Liatris pycnostachya	3	0.19	0.8	Forb	N	Y		14	WM	BB-Indian-Fbtongue-Swort-Galex-Ycone-Pblz
327	(WM)-14-BB-Indian-Fbtongue-Swor	327-(WM)-14-BB-Indian-Fbtong	Rattlesnake Master	Eryngium yuccifolium	6	0.38	1.1	Forb	N	Y		14	WM	BB-Indian-Fbtongue-Swort-Galex-Ycone-Pblz
327	(WM)-14-BB-Indian-Fbtongue-Swor	327-(WM)-14-BB-Indian-Fbtong	New England Aster	Symphyotrichum novae-angliae	3	0.19	4.8	Forb	N	Y		14	WM	BB-Indian-Fbtongue-Swort-Galex-Ycone-Pblz
327	(WM)-14-BB-Indian-Fbtongue-Swor	327-(WM)-14-BB-Indian-Fbtong	Blue Vervain	Verbena hastata	4	0.25	8.5	Forb	N	Y		14	WM	BB-Indian-Fbtongue-Swort-Galex-Ycone-Pblz

327	(WM)-14-BB-Indian-Fbtongue-Swor	327-(WM)-14-BB-Indian-Fbtongu	Common Ironweed	Vernonia fasciculata	3	0.19	1.4	Forb	N	Y		14	WM	BB-Indian-Fbtongue-Swort-Galex-Ycone-Pblz
327	(WM)-14-BB-Indian-Fbtongue-Swor	327-(WM)-14-BB-Indian-Fbtongu	Cupplant	Silphium perfoliatum	3	0.19	0.1	Forb	N	Y		14	WM	BB-Indian-Fbtongue-Swort-Galex-Ycone-Pblz
327	(D-W)-15A-Switch	327-(D-W)-15A-Switch	Switchgrass	Panicum virgatum	112	7	63	Grass	N	N		15A	D-W	Switch
327	(D-W)-15B-BB	327-(D-W)-15B-BB	Big Bluestem	Andropogon gerardii	176	11	42	Grass	N	N		15B	D-W	BB
327	(D-W)-15C-Indian	327-(D-W)-15C-Indian	Indiangrass	Sorghastrum nutans	160	10	44	Grass	N	N		15C	D-W	Indian
327	(DM-M)-16A-SB-Tim-Alf	327-(DM-M)-16A-SB-Tim-Alf	Smooth Bromegrass	Bromus inermis	48	3	9	Grass	I	N		16A	DM-M	SB-Tim-Alf
327	(DM-M)-16A-SB-Tim-Alf	327-(DM-M)-16A-SB-Tim-Alf	Timothy	Phleum pratense	40	2.5	71	Grass	I	N		16A	DM-M	SB-Tim-Alf
327	(DM-M)-16A-SB-Tim-Alf	327-(DM-M)-16A-SB-Tim-Alf	Alfalfa	Medicago sativa	96	6	30	Legume	I	N		16A	DM-M	SB-Tim-Alf
327	(M-W)-16B-Orc-Tim-RC	327-(M-W)-16B-Orc-Tim-RC	Orchardgrass	Dactylis glomerata L.	32	2	30	Grass	I	N		16B	M-W	Orc-Tim-RC
327	(M-W)-16B-Orc-Tim-RC	327-(M-W)-16B-Orc-Tim-RC	Timothy	Phleum pratense	32	2	57	Grass	I	N		16B	M-W	Orc-Tim-RC
327	(M-W)-16B-Orc-Tim-RC	327-(M-W)-16B-Orc-Tim-RC	Red Clover	Trifolium pratense	80	5	30	Legume	I	N		16B	M-W	Orc-Tim-RC
327	(DM-M)-16C-Orc-Tim-Alf	327-(DM-M)-16C-Orc-Tim-Alf	Orchardgrass	Dactylis glomerata L.	32	2	30	Grass	I	N		16C	DM-M	Orc-Tim-Alf
327	(DM-M)-16C-Orc-Tim-Alf	327-(DM-M)-16C-Orc-Tim-Alf	Timothy	Phleum pratense	32	2	57	Grass	I	N		16C	DM-M	Orc-Tim-Alf
327	(DM-M)-16C-Orc-Tim-Alf	327-(DM-M)-16C-Orc-Tim-Alf	Alfalfa	Medicago sativa	96	6	30	Legume	I	N		16C	DM-M	Orc-Tim-Alf
327	(M-WM)-16D-SB-Tim-RC	327-(M-WM)-16D-SB-Tim-RC	Smooth Bromegrass	Bromus inermis	48	3	9	Grass	I	N		16D	M-WM	SB-Tim-RC
327	(M-WM)-16D-SB-Tim-RC	327-(M-WM)-16D-SB-Tim-RC	Timothy	Phleum pratense	40	2.5	71	Grass	I	N		16D	M-WM	SB-Tim-RC
327	(M-WM)-16D-SB-Tim-RC	327-(M-WM)-16D-SB-Tim-RC	Red Clover	Trifolium pratense	80	5	30	Legume	I	N		16D	M-WM	SB-Tim-RC
327	(M-WM)-16E-SB-Tim-Orc-RC-Lad(	327-(M-WM)-16E-SB-Tim-Orc-I	Smooth Bromegrass	Bromus inermis	32	2	6	Grass	I	N		16E	M-WM	SB-Tim-Orc-RC-LadC
327	(M-WM)-16E-SB-Tim-Orc-RC-Lad(	327-(M-WM)-16E-SB-Tim-Orc-I	Timothy	Phleum pratense	32	2	57	Grass	I	N		16E	M-WM	SB-Tim-Orc-RC-LadC
327	(M-WM)-16E-SB-Tim-Orc-RC-Lad(	327-(M-WM)-16E-SB-Tim-Orc-I	Orchardgrass	Dactylis glomerata L.	16	1	15	Grass	I	N		16E	M-WM	SB-Tim-Orc-RC-LadC
327	(M-WM)-16E-SB-Tim-Orc-RC-Lad(	327-(M-WM)-16E-SB-Tim-Orc-I	Red Clover	Trifolium pratense	80	5	30	Legume	I	N		16E	M-WM	SB-Tim-Orc-RC-LadC
327	(M-WM)-16E-SB-Tim-Orc-RC-Lad(	327-(M-WM)-16E-SB-Tim-Orc-I	White Ladino Clover	Trifolium repens	8	0.5	10	Legume	I	N		16E	M-WM	SB-Tim-Orc-RC-LadC
327	(M-WM)-16F-Orc-Tim-RC-LadC	327-(M-WM)-16F-Orc-Tim-RC-I	Orchardgrass	Dactylis glomerata L.	32	2	30	Grass	I	N		16F	M-WM	Orc-Tim-RC-LadC
327	(M-WM)-16F-Orc-Tim-RC-LadC	327-(M-WM)-16F-Orc-Tim-RC-I	Timothy	Phleum pratense	32	2	57	Grass	I	N		16F	M-WM	Orc-Tim-RC-LadC
327	(M-WM)-16F-Orc-Tim-RC-LadC	327-(M-WM)-16F-Orc-Tim-RC-I	Red Clover	Trifolium pratense	80	5	30	Legume	I	N		16F	M-WM	Orc-Tim-RC-LadC
327	(M-WM)-16F-Orc-Tim-RC-LadC	327-(M-WM)-16F-Orc-Tim-RC-I	White Ladino Clover	Trifolium repens	8	0.5	10	Legume	I	N		16F	M-WM	Orc-Tim-RC-LadC
327	(DM-WM)-16G-Orc-Tim-Btrefoil	327-(DM-WM)-16G-Orc-Tim-Bt	Orchardgrass	Dactylis glomerata L.	32	2	30	Grass	I	N		16G	DM-WM	Orc-Tim-Btrefoil
327	(DM-WM)-16G-Orc-Tim-Btrefoil	327-(DM-WM)-16G-Orc-Tim-Bt	Timothy	Phleum pratense	32	2	57	Grass	I	N		16G	DM-WM	Orc-Tim-Btrefoil
327	(DM-WM)-16G-Orc-Tim-Btrefoil	327-(DM-WM)-16G-Orc-Tim-Bt	Birdsfoot Trefoil	Lotus corniculatus	64	4	36	Legume	I	N		16G	DM-WM	Orc-Tim-Btrefoil
327	(M-WM)-16H-Tfesc-Tim-RC-LadC	327-(M-WM)-16H-Tfesc-Tim-RC	Tall Fescue	Schedonorus arundinaceus	48	3	15	Grass	I	N		16H	M-WM	Tfesc-Tim-RC-LadC
327	(M-WM)-16H-Tfesc-Tim-RC-LadC	327-(M-WM)-16H-Tfesc-Tim-RC	Timothy	Phleum pratense	32	2	57	Grass	I	N		16H	M-WM	Tfesc-Tim-RC-LadC
327	(M-WM)-16H-Tfesc-Tim-RC-LadC	327-(M-WM)-16H-Tfesc-Tim-RC	Red Clover	Trifolium pratense	64	4	24	Legume	I	N		16H	M-WM	Tfesc-Tim-RC-LadC
327	(M-WM)-16H-Tfesc-Tim-RC-LadC	327-(M-WM)-16H-Tfesc-Tim-RC	White Ladino Clover	Trifolium repens	16	1	20	Legume	I	N		16H	M-WM	Tfesc-Tim-RC-LadC
327	(DM-M)-17A-Orc-Tim-Alf-LadC	327-(DM-M)-17A-Orc-Tim-Alf-I	Orchardgrass	Dactylis glomerata L.	16	1	15	Grass	I	Y		17A	DM-M	Orc-Tim-Alf-LadC
327	(DM-M)-17A-Orc-Tim-Alf-LadC	327-(DM-M)-17A-Orc-Tim-Alf-I	Timothy	Phleum pratense	8	0.5	14	Grass	I	Y		17A	DM-M	Orc-Tim-Alf-LadC
327	(DM-M)-17A-Orc-Tim-Alf-LadC	327-(DM-M)-17A-Orc-Tim-Alf-I	Alfalfa	Medicago sativa	64	4	20	Legume	I	Y		17A	DM-M	Orc-Tim-Alf-LadC
327	(DM-M)-17A-Orc-Tim-Alf-LadC	327-(DM-M)-17A-Orc-Tim-Alf-I	White Ladino Clover	Trifolium repens	24	1.5	30	Legume	I	Y		17A	DM-M	Orc-Tim-Alf-LadC
327	(WM-W)-17B-Prye-Tfesc-RC-Aclov	327-(WM-W)-17B-Prye-Tfesc-R	Perennial Ryegrass	Lolium perenne	48	3	15	Grass	I	Y		17B	WM-W	Prye-Tfesc-RC-Aclover
327	(WM-W)-17B-Prye-Tfesc-RC-Aclov	327-(WM-W)-17B-Prye-Tfesc-R	Tall Fescue	Schedonorus arundinaceus	48	3	15	Grass	I	Y		17B	WM-W	Prye-Tfesc-RC-Aclover
327	(WM-W)-17B-Prye-Tfesc-RC-Aclov	327-(WM-W)-17B-Prye-Tfesc-R	Red Clover	Trifolium pratense	64	4	20	Legume	I	Y		17B	WM-W	Prye-Tfesc-RC-Aclover
327	(WM-W)-17B-Prye-Tfesc-RC-Aclov	327-(WM-W)-17B-Prye-Tfesc-R	Alsike Clover	Trifolium hybridum	24	1.5	23.4	Legume	I	X		17B	WM-W	Prye-Tfesc-RC-Aclover

STANDARD 342 MIXES REVISION DATE: 1/23/2013

criteria 0

STD	Mix #	std-mix	Common Name	Scientific Name	PLS (oz./A)	PLS (lbs./A)	Seeds/Square Foot	Type	Intro / Native	Poll. (Y/N)		Mix No.	MR	Mix Components
	No 342 mixes meet this criterion	LEAVE THIS ROW AS IS							N	Y				
	No 342 mixes meet this criterion	LEAVE THIS ROW AS IS							N	N				
		LEAVE THIS ROW AS IS							I	Y				
342	(DM-M)-1-SB-Crfesc-KB-Alf-R	342-(DM-M)-1-SB-Crfesc-KB	Smooth Bromegrass	Bromus inermis	160.0	10	30	Grass	I	N		1	DM-M	SB-Crfesc-KB-Alf-RC
342	(DM-M)-1-SB-Crfesc-KB-Alf-R	342-(DM-M)-1-SB-Crfesc-KB	Creeping Red Fescue	Festuca rubra	48.0	3	24	Grass	I	N		1	DM-M	SB-Crfesc-KB-Alf-RC
342	(DM-M)-1-SB-Crfesc-KB-Alf-R	342-(DM-M)-1-SB-Crfesc-KB	Kentucky Bluegrass	Poa pratensis	24.0	1.5	75	Grass	I	N		1	DM-M	SB-Crfesc-KB-Alf-RC
342	(DM-M)-1-SB-Crfesc-KB-Alf-R	342-(DM-M)-1-SB-Crfesc-KB	Alfalfa	Medicago sativa	48.0	3	15	Legume	I	N		1	DM-M	SB-Crfesc-KB-Alf-RC
342	(DM-M)-1-SB-Crfesc-KB-Alf-R	342-(DM-M)-1-SB-Crfesc-KB	Red Clover	Trifolium pratense	48.0	3	18	Legume	I	N		1	DM-M	SB-Crfesc-KB-Alf-RC
342	(DM-M)-2-SB-Tim-Alf	342-(DM-M)-2-SB-Tim-Alf	Smooth Bromegrass	Bromus inermis	240.0	15	46	Grass	I	N		2	DM-M	SB-Tim-Alf
342	(DM-M)-2-SB-Tim-Alf	342-(DM-M)-2-SB-Tim-Alf	Timothy	Phleum pratense	48.0	3	84	Grass	I	N		2	DM-M	SB-Tim-Alf
342	(DM-M)-2-SB-Tim-Alf	342-(DM-M)-2-SB-Tim-Alf	Alfalfa	Medicago sativa	112.0	7	35	Legume	I	N		2	DM-M	SB-Tim-Alf
342	(DM-M)-3-SB-Prye-Tfesc-Tim-I	342-(DM-M)-3-SB-Prye-Tfesc	Smooth Bromegrass	Bromus inermis	160.0	10	30	Grass	I	N		3	DM-M	SB-Prye-Tfesc-Tim-KB
342	(DM-M)-3-SB-Prye-Tfesc-Tim-I	342-(DM-M)-3-SB-Prye-Tfesc	Perennial Ryegrass	Lolium perenne	80.0	5	25	Grass	I	N		3	DM-M	SB-Prye-Tfesc-Tim-KB
342	(DM-M)-3-SB-Prye-Tfesc-Tim-I	342-(DM-M)-3-SB-Prye-Tfesc	Tall Fescue	Schedonorus arundinaceus	32.0	2	10	Grass	I	N		3	DM-M	SB-Prye-Tfesc-Tim-KB
342	(DM-M)-3-SB-Prye-Tfesc-Tim-I	342-(DM-M)-3-SB-Prye-Tfesc	Timothy	Phleum pratense	32.0	2	57	Grass	I	N		3	DM-M	SB-Prye-Tfesc-Tim-KB
342	(DM-M)-3-SB-Prye-Tfesc-Tim-I	342-(DM-M)-3-SB-Prye-Tfesc	Kentucky Bluegrass	Poa pratensis	16.0	1	50	Grass	I	N		3	DM-M	SB-Prye-Tfesc-Tim-KB
342	(DM-M)-4-SB-Crfesc-Alf-RC	342-(DM-M)-4-SB-Crfesc-Alf	Smooth Bromegrass	Bromus inermis	320.0	20	62	Grass	I	N		4	DM-M	SB-Crfesc-Alf-RC
342	(DM-M)-4-SB-Crfesc-Alf-RC	342-(DM-M)-4-SB-Crfesc-Alf	Creeping Red Fescue	Festuca rubra	80.0	5	40	Grass	I	N		4	DM-M	SB-Crfesc-Alf-RC
342	(DM-M)-4-SB-Crfesc-Alf-RC	342-(DM-M)-4-SB-Crfesc-Alf	Alfalfa	Medicago sativa	128.0	8	40	Legume	I	N		4	DM-M	SB-Crfesc-Alf-RC
342	(DM-M)-4-SB-Crfesc-Alf-RC	342-(DM-M)-4-SB-Crfesc-Alf	Red Clover	Trifolium pratense	64.0	4	24	Legume	I	N		4	DM-M	SB-Crfesc-Alf-RC
342	(DM-M)-5-SB-Alf	342-(DM-M)-5-SB-Alf	Smooth Bromegrass	Bromus inermis	480.0	30	93	Grass	I	N		5	DM-M	SB-Alf
342	(DM-M)-5-SB-Alf	342-(DM-M)-5-SB-Alf	Alfalfa	Medicago sativa	224.0	14	70	Legume	I	N		5	DM-M	SB-Alf
342	(DM-WM)-6-SB-Prye-Tim-Crfe	342-(DM-WM)-6-SB-Prye-Tim	Smooth Bromegrass	Bromus inermis	112.0	7	21	Grass	I	N		6	DM-WM	SB-Prye-Tim-Crfesc-KB-RC
342	(DM-WM)-6-SB-Prye-Tim-Crfe	342-(DM-WM)-6-SB-Prye-Tim	Perennial Ryegrass	Lolium perenne	48.0	3	15	Grass	I	N		6	DM-WM	SB-Prye-Tim-Crfesc-KB-RC
342	(DM-WM)-6-SB-Prye-Tim-Crfe	342-(DM-WM)-6-SB-Prye-Tim	Timothy	Phleum pratense	32.0	2	57	Grass	I	N		6	DM-WM	SB-Prye-Tim-Crfesc-KB-RC
342	(DM-WM)-6-SB-Prye-Tim-Crfe	342-(DM-WM)-6-SB-Prye-Tim	Creeping Red Fescue	Festuca rubra	16.0	1	8	Grass	I	N		6	DM-WM	SB-Prye-Tim-Crfesc-KB-RC
342	(DM-WM)-6-SB-Prye-Tim-Crfe	342-(DM-WM)-6-SB-Prye-Tim	Kentucky Bluegrass	Poa pratensis	16.0	1	50	Grass	I	N		6	DM-WM	SB-Prye-Tim-Crfesc-KB-RC
342	(DM-WM)-6-SB-Prye-Tim-Crfe	342-(DM-WM)-6-SB-Prye-Tim	Red Clover	Trifolium pratense	48.0	3	18	Legume	I	N		6	DM-WM	SB-Prye-Tim-Crfesc-KB-RC
342	(M)-7-SB-KB-Crfesc-Btrefoil	342-(M)-7-SB-KB-Crfesc-Btre	Smooth Bromegrass	Bromus inermis	112.0	7	21	Grass	I	N		7	M	SB-KB-Crfesc-Btrefoil
342	(M)-7-SB-KB-Crfesc-Btrefoil	342-(M)-7-SB-KB-Crfesc-Btre	Kentucky Bluegrass	Poa pratensis	48.0	3	150	Grass	I	N		7	M	SB-KB-Crfesc-Btrefoil
342	(M)-7-SB-KB-Crfesc-Btrefoil	342-(M)-7-SB-KB-Crfesc-Btre	Creeping Red Fescue	Festuca rubra	32.0	2	16	Grass	I	N		7	M	SB-KB-Crfesc-Btrefoil
342	(M)-7-SB-KB-Crfesc-Btrefoil	342-(M)-7-SB-KB-Crfesc-Btre	Birdsfoot Trefoil	Lotus corniculatus	32.0	2	18	Legume	I	N		7	M	SB-KB-Crfesc-Btrefoil
342	(M)-8-SB-Crfesc-KB	342-(M)-8-SB-Crfesc-KB	Smooth Bromegrass	Bromus inermis	240.0	15	45	Grass	I	N		8	M	SB-Crfesc-KB
342	(M)-8-SB-Crfesc-KB	342-(M)-8-SB-Crfesc-KB	Creeping Red Fescue	Festuca rubra	32.0	2	16	Grass	I	N		8	M	SB-Crfesc-KB
342	(M)-8-SB-Crfesc-KB	342-(M)-8-SB-Crfesc-KB	Kentucky Bluegrass	Poa pratensis	32.0	2	100	Grass	I	N		8	M	SB-Crfesc-KB
342	(M)-9-Prye-Crfesc-KB	342-(M)-9-Prye-Crfesc-KB	Perennial Ryegrass	Lolium perenne	160.0	10	50	Grass	I	N		9	M	Prye-Crfesc-KB
342	(M)-9-Prye-Crfesc-KB	342-(M)-9-Prye-Crfesc-KB	Creeping Red Fescue	Festuca rubra	64.0	4	32	Grass	I	N		9	M	Prye-Crfesc-KB
342	(M)-9-Prye-Crfesc-KB	342-(M)-9-Prye-Crfesc-KB	Kentucky Bluegrass	Poa pratensis	48.0	3	150	Grass	I	N		9	M	Prye-Crfesc-KB
342	(M)-10-SB-Prye-Tim-RC	342-(M)-10-SB-Prye-Tim-RC	Smooth Bromegrass	Bromus inermis	224.0	14	42	Grass	I	N		10	M	SB-Prye-Tim-RC
342	(M)-10-SB-Prye-Tim-RC	342-(M)-10-SB-Prye-Tim-RC	Perennial Ryegrass	Lolium perenne	64.0	4	20	Grass	I	N		10	M	SB-Prye-Tim-RC
342	(M)-10-SB-Prye-Tim-RC	342-(M)-10-SB-Prye-Tim-RC	Timothy	Phleum pratense	48.0	3	84	Grass	I	N		10	M	SB-Prye-Tim-RC
342	(M)-10-SB-Prye-Tim-RC	342-(M)-10-SB-Prye-Tim-RC	Red Clover	Trifolium pratense	48.0	3	18	Legume	I	N		10	M	SB-Prye-Tim-RC
342	(M)-11-SB-Crfesc	342-(M)-11-SB-Crfesc	Smooth Bromegrass	Bromus inermis	512.0	32	96	Grass	I	N		11	M	SB-Crfesc
342	(M)-11-SB-Crfesc	342-(M)-11-SB-Crfesc	Creeping Red Fescue	Festuca rubra	128.0	8	64	Grass	I	N		11	M	SB-Crfesc
342	(M)-12-KB-Crfesc	342-(M)-12-KB-Crfesc	Kentucky Bluegrass	Poa pratensis	64.0	4	200	Grass	I	N		12	M	KB-Crfesc
342	(M)-12-KB-Crfesc	342-(M)-12-KB-Crfesc	Creeping Red Fescue	Festuca rubra	48.0	3	24	Grass	I	N		12	M	KB-Crfesc
342	(M)-13-SB-Tim-RC	342-(M)-13-SB-Tim-RC	Smooth Bromegrass	Bromus inermis	224.0	14	43	Grass	I	N		13	M	SB-Tim-RC
342	(M)-13-SB-Tim-RC	342-(M)-13-SB-Tim-RC	Timothy	Phleum pratense	64.0	4	112	Grass	I	N		13	M	SB-Tim-RC
342	(M)-13-SB-Tim-RC	342-(M)-13-SB-Tim-RC	Red Clover	Trifolium pratense	48.0	3	18	Legume	I	N		13	M	SB-Tim-RC
342	(M)-14-SB-Tim-Aclover	342-(M)-14-SB-Tim-Aclover	Smooth Bromegrass	Bromus inermis	240.0	15	43	Grass	I	N		14	M	SB-Tim-Aclover
342	(M)-14-SB-Tim-Aclover	342-(M)-14-SB-Tim-Aclover	Timothy	Phleum pratense	56.0	3.5	112	Grass	I	N		14	M	SB-Tim-Aclover
342	(M)-14-SB-Tim-Aclover	342-(M)-14-SB-Tim-Aclover	Alsike Clover	Trifolium hybridum	32.0	2	32	Legume	I	N		14	M	SB-Tim-Aclover
342	(M)-15-SB-Tim-Btrefoil	342-(M)-15-SB-Tim-Btrefoil	Smooth Bromegrass	Bromus inermis	240.0	15	43	Grass	I	N		15	M	SB-Tim-Btrefoil
342	(M)-15-SB-Tim-Btrefoil	342-(M)-15-SB-Tim-Btrefoil	Timothy	Phleum pratense	56.0	3.5	112	Grass	I	N		15	M	SB-Tim-Btrefoil
342	(M)-15-SB-Tim-Btrefoil	342-(M)-15-SB-Tim-Btrefoil	Birdsfoot Trefoil	Lotus corniculatus	48.0	3	26	Legume	I	N		15	M	SB-Tim-Btrefoil
342	(WM)-16-SB-Tfesc-Prye-Tim-K	342-(WM)-16-SB-Tfesc-Prye-	Smooth Bromegrass	Bromus inermis	96.0	6	18	Grass	I	N		16	WM	SB-Tfesc-Prye-Tim-KB-RC
342	(WM)-16-SB-Tfesc-Prye-Tim-K	342-(WM)-16-SB-Tfesc-Prye-	Tall Fescue	Schedonorus arundinaceus	80.0	5	25	Grass	I	N		16	WM	SB-Tfesc-Prye-Tim-KB-RC
342	(WM)-16-SB-Tfesc-Prye-Tim-K	342-(WM)-16-SB-Tfesc-Prye-	Perennial Ryegrass	Lolium perenne	48.0	3	15	Grass	I	N		16	WM	SB-Tfesc-Prye-Tim-KB-RC
342	(WM)-16-SB-Tfesc-Prye-Tim-K	342-(WM)-16-SB-Tfesc-Prye-	Timothy	Phleum pratense	48.0	3	84	Grass	I	N		16	WM	SB-Tfesc-Prye-Tim-KB-RC
342	(WM)-16-SB-Tfesc-Prye-Tim-K	342-(WM)-16-SB-Tfesc-Prye-	Kentucky Bluegrass	Poa pratensis	32.0	2	100	Grass	I	N		16	WM	SB-Tfesc-Prye-Tim-KB-RC
342	(WM)-16-SB-Tfesc-Prye-Tim-K	342-(WM)-16-SB-Tfesc-Prye-	Red Clover	Trifolium pratense	48.0	3	18	Legume	I	N		16	WM	SB-Tfesc-Prye-Tim-KB-RC
342	(WM)-17-Rtop-Tim-RC	342-(WM)-17-Rtop-Tim-RC	Redtop	Agrostis gigantea	16.0	1	114	Grass	I	N		17	WM	Rtop-Tim-RC
342	(WM)-17-Rtop-Tim-RC	342-(WM)-17-Rtop-Tim-RC	Timothy	Phleum pratense	48.0	3	84	Grass	I	N		17	WM	Rtop-Tim-RC
342	(WM)-17-Rtop-Tim-RC	342-(WM)-17-Rtop-Tim-RC	Red Clover	Trifolium pratense	80.0	5	30	Legume	I	N		17	WM	Rtop-Tim-RC
342	(WM)-18-SB-Tim-Prye-KB-RC	342-(WM)-18-SB-Tim-Prye-K	Smooth Bromegrass	Bromus inermis	96.0	6	18	Grass	I	N		18	WM	SB-Tim-Prye-KB-RC
342	(WM)-18-SB-Tim-Prye-KB-RC	342-(WM)-18-SB-Tim-Prye-K	Timothy	Phleum pratense	48.0	3	84	Grass	I	N		18	WM	SB-Tim-Prye-KB-RC
342	(WM)-18-SB-Tim-Prye-KB-RC	342-(WM)-18-SB-Tim-Prye-K	Perennial Ryegrass	Lolium perenne	48.0	3	15	Grass	I	N		18	WM	SB-Tim-Prye-KB-RC
342	(WM)-18-SB-Tim-Prye-KB-RC	342-(WM)-18-SB-Tim-Prye-K	Kentucky Bluegrass	Poa pratensis	32.0	2	100	Grass	I	N		18	WM	SB-Tim-Prye-KB-RC
342	(WM)-18-SB-Tim-Prye-KB-RC	342-(WM)-18-SB-Tim-Prye-K	Red Clover	Trifolium pratense	48.0	3	18	Legume	I	N		18	WM	SB-Tim-Prye-KB-RC
342	(WM)-19-KB-Rtop-Tim-RC	342-(WM)-19-KB-Rtop-Tim-R	Kentucky Bluegrass	Poa pratensis	32.0	2	100	Grass	I	N		19	WM	KB-Rtop-Tim-RC
342	(WM)-19-KB-Rtop-Tim-RC	342-(WM)-19-KB-Rtop-Tim-R	Redtop	Agrostis gigantea	16.0	1	114	Grass	I	N		19	WM	KB-Rtop-Tim-RC
342	(WM)-19-KB-Rtop-Tim-RC	342-(WM)-19-KB-Rtop-Tim-R	Timothy	Phleum pratense	16.0	1	28	Grass	I	N		19	WM	KB-Rtop-Tim-RC
342	(WM)-19-KB-Rtop-Tim-RC	342-(WM)-19-KB-Rtop-Tim-R	Red Clover	Trifolium pratense	64.0	4	24	Legume	I	N		19	WM	KB-Rtop-Tim-RC
342	(W)-20-KB-Rtop-Aclover	342-(W)-20-KB-Rtop-Aclover	Kentucky Bluegrass	Poa pratensis	32.0	2	100	Grass	I	N		20	W	KB-Rtop-Aclover
342	(W)-20-KB-Rtop-Aclover	342-(W)-20-KB-Rtop-Aclover	Redtop	Agrostis gigantea	32.0	2	228	Grass	I	N		20	W	KB-Rtop-Aclover
342	(W)-20-KB-Rtop-Aclover	342-(W)-20-KB-Rtop-Aclover	Alsike Clover	Trifolium hybridum	32.0	2	32	Legume	I	N		20	W	KB-Rtop-Aclover
342	(W)-21-Rtop-Aclover	342-(W)-21-Rtop-Aclover	Redtop	Agrostis gigantea	48.0	3	342	Grass	I	N		21	W	Rtop-Aclover
342	(W)-21-Rtop-Aclover	342-(W)-21-Rtop-Aclover	Alsike Clover	Trifolium hybridum	48.0	3	48	Legume	I	N		21	W	Rtop-Aclover

STANDARD 512 MIXES

criteria: H-1

STD	Mix #	std-mix	Common Name	Scientific Name
		LEAVE THIS ROW AS IS		
		LEAVE THIS ROW AS IS		
512	(FSG 1)-H1-RC-Tfesc-Tim	512-(FSG 1)-H1-RC-Tfesc-Tim	Red Clover	Trifolium pratense
512	(FSG 1)-H1-RC-Tfesc-Tim	512-(FSG 1)-H1-RC-Tfesc-Tim	Tall Fescue	Schedonorus arundinaceus
512	(FSG 1)-H1-RC-Tfesc-Tim	512-(FSG 1)-H1-RC-Tfesc-Tim	Timothy	Phleum pratense
512	(FSG 2)-H2-Alf	512-(FSG 2)-H2-Alf	Alfalfa	Medicago sativa
512	(FSG 2,3,5,6)-H3-Alf-SB	512-(FSG 2,3,5,6)-H3-Alf-SB	Alfalfa	Medicago sativa
512	(FSG 2,3,5,6)-H3-Alf-SB	512-(FSG 2,3,5,6)-H3-Alf-SB	Smooth Bromegrass	Bromus inermis
512	(FSG 4,7)-H4-Aclover-Tfesc-Tim	512-(FSG 4,7)-H4-Aclover-Tfesc-Tim	Alsike Clover	Trifolium hybridum
512	(FSG 4,7)-H4-Aclover-Tfesc-Tim	512-(FSG 4,7)-H4-Aclover-Tfesc-Tim	Tall Fescue	Schedonorus arundinaceus
512	(FSG 4,7)-H4-Aclover-Tfesc-Tim	512-(FSG 4,7)-H4-Aclover-Tfesc-Tim	Timothy	Phleum pratense
512	(FSG 8)-H5-Alf-Tim	512-(FSG 8)-H5-Alf-Tim	Alfalfa	Medicago sativa
512	(FSG 8)-H5-Alf-Tim	512-(FSG 8)-H5-Alf-Tim	Timothy	Phleum pratense
512	(FSG 9)-H6-Alf-SB-Tim	512-(FSG 9)-H6-Alf-SB-Tim	Alfalfa	Medicago sativa
512	(FSG 9)-H6-Alf-SB-Tim	512-(FSG 9)-H6-Alf-SB-Tim	Smooth Bromegrass	Bromus inermis
512	(FSG 9)-H6-Alf-SB-Tim	512-(FSG 9)-H6-Alf-SB-Tim	Timothy	Phleum pratense
512	(FSG 1-9)-H7-Switch	512-(FSG 1-9)-H7-Switch	Switchgrass	Panicum virgatum
512	(FSG 1-9)-H8-BB	512-(FSG 1-9)-H8-BB	Big Bluestem	Andropogon gerardii
512	(FSG 1-9)-H9-Indian	512-(FSG 1-9)-H9-Indian	Indiangrass	Sorghastrum nutans
512	(FSG 1)-PP1-Aclover-Mfesc	512-(FSG 1)-PP1-Aclover-Mfesc	Alsike Clover	Trifolium hybridum
512	(FSG 1)-PP1-Aclover-Mfesc	512-(FSG 1)-PP1-Aclover-Mfesc	Meadow Fescue	Schedonorus pratensis
512	(FSG 1)-PP1A-Aclover-Orc	512-(FSG 1)-PP1A-Aclover-Orc	Alsike Clover	Trifolium hybridum
512	(FSG 1)-PP1A-Aclover-Orc	512-(FSG 1)-PP1A-Aclover-Orc	Orchardgrass	Dactylis glomerata L.
512	(FSG 1)-PP1B-Aclover-Tim	512-(FSG 1)-PP1B-Aclover-Tim	Alsike Clover	Trifolium hybridum
512	(FSG 1)-PP1B-Aclover-Tim	512-(FSG 1)-PP1B-Aclover-Tim	Timothy	Phleum pratense
512	(FSG 2-3)-PP2-Alf-SB-Orc	512-(FSG 2-3)-PP2-Alf-SB-Orc	Alfalfa	Medicago sativa
512	(FSG 2-3)-PP2-Alf-SB-Orc	512-(FSG 2-3)-PP2-Alf-SB-Orc	Smooth Bromegrass	Bromus inermis
512	(FSG 2-3)-PP2-Alf-SB-Orc	512-(FSG 2-3)-PP2-Alf-SB-Orc	Orchardgrass	Dactylis glomerata L.
512	(FSG 4)-PP4-Aclover-Mfesc-Tim	512-(FSG 4)-PP4-Aclover-Mfesc-Tim	Alsike Clover	Trifolium hybridum
512	(FSG 4)-PP4-Aclover-Mfesc-Tim	512-(FSG 4)-PP4-Aclover-Mfesc-Tim	Meadow Fescue	Schedonorus pratensis
512	(FSG 4)-PP4-Aclover-Mfesc-Tim	512-(FSG 4)-PP4-Aclover-Mfesc-Tim	Timothy	Phleum pratense
512	(FSG 4)-PP4B-Btrefoil-Mfesc-Tim	512-(FSG 4)-PP4B-Btrefoil-Mfesc-Tim	Birdsfoot Trefoil	Lotus corniculatus
512	(FSG 4)-PP4B-Btrefoil-Mfesc-Tim	512-(FSG 4)-PP4B-Btrefoil-Mfesc-Tim	Meadow Fescue	Schedonorus pratensis
512	(FSG 4)-PP4B-Btrefoil-Mfesc-Tim	512-(FSG 4)-PP4B-Btrefoil-Mfesc-Tim	Timothy	Phleum pratense
512	(FSG 5)-PP5-RC-LadC-Orc-Mfesc	512-(FSG 5)-PP5-RC-LadC-Orc-Mfesc	Red Clover	Trifolium pratense
512	(FSG 5)-PP5-RC-LadC-Orc-Mfesc	512-(FSG 5)-PP5-RC-LadC-Orc-Mfesc	White Ladino Clover	Trifolium repens
512	(FSG 5)-PP5-RC-LadC-Orc-Mfesc	512-(FSG 5)-PP5-RC-LadC-Orc-Mfesc	Orchardgrass	Dactylis glomerata L.
512	(FSG 5)-PP5-RC-LadC-Orc-Mfesc	512-(FSG 5)-PP5-RC-LadC-Orc-Mfesc	Meadow Fescue	Schedonorus pratensis
512	(FSG 5)-PP5B-RC-LadC-Festu-Mfesc	512-(FSG 5)-PP5B-RC-LadC-Festu-Mfesc	Red Clover	Trifolium pratense
512	(FSG 5)-PP5B-RC-LadC-Festu-Mfesc	512-(FSG 5)-PP5B-RC-LadC-Festu-Mfesc	White Ladino Clover	Trifolium repens
512	(FSG 5)-PP5B-RC-LadC-Festu-Mfesc	512-(FSG 5)-PP5B-RC-LadC-Festu-Mfesc	Festulolium	Festuca x Lolium
512	(FSG 5)-PP5B-RC-LadC-Festu-Mfesc	512-(FSG 5)-PP5B-RC-LadC-Festu-Mfesc	Meadow Fescue	Schedonorus pratensis
512	(FSG 6)-PP6-RC-Orc-SB	512-(FSG 6)-PP6-RC-Orc-SB	Red Clover	Trifolium pratense
512	(FSG 6)-PP6-RC-Orc-SB	512-(FSG 6)-PP6-RC-Orc-SB	Orchardgrass	Dactylis glomerata L.
512	(FSG 6)-PP6-RC-Orc-SB	512-(FSG 6)-PP6-RC-Orc-SB	Smooth Bromegrass	Bromus inermis
512	(FSG 7)-PP7-Aclover-Mfesc-Tim-Rtop	512-(FSG 7)-PP7-Aclover-Mfesc-Tim-Rtop	Alsike Clover	Trifolium hybridum
512	(FSG 7)-PP7-Aclover-Mfesc-Tim-Rtop	512-(FSG 7)-PP7-Aclover-Mfesc-Tim-Rtop	Meadow Fescue	Schedonorus pratensis
512	(FSG 7)-PP7-Aclover-Mfesc-Tim-Rtop	512-(FSG 7)-PP7-Aclover-Mfesc-Tim-Rtop	Timothy	Phleum pratense
512	(FSG 7)-PP7-Aclover-Mfesc-Tim-Rtop	512-(FSG 7)-PP7-Aclover-Mfesc-Tim-Rtop	Redtop	Agrostis gigantea
512	(FSG 7)-PP7B-Btrefoil-Mfesc-Tim-Rtop	512-(FSG 7)-PP7B-Btrefoil-Mfesc-Tim-Rtop	Birdsfoot Trefoil	Lotus corniculatus
512	(FSG 7)-PP7B-Btrefoil-Mfesc-Tim-Rtop	512-(FSG 7)-PP7B-Btrefoil-Mfesc-Tim-Rtop	Meadow Fescue	Schedonorus pratensis
512	(FSG 7)-PP7B-Btrefoil-Mfesc-Tim-Rtop	512-(FSG 7)-PP7B-Btrefoil-Mfesc-Tim-Rtop	Timothy	Phleum pratense
512	(FSG 7)-PP7B-Btrefoil-Mfesc-Tim-Rtop	512-(FSG 7)-PP7B-Btrefoil-Mfesc-Tim-Rtop	Redtop	Agrostis gigantea
512	(FSG 8)-PP8-LadC-Orc-Mfesc	512-(FSG 8)-PP8-LadC-Orc-Mfesc	White Ladino Clover	Trifolium repens
512	(FSG 8)-PP8-LadC-Orc-Mfesc	512-(FSG 8)-PP8-LadC-Orc-Mfesc	Orchardgrass	Dactylis glomerata L.
512	(FSG 8)-PP8-LadC-Orc-Mfesc	512-(FSG 8)-PP8-LadC-Orc-Mfesc	Meadow Fescue	Schedonorus pratensis
512	(FSG 8)-PP8B-LadC-Festu-Mfesc	512-(FSG 8)-PP8B-LadC-Festu-Mfesc	White Ladino Clover	Trifolium repens
512	(FSG 8)-PP8B-LadC-Festu-Mfesc	512-(FSG 8)-PP8B-LadC-Festu-Mfesc	Festulolium	Festuca x Lolium
512	(FSG 8)-PP8B-LadC-Festu-Mfesc	512-(FSG 8)-PP8B-LadC-Festu-Mfesc	Meadow Fescue	Schedonorus pratensis
512	(FSG 9)-PP9-RC-Orc-Mfesc	512-(FSG 9)-PP9-RC-Orc-Mfesc	Red Clover	Trifolium pratense
512	(FSG 9)-PP9-RC-Orc-Mfesc	512-(FSG 9)-PP9-RC-Orc-Mfesc	Orchardgrass	Dactylis glomerata L.
512	(FSG 9)-PP9-RC-Orc-Mfesc	512-(FSG 9)-PP9-RC-Orc-Mfesc	Meadow Fescue	Schedonorus pratensis
512	(FSG 1,4,7)-PHS1-KB-Mfesc-LadC	512-(FSG 1,4,7)-PHS1-KB-Mfesc-LadC	Kentucky Bluegrass	Poa pratensis
512	(FSG 1,4,7)-PHS1-KB-Mfesc-LadC	512-(FSG 1,4,7)-PHS1-KB-Mfesc-LadC	Meadow Fescue	Schedonorus pratensis
512	(FSG 1,4,7)-PHS1-KB-Mfesc-LadC	512-(FSG 1,4,7)-PHS1-KB-Mfesc-LadC	White Ladino Clover	Trifolium repens
512	(FSG 1,4,7)-PHS1A-KB-Mfesc-Btrefoil	512-(FSG 1,4,7)-PHS1A-KB-Mfesc-Btrefoil	Kentucky Bluegrass	Poa pratensis
512	(FSG 1,4,7)-PHS1A-KB-Mfesc-Btrefoil	512-(FSG 1,4,7)-PHS1A-KB-Mfesc-Btrefoil	Meadow Fescue	Schedonorus pratensis
512	(FSG 1,4,7)-PHS1A-KB-Mfesc-Btrefoil	512-(FSG 1,4,7)-PHS1A-KB-Mfesc-Btrefoil	Birdsfoot Trefoil	Lotus corniculatus
512	(FSG 5-8)-PHS2-KB-Festu-LadC	512-(FSG 5-8)-PHS2-KB-Festu-LadC	Kentucky Bluegrass	Poa pratensis

512	(FSG 5-8)-PHS2-KB-Festu-LadC	512-(FSG 5-8)-PHS2-KB-Festu-LadC	Festulolium	Festuca x Lolium
512	(FSG 5-8)-PHS2-KB-Festu-LadC	512-(FSG 5-8)-PHS2-KB-Festu-LadC	White Ladino Clover	Trifolium repens
512	(FSG 5-8)-PHS2A-KB-Prye-LadC	512-(FSG 5-8)-PHS2A-KB-Prye-LadC	Kentucky Bluegrass	Poa pratensis
512	(FSG 5-8)-PHS2A-KB-Prye-LadC	512-(FSG 5-8)-PHS2A-KB-Prye-LadC	Perennial Ryegrass	Lolium perenne
512	(FSG 5-8)-PHS2A-KB-Prye-LadC	512-(FSG 5-8)-PHS2A-KB-Prye-LadC	White Ladino Clover	Trifolium repens
512	(FSG 2-3)-PHS3-Alf-Orc	512-(FSG 2-3)-PHS3-Alf-Orc	Alfalfa	Medicago sativa
512	(FSG 2-3)-PHS3-Alf-Orc	512-(FSG 2-3)-PHS3-Alf-Orc	Orchardgrass	Dactylis glomerata L.

REVISION DATE: 12/14/2012

PLS (oz./A)	PLS (lbs./A)	Seeds/Square Foot	Type	Intro / Native	Poll. (Y/N)		Mix No.	FSG-MIX #	Mix Components	FSG
				I	Y					
				N	Y					
96.0	6	36	Legume	I	N		H1	FSG 1	RC-Tfesc-Tim	1
96.0	6	32	Grass	I	N		H1	FSG 1	RC-Tfesc-Tim	1
16.0	1	28	Grass	I	N		H1	FSG 1	RC-Tfesc-Tim	1
192.0	12	60	Legume	I	N		H2	FSG 2	Alf	2
160.0	10	50	Legume	I	N		H3	FSG 2,3,5,6	Alf-SB	2,3,5,6
64.0	4	12	Grass	I	N		H3	FSG 2,3,5,6	Alf-SB	2,3,5,6
48.0	3	48	Legume	I	N		H4	FSG 4,7	Aclover-Tfesc-Tim	4,7
96.0	6	32	Grass	I	N		H4	FSG 4,7	Aclover-Tfesc-Tim	4,7
16.0	1	28	Grass	I	N		H4	FSG 4,7	Aclover-Tfesc-Tim	4,7
128.0	8	40	Legume	I	N		H5	FSG 8	Alf-Tim	8
32.0	2	56	Grass	I	N		H5	FSG 8	Alf-Tim	8
128.0	8	40	Legume	I	N		H6	FSG 9	Alf-SB-Tim	9
64.0	4	12	Grass	I	N		H6	FSG 9	Alf-SB-Tim	9
16.0	1	28	Grass	I	N		H6	FSG 9	Alf-SB-Tim	9
112.0	7	63	Grass	N	N		H7	FSG 1-9	Switch	1-9
176.0	11	42	Grass	N	N		H8	FSG 1-9	BB	1-9
160.0	10	44	Grass	N	N		H9	FSG 1-9	Indian	1-9
32.0	2	32	Legume	I	N		PP1	FSG 1	Aclover-Mfesc	1
96.0	6	30	Grass	I	N		PP1	FSG 1	Aclover-Mfesc	1
32.0	2	32	Legume	I	N		PP1A	FSG 1	Aclover-Orc	1
48.0	3	48	Grass	I	N		PP1A	FSG 1	Aclover-Orc	1
32.0	2	32	Legume	I	N		PP1B	FSG 1	Aclover-Tim	1
24.0	1.5	42	Grass	I	N		PP1B	FSG 1	Aclover-Tim	1
96.0	6	30	Legume	I	N		PP2	FSG 2-3	Alf-SB-Orc	2-3
64.0	4	12	Grass	I	N		PP2	FSG 2-3	Alf-SB-Orc	2-3
64.0	4	64	Grass	I	N		PP2	FSG 2-3	Alf-SB-Orc	2-3
32.0	2	32	Legume	I	N		PP4	FSG 4	Aclover-Mfesc-Tim	4
96.0	6	30	Grass	I	N		PP4	FSG 4	Aclover-Mfesc-Tim	4
16.0	1	28	Grass	I	N		PP4	FSG 4	Aclover-Mfesc-Tim	4
48.0	3	26	Legume	I	N		PP4B	FSG 4	Btrefoil-Mfesc-Tim	4
96.0	6	30	Grass	I	N		PP4B	FSG 4	Btrefoil-Mfesc-Tim	4
16.0	1	28	Grass	I	N		PP4B	FSG 4	Btrefoil-Mfesc-Tim	4
80.0	5	30	Legume	I	N		PP5	FSG 5	RC-LadC-Orc-Mfesc	5
16.0	1	20	Legume	I	N		PP5	FSG 5	RC-LadC-Orc-Mfesc	5
48.0	3	48	Grass	I	N		PP5	FSG 5	RC-LadC-Orc-Mfesc	5
96.0	6	30	Grass	I	N		PP5	FSG 5	RC-LadC-Orc-Mfesc	5
80.0	5	30	Legume	I	N		PP5B	FSG 5	RC-LadC-Festu-Mfesc	5
16.0	1	20	Legume	I	N		PP5B	FSG 5	RC-LadC-Festu-Mfesc	5
112.0	7	36	Grass	I	N		PP5B	FSG 5	RC-LadC-Festu-Mfesc	5
96.0	6	30	Grass	I	N		PP5B	FSG 5	RC-LadC-Festu-Mfesc	5
80.0	5	30	Legume	I	N		PP6	FSG 6	RC-Orc-SB	6
64.0	4	64	Grass	I	N		PP6	FSG 6	RC-Orc-SB	6
64.0	4	12	Grass	I	N		PP6	FSG 6	RC-Orc-SB	6
32.0	2	32	Legume	I	N		PP7	FSG 7	Aclover-Mfesc-Tim-Rtop	7
96.0	6	30	Grass	I	N		PP7	FSG 7	Aclover-Mfesc-Tim-Rtop	7
16.0	1	28	Grass	I	N		PP7	FSG 7	Aclover-Mfesc-Tim-Rtop	7
16.0	1	114	Grass	I	N		PP7	FSG 7	Aclover-Mfesc-Tim-Rtop	7
48.0	3	26	Legume	I	N		PP7B	FSG 7	Btrefoil-Mfesc-Tim-Rtop	7
96.0	6	30	Grass	I	N		PP7B	FSG 7	Btrefoil-Mfesc-Tim-Rtop	7
16.0	1	28	Grass	I	N		PP7B	FSG 7	Btrefoil-Mfesc-Tim-Rtop	7
16.0	1	114	Grass	I	N		PP7B	FSG 7	Btrefoil-Mfesc-Tim-Rtop	7
16.0	1	20	Legume	I	N		PP8	FSG 8	LadC-Orc-Mfesc	8
48.0	3	48	Grass	I	N		PP8	FSG 8	LadC-Orc-Mfesc	8
96.0	6	30	Grass	I	N		PP8	FSG 8	LadC-Orc-Mfesc	8
16.0	1	20	Legume	I	N		PP8B	FSG 8	LadC-Festu-Mfesc	8
112.0	7	36	Grass	I	N		PP8B	FSG 8	LadC-Festu-Mfesc	8
96.0	6	30	Grass	I	N		PP8B	FSG 8	LadC-Festu-Mfesc	8
80.0	5	30	Legume	I	N		PP9	FSG 9	RC-Orc-Mfesc	9
48.0	3	48	Grass	I	N		PP9	FSG 9	RC-Orc-Mfesc	9
96.0	6	30	Grass	I	N		PP9	FSG 9	RC-Orc-Mfesc	9
64.0	4	200	Grass	I	N		PHS1	FSG 1,4,7	KB-Mfesc-LadC	1,4,7
64.0	4	20	Grass	I	N		PHS1	FSG 1,4,7	KB-Mfesc-LadC	1,4,7
16.0	1	20	Legume	I	N		PHS1	FSG 1,4,7	KB-Mfesc-LadC	1,4,7
64.0	4	200	Grass	I	N		PHS1A	FSG 1,4,7	KB-Mfesc-Btrefoil	1,4,7
64.0	4	20	Grass	I	N		PHS1A	FSG 1,4,7	KB-Mfesc-Btrefoil	1,4,7
48.0	3	26	Legume	I	N		PHS1A	FSG 1,4,7	KB-Mfesc-Btrefoil	1,4,7
32.0	2	100	Grass	I	N		PHS2	FSG 5-8	KB-Festu-LadC	5-8

112.0	7	35	Grass	I	N		PHS2	FSG 5-8	KB-Festu-LadC	5-8
16.0	1	20	Legume	I	N		PHS2	FSG 5-8	KB-Festu-LadC	5-8
32.0	2	100	Grass	I	N		PHS2A	FSG 5-8	KB-Prye-LadC	5-8
112.0	7	35	Grass	I	N		PHS2A	FSG 5-8	KB-Prye-LadC	5-8
16.0	1	20	Legume	I	N		PHS2A	FSG 5-8	KB-Prye-LadC	5-8
96.0	6	30	Legume	I	N		PHS3	FSG 2-3	Alf-Orc	2-3
48.0	3	48	Grass	I	N		PHS3	FSG 2-3	Alf-Orc	2-3

CRP MIXES

REVISION DATE: 11/30/2020

criteria: 0

STD	Mix #	std-mix	Common Name	Scientific Name	PLS (oz./A)	PLS (lbs./A)	Seeds/Square Foot	Type	Intro / Native	Poll. (Y/N)	Mix No.	MR	Mix Components
		LEAVE THIS ROW AS IS							I	Y			
		LEAVE THIS ROW AS IS							N	Y			
1	CP1-1-Alf-SB-Tim	1-CP1-1-Alf-SB-Tim	Alfalfa	Medicago sativa	96.00	6		Legume	I	N	CP1-1		Alf-SB-Tim
1	CP1-1-Alf-SB-Tim	1-CP1-1-Alf-SB-Tim	Smooth Bromegrass	Bromus inermis	48.00	3		Grass	I	N	CP1-1		Alf-SB-Tim
1	CP1-1-Alf-SB-Tim	1-CP1-1-Alf-SB-Tim	Timothy	Phleum pratense	32.00	2		Grass	I	N	CP1-1		Alf-SB-Tim
1	CP1-2-RC-Orc-Tim	1-CP1-2-RC-Orc-Tim	Red Clover	Trifolium pratense	80.00	5		Legume	I	N	CP1-2		RC-Orc-Tim
1	CP1-2-RC-Orc-Tim	1-CP1-2-RC-Orc-Tim	Orchardgrass	Dactylis glomerata L.	48.00	3		Grass	I	N	CP1-2		RC-Orc-Tim
1	CP1-2-RC-Orc-Tim	1-CP1-2-RC-Orc-Tim	Timothy	Phleum pratense	32.00	2		Grass	I	N	CP1-2		RC-Orc-Tim
1	CP1-3-Alf-Orc-Tim	1-CP1-3-Alf-Orc-Tim	Alfalfa	Medicago sativa	96.00	6		Legume	I	N	CP1-3		Alf-Orc-Tim
1	CP1-3-Alf-Orc-Tim	1-CP1-3-Alf-Orc-Tim	Orchardgrass	Dactylis glomerata L.	48.00	3		Grass	I	N	CP1-3		Alf-Orc-Tim
1	CP1-3-Alf-Orc-Tim	1-CP1-3-Alf-Orc-Tim	Timothy	Phleum pratense	32.00	2		Grass	I	N	CP1-3		Alf-Orc-Tim
1	CP1-4-RC-SB-Tim	1-CP1-4-RC-SB-Tim	Red Clover	Trifolium pratense	80.00	5		Legume	I	N	CP1-4		RC-SB-Tim
1	CP1-4-RC-SB-Tim	1-CP1-4-RC-SB-Tim	Smooth Bromegrass	Bromus inermis	48.00	3		Grass	I	N	CP1-4		RC-SB-Tim
1	CP1-4-RC-SB-Tim	1-CP1-4-RC-SB-Tim	Timothy	Phleum pratense	32.00	2		Grass	I	N	CP1-4		RC-SB-Tim
1	CP1-5-RC-SB-Tim-Orc	1-CP1-5-RC-SB-Tim-Orc	Red Clover	Trifolium pratense	80.00	5		Legume	I	N	CP1-5		RC-SB-Tim-Orc
1	CP1-5-RC-SB-Tim-Orc	1-CP1-5-RC-SB-Tim-Orc	Smooth Bromegrass	Bromus inermis	32.00	2		Grass	I	N	CP1-5		RC-SB-Tim-Orc
1	CP1-5-RC-SB-Tim-Orc	1-CP1-5-RC-SB-Tim-Orc	Timothy	Phleum pratense	32.00	2		Grass	I	N	CP1-5		RC-SB-Tim-Orc
1	CP1-5-RC-SB-Tim-Orc	1-CP1-5-RC-SB-Tim-Orc	Orchardgrass	Dactylis glomerata L.	16.00	1		Grass	I	N	CP1-5		RC-SB-Tim-Orc
1	CP1-6-RC-Tim-Orc-Rtop-LadC	1-CP1-6-RC-Tim-Orc-Rtop-LadC	Red Clover	Trifolium pratense	80.00	5		Legume	I	N	CP1-6		RC-Tim-Orc-Rtop-LadC
1	CP1-6-RC-Tim-Orc-Rtop-LadC	1-CP1-6-RC-Tim-Orc-Rtop-LadC	Timothy	Phleum pratense	32.00	2		Grass	I	N	CP1-6		RC-Tim-Orc-Rtop-LadC
1	CP1-6-RC-Tim-Orc-Rtop-LadC	1-CP1-6-RC-Tim-Orc-Rtop-LadC	Orchardgrass	Dactylis glomerata L.	16.00	1		Grass	I	N	CP1-6		RC-Tim-Orc-Rtop-LadC
1	CP1-6-RC-Tim-Orc-Rtop-LadC	1-CP1-6-RC-Tim-Orc-Rtop-LadC	Redtop	Agrostis gigantea	16.00	1		Grass	I	N	CP1-6		RC-Tim-Orc-Rtop-LadC
1	CP1-6-RC-Tim-Orc-Rtop-LadC	1-CP1-6-RC-Tim-Orc-Rtop-LadC	White Ladino Clover	Trifolium repens	8.00	0.5		Legume	I	N	CP1-6		RC-Tim-Orc-Rtop-LadC
1	CP1-7-Alf-Rtop-Tim-Orc	1-CP1-7-Alf-Rtop-Tim-Orc	Alfalfa	Medicago sativa	96.00	6		Legume	I	N	CP1-7		Alf-Rtop-Tim-Orc
1	CP1-7-Alf-Rtop-Tim-Orc	1-CP1-7-Alf-Rtop-Tim-Orc	Redtop	Agrostis gigantea	32.00	2		Grass	I	N	CP1-7		Alf-Rtop-Tim-Orc
1	CP1-7-Alf-Rtop-Tim-Orc	1-CP1-7-Alf-Rtop-Tim-Orc	Timothy	Phleum pratense	32.00	2		Grass	I	N	CP1-7		Alf-Rtop-Tim-Orc
1	CP1-7-Alf-Rtop-Tim-Orc	1-CP1-7-Alf-Rtop-Tim-Orc	Orchardgrass	Dactylis glomerata L.	16.00	1		Grass	I	N	CP1-7		Alf-Rtop-Tim-Orc
1	CP1-8-RC-KB-Orc-Rtop	1-CP1-8-RC-KB-Orc-Rtop	Red Clover	Trifolium pratense	80.00	5		Legume	I	N	CP1-8		RC-KB-Orc-Rtop
1	CP1-8-RC-KB-Orc-Rtop	1-CP1-8-RC-KB-Orc-Rtop	Kentucky Bluegrass	Poa pratensis	32.00	2		Grass	I	N	CP1-8		RC-KB-Orc-Rtop
1	CP1-8-RC-KB-Orc-Rtop	1-CP1-8-RC-KB-Orc-Rtop	Orchardgrass	Dactylis glomerata L.	16.00	1		Grass	I	N	CP1-8		RC-KB-Orc-Rtop
1	CP1-8-RC-KB-Orc-Rtop	1-CP1-8-RC-KB-Orc-Rtop	Redtop	Agrostis gigantea	16.00	1		Grass	I	N	CP1-8		RC-KB-Orc-Rtop
2	CP2_1-BB-Switch-Cmilkvetch-Besus-Ycone	2-CP2_1-BB-Switch-Cmilkvetch-Besus-Ycone	Big Bluestem	Andropogon gerardii	48.00	3		Grass	N	N	CP2_1		BB-Switch-Cmilkvetch-Besus-Ycone
2	CP2_1-BB-Switch-Cmilkvetch-Besus-Ycone	2-CP2_1-BB-Switch-Cmilkvetch-Besus-Ycone	Switchgrass	Panicum virgatum	16.00	1		Grass	N	N	CP2_1		BB-Switch-Cmilkvetch-Besus-Ycone
2	CP2_1-BB-Switch-Cmilkvetch-Besus-Ycone	2-CP2_1-BB-Switch-Cmilkvetch-Besus-Ycone	Canada Milkvetch	Astragalus canadensis	2.00	0.125		Legume	N	N	CP2_1		BB-Switch-Cmilkvetch-Besus-Ycone
2	CP2_1-BB-Switch-Cmilkvetch-Besus-Ycone	2-CP2_1-BB-Switch-Cmilkvetch-Besus-Ycone	Black-eyed Susan	Rudbeckia hirta	1.00	0.0625		Forb	N	N	CP2_1		BB-Switch-Cmilkvetch-Besus-Ycone
2	CP2_1-BB-Switch-Cmilkvetch-Besus-Ycone	2-CP2_1-BB-Switch-Cmilkvetch-Besus-Ycone	Yellow Coneflower	Ratibida pinnata	1.00	0.0625		Forb	N	N	CP2_1		BB-Switch-Cmilkvetch-Besus-Ycone
2	CP2_2-BB-Switch-Ttrefoil-Besus-Ycone	2-CP2_2-BB-Switch-Ttrefoil-Besus-Ycone	Big Bluestem	Andropogon gerardii	48.00	3		Grass	N	N	CP2_2		BB-Switch-Ttrefoil-Besus-Ycone
2	CP2_2-BB-Switch-Ttrefoil-Besus-Ycone	2-CP2_2-BB-Switch-Ttrefoil-Besus-Ycone	Switchgrass	Panicum virgatum	16.00	1		Grass	N	N	CP2_2		BB-Switch-Ttrefoil-Besus-Ycone
2	CP2_2-BB-Switch-Ttrefoil-Besus-Ycone	2-CP2_2-BB-Switch-Ttrefoil-Besus-Ycone	Showy Tick Trefoil	Desmodium canadense	6.00	0.375		Legume	N	N	CP2_2		BB-Switch-Ttrefoil-Besus-Ycone
2	CP2_2-BB-Switch-Ttrefoil-Besus-Ycone	2-CP2_2-BB-Switch-Ttrefoil-Besus-Ycone	Black-eyed Susan	Rudbeckia hirta	1.00	0.0625		Forb	N	N	CP2_2		BB-Switch-Ttrefoil-Besus-Ycone
2	CP2_2-BB-Switch-Ttrefoil-Besus-Ycone	2-CP2_2-BB-Switch-Ttrefoil-Besus-Ycone	Yellow Coneflower	Ratibida pinnata	1.00	0.0625		Forb	N	N	CP2_2		BB-Switch-Ttrefoil-Besus-Ycone
2	CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycon	2-CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-Be	Little Bluestem	Schizachyrium scoparium	24.00	1.5		Grass	N	N	CP2_3		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
2	CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycon	2-CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-Be	Sideoats Grama	Bouteloua curtipendula	16.00	1		Grass	N	N	CP2_3		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
2	CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycon	2-CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-Be	Big Bluestem	Andropogon gerardii	8.00	0.5		Grass	N	N	CP2_3		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
2	CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycon	2-CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-Be	Indiangrass	Sorghastrum nutans	8.00	0.5		Grass	N	N	CP2_3		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone

2	CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycon	2-CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-Be	Switchgrass	Panicum virgatum	8.00	0.5		Grass	N	N	CP2_3		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
2	CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycon	2-CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-Be	Purple Prairie Clover	Dalea purpurea	2.00	0.125		Legume	N	N	CP2_3		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
2	CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycon	2-CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-Be	Bergamot	Monarda fistulosa	1.00	0.0625		Forb	N	N	CP2_3		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
2	CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycon	2-CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-Be	Yellow Coneflower	Ratibida pinnata	1.00	0.0625		Forb	N	N	CP2_3		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
2	CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone	2-CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus-Y	Little Bluestem	Schizachyrium scoparium	20.00	1.25		Grass	N	N	CP2_4		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
2	CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone	2-CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus-Y	Canada Wildrye	Elymus canadensis	16.00	1		Grass	N	N	CP2_4		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
2	CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone	2-CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus-Y	Indiangrass	Sorghastrum nutans	16.00	1		Grass	N	N	CP2_4		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
2	CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone	2-CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus-Y	Big Bluestem	Andropogon gerardii	8.00	0.5		Grass	N	N	CP2_4		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
2	CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone	2-CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus-Y	Switchgrass	Panicum virgatum	8.00	0.5		Grass	N	N	CP2_4		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
2	CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone	2-CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus-Y	Bergamot	Monarda fistulosa	1.00	0.0625		Forb	N	N	CP2_4		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
2	CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone	2-CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus-Y	Black-eyed Susan	Rudbeckia hirta	1.00	0.0625		Forb	N	N	CP2_4		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
2	CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone	2-CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus-Y	Yellow Coneflower	Ratibida pinnata	1.00	0.0625		Forb	N	N	CP2_4		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
2	CP2_5-BB-Sgrama-Indian-PPclover-Sgrod-Ycone	2-CP2_5-BB-Sgrama-Indian-PPclover-Sgrod-Ycone	Big Bluestem	Andropogon gerardii	24.00	1.5		Grass	N	N	CP2_5		BB-Sgrama-Indian-PPclover-Sgrod-Ycone
2	CP2_5-BB-Sgrama-Indian-PPclover-Sgrod-Ycone	2-CP2_5-BB-Sgrama-Indian-PPclover-Sgrod-Ycone	Sideoats Grama	Bouteloua curtipendula	24.00	1.5		Grass	N	N	CP2_5		BB-Sgrama-Indian-PPclover-Sgrod-Ycone
2	CP2_5-BB-Sgrama-Indian-PPclover-Sgrod-Ycone	2-CP2_5-BB-Sgrama-Indian-PPclover-Sgrod-Ycone	Indiangrass	Sorghastrum nutans	8.00	0.5		Grass	N	N	CP2_5		BB-Sgrama-Indian-PPclover-Sgrod-Ycone
2	CP2_5-BB-Sgrama-Indian-PPclover-Sgrod-Ycone	2-CP2_5-BB-Sgrama-Indian-PPclover-Sgrod-Ycone	Purple Prairie Clover	Dalea purpurea	2.00	0.125		Legume	N	N	CP2_5		BB-Sgrama-Indian-PPclover-Sgrod-Ycone
2	CP2_5-BB-Sgrama-Indian-PPclover-Sgrod-Ycone	2-CP2_5-BB-Sgrama-Indian-PPclover-Sgrod-Ycone	Stiff Goldenrod	Oligoneuron rigidum	1.00	0.0625		Forb	N	N	CP2_5		BB-Sgrama-Indian-PPclover-Sgrod-Ycone
2	CP2_5-BB-Sgrama-Indian-PPclover-Sgrod-Ycone	2-CP2_5-BB-Sgrama-Indian-PPclover-Sgrod-Ycone	Yellow Coneflower	Ratibida pinnata	1.00	0.0625		Forb	N	N	CP2_5		BB-Sgrama-Indian-PPclover-Sgrod-Ycone
2	CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciro	2-CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bverv	Big Bluestem	Andropogon gerardii	16.00	1		Grass	N	N	CP2_6		BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
2	CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciro	2-CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bverv	Canada Wildrye	Elymus canadensis	16.00	1		Grass	N	N	CP2_6		BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
2	CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciro	2-CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bverv	Indiangrass	Sorghastrum nutans	16.00	1		Grass	N	N	CP2_6		BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
2	CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciro	2-CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bverv	Switchgrass	Panicum virgatum	16.00	1		Grass	N	N	CP2_6		BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
2	CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciro	2-CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bverv	Prairie Cordgrass	Spartina pectinata	8.00	0.5		Grass	N	N	CP2_6		BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
2	CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciro	2-CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bverv	Cupplant	Silphium perfoliatum	2.00	0.125		Forb	N	N	CP2_6		BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
2	CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciro	2-CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bverv	Blue Vervain	Verbena hastata	1.00	0.0625		Forb	N	N	CP2_6		BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
2	CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciro	2-CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bverv	Common Ironweed	Vernonia fasciculata	1.00	0.0625		Forb	N	N	CP2_6		BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
2	CP2_7-Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone	2-CP2_7-Switch-BB-Cwrye-Pcord-Berg-NEaster-Yc	Switchgrass	Panicum virgatum	32.00	2		Grass	N	N	CP2_7		Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
2	CP2_7-Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone	2-CP2_7-Switch-BB-Cwrye-Pcord-Berg-NEaster-Yc	Big Bluestem	Andropogon gerardii	16.00	1		Grass	N	N	CP2_7		Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
2	CP2_7-Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone	2-CP2_7-Switch-BB-Cwrye-Pcord-Berg-NEaster-Yc	Canada Wildrye	Elymus canadensis	16.00	1		Grass	N	N	CP2_7		Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
2	CP2_7-Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone	2-CP2_7-Switch-BB-Cwrye-Pcord-Berg-NEaster-Yc	Prairie Cordgrass	Spartina pectinata	4.00	0.25		Grass	N	N	CP2_7		Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
2	CP2_7-Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone	2-CP2_7-Switch-BB-Cwrye-Pcord-Berg-NEaster-Yc	Bergamot	Monarda fistulosa	1.00	0.0625		Forb	N	N	CP2_7		Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
2	CP2_7-Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone	2-CP2_7-Switch-BB-Cwrye-Pcord-Berg-NEaster-Yc	New England Aster	Symphyotrichum novae-a	1.00	0.0625		Forb	N	N	CP2_7		Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
2	CP2_7-Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone	2-CP2_7-Switch-BB-Cwrye-Pcord-Berg-NEaster-Yc	Yellow Coneflower	Ratibida pinnata	1.00	0.0625		Forb	N	N	CP2_7		Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
4	CP4D-1-RC-SB-Tim-Orc-RC	4-CP4D-1-RC-SB-Tim-Orc-RC	Red Clover	Trifolium pratense	96.00	6		Legume	I	N	CP4D-1		RC-SB-Tim-Orc-RC
4	CP4D-1-RC-SB-Tim-Orc-RC	4-CP4D-1-RC-SB-Tim-Orc-RC	Smooth Bromegrass	Bromus inermis	32.00	2		Grass	I	N	CP4D-1		RC-SB-Tim-Orc-RC
4	CP4D-1-RC-SB-Tim-Orc-RC	4-CP4D-1-RC-SB-Tim-Orc-RC	Timothy	Phleum pratense	32.00	2		Grass	I	N	CP4D-1		RC-SB-Tim-Orc-RC
4	CP4D-1-RC-SB-Tim-Orc-RC	4-CP4D-1-RC-SB-Tim-Orc-RC	Orchardgrass	Dactylis glomerata L.	8.00	0.5		Grass	I	N	CP4D-1		RC-SB-Tim-Orc-RC
4	CP4D-1-RC-SB-Tim-Orc-RC	4-CP4D-1-RC-SB-Tim-Orc-RC	Red Clover	Trifolium pratense	8.00	0.5		Legume	I	N	CP4D-1		RC-SB-Tim-Orc-RC
4	CP4D-2-Alf-SB-Tim-Orc	4-CP4D-2-Alf-SB-Tim-Orc	Alfalfa	Medicago sativa	112.00	7		Legume	I	N	CP4D-2		Alf-SB-Tim-Orc
4	CP4D-2-Alf-SB-Tim-Orc	4-CP4D-2-Alf-SB-Tim-Orc	Smooth Bromegrass	Bromus inermis	32.00	2		Grass	I	N	CP4D-2		Alf-SB-Tim-Orc
4	CP4D-2-Alf-SB-Tim-Orc	4-CP4D-2-Alf-SB-Tim-Orc	Timothy	Phleum pratense	16.00	1		Grass	I	N	CP4D-2		Alf-SB-Tim-Orc
4	CP4D-2-Alf-SB-Tim-Orc	4-CP4D-2-Alf-SB-Tim-Orc	Orchardgrass	Dactylis glomerata L.	8.00	0.5		Grass	I	N	CP4D-2		Alf-SB-Tim-Orc
4	CP4D-3-RC-Tim-SB-Orc	4-CP4D-3-RC-Tim-SB-Orc	Red Clover	Trifolium pratense	96.00	6		Legume	I	N	CP4D-3		RC-Tim-SB-Orc
4	CP4D-3-RC-Tim-SB-Orc	4-CP4D-3-RC-Tim-SB-Orc	Timothy	Phleum pratense	32.00	2		Grass	I	N	CP4D-3		RC-Tim-SB-Orc
4	CP4D-3-RC-Tim-SB-Orc	4-CP4D-3-RC-Tim-SB-Orc	Smooth Bromegrass	Bromus inermis	32.00	2		Grass	I	N	CP4D-3		RC-Tim-SB-Orc
4	CP4D-3-RC-Tim-SB-Orc	4-CP4D-3-RC-Tim-SB-Orc	Orchardgrass	Dactylis glomerata L.	8.00	0.5		Grass	I	N	CP4D-3		RC-Tim-SB-Orc
4	CP4D-4-RC-Tim-Orc-LadC	4-CP4D-4-RC-Tim-Orc-LadC	Red Clover	Trifolium pratense	96.00	6		Legume	I	N	CP4D-4		RC-Tim-Orc-LadC
4	CP4D-4-RC-Tim-Orc-LadC	4-CP4D-4-RC-Tim-Orc-LadC	Timothy	Phleum pratense	32.00	2		Grass	I	N	CP4D-4		RC-Tim-Orc-LadC
4	CP4D-4-RC-Tim-Orc-LadC	4-CP4D-4-RC-Tim-Orc-LadC	Orchardgrass	Dactylis glomerata L.	16.00	1		Grass	I	N	CP4D-4		RC-Tim-Orc-LadC

4	CP4D-4-RC-Tim-Orc-LadC	4-CP4D-4-RC-Tim-Orc-LadC	White Ladino Clover	Trifolium repens	8.00	0.5		Legume	I	N	CP4D-4		RC-Tim-Orc-LadC
4	CP4D-5-Indian-BB-Switch-Cmilkvetch-Besus-Ycone	4-CP4D-5-Indian-BB-Switch-Cmilkvetch-Besus-Yco	Indiangrass	Sorghastrum nutans	48.00	3		Grass	N	N	CP4D-5		Indian-BB-Switch-Cmilkvetch-Besus-Ycone
4	CP4D-5-Indian-BB-Switch-Cmilkvetch-Besus-Ycone	4-CP4D-5-Indian-BB-Switch-Cmilkvetch-Besus-Yco	Big Bluestem	Andropogon gerardii	16.00	1		Grass	N	N	CP4D-5		Indian-BB-Switch-Cmilkvetch-Besus-Ycone
4	CP4D-5-Indian-BB-Switch-Cmilkvetch-Besus-Ycone	4-CP4D-5-Indian-BB-Switch-Cmilkvetch-Besus-Yco	Switchgrass	Panicum virgatum	16.00	1		Grass	N	N	CP4D-5		Indian-BB-Switch-Cmilkvetch-Besus-Ycone
4	CP4D-5-Indian-BB-Switch-Cmilkvetch-Besus-Ycone	4-CP4D-5-Indian-BB-Switch-Cmilkvetch-Besus-Yco	Canada Milkvetch	Astragalus canadensis	2.00	0.125		Legume	N	N	CP4D-5		Indian-BB-Switch-Cmilkvetch-Besus-Ycone
4	CP4D-5-Indian-BB-Switch-Cmilkvetch-Besus-Ycone	4-CP4D-5-Indian-BB-Switch-Cmilkvetch-Besus-Yco	Black-eyed Susan	Rudbeckia hirta	1.00	0.0625		Forb	N	N	CP4D-5		Indian-BB-Switch-Cmilkvetch-Besus-Ycone
4	CP4D-5-Indian-BB-Switch-Cmilkvetch-Besus-Ycone	4-CP4D-5-Indian-BB-Switch-Cmilkvetch-Besus-Yco	Yellow Coneflower	Ratibida pinnata	1.00	0.0625		Forb	N	N	CP4D-5		Indian-BB-Switch-Cmilkvetch-Besus-Ycone
4	CP4D-6-Indian-BB-Switch-LB-Cmilkvetch-Besus-Ycone	4-CP4D-6-Indian-BB-Switch-LB-Cmilkvetch-Besus-	Indiangrass	Sorghastrum nutans	48.00	3		Grass	N	N	CP4D-6		Indian-BB-Switch-LB-Cmilkvetch-Besus-Ycone
4	CP4D-6-Indian-BB-Switch-LB-Cmilkvetch-Besus-Ycone	4-CP4D-6-Indian-BB-Switch-LB-Cmilkvetch-Besus-	Big Bluestem	Andropogon gerardii	16.00	1		Grass	N	N	CP4D-6		Indian-BB-Switch-LB-Cmilkvetch-Besus-Ycone
4	CP4D-6-Indian-BB-Switch-LB-Cmilkvetch-Besus-Ycone	4-CP4D-6-Indian-BB-Switch-LB-Cmilkvetch-Besus-	Switchgrass	Panicum virgatum	16.00	1		Grass	N	N	CP4D-6		Indian-BB-Switch-LB-Cmilkvetch-Besus-Ycone
4	CP4D-6-Indian-BB-Switch-LB-Cmilkvetch-Besus-Ycone	4-CP4D-6-Indian-BB-Switch-LB-Cmilkvetch-Besus-	Little Bluestem	Schizachyrium scoparium	16.00	1		Grass	N	N	CP4D-6		Indian-BB-Switch-LB-Cmilkvetch-Besus-Ycone
4	CP4D-6-Indian-BB-Switch-LB-Cmilkvetch-Besus-Ycone	4-CP4D-6-Indian-BB-Switch-LB-Cmilkvetch-Besus-	Canada Milkvetch	Astragalus canadensis	2.00	0.125		Legume	N	N	CP4D-6		Indian-BB-Switch-LB-Cmilkvetch-Besus-Ycone
4	CP4D-6-Indian-BB-Switch-LB-Cmilkvetch-Besus-Ycone	4-CP4D-6-Indian-BB-Switch-LB-Cmilkvetch-Besus-	Black-eyed Susan	Rudbeckia hirta	1.00	0.0625		Forb	N	N	CP4D-6		Indian-BB-Switch-LB-Cmilkvetch-Besus-Ycone
4	CP4D-6-Indian-BB-Switch-LB-Cmilkvetch-Besus-Ycone	4-CP4D-6-Indian-BB-Switch-LB-Cmilkvetch-Besus-	Yellow Coneflower	Ratibida pinnata	1.00	0.0625		Forb	N	N	CP4D-6		Indian-BB-Switch-LB-Cmilkvetch-Besus-Ycone
4	CP4D-7-Indian-BB-Switch-PPclover-Besus-Ycone	4-CP4D-7-Indian-BB-Switch-PPclover-Besus-Ycone	Indiangrass	Sorghastrum nutans	48.00	3		Grass	N	N	CP4D-7		Indian-BB-Switch-PPclover-Besus-Ycone
4	CP4D-7-Indian-BB-Switch-PPclover-Besus-Ycone	4-CP4D-7-Indian-BB-Switch-PPclover-Besus-Ycone	Big Bluestem	Andropogon gerardii	16.00	1		Grass	N	N	CP4D-7		Indian-BB-Switch-PPclover-Besus-Ycone
4	CP4D-7-Indian-BB-Switch-PPclover-Besus-Ycone	4-CP4D-7-Indian-BB-Switch-PPclover-Besus-Ycone	Switchgrass	Panicum virgatum	16.00	1		Grass	N	N	CP4D-7		Indian-BB-Switch-PPclover-Besus-Ycone
4	CP4D-7-Indian-BB-Switch-PPclover-Besus-Ycone	4-CP4D-7-Indian-BB-Switch-PPclover-Besus-Ycone	Purple Prairie Clover	Dalea purpurea	2.00	0.125		Legume	N	N	CP4D-7		Indian-BB-Switch-PPclover-Besus-Ycone
4	CP4D-7-Indian-BB-Switch-PPclover-Besus-Ycone	4-CP4D-7-Indian-BB-Switch-PPclover-Besus-Ycone	Black-eyed Susan	Rudbeckia hirta	1.00	0.0625		Forb	N	N	CP4D-7		Indian-BB-Switch-PPclover-Besus-Ycone
4	CP4D-7-Indian-BB-Switch-PPclover-Besus-Ycone	4-CP4D-7-Indian-BB-Switch-PPclover-Besus-Ycone	Yellow Coneflower	Ratibida pinnata	1.00	0.0625		Forb	N	N	CP4D-7		Indian-BB-Switch-PPclover-Besus-Ycone
4	CP4D-8-Indian-BB-LB-Switch-PPclover-Besus-Ycone	4-CP4D-8-Indian-BB-LB-Switch-PPclover-Besus-Yc	Indiangrass	Sorghastrum nutans	48.00	3		Grass	N	N	CP4D-8		Indian-BB-LB-Switch-PPclover-Besus-Ycone
4	CP4D-8-Indian-BB-LB-Switch-PPclover-Besus-Ycone	4-CP4D-8-Indian-BB-LB-Switch-PPclover-Besus-Yc	Big Bluestem	Andropogon gerardii	16.00	1		Grass	N	N	CP4D-8		Indian-BB-LB-Switch-PPclover-Besus-Ycone
4	CP4D-8-Indian-BB-LB-Switch-PPclover-Besus-Ycone	4-CP4D-8-Indian-BB-LB-Switch-PPclover-Besus-Yc	Little Bluestem	Schizachyrium scoparium	16.00	1		Grass	N	N	CP4D-8		Indian-BB-LB-Switch-PPclover-Besus-Ycone
4	CP4D-8-Indian-BB-LB-Switch-PPclover-Besus-Ycone	4-CP4D-8-Indian-BB-LB-Switch-PPclover-Besus-Yc	Switchgrass	Panicum virgatum	16.00	1		Grass	N	N	CP4D-8		Indian-BB-LB-Switch-PPclover-Besus-Ycone
4	CP4D-8-Indian-BB-LB-Switch-PPclover-Besus-Ycone	4-CP4D-8-Indian-BB-LB-Switch-PPclover-Besus-Yc	Purple Prairie Clover	Dalea purpurea	2.00	0.125		Legume	N	N	CP4D-8		Indian-BB-LB-Switch-PPclover-Besus-Ycone
4	CP4D-8-Indian-BB-LB-Switch-PPclover-Besus-Ycone	4-CP4D-8-Indian-BB-LB-Switch-PPclover-Besus-Yc	Black-eyed Susan	Rudbeckia hirta	1.00	0.0625		Forb	N	N	CP4D-8		Indian-BB-LB-Switch-PPclover-Besus-Ycone
4	CP4D-8-Indian-BB-LB-Switch-PPclover-Besus-Ycone	4-CP4D-8-Indian-BB-LB-Switch-PPclover-Besus-Yc	Yellow Coneflower	Ratibida pinnata	1.00	0.0625		Forb	N	N	CP4D-8		Indian-BB-LB-Switch-PPclover-Besus-Ycone
4	CP4D-9-Indian-BB-Switch-PPclover-Berg-Ycone	4-CP4D-9-Indian-BB-Switch-PPclover-Berg-Ycone	Indiangrass	Sorghastrum nutans	48.00	3		Grass	N	N	CP4D-9		Indian-BB-Switch-PPclover-Berg-Ycone
4	CP4D-9-Indian-BB-Switch-PPclover-Berg-Ycone	4-CP4D-9-Indian-BB-Switch-PPclover-Berg-Ycone	Big Bluestem	Andropogon gerardii	16.00	1		Grass	N	N	CP4D-9		Indian-BB-Switch-PPclover-Berg-Ycone
4	CP4D-9-Indian-BB-Switch-PPclover-Berg-Ycone	4-CP4D-9-Indian-BB-Switch-PPclover-Berg-Ycone	Switchgrass	Panicum virgatum	16.00	1		Grass	N	N	CP4D-9		Indian-BB-Switch-PPclover-Berg-Ycone
4	CP4D-9-Indian-BB-Switch-PPclover-Berg-Ycone	4-CP4D-9-Indian-BB-Switch-PPclover-Berg-Ycone	Purple Prairie Clover	Dalea purpurea	2.00	0.125		Legume	N	N	CP4D-9		Indian-BB-Switch-PPclover-Berg-Ycone
4	CP4D-9-Indian-BB-Switch-PPclover-Berg-Ycone	4-CP4D-9-Indian-BB-Switch-PPclover-Berg-Ycone	Bergamot	Monarda fistulosa	1.00	0.0625		Forb	N	N	CP4D-9		Indian-BB-Switch-PPclover-Berg-Ycone
4	CP4D-9-Indian-BB-Switch-PPclover-Berg-Ycone	4-CP4D-9-Indian-BB-Switch-PPclover-Berg-Ycone	Yellow Coneflower	Ratibida pinnata	1.00	0.0625		Forb	N	N	CP4D-9		Indian-BB-Switch-PPclover-Berg-Ycone
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swd	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-S	Little Bluestem	Schizachyrium scoparium	24.00	1.5		Grass	N	N	CP25-D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swd	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-S	Sideoats Grama	Bouteloua curtipendula	24.00	1.5		Grass	N	N	CP25-D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swd	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-S	Indiangrass	Sorghastrum nutans	8.00	0.5		Grass	N	N	CP25-D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swd	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-S	Big Bluestem	Andropogon gerardii	4.00	0.25		Grass	N	N	CP25-D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swd	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-S	Prairie Junegrass	Koeleria macrantha	2.00	0.125		Grass	N	N	CP25-D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swd	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-S	Purple Prairie Clover	Dalea purpurea	2.00	0.125		Legume	N	N	CP25-D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swd	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-S	Sand Dropseed	Sporobolus cryptandrus	2.00	0.125		Grass	N	N	CP25-D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swd	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-S	Spiderwort	Tradescantia ohiensis	1.00	0.0625		Forb	N	N	CP25-D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swd	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-S	Hoary Vervain	Verbena stricta	0.50	0.03125		Forb	N	N	CP25-D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swd	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-S	Leadplant	Amorpha canescens	0.50	0.03125		Legume	N	N	CP25-D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swd	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-S	Prairie Tickseed	Coreopsis palmata	0.50	0.03125		Forb	N	N	CP25-D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swd	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-S	Silky Aster	Symphyotrichum pratens	0.50	0.03125		Forb	N	N	CP25-D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swd	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-S	Stiff Goldenrod	Oligoneuron rigidum	0.50	0.03125		Forb	N	N	CP25-D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swd	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-S	Yellow Coneflower	Ratibida pinnata	0.50	0.03125		Forb	N	N	CP25-D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swd	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-S	Prairie Cinquefoil	Potentilla arguta	0.25	0.015625		Forb	N	N	CP25-D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swd	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-S	Spotted Mint	Monarda punctata	0.25	0.015625		Forb	N	N	CP25-D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint

25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclove	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdro	Little Bluestem	Schizachyrium scoparium	24.00	1.5		Grass	N	N	CP25-DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclove	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdro	Sideoats Grama	Bouteloua curtipendula	24.00	1.5		Grass	N	N	CP25-DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclove	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdro	Indiangrass	Sorghastrum nutans	8.00	0.5		Grass	N	N	CP25-DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclove	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdro	Switchgrass	Panicum virgatum	4.00	0.25		Grass	N	N	CP25-DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclove	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdro	Prairie Junegrass	Koeleria macrantha	2.00	0.125		Grass	N	N	CP25-DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclove	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdro	Prairie Dropseed	Sporobolus heterolepis	2.00	0.125		Grass	N	N	CP25-DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclove	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdro	Purple Prairie Clover	Dalea purpurea	2.00	0.125		Legume	N	N	CP25-DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclove	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdro	Round-Headed Bushclover	Lespedeza capitata	2.00	0.125		Legume	N	N	CP25-DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclove	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdro	Bergamot	Monarda fistulosa	1.00	0.0625		Forb	N	N	CP25-DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclove	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdro	Spiderwort	Tradescantia ohiensis	1.00	0.0625		Forb	N	N	CP25-DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclove	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdro	Yellow Coneflower	Ratibida pinnata	1.00	0.0625		Forb	N	N	CP25-DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclove	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdro	Leadplant	Amorpha canescens	0.50	0.03125		Legume	N	N	CP25-DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclove	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdro	Rough Blazing Star	Liatris aspera	0.50	0.03125		Forb	N	N	CP25-DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclove	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdro	Sky-Blue Aster	Symphyotrichum oolenta	0.50	0.03125		Forb	N	N	CP25-DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclove	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdro	Stiff Goldenrod	Oligoneuron rigidum	0.50	0.03125		Forb	N	N	CP25-DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclove	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdro	Prairie Cinquefoil	Potentilla arguta	0.25	0.015625		Forb	N	N	CP25-DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjur	Little Bluestem	Schizachyrium scoparium	24.00	1.5		Grass	N	N	CP25-KBB		Lplant-Rblzstar-Sgrod-Ycone-Berg-Pcinque-SkyAster
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjur	Sideoats Grama	Bouteloua curtipendula	24.00	1.5		Grass	N	N	CP25-KBB		Lplant-Rblzstar-Sgrod-Ycone-Berg-Pcinque-SkyAster
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjur	Indiangrass	Sorghastrum nutans	8.00	0.5		Grass	N	N	CP25-KBB		Lplant-Rblzstar-Sgrod-Ycone-Berg-Pcinque-SkyAster
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjur	Switchgrass	Panicum virgatum	8.00	0.5		Grass	N	N	CP25-KBB		Lplant-Rblzstar-Sgrod-Ycone-Berg-Pcinque-SkyAster
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjur	Wild Lupine	Lupinus perennis	3.00	0.1875		Legume	N	N	CP25-KBB		Lplant-Rblzstar-Sgrod-Ycone-Berg-Pcinque-SkyAster
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjur	Prairie Junegrass	Koeleria macrantha	2.00	0.125		Grass	N	N	CP25-KBB		Lplant-Rblzstar-Sgrod-Ycone-Berg-Pcinque-SkyAster
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjur	Prairie Dropseed	Sporobolus heterolepis	2.00	0.125		Grass	N	N	CP25-KBB		Lplant-Rblzstar-Sgrod-Ycone-Berg-Pcinque-SkyAster
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjur	Purple Prairie Clover	Dalea purpurea	2.00	0.125		Legume	N	N	CP25-KBB		Lplant-Rblzstar-Sgrod-Ycone-Berg-Pcinque-SkyAster
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjur	Pale Purple Coneflower	Echinacea pallida	1.00	0.0625		Forb	N	N	CP25-KBB		Lplant-Rblzstar-Sgrod-Ycone-Berg-Pcinque-SkyAster
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjur	Leadplant	Amorpha canescens	0.50	0.03125		Legume	N	N	CP25-KBB		Lplant-Rblzstar-Sgrod-Ycone-Berg-Pcinque-SkyAster
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjur	Rough Blazing Star	Liatris aspera	0.50	0.03125		Forb	N	N	CP25-KBB		Lplant-Rblzstar-Sgrod-Ycone-Berg-Pcinque-SkyAster
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjur	Stiff Goldenrod	Oligoneuron rigidum	0.50	0.03125		Forb	N	N	CP25-KBB		Lplant-Rblzstar-Sgrod-Ycone-Berg-Pcinque-SkyAster
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjur	Yellow Coneflower	Ratibida pinnata	0.50	0.03125		Forb	N	N	CP25-KBB		Lplant-Rblzstar-Sgrod-Ycone-Berg-Pcinque-SkyAster
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjur	Bergamot	Monarda fistulosa	0.25	0.015625		Forb	N	N	CP25-KBB		Lplant-Rblzstar-Sgrod-Ycone-Berg-Pcinque-SkyAster
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjur	Prairie Cinquefoil	Potentilla arguta	0.25	0.015625		Forb	N	N	CP25-KBB		Lplant-Rblzstar-Sgrod-Ycone-Berg-Pcinque-SkyAster
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjur	Sky-Blue Aster	Symphyotrichum oolenta	0.25	0.015625		Forb	N	N	CP25-KBB		Lplant-Rblzstar-Sgrod-Ycone-Berg-Pcinque-SkyAster
25	CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-	25-CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun	Little Bluestem	Schizachyrium scoparium	24.00	1.5		Grass	N	N	CP25-M		Berg-Besus-NEaster-SkyAster-Ycone-Croot
25	CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-	25-CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun	Indiangrass	Sorghastrum nutans	16.00	1		Grass	N	N	CP25-M		Berg-Besus-NEaster-SkyAster-Ycone-Croot
25	CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-	25-CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun	Big Bluestem	Andropogon gerardii	8.00	0.5		Grass	N	N	CP25-M		Berg-Besus-NEaster-SkyAster-Ycone-Croot
25	CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-	25-CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun	Canada Wildrye	Elymus canadensis	8.00	0.5		Grass	N	N	CP25-M		Berg-Besus-NEaster-SkyAster-Ycone-Croot
25	CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-	25-CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun	Switchgrass	Panicum virgatum	8.00	0.5		Grass	N	N	CP25-M		Berg-Besus-NEaster-SkyAster-Ycone-Croot
25	CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-	25-CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun	Ox-eye Sunflower	Heliopsis helianthoides	1.00	0.0625		Forb	N	N	CP25-M		Berg-Besus-NEaster-SkyAster-Ycone-Croot
25	CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-	25-CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun	Prairie Blazing Star	Liatris pycnostachya	1.00	0.0625		Forb	N	N	CP25-M		Berg-Besus-NEaster-SkyAster-Ycone-Croot
25	CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-	25-CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun	Purple Prairie Clover	Dalea purpurea	1.00	0.0625		Legume	N	N	CP25-M		Berg-Besus-NEaster-SkyAster-Ycone-Croot
25	CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-	25-CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun	Rosinweed	Silphium integrifolium	1.00	0.0625		Forb	N	N	CP25-M		Berg-Besus-NEaster-SkyAster-Ycone-Croot
25	CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-	25-CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun	Bergamot	Monarda fistulosa	0.50	0.03125		Forb	N	N	CP25-M		Berg-Besus-NEaster-SkyAster-Ycone-Croot
25	CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-	25-CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun	Black-eyed Susan	Rudbeckia hirta	0.50	0.03125		Forb	N	N	CP25-M		Berg-Besus-NEaster-SkyAster-Ycone-Croot
25	CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-	25-CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun	New England Aster	Symphyotrichum novae-a	0.50	0.03125		Forb	N	N	CP25-M		Berg-Besus-NEaster-SkyAster-Ycone-Croot
25	CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-	25-CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun	Sky-Blue Aster	Symphyotrichum oolenta	0.50	0.03125		Forb	N	N	CP25-M		Berg-Besus-NEaster-SkyAster-Ycone-Croot
25	CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-	25-CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun	Yellow Coneflower	Ratibida pinnata	0.50	0.03125		Forb	N	N	CP25-M		Berg-Besus-NEaster-SkyAster-Ycone-Croot
25	CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-	25-CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun	Culver's Root	Veronicastrum virginicum	0.25	0.015625		Forb	N	N	CP25-M		Berg-Besus-NEaster-SkyAster-Ycone-Croot
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgras	Canada Wildrye	Elymus canadensis	16.00	1		Grass	N	N	CP25-W		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgras	Switchgrass	Panicum virgatum	16.00	1		Grass	N	N	CP25-W		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot

25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgras	Indiangrass	Sorghastrum nutans	12.00	0.75		Grass	N	N	CP25-W		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgras	Big Bluestem	Andropogon gerardii	8.00	0.5		Grass	N	N	CP25-W		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgras	Prairie Cordgrass	Spartina pectinata	8.00	0.5		Grass	N	N	CP25-W		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgras	Fowl Mannagrass	Glyceria striata	4.00	0.25		Grass	N	N	CP25-W		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgras	Fox Sedge	Carex vulpinoidea	4.00	0.25		Sedge	N	N	CP25-W		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgras	Cupplant	Silphium perfoliatum	2.00	0.125		Forb	N	N	CP25-W		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgras	Showy Tick Trefoil	Desmodium canadense	2.00	0.125		Legume	N	N	CP25-W		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgras	Blue Vervain	Verbena hastata	1.00	0.0625		Forb	N	N	CP25-W		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgras	Golden Alexanders	Zizia aurea	1.00	0.0625		Forb	N	N	CP25-W		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgras	Marsh Milkweed	Asclepias incarnata	1.00	0.0625		Forb	N	N	CP25-W		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgras	Boneset	Eupatorium perfoliatum	0.50	0.03125		Forb	N	N	CP25-W		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgras	Common Ironweed	Vernonia fasciculata	0.50	0.03125		Forb	N	N	CP25-W		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgras	Joe-pye Weed	Eutrochium maculatum	0.50	0.03125		Forb	N	N	CP25-W		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgras	Culver's Root	Veronicastrum virginicum	0.25	0.015625		Forb	N	N	CP25-W		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
25	CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-WWIndig	25-CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-	Switchgrass	Panicum virgatum	24.00	1.5		Grass	N	N	CP25-WM		Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
25	CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-WWIndig	25-CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-	Canada Wildrye	Elymus canadensis	16.00	1		Grass	N	N	CP25-WM		Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
25	CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-WWIndig	25-CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-	Indiangrass	Sorghastrum nutans	12.00	0.75		Grass	N	N	CP25-WM		Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
25	CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-WWIndig	25-CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-	Big Bluestem	Andropogon gerardii	8.00	0.5		Grass	N	N	CP25-WM		Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
25	CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-WWIndig	25-CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-	Prairie Cordgrass	Spartina pectinata	4.00	0.25		Grass	N	N	CP25-WM		Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
25	CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-WWIndig	25-CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-	Cupplant	Silphium perfoliatum	2.00	0.125		Forb	N	N	CP25-WM		Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
25	CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-WWIndig	25-CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-	White wild indigo	Baptisia alba	1.50	0.09375		Legume	N	N	CP25-WM		Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
25	CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-WWIndig	25-CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-	Black-eyed Susan	Rudbeckia hirta	0.50	0.03125		Forb	N	N	CP25-WM		Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
25	CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-WWIndig	25-CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-	Common Ironweed	Vernonia fasciculata	0.50	0.03125		Forb	N	N	CP25-WM		Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
25	CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-WWIndig	25-CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-	Golden Alexanders	Zizia aurea	0.50	0.03125		Forb	N	N	CP25-WM		Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
25	CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-WWIndig	25-CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-	New England Aster	Symphyotrichum novae-a	0.50	0.03125		Forb	N	N	CP25-WM		Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
25	CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-WWIndig	25-CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-	Prairie Blazing Star	Liatris pycnostachya	0.50	0.03125		Forb	N	N	CP25-WM		Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
25	CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-WWIndig	25-CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-	Yellow Coneflower	Ratibida pinnata	0.50	0.03125		Forb	N	N	CP25-WM		Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
25	CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-WWIndig	25-CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-	Bergamot	Monarda fistulosa	0.25	0.015625		Forb	N	N	CP25-WM		Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
25	CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-WWIndig	25-CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-	Great St. John's Wort	Hypericum ascyron	0.25	0.015625		Forb	N	N	CP25-WM		Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
33	CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHbushclover	33-CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHb	Little Bluestem	Schizachyrium scoparium	32.00	2		Grass	N	N	CP33-1		Wsun-Ycone-Besus
33	CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHbushclover	33-CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHb	Sideoats Grama	Bouteloua curtipendula	32.00	2		Grass	N	N	CP33-1		Wsun-Ycone-Besus
33	CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHbushclover	33-CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHb	Canada Wildrye	Elymus canadensis	8.00	0.5		Grass	N	N	CP33-1		Wsun-Ycone-Besus
33	CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHbushclover	33-CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHb	Indiangrass	Sorghastrum nutans	8.00	0.5		Grass	N	N	CP33-1		Wsun-Ycone-Besus
33	CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHbushclover	33-CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHb	Purple Prairie Clover	Dalea purpurea	2.00	0.125		Legume	N	N	CP33-1		Wsun-Ycone-Besus
33	CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHbushclover	33-CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHb	Round-Headed Bushclover	Lespedeza capitata	2.00	0.125		Legume	N	N	CP33-1		Wsun-Ycone-Besus
33	CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHbushclover	33-CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHb	Purple Coneflower	Echinacea purpurea	1.00	0.0625		Forb	N	N	CP33-1		Wsun-Ycone-Besus
33	CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHbushclover	33-CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHb	Stiff Goldenrod	Oligoneuron rigidum	1.00	0.0625		Forb	N	N	CP33-1		Wsun-Ycone-Besus
33	CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHbushclover	33-CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHb	Fewleaf Sunflower	Helianthus occidentalis	1.00	0.0625		Forb	N	N	CP33-1		Wsun-Ycone-Besus
33	CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHbushclover	33-CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHb	Yellow Coneflower	Ratibida pinnata	1.00	0.0625		Forb	N	N	CP33-1		Wsun-Ycone-Besus
33	CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHbushclover	33-CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHb	Black-eyed Susan	Rudbeckia hirta	0.75	0.046875		Forb	N	N	CP33-1		Wsun-Ycone-Besus
33	CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rblzst	33-CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclo	Little Bluestem	Schizachyrium scoparium	24.00	1.5		Grass	N	N	CP33-2		SkyAster-Sgrod-Wsun
33	CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rblzst	33-CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclo	Sideoats Grama	Bouteloua curtipendula	20.00	1.25		Grass	N	N	CP33-2		SkyAster-Sgrod-Wsun
33	CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rblzst	33-CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclo	Indiangrass	Sorghastrum nutans	16.00	1		Grass	N	N	CP33-2		SkyAster-Sgrod-Wsun
33	CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rblzst	33-CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclo	Canada Wildrye	Elymus canadensis	8.00	0.5		Grass	N	N	CP33-2		SkyAster-Sgrod-Wsun
33	CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rblzst	33-CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclo	Purple Coneflower	Echinacea purpurea	2.00	0.125		Forb	N	N	CP33-2		SkyAster-Sgrod-Wsun
33	CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rblzst	33-CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclo	Purple Prairie Clover	Dalea purpurea	2.00	0.125		Legume	N	N	CP33-2		SkyAster-Sgrod-Wsun
33	CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rblzst	33-CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclo	Rough Blazing Star	Liatris aspera	2.00	0.125		Forb	N	N	CP33-2		SkyAster-Sgrod-Wsun
33	CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rblzst	33-CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclo	Black-eyed Susan	Rudbeckia hirta	1.00	0.0625		Forb	N	N	CP33-2		SkyAster-Sgrod-Wsun
33	CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rblzst	33-CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclo	Sky-Blue Aster	Symphyotrichum oolenta	1.00	0.0625		Forb	N	N	CP33-2		SkyAster-Sgrod-Wsun

33	CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rblzs	33-CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclov	Stiff Goldenrod	Oligoneuron rigidum	1.00	0.0625		Forb	N	N	CP33-2		SkyAster-Sgrod-Wsun
33	CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rblzs	33-CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclov	Fewleaf Sunflower	Helianthus occidentalis	1.00	0.0625		Forb	N	N	CP33-2		SkyAster-Sgrod-Wsun
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord-I	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedg	Canada Wildrye	Elymus canadensis	16.00	1		Grass	N	N	CP38B-WPHRA		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord-I	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedg	Indiangrass	Sorghastrum nutans	12.00	0.75		Grass	N	N	CP38B-WPHRA		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord-I	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedg	Switchgrass	Panicum virgatum	12.00	0.75		Grass	N	N	CP38B-WPHRA		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord-I	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedg	Big Bluestem	Andropogon gerardii	8.00	0.5		Grass	N	N	CP38B-WPHRA		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord-I	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedg	Fox Sedge	Carex vulpinoidea	8.00	0.5		Sedge	N	N	CP38B-WPHRA		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord-I	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedg	Prairie Cordgrass	Spartina pectinata	8.00	0.5		Grass	N	N	CP38B-WPHRA		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord-I	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedg	Fowl Mannagrass	Glyceria striata	4.00	0.25		Grass	N	N	CP38B-WPHRA		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord-I	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedg	Cupplant	Silphium perfoliatum	2.00	0.125		Forb	N	N	CP38B-WPHRA		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord-I	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedg	Showy Tick Trefoil	Desmodium canadense	2.00	0.125		Legume	N	N	CP38B-WPHRA		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord-I	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedg	Blue Vervain	Verbena hastata	1.00	0.0625		Forb	N	N	CP38B-WPHRA		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord-I	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedg	Golden Alexanders	Zizia aurea	1.00	0.0625		Forb	N	N	CP38B-WPHRA		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord-I	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedg	Marsh Milkweed	Asclepias incarnata	1.00	0.0625		Forb	N	N	CP38B-WPHRA		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord-I	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedg	Boneset	Eupatorium perfoliatum	0.50	0.03125		Forb	N	N	CP38B-WPHRA		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord-I	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedg	Common Ironweed	Vernonia fasciculata	0.50	0.03125		Forb	N	N	CP38B-WPHRA		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord-I	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedg	Joe-pye Weed	Eutrochium maculatum	0.50	0.03125		Forb	N	N	CP38B-WPHRA		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord-I	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedg	Culver's Root	Veronicastrum virginicum	0.25	0.015625		Forb	N	N	CP38B-WPHRA		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-CWGCA(CP1)1-RC-Orc-Tim	38-CP38E-CWGCA(CP1)1-RC-Orc-Tim	Red Clover	Trifolium pratense	80.00	5		Legume	I	N	CP38E-CWGCA(CP1)1		RC-Orc-Tim
38	CP38E-CWGCA(CP1)1-RC-Orc-Tim	38-CP38E-CWGCA(CP1)1-RC-Orc-Tim	Orchardgrass	Dactylis glomerata L.	48.00	3		Grass	I	N	CP38E-CWGCA(CP1)1		RC-Orc-Tim
38	CP38E-CWGCA(CP1)1-RC-Orc-Tim	38-CP38E-CWGCA(CP1)1-RC-Orc-Tim	Timothy	Phleum pratense	32.00	2		Grass	I	N	CP38E-CWGCA(CP1)1		RC-Orc-Tim
38	CP38E-CWGCA(CP1)2-Alf-Orc-Tim	38-CP38E-CWGCA(CP1)2-Alf-Orc-Tim	Alfalfa	Medicago sativa	96.00	6		Legume	I	N	CP38E-CWGCA(CP1)2		Alf-Orc-Tim
38	CP38E-CWGCA(CP1)2-Alf-Orc-Tim	38-CP38E-CWGCA(CP1)2-Alf-Orc-Tim	Orchardgrass	Dactylis glomerata L.	48.00	3		Grass	I	N	CP38E-CWGCA(CP1)2		Alf-Orc-Tim
38	CP38E-CWGCA(CP1)2-Alf-Orc-Tim	38-CP38E-CWGCA(CP1)2-Alf-Orc-Tim	Timothy	Phleum pratense	32.00	2		Grass	I	N	CP38E-CWGCA(CP1)2		Alf-Orc-Tim
38	CP38E-CWGCA(CP1)3-RC-Tim-Orc-Rtop-LadC	38-CP38E-CWGCA(CP1)3-RC-Tim-Orc-Rtop-LadC	Red Clover	Trifolium pratense	80.00	5		Legume	I	N	CP38E-CWGCA(CP1)3		RC-Tim-Orc-Rtop-LadC
38	CP38E-CWGCA(CP1)3-RC-Tim-Orc-Rtop-LadC	38-CP38E-CWGCA(CP1)3-RC-Tim-Orc-Rtop-LadC	Timothy	Phleum pratense	32.00	2		Grass	I	N	CP38E-CWGCA(CP1)3		RC-Tim-Orc-Rtop-LadC
38	CP38E-CWGCA(CP1)3-RC-Tim-Orc-Rtop-LadC	38-CP38E-CWGCA(CP1)3-RC-Tim-Orc-Rtop-LadC	Orchardgrass	Dactylis glomerata L.	16.00	1		Grass	I	N	CP38E-CWGCA(CP1)3		RC-Tim-Orc-Rtop-LadC
38	CP38E-CWGCA(CP1)3-RC-Tim-Orc-Rtop-LadC	38-CP38E-CWGCA(CP1)3-RC-Tim-Orc-Rtop-LadC	Redtop	Agrostis gigantea	16.00	1		Grass	I	N	CP38E-CWGCA(CP1)3		RC-Tim-Orc-Rtop-LadC
38	CP38E-CWGCA(CP1)3-RC-Tim-Orc-Rtop-LadC	38-CP38E-CWGCA(CP1)3-RC-Tim-Orc-Rtop-LadC	White Ladino Clover	Trifolium repens	8.00	0.5		Legume	I	N	CP38E-CWGCA(CP1)3		RC-Tim-Orc-Rtop-LadC
38	CP38E-CWGCA(CP1)4-Alf-Rtop-Tim-Orc	38-CP38E-CWGCA(CP1)4-Alf-Rtop-Tim-Orc	Alfalfa	Medicago sativa	96.00	6		Legume	I	N	CP38E-CWGCA(CP1)4		Alf-Rtop-Tim-Orc
38	CP38E-CWGCA(CP1)4-Alf-Rtop-Tim-Orc	38-CP38E-CWGCA(CP1)4-Alf-Rtop-Tim-Orc	Redtop	Agrostis gigantea	32.00	2		Grass	I	N	CP38E-CWGCA(CP1)4		Alf-Rtop-Tim-Orc
38	CP38E-CWGCA(CP1)4-Alf-Rtop-Tim-Orc	38-CP38E-CWGCA(CP1)4-Alf-Rtop-Tim-Orc	Timothy	Phleum pratense	32.00	2		Grass	I	N	CP38E-CWGCA(CP1)4		Alf-Rtop-Tim-Orc
38	CP38E-CWGCA(CP1)4-Alf-Rtop-Tim-Orc	38-CP38E-CWGCA(CP1)4-Alf-Rtop-Tim-Orc	Orchardgrass	Dactylis glomerata L.	16.00	1		Grass	I	N	CP38E-CWGCA(CP1)4		Alf-Rtop-Tim-Orc
38	CP38E-CWGCA(CP1)5-RC-KB-Orc-Rtop	38-CP38E-CWGCA(CP1)5-RC-KB-Orc-Rtop	Red Clover	Trifolium pratense	80.00	5		Legume	I	N	CP38E-CWGCA(CP1)5		RC-KB-Orc-Rtop
38	CP38E-CWGCA(CP1)5-RC-KB-Orc-Rtop	38-CP38E-CWGCA(CP1)5-RC-KB-Orc-Rtop	Kentucky Bluegrass	Poa pratensis	32.00	2		Grass	I	N	CP38E-CWGCA(CP1)5		RC-KB-Orc-Rtop
38	CP38E-CWGCA(CP1)5-RC-KB-Orc-Rtop	38-CP38E-CWGCA(CP1)5-RC-KB-Orc-Rtop	Orchardgrass	Dactylis glomerata L.	16.00	1		Grass	I	N	CP38E-CWGCA(CP1)5		RC-KB-Orc-Rtop
38	CP38E-CWGCA(CP1)5-RC-KB-Orc-Rtop	38-CP38E-CWGCA(CP1)5-RC-KB-Orc-Rtop	Redtop	Agrostis gigantea	16.00	1		Grass	I	N	CP38E-CWGCA(CP1)5		RC-KB-Orc-Rtop
38	CP38E-CWGCA(CP1)6-Alf-SB-Tim	38-CP38E-CWGCA(CP1)6-Alf-SB-Tim	Alfalfa	Medicago sativa	96.00	6		Legume	I	N	CP38E-CWGCA(CP1)6		Alf-SB-Tim
38	CP38E-CWGCA(CP1)6-Alf-SB-Tim	38-CP38E-CWGCA(CP1)6-Alf-SB-Tim	Smooth Bromegrass	Bromus inermis	48.00	3		Grass	I	N	CP38E-CWGCA(CP1)6		Alf-SB-Tim
38	CP38E-CWGCA(CP1)6-Alf-SB-Tim	38-CP38E-CWGCA(CP1)6-Alf-SB-Tim	Timothy	Phleum pratense	32.00	2		Grass	I	N	CP38E-CWGCA(CP1)6		Alf-SB-Tim
38	CP38E-CWGCA(CP1)7-RC-SB-Tim-Orc-LadC	38-CP38E-CWGCA(CP1)7-RC-SB-Tim-Orc-LadC	Red Clover	Trifolium pratense	80.00	5		Legume	I	N	CP38E-CWGCA(CP1)7		RC-SB-Tim-Orc-LadC
38	CP38E-CWGCA(CP1)7-RC-SB-Tim-Orc-LadC	38-CP38E-CWGCA(CP1)7-RC-SB-Tim-Orc-LadC	Smooth Bromegrass	Bromus inermis	32.00	2		Grass	I	N	CP38E-CWGCA(CP1)7		RC-SB-Tim-Orc-LadC
38	CP38E-CWGCA(CP1)7-RC-SB-Tim-Orc-LadC	38-CP38E-CWGCA(CP1)7-RC-SB-Tim-Orc-LadC	Timothy	Phleum pratense	32.00	2		Grass	I	N	CP38E-CWGCA(CP1)7		RC-SB-Tim-Orc-LadC
38	CP38E-CWGCA(CP1)7-RC-SB-Tim-Orc-LadC	38-CP38E-CWGCA(CP1)7-RC-SB-Tim-Orc-LadC	Orchardgrass	Dactylis glomerata L.	16.00	1		Grass	I	N	CP38E-CWGCA(CP1)7		RC-SB-Tim-Orc-LadC
38	CP38E-CWGCA(CP1)7-RC-SB-Tim-Orc-LadC	38-CP38E-CWGCA(CP1)7-RC-SB-Tim-Orc-LadC	White Ladino Clover	Trifolium repens	8.00	0.5		Legume	I	N	CP38E-CWGCA(CP1)7		RC-SB-Tim-Orc-LadC
38	CP38E-CWGCA(CP1)8-RC-SB-Tim	38-CP38E-CWGCA(CP1)8-RC-SB-Tim	Red Clover	Trifolium pratense	80.00	5		Legume	I	N	CP38E-CWGCA(CP1)8		RC-SB-Tim
38	CP38E-CWGCA(CP1)8-RC-SB-Tim	38-CP38E-CWGCA(CP1)8-RC-SB-Tim	Smooth Bromegrass	Bromus inermis	48.00	3		Grass	I	N	CP38E-CWGCA(CP1)8		RC-SB-Tim
38	CP38E-CWGCA(CP1)8-RC-SB-Tim	38-CP38E-CWGCA(CP1)8-RC-SB-Tim	Timothy	Phleum pratense	32.00	2		Grass	I	N	CP38E-CWGCA(CP1)8		RC-SB-Tim
38	CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-	38-CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-I	Little Bluestem	Schizachyrium scoparium	24.00	1.5		Grass	N	N	CP38E-CWGCA(CP2)D		LB-Sgrama-BB-Indian-PPclover-Besus-Rblzstar-Sgrod-Ycone

38	CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-	38-CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-I	Sideoats Grama	Bouteloua curtipendula	24.00	1.5		Grass	N	N	CP38E-CWGCA(CP2)D		LB-Sgrama-BB-Indian-PPclover-Besus-Rblzstar-Sgrod-Ycone
38	CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-	38-CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-I	Big Bluestem	Andropogon gerardii	8.00	0.5		Grass	N	N	CP38E-CWGCA(CP2)D		LB-Sgrama-BB-Indian-PPclover-Besus-Rblzstar-Sgrod-Ycone
38	CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-	38-CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-I	Indiangrass	Sorghastrum nutans	8.00	0.5		Grass	N	N	CP38E-CWGCA(CP2)D		LB-Sgrama-BB-Indian-PPclover-Besus-Rblzstar-Sgrod-Ycone
38	CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-	38-CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-I	Purple Prairie Clover	Dalea purpurea	2.00	0.125		Legume	N	N	CP38E-CWGCA(CP2)D		LB-Sgrama-BB-Indian-PPclover-Besus-Rblzstar-Sgrod-Ycone
38	CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-	38-CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-I	Black-eyed Susan	Rudbeckia hirta	1.00	0.0625		Forb	N	N	CP38E-CWGCA(CP2)D		LB-Sgrama-BB-Indian-PPclover-Besus-Rblzstar-Sgrod-Ycone
38	CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-	38-CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-I	Rough Blazing Star	Liatris aspera	1.00	0.0625		Forb	N	N	CP38E-CWGCA(CP2)D		LB-Sgrama-BB-Indian-PPclover-Besus-Rblzstar-Sgrod-Ycone
38	CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-	38-CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-I	Stiff Goldenrod	Oligoneuron rigidum	1.00	0.0625		Forb	N	N	CP38E-CWGCA(CP2)D		LB-Sgrama-BB-Indian-PPclover-Besus-Rblzstar-Sgrod-Ycone
38	CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-	38-CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-I	Yellow Coneflower	Ratibida pinnata	1.00	0.0625		Forb	N	N	CP38E-CWGCA(CP2)D		LB-Sgrama-BB-Indian-PPclover-Besus-Rblzstar-Sgrod-Ycone
38	CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-	38-CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian	Little Bluestem	Schizachyrium scoparium	24.00	1.5		Grass	N	N	CP38E-CWGCA(CP2)DM		Shwgrod-Sgrod-Ycone
38	CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-	38-CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian	Sideoats Grama	Bouteloua curtipendula	16.00	1		Grass	N	N	CP38E-CWGCA(CP2)DM		Shwgrod-Sgrod-Ycone
38	CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-	38-CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian	Big Bluestem	Andropogon gerardii	8.00	0.5		Grass	N	N	CP38E-CWGCA(CP2)DM		Shwgrod-Sgrod-Ycone
38	CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-	38-CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian	Indiangrass	Sorghastrum nutans	8.00	0.5		Grass	N	N	CP38E-CWGCA(CP2)DM		Shwgrod-Sgrod-Ycone
38	CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-	38-CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian	Switchgrass	Panicum virgatum	8.00	0.5		Grass	N	N	CP38E-CWGCA(CP2)DM		Shwgrod-Sgrod-Ycone
38	CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-	38-CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian	Purple Prairie Clover	Dalea purpurea	2.00	0.125		Legume	N	N	CP38E-CWGCA(CP2)DM		Shwgrod-Sgrod-Ycone
38	CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-	38-CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian	Bergamot	Monarda fistulosa	1.00	0.0625		Forb	N	N	CP38E-CWGCA(CP2)DM		Shwgrod-Sgrod-Ycone
38	CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-	38-CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian	Black-eyed Susan	Rudbeckia hirta	1.00	0.0625		Forb	N	N	CP38E-CWGCA(CP2)DM		Shwgrod-Sgrod-Ycone
38	CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-	38-CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian	Rough Blazing Star	Liatris aspera	1.00	0.0625		Forb	N	N	CP38E-CWGCA(CP2)DM		Shwgrod-Sgrod-Ycone
38	CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-	38-CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian	Showy Goldenrod	Solidago speciosa	1.00	0.0625		Forb	N	N	CP38E-CWGCA(CP2)DM		Shwgrod-Sgrod-Ycone
38	CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-	38-CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian	Stiff Goldenrod	Oligoneuron rigidum	1.00	0.0625		Forb	N	N	CP38E-CWGCA(CP2)DM		Shwgrod-Sgrod-Ycone
38	CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-	38-CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian	Yellow Coneflower	Ratibida pinnata	1.00	0.0625		Forb	N	N	CP38E-CWGCA(CP2)DM		Shwgrod-Sgrod-Ycone
38	CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Pb	38-CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Little Bluestem	Schizachyrium scoparium	20.00	1.25		Grass	N	N	CP38E-CWGCA(CP2)M		Shwgrod-Sgrod-Ycone
38	CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Pb	38-CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Canada Wildrye	Elymus canadensis	16.00	1		Grass	N	N	CP38E-CWGCA(CP2)M		Shwgrod-Sgrod-Ycone
38	CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Pb	38-CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Indiangrass	Sorghastrum nutans	16.00	1		Grass	N	N	CP38E-CWGCA(CP2)M		Shwgrod-Sgrod-Ycone
38	CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Pb	38-CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Big Bluestem	Andropogon gerardii	8.00	0.5		Grass	N	N	CP38E-CWGCA(CP2)M		Shwgrod-Sgrod-Ycone
38	CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Pb	38-CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Switchgrass	Panicum virgatum	8.00	0.5		Grass	N	N	CP38E-CWGCA(CP2)M		Shwgrod-Sgrod-Ycone
38	CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Pb	38-CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Big Bluestem	Andropogon gerardii	8.00	0.5		Grass	N	N	CP38E-CWGCA(CP2)M		Shwgrod-Sgrod-Ycone
38	CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Pb	38-CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Switchgrass	Panicum virgatum	8.00	0.5		Grass	N	N	CP38E-CWGCA(CP2)M		Shwgrod-Sgrod-Ycone
38	CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Pb	38-CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Prairie Blazing Star	Liatris pycnostachya	2.00	0.125		Forb	N	N	CP38E-CWGCA(CP2)M		Shwgrod-Sgrod-Ycone
38	CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Pb	38-CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Rough Blazing Star	Liatris aspera	2.00	0.125		Forb	N	N	CP38E-CWGCA(CP2)M		Shwgrod-Sgrod-Ycone
38	CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Pb	38-CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Bergamot	Monarda fistulosa	1.00	0.0625		Forb	N	N	CP38E-CWGCA(CP2)M		Shwgrod-Sgrod-Ycone
38	CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Pb	38-CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Black-eyed Susan	Rudbeckia hirta	1.00	0.0625		Forb	N	N	CP38E-CWGCA(CP2)M		Shwgrod-Sgrod-Ycone
38	CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Pb	38-CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Showy Goldenrod	Solidago speciosa	1.00	0.0625		Forb	N	N	CP38E-CWGCA(CP2)M		Shwgrod-Sgrod-Ycone
38	CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Pb	38-CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Stiff Goldenrod	Oligoneuron rigidum	1.00	0.0625		Forb	N	N	CP38E-CWGCA(CP2)M		Shwgrod-Sgrod-Ycone
38	CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Pb	38-CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Yellow Coneflower	Ratibida pinnata	1.00	0.0625		Forb	N	N	CP38E-CWGCA(CP2)M		Shwgrod-Sgrod-Ycone
38	CP38E-CWGCA(CP2)W-BB-Cwrye-Switch-Pcord-Cup-Bv	38-CP38E-CWGCA(CP2)W-BB-Cwrye-Switch-Pcor	Big Bluestem	Andropogon gerardii	16.00	1		Grass	N	N	CP38E-CWGCA(CP2)W		BB-Cwrye-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-CWGCA(CP2)W-BB-Cwrye-Switch-Pcord-Cup-Bv	38-CP38E-CWGCA(CP2)W-BB-Cwrye-Switch-Pcor	Canada Wildrye	Elymus canadensis	16.00	1		Grass	N	N	CP38E-CWGCA(CP2)W		BB-Cwrye-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-CWGCA(CP2)W-BB-Cwrye-Switch-Pcord-Cup-Bv	38-CP38E-CWGCA(CP2)W-BB-Cwrye-Switch-Pcor	Switchgrass	Panicum virgatum	16.00	1		Grass	N	N	CP38E-CWGCA(CP2)W		BB-Cwrye-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-CWGCA(CP2)W-BB-Cwrye-Switch-Pcord-Cup-Bv	38-CP38E-CWGCA(CP2)W-BB-Cwrye-Switch-Pcor	Prairie Cordgrass	Spartina pectinata	8.00	0.5		Grass	N	N	CP38E-CWGCA(CP2)W		BB-Cwrye-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-CWGCA(CP2)W-BB-Cwrye-Switch-Pcord-Cup-Bv	38-CP38E-CWGCA(CP2)W-BB-Cwrye-Switch-Pcor	Cupplant	Silphium perfoliatum	2.00	0.125		Forb	N	N	CP38E-CWGCA(CP2)W		BB-Cwrye-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-CWGCA(CP2)W-BB-Cwrye-Switch-Pcord-Cup-Bv	38-CP38E-CWGCA(CP2)W-BB-Cwrye-Switch-Pcor	Blue Vervain	Verbena hastata	1.00	0.0625		Forb	N	N	CP38E-CWGCA(CP2)W		BB-Cwrye-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-CWGCA(CP2)W-BB-Cwrye-Switch-Pcord-Cup-Bv	38-CP38E-CWGCA(CP2)W-BB-Cwrye-Switch-Pcor	Common Ironweed	Vernonia fasciculata	1.00	0.0625		Forb	N	N	CP38E-CWGCA(CP2)W		BB-Cwrye-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Pblzs	38-CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pc	Switchgrass	Panicum virgatum	32.00	2		Grass	N	N	CP38E-CWGCA(CP2)WM		Switch-BB-Cwrye-Pcord-Pblzstar-Berg-Besus-NEaster-Ycone
38	CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Pblzs	38-CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pc	Big Bluestem	Andropogon gerardii	16.00	1		Grass	N	N	CP38E-CWGCA(CP2)WM		Switch-BB-Cwrye-Pcord-Pblzstar-Berg-Besus-NEaster-Ycone
38	CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Pblzs	38-CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pc	Canada Wildrye	Elymus canadensis	16.00	1		Grass	N	N	CP38E-CWGCA(CP2)WM		Switch-BB-Cwrye-Pcord-Pblzstar-Berg-Besus-NEaster-Ycone
38	CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Pblzs	38-CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pc	Prairie Cordgrass	Spartina pectinata	4.00	0.25		Grass	N	N	CP38E-CWGCA(CP2)WM		Switch-BB-Cwrye-Pcord-Pblzstar-Berg-Besus-NEaster-Ycone
38	CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Pblzs	38-CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pc	Prairie Blazing Star	Liatris pycnostachya	2.00	0.125		Forb	N	N	CP38E-CWGCA(CP2)WM		Switch-BB-Cwrye-Pcord-Pblzstar-Berg-Besus-NEaster-Ycone
38	CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Pblzs	38-CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pc	Bergamot	Monarda fistulosa	1.00	0.0625		Forb	N	N	CP38E-CWGCA(CP2)WM		Switch-BB-Cwrye-Pcord-Pblzstar-Berg-Besus-NEaster-Ycone
38	CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Pblzs	38-CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pc	Black-eyed Susan	Rudbeckia hirta	1.00	0.0625		Forb	N	N	CP38E-CWGCA(CP2)WM		Switch-BB-Cwrye-Pcord-Pblzstar-Berg-Besus-NEaster-Ycone
38	CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Pblzs	38-CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pc	New England Aster	Symphyotrichum novae-a	1.00	0.0625		Forb	N	N	CP38E-CWGCA(CP2)WM		Switch-BB-Cwrye-Pcord-Pblzstar-Berg-Besus-NEaster-Ycone
38	CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Pblzs	38-CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pc	Yellow Coneflower	Ratibida pinnata	1.00	0.0625		Forb	N	N	CP38E-CWGCA(CP2)WM		Switch-BB-Cwrye-Pcord-Pblzstar-Berg-Besus-NEaster-Ycone
38	CP38E-GHRA(CP2)D-LB-Sgrama-BB-Indian-PPclover-Sg	38-CP38E-GHRA(CP2)D-LB-Sgrama-BB-Indian-PP	Little Bluestem	Schizachyrium scoparium	24.00	1.5		Grass	N	N	CP38E-GHRA(CP2)D		LB-Sgrama-BB-Indian-PPclover-Sgrod-Ycone

38	CP38E-GHRA(CP2)D-LB-Sgrama-BB-Indian-PPclover-Sg	38-CP38E-GHRA(CP2)D-LB-Sgrama-BB-Indian-PP	Sideoats Grama	Bouteloua curtipendula	24.00	1.5		Grass	N	N	CP38E-GHRA(CP2)D		LB-Sgrama-BB-Indian-PPclover-Sgrod-Ycone
38	CP38E-GHRA(CP2)D-LB-Sgrama-BB-Indian-PPclover-Sg	38-CP38E-GHRA(CP2)D-LB-Sgrama-BB-Indian-PP	Big Bluestem	Andropogon gerardii	8.00	0.5		Grass	N	N	CP38E-GHRA(CP2)D		LB-Sgrama-BB-Indian-PPclover-Sgrod-Ycone
38	CP38E-GHRA(CP2)D-LB-Sgrama-BB-Indian-PPclover-Sg	38-CP38E-GHRA(CP2)D-LB-Sgrama-BB-Indian-PP	Indiangrass	Sorghastrum nutans	8.00	0.5		Grass	N	N	CP38E-GHRA(CP2)D		LB-Sgrama-BB-Indian-PPclover-Sgrod-Ycone
38	CP38E-GHRA(CP2)D-LB-Sgrama-BB-Indian-PPclover-Sg	38-CP38E-GHRA(CP2)D-LB-Sgrama-BB-Indian-PP	Purple Prairie Clover	Dalea purpurea	2.00	0.125		Legume	N	N	CP38E-GHRA(CP2)D		LB-Sgrama-BB-Indian-PPclover-Sgrod-Ycone
38	CP38E-GHRA(CP2)D-LB-Sgrama-BB-Indian-PPclover-Sg	38-CP38E-GHRA(CP2)D-LB-Sgrama-BB-Indian-PP	Stiff Goldenrod	Oligoneuron rigidum	1.00	0.0625		Forb	N	N	CP38E-GHRA(CP2)D		LB-Sgrama-BB-Indian-PPclover-Sgrod-Ycone
38	CP38E-GHRA(CP2)D-LB-Sgrama-BB-Indian-PPclover-Sg	38-CP38E-GHRA(CP2)D-LB-Sgrama-BB-Indian-PP	Yellow Coneflower	Ratibida pinnata	1.00	0.0625		Forb	N	N	CP38E-GHRA(CP2)D		LB-Sgrama-BB-Indian-PPclover-Sgrod-Ycone
38	CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-Switch-PP	38-CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-S	Little Bluestem	Schizachyrium scoparium	24.00	1.5		Grass	N	N	CP38E-GHRA(CP2)DM		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-Switch-PP	38-CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-S	Sideoats Grama	Bouteloua curtipendula	16.00	1		Grass	N	N	CP38E-GHRA(CP2)DM		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-Switch-PP	38-CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-S	Big Bluestem	Andropogon gerardii	8.00	0.5		Grass	N	N	CP38E-GHRA(CP2)DM		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-Switch-PP	38-CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-S	Indiangrass	Sorghastrum nutans	8.00	0.5		Grass	N	N	CP38E-GHRA(CP2)DM		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-Switch-PP	38-CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-S	Switchgrass	Panicum virgatum	8.00	0.5		Grass	N	N	CP38E-GHRA(CP2)DM		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-Switch-PP	38-CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-S	Purple Prairie Clover	Dalea purpurea	2.00	0.125		Legume	N	N	CP38E-GHRA(CP2)DM		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-Switch-PP	38-CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-S	Bergamot	Monarda fistulosa	1.00	0.0625		Forb	N	N	CP38E-GHRA(CP2)DM		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-Switch-PP	38-CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-S	Yellow Coneflower	Ratibida pinnata	1.00	0.0625		Forb	N	N	CP38E-GHRA(CP2)DM		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Switch-Berg	38-CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Sw	Little Bluestem	Schizachyrium scoparium	20.00	1.25		Grass	N	N	CP38E-GHRA(CP2)M		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Switch-Berg	38-CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Sw	Canada Wildrye	Elymus canadensis	16.00	1		Grass	N	N	CP38E-GHRA(CP2)M		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Switch-Berg	38-CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Sw	Indiangrass	Sorghastrum nutans	16.00	1		Grass	N	N	CP38E-GHRA(CP2)M		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Switch-Berg	38-CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Sw	Big Bluestem	Andropogon gerardii	8.00	0.5		Grass	N	N	CP38E-GHRA(CP2)M		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Switch-Berg	38-CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Sw	Switchgrass	Panicum virgatum	8.00	0.5		Grass	N	N	CP38E-GHRA(CP2)M		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Switch-Berg	38-CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Sw	Bergamot	Monarda fistulosa	1.00	0.0625		Forb	N	N	CP38E-GHRA(CP2)M		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Switch-Berg	38-CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Sw	Black-eyed Susan	Rudbeckia hirta	1.00	0.0625		Forb	N	N	CP38E-GHRA(CP2)M		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Switch-Berg	38-CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Sw	Yellow Coneflower	Ratibida pinnata	1.00	0.0625		Forb	N	N	CP38E-GHRA(CP2)M		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-Cu	38-CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch	Big Bluestem	Andropogon gerardii	16.00	1		Grass	N	N	CP38E-GHRA(CP2)W		BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-Cu	38-CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch	Canada Wildrye	Elymus canadensis	16.00	1		Grass	N	N	CP38E-GHRA(CP2)W		BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-Cu	38-CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch	Indiangrass	Sorghastrum nutans	16.00	1		Grass	N	N	CP38E-GHRA(CP2)W		BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-Cu	38-CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch	Switchgrass	Panicum virgatum	16.00	1		Grass	N	N	CP38E-GHRA(CP2)W		BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-Cu	38-CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch	Prairie Cordgrass	Spartina pectinata	8.00	0.5		Grass	N	N	CP38E-GHRA(CP2)W		BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-Cu	38-CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch	Cupplant	Silphium perfoliatum	2.00	0.125		Forb	N	N	CP38E-GHRA(CP2)W		BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-Cu	38-CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch	Blue Vervain	Verbena hastata	1.00	0.0625		Forb	N	N	CP38E-GHRA(CP2)W		BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-Cu	38-CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch	Common Ironweed	Vernonia fasciculata	1.00	0.0625		Forb	N	N	CP38E-GHRA(CP2)W		BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-GHRA(CP2)WM-Switch-BB-Cwrye-Pcord-Berg-N	38-CP38E-GHRA(CP2)WM-Switch-BB-Cwrye-Pcor	Switchgrass	Panicum virgatum	32.00	2		Grass	N	N	CP38E-GHRA(CP2)WM		Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
38	CP38E-GHRA(CP2)WM-Switch-BB-Cwrye-Pcord-Berg-N	38-CP38E-GHRA(CP2)WM-Switch-BB-Cwrye-Pcor	Big Bluestem	Andropogon gerardii	16.00	1		Grass	N	N	CP38E-GHRA(CP2)WM		Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
38	CP38E-GHRA(CP2)WM-Switch-BB-Cwrye-Pcord-Berg-N	38-CP38E-GHRA(CP2)WM-Switch-BB-Cwrye-Pcor	Canada Wildrye	Elymus canadensis	16.00	1		Grass	N	N	CP38E-GHRA(CP2)WM		Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
38	CP38E-GHRA(CP2)WM-Switch-BB-Cwrye-Pcord-Berg-N	38-CP38E-GHRA(CP2)WM-Switch-BB-Cwrye-Pcor	Prairie Cordgrass	Spartina pectinata	4.00	0.25		Grass	N	N	CP38E-GHRA(CP2)WM		Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
38	CP38E-GHRA(CP2)WM-Switch-BB-Cwrye-Pcord-Berg-N	38-CP38E-GHRA(CP2)WM-Switch-BB-Cwrye-Pcor	Bergamot	Monarda fistulosa	1.00	0.0625		Forb	N	N	CP38E-GHRA(CP2)WM		Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
38	CP38E-GHRA(CP2)WM-Switch-BB-Cwrye-Pcord-Berg-N	38-CP38E-GHRA(CP2)WM-Switch-BB-Cwrye-Pcor	New England Aster	Symphyotrichum novae-a	1.00	0.0625		Forb	N	N	CP38E-GHRA(CP2)WM		Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
38	CP38E-GHRA(CP2)WM-Switch-BB-Cwrye-Pcord-Berg-N	38-CP38E-GHRA(CP2)WM-Switch-BB-Cwrye-Pcor	Yellow Coneflower	Ratibida pinnata	1.00	0.0625		Forb	N	N	CP38E-GHRA(CP2)WM		Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Little Bluestem	Schizachyrium scoparium	24.00	1.5		Grass	N	N	CP38E-GHRA(CP25)D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Sideoats Grama	Bouteloua curtipendula	24.00	1.5		Grass	N	N	CP38E-GHRA(CP25)D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Indiangrass	Sorghastrum nutans	8.00	0.5		Grass	N	N	CP38E-GHRA(CP25)D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Big Bluestem	Andropogon gerardii	4.00	0.25		Grass	N	N	CP38E-GHRA(CP25)D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Purple Prairie Clover	Dalea purpurea	2.00	0.125		Legume	N	N	CP38E-GHRA(CP25)D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Sand Dropseed	Sporobolus cryptandrus	2.00	0.125		Grass	N	N	CP38E-GHRA(CP25)D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Prairie Junegrass	Koeleria macrantha	1.00	0.0625		Grass	N	N	CP38E-GHRA(CP25)D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Spiderwort	Tradescantia ohiensis	1.00	0.0625		Forb	N	N	CP38E-GHRA(CP25)D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Hoary Vervain	Verbena stricta	0.50	0.03125		Forb	N	N	CP38E-GHRA(CP25)D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Leadplant	Amorpha canescens	0.50	0.03125		Legume	N	N	CP38E-GHRA(CP25)D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Prairie Tickseed	Coreopsis palmata	0.50	0.03125		Forb	N	N	CP38E-GHRA(CP25)D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Silky Aster	Symphyotrichum pratens	0.50	0.03125		Forb	N	N	CP38E-GHRA(CP25)D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint

38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Stiff Goldenrod	Oligoneuron rigidum	0.50	0.03125		Forb	N	N	CP38E-GHRA(CP25)D	Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Yellow Coneflower	Ratibida pinnata	0.50	0.03125		Forb	N	N	CP38E-GHRA(CP25)D	Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Prairie Cinquefoil	Potentilla arguta	0.25	0.015625		Forb	N	N	CP38E-GHRA(CP25)D	Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Spotted Mint	Monarda punctata	0.25	0.015625		Forb	N	N	CP38E-GHRA(CP25)D	Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjune	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Little Bluestem	Schizachyrium scoparium	24.00	1.5		Grass	N	N	CP38E-GHRA(CP25)DM	Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjune	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Sideoats Grama	Bouteloua curtipendula	24.00	1.5		Grass	N	N	CP38E-GHRA(CP25)DM	Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjune	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Indiangrass	Sorghastrum nutans	8.00	0.5		Grass	N	N	CP38E-GHRA(CP25)DM	Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjune	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Switchgrass	Panicum virgatum	4.00	0.25		Grass	N	N	CP38E-GHRA(CP25)DM	Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjune	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Prairie Junegrass	Koeleria macrantha	2.00	0.125		Grass	N	N	CP38E-GHRA(CP25)DM	Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjune	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Prairie Dropseed	Sporobolus heterolepis	2.00	0.125		Grass	N	N	CP38E-GHRA(CP25)DM	Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjune	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Purple Prairie Clover	Dalea purpurea	2.00	0.125		Legume	N	N	CP38E-GHRA(CP25)DM	Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjune	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Round-Headed Bushclover	Lespedeza capitata	2.00	0.125		Legume	N	N	CP38E-GHRA(CP25)DM	Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjune	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Bergamot	Monarda fistulosa	1.00	0.0625		Forb	N	N	CP38E-GHRA(CP25)DM	Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjune	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Spiderwort	Tradescantia ohiensis	1.00	0.0625		Forb	N	N	CP38E-GHRA(CP25)DM	Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjune	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Yellow Coneflower	Ratibida pinnata	1.00	0.0625		Forb	N	N	CP38E-GHRA(CP25)DM	Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjune	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Leadplant	Amorpha canescens	0.50	0.03125		Legume	N	N	CP38E-GHRA(CP25)DM	Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjune	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Rough Blazing Star	Liatris aspera	0.50	0.03125		Forb	N	N	CP38E-GHRA(CP25)DM	Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjune	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Sky-Blue Aster	Symphyotrichum oolenta	0.50	0.03125		Forb	N	N	CP38E-GHRA(CP25)DM	Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjune	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Stiff Goldenrod	Oligoneuron rigidum	0.50	0.03125		Forb	N	N	CP38E-GHRA(CP25)DM	Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjune	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Prairie Cinquefoil	Potentilla arguta	0.25	0.015625		Forb	N	N	CP38E-GHRA(CP25)DM	Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Switch-Oxe	38-CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Sv	Little Bluestem	Schizachyrium scoparium	24.00	1.5		Grass	N	N	CP38E-GHRA(CP25)M	Berg-Besus-NEaster-SBAster-Ycone-Croot
38	CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Switch-Oxe	38-CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Sv	Indiangrass	Sorghastrum nutans	16.00	1		Grass	N	N	CP38E-GHRA(CP25)M	Berg-Besus-NEaster-SBAster-Ycone-Croot
38	CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Switch-Oxe	38-CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Sv	Big Bluestem	Andropogon gerardii	8.00	0.5		Grass	N	N	CP38E-GHRA(CP25)M	Berg-Besus-NEaster-SBAster-Ycone-Croot
38	CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Switch-Oxe	38-CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Sv	Canada Wildrye	Elymus canadensis	8.00	0.5		Grass	N	N	CP38E-GHRA(CP25)M	Berg-Besus-NEaster-SBAster-Ycone-Croot
38	CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Switch-Oxe	38-CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Sv	Switchgrass	Panicum virgatum	8.00	0.5		Grass	N	N	CP38E-GHRA(CP25)M	Berg-Besus-NEaster-SBAster-Ycone-Croot
38	CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Switch-Oxe	38-CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Sv	Ox-eye Sunflower	Heliopsis helianthoides	1.00	0.0625		Forb	N	N	CP38E-GHRA(CP25)M	Berg-Besus-NEaster-SBAster-Ycone-Croot
38	CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Switch-Oxe	38-CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Sv	Prairie Blazing Star	Liatris pycnostachya	1.00	0.0625		Forb	N	N	CP38E-GHRA(CP25)M	Berg-Besus-NEaster-SBAster-Ycone-Croot
38	CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Switch-Oxe	38-CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Sv	Purple Prairie Clover	Dalea purpurea	1.00	0.0625		Legume	N	N	CP38E-GHRA(CP25)M	Berg-Besus-NEaster-SBAster-Ycone-Croot
38	CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Switch-Oxe	38-CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Sv	Rosinweed	Silphium integrifolium	1.00	0.0625		Forb	N	N	CP38E-GHRA(CP25)M	Berg-Besus-NEaster-SBAster-Ycone-Croot
38	CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Switch-Oxe	38-CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Sv	Bergamot	Monarda fistulosa	0.50	0.03125		Forb	N	N	CP38E-GHRA(CP25)M	Berg-Besus-NEaster-SBAster-Ycone-Croot
38	CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Switch-Oxe	38-CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Sv	Black-eyed Susan	Rudbeckia hirta	0.50	0.03125		Forb	N	N	CP38E-GHRA(CP25)M	Berg-Besus-NEaster-SBAster-Ycone-Croot
38	CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Switch-Oxe	38-CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Sv	New England Aster	Symphyotrichum novae-a	0.50	0.03125		Forb	N	N	CP38E-GHRA(CP25)M	Berg-Besus-NEaster-SBAster-Ycone-Croot
38	CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Switch-Oxe	38-CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Sv	Smooth Blue Aster	Symphyotrichum laeve	0.50	0.03125		Forb	N	N	CP38E-GHRA(CP25)M	Berg-Besus-NEaster-SBAster-Ycone-Croot
38	CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Switch-Oxe	38-CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Sv	Yellow Coneflower	Ratibida pinnata	0.50	0.03125		Forb	N	N	CP38E-GHRA(CP25)M	Berg-Besus-NEaster-SBAster-Ycone-Croot
38	CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Switch-Oxe	38-CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Sv	Culver's Root	Veronicastrum virginicum	0.25	0.015625		Forb	N	N	CP38E-GHRA(CP25)M	Berg-Besus-NEaster-SBAster-Ycone-Croot
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-F	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BI	Canada Wildrye	Elymus canadensis	16.00	1		Grass	N	N	CP38E-GHRA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-F	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BI	Switchgrass	Panicum virgatum	16.00	1		Grass	N	N	CP38E-GHRA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-F	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BI	Indiangrass	Sorghastrum nutans	12.00	0.75		Grass	N	N	CP38E-GHRA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-F	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BI	Big Bluestem	Andropogon gerardii	8.00	0.5		Grass	N	N	CP38E-GHRA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-F	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BI	Prairie Cordgrass	Spartina pectinata	8.00	0.5		Grass	N	N	CP38E-GHRA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-F	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BI	Fowl Mannagrass	Glyceria striata	4.00	0.25		Grass	N	N	CP38E-GHRA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-F	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BI	Fox Sedge	Carex vulpinoidea	4.00	0.25		Sedge	N	N	CP38E-GHRA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-F	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BI	Cupplant	Silphium perfoliatum	2.00	0.125		Forb	N	N	CP38E-GHRA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-F	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BI	Showy Tick Trefoil	Desmodium canadense	2.00	0.125		Legume	N	N	CP38E-GHRA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-F	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BI	Blue Vervain	Verbena hastata	1.00	0.0625		Forb	N	N	CP38E-GHRA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-F	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BI	Golden Alexanders	Zizia aurea	1.00	0.0625		Forb	N	N	CP38E-GHRA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-F	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BI	Marsh Milkweed	Asclepias incarnata	1.00	0.0625		Forb	N	N	CP38E-GHRA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-F	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BI	Boneset	Eupatorium perfoliatum	0.50	0.03125		Forb	N	N	CP38E-GHRA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-F	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BI	Common Ironweed	Vernonia fasciculata	0.50	0.03125		Forb	N	N	CP38E-GHRA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot

38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-F	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BI	Joe-pye Weed	Eutrochium maculatum	0.50	0.03125		Forb	N	N	CP38E-GHRA(CP25)W		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-F	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BI	Culver's Root	Veronicastrum virginicum	0.25	0.015625		Forb	N	N	CP38E-GHRA(CP25)W		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Indian-Pcord	38-CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Ind	Switchgrass	Panicum virgatum	24.00	1.5		Grass	N	N	CP38E-GHRA(CP25)WM		Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
38	CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Indian-Pcord	38-CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Ind	Big Bluestem	Andropogon gerardii	20.00	1.25		Grass	N	N	CP38E-GHRA(CP25)WM		Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
38	CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Indian-Pcord	38-CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Ind	Canada Wildrye	Elymus canadensis	16.00	1		Grass	N	N	CP38E-GHRA(CP25)WM		Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
38	CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Indian-Pcord	38-CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Ind	Indiangrass	Sorghastrum nutans	12.00	0.75		Grass	N	N	CP38E-GHRA(CP25)WM		Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
38	CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Indian-Pcord	38-CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Ind	Prairie Cordgrass	Spartina pectinata	4.00	0.25		Grass	N	N	CP38E-GHRA(CP25)WM		Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
38	CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Indian-Pcord	38-CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Ind	Cupplant	Silphium perfoliatum	2.00	0.125		Forb	N	N	CP38E-GHRA(CP25)WM		Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
38	CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Indian-Pcord	38-CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Ind	White wild indigo	Baptisia alba	1.50	0.09375		Legume	N	N	CP38E-GHRA(CP25)WM		Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
38	CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Indian-Pcord	38-CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Ind	Black-eyed Susan	Rudbeckia hirta	0.50	0.03125		Forb	N	N	CP38E-GHRA(CP25)WM		Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
38	CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Indian-Pcord	38-CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Ind	Common Ironweed	Vernonia fasciculata	0.50	0.03125		Forb	N	N	CP38E-GHRA(CP25)WM		Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
38	CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Indian-Pcord	38-CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Ind	Golden Alexanders	Zizia aurea	0.50	0.03125		Forb	N	N	CP38E-GHRA(CP25)WM		Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
38	CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Indian-Pcord	38-CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Ind	New England Aster	Symphyotrichum novae-a	0.50	0.03125		Forb	N	N	CP38E-GHRA(CP25)WM		Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
38	CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Indian-Pcord	38-CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Ind	Prairie Blazing Star	Liatris pycnostachya	0.50	0.03125		Forb	N	N	CP38E-GHRA(CP25)WM		Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
38	CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Indian-Pcord	38-CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Ind	Yellow Coneflower	Ratibida pinnata	0.50	0.03125		Forb	N	N	CP38E-GHRA(CP25)WM		Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
38	CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Indian-Pcord	38-CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Ind	Bergamot	Monarda fistulosa	0.25	0.015625		Forb	N	N	CP38E-GHRA(CP25)WM		Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
38	CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Indian-Pcord	38-CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Ind	Great St. John's Wort	Hypericum ascyron	0.25	0.015625		Forb	N	N	CP38E-GHRA(CP25)WM		Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Little Bluestem	Schizachyrium scoparium	24.00	1.5		Grass	N	N	CP38E-KBB		Fspurge-Galex-Rblzstar-RHbushclover-Wsun-Berg-Ptick-Besus
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Canada Wildrye	Elymus canadensis	16.00	1		Grass	N	N	CP38E-KBB		Fspurge-Galex-Rblzstar-RHbushclover-Wsun-Berg-Ptick-Besus
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Indiangrass	Sorghastrum nutans	16.00	1		Grass	N	N	CP38E-KBB		Fspurge-Galex-Rblzstar-RHbushclover-Wsun-Berg-Ptick-Besus
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Big Bluestem	Andropogon gerardii	8.00	0.5		Grass	N	N	CP38E-KBB		Fspurge-Galex-Rblzstar-RHbushclover-Wsun-Berg-Ptick-Besus
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Sideoats Grama	Bouteloua curtipendula	8.00	0.5		Grass	N	N	CP38E-KBB		Fspurge-Galex-Rblzstar-RHbushclover-Wsun-Berg-Ptick-Besus
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Switchgrass	Panicum virgatum	8.00	0.5		Grass	N	N	CP38E-KBB		Fspurge-Galex-Rblzstar-RHbushclover-Wsun-Berg-Ptick-Besus
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Wild Lupine	Lupinus perennis	3.00	0.1875		Legume	N	N	CP38E-KBB		Fspurge-Galex-Rblzstar-RHbushclover-Wsun-Berg-Ptick-Besus
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Purple Prairie Clover	Dalea purpurea	2.00	0.125		Legume	N	N	CP38E-KBB		Fspurge-Galex-Rblzstar-RHbushclover-Wsun-Berg-Ptick-Besus
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Butterfly Milkweed	Asclepias tuberosa	1.00	0.0625		Forb	N	N	CP38E-KBB		Fspurge-Galex-Rblzstar-RHbushclover-Wsun-Berg-Ptick-Besus
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Flowering Spurge	Euphorbia corollata	1.00	0.0625		Forb	N	N	CP38E-KBB		Fspurge-Galex-Rblzstar-RHbushclover-Wsun-Berg-Ptick-Besus
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Golden Alexanders	Zizia aurea	1.00	0.0625		Forb	N	N	CP38E-KBB		Fspurge-Galex-Rblzstar-RHbushclover-Wsun-Berg-Ptick-Besus
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Rough Blazing Star	Liatris aspera	1.00	0.0625		Forb	N	N	CP38E-KBB		Fspurge-Galex-Rblzstar-RHbushclover-Wsun-Berg-Ptick-Besus
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Round-Headed Bushclover	Lespedeza capitata	1.00	0.0625		Legume	N	N	CP38E-KBB		Fspurge-Galex-Rblzstar-RHbushclover-Wsun-Berg-Ptick-Besus
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Fewleaf Sunflower	Helianthus occidentalis	1.00	0.0625		Forb	N	N	CP38E-KBB		Fspurge-Galex-Rblzstar-RHbushclover-Wsun-Berg-Ptick-Besus
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Bergamot	Monarda fistulosa	0.50	0.03125		Forb	N	N	CP38E-KBB		Fspurge-Galex-Rblzstar-RHbushclover-Wsun-Berg-Ptick-Besus
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Prairie Tickseed	Coreopsis palmata	0.50	0.03125		Forb	N	N	CP38E-KBB		Fspurge-Galex-Rblzstar-RHbushclover-Wsun-Berg-Ptick-Besus
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Black-eyed Susan	Rudbeckia hirta	0.40	0.025		Forb	N	N	CP38E-KBB		Fspurge-Galex-Rblzstar-RHbushclover-Wsun-Berg-Ptick-Besus
38	CP38E-KBB(CP1)1-Alf-Rtop-Tim-Orc	38-CP38E-KBB(CP1)1-Alf-Rtop-Tim-Orc	Alfalfa	Medicago sativa	96.00	6		Legume	I	N	CP38E-KBB(CP1)1		Alf-Rtop-Tim-Orc
38	CP38E-KBB(CP1)1-Alf-Rtop-Tim-Orc	38-CP38E-KBB(CP1)1-Alf-Rtop-Tim-Orc	Redtop	Agrostis gigantea	32.00	2		Grass	I	N	CP38E-KBB(CP1)1		Alf-Rtop-Tim-Orc
38	CP38E-KBB(CP1)1-Alf-Rtop-Tim-Orc	38-CP38E-KBB(CP1)1-Alf-Rtop-Tim-Orc	Timothy	Phleum pratense	32.00	2		Grass	I	N	CP38E-KBB(CP1)1		Alf-Rtop-Tim-Orc
38	CP38E-KBB(CP1)1-Alf-Rtop-Tim-Orc	38-CP38E-KBB(CP1)1-Alf-Rtop-Tim-Orc	Orchardgrass	Dactylis glomerata L.	16.00	1		Grass	I	N	CP38E-KBB(CP1)1		Alf-Rtop-Tim-Orc
38	CP38E-KBB(CP1)2-RC-KB-Orc-Rtop	38-CP38E-KBB(CP1)2-RC-KB-Orc-Rtop	Red Clover	Trifolium pratense	80.00	5		Legume	I	N	CP38E-KBB(CP1)2		RC-KB-Orc-Rtop
38	CP38E-KBB(CP1)2-RC-KB-Orc-Rtop	38-CP38E-KBB(CP1)2-RC-KB-Orc-Rtop	Kentucky Bluegrass	Poa pratensis	32.00	2		Grass	I	N	CP38E-KBB(CP1)2		RC-KB-Orc-Rtop
38	CP38E-KBB(CP1)2-RC-KB-Orc-Rtop	38-CP38E-KBB(CP1)2-RC-KB-Orc-Rtop	Orchardgrass	Dactylis glomerata L.	16.00	1		Grass	I	N	CP38E-KBB(CP1)2		RC-KB-Orc-Rtop
38	CP38E-KBB(CP1)2-RC-KB-Orc-Rtop	38-CP38E-KBB(CP1)2-RC-KB-Orc-Rtop	Redtop	Agrostis gigantea	16.00	1		Grass	I	N	CP38E-KBB(CP1)2		RC-KB-Orc-Rtop
38	CP38E-KBB(CP1)3-RC-SB-Tim	38-CP38E-KBB(CP1)3-RC-SB-Tim	Red Clover	Trifolium pratense	80.00	5		Legume	I	N	CP38E-KBB(CP1)3		RC-SB-Tim
38	CP38E-KBB(CP1)3-RC-SB-Tim	38-CP38E-KBB(CP1)3-RC-SB-Tim	Smooth Bromegrass	Bromus inermis	48.00	3		Grass	I	N	CP38E-KBB(CP1)3		RC-SB-Tim
38	CP38E-KBB(CP1)3-RC-SB-Tim	38-CP38E-KBB(CP1)3-RC-SB-Tim	Timothy	Phleum pratense	32.00	2		Grass	I	N	CP38E-KBB(CP1)3		RC-SB-Tim
38	CP38E-KBB(CP1)4-RC-Tim-Orc-Rtop	38-CP38E-KBB(CP1)4-RC-Tim-Orc-Rtop	Red Clover	Trifolium pratense	80.00	5		Legume	I	N	CP38E-KBB(CP1)4		RC-Tim-Orc-Rtop
38	CP38E-KBB(CP1)4-RC-Tim-Orc-Rtop	38-CP38E-KBB(CP1)4-RC-Tim-Orc-Rtop	Timothy	Phleum pratense	32.00	2		Grass	I	N	CP38E-KBB(CP1)4		RC-Tim-Orc-Rtop
38	CP38E-KBB(CP1)4-RC-Tim-Orc-Rtop	38-CP38E-KBB(CP1)4-RC-Tim-Orc-Rtop	Orchardgrass	Dactylis glomerata L.	16.00	1		Grass	I	N	CP38E-KBB(CP1)4		RC-Tim-Orc-Rtop
38	CP38E-KBB(CP1)4-RC-Tim-Orc-Rtop	38-CP38E-KBB(CP1)4-RC-Tim-Orc-Rtop	Redtop	Agrostis gigantea	16.00	1		Grass	I	N	CP38E-KBB(CP1)4		RC-Tim-Orc-Rtop

38	CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlup-PPclove	38-CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlu	Little Bluestem	Schizachyrium scoparium	36.00	2.25		Grass	N	N	CP38E-KBB(WHIP)		LB-Sgrama-BB-Pjune-Wlup-PPclover-Rblzstar-Ptick-Besus
38	CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlup-PPclove	38-CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlu	Sideoats Grama	Bouteloua curtipendula	16.00	1		Grass	N	N	CP38E-KBB(WHIP)		LB-Sgrama-BB-Pjune-Wlup-PPclover-Rblzstar-Ptick-Besus
38	CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlup-PPclove	38-CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlu	Big Bluestem	Andropogon gerardii	8.00	0.5		Grass	N	N	CP38E-KBB(WHIP)		LB-Sgrama-BB-Pjune-Wlup-PPclover-Rblzstar-Ptick-Besus
38	CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlup-PPclove	38-CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlu	Prairie Junegrass	Koeleria macrantha	4.00	0.25		Grass	N	N	CP38E-KBB(WHIP)		LB-Sgrama-BB-Pjune-Wlup-PPclover-Rblzstar-Ptick-Besus
38	CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlup-PPclove	38-CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlu	Wild Lupine	Lupinus perennis	3.00	0.1875		Legume	N	N	CP38E-KBB(WHIP)		LB-Sgrama-BB-Pjune-Wlup-PPclover-Rblzstar-Ptick-Besus
38	CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlup-PPclove	38-CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlu	Purple Prairie Clover	Dalea purpurea	2.00	0.125		Legume	N	N	CP38E-KBB(WHIP)		LB-Sgrama-BB-Pjune-Wlup-PPclover-Rblzstar-Ptick-Besus
38	CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlup-PPclove	38-CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlu	Rough Blazing Star	Liatris aspera	2.00	0.125		Forb	N	N	CP38E-KBB(WHIP)		LB-Sgrama-BB-Pjune-Wlup-PPclover-Rblzstar-Ptick-Besus
38	CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlup-PPclove	38-CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlu	Prairie Tickseed	Coreopsis palmata	1.00	0.0625		Forb	N	N	CP38E-KBB(WHIP)		LB-Sgrama-BB-Pjune-Wlup-PPclover-Rblzstar-Ptick-Besus
38	CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlup-PPclove	38-CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlu	Black-eyed Susan	Rudbeckia hirta	0.25	0.015625		Forb	N	N	CP38E-KBB(WHIP)		LB-Sgrama-BB-Pjune-Wlup-PPclover-Rblzstar-Ptick-Besus
38	CP38E-SWGCA(CP1)1-Alf-Rtop-Tim-Orc	38-CP38E-SWGCA(CP1)1-Alf-Rtop-Tim-Orc	Alfalfa	Medicago sativa	96.00	6		Legume	I	N	CP38E-SWGCA(CP1)1		Alf-Rtop-Tim-Orc
38	CP38E-SWGCA(CP1)1-Alf-Rtop-Tim-Orc	38-CP38E-SWGCA(CP1)1-Alf-Rtop-Tim-Orc	Redtop	Agrostis gigantea	32.00	2		Grass	I	N	CP38E-SWGCA(CP1)1		Alf-Rtop-Tim-Orc
38	CP38E-SWGCA(CP1)1-Alf-Rtop-Tim-Orc	38-CP38E-SWGCA(CP1)1-Alf-Rtop-Tim-Orc	Timothy	Phleum pratense	32.00	2		Grass	I	N	CP38E-SWGCA(CP1)1		Alf-Rtop-Tim-Orc
38	CP38E-SWGCA(CP1)1-Alf-Rtop-Tim-Orc	38-CP38E-SWGCA(CP1)1-Alf-Rtop-Tim-Orc	Orchardgrass	Dactylis glomerata L.	16.00	1		Grass	I	N	CP38E-SWGCA(CP1)1		Alf-Rtop-Tim-Orc
38	CP38E-SWGCA(CP1)2-RC-KB-Orc-Rtop	38-CP38E-SWGCA(CP1)2-RC-KB-Orc-Rtop	Red Clover	Trifolium pratense	80.00	5		Legume	I	N	CP38E-SWGCA(CP1)2		RC-KB-Orc-Rtop
38	CP38E-SWGCA(CP1)2-RC-KB-Orc-Rtop	38-CP38E-SWGCA(CP1)2-RC-KB-Orc-Rtop	Kentucky Bluegrass	Poa pratensis	32.00	2		Grass	I	N	CP38E-SWGCA(CP1)2		RC-KB-Orc-Rtop
38	CP38E-SWGCA(CP1)2-RC-KB-Orc-Rtop	38-CP38E-SWGCA(CP1)2-RC-KB-Orc-Rtop	Orchardgrass	Dactylis glomerata L.	16.00	1		Grass	I	N	CP38E-SWGCA(CP1)2		RC-KB-Orc-Rtop
38	CP38E-SWGCA(CP1)2-RC-KB-Orc-Rtop	38-CP38E-SWGCA(CP1)2-RC-KB-Orc-Rtop	Redtop	Agrostis gigantea	16.00	1		Grass	I	N	CP38E-SWGCA(CP1)2		RC-KB-Orc-Rtop
38	CP38E-SWGCA(CP1)3-RC-SB-Tim	38-CP38E-SWGCA(CP1)3-RC-SB-Tim	Red Clover	Trifolium pratense	80.00	5		Legume	I	N	CP38E-SWGCA(CP1)3		RC-SB-Tim
38	CP38E-SWGCA(CP1)3-RC-SB-Tim	38-CP38E-SWGCA(CP1)3-RC-SB-Tim	Smooth Bromegrass	Bromus inermis	48.00	3		Grass	I	N	CP38E-SWGCA(CP1)3		RC-SB-Tim
38	CP38E-SWGCA(CP1)3-RC-SB-Tim	38-CP38E-SWGCA(CP1)3-RC-SB-Tim	Timothy	Phleum pratense	32.00	2		Grass	I	N	CP38E-SWGCA(CP1)3		RC-SB-Tim
38	CP38E-SWGCA(CP1)4-RC-Tim-Orc-Rtop	38-CP38E-SWGCA(CP1)4-RC-Tim-Orc-Rtop	Red Clover	Trifolium pratense	80.00	5		Legume	I	N	CP38E-SWGCA(CP1)4		RC-Tim-Orc-Rtop
38	CP38E-SWGCA(CP1)4-RC-Tim-Orc-Rtop	38-CP38E-SWGCA(CP1)4-RC-Tim-Orc-Rtop	Timothy	Phleum pratense	32.00	2		Grass	I	N	CP38E-SWGCA(CP1)4		RC-Tim-Orc-Rtop
38	CP38E-SWGCA(CP1)4-RC-Tim-Orc-Rtop	38-CP38E-SWGCA(CP1)4-RC-Tim-Orc-Rtop	Orchardgrass	Dactylis glomerata L.	16.00	1		Grass	I	N	CP38E-SWGCA(CP1)4		RC-Tim-Orc-Rtop
38	CP38E-SWGCA(CP1)4-RC-Tim-Orc-Rtop	38-CP38E-SWGCA(CP1)4-RC-Tim-Orc-Rtop	Redtop	Agrostis gigantea	16.00	1		Grass	I	N	CP38E-SWGCA(CP1)4		RC-Tim-Orc-Rtop
38	CP38E-SWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-S	38-CP38E-SWGCA(CP2)D-LB-Sgrama-BB-Indian-I	Little Bluestem	Schizachyrium scoparium	24.00	1.5		Grass	N	N	CP38E-SWGCA(CP2)D		LB-Sgrama-BB-Indian-PPclover-Sgrod-Ycone
38	CP38E-SWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-S	38-CP38E-SWGCA(CP2)D-LB-Sgrama-BB-Indian-I	Sideoats Grama	Bouteloua curtipendula	24.00	1.5		Grass	N	N	CP38E-SWGCA(CP2)D		LB-Sgrama-BB-Indian-PPclover-Sgrod-Ycone
38	CP38E-SWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-S	38-CP38E-SWGCA(CP2)D-LB-Sgrama-BB-Indian-I	Big Bluestem	Andropogon gerardii	8.00	0.5		Grass	N	N	CP38E-SWGCA(CP2)D		LB-Sgrama-BB-Indian-PPclover-Sgrod-Ycone
38	CP38E-SWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-S	38-CP38E-SWGCA(CP2)D-LB-Sgrama-BB-Indian-I	Indiangrass	Sorghastrum nutans	8.00	0.5		Grass	N	N	CP38E-SWGCA(CP2)D		LB-Sgrama-BB-Indian-PPclover-Sgrod-Ycone
38	CP38E-SWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-S	38-CP38E-SWGCA(CP2)D-LB-Sgrama-BB-Indian-I	Purple Prairie Clover	Dalea purpurea	2.00	0.125		Legume	N	N	CP38E-SWGCA(CP2)D		LB-Sgrama-BB-Indian-PPclover-Sgrod-Ycone
38	CP38E-SWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-S	38-CP38E-SWGCA(CP2)D-LB-Sgrama-BB-Indian-I	Stiff Goldenrod	Oligoneuron rigidum	1.00	0.0625		Forb	N	N	CP38E-SWGCA(CP2)D		LB-Sgrama-BB-Indian-PPclover-Sgrod-Ycone
38	CP38E-SWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-S	38-CP38E-SWGCA(CP2)D-LB-Sgrama-BB-Indian-I	Yellow Coneflower	Ratibida pinnata	1.00	0.0625		Forb	N	N	CP38E-SWGCA(CP2)D		LB-Sgrama-BB-Indian-PPclover-Sgrod-Ycone
38	CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-I	38-CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian	Little Bluestem	Schizachyrium scoparium	24.00	1.5		Grass	N	N	CP38E-SWGCA(CP2)DM		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-I	38-CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian	Sideoats Grama	Bouteloua curtipendula	16.00	1		Grass	N	N	CP38E-SWGCA(CP2)DM		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-I	38-CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian	Big Bluestem	Andropogon gerardii	8.00	0.5		Grass	N	N	CP38E-SWGCA(CP2)DM		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-I	38-CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian	Indiangrass	Sorghastrum nutans	8.00	0.5		Grass	N	N	CP38E-SWGCA(CP2)DM		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-I	38-CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian	Switchgrass	Panicum virgatum	8.00	0.5		Grass	N	N	CP38E-SWGCA(CP2)DM		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-I	38-CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian	Purple Prairie Clover	Dalea purpurea	2.00	0.125		Legume	N	N	CP38E-SWGCA(CP2)DM		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-I	38-CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian	Bergamot	Monarda fistulosa	1.00	0.0625		Forb	N	N	CP38E-SWGCA(CP2)DM		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-I	38-CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian	Yellow Coneflower	Ratibida pinnata	1.00	0.0625		Forb	N	N	CP38E-SWGCA(CP2)DM		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Ber	38-CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Little Bluestem	Schizachyrium scoparium	20.00	1.25		Grass	N	N	CP38E-SWGCA(CP2)M		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Ber	38-CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Canada Wildrye	Elymus canadensis	16.00	1		Grass	N	N	CP38E-SWGCA(CP2)M		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Ber	38-CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Indiangrass	Sorghastrum nutans	16.00	1		Grass	N	N	CP38E-SWGCA(CP2)M		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Ber	38-CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Big Bluestem	Andropogon gerardii	8.00	0.5		Grass	N	N	CP38E-SWGCA(CP2)M		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Ber	38-CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Switchgrass	Panicum virgatum	8.00	0.5		Grass	N	N	CP38E-SWGCA(CP2)M		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Ber	38-CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Bergamot	Monarda fistulosa	1.00	0.0625		Forb	N	N	CP38E-SWGCA(CP2)M		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Ber	38-CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Black-eyed Susan	Rudbeckia hirta	1.00	0.0625		Forb	N	N	CP38E-SWGCA(CP2)M		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Ber	38-CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Yellow Coneflower	Ratibida pinnata	1.00	0.0625		Forb	N	N	CP38E-SWGCA(CP2)M		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-	38-CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Switc	Big Bluestem	Andropogon gerardii	16.00	1		Grass	N	N	CP38E-SWGCA(CP2)W		BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-	38-CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Switc	Canada Wildrye	Elymus canadensis	16.00	1		Grass	N	N	CP38E-SWGCA(CP2)W		BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron

38	CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-C	38-CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Switc	Indiangrass	Sorghastrum nutans	16.00	1		Grass	N	N	CP38E-SWGCA(CP2)W		BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-C	38-CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Switc	Switchgrass	Panicum virgatum	16.00	1		Grass	N	N	CP38E-SWGCA(CP2)W		BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-C	38-CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Switc	Prairie Cordgrass	Spartina pectinata	8.00	0.5		Grass	N	N	CP38E-SWGCA(CP2)W		BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-C	38-CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Switc	Cupplant	Silphium perfoliatum	2.00	0.125		Forb	N	N	CP38E-SWGCA(CP2)W		BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-C	38-CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Switc	Blue Vervain	Verbena hastata	1.00	0.0625		Forb	N	N	CP38E-SWGCA(CP2)W		BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-C	38-CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Switc	Common Ironweed	Vernonia fasciculata	1.00	0.0625		Forb	N	N	CP38E-SWGCA(CP2)W		BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-SWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Berg-	38-CP38E-SWGCA(CP2)WM-Switch-BB-Cwrye-Pc	Switchgrass	Panicum virgatum	32.00	2		Grass	N	N	CP38E-SWGCA(CP2)WM		Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
38	CP38E-SWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Berg-	38-CP38E-SWGCA(CP2)WM-Switch-BB-Cwrye-Pc	Big Bluestem	Andropogon gerardii	16.00	1		Grass	N	N	CP38E-SWGCA(CP2)WM		Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
38	CP38E-SWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Berg-	38-CP38E-SWGCA(CP2)WM-Switch-BB-Cwrye-Pc	Canada Wildrye	Elymus canadensis	16.00	1		Grass	N	N	CP38E-SWGCA(CP2)WM		Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
38	CP38E-SWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Berg-	38-CP38E-SWGCA(CP2)WM-Switch-BB-Cwrye-Pc	Prairie Cordgrass	Spartina pectinata	4.00	0.25		Grass	N	N	CP38E-SWGCA(CP2)WM		Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
38	CP38E-SWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Berg-	38-CP38E-SWGCA(CP2)WM-Switch-BB-Cwrye-Pc	Bergamot	Monarda fistulosa	1.00	0.0625		Forb	N	N	CP38E-SWGCA(CP2)WM		Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
38	CP38E-SWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Berg-	38-CP38E-SWGCA(CP2)WM-Switch-BB-Cwrye-Pc	New England Aster	Symphyotrichum novae-a	1.00	0.0625		Forb	N	N	CP38E-SWGCA(CP2)WM		Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
38	CP38E-SWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Berg-	38-CP38E-SWGCA(CP2)WM-Switch-BB-Cwrye-Pc	Yellow Coneflower	Ratibida pinnata	1.00	0.0625		Forb	N	N	CP38E-SWGCA(CP2)WM		Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Little Bluestem	Schizachyrium scoparium	24.00	1.5		Grass	N	N	CP38E-SWGCA(CP25)D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Sideoats Grama	Bouteloua curtipendula	24.00	1.5		Grass	N	N	CP38E-SWGCA(CP25)D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Indiangrass	Sorghastrum nutans	8.00	0.5		Grass	N	N	CP38E-SWGCA(CP25)D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Big Bluestem	Andropogon gerardii	4.00	0.25		Grass	N	N	CP38E-SWGCA(CP25)D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Purple Prairie Clover	Dalea purpurea	2.00	0.125		Legume	N	N	CP38E-SWGCA(CP25)D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Sand Dropseed	Sporobolus cryptandrus	2.00	0.125		Grass	N	N	CP38E-SWGCA(CP25)D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Prairie Junegrass	Koeleria macrantha	1.00	0.0625		Grass	N	N	CP38E-SWGCA(CP25)D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Spiderwort	Tradescantia ohiensis	1.00	0.0625		Forb	N	N	CP38E-SWGCA(CP25)D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Hoary Vervain	Verbena stricta	0.50	0.03125		Forb	N	N	CP38E-SWGCA(CP25)D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Leadplant	Amorpha canescens	0.50	0.03125		Legume	N	N	CP38E-SWGCA(CP25)D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Prairie Tickseed	Coreopsis palmata	0.50	0.03125		Forb	N	N	CP38E-SWGCA(CP25)D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Silky Aster	Symphyotrichum pratens	0.50	0.03125		Forb	N	N	CP38E-SWGCA(CP25)D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Stiff Goldenrod	Oligoneuron rigidum	0.50	0.03125		Forb	N	N	CP38E-SWGCA(CP25)D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Yellow Coneflower	Ratibida pinnata	0.50	0.03125		Forb	N	N	CP38E-SWGCA(CP25)D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Prairie Cinquefoil	Potentilla arguta	0.25	0.015625		Forb	N	N	CP38E-SWGCA(CP25)D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Spotted Mint	Monarda punctata	0.25	0.015625		Forb	N	N	CP38E-SWGCA(CP25)D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Little Bluestem	Schizachyrium scoparium	24.00	1.5		Grass	N	N	CP38E-SWGCA(CP25)DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Sideoats Grama	Bouteloua curtipendula	24.00	1.5		Grass	N	N	CP38E-SWGCA(CP25)DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Indiangrass	Sorghastrum nutans	8.00	0.5		Grass	N	N	CP38E-SWGCA(CP25)DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Switchgrass	Panicum virgatum	4.00	0.25		Grass	N	N	CP38E-SWGCA(CP25)DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Prairie Junegrass	Koeleria macrantha	2.00	0.125		Grass	N	N	CP38E-SWGCA(CP25)DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Prairie Dropseed	Sporobolus heterolepis	2.00	0.125		Grass	N	N	CP38E-SWGCA(CP25)DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Purple Prairie Clover	Dalea purpurea	2.00	0.125		Legume	N	N	CP38E-SWGCA(CP25)DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Round-Headed Bushclover	Lespedeza capitata	2.00	0.125		Legume	N	N	CP38E-SWGCA(CP25)DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Bergamot	Monarda fistulosa	1.00	0.0625		Forb	N	N	CP38E-SWGCA(CP25)DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Spiderwort	Tradescantia ohiensis	1.00	0.0625		Forb	N	N	CP38E-SWGCA(CP25)DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Yellow Coneflower	Ratibida pinnata	1.00	0.0625		Forb	N	N	CP38E-SWGCA(CP25)DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Leadplant	Amorpha canescens	0.50	0.03125		Legume	N	N	CP38E-SWGCA(CP25)DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Rough Blazing Star	Liatris aspera	0.50	0.03125		Forb	N	N	CP38E-SWGCA(CP25)DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Sky-Blue Aster	Symphyotrichum oolenta	0.50	0.03125		Forb	N	N	CP38E-SWGCA(CP25)DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Stiff Goldenrod	Oligoneuron rigidum	0.50	0.03125		Forb	N	N	CP38E-SWGCA(CP25)DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Prairie Cinquefoil	Potentilla arguta	0.25	0.015625		Forb	N	N	CP38E-SWGCA(CP25)DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-Switch-O	38-CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-	Little Bluestem	Schizachyrium scoparium	24.00	1.5		Grass	N	N	CP38E-SWGCA(CP25)M		Berg-Besus-NEaster-SBAster-Ycone-Croot
38	CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-Switch-O	38-CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-	Indiangrass	Sorghastrum nutans	16.00	1		Grass	N	N	CP38E-SWGCA(CP25)M		Berg-Besus-NEaster-SBAster-Ycone-Croot
38	CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-Switch-O	38-CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-	Big Bluestem	Andropogon gerardii	8.00	0.5		Grass	N	N	CP38E-SWGCA(CP25)M		Berg-Besus-NEaster-SBAster-Ycone-Croot
38	CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-Switch-O	38-CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-	Canada Wildrye	Elymus canadensis	8.00	0.5		Grass	N	N	CP38E-SWGCA(CP25)M		Berg-Besus-NEaster-SBAster-Ycone-Croot

38	CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-Switch-O	38-CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-	Switchgrass	Panicum virgatum	8.00	0.5		Grass	N	N	CP38E-SWGCA(CP25)M	Berg-Besus-NEaster-SBAster-Ycone-Croot
38	CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-Switch-O	38-CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-	Ox-eye Sunflower	Heliopsis helianthoides	1.00	0.0625		Forb	N	N	CP38E-SWGCA(CP25)M	Berg-Besus-NEaster-SBAster-Ycone-Croot
38	CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-Switch-O	38-CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-	Prairie Blazing Star	Liatris pycnostachya	1.00	0.0625		Forb	N	N	CP38E-SWGCA(CP25)M	Berg-Besus-NEaster-SBAster-Ycone-Croot
38	CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-Switch-O	38-CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-	Purple Prairie Clover	Dalea purpurea	1.00	0.0625		Legume	N	N	CP38E-SWGCA(CP25)M	Berg-Besus-NEaster-SBAster-Ycone-Croot
38	CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-Switch-O	38-CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-	Rosinweed	Silphium integrifolium	1.00	0.0625		Forb	N	N	CP38E-SWGCA(CP25)M	Berg-Besus-NEaster-SBAster-Ycone-Croot
38	CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-Switch-O	38-CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-	Bergamot	Monarda fistulosa	0.50	0.03125		Forb	N	N	CP38E-SWGCA(CP25)M	Berg-Besus-NEaster-SBAster-Ycone-Croot
38	CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-Switch-O	38-CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-	Black-eyed Susan	Rudbeckia hirta	0.50	0.03125		Forb	N	N	CP38E-SWGCA(CP25)M	Berg-Besus-NEaster-SBAster-Ycone-Croot
38	CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-Switch-O	38-CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-	New England Aster	Symphyotrichum novae-a	0.50	0.03125		Forb	N	N	CP38E-SWGCA(CP25)M	Berg-Besus-NEaster-SBAster-Ycone-Croot
38	CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-Switch-O	38-CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-	Smooth Blue Aster	Symphyotrichum laeve	0.50	0.03125		Forb	N	N	CP38E-SWGCA(CP25)M	Berg-Besus-NEaster-SBAster-Ycone-Croot
38	CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-Switch-O	38-CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-	Yellow Coneflower	Ratibida pinnata	0.50	0.03125		Forb	N	N	CP38E-SWGCA(CP25)M	Berg-Besus-NEaster-SBAster-Ycone-Croot
38	CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-Switch-O	38-CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-	Culver's Root	Veronicastrum virginicum	0.25	0.015625		Forb	N	N	CP38E-SWGCA(CP25)M	Berg-Besus-NEaster-SBAster-Ycone-Croot
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-	Canada Wildrye	Elymus canadensis	16.00	1		Grass	N	N	CP38E-SWGCA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-	Switchgrass	Panicum virgatum	16.00	1		Grass	N	N	CP38E-SWGCA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-	Indiangrass	Sorghastrum nutans	12.00	0.75		Grass	N	N	CP38E-SWGCA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-	Big Bluestem	Andropogon gerardii	8.00	0.5		Grass	N	N	CP38E-SWGCA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-	Prairie Cordgrass	Spartina pectinata	8.00	0.5		Grass	N	N	CP38E-SWGCA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-	Fowl Mannagrass	Glyceria striata	4.00	0.25		Grass	N	N	CP38E-SWGCA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-	Fox Sedge	Carex vulpinoidea	4.00	0.25		Sedge	N	N	CP38E-SWGCA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-	Cupplant	Silphium perfoliatum	2.00	0.125		Forb	N	N	CP38E-SWGCA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-	Showy Tick Trefoil	Desmodium canadense	2.00	0.125		Legume	N	N	CP38E-SWGCA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-	Blue Vervain	Verbena hastata	1.00	0.0625		Forb	N	N	CP38E-SWGCA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-	Golden Alexanders	Zizia aurea	1.00	0.0625		Forb	N	N	CP38E-SWGCA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-	Marsh Milkweed	Asclepias incarnata	1.00	0.0625		Forb	N	N	CP38E-SWGCA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-	Boneset	Eupatorium perfoliatum	0.50	0.03125		Forb	N	N	CP38E-SWGCA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-	Common Ironweed	Vernonia fasciculata	0.50	0.03125		Forb	N	N	CP38E-SWGCA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-	Joe-pye Weed	Eutrochium maculatum	0.50	0.03125		Forb	N	N	CP38E-SWGCA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-	Culver's Root	Veronicastrum virginicum	0.25	0.015625		Forb	N	N	CP38E-SWGCA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-Indian-Pco	38-CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-I	Switchgrass	Panicum virgatum	24.00	1.5		Grass	N	N	CP38E-SWGCA(CP25)WM	Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
38	CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-Indian-Pco	38-CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-I	Big Bluestem	Andropogon gerardii	20.00	1.25		Grass	N	N	CP38E-SWGCA(CP25)WM	Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
38	CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-Indian-Pco	38-CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-I	Canada Wildrye	Elymus canadensis	16.00	1		Grass	N	N	CP38E-SWGCA(CP25)WM	Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
38	CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-Indian-Pco	38-CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-I	Indiangrass	Sorghastrum nutans	12.00	0.75		Grass	N	N	CP38E-SWGCA(CP25)WM	Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
38	CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-Indian-Pco	38-CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-I	Prairie Cordgrass	Spartina pectinata	4.00	0.25		Grass	N	N	CP38E-SWGCA(CP25)WM	Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
38	CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-Indian-Pco	38-CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-I	Cupplant	Silphium perfoliatum	2.00	0.125		Forb	N	N	CP38E-SWGCA(CP25)WM	Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
38	CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-Indian-Pco	38-CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-I	White wild indigo	Baptisia alba	1.50	0.09375		Legume	N	N	CP38E-SWGCA(CP25)WM	Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
38	CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-Indian-Pco	38-CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-I	Black-eyed Susan	Rudbeckia hirta	0.50	0.03125		Forb	N	N	CP38E-SWGCA(CP25)WM	Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
38	CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-Indian-Pco	38-CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-I	Common Ironweed	Vernonia fasciculata	0.50	0.03125		Forb	N	N	CP38E-SWGCA(CP25)WM	Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
38	CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-Indian-Pco	38-CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-I	Golden Alexanders	Zizia aurea	0.50	0.03125		Forb	N	N	CP38E-SWGCA(CP25)WM	Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
38	CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-Indian-Pco	38-CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-I	New England Aster	Symphyotrichum novae-a	0.50	0.03125		Forb	N	N	CP38E-SWGCA(CP25)WM	Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
38	CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-Indian-Pco	38-CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-I	Prairie Blazing Star	Liatris pycnostachya	0.50	0.03125		Forb	N	N	CP38E-SWGCA(CP25)WM	Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
38	CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-Indian-Pco	38-CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-I	Yellow Coneflower	Ratibida pinnata	0.50	0.03125		Forb	N	N	CP38E-SWGCA(CP25)WM	Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
38	CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-Indian-Pco	38-CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-I	Bergamot	Monarda fistulosa	0.25	0.015625		Forb	N	N	CP38E-SWGCA(CP25)WM	Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
38	CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-Indian-Pco	38-CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-I	Great St. John's Wort	Hypericum ascyron	0.25	0.015625		Forb	N	N	CP38E-SWGCA(CP25)WM	Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop-	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pju	Little Bluestem	Schizachyrium scoparium	32.00	2		Grass	N	N	CP38E-WPHRA(CP25)D	Swort-Berg-Lplant-Rblzstar-SkyAster-Besus-Pcinque-Sgrod-
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop-	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pju	Sideoats Grama	Bouteloua curtipendula	24.00	1.5		Grass	N	N	CP38E-WPHRA(CP25)D	Swort-Berg-Lplant-Rblzstar-SkyAster-Besus-Pcinque-Sgrod-
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop-	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pju	Indiangrass	Sorghastrum nutans	4.00	0.25		Grass	N	N	CP38E-WPHRA(CP25)D	Swort-Berg-Lplant-Rblzstar-SkyAster-Besus-Pcinque-Sgrod-
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop-	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pju	Prairie Junegrass	Koeleria macrantha	4.00	0.25		Grass	N	N	CP38E-WPHRA(CP25)D	Swort-Berg-Lplant-Rblzstar-SkyAster-Besus-Pcinque-Sgrod-
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop-	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pju	Prairie Dropseed	Sporobolus heterolepis	4.00	0.25		Grass	N	N	CP38E-WPHRA(CP25)D	Swort-Berg-Lplant-Rblzstar-SkyAster-Besus-Pcinque-Sgrod-
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop-	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pju	Switchgrass	Panicum virgatum	4.00	0.25		Grass	N	N	CP38E-WPHRA(CP25)D	Swort-Berg-Lplant-Rblzstar-SkyAster-Besus-Pcinque-Sgrod-
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop-	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pju	Purple Prairie Clover	Dalea purpurea	2.00	0.125		Legume	N	N	CP38E-WPHRA(CP25)D	Swort-Berg-Lplant-Rblzstar-SkyAster-Besus-Pcinque-Sgrod-

38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop-	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjur	Round-Headed Bushclover	Lespedeza capitata	2.00	0.125		Legume	N	N	CP38E-WPHRA(CP25)D	Swort-Berg-Lplant-Rblzstar-SkyAster-Besus-Pcinque-Sgrod-
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop-	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjur	Spiderwort	Tradescantia ohiensis	1.00	0.0625		Forb	N	N	CP38E-WPHRA(CP25)D	Swort-Berg-Lplant-Rblzstar-SkyAster-Besus-Pcinque-Sgrod-
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop-	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjur	Bergamot	Monarda fistulosa	0.50	0.03125		Forb	N	N	CP38E-WPHRA(CP25)D	Swort-Berg-Lplant-Rblzstar-SkyAster-Besus-Pcinque-Sgrod-
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop-	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjur	Leadplant	Amorpha canescens	0.50	0.03125		Legume	N	N	CP38E-WPHRA(CP25)D	Swort-Berg-Lplant-Rblzstar-SkyAster-Besus-Pcinque-Sgrod-
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop-	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjur	Rough Blazing Star	Liatris aspera	0.50	0.03125		Forb	N	N	CP38E-WPHRA(CP25)D	Swort-Berg-Lplant-Rblzstar-SkyAster-Besus-Pcinque-Sgrod-
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop-	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjur	Sky-Blue Aster	Symphyotrichum oolenta	0.50	0.03125		Forb	N	N	CP38E-WPHRA(CP25)D	Swort-Berg-Lplant-Rblzstar-SkyAster-Besus-Pcinque-Sgrod-
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop-	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjur	Black-eyed Susan	Rudbeckia hirta	0.25	0.015625		Forb	N	N	CP38E-WPHRA(CP25)D	Swort-Berg-Lplant-Rblzstar-SkyAster-Besus-Pcinque-Sgrod-
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop-	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjur	Prairie Cinquefoil	Potentilla arguta	0.25	0.015625		Forb	N	N	CP38E-WPHRA(CP25)D	Swort-Berg-Lplant-Rblzstar-SkyAster-Besus-Pcinque-Sgrod-
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop-	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjur	Stiff Goldenrod	Oligoneuron rigidum	0.25	0.015625		Forb	N	N	CP38E-WPHRA(CP25)D	Swort-Berg-Lplant-Rblzstar-SkyAster-Besus-Pcinque-Sgrod-
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop-	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjur	Yellow Coneflower	Ratibida pinnata	0.25	0.015625		Forb	N	N	CP38E-WPHRA(CP25)D	Swort-Berg-Lplant-Rblzstar-SkyAster-Besus-Pcinque-Sgrod-
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BI	Little Bluestem	Schizachyrium scoparium	32.00	2		Grass	N	N	CP38E-WPHRA(CP25)DM	Hvervain-Lplant-Ptick-SilkAster-Pcinque-Smint-Sgrod-Ycone
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BI	Sideoats Grama	Bouteloua curtipendula	24.00	1.5		Grass	N	N	CP38E-WPHRA(CP25)DM	Hvervain-Lplant-Ptick-SilkAster-Pcinque-Smint-Sgrod-Ycone
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BI	Prairie Junegrass	Koeleria macrantha	6.00	0.375		Grass	N	N	CP38E-WPHRA(CP25)DM	Hvervain-Lplant-Ptick-SilkAster-Pcinque-Smint-Sgrod-Ycone
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BI	Big Bluestem	Andropogon gerardii	4.00	0.25		Grass	N	N	CP38E-WPHRA(CP25)DM	Hvervain-Lplant-Ptick-SilkAster-Pcinque-Smint-Sgrod-Ycone
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BI	Indiangrass	Sorghastrum nutans	4.00	0.25		Grass	N	N	CP38E-WPHRA(CP25)DM	Hvervain-Lplant-Ptick-SilkAster-Pcinque-Smint-Sgrod-Ycone
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BI	Sand Dropseed	Sporobolus cryptandrus	4.00	0.25		Grass	N	N	CP38E-WPHRA(CP25)DM	Hvervain-Lplant-Ptick-SilkAster-Pcinque-Smint-Sgrod-Ycone
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BI	Butterfly Milkweed	Asclepias tuberosa	1.00	0.0625		Forb	N	N	CP38E-WPHRA(CP25)DM	Hvervain-Lplant-Ptick-SilkAster-Pcinque-Smint-Sgrod-Ycone
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BI	Purple Prairie Clover	Dalea purpurea	1.00	0.0625		Legume	N	N	CP38E-WPHRA(CP25)DM	Hvervain-Lplant-Ptick-SilkAster-Pcinque-Smint-Sgrod-Ycone
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BI	Spiderwort	Tradescantia ohiensis	1.00	0.0625		Forb	N	N	CP38E-WPHRA(CP25)DM	Hvervain-Lplant-Ptick-SilkAster-Pcinque-Smint-Sgrod-Ycone
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BI	Hoary Vervain	Verbena stricta	0.50	0.03125		Forb	N	N	CP38E-WPHRA(CP25)DM	Hvervain-Lplant-Ptick-SilkAster-Pcinque-Smint-Sgrod-Ycone
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BI	Leadplant	Amorpha canescens	0.50	0.03125		Legume	N	N	CP38E-WPHRA(CP25)DM	Hvervain-Lplant-Ptick-SilkAster-Pcinque-Smint-Sgrod-Ycone
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BI	Prairie Tickseed	Coreopsis palmata	0.50	0.03125		Forb	N	N	CP38E-WPHRA(CP25)DM	Hvervain-Lplant-Ptick-SilkAster-Pcinque-Smint-Sgrod-Ycone
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BI	Silky Aster	Symphyotrichum pratens	0.50	0.03125		Forb	N	N	CP38E-WPHRA(CP25)DM	Hvervain-Lplant-Ptick-SilkAster-Pcinque-Smint-Sgrod-Ycone
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BI	Prairie Cinquefoil	Potentilla arguta	0.25	0.015625		Forb	N	N	CP38E-WPHRA(CP25)DM	Hvervain-Lplant-Ptick-SilkAster-Pcinque-Smint-Sgrod-Ycone
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BI	Spotted Mint	Monarda punctata	0.25	0.015625		Forb	N	N	CP38E-WPHRA(CP25)DM	Hvervain-Lplant-Ptick-SilkAster-Pcinque-Smint-Sgrod-Ycone
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BI	Stiff Goldenrod	Oligoneuron rigidum	0.25	0.015625		Forb	N	N	CP38E-WPHRA(CP25)DM	Hvervain-Lplant-Ptick-SilkAster-Pcinque-Smint-Sgrod-Ycone
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BI	Yellow Coneflower	Ratibida pinnata	0.25	0.015625		Forb	N	N	CP38E-WPHRA(CP25)DM	Hvervain-Lplant-Ptick-SilkAster-Pcinque-Smint-Sgrod-Ycone
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BE	Little Bluestem	Schizachyrium scoparium	28.00	1.75		Grass	N	N	CP38E-WPHRA(CP25)M	Pblzstar-PPclover-Berg-Besus-NEaster-SkyAster-SBAster-Ycone-
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BE	Canada Wildrye	Elymus canadensis	12.00	0.75		Grass	N	N	CP38E-WPHRA(CP25)M	Pblzstar-PPclover-Berg-Besus-NEaster-SkyAster-SBAster-Ycone-
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BE	Sideoats Grama	Bouteloua curtipendula	12.00	0.75		Grass	N	N	CP38E-WPHRA(CP25)M	Pblzstar-PPclover-Berg-Besus-NEaster-SkyAster-SBAster-Ycone-
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BE	Big Bluestem	Andropogon gerardii	4.00	0.25		Grass	N	N	CP38E-WPHRA(CP25)M	Pblzstar-PPclover-Berg-Besus-NEaster-SkyAster-SBAster-Ycone-
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BE	Indiangrass	Sorghastrum nutans	4.00	0.25		Grass	N	N	CP38E-WPHRA(CP25)M	Pblzstar-PPclover-Berg-Besus-NEaster-SkyAster-SBAster-Ycone-
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BE	Switchgrass	Panicum virgatum	4.00	0.25		Grass	N	N	CP38E-WPHRA(CP25)M	Pblzstar-PPclover-Berg-Besus-NEaster-SkyAster-SBAster-Ycone-
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BE	Canada Milkvetch	Astragalus canadensis	2.00	0.125		Legume	N	N	CP38E-WPHRA(CP25)M	Pblzstar-PPclover-Berg-Besus-NEaster-SkyAster-SBAster-Ycone-
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BE	Ox-eye Sunflower	Heliopsis helianthoides	1.00	0.0625		Forb	N	N	CP38E-WPHRA(CP25)M	Pblzstar-PPclover-Berg-Besus-NEaster-SkyAster-SBAster-Ycone-
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BE	Prairie Blazing Star	Liatris pycnostachya	1.00	0.0625		Forb	N	N	CP38E-WPHRA(CP25)M	Pblzstar-PPclover-Berg-Besus-NEaster-SkyAster-SBAster-Ycone-
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BE	Purple Prairie Clover	Dalea purpurea	1.00	0.0625		Legume	N	N	CP38E-WPHRA(CP25)M	Pblzstar-PPclover-Berg-Besus-NEaster-SkyAster-SBAster-Ycone-
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BE	Bergamot	Monarda fistulosa	0.50	0.03125		Forb	N	N	CP38E-WPHRA(CP25)M	Pblzstar-PPclover-Berg-Besus-NEaster-SkyAster-SBAster-Ycone-
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BE	Black-eyed Susan	Rudbeckia hirta	0.50	0.03125		Forb	N	N	CP38E-WPHRA(CP25)M	Pblzstar-PPclover-Berg-Besus-NEaster-SkyAster-SBAster-Ycone-
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BE	New England Aster	Symphyotrichum novae-a	0.50	0.03125		Forb	N	N	CP38E-WPHRA(CP25)M	Pblzstar-PPclover-Berg-Besus-NEaster-SkyAster-SBAster-Ycone-
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BE	Sky-Blue Aster	Symphyotrichum oolenta	0.50	0.03125		Forb	N	N	CP38E-WPHRA(CP25)M	Pblzstar-PPclover-Berg-Besus-NEaster-SkyAster-SBAster-Ycone-
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BE	Smooth Blue Aster	Symphyotrichum laeve	0.50	0.03125		Forb	N	N	CP38E-WPHRA(CP25)M	Pblzstar-PPclover-Berg-Besus-NEaster-SkyAster-SBAster-Ycone-
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BE	Yellow Coneflower	Ratibida pinnata	0.50	0.03125		Forb	N	N	CP38E-WPHRA(CP25)M	Pblzstar-PPclover-Berg-Besus-NEaster-SkyAster-SBAster-Ycone-
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BE	Culver's Root	Veronicastrum virginicum	0.25	0.015625		Forb	N	N	CP38E-WPHRA(CP25)M	Pblzstar-PPclover-Berg-Besus-NEaster-SkyAster-SBAster-Ycone-
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsedg	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-	Canada Wildrye	Elymus canadensis	16.00	1		Grass	N	N	CP38E-WPHRA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsedg	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-	Indiangrass	Sorghastrum nutans	12.00	0.75		Grass	N	N	CP38E-WPHRA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsedg	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-	Switchgrass	Panicum virgatum	12.00	0.75		Grass	N	N	CP38E-WPHRA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsedg	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-	Big Bluestem	Andropogon gerardii	8.00	0.5		Grass	N	N	CP38E-WPHRA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsedg	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-	Fox Sedge	Carex vulpinoidea	8.00	0.5		Sedge	N	N	CP38E-WPHRA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot

38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsedg	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-	Prairie Cordgrass	Spartina pectinata	8.00	0.5		Grass	N	N	CP38E-WPHRA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsedg	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-	Fowl Mannagrass	Glyceria striata	4.00	0.25		Grass	N	N	CP38E-WPHRA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsedg	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-	Cupplant	Silphium perfoliatum	2.00	0.125		Forb	N	N	CP38E-WPHRA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsedg	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-	Showy Tick Trefoil	Desmodium canadense	2.00	0.125		Legume	N	N	CP38E-WPHRA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsedg	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-	Blue Vervain	Verbena hastata	1.00	0.0625		Forb	N	N	CP38E-WPHRA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsedg	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-	Golden Alexanders	Zizia aurea	1.00	0.0625		Forb	N	N	CP38E-WPHRA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsedg	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-	Marsh Milkweed	Asclepias incarnata	1.00	0.0625		Forb	N	N	CP38E-WPHRA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsedg	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-	Boneset	Eupatorium perfoliatum	0.50	0.03125		Forb	N	N	CP38E-WPHRA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsedg	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-	Common Ironweed	Vernonia fasciculata	0.50	0.03125		Forb	N	N	CP38E-WPHRA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsedg	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-	Joe-pye Weed	Eutrochium maculatum	0.50	0.03125		Forb	N	N	CP38E-WPHRA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsedg	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-	Culver's Root	Veronicastrum virginicum	0.25	0.015625		Forb	N	N	CP38E-WPHRA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-Monarch(CP1)-Tim-Orc-RC-Cmilkweed-Besus-Ox	38-CP38E-Monarch(CP1)-Tim-Orc-RC-Cmilkweed-	Timothy	Phleum pratense	8.00	0.5	14.2	Grass	I	X	CP38E-Monarch(CP1)	Tim-Orc-RC-Cmilkweed-Besus-Oxeyesun-Sgrod
38	CP38E-Monarch(CP1)-Tim-Orc-RC-Cmilkweed-Besus-Ox	38-CP38E-Monarch(CP1)-Tim-Orc-RC-Cmilkweed-	Orchardgrass	Dactylis glomerata L.	8.00	0.5	7.5	Grass	I	X	CP38E-Monarch(CP1)	Tim-Orc-RC-Cmilkweed-Besus-Oxeyesun-Sgrod
38	CP38E-Monarch(CP1)-Tim-Orc-RC-Cmilkweed-Besus-Ox	38-CP38E-Monarch(CP1)-Tim-Orc-RC-Cmilkweed-	Red Clover	Trifolium pratense	4.80	0.3	1.9	Legume	I	X	CP38E-Monarch(CP1)	Tim-Orc-RC-Cmilkweed-Besus-Oxeyesun-Sgrod
38	CP38E-Monarch(CP1)-Tim-Orc-RC-Cmilkweed-Besus-Ox	38-CP38E-Monarch(CP1)-Tim-Orc-RC-Cmilkweed-	Common Milkweed	Asclepias syriaca	6.05	0.38	0.6	Forb	N	X	CP38E-Monarch(CP1)	Tim-Orc-RC-Cmilkweed-Besus-Oxeyesun-Sgrod
38	CP38E-Monarch(CP1)-Tim-Orc-RC-Cmilkweed-Besus-Ox	38-CP38E-Monarch(CP1)-Tim-Orc-RC-Cmilkweed-	Black-Eyed Susan	Rudbeckia hirta	0.96	0.06	2.2	Forb	N	X	CP38E-Monarch(CP1)	Tim-Orc-RC-Cmilkweed-Besus-Oxeyesun-Sgrod
38	CP38E-Monarch(CP1)-Tim-Orc-RC-Cmilkweed-Besus-Ox	38-CP38E-Monarch(CP1)-Tim-Orc-RC-Cmilkweed-	Ox-eye Sunflower	Heliopsis helianthoides	0.96	0.06	0.20	Forb	N	X	CP38E-Monarch(CP1)	Tim-Orc-RC-Cmilkweed-Besus-Oxeyesun-Sgrod
38	CP38E-Monarch(CP1)-Tim-Orc-RC-Cmilkweed-Besus-Ox	38-CP38E-Monarch(CP1)-Tim-Orc-RC-Cmilkweed-	Stiff Goldenrod	Oligoneuron rigidum	0.96	0.06	1.1	Forb	N	X	CP38E-Monarch(CP1)	Tim-Orc-RC-Cmilkweed-Besus-Oxeyesun-Sgrod
38	CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cwrye-Wpc	38-CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cv	Big Bluestem	Andropogon gerardii	4.00	0.25	1	Grass	N	X	CP38E-Monarch(CP2)	Sgrod-Shwgrod-NEaster
38	CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cwrye-Wpc	38-CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cv	Little Bluestem	Schizachyrium scopariu	24.00	1.5	8.3	Grass	N	X	CP38E-Monarch(CP2)	Sgrod-Shwgrod-NEaster
38	CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cwrye-Wpc	38-CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cv	Indiangrass	Sorghastrum nutans	4.00	0.25	1.2	Grass	N	X	CP38E-Monarch(CP2)	Sgrod-Shwgrod-NEaster
38	CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cwrye-Wpc	38-CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cv	Sideoats Grama	Bouteloua curtipendula	12.00	0.75	2.2	Grass	N	X	CP38E-Monarch(CP2)	Sgrod-Shwgrod-NEaster
38	CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cwrye-Wpc	38-CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cv	Canada Wildrye	Elymus canadensis	16.00	1	2	Grass	N	X	CP38E-Monarch(CP2)	Sgrod-Shwgrod-NEaster
38	CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cwrye-Wpc	38-CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cv	white prairie clover	Dalea candida	3.04	0.19	1.2	Legume	N	X	CP38E-Monarch(CP2)	Sgrod-Shwgrod-NEaster
38	CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cwrye-Wpc	38-CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cv	Common Milkweed	Asclepias syriaca	4.96	0.31	0.5	Forb	N	X	CP38E-Monarch(CP2)	Sgrod-Shwgrod-NEaster
38	CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cwrye-Wpc	38-CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cv	Black-eyed Susan	Rudbeckia hirta	0.96	0.06	2.2	Forb	N	X	CP38E-Monarch(CP2)	Sgrod-Shwgrod-NEaster
38	CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cwrye-Wpc	38-CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cv	Bergamot	Monarda fistulosa	0.96	0.06	1.8	Forb	N	X	CP38E-Monarch(CP2)	Sgrod-Shwgrod-NEaster
38	CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cwrye-Wpc	38-CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cv	Stiff Goldenrod	Oligoneuron rigidum	0.96	0.06	1.1	Forb	N	X	CP38E-Monarch(CP2)	Sgrod-Shwgrod-NEaster
38	CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cwrye-Wpc	38-CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cv	Showy Goldenrod	Solidago speciosa	0.48	0.03	1.1	Forb	N	X	CP38E-Monarch(CP2)	Sgrod-Shwgrod-NEaster
38	CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cwrye-Wpc	38-CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cv	New England Aster	Symphyotrichum novae	0.48	0.03	0.8	Forb	N	X	CP38E-Monarch(CP2)	Sgrod-Shwgrod-NEaster
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-Cwrye-Wp	38-CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	Big Bluestem	Andropogon gerardii	4.00	0.25	1	Grass	N	X	CP38E-Monarch(CP25)	Sgrod-Shwgrod-NEaster-Rblzstar-Rtlsnkmaster-Cup-SkyAster
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-Cwrye-Wp	38-CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	Little Bluestem	Schizachyrium scopariu	16.00	1	5.6	Grass	N	X	CP38E-Monarch(CP25)	Sgrod-Shwgrod-NEaster-Rblzstar-Rtlsnkmaster-Cup-SkyAster
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-Cwrye-Wp	38-CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	Indiangrass	Sorghastrum nutans	4.00	0.25	1.2	Grass	N	X	CP38E-Monarch(CP25)	Sgrod-Shwgrod-NEaster-Rblzstar-Rtlsnkmaster-Cup-SkyAster
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-Cwrye-Wp	38-CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	Sideoats Grama	Bouteloua curtipendula	8.00	0.5	1.5	Grass	N	X	CP38E-Monarch(CP25)	Sgrod-Shwgrod-NEaster-Rblzstar-Rtlsnkmaster-Cup-SkyAster
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-Cwrye-Wp	38-CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	Canada Wildrye	Elymus canadensis	8.00	0.5	1	Grass	N	X	CP38E-Monarch(CP25)	Sgrod-Shwgrod-NEaster-Rblzstar-Rtlsnkmaster-Cup-SkyAster
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-Cwrye-Wp	38-CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	white prairie clover	Dalea candida	3.04	0.19	1.2	Legume	N	X	CP38E-Monarch(CP25)	Sgrod-Shwgrod-NEaster-Rblzstar-Rtlsnkmaster-Cup-SkyAster
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-Cwrye-Wp	38-CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	Common Milkweed	Asclepias syriaca	4.96	0.31	0.5	Forb	N	X	CP38E-Monarch(CP25)	Sgrod-Shwgrod-NEaster-Rblzstar-Rtlsnkmaster-Cup-SkyAster
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-Cwrye-Wp	38-CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	Black-eyed Susan	Rudbeckia hirta	0.96	0.06	2.2	Forb	N	X	CP38E-Monarch(CP25)	Sgrod-Shwgrod-NEaster-Rblzstar-Rtlsnkmaster-Cup-SkyAster
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-Cwrye-Wp	38-CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	Bergamot	Monarda fistulosa	0.96	0.06	1.8	Forb	N	X	CP38E-Monarch(CP25)	Sgrod-Shwgrod-NEaster-Rblzstar-Rtlsnkmaster-Cup-SkyAster
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-Cwrye-Wp	38-CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	Stiff Goldenrod	Oligoneuron rigidum	0.96	0.06	1.1	Forb	N	X	CP38E-Monarch(CP25)	Sgrod-Shwgrod-NEaster-Rblzstar-Rtlsnkmaster-Cup-SkyAster
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-Cwrye-Wp	38-CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	Showy Goldenrod	Solidago speciosa	0.48	0.03	1.1	Forb	N	X	CP38E-Monarch(CP25)	Sgrod-Shwgrod-NEaster-Rblzstar-Rtlsnkmaster-Cup-SkyAster
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-Cwrye-Wp	38-CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	New England Aster	Symphyotrichum novae	0.48	0.03	0.8	Forb	N	X	CP38E-Monarch(CP25)	Sgrod-Shwgrod-NEaster-Rblzstar-Rtlsnkmaster-Cup-SkyAster
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-Cwrye-Wp	38-CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	Rough Blazing Star	Liatris aspera	0.48	0.03	0.2	Forb	N	X	CP38E-Monarch(CP25)	Sgrod-Shwgrod-NEaster-Rblzstar-Rtlsnkmaster-Cup-SkyAster
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-Cwrye-Wp	38-CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	Rattlesnake Master	Eryngium yuccifolium	0.96	0.06	0.2	Forb	N	X	CP38E-Monarch(CP25)	Sgrod-Shwgrod-NEaster-Rblzstar-Rtlsnkmaster-Cup-SkyAster
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-Cwrye-Wp	38-CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	Cupplant	Silphium perfoliatum	2.08	0.13	0.1	Forb	N	X	CP38E-Monarch(CP25)	Sgrod-Shwgrod-NEaster-Rblzstar-Rtlsnkmaster-Cup-SkyAster
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-Cwrye-Wp	38-CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	Sky-Blue Aster	Symphyotrichum oolen	0.96	0.06	1.9	Forb	N	X	CP38E-Monarch(CP25)	BB-LB-Indian-Sgrama-Cwrye-Wpclover-Cmilkweed-Besus-Berg-Sgrod-Shwgrod-NEaster-Rblzstar-Rtlsnkmaster-Cup-SkyAster
38	CP38E-GHRA(CP1)1-Alf-Rtop-Tim-Orc	38-CP38E-GHRA(CP1)1-Alf-Rtop-Tim-Orc	Alfalfa	Medicago sativa	96.00	6	30.2	Legume	I	X	CP38E-GHRA(CP1)1	Alf-Rtop-Tim-Orc
38	CP38E-GHRA(CP1)1-Alf-Rtop-Tim-Orc	38-CP38E-GHRA(CP1)1-Alf-Rtop-Tim-Orc	Redtop	Agrostis gigantea	32.00	2	229.2	Grass	I		CP38E-GHRA(CP1)1	Alf-Rtop-Tim-Orc

38	CP38E-GHRA(CP1)1-Alf-Rtop-Tim-Orc	38-CP38E-GHRA(CP1)1-Alf-Rtop-Tim-Orc	timothy	Phleum pratense	32.00	2	56.5	Grass	I	X	CP38E-GHRA(CP1)1		Alf-Rtop-Tim-Orc
38	CP38E-GHRA(CP1)1-Alf-Rtop-Tim-Orc	38-CP38E-GHRA(CP1)1-Alf-Rtop-Tim-Orc	Orchardgrass	Dactylis glomerata L.	16.00	1	15	Grass	I	X	CP38E-GHRA(CP1)1		Alf-Rtop-Tim-Orc
38	CP38E-GHRA(CP1)2-RC-KB-Orc-Rtop	38-CP38E-GHRA(CP1)2-RC-KB-Orc-Rtop	Red Clover	Trifolium pratense	80.00	5	31.6	Legume	I	X	CP38E-GHRA(CP1)2		RC-KB-Orc-Rtop
38	CP38E-GHRA(CP1)2-RC-KB-Orc-Rtop	38-CP38E-GHRA(CP1)2-RC-KB-Orc-Rtop	Kentucky Bluegrass	Poa pratensis	32.00	2	100	Grass	I		CP38E-GHRA(CP1)2		RC-KB-Orc-Rtop
38	CP38E-GHRA(CP1)2-RC-KB-Orc-Rtop	38-CP38E-GHRA(CP1)2-RC-KB-Orc-Rtop	Orchardgrass	Dactylis glomerata L.	16.00	1	15	Grass	I	X	CP38E-GHRA(CP1)2		RC-KB-Orc-Rtop
38	CP38E-GHRA(CP1)2-RC-KB-Orc-Rtop	38-CP38E-GHRA(CP1)2-RC-KB-Orc-Rtop	Redtop	Agrostis gigantea	16.00	1	114.6	Grass	I		CP38E-GHRA(CP1)2		RC-KB-Orc-Rtop
38	CP38E-GHRA(CP1)3-RC-SB-Tim	38-CP38E-GHRA(CP1)3-RC-SB-Tim	Red Clover	Trifolium pratense	80.00	5	31.6	Legume	I	X	CP38E-GHRA(CP1)3		RC-SB-Tim
38	CP38E-GHRA(CP1)3-RC-SB-Tim	38-CP38E-GHRA(CP1)3-RC-SB-Tim	Smooth Bromegrass	Bromus inermis	48.00	3	9.4	Grass	I		CP38E-GHRA(CP1)3		RC-SB-Tim
38	CP38E-GHRA(CP1)3-RC-SB-Tim	38-CP38E-GHRA(CP1)3-RC-SB-Tim	Timothy	Phleum pratense	32.00	2	56.5	Grass	I	X	CP38E-GHRA(CP1)3		RC-SB-Tim
38	CP38E-GHRA(CP1)4-RC-Tim-Orc-Rtop	38-CP38E-GHRA(CP1)4-RC-Tim-Orc-Rtop	Red Clover	Trifolium pratense	80.00	5	31.6	Legume	I	X	CP38E-GHRA(CP1)4		RC-Tim-Orc-Rtop
38	CP38E-GHRA(CP1)4-RC-Tim-Orc-Rtop	38-CP38E-GHRA(CP1)4-RC-Tim-Orc-Rtop	Timothy	Phleum pratense	32.00	2	56.5	Grass	I	X	CP38E-GHRA(CP1)4		RC-Tim-Orc-Rtop
38	CP38E-GHRA(CP1)4-RC-Tim-Orc-Rtop	38-CP38E-GHRA(CP1)4-RC-Tim-Orc-Rtop	Orchardgrass	Dactylis glomerata L.	16.00	1	15	Grass	I	X	CP38E-GHRA(CP1)4		RC-Tim-Orc-Rtop
38	CP38E-GHRA(CP1)4-RC-Tim-Orc-Rtop	38-CP38E-GHRA(CP1)4-RC-Tim-Orc-Rtop	Redtop	Agrostis gigantea	16.00	1	114.6	Grass	I		CP38E-GHRA(CP1)4		RC-Tim-Orc-Rtop
38	CP3-1-BB-LB-Indian-Sgrama-Sgrod-Ycone-PPclover	38-CP3-1-BB-LB-Indian-Sgrama-Sgrod-Ycone-PPcl	Big Bluestem	Andropogon gerardii	8.00	0.5	1.9	Grass	N	X	CP3-1		BB-LB-Indian-Sgrama-Sgrod-Ycone-PPclover
38	CP3-1-BB-LB-Indian-Sgrama-Sgrod-Ycone-PPclover	38-CP3-1-BB-LB-Indian-Sgrama-Sgrod-Ycone-PPcl	Little Bluestem	Schizachyrium scopariu	24.00	1.5	8.3	Grass	N	X	CP3-1		BB-LB-Indian-Sgrama-Sgrod-Ycone-PPclover
38	CP3-1-BB-LB-Indian-Sgrama-Sgrod-Ycone-PPclover	38-CP3-1-BB-LB-Indian-Sgrama-Sgrod-Ycone-PPcl	Indiangrass	Sorghastrum nutans	8.00	0.5	2.3	Grass	N	X	CP3-1		BB-LB-Indian-Sgrama-Sgrod-Ycone-PPclover
38	CP3-1-BB-LB-Indian-Sgrama-Sgrod-Ycone-PPclover	38-CP3-1-BB-LB-Indian-Sgrama-Sgrod-Ycone-PPcl	Sideoats Grama	Bouteloua curtipendula	24.00	1.5	4.4	Grass	N	X	CP3-1		BB-LB-Indian-Sgrama-Sgrod-Ycone-PPclover
38	CP3-1-BB-LB-Indian-Sgrama-Sgrod-Ycone-PPclover	38-CP3-1-BB-LB-Indian-Sgrama-Sgrod-Ycone-PPcl	Stiff Goldenrod	Oligoneuron rigidum	1.00	0.0625	1.1	Forb	N	X	CP3-1		BB-LB-Indian-Sgrama-Sgrod-Ycone-PPclover
38	CP3-1-BB-LB-Indian-Sgrama-Sgrod-Ycone-PPclover	38-CP3-1-BB-LB-Indian-Sgrama-Sgrod-Ycone-PPcl	Yellow Coneflower	Ratibida pinnata	1.00	0.0625	0.7	Forb	N	X	CP3-1		BB-LB-Indian-Sgrama-Sgrod-Ycone-PPclover
38	CP3-1-BB-LB-Indian-Sgrama-Sgrod-Ycone-PPclover	38-CP3-1-BB-LB-Indian-Sgrama-Sgrod-Ycone-PPcl	Purple Prairie Clover	Dalea purpurea	2.00	0.125	1	Legume	N	X	CP3-1		BB-LB-Indian-Sgrama-Sgrod-Ycone-PPclover
38	CP3-2-BB-Switch-LB-Indian-Cwrye-Ycone-Besus-Berg	38-CP3-2-BB-Switch-LB-Indian-Cwrye-Ycone-Besu	Big Bluestem	Andropogon gerardii	8.00	0.5	1.9	Grass	N	X	CP3-2		BB-Switch-LB-Indian-Cwrye-Ycone-Besus-Berg
38	CP3-2-BB-Switch-LB-Indian-Cwrye-Ycone-Besus-Berg	38-CP3-2-BB-Switch-LB-Indian-Cwrye-Ycone-Besu	Switchgrass	Panicum virgatum	8.00	0.5	4.5	Grass	N	X	CP3-2		BB-Switch-LB-Indian-Cwrye-Ycone-Besus-Berg
38	CP3-2-BB-Switch-LB-Indian-Cwrye-Ycone-Besus-Berg	38-CP3-2-BB-Switch-LB-Indian-Cwrye-Ycone-Besu	Little Bluestem	Schizachyrium scopariu	20.00	1.25	6.9	Grass	N	X	CP3-2		BB-Switch-LB-Indian-Cwrye-Ycone-Besus-Berg
38	CP3-2-BB-Switch-LB-Indian-Cwrye-Ycone-Besus-Berg	38-CP3-2-BB-Switch-LB-Indian-Cwrye-Ycone-Besu	Indiangrass	Sorghastrum nutans	16.00	1	4.5	Grass	N	X	CP3-2		BB-Switch-LB-Indian-Cwrye-Ycone-Besus-Berg
38	CP3-2-BB-Switch-LB-Indian-Cwrye-Ycone-Besus-Berg	38-CP3-2-BB-Switch-LB-Indian-Cwrye-Ycone-Besu	Canada Wildrye	Elymus canadensis	16.00	1	2	Grass	N	X	CP3-2		BB-Switch-LB-Indian-Cwrye-Ycone-Besus-Berg
38	CP3-2-BB-Switch-LB-Indian-Cwrye-Ycone-Besus-Berg	38-CP3-2-BB-Switch-LB-Indian-Cwrye-Ycone-Besu	Yellow Coneflower	Ratibida pinnata	1.00	0.0625	0.7	Forb	N	X	CP3-2		BB-Switch-LB-Indian-Cwrye-Ycone-Besus-Berg
38	CP3-2-BB-Switch-LB-Indian-Cwrye-Ycone-Besus-Berg	38-CP3-2-BB-Switch-LB-Indian-Cwrye-Ycone-Besu	Black-Eyed Susan	Rudbeckia hirta	1.00	0.0625	2.3	Forb	N	X	CP3-2		BB-Switch-LB-Indian-Cwrye-Ycone-Besus-Berg
38	CP3-2-BB-Switch-LB-Indian-Cwrye-Ycone-Besus-Berg	38-CP3-2-BB-Switch-LB-Indian-Cwrye-Ycone-Besu	Bergamot	Monarda fistulosa	1.00	0.0625	1.8	Forb	N	X	CP3-2		BB-Switch-LB-Indian-Cwrye-Ycone-Besus-Berg
38	CP3-3-BB-LB-Indian-Switch-Sgrama-PPclover-Berg-Ycon	38-CP3-3-BB-LB-Indian-Switch-Sgrama-PPclover-B	Big Bluestem	Andropogon gerardii	8.00	0.5	1.9	Grass	N	X	CP3-3		BB-LB-Indian-Switch-Sgrama-PPclover-Berg-Ycone
38	CP3-3-BB-LB-Indian-Switch-Sgrama-PPclover-Berg-Ycon	38-CP3-3-BB-LB-Indian-Switch-Sgrama-PPclover-B	Little Bluestem	Schizachyrium scopariu	24.00	1.5	8.3	Grass	N	X	CP3-3		BB-LB-Indian-Switch-Sgrama-PPclover-Berg-Ycone
38	CP3-3-BB-LB-Indian-Switch-Sgrama-PPclover-Berg-Ycon	38-CP3-3-BB-LB-Indian-Switch-Sgrama-PPclover-B	Indiangrass	Sorghastrum nutans	8.00	0.5	2.3	Grass	N	X	CP3-3		BB-LB-Indian-Switch-Sgrama-PPclover-Berg-Ycone
38	CP3-3-BB-LB-Indian-Switch-Sgrama-PPclover-Berg-Ycon	38-CP3-3-BB-LB-Indian-Switch-Sgrama-PPclover-B	Switchgrass	Panicum virgatum	8.00	0.5	4.5	Grass	N	X	CP3-3		BB-LB-Indian-Switch-Sgrama-PPclover-Berg-Ycone
38	CP3-3-BB-LB-Indian-Switch-Sgrama-PPclover-Berg-Ycon	38-CP3-3-BB-LB-Indian-Switch-Sgrama-PPclover-B	Sideoats Grama	Bouteloua curtipendula	16.00	1	3	Grass	N	X	CP3-3		BB-LB-Indian-Switch-Sgrama-PPclover-Berg-Ycone
38	CP3-3-BB-LB-Indian-Switch-Sgrama-PPclover-Berg-Ycon	38-CP3-3-BB-LB-Indian-Switch-Sgrama-PPclover-B	Purple Prairie Clover	Dalea purpurea	2.00	0.125	1	Legume	N	X	CP3-3		BB-LB-Indian-Switch-Sgrama-PPclover-Berg-Ycone
38	CP3-3-BB-LB-Indian-Switch-Sgrama-PPclover-Berg-Ycon	38-CP3-3-BB-LB-Indian-Switch-Sgrama-PPclover-B	Bergamot	Monarda fistulosa	1.00	0.0625	1.8	Forb	N	X	CP3-3		BB-LB-Indian-Switch-Sgrama-PPclover-Berg-Ycone
38	CP3-3-BB-LB-Indian-Switch-Sgrama-PPclover-Berg-Ycon	38-CP3-3-BB-LB-Indian-Switch-Sgrama-PPclover-B	Yellow Coneflower	Ratibida pinnata	1.00	0.0625	0.7	Forb	N	X	CP3-3		BB-LB-Indian-Switch-Sgrama-PPclover-Berg-Ycone
38	CP3-4-Switch-Pcord-BB-Indian-Cwrye-Ciron-Cup-Bvervai	38-CP3-4-Switch-Pcord-BB-Indian-Cwrye-Ciron-Cu	Switchgrass	Panicum virgatum	16.00	1	9	Grass	N	X	CP3-4		Switch-Pcord-BB-Indian-Cwrye-Ciron-Cup-Bvervain
38	CP3-4-Switch-Pcord-BB-Indian-Cwrye-Ciron-Cup-Bvervai	38-CP3-4-Switch-Pcord-BB-Indian-Cwrye-Ciron-Cu	Prairie Cordgrass	Spartina pectinata	8.00	0.5	1.3	Grass	N		CP3-4		Switch-Pcord-BB-Indian-Cwrye-Ciron-Cup-Bvervain
38	CP3-4-Switch-Pcord-BB-Indian-Cwrye-Ciron-Cup-Bvervai	38-CP3-4-Switch-Pcord-BB-Indian-Cwrye-Ciron-Cu	Big Bluestem	Andropogon gerardii	16.00	1	3.8	Grass	N	X	CP3-4		Switch-Pcord-BB-Indian-Cwrye-Ciron-Cup-Bvervain
38	CP3-4-Switch-Pcord-BB-Indian-Cwrye-Ciron-Cup-Bvervai	38-CP3-4-Switch-Pcord-BB-Indian-Cwrye-Ciron-Cu	Indiangrass	Sorghastrum nutans	16.00	1	4.5	Grass	N	X	CP3-4		Switch-Pcord-BB-Indian-Cwrye-Ciron-Cup-Bvervain
38	CP3-4-Switch-Pcord-BB-Indian-Cwrye-Ciron-Cup-Bvervai	38-CP3-4-Switch-Pcord-BB-Indian-Cwrye-Ciron-Cu	Canada Wildrye	Elymus canadensis	16.00	1	2	Grass	N	X	CP3-4		Switch-Pcord-BB-Indian-Cwrye-Ciron-Cup-Bvervain
38	CP3-4-Switch-Pcord-BB-Indian-Cwrye-Ciron-Cup-Bvervai	38-CP3-4-Switch-Pcord-BB-Indian-Cwrye-Ciron-Cu	Common Ironweed	Vernonia fasciculata	1.00	0.0625	0.5	Forb	N	X	CP3-4		Switch-Pcord-BB-Indian-Cwrye-Ciron-Cup-Bvervain
38	CP3-4-Switch-Pcord-BB-Indian-Cwrye-Ciron-Cup-Bvervai	38-CP3-4-Switch-Pcord-BB-Indian-Cwrye-Ciron-Cu	Cupplant	Silphium perfoliatum	2.00	0.125	0.1	Forb	N	X	CP3-4		Switch-Pcord-BB-Indian-Cwrye-Ciron-Cup-Bvervain
38	CP3-4-Switch-Pcord-BB-Indian-Cwrye-Ciron-Cup-Bvervai	38-CP3-4-Switch-Pcord-BB-Indian-Cwrye-Ciron-Cu	Blue Vervain	Verbena hastata	1.00	0.0625	2.2	Forb	N	X	CP3-4		Switch-Pcord-BB-Indian-Cwrye-Ciron-Cup-Bvervain
38	CP3-5-Switch-Pcord-BB-Cwrye-Berg-Ycone-NEaster	38-CP3-5-Switch-Pcord-BB-Cwrye-Berg-Ycone-NEa	Switchgrass	Panicum virgatum	32.00	2	17.9	Grass	N	X	CP3-5		Switch-Pcord-BB-Cwrye-Berg-Ycone-NEaster
38	CP3-5-Switch-Pcord-BB-Cwrye-Berg-Ycone-NEaster	38-CP3-5-Switch-Pcord-BB-Cwrye-Berg-Ycone-NEa	Prairie Cordgrass	Spartina pectinata	4.00	0.25	0.7	Grass	N		CP3-5		Switch-Pcord-BB-Cwrye-Berg-Ycone-NEaster
38	CP3-5-Switch-Pcord-BB-Cwrye-Berg-Ycone-NEaster	38-CP3-5-Switch-Pcord-BB-Cwrye-Berg-Ycone-NEa	Big Bluestem	Andropogon gerardii	16.00	1	3.8	Grass	N	X	CP3-5		Switch-Pcord-BB-Cwrye-Berg-Ycone-NEaster
38	CP3-5-Switch-Pcord-BB-Cwrye-Berg-Ycone-NEaster	38-CP3-5-Switch-Pcord-BB-Cwrye-Berg-Ycone-NEa	Canada Wildrye	Elymus canadensis	16.00	1	2	Grass	N	X	CP3-5		Switch-Pcord-BB-Cwrye-Berg-Ycone-NEaster
38	CP3-5-Switch-Pcord-BB-Cwrye-Berg-Ycone-NEaster	38-CP3-5-Switch-Pcord-BB-Cwrye-Berg-Ycone-NEa	Bergamot	Monarda fistulosa	1.00	0.0625	1.8	Forb	N	X	CP3-5		Switch-Pcord-BB-Cwrye-Berg-Ycone-NEaster

38	CP3-5-Switch-Pcord-BB-Cwrye-Berg-Ycone-NEaster	38-CP3-5-Switch-Pcord-BB-Cwrye-Berg-Ycone-NEa	Yellow Coneflower	Ratibida pinnata	1.00	0.0625	0.7	Forb	N	X	CP3-5		Switch-Pcord-BB-Cwrye-Berg-Ycone-NEaster
38	CP3-5-Switch-Pcord-BB-Cwrye-Berg-Ycone-NEaster	38-CP3-5-Switch-Pcord-BB-Cwrye-Berg-Ycone-NEa	New England Aster	Symphyotrichum novae	1.00	0.0625	1.7	Forb	N	X	CP3-5		Switch-Pcord-BB-Cwrye-Berg-Ycone-NEaster
STD	**Mix #**	**std-mix**	**Common Name**	**Scientific Name**	**(oz./A)**	**(lbs./A)**	**Seeds/Square Foot**	**Type**	**Native**	**(Y/N)**	**I**	**Mix No.**	**MR**
									N				

STD	Mix #	std-mix	Common Name	Scientific Name	PLS (oz./A)	PLS (lbs./A)	Seeds/Square Foot	Type	Intro / Native	Poll. (Y/N)	Mix No.	MR	Mix Components
		LEAVE THIS ROW AS IS							N	Y			
2	CP2_1-BB-Switch-Cmilkvetch-Besus-Ycone	2-CP2_1-BB-Switch-Cmilkvetch-Besus-Ycone	Big Bluestem	Andropogon gerardii	48	3		Grass	N	N	CP2_1		BB-Switch-Cmilkvetch-Besus-Ycone
2	CP2_1-BB-Switch-Cmilkvetch-Besus-Ycone	2-CP2_1-BB-Switch-Cmilkvetch-Besus-Ycone	Switchgrass	Panicum virgatum	16	1		Grass	N	N	CP2_1		BB-Switch-Cmilkvetch-Besus-Ycone
2	CP2_1-BB-Switch-Cmilkvetch-Besus-Ycone	2-CP2_1-BB-Switch-Cmilkvetch-Besus-Ycone	Canada Milkvetch	Astragalus canadensis	2	0.125		Legume	N	N	CP2_1		BB-Switch-Cmilkvetch-Besus-Ycone
2	CP2_1-BB-Switch-Cmilkvetch-Besus-Ycone	2-CP2_1-BB-Switch-Cmilkvetch-Besus-Ycone	Black-eyed Susan	Rudbeckia hirta	1	0.0625		Forb	N	N	CP2_1		BB-Switch-Cmilkvetch-Besus-Ycone
2	CP2_1-BB-Switch-Cmilkvetch-Besus-Ycone	2-CP2_1-BB-Switch-Cmilkvetch-Besus-Ycone	Yellow Coneflower	Ratibida pinnata	1	0.0625		Forb	N	N	CP2_1		BB-Switch-Cmilkvetch-Besus-Ycone
2	CP2_2-BB-Switch-Ttrefoil-Besus-Ycone	2-CP2_2-BB-Switch-Ttrefoil-Besus-Ycone	Big Bluestem	Andropogon gerardii	48	3		Grass	N	N	CP2_2		BB-Switch-Ttrefoil-Besus-Ycone
2	CP2_2-BB-Switch-Ttrefoil-Besus-Ycone	2-CP2_2-BB-Switch-Ttrefoil-Besus-Ycone	Switchgrass	Panicum virgatum	16	1		Grass	N	N	CP2_2		BB-Switch-Ttrefoil-Besus-Ycone
2	CP2_2-BB-Switch-Ttrefoil-Besus-Ycone	2-CP2_2-BB-Switch-Ttrefoil-Besus-Ycone	Showy Tick Trefoil	Desmodium canadense	6	0.375		Legume	N	N	CP2_2		BB-Switch-Ttrefoil-Besus-Ycone
2	CP2_2-BB-Switch-Ttrefoil-Besus-Ycone	2-CP2_2-BB-Switch-Ttrefoil-Besus-Ycone	Black-eyed Susan	Rudbeckia hirta	1	0.0625		Forb	N	N	CP2_2		BB-Switch-Ttrefoil-Besus-Ycone
2	CP2_2-BB-Switch-Ttrefoil-Besus-Ycone	2-CP2_2-BB-Switch-Ttrefoil-Besus-Ycone	Yellow Coneflower	Ratibida pinnata	1	0.0625		Forb	N	N	CP2_2		BB-Switch-Ttrefoil-Besus-Ycone
2	CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Yco	2-CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-B	Little Bluestem	Schizachyrium scoparium	24	1.5		Grass	N	N	CP2_3		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
2	CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Yco	2-CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-B	Sideoats Grama	Bouteloua curtipendula	16	1		Grass	N	N	CP2_3		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
2	CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Yco	2-CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-B	Big Bluestem	Andropogon gerardii	8	0.5		Grass	N	N	CP2_3		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
2	CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Yco	2-CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-B	Indiangrass	Sorghastrum nutans	8	0.5		Grass	N	N	CP2_3		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
2	CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Yco	2-CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-B	Switchgrass	Panicum virgatum	8	0.5		Grass	N	N	CP2_3		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
2	CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Yco	2-CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-B	Purple Prairie Clover	Dalea purpurea	2	0.125		Legume	N	N	CP2_3		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
2	CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Yco	2-CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-B	Bergamot	Monarda fistulosa	1	0.0625		Forb	N	N	CP2_3		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
2	CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Yco	2-CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-B	Yellow Coneflower	Ratibida pinnata	1	0.0625		Forb	N	N	CP2_3		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
2	CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone	2-CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus	Little Bluestem	Schizachyrium scoparium	20	1.25		Grass	N	N	CP2_4		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
2	CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone	2-CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus	Canada Wildrye	Elymus canadensis	16	1		Grass	N	N	CP2_4		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
2	CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone	2-CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus	Indiangrass	Sorghastrum nutans	16	1		Grass	N	N	CP2_4		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
2	CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone	2-CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus	Big Bluestem	Andropogon gerardii	8	0.5		Grass	N	N	CP2_4		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
2	CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone	2-CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus	Switchgrass	Panicum virgatum	8	0.5		Grass	N	N	CP2_4		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
2	CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone	2-CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus	Bergamot	Monarda fistulosa	1	0.0625		Forb	N	N	CP2_4		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
2	CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone	2-CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus	Black-eyed Susan	Rudbeckia hirta	1	0.0625		Forb	N	N	CP2_4		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
2	CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone	2-CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus	Yellow Coneflower	Ratibida pinnata	1	0.0625		Forb	N	N	CP2_4		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
2	CP2_5-BB-Sgrama-Indian-PPclover-Sgrod-Ycone	2-CP2_5-BB-Sgrama-Indian-PPclover-Sgrod-Ycon	Big Bluestem	Andropogon gerardii	24	1.5		Grass	N	N	CP2_5		BB-Sgrama-Indian-PPclover-Sgrod-Ycone
2	CP2_5-BB-Sgrama-Indian-PPclover-Sgrod-Ycone	2-CP2_5-BB-Sgrama-Indian-PPclover-Sgrod-Ycon	Sideoats Grama	Bouteloua curtipendula	24	1.5		Grass	N	N	CP2_5		BB-Sgrama-Indian-PPclover-Sgrod-Ycone
2	CP2_5-BB-Sgrama-Indian-PPclover-Sgrod-Ycone	2-CP2_5-BB-Sgrama-Indian-PPclover-Sgrod-Ycon	Indiangrass	Sorghastrum nutans	8	0.5		Grass	N	N	CP2_5		BB-Sgrama-Indian-PPclover-Sgrod-Ycone
2	CP2_5-BB-Sgrama-Indian-PPclover-Sgrod-Ycone	2-CP2_5-BB-Sgrama-Indian-PPclover-Sgrod-Ycon	Purple Prairie Clover	Dalea purpurea	2	0.125		Legume	N	N	CP2_5		BB-Sgrama-Indian-PPclover-Sgrod-Ycone
2	CP2_5-BB-Sgrama-Indian-PPclover-Sgrod-Ycone	2-CP2_5-BB-Sgrama-Indian-PPclover-Sgrod-Ycon	Stiff Goldenrod	Oligoneuron rigidum	1	0.0625		Forb	N	N	CP2_5		BB-Sgrama-Indian-PPclover-Sgrod-Ycone
2	CP2_5-BB-Sgrama-Indian-PPclover-Sgrod-Ycone	2-CP2_5-BB-Sgrama-Indian-PPclover-Sgrod-Ycon	Yellow Coneflower	Ratibida pinnata	1	0.0625		Forb	N	N	CP2_5		BB-Sgrama-Indian-PPclover-Sgrod-Ycone
2	CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ci	2-CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bve	Big Bluestem	Andropogon gerardii	16	1		Grass	N	N	CP2_6		BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
2	CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ci	2-CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bve	Canada Wildrye	Elymus canadensis	16	1		Grass	N	N	CP2_6		BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
2	CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ci	2-CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bve	Indiangrass	Sorghastrum nutans	16	1		Grass	N	N	CP2_6		BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
2	CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ci	2-CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bve	Switchgrass	Panicum virgatum	16	1		Grass	N	N	CP2_6		BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
2	CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ci	2-CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bve	Prairie Cordgrass	Spartina pectinata	8	0.5		Grass	N	N	CP2_6		BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
2	CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ci	2-CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bve	Cupplant	Silphium perfoliatum	2	0.125		Forb	N	N	CP2_6		BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron

2	CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ci	2-CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bve	Blue Vervain	Verbena hastata	1	0.0625		Forb	N	N	CP2_6	BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
2	CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ci	2-CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bve	Common Ironweed	Vernonia fasciculata	1	0.0625		Forb	N	N	CP2_6	BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
2	CP2_7-Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone	2-CP2_7-Switch-BB-Cwrye-Pcord-Berg-NEaster-Y	Switchgrass	Panicum virgatum	32	2		Grass	N	N	CP2_7	Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
2	CP2_7-Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone	2-CP2_7-Switch-BB-Cwrye-Pcord-Berg-NEaster-Y	Big Bluestem	Andropogon gerardii	16	1		Grass	N	N	CP2_7	Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
2	CP2_7-Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone	2-CP2_7-Switch-BB-Cwrye-Pcord-Berg-NEaster-Y	Canada Wildrye	Elymus canadensis	16	1		Grass	N	N	CP2_7	Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
2	CP2_7-Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone	2-CP2_7-Switch-BB-Cwrye-Pcord-Berg-NEaster-Y	Prairie Cordgrass	Spartina pectinata	4	0.25		Grass	N	N	CP2_7	Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
2	CP2_7-Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone	2-CP2_7-Switch-BB-Cwrye-Pcord-Berg-NEaster-Y	Bergamot	Monarda fistulosa	1	0.0625		Forb	N	N	CP2_7	Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
2	CP2_7-Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone	2-CP2_7-Switch-BB-Cwrye-Pcord-Berg-NEaster-Y	New England Aster	Symphyotrichum novae-a	1	0.0625		Forb	N	N	CP2_7	Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
2	CP2_7-Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone	2-CP2_7-Switch-BB-Cwrye-Pcord-Berg-NEaster-Y	Yellow Coneflower	Ratibida pinnata	1	0.0625		Forb	N	N	CP2_7	Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
4	CP4D-5-Indian-BB-Switch-Cmilkvetch-Besus-Ycone	4-CP4D-5-Indian-BB-Switch-Cmilkvetch-Besus-Yc	Indiangrass	Sorghastrum nutans	48	3		Grass	N	N	CP4D-5	Indian-BB-Switch-Cmilkvetch-Besus-Ycone
4	CP4D-5-Indian-BB-Switch-Cmilkvetch-Besus-Ycone	4-CP4D-5-Indian-BB-Switch-Cmilkvetch-Besus-Yc	Big Bluestem	Andropogon gerardii	16	1		Grass	N	N	CP4D-5	Indian-BB-Switch-Cmilkvetch-Besus-Ycone
4	CP4D-5-Indian-BB-Switch-Cmilkvetch-Besus-Ycone	4-CP4D-5-Indian-BB-Switch-Cmilkvetch-Besus-Yc	Switchgrass	Panicum virgatum	16	1		Grass	N	N	CP4D-5	Indian-BB-Switch-Cmilkvetch-Besus-Ycone
4	CP4D-5-Indian-BB-Switch-Cmilkvetch-Besus-Ycone	4-CP4D-5-Indian-BB-Switch-Cmilkvetch-Besus-Yc	Canada Milkvetch	Astragalus canadensis	2	0.125		Legume	N	N	CP4D-5	Indian-BB-Switch-Cmilkvetch-Besus-Ycone
4	CP4D-5-Indian-BB-Switch-Cmilkvetch-Besus-Ycone	4-CP4D-5-Indian-BB-Switch-Cmilkvetch-Besus-Yc	Black-eyed Susan	Rudbeckia hirta	1	0.0625		Forb	N	N	CP4D-5	Indian-BB-Switch-Cmilkvetch-Besus-Ycone
4	CP4D-5-Indian-BB-Switch-Cmilkvetch-Besus-Ycone	4-CP4D-5-Indian-BB-Switch-Cmilkvetch-Besus-Yc	Yellow Coneflower	Ratibida pinnata	1	0.0625		Forb	N	N	CP4D-5	Indian-BB-Switch-Cmilkvetch-Besus-Ycone
4	CP4D-6-Indian-BB-Switch-LB-Cmilkvetch-Besus-Ycone	4-CP4D-6-Indian-BB-Switch-LB-Cmilkvetch-Besus	Indiangrass	Sorghastrum nutans	48	3		Grass	N	N	CP4D-6	Indian-BB-Switch-LB-Cmilkvetch-Besus-Ycone
4	CP4D-6-Indian-BB-Switch-LB-Cmilkvetch-Besus-Ycone	4-CP4D-6-Indian-BB-Switch-LB-Cmilkvetch-Besus	Big Bluestem	Andropogon gerardii	16	1		Grass	N	N	CP4D-6	Indian-BB-Switch-LB-Cmilkvetch-Besus-Ycone
4	CP4D-6-Indian-BB-Switch-LB-Cmilkvetch-Besus-Ycone	4-CP4D-6-Indian-BB-Switch-LB-Cmilkvetch-Besus	Switchgrass	Panicum virgatum	16	1		Grass	N	N	CP4D-6	Indian-BB-Switch-LB-Cmilkvetch-Besus-Ycone
4	CP4D-6-Indian-BB-Switch-LB-Cmilkvetch-Besus-Ycone	4-CP4D-6-Indian-BB-Switch-LB-Cmilkvetch-Besus	Little Bluestem	Schizachyrium scoparium	16	1		Grass	N	N	CP4D-6	Indian-BB-Switch-LB-Cmilkvetch-Besus-Ycone
4	CP4D-6-Indian-BB-Switch-LB-Cmilkvetch-Besus-Ycone	4-CP4D-6-Indian-BB-Switch-LB-Cmilkvetch-Besus	Canada Milkvetch	Astragalus canadensis	2	0.125		Legume	N	N	CP4D-6	Indian-BB-Switch-LB-Cmilkvetch-Besus-Ycone
4	CP4D-6-Indian-BB-Switch-LB-Cmilkvetch-Besus-Ycone	4-CP4D-6-Indian-BB-Switch-LB-Cmilkvetch-Besus	Black-eyed Susan	Rudbeckia hirta	1	0.0625		Forb	N	N	CP4D-6	Indian-BB-Switch-LB-Cmilkvetch-Besus-Ycone
4	CP4D-6-Indian-BB-Switch-LB-Cmilkvetch-Besus-Ycone	4-CP4D-6-Indian-BB-Switch-LB-Cmilkvetch-Besus	Yellow Coneflower	Ratibida pinnata	1	0.0625		Forb	N	N	CP4D-6	Indian-BB-Switch-LB-Cmilkvetch-Besus-Ycone
4	CP4D-7-Indian-BB-Switch-PPclover-Besus-Ycone	4-CP4D-7-Indian-BB-Switch-PPclover-Besus-Ycon	Indiangrass	Sorghastrum nutans	48	3		Grass	N	N	CP4D-7	Indian-BB-Switch-PPclover-Besus-Ycone
4	CP4D-7-Indian-BB-Switch-PPclover-Besus-Ycone	4-CP4D-7-Indian-BB-Switch-PPclover-Besus-Ycon	Big Bluestem	Andropogon gerardii	16	1		Grass	N	N	CP4D-7	Indian-BB-Switch-PPclover-Besus-Ycone
4	CP4D-7-Indian-BB-Switch-PPclover-Besus-Ycone	4-CP4D-7-Indian-BB-Switch-PPclover-Besus-Ycon	Switchgrass	Panicum virgatum	16	1		Grass	N	N	CP4D-7	Indian-BB-Switch-PPclover-Besus-Ycone
4	CP4D-7-Indian-BB-Switch-PPclover-Besus-Ycone	4-CP4D-7-Indian-BB-Switch-PPclover-Besus-Ycon	Purple Prairie Clover	Dalea purpurea	2	0.125		Legume	N	N	CP4D-7	Indian-BB-Switch-PPclover-Besus-Ycone
4	CP4D-7-Indian-BB-Switch-PPclover-Besus-Ycone	4-CP4D-7-Indian-BB-Switch-PPclover-Besus-Ycon	Black-eyed Susan	Rudbeckia hirta	1	0.0625		Forb	N	N	CP4D-7	Indian-BB-Switch-PPclover-Besus-Ycone
4	CP4D-7-Indian-BB-Switch-PPclover-Besus-Ycone	4-CP4D-7-Indian-BB-Switch-PPclover-Besus-Ycon	Yellow Coneflower	Ratibida pinnata	1	0.0625		Forb	N	N	CP4D-7	Indian-BB-Switch-PPclover-Besus-Ycone
4	CP4D-8-Indian-BB-LB-Switch-PPclover-Besus-Ycone	4-CP4D-8-Indian-BB-LB-Switch-PPclover-Besus-Y	Indiangrass	Sorghastrum nutans	48	3		Grass	N	N	CP4D-8	Indian-BB-LB-Switch-PPclover-Besus-Ycone
4	CP4D-8-Indian-BB-LB-Switch-PPclover-Besus-Ycone	4-CP4D-8-Indian-BB-LB-Switch-PPclover-Besus-Y	Big Bluestem	Andropogon gerardii	16	1		Grass	N	N	CP4D-8	Indian-BB-LB-Switch-PPclover-Besus-Ycone
4	CP4D-8-Indian-BB-LB-Switch-PPclover-Besus-Ycone	4-CP4D-8-Indian-BB-LB-Switch-PPclover-Besus-Y	Little Bluestem	Schizachyrium scoparium	16	1		Grass	N	N	CP4D-8	Indian-BB-LB-Switch-PPclover-Besus-Ycone
4	CP4D-8-Indian-BB-LB-Switch-PPclover-Besus-Ycone	4-CP4D-8-Indian-BB-LB-Switch-PPclover-Besus-Y	Switchgrass	Panicum virgatum	16	1		Grass	N	N	CP4D-8	Indian-BB-LB-Switch-PPclover-Besus-Ycone
4	CP4D-8-Indian-BB-LB-Switch-PPclover-Besus-Ycone	4-CP4D-8-Indian-BB-LB-Switch-PPclover-Besus-Y	Purple Prairie Clover	Dalea purpurea	2	0.125		Legume	N	N	CP4D-8	Indian-BB-LB-Switch-PPclover-Besus-Ycone
4	CP4D-8-Indian-BB-LB-Switch-PPclover-Besus-Ycone	4-CP4D-8-Indian-BB-LB-Switch-PPclover-Besus-Y	Black-eyed Susan	Rudbeckia hirta	1	0.0625		Forb	N	N	CP4D-8	Indian-BB-LB-Switch-PPclover-Besus-Ycone
4	CP4D-8-Indian-BB-LB-Switch-PPclover-Besus-Ycone	4-CP4D-8-Indian-BB-LB-Switch-PPclover-Besus-Y	Yellow Coneflower	Ratibida pinnata	1	0.0625		Forb	N	N	CP4D-8	Indian-BB-LB-Switch-PPclover-Besus-Ycone
4	CP4D-9-Indian-BB-Switch-PPclover-Berg-Ycone	4-CP4D-9-Indian-BB-Switch-PPclover-Berg-Ycone	Indiangrass	Sorghastrum nutans	48	3		Grass	N	N	CP4D-9	Indian-BB-Switch-PPclover-Berg-Ycone
4	CP4D-9-Indian-BB-Switch-PPclover-Berg-Ycone	4-CP4D-9-Indian-BB-Switch-PPclover-Berg-Ycone	Big Bluestem	Andropogon gerardii	16	1		Grass	N	N	CP4D-9	Indian-BB-Switch-PPclover-Berg-Ycone
4	CP4D-9-Indian-BB-Switch-PPclover-Berg-Ycone	4-CP4D-9-Indian-BB-Switch-PPclover-Berg-Ycone	Switchgrass	Panicum virgatum	16	1		Grass	N	N	CP4D-9	Indian-BB-Switch-PPclover-Berg-Ycone
4	CP4D-9-Indian-BB-Switch-PPclover-Berg-Ycone	4-CP4D-9-Indian-BB-Switch-PPclover-Berg-Ycone	Purple Prairie Clover	Dalea purpurea	2	0.125		Legume	N	N	CP4D-9	Indian-BB-Switch-PPclover-Berg-Ycone
4	CP4D-9-Indian-BB-Switch-PPclover-Berg-Ycone	4-CP4D-9-Indian-BB-Switch-PPclover-Berg-Ycone	Bergamot	Monarda fistulosa	1	0.0625		Forb	N	N	CP4D-9	Indian-BB-Switch-PPclover-Berg-Ycone
4	CP4D-9-Indian-BB-Switch-PPclover-Berg-Ycone	4-CP4D-9-Indian-BB-Switch-PPclover-Berg-Ycone	Yellow Coneflower	Ratibida pinnata	1	0.0625		Forb	N	N	CP4D-9	Indian-BB-Switch-PPclover-Berg-Ycone
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Sv	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover	Little Bluestem	Schizachyrium scoparium	24	1.5		Grass	N	N	CP25-D	LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swort-Hvervain-Lpla
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Sv	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover	Sideoats Grama	Bouteloua curtipendula	24	1.5		Grass	N	N	CP25-D	LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swort-Hvervain-Lpla
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Sv	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover	Indiangrass	Sorghastrum nutans	8	0.5		Grass	N	N	CP25-D	LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swort-Hvervain-Lpla
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Sv	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover	Big Bluestem	Andropogon gerardii	4	0.25		Grass	N	N	CP25-D	LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swort-Hvervain-Lpla
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Sv	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover	Prairie Junegrass	Koeleria macrantha	2	0.125		Grass	N	N	CP25-D	LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swort-Hvervain-Lpla
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Sv	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover	Purple Prairie Clover	Dalea purpurea	2	0.125		Legume	N	N	CP25-D	LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swort-Hvervain-Lpla
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Sv	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover	Sand Dropseed	Sporobolus cryptandrus	2	0.125		Grass	N	N	CP25-D	LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swort-Hvervain-Lpla
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Sv	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover	Spiderwort	Tradescantia ohiensis	1	0.0625		Forb	N	N	CP25-D	LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swort-Hvervain-Lpla
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Sv	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover	Hoary Vervain	Verbena stricta	0.5	0.03125		Forb	N	N	CP25-D	LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swort-Hvervain-Lpla
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Sv	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover	Leadplant	Amorpha canescens	0.5	0.03125		Legume	N	N	CP25-D	LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swort-Hvervain-Lpla
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Sv	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover	Prairie Tickseed	Coreopsis palmata	0.5	0.03125		Forb	N	N	CP25-D	LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swort-Hvervain-Lpla
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Sv	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover	Silky Aster	Symphyotrichum pratens	0.5	0.03125		Forb	N	N	CP25-D	LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swort-Hvervain-Lpla
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Sv	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover	Stiff Goldenrod	Oligoneuron rigidum	0.5	0.03125		Forb	N	N	CP25-D	LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swort-Hvervain-Lpla
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Sv	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover	Yellow Coneflower	Ratibida pinnata	1	0.03125		Forb	N	N	CP25-D	LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swort-Hvervain-Lpla
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Sv	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover	Prairie Cinquefoil	Potentilla arguta	0.25	0.015625		Forb	N	N	CP25-D	LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swort-Hvervain-Lpla
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Sv	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover	Spotted Mint	Monarda punctata	0	0.015625		Forb	N	N	CP25-D	LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swort-Hvervain-Lpla
25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclo	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pd	Little Bluestem	Schizachyrium scoparium	24	1.5		Grass	N	N	CP25-DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-Bi
25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclo	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pd	Sideoats Grama	Bouteloua curtipendula	24	1.5		Grass	N	N	CP25-DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-Bi
25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclo	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pd	Indiangrass	Sorghastrum nutans	8	0.5		Grass	N	N	CP25-DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-Bi
25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclo	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pd	Switchgrass	Panicum virgatum	4	0.25		Grass	N	N	CP25-DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-Bi
25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclo	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pd	Prairie Junegrass	Koeleria macrantha	2	0.125		Grass	N	N	CP25-DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-Bi
25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclo	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pd	Prairie Dropseed	Sporobolus heterolepis	2	0.125		Grass	N	N	CP25-DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-Bi
25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclo	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pd	Purple Prairie Clover	Dalea purpurea	2	0.125		Legume	N	N	CP25-DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-Bi
25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclo	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pd	Round-Headed Bushclover	Lespedeza capitata	2	0.125		Legume	N	N	CP25-DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-Bi
25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclo	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pd	Bergamot	Monarda fistulosa	1	0.0625		Forb	N	N	CP25-DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-Bi
25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclo	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pd	Spiderwort	Tradescantia ohiensis	1	0.0625		Forb	N	N	CP25-DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-Bi
25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclo	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pd	Yellow Coneflower	Ratibida pinnata	1	0.0625		Forb	N	N	CP25-DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-Bi
25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclo	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pd	Leadplant	Amorpha canescens	0.5	0.03125		Legume	N	N	CP25-DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-Bi
25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclo	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pd	Rough Blazing Star	Liatris aspera	1	0.03125		Forb	N	N	CP25-DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-Bi
25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclo	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pd	Sky-Blue Aster	Symphyotrichum oolenta	1	0.03125		Forb	N	N	CP25-DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-Bi

25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclo	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pd	Stiff Goldenrod	Oligoneuron rigidum	0.5	0.03125		Forb	N	N	CP25-DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclo	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pd	Prairie Cinquefoil	Potentilla arguta	0.25	0.015625		Forb	N	N	CP25-DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pju	Little Bluestem	Schizachyrium scoparium	24	1.5		Grass	N	N	CP25-KBB	LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-PPclover-PPCone-Lp
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pju	Sideoats Grama	Bouteloua curtipendula	24	1.5		Grass	N	N	CP25-KBB	LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-PPclover-PPCone-Lp
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pju	Indiangrass	Sorghastrum nutans	8	0.5		Grass	N	N	CP25-KBB	LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-PPclover-PPCone-Lp
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pju	Switchgrass	Panicum virgatum	8	0.5		Grass	N	N	CP25-KBB	LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-PPclover-PPCone-Lp
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pju	Wild Lupine	Lupinus perennis	3	0.1875		Legume	N	N	CP25-KBB	LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-PPclover-PPCone-Lp
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pju	Prairie Junegrass	Koeleria macrantha	2	0.125		Grass	N	N	CP25-KBB	LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-PPclover-PPCone-Lp
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pju	Prairie Dropseed	Sporobolus heterolepis	2	0.125		Grass	N	N	CP25-KBB	LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-PPclover-PPCone-Lp
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pju	Purple Prairie Clover	Dalea purpurea	2	0.125		Legume	N	N	CP25-KBB	LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-PPclover-PPCone-Lp
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pju	Pale Purple Coneflower	Echinacea pallida	1	0.0625		Forb	N	N	CP25-KBB	LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-PPclover-PPCone-Lp
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pju	Leadplant	Amorpha canescens	0.5	0.03125		Legume	N	N	CP25-KBB	LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-PPclover-PPCone-Lp
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pju	Rough Blazing Star	Liatris aspera	0.5	0.03125		Forb	N	N	CP25-KBB	LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-PPclover-PPCone-Lp
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pju	Stiff Goldenrod	Oligoneuron rigidum	0.5	0.03125		Forb	N	N	CP25-KBB	LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-PPclover-PPCone-Lp
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pju	Yellow Coneflower	Ratibida pinnata	1	0.03125		Forb	N	N	CP25-KBB	LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-PPclover-PPCone-Lp
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pju	Bergamot	Monarda fistulosa	0	0.015625		Forb	N	N	CP25-KBB	LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-PPclover-PPCone-Lp
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pju	Prairie Cinquefoil	Potentilla arguta	0.25	0.015625		Forb	N	N	CP25-KBB	LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-PPclover-PPCone-Lp
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pju	Sky-Blue Aster	Symphyotrichum oolenta	0.25	0.015625		Forb	N	N	CP25-KBB	LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-PPclover-PPCone-Lp
25	CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzsta	25-CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesu	Little Bluestem	Schizachyrium scoparium	24	1.5		Grass	N	N	CP25-M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
25	CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzsta	25-CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesu	Indiangrass	Sorghastrum nutans	16	1		Grass	N	N	CP25-M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
25	CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzsta	25-CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesu	Big Bluestem	Andropogon gerardii	8	0.5		Grass	N	N	CP25-M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
25	CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzsta	25-CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesu	Canada Wildrye	Elymus canadensis	8	0.5		Grass	N	N	CP25-M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
25	CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzsta	25-CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesu	Switchgrass	Panicum virgatum	8	0.5		Grass	N	N	CP25-M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
25	CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzsta	25-CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesu	Ox-eye Sunflower	Heliopsis helianthoides	1	0.0625		Forb	N	N	CP25-M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
25	CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzsta	25-CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesu	Prairie Blazing Star	Liatris pycnostachya	1	0.0625		Forb	N	N	CP25-M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
25	CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzsta	25-CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesu	Purple Prairie Clover	Dalea purpurea	1	0.0625		Legume	N	N	CP25-M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
25	CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzsta	25-CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesu	Rosinweed	Silphium integrifolium	1	0.0625		Forb	N	N	CP25-M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
25	CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzsta	25-CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesu	Bergamot	Monarda fistulosa	0.5	0.03125		Forb	N	N	CP25-M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
25	CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzsta	25-CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesu	Black-eyed Susan	Rudbeckia hirta	0.5	0.03125		Forb	N	N	CP25-M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
25	CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzsta	25-CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesu	New England Aster	Symphyotrichum novae-a	0.5	0.03125		Forb	N	N	CP25-M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
25	CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzsta	25-CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesu	Sky-Blue Aster	Symphyotrichum oolenta	0.5	0.03125		Forb	N	N	CP25-M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
25	CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzsta	25-CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesu	Yellow Coneflower	Ratibida pinnata	0.5	0.03125		Forb	N	N	CP25-M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
25	CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzsta	25-CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesu	Culver's Root	Veronicastrum virginicum	0	0.015625		Forb	N	N	CP25-M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsed	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgr	Canada Wildrye	Elymus canadensis	16	1		Grass	N	N	CP25-W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsed	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgr	Switchgrass	Panicum virgatum	16	1		Grass	N	N	CP25-W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsed	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgr	Indiangrass	Sorghastrum nutans	12	0.75		Grass	N	N	CP25-W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsed	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgr	Big Bluestem	Andropogon gerardii	8	0.5		Grass	N	N	CP25-W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsed	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgr	Prairie Cordgrass	Spartina pectinata	8	0.5		Grass	N	N	CP25-W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsed	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgr	Fowl Mannagrass	Glyceria striata	4	0.25		Grass	N	N	CP25-W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsed	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgr	Fox Sedge	Carex vulpinoidea	4	0.25		Sedge	N	N	CP25-W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsed	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgr	Cupplant	Silphium perfoliatum	2	0.125		Forb	N	N	CP25-W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsed	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgr	Showy Tick Trefoil	Desmodium canadense	2	0.125		Legume	N	N	CP25-W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsed	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgr	Blue Vervain	Verbena hastata	1	0.0625		Forb	N	N	CP25-W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsed	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgr	Golden Alexanders	Zizia aurea	1	0.0625		Forb	N	N	CP25-W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsed	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgr	Marsh Milkweed	Asclepias incarnata	1	0.0625		Forb	N	N	CP25-W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsed	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgr	Boneset	Eupatorium perfoliatum	0.5	0.03125		Forb	N	N	CP25-W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsed	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgr	Common Ironweed	Vernonia fasciculata	1	0.03125		Forb	N	N	CP25-W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsed	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgr	Joe-pye Weed	Eutrochium maculatum	1	0.03125		Forb	N	N	CP25-W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsed	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgr	Culver's Root	Veronicastrum virginicum	0	0.015625		Forb	N	N	CP25-W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
25	CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-WWInd	25-CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cu	Switchgrass	Panicum virgatum	24	1.5		Grass	N	N	CP25-WM	Switch-Cwrye-Indian-BB-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
25	CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-WWInd	25-CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cu	Canada Wildrye	Elymus canadensis	16	1		Grass	N	N	CP25-WM	Switch-Cwrye-Indian-BB-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
25	CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-WWInd	25-CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cu	Indiangrass	Sorghastrum nutans	12	0.75		Grass	N	N	CP25-WM	Switch-Cwrye-Indian-BB-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
25	CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-WWInd	25-CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cu	Big Bluestem	Andropogon gerardii	8	0.5		Grass	N	N	CP25-WM	Switch-Cwrye-Indian-BB-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
25	CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-WWInd	25-CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cu	Prairie Cordgrass	Spartina pectinata	4	0.25		Grass	N	N	CP25-WM	Switch-Cwrye-Indian-BB-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
25	CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-WWInd	25-CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cu	Cupplant	Silphium perfoliatum	2	0.125		Forb	N	N	CP25-WM	Switch-Cwrye-Indian-BB-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
25	CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-WWInd	25-CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cu	White wild indigo	Baptisia alba	1.5	0.09375		Legume	N	N	CP25-WM	Switch-Cwrye-Indian-BB-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
25	CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-WWInd	25-CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cu	Black-eyed Susan	Rudbeckia hirta	0.5	0.03125		Forb	N	N	CP25-WM	Switch-Cwrye-Indian-BB-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
25	CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-WWInd	25-CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cu	Common Ironweed	Vernonia fasciculata	0.5	0.03125		Forb	N	N	CP25-WM	Switch-Cwrye-Indian-BB-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
25	CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-WWInd	25-CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cu	Golden Alexanders	Zizia aurea	0.5	0.03125		Forb	N	N	CP25-WM	Switch-Cwrye-Indian-BB-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
25	CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-WWInd	25-CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cu	New England Aster	Symphyotrichum novae-a	0.5	0.03125		Forb	N	N	CP25-WM	Switch-Cwrye-Indian-BB-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
25	CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-WWInd	25-CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cu	Prairie Blazing Star	Liatris pycnostachya	0.5	0.03125		Forb	N	N	CP25-WM	Switch-Cwrye-Indian-BB-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
25	CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-WWInd	25-CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cu	Yellow Coneflower	Ratibida pinnata	0.5	0.03125		Forb	N	N	CP25-WM	Switch-Cwrye-Indian-BB-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
25	CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-WWInd	25-CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cu	Bergamot	Monarda fistulosa	0.25	0.015625		Forb	N	N	CP25-WM	Switch-Cwrye-Indian-BB-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
25	CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-WWInd	25-CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cu	Great St. John's Wort	Hypericum ascyron	0	0.015625		Forb	N	N	CP25-WM	Switch-Cwrye-Indian-BB-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
33	CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHbushclov	33-CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RH	Little Bluestem	Schizachyrium scoparium	32	2		Grass	N	N	CP33-1	LB-Sgrama-Cwrye-Indian-PPclover-RHbushclover-PPcone-Sgrod-\
33	CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHbushclov	33-CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RH	Sideoats Grama	Bouteloua curtipendula	32	2		Grass	N	N	CP33-1	LB-Sgrama-Cwrye-Indian-PPclover-RHbushclover-PPcone-Sgrod-\
33	CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHbushclov	33-CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RH	Canada Wildrye	Elymus canadensis	8	0.5		Grass	N	N	CP33-1	LB-Sgrama-Cwrye-Indian-PPclover-RHbushclover-PPcone-Sgrod-\
33	CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHbushclov	33-CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RH	Indiangrass	Sorghastrum nutans	8	0.5		Grass	N	N	CP33-1	LB-Sgrama-Cwrye-Indian-PPclover-RHbushclover-PPcone-Sgrod-\
33	CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHbushclov	33-CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RH	Purple Prairie Clover	Dalea purpurea	2	0.125		Legume	N	N	CP33-1	LB-Sgrama-Cwrye-Indian-PPclover-RHbushclover-PPcone-Sgrod-\
33	CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHbushclov	33-CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RH	Round-Headed Bushclover	Lespedeza capitata	2	0.125		Legume	N	N	CP33-1	LB-Sgrama-Cwrye-Indian-PPclover-RHbushclover-PPcone-Sgrod-\
33	CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHbushclov	33-CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RH	Purple Coneflower	Echinacea purpurea	1	0.0625		Forb	N	N	CP33-1	LB-Sgrama-Cwrye-Indian-PPclover-RHbushclover-PPcone-Sgrod-\

33	CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHbushclov	33-CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RH	Stiff Goldenrod	Oligoneuron rigidum	1	0.0625		Forb	N	N	CP33-1	LB-Sgrama-Cwrye-Indian-PPclover-RHbushclover-PPcone-Sgrod-\
33	CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHbushclov	33-CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RH	Fewleaf Sunflower	Helianthus occidentalis	1	0.0625		Forb	N	N	CP33-1	LB-Sgrama-Cwrye-Indian-PPclover-RHbushclover-PPcone-Sgrod-\
33	CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHbushclov	33-CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RH	Yellow Coneflower	Ratibida pinnata	1	0.0625		Forb	N	N	CP33-1	LB-Sgrama-Cwrye-Indian-PPclover-RHbushclover-PPcone-Sgrod-\
33	CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHbushclov	33-CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RH	Black-eyed Susan	Rudbeckia hirta	0.75	0.046875		Forb	N	N	CP33-1	LB-Sgrama-Cwrye-Indian-PPclover-RHbushclover-PPcone-Sgrod-\
33	CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rbl	33-CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPc	Little Bluestem	Schizachyrium scoparium	24	1.5		Grass	N	N	CP33-2	LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rblzstar-Besus-SkyAst
33	CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rbl	33-CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPc	Sideoats Grama	Bouteloua curtipendula	20	1.25		Grass	N	N	CP33-2	LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rblzstar-Besus-SkyAst
33	CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rbl	33-CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPc	Indiangrass	Sorghastrum nutans	16	1		Grass	N	N	CP33-2	LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rblzstar-Besus-SkyAst
33	CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rbl	33-CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPc	Canada Wildrye	Elymus canadensis	8	0.5		Grass	N	N	CP33-2	LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rblzstar-Besus-SkyAst
33	CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rbl	33-CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPc	Purple Coneflower	Echinacea purpurea	2	0.125		Forb	N	N	CP33-2	LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rblzstar-Besus-SkyAst
33	CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rbl	33-CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPc	Purple Prairie Clover	Dalea purpurea	2	0.125		Legume	N	N	CP33-2	LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rblzstar-Besus-SkyAst
33	CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rbl	33-CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPc	Rough Blazing Star	Liatris aspera	2	0.125		Forb	N	N	CP33-2	LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rblzstar-Besus-SkyAst
33	CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rbl	33-CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPc	Black-eyed Susan	Rudbeckia hirta	1	0.0625		Forb	N	N	CP33-2	LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rblzstar-Besus-SkyAst
33	CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rbl	33-CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPc	Sky-Blue Aster	Symphyotrichum oolenta	1	0.0625		Forb	N	N	CP33-2	LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rblzstar-Besus-SkyAst
33	CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rbl	33-CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPc	Stiff Goldenrod	Oligoneuron rigidum	1	0.0625		Forb	N	N	CP33-2	LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rblzstar-Besus-SkyAst
33	CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rbl	33-CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPc	Fewleaf Sunflower	Helianthus occidentalis	1	0.0625		Forb	N	N	CP33-2	LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rblzstar-Besus-SkyAst
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsed	Canada Wildrye	Elymus canadensis	16	1		Grass	N	N	CP38B-WPHRA	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsed	Indiangrass	Sorghastrum nutans	12	0.75		Grass	N	N	CP38B-WPHRA	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsed	Switchgrass	Panicum virgatum	12	0.75		Grass	N	N	CP38B-WPHRA	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsed	Big Bluestem	Andropogon gerardii	8	0.5		Grass	N	N	CP38B-WPHRA	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsed	Fox Sedge	Carex vulpinoidea	8	0.5		Sedge	N	N	CP38B-WPHRA	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsed	Prairie Cordgrass	Spartina pectinata	8	0.5		Grass	N	N	CP38B-WPHRA	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsed	Fowl Mannagrass	Glyceria striata	4	0.25		Grass	N	N	CP38B-WPHRA	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsed	Cupplant	Silphium perfoliatum	2	0.125		Forb	N	N	CP38B-WPHRA	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsed	Showy Tick Trefoil	Desmodium canadense	2	0.125		Legume	N	N	CP38B-WPHRA	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsed	Blue Vervain	Verbena hastata	1	0.0625		Forb	N	N	CP38B-WPHRA	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsed	Golden Alexanders	Zizia aurea	1	0.0625		Forb	N	N	CP38B-WPHRA	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsed	Marsh Milkweed	Asclepias incarnata	1	0.0625		Forb	N	N	CP38B-WPHRA	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsed	Boneset	Eupatorium perfoliatum	0.5	0.03125		Forb	N	N	CP38B-WPHRA	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsed	Common Ironweed	Vernonia fasciculata	1	0.03125		Forb	N	N	CP38B-WPHRA	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsed	Joe-pye Weed	Eutrochium maculatum	1	0.03125		Forb	N	N	CP38B-WPHRA	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsed	Culver's Root	Veronicastrum virginicum	0	0.015625		Forb	N	N	CP38B-WPHRA	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-B	38-CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-P	Little Bluestem	Schizachyrium scoparium	24	1.5		Grass	N	N	CP38E-CWGCA(CP2)D	LB-Sgrama-BB-Indian-PPclover-Besus-Rblzstar-Sgrod-Ycone
38	CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-B	38-CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-P	Sideoats Grama	Bouteloua curtipendula	24	1.5		Grass	N	N	CP38E-CWGCA(CP2)D	LB-Sgrama-BB-Indian-PPclover-Besus-Rblzstar-Sgrod-Ycone
38	CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-B	38-CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-P	Big Bluestem	Andropogon gerardii	8	0.5		Grass	N	N	CP38E-CWGCA(CP2)D	LB-Sgrama-BB-Indian-PPclover-Besus-Rblzstar-Sgrod-Ycone
38	CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-B	38-CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-P	Indiangrass	Sorghastrum nutans	8	0.5		Grass	N	N	CP38E-CWGCA(CP2)D	LB-Sgrama-BB-Indian-PPclover-Besus-Rblzstar-Sgrod-Ycone
38	CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-B	38-CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-P	Purple Prairie Clover	Dalea purpurea	2	0.125		Legume	N	N	CP38E-CWGCA(CP2)D	LB-Sgrama-BB-Indian-PPclover-Besus-Rblzstar-Sgrod-Ycone
38	CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-B	38-CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-P	Black-eyed Susan	Rudbeckia hirta	1	0.0625		Forb	N	N	CP38E-CWGCA(CP2)D	LB-Sgrama-BB-Indian-PPclover-Besus-Rblzstar-Sgrod-Ycone
38	CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-B	38-CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-P	Rough Blazing Star	Liatris aspera	1	0.0625		Forb	N	N	CP38E-CWGCA(CP2)D	LB-Sgrama-BB-Indian-PPclover-Besus-Rblzstar-Sgrod-Ycone
38	CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-B	38-CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-P	Stiff Goldenrod	Oligoneuron rigidum	1	0.0625		Forb	N	N	CP38E-CWGCA(CP2)D	LB-Sgrama-BB-Indian-PPclover-Besus-Rblzstar-Sgrod-Ycone
38	CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-B	38-CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-P	Yellow Coneflower	Ratibida pinnata	1	0.0625		Forb	N	N	CP38E-CWGCA(CP2)D	LB-Sgrama-BB-Indian-PPclover-Besus-Rblzstar-Sgrod-Ycone
38	CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-I	38-CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian	Little Bluestem	Schizachyrium scoparium	24	1.5		Grass	N	N	CP38E-CWGCA(CP2)DM	LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Besus-Rblzstar-Shwg
38	CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-I	38-CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian	Sideoats Grama	Bouteloua curtipendula	16	1		Grass	N	N	CP38E-CWGCA(CP2)DM	LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Besus-Rblzstar-Shwg
38	CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-I	38-CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian	Big Bluestem	Andropogon gerardii	8	0.5		Grass	N	N	CP38E-CWGCA(CP2)DM	LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Besus-Rblzstar-Shwg
38	CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-I	38-CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian	Indiangrass	Sorghastrum nutans	8	0.5		Grass	N	N	CP38E-CWGCA(CP2)DM	LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Besus-Rblzstar-Shwg
38	CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-I	38-CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian	Switchgrass	Panicum virgatum	8	0.5		Grass	N	N	CP38E-CWGCA(CP2)DM	LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Besus-Rblzstar-Shwg
38	CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-I	38-CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian	Purple Prairie Clover	Dalea purpurea	2	0.125		Legume	N	N	CP38E-CWGCA(CP2)DM	LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Besus-Rblzstar-Shwg
38	CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-I	38-CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian	Bergamot	Monarda fistulosa	1	0.0625		Forb	N	N	CP38E-CWGCA(CP2)DM	LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Besus-Rblzstar-Shwg
38	CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-I	38-CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian	Black-eyed Susan	Rudbeckia hirta	1	0.0625		Forb	N	N	CP38E-CWGCA(CP2)DM	LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Besus-Rblzstar-Shwg
38	CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-I	38-CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian	Rough Blazing Star	Liatris aspera	1	0.0625		Forb	N	N	CP38E-CWGCA(CP2)DM	LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Besus-Rblzstar-Shwg
38	CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-I	38-CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian	Showy Goldenrod	Solidago speciosa	1	0.0625		Forb	N	N	CP38E-CWGCA(CP2)DM	LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Besus-Rblzstar-Shwg
38	CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-I	38-CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian	Stiff Goldenrod	Oligoneuron rigidum	1	0.0625		Forb	N	N	CP38E-CWGCA(CP2)DM	LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Besus-Rblzstar-Shwg
38	CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-I	38-CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian	Yellow Coneflower	Ratibida pinnata	1	0.0625		Forb	N	N	CP38E-CWGCA(CP2)DM	LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Besus-Rblzstar-Shwg
38	CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Pbl	38-CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Little Bluestem	Schizachyrium scoparium	20	1.25		Grass	N	N	CP38E-CWGCA(CP2)M	LB-Cwrye-Indian-BB-Switch-Pblzstar-Rblzstar-Berg-Besus-Shwgro
38	CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Pbl	38-CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Canada Wildrye	Elymus canadensis	16	1		Grass	N	N	CP38E-CWGCA(CP2)M	LB-Cwrye-Indian-BB-Switch-Pblzstar-Rblzstar-Berg-Besus-Shwgro
38	CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Pbl	38-CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Indiangrass	Sorghastrum nutans	16	1		Grass	N	N	CP38E-CWGCA(CP2)M	LB-Cwrye-Indian-BB-Switch-Pblzstar-Rblzstar-Berg-Besus-Shwgro
38	CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Pbl	38-CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Big Bluestem	Andropogon gerardii	8	0.5		Grass	N	N	CP38E-CWGCA(CP2)M	LB-Cwrye-Indian-BB-Switch-Pblzstar-Rblzstar-Berg-Besus-Shwgro
38	CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Pbl	38-CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Switchgrass	Panicum virgatum	8	0.5		Grass	N	N	CP38E-CWGCA(CP2)M	LB-Cwrye-Indian-BB-Switch-Pblzstar-Rblzstar-Berg-Besus-Shwgro
38	CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Pbl	38-CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Prairie Blazing Star	Liatris pycnostachya	2	0.125		Forb	N	N	CP38E-CWGCA(CP2)M	LB-Cwrye-Indian-BB-Switch-Pblzstar-Rblzstar-Berg-Besus-Shwgro
38	CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Pbl	38-CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Rough Blazing Star	Liatris aspera	2	0.125		Forb	N	N	CP38E-CWGCA(CP2)M	LB-Cwrye-Indian-BB-Switch-Pblzstar-Rblzstar-Berg-Besus-Shwgro
38	CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Pbl	38-CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Bergamot	Monarda fistulosa	1	0.0625		Forb	N	N	CP38E-CWGCA(CP2)M	LB-Cwrye-Indian-BB-Switch-Pblzstar-Rblzstar-Berg-Besus-Shwgro
38	CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Pbl	38-CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Black-eyed Susan	Rudbeckia hirta	1	0.0625		Forb	N	N	CP38E-CWGCA(CP2)M	LB-Cwrye-Indian-BB-Switch-Pblzstar-Rblzstar-Berg-Besus-Shwgro
38	CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Pbl	38-CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Showy Goldenrod	Solidago speciosa	1	0.0625		Forb	N	N	CP38E-CWGCA(CP2)M	LB-Cwrye-Indian-BB-Switch-Pblzstar-Rblzstar-Berg-Besus-Shwgro
38	CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Pbl	38-CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Stiff Goldenrod	Oligoneuron rigidum	1	0.0625		Forb	N	N	CP38E-CWGCA(CP2)M	LB-Cwrye-Indian-BB-Switch-Pblzstar-Rblzstar-Berg-Besus-Shwgro
38	CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Pbl	38-CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Yellow Coneflower	Ratibida pinnata	1	0.0625		Forb	N	N	CP38E-CWGCA(CP2)M	LB-Cwrye-Indian-BB-Switch-Pblzstar-Rblzstar-Berg-Besus-Shwgro
38	CP38E-CWGCA(CP2)W-BB-Cwrye-Switch-Pcord-Cup-Bv	38-CP38E-CWGCA(CP2)W-BB-Cwrye-Switch-Pcor	Big Bluestem	Andropogon gerardii	16	1		Grass	N	N	CP38E-CWGCA(CP2)W	BB-Cwrye-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-CWGCA(CP2)W-BB-Cwrye-Switch-Pcord-Cup-Bv	38-CP38E-CWGCA(CP2)W-BB-Cwrye-Switch-Pcor	Canada Wildrye	Elymus canadensis	16	1		Grass	N	N	CP38E-CWGCA(CP2)W	BB-Cwrye-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-CWGCA(CP2)W-BB-Cwrye-Switch-Pcord-Cup-Bv	38-CP38E-CWGCA(CP2)W-BB-Cwrye-Switch-Pcor	Switchgrass	Panicum virgatum	16	1		Grass	N	N	CP38E-CWGCA(CP2)W	BB-Cwrye-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-CWGCA(CP2)W-BB-Cwrye-Switch-Pcord-Cup-Bv	38-CP38E-CWGCA(CP2)W-BB-Cwrye-Switch-Pcor	Prairie Cordgrass	Spartina pectinata	8	0.5		Grass	N	N	CP38E-CWGCA(CP2)W	BB-Cwrye-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-CWGCA(CP2)W-BB-Cwrye-Switch-Pcord-Cup-Bv	38-CP38E-CWGCA(CP2)W-BB-Cwrye-Switch-Pcor	Cupplant	Silphium perfoliatum	2	0.125		Forb	N	N	CP38E-CWGCA(CP2)W	BB-Cwrye-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-CWGCA(CP2)W-BB-Cwrye-Switch-Pcord-Cup-Bv	38-CP38E-CWGCA(CP2)W-BB-Cwrye-Switch-Pcor	Blue Vervain	Verbena hastata	1	0.0625		Forb	N	N	CP38E-CWGCA(CP2)W	BB-Cwrye-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-CWGCA(CP2)W-BB-Cwrye-Switch-Pcord-Cup-Bv	38-CP38E-CWGCA(CP2)W-BB-Cwrye-Switch-Pcor	Common Ironweed	Vernonia fasciculata	1	0.0625		Forb	N	N	CP38E-CWGCA(CP2)W	BB-Cwrye-Switch-Pcord-Cup-Bvervain-Ciron

38	CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Pblzs	38-CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pc	Switchgrass	Panicum virgatum	32	2		Grass	N	N	CP38E-CWGCA(CP2)WM	Switch-BB-Cwrye-Pcord-Pblzstar-Berg-Besus-NEaster-Ycone
38	CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Pblzs	38-CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pc	Big Bluestem	Andropogon gerardii	16	1		Grass	N	N	CP38E-CWGCA(CP2)WM	Switch-BB-Cwrye-Pcord-Pblzstar-Berg-Besus-NEaster-Ycone
38	CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Pblzs	38-CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pc	Canada Wildrye	Elymus canadensis	16	1		Grass	N	N	CP38E-CWGCA(CP2)WM	Switch-BB-Cwrye-Pcord-Pblzstar-Berg-Besus-NEaster-Ycone
38	CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Pblzs	38-CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pc	Prairie Cordgrass	Spartina pectinata	4	0.25		Grass	N	N	CP38E-CWGCA(CP2)WM	Switch-BB-Cwrye-Pcord-Pblzstar-Berg-Besus-NEaster-Ycone
38	CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Pblzs	38-CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pc	Prairie Blazing Star	Liatris pycnostachya	2	0.125		Forb	N	N	CP38E-CWGCA(CP2)WM	Switch-BB-Cwrye-Pcord-Pblzstar-Berg-Besus-NEaster-Ycone
38	CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Pblzs	38-CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pc	Bergamot	Monarda fistulosa	1	0.0625		Forb	N	N	CP38E-CWGCA(CP2)WM	Switch-BB-Cwrye-Pcord-Pblzstar-Berg-Besus-NEaster-Ycone
38	CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Pblzs	38-CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pc	Black-eyed Susan	Rudbeckia hirta	1	0.0625		Forb	N	N	CP38E-CWGCA(CP2)WM	Switch-BB-Cwrye-Pcord-Pblzstar-Berg-Besus-NEaster-Ycone
38	CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Pblzs	38-CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pc	New England Aster	Symphyotrichum novae-a	1	0.0625		Forb	N	N	CP38E-CWGCA(CP2)WM	Switch-BB-Cwrye-Pcord-Pblzstar-Berg-Besus-NEaster-Ycone
38	CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Pblzs	38-CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pc	Yellow Coneflower	Ratibida pinnata	1	0.0625		Forb	N	N	CP38E-CWGCA(CP2)WM	Switch-BB-Cwrye-Pcord-Pblzstar-Berg-Besus-NEaster-Ycone
38	CP38E-GHRA(CP2)D-LB-Sgrama-BB-Indian-PPclover-Sg	38-CP38E-GHRA(CP2)D-LB-Sgrama-BB-Indian-PP	Little Bluestem	Schizachyrium scoparium	24	1.5		Grass	N	N	CP38E-GHRA(CP2)D	LB-Sgrama-BB-Indian-PPclover-Sgrod-Ycone
38	CP38E-GHRA(CP2)D-LB-Sgrama-BB-Indian-PPclover-Sg	38-CP38E-GHRA(CP2)D-LB-Sgrama-BB-Indian-PP	Sideoats Grama	Bouteloua curtipendula	24	1.5		Grass	N	N	CP38E-GHRA(CP2)D	LB-Sgrama-BB-Indian-PPclover-Sgrod-Ycone
38	CP38E-GHRA(CP2)D-LB-Sgrama-BB-Indian-PPclover-Sg	38-CP38E-GHRA(CP2)D-LB-Sgrama-BB-Indian-PP	Big Bluestem	Andropogon gerardii	8	0.5		Grass	N	N	CP38E-GHRA(CP2)D	LB-Sgrama-BB-Indian-PPclover-Sgrod-Ycone
38	CP38E-GHRA(CP2)D-LB-Sgrama-BB-Indian-PPclover-Sg	38-CP38E-GHRA(CP2)D-LB-Sgrama-BB-Indian-PP	Indiangrass	Sorghastrum nutans	8	0.5		Grass	N	N	CP38E-GHRA(CP2)D	LB-Sgrama-BB-Indian-PPclover-Sgrod-Ycone
38	CP38E-GHRA(CP2)D-LB-Sgrama-BB-Indian-PPclover-Sg	38-CP38E-GHRA(CP2)D-LB-Sgrama-BB-Indian-PP	Purple Prairie Clover	Dalea purpurea	2	0.125		Legume	N	N	CP38E-GHRA(CP2)D	LB-Sgrama-BB-Indian-PPclover-Sgrod-Ycone
38	CP38E-GHRA(CP2)D-LB-Sgrama-BB-Indian-PPclover-Sg	38-CP38E-GHRA(CP2)D-LB-Sgrama-BB-Indian-PP	Stiff Goldenrod	Oligoneuron rigidum	1	0.0625		Forb	N	N	CP38E-GHRA(CP2)D	LB-Sgrama-BB-Indian-PPclover-Sgrod-Ycone
38	CP38E-GHRA(CP2)D-LB-Sgrama-BB-Indian-PPclover-Sg	38-CP38E-GHRA(CP2)D-LB-Sgrama-BB-Indian-PP	Yellow Coneflower	Ratibida pinnata	1	0.0625		Forb	N	N	CP38E-GHRA(CP2)D	LB-Sgrama-BB-Indian-PPclover-Sgrod-Ycone
38	CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-Switch-PP	38-CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-S	Little Bluestem	Schizachyrium scoparium	24	1.5		Grass	N	N	CP38E-GHRA(CP2)DM	LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-Switch-PP	38-CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-S	Sideoats Grama	Bouteloua curtipendula	16	1		Grass	N	N	CP38E-GHRA(CP2)DM	LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-Switch-PP	38-CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-S	Big Bluestem	Andropogon gerardii	8	0.5		Grass	N	N	CP38E-GHRA(CP2)DM	LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-Switch-PP	38-CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-S	Indiangrass	Sorghastrum nutans	8	0.5		Grass	N	N	CP38E-GHRA(CP2)DM	LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-Switch-PP	38-CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-S	Switchgrass	Panicum virgatum	8	0.5		Grass	N	N	CP38E-GHRA(CP2)DM	LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-Switch-PP	38-CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-S	Purple Prairie Clover	Dalea purpurea	2	0.125		Legume	N	N	CP38E-GHRA(CP2)DM	LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-Switch-PP	38-CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-S	Bergamot	Monarda fistulosa	1	0.0625		Forb	N	N	CP38E-GHRA(CP2)DM	LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-Switch-PP	38-CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-S	Yellow Coneflower	Ratibida pinnata	1	0.0625		Forb	N	N	CP38E-GHRA(CP2)DM	LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Switch-Berg-	38-CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Swi	Little Bluestem	Schizachyrium scoparium	20	1.25		Grass	N	N	CP38E-GHRA(CP2)M	LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Switch-Berg-	38-CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Swi	Canada Wildrye	Elymus canadensis	16	1		Grass	N	N	CP38E-GHRA(CP2)M	LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Switch-Berg-	38-CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Swi	Indiangrass	Sorghastrum nutans	16	1		Grass	N	N	CP38E-GHRA(CP2)M	LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Switch-Berg-	38-CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Swi	Big Bluestem	Andropogon gerardii	8	0.5		Grass	N	N	CP38E-GHRA(CP2)M	LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Switch-Berg-	38-CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Swi	Switchgrass	Panicum virgatum	8	0.5		Grass	N	N	CP38E-GHRA(CP2)M	LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Switch-Berg-	38-CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Swi	Bergamot	Monarda fistulosa	1	0.0625		Forb	N	N	CP38E-GHRA(CP2)M	LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Switch-Berg-	38-CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Swi	Black-eyed Susan	Rudbeckia hirta	1	0.0625		Forb	N	N	CP38E-GHRA(CP2)M	LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Switch-Berg-	38-CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Swi	Yellow Coneflower	Ratibida pinnata	1	0.0625		Forb	N	N	CP38E-GHRA(CP2)M	LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-C	38-CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch	Big Bluestem	Andropogon gerardii	16	1		Grass	N	N	CP38E-GHRA(CP2)W	BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-C	38-CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch	Canada Wildrye	Elymus canadensis	16	1		Grass	N	N	CP38E-GHRA(CP2)W	BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-C	38-CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch	Indiangrass	Sorghastrum nutans	16	1		Grass	N	N	CP38E-GHRA(CP2)W	BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-C	38-CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch	Switchgrass	Panicum virgatum	16	1		Grass	N	N	CP38E-GHRA(CP2)W	BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-C	38-CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch	Prairie Cordgrass	Spartina pectinata	8	0.5		Grass	N	N	CP38E-GHRA(CP2)W	BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-C	38-CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch	Cupplant	Silphium perfoliatum	2	0.125		Forb	N	N	CP38E-GHRA(CP2)W	BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-C	38-CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch	Blue Vervain	Verbena hastata	1	0.0625		Forb	N	N	CP38E-GHRA(CP2)W	BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-C	38-CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch	Common Ironweed	Vernonia fasciculata	1	0.0625		Forb	N	N	CP38E-GHRA(CP2)W	BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-GHRA(CP2)WM-Switch-BB-Cwrye-Pcord-Berg-N	38-CP38E-GHRA(CP2)WM-Switch-BB-Cwrye-Pco	Switchgrass	Panicum virgatum	32	2		Grass	N	N	CP38E-GHRA(CP2)WM	Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
38	CP38E-GHRA(CP2)WM-Switch-BB-Cwrye-Pcord-Berg-N	38-CP38E-GHRA(CP2)WM-Switch-BB-Cwrye-Pco	Big Bluestem	Andropogon gerardii	16	1		Grass	N	N	CP38E-GHRA(CP2)WM	Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
38	CP38E-GHRA(CP2)WM-Switch-BB-Cwrye-Pcord-Berg-N	38-CP38E-GHRA(CP2)WM-Switch-BB-Cwrye-Pco	Canada Wildrye	Elymus canadensis	16	1		Grass	N	N	CP38E-GHRA(CP2)WM	Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
38	CP38E-GHRA(CP2)WM-Switch-BB-Cwrye-Pcord-Berg-N	38-CP38E-GHRA(CP2)WM-Switch-BB-Cwrye-Pco	Prairie Cordgrass	Spartina pectinata	4	0.25		Grass	N	N	CP38E-GHRA(CP2)WM	Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
38	CP38E-GHRA(CP2)WM-Switch-BB-Cwrye-Pcord-Berg-N	38-CP38E-GHRA(CP2)WM-Switch-BB-Cwrye-Pco	Bergamot	Monarda fistulosa	1	0.0625		Forb	N	N	CP38E-GHRA(CP2)WM	Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
38	CP38E-GHRA(CP2)WM-Switch-BB-Cwrye-Pcord-Berg-N	38-CP38E-GHRA(CP2)WM-Switch-BB-Cwrye-Pco	New England Aster	Symphyotrichum novae-a	1	0.0625		Forb	N	N	CP38E-GHRA(CP2)WM	Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
38	CP38E-GHRA(CP2)WM-Switch-BB-Cwrye-Pcord-Berg-N	38-CP38E-GHRA(CP2)WM-Switch-BB-Cwrye-Pco	Yellow Coneflower	Ratibida pinnata	1	0.0625		Forb	N	N	CP38E-GHRA(CP2)WM	Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Little Bluestem	Schizachyrium scoparium	24	1.5		Grass	N	N	CP38E-GHRA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Sideoats Grama	Bouteloua curtipendula	24	1.5		Grass	N	N	CP38E-GHRA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Indiangrass	Sorghastrum nutans	8	0.5		Grass	N	N	CP38E-GHRA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Big Bluestem	Andropogon gerardii	4	0.25		Grass	N	N	CP38E-GHRA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Purple Prairie Clover	Dalea purpurea	2	0.125		Legume	N	N	CP38E-GHRA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Sand Dropseed	Sporobolus cryptandrus	2	0.125		Grass	N	N	CP38E-GHRA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Prairie Junegrass	Koeleria macrantha	1	0.0625		Grass	N	N	CP38E-GHRA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Spiderwort	Tradescantia ohiensis	1	0.0625		Forb	N	N	CP38E-GHRA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Hoary Vervain	Verbena stricta	0.5	0.03125		Forb	N	N	CP38E-GHRA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Leadplant	Amorpha canescens	0.5	0.03125		Legume	N	N	CP38E-GHRA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Prairie Tickseed	Coreopsis palmata	0.5	0.03125		Forb	N	N	CP38E-GHRA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Silky Aster	Symphyotrichum pratens	0.5	0.03125		Forb	N	N	CP38E-GHRA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Stiff Goldenrod	Oligoneuron rigidum	0.5	0.03125		Forb	N	N	CP38E-GHRA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Yellow Coneflower	Ratibida pinnata	0.5	0.03125		Forb	N	N	CP38E-GHRA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Prairie Cinquefoil	Potentilla arguta	0.25	0.015625		Forb	N	N	CP38E-GHRA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Spotted Mint	Monarda punctata	0	0.015625		Forb	N	N	CP38E-GHRA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjun	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Little Bluestem	Schizachyrium scoparium	24	1.5		Grass	N	N	CP38E-GHRA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjun	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Sideoats Grama	Bouteloua curtipendula	24	1.5		Grass	N	N	CP38E-GHRA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjun	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Indiangrass	Sorghastrum nutans	8	0.5		Grass	N	N	CP38E-GHRA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjun	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Switchgrass	Panicum virgatum	4	0.25		Grass	N	N	CP38E-GHRA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjun	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Prairie Junegrass	Koeleria macrantha	2	0.125		Grass	N	N	CP38E-GHRA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjun	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Prairie Dropseed	Sporobolus heterolepis	2	0.125		Grass	N	N	CP38E-GHRA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjun	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Purple Prairie Clover	Dalea purpurea	2	0.125		Legume	N	N	CP38E-GHRA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjun	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Round-Headed Bushclover	Lespedeza capitata	2	0.125		Legume	N	N	CP38E-GHRA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B

38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjun	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Bergamot	Monarda fistulosa	1	0.0625		Forb	N	N	CP38E-GHRA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjun	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Spiderwort	Tradescantia ohiensis	1	0.0625		Forb	N	N	CP38E-GHRA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjun	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Yellow Coneflower	Ratibida pinnata	1	0.0625		Forb	N	N	CP38E-GHRA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjun	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Leadplant	Amorpha canescens	0.5	0.03125		Legume	N	N	CP38E-GHRA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjun	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Rough Blazing Star	Liatris aspera	1	0.03125		Forb	N	N	CP38E-GHRA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjun	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Sky-Blue Aster	Symphyotrichum oolenta	1	0.03125		Forb	N	N	CP38E-GHRA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjun	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Stiff Goldenrod	Oligoneuron rigidum	0.5	0.03125		Forb	N	N	CP38E-GHRA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjun	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Prairie Cinquefoil	Potentilla arguta	0.25	0.015625		Forb	N	N	CP38E-GHRA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
38	CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Switch-Oxe	38-CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Sw	Little Bluestem	Schizachyrium scoparium	24	1.5		Grass	N	N	CP38E-GHRA(CP25)M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
38	CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Switch-Oxe	38-CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Sw	Indiangrass	Sorghastrum nutans	16	1		Grass	N	N	CP38E-GHRA(CP25)M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
38	CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Switch-Oxe	38-CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Sw	Big Bluestem	Andropogon gerardii	8	0.5		Grass	N	N	CP38E-GHRA(CP25)M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
38	CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Switch-Oxe	38-CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Sw	Canada Wildrye	Elymus canadensis	8	0.5		Grass	N	N	CP38E-GHRA(CP25)M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
38	CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Switch-Oxe	38-CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Sw	Switchgrass	Panicum virgatum	8	0.5		Grass	N	N	CP38E-GHRA(CP25)M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
38	CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Switch-Oxe	38-CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Sw	Ox-eye Sunflower	Heliopsis helianthoides	1	0.0625		Forb	N	N	CP38E-GHRA(CP25)M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
38	CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Switch-Oxe	38-CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Sw	Prairie Blazing Star	Liatris pycnostachya	1	0.0625		Forb	N	N	CP38E-GHRA(CP25)M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
38	CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Switch-Oxe	38-CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Sw	Purple Prairie Clover	Dalea purpurea	1	0.0625		Legume	N	N	CP38E-GHRA(CP25)M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
38	CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Switch-Oxe	38-CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Sw	Rosinweed	Silphium integrifolium	1	0.0625		Forb	N	N	CP38E-GHRA(CP25)M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
38	CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Switch-Oxe	38-CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Sw	Bergamot	Monarda fistulosa	0.5	0.03125		Forb	N	N	CP38E-GHRA(CP25)M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
38	CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Switch-Oxe	38-CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Sw	Black-eyed Susan	Rudbeckia hirta	0.5	0.03125		Forb	N	N	CP38E-GHRA(CP25)M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
38	CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Switch-Oxe	38-CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Sw	New England Aster	Symphyotrichum novae-a	0.5	0.03125		Forb	N	N	CP38E-GHRA(CP25)M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
38	CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Switch-Oxe	38-CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Sw	Smooth Blue Aster	Symphyotrichum laeve	0.5	0.03125		Forb	N	N	CP38E-GHRA(CP25)M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
38	CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Switch-Oxe	38-CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Sw	Yellow Coneflower	Ratibida pinnata	0.5	0.03125		Forb	N	N	CP38E-GHRA(CP25)M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
38	CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Switch-Oxe	38-CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Sw	Culver's Root	Veronicastrum virginicum	0	0.015625		Forb	N	N	CP38E-GHRA(CP25)M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-B	Canada Wildrye	Elymus canadensis	16	1		Grass	N	N	CP38E-GHRA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-B	Switchgrass	Panicum virgatum	16	1		Grass	N	N	CP38E-GHRA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-B	Indiangrass	Sorghastrum nutans	12	0.75		Grass	N	N	CP38E-GHRA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-B	Big Bluestem	Andropogon gerardii	8	0.5		Grass	N	N	CP38E-GHRA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-B	Prairie Cordgrass	Spartina pectinata	8	0.5		Grass	N	N	CP38E-GHRA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-B	Fowl Mannagrass	Glyceria striata	4	0.25		Grass	N	N	CP38E-GHRA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-B	Fox Sedge	Carex vulpinoidea	4	0.25		Sedge	N	N	CP38E-GHRA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-B	Cupplant	Silphium perfoliatum	2	0.125		Forb	N	N	CP38E-GHRA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-B	Showy Tick Trefoil	Desmodium canadense	2	0.125		Legume	N	N	CP38E-GHRA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-B	Blue Vervain	Verbena hastata	1	0.0625		Forb	N	N	CP38E-GHRA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-B	Golden Alexanders	Zizia aurea	1	0.0625		Forb	N	N	CP38E-GHRA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-B	Marsh Milkweed	Asclepias incarnata	1	0.0625		Forb	N	N	CP38E-GHRA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-B	Boneset	Eupatorium perfoliatum	0.5	0.03125		Forb	N	N	CP38E-GHRA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-B	Common Ironweed	Vernonia fasciculata	1	0.03125		Forb	N	N	CP38E-GHRA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-B	Joe-pye Weed	Eutrochium maculatum	1	0.03125		Forb	N	N	CP38E-GHRA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-B	Culver's Root	Veronicastrum virginicum	0	0.015625		Forb	N	N	CP38E-GHRA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Indian-Pcor	38-CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Ind	Switchgrass	Panicum virgatum	24	1.5		Grass	N	N	CP38E-GHRA(CP25)WM	Switch-BB-Cwrye-Indian-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
38	CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Indian-Pcor	38-CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Ind	Big Bluestem	Andropogon gerardii	20	1.25		Grass	N	N	CP38E-GHRA(CP25)WM	Switch-BB-Cwrye-Indian-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
38	CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Indian-Pcor	38-CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Ind	Canada Wildrye	Elymus canadensis	16	1		Grass	N	N	CP38E-GHRA(CP25)WM	Switch-BB-Cwrye-Indian-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
38	CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Indian-Pcor	38-CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Ind	Indiangrass	Sorghastrum nutans	12	0.75		Grass	N	N	CP38E-GHRA(CP25)WM	Switch-BB-Cwrye-Indian-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
38	CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Indian-Pcor	38-CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Ind	Prairie Cordgrass	Spartina pectinata	4	0.25		Grass	N	N	CP38E-GHRA(CP25)WM	Switch-BB-Cwrye-Indian-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
38	CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Indian-Pcor	38-CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Ind	Cupplant	Silphium perfoliatum	2	0.125		Forb	N	N	CP38E-GHRA(CP25)WM	Switch-BB-Cwrye-Indian-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
38	CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Indian-Pcor	38-CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Ind	White wild indigo	Baptisia alba	1.5	0.09375		Legume	N	N	CP38E-GHRA(CP25)WM	Switch-BB-Cwrye-Indian-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
38	CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Indian-Pcor	38-CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Ind	Black-eyed Susan	Rudbeckia hirta	0.5	0.03125		Forb	N	N	CP38E-GHRA(CP25)WM	Switch-BB-Cwrye-Indian-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
38	CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Indian-Pcor	38-CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Ind	Common Ironweed	Vernonia fasciculata	0.5	0.03125		Forb	N	N	CP38E-GHRA(CP25)WM	Switch-BB-Cwrye-Indian-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
38	CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Indian-Pcor	38-CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Ind	Golden Alexanders	Zizia aurea	0.5	0.03125		Forb	N	N	CP38E-GHRA(CP25)WM	Switch-BB-Cwrye-Indian-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
38	CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Indian-Pcor	38-CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Ind	New England Aster	Symphyotrichum novae-a	0.5	0.03125		Forb	N	N	CP38E-GHRA(CP25)WM	Switch-BB-Cwrye-Indian-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
38	CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Indian-Pcor	38-CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Ind	Prairie Blazing Star	Liatris pycnostachya	0.5	0.03125		Forb	N	N	CP38E-GHRA(CP25)WM	Switch-BB-Cwrye-Indian-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
38	CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Indian-Pcor	38-CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Ind	Yellow Coneflower	Ratibida pinnata	0.5	0.03125		Forb	N	N	CP38E-GHRA(CP25)WM	Switch-BB-Cwrye-Indian-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
38	CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Indian-Pcor	38-CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Ind	Bergamot	Monarda fistulosa	0.25	0.015625		Forb	N	N	CP38E-GHRA(CP25)WM	Switch-BB-Cwrye-Indian-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
38	CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Indian-Pcor	38-CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Ind	Great St. John's Wort	Hypericum ascyron	0	0.015625		Forb	N	N	CP38E-GHRA(CP25)WM	Switch-BB-Cwrye-Indian-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Little Bluestem	Schizachyrium scoparium	24	1.5		Grass	N	N	CP38E-KBB	LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-PPclover-Bmilkweed-F
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Canada Wildrye	Elymus canadensis	16	1		Grass	N	N	CP38E-KBB	LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-PPclover-Bmilkweed-F
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Indiangrass	Sorghastrum nutans	16	1		Grass	N	N	CP38E-KBB	LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-PPclover-Bmilkweed-F
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Big Bluestem	Andropogon gerardii	8	0.5		Grass	N	N	CP38E-KBB	LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-PPclover-Bmilkweed-F
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Sideoats Grama	Bouteloua curtipendula	8	0.5		Grass	N	N	CP38E-KBB	LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-PPclover-Bmilkweed-F
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Switchgrass	Panicum virgatum	8	0.5		Grass	N	N	CP38E-KBB	LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-PPclover-Bmilkweed-F
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Wild Lupine	Lupinus perennis	3	0.1875		Legume	N	N	CP38E-KBB	LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-PPclover-Bmilkweed-F
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Purple Prairie Clover	Dalea purpurea	2	0.125		Legume	N	N	CP38E-KBB	LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-PPclover-Bmilkweed-F
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Butterfly Milkweed	Asclepias tuberosa	1	0.0625		Forb	N	N	CP38E-KBB	LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-PPclover-Bmilkweed-F
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Flowering Spurge	Euphorbia corollata	1	0.0625		Forb	N	N	CP38E-KBB	LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-PPclover-Bmilkweed-F
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Golden Alexanders	Zizia aurea	1	0.0625		Forb	N	N	CP38E-KBB	LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-PPclover-Bmilkweed-F
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Rough Blazing Star	Liatris aspera	1	0.0625		Forb	N	N	CP38E-KBB	LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-PPclover-Bmilkweed-F
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Round-Headed Bushclover	Lespedeza capitata	1	0.0625		Legume	N	N	CP38E-KBB	LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-PPclover-Bmilkweed-F
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Fewleaf Sunflower	Helianthus occidentalis	1	0.0625		Forb	N	N	CP38E-KBB	LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-PPclover-Bmilkweed-F
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Bergamot	Monarda fistulosa	0.5	0.03125		Forb	N	N	CP38E-KBB	LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-PPclover-Bmilkweed-F
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Prairie Tickseed	Coreopsis palmata	1	0.03125		Forb	N	N	CP38E-KBB	LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-PPclover-Bmilkweed-F
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Black-eyed Susan	Rudbeckia hirta	0	0.025		Forb	N	N	CP38E-KBB	LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-PPclover-Bmilkweed-F

38	CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlup-PPclove	38-CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlup	Little Bluestem	Schizachyrium scoparium	36	2.25		Grass	N	N	CP38E-KBB(WHIP)	LB-Sgrama-BB-Pjune-Wlup-PPclover-Rblzstar-Ptick-Besus
38	CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlup-PPclove	38-CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlup	Sideoats Grama	Bouteloua curtipendula	16	1		Grass	N	N	CP38E-KBB(WHIP)	LB-Sgrama-BB-Pjune-Wlup-PPclover-Rblzstar-Ptick-Besus
38	CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlup-PPclove	38-CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlup	Big Bluestem	Andropogon gerardii	8	0.5		Grass	N	N	CP38E-KBB(WHIP)	LB-Sgrama-BB-Pjune-Wlup-PPclover-Rblzstar-Ptick-Besus
38	CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlup-PPclove	38-CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlup	Prairie Junegrass	Koeleria macrantha	4	0.25		Grass	N	N	CP38E-KBB(WHIP)	LB-Sgrama-BB-Pjune-Wlup-PPclover-Rblzstar-Ptick-Besus
38	CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlup-PPclove	38-CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlup	Wild Lupine	Lupinus perennis	3	0.1875		Legume	N	N	CP38E-KBB(WHIP)	LB-Sgrama-BB-Pjune-Wlup-PPclover-Rblzstar-Ptick-Besus
38	CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlup-PPclove	38-CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlup	Purple Prairie Clover	Dalea purpurea	2	0.125		Legume	N	N	CP38E-KBB(WHIP)	LB-Sgrama-BB-Pjune-Wlup-PPclover-Rblzstar-Ptick-Besus
38	CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlup-PPclove	38-CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlup	Rough Blazing Star	Liatris aspera	2	0.125		Forb	N	N	CP38E-KBB(WHIP)	LB-Sgrama-BB-Pjune-Wlup-PPclover-Rblzstar-Ptick-Besus
38	CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlup-PPclove	38-CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlup	Prairie Tickseed	Coreopsis palmata	1	0.0625		Forb	N	N	CP38E-KBB(WHIP)	LB-Sgrama-BB-Pjune-Wlup-PPclover-Rblzstar-Ptick-Besus
38	CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlup-PPclove	38-CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlup	Black-eyed Susan	Rudbeckia hirta	0.25	0.015625		Forb	N	N	CP38E-KBB(WHIP)	LB-Sgrama-BB-Pjune-Wlup-PPclover-Rblzstar-Ptick-Besus
38	CP38E-SWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-S	38-CP38E-SWGCA(CP2)D-LB-Sgrama-BB-Indian-P	Little Bluestem	Schizachyrium scoparium	24	1.5		Grass	N	N	CP38E-SWGCA(CP2)D	LB-Sgrama-BB-Indian-PPclover-Sgrod-Ycone
38	CP38E-SWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-S	38-CP38E-SWGCA(CP2)D-LB-Sgrama-BB-Indian-P	Sideoats Grama	Bouteloua curtipendula	24	1.5		Grass	N	N	CP38E-SWGCA(CP2)D	LB-Sgrama-BB-Indian-PPclover-Sgrod-Ycone
38	CP38E-SWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-S	38-CP38E-SWGCA(CP2)D-LB-Sgrama-BB-Indian-P	Big Bluestem	Andropogon gerardii	8	0.5		Grass	N	N	CP38E-SWGCA(CP2)D	LB-Sgrama-BB-Indian-PPclover-Sgrod-Ycone
38	CP38E-SWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-S	38-CP38E-SWGCA(CP2)D-LB-Sgrama-BB-Indian-P	Indiangrass	Sorghastrum nutans	8	0.5		Grass	N	N	CP38E-SWGCA(CP2)D	LB-Sgrama-BB-Indian-PPclover-Sgrod-Ycone
38	CP38E-SWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-S	38-CP38E-SWGCA(CP2)D-LB-Sgrama-BB-Indian-P	Purple Prairie Clover	Dalea purpurea	2	0.125		Legume	N	N	CP38E-SWGCA(CP2)D	LB-Sgrama-BB-Indian-PPclover-Sgrod-Ycone
38	CP38E-SWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-S	38-CP38E-SWGCA(CP2)D-LB-Sgrama-BB-Indian-P	Stiff Goldenrod	Oligoneuron rigidum	1	0.0625		Forb	N	N	CP38E-SWGCA(CP2)D	LB-Sgrama-BB-Indian-PPclover-Sgrod-Ycone
38	CP38E-SWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-S	38-CP38E-SWGCA(CP2)D-LB-Sgrama-BB-Indian-P	Yellow Coneflower	Ratibida pinnata	1	0.0625		Forb	N	N	CP38E-SWGCA(CP2)D	LB-Sgrama-BB-Indian-PPclover-Sgrod-Ycone
38	CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-P	38-CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian	Little Bluestem	Schizachyrium scoparium	24	1.5		Grass	N	N	CP38E-SWGCA(CP2)DM	LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-P	38-CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian	Sideoats Grama	Bouteloua curtipendula	16	1		Grass	N	N	CP38E-SWGCA(CP2)DM	LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-P	38-CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian	Big Bluestem	Andropogon gerardii	8	0.5		Grass	N	N	CP38E-SWGCA(CP2)DM	LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-P	38-CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian	Indiangrass	Sorghastrum nutans	8	0.5		Grass	N	N	CP38E-SWGCA(CP2)DM	LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-P	38-CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian	Switchgrass	Panicum virgatum	8	0.5		Grass	N	N	CP38E-SWGCA(CP2)DM	LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-P	38-CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian	Purple Prairie Clover	Dalea purpurea	2	0.125		Legume	N	N	CP38E-SWGCA(CP2)DM	LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-P	38-CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian	Bergamot	Monarda fistulosa	1	0.0625		Forb	N	N	CP38E-SWGCA(CP2)DM	LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-P	38-CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian	Yellow Coneflower	Ratibida pinnata	1	0.0625		Forb	N	N	CP38E-SWGCA(CP2)DM	LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Ber	38-CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-Sv	Little Bluestem	Schizachyrium scoparium	20	1.25		Grass	N	N	CP38E-SWGCA(CP2)M	LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Ber	38-CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-Sv	Canada Wildrye	Elymus canadensis	16	1		Grass	N	N	CP38E-SWGCA(CP2)M	LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Ber	38-CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-Sv	Indiangrass	Sorghastrum nutans	16	1		Grass	N	N	CP38E-SWGCA(CP2)M	LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Ber	38-CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-Sv	Big Bluestem	Andropogon gerardii	8	0.5		Grass	N	N	CP38E-SWGCA(CP2)M	LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Ber	38-CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-Sv	Switchgrass	Panicum virgatum	8	0.5		Grass	N	N	CP38E-SWGCA(CP2)M	LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Ber	38-CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-Sv	Bergamot	Monarda fistulosa	1	0.0625		Forb	N	N	CP38E-SWGCA(CP2)M	LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Ber	38-CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-Sv	Black-eyed Susan	Rudbeckia hirta	1	0.0625		Forb	N	N	CP38E-SWGCA(CP2)M	LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Ber	38-CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-Sv	Yellow Coneflower	Ratibida pinnata	1	0.0625		Forb	N	N	CP38E-SWGCA(CP2)M	LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-	38-CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Swit	Big Bluestem	Andropogon gerardii	16	1		Grass	N	N	CP38E-SWGCA(CP2)W	BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-	38-CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Swit	Canada Wildrye	Elymus canadensis	16	1		Grass	N	N	CP38E-SWGCA(CP2)W	BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-	38-CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Swit	Indiangrass	Sorghastrum nutans	16	1		Grass	N	N	CP38E-SWGCA(CP2)W	BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-	38-CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Swit	Switchgrass	Panicum virgatum	16	1		Grass	N	N	CP38E-SWGCA(CP2)W	BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-	38-CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Swit	Prairie Cordgrass	Spartina pectinata	8	0.5		Grass	N	N	CP38E-SWGCA(CP2)W	BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-	38-CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Swit	Silphium perfoliatum	Cupplant	2	0.125		Forb	N	N	CP38E-SWGCA(CP2)W	BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-	38-CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Swit	Blue Vervain	Verbena hastata	1	0.0625		Forb	N	N	CP38E-SWGCA(CP2)W	BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-	38-CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Swit	Common Ironweed	Vernonia fasciculata	1	0.0625		Forb	N	N	CP38E-SWGCA(CP2)W	BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-SWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Berg	38-CP38E-SWGCA(CP2)WM-Switch-BB-Cwrye-Pc	Switchgrass	Panicum virgatum	32	2		Grass	N	N	CP38E-SWGCA(CP2)WM	Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
38	CP38E-SWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Berg	38-CP38E-SWGCA(CP2)WM-Switch-BB-Cwrye-Pc	Big Bluestem	Andropogon gerardii	16	1		Grass	N	N	CP38E-SWGCA(CP2)WM	Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
38	CP38E-SWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Berg	38-CP38E-SWGCA(CP2)WM-Switch-BB-Cwrye-Pc	Canada Wildrye	Elymus canadensis	16	1		Grass	N	N	CP38E-SWGCA(CP2)WM	Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
38	CP38E-SWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Berg	38-CP38E-SWGCA(CP2)WM-Switch-BB-Cwrye-Pc	Prairie Cordgrass	Spartina pectinata	4	0.25		Grass	N	N	CP38E-SWGCA(CP2)WM	Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
38	CP38E-SWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Berg	38-CP38E-SWGCA(CP2)WM-Switch-BB-Cwrye-Pc	Bergamot	Monarda fistulosa	1	0.0625		Forb	N	N	CP38E-SWGCA(CP2)WM	Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
38	CP38E-SWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Berg	38-CP38E-SWGCA(CP2)WM-Switch-BB-Cwrye-Pc	New England Aster	Symphyotrichum novae-a	1	0.0625		Forb	N	N	CP38E-SWGCA(CP2)WM	Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
38	CP38E-SWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Berg	38-CP38E-SWGCA(CP2)WM-Switch-BB-Cwrye-Pc	Yellow Coneflower	Ratibida pinnata	1	0.0625		Forb	N	N	CP38E-SWGCA(CP2)WM	Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Little Bluestem	Schizachyrium scoparium	24	1.5		Grass	N	N	CP38E-SWGCA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Sideoats Grama	Bouteloua curtipendula	24	1.5		Grass	N	N	CP38E-SWGCA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Indiangrass	Sorghastrum nutans	8	0.5		Grass	N	N	CP38E-SWGCA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Big Bluestem	Andropogon gerardii	4	0.25		Grass	N	N	CP38E-SWGCA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Purple Prairie Clover	Dalea purpurea	2	0.125		Legume	N	N	CP38E-SWGCA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Sand Dropseed	Sporobolus cryptandrus	2	0.125		Grass	N	N	CP38E-SWGCA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Prairie Junegrass	Koeleria macrantha	1	0.0625		Grass	N	N	CP38E-SWGCA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Spiderwort	Tradescantia ohiensis	1	0.0625		Forb	N	N	CP38E-SWGCA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Hoary Vervain	Verbena stricta	0.5	0.03125		Forb	N	N	CP38E-SWGCA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Leadplant	Amorpha canescens	0.5	0.03125		Legume	N	N	CP38E-SWGCA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Prairie Tickseed	Coreopsis palmata	0.5	0.03125		Forb	N	N	CP38E-SWGCA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Silky Aster	Symphyotrichum pratens	0.5	0.03125		Forb	N	N	CP38E-SWGCA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Stiff Goldenrod	Oligoneuron rigidum	1	0.03125		Forb	N	N	CP38E-SWGCA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Yellow Coneflower	Ratibida pinnata	0.5	0.03125		Forb	N	N	CP38E-SWGCA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Prairie Cinquefoil	Potentilla arguta	0.25	0.015625		Forb	N	N	CP38E-SWGCA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Spotted Mint	Monarda punctata	0	0.015625		Forb	N	N	CP38E-SWGCA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Little Bluestem	Schizachyrium scoparium	24	1.5		Grass	N	N	CP38E-SWGCA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Sideoats Grama	Bouteloua curtipendula	24	1.5		Grass	N	N	CP38E-SWGCA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Indiangrass	Sorghastrum nutans	8	0.5		Grass	N	N	CP38E-SWGCA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Switchgrass	Panicum virgatum	4	0.25		Grass	N	N	CP38E-SWGCA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Prairie Junegrass	Koeleria macrantha	2	0.125		Grass	N	N	CP38E-SWGCA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Prairie Dropseed	Sporobolus heterolepis	2	0.125		Grass	N	N	CP38E-SWGCA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Purple Prairie Clover	Dalea purpurea	2	0.125		Legume	N	N	CP38E-SWGCA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Round-Headed Bushclover	Lespedeza capitata	2	0.125		Legume	N	N	CP38E-SWGCA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B

38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Bergamot	Monarda fistulosa	1	0.0625		Forb	N	N	CP38E-SWGCA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Spiderwort	Tradescantia ohiensis	1	0.0625		Forb	N	N	CP38E-SWGCA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Yellow Coneflower	Ratibida pinnata	1	0.0625		Forb	N	N	CP38E-SWGCA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Leadplant	Amorpha canescens	0.5	0.03125		Legume	N	N	CP38E-SWGCA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Rough Blazing Star	Liatris aspera	1	0.03125		Forb	N	N	CP38E-SWGCA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Sky-Blue Aster	Symphyotrichum oolenta	1	0.03125		Forb	N	N	CP38E-SWGCA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Stiff Goldenrod	Oligoneuron rigidum	0.5	0.03125		Forb	N	N	CP38E-SWGCA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Prairie Cinquefoil	Potentilla arguta	0.25	0.015625		Forb	N	N	CP38E-SWGCA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
38	CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-Switch-Ox	38-CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-S	Little Bluestem	Schizachyrium scoparium	24	1.5		Grass	N	N	CP38E-SWGCA(CP25)M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
38	CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-Switch-Ox	38-CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-S	Indiangrass	Sorghastrum nutans	16	1		Grass	N	N	CP38E-SWGCA(CP25)M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
38	CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-Switch-Ox	38-CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-S	Big Bluestem	Andropogon gerardii	8	0.5		Grass	N	N	CP38E-SWGCA(CP25)M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
38	CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-Switch-Ox	38-CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-S	Canada Wildrye	Elymus canadensis	8	0.5		Grass	N	N	CP38E-SWGCA(CP25)M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
38	CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-Switch-Ox	38-CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-S	Switchgrass	Panicum virgatum	8	0.5		Grass	N	N	CP38E-SWGCA(CP25)M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
38	CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-Switch-Ox	38-CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-S	Ox-eye Sunflower	Heliopsis helianthoides	1	0.0625		Forb	N	N	CP38E-SWGCA(CP25)M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
38	CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-Switch-Ox	38-CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-S	Prairie Blazing Star	Liatris pycnostachya	1	0.0625		Forb	N	N	CP38E-SWGCA(CP25)M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
38	CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-Switch-Ox	38-CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-S	Purple Prairie Clover	Dalea purpurea	1	0.0625		Legume	N	N	CP38E-SWGCA(CP25)M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
38	CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-Switch-Ox	38-CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-S	Rosinweed	Silphium integrifolium	1	0.0625		Forb	N	N	CP38E-SWGCA(CP25)M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
38	CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-Switch-Ox	38-CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-S	Bergamot	Monarda fistulosa	0.5	0.03125		Forb	N	N	CP38E-SWGCA(CP25)M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
38	CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-Switch-Ox	38-CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-S	Black-eyed Susan	Rudbeckia hirta	0.5	0.03125		Forb	N	N	CP38E-SWGCA(CP25)M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
38	CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-Switch-Ox	38-CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-S	New England Aster	Symphyotrichum novae-a	0.5	0.03125		Forb	N	N	CP38E-SWGCA(CP25)M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
38	CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-Switch-Ox	38-CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-S	Smooth Blue Aster	Symphyotrichum laeve	0.5	0.03125		Forb	N	N	CP38E-SWGCA(CP25)M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
38	CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-Switch-Ox	38-CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-S	Yellow Coneflower	Ratibida pinnata	0.5	0.03125		Forb	N	N	CP38E-SWGCA(CP25)M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
38	CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-Switch-Ox	38-CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-S	Culver's Root	Veronicastrum virginicum	0	0.015625		Forb	N	N	CP38E-SWGCA(CP25)M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian	Canada Wildrye	Elymus canadensis	16	1		Grass	N	N	CP38E-SWGCA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian	Switchgrass	Panicum virgatum	16	1		Grass	N	N	CP38E-SWGCA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian	Indiangrass	Sorghastrum nutans	12	0.75		Grass	N	N	CP38E-SWGCA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian	Big Bluestem	Andropogon gerardii	8	0.5		Grass	N	N	CP38E-SWGCA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian	Prairie Cordgrass	Spartina pectinata	8	0.5		Grass	N	N	CP38E-SWGCA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian	Fowl Mannagrass	Glyceria striata	4	0.25		Grass	N	N	CP38E-SWGCA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian	Fox Sedge	Carex vulpinoidea	4	0.25		Sedge	N	N	CP38E-SWGCA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian	Cupplant	Silphium perfoliatum	2	0.125		Forb	N	N	CP38E-SWGCA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian	Showy Tick Trefoil	Desmodium canadense	2	0.125		Legume	N	N	CP38E-SWGCA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian	Blue Vervain	Verbena hastata	1	0.0625		Forb	N	N	CP38E-SWGCA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian	Golden Alexanders	Zizia aurea	1	0.0625		Forb	N	N	CP38E-SWGCA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian	Marsh Milkweed	Asclepias incarnata	1	0.0625		Forb	N	N	CP38E-SWGCA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian	Boneset	Eupatorium perfoliatum	0.5	0.03125		Forb	N	N	CP38E-SWGCA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian	Common Ironweed	Vernonia fasciculata	1	0.03125		Forb	N	N	CP38E-SWGCA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian	Joe-pye Weed	Eutrochium maculatum	1	0.03125		Forb	N	N	CP38E-SWGCA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian	Culver's Root	Veronicastrum virginicum	0	0.015625		Forb	N	N	CP38E-SWGCA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-Indian-Pco	38-CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-I	Switchgrass	Panicum virgatum	24	1.5		Grass	N	N	CP38E-SWGCA(CP25)WM	Switch-BB-Cwrye-Indian-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
38	CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-Indian-Pco	38-CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-I	Big Bluestem	Andropogon gerardii	20	1.25		Grass	N	N	CP38E-SWGCA(CP25)WM	Switch-BB-Cwrye-Indian-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
38	CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-Indian-Pco	38-CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-I	Canada Wildrye	Elymus canadensis	16	1		Grass	N	N	CP38E-SWGCA(CP25)WM	Switch-BB-Cwrye-Indian-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
38	CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-Indian-Pco	38-CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-I	Indiangrass	Sorghastrum nutans	12	0.75		Grass	N	N	CP38E-SWGCA(CP25)WM	Switch-BB-Cwrye-Indian-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
38	CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-Indian-Pco	38-CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-I	Prairie Cordgrass	Spartina pectinata	4	0.25		Grass	N	N	CP38E-SWGCA(CP25)WM	Switch-BB-Cwrye-Indian-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
38	CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-Indian-Pco	38-CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-I	Cupplant	Silphium perfoliatum	2	0.125		Forb	N	N	CP38E-SWGCA(CP25)WM	Switch-BB-Cwrye-Indian-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
38	CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-Indian-Pco	38-CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-I	White wild indigo	Baptisia alba	1.5	0.09375		Legume	N	N	CP38E-SWGCA(CP25)WM	Switch-BB-Cwrye-Indian-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
38	CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-Indian-Pco	38-CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-I	Black-eyed Susan	Rudbeckia hirta	0.5	0.03125		Forb	N	N	CP38E-SWGCA(CP25)WM	Switch-BB-Cwrye-Indian-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
38	CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-Indian-Pco	38-CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-I	Common Ironweed	Vernonia fasciculata	0.5	0.03125		Forb	N	N	CP38E-SWGCA(CP25)WM	Switch-BB-Cwrye-Indian-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
38	CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-Indian-Pco	38-CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-I	Golden Alexanders	Zizia aurea	0.5	0.03125		Forb	N	N	CP38E-SWGCA(CP25)WM	Switch-BB-Cwrye-Indian-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
38	CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-Indian-Pco	38-CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-I	New England Aster	Symphyotrichum novae-a	0.5	0.03125		Forb	N	N	CP38E-SWGCA(CP25)WM	Switch-BB-Cwrye-Indian-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
38	CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-Indian-Pco	38-CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-I	Prairie Blazing Star	Liatris pycnostachya	0.5	0.03125		Forb	N	N	CP38E-SWGCA(CP25)WM	Switch-BB-Cwrye-Indian-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
38	CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-Indian-Pco	38-CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-I	Yellow Coneflower	Ratibida pinnata	0.5	0.03125		Forb	N	N	CP38E-SWGCA(CP25)WM	Switch-BB-Cwrye-Indian-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
38	CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-Indian-Pco	38-CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-I	Bergamot	Monarda fistulosa	0.25	0.015625		Forb	N	N	CP38E-SWGCA(CP25)WM	Switch-BB-Cwrye-Indian-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
38	CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-Indian-Pco	38-CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-I	Great St. John's Wort	Hypericum ascyron	0	0.015625		Forb	N	N	CP38E-SWGCA(CP25)WM	Switch-BB-Cwrye-Indian-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pju	Little Bluestem	Schizachyrium scoparium	32	2		Grass	N	N	CP38E-WPHRA(CP25)D	LB-Sgrama-Indian-Pjune-Pdrop-Switch-PPclover-RHbushclover-S
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pju	Sideoats Grama	Bouteloua curtipendula	24	1.5		Grass	N	N	CP38E-WPHRA(CP25)D	LB-Sgrama-Indian-Pjune-Pdrop-Switch-PPclover-RHbushclover-S
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pju	Indiangrass	Sorghastrum nutans	4	0.25		Grass	N	N	CP38E-WPHRA(CP25)D	LB-Sgrama-Indian-Pjune-Pdrop-Switch-PPclover-RHbushclover-S
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pju	Prairie Junegrass	Koeleria macrantha	4	0.25		Grass	N	N	CP38E-WPHRA(CP25)D	LB-Sgrama-Indian-Pjune-Pdrop-Switch-PPclover-RHbushclover-S
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pju	Prairie Dropseed	Sporobolus heterolepis	4	0.25		Grass	N	N	CP38E-WPHRA(CP25)D	LB-Sgrama-Indian-Pjune-Pdrop-Switch-PPclover-RHbushclover-S
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pju	Switchgrass	Panicum virgatum	4	0.25		Grass	N	N	CP38E-WPHRA(CP25)D	LB-Sgrama-Indian-Pjune-Pdrop-Switch-PPclover-RHbushclover-S
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pju	Purple Prairie Clover	Dalea purpurea	2	0.125		Legume	N	N	CP38E-WPHRA(CP25)D	LB-Sgrama-Indian-Pjune-Pdrop-Switch-PPclover-RHbushclover-S
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pju	Round-Headed Bushclover	Lespedeza capitata	2	0.125		Legume	N	N	CP38E-WPHRA(CP25)D	LB-Sgrama-Indian-Pjune-Pdrop-Switch-PPclover-RHbushclover-S
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pju	Spiderwort	Tradescantia ohiensis	1	0.0625		Forb	N	N	CP38E-WPHRA(CP25)D	LB-Sgrama-Indian-Pjune-Pdrop-Switch-PPclover-RHbushclover-S
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pju	Bergamot	Monarda fistulosa	0.5	0.03125		Forb	N	N	CP38E-WPHRA(CP25)D	LB-Sgrama-Indian-Pjune-Pdrop-Switch-PPclover-RHbushclover-S
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pju	Leadplant	Amorpha canescens	0.5	0.03125		Legume	N	N	CP38E-WPHRA(CP25)D	LB-Sgrama-Indian-Pjune-Pdrop-Switch-PPclover-RHbushclover-S
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pju	Rough Blazing Star	Liatris aspera	0.5	0.03125		Forb	N	N	CP38E-WPHRA(CP25)D	LB-Sgrama-Indian-Pjune-Pdrop-Switch-PPclover-RHbushclover-S
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pju	Sky-Blue Aster	Symphyotrichum oolenta	0.5	0.03125		Forb	N	N	CP38E-WPHRA(CP25)D	LB-Sgrama-Indian-Pjune-Pdrop-Switch-PPclover-RHbushclover-S
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pju	Black-eyed Susan	Rudbeckia hirta	0.25	0.015625		Forb	N	N	CP38E-WPHRA(CP25)D	LB-Sgrama-Indian-Pjune-Pdrop-Switch-PPclover-RHbushclover-S
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pju	Prairie Cinquefoil	Potentilla arguta	0.25	0.015625		Forb	N	N	CP38E-WPHRA(CP25)D	LB-Sgrama-Indian-Pjune-Pdrop-Switch-PPclover-RHbushclover-S
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pju	Stiff Goldenrod	Oligoneuron rigidum	0	0.015625		Forb	N	N	CP38E-WPHRA(CP25)D	LB-Sgrama-Indian-Pjune-Pdrop-Switch-PPclover-RHbushclover-S
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pju	Yellow Coneflower	Ratibida pinnata	0	0.015625		Forb	N	N	CP38E-WPHRA(CP25)D	LB-Sgrama-Indian-Pjune-Pdrop-Switch-PPclover-RHbushclover-S

38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-B	Little Bluestem	Schizachyrium scoparium	32	2		Grass	N	N	CP38E-WPHRA(CP25)DM	LB-Sgrama-Pjune-BB-Indian-Sdrop-Bmilkweed-PPclover-Swort-H
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-B	Sideoats Grama	Bouteloua curtipendula	24	1.5		Grass	N	N	CP38E-WPHRA(CP25)DM	LB-Sgrama-Pjune-BB-Indian-Sdrop-Bmilkweed-PPclover-Swort-H
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-B	Prairie Junegrass	Koeleria macrantha	6	0.375		Grass	N	N	CP38E-WPHRA(CP25)DM	LB-Sgrama-Pjune-BB-Indian-Sdrop-Bmilkweed-PPclover-Swort-H
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-B	Big Bluestem	Andropogon gerardii	4	0.25		Grass	N	N	CP38E-WPHRA(CP25)DM	LB-Sgrama-Pjune-BB-Indian-Sdrop-Bmilkweed-PPclover-Swort-H
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-B	Indiangrass	Sorghastrum nutans	4	0.25		Grass	N	N	CP38E-WPHRA(CP25)DM	LB-Sgrama-Pjune-BB-Indian-Sdrop-Bmilkweed-PPclover-Swort-H
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-B	Sand Dropseed	Sporobolus cryptandrus	4	0.25		Grass	N	N	CP38E-WPHRA(CP25)DM	LB-Sgrama-Pjune-BB-Indian-Sdrop-Bmilkweed-PPclover-Swort-H
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-B	Butterfly Milkweed	Asclepias tuberosa	1	0.0625		Forb	N	N	CP38E-WPHRA(CP25)DM	LB-Sgrama-Pjune-BB-Indian-Sdrop-Bmilkweed-PPclover-Swort-H
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-B	Purple Prairie Clover	Dalea purpurea	1	0.0625		Legume	N	N	CP38E-WPHRA(CP25)DM	LB-Sgrama-Pjune-BB-Indian-Sdrop-Bmilkweed-PPclover-Swort-H
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-B	Spiderwort	Tradescantia ohiensis	1	0.0625		Forb	N	N	CP38E-WPHRA(CP25)DM	LB-Sgrama-Pjune-BB-Indian-Sdrop-Bmilkweed-PPclover-Swort-H
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-B	Hoary Vervain	Verbena stricta	0.5	0.03125		Forb	N	N	CP38E-WPHRA(CP25)DM	LB-Sgrama-Pjune-BB-Indian-Sdrop-Bmilkweed-PPclover-Swort-H
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-B	Leadplant	Amorpha canescens	0.5	0.03125		Legume	N	N	CP38E-WPHRA(CP25)DM	LB-Sgrama-Pjune-BB-Indian-Sdrop-Bmilkweed-PPclover-Swort-H
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-B	Prairie Tickseed	Coreopsis palmata	0.5	0.03125		Forb	N	N	CP38E-WPHRA(CP25)DM	LB-Sgrama-Pjune-BB-Indian-Sdrop-Bmilkweed-PPclover-Swort-H
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-B	Silky Aster	Symphyotrichum pratens	0.5	0.03125		Forb	N	N	CP38E-WPHRA(CP25)DM	LB-Sgrama-Pjune-BB-Indian-Sdrop-Bmilkweed-PPclover-Swort-H
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-B	Prairie Cinquefoil	Potentilla arguta	0.25	0.015625		Forb	N	N	CP38E-WPHRA(CP25)DM	LB-Sgrama-Pjune-BB-Indian-Sdrop-Bmilkweed-PPclover-Swort-H
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-B	Spotted Mint	Monarda punctata	0.25	0.015625		Forb	N	N	CP38E-WPHRA(CP25)DM	LB-Sgrama-Pjune-BB-Indian-Sdrop-Bmilkweed-PPclover-Swort-H
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-B	Stiff Goldenrod	Oligoneuron rigidum	0	0.015625		Forb	N	N	CP38E-WPHRA(CP25)DM	LB-Sgrama-Pjune-BB-Indian-Sdrop-Bmilkweed-PPclover-Swort-H
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-B	Yellow Coneflower	Ratibida pinnata	0	0.015625		Forb	N	N	CP38E-WPHRA(CP25)DM	LB-Sgrama-Pjune-BB-Indian-Sdrop-Bmilkweed-PPclover-Swort-H
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB	Little Bluestem	Schizachyrium scoparium	28	1.75		Grass	N	N	CP38E-WPHRA(CP25)M	LB-Cwrye-Sgrama-BB-Indian-Switch-Cmilkvetch-Oxeyesun-Pblzst
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB	Canada Wildrye	Elymus canadensis	12	0.75		Grass	N	N	CP38E-WPHRA(CP25)M	LB-Cwrye-Sgrama-BB-Indian-Switch-Cmilkvetch-Oxeyesun-Pblzst
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB	Sideoats Grama	Bouteloua curtipendula	12	0.75		Grass	N	N	CP38E-WPHRA(CP25)M	LB-Cwrye-Sgrama-BB-Indian-Switch-Cmilkvetch-Oxeyesun-Pblzst
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB	Big Bluestem	Andropogon gerardii	4	0.25		Grass	N	N	CP38E-WPHRA(CP25)M	LB-Cwrye-Sgrama-BB-Indian-Switch-Cmilkvetch-Oxeyesun-Pblzst
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB	Indiangrass	Sorghastrum nutans	4	0.25		Grass	N	N	CP38E-WPHRA(CP25)M	LB-Cwrye-Sgrama-BB-Indian-Switch-Cmilkvetch-Oxeyesun-Pblzst
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB	Switchgrass	Panicum virgatum	4	0.25		Grass	N	N	CP38E-WPHRA(CP25)M	LB-Cwrye-Sgrama-BB-Indian-Switch-Cmilkvetch-Oxeyesun-Pblzst
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB	Canada Milkvetch	Astragalus canadensis	2	0.125		Legume	N	N	CP38E-WPHRA(CP25)M	LB-Cwrye-Sgrama-BB-Indian-Switch-Cmilkvetch-Oxeyesun-Pblzst
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB	Ox-eye Sunflower	Heliopsis helianthoides	1	0.0625		Forb	N	N	CP38E-WPHRA(CP25)M	LB-Cwrye-Sgrama-BB-Indian-Switch-Cmilkvetch-Oxeyesun-Pblzst
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB	Prairie Blazing Star	Liatris pycnostachya	1	0.0625		Forb	N	N	CP38E-WPHRA(CP25)M	LB-Cwrye-Sgrama-BB-Indian-Switch-Cmilkvetch-Oxeyesun-Pblzst
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB	Purple Prairie Clover	Dalea purpurea	1	0.0625		Legume	N	N	CP38E-WPHRA(CP25)M	LB-Cwrye-Sgrama-BB-Indian-Switch-Cmilkvetch-Oxeyesun-Pblzst
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB	Bergamot	Monarda fistulosa	0.5	0.03125		Forb	N	N	CP38E-WPHRA(CP25)M	LB-Cwrye-Sgrama-BB-Indian-Switch-Cmilkvetch-Oxeyesun-Pblzst
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB	Black-eyed Susan	Rudbeckia hirta	0.5	0.03125		Forb	N	N	CP38E-WPHRA(CP25)M	LB-Cwrye-Sgrama-BB-Indian-Switch-Cmilkvetch-Oxeyesun-Pblzst
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB	New England Aster	Symphyotrichum novae-a	0.5	0.03125		Forb	N	N	CP38E-WPHRA(CP25)M	LB-Cwrye-Sgrama-BB-Indian-Switch-Cmilkvetch-Oxeyesun-Pblzst
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB	Sky-Blue Aster	Symphyotrichum oolenta	0.5	0.03125		Forb	N	N	CP38E-WPHRA(CP25)M	LB-Cwrye-Sgrama-BB-Indian-Switch-Cmilkvetch-Oxeyesun-Pblzst
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB	Smooth Blue Aster	Symphyotrichum laeve	0.5	0.03125		Forb	N	N	CP38E-WPHRA(CP25)M	LB-Cwrye-Sgrama-BB-Indian-Switch-Cmilkvetch-Oxeyesun-Pblzst
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB	Yellow Coneflower	Ratibida pinnata	1	0.03125		Forb	N	N	CP38E-WPHRA(CP25)M	LB-Cwrye-Sgrama-BB-Indian-Switch-Cmilkvetch-Oxeyesun-Pblzst
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB	Culver's Root	Veronicastrum virginicum	0	0.015625		Forb	N	N	CP38E-WPHRA(CP25)M	LB-Cwrye-Sgrama-BB-Indian-Switch-Cmilkvetch-Oxeyesun-Pblzst
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsed	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch	Canada Wildrye	Elymus canadensis	16	1		Grass	N	N	CP38E-WPHRA(CP25)W	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsed	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch	Indiangrass	Sorghastrum nutans	12	0.75		Grass	N	N	CP38E-WPHRA(CP25)W	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsed	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch	Switchgrass	Panicum virgatum	12	0.75		Grass	N	N	CP38E-WPHRA(CP25)W	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsed	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch	Big Bluestem	Andropogon gerardii	8	0.5		Grass	N	N	CP38E-WPHRA(CP25)W	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsed	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch	Fox Sedge	Carex vulpinoidea	8	0.5		Sedge	N	N	CP38E-WPHRA(CP25)W	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsed	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch	Prairie Cordgrass	Spartina pectinata	8	0.5		Grass	N	N	CP38E-WPHRA(CP25)W	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsed	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch	Fowl Mannagrass	Glyceria striata	4	0.25		Grass	N	N	CP38E-WPHRA(CP25)W	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsed	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch	Cupplant	Silphium perfoliatum	2	0.125		Forb	N	N	CP38E-WPHRA(CP25)W	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsed	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch	Showy Tick Trefoil	Desmodium canadense	2	0.125		Legume	N	N	CP38E-WPHRA(CP25)W	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsed	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch	Blue Vervain	Verbena hastata	1	0.0625		Forb	N	N	CP38E-WPHRA(CP25)W	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsed	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch	Golden Alexanders	Zizia aurea	1	0.0625		Forb	N	N	CP38E-WPHRA(CP25)W	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsed	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch	Marsh Milkweed	Asclepias incarnata	1	0.0625		Forb	N	N	CP38E-WPHRA(CP25)W	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsed	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch	Boneset	Eupatorium perfoliatum	0.5	0.03125		Forb	N	N	CP38E-WPHRA(CP25)W	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsed	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch	Common Ironweed	Vernonia fasciculata	1	0.03125		Forb	N	N	CP38E-WPHRA(CP25)W	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsed	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch	Joe-pye Weed	Eutrochium maculatum	1	0.03125		Forb	N	N	CP38E-WPHRA(CP25)W	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsed	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch	Culver's Root	Veronicastrum virginicum	0	0.015625		Forb	N	N	CP38E-WPHRA(CP25)W	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38E-Monarch(CP1)-Tim-Orc-RC-Cmilkweed-Besus-O	38-CP38E-Monarch(CP1)-Tim-Orc-RC-Cmilkweed	Common Milkweed	Asclepias syriaca	6	0.378	0.6	Forb	N	X	CP38E-Monarch(CP1)	Tim-Orc-RC-Cmilkweed-Besus-Oxeyesun-Sgrod
38	CP38E-Monarch(CP1)-Tim-Orc-RC-Cmilkweed-	38-CP38E-Monarch(CP1)-Tim-Orc-RC-Cm	Black-Eyed Susan	Rudbeckia hirta	0.96	0.06	2.2	Forb	N	X	CP38E-Monarch(CP1)	Tim-Orc-RC-Cmilkweed-Besus-Oxeyesun-Sgrod
38	CP38E-Monarch(CP1)-Tim-Orc-RC-Cmilkweed-	38-CP38E-Monarch(CP1)-Tim-Orc-RC-Cm	Ox-eye Sunflower	Heliopsis helianthoides	0.96	0.06	0.2	Forb	N	X	CP38E-Monarch(CP1)	Tim-Orc-RC-Cmilkweed-Besus-Oxeyesun-Sgrod
38	CP38E-Monarch(CP1)-Tim-Orc-RC-Cmilkweed-	38-CP38E-Monarch(CP1)-Tim-Orc-RC-Cm	Stiff Goldenrod	Oligoneuron rigidum	0.96	0.06	1.1	Forb	N	X	CP38E-Monarch(CP1)	Tim-Orc-RC-Cmilkweed-Besus-Oxeyesun-Sgrod
38	CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cv	38-CP38E-Monarch(CP2)-BB-LB-Indian-Sg	Big Bluestem	Andropogon gerardii	4	0.25	1	Grass	N	X	CP38E-Monarch(CP2)	BB-LB-Indian-Sgrama-Cwrye-Wpclover-Cmilkweed-Besus-Berg-Sg
38	CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cv	38-CP38E-Monarch(CP2)-BB-LB-Indian-Sg	Little Bluestem	Schizachyrium scoparium	24	1.5	8.3	Grass	N	X	CP38E-Monarch(CP2)	BB-LB-Indian-Sgrama-Cwrye-Wpclover-Cmilkweed-Besus-Berg-Sg
38	CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cv	38-CP38E-Monarch(CP2)-BB-LB-Indian-Sg	Indiangrass	Sorghastrum nutans	4	0.25	1.2	Grass	N	X	CP38E-Monarch(CP2)	BB-LB-Indian-Sgrama-Cwrye-Wpclover-Cmilkweed-Besus-Berg-Sg
38	CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cv	38-CP38E-Monarch(CP2)-BB-LB-Indian-Sg	Sideoats Grama	Bouteloua curtipendula	12	0.75	2.2	Grass	N	X	CP38E-Monarch(CP2)	BB-LB-Indian-Sgrama-Cwrye-Wpclover-Cmilkweed-Besus-Berg-Sg
38	CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cv	38-CP38E-Monarch(CP2)-BB-LB-Indian-Sg	Canada Wildrye	Elymus canadensis	16	1	2	Grass	N	X	CP38E-Monarch(CP2)	BB-LB-Indian-Sgrama-Cwrye-Wpclover-Cmilkweed-Besus-Berg-Sg
38	CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cv	38-CP38E-Monarch(CP2)-BB-LB-Indian-Sg	white prairie clover	Dalea candida	3.04	0.19	1.2	Legume	N	X	CP38E-Monarch(CP2)	BB-LB-Indian-Sgrama-Cwrye-Wpclover-Cmilkweed-Besus-Berg-Sg
38	CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cv	38-CP38E-Monarch(CP2)-BB-LB-Indian-Sg	Common Milkweed	Asclepias syriaca	4.96	0.31	0.5	Forb	N	X	CP38E-Monarch(CP2)	BB-LB-Indian-Sgrama-Cwrye-Wpclover-Cmilkweed-Besus-Berg-Sg
38	CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cv	38-CP38E-Monarch(CP2)-BB-LB-Indian-Sg	Black-eyed Susan	Rudbeckia hirta	0.96	0.06	2.2	Forb	N	X	CP38E-Monarch(CP2)	BB-LB-Indian-Sgrama-Cwrye-Wpclover-Cmilkweed-Besus-Berg-Sg
38	CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cv	38-CP38E-Monarch(CP2)-BB-LB-Indian-Sg	Bergamot	Monarda fistulosa	0.96	0.06	1.8	Forb	N	X	CP38E-Monarch(CP2)	BB-LB-Indian-Sgrama-Cwrye-Wpclover-Cmilkweed-Besus-Berg-Sg
38	CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cv	38-CP38E-Monarch(CP2)-BB-LB-Indian-Sg	Stiff Goldenrod	Oligoneuron rigidum	0.96	0.06	1.1	Forb	N	X	CP38E-Monarch(CP2)	BB-LB-Indian-Sgrama-Cwrye-Wpclover-Cmilkweed-Besus-Berg-Sg
38	CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cv	38-CP38E-Monarch(CP2)-BB-LB-Indian-Sg	Showy Goldenrod	Solidago speciosa	0.48	0.03	1.1	Forb	N	X	CP38E-Monarch(CP2)	BB-LB-Indian-Sgrama-Cwrye-Wpclover-Cmilkweed-Besus-Berg-Sg
38	CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cv	38-CP38E-Monarch(CP2)-BB-LB-Indian-Sg	New England Aster	Symphyotrichum novae-angliae	0.48	0.03	0.8	Forb	N	X	CP38E-Monarch(CP2)	BB-LB-Indian-Sgrama-Cwrye-Wpclover-Cmilkweed-Besus-Berg-Sg

38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	38-CP38E-Monarch(CP25)-BB-LB-Indian-S	Big Bluestem	Andropogon gerardii	4	0.25	1	Grass	N	X	CP38E-Monarch(CP25)	BB-LB-Indian-Sgrama-Cwrye-Wpclover-Cmilkweed-Besus-Berg-Sg
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	38-CP38E-Monarch(CP25)-BB-LB-Indian-S	Little Bluestem	Schizachyrium scoparium	16	1	5.6	Grass	N	X	CP38E-Monarch(CP25)	BB-LB-Indian-Sgrama-Cwrye-Wpclover-Cmilkweed-Besus-Berg-Sg
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	38-CP38E-Monarch(CP25)-BB-LB-Indian-S	Indiangrass	Sorghastrum nutans	4	0.25	1.2	Grass	N	X	CP38E-Monarch(CP25)	BB-LB-Indian-Sgrama-Cwrye-Wpclover-Cmilkweed-Besus-Berg-Sg
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	38-CP38E-Monarch(CP25)-BB-LB-Indian-S	Sideoats Grama	Bouteloua curtipendula	8	0.5	1.5	Grass	N	X	CP38E-Monarch(CP25)	BB-LB-Indian-Sgrama-Cwrye-Wpclover-Cmilkweed-Besus-Berg-Sg
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	38-CP38E-Monarch(CP25)-BB-LB-Indian-S	Canada Wildrye	Elymus canadensis	8	0.5	1	Grass	N	X	CP38E-Monarch(CP25)	BB-LB-Indian-Sgrama-Cwrye-Wpclover-Cmilkweed-Besus-Berg-Sg
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	38-CP38E-Monarch(CP25)-BB-LB-Indian-S	white prairie clover	Dalea candida	3.04	0.19	1.2	Legume	N	X	CP38E-Monarch(CP25)	BB-LB-Indian-Sgrama-Cwrye-Wpclover-Cmilkweed-Besus-Berg-Sg
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	38-CP38E-Monarch(CP25)-BB-LB-Indian-S	Common Milkweed	Asclepias syriaca	4.96	0.31	0.5	Forb	N	X	CP38E-Monarch(CP25)	BB-LB-Indian-Sgrama-Cwrye-Wpclover-Cmilkweed-Besus-Berg-Sg
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	38-CP38E-Monarch(CP25)-BB-LB-Indian-S	Black-eyed Susan	Rudbeckia hirta	0.96	0.06	2.2	Forb	N	X	CP38E-Monarch(CP25)	BB-LB-Indian-Sgrama-Cwrye-Wpclover-Cmilkweed-Besus-Berg-Sg
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	38-CP38E-Monarch(CP25)-BB-LB-Indian-S	Bergamot	Monarda fistulosa	0.96	0.06	1.8	Forb	N	X	CP38E-Monarch(CP25)	BB-LB-Indian-Sgrama-Cwrye-Wpclover-Cmilkweed-Besus-Berg-Sg
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	38-CP38E-Monarch(CP25)-BB-LB-Indian-S	Stiff Goldenrod	Oligoneuron rigidum	0.96	0.06	1.1	Forb	N	X	CP38E-Monarch(CP25)	BB-LB-Indian-Sgrama-Cwrye-Wpclover-Cmilkweed-Besus-Berg-Sg
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	38-CP38E-Monarch(CP25)-BB-LB-Indian-S	Showy Goldenrod	Solidago speciosa	0.48	0.03	1.1	Forb	N	X	CP38E-Monarch(CP25)	BB-LB-Indian-Sgrama-Cwrye-Wpclover-Cmilkweed-Besus-Berg-Sg
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	38-CP38E-Monarch(CP25)-BB-LB-Indian-S	New England Aster	Symphyotrichum novae-angliae	0.48	0.03	0.8	Forb	N	X	CP38E-Monarch(CP25)	BB-LB-Indian-Sgrama-Cwrye-Wpclover-Cmilkweed-Besus-Berg-Sg
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	38-CP38E-Monarch(CP25)-BB-LB-Indian-S	Rough Blazing Star	Liatris aspera	0.48	0.03	0.2	Forb	N	X	CP38E-Monarch(CP25)	BB-LB-Indian-Sgrama-Cwrye-Wpclover-Cmilkweed-Besus-Berg-Sg
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	38-CP38E-Monarch(CP25)-BB-LB-Indian-S	Rattlesnake Master	Eryngium yuccifolium	0.96	0.06	0.2	Forb	N	X	CP38E-Monarch(CP25)	BB-LB-Indian-Sgrama-Cwrye-Wpclover-Cmilkweed-Besus-Berg-Sg
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	38-CP38E-Monarch(CP25)-BB-LB-Indian-S	Cupplant	Silphium perfoliatum	2.08	0.13	0.1	Forb	N	X	CP38E-Monarch(CP25)	BB-LB-Indian-Sgrama-Cwrye-Wpclover-Cmilkweed-Besus-Berg-Sg
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	38-CP38E-Monarch(CP25)-BB-LB-Indian-S	Sky-Blue Aster	Symphyotrichum oolentangiense	0.96	0.06	1.9	Forb	N	X	CP38E-Monarch(CP25)	BB-LB-Indian-Sgrama-Cwrye-Wpclover-Cmilkweed-Besus-Berg-Sg
38	CP3-1-BB-LB-Indian-Sgrama-Sgrod-Ycone-PPcl	38-CP3-1-BB-LB-Indian-Sgrama-Sgrod-Yc	Big Bluestem	Andropogon gerardii	8	0.5	1.9	Grass	N	X	CP3-1	BB-LB-Indian-Sgrama-Sgrod-Ycone-PPclover
38	CP3-1-BB-LB-Indian-Sgrama-Sgrod-Ycone-PPcl	38-CP3-1-BB-LB-Indian-Sgrama-Sgrod-Yc	Little Bluestem	Schizachyrium scoparium	24	1.5	8.3	Grass	N	X	CP3-1	BB-LB-Indian-Sgrama-Sgrod-Ycone-PPclover
38	CP3-1-BB-LB-Indian-Sgrama-Sgrod-Ycone-PPcl	38-CP3-1-BB-LB-Indian-Sgrama-Sgrod-Yc	Indiangrass	Sorghastrum nutans	8	0.5	2.3	Grass	N	X	CP3-1	BB-LB-Indian-Sgrama-Sgrod-Ycone-PPclover
38	CP3-1-BB-LB-Indian-Sgrama-Sgrod-Ycone-PPcl	38-CP3-1-BB-LB-Indian-Sgrama-Sgrod-Yc	Sideoats Grama	Bouteloua curtipendula	24	1.5	4.4	Grass	N	X	CP3-1	BB-LB-Indian-Sgrama-Sgrod-Ycone-PPclover
38	CP3-1-BB-LB-Indian-Sgrama-Sgrod-Ycone-PPcl	38-CP3-1-BB-LB-Indian-Sgrama-Sgrod-Yc	Stiff Goldenrod	Oligoneuron rigidum	1	0.0625	1.1	Forb	N	X	CP3-1	BB-LB-Indian-Sgrama-Sgrod-Ycone-PPclover
38	CP3-1-BB-LB-Indian-Sgrama-Sgrod-Ycone-PPcl	38-CP3-1-BB-LB-Indian-Sgrama-Sgrod-Yc	Yellow Coneflower	Ratibida pinnata	1	0.0625	0.7	Forb	N	X	CP3-1	BB-LB-Indian-Sgrama-Sgrod-Ycone-PPclover
38	CP3-1-BB-LB-Indian-Sgrama-Sgrod-Ycone-PPcl	38-CP3-1-BB-LB-Indian-Sgrama-Sgrod-Yc	Purple Prairie Clover	Dalea purpurea	2	0.125	1	Legume	N	X	CP3-1	BB-LB-Indian-Sgrama-Sgrod-Ycone-PPclover
38	CP3-2-BB-Switch-LB-Indian-Cwrye-Ycone-Besu	38-CP3-2-BB-Switch-LB-Indian-Cwrye-Yc	Big Bluestem	Andropogon gerardii	8	0.5	1.9	Grass	N	X	CP3-2	BB-Switch-LB-Indian-Cwrye-Ycone-Besus-Berg
38	CP3-2-BB-Switch-LB-Indian-Cwrye-Ycone-Besu	38-CP3-2-BB-Switch-LB-Indian-Cwrye-Yc	Switchgrass	Panicum virgatum	8	0.5	4.5	Grass	N	X	CP3-2	BB-Switch-LB-Indian-Cwrye-Ycone-Besus-Berg
38	CP3-2-BB-Switch-LB-Indian-Cwrye-Ycone-Besu	38-CP3-2-BB-Switch-LB-Indian-Cwrye-Yc	Little Bluestem	Schizachyrium scoparium	20	1.25	6.9	Grass	N	X	CP3-2	BB-Switch-LB-Indian-Cwrye-Ycone-Besus-Berg
38	CP3-2-BB-Switch-LB-Indian-Cwrye-Ycone-Besu	38-CP3-2-BB-Switch-LB-Indian-Cwrye-Yc	Indiangrass	Sorghastrum nutans	16	1	4.5	Grass	N	X	CP3-2	BB-Switch-LB-Indian-Cwrye-Ycone-Besus-Berg
38	CP3-2-BB-Switch-LB-Indian-Cwrye-Ycone-Besu	38-CP3-2-BB-Switch-LB-Indian-Cwrye-Yc	Canada Wildrye	Elymus canadensis	16	1	2	Grass	N	X	CP3-2	BB-Switch-LB-Indian-Cwrye-Ycone-Besus-Berg
38	CP3-2-BB-Switch-LB-Indian-Cwrye-Ycone-Besu	38-CP3-2-BB-Switch-LB-Indian-Cwrye-Yc	Yellow Coneflower	Ratibida pinnata	1	0.0625	0.7	Forb	N	X	CP3-2	BB-Switch-LB-Indian-Cwrye-Ycone-Besus-Berg
38	CP3-2-BB-Switch-LB-Indian-Cwrye-Ycone-Besu	38-CP3-2-BB-Switch-LB-Indian-Cwrye-Yc	Black-Eyed Susan	Rudbeckia hirta	1	0.0625	2.3	Forb	N	X	CP3-2	BB-Switch-LB-Indian-Cwrye-Ycone-Besus-Berg
38	CP3-2-BB-Switch-LB-Indian-Cwrye-Ycone-Besu	38-CP3-2-BB-Switch-LB-Indian-Cwrye-Yc	Bergamot	Monarda fistulosa	1	0.0625	1.8	Forb	N	X	CP3-2	BB-Switch-LB-Indian-Cwrye-Ycone-Besus-Berg
38	CP3-3-BB-LB-Indian-Switch-Sgrama-PPclover-B	38-CP3-3-BB-LB-Indian-Switch-Sgrama-PP	Big Bluestem	Andropogon gerardii	8	0.5	1.9	Grass	N	X	CP3-3	BB-LB-Indian-Switch-Sgrama-PPclover-Berg-Ycone
38	CP3-3-BB-LB-Indian-Switch-Sgrama-PPclover-B	38-CP3-3-BB-LB-Indian-Switch-Sgrama-PP	Little Bluestem	Schizachyrium scoparium	24	1.5	8.3	Grass	N	X	CP3-3	BB-LB-Indian-Switch-Sgrama-PPclover-Berg-Ycone
38	CP3-3-BB-LB-Indian-Switch-Sgrama-PPclover-B	38-CP3-3-BB-LB-Indian-Switch-Sgrama-PP	Indiangrass	Sorghastrum nutans	8	0.5	2.3	Grass	N	X	CP3-3	BB-LB-Indian-Switch-Sgrama-PPclover-Berg-Ycone
38	CP3-3-BB-LB-Indian-Switch-Sgrama-PPclover-B	38-CP3-3-BB-LB-Indian-Switch-Sgrama-PP	Switchgrass	Panicum virgatum	8	0.5	4.5	Grass	N	X	CP3-3	BB-LB-Indian-Switch-Sgrama-PPclover-Berg-Ycone
38	CP3-3-BB-LB-Indian-Switch-Sgrama-PPclover-B	38-CP3-3-BB-LB-Indian-Switch-Sgrama-PP	Sideoats Grama	Bouteloua curtipendula	16	1	3	Grass	N	X	CP3-3	BB-LB-Indian-Switch-Sgrama-PPclover-Berg-Ycone
38	CP3-3-BB-LB-Indian-Switch-Sgrama-PPclover-B	38-CP3-3-BB-LB-Indian-Switch-Sgrama-PP	Purple Prairie Clover	Dalea purpurea	2	0.125	1	Legume	N	X	CP3-3	BB-LB-Indian-Switch-Sgrama-PPclover-Berg-Ycone
38	CP3-3-BB-LB-Indian-Switch-Sgrama-PPclover-B	38-CP3-3-BB-LB-Indian-Switch-Sgrama-PP	Bergamot	Monarda fistulosa	1	0.0625	1.8	Forb	N	X	CP3-3	BB-LB-Indian-Switch-Sgrama-PPclover-Berg-Ycone
38	CP3-3-BB-LB-Indian-Switch-Sgrama-PPclover-B	38-CP3-3-BB-LB-Indian-Switch-Sgrama-PP	Yellow Coneflower	Ratibida pinnata	1	0.0625	0.7	Forb	N	X	CP3-3	BB-LB-Indian-Switch-Sgrama-PPclover-Berg-Ycone
38	CP3-4-Switch-Pcord-BB-Indian-Cwrye-Ciron-Cu	38-CP3-4-Switch-Pcord-BB-Indian-Cwrye-C	Switchgrass	Panicum virgatum	16	1	9	Grass	N	X	CP3-4	Switch-Pcord-BB-Indian-Cwrye-Ciron-Cup-Bvervain
38	CP3-4-Switch-Pcord-BB-Indian-Cwrye-Ciron-Cu	38-CP3-4-Switch-Pcord-BB-Indian-Cwrye-C	Prairie Cordgrass	Spartina pectinata	8	0.5	1.3	Grass	N		CP3-4	Switch-Pcord-BB-Indian-Cwrye-Ciron-Cup-Bvervain
38	CP3-4-Switch-Pcord-BB-Indian-Cwrye-Ciron-Cu	38-CP3-4-Switch-Pcord-BB-Indian-Cwrye-C	Big Bluestem	Andropogon gerardii	16	1	3.8	Grass	N	X	CP3-4	Switch-Pcord-BB-Indian-Cwrye-Ciron-Cup-Bvervain
38	CP3-4-Switch-Pcord-BB-Indian-Cwrye-Ciron-Cu	38-CP3-4-Switch-Pcord-BB-Indian-Cwrye-C	Indiangrass	Sorghastrum nutans	16	1	4.5	Grass	N	X	CP3-4	Switch-Pcord-BB-Indian-Cwrye-Ciron-Cup-Bvervain
38	CP3-4-Switch-Pcord-BB-Indian-Cwrye-Ciron-Cu	38-CP3-4-Switch-Pcord-BB-Indian-Cwrye-C	Canada Wildrye	Elymus canadensis	16	1	2	Grass	N	X	CP3-4	Switch-Pcord-BB-Indian-Cwrye-Ciron-Cup-Bvervain
38	CP3-4-Switch-Pcord-BB-Indian-Cwrye-Ciron-Cu	38-CP3-4-Switch-Pcord-BB-Indian-Cwrye-C	Common Ironweed	Vernonia fasciculata	1	0.0625	0.5	Forb	N	X	CP3-4	Switch-Pcord-BB-Indian-Cwrye-Ciron-Cup-Bvervain
38	CP3-4-Switch-Pcord-BB-Indian-Cwrye-Ciron-Cu	38-CP3-4-Switch-Pcord-BB-Indian-Cwrye-C	Cupplant	Silphium perfoliatum	2	0.125	0.1	Forb	N	X	CP3-4	Switch-Pcord-BB-Indian-Cwrye-Ciron-Cup-Bvervain
38	CP3-4-Switch-Pcord-BB-Indian-Cwrye-Ciron-Cu	38-CP3-4-Switch-Pcord-BB-Indian-Cwrye-C	Blue Vervain	Verbena hastata	1	0.0625	2.2	Forb	N	X	CP3-4	Switch-Pcord-BB-Indian-Cwrye-Ciron-Cup-Bvervain
38	CP3-5-Switch-Pcord-BB-Cwrye-Berg-Ycone-NEA	38-CP3-5-Switch-Pcord-BB-Cwrye-Berg-Yc	Switchgrass	Panicum virgatum	32	2	17.9	Grass	N	X	CP3-5	Switch-Pcord-BB-Cwrye-Berg-Ycone-NEaster
38	CP3-5-Switch-Pcord-BB-Cwrye-Berg-Ycone-NEA	38-CP3-5-Switch-Pcord-BB-Cwrye-Berg-Yc	Prairie Cordgrass	Spartina pectinata	4	0.25	0.7	Grass	N		CP3-5	Switch-Pcord-BB-Cwrye-Berg-Ycone-NEaster
38	CP3-5-Switch-Pcord-BB-Cwrye-Berg-Ycone-NEA	38-CP3-5-Switch-Pcord-BB-Cwrye-Berg-Yc	Big Bluestem	Andropogon gerardii	16	1	3.8	Grass	N	X	CP3-5	Switch-Pcord-BB-Cwrye-Berg-Ycone-NEaster
38	CP3-5-Switch-Pcord-BB-Cwrye-Berg-Ycone-NEA	38-CP3-5-Switch-Pcord-BB-Cwrye-Berg-Yc	Canada Wildrye	Elymus canadensis	16	1	2	Grass	N	X	CP3-5	Switch-Pcord-BB-Cwrye-Berg-Ycone-NEaster
38	CP3-5-Switch-Pcord-BB-Cwrye-Berg-Ycone-NEA	38-CP3-5-Switch-Pcord-BB-Cwrye-Berg-Yc	Monarda fistulosa	Monarda fistulosa	1	0.0625	1.8	Forb	N	X	CP3-5	Switch-Pcord-BB-Cwrye-Berg-Ycone-NEaster
38	CP3-5-Switch-Pcord-BB-Cwrye-Berg-Ycone-NEA	38-CP3-5-Switch-Pcord-BB-Cwrye-Berg-Yc	Yellow Coneflower	Ratibida pinnata	1	0.0625	0.7	Forb	N	X	CP3-5	Switch-Pcord-BB-Cwrye-Berg-Ycone-NEaster
38	CP3-5-Switch-Pcord-BB-Cwrye-Berg-Ycone-NEA	38-CP3-5-Switch-Pcord-BB-Cwrye-Berg-Yc	New England Aster	Symphyotrichum novae-angliae	1	0.0625	1.7	Forb	N	X	CP3-5	Switch-Pcord-BB-Cwrye-Berg-Ycone-NEaster

STD	Mix #	std-mix	Common Name	Scientific Name	PLS (oz./A)	PLS (lbs./A)	Seeds/Square Foot	Type	Intro / Native	Poll. (Y/N)	MIXDescrip	Mix No.	MR
	0												

STD	Mix #	std-mix	Common Name	Scientific Name	PLS (oz./A)	PLS (lbs./A)	Seeds/Square Foot	Type	Intro / Native	Poll. (Y/N)	Mix No.	MR	Mix Components
38	CP3-1-BB-LB-Indian-Sgrama-Sgrod-Ycone-PPcl	38-CP3-1-BB-LB-Indian-Sgrama-Sgrod-Yc	Big Bluestem	Andropogon gerardii	8	0.5	1.9	Grass	N	X	CP3-1		BB-LB-Indian-Sgrama-Sgrod-Ycone-PPclover
38	CP3-1-BB-LB-Indian-Sgrama-Sgrod-Ycone-PPcl	38-CP3-1-BB-LB-Indian-Sgrama-Sgrod-Yc	Indiangrass	Sorghastrum nutans	8	0.5	2.3	Grass	N	X	CP3-1		BB-LB-Indian-Sgrama-Sgrod-Ycone-PPclover
38	CP3-1-BB-LB-Indian-Sgrama-Sgrod-Ycone-PPcl	38-CP3-1-BB-LB-Indian-Sgrama-Sgrod-Yc	Little Bluestem	Schizachyrium scoparium	24	1.5	8.3	Grass	N	X	CP3-1		BB-LB-Indian-Sgrama-Sgrod-Ycone-PPclover
38	CP3-1-BB-LB-Indian-Sgrama-Sgrod-Ycone-PPcl	38-CP3-1-BB-LB-Indian-Sgrama-Sgrod-Yc	Purple Prairie Clover	Dalea purpurea	2	0.125	1	Legume	N	X	CP3-1		BB-LB-Indian-Sgrama-Sgrod-Ycone-PPclover
38	CP3-1-BB-LB-Indian-Sgrama-Sgrod-Ycone-PPcl	38-CP3-1-BB-LB-Indian-Sgrama-Sgrod-Yc	Sideoats Grama	Bouteloua curtipendula	24	1.5	4.4	Grass	N	X	CP3-1		BB-LB-Indian-Sgrama-Sgrod-Ycone-PPclover
38	CP3-1-BB-LB-Indian-Sgrama-Sgrod-Ycone-PPcl	38-CP3-1-BB-LB-Indian-Sgrama-Sgrod-Yc	Stiff Goldenrod	Oligoneuron rigidum	1	0.0625	1.1	Forb	N	X	CP3-1		BB-LB-Indian-Sgrama-Sgrod-Ycone-PPclover
38	CP3-1-BB-LB-Indian-Sgrama-Sgrod-Ycone-PPcl	38-CP3-1-BB-LB-Indian-Sgrama-Sgrod-Yc	Yellow Coneflower	Ratibida pinnata	1	0.0625	0.7	Forb	N	X	CP3-1		BB-LB-Indian-Sgrama-Sgrod-Ycone-PPclover

Chan, Ginger

From: Bartsch, Zachary
Sent: Thursday, December 21, 2023 1:32 PM
To: Schaar, Matthew - NRCS, Farmington, MN
Subject: RE: [External Email]Seed mixes and erosion controls
Attachments: MNAgronomyTechNote_No_31_version1_7.pdf; 484_MN_OTH_Mulching_Tables_2021.pdf

Hi Matthew,

It has been a while since the last time we spoke, I hope you are well. I am reaching out for a project that is taking place in Washington County, MN, and similar to the project I contacted you about in 2022 that will be disturbing cropland, ditches, and perennial grasses. I didn't see anyone listed for the NRCS in Chisago or Washington County, but saw you on the Farmington field office (Dakota Co). In 2022, you provided me with the MN Agronomy Technical Note No. 31 and the 484 Mulching table (attached) to use for reseeding and preventing erosion following soil disturbances. Are these documents still acceptable for us and my client to reference now?

Let me know if you have any questions.

Zach Bartsch
Soil Scientist

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From: Schaar, Matthew - NRCS, Farmington, MN <matthew.schaar@usda.gov>
Sent: Friday, January 7, 2022 1:57 PM
To: Bartsch, Zachary <zachary.bartsch@stantec.com>
Subject: RE: [External Email]Seed mixes and erosion controls

Zach,

The attachment named "mulching tables" lists the quantities recommended for different materials used for mulch. The first one on the table "Grass Hay or Cereal Grain Straw" is very commonly used where concentrated flow is not much of an issue. Crimping the mulch after it is spread out is highly recommended.

The other attachment has some recommended seeding mixes and rates. Take a look at page 22 (STANDARD 342 – CRITICAL AREA PLANTING SPECIFICATIONS). If there are no concentrated flow issues or areas of really steep slopes the mixes suitable to construction sites may be appropriate, otherwise take a look at the mixes recommended for critical areas or waterways. Also, if there are native plant communities nearby you may want to be a bit cautious about using smooth brome grass.

Hope this helps,

Matthew Schaar
Soil Conservation Technician
USDA / NRCS
Farmington, MN
651-463-8665 ext. 6419

From: Bartsch, Zachary <zachary.bartsch@stantec.com>
Sent: Friday, January 7, 2022 8:55 AM
To: Schaar, Matthew - NRCS, Farmington, MN <matthew.schaar@usda.gov>
Subject: [External Email]Seed mixes and erosion controls

[External Email]
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Use caution before clicking links or opening attachments.
Please send any concerns or suspicious messages to: Spam.Abuse@usda.gov

Good morning Matt,

Here is my contact info. Thanks.

Zach Bartsch
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Minnesota Agronomy Technical Note # 31 (Ver. 1.8)
Herbaceous Vegetation Establishment Guide

INTRODUCTION

This technical note may be used to guide establishment of native and introduced plantings of herbaceous vegetation for the purposes of meeting criteria in the Minnesota Natural Resources Conservation Service Field Office Technical Guide (FOTG) Practice Standards; ***327-Conservation Cover, 332-Contour Buffer Strips, 342-Critical Area Planting, 390- Riparian Herbaceous Cover, 393-Filter Strip, 420-Wildlife Habitat Planting, 512-Forage and Biomass Planting, 589C- Cross Wind Trap Strips, 643-Restoration of Rare or Declining Natural Communities, 645-Upland Wildlife Habitat Management, and 657-Wetland Restoration***. Other ecological science and certain engineering standards may refer to this technical note Refer to those standards for specific practice criteria.

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Recommended Plant Species

Varieties of introduced grasses and legumes shall be selected from one of the following sources:

- University of Minnesota Varietal Trials
- Plant Material Center varietal selections
- Varieties listed as recommended by Extension publications, Minnesota Crop Improvement Association or Varietal Trials of states adjacent to Minnesota
- Named varieties known to be locally adapted. Seek Area Office approval for varieties not identified as recommended by University of Minnesota or adjacent State Varietal Trials.

Select varieties that are adapted to specific site conditions, planned harvest schedule and harvest method, if applicable. To ensure longer life, alfalfa varieties shall have a Winter Survival Index of less than three, listed in the Very Good Winter Survival category. Varieties with no Winter Survival Index shall have a third-year yield of at least 105% of check varieties.

Seed Quality

All seed shall be of high quality and be labeled in accordance with Minnesota Seed Law, section 21.82 including limits on noxious weeds. For information about this law, see Minnesota Agronomy Tech Note MN-21 Agronomy Technical Notes | NRCS Minnesota. If *Amaranth* species are found in the test results, it must be identified on the seed test report. The Minnesota Department of Agriculture (MDA) requires that a genetic test must be done to determine if the *Amaranth* species are Palmer amaranth.

*--Non-commercial (bin-run) seed can be used as temporary cover or companion crop if the seed has been tested for germination and scale tickets provided. NRCS payments associated with conservation programs will not be allowed until seeding is established and field verified.

Wild or native harvest mixtures meeting the species diversity and quantity (minimum 35-40 PLS seeds/ft^2 total) requirements will be considered adequate. Seed tests are required to determine pure live seed requirements and presence of noxious weeds. Seed must be cleaned to an extent sufficient to allow passage through appropriate seeding equipment

Landowners who have purchased seed for use in NRCS financial assistance programs, must follow Minnesota state seed laws.

- The germination test date located on the seed label may not be more than 15 months old excluding the month of test for native grass and forb seeds when used as agricultural seed. A sell by date may be listed in addition to or in lieu of the test date and denote the end of the 15-month test date period.
- The germination test date, or sell by date, located on the seed label may not be more than 12 months old for introduced species.
- Landowners will have 12 months after the germination test date expires to plant the native and/or introduced seed and seed mixtures. If seeding will exceed these time limits, the seed shall be re-tested for germination to ensure seed quality. Variances may be granted by the State Resource Conservationist on a case-by-case basis.

Seed should be stored in a cool, dry place to maintain the purity, quality, and viability of the seed.

Inoculate legume seed before seeding with the inoculants specific for the species. Pre-inoculated seed may be used but shall be re-inoculated if used beyond dates specified on the seed tag. This does not apply to native legumes.

Native Seed Origin

Native seed origin must be labeled in accordance with federal and state seed laws including Minnesota Seed Law sections 21.80 through 21.92. Use source-identified local ecotypes, when available. This applicability is dependent upon program and practice requirements. Be aware that deviation from local origin could result in failure of establishment or long-lasting vegetative stand. Producers will document why origin was outside the recommended region and are aware that stand failure will be their responsibility.

The following is recommended when obtaining seeds/plants:

1. It is desirable for seed sources of native grass, forbs, and legumes to originate from as close to the planting site as possible. The preferred sequence: within the ecological sub-section, ecological section and then within a 200-mile radius of the project site, unless otherwise identified as an acceptable cultivar. Exception: Tallgrass Prairie Restoration shall be within a 175-mile radius of the project. Variances may be granted by the State Resource Conservationist on a case-by-case basis.
2. Seed origins native to Minnesota are preferred. When local Minnesota sources are not available, native seed shall originate from Wisconsin, North Dakota, South Dakota, Iowa, Illinois, and the Canadian provinces of Manitoba, or Ontario.
3. For native seed, the origin is the area where the original foundation seed was collected.
4. If the origin of the seed (generation 0) can be certified as one of the accepted states or provinces, then there would be no restriction on where the seed is grown. Certification must be provided by the grower, and responsibility for obtaining certification rests with the producer.
5. Where there are known remnant native prairies or certified native grass, or forb seed production fields present, maintain an isolation distance of 165 feet for grasses and 1320 feet for forbs when planting the same species that have different genetic origins.
6. The use of cultivars should be avoided within ¼ mile of existing remnant native prairie or other sensitive areas. "Yellow Tag" or source identified materials would be preferred.

Potentially Invasive Species

Ask for prior approval from the Area Resource Conservationist or Grazing Specialist before recommending reed canary grass, birdsfoot trefoil, crown vetch, sweet clover, or crested wheatgrass. These may be considered invasive if adjacent to restored native warm season grass stands or prairie remnants.

Seedbed Preparation and Seeding Methods

Prepare a firm seedbed for all planting methods.

Conventional Tillage - Prepare a fine, firm seedbed to a minimum of 3 inches. The seedbed should contain enough fine soil particles for uniform shallow coverage of the seed as well as contact with moisture and nutrients. If possible, use specialized native grass drills with depth bands designed to handle a wide variety of seed. For conventional drills, a minimum, cultipack before seeding.

Do not use heavy drills on conventionally prepared seedbeds as heavy drills tend to sink in the soil and depth control is difficult. Plant seed between ¼" and ½" inch deep depending on species recommendations. **The seedbed is firm enough when an adult footprint penetrates ¼" to ½" deep.** Some seed may be seen on the surface of the ground after seeding. Tillage should only be used on flatter slopes or in conjunction with erosion control measures.

No-Till - No-till drilling reduces the exposure of the newly seeded site to erosion. A drill should be selected that can handle a wide variety of seed (fluffy, smooth, large, and small) and low seeding rates. Plant seed between ¼" and ½" inch deep depending on species recommendations. Seed when the soil is slightly moist but not wet, especially when seeding inoculated legumes. Adjust the coulters and packing wheels of the drill to cover the seed based on the soil texture, moisture, and surface residue conditions.

- No-till Into Existing Vegetation:

  Use of herbicides is essential to kill existing vegetation. (Organic producers will not have this option available to them.) Complete control often requires more than one application. Land that has been in grass for many years usually has a thick residue layer on the soil surface. To allow for the best no-till seedbed this residue must be removed. Three options are: (1) grazing; (2) mowing with residue removed; and (3) prescribed burn. In the fall a burndown herbicide can be applied to prepare for a spring no-till seeding. An additional spring herbicide application may be required, depending on weed growth.

  No-till seeding should be used on existing pastures that lack diversity, either in grasses or legumes, on existing pastures that contain species unsuited to the kind and/or class of livestock, to improve the nutritional value of an existing pasture, improve forage production, and on pastures or grasslands that contain little debris, rocks, or boulders. Do not recommend inter-seeding alfalfa into existing alfalfa stands due to autotoxicity.

- No-Till into Crop Residue:

  When native materials are planted into undisturbed ground, the crop residue should be uniformly distributed over the soil surface prior to planting to minimize the smothering of new seedlings and to provide conditions for the operation of planting equipment. Native material planted into undisturbed corn residue has proven successful at times, however soybean residue is preferred. Soybeans produce a moderate amount of crop residue that can be effectively managed and tend to leave the soil in a mellow condition that is well suited to no-till planting of prairie plants.

- Inter-seeding with Tillage into Existing Coo Season Grass Stands:

  If a no-till drill is not available, it is still possible to inter-seed an existing grass stand by using tillage and a conventional grain drill. Disturb the existing sod with a light disc harrow or a harrow/field cultivator combination.

  If there is an old dense stand of Kentucky bluegrass and quackgrass, fall tillage will help to reduce competition before spring planting. Use enough tillage passes to expose at least 50% bare soil. If the surface is rough after the initial tillage use a drag harrow to level prior to seeding with the drill. Seed into moist but not wet soil. Immediately after drilling, the soil should be run over with a cultipacker.

Broadcast: - Prepare a fine firm seedbed to a minimum of 3 inches. Use a roller, cultipacker or similar implement prior to seeding. The seedbed should contain enough fine soil particles for uniform shallow coverage of the seed as well as contact with moisture and nutrients. **The seedbed is firm enough when a footprint penetrates ¼ to ½ deep.** Broadcast seed at a rate of 1.5 times the normal seeding rate and roll or cultipack again after seeding. Do not harrow in the seed.

Frost seeding (late February or March):

Graze or clip to a 2" of less stubble height the season before seeding or use a suppression rate of herbicide according to label directions. Broadcast the legume seed on top of the ground in late winter or early spring when freezing and thawing help to incorporate the seed into the soil. Do not seed on snow cover, especially on steeper soils because snow melt may carry the seed away in runoff events. Frost seeding also works well on small, disturbed areas within a pasture. Use this method where it is impractical or impossible to use conventional seeding equipment such as steep slopes, rough terrain, and rock outcrops. Red clover and white clover are vigorous and competitive with existing sods and are the ideal species for adding legumes to grass pastures. Use flash grazing after seeding to suppress the grasses and allow legumes to establish.

Seeding Equipment

Seeding equipment that ensures proper seed placement and good seed-soil contact will be used. Modern grass seeding attachments that allow for proper seed flow, seed placement and soil packing are needed to ensure a successful seeding.

Slower seeding speeds should be used for fluffy or rough-coated seed species. Three to five miles per hour should be the seeding speed for most types of grass drills. Seeding speeds in excess of 6 miles per hour may result in uneven or inconsistent grass and legume stands.

If a carrier is needed to help feed seed through the drill; cracked corn, dead barley, granular clay, vermiculite or rolled oats are examples of material that may be added to the mixture.

A. Grass Drill

Grass drills are specifically designed and equipped to properly meter and place various grass, legume and/or forb seed and share the following design characteristics:

1. Different seed boxes are normally required to handle the three types of grass seed commonly used. This includes the relatively clean, smooth seed characteristic of many cool-season grasses, the chaffy or trashy seed characteristic of many warm season grasses, and fine, smooth seed, characteristic of legumes or grasses such as Switchgrass.

   Seed boxes having the capability of seeding chaffy or awned grasses (i.e., blue grama, bluestems, and Indiangrass) are needed, only if such species are planned in the seeding mixture; likewise, fine-seed or legume seed boxes are needed, only if such species are to be seeded.

2. Agitators or similar mechanisms that prevent bridging of chaffy or trashy seed and ensure a constant flow of seed at the desired rate with uniform mixing of the species in the mixture.

3. Feeder mechanism (picker wheels, fluted feed, etc.) that ensures uniform flow of all types of grass seed either separately or in a mixture.

4. Oversized feeder tubes that allow constant flow of chaffy or trashy type seed from boxes to placement point (if such seed is used).

5. Individually mounted, adjustable, spring loaded, double-disc openers.

6. Depth bands or other depth-control systems that provide positive seed placement for final planting depth of one-fourth to one inch over varying degrees of seedbed firmness.

7. Press/packer wheels that provide adequate covering and firming of soil over and around the seed for necessary seed/soil contact after proper seed placement.

They should be mounted individually on each furrow opener or independently to follow behind each opener. Press/packer wheels are not intended to provide the basic "firm seedbed." The firm seedbed must exist before the drilling operation begins.

8. Drill calibration should be completed for both grass and grain drills prior to seeding. Refer to guidance below for completing drill calibration.

B. Small Grain Drill

1. Free-flowing grass seed (i.e., wheatgrasses) and legume seed can be successfully planted with a small grain drill provided proper seeding depth can be maintained throughout the field. Seeding depth is the most limiting factor to seeding success and contributes to most of the seeding failures when using a grain drill. It is extremely important to have a firm seedbed when using a grain drill. Periodic inspections should be done to check seeding depth especially when seeding across different soil types. Seeding depth will vary under actual planting conditions.

2. Checking the drill frequently and hand mixing the seed is essential to achieving a properly blended seed mix and helps ensure that seeds of different sizes are seeded evenly across the field. Periodic feeder mechanism adjustments are usually necessary to ensure proper seeding rates. A separate legume box is desirable for seeding small seeded species. (i.e., switchgrass and alfalfa). Ensure the grain drill's drop tubes are placed in front of the packer wheels to allow for seed-soil contact.

3. Chaffy or awned seeds (i.e., bluestems, Indiangrass, and blue grama) are difficult to plant with a grain drill. It is recommended that a grass drill be used for these types of grasses. Proper agitation is needed to prevent “bridging” of seed in the seed box, and the feeder mechanism must be capable of metering a uniform flow of seed at the desired rate. Very few grain drills have this capability. Use of debearded seeds is strongly recommended when considering seeding chaffy or awned seeds in a grain drill.

C. Broadcast Seeder

Broadcast seeding method may only be used when the slope, soil conditions, and/or size of area to be seeded makes the use of a drill impractical. All broadcast seedings will have a properly prepared seedbed (minimal residual cover with a smooth, firmly packed surface) and an operation which incorporates the seed into the soil at the proper depth (i.e., covering operation using a drag harrow, cultipacker, roller packer, or other suitable implement to cover and press the seed into the soil surface). When using the broadcast method, the seeding rates will be increased by 1.5 times.

D. Air seeders

Some air seeders and similar types of equipment may be used to seed free flowing grass seed (i.e., wheatgrasses) and legume seed if proper seeding depth can be obtained. However, seeding mixtures containing varying seed sizes may require an inert carrier to work properly in air seeders. The shallow planting depths for grasses and legumes can be difficult to maintain with this type of equipment. The equipment must be able to provide a uniform flow of seed at the desired rate. Use the correct seeding plates recommended by the manufacturer for the species to be planted. Use packer wheels or other suitable packing implement to press soil firmly around the seeds. **Air seeders are not recommended for seeding native grass and forb mixtures.**

Drill Calibration

Grass or grain drills may be calibrated using the following methods.

A. Bulk Weight Method

Raise the drill's drive wheel and measure its circumference in **feet**. Next, measure the distance between seed spouts or disc openers. Use Table 1 to determine the number of revolutions (R) to turn the drive wheel for the row spacing and wheel circumference in feet for your drill.

Table 1: Drill Calibration

Row spacing in inches	No. of seed spouts to use	Turns of drive wheel	Row spacing in inches	No. of seed spouts to use	Turns of drive wheel
6	4	96/C = R	24	1	96/C = R
7	4	82/C = R	30	1	77/C = R
8	3	96/C = R	36	1	64/C = R
10	3	77/C = R	42	1	55/C = R
12	2	96/C = R	48	1	48/C = R

Place enough seed in the box to cover spouts from which you will collect seed. Turn the drive wheel until all spouts are feeding. Place a container under the correct number of seed spouts (as determined from the Table 1) and turn the drive wheel the number of revolutions previously determined. Weigh the sample in grams. Multiply this weight by 0.5. The result is the pounds per acre at that setting. Adjust the drill setting and continue trials until the desired seeding rate is obtained.

Remember: Seeding rates as determined by this method are in terms of **bulk seed**. You need to convert your seeding rate from pure live seed per acre to bulk seed per acre when using this calibration method. Seed vendor should be able to provide bulk seed weights and pure live seed weights.

Example:

- Row spacing = 7 inches
- Number of seed spouts = 4
- Circumference of drive wheel (C) = 6.8 ft
- Revolutions of drive wheel (R) = 82/C R = 82/6.8 = 12 revolutions
- Bulk seeding rate is 15.1 lbs/ac. The drill is properly set when the 4 seed spouts yield 30 grams of seed after 12 revolutions of the drive wheel.
    - 30 grams x 0.5 = 15 lbs/ac

B. Seeds Per Row Foot Method

This method of determining the amount of seed being distributed by the seeding equipment is to count the number of seeds per foot of drill row while the machine is in operation.

Fill the drill with seed, make setting, and drive equipment over a hard ground surface or canvas. Count the number of seeds per foot of row and adjust until proper seeding rate is attained.

Use the information below to determine the linear foot of row necessary to equal one square foot planted.

Row spacing in inches	Linear foot of row to equal one square foot
6	2.0 feet
7	1.8 feet
8	1.5 feet
10	1.2 feet
12	1.0 foot

To determine the proper number of seeds per foot of drill row for a specific seeding mixture; you will first need to calculate the bulk seeding rate for each species in the mix. From Table 1, calculate the number of seeds per square foot (ft^2) for each pound seeded (seeds per pound divided by 43,560ft^2/acre).

Multiply the number of seeds per square foot for each pound seeded by the bulk seeding rate for each species. Total the resulting numbers to determine the number of seeds per square foot for the mixture.

Example:

If you want to calibrate a drill for a mixture of 4.5 lbs. PLS/ac green needlegrass (80% purity and 70% germination) and 4.0 lbs PLS/ac western wheatgrass (92% purity and 85% germination), calculate the bulk seeding rate for each species.

Bulk seeding rate would be 8 lbs/ac for green needlegrass and 5.1 lbs/ac for western wheatgrass.

- Green needlegrass – (.80 x .70) = .56. 4.5/.56 = 8.0 lb./ac bulk
- Western wheatgrass – (.92 x .85) = .78. 4.0/.78 = 5.1 lb./ac bulk

Green needlegrass seed contains 180,000 or 4.1 seeds/$ft^2$for each pound seeded (180,000/43560 ft^2/acre).

Western wheatgrass has 112,000 seeds per pound or about 2.6 seeds /ft^2 for each pound seeded.

- 8.0 lbs/ac x 4.1 seeds/ft^2/lb. = 32.8 seeds/ft^2
- 5.1 lbs/ac x 2.6 seeds/ft^2/lb. = 13.3 seeds/ft^2

The total seeds per square foot for the mix would be 46. If the drill we are calibrating has 7-inch row spacing, the drill calibration would be 46 seeds per 1.8 feet of row length.

Broadcast Seeder Calibration

A. Seeds Per Square Foot Method

1. Spread a large tarp or piece of plastic on a smooth level surface and anchor the edges to hold in place.
2. Place seed in the seed compartment(s) and travel across the tarp at the anticipated speed you will travel in the field. Make one pass across the tarp to check seeding rate.
3. Using a one square foot frame count the seeds in one square foot. Count the seeds on three to five samples and average.
4. Compare the results from step #3 with the planned seeding rate number of seeds per square foot of bulk seed for the seed mixture. Use the planned seeds per square foot of bulk seed since you will be counting all seeds on the tarp. If necessary, adjust the control gate for the small seed compartment and/or travel speed and repeat the test until the desired seeding rate is achieved.
5. Make two or three passes across the tarp at a selected spacing to check seed distribution and seeding pattern overlap. Adjust the travel spacing to achieve the desired overlap.
6. It may be desirable to check the seed being delivered from each seed compartment individually. In this case carryout Steps 2 through 4 independently for each seed compartment.

B. Pounds Per Acre Method

1. Measure out some fraction of an acre. For example, 1000 square feet is 2.3% (0.023) of an acre; 2000 square feet is 4.6% (0.046) of an acre; or 10890 square feet is 25% (0.25) of an acre.
2. Calculate the amount of seed required for the measured area. Weigh out the appropriate amount of each seed type and place in the appropriate box(s).

3. Seed the measured area and check if you had sufficient seed to cover the area or ran out before covering the measured area.
4. Adjust the settings and/or travel speed and repeat the trial on a new area as necessary.

Herbicide and Insecticide Carryover

Prior to planting, check to ensure that any herbicides used on previous two crop years will not "carry over" and negatively impact newly seeded plants. Residues of some herbicides may prevent the establishment of some native plant materials for up to two years. If the residual effects of herbicides are possible, delay planting until after the recommended interval to allow residual herbicide levels to dissipate, establish temporary cover or change species to be planted.

To protect pollinators, any seed supplied for projects must be free of pollinator lethal insecticides. Systemic insecticides including but not limited to neonicotinoid insecticides, can persist in the soil, and absorbed by new plantings and transferred to pollinators that forage on them. Use temporary cover such as oats or winter wheat in areas where insecticides may be a problem to allow time for the chemicals to break down.

Planting Dates

Seeding dates are based on long term averages and may be extended based on moisture conditions. See MN Instruction 190-380. Extension of these deadlines shall be based on both favorable moisture and temperature for seed germination.

Seeding of warm season grasses may begin before May 15 when the soil temperature is consistently 50° F or higher. When mixtures containing both warm season native and cool season introduced grasses are to be planted, select the seeding date based on the predominant plants in the mixture.

Table 2: Planting Dates

Cool Season Grasses and Legumes			
	Spring	Late Summer	Dormant
North	4/1 - 6/15	7/15 - 9/1	11/1 or a consistent soil temperature of <40° F.
South	4/1 - 6/1	8/1 - 9/10	11/1 or a consistent soil temperature of <40° F.
Warm Season Grasses, Forbs, and Legumes (includes warm and cool season natives planted in mixtures)			
	Spring	Late Summer	Dormant
Statewide	5/15 - 6/30	Not recommended	11/1 or a consistent soil temperature of <50° F.

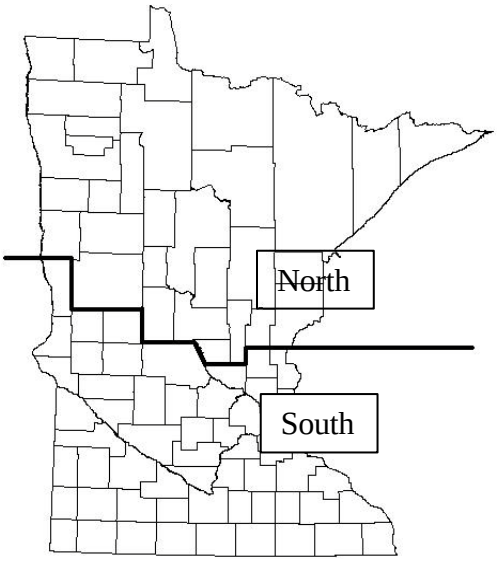


Figure 1: Planting Zones

Seeding Rates

Seed tests must show the percentage of germination and percentage of purity. Seeding rates shall be based on Pure Live Seed (PLS), where **PLS = % germination (+ dormant seed) x % purity**. To calculate the pounds of bulk seed required, divide the PLS requirement for the seeding by the percent PLS (expressed as a decimal). See Table 22: Conversion of Bulk Pounds to Pure Live Seed.

For example, if 1,000 pounds of PLS of Indiangrass is required for the seeding, germination is 90% and purity is 98%. The amount of bulk seed to purchase and apply to the field is: 1,000 lbs./0.882 = 1,134 lbs. of bulk seed.

Legumes will have hard seed, seeds that do not germinate during the first year, and the amount of hard seed will be specified on the seed tag. If there are more than 20% hard seed adjust the seeding rate up to achieve the desired pure, live seed coverage. Do not recommend seeding alfalfa following alfalfa due to problems with autotoxicity. Pasture mixes should not contain more than 50% legumes on a pure live seed basis to avoid bloat in livestock.

Companion Crops

For spring seeding of cool season species, a companion crop may be used for erosion control and weed suppression. No companion crop is required for inter-seeding or for late summer seeding but may be desirable for erosion control and to protect developing seedlings. Companion crop seeding rates may be increased when the companion crop will be harvested for forage.

Companion crops are competition for moisture and sunlight. Early maturing varieties of oats with good lodging resistance are desirable.

Companion crop seeding rates shall be:

Crop	Seeding Rate
Oats	0.75 – 1.25 bu/ac
Barley	0.5 – 1.0 bu/ac
Winter Wheat*	0.5 bu/ac
Ryegrass**	< 2.5 lbs/ac
Cereal Rye***	NOT RECOMMENDED

* Spring seeded only.
** Ryegrass is extremely difficult to dry down after cutting. Haylage is the preferred method of storage.
*** Cereal Rye can have allelopathic effects on competing species and is not recommended as a companion crop.

Companion crops are generally not recommended for warm season seeding. On highly erodible sites it may be desirable unless you are no-tilling into 70% residue cover or standing small grain stubble. Use a seeding of oats at ¾ to 1 ¼ bushels/acre.

Companion crops will be clipped or harvested for forage after jointing but before heading unless otherwise directed. Companion crops will not be harvested for grain. Clipping will be done when moisture conditions will not cause ruts or other field damage. Second and subsequent clippings are necessary when re-growth provides competition. Clipping height should be above developing seedlings – no less than 6". Where excessive growth has accumulated, the vegetation should be chopped and dispersed or harvested for forage rather than swathed. Companion crops seeded with late summer cool season grass seeding do not require clipping.

Temporary Cover Establishment

Where chemical residue carryover is the cause of delayed planting, refer to the product label for crops to rotate to. A bioassay test may be used to better determine chemical carryover.

Small grain temporary cover crops will be clipped in the boot stage to prevent seed formation. Spring seeded winter wheat and spring seeded winter rye will not require clipping. Millet and sorghums need to be clipped in the early heading stage to prevent viable seed formation. Forage sorghums, Sudangrass and sorghum-Sudangrass may need multiple clippings to control biomass accumulation and seed production. Residue from the temporary cover may be fall tilled, leaving a minimum of 40% residue cover.

Temporary Cover	Seeding Rate/Acre	Seeding Dates - Statewide
Oats	2.5 bu.	*-- April 1 to June 15 *-- August 1 to September 10
Barley	1.5 bu.	*--April 1 to June 15 *-- August 1 to September 10
Spring Wheat	1.25 bu.	*--April 1 to June 15
Winter Wheat	1.25 bu.	*-- August 1 to September 30
Spring Rye	1.0 bu.	*--April 1 to June 15
Winter Rye	1.0 bu.	*-- August 1 to September 30
Annual Ryegrass	8.0 lbs.	*--April 1 to June 15 *-- August 1 to September 10
Proso Millet	12.0 lbs.	May 15 to June 10
Sorghum/Sudangrass	12.0 lbs.	May 15 to June 10
Grain Sorghum	10.0 lbs.	May 15 to June 10
Corn	92.0 lbs.	May 15 to June 10

Weed Control

Approved herbicides may be used on both introduced and native plantings to control weed species. During the establishment year, mow weeds after they have reached a 12” height. Mow 2–3 times or as needed based on onsite evaluation, generally on 30-day intervals from the date of seeding. Mow to a height of 6” to 8”. Use a rotary mower or remove the clippings so as not to smother the seedlings. This will slow the weeds but won't harm the prairie plants. Livestock grazing is not an acceptable method of weed control during the establishment period.

The second year, evaluate the stand to determine if weed control is necessary. If it is, spot mow the planting at a height of six inches. If there is enough material for a prescribed burn, this may be an effective method to control weeds, but fire should not be introduced until the third year of establishment.

Fertilizer and Lime Requirements for Practices 327, 332, 342, 393, 512 and 589C

- **Introduced Cool Season Grasses and Legumes**
  - Apply fertilizer, manure, and lime according to University of Minnesota fertilizer recommendations. Soil tests will be completed by a Minnesota Department of Agriculture certified lab. Soil tests will be no older than four years. Manure nutrient samples will be done in the year of application. The sample tests will also be performed by a Minnesota Department of Agriculture certified lab. Apply manure with a calibrated spreader using guidelines from the Nutrient Management (590) practice standard. Refer to Table 17, Fertilizer Recommendations for Grass, Grass/Legume Mixes, and Alfalfa Hay for University of Minnesota fertilizer recommendations.

For Conservation Cover (327), Filter Strip (393), and Critical Area Planting (342), use a two ton per acre yield goal. If soil tests are not available, fertilizer will be applied in equal amounts of Nitrogen-Phosphorus-Potassium (N-P-K) for grass and legume establishment. An example fertilizer blend would be 60-60-60.

- The recommended rate per acre of liming materials shall be used to raise pH to 6.5 for alfalfa or 6.0 for other legume species. Liming materials will meet University of Minnesota recommendations for fineness of material and will be applied and incorporated a minimum of one year prior to seeding to achieve the desired pH.

- **Native Grasses, Forbs, and Legumes**

  Fertilizer is not required for seeding native grasses, forbs, and legumes.

Stand Evaluation

To determine adequacy of stands and to determine if reseeding or reinforcement seeding is required, please follow Agronomy Technical Note No. 17 "Guidelines for Herbaceous Stand Evaluation", FOTG > Section 1 > Reference List > Technical Notes and References by Discipline > Agronomy

Seeding Tools

Optional seeding plan tools and calculators are located on the MN FOTG at: Technical Resources/Seeding Tools.

STANDARD 327 – CONSERVATION COVER SEEDING SPECIFICATIONS
And
STANDARD 420 - WILDLIFE HABITAT PLANTING SPECIFICATIONS

Permanent, perennial vegetative cover should be established during the first recommended seeding or planting period for the selected species within the first year of the land use conversion. If this is not possible, a temporary cover may be used, and the permanent vegetative cover must be established during the next seeding period.

1. Specifications for Establishment of Upland Cover, and Upland Wildlife Habitat - Grasses, Legumes, Forbs

Commonly recommended native and introduced grass, legume and forb species are listed in Tables 3-5. Native plants and plant communities are encouraged since they are well-adapted to sites, less invasive, and likely to provide quality habitat without costly long-term maintenance. Native plants are required for Wildlife Habitat Plantings (420); however, due to cost, availability and landscape position, native plants may not be feasible in all Conservation Cover (327) situations.

A. Native Grasses, Forbs, and Legumes:

- Mixtures will comprise a minimum of 5 native species consisting of at least 3 native grasses and at least 2 native forbs/legumes. Mixtures will result in a minimum 35-40 total seeds/ft^2.
- Grasses shall not exceed 90% of the total mixture based on seeds/ft^2.
- No more than 20% of the grass component will be comprised of cool season grass species based on seeds/ft^2.

- Switchgrass in mixtures shall not exceed 10% of the grass component based on seeds/ft^2.
- Solid stands of Switchgrass seeded at 6.0 lbs/ac are allowed for site specific purposes such as providing winter cover in landscapes lacking adequate emergent wetlands or woody vegetation.
- When multiple forbs/legumes are included in a seed mixture, no individual species shall comprise more than 50% of the mixture based on seeds/ft^2.
- Refer to Biology Job Sheet #9 – "Establishment of Native Grass and Forbs" for additional establishment specifications. Refer to practice standard ***Upland Wildlife Habitat Management (645)*** for management recommendations.

B. Introduced Grasses and Legumes:

- Mixtures will comprise a minimum of 4 species consisting of at least 3 grasses and at least 1 forb or legume.
- Total recommended seeding rate is a minimum 35-40 total seeds/ft^2.
- At least 50% of the mixture shall be comprised of grasses based on seeds/ft^2.
- Introduced grass/legume mixtures may include up to 20% Switchgrass and/or Western Wheatgrass.
- The use of introduced species should be avoided adjacent to native prairie or other sensitive areas.
- Refer to Biology Job Sheet #8 - "Establishment of Introduced Grasses/Legumes" for additional establishment specifications. Refer to practice standard ***Upland Wildlife Habitat Management (645)*** for management recommendations.

2. Specifications for Native Pollinator, Honeybee and Monarch Habitat Establishment

Encourage blocks of cover as opposed to narrow linear plantings to improve habitat for grassland nesting birds and to decrease weed pressure along the edges of a native planting.

- Minimum size shall be 0.5 ac., with a minimum width of 20'.
- Apply techniques to prevent or mitigate offsite insecticide risks from drift from areas treated with insecticides (e.g., cropland). Achieve a target mitigation index value of ≥20 from Table 3 of Agronomy Technical Note #9 – "Preventing or Mitigating Potential Negative Impacts of Pesticides on Pollinators using Integrated Pest Management and Other Conservation Practices". Commonly recommended options which meet a target mitigation index value of 20 include, but are not limited to:

  1. Establish a ≥ 100' pesticide free setback from the edge of the planting into adjacent cropland. Pesticide free includes planting un-treated seed.
  2. Establish or incorporate an existing ≥30' flower free vegetated buffer between the habitat planting and cropland, and apply one of the following mitigation techniques to cropland beyond the vegetated buffer:
     - Utilize high volume/low pressure spray nozzles, and/or
     - Apply insecticides on adjacent cropland when wind speed is between 2 and 9 mph.
  3. Where cropland is adjacent to the planting, no application of insecticides within 30 feet of the habitat planting, and apply one of the following mitigation techniques to cropland beyond the insecticide free setback:
     - Utilize high volume/low pressure spray nozzles, and/or
     - Apply insecticides when wind speed is between 2 and 9 mph.

A. Native Grass and Forbs (Native Pollinator, Monarch, and Honeybee)

Plantings shall contain:

- A minimum of nine species of pollinator friendly native forbs – additional forbs are strongly encouraged.
- At least three species shall be from each bloom period – early, mid, and late flowering season so that pollinators have continuous food sources.
- A minimum of two native bunch grasses to provide nest sites.

Composition:

- The mixture will result in a minimum 35-40 seeds/ft² total. See Tables 6 and 10 for recommended species and individual composition.
- Forbs will comprise 50-75% of the mixture based on seeds/ft². No individual forb shall comprise more than 20% of the forb mixture based on seeds/ft². At least one forb shall be a legume.
- Grasses will comprise 25-50% of the mixture based on seeds/ft².
    - Canada or Virginia wildrye may be included in the mixture on erodible sites and shall comprise no more than 20% of the total grass mixture based on seeds/ft².
    - Certain species of native grass are restricted due to potential for aggressive growth and suppression of planted wildflowers or reducing the available bare soil in plantings. The seed mix cannot contain more than 10% total (by seeds/ft²) of any combination of the three grasses listed below.
        - Big bluestem (*Andropogon gerardii*)
        - Indiangrass (*Sorghastrum nutans*)
        - Switchgrass (*Panicum virgatum*)
- Mixtures designed to benefit monarch butterflies shall include nectar and larval plants beneficial to the monarch butterfly from Table 6. To provide food for monarch butterfly larvae, plantings shall include at least one species of milkweed (Asclepias spp.). Milkweed species shall comprise at least 1.5% of the total mixture (grass and forbs) based on seeds/ft². To provide food for adult Monarchs, at least 60% of the forbs in the mix shall be from the monarch butterfly planting list in Table 6.
- Blooming shrubs and trees can be an important source of pollen and nectar for pollinators, usually blooming well before many forb species. See Table 9 for native shrubs beneficial to pollinators.

Seeding Date: Fall dormant seeding favors forbs due to moist cold stratification. Fall dormant seeding is recommended unless the forb seed has been pre-stratified before purchase. See Table 2 for planting dates.

B. Introduced Perennial Grass and Legumes (Honeybee) - See Table 7 for recommended species and composition.

Refer to ***Biology Job Sheet #16 – "Native Habitat Development for Pollinators, Honeybees and Monarchs"*** and ***Biology Job Sheet #18 – "Introduced Grasses and Legumes – Honeybee Habitat"*** for additional establishment specifications. Refer to practice standard ***Upland Wildlife Habitat Management (645)*** for annual habitat recommendations.

STANDARD 645 – UPLAND WILDLIFE HABITAT MANAGEMENT SPECIFICATIONS

Specifications for Annual Forbs and Legumes for Honeybee Habitat

Encourage blocks of cover as opposed to narrow linear plantings.

- Minimum size shall be 0.5 ac., with a minimum width of 20'.

- Apply techniques to prevent or mitigate offsite insecticide risks from drift from areas treated with insecticides (e.g., cropland). Achieve a target mitigation index value of $\geq$ 20 from Table 3 of

Agronomy Technical Note #9 – "Preventing or Mitigating Potential Negative Impacts of Pesticides on Pollinators using Integrated Pest Management and Other Conservation Practices". Commonly recommended options which meet a target mitigation index value of 20 include but are not limited to:

1. Establish a ≥ 100' pesticide free setback from the edge of the planting into adjacent cropland. Pesticide free includes planting un-treated seed.
2. Establish or incorporate an existing ≥30' flower free vegetated buffer between the habitat planting and cropland, and apply one of the following mitigation techniques to cropland beyond the vegetated buffer:
   - Utilize high volume/low pressure spray nozzles, and/or
   - Apply insecticides on adjacent cropland when wind speed is between 2 and 9 mph.
3. Where cropland is adjacent to the planting, no application of insecticides within 30 feet of the habitat planting, and apply one of the following mitigation techniques to cropland beyond the insecticide free setback:
   - Utilize high volume/low pressure spray nozzles, and/or
   - Apply insecticides when wind speed is between 2 and 9 mph.

See Table 8 for species and seeding rates. Planting dates specific to annual forb/legume mixtures:

- South of Interstate 94 5/1 – 5/15
- North of Interstate 94 5/15 –6/1

Refer to ***Biology Job Sheet #20 – "Annual Forbs and Legumes – Pollinator and Honeybee Habitat"*** for additional establishment specifications.

This practice is intended to increase breeding habitat for monarchs by inter-seeding milkweed into an existing stand of vegetation that has sufficient nectar plant richness and abundance but lacks reproductive habitat, as determined by a monarch butterfly wildlife habitat evaluation guide (WHEG).

Inter-seeding milkweed should follow a disturbance such as prescribed burning, haying, grazing and/or herbicide spraying.

Option 1: Use a late summer or fall prescribed burn to remove above ground vegetation. Dormant inter-seed milkweed directly into seedbed. The following growing season, mow, or hay to a height of 6" whenever vegetation reaches 12-18" in height.

Option 2: Use a spring prescribed burn to remove previous year's residues. Inter-seed milkweed in strips with a no-till drill. Apply a grass selective herbicide to the planted strips during the growing season: warm season grasses (early summer), cool season grasses (spring, or late fall). Follow manufacturer's label directions. Mow or hay to a height of 6" when vegetation reaches 12-18" in height during the first year of establishment.

Seeding rates
Milkweed species (*Asclepias* sp.) should be seeded at a minimum rate of 0.15 seeds/sq. ft. and planted with a no-till drill at 1/4" depth.

STANDARD 643 – RESTORATION OF RARE OR DECLINING NATURAL COMMUNITIES – TALLGRASS PRAIRIE SEEDING SPECIFICATIONS

High species diversity is recommended to promote native community stability and function, to provide benefits to multiple wildlife species and to prevent establishment of invasive species.

Native prairie plant communities will be established utilizing seed harvested from existing Minnesota native prairies, or utilizing seed mixes comprised of Minnesota ecotype grasses, legumes, and forbs, developed to reflect "native prairie" communities as determined suitable for specific site conditions.

All seed, including native harvest, shall be supplied as pure-live seed (PLS) and conform to Minnesota Seed Law including limits on noxious weed content and State labeling requirements.

Restoration on Agricultural Fields and Other Disturbed Sites:

Seed Origin

It is desirable for seed sources of native grass, forbs, and legumes to originate from as close to the planting site as possible. When available, "Yellow Tag" or source identified materials are preferred. The following sequence defines the preferred wild/native harvest seed source for the project. Areas with similar site conditions and located as close to the project site as possible:

- Ecological Sub-sections
- Ecological Section
- Maximum distance of 175 miles of project
- Field tested native grass varieties and natural germplasm materials of known origin and adaptability. Refer to Table 21 for a listing of grass varieties/natural germplasm materials and their zone of adaptability.

Seeding Requirements

Diversity - Seed mixes will consist of a minimum 15 native species. The mixture will be comprised of a minimum 5 grasses, and a minimum 5 forbs. At least one forb shall be a legume.

Quantity - The mixture will result in a minimum 35-40 PLS seeds/ft^2 total, with a maximum 60% grass component based on seeds per square foot.

Composition

- No more than 20% of the grass component will be comprised of cool season grasses based on seeds/ft^2.
- Switchgrass shall not exceed 5% of the grass component based on seeds/ft^2
- No individual forb specie will comprise more than 20% of the forb mixture based on seeds/ft^2.
- Constructed mixtures may be developed using Tables 3 and 6**.**

Optional criteria to benefit monarchs, pollinators, and beneficial

insects:

- Consider designing the mixture to benefit both pollinators and monarch butterflies by adding nectar and larval plants beneficial to monarchs and pollinators.
- A minimum 3 forbs from each bloom period (early, mid, and late) should be included in the mixture.
- To provide food for monarch butterfly larvae, plantings should include at least one species of

milkweed (*Asclepias* spp.). Milkweed species should comprise at least 1.0% of the total mixture (grass and forbs) based on seeds/ft^2.

- Consider specific pollinator habitat requirements and select appropriate forb species using the columns listed in Table 6.

Refer to ***Biology Job Sheet #12 – "Restoration of Rare or Declining Plant Communities – Tallgrass Prairie"*** for additional establishment specifications. Refer to practice standard ***Upland Wildlife Habitat Management (645)*** for management recommendations.
Refer to ***Biology Technical Note #16 - Wild and Rare Riparian Habitat Guide*** for additional establishment specifications.

Table 3: Commonly Recommended Native Grasses

The following list identifies native grasses beneficial to upland wildlife and native habitat restoration. The list is not exhaustive and identifies species that are readily commercially available.

Species	% of Grass Component Seeds/Ft^2	Seeds/Ft^2 (1 lb/ac)	pH Min.	Wet Soils[1]	Drought[2] Tolerance	Flood Tolerance
Warm Season Grasses						
Big Bluestem *Andropogon gerardii*	0-30[3]	4.0	>6.0	Good	Fair	Fair
Indiangrass *Sorgastrum nutans*	0-30[3]	4.4	>4.8	Fair	Fair	Good
Blue Grama *Bouteloua gracilis*	0-20	17.2	>6.6	Poor	Good	Poor
Switchgrass *Panicum virgatum*	0-100[4]	9.0	>4.5	Good	Fair	Good
Little Bluestem *Schizachryrium scoparium*	0-30	6.6	>5.0	Poor	Good	Poor
Sideoats Grama *Bouteloua curtipendula*	0-30	4.1	>5.5	Poor	Good	Poor
Prairie Sandreed *Calamovilfa longifolia*	0-30	6.3	>5.6	Poor	Good	Poor
Prairie Cordgrass *Spartina pectinata*	0-5	4.2	>6.0	Excellent	Poor	Excellent
Prairie Dropseed *Sporopolus heterolepis*	0-10	5.1	>6.0	Fair	Fair	Good
Cool Season Grasses						
# Green Needlegrass *Stipa viridula*	0-10	4.1	>6.6	Poor	Good	Fair
# Canada Wildrye *Elymus canadensis*	0-10	2.6	>5.0	Good	Fair	Fair
# Slender Wheatgrass *Agropyron caninum*	0-10	3.6	>5.6	Fair	Good	Good
# Western Wheatgrass *Agropyron smithii*	0-10	2.6	>4.5	Fair	Good	Good
# Canada Bluejoint *Calamagrostis canadensis*	0-5	102.8	>4.5	Excellent	Poor	Excellent
# Virginia Wildrye *Elymus virginicus*	0-10	2.2	>5.0	Good	Fair	Good
# Kalms Brome *Bromus kalmii*	0-10	2.9	>5.5	Good	Fair	Fair
# Porcupine Grass *Hesperostipa spartea*	0-10	1.3	>6.6	Poor	Good	Fair
# Junegrass *Koeleria macrantha*	0-5	53.1	> 6.0	Poor	Good	Poor

Seeding rates are listed in pounds pure live seed per acre.

1/ Wet soils are those classified as somewhat poorly drained to very poorly drained.
2/ Droughty soils are those classified as excessively drained.
3/ Big bluestem or Indiangrass may not individually exceed 25% of the grass component in 643 – Restoration of Rare and Declining Habitat and 327 – Native Pollinator, Honeybee, and Monarch Habitat mixtures.
4/ Switchgrass may not exceed 10% of the grass component in 327 – Conservation Cover mixtures. Switchgrass may not exceed 5% of the grass component in 643 – Restoration of Rare and Declining Habitat mixtures.

Table 5: Commonly Recommended Introduced Grasses and Legumes

The following list identifies introduced grass and legumes beneficial to upland wildlife and native habitat restoration. The list is not inclusive, and identifies those species, which are readily available through private vendor seed supplies.

Species	% of Grass Component Seeds/Ft^2	Seeds/Ft^2 (1.0 lb./ac)	pH Range	Wet Soils 1/	Drought Tolerance 2/	Flood Tolerance	Invasiveness 3/
Orchard grass	0-25	15.0	5.6 – 8.4	Yes	Fair	Poor	Low
Timothy	0-25	29.8	5.1 – 8.4	Yes	Poor	Good	Low
Intermediate Wheatgrass	0-50	2.0	7.0 - 8.5	No	Fair	Fair	Low
Tall Wheatgrass	0-50	1.8	7.0 - 8.5	Yes	Poor	Good	Low
Western Wheatgrass 4/	0-10	2.5	4.5 – 9.0	Yes	Good	Good	Low
Switchgrass 4/	0-10	9.0	4.5 – 8.0	Yes	Fair	Good	Low
Alfalfa	0-50	5.2	6.0 - 8.5	No	Good	Poor	Low
Red Clover	0-25	6.3	5.5 - 7.6	Yes	Fair	Fair	Low
White Clover	0-25	18.4	5.2 – 8.0	Yes	Poor	Good	Low
Alsike Clover	0-25	15.6	5.6 - 7.5	Yes	Poor	Good	Low

[1]Wet soils are those classified as somewhat poorly drained to poorly drained.
[2]Droughty soils are those classified as excessively drained.
[3]Refers to the potential for a species to spread into adjoining areas.
[4]Switchgrass and/or Western Wheatgrass may be included in introduced grass-legume mixtures.

Table 6: Native Forb Species Beneficial to Pollinators, Monarchs and Other Beneficial Insects					
Species		**Bloom Color**	**Honey bee**	**Monarch**	**Flowering Season** Early = April - June Mid = June - August Late = August - October
DRY to MESIC					
Butterfly Weed	*Asclepias tuberosa*	Orange	H	LH	Mid
Canada Milkvetch	*Astragalus canadensis*	Cream	H		Mid
Compass Plant	*Silphium laciniatum*	Yellow		H	Mid
Dotted Blazing Star	*Liatris punctata*	Rose		VH	Mid
Evening Primrose	*Oenothera biennis*	Yellow			Mid
Foxglove Beardtongue	*Penstemon digitalis*	White	H		Early
Gray goldenrod	*Solidago nemoralis*	Yellow	H	H	Late
Hoary Vervain	*Verbena stricta*	Blue	H	H	Mid
Lance-leaved Coreopsis	*Coreopsis lanceolata*	Yellow	H	H	Early
Leadplant	*Amorpha canescens*	Purple	H	H	Mid
Long-headed Coneflower	*Ratibida columnifera*	Yellow			Mid
Ontario Blazing Star	*Liatris cylindracea*	Purple	H	VH	Late
Prairie onion	*Allium stellatum*	Pink	H		Mid
Purple Coneflower Narrow	*Echinacea angustifolia*	Pink	H	H	Mid
Purple Coneflower - Eastern	*Echinacea purpurea*	Pink	H	VH	Mid
Rough Blazing Star	*Liatris aspera*	Purple	H	VH	Late
Showy Goldenrod	*Solidago speciosa*	Yellow	H	VH	Late
Large-flowered Penstemon	*Penstemon grandiflorus*	Lavender	H		Early
Showy Milkweed	*Asclepias speciosa*	Pink	H	VH	Late
Silky Aster	*Symphyotrichum sericeum*	Purple		H	Late
Skyblue Aster	*Symphyotrichum oolentangiense*	Blue	H	H	Late
Smooth Aster	*Symphyotrichum laeva*	Blue	H	H	Late
Spotted Beebalm	*Monarda punctata*	Lavender	H	H	Mid
Stiff Sunflower	*Helianthus pauciflorus*	Yellow		H	Mid
Stiff Tickseed	*Coreopsis palmata*	Yellow		H	Mid
Wild Columbine	*Aquilegia canadensis*	Red	H		Early
Wild Lupine	*Lupinis perennis*	Lavender			Early
Wild White Indigo	*Baptista albaa*	White			Early
Whorled Milkweed	*Asclepias verticillata*	White	H	LH	Mid - Late
Yarrow	*Achillea millefolium*	White	H		Mid
MESIC to WET MESIC					
Blue Vervain	*Verbena hastata*	Blue		H	Mid - Late
Bottle Gentian	*Gentiana andrewsii*	Blue			Late
Canada Tick Trefoil	*Desmodium canadense*	Purple	H		Mid
Common Oxeye	*Heliopsis helianthoides*	Yellow		VH	Mid
Culvers Root	*Veronicastrum virginicum*	White	H	H	Mid
Giant Sunflower	*Helianthus giganteus*	Yellow	H	H	Late
Golden Alexanders	*Zizia aurea*	Yellow			Early
Great Blue Lobelia	*Lobelia siphilitica*	Blue		H	Late
Ironweed	*Veronia fasciculata*	Purple	H	H	Late
Meadow Blazing Star	*Liatris lingulistylis*	Purple		VH	Late
Mountain Mint	*Pycnanthemum virginianum*	White	VH	H	Mid
Obedient plant	*Physostegia virginiana*	Pink	H	H	Mid - Late
Partridge Pea	*Chamaechrista fasciculata*	Yellow	H		Mid
Rattlesnake Master	*Eryngium yuccifolium*	White		H	Mid
Sawtooth Sunflower	*Helianthus grosseserratus*	Yellow		VH	Late
Tall Blazing Star	*Liatris pycnostachya*	Purple		VH	Mid

Wild Bergamot	*Monarda fistulosa*	Lavender		H	Mid
Yellow Coneflower	*Ratibida pinnata*	Yellow			Mid
WET					
Blue Flag Iris	*Iris versicolor*	Blue	H		Early
Boneset	*Eupatorium perfoliatum*	White	H	H	Late
Cup Plant	*Silphium perfoliatum*	Yellow	H	H	Mid
Joe-pye Weed	*Eupatorium maculatum*	Rose	H	VH	Mid - Late
Giant Goldenrod	*Solidago gigantea*	Yellow	H	H	Mid - Late
New England Aster	*Symphyotrichum novae-angliae*	Purple	H	VH	Late
Panicled Aster	*Symphyotrichum lanceolatum*	White	H	H	Late
Sneezeweed	*Helenium autumnale*	Yellow	VH		Late
*Swamp Milkweed	*Asclepias incarnata*	Red	H	VH	Mid
DRY to WET MESIC					
Anise Hyssop	*Agastache foeniculum*	Purple	H	H	Mid
Black-eyed Susan	*Rudbeckia hirta*	Yellow		H	Mid - Late
*Common Milkweed	*Asclepias syriaca*	Purple	H	VH	Mid
Cream Gentian	*Gentiana flavida*	Cream			Late
Field thistle	*Cirsium doscolor*	Pink	H	VH	Late
Grass-leaved Goldenrod	*Euthamia graminifolia*	Yellow	H	VH	Mid
Heath aster	*Symphyotrichum ericoides*	White	H	H	Late
Prairie phlox	*Phlox pilosa*	Pink		H	Early
Purple Prairie Clover	*Dalea purpurea*	Purple	VH		Mid
Maximilian Sunflower	*Helianthus maximiliani*	Yellow	H	H	Late
Spiderworts	*Tradescantia spp.*	Blue			Early
Stiff Goldenrod	*Solidago rigida*	Yellow	H	VH	Late
White Prairie Clover	*Dalea candida*	White	H	H	Mid

Monarch larval host = * Honeybee and Monarch nectar value = Very High, High

Table 7: Introduced Perennial Grasses and Legumes - Honey Bee Habitat		
Recommended Basic Mixture	**Rate in lbs./acres PLS**	**Flowering Season**
Timothy	0.5	
Alfalfa	2.0	Mid-Late
White Clover	3.0	Early - Mid
Alsike Clover	4.0	Early - Mid
Red Clover	3.0	Early
Buckwheat **1/**	16.0	Early - Mid
Additional Optional Species		
Purple Prairie Clover	0.5	Mid
Canada Milkvetch	0.25	Late

1/ Plantings containing buckwheat may not be seeded within 30 feet of an existing commodity wheat field, or in a field with a planned rotation to commodity wheat within two years. Note should be taken that buckwheat is an annual.

Table 8: Annual Forbs and Legumes - Honeybee Habitat			
Recommended Basic Mixture	**Rate in lbs./acres PLS**		**Flowering Season**
	Drill	**Broadcast**	
Mustard *(Sinapis alba or Brassica juncea)*	2.0	2.5	Early
Buckwheat 1/	16.0	22.0	Early - Mid
Cowpea	18.0	25.0	Mid
Annual Sunflower Cultivar	0.5	0.5	Mid - Late
Additional Optional Species			
Dwarf Essex Rapeseed	1.0	1.5	Mid
Berseem Clover	3.5	5.0	Season Long
Red/Crimson Clover 2/	4.0	6.0	Early

1/ Plantings containing buckwheat may not be seeded within 30 feet of an existing commodity wheat field, or in a field with a planned rotation to commodity wheat within two years.

2/ This is only true for red clover that is already established (i.e., not an annual planting).

Table 9: Woody Species Beneficial to Native Pollinators and Honeybees			
Species		**Value to Pollinators 1/**	**Flowering Season**
American Basswood	*Tilia americana*	VH	Early - Mid
American Plum	*Prunus americana*	VH	Early
Black Cherry	*Prunus serotina*	VH	Early - Mid
Black Chokeberry	*Aronia melanocarpa*	VH	Early
Black Elderberry	*Sambucus nigra*	VH	Early
Black Willow	*Salix nigra*	VH	Early
Button Bush	*Cephalanthus occidentalis*	VH	Mid
Chokecherry	*Prunus virginiana*	VH	Early
Cockspur Hawthorn	*Crataegus crus-galli*	VH	Early
Common Chokecherry	*Prunus virginiana*	VH	Early
Common Ninebark	*Physocarpus opulifolius*	VH	Early
Currant/Gooseberry	*Ribes spp.*	VH	Early - Mid
Dogwoods	*Cornus spp.*	H	Early
Downy Arrowwood	*Viburnum rafinesqueanum*	VH	Early - Mid
False Indigo Bush	*Amorpha fruticosa*	VH	Mid
Fragrant False Indigo	*Amorpha nana*	VH	Mid
Lowbush Blueberry	*Vaccinium angustifolium*	VH	Mid
Nannyberry	*Viburnum lentago*	VH	Early - Mid
Native Rose Species	*Rosa spp.*	VH	Mid
New Jersey Tea	*Ceanothus americanus*	VH	Mid
Northern bush honeysuckle	*Diervilla lonicera*	VH	Early - Mid
Pagoda dogwood	*Cornus alternifolia*	H	Early
Pin cherry	*Prunus pensylvanica*	VH	Early
Prairie rose	*Rosa arkansana*	VH	Mid
Raspberries/Blackberries	*Rubus spp.*	VH	Early
Redosier dogwood	*Cornus sericea*	VH	Early
Sandcherry	*Prunus pumila*	VH	Early - Mid
Saskatoon Serviceberry	*Amelanchier alnifolia*	VH	Early
Serviceberries	*Amelanchier spp.*	H	Early - Mid
Smooth rose	*Rosa blanda*	VH	Mid

Smooth Sumac	*Rhus glabra*	VH	Early
Western snowberry	*Symphoricarpos occidentalis*	H	Mid
Willow, Pussy or Black	*Salix spp.*	VH	Early

1/ H = High VH = Very High

Table 10: Native Grasses for Native Pollinator, Monarch, and Honeybee Habitat

Species	Percentage of Grass Mixture – Seeds/Ft^2
Big Bluestem and/or Indiangrass	0-25%
Little Bluestem	0-50%
Prairie Dropseed	0-50%
Rough Dropseed	0-25%
Sideoats Grama	0-25%
Wildrye (Canada or Virginia)	0-20%

STANDARD 342 – CRITICAL AREA PLANTING SPECIFICATIONS

Recommended seed mixtures are found in Table 11. Seeding rates are based on pounds of Pure Live Seed (PLS) per acre. Design custom seed mixtures as follows:

Introduced Grass/Legume: Mixture will result in a minimum 150 seeds/ft^2, at least 50% of the mixture must be grass. Sod forming grasses will comprise a minimum 30% of the mixture. Legume seed shall be inoculated with the appropriate strain of nitrogen fixing bacteria prior to planting.

Native Grasses: Mixture will result in a minimum 75 seeds/ft^2. Sod forming grasses will comprise a minimum 30% of the mixture.

Table 11: Recommended Seed Mixtures for Critical Area Planting

Seeding Mixture	Lbs/ ac	Seeds/ft^2 Total Mix	% Sod Forming	Suitable Uses [1/]	Drainage	Capacity Retardance	Remarks
Smooth Brome [2] Perennial Ryegrass	28 10	150	58	CO, WW, CA	Moderate to well, excessively drained	B	Add Red Clover or Alsike Clover if desired
Smooth Brome [2] Timothy Perennial Ryegrass	15 3 3	155	30	CO, WW, CA	Moderate to well, excessively drained	B	Add Red Clover or Alsike Clover if desired
Smooth Brome [2] Red Top Perennial Ryegrass	15 1 5	190	83	CO	Moderate to excessively drained	B	Add Alfalfa or Alsike Clover if desired
Int. Wheatgrass Timothy Canada Wildrye	23 3 7	155	30	CO, WW	Well to somewhat poorly drained	B	Add Alsike clover or Alfalfa if desired
Kentucky Bluegrass [2] Creeping Red Fescue Perennial Ryegrass	3 5 10	210	70	CO, CA	Well to somewhat poorly drained	C	Add alsike or red clover if desired
Creeping Foxtail Timothy Red Top Perennial Ryegrass	10 2 1 3	362	78	CO, WW, CA	Somewhat poorly to poorly drained	C	Add Red Clover if desired
Timothy Perennial Ryegrass Kentucky Bluegrass [2] Tall Fescue Annual Ryegrass	2 4.5 2.5 3 3	198	40	CO, WW, CA	Moderate to somewhat poorly drained	C	
Big Bluestem Indiangrass Switchgrass Canada Wildrye	6 6 6 7	123	63	CO, CA	Moderate to well drained	B	
Big Bluestem Indiangrass Switchgrass Sideoats grama Little Bluestem	4 4 3 3 3	93	60	CO	Moderate to Excessively drained	B	
Switchgrass Sideoats Grama Canada Wildrye Western Wheatgrass	4 4 7 5	84	78	CO, CA	Moderately to well drained	B	
Prairie Cordgrass Switchgrass Western Wheatgrass Canada Wildrye	3 3 7 7	76	76	CO, CA, WW	Somewhat poorly to poorly drained	B	

[1] Suitable Uses: **CO** = construction sites **CA** = critical areas **WW** = waterways

[2] Do not recommend these species adjacent to native prairie.

STANDARD 332 – CONTOUR BUFFER STRIP SEEDING SPECIFICATIONS AND STANDARD 393 – FILTER STRIP SEEDING SPECIFICATIONS AND STANDARD 589C – CROSS WIND TRAP STRIP SEEDING SPECIFICATIONS

Refer to the applicable practice standard for design and vegetation criteria.

Acceptable plant species and seeding rates are found in Tables 12 and 13. See Table 23 for a summary of plant species characteristics.

Seeding mixture will result in a minimum 55 seeds/ft^2 total.

Introduced grass/legume mixtures shall contain no more than one legume component not to exceed the maximum mixture composition in Table 12.

Native forbs may be added to native grass mixtures to enhance the practices for wildlife, pollinators, monarchs, and beneficial insects. Forbs can be added to a native species mixture. However, the criteria for pollutant reduction must be met. Forbs may comprise up to 10% of the mixture. For seedings ≤ 30 feet wide, and adjacent to cropland where pesticides are applied, forbs or legumes are not recommended. Refer to National Agronomy Technical Note #9 for mitigation recommendations related to pesticide application. Refer to Table 13 for recommended native forbs which can withstand sheet flow.

Table 12: Recommended Species for Contour Buffer (332), Cross Wind Trap (589c) and Filter Strip (393) Seed Mixtures

SPECIES C = Cool season W = Warm season R = Rhizomatous	% Allowed in Mix	Seeds/ft^2 based on 1.0 PLS lb./Ac 1/	Drought	Flooding	Salts	Wet Soil	Effective Height	Longevity	Rooting Depth
Native Grasses									
Canada Wildrye C	0-25	2.6	Fair	Fair	Good	No	>12”	Short	M
Slender Wheatgrass # C	0-25	3.6	Good	Good	Good	No	< 12”	Short	M
Virginia Wildrye C	0-25	2.2	Fair	Good	Fair	S	>12”	Short	M
Green Needlegrass C	0-25	4.1	Good	Fair	Fair-Good	No	>12”	Long	D
Western Wheatgrass #C/R	0-50	2.6	Good	Good	Good-Ex	Yes	>12”	Long	D
Kalms Brome C	0-25	2.9	Fair	Fair	Poor	No	>12”	Short	M
Fringed Brome C	0-50	3.7	Fair	Fair	Poor	Yes	>12”	Moderate	M
Switchgrass # W/R	0-100	9.0	Fair	Good	Fair	Yes	>12”	Long	D
Prairie Cordgrass[4] W/R	0-100	4.2	Poor	Excellent	Poor	Yes	>12”	Long	D
Big Bluestem # W/R	0-50	4.0	Fair	Fair	Fair	No	>12”	Long	D
Indiangrass # W/R	0-25	4.4	Fair	Good	Fair	No	>12”	Long	M to D
Sideoats Grama # W/R	0-25	4.1	Good	Poor	Poor	No	< 12”	Long	S to M
Little Bluestem # W	0-25	6.6	Good	Poor	Poor	No	>12”	Long	D
Blue Grama W/R	0-25	17.2	Good	Poor	Fair	No	< 12”	Long	S

SPECIES C = Cool season W = Warm season R = Rhizomatous	% Allowed in Mix	Seeds/ft^2 based on 1.0 PLS lb./Ac 1/	Drought	Flooding	Salts	Wet Soil	Effective Height	Longevity	Rooting Depth
Introduced Grasses and Legumes[2]									
Creeping Foxtail # C/R	0-100	17.2	Poor	Good	Poor-Fair	Yes	>12”	Long	S to M
Smooth Bromegrass[3] C/R	0-100	3.1	Fair	Good	Poor-Fair	No	>12”	Long	S to M
Redtop C/R	0-100	111.4	Poor	Good	Poor-Fair	Yes	>12”	Short	S to M
Meadow Brome C	0-100	1.8	Fair	Fair	Poor	No	>12”	Moderate	M
Int. Wheatgrass # C/R	0-100	2.0	Fair	Fair	Fair-Good	No	>12”	Long	D
Tall Wheatgrass # C	0-50	1.8	Fair	Good	Good-Ex	Yes	>12”	Moderate	D
Timothy # C	0-25	29.8	Poor	Good	Poor	Yes	>12”	Short	S to M
Alfalfa # C	0-25	5.2	Good	Poor	Fair	No	>12”	Moderate	D
Red Clover # C	0-25	6.3	Fair	Fair	Poor-Fair	No	< 12”	Short	D
Alsike Clover C	0-25	15.6	Fair	Good	Poor-Fair	Yes	< 12”	Short	D

[#] **Varietal selection important**. See current edition of Minnesota Varietal Trials for Select Crops.

[1] PLS is Pure Live Seed.
[2] Do not mix introduced grass species with native grass species.
[3] Do not recommend these species adjacent to native prairie.
[4] Prairie Cordgrass should not exceed 20% of the mixture when combined with Big Bluestem, Indiangrass or Switchgrass.

Flooding ratings: **None** <1 week; **Poor** 1-2 weeks; **Fair** 2-4 weeks; **Good** 4-6 weeks; **Excellent** >6 weeks
Soluble salts ratings: **Poor** 0-2 mmhos; **Fair** 3-4 mmhos; **Good** 5-7 mmhos; **Excellent** 8-16 mmhos
Longevity: **Short** 1-4 Years; **Moderate** 5-10 Years; **Long** > 10 Years
Wet soils: **Yes**-tolerates poorly or very poorly drained. **S**-Tolerates somewhat poorly drained sites.
Rooting Depth: Rooting depths are based on typical growing conditions of the species
S (Shallow) = 0-12 inches, **M** (Medium) = 12-24 inches, **D** (Deep) = 24+ inches

Table 13: Native Forbs Suitable for Contour Buffer (332), Cross Wind Trap (589c) and Filter Strips (393)

The following list identifies native forbs and wildflowers beneficial to wildlife, pollinators, monarchs, and other beneficial insects and support higher volumes of water flow and sedimentation.

Common Name	Scientific Name	Bloom Period	Handle sheet flow	Dense stems to slow water flow	Rooting Depth
Canada Goldenrod	*Solidago canadensis*	Late	Yes	Yes	S
Cup Plant	*Silphium perfoliatum*	Mid	Yes		D
Giant Goldenrod	*Solidago gigantea*	Late	Yes		M to D
Giant Hyssop	*Agastache foeniculum*	Mid	Yes		M
Grass-leaved Goldenrod	*Euthamia graminifolia*	Late	Yes	Yes	D
Ironweed	*Vernonia fasciculata*	Mid	Yes		D
Joe-Pye Weed	*Eutrochium maculatum*	Mid	Yes		S
Marsh Milkweed	*Asclepias incarnata*	Mid	Yes		D
Mountain Mint	*Pycnanthemum virginianum*	Mid	Yes	Yes	D
New England Aster	*Symphyotrichum novae-angliae*	Late	Yes		S
Sneezeweed	*Helenium autumnale*	Late	Yes		S
Stiff Goldenrod	*Solidago rigida*	Late	Yes		D
Panicled Aster	*Symphyotrichum lanceolatum*	Late	Yes		S
White Sage	*Artemisia ludoviciana*	Late	Yes	Yes	D
Wild Bergamot	*Monarda fistulosa*	Mid	Yes	Yes	D
Yellow Coneflower	*Ratibida pinnata*	Mid	Yes		M

STANDARD 512 – PASTURE AND HAYLAND PLANTING SPECIFICATIONS

The following information contains specific requirements, recommendations, references, and guidelines to fully develop and implement a successful pasture or hayland planting.

When selecting or developing a seeding mixture, planners must consider what kind and class of livestock will consume the planned forage stand.

Experienced livestock producers may have preferences for forages, and the planner should consider those options. However, it is possible that the producer has overlooked additional species that might meet their goals.

Species Selection and Mix Development

Seed mixes shall be developed using the Pasture and Hay Planting Seed Tool available under the Pasture and Hayland Planting (512) conservation practice in Section IV of the FOTG. Refer to Tables 16, 17 and 24 for assistance with developing and/or approving seed mixes. If needed, consult an Area Resource Conservationist or Grazing/Rangeland Management Specialist for assistance with developing or certifying seed mixes.

When developing seed mixes, select species based on the following factors:

- Soil Drainage Classes present
- Soil Types present
- Management needs of the producer
- Soil fertility
- Soil pH
- Kind and class of animal (avoid planting species that may cause health concerns)
- Client suggestions.

Table 14 below contains seeding mixes that are adapted to a variety of soil drainage classes and livestock found in Minnesota. The mixes included in Table 14 should cover most situations and are a resource that conservation planners may use to assist with developing pasture and hayland seed mixes. **Do not use switchgrass in mixes consumed by sheep or horses. Do not use alsike clover in mixes consumed by horses.**

Seed mixes must be approved by an Area Resource Conservationist, Grazing/Rangeland Management Specialist, or field office staff with the appropriate Job Approval Authority if the planner does not possess the appropriate level of JAA for the plan.

Fundamentally, a seed mix must provide sufficient perennial ground cover. A rate of **64-120 pure live seeds (PLS) per square foot of perennial species** are required to achieve a dense stand for pasture or hay production. The lower end of this range of seed concentration may be used when seedbed conditions are expected to be optimal. Use higher seeding rates when:

- the seedbed is clumpy/rough or too loose
- when broadcast seeding
- into high residue situations (examples: dead perennial sod or un-tilled corn stalks)
- variable soil drainage classes are present (example: poorly drained and well drained soils need to be covered by the same mix).
- Overall site preparation may be undesirable

General recommendations for seeds/square foot based on site conditions:

- Good site prep with adequate weed control and a firm seed bed: 64-80+ seeds/sq ft
- Broadcast with a spinner-type spreader: 150% of the drilled rate.
    - Broadcast with an airflow machine where seed is evenly spaced (example: terragator) may not need additional seed over drilled rate.
- No-till into high residue (such as dead perennial sod or un-tilled corn stalks): 100+ seeds/sq ft
- Variable soil drainage conditions present: 100+ seeds/sq ft
- Frost seeding legumes: 64+ seeds/sq ft
- Note: These are general recommendations. Exact amounts may vary based on site conditions/characteristics.

Pasture plantings

- Usually contain 4-6 species or more, depending on site-specific conditions and management objectives of the producers. Based on those factors, more or less species may be desirable.
    - Generally, pasture mixes contain 2-4 grass species and 1-3 legume species.
- 30-50% legumes are usually recommended to improve forage quality of the stand and provide good nitrogen fixing capabilities. Legume content in the seed mix will depend upon:
    - Kind and class of livestock
    - Soil conditions/drainage class
    - Soil fertility
    - Producer input
    - Types of legumes used. Most legumes used commonly in plantings (except for birsdfoot trefoil) cause bloat. When using all bloat causing legumes, keep legume content down to less than 40% of the seed mix (on a seeds/square foot basis).

Hayland Plantings

For Hayland plantings, the harvest method must also be considered. Some species do not dry down very easily for dry hay and the producer must have access to harvest equipment and storage facilities that correspond to the forages planted. Forage species that meet nutrient needs and palatability requirements of the livestock shall be selected. Soil drainage class, Forage Suitability Groups, and nutrient status will determine which forage species are adapted to the site. Seed mixes for hay may contain pure stands of grasses or a mixture of grasses and legumes. For ease of management, no more than two grass species per mix for hay production are recommended.

- Match species to producer's operation and harvest/storage capabilities. For example, does the producer make haylage/baleage or harvest everything as dry hay.
- Seed mixes generally contain 60-80% legumes. Exact amount depends on the goals/objectives of the producer.
- Usually contain 2-4 species.
    - Recommend no more than two grasses to ensure the quality of the forage at harvest can be easily managed.
    - Select varieties with similar maturity/growth curves to allow for consistent quality at harvest.
    - Note more or less species may be desirable based on site conditions and the goals/objectives of the producer.

Perennial ryegrass, Italian ryegrass, festulolium, annual ryegrass, and other short-lived perennials and annuals do not meet the 512 standard because they do not live long enough to meet the 5-year lifespan

of the practice. When including short-term perennials or annuals into the seed mix, do not count them towards the required minimum number of seeds/square foot.
Seeding rates are developed on a pure live seed basis. Refer to the Pasture and Hay Planting Seed Tool for assistance with calculating PLS prior to seeding as needed. Also, refer to table 23 in this tech note for assistance calculating PLS based on the purity and total germination of the seed. Make certain the seed mix meets the nutrient requirements of the kind and class of animal, the level of performance desired by the producer, and the harvest and storage method available to the producer.

Native grasses/forbs usually require special seeding equipment. Refer to the section on seeding equipment for details on equipment characteristics and calibration methods.

Variety Selection

Refer to the Recommended Plant Species section at the beginning of this document for more information about variety selection. Table 15 lists some recommended varieties but is not all-encompassing due the large number of varieties present that may work for the various species. Producers should select varieties that:

- have resistance for insects or diseases that may be present,
- that match the harvest schedule and method of the producer,
- match the intended livestock species, class, and utilization method,
- are adapted to climatic and microclimatic conditions in the area to be seeded
- fit the overall management needs of the producer

Avoid species with "Variety Not Stated", if possible. Named varieties have specific documented traits that can be referred to with regards to persistence, production, etc.

Legumes

Use pre-inoculated legume seed with the rhizobia species specific to the legume(s) in the seed mix. If there are two kinds of legumes, each one will be inoculated with its specific rhizobia species.

Legumes may have relatively high amounts of hard seed, which are seeds that do not germinate during the first year, and the amount of hard seed will be specified on the seed tag. In many cases, these seeds may germinate in subsequent years. Increasing the seeding rate for species with higher than 20% hard seed may be desirable to ensure an adequate number of seedlings become established during the seeding year. Do not recommend seeding alfalfa following alfalfa due to problems with autotoxicity. Pasture mixes should not contain more than 50% legumes on a pure live seed basis to avoid bloat in livestock.

Management of New Seedings

Management during the seeding year is critical. Little or no grazing should be expected under normal conditions during the seeding year. Companion crops may be planted with new seedings and removed as hay. If growing conditions are favorable, grazing during the seeding year may be possible late in the season when the plants are dormant, and the ground is dry and/or frozen. Any grazing during the seeding year should result in low utilization/light grazing intensity. Avoid grazing or haying new seedings in the month of September and leave a minimum of six inches of residual height going into the winter. If growing conditions are not favorable, (such as excessive moisture or drought conditions that have affected establishment), then grazing must be deferred until the stand is fully established and conditions improve. If hay was harvested from new seedings, fertilizer may need to be applied based on soil test results to replace the amount of nutrients removed in the harvested hay.

Practice Certification

Use the Pasture and Hay Planting Seed Tool to determine the number of pure live seeds per square foot applied. **A minimum of 64 pure live seeds per square foot of acceptable perennial species are required to meet this practice standard.** When certifying this practice, do not include annual species or short-term perennials, such as annual ryegrass, perennial ryegrass, festulolium, warn season annual grasses, cool season annual grasses, annual legumes, brassicas, etc. when calculating the number of pure live seeds per square foot as these species do not meet the lifespan of this practice for growing conditions in Minnesota. Obtain copies of soil tests from an approved soil testing laboratory that are four years old or less. Also seed tags are required to allow for calculating the amount of pure live seed applied based on the purity and germination of the species in the seed mix.

Table 14: SEEDING MIXES FOR HAYLAND AND PASTURE

Cool Season Introduced Hay Mixes

Soil Drainage Class: Very Poorly to Poorly Drained			
Species	**Variety**	**Seeding Rate (PLS LBS/Acre)**	**% in Mixture**
Creeping Foxtail	Garrison	1	24
Alsike Clover	Named Variety	4	76
Soil Drainage Class: Poorly Drained			
Species	**Variety**	**Seeding Rate (PLS LBS/Acre)**	**% in Mixture**
Timothy	Climax	2	57
Birdsfoot Trefoil[1]	Norcen	5	43

Table 14: Cool Season Introduced Hay Mixes

Soil Drainage Class: Poorly Drained			
Species	**Variety**	**Seeding Rate (PLS LBS/Acre)**	**% in Mixture**
Creeping Foxtail	Named Variety	0.5	13
Timothy	Named Variety	0.5	18
Reed Canary Grass[1]	Named Variety	1	15
Meadow Fescue	Named Variety	3	20
White Clover	Named Variety	1	23
Birdsfoot Trefoil[1]	Named Variety	1	11
Note: This mix is best suited to baleage or silage.			

Soil Drainage Class: Somewhat Poorly to Moderately Well Drained			
Species	**Variety**	**Seeding Rate (PLS LBS/Acre)**	**% in Mixture**
Meadow Bromegrass	Fleet	10	16
Orchard grass	Orion	2	26
Tall Fescue	Bull	6	27
Birdsfoot Trefoil[1]	Roseau	1	7
White Clover	Alice	0.5	8
Red Clover	Medium	3	16

Soil Drainage Class: Moderately Well Drained to Well Drained			
Species	**Variety**	**Seeding Rate (PLS LBS/Acre)**	**% in Mixture**
Orchard grass	Named Variety	0.5	9
Meadow Fescue	Named Variety	6	40
Alfalfa*	Named Variety	8	51

Soil Drainage Class: Moderately Well Drained to Excessively Drained			
Species	**Variety**	**Seeding Rate (PLS LBS/Acre)**	**% in Mixture**
Intermediate Wheatgrass	Named Variety	8.5	23
Meadow Bromegrass	Named Variety	6.5	16
Alfalfa*	Named Variety	9	61

Table 14: Cool Season Introduced Hay Mixes			
Soil Drainage Class: Moderately Well Drained to Excessively Drained			
Species	**Variety**	**Seeding Rate (PLS LBS/Acre)**	**% in Mixture**
Timothy	Named Variety	0.5	19
Orchard grass	Named Variety	0.5	10
Intermediate Wheatgrass**	Named Variety	6	16
Meadow Bromegrass	Named Variety	3	7
Smooth Bromegrass	Named Variety	1.5	6
Alfalfa*	Hay Type	6	41

Cool Season Introduced Pasture Mixes			
Soil Drainage Class: Very Poorly to Poorly Drained			
Species	**Variety**	**Seeding Rate (PLS LBS/Acre)**	**% in Mix**
Creeping Foxtail	Garrison	2	34.6
Timothy	Climax	0.5	11.8
Tall Fescue	Bull	6	26.2
Alsike Clover	Recommended	1.5	20.2
Birdsfoot Trefoil[1]	Norcen	1	7.2
Soil Drainage Class: Very Poorly to Poorly Drained			
Species	**Variety**	**Seeding Rate (PLS LBS/Acre)**	**% in Mix**
Reed Canary Grass[1]	Named Variety	3	21.3
Creeping Foxtail	Named Variety	3	36.5
Timothy	Named Variety	0.5	8.3
Alsike Clover	Named Variety	3	28.4
Ladino Clover	Named Variety	0.5	5.4
Soil Drainage Class: Somewhat Poorly to Moderately Well Drained			
Species	**Variety**	**Seeding Rate (PLS LBS/Acre)**	**% in Mix**
Meadow Bromegrass	Fleet	10	15.8
Orchard grass	Orion	2	25.8
Tall Fescue	Bull	6	26.9
Birdsfoot Trefoil[1]	Roseau	1	7.3
White Clover	Alice	0.5	7.9
Red Clover	Medium	3	16.3

Table 14: Cool Season Introduced Pasture Mixes

Soil Drainage Class: Somewhat Poorly Drained to Well Drained			
Species	**Variety**	**Seeding Rate (PLS LBS/Acre)**	**% in Mix**
Perennial Ryegrass	Named Variety	2	12
Orchard grass	Named Variety	0.5	9
Meadow Fescue	Named Variety	5	31
Tall Fescue	Named Variety	2	12
Red Clover	Named Variety	2	15
White Clover	Named Variety	0.5	11
Birdsfoot Trefoil[1]	Named Variety	1	10

Soil Drainage Class: Moderately Well Drained to Well Drained (All Grass)			
Species	**Variety**	**Seeding Rate (PLS LBS/Acre)**	**% in Mix**
Timothy	Named Variety	0.5	20.6
Orchard grass	Named Variety	0.5	10.9
Intermediate Wheatgrass**	Named Variety	11.5	33.8
Smooth Bromegrass	Named Variety	3.5	15.9
Meadow Bromegrass	Named Variety	7	18.7

Soil Drainage Class: Moderately Well Drained to Well Drained			
Species	**Variety**	**Seeding Rate (PLS LBS/Acre)**	**% in Mix**
Timothy	Named Variety	0.5	18.9
Orchard grass	Named Variety	0.5	10
Intermediate Wheatgrass**	Named Variety	5	13.5
Meadow Bromegrass	Named Variety	5.5	10.4
Smooth Bromegrass	Named Variety	2.5	13.5
Alfalfa*	Grazing Type	5	33.7

Soil Drainage Class: Moderately Well Drained to Well Drained			
Species	**Variety**	**Seeding Rate (PLS LBS/Acre)**	**% in Mix**
Intermediate Wheatgrass**	Named Variety	8.5	25.4
Smooth Bromegrass	Named Variety	6.5	30
Orchard grass	Named Variety	0.5	11.1
Alfalfa*	Grazing Type	4.5	33.6

Table 14: Cool Season Introduced Pasture Mixes			
Soil Drainage Class: Moderately Well Drained to Excessively Drained			
Species	**Variety**	**Seeding Rate (PLS LBS/Acre)**	**% in Mix**
Meadow Bromegrass	Fleet	12	20.3
Intermediate Wheatgrass**	Oahe	10	18.6
Tall Fescue	Fawn	4	19.2
Alfalfa*	Grazing Type	4	18.6
Red Clover	Medium	4	23.3
Soil Drainage Class: Moderately Well Drained to Excessively Drained			
Species	**Variety**	**Seeding Rate (PLS LBS/Acre)**	**% in Mix**
Smooth Brome	Named Variety	5	23.4
Intermediate Wheatgrass**	Named Variety	5	15.2
Tall Fescue	Named Variety	3	23.5
Alfalfa*	Grazing Type	5	37.9

1/ Use birdsfoot trefoil or reed canary grass only in site specific circumstances and when it will not be invasive in native plant communities. Prior approval is required from the Area Grazing/Rangeland Management Specialist or Area Resource Conservationist Specialist.

*Alfalfa requires a minimum soil pH to be 6.5 or greater for optimum production.

**Intermediate wheatgrass requires a minimum soil pH of 6.0 or greater for optimum production.

Table 14: Legume Inter-seeding/Frost Seeding Mixes

Soil Drainage Class: Very Poorly Drained to Well Drained			
Species	**Variety**	**Seeding Rate (PLS LBS/Acre)**	**% in Mix**
Alsike Clover	Named Variety	4	100
Soil Drainage Class: Very Poorly Drained to Well Drained			
Species	**Variety**	**Seeding Rate (PLS LBS/Acre)**	**% in Mix**
Alsike Clover	Named Variety	3	60.4
Red Clover	Named Variety	5	39.6
Soil Drainage Class: Somewhat Poorly Drained to Well Drained			
Species	**Variety**	**Seeding Rate (PLS LBS/Acre)**	**% in Mix**
Red Clover	Named Variety	10	100
Soil Drainage Class: Well Drained to Excessively Drained			
Species	**Variety**	**Seeding Rate (PLS LBS/Acre)**	**% in Mix**
Alfalfa	Named Variety	5	31.3
Birsdfoot Trefoil	Named Variety	5	53
Red Clover	Named Variety	2	23.5

Table 15: RECOMMENDED NATIVE AND INTRODUCED GRASS, FORB AND LEGUME FORAGE VARIETIES.					
Recommended Introduced Grasses		**Recommended Legumes and Forbs**		**Recommended Native Grasses**	
Meadow Brome	Paddock Fleet	**Alfalfa**	Winter hardy grazing varieties	**Big Bluestem**	Bison Sunnyview Rountree Champ
Smooth Brome	Superior, Alpha Manchar, Bravo Carlton, Polar, Jubilee, Saratoga	**White Clover**	Ladino Alice	**Little Bluestem**	Itasca Badlands Blaze Camper
Orchard Grass	Potomac Orion Ambassador	**Alsike Clover**	Named Variety	**Switchgrass**	Dacotah Summer Sunburst Pathfinder Forestburg
Timothy	Climax Colt	**Kura Clover**	Named Variety	**Indiangrass**	Tomahawk Holt Oto
Tall Fescue	Courtenay Select	**Birdsfoot Trefoil[1]**	Roseau	**Side-oats Grama**	Killdeer Pierre
Reed Canary Grass[1]	Palaton Chieftan Venture	**Cicer Milkvetch**	Named Variety	**Western Wheatgrass**	Rodan
Intermediate Wheatgrass	Oahe Manska	**Forage Chickory**	Named Variety		
Tall Wheatgrass	Alkar	**Red Clover**	Named Variety		
Meadow Fescue	Pradel				
Creeping Foxtail	Garrison Retain				

1/ Use birdsfoot trefoil or reed canary grass only in site specific circumstances and when it will not be invasive in native plant communities. Prior approval is required from the Area Grazing Specialist.

Table 16: SELECTED FORAGE SPECIES ADAPTABILITY BY SOIL DRAINAGE CLASS

INTRODUCED GRASSES							
Soil Drainage Classes	**Very Poorly Drained**	**Poorly Drained**	**Somewhat Poorly Drained**	**Moderately Well Drained**	**Well Drained**	**Somewhat Excessively Drained**	**Excessively Drained**
Kentucky Bluegrass	N	N	Y	Y	Y	N	N
Meadow Bromegrass	N	N	Y	Y	Y	Y	Y
Smooth Bromegrass	N	N	Y	Y	Y	Y	Y
Reed Canary grass	Y	Y	Y	Y	Y	Y	Y
Meadow Fescue	N	Y	Y	Y	Y	Y	N
Tall Fescue	N	Y	Y	Y	Y	Y	Y
Creeping Foxtail	Y	Y	N	N	N	N	N
Orchard grass	N	N	Y	Y	Y	N	N
Timothy	N	Y	Y	Y	Y	N	N
Intermediate Wheatgrass	N	N	Y	Y	Y	Y	Y
Pubescent Wheatgrass	N	N	Y	Y	Y	Y	Y
Tall Wheatgrass	N	N	Y	Y	Y	Y	Y
NATIVE GRASSES							
Big Bluestem	N	Y	Y	Y	Y	Y	Y
Little Bluestem	N	N	N	Y	Y	Y	Y
Side Oats Grama	N	N	N	Y	Y	Y	Y
Indiangrass	N	Y	Y	Y	Y	N	N
Switchgrass	N	Y	Y	Y	Y	N	N
Slender Wheatgrass	N	Y	Y	Y	Y	Y	N
Western Wheatgrass	N	Y	Y	Y	Y	Y	N
Canada Wildrye	N	N	N	Y	Y	Y	Y
Virginia Wildrye	N	Y	Y	Y	N	N	N
LEGUMES/FORBS							
Alfalfa	N	N	N	Y	Y	Y	Y
Alsike Clover	Y	Y	Y	Y	Y	N	N
Kura Clover	N	Y	Y	Y	Y	N	N
Ladino Clover	N	Y	Y	Y	Y	N	N
Red Clover	N	N	Y	Y	Y	N	N
White Clover	N	N	Y	Y	Y	N	N
Cicer Milkvetch	N	Y	Y	Y	Y	Y	Y
Birdsfoot Trefoil	N	Y	Y	Y	Y	Y	Y
Forage Chickory	N	N	N	Y	Y	N	N

Table 17: FERTILIZER RECOMMENDATIONS FOR GRASS, GRASS/LEGUME AND ALFALFA FORAGE

Nitrogen Recommendations

	Conditions	N to Apply (units/Ac.)
>20% Legume		Nitrogen not recommended
< 20% Legume	Rotational grazing and adequate rainfall	150
	Continuous grazing and adequate rainfall	100
	Grazing and moderate rainfall	50
	Practice 327, 393, 342	60
	Sandy soils, steep slopes, low precipitation areas	30
	Organic Soils	50

Phosphorous Recommendations for Pasture > 20% Legume

	0-5	6-10	11-15	16-20	21+	Bray
	0-3	**4-7**	**8-11**	**12-15**	**16+**	**Olson**
Yield Goal Tons/Acre						
2	35	25	15	0	0	
3	55	40	25	10	0	
4	70	50	30	10	0	
5	90	65	40	15	0	
6	90	65	40	15	0	
7+	90	65	40	15	0	

Phosphorous Recommendations for Pasture < 20% Legume

	0-5	6-10	11-15	16-20	21+	Bray
	0-3	**4-7**	**8-11**	**12-15**	**16+**	**Olson**
Yield Goal Tons/Acre						
2	40	30	20	10	0	
3	50	40	30	20	0	
4	60	50	40	30	0	
5	70	60	50	40	0	
6	70	60	50	40	0	
7+	70	60	50	40	0	

Phosphorous Recommendations for Alfalfa Hay

	0-5	6-10	11-15	16-20	21+	Bray
	0-3	**4-7**	**8-11**	**12-15**	**16+**	**Olson**
Yield Goal Tons/Acre						
2	45	35	20	10	0	
3	65	45	25	10	0	
4	80	55	30	15	0	
5	95	65	40	15	0	
6	110	80	45	20	0	
7+	125	90	55	25	0	

Table 17: FERTILIZER RECOMMENDATIONS FOR GRASS, GRASS/LEGUME AND ALFALFA FORAGE cont.

Phosphorous Recommendations for Other Legume Hay						
	0-5	6-10	11-15	16-20	21+	Bray
	0-3	4-7	8-11	12-15	16+	Olson
Yield Goal Tons/Ac.						
2	40	30	20	10	0	
3	50	40	30	20	0	
4	60	50	40	30	0	
5	70	60	50	40	0	
6	70	60	50	40	0	
7+	70	60	50	40	0	
Potassium Recommendations for Pasture >20% Legume						
	0-40	41-80	81-120	121-160	161+	Soil Test Result
Yield Goal Tons/Ac.						
2	95	65	40	15	0	
3	140	100	60	20	0	
4	185	135	80	25	0	
5	230	165	100	35	0	
6	230	165	100	35	0	
7+	230	165	100	35	0	
Potassium Recommendations for Pasture <20% Legume						
	0-40	41-80	81-120	121-160	161+	Soil Test Result
Yield Goal Tons/Ac.						
2	90	60	30	0	0	
3	100	70	40	10	0	
4	110	80	50	20	0	
5	120	90	60	30	0	
6	120	90	60	30	0	
7+	120	90	60	30	0	
Potassium Recommendations for Alfalfa Hay						
	0-40	41-80	81-120	121-160	161+	Soil Test Result
Yield Goal Tons/Ac.						
2	145	100	55	10	0	
3	190	130	70	10	0	
4	240	165	90	15	0	
5	290	195	105	15	0	
6	335	230	125	20	0	
7+	380	265	145	20	0	

Table 17: FERTILIZER RECOMMENDATIONS FOR GRASS, GRASS/LEGUME AND ALFALFA FORAGE cont.

Potassium Recommendations for Other Legume Hay						
	0-40	41-80	81-120	121-160	161+	Soil Test Result
Yield Goal Tons/Ac.						
2	90	60	30	0	0	
3	100	70	40	10	0	
4	110	80	50	20	0	
5	120	90	60	30	0	
6	120	90	60	30	0	
7+	120	90	60	30	0	

TABLE 18: FORAGE SPECIES CHARACTERISTICS KEY - Livestock Grazing and Mechanical Harvesting

Increaser, Decreaser & Invader Describe Plant Species Reaction to Increased Livestock Grazing Pressure.	Increaser	Decreaser	Invader	Cattle	Horses	Sheep	Goats	Hay	Haylage	Silage	Baleage	Recovery After Harvest
NATIVE COOL SEASON GRASSES												
American mannagrass												
Fowl bluegrass				P								P
Needlegrass												
Green needlegrass		X		G				G				G
Needleandthread	X			F		P						F
Porcupine grass		X		F		P						G
Mountain brome				G								P
Prairie junegrass		X		G								P
Wheatgrass												
Bearded		X		G								
Bluebunch		X		G								F
Slender		X		G								F
Western		X		G				G				F
Whitetop		X		G								F
Wildrye												
Basin				G								F
Beardless				F								P
Canada		X		F								F
Virginia				F								P
NATIVE WARM SEASON GRASSES												
Alkali sacaton				F								F
Bluestem												
Big		X		G				G				G
Little		X		F								F
Sand		X		G								F
Buffalo grass	X			G								F
Grama												
Blue	X			G								P
Sideoats		X		G				G				F
Indian rice grass		X		G								F
Indiangrass				G				G				G
Inland Saltgrass	X			P								P
Prairie cordgrass				F								F
Prairie sandreed		X		F								F
Prairie dropseed				F								F
Reed canary grass		X		G	G							G
Sand dropseed				P								P
Switchgrass		X		F								F

Increaser, Decreaser & Invader Describe Plant Species Reaction to Increased Livestock Grazing Pressure.	Increaser	Decreaser	Invader	Cattle	Horses	Sheep	Goats	Hay	Haylage	Silage	Baleage	Recovery After Harvest
INTRODUCED COOL SEASON GRASSES												
Bromegrass												
Meadow				G								G
Smooth			X	G								G
Creeping foxtail				G								G
Kentucky bluegrass												
Orchard grass				G								G
Fescue												
Tall												
Meadow			X									
Timothy				F	G							G
Wheatgrass												
Crested				F								F
Intermediate				G								F
Pubescent				G								F
Siberian				F								F
Tall				P								F
Wildrye												
Altai				F								P
Mammoth				P								F
Russian				G								G
LEGUMES												
Alfalfa				G	P							G
Birdsfoot trefoil				G	P							G
Crown vetch					P							
Cicer milkvetch				G	P							G
Clover												
Alsike				G	P							G
Kura				G	P	G						
Ladino (white)				G	P							F
Red				G	P	G						F
Strawberry				G	P							F
Sweet				F	P							P
Sainfoin				G	P							F
Small burnet				F	P							

STANDARD 657 – WETLAND RESTORATION: HERBACEOUS SEEDING SPECIFICATIONS

Vegetative Restoration
Restoration of sites involves planting with appropriate native species. Species planted may vary depending on the type of wetland being restored. Planting specifications should be developed for the different zones where vegetation is to be established. Zones range from shallow open water, deep marsh, shallow/emergent marsh, and sedge/wet meadow. This technical note addresses shallow/emergent marsh fringe and sedge/wet meadow zones. Reference ***Section 5 of the Minnesota Wetland Restoration Guide*** for additional vegetative establishment recommendations: BWSR Wetland Restoration Guide.

Use of Native Seedbank
Maximizing the use of native seedbank is encouraged for wetland projects to promote the establishment of local seed/species. Seedbanks often contain annual species that provide important environmental benefits and often are not included in seed mixes. Survey information from nearby remnant communities can be used as a guide for developing a diversity standard and determining what additional species may be beneficial.

Seeding Wetlands
Wet meadow and sedge meadow seed mixes are designed to be used from the planned edge of open water (pool elevation) to around 1-1.5 feet in elevation depending on soil texture and capillary action of soil. Emergent seed mixes are commonly used in a 6 to 10-foot band that straddles the edge of open water. This strip of emergent seed is typically hand broadcast after water levels have stabilized within the wetland. It is not recommended to seed in areas that will have open water, as most wetland seed will float.

In most cases, wetland seed can be broadcast-seeded followed by rolling or packing, as most wetland seed needs light to germinate. Wetland grasses can be drill-seeded 1/8 to 1/4-inch-deep followed by broadcasting forbs and sedges. If a seed drill is used for installation of wetland seed the drill must be calibrated appropriately to ensure that small seed is planted correctly.

Establishment - Wetlands are typically dormant seeded in the fall or seeded in spring after hydrology conditions have stabilized. An advantage of fall dormant seeding is that forb and sedge seed is allowed to stratify over winter. Emergent wetland species may be seeded but are also commonly planted on the edge of open water and allowed to move to deeper areas on their own. Aggressive wetland species such as reed canary grass, non-native cattails and non-native phragmites need to be thoroughly controlled prior to wetland seeding or plantings will likely not be successful.

Seed Planting Density - Wetland seed mixes shall provide seed densities ranging from 110 to 200 seeds/ft^2. Wet/sedge meadow seed mixes shall contain 20-30 species. Shallow emergent marsh communities may be seeded with mixes of 10-20 species. For recommended species and optional seeding calculator refer to the MN NRCS Home Page at Field Office Technical Guide. Higher diversity mixes will help support pollinators and other invertebrates that play a key role in the health of wetland habitats. Recommended composition of mixes, based on seeds/ft^2:

Emergent Fringe		Sedge Meadow		Wet Meadow	
Grasses	20 – 65%	Grasses	20 – 50%	Grasses	20 – 60%
Sedges - Rushes	20 – 65%	Sedges - Rushes	40 – 70%	Sedges - Rushes	15 – 60%
Forbs	15 – 30%	Forbs	15 – 35%	Forbs	15 – 35%

*-- **NOTE** – Wet/Sedge meadow class wetland restorations that are intended to be short-term in duration, may utilize the following Conservation Practice Standards; Conservation Cover (327) or Restoration of Rare or Declining Natural Communities (643) specifications in lieu of 657 seeding specifications. Species shall be selected from Wet– Mesic drainage classes.

Early Successional Floodplain – The following mixtures are recommended on sites where natural regeneration of woody or herbaceous vegetation is expected to establish over time.

1.	Switchgrass	6.0 lbs/ac		
2.	Virginia Wildrye	3.0 lbs/ac		
	Slender Wheatgrass	5.0 lbs/ac		
	Switchgrass	3.0 lbs/ac		
*-- 3.	Riverbank Wild Rye	0.09 lb/ac		
	Slender Wheatgrass	0.99 lb/ac		
	Virginia Wild Rye	5.19 lbs/ac		
	Fowl Bluegrass	0.42 lb/ac		
	Marsh Milkweed	0.06 lb/ac		
	Autumn Sneezeweed	0.04 lb/ac		
	Tall Coneflower	0.02 lb/ac		
	Blue Vervain	0.09 lb/ac		

Table 21: Key Plant Species for Herbaceous Wetland Restoration

Grasses, forbs, sedges, and rushes are all commonly used as part of herbaceous wetland restoration projects. Species should be selected that are native to the area and well adapted to site conditions. The listed seeds per square foot are a general recommendation for seed mixes.

Shallow/Emergent Wetland Fringe (Saturated soils to water depths up to 6 inches)

Common Name	Botanical Name	Succession	Zone	Seeds/ft^2 at 1.0 lb/ac.	Seeds/ft^2 at 1.0 oz/ac.
Sweet flag	*Acorus americanus*	L	E	2.4	0.2
Water plantain	*Alisma subcordatum*	M	E	22.0	1.5
Marsh milkweed	*Asclepias incarnata*	L	S	1.76	0.1
American slough grass	*Beckmannia syzigachne*	E	S	18.4	1.2
Canada bluejoint grass	*Calamagrostis canadensis*	L	S	102.8	6.4
Slough sedge	*Carex atherodes*	L	E	10.7	0.7
Bottlebrush sedge	*Carex comosa*	L	E	11.0	0.7
Porcupine sedge	*Carex hystericina*	L	E	11.0	0.7
Lake sedge	*Carex lacustris*	L	E	11.8	0.7
Tussock sedge	*Carex stricta*	L	E	19.5	1.2
Fox sedge	*Carex vulpinoidea*	L	E	36.7	2.3
Least spike-rush	*Eleocharis acicularis*	M	E	25.7	1.6
Marsh spike-rush	*Eleocharis palustris*	M	E	18.7	1.2
Joe-pye weed	*Eutrochium maculatum*	L	S	34.9	2.2
Rattlesnake manna grass	*Glyceria canadensis*	M	E	58.8	3.7
Tall/Reed manna grass	*Glyceria grandis*	L	E	29.4	1.8
Soft rush	*Juncus effusus*	L	E	367.3	23.0
Knotted rush	*Juncus nodosus*	L	E	679.9	42.5
Torrey's rush	*Juncus torreyi*	M	E	587.7	36.7
Rice cutgrass	*Leersia oryzoides*	M	S	12.5	0.8
Water smartweed	*Polygonum amphibium*	E	E	2.9	0.2
Great water dock	*Rumex orbiculatus*	M	S	4.3	0.3
Broad-leaved arrowhead	*Sagittaria latifolia*	M	E	22.4	1.4
Hard-stem bulrush	*Schoenoplectus acutus*	L	E	4.7	0.3
River bulrush	*Schoenoplectus fluviatilis*	L	E	1.6	0.1
Three-square bulrush	*Schoenoplectus pungens*	L	E	4.4	0.3
Soft-stem bulrush	*Schoenoplectus tabernaemontani*	M	E	11.4	0.7
Wool grass	*Scirpus cyperinus*	L	S	624.4	39.0
Giant bur-reed	*Sparganium eurycarpum*	L	E	.01	NA

Wet Meadow – Sedge Meadow Wetland (saturated soils dominated by grasses, sedges, and forbs)					
Common Name	**Botanical Name**	**Succession**	**Zone**	**Seeds/ft^2 at 1.0 lb/ac.**	**Seeds/ft^2 at 1.0 oz/ac.**
Blue giant hyssop	*Agastache foeniculum*	L	S	33.4	2.1
Big bluestem	*Andropogon gerardi*	M	S	4.0	0.3
Canada anemone	*Anemone canadensis*	L	S	2.9	0.2
Marsh milkweed	*Asclepias incarnata*	L	S	1.8	0.1
American slough grass	*Beckmannia syzigachne*	E	S	18.4	1.2
Beggar's ticks	*Bidens cernua*	E	S	7.7	0.5
Fringed brome	*Bromus ciliata*	M	S	3.7	0.2
Canada bluejoint grass	*Calamagrostis canadensis*	L	S	102.8	6.4
Bebb's sedge	*Carex bebbii*	L	S	12.5	0.8
Bottlebrush sedge	*Carex comosa*	L	S	11.0	0.7
Wooly sedge	*Carex pellita*	L	E	10.3	0.6
Retrorsa sedge	*Carex retrorsa*	L	S	4.0	0.3
Pointed broom sedge	*Carex scoparia*	L	S	30.9	1.9
Awl-fruited sedge	*Carex stipata*	L	S	12.5	0.8
Tussock sedge	*Carex stricta*	L	E	19.5	1.2
Fox sedge	*Carex vulpinoidea*	E	S	36.7	2.3
Canada tick trefoil	*Desmodium canadense*	M	S	2.1	0.1
Flat-topped aster	*Doellingeria umbellata*	L	S	24.6	1.5
Spike-rush	*Eleocharis acicularis*	M	S	25.7	1.6
Creeping spike-rush	*Eleocharis palustris*	M	S	18.7	1.2
Virginia wild-rye	*Elymus vriginicus*	M	S	2.2	0.1
Boneset	*Eupatorium perfoliatum*	L	S	58.7	3.7
Grass-leaved goldenrod	*Euthamia graminifolia*	M	S	128.5	8.0
Joe-pye weed	*Eutrochium maculatum*	L	S	34.9	2.2
Tall/Reed manna grass	*Glyceria grandis*	L	S	29.4	1.8
Fowl manna grass	*Glyceria striata*	M	S	58.8	3.7
Sneezeweed	*Helenium autumnale*	M	S	47.7	3.0
Sawtooth sunflower	*Helianthus grossesserratus*	L	S	3.7	0.2
Blue-flag iris	*Iris versicolor*	L	S	.32	0.1
Knotted rush	*Juncus nodosus*	L	S	679.9	42.5
Slender rush	*Juncus tenuis*	M	S	367.3	23.0
Torrey's rush	*Juncus torreyii*	M	S	587.7	36.7
Rice-cut grass	*Leersia oryzoides*	M	S	12.5	0.8
Meadow blazingstar	*Liatris ligulistylis*	L	S	4.0	0.3
Tall blazingstar	*Liatris pycnostachya*	L	S	4.0	0.3
Great blue lobelia	*Lobelia siphilitica*	M	S	183.7	11.5
Water horehound	*Lycopus americanus*	E	S	47.7	2.98
Monkeyflower	*Mimulus ringens*	M	S	844.8	52.80
Switchgrass	*Panicum virgatum*	M	S	9.0	0.6
Fowl bluegrass	*Poa palustris*	M	S	47.8	3.0
Mountain mint	*Pycnanthemum virginianum*	L	S	80.8	5.1
Green bulrush	*Scirpus atrovirens*	M	S	168.9	10.6
Wool grass	*Scirpus cyperinus*	L	S	624.4	39.0
Giant goldenrod	*Solidago gigantea*	L	S	91.8	5.7
Indiangrass	*Sorgastrum nutans*	M	S	4.8	0.3

Common Name	Botanical Name	Succession	Zone	Seeds/ft^2 at 1.0 lb/ac.	Seeds/ft^2 at 1.0 oz/ac.
Prairie cordgrass	*Spartina pectinata*	M	S	4.2	0.3
Panicled aster	*Symphyotrichum lanceolatum*	L	S	57.3	3.6
New England aster	*Symphyotrichum novae-angliae*	L	S	24.3	1.5
Red-stem aster	*Symphyotrichum puniceum*	L	S	29.4	1.8
Tall meadow rue	*Thalictrum dasycarpum*	L	S	4.0	0.3
Blue vervain	*Verbena hastata*	M	S	34.1	2.1
Ironweed	*Veronia fasciculata*	L	S	8.8	0.6
Culver's root	*Veronicastrum virginicum*	L	S	293.9	18.3
Golden alexanders	*Zizia aurea*	M	S	4.0	0.3

Succession Definitions:

E = Early successional. Species is an annual or biennial.
M = Middle successional. Species is a short-term perennial or subdominant in the plant community. They generally establish in two years.
L = Late successional. Species is a dominant. Generally slow to establish from seed (3-5 years).

Zone Definitions:

E = Emergent – Plants are partially submerged with leaves, stems, and flowering parts partially or entirely out of the water. They can often grow under saturated conditions and may survive short periods of dry-down. The seed should be placed either on a mud flat or at the water's edge.
S = Saturated – Soils are saturated most of the year, plants will tolerate periodic flooding and dry-down periods. Species categorized as "Saturated" should generally be planted at the water's edge.

Table 22: Varieties and Natural Germplasm for Select Grass and Forbs for All Practice Standards						
Species	**Variety**	**Adaptability Zone Ratings**				
		A	**B**	**C**	**D**	**E**
Switchgrass	Forestburg*, Sunburst*	1	1	1	2	3
	Dacotah*	3	2	1	1	1
	Nebraska 28	1	1	2	3	4
	Pathfinder, Summer, Trailblazer	1	2	3	4	4
Big Bluestem	Bonilla*, Bounty*, Sunnyview	1	1	1	2	3
	Bison*	3	2	1	1	1
	Champ	1	1	2	3	4
	Roundtree	1	2	3	4	4
	Bonanza, Pawnee	1	2	3	3	4
Indiangrass	Tomahawk*	2	1	1	1	1
	Oto	2	3	4	4	4
	Holt	1	1	2	3	4
Sideoats Grama	Pierre*	1	1	1	2	3
	Killdeer*	3	2	1	1	1
	Butte	1	1	2	3	4
	Trailway	1	2	3	4	4
Little Bluestem	Itasca*	1	1	1	1	1
	Badlands*	2	1	1	1	1
	Camper	2	3	3	4	4
	Blaze	2	3	4	4	4
Prairie Sandreed	Goshen	1	1	2	4	4
Prairie Cordgrass	Red River*	Adapted in all zones				
Green Needlegrass	Lodorm*; MN, ND, SD Common*	Adapted in all zones				
Blue Grama	Bad River Ecotype*; ND or SD Common*	Adapted in all zones				
Slender Wheatgrass	Revenue*, Adanac, Primar, Pryor	Adapted in all zones				
Western Wheatgrass	Rodan*, Flintlock, Rosana	Adapted in all zones				
Canada Wildrye	Mandan*	Adapted in all zones				
Pubescent/Intermediate Wheatgrass	Beefmaker, Chief, Clarke, Haymaker, Manifest, Manska, Oahe, Reliant, Slate, Tegmar	Adapted in all zones				
Tall Wheatgrass	Alkar, Jose, Orbit, Platte	Adapted in all zones				
Maximilian Sunflower	Medicine Creek*	Adapted in all zones				
Stiff Sunflower	Bismarck Natural Germplasm*	Adapted in all zones				
Purple Prairie Clover	Bismarck Natural Germplasm*	Adapted in all zones				
Narrow-leaf Purple Coneflower	Bismarck Natural Germplasm*	Adapted in all zones				
Yellow Coneflower	Stillwater	Adapted in all zones				

***** Varieties/natural germplasm materials suitable for Tallgrass Prairie Restoration.

Figure 2: Grass Variety and Natural Germplasm Adaptability Zones and Ratings

1. Adapted with optimum performance.
2. Moderately adapted under haying or grazing, may not always produce mature seed.
3. Poorly adapted.
4. Not adapted

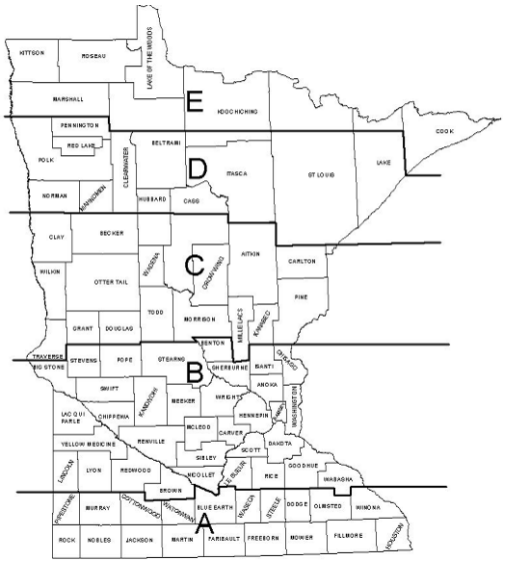


Table 23: Conversion of Bulk Pounds To Pure Live Seed

POUNDS OF GRASS SEED; BULK MATERIAL REQUIRED TO YIELD ONE POUND OF PURE LIVE SEED

Percent Germination

Percent Purity	100	99	98	97	96	95	94	93	92	91	90	89	88	87	86	85	84	83	82	81	80	75	70	65	60	55	50	45	40	35	30	25
100	1.00	1.01	1.02	1.03	1.04	1.05	1.06	1.08	1.09	1.10	1.11	1.12	1.14	1.15	1.16	1.18	1.19	1.20	1.22	1.23	1.25	1.33	1.43	1.54	1.67	1.82	2.00	2.22	2.50	2.86	3.33	4.00
99	1.01	1.02	1.03	1.04	1.05	1.06	1.07	1.09	1.10	1.11	1.12	1.13	1.15	1.16	1.17	1.19	1.20	1.22	1.23	1.25	1.26	1.35	1.44	1.55	1.68	1.84	2.02	2.24	2.53	2.89	3.37	4.04
98	1.02	1.03	1.04	1.05	1.06	1.07	1.09	1.10	1.11	1.12	1.13	1.15	1.16	1.17	1.19	1.20	1.21	1.23	1.24	1.26	1.28	1.36	1.46	1.57	1.70	1.86	2.04	2.27	2.55	2.92	3.40	4.08
97	1.03	1.04	1.05	1.06	1.07	1.09	1.10	1.11	1.12	1.13	1.15	1.16	1.17	1.18	1.20	1.21	1.23	1.24	1.26	1.27	1.29	1.37	1.47	1.59	1.72	1.87	2.06	2.29	2.58	2.95	3.44	4.12
96	1.04	1.05	1.06	1.07	1.09	1.10	1.11	1.12	1.13	1.14	1.16	1.17	1.18	1.20	1.21	1.23	1.24	1.26	1.27	1.29	1.30	1.39	1.49	1.60	1.74	1.89	2.08	2.31	2.60	2.98	3.47	4.17
95	1.05	1.06	1.07	1.09	1.10	1.11	1.12	1.13	1.14	1.16	1.17	1.18	1.20	1.21	1.22	1.24	1.25	1.27	1.28	1.30	1.32	1.40	1.50	1.62	1.75	1.91	2.11	2.34	2.63	3.01	3.51	4.21
94	1.06	1.07	1.09	1.10	1.11	1.12	1.13	1.14	1.16	1.17	1.18	1.20	1.21	1.22	1.24	1.25	1.27	1.28	1.30	1.31	1.33	1.42	1.52	1.64	1.77	1.93	2.13	2.36	2.66	3.04	3.55	4.26
93	1.08	1.09	1.10	1.11	1.12	1.13	1.14	1.16	1.17	1.18	1.19	1.21	1.22	1.24	1.25	1.27	1.28	1.30	1.31	1.33	1.34	1.43	1.54	1.65	1.79	1.96	2.15	2.39	2.69	3.07	3.58	4.30
92	1.09	1.10	1.11	1.12	1.13	1.14	1.16	1.17	1.18	1.19	1.21	1.22	1.24	1.25	1.26	1.28	1.29	1.31	1.33	1.34	1.36	1.45	1.55	1.67	1.81	1.98	2.17	2.42	2.72	3.11	3.62	4.35
91	1.10	1.11	1.12	1.13	1.14	1.16	1.17	1.18	1.19	1.21	1.22	1.23	1.25	1.26	1.28	1.29	1.31	1.32	1.34	1.36	1.37	1.47	1.57	1.69	1.83	2.00	2.20	2.44	2.75	3.14	3.66	4.40
90	1.11	1.12	1.13	1.15	1.16	1.17	1.18	1.19	1.21	1.22	1.23	1.25	1.26	1.28	1.29	1.31	1.32	1.34	1.36	1.37	1.39	1.48	1.59	1.71	1.85	2.02	2.22	2.47	2.78	3.17	3.70	4.44
89	1.12	1.13	1.15	1.16	1.17	1.18	1.20	1.21	1.22	1.23	1.25	1.26	1.28	1.29	1.31	1.32	1.34	1.35	1.37	1.39	1.40	1.50	1.61	1.73	1.87	2.04	2.25	2.50	2.81	3.21	3.75	4.49
88	1.14	1.15	1.16	1.17	1.18	1.20	1.21	1.22	1.24	1.25	1.26	1.28	1.29	1.31	1.32	1.34	1.35	1.37	1.39	1.40	1.42	1.52	1.62	1.75	1.89	2.07	2.27	2.53	2.84	3.25	3.79	4.55
87	1.15	1.16	1.17	1.18	1.20	1.21	1.22	1.24	1.25	1.26	1.28	1.29	1.31	1.32	1.34	1.35	1.37	1.38	1.40	1.42	1.44	1.53	1.64	1.77	1.92	2.09	2.30	2.55	2.87	3.28	3.83	4.60
86	1.16	1.17	1.19	1.20	1.21	1.22	1.24	1.25	1.26	1.28	1.29	1.31	1.32	1.34	1.35	1.37	1.38	1.40	1.42	1.44	1.45	1.55	1.66	1.79	1.94	2.11	2.33	2.58	2.91	3.32	3.88	4.65
85	1.18	1.19	1.20	1.21	1.23	1.24	1.25	1.27	1.28	1.29	1.31	1.32	1.34	1.35	1.37	1.38	1.40	1.42	1.43	1.45	1.47	1.57	1.68	1.81	1.96	2.14	2.35	2.61	2.94	3.36	3.92	4.71
84	1.19	1.20	1.21	1.23	1.24	1.25	1.27	1.28	1.29	1.31	1.32	1.34	1.35	1.37	1.38	1.40	1.42	1.43	1.45	1.47	1.49	1.59	1.70	1.83	1.98	2.16	2.38	2.65	2.98	3.40	3.97	4.76
83	1.20	1.22	1.23	1.24	1.26	1.27	1.28	1.30	1.31	1.32	1.34	1.35	1.37	1.38	1.40	1.42	1.43	1.45	1.47	1.49	1.51	1.61	1.72	1.85	2.01	2.19	2.41	2.68	3.01	3.44	4.02	4.82
82	1.22	1.23	1.24	1.26	1.27	1.28	1.30	1.31	1.33	1.34	1.36	1.37	1.39	1.40	1.42	1.43	1.45	1.47	1.49	1.51	1.52	1.63	1.74	1.88	2.03	2.22	2.44	2.71	3.05	3.48	4.07	4.88
81	1.23	1.25	1.26	1.27	1.29	1.30	1.31	1.33	1.34	1.36	1.37	1.39	1.40	1.42	1.44	1.45	1.47	1.49	1.51	1.52	1.54	1.65	1.76	1.90	2.06	2.24	2.47	2.74	3.09	3.53	4.12	4.94
80	1.25	1.26	1.28	1.29	1.30	1.32	1.33	1.34	1.36	1.37	1.39	1.40	1.42	1.44	1.45	1.47	1.49	1.51	1.52	1.54	1.56	1.67	1.79	1.92	2.08	2.27	2.50	2.78	3.13	3.57	4.17	5.00
75	1.33	1.35	1.36	1.37	1.39	1.40	1.42	1.43	1.45	1.47	1.48	1.50	1.52	1.53	1.55	1.57	1.59	1.61	1.63	1.65	1.67	1.78	1.90	2.05	2.22	2.42	2.67	2.96	3.33	3.81	4.44	5.33
70	1.43	1.44	1.46	1.47	1.49	1.50	1.52	1.54	1.55	1.57	1.59	1.61	1.62	1.64	1.66	1.68	1.70	1.72	1.74	1.76	1.79	1.90	2.04	2.20	2.38	2.60	2.86	3.17	3.57	4.08	4.76	5.71
65	1.54	1.55	1.57	1.59	1.60	1.62	1.64	1.65	1.67	1.69	1.71	1.73	1.75	1.77	1.79	1.81	1.83	1.85	1.88	1.90	1.92	2.05	2.20	2.37	2.56	2.80	3.08	3.42	3.85	4.40	5.13	6.15
60	1.67	1.68	1.70	1.72	1.74	1.75	1.77	1.79	1.81	1.83	1.85	1.87	1.89	1.92	1.94	1.96	1.98	2.01	2.03	2.06	2.08	2.22	2.38	2.56	2.78	3.03	3.33	3.70	4.17	4.76	5.56	6.67
55	1.82	1.84	1.86	1.87	1.89	1.91	1.93	1.96	1.98	2.00	2.02	2.04	2.07	2.09	2.11	2.14	2.16	2.19	2.22	2.24	2.27	2.42	2.60	2.80	3.03	3.31	3.64	4.04	4.55	5.19	6.06	7.27
50	2.00	2.02	2.04	2.06	2.08	2.11	2.13	2.15	2.17	2.20	2.22	2.25	2.27	2.30	2.33	2.35	2.38	2.41	2.44	2.47	2.50	2.67	2.86	3.08	3.33	3.64	4.00	4.44	5.00	5.71	6.67	8.00
45	2.22	2.24	2.27	2.29	2.31	2.34	2.36	2.39	2.42	2.44	2.47	2.50	2.53	2.55	2.58	2.61	2.65	2.68	2.71	2.74	2.78	2.96	3.17	3.42	3.70	4.04	4.44	4.94	5.56	6.35	7.41	8.89
40	2.50	2.53	2.55	2.58	2.60	2.63	2.66	2.69	2.72	2.75	2.78	2.81	2.84	2.87	2.91	2.94	2.98	3.01	3.05	3.09	3.13	3.33	3.57	3.85	4.17	4.55	5.00	5.56	6.25	7.14	8.33	10.00
35	2.86	2.89	2.92	2.95	2.98	3.01	3.04	3.07	3.11	3.14	3.17	3.21	3.25	3.28	3.32	3.36	3.40	3.44	3.48	3.53	3.57	3.81	4.08	4.40	4.76	5.19	5.71	6.35	7.14	8.16	9.52	11.43
30	3.33	3.37	3.40	3.44	3.47	3.51	3.55	3.58	3.62	3.66	3.70	3.75	3.79	3.83	3.88	3.92	3.97	4.02	4.07	4.12	4.17	4.44	4.76	5.13	5.56	6.06	6.67	7.41	8.33	9.52	11.11	13.33
25	4.00	4.04	4.08	4.12	4.17	4.21	4.26	4.30	4.35	4.40	4.44	4.49	4.55	4.60	4.65	4.71	4.76	4.82	4.88	4.94	5.00	5.33	5.71	6.15	6.67	7.27	8.00	8.89	10.00	11.43	13.33	16.00

Table 24: Characteristics of Common Grass, Legume and Forb Species for All Practice Standards

	Growth Habit 1	Drought Tolerance 2	Flood Tolerance 3	Longevity 4	Stand Establishment 5	Moisture Regime 6	Height 7	Growth Form 8	Salt Tolerance	Shade Tolerance	pH	Seeds/ Lb
Introduced Cool - Season Grasses												
Bromegrass												
Meadow	P	Fair	Fair	Medium	Medium	WM - D	M	B	Poor	Intolerant	5.6-8.4	80,000
Smooth	P	Fair	Good	Long	Rapid	M - D	M	S/R	Poor	Intolerant	5.6-8.4	135,000
Creeping foxtail	P	Poor	Good	Long	Medium	W - M	M	S/R	Poor	Intolerant	6.1-8.4	750,000
Fescue												
Tall	P	Good	Good	Medium	Medium	M - D	M	B	Fair	Tolerant	4.5-9.0	210,000
Meadow	P	Good	Good	Medium	Medium	M - D	M	B	Fair	Tolerant	4.5-9.0	235,955
Kentucky bluegrass	P	Poor	Fair	Long	Rapid	WM - DM	S	S/R	Poor	Intolerant	5.6-7.3	1,389,840
Orchard grass	P	Fair	Fair	Medium	Medium	WM – DW	M	B	Poor	Tolerant	5.6-8.4	654,000
Timothy	P	Poor	Good	Short	Rapid	DM - D	M	B	Poor	Moderate	5.1-8.4	1,163200
Red top	P	Poor	Good	Short	Medium	W - M	M	S/R	Poor	Intolerant	4.5-8.0	4,851,200
Wheatgrass												
Intermediate	P	Fair	Fair	Long	Medium	M - D	M	S/R	Fair	Intolerant	7.0-8.5	88,000
Pubescent	P	Fair	Fair	Long	Medium	M – D	M	S/R	Fair	Intolerant	7.0-8.5	88,000
Tall	P	Fair	Good	Medium	Medium	W - M	T	B	Good	Intolerant	7.0-8.5	79,000
Wildrye												
Altai	P	Fair	Good	Medium	Slow	M - D	M	B	Good	Intolerant	5.9-9.0	68,000
Mammoth	P	Good	Poor	Good	Slow	M - D	T	S/R	Fair	Intolerant	5.6-9.0	150,000
Russian	P	Good	Fair	Medium	Medium	M - D	M	B	Fair	Intolerant	6.0-9.0	55,000
Introduced Legumes												
Alfalfa	P	Good	Poor	Medium	Rapid	M - D	M	Crown	Fair	Intolerant	6.0-8.5	226,800
Birdsfoot trefoil	P	Fair	Fair	Medium	Rapid	W - DM	M	Pr	Good	Intolerant	5.8-8.0	369,840
Crown vetch	P	Good	Poor	Long	Medium	M - D	M	Pr	Poor	Intolerant	5.5-7.0	110,000
Cicer milkvetch	P	Good	Fair	Long	Medium	W - DM	T	Pr	Fair	Intolerant	6.0-8.1	134,000
Clover												
Alsike	P	Fair	Good		Medium	W - M	M	Crown	Poor	Intolerant	5.6-7.5	680,000
White	P	Poor	Good	Medium	Medium	WM - DM	S	Crown	Poor	Intolerant	5.2-8.0	800,000
Red	P	Fair	Fair	Short	Medium	WM - DM	M	Crown	Poor	Intolerant	5.5-7.6	275,000
Kura	P	Poor	Fair	Long	Medium	M - DM	S	P/Crown	Poor	Moderate	6.0-7.0	215,000
Sweet	P	Good	Fair	Medium	Rapid	WM - DM	T	Crown	Good	Intolerant	6.5-8.0	285,560

	Growth Habit 1	Drought Tolerance 2	Flood Tolerance 3	Longevity 4	Stand Establishment 5	Moisture Regime 6	Height 7	Growth Form 8	Salt Tolerance	Shade Tolerance	pH	Seeds/ Lb
Native Cool-Season Grasses												
Canada Bluejoint grass	P	Poor	Good	Long	Medium	W - M	T	S/R	Poor	Intolerant	4.5-8.0	4,480,000
Fowl bluegrass	P	Poor	Good	Medium	Med	W - WM	M	B	Poor	Intolerant	4.9-7.5	2,080,000
Fringed brome	P	Fair	Fair	Medium	Rapid	W - WM	M	B	Poor	Tolerant	5.5-7.5	160,000
Green needlegrass	P	Good	Fair	Long	Medium	DM - D	M	B	Fair	Intolerant	6.6-8.4	180,000
Kalms brome	P	Fair	Fair	Short	Medium	WM - M	M	B	Poor	Tolerant	5.5-7.5	128,000
Needle and thread grass	P	Good	Fair	Long	Slow	DM - D	M	B	Poor	Intolerant	6.6-8.4	25,600
Porcupine grass	P	Good	Fair	Long	Slow	DM - D	M	B	Poor	Intolerant	6.6-8.4	57,000
Prairie junegrass	P	Good	Poor	Long	Slow	DM - D	S	B	Poor	Tolerant	6.0-8.0	2,315,000
Reed canary grass	P	Fair	Good	Long	Medium	W - M	T	S/R	Fair	Intolerant	5.5-8.0	530,000
Wheatgrass												
Bearded	P	Good	Good	Short	Rapid	WM - D	M	B	Fair	Intolerant	5.6-9.0	155,000
Bluebunch	P	Good	Poor	Long	Medium	DM-D	T	B	Fair	Intolerant	6.6-8.4	125,680
Slender	P	Good	Good	Short	Rapid	WM - D	M	B	Good	Intolerant	5.6-9.0	155,000
Western	P	Good	Good	Long	Medium	DM - D	M	S/R	Good	Intolerant	4.5-9.0	112,000
Wildrye												
Canada	P	Fair	Fair	Short	Rapid	WM - D	M	B	Good	Tolerant	5.0-7.9	115,000
Virginia	P	Fair	Good	Short	Rapid	W - M	M	B	Fair	Tolerant	5.0-7.0	96,000
Native Warm-Season Grasses												
American slough grass	A	Poor	Good	NR	NR	W – WM	S	B	Fair	Moderate	5.5-7.5	800,000
Bluestem												
Big	P	Fair	Fair	Long	Slow	WM – D	T	R	Fair	Intolerant	6.0-7.5	176,000
Little	P	Good	Poor	Long	Medium	M - D	M	B	Poor	Intolerant	5.0-8.4	286,000
Sand	P	Good	Fair	Long	Slow	DM - D	T	R	Poor	Intolerant	5.6-8.4	100,000
Buffalo grass	P	Good	Fair	Long	Medium	M - D	S	S/St	Good	Intolerant	6.0-8.5	57,600
Grama												
Blue	P	Good	Poor	Long	Medium	DM - D	S	S/St	Fair	Intolerant	6.6-8.4	750,000
Sideoats	P	Good	Poor	Long	Medium	M - D	S	S/R	Poor	Intolerant	5.5-8.5	180,000
Indiangrass	P	Fair	Good	Long	Medium	M - D	T	B	Fair	Intolerant	4.8-8.0	193,000
Prairie cordgrass	P	Poor	Good	Long	Slow	W - M	T	S/R	Poor	Intolerant	6.0-8.5	183,000
Prairie slandered	P	Good	Poor	Long	Slow	D	T	S/R	Poor	Intolerant	5.6-8.4	275,000
Prairie dropseed	P	Fair	Good	Long	Slow	DM - D	M	B	Fair	Intolerant	6.0-7.2	224,000
Rough dropseed	P	Fair	Good	Long	Slow	DM - D	M	B	Fair	Intolerant	NR	480,000
Sand dropseed	P	Good	Poor	Short	Rapid	DM - D	M	B	Fair	Intolerant	6.6-8.0	3,200,000
Switchgrass	P	Fair	Good	Long	Medium	WM - D	T	S/R	Fair	Intolerant	4.5-8.0	390,000

	Growth Habit 1	Drought Tolerance 2	Flood Tolerance 3	Longevity 4	Stand Establishment 5	Moisture Regime 6	Height 7	Growth Form 8	Salt Tolerance	Shade Tolerance	pH	Seeds/ Oz
Native Forbs and Legumes												
American vetch	P	Good	Poor	Medium	Medium	WM – DM	S	Pr	Poor	Intolerant	5.9-7.2	2,052
Aster												
Heath	P	Good	Fair	Long	NR	M - D	M	E/R	NR	Intolerant	NR	200,000
New England	P	NR	Good	Long	Medium	W - DM	T	E/R	NR	Intolerant	5.5-7.0	66,000
Panicled	P	Fair	Fair	Long	Medium	WM - M	T	E	NR	Intolerant	NR	156,000
Silky	P	Good	Poor	Medium	Slow	DM - D	S	E	NR	Intolerant	NR	26,000
Smooth	P	Good	Poor	Long	Medium	WM – DM	T	E	NR	Intolerant	6.0-6.5	55,000
Swamp	P	NR	Good	Long	Medium	W - WM	T	E	NR	Intolerant	NR	80,000
Black-eyed Susan	Bi	Good	Good	Short	Rapid	WM - D	M	E	Poor	Intolerant	6.0-7.0	92,000
Blanket flower	P	Good	Fair	Medium	Medium	W - M	M	E	Poor	Intolerant	5.5-7.9	9,813
Blazingstar												
Dotted	P	Good	Poor	Long	Slow	DM - D	M	E	Poor	Intolerant	6.0-7.8	7,000
Ontario	P	Good	Poor	Long	Medium	DM - D	M	E	Poor	Intolerant	NR	14,000
Meadow	P	Good	Poor	Long	Medium	WM - M	T	E	Poor	Intolerant	6.0-8.5	11,000
Rough	P	Fair	Poor	Long	Medium	M - D	T	E	Poor	Intolerant	NR	16,000
Tall/Prairie	P	Good	Poor	Long	Medium	WM - M	T	E	Poor	Intolerant	6.0-8.5	11,000
Boneset	P	Good	Poor	Medium	Slow	W – WM	T	E	NR	Moderate	NR	160,000
Bush clover	P	Good	Poor	Long	Slow	DM - D	T	E/R	Poor	Intolerant	5.7-8.2	8,000
Canada milkvetch	P	Fair	Good	Short	Medium	WM - DM	T	E/R	Poor	Intolerant	6.0-8.0	17,000
Canada tick trefoil	P	Fair	Fair	Medium	NR	WM - DM	T	E	NR	Tolerant	NR	5,500
Common ox-eye	P	Good	Short	Short	Medium	WM - DM	T	E	NR	Moderate	NR	6,300
Compass plant	P	NR	NR	NR	NR	WM - D	T	E	NR	Moderate	4.5-7.5	660
Coneflower												
Yellow	Bi/P	Good	Fair	Medium	Medium	M - DM	T	E	Poor	Intolerant	5.6-6.8	30,000
Narrow-leaved purple	P	Good	Poor	Long	Slow	DM - D	M	E	Poor	Intolerant	6.5-7.2	7,000
Purple	P	Good	Poor	Long	Medium	WM - DM	T	E	Poor	Intolerant	6.5-7.2	7,000
Culver's root	P	NR	Fair	Long	NR	WM - DM	T	E	NR	Moderate	NR	800,000
Cup plant	P	Poor	Fair	Long	Medium	WM - M	T	E	Poor	Moderate	4.5-7.5	1,400
Evening primrose	Bi/P	Good	Poor	Long	Rapid	WM - D	T	E	Poor	Tolerant	5.0-7.0	90,000
Gentian												
Bottle	Bi	Poor	Poor	Short	Medium	WM - M	M	E	NR	Tolerant	NR	280,000
Cream	Bi	Poor	Poor	Short	Slow	WM - DM	T	E	NR	Tolerant	NR	140,000
Blue Giant hyssop	P	Poor	Fair	Medium	Rapid	M - DM	T	E/R	NR	Moderate	NR	91,000
Golden alexanders	P	NR	NR	NR	NR	WM - DM	T	E	NR	Moderate	NR	11,000

	Growth Habit 1	Drought Tolerance 2	Flood Tolerance 3	Longevity 4	Stand Establishment 5	Moisture Regime 6	Height 7	Growth Form 8	Salt Tolerance	Shade Tolerance	pH	Seeds/ Oz
Goldenrod												
Canada	P	Fair	NR	Long	NR	DM - D	T	E	Poor	Moderate	NR	287,500
Giant	P	NR	Fair	NR	NR	W - M	T	E	Poor	Moderate	NR	250,000
Grass-leaved	P	NR	Fair	NR	NR	W - M	T	E	Poor	Moderate	NR	350,000
Stiff	P	Good	Poor	Medium	Medium	WM - D	T	E	Poor	Moderate	5.0-7.5	41,000
Showy	P	NR	NR	NR	NR	M - D	T	E	NR	NR	NR	95,000
Great blue lobelia	P	Poor	Good	NR	Medium	W - M	T	E	NR	Moderate	NR	500,000
Ground plum	P	Fair	Poor	NR	NR	DM - D	S	Pr	Poor	NR	NR	5,200
Heart-leaved alexander	P	NR	NR	NR	NR	M - DM	M	E	NR	Moderate	NR	12,000
Illinois bundleflower	P	Fair	Poor	Long	Rapid	M - D	T	E	Poor	Intolerant	5.0-8.0	4,200
Ironweed	P	Fair	Good	Short	Rapid	WM - M	T	E	NR	Moderate	5.6-7.0	24,000
Joe pye weed	P	Fair	Good	Medium	NR	W - WM	T	E	NR	Moderate	NR	95,000
Lance-leaved coreopsis	P	Good	Good	Short	Rapid	M - D	M	E/R	Poor	NR	NR	20,000
Leadplant	P	Good	Poor	Long	Slow	M - D	M	E	Poor	Tolerant	5.5-8.0	16,000
Milkweed												
Butterfly	P	Good	Medium	Medium	Slow	M - D	M	E/R	Poor	Intolerant	4.8-6.8	4,300
Common	P	NR	NR	NR	Rapid	WM - D	T	E/R	NR	Intolerant	NR	4,000
Swamp - Marsh	P	Poor	Good	Medium	Slow	W - M	T	E/R	Poor	Intolerant	5.0-8.0	4,800
Whorled	P	Good	Poor	Long	Slow	M - D	M	E/R	NR	Intolerant	NR	11,000
Mountain Mint	P	Good	Poor	NR	NR	WM - M	T	E/R	Poor	Moderate	5.0-7.0	220,000
Partridge pea	A	NR	NR	NR	NR	M - D	M	E	NR	Tolerant	5.5-7.5	2,700
Penstemon												
Large-flowered	P	Good	Poor	Short	Medium	DM - D	M	E	Poor	Moderate	NR	14,000
Foxglove	P	Good	Poor	Short	Medium	M - DM	T	E	Poor	Tolerant	NR	130,000
Prairie cinquefoil	P	Poor	Fair	Short	Slow	DM - D	M	E	Poor	Moderate	NR	230,000
Prairie phlox	P	Good	Poor	Medium	Medium	WM - D	M	E	Poor	NR	NR	19,000
Prairie smoke	P	Good	Poor	Medium	Medium	WM - D	S	Pr	Poor	NR	NR	27,000
Purple prairie clover	P	Good	Fair	Medium	Medium	M - D	M	E	Fair	Moderate	5.5-6.6	18,000
Rattlesnake master	P	Good	Poor	Long	Medium	WM - DM	T	E	Poor	NR	NR	7,500
Sneezeweed	P	Poor	NR	Medium	NR	W - WM	T	E	Poor	Moderate	6.0-7.0	130,000
Spiderwort	P	Fair	Good	NR	NR	WM - D	S	E	NR	NR	NR	10,000
Spotted beebalm	Bi/P	Good	Poor	Short	Medium	M - D	M	E	Poor	Moderate	6.0-8.0	70,000
Sunflower												
Stiff	P	Good	Good	Long	Medium	DM - D	T	E/R	Poor	NR	NR	85,000
Maximilian	P	Poor	Good	Long	Medium	WM - DM	T	E/R	Poor	Intolerant	6.0-8.0	13,000
Giant	P	Poor	Good	Long	Medium	WM - M	T	E/R	Poor	NR	NR	10,000
Sawtooth	P	Fair	Poor	Medium	Medium	WM - DM	T	E/R	Poor	NR	5.8-7.3	10,000
Vervain												
Hoary	P	NR	NR	NR	NR	DM - D	M	E	NR	Moderate	NR	28,000
Blue	P	NR	NR	NR	NR	W - M	T	E	NR	Moderate	6.0-7.0	93,000
White prairie clover	P	Good	Fair	Medium	Medium	M - D	M	E	Fair	Moderate	5.5-6.6	19,000

	Growth Habit 1	Drought Tolerance 2	Flood Tolerance 3	Longevity 4	Stand Establishment 5	Moisture Regime 6	Height 7	Growth Form 8	Salt Tolerance	Shade Tolerance	pH	Seeds/ Oz
White sage	P	Good	NR	Short	Medium	DM - D	T	E/R	Good	Intolerant	6.0-9.0	4,048,000
White wild indigo	P	Fair	Fair	Medium	Medium	WM - D	T	E	NR	Moderate	< 6.8	1,700
Wild bergamot	P	Poor	Good	Medium	Medium	WM - D	T	E/R	Poor	Moderate	6.0-8.0	70,000
Wild lupine	P	Fair	Poor	Short	Medium	DM - D	M	E	Poor	Moderate	4.2-5.6	1,200
Wingstem	P	Poor	Fair	Medium	NR	WM - M	T	E/R	Poor	Tolerant	NR	9,000
Yarrow	P	Good	Good	Long	Medium	WM - D	M	E/R	Fair	Moderate	6.0-8.0	180,000

1. **Growth Habit**
   - A - Annual
   - P – Perennial
   - Bi – Biannual

2. **Drought Tolerance**
   Based on species recommended on an adapted site.

3. **Flood Tolerance**
   - Good - 28-42 days.
   - Fair - 14-28 days.
   - Poor - less than 14 days.
   - Creeping foxtail/ reed canary grass can tolerate up to 60 days.

4. **Longevity**
   - Short - 1-4 years.
   - Medium - 5-10 years.
   - Long – longer than 10 years with proper management.

5. **Stand Establishment**
   - Rapid – usually 1 growing season after planting.
   - Medium – usually 1-2 growing seasons after planting.
   - Slow - usually 2-3 growing seasons after planting.

6. **Moisture Regime**
   - W -Wet
   - WM – Wet Mesic
   - M - Mesic
   - DM – Dry Mesic
   - D – Dry

7. **Height**
   - S – Short <18”
   - M – Mid 18” – 36”
   - T – Tall >36”

8. **Growth Form**
   - B – Bunch
   - S – Sod Forming
   - Pr – Prostrate
   - E - Erect
   - R – Rhizomatous
   - St – Stoloniferous

NR – Not Rated

TABLE 1 - GUIDE[1] TO MULCH MATERIALS, RATES, AND USES

Mulch Material	Quality Standards	Applicable Rate	Depth of Application	Remarks
Organic Mulches				
Grass Hay or Cereal Grain Straw[2]	Air dried; free of undesirable seeds, coarse material and moldy chunks	1.5 – 2 tons / acre	Lightly cover 75 – 90% of surface	Use where mulch effect is to be maintained for more than three months. Subject to blowing unless kept moist or anchored.
Wood Fiber Hydromulch	Natural wood fiber with green dye and dispersing agent added	0.75 – 1 ton / acre	Lightly cover 100% of the surface	Apply with hydromulcher, on 0-2% slopes. Use material with tacking agent for anchoring.
Wood Fiber / Paper Blend hydromulch	Blend of natural wood fiber and paper	0.75 – 1 ton / acre	Lightly cover 100% of the surface	Apply with hydromulcher, on 0-2% slopes. Use material with tacking agent for anchoring.
Wood Long-Fiber Excelsior	Air dried burred wood fibers, 4” or longer	1 – 2 tons / acre		Effective for erosion control. Anchoring usually not required except on critical areas or sites subject to high winds.
Compost	Commonly made from yard waste (leaves, branches, etc.) or manure	Cover 100% of the ground	2 inches	Applied with a blower truck. Anchoring is not required. Excellent for water infiltration and moisture conservation.
Manure	Well shredded, free of coarse materials	8 – 10 tons / acre		May create a problem with weeds. Excellent moisture conserver. Resistant to wind blowing. Do not use manure for water erosion control because surface water may be contaminated. Anchoring is required.

Mulch Material	Quality Standards	Applicable Rate	Depth of Application	Remarks
Organic Mulches				
Sawdust and ground corn cobs	Green or composted, free from weed seeds, trash and coarse materials.	5 tons / acre	2 – 7 inches	Sawdust from hardwood species is preferred to avoid possible toxicity from pitch or resins contained in conifers. Most effective as mulch around ornamentals, small fruits and other nursery stock. Special application rates: fruit trees 5-7"; blueberries 6", vegetables and flowers, 2-3", blackberries and raspberries 4-7"; strawberries 3". Resistance to blowing. Requires 30-35 lbs. N/ton to prevent nitrogen deficiency during decay. Rate based on weight of 24 lbs./cubic foot. Anchoring is required.
Wood Chips or Bark, Shavings	Green or air dried; free of weed seeds, trash and coarse material	10 – 20 tons / acre	2 – 7 inches	Chips or shavings from hardwood species are preferred to avoid possible toxicity from pitch or resins contained in conifers. Has same use and application as sawdust. Requires 20-25 lbs. N/ton to prevent nitrogen deficiency during decay. Resistant to blowing. Decomposes slowly. Anchoring not required.
Cornstalks, shredded or chopped	Air dried; shredded into 8” to 12” lengths	4 – 6 tons/ acre		Effective for erosion control. Slow to decompose. Excellent mulch for field crops. Resistant to wind blowing. Anchoring not required.
Non-Organic Mulches				
Gravel, crushed stone or slag	Washed	90% ground cover	2-3 inches	Use for permanent erosion control; on short slopes; around woody plants and ornamentals.

Mulch Material	Quality Standards	Applicable Rate	Depth of Application	Remarks
Non-Organic Mulches				
Plastic	2-4 mils	Apply according to manufacturer's specifications	Thickness of one layer	Use black for weed control and white for seedling establishment without organic mulch. Release plastic after seeding is established. Effective moisture conservation and weed control for small fruits. Large areas should have holes or slits cut to let rainfall percolate. Anchoring is required.
1. This table is not all-inclusive. There may be additional mulch materials or variations of the materials listed here that would be equivalent to achieve the intended effect.				
2. Mulch used on native seedings should not consist of pasture hay containing introduced species. Use grain straw mulches only.				

TABLE 2- GUIDE TO MULCH ANCHORING MATERIALS		
Anchoring Method or Material	**Kind of Mulch to be Anchored**	**How to Apply**
Mechanical		
Mulch Anchoring Tool or Disk	Grass hay, straw or manure	Apply mulch and pull the mulch anchoring tool or disk over mulch. Use equipment with serrated straight disks spaced 6-10" apart or other suitable equipment. Operate as close to the contour as possible. Mulch material should be tucked into the soil surface 2-3 inches. Use on areas of concentrated flow when velocity is less than approximately 4 feet per second.
Tackifier or Binder	Grass hay, straw, Hydromulch materials	Method and rate of application shall be according to manufacturers' recommendation. Use on areas without concentrated flow. Usually applied with a hydromulcher after seeding has been completed.
Wood Hydromulch Fibers	Grass, hay, straw	Use on areas without concentrated flow. Apply with hydromulcher immediately after seeding. Use 3000 lbs. Of mulch material and apply 750 lbs. of wood fiber with tacking agent per acre.
Asphalt Spray (Emulsion)	Grass hay, straw, compost, wood chips, wood shavings	Apply with suitable equipment to spray asphalt into the mulch as it is applied. Materials shall conform to the requirements of ASTM Specifications D 977. Application rate is 0.05 gallons per square yard (242 gallons per acres). Material shall be non-toxic to plant life. Use on areas without concentrated flow.
Manual		
Polypropylene plastic netting	Grass hay, straw, compost, wood shavings, wood long-fiber excelsior.	Apply plastic netting over mulch immediately after mulching and staple with 11 gauge or heavier wire staples. Installation is the same as for fiber blankets, mats and netting. Use when concentrated flow velocity is less than 4 feet per second.[1]
Wood Excelsior Fiber Blanket: interlocking web of excelsior fibers with netting on one or both sides. 80% of fibers are 8 inches or longer.	Use without additional mulch.	Anchor per manufacturer's specifications. Effective for erosion control on steep slopes and areas of concentrated flow.[1]

Anchoring Method or Material	Kind of Mulch to be Anchored	How to Apply
Chopped straw or straw and coconut fiber blanket: Uniform agricultural wheat straw or straw and coconut fiber between photodegradable or biodegradable netting.	Use without additional mulch.	Anchor per manufacturer's specifications. Effective for erosion control on moderate or steep slopes and low flow channels.[1]
Peg and twine	Grass hay, straw, wood shavings, wood long-fiber excelsior	After mulching, divide the area into blocks approximately 1 square yard in size. Drive 4-6 pegs per block to within 2-3" of soil surface. Anchor mulch by stretching twine between pegs in a criss-cross pattern on each block. Secure twin around each peg with two or more turns. Where mowing is planned, drive pegs flush with the soil surface.
Spade	Grass hay, straw, wood shavings, wood long-fiber excelsior	Cut mulch into soil surface with square edge spade. Make cuts in contour rows spaced 18 inches apart.
Soil and Stones	Plastic	Bury edge of plastic in a trench 6 inches deep. Firm soil over plastic. Use stones to hold plastic down in other places as needed.

1. Placing and anchoring Blankets, Mats and Netting: In areas of concentrated flow, lay the mat parallel to the direction of water flow, with netting on top. Spread blankets evenly without stretching so fibers are in direct contact with the soil. Adjacent strip edges shall be overlapped 2-4 inches. Strip ends shall overlap a minimum of 10 inches with the upgrade strip on top. The upgrade end of each blanket shall be buried at least 6 inches in a vertical slot with the soil pressed firmly against the embedded mat. Additional check slots at 50-foot intervals may be desirable on steep grades or long flow patterns. Strip ends and end overlaps shall be stapled with not more than 12 inches between staples. All other joints and edges shall be stapled at 4 foot intervals. Additional staples shall be placed down the center of each blanket in a diamond pattern at a maximum of 4-foot intervals. Where velocities exceed 5 cfs, place edge and center staples at 2-foot intervals. All staples shall be inserted flush with the ground surface. Staples shall be 11 gauge or heavier U shaped with a 1-2 inch crown. Staple length shall be determined by soil conditions as follows: Highly compacted soils – 6 inch: Friable soils – 8 inches; Loose or sandy soils – 10 inch.

2. In areas of broad sheet flow, mats may be placed either parallel or perpendicular to slope direction. Spread blankets evenly without stretching so fibers are in direct contact with the soil. Adjacent strip edges shall be overlapped 2-4 inches with upgrade strip on top. Ends of each mat shall be stapled with not more than 12 inches between staples. All other edges and mat centers shall be stapled to hold the mat in place with not more than 4-6 feet between staples. All staples shall be inserted flush with the ground surface. Staples shall be 11 gauge or heavier, U shaped with a 1-2 inch crown. Staple length shall be determined by soil condition as listed above.

Chan, Ginger

From: Hytry, Ryan - FPAC-NRCS, MN <ryan.hytry@usda.gov>
Sent: Wednesday, December 27, 2023 6:55 AM
To: Bartsch, Zachary
Subject: RE: [External Email]Seed mixes and restoration technical notes
Attachments: 000_MN_EST_MNNRCS_Seedcalc_ver2_5_seedtag_checkout_May_2021.xlsm

> You don't often get email from ryan.hytry@usda.gov. Learn why this is important

Zach,

For a seeding after a conservation practice/disturbance we recommend a Critical Area Planting, CP342. The requirements for a 342 seeding are minimum 150 seeds per sq foot, minimum 30% sod forming grasses, and grasses shall comprise at least 50% of the mix. The mix we typically recommend is BLM#4 at a rate of 15 pls lbs per acre. If you have a different mix in mind you could run it through the attached seed mix calculator to see if it would meet a 342.

Ryan Hytry
Office: 507-724-5261 ext 109
Cell: 507-318-1978
District Conservationist
Houston County Field Office
USDA/NRCS



United States Department of Agriculture

From: Bartsch, Zachary <zachary.bartsch@stantec.com>
Sent: Thursday, December 21, 2023 3:21 PM
To: Hytry, Ryan - FPAC-NRCS, MN <ryan.hytry@usda.gov>; Bollman, Machele - FPAC-NRCS, IA <machele.bollman@usda.gov>
Subject: [External Email]Seed mixes and restoration technical notes

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Hello Ryan and Machele,

My name is Zach and I am a soil scientist at Stantec. I am reaching out to your NRCS office due to my involvement on a project taking place in Houston County that will disturb soil in cropland, and potentially hayfields. Does your county/district have any recommended or required seed mixes, seed mix calculators, or guides to follow for restoration of previously vegetated areas? For example, I have found the Agronomy Technical Note No. 31 and Mulching Tables (CPS 484) to use in other MN counties. Are there any other publications or resources you might have in addition to these items?

Thank you,

Zach Bartsch
Soil Scientist

Mobile: 701-318-9364
zachary.bartsch@stantec.com

Stantec
3303 Fiechtner Drive Suite 100
Fargo ND 58103



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Seeding Plan

Name **John Diersen** Date **2/12/2024**

Prepared by **RH** Tract No./ Field No. **16637**

Type of Seeding: 342 - Critical Area Planting

Field Area (acres): 2.00

10

Seeding Mix Summary

342 CRITICAL AREA PLANTING - INTRODUCED GRASS/LEGUME

Grasses/ Sedges	Common Name	Scientific Name	PLS Lbs/Acre	PLS Lbs
1	Kentucky Bluegrass	Poa pratensis	2.5	5.00
2	Annual Ryegrass	Lolium multiflorum	3	6.00
3	Perennial Ryegrass	Lolium perenne	4.5	9.00
4	Tall Fescue	Festuca arundinacea	3	6.00
5	Timothy	Phleum pratense	2	4.00
			15.00	**30.00**

Forbs/ Legumes	Common Name	Scientific Name	PLS Lbs/Acre	Total PLS/Lbs
		SUBTOTAL FORBS/Legumes	**0.00**	**0.00**
		DRILLED RATE [1]		

1/ Broadcast seeding rate is 1.5 times the drilled rate.

Seeding Dates

Cool Season Grasses and Legumes. South: Spring 4/1 - 6/1. Late Summer 8/1 - 9/10.

Seeding Method and Seedbed Preparation

Broadcasting via terrigator or vicon seeder: Seedbed should be tilled and clean of all vegetation and weeds, packed and firm enough to make a 1/2' or less boot imprint. Pack or light harrow following application to ensure proper seed to soil contact. Broadcast seed at 1.5 times the recommended drilled rate.

Companion Crop

Oats 3/4-1.25 BU/Ac

Fertilizer is Only Recommended For Introduced Grass or Grass/Legume Mixtures

Nitrogen Recommended (units/ac)	
Grass w/Legume >20%	0
Grass w/Legume <20%	60

Phosphorous Recommendations for Grass w/ >20% Legume (lb/ac)					
Bray	0-5	6-10	11-15	16-20	21+
Olsen	0-3	4-7	8-11	12-15	16+
	35	25	15	0	0
Phosphorous Recommendations for Grass w/ <20% Legume (lb/ac)					
Bray	0-5	6-10	11-15	16-20	21+
Olsen	0-3	4-7	8-11	12-15	16+
	40	30	20	10	0

Potassium Recommendations for Grass w/ >20% Legume (lb/ac)					
Soil Test Result	0-40	41-80	81-120	121-160	161+
	95	65	40	15	0
Potassium Recommendations for Grass w/ <20% Legume (lb/ac)					

Soil Test Result	0-40	41-80	81-120	121-160	161+
	90	60	30	0	0

If soil tests are not available, fertilizer will be applied in equal amounts of Nitrogen-Phosphorus-Potassium (N-P-K) for grass and legume establishment. An example fertilizer blend would be 60-60-60.

Checkout and Certification

Name | Date 2/12/2024

Prepared by | Tract No./ Field No.

Type of Seeding:

Field Area (acres): 10.00

Planting Date 6/28/20

Seeding Mix Summary

327 CONSERVATION COVER - INTRODUCED GRASS/LEGUME

Grasses/ Sedges	Common Name	Scientific Name	PLS Lbs/Acre		PLS Lbs
1	Orchardgrass	Dactylis glomerata	2.728		27.28
2	Int. Wheatgrass	Thinopyrum intermedium	5.58		55.80
		SUBTOTAL GRASS/SEDGE	**8.31**		**83.08**
		DRILLED RATE[1]			

Forbs/ Legumes	Common Name	Scientific Name	PLS Lbs/Acre	Total PLS/Lbs
1	Alfalfa	Medicago sativa	3.038	30.38
		SUBTOTAL FORBS	**3.04**	**30.38**
		DRILLED RATE [1]		

1/ Broadcast seeding rate is 1.5 times the drilled rate.

Seeding Evlauation and Checkout

TOTAL SEEDS/FT	**0.0**	**LOW**
Percent Grass	**#DIV/0!**	**#DIV/0!**
percent forb	**#DIV/0!**	**#DIV/0!**

Chan, Ginger

From: Bartsch, Zachary
Sent: Thursday, December 21, 2023 2:21 PM
To: ryan.hytry@usda.gov; machele.bollman@usda.gov
Subject: Seed mixes and restoration technical notes

Hello Ryan and Machele,

My name is Zach and I am a soil scientist at Stantec. I am reaching out to your NRCS office due to my involvement on a project taking place in Houston County that will disturb soil in cropland, and potentially hayfields. Does your county/district have any recommended or required seed mixes, seed mix calculators, or guides to follow for restoration of previously vegetated areas? For example, I have found the Agronomy Technical Note No. 31 and Mulching Tables (CPS 484) to use in other MN counties. Are there any other publications or resources you might have in addition to these items?

Thank you,

Zach Bartsch
Soil Scientist

Mobile: 701-318-9364
zachary.bartsch@stantec.com

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Fargo ND 58103



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Chan, Ginger

From: Blount, Veronica - FPAC-NRCS, WI <veronica.blount@usda.gov>
Sent: Wednesday, January 3, 2024 8:32 AM
To: Bartsch, Zachary
Subject: RE: 2023 Seed mixes

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Hi Zach!

Yes, these resources are still applicable.

Thank you, have a wonderful 2024.
Ronnie

Veronica "Ronnie" Blount | Soil Conservationist | Sparta Field Office
U.S. Department of Agriculture | Natural Resources Conservation Service
Office 608-269-8136 x. 116 | Cell 608-633-8780

From: Bartsch, Zachary <zachary.bartsch@stantec.com>
Sent: Thursday, December 21, 2023 1:57 PM
To: Blount, Veronica - FPAC-NRCS, WI <veronica.blount@usda.gov>
Subject: 2023 Seed mixes

Hello Veronica,

I hope 2023 has treated you well. I am reaching out again for a similar project to the one you helped me with in 2022.

This project is located in Monroe County, and will disturbing cropland, forest, and grass ditches/right of ways. Are the two resources you provided in 2022 (attached) still acceptable for use to plan seed mixes and erosion control practices?

Thank you,

Zach Bartsch
Soil Scientist

Mobile: 701-318-9364
zachary.bartsch@stantec.com

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From: Blount, Veronica - NRCS, Sparta, WI <veronica.blount@usda.gov>
Sent: Wednesday, January 12, 2022 8:19 AM
To: Bartsch, Zachary <zachary.bartsch@stantec.com>
Subject: RE: [External Email]Seed mixes

Zach,

I apologize for the delay; this one got away from me!

I've attached:

1. The standard mix NRCS seed calculator. You'll need to Enable Macros in the yellow ribbon at the top, then:
    a. For sites where erosion control is the main concern, select "342" in STEP 1. For a habitat/wildlife concern, select "327."
    b. Then, for STEP 2, select "Introduced"
    c. For STEP 3, select a mix from the alternatives listed. On the "342Mixes" tab, you can see the Moisture Regimes they are designed for (Column N)

2. NRCS Standard 484, Mulching. This will describe soil coverage/erosion control considerations.

I hope this is helpful,
Veronica

Veronica Blount | District Conservationist (Acting)| Onalaska & Sparta Field Offices
U.S. Department of Agriculture | Natural Resources Conservation Service
Onalaska Office 608-433-7365 | Sparta Office 608-269-8136 x. 113 | Cell 608-633-8780

From: Bartsch, Zachary <zachary.bartsch@stantec.com>
Sent: Friday, January 7, 2022 9:49 AM
To: Blount, Veronica - NRCS, Sparta, WI <veronica.blount@usda.gov>
Subject: [External Email]Seed mixes

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Veronica,

Apologies for the wait, I had a meeting come up.

One thing I forgot to follow up with was if your office (or Monroe Co) has any erosion control practice guidelines that it would want the project to follow or use?

Thanks,

Zach Bartsch
Soil Scientist

Mobile: 701-318-9364
zachary.bartsch@stantec.com

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From: Bartsch, Zachary
Sent: Thursday, December 21, 2023 12:57 PM
To: Blount, Veronica - NRCS, Sparta, WI
Subject: 2023 Seed mixes
Attachments: 484_WI_CPS_Mulching_2016.pdf; Standard_Mix_Calc2020-30-11.xlsm

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Veronica

Veronica Blount | District Conservationist (Acting)| Onalaska & Sparta Field Offices
U.S. Department of Agriculture | Natural Resources Conservation Service
Onalaska Office 608-433-7365 | Sparta Office 608-269-8136 x. 113 | Cell 608-633-8780

From: Bartsch, Zachary <zachary.bartsch@stantec.com>
Sent: Friday, January 7, 2022 9:49 AM
To: Blount, Veronica - NRCS, Sparta, WI <veronica.blount@usda.gov>
Subject: [External Email]Seed mixes

[External Email]
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Veronica,

Apologies for the wait, I had a meeting come up.

One thing I forgot to follow up with was if your office (or Monroe Co) has any erosion control practice guidelines that it would want the project to follow or use?

Thanks,

Zach Bartsch
Soil Scientist

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TABLE 1 - GUIDE[1] TO MULCH MATERIALS, RATES, AND USES

Mulch Material	Quality Standards	Applicable Rate	Depth of Application	Remarks
Organic Mulches				
Grass Hay or Cereal Grain Straw[2]	Air dried; free of undesirable seeds, coarse material and moldy chunks	1.5 – 2 tons / acre	Lightly cover 75 – 90% of surface	Use where mulch effect is to be maintained for more than three months. Subject to blowing unless kept moist or anchored.
Wood Fiber Hydromulch	Natural wood fiber with green dye and dispersing agent added	0.75 – 1 ton / acre	Lightly cover 100% of the surface	Apply with hydromulcher, on 0-2% slopes. Use material with tacking agent for anchoring.
Wood Fiber / Paper Blend hydromulch	Blend of natural wood fiber and paper	0.75 – 1 ton / acre	Lightly cover 100% of the surface	Apply with hydromulcher, on 0-2% slopes. Use material with tacking agent for anchoring.
Wood Long-Fiber Excelsior	Air dried burred wood fibers, 4” or longer	1 – 2 tons / acre		Effective for erosion control. Anchoring usually not required except on critical areas or sites subject to high winds.
Compost	Commonly made from yard waste (leaves, branches, etc.) or manure	Cover 100% of the ground	2 inches	Applied with a blower truck. Anchoring is not required. Excellent for water infiltration and moisture conservation.
Manure	Well shredded, free of coarse materials	8 – 10 tons / acre		May create a problem with weeds. Excellent moisture conserver. Resistant to wind blowing. Do not use manure for water erosion control because surface water may be contaminated. Anchoring is required.

Mulch Material	Quality Standards	Applicable Rate	Depth of Application	Remarks
Organic Mulches				
Sawdust and ground corn cobs	Green or composted, free from weed seeds, trash and coarse materials.	5 tons / acre	2 – 7 inches	Sawdust from hardwood species is preferred to avoid possible toxicity from pitch or resins contained in conifers. Most effective as mulch around ornamentals, small fruits and other nursery stock. Special application rates: fruit trees 5-7"; blueberries 6", vegetables and flowers, 2-3", blackberries and raspberries 4-7"; strawberries 3". Resistance to blowing. Requires 30-35 lbs. N/ton to prevent nitrogen deficiency during decay. Rate based on weight of 24 lbs./cubic foot. Anchoring is required.
Wood Chips or Bark, Shavings	Green or air dried; free of weed seeds, trash and coarse material	10 – 20 tons / acre	2 – 7 inches	Chips or shavings from hardwood species are preferred to avoid possible toxicity from pitch or resins contained in conifers. Has same use and application as sawdust. Requires 20-25 lbs. N/ton to prevent nitrogen deficiency during decay. Resistant to blowing. Decomposes slowly. Anchoring not required.
Cornstalks, shredded or chopped	Air dried; shredded into 8” to 12” lengths	4 – 6 tons/ acre		Effective for erosion control. Slow to decompose. Excellent mulch for field crops. Resistant to wind blowing. Anchoring not required.
Non-Organic Mulches				
Gravel, crushed stone or slag	Washed	90% ground cover	2-3 inches	Use for permanent erosion control; on short slopes; around woody plants and ornamentals.

Mulch Material	Quality Standards	Applicable Rate	Depth of Application	Remarks
Non-Organic Mulches				
Plastic	2-4 mils	Apply according to manufacturer's specifications	Thickness of one layer	Use black for weed control and white for seedling establishment without organic mulch. Release plastic after seeding is established. Effective moisture conservation and weed control for small fruits. Large areas should have holes or slits cut to let rainfall percolate. Anchoring is required.
1. This table is not all-inclusive. There may be additional mulch materials or variations of the materials listed here that would be equivalent to achieve the intended effect.				
2. Mulch used on native seedings should not consist of pasture hay containing introduced species. Use grain straw mulches only.				

TABLE 2- GUIDE TO MULCH ANCHORING MATERIALS		
Anchoring Method or Material	**Kind of Mulch to be Anchored**	**How to Apply**
Mechanical		
Mulch Anchoring Tool or Disk	Grass hay, straw or manure	Apply mulch and pull the mulch anchoring tool or disk over mulch. Use equipment with serrated straight disks spaced 6-10" apart or other suitable equipment. Operate as close to the contour as possible. Mulch material should be tucked into the soil surface 2-3 inches. Use on areas of concentrated flow when velocity is less than approximately 4 feet per second.
Tackifier or Binder	Grass hay, straw, Hydromulch materials	Method and rate of application shall be according to manufacturers' recommendation. Use on areas without concentrated flow. Usually applied with a hydromulcher after seeding has been completed.
Wood Hydromulch Fibers	Grass, hay, straw	Use on areas without concentrated flow. Apply with hydromulcher immediately after seeding. Use 3000 lbs. Of mulch material and apply 750 lbs. of wood fiber with tacking agent per acre.
Asphalt Spray (Emulsion)	Grass hay, straw, compost, wood chips, wood shavings	Apply with suitable equipment to spray asphalt into the mulch as it is applied. Materials shall conform to the requirements of ASTM Specifications D 977. Application rate is 0.05 gallons per square yard (242 gallons per acres). Material shall be non-toxic to plant life. Use on areas without concentrated flow.
Manual		
Polypropylene plastic netting	Grass hay, straw, compost, wood shavings, wood long-fiber excelsior.	Apply plastic netting over mulch immediately after mulching and staple with 11 gauge or heavier wire staples. Installation is the same as for fiber blankets, mats and netting. Use when concentrated flow velocity is less than 4 feet per second.[1]
Wood Excelsior Fiber Blanket: interlocking web of excelsior fibers with netting on one or both sides. 80% of fibers are 8 inches or longer.	Use without additional mulch.	Anchor per manufacturer's specifications. Effective for erosion control on steep slopes and areas of concentrated flow.[1]

Anchoring Method or Material	Kind of Mulch to be Anchored	How to Apply
Chopped straw or straw and coconut fiber blanket: Uniform agricultural wheat straw or straw and coconut fiber between photodegradable or biodegradable netting.	Use without additional mulch.	Anchor per manufacturer's specifications. Effective for erosion control on moderate or steep slopes and low flow channels.[1]
Peg and twine	Grass hay, straw, wood shavings, wood long-fiber excelsior	After mulching, divide the area into blocks approximately 1 square yard in size. Drive 4-6 pegs per block to within 2-3" of soil surface. Anchor mulch by stretching twine between pegs in a criss-cross pattern on each block. Secure twin around each peg with two or more turns. Where mowing is planned, drive pegs flush with the soil surface.
Spade	Grass hay, straw, wood shavings, wood long-fiber excelsior	Cut mulch into soil surface with square edge spade. Make cuts in contour rows spaced 18 inches apart.
Soil and Stones	Plastic	Bury edge of plastic in a trench 6 inches deep. Firm soil over plastic. Use stones to hold plastic down in other places as needed.

1. Placing and anchoring Blankets, Mats and Netting: In areas of concentrated flow, lay the mat parallel to the direction of water flow, with netting on top. Spread blankets evenly without stretching so fibers are in direct contact with the soil. Adjacent strip edges shall be overlapped 2-4 inches. Strip ends shall overlap a minimum of 10 inches with the upgrade strip on top. The upgrade end of each blanket shall be buried at least 6 inches in a vertical slot with the soil pressed firmly against the embedded mat. Additional check slots at 50-foot intervals may be desirable on steep grades or long flow patterns. Strip ends and end overlaps shall be stapled with not more than 12 inches between staples. All other joints and edges shall be stapled at 4 foot intervals. Additional staples shall be placed down the center of each blanket in a diamond pattern at a maximum of 4-foot intervals. Where velocities exceed 5 cfs, place edge and center staples at 2-foot intervals. All staples shall be inserted flush with the ground surface. Staples shall be 11 gauge or heavier U shaped with a 1-2 inch crown. Staple length shall be determined by soil conditions as follows: Highly compacted soils – 6 inch: Friable soils – 8 inches; Loose or sandy soils – 10 inch.

2. In areas of broad sheet flow, mats may be placed either parallel or perpendicular to slope direction. Spread blankets evenly without stretching so fibers are in direct contact with the soil. Adjacent strip edges shall be overlapped 2-4 inches with upgrade strip on top. Ends of each mat shall be stapled with not more than 12 inches between staples. All other edges and mat centers shall be stapled to hold the mat in place with not more than 4-6 feet between staples. All staples shall be inserted flush with the ground surface. Staples shall be 11 gauge or heavier, U shaped with a 1-2 inch crown. Staple length shall be determined by soil condition as listed above.

USDA NRCS
Natural Resources Conservation Service

SEEDING PLAN
Standard and CRP Mixes

Ver. 1/2015

Landowner:	
TRACT #:	
Field(s):	
Plan by:	
County:	
Date:	
Total Acres:	

○ 327 ○ 342 ○ 512 ○ CRP NRCS STD.

Mix Type: ○ Introduced ○ Native

Mix #

GRASSES					
Common Name	Scientific Name	Intro/ Native	PLS (lbs / Acre)	Total Lbs.	
TOTAL GRASSES:			0.0	0.0	

FORBS/LEGUMES						
Common Name	Scientific Name	Intro/ Native	PLS (lbs / Acre)	Total Lbs.	PLS (oz./Acre)	Total Oz.

USDA NRCS
Natural Resources Conservation Service

SEEDING PLAN
Standard and CRP Mixes

Ver. 1/2015

Landowner:
TRACT #:
Field(s):
Plan by:
County:
Date:
Total Acres:

○ 327 ○ 342 ○ 512 ○ CRP — NRCS STD.
Mix Type: ○ Introduced ○ Native
Mix #

TOTAL FORBS/LEGUMES:						

SEEDING DATES	Spring Seeding	Late Summer	Fall Dormant Seeding		Frost Seeding Allowed?

		lbs/acre	Total lbs.	*OR*	Bu./Acre	Total Bu.
Temporary Cover Crop:						
Companion Crop: ○ YES ○ NO **You must pick Yes or No**						

Fertilizer & Lime		Lbs./Acre	Total Needed (lbs)
80-89 Lime		N/R	
Nitrogen		N/R	
Phosphate (P205)		N/R	
Potash (K20)		N/R	

☐ **General**
☐ **Soil Test**
☐ Fert./Lime Not Needed

N/R=Not Recommended for Pure Native Mixes

Seeding was completed on: _____ **according to the above requirements.**
(Date)

STANDARD 327 MIXES

REVISION DATE: 12/14/2012

criteria: 0

STD	Mix #	std-mix	Common Name	Scientific Name	PLS (oz./A)	PLS (lbs./A)	Seeds/Square Foot	Type	Intro / Native	Poll. (Y/N)		Mix No.	MR	Mix Components
327	(D)-1-Sgrod-Ycone-PPclover-BB-LE	327-(D)-1-Sgrod-Ycone-PPclover	Stiff Goldenrod	Oligoneuron rigidum	1	0.06	1	Forb	N	N		1	D	Sgrod-Ycone-PPclover-BB-LB-Indian-Sgrama
327	(D)-1-Sgrod-Ycone-PPclover-BB-LE	327-(D)-1-Sgrod-Ycone-PPclover	Yellow Coneflower	Ratibida pinnata	1	0.06	0.6	Forb	N	N		1	D	Sgrod-Ycone-PPclover-BB-LB-Indian-Sgrama
327	(D)-1-Sgrod-Ycone-PPclover-BB-LE	327-(D)-1-Sgrod-Ycone-PPclover	Purple Prairie Clover	Dalea purpurea	2	0.13	0.9	Legume	N	N		1	D	Sgrod-Ycone-PPclover-BB-LB-Indian-Sgrama
327	(D)-1-Sgrod-Ycone-PPclover-BB-LE	327-(D)-1-Sgrod-Ycone-PPclover	Big Bluestem	Andropogon gerardii	16	1	3.8	Grass	N	N		1	D	Sgrod-Ycone-PPclover-BB-LB-Indian-Sgrama
327	(D)-1-Sgrod-Ycone-PPclover-BB-LE	327-(D)-1-Sgrod-Ycone-PPclover	Little Bluestem	Schizachyrium scoparium	28	1.75	9.6	Grass	N	N		1	D	Sgrod-Ycone-PPclover-BB-LB-Indian-Sgrama
327	(D)-1-Sgrod-Ycone-PPclover-BB-LE	327-(D)-1-Sgrod-Ycone-PPclover	Indiangrass	Sorghastrum nutans	16	1	4.4	Grass	N	N		1	D	Sgrod-Ycone-PPclover-BB-LB-Indian-Sgrama
327	(D)-1-Sgrod-Ycone-PPclover-BB-LE	327-(D)-1-Sgrod-Ycone-PPclover	Sideoats Grama	Bouteloua curtipendula	28	1.75	5.1	Grass	N	N		1	D	Sgrod-Ycone-PPclover-BB-LB-Indian-Sgrama
327	(DM)-2-LB-Indian-Sgrama-BB-Swit	327-(DM)-2-LB-Indian-Sgrama-B	Little Bluestem	Schizachyrium scoparium	24	1.5	8.2	Grass	N	N		2	DM	LB-Indian-Sgrama-BB-Switch-PPclover-Berg-Y
327	(DM)-2-LB-Indian-Sgrama-BB-Swit	327-(DM)-2-LB-Indian-Sgrama-B	Indiangrass	Sorghastrum nutans	16	1	4	Grass	N	N		2	DM	LB-Indian-Sgrama-BB-Switch-PPclover-Berg-Y
327	(DM)-2-LB-Indian-Sgrama-BB-Swit	327-(DM)-2-LB-Indian-Sgrama-B	Sideoats Grama	Bouteloua curtipendula	16	1	2.9	Grass	N	N		2	DM	LB-Indian-Sgrama-BB-Switch-PPclover-Berg-Y
327	(DM)-2-LB-Indian-Sgrama-BB-Swit	327-(DM)-2-LB-Indian-Sgrama-B	Big Bluestem	Andropogon gerardii	8	0.5	1.5	Grass	N	N		2	DM	LB-Indian-Sgrama-BB-Switch-PPclover-Berg-Y
327	(DM)-2-LB-Indian-Sgrama-BB-Swit	327-(DM)-2-LB-Indian-Sgrama-B	Switchgrass	Panicum virgatum	8	0.5	4.5	Grass	N	N		2	DM	LB-Indian-Sgrama-BB-Switch-PPclover-Berg-Y
327	(DM)-2-LB-Indian-Sgrama-BB-Swit	327-(DM)-2-LB-Indian-Sgrama-B	Purple Prairie Clover	Dalea purpurea	2	0.13	0.9	Legume	N	N		2	DM	LB-Indian-Sgrama-BB-Switch-PPclover-Berg-Y
327	(DM)-2-LB-Indian-Sgrama-BB-Swit	327-(DM)-2-LB-Indian-Sgrama-B	Bergamot	Monarda fistulosa	1	0.06	1.8	Forb	N	N		2	DM	LB-Indian-Sgrama-BB-Switch-PPclover-Berg-Y
327	(DM)-2-LB-Indian-Sgrama-BB-Swit	327-(DM)-2-LB-Indian-Sgrama-B	Yellow Coneflower	Ratibida pinnata	1	0.06	0.6	Forb	N	N		2	DM	LB-Indian-Sgrama-BB-Switch-PPclover-Berg-Y
327	(M)-3-LB-BB-Cwrye-Indian-Switch-	327-(M)-3-LB-BB-Cwrye-Indian-	Little Bluestem	Schizachyrium scoparium	20	1.25	6.8	Grass	N	N		3	M	LB-BB-Cwrye-Indian-Switch-Berg-Besus-Ycon
327	(M)-3-LB-BB-Cwrye-Indian-Switch-	327-(M)-3-LB-BB-Cwrye-Indian-	Big Bluestem	Andropogon gerardii	16	1	3.8	Grass	N	N		3	M	LB-BB-Cwrye-Indian-Switch-Berg-Besus-Ycon
327	(M)-3-LB-BB-Cwrye-Indian-Switch-	327-(M)-3-LB-BB-Cwrye-Indian-	Canada Wildrye	Elymus canadensis	16	1	2.5	Grass	N	N		3	M	LB-BB-Cwrye-Indian-Switch-Berg-Besus-Ycon
327	(M)-3-LB-BB-Cwrye-Indian-Switch-	327-(M)-3-LB-BB-Cwrye-Indian-	Indiangrass	Sorghastrum nutans	16	1	4	Grass	N	N		3	M	LB-BB-Cwrye-Indian-Switch-Berg-Besus-Ycon
327	(M)-3-LB-BB-Cwrye-Indian-Switch-	327-(M)-3-LB-BB-Cwrye-Indian-	Switchgrass	Panicum virgatum	8	0.5	4.5	Grass	N	N		3	M	LB-BB-Cwrye-Indian-Switch-Berg-Besus-Ycon
327	(M)-3-LB-BB-Cwrye-Indian-Switch-	327-(M)-3-LB-BB-Cwrye-Indian-	Bergamot	Monarda fistulosa	1	0.06	1.8	Forb	N	N		3	M	LB-BB-Cwrye-Indian-Switch-Berg-Besus-Ycon
327	(M)-3-LB-BB-Cwrye-Indian-Switch-	327-(M)-3-LB-BB-Cwrye-Indian-	Black-Eyed Susan	Rudbeckia hirta	1	0.06	2.2	Forb	N	N		3	M	LB-BB-Cwrye-Indian-Switch-Berg-Besus-Ycon
327	(M)-3-LB-BB-Cwrye-Indian-Switch-	327-(M)-3-LB-BB-Cwrye-Indian-	Yellow Coneflower	Ratibida pinnata	1	0.06	0.6	Forb	N	N		3	M	LB-BB-Cwrye-Indian-Switch-Berg-Besus-Ycon
327	(WM)-4-BB-Indian-Switch-Vwrye-P	327-(WM)-4-BB-Indian-Switch-V	Big Bluestem	Andropogon gerardii	24	1.5	5.7	Grass	N	N		4	WM	BB-Indian-Switch-Vwrye-Pcord-Berg-NEaster
327	(WM)-4-BB-Indian-Switch-Vwrye-P	327-(WM)-4-BB-Indian-Switch-V	Indiangrass	Sorghastrum nutans	16	1	4	Grass	N	N		4	WM	BB-Indian-Switch-Vwrye-Pcord-Berg-NEaster
327	(WM)-4-BB-Indian-Switch-Vwrye-P	327-(WM)-4-BB-Indian-Switch-V	Switchgrass	Panicum virgatum	16	1	9	Grass	N	N		4	WM	BB-Indian-Switch-Vwrye-Pcord-Berg-NEaster
327	(WM)-4-BB-Indian-Switch-Vwrye-P	327-(WM)-4-BB-Indian-Switch-V	Virginia Wildrye	Elymus virginicus	16	1	1.5	Grass	N	N		4	WM	BB-Indian-Switch-Vwrye-Pcord-Berg-NEaster
327	(WM)-4-BB-Indian-Switch-Vwrye-P	327-(WM)-4-BB-Indian-Switch-V	Prairie Cordgrass	Spartina pectinata	8	0.5	0.6	Grass	N	N		4	WM	BB-Indian-Switch-Vwrye-Pcord-Berg-NEaster
327	(WM)-4-BB-Indian-Switch-Vwrye-P	327-(WM)-4-BB-Indian-Switch-V	Bergamot	Monarda fistulosa	1	0.06	1.8	Forb	N	N		4	WM	BB-Indian-Switch-Vwrye-Pcord-Berg-NEaster
327	(WM)-4-BB-Indian-Switch-Vwrye-P	327-(WM)-4-BB-Indian-Switch-V	New England Aster	Symphyotrichum novae-angliae	1	0.06	1.6	Forb	N	N		4	WM	BB-Indian-Switch-Vwrye-Pcord-Berg-NEaster
327	(WM)-4-BB-Indian-Switch-Vwrye-P	327-(WM)-4-BB-Indian-Switch-V	Yellow Coneflower	Ratibida pinnata	1	0.06	0.6	Forb	N	N		4	WM	BB-Indian-Switch-Vwrye-Pcord-Berg-NEaster
327	(W)-5-Ciron-Cup-Bvervain-Switch-P	327-(W)-5-Ciron-Cup-Bvervain-S	Common Ironweed	Vernonia fasciculata	1	0.06	0.5	Forb	N	N		5	W	Ciron-Cup-Bvervain-Switch-Pcord-BB-Indian-V
327	(W)-5-Ciron-Cup-Bvervain-Switch-P	327-(W)-5-Ciron-Cup-Bvervain-S	Cupplant	Silphium perfoliatum	2	0.13	0.1	Forb	N	N		5	W	Ciron-Cup-Bvervain-Switch-Pcord-BB-Indian-V
327	(W)-5-Ciron-Cup-Bvervain-Switch-P	327-(W)-5-Ciron-Cup-Bvervain-S	Blue Vervain	Verbena hastata	1	0.06	2.1	Forb	N	N		5	W	Ciron-Cup-Bvervain-Switch-Pcord-BB-Indian-V
327	(W)-5-Ciron-Cup-Bvervain-Switch-P	327-(W)-5-Ciron-Cup-Bvervain-S	Switchgrass	Panicum virgatum	16	1	8.9	Grass	N	N		5	W	Ciron-Cup-Bvervain-Switch-Pcord-BB-Indian-V
327	(W)-5-Ciron-Cup-Bvervain-Switch-P	327-(W)-5-Ciron-Cup-Bvervain-S	Prairie Cordgrass	Spartina pectinata	8	0.5	1.2	Grass	N	N		5	W	Ciron-Cup-Bvervain-Switch-Pcord-BB-Indian-V
327	(W)-5-Ciron-Cup-Bvervain-Switch-P	327-(W)-5-Ciron-Cup-Bvervain-S	Big Bluestem	Andropogon gerardii	16	1	3.8	Grass	N	N		5	W	Ciron-Cup-Bvervain-Switch-Pcord-BB-Indian-V
327	(W)-5-Ciron-Cup-Bvervain-Switch-P	327-(W)-5-Ciron-Cup-Bvervain-S	Indiangrass	Sorghastrum nutans	16	1	4.4	Grass	N	N		5	W	Ciron-Cup-Bvervain-Switch-Pcord-BB-Indian-V
327	(W)-5-Ciron-Cup-Bvervain-Switch-P	327-(W)-5-Ciron-Cup-Bvervain-S	Virginia Wildrye	Elymus virginicus	20	1.25	1.9	Grass	N	N		5	W	Ciron-Cup-Bvervain-Switch-Pcord-BB-Indian-V
327	(D)-6-Pcinque-SilkAster-Lplant-Smi	327-(D)-6-Pcinque-SilkAster-Lpl	Prairie Cinquefoil	Potentilla arguta	0.5	0.03	2.3	Forb	N	N		6	D	Pcinque-SilkAster-Lplant-Smint-Ptick-Sgrod-H
327	(D)-6-Pcinque-SilkAster-Lplant-Smi	327-(D)-6-Pcinque-SilkAster-Lpl	Silky Aster	Symphyotrichum sericeum	1	0.06	1.3	Forb	N	N		6	D	Pcinque-SilkAster-Lplant-Smint-Ptick-Sgrod-H
327	(D)-6-Pcinque-SilkAster-Lplant-Smi	327-(D)-6-Pcinque-SilkAster-Lpl	Leadplant	Amorpha canescens	1	0.06	0.4	Legume	N	N		6	D	Pcinque-SilkAster-Lplant-Smint-Ptick-Sgrod-H
327	(D)-6-Pcinque-SilkAster-Lplant-Smi	327-(D)-6-Pcinque-SilkAster-Lpl	Spotted Mint	Monarda punctata	0.5	0.03	1.1	Forb	N	N		6	D	Pcinque-SilkAster-Lplant-Smint-Ptick-Sgrod-H
327	(D)-6-Pcinque-SilkAster-Lplant-Smi	327-(D)-6-Pcinque-SilkAster-Lpl	Prairie Tickseed	Coreopsis palmata	1	0.06	0.3	Forb	N	N		6	D	Pcinque-SilkAster-Lplant-Smint-Ptick-Sgrod-H
327	(D)-6-Pcinque-SilkAster-Lplant-Smi	327-(D)-6-Pcinque-SilkAster-Lpl	Stiff Goldenrod	Oligoneuron rigidum	1	0.06	1	Forb	N	N		6	D	Pcinque-SilkAster-Lplant-Smint-Ptick-Sgrod-H
327	(D)-6-Pcinque-SilkAster-Lplant-Smi	327-(D)-6-Pcinque-SilkAster-Lpl	Hoary Vervain	Verbena stricta	1	0.06	0.7	Forb	N	N		6	D	Pcinque-SilkAster-Lplant-Smint-Ptick-Sgrod-H
327	(D)-6-Pcinque-SilkAster-Lplant-Smi	327-(D)-6-Pcinque-SilkAster-Lpl	Yellow Coneflower	Ratibida pinnata	1	0.06	0.6	Forb	N	N		6	D	Pcinque-SilkAster-Lplant-Smint-Ptick-Sgrod-H
327	(D)-6-Pcinque-SilkAster-Lplant-Smi	327-(D)-6-Pcinque-SilkAster-Lpl	Spiderwort	Tradescantia ohiensis	2	0.13	0.4	Forb	N	N		6	D	Pcinque-SilkAster-Lplant-Smint-Ptick-Sgrod-H
327	(D)-6-Pcinque-SilkAster-Lplant-Smi	327-(D)-6-Pcinque-SilkAster-Lpl	Purple Prairie Clover	Dalea purpurea	4	0.25	1.8	Legume	N	N		6	D	Pcinque-SilkAster-Lplant-Smint-Ptick-Sgrod-H
327	(D)-6-Pcinque-SilkAster-Lplant-Smi	327-(D)-6-Pcinque-SilkAster-Lpl	Big Bluestem	Andropogon gerardii	4	0.25	1	Grass	N	N		6	D	Pcinque-SilkAster-Lplant-Smint-Ptick-Sgrod-H
327	(D)-6-Pcinque-SilkAster-Lplant-Smi	327-(D)-6-Pcinque-SilkAster-Lpl	Sideoats Grama	Bouteloua curtipendula	24	1.5	4.4	Grass	N	N		6	D	Pcinque-SilkAster-Lplant-Smint-Ptick-Sgrod-H
327	(D)-6-Pcinque-SilkAster-Lplant-Smi	327-(D)-6-Pcinque-SilkAster-Lpl	Little Bluestem	Schizachyrium scoparium	24	1.5	8.3	Grass	N	N		6	D	Pcinque-SilkAster-Lplant-Smint-Ptick-Sgrod-H

327	(D)-6-Pcinque-SilkAster-Lplant-Smi	327-(D)-6-Pcinque-SilkAster-Lpl	Indiangrass	Sorghastrum nutans	8	0.5	2.2	Grass	N	N		6	D	Pcinque-SilkAster-Lplant-Smint-Ptick-Sgrod-H
327	(D)-6-Pcinque-SilkAster-Lplant-Smi	327-(D)-6-Pcinque-SilkAster-Lpl	Prairie Junegrass	Koeleria macrantha	2	0.13	6.6	Grass	N	N		6	D	Pcinque-SilkAster-Lplant-Smint-Ptick-Sgrod-H
327	(D)-6-Pcinque-SilkAster-Lplant-Smi	327-(D)-6-Pcinque-SilkAster-Lpl	Sand Dropseed	Sporobolus cryptandrus	2	0.13	15.3	Grass	N	N		6	D	Pcinque-SilkAster-Lplant-Smint-Ptick-Sgrod-H
327	(DM)-7-LB-Sgrama-Indian-Switch-P	327-(DM)-7-LB-Sgrama-Indian-S	Little Bluestem	Schizachyrium scoparium	24	1.5	8.2	Grass	N	N		7	DM	LB-Sgrama-Indian-Switch-PPclover-RHbushclo
327	(DM)-7-LB-Sgrama-Indian-Switch-P	327-(DM)-7-LB-Sgrama-Indian-S	Sideoats Grama	Bouteloua curtipendula	24	1.5	4.4	Grass	N	N		7	DM	LB-Sgrama-Indian-Switch-PPclover-RHbushclo
327	(DM)-7-LB-Sgrama-Indian-Switch-P	327-(DM)-7-LB-Sgrama-Indian-S	Indiangrass	Sorghastrum nutans	8	0.5	2	Grass	N	N		7	DM	LB-Sgrama-Indian-Switch-PPclover-RHbushclo
327	(DM)-7-LB-Sgrama-Indian-Switch-P	327-(DM)-7-LB-Sgrama-Indian-S	Switchgrass	Panicum virgatum	4	0.25	2.2	Grass	N	N		7	DM	LB-Sgrama-Indian-Switch-PPclover-RHbushclo
327	(DM)-7-LB-Sgrama-Indian-Switch-P	327-(DM)-7-LB-Sgrama-Indian-S	Purple Prairie Clover	Dalea purpurea	3	0.19	1.4	Legume	N	N		7	DM	LB-Sgrama-Indian-Switch-PPclover-RHbushclo
327	(DM)-7-LB-Sgrama-Indian-Switch-P	327-(DM)-7-LB-Sgrama-Indian-S	Round-Headed Bushclover	Lespedeza capitata	3	0.19	0.8	Legume	N	N		7	DM	LB-Sgrama-Indian-Switch-PPclover-RHbushclo
327	(DM)-7-LB-Sgrama-Indian-Switch-P	327-(DM)-7-LB-Sgrama-Indian-S	Prairie Junegrass	Koeleria macrantha	2	0.13	6.6	Grass	N	N		7	DM	LB-Sgrama-Indian-Switch-PPclover-RHbushclo
327	(DM)-7-LB-Sgrama-Indian-Switch-P	327-(DM)-7-LB-Sgrama-Indian-S	Prairie Dropseed	Sporobolus heterolepis	2	0.13	0.6	Grass	N	N		7	DM	LB-Sgrama-Indian-Switch-PPclover-RHbushclo
327	(DM)-7-LB-Sgrama-Indian-Switch-P	327-(DM)-7-LB-Sgrama-Indian-S	Bergamot	Monarda fistulosa	1	0.06	1.8	Forb	N	N		7	DM	LB-Sgrama-Indian-Switch-PPclover-RHbushclo
327	(DM)-7-LB-Sgrama-Indian-Switch-P	327-(DM)-7-LB-Sgrama-Indian-S	Leadplant	Amorpha canescens	1	0.06	0.4	Legume	N	N		7	DM	LB-Sgrama-Indian-Switch-PPclover-RHbushclo
327	(DM)-7-LB-Sgrama-Indian-Switch-P	327-(DM)-7-LB-Sgrama-Indian-S	Silky Aster	Symphyotrichum sericeum	1	0.06	0.6	Forb	N	N		7	DM	LB-Sgrama-Indian-Switch-PPclover-RHbushclo
327	(DM)-7-LB-Sgrama-Indian-Switch-P	327-(DM)-7-LB-Sgrama-Indian-S	Spiderwort	Tradescantia ohiensis	1	0.06	0.2	Forb	N	N		7	DM	LB-Sgrama-Indian-Switch-PPclover-RHbushclo
327	(DM)-7-LB-Sgrama-Indian-Switch-P	327-(DM)-7-LB-Sgrama-Indian-S	Stiff Goldenrod	Oligoneuron rigidum	1	0.06	1	Forb	N	N		7	DM	LB-Sgrama-Indian-Switch-PPclover-RHbushclo
327	(DM)-7-LB-Sgrama-Indian-Switch-P	327-(DM)-7-LB-Sgrama-Indian-S	Yellow Coneflower	Ratibida pinnata	1	0.06	0.6	Forb	N	N		7	DM	LB-Sgrama-Indian-Switch-PPclover-RHbushclo
327	(DM)-7-LB-Sgrama-Indian-Switch-P	327-(DM)-7-LB-Sgrama-Indian-S	Rough Blazing Star	Liatris aspera	0.5	0.03	0.2	Forb	N	N		7	DM	LB-Sgrama-Indian-Switch-PPclover-RHbushclo
327	(DM)-7-LB-Sgrama-Indian-Switch-P	327-(DM)-7-LB-Sgrama-Indian-S	Prairie Cinquefoil	Potentilla arguta	0.25	0.02	1.1	Forb	N	N		7	DM	LB-Sgrama-Indian-Switch-PPclover-RHbushclo
327	(M)-8-LB-BB-Indian-Cwrye-Switch-	327-(M)-8-LB-BB-Indian-Cwrye-	Little Bluestem	Schizachyrium scoparium	24	1.5	8.2	Grass	N	N		8	M	LB-BB-Indian-Cwrye-Switch-Oxeyesun-Pblzsta
327	(M)-8-LB-BB-Indian-Cwrye-Switch-	327-(M)-8-LB-BB-Indian-Cwrye-	Big Bluestem	Andropogon gerardii	16	1	3.8	Grass	N	N		8	M	LB-BB-Indian-Cwrye-Switch-Oxeyesun-Pblzsta
327	(M)-8-LB-BB-Indian-Cwrye-Switch-	327-(M)-8-LB-BB-Indian-Cwrye-	Indiangrass	Sorghastrum nutans	16	1	4	Grass	N	N		8	M	LB-BB-Indian-Cwrye-Switch-Oxeyesun-Pblzsta
327	(M)-8-LB-BB-Indian-Cwrye-Switch-	327-(M)-8-LB-BB-Indian-Cwrye-	Canada Wildrye	Elymus canadensis	8	0.5	1.3	Grass	N	N		8	M	LB-BB-Indian-Cwrye-Switch-Oxeyesun-Pblzsta
327	(M)-8-LB-BB-Indian-Cwrye-Switch-	327-(M)-8-LB-BB-Indian-Cwrye-	Switchgrass	Panicum virgatum	8	0.5	4.5	Grass	N	N		8	M	LB-BB-Indian-Cwrye-Switch-Oxeyesun-Pblzsta
327	(M)-8-LB-BB-Indian-Cwrye-Switch-	327-(M)-8-LB-BB-Indian-Cwrye-	Ox-eye Sunflower	Heliopsis helianthoides	1	0.06	0.1	Forb	N	N		8	M	LB-BB-Indian-Cwrye-Switch-Oxeyesun-Pblzsta
327	(M)-8-LB-BB-Indian-Cwrye-Switch-	327-(M)-8-LB-BB-Indian-Cwrye-	Prairie Blazing Star	Liatris pycnostachya	1	0.06	0.3	Forb	N	N		8	M	LB-BB-Indian-Cwrye-Switch-Oxeyesun-Pblzsta
327	(M)-8-LB-BB-Indian-Cwrye-Switch-	327-(M)-8-LB-BB-Indian-Cwrye-	Purple Prairie Clover	Dalea purpurea	1	0.06	0.5	Legume	N	N		8	M	LB-BB-Indian-Cwrye-Switch-Oxeyesun-Pblzsta
327	(M)-8-LB-BB-Indian-Cwrye-Switch-	327-(M)-8-LB-BB-Indian-Cwrye-	Rosinweed	Silphium integrifolium	1	0.06	0.1	Forb	N	N		8	M	LB-BB-Indian-Cwrye-Switch-Oxeyesun-Pblzsta
327	(M)-8-LB-BB-Indian-Cwrye-Switch-	327-(M)-8-LB-BB-Indian-Cwrye-	Bergamot	Monarda fistulosa	0.5	0.03	0.9	Forb	N	N		8	M	LB-BB-Indian-Cwrye-Switch-Oxeyesun-Pblzsta
327	(M)-8-LB-BB-Indian-Cwrye-Switch-	327-(M)-8-LB-BB-Indian-Cwrye-	Black-Eyed Susan	Rudbeckia hirta	0.5	0.03	1.1	Forb	N	N		8	M	LB-BB-Indian-Cwrye-Switch-Oxeyesun-Pblzsta
327	(M)-8-LB-BB-Indian-Cwrye-Switch-	327-(M)-8-LB-BB-Indian-Cwrye-	New England Aster	Symphyotrichum novae-angliae	0.5	0.03	0.8	Forb	N	N		8	M	LB-BB-Indian-Cwrye-Switch-Oxeyesun-Pblzsta
327	(M)-8-LB-BB-Indian-Cwrye-Switch-	327-(M)-8-LB-BB-Indian-Cwrye-	Sky-Blue Aster	Symphyotrichum oolentangiense	0.5	0.03	0.9	Forb	N	N		8	M	LB-BB-Indian-Cwrye-Switch-Oxeyesun-Pblzsta
327	(M)-8-LB-BB-Indian-Cwrye-Switch-	327-(M)-8-LB-BB-Indian-Cwrye-	Yellow Coneflower	Ratibida pinnata	0.5	0.03	0.3	Forb	N	N		8	M	LB-BB-Indian-Cwrye-Switch-Oxeyesun-Pblzsta
327	(M)-8-LB-BB-Indian-Cwrye-Switch-	327-(M)-8-LB-BB-Indian-Cwrye-	Culver's Root	Veronicastrum virginicum	0.25	0.02	4.3	Forb	N	N		8	M	LB-BB-Indian-Cwrye-Switch-Oxeyesun-Pblzsta
327	(WM)-9-BB-Cwrye-Switch-Indian-C	327-(WM)-9-BB-Cwrye-Switch-I	Big Bluestem	Andropogon gerardii	20	1.25	4.8	Grass	N	N		9	WM	BB-Cwrye-Switch-Indian-Cup-Pcord-WWIndig
327	(WM)-9-BB-Cwrye-Switch-Indian-C	327-(WM)-9-BB-Cwrye-Switch-I	Canada Wildrye	Elymus canadensis	16	1	2.5	Grass	N	N		9	WM	BB-Cwrye-Switch-Indian-Cup-Pcord-WWIndig
327	(WM)-9-BB-Cwrye-Switch-Indian-C	327-(WM)-9-BB-Cwrye-Switch-I	Switchgrass	Panicum virgatum	16	1	9	Grass	N	N		9	WM	BB-Cwrye-Switch-Indian-Cup-Pcord-WWIndig
327	(WM)-9-BB-Cwrye-Switch-Indian-C	327-(WM)-9-BB-Cwrye-Switch-I	Indiangrass	Sorghastrum nutans	12	0.75	3	Grass	N	N		9	WM	BB-Cwrye-Switch-Indian-Cup-Pcord-WWIndig
327	(WM)-9-BB-Cwrye-Switch-Indian-C	327-(WM)-9-BB-Cwrye-Switch-I	Cupplant	Silphium perfoliatum	4	0.25	0.1	Forb	N	N		9	WM	BB-Cwrye-Switch-Indian-Cup-Pcord-WWIndig
327	(WM)-9-BB-Cwrye-Switch-Indian-C	327-(WM)-9-BB-Cwrye-Switch-I	Prairie Cordgrass	Spartina pectinata	4	0.25	0.6	Grass	N	N		9	WM	BB-Cwrye-Switch-Indian-Cup-Pcord-WWIndig
327	(WM)-9-BB-Cwrye-Switch-Indian-C	327-(WM)-9-BB-Cwrye-Switch-I	White Wild Indigo	Baptisia alba	1.5	0.09	0.1	Legume	N	N		9	WM	BB-Cwrye-Switch-Indian-Cup-Pcord-WWIndig
327	(WM)-9-BB-Cwrye-Switch-Indian-C	327-(WM)-9-BB-Cwrye-Switch-I	Bergamot	Monarda fistulosa	1	0.06	1.8	Forb	N	N		9	WM	BB-Cwrye-Switch-Indian-Cup-Pcord-WWIndig
327	(WM)-9-BB-Cwrye-Switch-Indian-C	327-(WM)-9-BB-Cwrye-Switch-I	Black-Eyed Susan	Rudbeckia hirta	1	0.06	2.2	Forb	N	N		9	WM	BB-Cwrye-Switch-Indian-Cup-Pcord-WWIndig
327	(WM)-9-BB-Cwrye-Switch-Indian-C	327-(WM)-9-BB-Cwrye-Switch-I	Common Ironweed	Vernonia fasciculata	1	0.06	0.4	Forb	N	N		9	WM	BB-Cwrye-Switch-Indian-Cup-Pcord-WWIndig
327	(WM)-9-BB-Cwrye-Switch-Indian-C	327-(WM)-9-BB-Cwrye-Switch-I	Golden Alexanders	Zizia aurea	1	0.06	0.2	Forb	N	N		9	WM	BB-Cwrye-Switch-Indian-Cup-Pcord-WWIndig
327	(WM)-9-BB-Cwrye-Switch-Indian-C	327-(WM)-9-BB-Cwrye-Switch-I	New England Aster	Symphyotrichum novae-angliae	1	0.06	1.6	Forb	N	N		9	WM	BB-Cwrye-Switch-Indian-Cup-Pcord-WWIndig
327	(WM)-9-BB-Cwrye-Switch-Indian-C	327-(WM)-9-BB-Cwrye-Switch-I	Prairie Blazing Star	Liatris pycnostachya	1	0.06	0.4	Forb	N	N		9	WM	BB-Cwrye-Switch-Indian-Cup-Pcord-WWIndig
327	(WM)-9-BB-Cwrye-Switch-Indian-C	327-(WM)-9-BB-Cwrye-Switch-I	Yellow Coneflower	Ratibida pinnata	1	0.06	0.6	Forb	N	N		9	WM	BB-Cwrye-Switch-Indian-Cup-Pcord-WWIndig
327	(WM)-9-BB-Cwrye-Switch-Indian-C	327-(WM)-9-BB-Cwrye-Switch-I	Great St. John's Wort	Hypericum ascyron	0.25	0.02	1.1	Forb	N	N		9	WM	BB-Cwrye-Switch-Indian-Cup-Pcord-WWIndig
327	(W)-10-Croot-Ciron-Cup-MM-Jpye-	327-(W)-10-Croot-Ciron-Cup-M	Culver's Root	Veronicastrum virginicum	0.25	0.02	4.3	Forb	N	N		10	W	Croot-Ciron-Cup-MM-Jpye-Bvervain-Shwgroo
327	(W)-10-Croot-Ciron-Cup-MM-Jpye-	327-(W)-10-Croot-Ciron-Cup-M	Common Ironweed	Vernonia fasciculata	0.5	0.03	0.2	Forb	N	N		10	W	Croot-Ciron-Cup-MM-Jpye-Bvervain-Shwgroo
327	(W)-10-Croot-Ciron-Cup-MM-Jpye-	327-(W)-10-Croot-Ciron-Cup-M	Cupplant	Silphium perfoliatum	2	0.13	0.1	Forb	N	N		10	W	Croot-Ciron-Cup-MM-Jpye-Bvervain-Shwgroo
327	(W)-10-Croot-Ciron-Cup-MM-Jpye-	327-(W)-10-Croot-Ciron-Cup-M	Marsh Milkweed	Asclepias incarnata	2	0.13	0.2	Forb	N	N		10	W	Croot-Ciron-Cup-MM-Jpye-Bvervain-Shwgroo
327	(W)-10-Croot-Ciron-Cup-MM-Jpye-	327-(W)-10-Croot-Ciron-Cup-M	Joe-Pye Weed	Eutrochium maculatum	1	0.06	2.2	Forb	N	N		10	W	Croot-Ciron-Cup-MM-Jpye-Bvervain-Shwgroo
327	(W)-10-Croot-Ciron-Cup-MM-Jpye-	327-(W)-10-Croot-Ciron-Cup-M	Blue Vervain	Verbena hastata	2	0.13	4.3	Forb	N	N		10	W	Croot-Ciron-Cup-MM-Jpye-Bvervain-Shwgroo
327	(W)-10-Croot-Ciron-Cup-MM-Jpye-	327-(W)-10-Croot-Ciron-Cup-M	Showy Tick Trefoil	Desmodium canadense	3	0.19	0.3	Forb	N	N		10	W	Croot-Ciron-Cup-MM-Jpye-Bvervain-Shwgroo
327	(W)-10-Croot-Ciron-Cup-MM-Jpye-	327-(W)-10-Croot-Ciron-Cup-M	Boneset	Eupatorium perfoliatum	0.5	0.03	1.8	Forb	N	N		10	W	Croot-Ciron-Cup-MM-Jpye-Bvervain-Shwgroo

327	(W)-10-Croot-Ciron-Cup-MM-Jpye-	327-(W)-10-Croot-Ciron-Cup-M	Golden Alexanders	Zizia aurea	2	0.13	0.5	Forb	N	N		10	W	Croot-Ciron-Cup-MM-Jpye-Bvervain-Shwgroc
327	(W)-10-Croot-Ciron-Cup-MM-Jpye-	327-(W)-10-Croot-Ciron-Cup-M	Switchgrass	Panicum virgatum	8	0.5	4.5	Grass	N	N		10	W	Croot-Ciron-Cup-MM-Jpye-Bvervain-Shwgroc
327	(W)-10-Croot-Ciron-Cup-MM-Jpye-	327-(W)-10-Croot-Ciron-Cup-M	Prairie Cordgrass	Spartina pectinata	4	0.25	0.6	Grass	N	N		10	W	Croot-Ciron-Cup-MM-Jpye-Bvervain-Shwgroc
327	(W)-10-Croot-Ciron-Cup-MM-Jpye-	327-(W)-10-Croot-Ciron-Cup-M	Big Bluestem	Andropogon gerardii	4	0.25	1	Grass	N	N		10	W	Croot-Ciron-Cup-MM-Jpye-Bvervain-Shwgroc
327	(W)-10-Croot-Ciron-Cup-MM-Jpye-	327-(W)-10-Croot-Ciron-Cup-M	Canada Wildrye	Elymus canadensis	8	0.5	1	Grass	N	N		10	W	Croot-Ciron-Cup-MM-Jpye-Bvervain-Shwgroc
327	(W)-10-Croot-Ciron-Cup-MM-Jpye-	327-(W)-10-Croot-Ciron-Cup-M	Indiangrass	Sorghastrum nutans	4	0.25	1.1	Grass	N	N		10	W	Croot-Ciron-Cup-MM-Jpye-Bvervain-Shwgroc
327	(W)-10-Croot-Ciron-Cup-MM-Jpye-	327-(W)-10-Croot-Ciron-Cup-M	Fowl Mannagrass	Glyceria striata	4	0.25	14.7	Grass	N	N		10	W	Croot-Ciron-Cup-MM-Jpye-Bvervain-Shwgroc
327	(W)-10-Croot-Ciron-Cup-MM-Jpye-	327-(W)-10-Croot-Ciron-Cup-M	Fox Sedge	Carex vulpinoidea	4	0.25	9.2	Sedge	N	N		10	W	Croot-Ciron-Cup-MM-Jpye-Bvervain-Shwgroc
327	(DM)-11-Pcinque-Lplant-SilkAster-I	327-(DM)-11-Pcinque-Lplant-Sil	Prairie Cinquefoil	Potentilla arguta	0.5	0.03	2.2	Forb	N	N		11	DM	Pcinque-Lplant-SilkAster-PPclover-Rblzstar-W
327	(DM)-11-Pcinque-Lplant-SilkAster-I	327-(DM)-11-Pcinque-Lplant-Sil	Leadplant	Amorpha canescens	1	0.06	0.4	Legume	N	N		11	DM	Pcinque-Lplant-SilkAster-PPclover-Rblzstar-W
327	(DM)-11-Pcinque-Lplant-SilkAster-I	327-(DM)-11-Pcinque-Lplant-Sil	Silky Aster	Symphyotrichum sericeum	1	0.06	1.3	Forb	N	N		11	DM	Pcinque-Lplant-SilkAster-PPclover-Rblzstar-W
327	(DM)-11-Pcinque-Lplant-SilkAster-I	327-(DM)-11-Pcinque-Lplant-Sil	Purple Prairie Clover	Dalea purpurea	4	0.25	1.8	Legume	N	N		11	DM	Pcinque-Lplant-SilkAster-PPclover-Rblzstar-W
327	(DM)-11-Pcinque-Lplant-SilkAster-I	327-(DM)-11-Pcinque-Lplant-Sil	Rough Blazing Star	Liatris aspera	1	0.06	0.3	Forb	N	N		11	DM	Pcinque-Lplant-SilkAster-PPclover-Rblzstar-W
327	(DM)-11-Pcinque-Lplant-SilkAster-I	327-(DM)-11-Pcinque-Lplant-Sil	Wild Lupine	Lupinus perennis	6	0.38	0.1	Legume	N	N		11	DM	Pcinque-Lplant-SilkAster-PPclover-Rblzstar-W
327	(DM)-11-Pcinque-Lplant-SilkAster-I	327-(DM)-11-Pcinque-Lplant-Sil	Bergamot	Monarda fistulosa	0.5	0.03	0.9	Forb	N	N		11	DM	Pcinque-Lplant-SilkAster-PPclover-Rblzstar-W
327	(DM)-11-Pcinque-Lplant-SilkAster-I	327-(DM)-11-Pcinque-Lplant-Sil	Yellow Coneflower	Ratibida pinnata	1	0.06	0.6	Forb	N	N		11	DM	Pcinque-Lplant-SilkAster-PPclover-Rblzstar-W
327	(DM)-11-Pcinque-Lplant-SilkAster-I	327-(DM)-11-Pcinque-Lplant-Sil	Stiff Goldenrod	Oligoneuron rigidum	1	0.06	1.1	Forb	N	N		11	DM	Pcinque-Lplant-SilkAster-PPclover-Rblzstar-W
327	(DM)-11-Pcinque-Lplant-SilkAster-I	327-(DM)-11-Pcinque-Lplant-Sil	Pale Purple Coneflower	Echinacea pallida	2	0.13	0.2	Forb	N	N		11	DM	Pcinque-Lplant-SilkAster-PPclover-Rblzstar-W
327	(DM)-11-Pcinque-Lplant-SilkAster-I	327-(DM)-11-Pcinque-Lplant-Sil	Sideoats Grama	Bouteloua curtipendula	20	1.25	3.7	Grass	N	N		11	DM	Pcinque-Lplant-SilkAster-PPclover-Rblzstar-W
327	(DM)-11-Pcinque-Lplant-SilkAster-I	327-(DM)-11-Pcinque-Lplant-Sil	Little Bluestem	Schizachyrium scoparium	24	1.5	8.3	Grass	N	N		11	DM	Pcinque-Lplant-SilkAster-PPclover-Rblzstar-W
327	(DM)-11-Pcinque-Lplant-SilkAster-I	327-(DM)-11-Pcinque-Lplant-Sil	Indiangrass	Sorghastrum nutans	8	0.5	2.2	Grass	N	N		11	DM	Pcinque-Lplant-SilkAster-PPclover-Rblzstar-W
327	(DM)-11-Pcinque-Lplant-SilkAster-I	327-(DM)-11-Pcinque-Lplant-Sil	Prairie Junegrass	Koeleria macrantha	1	0.06	3.3	Grass	N	N		11	DM	Pcinque-Lplant-SilkAster-PPclover-Rblzstar-W
327	(DM)-11-Pcinque-Lplant-SilkAster-I	327-(DM)-11-Pcinque-Lplant-Sil	Prairie Dropseed	Sporobolus heterolepis	2	0.13	0.7	Grass	N	N		11	DM	Pcinque-Lplant-SilkAster-PPclover-Rblzstar-W
327	(DM)-11-Pcinque-Lplant-SilkAster-I	327-(DM)-11-Pcinque-Lplant-Sil	Switchgrass	Panicum virgatum	4	0.25	2.2	Grass	N	N		11	DM	Pcinque-Lplant-SilkAster-PPclover-Rblzstar-W
327	(DM)-12-LB-Sgrama-0-Swort-PPclo	327-(DM)-12-LB-Sgrama-0-Swo	Little Bluestem	Schizachyrium scoparium	16	1	5.5	Grass	N	Y		12	DM	LB-Sgrama-0-Swort-PPclover-Ycone-Pblzstar-
327	(DM)-12-LB-Sgrama-0-Swort-PPclo	327-(DM)-12-LB-Sgrama-0-Swo	Sideoats Grama	Bouteloua curtipendula	16	1	2.2	Grass	N	Y		12	DM	LB-Sgrama-0-Swort-PPclover-Ycone-Pblzstar-
327	(DM)-12-LB-Sgrama-0-Swort-PPclo	327-(DM)-12-LB-Sgrama-0-Swo	Illinois Tick Trefoil	Desmodium illinoense	5	0.31	0.5	Legume	N	Y		12	DM	LB-Sgrama-0-Swort-PPclover-Ycone-Pblzstar-
327	(DM)-12-LB-Sgrama-0-Swort-PPclo	327-(DM)-12-LB-Sgrama-0-Swo	Spiderwort	Tradescantia ohiensis	5	0.31	0.9	Forb	N	Y		12	DM	LB-Sgrama-0-Swort-PPclover-Ycone-Pblzstar-
327	(DM)-12-LB-Sgrama-0-Swort-PPclo	327-(DM)-12-LB-Sgrama-0-Swo	Purple Prairie Clover	Dalea purpurea	6	0.38	2.7	Legume	N	Y		12	DM	LB-Sgrama-0-Swort-PPclover-Ycone-Pblzstar-
327	(DM)-12-LB-Sgrama-0-Swort-PPclo	327-(DM)-12-LB-Sgrama-0-Swo	Yellow Coneflower	Ratibida pinnata	1	0.06	0.6	Forb	N	Y		12	DM	LB-Sgrama-0-Swort-PPclover-Ycone-Pblzstar-
327	(DM)-12-LB-Sgrama-0-Swort-PPclo	327-(DM)-12-LB-Sgrama-0-Swo	Prairie Blazing Star	Liatris pycnostachya	3	0.19	0.8	Forb	N	Y		12	DM	LB-Sgrama-0-Swort-PPclover-Ycone-Pblzstar-
327	(DM)-12-LB-Sgrama-0-Swort-PPclo	327-(DM)-12-LB-Sgrama-0-Swo	Rattlesnake Master	Eryngium yuccifolium	6	0.38	1.1	Forb	N	Y		12	DM	LB-Sgrama-0-Swort-PPclover-Ycone-Pblzstar-
327	(DM)-12-LB-Sgrama-0-Swort-PPclo	327-(DM)-12-LB-Sgrama-0-Swo	Showy Goldenrod	Solidago speciosa	4	0.25	8.7	Forb	N	Y		12	DM	LB-Sgrama-0-Swort-PPclover-Ycone-Pblzstar-
327	(DM)-12-LB-Sgrama-0-Swort-PPclo	327-(DM)-12-LB-Sgrama-0-Swo	Stiff Goldenrod	Oligoneuron rigidum	3	0.19	3.2	Forb	N	Y		12	DM	LB-Sgrama-0-Swort-PPclover-Ycone-Pblzstar-
327	(DM)-12-LB-Sgrama-0-Swort-PPclo	327-(DM)-12-LB-Sgrama-0-Swo	Smooth Blue Aster	Symphyotricum laeve	2	0.13	2.2	Forb	N	Y		12	DM	LB-Sgrama-0-Swort-PPclover-Ycone-Pblzstar-
327	(DM)-12-LB-Sgrama-0-Swort-PPclo	327-(DM)-12-LB-Sgrama-0-Swo	Prairie Cinquefoil	Potentilla arguta	2	0.13	9.2	Forb	N	Y		12	DM	LB-Sgrama-0-Swort-PPclover-Ycone-Pblzstar-
327	(M)-13-LB-Sgrama-Fbtongue-Swort-	327-(M)-13-LB-Sgrama-Fbtongu	Little Bluestem	Schizachyrium scoparium	16	1	5.5	Grass	N	Y		13	M	LB-Sgrama-Fbtongue-Swort-Galex-Ycone-PPc
327	(M)-13-LB-Sgrama-Fbtongue-Swort-	327-(M)-13-LB-Sgrama-Fbtongu	Sideoats Grama	Bouteloua curtipendula	16	1	2.2	Grass	N	Y		13	M	LB-Sgrama-Fbtongue-Swort-Galex-Ycone-PPc
327	(M)-13-LB-Sgrama-Fbtongue-Swort-	327-(M)-13-LB-Sgrama-Fbtongu	Foxglove Beardtongue	Penstemon digitalis	4	0.25	10.6	Forb	N	Y		13	M	LB-Sgrama-Fbtongue-Swort-Galex-Ycone-PPc
327	(M)-13-LB-Sgrama-Fbtongue-Swort-	327-(M)-13-LB-Sgrama-Fbtongu	Spiderwort	Tradescantia ohiensis	6	0.38	1.1	Forb	N	Y		13	M	LB-Sgrama-Fbtongue-Swort-Galex-Ycone-PPc
327	(M)-13-LB-Sgrama-Fbtongue-Swort-	327-(M)-13-LB-Sgrama-Fbtongu	Golden Alexanders	Zizia aurea	6	0.38	1.5	Forb	N	Y		13	M	LB-Sgrama-Fbtongue-Swort-Galex-Ycone-PPc
327	(M)-13-LB-Sgrama-Fbtongue-Swort-	327-(M)-13-LB-Sgrama-Fbtongu	Yellow Coneflower	Ratibida pinnata	1	0.06	0.6	Forb	N	Y		13	M	LB-Sgrama-Fbtongue-Swort-Galex-Ycone-PPc
327	(M)-13-LB-Sgrama-Fbtongue-Swort-	327-(M)-13-LB-Sgrama-Fbtongu	Purple Prairie Clover	Dalea purpurea	6	0.38	2.7	Legume	N	Y		13	M	LB-Sgrama-Fbtongue-Swort-Galex-Ycone-PPc
327	(M)-13-LB-Sgrama-Fbtongue-Swort-	327-(M)-13-LB-Sgrama-Fbtongu	Prairie Blazing Star	Liatris pycnostachya	4	0.25	1.1	Forb	N	Y		13	M	LB-Sgrama-Fbtongue-Swort-Galex-Ycone-PPc
327	(M)-13-LB-Sgrama-Fbtongue-Swort-	327-(M)-13-LB-Sgrama-Fbtongu	Rattlesnake Master	Eryngium yuccifolium	6	0.38	1.1	Forb	N	Y		13	M	LB-Sgrama-Fbtongue-Swort-Galex-Ycone-PPc
327	(M)-13-LB-Sgrama-Fbtongue-Swort-	327-(M)-13-LB-Sgrama-Fbtongu	New England Aster	Symphyotrichum novae-angliae	3	0.19	4.8	Forb	N	Y		13	M	LB-Sgrama-Fbtongue-Swort-Galex-Ycone-PPc
327	(M)-13-LB-Sgrama-Fbtongue-Swort-	327-(M)-13-LB-Sgrama-Fbtongu	Stiff Goldenrod	Oligoneuron rigidum	3	0.19	3.2	Forb	N	Y		13	M	LB-Sgrama-Fbtongue-Swort-Galex-Ycone-PPc
327	(M)-13-LB-Sgrama-Fbtongue-Swort-	327-(M)-13-LB-Sgrama-Fbtongu	Smooth Blue Aster	Symphyotrichum laeve	3	0.19	3.3	Forb	N	Y		13	M	LB-Sgrama-Fbtongue-Swort-Galex-Ycone-PPc
327	(WM)-14-BB-Indian-Fbtongue-Swor	327-(WM)-14-BB-Indian-Fbtong	Big Bluestem	Andropogon gerardii	16	1	3.8	Grass	N	Y		14	WM	BB-Indian-Fbtongue-Swort-Galex-Ycone-Pblz
327	(WM)-14-BB-Indian-Fbtongue-Swor	327-(WM)-14-BB-Indian-Fbtong	Indiangrass	Sorghastrum nutans	16	1	4.4	Grass	N	Y		14	WM	BB-Indian-Fbtongue-Swort-Galex-Ycone-Pblz
327	(WM)-14-BB-Indian-Fbtongue-Swor	327-(WM)-14-BB-Indian-Fbtong	Foxglove Beardtongue	Penstemon digitalis	4	0.25	10.6	Forb	N	Y		14	WM	BB-Indian-Fbtongue-Swort-Galex-Ycone-Pblz
327	(WM)-14-BB-Indian-Fbtongue-Swor	327-(WM)-14-BB-Indian-Fbtong	Spiderwort	Tradescantia ohiensis	6	0.38	1.1	Forb	N	Y		14	WM	BB-Indian-Fbtongue-Swort-Galex-Ycone-Pblz
327	(WM)-14-BB-Indian-Fbtongue-Swor	327-(WM)-14-BB-Indian-Fbtong	Golden Alexanders	Zizia aurea	5	0.31	1.3	Forb	N	Y		14	WM	BB-Indian-Fbtongue-Swort-Galex-Ycone-Pblz
327	(WM)-14-BB-Indian-Fbtongue-Swor	327-(WM)-14-BB-Indian-Fbtong	Yellow Coneflower	Ratibida pinnata	1	0.06	0.6	Forb	N	Y		14	WM	BB-Indian-Fbtongue-Swort-Galex-Ycone-Pblz
327	(WM)-14-BB-Indian-Fbtongue-Swor	327-(WM)-14-BB-Indian-Fbtong	Prairie Blazing Star	Liatris pycnostachya	3	0.19	0.8	Forb	N	Y		14	WM	BB-Indian-Fbtongue-Swort-Galex-Ycone-Pblz
327	(WM)-14-BB-Indian-Fbtongue-Swor	327-(WM)-14-BB-Indian-Fbtong	Rattlesnake Master	Eryngium yuccifolium	6	0.38	1.1	Forb	N	Y		14	WM	BB-Indian-Fbtongue-Swort-Galex-Ycone-Pblz
327	(WM)-14-BB-Indian-Fbtongue-Swor	327-(WM)-14-BB-Indian-Fbtong	New England Aster	Symphyotrichum novae-angliae	3	0.19	4.8	Forb	N	Y		14	WM	BB-Indian-Fbtongue-Swort-Galex-Ycone-Pblz
327	(WM)-14-BB-Indian-Fbtongue-Swor	327-(WM)-14-BB-Indian-Fbtong	Blue Vervain	Verbena hastata	4	0.25	8.5	Forb	N	Y		14	WM	BB-Indian-Fbtongue-Swort-Galex-Ycone-Pblz

327	(WM)-14-BB-Indian-Fbtongue-Swor	327-(WM)-14-BB-Indian-Fbtongu	Common Ironweed	Vernonia fasciculata	3	0.19	1.4	Forb	N	Y		14	WM	BB-Indian-Fbtongue-Swort-Galex-Ycone-Pblz
327	(WM)-14-BB-Indian-Fbtongue-Swor	327-(WM)-14-BB-Indian-Fbtongu	Cupplant	Silphium perfoliatum	3	0.19	0.1	Forb	N	Y		14	WM	BB-Indian-Fbtongue-Swort-Galex-Ycone-Pblz
327	(D-W)-15A-Switch	327-(D-W)-15A-Switch	Switchgrass	Panicum virgatum	112	7	63	Grass	N	N		15A	D-W	Switch
327	(D-W)-15B-BB	327-(D-W)-15B-BB	Big Bluestem	Andropogon gerardii	176	11	42	Grass	N	N		15B	D-W	BB
327	(D-W)-15C-Indian	327-(D-W)-15C-Indian	Indiangrass	Sorghastrum nutans	160	10	44	Grass	N	N		15C	D-W	Indian
327	(DM-M)-16A-SB-Tim-Alf	327-(DM-M)-16A-SB-Tim-Alf	Smooth Bromegrass	Bromus inermis	48	3	9	Grass	I	N		16A	DM-M	SB-Tim-Alf
327	(DM-M)-16A-SB-Tim-Alf	327-(DM-M)-16A-SB-Tim-Alf	Timothy	Phleum pratense	40	2.5	71	Grass	I	N		16A	DM-M	SB-Tim-Alf
327	(DM-M)-16A-SB-Tim-Alf	327-(DM-M)-16A-SB-Tim-Alf	Alfalfa	Medicago sativa	96	6	30	Legume	I	N		16A	DM-M	SB-Tim-Alf
327	(M-W)-16B-Orc-Tim-RC	327-(M-W)-16B-Orc-Tim-RC	Orchardgrass	Dactylis glomerata L.	32	2	30	Grass	I	N		16B	M-W	Orc-Tim-RC
327	(M-W)-16B-Orc-Tim-RC	327-(M-W)-16B-Orc-Tim-RC	Timothy	Phleum pratense	32	2	57	Grass	I	N		16B	M-W	Orc-Tim-RC
327	(M-W)-16B-Orc-Tim-RC	327-(M-W)-16B-Orc-Tim-RC	Red Clover	Trifolium pratense	80	5	30	Legume	I	N		16B	M-W	Orc-Tim-RC
327	(DM-M)-16C-Orc-Tim-Alf	327-(DM-M)-16C-Orc-Tim-Alf	Orchardgrass	Dactylis glomerata L.	32	2	30	Grass	I	N		16C	DM-M	Orc-Tim-Alf
327	(DM-M)-16C-Orc-Tim-Alf	327-(DM-M)-16C-Orc-Tim-Alf	Timothy	Phleum pratense	32	2	57	Grass	I	N		16C	DM-M	Orc-Tim-Alf
327	(DM-M)-16C-Orc-Tim-Alf	327-(DM-M)-16C-Orc-Tim-Alf	Alfalfa	Medicago sativa	96	6	30	Legume	I	N		16C	DM-M	Orc-Tim-Alf
327	(M-WM)-16D-SB-Tim-RC	327-(M-WM)-16D-SB-Tim-RC	Smooth Bromegrass	Bromus inermis	48	3	9	Grass	I	N		16D	M-WM	SB-Tim-RC
327	(M-WM)-16D-SB-Tim-RC	327-(M-WM)-16D-SB-Tim-RC	Timothy	Phleum pratense	40	2.5	71	Grass	I	N		16D	M-WM	SB-Tim-RC
327	(M-WM)-16D-SB-Tim-RC	327-(M-WM)-16D-SB-Tim-RC	Red Clover	Trifolium pratense	80	5	30	Legume	I	N		16D	M-WM	SB-Tim-RC
327	(M-WM)-16E-SB-Tim-Orc-RC-Lad(	327-(M-WM)-16E-SB-Tim-Orc-I	Smooth Bromegrass	Bromus inermis	32	2	6	Grass	I	N		16E	M-WM	SB-Tim-Orc-RC-LadC
327	(M-WM)-16E-SB-Tim-Orc-RC-Lad(	327-(M-WM)-16E-SB-Tim-Orc-I	Timothy	Phleum pratense	32	2	57	Grass	I	N		16E	M-WM	SB-Tim-Orc-RC-LadC
327	(M-WM)-16E-SB-Tim-Orc-RC-Lad(	327-(M-WM)-16E-SB-Tim-Orc-I	Orchardgrass	Dactylis glomerata L.	16	1	15	Grass	I	N		16E	M-WM	SB-Tim-Orc-RC-LadC
327	(M-WM)-16E-SB-Tim-Orc-RC-Lad(	327-(M-WM)-16E-SB-Tim-Orc-I	Red Clover	Trifolium pratense	80	5	30	Legume	I	N		16E	M-WM	SB-Tim-Orc-RC-LadC
327	(M-WM)-16E-SB-Tim-Orc-RC-Lad(	327-(M-WM)-16E-SB-Tim-Orc-I	White Ladino Clover	Trifolium repens	8	0.5	10	Legume	I	N		16E	M-WM	SB-Tim-Orc-RC-LadC
327	(M-WM)-16F-Orc-Tim-RC-LadC	327-(M-WM)-16F-Orc-Tim-RC-I	Orchardgrass	Dactylis glomerata L.	32	2	30	Grass	I	N		16F	M-WM	Orc-Tim-RC-LadC
327	(M-WM)-16F-Orc-Tim-RC-LadC	327-(M-WM)-16F-Orc-Tim-RC-I	Timothy	Phleum pratense	32	2	57	Grass	I	N		16F	M-WM	Orc-Tim-RC-LadC
327	(M-WM)-16F-Orc-Tim-RC-LadC	327-(M-WM)-16F-Orc-Tim-RC-I	Red Clover	Trifolium pratense	80	5	30	Legume	I	N		16F	M-WM	Orc-Tim-RC-LadC
327	(M-WM)-16F-Orc-Tim-RC-LadC	327-(M-WM)-16F-Orc-Tim-RC-I	White Ladino Clover	Trifolium repens	8	0.5	10	Legume	I	N		16F	M-WM	Orc-Tim-RC-LadC
327	(DM-WM)-16G-Orc-Tim-Btrefoil	327-(DM-WM)-16G-Orc-Tim-Bt	Orchardgrass	Dactylis glomerata L.	32	2	30	Grass	I	N		16G	DM-WM	Orc-Tim-Btrefoil
327	(DM-WM)-16G-Orc-Tim-Btrefoil	327-(DM-WM)-16G-Orc-Tim-Bt	Timothy	Phleum pratense	32	2	57	Grass	I	N		16G	DM-WM	Orc-Tim-Btrefoil
327	(DM-WM)-16G-Orc-Tim-Btrefoil	327-(DM-WM)-16G-Orc-Tim-Bt	Birdsfoot Trefoil	Lotus corniculatus	64	4	36	Legume	I	N		16G	DM-WM	Orc-Tim-Btrefoil
327	(M-WM)-16H-Tfesc-Tim-RC-LadC	327-(M-WM)-16H-Tfesc-Tim-RC	Tall Fescue	Schedonorus arundinaceus	48	3	15	Grass	I	N		16H	M-WM	Tfesc-Tim-RC-LadC
327	(M-WM)-16H-Tfesc-Tim-RC-LadC	327-(M-WM)-16H-Tfesc-Tim-RC	Timothy	Phleum pratense	32	2	57	Grass	I	N		16H	M-WM	Tfesc-Tim-RC-LadC
327	(M-WM)-16H-Tfesc-Tim-RC-LadC	327-(M-WM)-16H-Tfesc-Tim-RC	Red Clover	Trifolium pratense	64	4	24	Legume	I	N		16H	M-WM	Tfesc-Tim-RC-LadC
327	(M-WM)-16H-Tfesc-Tim-RC-LadC	327-(M-WM)-16H-Tfesc-Tim-RC	White Ladino Clover	Trifolium repens	16	1	20	Legume	I	N		16H	M-WM	Tfesc-Tim-RC-LadC
327	(DM-M)-17A-Orc-Tim-Alf-LadC	327-(DM-M)-17A-Orc-Tim-Alf-I	Orchardgrass	Dactylis glomerata L.	16	1	15	Grass	I	Y		17A	DM-M	Orc-Tim-Alf-LadC
327	(DM-M)-17A-Orc-Tim-Alf-LadC	327-(DM-M)-17A-Orc-Tim-Alf-I	Timothy	Phleum pratense	8	0.5	14	Grass	I	Y		17A	DM-M	Orc-Tim-Alf-LadC
327	(DM-M)-17A-Orc-Tim-Alf-LadC	327-(DM-M)-17A-Orc-Tim-Alf-I	Alfalfa	Medicago sativa	64	4	20	Legume	I	Y		17A	DM-M	Orc-Tim-Alf-LadC
327	(DM-M)-17A-Orc-Tim-Alf-LadC	327-(DM-M)-17A-Orc-Tim-Alf-I	White Ladino Clover	Trifolium repens	24	1.5	30	Legume	I	Y		17A	DM-M	Orc-Tim-Alf-LadC
327	(WM-W)-17B-Prye-Tfesc-RC-Aclov	327-(WM-W)-17B-Prye-Tfesc-R	Perennial Ryegrass	Lolium perenne	48	3	15	Grass	I	Y		17B	WM-W	Prye-Tfesc-RC-Aclover
327	(WM-W)-17B-Prye-Tfesc-RC-Aclov	327-(WM-W)-17B-Prye-Tfesc-R	Tall Fescue	Schedonorus arundinaceus	48	3	15	Grass	I	Y		17B	WM-W	Prye-Tfesc-RC-Aclover
327	(WM-W)-17B-Prye-Tfesc-RC-Aclov	327-(WM-W)-17B-Prye-Tfesc-R	Red Clover	Trifolium pratense	64	4	20	Legume	I	Y		17B	WM-W	Prye-Tfesc-RC-Aclover
327	(WM-W)-17B-Prye-Tfesc-RC-Aclov	327-(WM-W)-17B-Prye-Tfesc-R	Alsike Clover	Trifolium hybridum	24	1.5	23.4	Legume	I	X		17B	WM-W	Prye-Tfesc-RC-Aclover

STANDARD 342 MIXES REVISION DATE: 1/23/2013

criteria 0

STD	Mix #	std-mix	Common Name	Scientific Name	PLS (oz./A)	PLS (lbs./A)	Seeds/Square Foot	Type	Intro / Native	Poll. (Y/N)		Mix No.	MR	Mix Components
	No 342 mixes meet this criterion	LEAVE THIS ROW AS IS							N	Y				
	No 342 mixes meet this criterion	LEAVE THIS ROW AS IS							N	N				
		LEAVE THIS ROW AS IS							I	Y				
342	(DM-M)-1-SB-Crfesc-KB-Alf-R	342-(DM-M)-1-SB-Crfesc-KB	Smooth Bromegrass	Bromus inermis	160.0	10	30	Grass	I	N		1	DM-M	SB-Crfesc-KB-Alf-RC
342	(DM-M)-1-SB-Crfesc-KB-Alf-R	342-(DM-M)-1-SB-Crfesc-KB	Creeping Red Fescue	Festuca rubra	48.0	3	24	Grass	I	N		1	DM-M	SB-Crfesc-KB-Alf-RC
342	(DM-M)-1-SB-Crfesc-KB-Alf-R	342-(DM-M)-1-SB-Crfesc-KB	Kentucky Bluegrass	Poa pratensis	24.0	1.5	75	Grass	I	N		1	DM-M	SB-Crfesc-KB-Alf-RC
342	(DM-M)-1-SB-Crfesc-KB-Alf-R	342-(DM-M)-1-SB-Crfesc-KB	Alfalfa	Medicago sativa	48.0	3	15	Legume	I	N		1	DM-M	SB-Crfesc-KB-Alf-RC
342	(DM-M)-1-SB-Crfesc-KB-Alf-R	342-(DM-M)-1-SB-Crfesc-KB	Red Clover	Trifolium pratense	48.0	3	18	Legume	I	N		1	DM-M	SB-Crfesc-KB-Alf-RC
342	(DM-M)-2-SB-Tim-Alf	342-(DM-M)-2-SB-Tim-Alf	Smooth Bromegrass	Bromus inermis	240.0	15	46	Grass	I	N		2	DM-M	SB-Tim-Alf
342	(DM-M)-2-SB-Tim-Alf	342-(DM-M)-2-SB-Tim-Alf	Timothy	Phleum pratense	48.0	3	84	Grass	I	N		2	DM-M	SB-Tim-Alf
342	(DM-M)-2-SB-Tim-Alf	342-(DM-M)-2-SB-Tim-Alf	Alfalfa	Medicago sativa	112.0	7	35	Legume	I	N		2	DM-M	SB-Tim-Alf
342	(DM-M)-3-SB-Prye-Tfesc-Tim-I	342-(DM-M)-3-SB-Prye-Tfesc	Smooth Bromegrass	Bromus inermis	160.0	10	30	Grass	I	N		3	DM-M	SB-Prye-Tfesc-Tim-KB
342	(DM-M)-3-SB-Prye-Tfesc-Tim-I	342-(DM-M)-3-SB-Prye-Tfesc	Perennial Ryegrass	Lolium perenne	80.0	5	25	Grass	I	N		3	DM-M	SB-Prye-Tfesc-Tim-KB
342	(DM-M)-3-SB-Prye-Tfesc-Tim-I	342-(DM-M)-3-SB-Prye-Tfesc	Tall Fescue	Schedonorus arundinaceus	32.0	2	10	Grass	I	N		3	DM-M	SB-Prye-Tfesc-Tim-KB
342	(DM-M)-3-SB-Prye-Tfesc-Tim-I	342-(DM-M)-3-SB-Prye-Tfesc	Timothy	Phleum pratense	32.0	2	57	Grass	I	N		3	DM-M	SB-Prye-Tfesc-Tim-KB
342	(DM-M)-3-SB-Prye-Tfesc-Tim-I	342-(DM-M)-3-SB-Prye-Tfesc	Kentucky Bluegrass	Poa pratensis	16.0	1	50	Grass	I	N		3	DM-M	SB-Prye-Tfesc-Tim-KB
342	(DM-M)-4-SB-Crfesc-Alf-RC	342-(DM-M)-4-SB-Crfesc-Alf	Smooth Bromegrass	Bromus inermis	320.0	20	62	Grass	I	N		4	DM-M	SB-Crfesc-Alf-RC
342	(DM-M)-4-SB-Crfesc-Alf-RC	342-(DM-M)-4-SB-Crfesc-Alf	Creeping Red Fescue	Festuca rubra	80.0	5	40	Grass	I	N		4	DM-M	SB-Crfesc-Alf-RC
342	(DM-M)-4-SB-Crfesc-Alf-RC	342-(DM-M)-4-SB-Crfesc-Alf	Alfalfa	Medicago sativa	128.0	8	40	Legume	I	N		4	DM-M	SB-Crfesc-Alf-RC
342	(DM-M)-4-SB-Crfesc-Alf-RC	342-(DM-M)-4-SB-Crfesc-Alf	Red Clover	Trifolium pratense	64.0	4	24	Legume	I	N		4	DM-M	SB-Crfesc-Alf-RC
342	(DM-M)-5-SB-Alf	342-(DM-M)-5-SB-Alf	Smooth Bromegrass	Bromus inermis	480.0	30	93	Grass	I	N		5	DM-M	SB-Alf
342	(DM-M)-5-SB-Alf	342-(DM-M)-5-SB-Alf	Alfalfa	Medicago sativa	224.0	14	70	Legume	I	N		5	DM-M	SB-Alf
342	(DM-WM)-6-SB-Prye-Tim-Crfe	342-(DM-WM)-6-SB-Prye-Tim	Smooth Bromegrass	Bromus inermis	112.0	7	21	Grass	I	N		6	DM-WM	SB-Prye-Tim-Crfesc-KB-RC
342	(DM-WM)-6-SB-Prye-Tim-Crfe	342-(DM-WM)-6-SB-Prye-Tim	Perennial Ryegrass	Lolium perenne	48.0	3	15	Grass	I	N		6	DM-WM	SB-Prye-Tim-Crfesc-KB-RC
342	(DM-WM)-6-SB-Prye-Tim-Crfe	342-(DM-WM)-6-SB-Prye-Tim	Timothy	Phleum pratense	32.0	2	57	Grass	I	N		6	DM-WM	SB-Prye-Tim-Crfesc-KB-RC
342	(DM-WM)-6-SB-Prye-Tim-Crfe	342-(DM-WM)-6-SB-Prye-Tim	Creeping Red Fescue	Festuca rubra	16.0	1	8	Grass	I	N		6	DM-WM	SB-Prye-Tim-Crfesc-KB-RC
342	(DM-WM)-6-SB-Prye-Tim-Crfe	342-(DM-WM)-6-SB-Prye-Tim	Kentucky Bluegrass	Poa pratensis	16.0	1	50	Grass	I	N		6	DM-WM	SB-Prye-Tim-Crfesc-KB-RC
342	(DM-WM)-6-SB-Prye-Tim-Crfe	342-(DM-WM)-6-SB-Prye-Tim	Red Clover	Trifolium pratense	48.0	3	18	Legume	I	N		6	DM-WM	SB-Prye-Tim-Crfesc-KB-RC
342	(M)-7-SB-KB-Crfesc-Btrefoil	342-(M)-7-SB-KB-Crfesc-Btre	Smooth Bromegrass	Bromus inermis	112.0	7	21	Grass	I	N		7	M	SB-KB-Crfesc-Btrefoil
342	(M)-7-SB-KB-Crfesc-Btrefoil	342-(M)-7-SB-KB-Crfesc-Btre	Kentucky Bluegrass	Poa pratensis	48.0	3	150	Grass	I	N		7	M	SB-KB-Crfesc-Btrefoil
342	(M)-7-SB-KB-Crfesc-Btrefoil	342-(M)-7-SB-KB-Crfesc-Btre	Creeping Red Fescue	Festuca rubra	32.0	2	16	Grass	I	N		7	M	SB-KB-Crfesc-Btrefoil
342	(M)-7-SB-KB-Crfesc-Btrefoil	342-(M)-7-SB-KB-Crfesc-Btre	Birdsfoot Trefoil	Lotus corniculatus	32.0	2	18	Legume	I	N		7	M	SB-KB-Crfesc-Btrefoil
342	(M)-8-SB-Crfesc-KB	342-(M)-8-SB-Crfesc-KB	Smooth Bromegrass	Bromus inermis	240.0	15	45	Grass	I	N		8	M	SB-Crfesc-KB
342	(M)-8-SB-Crfesc-KB	342-(M)-8-SB-Crfesc-KB	Creeping Red Fescue	Festuca rubra	32.0	2	16	Grass	I	N		8	M	SB-Crfesc-KB
342	(M)-8-SB-Crfesc-KB	342-(M)-8-SB-Crfesc-KB	Kentucky Bluegrass	Poa pratensis	32.0	2	100	Grass	I	N		8	M	SB-Crfesc-KB
342	(M)-9-Prye-Crfesc-KB	342-(M)-9-Prye-Crfesc-KB	Perennial Ryegrass	Lolium perenne	160.0	10	50	Grass	I	N		9	M	Prye-Crfesc-KB
342	(M)-9-Prye-Crfesc-KB	342-(M)-9-Prye-Crfesc-KB	Creeping Red Fescue	Festuca rubra	64.0	4	32	Grass	I	N		9	M	Prye-Crfesc-KB
342	(M)-9-Prye-Crfesc-KB	342-(M)-9-Prye-Crfesc-KB	Kentucky Bluegrass	Poa pratensis	48.0	3	150	Grass	I	N		9	M	Prye-Crfesc-KB
342	(M)-10-SB-Prye-Tim-RC	342-(M)-10-SB-Prye-Tim-RC	Smooth Bromegrass	Bromus inermis	224.0	14	42	Grass	I	N		10	M	SB-Prye-Tim-RC
342	(M)-10-SB-Prye-Tim-RC	342-(M)-10-SB-Prye-Tim-RC	Perennial Ryegrass	Lolium perenne	64.0	4	20	Grass	I	N		10	M	SB-Prye-Tim-RC
342	(M)-10-SB-Prye-Tim-RC	342-(M)-10-SB-Prye-Tim-RC	Timothy	Phleum pratense	48.0	3	84	Grass	I	N		10	M	SB-Prye-Tim-RC
342	(M)-10-SB-Prye-Tim-RC	342-(M)-10-SB-Prye-Tim-RC	Red Clover	Trifolium pratense	48.0	3	18	Legume	I	N		10	M	SB-Prye-Tim-RC
342	(M)-11-SB-Crfesc	342-(M)-11-SB-Crfesc	Smooth Bromegrass	Bromus inermis	512.0	32	96	Grass	I	N		11	M	SB-Crfesc
342	(M)-11-SB-Crfesc	342-(M)-11-SB-Crfesc	Creeping Red Fescue	Festuca rubra	128.0	8	64	Grass	I	N		11	M	SB-Crfesc
342	(M)-12-KB-Crfesc	342-(M)-12-KB-Crfesc	Kentucky Bluegrass	Poa pratensis	64.0	4	200	Grass	I	N		12	M	KB-Crfesc
342	(M)-12-KB-Crfesc	342-(M)-12-KB-Crfesc	Creeping Red Fescue	Festuca rubra	48.0	3	24	Grass	I	N		12	M	KB-Crfesc
342	(M)-13-SB-Tim-RC	342-(M)-13-SB-Tim-RC	Smooth Bromegrass	Bromus inermis	224.0	14	43	Grass	I	N		13	M	SB-Tim-RC
342	(M)-13-SB-Tim-RC	342-(M)-13-SB-Tim-RC	Timothy	Phleum pratense	64.0	4	112	Grass	I	N		13	M	SB-Tim-RC
342	(M)-13-SB-Tim-RC	342-(M)-13-SB-Tim-RC	Red Clover	Trifolium pratense	48.0	3	18	Legume	I	N		13	M	SB-Tim-RC
342	(M)-14-SB-Tim-Aclover	342-(M)-14-SB-Tim-Aclover	Smooth Bromegrass	Bromus inermis	240.0	15	43	Grass	I	N		14	M	SB-Tim-Aclover
342	(M)-14-SB-Tim-Aclover	342-(M)-14-SB-Tim-Aclover	Timothy	Phleum pratense	56.0	3.5	112	Grass	I	N		14	M	SB-Tim-Aclover
342	(M)-14-SB-Tim-Aclover	342-(M)-14-SB-Tim-Aclover	Alsike Clover	Trifolium hybridum	32.0	2	32	Legume	I	N		14	M	SB-Tim-Aclover
342	(M)-15-SB-Tim-Btrefoil	342-(M)-15-SB-Tim-Btrefoil	Smooth Bromegrass	Bromus inermis	240.0	15	43	Grass	I	N		15	M	SB-Tim-Btrefoil
342	(M)-15-SB-Tim-Btrefoil	342-(M)-15-SB-Tim-Btrefoil	Timothy	Phleum pratense	56.0	3.5	112	Grass	I	N		15	M	SB-Tim-Btrefoil
342	(M)-15-SB-Tim-Btrefoil	342-(M)-15-SB-Tim-Btrefoil	Birdsfoot Trefoil	Lotus corniculatus	48.0	3	26	Legume	I	N		15	M	SB-Tim-Btrefoil
342	(WM)-16-SB-Tfesc-Prye-Tim-K	342-(WM)-16-SB-Tfesc-Prye-	Smooth Bromegrass	Bromus inermis	96.0	6	18	Grass	I	N		16	WM	SB-Tfesc-Prye-Tim-KB-RC
342	(WM)-16-SB-Tfesc-Prye-Tim-K	342-(WM)-16-SB-Tfesc-Prye-	Tall Fescue	Schedonorus arundinaceus	80.0	5	25	Grass	I	N		16	WM	SB-Tfesc-Prye-Tim-KB-RC
342	(WM)-16-SB-Tfesc-Prye-Tim-K	342-(WM)-16-SB-Tfesc-Prye-	Perennial Ryegrass	Lolium perenne	48.0	3	15	Grass	I	N		16	WM	SB-Tfesc-Prye-Tim-KB-RC
342	(WM)-16-SB-Tfesc-Prye-Tim-K	342-(WM)-16-SB-Tfesc-Prye-	Timothy	Phleum pratense	48.0	3	84	Grass	I	N		16	WM	SB-Tfesc-Prye-Tim-KB-RC
342	(WM)-16-SB-Tfesc-Prye-Tim-K	342-(WM)-16-SB-Tfesc-Prye-	Kentucky Bluegrass	Poa pratensis	32.0	2	100	Grass	I	N		16	WM	SB-Tfesc-Prye-Tim-KB-RC
342	(WM)-16-SB-Tfesc-Prye-Tim-K	342-(WM)-16-SB-Tfesc-Prye-	Red Clover	Trifolium pratense	48.0	3	18	Legume	I	N		16	WM	SB-Tfesc-Prye-Tim-KB-RC
342	(WM)-17-Rtop-Tim-RC	342-(WM)-17-Rtop-Tim-RC	Redtop	Agrostis gigantea	16.0	1	114	Grass	I	N		17	WM	Rtop-Tim-RC
342	(WM)-17-Rtop-Tim-RC	342-(WM)-17-Rtop-Tim-RC	Timothy	Phleum pratense	48.0	3	84	Grass	I	N		17	WM	Rtop-Tim-RC
342	(WM)-17-Rtop-Tim-RC	342-(WM)-17-Rtop-Tim-RC	Red Clover	Trifolium pratense	80.0	5	30	Legume	I	N		17	WM	Rtop-Tim-RC
342	(WM)-18-SB-Tim-Prye-KB-RC	342-(WM)-18-SB-Tim-Prye-K	Smooth Bromegrass	Bromus inermis	96.0	6	18	Grass	I	N		18	WM	SB-Tim-Prye-KB-RC
342	(WM)-18-SB-Tim-Prye-KB-RC	342-(WM)-18-SB-Tim-Prye-K	Timothy	Phleum pratense	48.0	3	84	Grass	I	N		18	WM	SB-Tim-Prye-KB-RC
342	(WM)-18-SB-Tim-Prye-KB-RC	342-(WM)-18-SB-Tim-Prye-K	Perennial Ryegrass	Lolium perenne	48.0	3	15	Grass	I	N		18	WM	SB-Tim-Prye-KB-RC
342	(WM)-18-SB-Tim-Prye-KB-RC	342-(WM)-18-SB-Tim-Prye-K	Kentucky Bluegrass	Poa pratensis	32.0	2	100	Grass	I	N		18	WM	SB-Tim-Prye-KB-RC
342	(WM)-18-SB-Tim-Prye-KB-RC	342-(WM)-18-SB-Tim-Prye-K	Red Clover	Trifolium pratense	48.0	3	18	Legume	I	N		18	WM	SB-Tim-Prye-KB-RC
342	(WM)-19-KB-Rtop-Tim-RC	342-(WM)-19-KB-Rtop-Tim-R	Kentucky Bluegrass	Poa pratensis	32.0	2	100	Grass	I	N		19	WM	KB-Rtop-Tim-RC
342	(WM)-19-KB-Rtop-Tim-RC	342-(WM)-19-KB-Rtop-Tim-R	Redtop	Agrostis gigantea	16.0	1	114	Grass	I	N		19	WM	KB-Rtop-Tim-RC
342	(WM)-19-KB-Rtop-Tim-RC	342-(WM)-19-KB-Rtop-Tim-R	Timothy	Phleum pratense	16.0	1	28	Grass	I	N		19	WM	KB-Rtop-Tim-RC
342	(WM)-19-KB-Rtop-Tim-RC	342-(WM)-19-KB-Rtop-Tim-R	Red Clover	Trifolium pratense	64.0	4	24	Legume	I	N		19	WM	KB-Rtop-Tim-RC
342	(W)-20-KB-Rtop-Aclover	342-(W)-20-KB-Rtop-Aclover	Kentucky Bluegrass	Poa pratensis	32.0	2	100	Grass	I	N		20	W	KB-Rtop-Aclover
342	(W)-20-KB-Rtop-Aclover	342-(W)-20-KB-Rtop-Aclover	Redtop	Agrostis gigantea	32.0	2	228	Grass	I	N		20	W	KB-Rtop-Aclover
342	(W)-20-KB-Rtop-Aclover	342-(W)-20-KB-Rtop-Aclover	Alsike Clover	Trifolium hybridum	32.0	2	32	Legume	I	N		20	W	KB-Rtop-Aclover
342	(W)-21-Rtop-Aclover	342-(W)-21-Rtop-Aclover	Redtop	Agrostis gigantea	48.0	3	342	Grass	I	N		21	W	Rtop-Aclover
342	(W)-21-Rtop-Aclover	342-(W)-21-Rtop-Aclover	Alsike Clover	Trifolium hybridum	48.0	3	48	Legume	I	N		21	W	Rtop-Aclover

STANDARD 512 MIXES

criteria: H-1

STD	Mix #	std-mix	Common Name	Scientific Name
		LEAVE THIS ROW AS IS		
		LEAVE THIS ROW AS IS		
512	(FSG 1)-H1-RC-Tfesc-Tim	512-(FSG 1)-H1-RC-Tfesc-Tim	Red Clover	Trifolium pratense
512	(FSG 1)-H1-RC-Tfesc-Tim	512-(FSG 1)-H1-RC-Tfesc-Tim	Tall Fescue	Schedonorus arundinaceus
512	(FSG 1)-H1-RC-Tfesc-Tim	512-(FSG 1)-H1-RC-Tfesc-Tim	Timothy	Phleum pratense
512	(FSG 2)-H2-Alf	512-(FSG 2)-H2-Alf	Alfalfa	Medicago sativa
512	(FSG 2,3,5,6)-H3-Alf-SB	512-(FSG 2,3,5,6)-H3-Alf-SB	Alfalfa	Medicago sativa
512	(FSG 2,3,5,6)-H3-Alf-SB	512-(FSG 2,3,5,6)-H3-Alf-SB	Smooth Bromegrass	Bromus inermis
512	(FSG 4,7)-H4-Aclover-Tfesc-Tim	512-(FSG 4,7)-H4-Aclover-Tfesc-Tim	Alsike Clover	Trifolium hybridum
512	(FSG 4,7)-H4-Aclover-Tfesc-Tim	512-(FSG 4,7)-H4-Aclover-Tfesc-Tim	Tall Fescue	Schedonorus arundinaceus
512	(FSG 4,7)-H4-Aclover-Tfesc-Tim	512-(FSG 4,7)-H4-Aclover-Tfesc-Tim	Timothy	Phleum pratense
512	(FSG 8)-H5-Alf-Tim	512-(FSG 8)-H5-Alf-Tim	Alfalfa	Medicago sativa
512	(FSG 8)-H5-Alf-Tim	512-(FSG 8)-H5-Alf-Tim	Timothy	Phleum pratense
512	(FSG 9)-H6-Alf-SB-Tim	512-(FSG 9)-H6-Alf-SB-Tim	Alfalfa	Medicago sativa
512	(FSG 9)-H6-Alf-SB-Tim	512-(FSG 9)-H6-Alf-SB-Tim	Smooth Bromegrass	Bromus inermis
512	(FSG 9)-H6-Alf-SB-Tim	512-(FSG 9)-H6-Alf-SB-Tim	Timothy	Phleum pratense
512	(FSG 1-9)-H7-Switch	512-(FSG 1-9)-H7-Switch	Switchgrass	Panicum virgatum
512	(FSG 1-9)-H8-BB	512-(FSG 1-9)-H8-BB	Big Bluestem	Andropogon gerardii
512	(FSG 1-9)-H9-Indian	512-(FSG 1-9)-H9-Indian	Indiangrass	Sorghastrum nutans
512	(FSG 1)-PP1-Aclover-Mfesc	512-(FSG 1)-PP1-Aclover-Mfesc	Alsike Clover	Trifolium hybridum
512	(FSG 1)-PP1-Aclover-Mfesc	512-(FSG 1)-PP1-Aclover-Mfesc	Meadow Fescue	Schedonorus pratensis
512	(FSG 1)-PP1A-Aclover-Orc	512-(FSG 1)-PP1A-Aclover-Orc	Alsike Clover	Trifolium hybridum
512	(FSG 1)-PP1A-Aclover-Orc	512-(FSG 1)-PP1A-Aclover-Orc	Orchardgrass	Dactylis glomerata L.
512	(FSG 1)-PP1B-Aclover-Tim	512-(FSG 1)-PP1B-Aclover-Tim	Alsike Clover	Trifolium hybridum
512	(FSG 1)-PP1B-Aclover-Tim	512-(FSG 1)-PP1B-Aclover-Tim	Timothy	Phleum pratense
512	(FSG 2-3)-PP2-Alf-SB-Orc	512-(FSG 2-3)-PP2-Alf-SB-Orc	Alfalfa	Medicago sativa
512	(FSG 2-3)-PP2-Alf-SB-Orc	512-(FSG 2-3)-PP2-Alf-SB-Orc	Smooth Bromegrass	Bromus inermis
512	(FSG 2-3)-PP2-Alf-SB-Orc	512-(FSG 2-3)-PP2-Alf-SB-Orc	Orchardgrass	Dactylis glomerata L.
512	(FSG 4)-PP4-Aclover-Mfesc-Tim	512-(FSG 4)-PP4-Aclover-Mfesc-Tim	Alsike Clover	Trifolium hybridum
512	(FSG 4)-PP4-Aclover-Mfesc-Tim	512-(FSG 4)-PP4-Aclover-Mfesc-Tim	Meadow Fescue	Schedonorus pratensis
512	(FSG 4)-PP4-Aclover-Mfesc-Tim	512-(FSG 4)-PP4-Aclover-Mfesc-Tim	Timothy	Phleum pratense
512	(FSG 4)-PP4B-Btrefoil-Mfesc-Tim	512-(FSG 4)-PP4B-Btrefoil-Mfesc-Tim	Birdsfoot Trefoil	Lotus corniculatus
512	(FSG 4)-PP4B-Btrefoil-Mfesc-Tim	512-(FSG 4)-PP4B-Btrefoil-Mfesc-Tim	Meadow Fescue	Schedonorus pratensis
512	(FSG 4)-PP4B-Btrefoil-Mfesc-Tim	512-(FSG 4)-PP4B-Btrefoil-Mfesc-Tim	Timothy	Phleum pratense
512	(FSG 5)-PP5-RC-LadC-Orc-Mfesc	512-(FSG 5)-PP5-RC-LadC-Orc-Mfesc	Red Clover	Trifolium pratense
512	(FSG 5)-PP5-RC-LadC-Orc-Mfesc	512-(FSG 5)-PP5-RC-LadC-Orc-Mfesc	White Ladino Clover	Trifolium repens
512	(FSG 5)-PP5-RC-LadC-Orc-Mfesc	512-(FSG 5)-PP5-RC-LadC-Orc-Mfesc	Orchardgrass	Dactylis glomerata L.
512	(FSG 5)-PP5-RC-LadC-Orc-Mfesc	512-(FSG 5)-PP5-RC-LadC-Orc-Mfesc	Meadow Fescue	Schedonorus pratensis
512	(FSG 5)-PP5B-RC-LadC-Festu-Mfesc	512-(FSG 5)-PP5B-RC-LadC-Festu-Mfesc	Red Clover	Trifolium pratense
512	(FSG 5)-PP5B-RC-LadC-Festu-Mfesc	512-(FSG 5)-PP5B-RC-LadC-Festu-Mfesc	White Ladino Clover	Trifolium repens
512	(FSG 5)-PP5B-RC-LadC-Festu-Mfesc	512-(FSG 5)-PP5B-RC-LadC-Festu-Mfesc	Festulolium	Festuca x Lolium
512	(FSG 5)-PP5B-RC-LadC-Festu-Mfesc	512-(FSG 5)-PP5B-RC-LadC-Festu-Mfesc	Meadow Fescue	Schedonorus pratensis
512	(FSG 6)-PP6-RC-Orc-SB	512-(FSG 6)-PP6-RC-Orc-SB	Red Clover	Trifolium pratense
512	(FSG 6)-PP6-RC-Orc-SB	512-(FSG 6)-PP6-RC-Orc-SB	Orchardgrass	Dactylis glomerata L.
512	(FSG 6)-PP6-RC-Orc-SB	512-(FSG 6)-PP6-RC-Orc-SB	Smooth Bromegrass	Bromus inermis
512	(FSG 7)-PP7-Aclover-Mfesc-Tim-Rtop	512-(FSG 7)-PP7-Aclover-Mfesc-Tim-Rtop	Alsike Clover	Trifolium hybridum
512	(FSG 7)-PP7-Aclover-Mfesc-Tim-Rtop	512-(FSG 7)-PP7-Aclover-Mfesc-Tim-Rtop	Meadow Fescue	Schedonorus pratensis
512	(FSG 7)-PP7-Aclover-Mfesc-Tim-Rtop	512-(FSG 7)-PP7-Aclover-Mfesc-Tim-Rtop	Timothy	Phleum pratense
512	(FSG 7)-PP7-Aclover-Mfesc-Tim-Rtop	512-(FSG 7)-PP7-Aclover-Mfesc-Tim-Rtop	Redtop	Agrostis gigantea
512	(FSG 7)-PP7B-Btrefoil-Mfesc-Tim-Rtop	512-(FSG 7)-PP7B-Btrefoil-Mfesc-Tim-Rtop	Birdsfoot Trefoil	Lotus corniculatus
512	(FSG 7)-PP7B-Btrefoil-Mfesc-Tim-Rtop	512-(FSG 7)-PP7B-Btrefoil-Mfesc-Tim-Rtop	Meadow Fescue	Schedonorus pratensis
512	(FSG 7)-PP7B-Btrefoil-Mfesc-Tim-Rtop	512-(FSG 7)-PP7B-Btrefoil-Mfesc-Tim-Rtop	Timothy	Phleum pratense
512	(FSG 7)-PP7B-Btrefoil-Mfesc-Tim-Rtop	512-(FSG 7)-PP7B-Btrefoil-Mfesc-Tim-Rtop	Redtop	Agrostis gigantea
512	(FSG 8)-PP8-LadC-Orc-Mfesc	512-(FSG 8)-PP8-LadC-Orc-Mfesc	White Ladino Clover	Trifolium repens
512	(FSG 8)-PP8-LadC-Orc-Mfesc	512-(FSG 8)-PP8-LadC-Orc-Mfesc	Orchardgrass	Dactylis glomerata L.
512	(FSG 8)-PP8-LadC-Orc-Mfesc	512-(FSG 8)-PP8-LadC-Orc-Mfesc	Meadow Fescue	Schedonorus pratensis
512	(FSG 8)-PP8B-LadC-Festu-Mfesc	512-(FSG 8)-PP8B-LadC-Festu-Mfesc	White Ladino Clover	Trifolium repens
512	(FSG 8)-PP8B-LadC-Festu-Mfesc	512-(FSG 8)-PP8B-LadC-Festu-Mfesc	Festulolium	Festuca x Lolium
512	(FSG 8)-PP8B-LadC-Festu-Mfesc	512-(FSG 8)-PP8B-LadC-Festu-Mfesc	Meadow Fescue	Schedonorus pratensis
512	(FSG 9)-PP9-RC-Orc-Mfesc	512-(FSG 9)-PP9-RC-Orc-Mfesc	Red Clover	Trifolium pratense
512	(FSG 9)-PP9-RC-Orc-Mfesc	512-(FSG 9)-PP9-RC-Orc-Mfesc	Orchardgrass	Dactylis glomerata L.
512	(FSG 9)-PP9-RC-Orc-Mfesc	512-(FSG 9)-PP9-RC-Orc-Mfesc	Meadow Fescue	Schedonorus pratensis
512	(FSG 1,4,7)-PHS1-KB-Mfesc-LadC	512-(FSG 1,4,7)-PHS1-KB-Mfesc-LadC	Kentucky Bluegrass	Poa pratensis
512	(FSG 1,4,7)-PHS1-KB-Mfesc-LadC	512-(FSG 1,4,7)-PHS1-KB-Mfesc-LadC	Meadow Fescue	Schedonorus pratensis
512	(FSG 1,4,7)-PHS1-KB-Mfesc-LadC	512-(FSG 1,4,7)-PHS1-KB-Mfesc-LadC	White Ladino Clover	Trifolium repens
512	(FSG 1,4,7)-PHS1A-KB-Mfesc-Btrefoil	512-(FSG 1,4,7)-PHS1A-KB-Mfesc-Btrefoil	Kentucky Bluegrass	Poa pratensis
512	(FSG 1,4,7)-PHS1A-KB-Mfesc-Btrefoil	512-(FSG 1,4,7)-PHS1A-KB-Mfesc-Btrefoil	Meadow Fescue	Schedonorus pratensis
512	(FSG 1,4,7)-PHS1A-KB-Mfesc-Btrefoil	512-(FSG 1,4,7)-PHS1A-KB-Mfesc-Btrefoil	Birdsfoot Trefoil	Lotus corniculatus
512	(FSG 5-8)-PHS2-KB-Festu-LadC	512-(FSG 5-8)-PHS2-KB-Festu-LadC	Kentucky Bluegrass	Poa pratensis

512	(FSG 5-8)-PHS2-KB-Festu-LadC	512-(FSG 5-8)-PHS2-KB-Festu-LadC	Festulolium	Festuca x Lolium
512	(FSG 5-8)-PHS2-KB-Festu-LadC	512-(FSG 5-8)-PHS2-KB-Festu-LadC	White Ladino Clover	Trifolium repens
512	(FSG 5-8)-PHS2A-KB-Prye-LadC	512-(FSG 5-8)-PHS2A-KB-Prye-LadC	Kentucky Bluegrass	Poa pratensis
512	(FSG 5-8)-PHS2A-KB-Prye-LadC	512-(FSG 5-8)-PHS2A-KB-Prye-LadC	Perennial Ryegrass	Lolium perenne
512	(FSG 5-8)-PHS2A-KB-Prye-LadC	512-(FSG 5-8)-PHS2A-KB-Prye-LadC	White Ladino Clover	Trifolium repens
512	(FSG 2-3)-PHS3-Alf-Orc	512-(FSG 2-3)-PHS3-Alf-Orc	Alfalfa	Medicago sativa
512	(FSG 2-3)-PHS3-Alf-Orc	512-(FSG 2-3)-PHS3-Alf-Orc	Orchardgrass	Dactylis glomerata L.

REVISION DATE: 12/14/2012

PLS (oz./A)	PLS (lbs./A)	Seeds/Square Foot	Type	Intro / Native	Poll. (Y/N)		Mix No.	FSG-MIX #	Mix Components	FSG
				I	Y					
				N	Y					
96.0	6	36	Legume	I	N		H1	FSG 1	RC-Tfesc-Tim	1
96.0	6	32	Grass	I	N		H1	FSG 1	RC-Tfesc-Tim	1
16.0	1	28	Grass	I	N		H1	FSG 1	RC-Tfesc-Tim	1
192.0	12	60	Legume	I	N		H2	FSG 2	Alf	2
160.0	10	50	Legume	I	N		H3	FSG 2,3,5,6	Alf-SB	2,3,5,6
64.0	4	12	Grass	I	N		H3	FSG 2,3,5,6	Alf-SB	2,3,5,6
48.0	3	48	Legume	I	N		H4	FSG 4,7	Aclover-Tfesc-Tim	4,7
96.0	6	32	Grass	I	N		H4	FSG 4,7	Aclover-Tfesc-Tim	4,7
16.0	1	28	Grass	I	N		H4	FSG 4,7	Aclover-Tfesc-Tim	4,7
128.0	8	40	Legume	I	N		H5	FSG 8	Alf-Tim	8
32.0	2	56	Grass	I	N		H5	FSG 8	Alf-Tim	8
128.0	8	40	Legume	I	N		H6	FSG 9	Alf-SB-Tim	9
64.0	4	12	Grass	I	N		H6	FSG 9	Alf-SB-Tim	9
16.0	1	28	Grass	I	N		H6	FSG 9	Alf-SB-Tim	9
112.0	7	63	Grass	N	N		H7	FSG 1-9	Switch	1-9
176.0	11	42	Grass	N	N		H8	FSG 1-9	BB	1-9
160.0	10	44	Grass	N	N		H9	FSG 1-9	Indian	1-9
32.0	2	32	Legume	I	N		PP1	FSG 1	Aclover-Mfesc	1
96.0	6	30	Grass	I	N		PP1	FSG 1	Aclover-Mfesc	1
32.0	2	32	Legume	I	N		PP1A	FSG 1	Aclover-Orc	1
48.0	3	48	Grass	I	N		PP1A	FSG 1	Aclover-Orc	1
32.0	2	32	Legume	I	N		PP1B	FSG 1	Aclover-Tim	1
24.0	1.5	42	Grass	I	N		PP1B	FSG 1	Aclover-Tim	1
96.0	6	30	Legume	I	N		PP2	FSG 2-3	Alf-SB-Orc	2-3
64.0	4	12	Grass	I	N		PP2	FSG 2-3	Alf-SB-Orc	2-3
64.0	4	64	Grass	I	N		PP2	FSG 2-3	Alf-SB-Orc	2-3
32.0	2	32	Legume	I	N		PP4	FSG 4	Aclover-Mfesc-Tim	4
96.0	6	30	Grass	I	N		PP4	FSG 4	Aclover-Mfesc-Tim	4
16.0	1	28	Grass	I	N		PP4	FSG 4	Aclover-Mfesc-Tim	4
48.0	3	26	Legume	I	N		PP4B	FSG 4	Btrefoil-Mfesc-Tim	4
96.0	6	30	Grass	I	N		PP4B	FSG 4	Btrefoil-Mfesc-Tim	4
16.0	1	28	Grass	I	N		PP4B	FSG 4	Btrefoil-Mfesc-Tim	4
80.0	5	30	Legume	I	N		PP5	FSG 5	RC-LadC-Orc-Mfesc	5
16.0	1	20	Legume	I	N		PP5	FSG 5	RC-LadC-Orc-Mfesc	5
48.0	3	48	Grass	I	N		PP5	FSG 5	RC-LadC-Orc-Mfesc	5
96.0	6	30	Grass	I	N		PP5	FSG 5	RC-LadC-Orc-Mfesc	5
80.0	5	30	Legume	I	N		PP5B	FSG 5	RC-LadC-Festu-Mfesc	5
16.0	1	20	Legume	I	N		PP5B	FSG 5	RC-LadC-Festu-Mfesc	5
112.0	7	36	Grass	I	N		PP5B	FSG 5	RC-LadC-Festu-Mfesc	5
96.0	6	30	Grass	I	N		PP5B	FSG 5	RC-LadC-Festu-Mfesc	5
80.0	5	30	Legume	I	N		PP6	FSG 6	RC-Orc-SB	6
64.0	4	64	Grass	I	N		PP6	FSG 6	RC-Orc-SB	6
64.0	4	12	Grass	I	N		PP6	FSG 6	RC-Orc-SB	6
32.0	2	32	Legume	I	N		PP7	FSG 7	Aclover-Mfesc-Tim-Rtop	7
96.0	6	30	Grass	I	N		PP7	FSG 7	Aclover-Mfesc-Tim-Rtop	7
16.0	1	28	Grass	I	N		PP7	FSG 7	Aclover-Mfesc-Tim-Rtop	7
16.0	1	114	Grass	I	N		PP7	FSG 7	Aclover-Mfesc-Tim-Rtop	7
48.0	3	26	Legume	I	N		PP7B	FSG 7	Btrefoil-Mfesc-Tim-Rtop	7
96.0	6	30	Grass	I	N		PP7B	FSG 7	Btrefoil-Mfesc-Tim-Rtop	7
16.0	1	28	Grass	I	N		PP7B	FSG 7	Btrefoil-Mfesc-Tim-Rtop	7
16.0	1	114	Grass	I	N		PP7B	FSG 7	Btrefoil-Mfesc-Tim-Rtop	7
16.0	1	20	Legume	I	N		PP8	FSG 8	LadC-Orc-Mfesc	8
48.0	3	48	Grass	I	N		PP8	FSG 8	LadC-Orc-Mfesc	8
96.0	6	30	Grass	I	N		PP8	FSG 8	LadC-Orc-Mfesc	8
16.0	1	20	Legume	I	N		PP8B	FSG 8	LadC-Festu-Mfesc	8
112.0	7	36	Grass	I	N		PP8B	FSG 8	LadC-Festu-Mfesc	8
96.0	6	30	Grass	I	N		PP8B	FSG 8	LadC-Festu-Mfesc	8
80.0	5	30	Legume	I	N		PP9	FSG 9	RC-Orc-Mfesc	9
48.0	3	48	Grass	I	N		PP9	FSG 9	RC-Orc-Mfesc	9
96.0	6	30	Grass	I	N		PP9	FSG 9	RC-Orc-Mfesc	9
64.0	4	200	Grass	I	N		PHS1	FSG 1,4,7	KB-Mfesc-LadC	1,4,7
64.0	4	20	Grass	I	N		PHS1	FSG 1,4,7	KB-Mfesc-LadC	1,4,7
16.0	1	20	Legume	I	N		PHS1	FSG 1,4,7	KB-Mfesc-LadC	1,4,7
64.0	4	200	Grass	I	N		PHS1A	FSG 1,4,7	KB-Mfesc-Btrefoil	1,4,7
64.0	4	20	Grass	I	N		PHS1A	FSG 1,4,7	KB-Mfesc-Btrefoil	1,4,7
48.0	3	26	Legume	I	N		PHS1A	FSG 1,4,7	KB-Mfesc-Btrefoil	1,4,7
32.0	2	100	Grass	I	N		PHS2	FSG 5-8	KB-Festu-LadC	5-8

112.0	7	35	Grass	I	N		PHS2	FSG 5-8	KB-Festu-LadC	5-8
16.0	1	20	Legume	I	N		PHS2	FSG 5-8	KB-Festu-LadC	5-8
32.0	2	100	Grass	I	N		PHS2A	FSG 5-8	KB-Prye-LadC	5-8
112.0	7	35	Grass	I	N		PHS2A	FSG 5-8	KB-Prye-LadC	5-8
16.0	1	20	Legume	I	N		PHS2A	FSG 5-8	KB-Prye-LadC	5-8
96.0	6	30	Legume	I	N		PHS3	FSG 2-3	Alf-Orc	2-3
48.0	3	48	Grass	I	N		PHS3	FSG 2-3	Alf-Orc	2-3

CRP MIXES

REVISION DATE: 11/30/2020

criteria: 0

STD	Mix #	std-mix	Common Name	Scientific Name	PLS (oz./A)	PLS (lbs./A)	Seeds/Square Foot	Type	Intro / Native	Poll. (Y/N)	Mix No.	MR	Mix Components
		LEAVE THIS ROW AS IS							I	Y			
		LEAVE THIS ROW AS IS							N	Y			
1	CP1-1-Alf-SB-Tim	1-CP1-1-Alf-SB-Tim	Alfalfa	Medicago sativa	96.00	6		Legume	I	N	CP1-1		Alf-SB-Tim
1	CP1-1-Alf-SB-Tim	1-CP1-1-Alf-SB-Tim	Smooth Bromegrass	Bromus inermis	48.00	3		Grass	I	N	CP1-1		Alf-SB-Tim
1	CP1-1-Alf-SB-Tim	1-CP1-1-Alf-SB-Tim	Timothy	Phleum pratense	32.00	2		Grass	I	N	CP1-1		Alf-SB-Tim
1	CP1-2-RC-Orc-Tim	1-CP1-2-RC-Orc-Tim	Red Clover	Trifolium pratense	80.00	5		Legume	I	N	CP1-2		RC-Orc-Tim
1	CP1-2-RC-Orc-Tim	1-CP1-2-RC-Orc-Tim	Orchardgrass	Dactylis glomerata L.	48.00	3		Grass	I	N	CP1-2		RC-Orc-Tim
1	CP1-2-RC-Orc-Tim	1-CP1-2-RC-Orc-Tim	Timothy	Phleum pratense	32.00	2		Grass	I	N	CP1-2		RC-Orc-Tim
1	CP1-3-Alf-Orc-Tim	1-CP1-3-Alf-Orc-Tim	Alfalfa	Medicago sativa	96.00	6		Legume	I	N	CP1-3		Alf-Orc-Tim
1	CP1-3-Alf-Orc-Tim	1-CP1-3-Alf-Orc-Tim	Orchardgrass	Dactylis glomerata L.	48.00	3		Grass	I	N	CP1-3		Alf-Orc-Tim
1	CP1-3-Alf-Orc-Tim	1-CP1-3-Alf-Orc-Tim	Timothy	Phleum pratense	32.00	2		Grass	I	N	CP1-3		Alf-Orc-Tim
1	CP1-4-RC-SB-Tim	1-CP1-4-RC-SB-Tim	Red Clover	Trifolium pratense	80.00	5		Legume	I	N	CP1-4		RC-SB-Tim
1	CP1-4-RC-SB-Tim	1-CP1-4-RC-SB-Tim	Smooth Bromegrass	Bromus inermis	48.00	3		Grass	I	N	CP1-4		RC-SB-Tim
1	CP1-4-RC-SB-Tim	1-CP1-4-RC-SB-Tim	Timothy	Phleum pratense	32.00	2		Grass	I	N	CP1-4		RC-SB-Tim
1	CP1-5-RC-SB-Tim-Orc	1-CP1-5-RC-SB-Tim-Orc	Red Clover	Trifolium pratense	80.00	5		Legume	I	N	CP1-5		RC-SB-Tim-Orc
1	CP1-5-RC-SB-Tim-Orc	1-CP1-5-RC-SB-Tim-Orc	Smooth Bromegrass	Bromus inermis	32.00	2		Grass	I	N	CP1-5		RC-SB-Tim-Orc
1	CP1-5-RC-SB-Tim-Orc	1-CP1-5-RC-SB-Tim-Orc	Timothy	Phleum pratense	32.00	2		Grass	I	N	CP1-5		RC-SB-Tim-Orc
1	CP1-5-RC-SB-Tim-Orc	1-CP1-5-RC-SB-Tim-Orc	Orchardgrass	Dactylis glomerata L.	16.00	1		Grass	I	N	CP1-5		RC-SB-Tim-Orc
1	CP1-6-RC-Tim-Orc-Rtop-LadC	1-CP1-6-RC-Tim-Orc-Rtop-LadC	Red Clover	Trifolium pratense	80.00	5		Legume	I	N	CP1-6		RC-Tim-Orc-Rtop-LadC
1	CP1-6-RC-Tim-Orc-Rtop-LadC	1-CP1-6-RC-Tim-Orc-Rtop-LadC	Timothy	Phleum pratense	32.00	2		Grass	I	N	CP1-6		RC-Tim-Orc-Rtop-LadC
1	CP1-6-RC-Tim-Orc-Rtop-LadC	1-CP1-6-RC-Tim-Orc-Rtop-LadC	Orchardgrass	Dactylis glomerata L.	16.00	1		Grass	I	N	CP1-6		RC-Tim-Orc-Rtop-LadC
1	CP1-6-RC-Tim-Orc-Rtop-LadC	1-CP1-6-RC-Tim-Orc-Rtop-LadC	Redtop	Agrostis gigantea	16.00	1		Grass	I	N	CP1-6		RC-Tim-Orc-Rtop-LadC
1	CP1-6-RC-Tim-Orc-Rtop-LadC	1-CP1-6-RC-Tim-Orc-Rtop-LadC	White Ladino Clover	Trifolium repens	8.00	0.5		Legume	I	N	CP1-6		RC-Tim-Orc-Rtop-LadC
1	CP1-7-Alf-Rtop-Tim-Orc	1-CP1-7-Alf-Rtop-Tim-Orc	Alfalfa	Medicago sativa	96.00	6		Legume	I	N	CP1-7		Alf-Rtop-Tim-Orc
1	CP1-7-Alf-Rtop-Tim-Orc	1-CP1-7-Alf-Rtop-Tim-Orc	Redtop	Agrostis gigantea	32.00	2		Grass	I	N	CP1-7		Alf-Rtop-Tim-Orc
1	CP1-7-Alf-Rtop-Tim-Orc	1-CP1-7-Alf-Rtop-Tim-Orc	Timothy	Phleum pratense	32.00	2		Grass	I	N	CP1-7		Alf-Rtop-Tim-Orc
1	CP1-7-Alf-Rtop-Tim-Orc	1-CP1-7-Alf-Rtop-Tim-Orc	Orchardgrass	Dactylis glomerata L.	16.00	1		Grass	I	N	CP1-7		Alf-Rtop-Tim-Orc
1	CP1-8-RC-KB-Orc-Rtop	1-CP1-8-RC-KB-Orc-Rtop	Red Clover	Trifolium pratense	80.00	5		Legume	I	N	CP1-8		RC-KB-Orc-Rtop
1	CP1-8-RC-KB-Orc-Rtop	1-CP1-8-RC-KB-Orc-Rtop	Kentucky Bluegrass	Poa pratensis	32.00	2		Grass	I	N	CP1-8		RC-KB-Orc-Rtop
1	CP1-8-RC-KB-Orc-Rtop	1-CP1-8-RC-KB-Orc-Rtop	Orchardgrass	Dactylis glomerata L.	16.00	1		Grass	I	N	CP1-8		RC-KB-Orc-Rtop
1	CP1-8-RC-KB-Orc-Rtop	1-CP1-8-RC-KB-Orc-Rtop	Redtop	Agrostis gigantea	16.00	1		Grass	I	N	CP1-8		RC-KB-Orc-Rtop
2	CP2_1-BB-Switch-Cmilkvetch-Besus-Ycone	2-CP2_1-BB-Switch-Cmilkvetch-Besus-Ycone	Big Bluestem	Andropogon gerardii	48.00	3		Grass	N	N	CP2_1		BB-Switch-Cmilkvetch-Besus-Ycone
2	CP2_1-BB-Switch-Cmilkvetch-Besus-Ycone	2-CP2_1-BB-Switch-Cmilkvetch-Besus-Ycone	Switchgrass	Panicum virgatum	16.00	1		Grass	N	N	CP2_1		BB-Switch-Cmilkvetch-Besus-Ycone
2	CP2_1-BB-Switch-Cmilkvetch-Besus-Ycone	2-CP2_1-BB-Switch-Cmilkvetch-Besus-Ycone	Canada Milkvetch	Astragalus canadensis	2.00	0.125		Legume	N	N	CP2_1		BB-Switch-Cmilkvetch-Besus-Ycone
2	CP2_1-BB-Switch-Cmilkvetch-Besus-Ycone	2-CP2_1-BB-Switch-Cmilkvetch-Besus-Ycone	Black-eyed Susan	Rudbeckia hirta	1.00	0.0625		Forb	N	N	CP2_1		BB-Switch-Cmilkvetch-Besus-Ycone
2	CP2_1-BB-Switch-Cmilkvetch-Besus-Ycone	2-CP2_1-BB-Switch-Cmilkvetch-Besus-Ycone	Yellow Coneflower	Ratibida pinnata	1.00	0.0625		Forb	N	N	CP2_1		BB-Switch-Cmilkvetch-Besus-Ycone
2	CP2_2-BB-Switch-Ttrefoil-Besus-Ycone	2-CP2_2-BB-Switch-Ttrefoil-Besus-Ycone	Big Bluestem	Andropogon gerardii	48.00	3		Grass	N	N	CP2_2		BB-Switch-Ttrefoil-Besus-Ycone
2	CP2_2-BB-Switch-Ttrefoil-Besus-Ycone	2-CP2_2-BB-Switch-Ttrefoil-Besus-Ycone	Switchgrass	Panicum virgatum	16.00	1		Grass	N	N	CP2_2		BB-Switch-Ttrefoil-Besus-Ycone
2	CP2_2-BB-Switch-Ttrefoil-Besus-Ycone	2-CP2_2-BB-Switch-Ttrefoil-Besus-Ycone	Showy Tick Trefoil	Desmodium canadense	6.00	0.375		Legume	N	N	CP2_2		BB-Switch-Ttrefoil-Besus-Ycone
2	CP2_2-BB-Switch-Ttrefoil-Besus-Ycone	2-CP2_2-BB-Switch-Ttrefoil-Besus-Ycone	Black-eyed Susan	Rudbeckia hirta	1.00	0.0625		Forb	N	N	CP2_2		BB-Switch-Ttrefoil-Besus-Ycone
2	CP2_2-BB-Switch-Ttrefoil-Besus-Ycone	2-CP2_2-BB-Switch-Ttrefoil-Besus-Ycone	Yellow Coneflower	Ratibida pinnata	1.00	0.0625		Forb	N	N	CP2_2		BB-Switch-Ttrefoil-Besus-Ycone
2	CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycon	2-CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-Be	Little Bluestem	Schizachyrium scoparium	24.00	1.5		Grass	N	N	CP2_3		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
2	CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycon	2-CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-Be	Sideoats Grama	Bouteloua curtipendula	16.00	1		Grass	N	N	CP2_3		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
2	CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycon	2-CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-Be	Big Bluestem	Andropogon gerardii	8.00	0.5		Grass	N	N	CP2_3		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
2	CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycon	2-CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-Be	Indiangrass	Sorghastrum nutans	8.00	0.5		Grass	N	N	CP2_3		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone

2	CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycon	2-CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-Be	Switchgrass	Panicum virgatum	8.00	0.5		Grass	N	N	CP2_3		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
2	CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycon	2-CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-Be	Purple Prairie Clover	Dalea purpurea	2.00	0.125		Legume	N	N	CP2_3		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
2	CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycon	2-CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-Be	Bergamot	Monarda fistulosa	1.00	0.0625		Forb	N	N	CP2_3		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
2	CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycon	2-CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-Be	Yellow Coneflower	Ratibida pinnata	1.00	0.0625		Forb	N	N	CP2_3		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
2	CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone	2-CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus-Y	Little Bluestem	Schizachyrium scoparium	20.00	1.25		Grass	N	N	CP2_4		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
2	CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone	2-CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus-Y	Canada Wildrye	Elymus canadensis	16.00	1		Grass	N	N	CP2_4		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
2	CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone	2-CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus-Y	Indiangrass	Sorghastrum nutans	16.00	1		Grass	N	N	CP2_4		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
2	CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone	2-CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus-Y	Big Bluestem	Andropogon gerardii	8.00	0.5		Grass	N	N	CP2_4		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
2	CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone	2-CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus-Y	Switchgrass	Panicum virgatum	8.00	0.5		Grass	N	N	CP2_4		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
2	CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone	2-CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus-Y	Bergamot	Monarda fistulosa	1.00	0.0625		Forb	N	N	CP2_4		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
2	CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone	2-CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus-Y	Black-eyed Susan	Rudbeckia hirta	1.00	0.0625		Forb	N	N	CP2_4		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
2	CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone	2-CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus-Y	Yellow Coneflower	Ratibida pinnata	1.00	0.0625		Forb	N	N	CP2_4		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
2	CP2_5-BB-Sgrama-Indian-PPclover-Sgrod-Ycone	2-CP2_5-BB-Sgrama-Indian-PPclover-Sgrod-Ycone	Big Bluestem	Andropogon gerardii	24.00	1.5		Grass	N	N	CP2_5		BB-Sgrama-Indian-PPclover-Sgrod-Ycone
2	CP2_5-BB-Sgrama-Indian-PPclover-Sgrod-Ycone	2-CP2_5-BB-Sgrama-Indian-PPclover-Sgrod-Ycone	Sideoats Grama	Bouteloua curtipendula	24.00	1.5		Grass	N	N	CP2_5		BB-Sgrama-Indian-PPclover-Sgrod-Ycone
2	CP2_5-BB-Sgrama-Indian-PPclover-Sgrod-Ycone	2-CP2_5-BB-Sgrama-Indian-PPclover-Sgrod-Ycone	Indiangrass	Sorghastrum nutans	8.00	0.5		Grass	N	N	CP2_5		BB-Sgrama-Indian-PPclover-Sgrod-Ycone
2	CP2_5-BB-Sgrama-Indian-PPclover-Sgrod-Ycone	2-CP2_5-BB-Sgrama-Indian-PPclover-Sgrod-Ycone	Purple Prairie Clover	Dalea purpurea	2.00	0.125		Legume	N	N	CP2_5		BB-Sgrama-Indian-PPclover-Sgrod-Ycone
2	CP2_5-BB-Sgrama-Indian-PPclover-Sgrod-Ycone	2-CP2_5-BB-Sgrama-Indian-PPclover-Sgrod-Ycone	Stiff Goldenrod	Oligoneuron rigidum	1.00	0.0625		Forb	N	N	CP2_5		BB-Sgrama-Indian-PPclover-Sgrod-Ycone
2	CP2_5-BB-Sgrama-Indian-PPclover-Sgrod-Ycone	2-CP2_5-BB-Sgrama-Indian-PPclover-Sgrod-Ycone	Yellow Coneflower	Ratibida pinnata	1.00	0.0625		Forb	N	N	CP2_5		BB-Sgrama-Indian-PPclover-Sgrod-Ycone
2	CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciro	2-CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bverv	Big Bluestem	Andropogon gerardii	16.00	1		Grass	N	N	CP2_6		BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
2	CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciro	2-CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bverv	Canada Wildrye	Elymus canadensis	16.00	1		Grass	N	N	CP2_6		BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
2	CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciro	2-CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bverv	Indiangrass	Sorghastrum nutans	16.00	1		Grass	N	N	CP2_6		BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
2	CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciro	2-CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bverv	Switchgrass	Panicum virgatum	16.00	1		Grass	N	N	CP2_6		BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
2	CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciro	2-CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bverv	Prairie Cordgrass	Spartina pectinata	8.00	0.5		Grass	N	N	CP2_6		BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
2	CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciro	2-CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bverv	Cupplant	Silphium perfoliatum	2.00	0.125		Forb	N	N	CP2_6		BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
2	CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciro	2-CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bverv	Blue Vervain	Verbena hastata	1.00	0.0625		Forb	N	N	CP2_6		BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
2	CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciro	2-CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bverv	Common Ironweed	Vernonia fasciculata	1.00	0.0625		Forb	N	N	CP2_6		BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
2	CP2_7-Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone	2-CP2_7-Switch-BB-Cwrye-Pcord-Berg-NEaster-Yc	Switchgrass	Panicum virgatum	32.00	2		Grass	N	N	CP2_7		Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
2	CP2_7-Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone	2-CP2_7-Switch-BB-Cwrye-Pcord-Berg-NEaster-Yc	Big Bluestem	Andropogon gerardii	16.00	1		Grass	N	N	CP2_7		Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
2	CP2_7-Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone	2-CP2_7-Switch-BB-Cwrye-Pcord-Berg-NEaster-Yc	Canada Wildrye	Elymus canadensis	16.00	1		Grass	N	N	CP2_7		Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
2	CP2_7-Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone	2-CP2_7-Switch-BB-Cwrye-Pcord-Berg-NEaster-Yc	Prairie Cordgrass	Spartina pectinata	4.00	0.25		Grass	N	N	CP2_7		Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
2	CP2_7-Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone	2-CP2_7-Switch-BB-Cwrye-Pcord-Berg-NEaster-Yc	Bergamot	Monarda fistulosa	1.00	0.0625		Forb	N	N	CP2_7		Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
2	CP2_7-Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone	2-CP2_7-Switch-BB-Cwrye-Pcord-Berg-NEaster-Yc	New England Aster	Symphyotrichum novae-a	1.00	0.0625		Forb	N	N	CP2_7		Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
2	CP2_7-Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone	2-CP2_7-Switch-BB-Cwrye-Pcord-Berg-NEaster-Yc	Yellow Coneflower	Ratibida pinnata	1.00	0.0625		Forb	N	N	CP2_7		Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
4	CP4D-1-RC-SB-Tim-Orc-RC	4-CP4D-1-RC-SB-Tim-Orc-RC	Red Clover	Trifolium pratense	96.00	6		Legume	I	N	CP4D-1		RC-SB-Tim-Orc-RC
4	CP4D-1-RC-SB-Tim-Orc-RC	4-CP4D-1-RC-SB-Tim-Orc-RC	Smooth Bromegrass	Bromus inermis	32.00	2		Grass	I	N	CP4D-1		RC-SB-Tim-Orc-RC
4	CP4D-1-RC-SB-Tim-Orc-RC	4-CP4D-1-RC-SB-Tim-Orc-RC	Timothy	Phleum pratense	32.00	2		Grass	I	N	CP4D-1		RC-SB-Tim-Orc-RC
4	CP4D-1-RC-SB-Tim-Orc-RC	4-CP4D-1-RC-SB-Tim-Orc-RC	Orchardgrass	Dactylis glomerata L.	8.00	0.5		Grass	I	N	CP4D-1		RC-SB-Tim-Orc-RC
4	CP4D-1-RC-SB-Tim-Orc-RC	4-CP4D-1-RC-SB-Tim-Orc-RC	Red Clover	Trifolium pratense	8.00	0.5		Legume	I	N	CP4D-1		RC-SB-Tim-Orc-RC
4	CP4D-2-Alf-SB-Tim-Orc	4-CP4D-2-Alf-SB-Tim-Orc	Alfalfa	Medicago sativa	112.00	7		Legume	I	N	CP4D-2		Alf-SB-Tim-Orc
4	CP4D-2-Alf-SB-Tim-Orc	4-CP4D-2-Alf-SB-Tim-Orc	Smooth Bromegrass	Bromus inermis	32.00	2		Grass	I	N	CP4D-2		Alf-SB-Tim-Orc
4	CP4D-2-Alf-SB-Tim-Orc	4-CP4D-2-Alf-SB-Tim-Orc	Timothy	Phleum pratense	16.00	1		Grass	I	N	CP4D-2		Alf-SB-Tim-Orc
4	CP4D-2-Alf-SB-Tim-Orc	4-CP4D-2-Alf-SB-Tim-Orc	Orchardgrass	Dactylis glomerata L.	8.00	0.5		Grass	I	N	CP4D-2		Alf-SB-Tim-Orc
4	CP4D-3-RC-Tim-SB-Orc	4-CP4D-3-RC-Tim-SB-Orc	Red Clover	Trifolium pratense	96.00	6		Legume	I	N	CP4D-3		RC-Tim-SB-Orc
4	CP4D-3-RC-Tim-SB-Orc	4-CP4D-3-RC-Tim-SB-Orc	Timothy	Phleum pratense	32.00	2		Grass	I	N	CP4D-3		RC-Tim-SB-Orc
4	CP4D-3-RC-Tim-SB-Orc	4-CP4D-3-RC-Tim-SB-Orc	Smooth Bromegrass	Bromus inermis	32.00	2		Grass	I	N	CP4D-3		RC-Tim-SB-Orc
4	CP4D-3-RC-Tim-SB-Orc	4-CP4D-3-RC-Tim-SB-Orc	Orchardgrass	Dactylis glomerata L.	8.00	0.5		Grass	I	N	CP4D-3		RC-Tim-SB-Orc
4	CP4D-4-RC-Tim-Orc-LadC	4-CP4D-4-RC-Tim-Orc-LadC	Red Clover	Trifolium pratense	96.00	6		Legume	I	N	CP4D-4		RC-Tim-Orc-LadC
4	CP4D-4-RC-Tim-Orc-LadC	4-CP4D-4-RC-Tim-Orc-LadC	Timothy	Phleum pratense	32.00	2		Grass	I	N	CP4D-4		RC-Tim-Orc-LadC
4	CP4D-4-RC-Tim-Orc-LadC	4-CP4D-4-RC-Tim-Orc-LadC	Orchardgrass	Dactylis glomerata L.	16.00	1		Grass	I	N	CP4D-4		RC-Tim-Orc-LadC

4	CP4D-4-RC-Tim-Orc-LadC	4-CP4D-4-RC-Tim-Orc-LadC	White Ladino Clover	Trifolium repens	8.00	0.5		Legume	I	N	CP4D-4		RC-Tim-Orc-LadC
4	CP4D-5-Indian-BB-Switch-Cmilkvetch-Besus-Ycone	4-CP4D-5-Indian-BB-Switch-Cmilkvetch-Besus-Yco	Indiangrass	Sorghastrum nutans	48.00	3		Grass	N	N	CP4D-5		Indian-BB-Switch-Cmilkvetch-Besus-Ycone
4	CP4D-5-Indian-BB-Switch-Cmilkvetch-Besus-Ycone	4-CP4D-5-Indian-BB-Switch-Cmilkvetch-Besus-Yco	Big Bluestem	Andropogon gerardii	16.00	1		Grass	N	N	CP4D-5		Indian-BB-Switch-Cmilkvetch-Besus-Ycone
4	CP4D-5-Indian-BB-Switch-Cmilkvetch-Besus-Ycone	4-CP4D-5-Indian-BB-Switch-Cmilkvetch-Besus-Yco	Switchgrass	Panicum virgatum	16.00	1		Grass	N	N	CP4D-5		Indian-BB-Switch-Cmilkvetch-Besus-Ycone
4	CP4D-5-Indian-BB-Switch-Cmilkvetch-Besus-Ycone	4-CP4D-5-Indian-BB-Switch-Cmilkvetch-Besus-Yco	Canada Milkvetch	Astragalus canadensis	2.00	0.125		Legume	N	N	CP4D-5		Indian-BB-Switch-Cmilkvetch-Besus-Ycone
4	CP4D-5-Indian-BB-Switch-Cmilkvetch-Besus-Ycone	4-CP4D-5-Indian-BB-Switch-Cmilkvetch-Besus-Yco	Black-eyed Susan	Rudbeckia hirta	1.00	0.0625		Forb	N	N	CP4D-5		Indian-BB-Switch-Cmilkvetch-Besus-Ycone
4	CP4D-5-Indian-BB-Switch-Cmilkvetch-Besus-Ycone	4-CP4D-5-Indian-BB-Switch-Cmilkvetch-Besus-Yco	Yellow Coneflower	Ratibida pinnata	1.00	0.0625		Forb	N	N	CP4D-5		Indian-BB-Switch-Cmilkvetch-Besus-Ycone
4	CP4D-6-Indian-BB-Switch-LB-Cmilkvetch-Besus-Ycone	4-CP4D-6-Indian-BB-Switch-LB-Cmilkvetch-Besus-	Indiangrass	Sorghastrum nutans	48.00	3		Grass	N	N	CP4D-6		Indian-BB-Switch-LB-Cmilkvetch-Besus-Ycone
4	CP4D-6-Indian-BB-Switch-LB-Cmilkvetch-Besus-Ycone	4-CP4D-6-Indian-BB-Switch-LB-Cmilkvetch-Besus-	Big Bluestem	Andropogon gerardii	16.00	1		Grass	N	N	CP4D-6		Indian-BB-Switch-LB-Cmilkvetch-Besus-Ycone
4	CP4D-6-Indian-BB-Switch-LB-Cmilkvetch-Besus-Ycone	4-CP4D-6-Indian-BB-Switch-LB-Cmilkvetch-Besus-	Switchgrass	Panicum virgatum	16.00	1		Grass	N	N	CP4D-6		Indian-BB-Switch-LB-Cmilkvetch-Besus-Ycone
4	CP4D-6-Indian-BB-Switch-LB-Cmilkvetch-Besus-Ycone	4-CP4D-6-Indian-BB-Switch-LB-Cmilkvetch-Besus-	Little Bluestem	Schizachyrium scoparium	16.00	1		Grass	N	N	CP4D-6		Indian-BB-Switch-LB-Cmilkvetch-Besus-Ycone
4	CP4D-6-Indian-BB-Switch-LB-Cmilkvetch-Besus-Ycone	4-CP4D-6-Indian-BB-Switch-LB-Cmilkvetch-Besus-	Canada Milkvetch	Astragalus canadensis	2.00	0.125		Legume	N	N	CP4D-6		Indian-BB-Switch-LB-Cmilkvetch-Besus-Ycone
4	CP4D-6-Indian-BB-Switch-LB-Cmilkvetch-Besus-Ycone	4-CP4D-6-Indian-BB-Switch-LB-Cmilkvetch-Besus-	Black-eyed Susan	Rudbeckia hirta	1.00	0.0625		Forb	N	N	CP4D-6		Indian-BB-Switch-LB-Cmilkvetch-Besus-Ycone
4	CP4D-6-Indian-BB-Switch-LB-Cmilkvetch-Besus-Ycone	4-CP4D-6-Indian-BB-Switch-LB-Cmilkvetch-Besus-	Yellow Coneflower	Ratibida pinnata	1.00	0.0625		Forb	N	N	CP4D-6		Indian-BB-Switch-LB-Cmilkvetch-Besus-Ycone
4	CP4D-7-Indian-BB-Switch-PPclover-Besus-Ycone	4-CP4D-7-Indian-BB-Switch-PPclover-Besus-Ycone	Indiangrass	Sorghastrum nutans	48.00	3		Grass	N	N	CP4D-7		Indian-BB-Switch-PPclover-Besus-Ycone
4	CP4D-7-Indian-BB-Switch-PPclover-Besus-Ycone	4-CP4D-7-Indian-BB-Switch-PPclover-Besus-Ycone	Big Bluestem	Andropogon gerardii	16.00	1		Grass	N	N	CP4D-7		Indian-BB-Switch-PPclover-Besus-Ycone
4	CP4D-7-Indian-BB-Switch-PPclover-Besus-Ycone	4-CP4D-7-Indian-BB-Switch-PPclover-Besus-Ycone	Switchgrass	Panicum virgatum	16.00	1		Grass	N	N	CP4D-7		Indian-BB-Switch-PPclover-Besus-Ycone
4	CP4D-7-Indian-BB-Switch-PPclover-Besus-Ycone	4-CP4D-7-Indian-BB-Switch-PPclover-Besus-Ycone	Purple Prairie Clover	Dalea purpurea	2.00	0.125		Legume	N	N	CP4D-7		Indian-BB-Switch-PPclover-Besus-Ycone
4	CP4D-7-Indian-BB-Switch-PPclover-Besus-Ycone	4-CP4D-7-Indian-BB-Switch-PPclover-Besus-Ycone	Black-eyed Susan	Rudbeckia hirta	1.00	0.0625		Forb	N	N	CP4D-7		Indian-BB-Switch-PPclover-Besus-Ycone
4	CP4D-7-Indian-BB-Switch-PPclover-Besus-Ycone	4-CP4D-7-Indian-BB-Switch-PPclover-Besus-Ycone	Yellow Coneflower	Ratibida pinnata	1.00	0.0625		Forb	N	N	CP4D-7		Indian-BB-Switch-PPclover-Besus-Ycone
4	CP4D-8-Indian-BB-LB-Switch-PPclover-Besus-Ycone	4-CP4D-8-Indian-BB-LB-Switch-PPclover-Besus-Yc	Indiangrass	Sorghastrum nutans	48.00	3		Grass	N	N	CP4D-8		Indian-BB-LB-Switch-PPclover-Besus-Ycone
4	CP4D-8-Indian-BB-LB-Switch-PPclover-Besus-Ycone	4-CP4D-8-Indian-BB-LB-Switch-PPclover-Besus-Yc	Big Bluestem	Andropogon gerardii	16.00	1		Grass	N	N	CP4D-8		Indian-BB-LB-Switch-PPclover-Besus-Ycone
4	CP4D-8-Indian-BB-LB-Switch-PPclover-Besus-Ycone	4-CP4D-8-Indian-BB-LB-Switch-PPclover-Besus-Yc	Little Bluestem	Schizachyrium scoparium	16.00	1		Grass	N	N	CP4D-8		Indian-BB-LB-Switch-PPclover-Besus-Ycone
4	CP4D-8-Indian-BB-LB-Switch-PPclover-Besus-Ycone	4-CP4D-8-Indian-BB-LB-Switch-PPclover-Besus-Yc	Switchgrass	Panicum virgatum	16.00	1		Grass	N	N	CP4D-8		Indian-BB-LB-Switch-PPclover-Besus-Ycone
4	CP4D-8-Indian-BB-LB-Switch-PPclover-Besus-Ycone	4-CP4D-8-Indian-BB-LB-Switch-PPclover-Besus-Yc	Purple Prairie Clover	Dalea purpurea	2.00	0.125		Legume	N	N	CP4D-8		Indian-BB-LB-Switch-PPclover-Besus-Ycone
4	CP4D-8-Indian-BB-LB-Switch-PPclover-Besus-Ycone	4-CP4D-8-Indian-BB-LB-Switch-PPclover-Besus-Yc	Black-eyed Susan	Rudbeckia hirta	1.00	0.0625		Forb	N	N	CP4D-8		Indian-BB-LB-Switch-PPclover-Besus-Ycone
4	CP4D-8-Indian-BB-LB-Switch-PPclover-Besus-Ycone	4-CP4D-8-Indian-BB-LB-Switch-PPclover-Besus-Yc	Yellow Coneflower	Ratibida pinnata	1.00	0.0625		Forb	N	N	CP4D-8		Indian-BB-LB-Switch-PPclover-Besus-Ycone
4	CP4D-9-Indian-BB-Switch-PPclover-Berg-Ycone	4-CP4D-9-Indian-BB-Switch-PPclover-Berg-Ycone	Indiangrass	Sorghastrum nutans	48.00	3		Grass	N	N	CP4D-9		Indian-BB-Switch-PPclover-Berg-Ycone
4	CP4D-9-Indian-BB-Switch-PPclover-Berg-Ycone	4-CP4D-9-Indian-BB-Switch-PPclover-Berg-Ycone	Big Bluestem	Andropogon gerardii	16.00	1		Grass	N	N	CP4D-9		Indian-BB-Switch-PPclover-Berg-Ycone
4	CP4D-9-Indian-BB-Switch-PPclover-Berg-Ycone	4-CP4D-9-Indian-BB-Switch-PPclover-Berg-Ycone	Switchgrass	Panicum virgatum	16.00	1		Grass	N	N	CP4D-9		Indian-BB-Switch-PPclover-Berg-Ycone
4	CP4D-9-Indian-BB-Switch-PPclover-Berg-Ycone	4-CP4D-9-Indian-BB-Switch-PPclover-Berg-Ycone	Purple Prairie Clover	Dalea purpurea	2.00	0.125		Legume	N	N	CP4D-9		Indian-BB-Switch-PPclover-Berg-Ycone
4	CP4D-9-Indian-BB-Switch-PPclover-Berg-Ycone	4-CP4D-9-Indian-BB-Switch-PPclover-Berg-Ycone	Bergamot	Monarda fistulosa	1.00	0.0625		Forb	N	N	CP4D-9		Indian-BB-Switch-PPclover-Berg-Ycone
4	CP4D-9-Indian-BB-Switch-PPclover-Berg-Ycone	4-CP4D-9-Indian-BB-Switch-PPclover-Berg-Ycone	Yellow Coneflower	Ratibida pinnata	1.00	0.0625		Forb	N	N	CP4D-9		Indian-BB-Switch-PPclover-Berg-Ycone
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swd	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-S	Little Bluestem	Schizachyrium scoparium	24.00	1.5		Grass	N	N	CP25-D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swd	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-S	Sideoats Grama	Bouteloua curtipendula	24.00	1.5		Grass	N	N	CP25-D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swd	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-S	Indiangrass	Sorghastrum nutans	8.00	0.5		Grass	N	N	CP25-D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swd	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-S	Big Bluestem	Andropogon gerardii	4.00	0.25		Grass	N	N	CP25-D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swd	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-S	Prairie Junegrass	Koeleria macrantha	2.00	0.125		Grass	N	N	CP25-D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swd	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-S	Purple Prairie Clover	Dalea purpurea	2.00	0.125		Legume	N	N	CP25-D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swd	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-S	Sand Dropseed	Sporobolus cryptandrus	2.00	0.125		Grass	N	N	CP25-D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swd	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-S	Spiderwort	Tradescantia ohiensis	1.00	0.0625		Forb	N	N	CP25-D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swd	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-S	Hoary Vervain	Verbena stricta	0.50	0.03125		Forb	N	N	CP25-D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swd	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-S	Leadplant	Amorpha canescens	0.50	0.03125		Legume	N	N	CP25-D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swd	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-S	Prairie Tickseed	Coreopsis palmata	0.50	0.03125		Forb	N	N	CP25-D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swd	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-S	Silky Aster	Symphyotrichum pratens	0.50	0.03125		Forb	N	N	CP25-D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swd	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-S	Stiff Goldenrod	Oligoneuron rigidum	0.50	0.03125		Forb	N	N	CP25-D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swd	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-S	Yellow Coneflower	Ratibida pinnata	0.50	0.03125		Forb	N	N	CP25-D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swd	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-S	Prairie Cinquefoil	Potentilla arguta	0.25	0.015625		Forb	N	N	CP25-D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swd	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-S	Spotted Mint	Monarda punctata	0.25	0.015625		Forb	N	N	CP25-D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint

25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclove	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdro	Little Bluestem	Schizachyrium scoparium	24.00	1.5		Grass	N	N	CP25-DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclove	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdro	Sideoats Grama	Bouteloua curtipendula	24.00	1.5		Grass	N	N	CP25-DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclove	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdro	Indiangrass	Sorghastrum nutans	8.00	0.5		Grass	N	N	CP25-DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclove	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdro	Switchgrass	Panicum virgatum	4.00	0.25		Grass	N	N	CP25-DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclove	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdro	Prairie Junegrass	Koeleria macrantha	2.00	0.125		Grass	N	N	CP25-DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclove	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdro	Prairie Dropseed	Sporobolus heterolepis	2.00	0.125		Grass	N	N	CP25-DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclove	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdro	Purple Prairie Clover	Dalea purpurea	2.00	0.125		Legume	N	N	CP25-DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclove	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdro	Round-Headed Bushclover	Lespedeza capitata	2.00	0.125		Legume	N	N	CP25-DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclove	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdro	Bergamot	Monarda fistulosa	1.00	0.0625		Forb	N	N	CP25-DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclove	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdro	Spiderwort	Tradescantia ohiensis	1.00	0.0625		Forb	N	N	CP25-DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclove	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdro	Yellow Coneflower	Ratibida pinnata	1.00	0.0625		Forb	N	N	CP25-DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclove	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdro	Leadplant	Amorpha canescens	0.50	0.03125		Legume	N	N	CP25-DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclove	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdro	Rough Blazing Star	Liatris aspera	0.50	0.03125		Forb	N	N	CP25-DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclove	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdro	Sky-Blue Aster	Symphyotrichum oolenta	0.50	0.03125		Forb	N	N	CP25-DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclove	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdro	Stiff Goldenrod	Oligoneuron rigidum	0.50	0.03125		Forb	N	N	CP25-DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclove	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdro	Prairie Cinquefoil	Potentilla arguta	0.25	0.015625		Forb	N	N	CP25-DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjur	Little Bluestem	Schizachyrium scoparium	24.00	1.5		Grass	N	N	CP25-KBB		Lplant-Rblzstar-Sgrod-Ycone-Berg-Pcinque-SkyAster
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjur	Sideoats Grama	Bouteloua curtipendula	24.00	1.5		Grass	N	N	CP25-KBB		Lplant-Rblzstar-Sgrod-Ycone-Berg-Pcinque-SkyAster
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjur	Indiangrass	Sorghastrum nutans	8.00	0.5		Grass	N	N	CP25-KBB		Lplant-Rblzstar-Sgrod-Ycone-Berg-Pcinque-SkyAster
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjur	Switchgrass	Panicum virgatum	8.00	0.5		Grass	N	N	CP25-KBB		Lplant-Rblzstar-Sgrod-Ycone-Berg-Pcinque-SkyAster
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjur	Wild Lupine	Lupinus perennis	3.00	0.1875		Legume	N	N	CP25-KBB		Lplant-Rblzstar-Sgrod-Ycone-Berg-Pcinque-SkyAster
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjur	Prairie Junegrass	Koeleria macrantha	2.00	0.125		Grass	N	N	CP25-KBB		Lplant-Rblzstar-Sgrod-Ycone-Berg-Pcinque-SkyAster
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjur	Prairie Dropseed	Sporobolus heterolepis	2.00	0.125		Grass	N	N	CP25-KBB		Lplant-Rblzstar-Sgrod-Ycone-Berg-Pcinque-SkyAster
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjur	Purple Prairie Clover	Dalea purpurea	2.00	0.125		Legume	N	N	CP25-KBB		Lplant-Rblzstar-Sgrod-Ycone-Berg-Pcinque-SkyAster
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjur	Pale Purple Coneflower	Echinacea pallida	1.00	0.0625		Forb	N	N	CP25-KBB		Lplant-Rblzstar-Sgrod-Ycone-Berg-Pcinque-SkyAster
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjur	Leadplant	Amorpha canescens	0.50	0.03125		Legume	N	N	CP25-KBB		Lplant-Rblzstar-Sgrod-Ycone-Berg-Pcinque-SkyAster
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjur	Rough Blazing Star	Liatris aspera	0.50	0.03125		Forb	N	N	CP25-KBB		Lplant-Rblzstar-Sgrod-Ycone-Berg-Pcinque-SkyAster
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjur	Stiff Goldenrod	Oligoneuron rigidum	0.50	0.03125		Forb	N	N	CP25-KBB		Lplant-Rblzstar-Sgrod-Ycone-Berg-Pcinque-SkyAster
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjur	Yellow Coneflower	Ratibida pinnata	0.50	0.03125		Forb	N	N	CP25-KBB		Lplant-Rblzstar-Sgrod-Ycone-Berg-Pcinque-SkyAster
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjur	Bergamot	Monarda fistulosa	0.25	0.015625		Forb	N	N	CP25-KBB		Lplant-Rblzstar-Sgrod-Ycone-Berg-Pcinque-SkyAster
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjur	Prairie Cinquefoil	Potentilla arguta	0.25	0.015625		Forb	N	N	CP25-KBB		Lplant-Rblzstar-Sgrod-Ycone-Berg-Pcinque-SkyAster
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjur	Sky-Blue Aster	Symphyotrichum oolenta	0.25	0.015625		Forb	N	N	CP25-KBB		Lplant-Rblzstar-Sgrod-Ycone-Berg-Pcinque-SkyAster
25	CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-	25-CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun	Little Bluestem	Schizachyrium scoparium	24.00	1.5		Grass	N	N	CP25-M		Berg-Besus-NEaster-SkyAster-Ycone-Croot
25	CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-	25-CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun	Indiangrass	Sorghastrum nutans	16.00	1		Grass	N	N	CP25-M		Berg-Besus-NEaster-SkyAster-Ycone-Croot
25	CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-	25-CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun	Big Bluestem	Andropogon gerardii	8.00	0.5		Grass	N	N	CP25-M		Berg-Besus-NEaster-SkyAster-Ycone-Croot
25	CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-	25-CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun	Canada Wildrye	Elymus canadensis	8.00	0.5		Grass	N	N	CP25-M		Berg-Besus-NEaster-SkyAster-Ycone-Croot
25	CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-	25-CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun	Switchgrass	Panicum virgatum	8.00	0.5		Grass	N	N	CP25-M		Berg-Besus-NEaster-SkyAster-Ycone-Croot
25	CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-	25-CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun	Ox-eye Sunflower	Heliopsis helianthoides	1.00	0.0625		Forb	N	N	CP25-M		Berg-Besus-NEaster-SkyAster-Ycone-Croot
25	CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-	25-CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun	Prairie Blazing Star	Liatris pycnostachya	1.00	0.0625		Forb	N	N	CP25-M		Berg-Besus-NEaster-SkyAster-Ycone-Croot
25	CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-	25-CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun	Purple Prairie Clover	Dalea purpurea	1.00	0.0625		Legume	N	N	CP25-M		Berg-Besus-NEaster-SkyAster-Ycone-Croot
25	CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-	25-CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun	Rosinweed	Silphium integrifolium	1.00	0.0625		Forb	N	N	CP25-M		Berg-Besus-NEaster-SkyAster-Ycone-Croot
25	CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-	25-CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun	Bergamot	Monarda fistulosa	0.50	0.03125		Forb	N	N	CP25-M		Berg-Besus-NEaster-SkyAster-Ycone-Croot
25	CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-	25-CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun	Black-eyed Susan	Rudbeckia hirta	0.50	0.03125		Forb	N	N	CP25-M		Berg-Besus-NEaster-SkyAster-Ycone-Croot
25	CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-	25-CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun	New England Aster	Symphyotrichum novae-a	0.50	0.03125		Forb	N	N	CP25-M		Berg-Besus-NEaster-SkyAster-Ycone-Croot
25	CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-	25-CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun	Sky-Blue Aster	Symphyotrichum oolenta	0.50	0.03125		Forb	N	N	CP25-M		Berg-Besus-NEaster-SkyAster-Ycone-Croot
25	CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-	25-CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun	Yellow Coneflower	Ratibida pinnata	0.50	0.03125		Forb	N	N	CP25-M		Berg-Besus-NEaster-SkyAster-Ycone-Croot
25	CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-	25-CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun	Culver's Root	Veronicastrum virginicum	0.25	0.015625		Forb	N	N	CP25-M		Berg-Besus-NEaster-SkyAster-Ycone-Croot
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgras	Canada Wildrye	Elymus canadensis	16.00	1		Grass	N	N	CP25-W		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgras	Switchgrass	Panicum virgatum	16.00	1		Grass	N	N	CP25-W		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot

25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgras	Indiangrass	Sorghastrum nutans	12.00	0.75		Grass	N	N	CP25-W		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgras	Big Bluestem	Andropogon gerardii	8.00	0.5		Grass	N	N	CP25-W		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgras	Prairie Cordgrass	Spartina pectinata	8.00	0.5		Grass	N	N	CP25-W		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgras	Fowl Mannagrass	Glyceria striata	4.00	0.25		Grass	N	N	CP25-W		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgras	Fox Sedge	Carex vulpinoidea	4.00	0.25		Sedge	N	N	CP25-W		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgras	Cupplant	Silphium perfoliatum	2.00	0.125		Forb	N	N	CP25-W		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgras	Showy Tick Trefoil	Desmodium canadense	2.00	0.125		Legume	N	N	CP25-W		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgras	Blue Vervain	Verbena hastata	1.00	0.0625		Forb	N	N	CP25-W		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgras	Golden Alexanders	Zizia aurea	1.00	0.0625		Forb	N	N	CP25-W		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgras	Marsh Milkweed	Asclepias incarnata	1.00	0.0625		Forb	N	N	CP25-W		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgras	Boneset	Eupatorium perfoliatum	0.50	0.03125		Forb	N	N	CP25-W		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgras	Common Ironweed	Vernonia fasciculata	0.50	0.03125		Forb	N	N	CP25-W		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgras	Joe-pye Weed	Eutrochium maculatum	0.50	0.03125		Forb	N	N	CP25-W		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgras	Culver's Root	Veronicastrum virginicum	0.25	0.015625		Forb	N	N	CP25-W		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
25	CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-WWIndig	25-CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-	Switchgrass	Panicum virgatum	24.00	1.5		Grass	N	N	CP25-WM		Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
25	CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-WWIndig	25-CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-	Canada Wildrye	Elymus canadensis	16.00	1		Grass	N	N	CP25-WM		Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
25	CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-WWIndig	25-CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-	Indiangrass	Sorghastrum nutans	12.00	0.75		Grass	N	N	CP25-WM		Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
25	CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-WWIndig	25-CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-	Big Bluestem	Andropogon gerardii	8.00	0.5		Grass	N	N	CP25-WM		Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
25	CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-WWIndig	25-CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-	Prairie Cordgrass	Spartina pectinata	4.00	0.25		Grass	N	N	CP25-WM		Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
25	CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-WWIndig	25-CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-	Cupplant	Silphium perfoliatum	2.00	0.125		Forb	N	N	CP25-WM		Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
25	CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-WWIndig	25-CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-	White wild indigo	Baptisia alba	1.50	0.09375		Legume	N	N	CP25-WM		Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
25	CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-WWIndig	25-CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-	Black-eyed Susan	Rudbeckia hirta	0.50	0.03125		Forb	N	N	CP25-WM		Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
25	CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-WWIndig	25-CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-	Common Ironweed	Vernonia fasciculata	0.50	0.03125		Forb	N	N	CP25-WM		Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
25	CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-WWIndig	25-CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-	Golden Alexanders	Zizia aurea	0.50	0.03125		Forb	N	N	CP25-WM		Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
25	CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-WWIndig	25-CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-	New England Aster	Symphyotrichum novae-a	0.50	0.03125		Forb	N	N	CP25-WM		Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
25	CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-WWIndig	25-CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-	Prairie Blazing Star	Liatris pycnostachya	0.50	0.03125		Forb	N	N	CP25-WM		Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
25	CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-WWIndig	25-CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-	Yellow Coneflower	Ratibida pinnata	0.50	0.03125		Forb	N	N	CP25-WM		Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
25	CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-WWIndig	25-CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-	Bergamot	Monarda fistulosa	0.25	0.015625		Forb	N	N	CP25-WM		Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
25	CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-WWIndig	25-CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-	Great St. John's Wort	Hypericum ascyron	0.25	0.015625		Forb	N	N	CP25-WM		Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
33	CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHbushclover	33-CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHb	Little Bluestem	Schizachyrium scoparium	32.00	2		Grass	N	N	CP33-1		Wsun-Ycone-Besus
33	CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHbushclover	33-CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHb	Sideoats Grama	Bouteloua curtipendula	32.00	2		Grass	N	N	CP33-1		Wsun-Ycone-Besus
33	CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHbushclover	33-CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHb	Canada Wildrye	Elymus canadensis	8.00	0.5		Grass	N	N	CP33-1		Wsun-Ycone-Besus
33	CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHbushclover	33-CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHb	Indiangrass	Sorghastrum nutans	8.00	0.5		Grass	N	N	CP33-1		Wsun-Ycone-Besus
33	CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHbushclover	33-CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHb	Purple Prairie Clover	Dalea purpurea	2.00	0.125		Legume	N	N	CP33-1		Wsun-Ycone-Besus
33	CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHbushclover	33-CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHb	Round-Headed Bushclover	Lespedeza capitata	2.00	0.125		Legume	N	N	CP33-1		Wsun-Ycone-Besus
33	CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHbushclover	33-CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHb	Purple Coneflower	Echinacea purpurea	1.00	0.0625		Forb	N	N	CP33-1		Wsun-Ycone-Besus
33	CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHbushclover	33-CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHb	Stiff Goldenrod	Oligoneuron rigidum	1.00	0.0625		Forb	N	N	CP33-1		Wsun-Ycone-Besus
33	CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHbushclover	33-CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHb	Fewleaf Sunflower	Helianthus occidentalis	1.00	0.0625		Forb	N	N	CP33-1		Wsun-Ycone-Besus
33	CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHbushclover	33-CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHb	Yellow Coneflower	Ratibida pinnata	1.00	0.0625		Forb	N	N	CP33-1		Wsun-Ycone-Besus
33	CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHbushclover	33-CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHb	Black-eyed Susan	Rudbeckia hirta	0.75	0.046875		Forb	N	N	CP33-1		Wsun-Ycone-Besus
33	CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rblzst	33-CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclo	Little Bluestem	Schizachyrium scoparium	24.00	1.5		Grass	N	N	CP33-2		SkyAster-Sgrod-Wsun
33	CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rblzst	33-CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclo	Sideoats Grama	Bouteloua curtipendula	20.00	1.25		Grass	N	N	CP33-2		SkyAster-Sgrod-Wsun
33	CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rblzst	33-CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclo	Indiangrass	Sorghastrum nutans	16.00	1		Grass	N	N	CP33-2		SkyAster-Sgrod-Wsun
33	CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rblzst	33-CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclo	Canada Wildrye	Elymus canadensis	8.00	0.5		Grass	N	N	CP33-2		SkyAster-Sgrod-Wsun
33	CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rblzst	33-CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclo	Purple Coneflower	Echinacea purpurea	2.00	0.125		Forb	N	N	CP33-2		SkyAster-Sgrod-Wsun
33	CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rblzst	33-CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclo	Purple Prairie Clover	Dalea purpurea	2.00	0.125		Legume	N	N	CP33-2		SkyAster-Sgrod-Wsun
33	CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rblzst	33-CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclo	Rough Blazing Star	Liatris aspera	2.00	0.125		Forb	N	N	CP33-2		SkyAster-Sgrod-Wsun
33	CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rblzst	33-CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclo	Black-eyed Susan	Rudbeckia hirta	1.00	0.0625		Forb	N	N	CP33-2		SkyAster-Sgrod-Wsun
33	CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rblzst	33-CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclo	Sky-Blue Aster	Symphyotrichum oolenta	1.00	0.0625		Forb	N	N	CP33-2		SkyAster-Sgrod-Wsun

33	CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rblzs	33-CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclov	Stiff Goldenrod	Oligoneuron rigidum	1.00	0.0625		Forb	N	N	CP33-2		SkyAster-Sgrod-Wsun
33	CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rblzs	33-CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclov	Fewleaf Sunflower	Helianthus occidentalis	1.00	0.0625		Forb	N	N	CP33-2		SkyAster-Sgrod-Wsun
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord-I	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedg	Canada Wildrye	Elymus canadensis	16.00	1		Grass	N	N	CP38B-WPHRA		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord-I	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedg	Indiangrass	Sorghastrum nutans	12.00	0.75		Grass	N	N	CP38B-WPHRA		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord-I	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedg	Switchgrass	Panicum virgatum	12.00	0.75		Grass	N	N	CP38B-WPHRA		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord-I	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedg	Big Bluestem	Andropogon gerardii	8.00	0.5		Grass	N	N	CP38B-WPHRA		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord-I	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedg	Fox Sedge	Carex vulpinoidea	8.00	0.5		Sedge	N	N	CP38B-WPHRA		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord-I	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedg	Prairie Cordgrass	Spartina pectinata	8.00	0.5		Grass	N	N	CP38B-WPHRA		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord-I	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedg	Fowl Mannagrass	Glyceria striata	4.00	0.25		Grass	N	N	CP38B-WPHRA		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord-I	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedg	Cupplant	Silphium perfoliatum	2.00	0.125		Forb	N	N	CP38B-WPHRA		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord-I	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedg	Showy Tick Trefoil	Desmodium canadense	2.00	0.125		Legume	N	N	CP38B-WPHRA		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord-I	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedg	Blue Vervain	Verbena hastata	1.00	0.0625		Forb	N	N	CP38B-WPHRA		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord-I	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedg	Golden Alexanders	Zizia aurea	1.00	0.0625		Forb	N	N	CP38B-WPHRA		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord-I	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedg	Marsh Milkweed	Asclepias incarnata	1.00	0.0625		Forb	N	N	CP38B-WPHRA		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord-I	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedg	Boneset	Eupatorium perfoliatum	0.50	0.03125		Forb	N	N	CP38B-WPHRA		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord-I	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedg	Common Ironweed	Vernonia fasciculata	0.50	0.03125		Forb	N	N	CP38B-WPHRA		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord-I	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedg	Joe-pye Weed	Eutrochium maculatum	0.50	0.03125		Forb	N	N	CP38B-WPHRA		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord-I	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedg	Culver's Root	Veronicastrum virginicum	0.25	0.015625		Forb	N	N	CP38B-WPHRA		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-CWGCA(CP1)1-RC-Orc-Tim	38-CP38E-CWGCA(CP1)1-RC-Orc-Tim	Red Clover	Trifolium pratense	80.00	5		Legume	I	N	CP38E-CWGCA(CP1)1		RC-Orc-Tim
38	CP38E-CWGCA(CP1)1-RC-Orc-Tim	38-CP38E-CWGCA(CP1)1-RC-Orc-Tim	Orchardgrass	Dactylis glomerata L.	48.00	3		Grass	I	N	CP38E-CWGCA(CP1)1		RC-Orc-Tim
38	CP38E-CWGCA(CP1)1-RC-Orc-Tim	38-CP38E-CWGCA(CP1)1-RC-Orc-Tim	Timothy	Phleum pratense	32.00	2		Grass	I	N	CP38E-CWGCA(CP1)1		RC-Orc-Tim
38	CP38E-CWGCA(CP1)2-Alf-Orc-Tim	38-CP38E-CWGCA(CP1)2-Alf-Orc-Tim	Alfalfa	Medicago sativa	96.00	6		Legume	I	N	CP38E-CWGCA(CP1)2		Alf-Orc-Tim
38	CP38E-CWGCA(CP1)2-Alf-Orc-Tim	38-CP38E-CWGCA(CP1)2-Alf-Orc-Tim	Orchardgrass	Dactylis glomerata L.	48.00	3		Grass	I	N	CP38E-CWGCA(CP1)2		Alf-Orc-Tim
38	CP38E-CWGCA(CP1)2-Alf-Orc-Tim	38-CP38E-CWGCA(CP1)2-Alf-Orc-Tim	Timothy	Phleum pratense	32.00	2		Grass	I	N	CP38E-CWGCA(CP1)2		Alf-Orc-Tim
38	CP38E-CWGCA(CP1)3-RC-Tim-Orc-Rtop-LadC	38-CP38E-CWGCA(CP1)3-RC-Tim-Orc-Rtop-LadC	Red Clover	Trifolium pratense	80.00	5		Legume	I	N	CP38E-CWGCA(CP1)3		RC-Tim-Orc-Rtop-LadC
38	CP38E-CWGCA(CP1)3-RC-Tim-Orc-Rtop-LadC	38-CP38E-CWGCA(CP1)3-RC-Tim-Orc-Rtop-LadC	Timothy	Phleum pratense	32.00	2		Grass	I	N	CP38E-CWGCA(CP1)3		RC-Tim-Orc-Rtop-LadC
38	CP38E-CWGCA(CP1)3-RC-Tim-Orc-Rtop-LadC	38-CP38E-CWGCA(CP1)3-RC-Tim-Orc-Rtop-LadC	Orchardgrass	Dactylis glomerata L.	16.00	1		Grass	I	N	CP38E-CWGCA(CP1)3		RC-Tim-Orc-Rtop-LadC
38	CP38E-CWGCA(CP1)3-RC-Tim-Orc-Rtop-LadC	38-CP38E-CWGCA(CP1)3-RC-Tim-Orc-Rtop-LadC	Redtop	Agrostis gigantea	16.00	1		Grass	I	N	CP38E-CWGCA(CP1)3		RC-Tim-Orc-Rtop-LadC
38	CP38E-CWGCA(CP1)3-RC-Tim-Orc-Rtop-LadC	38-CP38E-CWGCA(CP1)3-RC-Tim-Orc-Rtop-LadC	White Ladino Clover	Trifolium repens	8.00	0.5		Legume	I	N	CP38E-CWGCA(CP1)3		RC-Tim-Orc-Rtop-LadC
38	CP38E-CWGCA(CP1)4-Alf-Rtop-Tim-Orc	38-CP38E-CWGCA(CP1)4-Alf-Rtop-Tim-Orc	Alfalfa	Medicago sativa	96.00	6		Legume	I	N	CP38E-CWGCA(CP1)4		Alf-Rtop-Tim-Orc
38	CP38E-CWGCA(CP1)4-Alf-Rtop-Tim-Orc	38-CP38E-CWGCA(CP1)4-Alf-Rtop-Tim-Orc	Redtop	Agrostis gigantea	32.00	2		Grass	I	N	CP38E-CWGCA(CP1)4		Alf-Rtop-Tim-Orc
38	CP38E-CWGCA(CP1)4-Alf-Rtop-Tim-Orc	38-CP38E-CWGCA(CP1)4-Alf-Rtop-Tim-Orc	Timothy	Phleum pratense	32.00	2		Grass	I	N	CP38E-CWGCA(CP1)4		Alf-Rtop-Tim-Orc
38	CP38E-CWGCA(CP1)4-Alf-Rtop-Tim-Orc	38-CP38E-CWGCA(CP1)4-Alf-Rtop-Tim-Orc	Orchardgrass	Dactylis glomerata L.	16.00	1		Grass	I	N	CP38E-CWGCA(CP1)4		Alf-Rtop-Tim-Orc
38	CP38E-CWGCA(CP1)5-RC-KB-Orc-Rtop	38-CP38E-CWGCA(CP1)5-RC-KB-Orc-Rtop	Red Clover	Trifolium pratense	80.00	5		Legume	I	N	CP38E-CWGCA(CP1)5		RC-KB-Orc-Rtop
38	CP38E-CWGCA(CP1)5-RC-KB-Orc-Rtop	38-CP38E-CWGCA(CP1)5-RC-KB-Orc-Rtop	Kentucky Bluegrass	Poa pratensis	32.00	2		Grass	I	N	CP38E-CWGCA(CP1)5		RC-KB-Orc-Rtop
38	CP38E-CWGCA(CP1)5-RC-KB-Orc-Rtop	38-CP38E-CWGCA(CP1)5-RC-KB-Orc-Rtop	Orchardgrass	Dactylis glomerata L.	16.00	1		Grass	I	N	CP38E-CWGCA(CP1)5		RC-KB-Orc-Rtop
38	CP38E-CWGCA(CP1)5-RC-KB-Orc-Rtop	38-CP38E-CWGCA(CP1)5-RC-KB-Orc-Rtop	Redtop	Agrostis gigantea	16.00	1		Grass	I	N	CP38E-CWGCA(CP1)5		RC-KB-Orc-Rtop
38	CP38E-CWGCA(CP1)6-Alf-SB-Tim	38-CP38E-CWGCA(CP1)6-Alf-SB-Tim	Alfalfa	Medicago sativa	96.00	6		Legume	I	N	CP38E-CWGCA(CP1)6		Alf-SB-Tim
38	CP38E-CWGCA(CP1)6-Alf-SB-Tim	38-CP38E-CWGCA(CP1)6-Alf-SB-Tim	Smooth Bromegrass	Bromus inermis	48.00	3		Grass	I	N	CP38E-CWGCA(CP1)6		Alf-SB-Tim
38	CP38E-CWGCA(CP1)6-Alf-SB-Tim	38-CP38E-CWGCA(CP1)6-Alf-SB-Tim	Timothy	Phleum pratense	32.00	2		Grass	I	N	CP38E-CWGCA(CP1)6		Alf-SB-Tim
38	CP38E-CWGCA(CP1)7-RC-SB-Tim-Orc-LadC	38-CP38E-CWGCA(CP1)7-RC-SB-Tim-Orc-LadC	Red Clover	Trifolium pratense	80.00	5		Legume	I	N	CP38E-CWGCA(CP1)7		RC-SB-Tim-Orc-LadC
38	CP38E-CWGCA(CP1)7-RC-SB-Tim-Orc-LadC	38-CP38E-CWGCA(CP1)7-RC-SB-Tim-Orc-LadC	Smooth Bromegrass	Bromus inermis	32.00	2		Grass	I	N	CP38E-CWGCA(CP1)7		RC-SB-Tim-Orc-LadC
38	CP38E-CWGCA(CP1)7-RC-SB-Tim-Orc-LadC	38-CP38E-CWGCA(CP1)7-RC-SB-Tim-Orc-LadC	Timothy	Phleum pratense	32.00	2		Grass	I	N	CP38E-CWGCA(CP1)7		RC-SB-Tim-Orc-LadC
38	CP38E-CWGCA(CP1)7-RC-SB-Tim-Orc-LadC	38-CP38E-CWGCA(CP1)7-RC-SB-Tim-Orc-LadC	Orchardgrass	Dactylis glomerata L.	16.00	1		Grass	I	N	CP38E-CWGCA(CP1)7		RC-SB-Tim-Orc-LadC
38	CP38E-CWGCA(CP1)7-RC-SB-Tim-Orc-LadC	38-CP38E-CWGCA(CP1)7-RC-SB-Tim-Orc-LadC	White Ladino Clover	Trifolium repens	8.00	0.5		Legume	I	N	CP38E-CWGCA(CP1)7		RC-SB-Tim-Orc-LadC
38	CP38E-CWGCA(CP1)8-RC-SB-Tim	38-CP38E-CWGCA(CP1)8-RC-SB-Tim	Red Clover	Trifolium pratense	80.00	5		Legume	I	N	CP38E-CWGCA(CP1)8		RC-SB-Tim
38	CP38E-CWGCA(CP1)8-RC-SB-Tim	38-CP38E-CWGCA(CP1)8-RC-SB-Tim	Smooth Bromegrass	Bromus inermis	48.00	3		Grass	I	N	CP38E-CWGCA(CP1)8		RC-SB-Tim
38	CP38E-CWGCA(CP1)8-RC-SB-Tim	38-CP38E-CWGCA(CP1)8-RC-SB-Tim	Timothy	Phleum pratense	32.00	2		Grass	I	N	CP38E-CWGCA(CP1)8		RC-SB-Tim
38	CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-	38-CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-I	Little Bluestem	Schizachyrium scoparium	24.00	1.5		Grass	N	N	CP38E-CWGCA(CP2)D		LB-Sgrama-BB-Indian-PPclover-Besus-Rblzstar-Sgrod-Ycone

38	CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-	38-CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-I	Sideoats Grama	Bouteloua curtipendula	24.00	1.5		Grass	N	N	CP38E-CWGCA(CP2)D		LB-Sgrama-BB-Indian-PPclover-Besus-Rblzstar-Sgrod-Ycone
38	CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-	38-CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-I	Big Bluestem	Andropogon gerardii	8.00	0.5		Grass	N	N	CP38E-CWGCA(CP2)D		LB-Sgrama-BB-Indian-PPclover-Besus-Rblzstar-Sgrod-Ycone
38	CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-	38-CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-I	Indiangrass	Sorghastrum nutans	8.00	0.5		Grass	N	N	CP38E-CWGCA(CP2)D		LB-Sgrama-BB-Indian-PPclover-Besus-Rblzstar-Sgrod-Ycone
38	CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-	38-CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-I	Purple Prairie Clover	Dalea purpurea	2.00	0.125		Legume	N	N	CP38E-CWGCA(CP2)D		LB-Sgrama-BB-Indian-PPclover-Besus-Rblzstar-Sgrod-Ycone
38	CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-	38-CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-I	Black-eyed Susan	Rudbeckia hirta	1.00	0.0625		Forb	N	N	CP38E-CWGCA(CP2)D		LB-Sgrama-BB-Indian-PPclover-Besus-Rblzstar-Sgrod-Ycone
38	CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-	38-CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-I	Rough Blazing Star	Liatris aspera	1.00	0.0625		Forb	N	N	CP38E-CWGCA(CP2)D		LB-Sgrama-BB-Indian-PPclover-Besus-Rblzstar-Sgrod-Ycone
38	CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-	38-CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-I	Stiff Goldenrod	Oligoneuron rigidum	1.00	0.0625		Forb	N	N	CP38E-CWGCA(CP2)D		LB-Sgrama-BB-Indian-PPclover-Besus-Rblzstar-Sgrod-Ycone
38	CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-	38-CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-I	Yellow Coneflower	Ratibida pinnata	1.00	0.0625		Forb	N	N	CP38E-CWGCA(CP2)D		LB-Sgrama-BB-Indian-PPclover-Besus-Rblzstar-Sgrod-Ycone
38	CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-	38-CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian	Little Bluestem	Schizachyrium scoparium	24.00	1.5		Grass	N	N	CP38E-CWGCA(CP2)DM		Shwgrod-Sgrod-Ycone
38	CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-	38-CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian	Sideoats Grama	Bouteloua curtipendula	16.00	1		Grass	N	N	CP38E-CWGCA(CP2)DM		Shwgrod-Sgrod-Ycone
38	CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-	38-CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian	Big Bluestem	Andropogon gerardii	8.00	0.5		Grass	N	N	CP38E-CWGCA(CP2)DM		Shwgrod-Sgrod-Ycone
38	CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-	38-CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian	Indiangrass	Sorghastrum nutans	8.00	0.5		Grass	N	N	CP38E-CWGCA(CP2)DM		Shwgrod-Sgrod-Ycone
38	CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-	38-CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian	Switchgrass	Panicum virgatum	8.00	0.5		Grass	N	N	CP38E-CWGCA(CP2)DM		Shwgrod-Sgrod-Ycone
38	CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-	38-CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian	Purple Prairie Clover	Dalea purpurea	2.00	0.125		Legume	N	N	CP38E-CWGCA(CP2)DM		Shwgrod-Sgrod-Ycone
38	CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-	38-CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian	Bergamot	Monarda fistulosa	1.00	0.0625		Forb	N	N	CP38E-CWGCA(CP2)DM		Shwgrod-Sgrod-Ycone
38	CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-	38-CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian	Black-eyed Susan	Rudbeckia hirta	1.00	0.0625		Forb	N	N	CP38E-CWGCA(CP2)DM		Shwgrod-Sgrod-Ycone
38	CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-	38-CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian	Rough Blazing Star	Liatris aspera	1.00	0.0625		Forb	N	N	CP38E-CWGCA(CP2)DM		Shwgrod-Sgrod-Ycone
38	CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-	38-CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian	Showy Goldenrod	Solidago speciosa	1.00	0.0625		Forb	N	N	CP38E-CWGCA(CP2)DM		Shwgrod-Sgrod-Ycone
38	CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-	38-CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian	Stiff Goldenrod	Oligoneuron rigidum	1.00	0.0625		Forb	N	N	CP38E-CWGCA(CP2)DM		Shwgrod-Sgrod-Ycone
38	CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-	38-CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian	Yellow Coneflower	Ratibida pinnata	1.00	0.0625		Forb	N	N	CP38E-CWGCA(CP2)DM		Shwgrod-Sgrod-Ycone
38	CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Pb	38-CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Little Bluestem	Schizachyrium scoparium	20.00	1.25		Grass	N	N	CP38E-CWGCA(CP2)M		Shwgrod-Sgrod-Ycone
38	CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Pb	38-CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Canada Wildrye	Elymus canadensis	16.00	1		Grass	N	N	CP38E-CWGCA(CP2)M		Shwgrod-Sgrod-Ycone
38	CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Pb	38-CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Indiangrass	Sorghastrum nutans	16.00	1		Grass	N	N	CP38E-CWGCA(CP2)M		Shwgrod-Sgrod-Ycone
38	CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Pb	38-CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Big Bluestem	Andropogon gerardii	8.00	0.5		Grass	N	N	CP38E-CWGCA(CP2)M		Shwgrod-Sgrod-Ycone
38	CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Pb	38-CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Switchgrass	Panicum virgatum	8.00	0.5		Grass	N	N	CP38E-CWGCA(CP2)M		Shwgrod-Sgrod-Ycone
38	CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Pb	38-CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Big Bluestem	Andropogon gerardii	8.00	0.5		Grass	N	N	CP38E-CWGCA(CP2)M		Shwgrod-Sgrod-Ycone
38	CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Pb	38-CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Switchgrass	Panicum virgatum	8.00	0.5		Grass	N	N	CP38E-CWGCA(CP2)M		Shwgrod-Sgrod-Ycone
38	CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Pb	38-CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Prairie Blazing Star	Liatris pycnostachya	2.00	0.125		Forb	N	N	CP38E-CWGCA(CP2)M		Shwgrod-Sgrod-Ycone
38	CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Pb	38-CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Rough Blazing Star	Liatris aspera	2.00	0.125		Forb	N	N	CP38E-CWGCA(CP2)M		Shwgrod-Sgrod-Ycone
38	CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Pb	38-CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Bergamot	Monarda fistulosa	1.00	0.0625		Forb	N	N	CP38E-CWGCA(CP2)M		Shwgrod-Sgrod-Ycone
38	CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Pb	38-CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Black-eyed Susan	Rudbeckia hirta	1.00	0.0625		Forb	N	N	CP38E-CWGCA(CP2)M		Shwgrod-Sgrod-Ycone
38	CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Pb	38-CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Showy Goldenrod	Solidago speciosa	1.00	0.0625		Forb	N	N	CP38E-CWGCA(CP2)M		Shwgrod-Sgrod-Ycone
38	CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Pb	38-CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Stiff Goldenrod	Oligoneuron rigidum	1.00	0.0625		Forb	N	N	CP38E-CWGCA(CP2)M		Shwgrod-Sgrod-Ycone
38	CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Pb	38-CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Yellow Coneflower	Ratibida pinnata	1.00	0.0625		Forb	N	N	CP38E-CWGCA(CP2)M		Shwgrod-Sgrod-Ycone
38	CP38E-CWGCA(CP2)W-BB-Cwrye-Switch-Pcord-Cup-Bv	38-CP38E-CWGCA(CP2)W-BB-Cwrye-Switch-Pcor	Big Bluestem	Andropogon gerardii	16.00	1		Grass	N	N	CP38E-CWGCA(CP2)W		BB-Cwrye-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-CWGCA(CP2)W-BB-Cwrye-Switch-Pcord-Cup-Bv	38-CP38E-CWGCA(CP2)W-BB-Cwrye-Switch-Pcor	Canada Wildrye	Elymus canadensis	16.00	1		Grass	N	N	CP38E-CWGCA(CP2)W		BB-Cwrye-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-CWGCA(CP2)W-BB-Cwrye-Switch-Pcord-Cup-Bv	38-CP38E-CWGCA(CP2)W-BB-Cwrye-Switch-Pcor	Switchgrass	Panicum virgatum	16.00	1		Grass	N	N	CP38E-CWGCA(CP2)W		BB-Cwrye-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-CWGCA(CP2)W-BB-Cwrye-Switch-Pcord-Cup-Bv	38-CP38E-CWGCA(CP2)W-BB-Cwrye-Switch-Pcor	Prairie Cordgrass	Spartina pectinata	8.00	0.5		Grass	N	N	CP38E-CWGCA(CP2)W		BB-Cwrye-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-CWGCA(CP2)W-BB-Cwrye-Switch-Pcord-Cup-Bv	38-CP38E-CWGCA(CP2)W-BB-Cwrye-Switch-Pcor	Cupplant	Silphium perfoliatum	2.00	0.125		Forb	N	N	CP38E-CWGCA(CP2)W		BB-Cwrye-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-CWGCA(CP2)W-BB-Cwrye-Switch-Pcord-Cup-Bv	38-CP38E-CWGCA(CP2)W-BB-Cwrye-Switch-Pcor	Blue Vervain	Verbena hastata	1.00	0.0625		Forb	N	N	CP38E-CWGCA(CP2)W		BB-Cwrye-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-CWGCA(CP2)W-BB-Cwrye-Switch-Pcord-Cup-Bv	38-CP38E-CWGCA(CP2)W-BB-Cwrye-Switch-Pcor	Common Ironweed	Vernonia fasciculata	1.00	0.0625		Forb	N	N	CP38E-CWGCA(CP2)W		BB-Cwrye-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Pblzs	38-CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pc	Switchgrass	Panicum virgatum	32.00	2		Grass	N	N	CP38E-CWGCA(CP2)WM		Switch-BB-Cwrye-Pcord-Pblzstar-Berg-Besus-NEaster-Ycone
38	CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Pblzs	38-CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pc	Big Bluestem	Andropogon gerardii	16.00	1		Grass	N	N	CP38E-CWGCA(CP2)WM		Switch-BB-Cwrye-Pcord-Pblzstar-Berg-Besus-NEaster-Ycone
38	CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Pblzs	38-CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pc	Canada Wildrye	Elymus canadensis	16.00	1		Grass	N	N	CP38E-CWGCA(CP2)WM		Switch-BB-Cwrye-Pcord-Pblzstar-Berg-Besus-NEaster-Ycone
38	CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Pblzs	38-CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pc	Prairie Cordgrass	Spartina pectinata	4.00	0.25		Grass	N	N	CP38E-CWGCA(CP2)WM		Switch-BB-Cwrye-Pcord-Pblzstar-Berg-Besus-NEaster-Ycone
38	CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Pblzs	38-CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pc	Prairie Blazing Star	Liatris pycnostachya	2.00	0.125		Forb	N	N	CP38E-CWGCA(CP2)WM		Switch-BB-Cwrye-Pcord-Pblzstar-Berg-Besus-NEaster-Ycone
38	CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Pblzs	38-CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pc	Bergamot	Monarda fistulosa	1.00	0.0625		Forb	N	N	CP38E-CWGCA(CP2)WM		Switch-BB-Cwrye-Pcord-Pblzstar-Berg-Besus-NEaster-Ycone
38	CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Pblzs	38-CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pc	Black-eyed Susan	Rudbeckia hirta	1.00	0.0625		Forb	N	N	CP38E-CWGCA(CP2)WM		Switch-BB-Cwrye-Pcord-Pblzstar-Berg-Besus-NEaster-Ycone
38	CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Pblzs	38-CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pc	New England Aster	Symphyotrichum novae-a	1.00	0.0625		Forb	N	N	CP38E-CWGCA(CP2)WM		Switch-BB-Cwrye-Pcord-Pblzstar-Berg-Besus-NEaster-Ycone
38	CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Pblzs	38-CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pc	Yellow Coneflower	Ratibida pinnata	1.00	0.0625		Forb	N	N	CP38E-CWGCA(CP2)WM		Switch-BB-Cwrye-Pcord-Pblzstar-Berg-Besus-NEaster-Ycone
38	CP38E-GHRA(CP2)D-LB-Sgrama-BB-Indian-PPclover-Sg	38-CP38E-GHRA(CP2)D-LB-Sgrama-BB-Indian-PP	Little Bluestem	Schizachyrium scoparium	24.00	1.5		Grass	N	N	CP38E-GHRA(CP2)D		LB-Sgrama-BB-Indian-PPclover-Sgrod-Ycone

38	CP38E-GHRA(CP2)D-LB-Sgrama-BB-Indian-PPclover-Sg	38-CP38E-GHRA(CP2)D-LB-Sgrama-BB-Indian-PP	Sideoats Grama	Bouteloua curtipendula	24.00	1.5		Grass	N	N	CP38E-GHRA(CP2)D		LB-Sgrama-BB-Indian-PPclover-Sgrod-Ycone
38	CP38E-GHRA(CP2)D-LB-Sgrama-BB-Indian-PPclover-Sg	38-CP38E-GHRA(CP2)D-LB-Sgrama-BB-Indian-PP	Big Bluestem	Andropogon gerardii	8.00	0.5		Grass	N	N	CP38E-GHRA(CP2)D		LB-Sgrama-BB-Indian-PPclover-Sgrod-Ycone
38	CP38E-GHRA(CP2)D-LB-Sgrama-BB-Indian-PPclover-Sg	38-CP38E-GHRA(CP2)D-LB-Sgrama-BB-Indian-PP	Indiangrass	Sorghastrum nutans	8.00	0.5		Grass	N	N	CP38E-GHRA(CP2)D		LB-Sgrama-BB-Indian-PPclover-Sgrod-Ycone
38	CP38E-GHRA(CP2)D-LB-Sgrama-BB-Indian-PPclover-Sg	38-CP38E-GHRA(CP2)D-LB-Sgrama-BB-Indian-PP	Purple Prairie Clover	Dalea purpurea	2.00	0.125		Legume	N	N	CP38E-GHRA(CP2)D		LB-Sgrama-BB-Indian-PPclover-Sgrod-Ycone
38	CP38E-GHRA(CP2)D-LB-Sgrama-BB-Indian-PPclover-Sg	38-CP38E-GHRA(CP2)D-LB-Sgrama-BB-Indian-PP	Stiff Goldenrod	Oligoneuron rigidum	1.00	0.0625		Forb	N	N	CP38E-GHRA(CP2)D		LB-Sgrama-BB-Indian-PPclover-Sgrod-Ycone
38	CP38E-GHRA(CP2)D-LB-Sgrama-BB-Indian-PPclover-Sg	38-CP38E-GHRA(CP2)D-LB-Sgrama-BB-Indian-PP	Yellow Coneflower	Ratibida pinnata	1.00	0.0625		Forb	N	N	CP38E-GHRA(CP2)D		LB-Sgrama-BB-Indian-PPclover-Sgrod-Ycone
38	CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-Switch-PP	38-CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-S	Little Bluestem	Schizachyrium scoparium	24.00	1.5		Grass	N	N	CP38E-GHRA(CP2)DM		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-Switch-PP	38-CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-S	Sideoats Grama	Bouteloua curtipendula	16.00	1		Grass	N	N	CP38E-GHRA(CP2)DM		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-Switch-PP	38-CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-S	Big Bluestem	Andropogon gerardii	8.00	0.5		Grass	N	N	CP38E-GHRA(CP2)DM		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-Switch-PP	38-CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-S	Indiangrass	Sorghastrum nutans	8.00	0.5		Grass	N	N	CP38E-GHRA(CP2)DM		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-Switch-PP	38-CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-S	Switchgrass	Panicum virgatum	8.00	0.5		Grass	N	N	CP38E-GHRA(CP2)DM		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-Switch-PP	38-CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-S	Purple Prairie Clover	Dalea purpurea	2.00	0.125		Legume	N	N	CP38E-GHRA(CP2)DM		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-Switch-PP	38-CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-S	Bergamot	Monarda fistulosa	1.00	0.0625		Forb	N	N	CP38E-GHRA(CP2)DM		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-Switch-PP	38-CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-S	Yellow Coneflower	Ratibida pinnata	1.00	0.0625		Forb	N	N	CP38E-GHRA(CP2)DM		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Switch-Berg	38-CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Sw	Little Bluestem	Schizachyrium scoparium	20.00	1.25		Grass	N	N	CP38E-GHRA(CP2)M		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Switch-Berg	38-CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Sw	Canada Wildrye	Elymus canadensis	16.00	1		Grass	N	N	CP38E-GHRA(CP2)M		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Switch-Berg	38-CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Sw	Indiangrass	Sorghastrum nutans	16.00	1		Grass	N	N	CP38E-GHRA(CP2)M		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Switch-Berg	38-CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Sw	Big Bluestem	Andropogon gerardii	8.00	0.5		Grass	N	N	CP38E-GHRA(CP2)M		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Switch-Berg	38-CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Sw	Switchgrass	Panicum virgatum	8.00	0.5		Grass	N	N	CP38E-GHRA(CP2)M		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Switch-Berg	38-CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Sw	Bergamot	Monarda fistulosa	1.00	0.0625		Forb	N	N	CP38E-GHRA(CP2)M		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Switch-Berg	38-CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Sw	Black-eyed Susan	Rudbeckia hirta	1.00	0.0625		Forb	N	N	CP38E-GHRA(CP2)M		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Switch-Berg	38-CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Sw	Yellow Coneflower	Ratibida pinnata	1.00	0.0625		Forb	N	N	CP38E-GHRA(CP2)M		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-Cu	38-CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch	Big Bluestem	Andropogon gerardii	16.00	1		Grass	N	N	CP38E-GHRA(CP2)W		BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-Cu	38-CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch	Canada Wildrye	Elymus canadensis	16.00	1		Grass	N	N	CP38E-GHRA(CP2)W		BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-Cu	38-CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch	Indiangrass	Sorghastrum nutans	16.00	1		Grass	N	N	CP38E-GHRA(CP2)W		BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-Cu	38-CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch	Switchgrass	Panicum virgatum	16.00	1		Grass	N	N	CP38E-GHRA(CP2)W		BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-Cu	38-CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch	Prairie Cordgrass	Spartina pectinata	8.00	0.5		Grass	N	N	CP38E-GHRA(CP2)W		BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-Cu	38-CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch	Cupplant	Silphium perfoliatum	2.00	0.125		Forb	N	N	CP38E-GHRA(CP2)W		BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-Cu	38-CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch	Blue Vervain	Verbena hastata	1.00	0.0625		Forb	N	N	CP38E-GHRA(CP2)W		BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-Cu	38-CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch	Common Ironweed	Vernonia fasciculata	1.00	0.0625		Forb	N	N	CP38E-GHRA(CP2)W		BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-GHRA(CP2)WM-Switch-BB-Cwrye-Pcord-Berg-N	38-CP38E-GHRA(CP2)WM-Switch-BB-Cwrye-Pcor	Switchgrass	Panicum virgatum	32.00	2		Grass	N	N	CP38E-GHRA(CP2)WM		Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
38	CP38E-GHRA(CP2)WM-Switch-BB-Cwrye-Pcord-Berg-N	38-CP38E-GHRA(CP2)WM-Switch-BB-Cwrye-Pcor	Big Bluestem	Andropogon gerardii	16.00	1		Grass	N	N	CP38E-GHRA(CP2)WM		Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
38	CP38E-GHRA(CP2)WM-Switch-BB-Cwrye-Pcord-Berg-N	38-CP38E-GHRA(CP2)WM-Switch-BB-Cwrye-Pcor	Canada Wildrye	Elymus canadensis	16.00	1		Grass	N	N	CP38E-GHRA(CP2)WM		Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
38	CP38E-GHRA(CP2)WM-Switch-BB-Cwrye-Pcord-Berg-N	38-CP38E-GHRA(CP2)WM-Switch-BB-Cwrye-Pcor	Prairie Cordgrass	Spartina pectinata	4.00	0.25		Grass	N	N	CP38E-GHRA(CP2)WM		Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
38	CP38E-GHRA(CP2)WM-Switch-BB-Cwrye-Pcord-Berg-N	38-CP38E-GHRA(CP2)WM-Switch-BB-Cwrye-Pcor	Bergamot	Monarda fistulosa	1.00	0.0625		Forb	N	N	CP38E-GHRA(CP2)WM		Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
38	CP38E-GHRA(CP2)WM-Switch-BB-Cwrye-Pcord-Berg-N	38-CP38E-GHRA(CP2)WM-Switch-BB-Cwrye-Pcor	New England Aster	Symphyotrichum novae-a	1.00	0.0625		Forb	N	N	CP38E-GHRA(CP2)WM		Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
38	CP38E-GHRA(CP2)WM-Switch-BB-Cwrye-Pcord-Berg-N	38-CP38E-GHRA(CP2)WM-Switch-BB-Cwrye-Pcor	Yellow Coneflower	Ratibida pinnata	1.00	0.0625		Forb	N	N	CP38E-GHRA(CP2)WM		Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Little Bluestem	Schizachyrium scoparium	24.00	1.5		Grass	N	N	CP38E-GHRA(CP25)D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Sideoats Grama	Bouteloua curtipendula	24.00	1.5		Grass	N	N	CP38E-GHRA(CP25)D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Indiangrass	Sorghastrum nutans	8.00	0.5		Grass	N	N	CP38E-GHRA(CP25)D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Big Bluestem	Andropogon gerardii	4.00	0.25		Grass	N	N	CP38E-GHRA(CP25)D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Purple Prairie Clover	Dalea purpurea	2.00	0.125		Legume	N	N	CP38E-GHRA(CP25)D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Sand Dropseed	Sporobolus cryptandrus	2.00	0.125		Grass	N	N	CP38E-GHRA(CP25)D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Prairie Junegrass	Koeleria macrantha	1.00	0.0625		Grass	N	N	CP38E-GHRA(CP25)D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Spiderwort	Tradescantia ohiensis	1.00	0.0625		Forb	N	N	CP38E-GHRA(CP25)D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Hoary Vervain	Verbena stricta	0.50	0.03125		Forb	N	N	CP38E-GHRA(CP25)D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Leadplant	Amorpha canescens	0.50	0.03125		Legume	N	N	CP38E-GHRA(CP25)D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Prairie Tickseed	Coreopsis palmata	0.50	0.03125		Forb	N	N	CP38E-GHRA(CP25)D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Silky Aster	Symphyotrichum pratens	0.50	0.03125		Forb	N	N	CP38E-GHRA(CP25)D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint

38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Stiff Goldenrod	Oligoneuron rigidum	0.50	0.03125		Forb	N	N	CP38E-GHRA(CP25)D	Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Yellow Coneflower	Ratibida pinnata	0.50	0.03125		Forb	N	N	CP38E-GHRA(CP25)D	Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Prairie Cinquefoil	Potentilla arguta	0.25	0.015625		Forb	N	N	CP38E-GHRA(CP25)D	Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Spotted Mint	Monarda punctata	0.25	0.015625		Forb	N	N	CP38E-GHRA(CP25)D	Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjune	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Little Bluestem	Schizachyrium scoparium	24.00	1.5		Grass	N	N	CP38E-GHRA(CP25)DM	Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjune	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Sideoats Grama	Bouteloua curtipendula	24.00	1.5		Grass	N	N	CP38E-GHRA(CP25)DM	Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjune	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Indiangrass	Sorghastrum nutans	8.00	0.5		Grass	N	N	CP38E-GHRA(CP25)DM	Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjune	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Switchgrass	Panicum virgatum	4.00	0.25		Grass	N	N	CP38E-GHRA(CP25)DM	Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjune	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Prairie Junegrass	Koeleria macrantha	2.00	0.125		Grass	N	N	CP38E-GHRA(CP25)DM	Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjune	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Prairie Dropseed	Sporobolus heterolepis	2.00	0.125		Grass	N	N	CP38E-GHRA(CP25)DM	Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjune	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Purple Prairie Clover	Dalea purpurea	2.00	0.125		Legume	N	N	CP38E-GHRA(CP25)DM	Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjune	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Round-Headed Bushclover	Lespedeza capitata	2.00	0.125		Legume	N	N	CP38E-GHRA(CP25)DM	Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjune	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Bergamot	Monarda fistulosa	1.00	0.0625		Forb	N	N	CP38E-GHRA(CP25)DM	Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjune	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Spiderwort	Tradescantia ohiensis	1.00	0.0625		Forb	N	N	CP38E-GHRA(CP25)DM	Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjune	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Yellow Coneflower	Ratibida pinnata	1.00	0.0625		Forb	N	N	CP38E-GHRA(CP25)DM	Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjune	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Leadplant	Amorpha canescens	0.50	0.03125		Legume	N	N	CP38E-GHRA(CP25)DM	Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjune	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Rough Blazing Star	Liatris aspera	0.50	0.03125		Forb	N	N	CP38E-GHRA(CP25)DM	Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjune	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Sky-Blue Aster	Symphyotrichum oolenta	0.50	0.03125		Forb	N	N	CP38E-GHRA(CP25)DM	Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjune	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Stiff Goldenrod	Oligoneuron rigidum	0.50	0.03125		Forb	N	N	CP38E-GHRA(CP25)DM	Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjune	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Prairie Cinquefoil	Potentilla arguta	0.25	0.015625		Forb	N	N	CP38E-GHRA(CP25)DM	Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Switch-Oxe	38-CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Sv	Little Bluestem	Schizachyrium scoparium	24.00	1.5		Grass	N	N	CP38E-GHRA(CP25)M	Berg-Besus-NEaster-SBAster-Ycone-Croot
38	CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Switch-Oxe	38-CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Sv	Indiangrass	Sorghastrum nutans	16.00	1		Grass	N	N	CP38E-GHRA(CP25)M	Berg-Besus-NEaster-SBAster-Ycone-Croot
38	CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Switch-Oxe	38-CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Sv	Big Bluestem	Andropogon gerardii	8.00	0.5		Grass	N	N	CP38E-GHRA(CP25)M	Berg-Besus-NEaster-SBAster-Ycone-Croot
38	CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Switch-Oxe	38-CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Sv	Canada Wildrye	Elymus canadensis	8.00	0.5		Grass	N	N	CP38E-GHRA(CP25)M	Berg-Besus-NEaster-SBAster-Ycone-Croot
38	CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Switch-Oxe	38-CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Sv	Switchgrass	Panicum virgatum	8.00	0.5		Grass	N	N	CP38E-GHRA(CP25)M	Berg-Besus-NEaster-SBAster-Ycone-Croot
38	CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Switch-Oxe	38-CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Sv	Ox-eye Sunflower	Heliopsis helianthoides	1.00	0.0625		Forb	N	N	CP38E-GHRA(CP25)M	Berg-Besus-NEaster-SBAster-Ycone-Croot
38	CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Switch-Oxe	38-CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Sv	Prairie Blazing Star	Liatris pycnostachya	1.00	0.0625		Forb	N	N	CP38E-GHRA(CP25)M	Berg-Besus-NEaster-SBAster-Ycone-Croot
38	CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Switch-Oxe	38-CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Sv	Purple Prairie Clover	Dalea purpurea	1.00	0.0625		Legume	N	N	CP38E-GHRA(CP25)M	Berg-Besus-NEaster-SBAster-Ycone-Croot
38	CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Switch-Oxe	38-CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Sv	Rosinweed	Silphium integrifolium	1.00	0.0625		Forb	N	N	CP38E-GHRA(CP25)M	Berg-Besus-NEaster-SBAster-Ycone-Croot
38	CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Switch-Oxe	38-CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Sv	Bergamot	Monarda fistulosa	0.50	0.03125		Forb	N	N	CP38E-GHRA(CP25)M	Berg-Besus-NEaster-SBAster-Ycone-Croot
38	CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Switch-Oxe	38-CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Sv	Black-eyed Susan	Rudbeckia hirta	0.50	0.03125		Forb	N	N	CP38E-GHRA(CP25)M	Berg-Besus-NEaster-SBAster-Ycone-Croot
38	CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Switch-Oxe	38-CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Sv	New England Aster	Symphyotrichum novae-a	0.50	0.03125		Forb	N	N	CP38E-GHRA(CP25)M	Berg-Besus-NEaster-SBAster-Ycone-Croot
38	CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Switch-Oxe	38-CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Sv	Smooth Blue Aster	Symphyotrichum laeve	0.50	0.03125		Forb	N	N	CP38E-GHRA(CP25)M	Berg-Besus-NEaster-SBAster-Ycone-Croot
38	CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Switch-Oxe	38-CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Sv	Yellow Coneflower	Ratibida pinnata	0.50	0.03125		Forb	N	N	CP38E-GHRA(CP25)M	Berg-Besus-NEaster-SBAster-Ycone-Croot
38	CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Switch-Oxe	38-CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Sv	Culver's Root	Veronicastrum virginicum	0.25	0.015625		Forb	N	N	CP38E-GHRA(CP25)M	Berg-Besus-NEaster-SBAster-Ycone-Croot
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-F	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BI	Canada Wildrye	Elymus canadensis	16.00	1		Grass	N	N	CP38E-GHRA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-F	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BI	Switchgrass	Panicum virgatum	16.00	1		Grass	N	N	CP38E-GHRA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-F	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BI	Indiangrass	Sorghastrum nutans	12.00	0.75		Grass	N	N	CP38E-GHRA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-F	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BI	Big Bluestem	Andropogon gerardii	8.00	0.5		Grass	N	N	CP38E-GHRA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-F	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BI	Prairie Cordgrass	Spartina pectinata	8.00	0.5		Grass	N	N	CP38E-GHRA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-F	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BI	Fowl Mannagrass	Glyceria striata	4.00	0.25		Grass	N	N	CP38E-GHRA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-F	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BI	Fox Sedge	Carex vulpinoidea	4.00	0.25		Sedge	N	N	CP38E-GHRA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-F	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BI	Cupplant	Silphium perfoliatum	2.00	0.125		Forb	N	N	CP38E-GHRA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-F	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BI	Showy Tick Trefoil	Desmodium canadense	2.00	0.125		Legume	N	N	CP38E-GHRA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-F	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BI	Blue Vervain	Verbena hastata	1.00	0.0625		Forb	N	N	CP38E-GHRA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-F	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BI	Golden Alexanders	Zizia aurea	1.00	0.0625		Forb	N	N	CP38E-GHRA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-F	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BI	Marsh Milkweed	Asclepias incarnata	1.00	0.0625		Forb	N	N	CP38E-GHRA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-F	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BI	Boneset	Eupatorium perfoliatum	0.50	0.03125		Forb	N	N	CP38E-GHRA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-F	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BI	Common Ironweed	Vernonia fasciculata	0.50	0.03125		Forb	N	N	CP38E-GHRA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot

38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-F	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BI	Joe-pye Weed	Eutrochium maculatum	0.50	0.03125		Forb	N	N	CP38E-GHRA(CP25)W		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-F	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BI	Culver's Root	Veronicastrum virginicum	0.25	0.015625		Forb	N	N	CP38E-GHRA(CP25)W		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Indian-Pcord	38-CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Ind	Switchgrass	Panicum virgatum	24.00	1.5		Grass	N	N	CP38E-GHRA(CP25)WM		Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
38	CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Indian-Pcord	38-CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Ind	Big Bluestem	Andropogon gerardii	20.00	1.25		Grass	N	N	CP38E-GHRA(CP25)WM		Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
38	CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Indian-Pcord	38-CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Ind	Canada Wildrye	Elymus canadensis	16.00	1		Grass	N	N	CP38E-GHRA(CP25)WM		Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
38	CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Indian-Pcord	38-CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Ind	Indiangrass	Sorghastrum nutans	12.00	0.75		Grass	N	N	CP38E-GHRA(CP25)WM		Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
38	CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Indian-Pcord	38-CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Ind	Prairie Cordgrass	Spartina pectinata	4.00	0.25		Grass	N	N	CP38E-GHRA(CP25)WM		Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
38	CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Indian-Pcord	38-CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Ind	Cupplant	Silphium perfoliatum	2.00	0.125		Forb	N	N	CP38E-GHRA(CP25)WM		Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
38	CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Indian-Pcord	38-CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Ind	White wild indigo	Baptisia alba	1.50	0.09375		Legume	N	N	CP38E-GHRA(CP25)WM		Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
38	CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Indian-Pcord	38-CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Ind	Black-eyed Susan	Rudbeckia hirta	0.50	0.03125		Forb	N	N	CP38E-GHRA(CP25)WM		Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
38	CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Indian-Pcord	38-CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Ind	Common Ironweed	Vernonia fasciculata	0.50	0.03125		Forb	N	N	CP38E-GHRA(CP25)WM		Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
38	CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Indian-Pcord	38-CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Ind	Golden Alexanders	Zizia aurea	0.50	0.03125		Forb	N	N	CP38E-GHRA(CP25)WM		Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
38	CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Indian-Pcord	38-CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Ind	New England Aster	Symphyotrichum novae-a	0.50	0.03125		Forb	N	N	CP38E-GHRA(CP25)WM		Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
38	CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Indian-Pcord	38-CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Ind	Prairie Blazing Star	Liatris pycnostachya	0.50	0.03125		Forb	N	N	CP38E-GHRA(CP25)WM		Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
38	CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Indian-Pcord	38-CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Ind	Yellow Coneflower	Ratibida pinnata	0.50	0.03125		Forb	N	N	CP38E-GHRA(CP25)WM		Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
38	CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Indian-Pcord	38-CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Ind	Bergamot	Monarda fistulosa	0.25	0.015625		Forb	N	N	CP38E-GHRA(CP25)WM		Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
38	CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Indian-Pcord	38-CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Ind	Great St. John's Wort	Hypericum ascyron	0.25	0.015625		Forb	N	N	CP38E-GHRA(CP25)WM		Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Little Bluestem	Schizachyrium scoparium	24.00	1.5		Grass	N	N	CP38E-KBB		Fspurge-Galex-Rblzstar-RHbushclover-Wsun-Berg-Ptick-Besus
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Canada Wildrye	Elymus canadensis	16.00	1		Grass	N	N	CP38E-KBB		Fspurge-Galex-Rblzstar-RHbushclover-Wsun-Berg-Ptick-Besus
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Indiangrass	Sorghastrum nutans	16.00	1		Grass	N	N	CP38E-KBB		Fspurge-Galex-Rblzstar-RHbushclover-Wsun-Berg-Ptick-Besus
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Big Bluestem	Andropogon gerardii	8.00	0.5		Grass	N	N	CP38E-KBB		Fspurge-Galex-Rblzstar-RHbushclover-Wsun-Berg-Ptick-Besus
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Sideoats Grama	Bouteloua curtipendula	8.00	0.5		Grass	N	N	CP38E-KBB		Fspurge-Galex-Rblzstar-RHbushclover-Wsun-Berg-Ptick-Besus
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Switchgrass	Panicum virgatum	8.00	0.5		Grass	N	N	CP38E-KBB		Fspurge-Galex-Rblzstar-RHbushclover-Wsun-Berg-Ptick-Besus
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Wild Lupine	Lupinus perennis	3.00	0.1875		Legume	N	N	CP38E-KBB		Fspurge-Galex-Rblzstar-RHbushclover-Wsun-Berg-Ptick-Besus
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Purple Prairie Clover	Dalea purpurea	2.00	0.125		Legume	N	N	CP38E-KBB		Fspurge-Galex-Rblzstar-RHbushclover-Wsun-Berg-Ptick-Besus
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Butterfly Milkweed	Asclepias tuberosa	1.00	0.0625		Forb	N	N	CP38E-KBB		Fspurge-Galex-Rblzstar-RHbushclover-Wsun-Berg-Ptick-Besus
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Flowering Spurge	Euphorbia corollata	1.00	0.0625		Forb	N	N	CP38E-KBB		Fspurge-Galex-Rblzstar-RHbushclover-Wsun-Berg-Ptick-Besus
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Golden Alexanders	Zizia aurea	1.00	0.0625		Forb	N	N	CP38E-KBB		Fspurge-Galex-Rblzstar-RHbushclover-Wsun-Berg-Ptick-Besus
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Rough Blazing Star	Liatris aspera	1.00	0.0625		Forb	N	N	CP38E-KBB		Fspurge-Galex-Rblzstar-RHbushclover-Wsun-Berg-Ptick-Besus
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Round-Headed Bushclover	Lespedeza capitata	1.00	0.0625		Legume	N	N	CP38E-KBB		Fspurge-Galex-Rblzstar-RHbushclover-Wsun-Berg-Ptick-Besus
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Fewleaf Sunflower	Helianthus occidentalis	1.00	0.0625		Forb	N	N	CP38E-KBB		Fspurge-Galex-Rblzstar-RHbushclover-Wsun-Berg-Ptick-Besus
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Bergamot	Monarda fistulosa	0.50	0.03125		Forb	N	N	CP38E-KBB		Fspurge-Galex-Rblzstar-RHbushclover-Wsun-Berg-Ptick-Besus
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Prairie Tickseed	Coreopsis palmata	0.50	0.03125		Forb	N	N	CP38E-KBB		Fspurge-Galex-Rblzstar-RHbushclover-Wsun-Berg-Ptick-Besus
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Black-eyed Susan	Rudbeckia hirta	0.40	0.025		Forb	N	N	CP38E-KBB		Fspurge-Galex-Rblzstar-RHbushclover-Wsun-Berg-Ptick-Besus
38	CP38E-KBB(CP1)1-Alf-Rtop-Tim-Orc	38-CP38E-KBB(CP1)1-Alf-Rtop-Tim-Orc	Alfalfa	Medicago sativa	96.00	6		Legume	I	N	CP38E-KBB(CP1)1		Alf-Rtop-Tim-Orc
38	CP38E-KBB(CP1)1-Alf-Rtop-Tim-Orc	38-CP38E-KBB(CP1)1-Alf-Rtop-Tim-Orc	Redtop	Agrostis gigantea	32.00	2		Grass	I	N	CP38E-KBB(CP1)1		Alf-Rtop-Tim-Orc
38	CP38E-KBB(CP1)1-Alf-Rtop-Tim-Orc	38-CP38E-KBB(CP1)1-Alf-Rtop-Tim-Orc	Timothy	Phleum pratense	32.00	2		Grass	I	N	CP38E-KBB(CP1)1		Alf-Rtop-Tim-Orc
38	CP38E-KBB(CP1)1-Alf-Rtop-Tim-Orc	38-CP38E-KBB(CP1)1-Alf-Rtop-Tim-Orc	Orchardgrass	Dactylis glomerata L.	16.00	1		Grass	I	N	CP38E-KBB(CP1)1		Alf-Rtop-Tim-Orc
38	CP38E-KBB(CP1)2-RC-KB-Orc-Rtop	38-CP38E-KBB(CP1)2-RC-KB-Orc-Rtop	Red Clover	Trifolium pratense	80.00	5		Legume	I	N	CP38E-KBB(CP1)2		RC-KB-Orc-Rtop
38	CP38E-KBB(CP1)2-RC-KB-Orc-Rtop	38-CP38E-KBB(CP1)2-RC-KB-Orc-Rtop	Kentucky Bluegrass	Poa pratensis	32.00	2		Grass	I	N	CP38E-KBB(CP1)2		RC-KB-Orc-Rtop
38	CP38E-KBB(CP1)2-RC-KB-Orc-Rtop	38-CP38E-KBB(CP1)2-RC-KB-Orc-Rtop	Orchardgrass	Dactylis glomerata L.	16.00	1		Grass	I	N	CP38E-KBB(CP1)2		RC-KB-Orc-Rtop
38	CP38E-KBB(CP1)2-RC-KB-Orc-Rtop	38-CP38E-KBB(CP1)2-RC-KB-Orc-Rtop	Redtop	Agrostis gigantea	16.00	1		Grass	I	N	CP38E-KBB(CP1)2		RC-KB-Orc-Rtop
38	CP38E-KBB(CP1)3-RC-SB-Tim	38-CP38E-KBB(CP1)3-RC-SB-Tim	Red Clover	Trifolium pratense	80.00	5		Legume	I	N	CP38E-KBB(CP1)3		RC-SB-Tim
38	CP38E-KBB(CP1)3-RC-SB-Tim	38-CP38E-KBB(CP1)3-RC-SB-Tim	Smooth Bromegrass	Bromus inermis	48.00	3		Grass	I	N	CP38E-KBB(CP1)3		RC-SB-Tim
38	CP38E-KBB(CP1)3-RC-SB-Tim	38-CP38E-KBB(CP1)3-RC-SB-Tim	Timothy	Phleum pratense	32.00	2		Grass	I	N	CP38E-KBB(CP1)3		RC-SB-Tim
38	CP38E-KBB(CP1)4-RC-Tim-Orc-Rtop	38-CP38E-KBB(CP1)4-RC-Tim-Orc-Rtop	Red Clover	Trifolium pratense	80.00	5		Legume	I	N	CP38E-KBB(CP1)4		RC-Tim-Orc-Rtop
38	CP38E-KBB(CP1)4-RC-Tim-Orc-Rtop	38-CP38E-KBB(CP1)4-RC-Tim-Orc-Rtop	Timothy	Phleum pratense	32.00	2		Grass	I	N	CP38E-KBB(CP1)4		RC-Tim-Orc-Rtop
38	CP38E-KBB(CP1)4-RC-Tim-Orc-Rtop	38-CP38E-KBB(CP1)4-RC-Tim-Orc-Rtop	Orchardgrass	Dactylis glomerata L.	16.00	1		Grass	I	N	CP38E-KBB(CP1)4		RC-Tim-Orc-Rtop
38	CP38E-KBB(CP1)4-RC-Tim-Orc-Rtop	38-CP38E-KBB(CP1)4-RC-Tim-Orc-Rtop	Redtop	Agrostis gigantea	16.00	1		Grass	I	N	CP38E-KBB(CP1)4		RC-Tim-Orc-Rtop

38	CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlup-PPclove	38-CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlu	Little Bluestem	Schizachyrium scoparium	36.00	2.25		Grass	N	N	CP38E-KBB(WHIP)		LB-Sgrama-BB-Pjune-Wlup-PPclover-Rblzstar-Ptick-Besus
38	CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlup-PPclove	38-CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlu	Sideoats Grama	Bouteloua curtipendula	16.00	1		Grass	N	N	CP38E-KBB(WHIP)		LB-Sgrama-BB-Pjune-Wlup-PPclover-Rblzstar-Ptick-Besus
38	CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlup-PPclove	38-CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlu	Big Bluestem	Andropogon gerardii	8.00	0.5		Grass	N	N	CP38E-KBB(WHIP)		LB-Sgrama-BB-Pjune-Wlup-PPclover-Rblzstar-Ptick-Besus
38	CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlup-PPclove	38-CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlu	Prairie Junegrass	Koeleria macrantha	4.00	0.25		Grass	N	N	CP38E-KBB(WHIP)		LB-Sgrama-BB-Pjune-Wlup-PPclover-Rblzstar-Ptick-Besus
38	CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlup-PPclove	38-CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlu	Wild Lupine	Lupinus perennis	3.00	0.1875		Legume	N	N	CP38E-KBB(WHIP)		LB-Sgrama-BB-Pjune-Wlup-PPclover-Rblzstar-Ptick-Besus
38	CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlup-PPclove	38-CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlu	Purple Prairie Clover	Dalea purpurea	2.00	0.125		Legume	N	N	CP38E-KBB(WHIP)		LB-Sgrama-BB-Pjune-Wlup-PPclover-Rblzstar-Ptick-Besus
38	CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlup-PPclove	38-CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlu	Rough Blazing Star	Liatris aspera	2.00	0.125		Forb	N	N	CP38E-KBB(WHIP)		LB-Sgrama-BB-Pjune-Wlup-PPclover-Rblzstar-Ptick-Besus
38	CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlup-PPclove	38-CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlu	Prairie Tickseed	Coreopsis palmata	1.00	0.0625		Forb	N	N	CP38E-KBB(WHIP)		LB-Sgrama-BB-Pjune-Wlup-PPclover-Rblzstar-Ptick-Besus
38	CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlup-PPclove	38-CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlu	Black-eyed Susan	Rudbeckia hirta	0.25	0.015625		Forb	N	N	CP38E-KBB(WHIP)		LB-Sgrama-BB-Pjune-Wlup-PPclover-Rblzstar-Ptick-Besus
38	CP38E-SWGCA(CP1)1-Alf-Rtop-Tim-Orc	38-CP38E-SWGCA(CP1)1-Alf-Rtop-Tim-Orc	Alfalfa	Medicago sativa	96.00	6		Legume	I	N	CP38E-SWGCA(CP1)1		Alf-Rtop-Tim-Orc
38	CP38E-SWGCA(CP1)1-Alf-Rtop-Tim-Orc	38-CP38E-SWGCA(CP1)1-Alf-Rtop-Tim-Orc	Redtop	Agrostis gigantea	32.00	2		Grass	I	N	CP38E-SWGCA(CP1)1		Alf-Rtop-Tim-Orc
38	CP38E-SWGCA(CP1)1-Alf-Rtop-Tim-Orc	38-CP38E-SWGCA(CP1)1-Alf-Rtop-Tim-Orc	Timothy	Phleum pratense	32.00	2		Grass	I	N	CP38E-SWGCA(CP1)1		Alf-Rtop-Tim-Orc
38	CP38E-SWGCA(CP1)1-Alf-Rtop-Tim-Orc	38-CP38E-SWGCA(CP1)1-Alf-Rtop-Tim-Orc	Orchardgrass	Dactylis glomerata L.	16.00	1		Grass	I	N	CP38E-SWGCA(CP1)1		Alf-Rtop-Tim-Orc
38	CP38E-SWGCA(CP1)2-RC-KB-Orc-Rtop	38-CP38E-SWGCA(CP1)2-RC-KB-Orc-Rtop	Red Clover	Trifolium pratense	80.00	5		Legume	I	N	CP38E-SWGCA(CP1)2		RC-KB-Orc-Rtop
38	CP38E-SWGCA(CP1)2-RC-KB-Orc-Rtop	38-CP38E-SWGCA(CP1)2-RC-KB-Orc-Rtop	Kentucky Bluegrass	Poa pratensis	32.00	2		Grass	I	N	CP38E-SWGCA(CP1)2		RC-KB-Orc-Rtop
38	CP38E-SWGCA(CP1)2-RC-KB-Orc-Rtop	38-CP38E-SWGCA(CP1)2-RC-KB-Orc-Rtop	Orchardgrass	Dactylis glomerata L.	16.00	1		Grass	I	N	CP38E-SWGCA(CP1)2		RC-KB-Orc-Rtop
38	CP38E-SWGCA(CP1)2-RC-KB-Orc-Rtop	38-CP38E-SWGCA(CP1)2-RC-KB-Orc-Rtop	Redtop	Agrostis gigantea	16.00	1		Grass	I	N	CP38E-SWGCA(CP1)2		RC-KB-Orc-Rtop
38	CP38E-SWGCA(CP1)3-RC-SB-Tim	38-CP38E-SWGCA(CP1)3-RC-SB-Tim	Red Clover	Trifolium pratense	80.00	5		Legume	I	N	CP38E-SWGCA(CP1)3		RC-SB-Tim
38	CP38E-SWGCA(CP1)3-RC-SB-Tim	38-CP38E-SWGCA(CP1)3-RC-SB-Tim	Smooth Bromegrass	Bromus inermis	48.00	3		Grass	I	N	CP38E-SWGCA(CP1)3		RC-SB-Tim
38	CP38E-SWGCA(CP1)3-RC-SB-Tim	38-CP38E-SWGCA(CP1)3-RC-SB-Tim	Timothy	Phleum pratense	32.00	2		Grass	I	N	CP38E-SWGCA(CP1)3		RC-SB-Tim
38	CP38E-SWGCA(CP1)4-RC-Tim-Orc-Rtop	38-CP38E-SWGCA(CP1)4-RC-Tim-Orc-Rtop	Red Clover	Trifolium pratense	80.00	5		Legume	I	N	CP38E-SWGCA(CP1)4		RC-Tim-Orc-Rtop
38	CP38E-SWGCA(CP1)4-RC-Tim-Orc-Rtop	38-CP38E-SWGCA(CP1)4-RC-Tim-Orc-Rtop	Timothy	Phleum pratense	32.00	2		Grass	I	N	CP38E-SWGCA(CP1)4		RC-Tim-Orc-Rtop
38	CP38E-SWGCA(CP1)4-RC-Tim-Orc-Rtop	38-CP38E-SWGCA(CP1)4-RC-Tim-Orc-Rtop	Orchardgrass	Dactylis glomerata L.	16.00	1		Grass	I	N	CP38E-SWGCA(CP1)4		RC-Tim-Orc-Rtop
38	CP38E-SWGCA(CP1)4-RC-Tim-Orc-Rtop	38-CP38E-SWGCA(CP1)4-RC-Tim-Orc-Rtop	Redtop	Agrostis gigantea	16.00	1		Grass	I	N	CP38E-SWGCA(CP1)4		RC-Tim-Orc-Rtop
38	CP38E-SWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-S	38-CP38E-SWGCA(CP2)D-LB-Sgrama-BB-Indian-I	Little Bluestem	Schizachyrium scoparium	24.00	1.5		Grass	N	N	CP38E-SWGCA(CP2)D		LB-Sgrama-BB-Indian-PPclover-Sgrod-Ycone
38	CP38E-SWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-S	38-CP38E-SWGCA(CP2)D-LB-Sgrama-BB-Indian-I	Sideoats Grama	Bouteloua curtipendula	24.00	1.5		Grass	N	N	CP38E-SWGCA(CP2)D		LB-Sgrama-BB-Indian-PPclover-Sgrod-Ycone
38	CP38E-SWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-S	38-CP38E-SWGCA(CP2)D-LB-Sgrama-BB-Indian-I	Big Bluestem	Andropogon gerardii	8.00	0.5		Grass	N	N	CP38E-SWGCA(CP2)D		LB-Sgrama-BB-Indian-PPclover-Sgrod-Ycone
38	CP38E-SWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-S	38-CP38E-SWGCA(CP2)D-LB-Sgrama-BB-Indian-I	Indiangrass	Sorghastrum nutans	8.00	0.5		Grass	N	N	CP38E-SWGCA(CP2)D		LB-Sgrama-BB-Indian-PPclover-Sgrod-Ycone
38	CP38E-SWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-S	38-CP38E-SWGCA(CP2)D-LB-Sgrama-BB-Indian-I	Purple Prairie Clover	Dalea purpurea	2.00	0.125		Legume	N	N	CP38E-SWGCA(CP2)D		LB-Sgrama-BB-Indian-PPclover-Sgrod-Ycone
38	CP38E-SWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-S	38-CP38E-SWGCA(CP2)D-LB-Sgrama-BB-Indian-I	Stiff Goldenrod	Oligoneuron rigidum	1.00	0.0625		Forb	N	N	CP38E-SWGCA(CP2)D		LB-Sgrama-BB-Indian-PPclover-Sgrod-Ycone
38	CP38E-SWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-S	38-CP38E-SWGCA(CP2)D-LB-Sgrama-BB-Indian-I	Yellow Coneflower	Ratibida pinnata	1.00	0.0625		Forb	N	N	CP38E-SWGCA(CP2)D		LB-Sgrama-BB-Indian-PPclover-Sgrod-Ycone
38	CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-I	38-CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian	Little Bluestem	Schizachyrium scoparium	24.00	1.5		Grass	N	N	CP38E-SWGCA(CP2)DM		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-I	38-CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian	Sideoats Grama	Bouteloua curtipendula	16.00	1		Grass	N	N	CP38E-SWGCA(CP2)DM		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-I	38-CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian	Big Bluestem	Andropogon gerardii	8.00	0.5		Grass	N	N	CP38E-SWGCA(CP2)DM		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-I	38-CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian	Indiangrass	Sorghastrum nutans	8.00	0.5		Grass	N	N	CP38E-SWGCA(CP2)DM		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-I	38-CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian	Switchgrass	Panicum virgatum	8.00	0.5		Grass	N	N	CP38E-SWGCA(CP2)DM		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-I	38-CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian	Purple Prairie Clover	Dalea purpurea	2.00	0.125		Legume	N	N	CP38E-SWGCA(CP2)DM		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-I	38-CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian	Bergamot	Monarda fistulosa	1.00	0.0625		Forb	N	N	CP38E-SWGCA(CP2)DM		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-I	38-CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian	Yellow Coneflower	Ratibida pinnata	1.00	0.0625		Forb	N	N	CP38E-SWGCA(CP2)DM		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Ber	38-CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Little Bluestem	Schizachyrium scoparium	20.00	1.25		Grass	N	N	CP38E-SWGCA(CP2)M		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Ber	38-CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Canada Wildrye	Elymus canadensis	16.00	1		Grass	N	N	CP38E-SWGCA(CP2)M		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Ber	38-CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Indiangrass	Sorghastrum nutans	16.00	1		Grass	N	N	CP38E-SWGCA(CP2)M		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Ber	38-CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Big Bluestem	Andropogon gerardii	8.00	0.5		Grass	N	N	CP38E-SWGCA(CP2)M		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Ber	38-CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Switchgrass	Panicum virgatum	8.00	0.5		Grass	N	N	CP38E-SWGCA(CP2)M		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Ber	38-CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Bergamot	Monarda fistulosa	1.00	0.0625		Forb	N	N	CP38E-SWGCA(CP2)M		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Ber	38-CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Black-eyed Susan	Rudbeckia hirta	1.00	0.0625		Forb	N	N	CP38E-SWGCA(CP2)M		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Ber	38-CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Yellow Coneflower	Ratibida pinnata	1.00	0.0625		Forb	N	N	CP38E-SWGCA(CP2)M		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-	38-CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Switc	Big Bluestem	Andropogon gerardii	16.00	1		Grass	N	N	CP38E-SWGCA(CP2)W		BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-	38-CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Switc	Canada Wildrye	Elymus canadensis	16.00	1		Grass	N	N	CP38E-SWGCA(CP2)W		BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron

38	CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-C	38-CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Switc	Indiangrass	Sorghastrum nutans	16.00	1		Grass	N	N	CP38E-SWGCA(CP2)W		BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-C	38-CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Switc	Switchgrass	Panicum virgatum	16.00	1		Grass	N	N	CP38E-SWGCA(CP2)W		BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-C	38-CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Switc	Prairie Cordgrass	Spartina pectinata	8.00	0.5		Grass	N	N	CP38E-SWGCA(CP2)W		BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-C	38-CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Switc	Cupplant	Silphium perfoliatum	2.00	0.125		Forb	N	N	CP38E-SWGCA(CP2)W		BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-C	38-CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Switc	Blue Vervain	Verbena hastata	1.00	0.0625		Forb	N	N	CP38E-SWGCA(CP2)W		BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-C	38-CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Switc	Common Ironweed	Vernonia fasciculata	1.00	0.0625		Forb	N	N	CP38E-SWGCA(CP2)W		BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-SWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Berg-	38-CP38E-SWGCA(CP2)WM-Switch-BB-Cwrye-Pc	Switchgrass	Panicum virgatum	32.00	2		Grass	N	N	CP38E-SWGCA(CP2)WM		Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
38	CP38E-SWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Berg-	38-CP38E-SWGCA(CP2)WM-Switch-BB-Cwrye-Pc	Big Bluestem	Andropogon gerardii	16.00	1		Grass	N	N	CP38E-SWGCA(CP2)WM		Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
38	CP38E-SWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Berg-	38-CP38E-SWGCA(CP2)WM-Switch-BB-Cwrye-Pc	Canada Wildrye	Elymus canadensis	16.00	1		Grass	N	N	CP38E-SWGCA(CP2)WM		Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
38	CP38E-SWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Berg-	38-CP38E-SWGCA(CP2)WM-Switch-BB-Cwrye-Pc	Prairie Cordgrass	Spartina pectinata	4.00	0.25		Grass	N	N	CP38E-SWGCA(CP2)WM		Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
38	CP38E-SWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Berg-	38-CP38E-SWGCA(CP2)WM-Switch-BB-Cwrye-Pc	Bergamot	Monarda fistulosa	1.00	0.0625		Forb	N	N	CP38E-SWGCA(CP2)WM		Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
38	CP38E-SWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Berg-	38-CP38E-SWGCA(CP2)WM-Switch-BB-Cwrye-Pc	New England Aster	Symphyotrichum novae-a	1.00	0.0625		Forb	N	N	CP38E-SWGCA(CP2)WM		Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
38	CP38E-SWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Berg-	38-CP38E-SWGCA(CP2)WM-Switch-BB-Cwrye-Pc	Yellow Coneflower	Ratibida pinnata	1.00	0.0625		Forb	N	N	CP38E-SWGCA(CP2)WM		Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Little Bluestem	Schizachyrium scoparium	24.00	1.5		Grass	N	N	CP38E-SWGCA(CP25)D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Sideoats Grama	Bouteloua curtipendula	24.00	1.5		Grass	N	N	CP38E-SWGCA(CP25)D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Indiangrass	Sorghastrum nutans	8.00	0.5		Grass	N	N	CP38E-SWGCA(CP25)D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Big Bluestem	Andropogon gerardii	4.00	0.25		Grass	N	N	CP38E-SWGCA(CP25)D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Purple Prairie Clover	Dalea purpurea	2.00	0.125		Legume	N	N	CP38E-SWGCA(CP25)D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Sand Dropseed	Sporobolus cryptandrus	2.00	0.125		Grass	N	N	CP38E-SWGCA(CP25)D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Prairie Junegrass	Koeleria macrantha	1.00	0.0625		Grass	N	N	CP38E-SWGCA(CP25)D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Spiderwort	Tradescantia ohiensis	1.00	0.0625		Forb	N	N	CP38E-SWGCA(CP25)D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Hoary Vervain	Verbena stricta	0.50	0.03125		Forb	N	N	CP38E-SWGCA(CP25)D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Leadplant	Amorpha canescens	0.50	0.03125		Legume	N	N	CP38E-SWGCA(CP25)D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Prairie Tickseed	Coreopsis palmata	0.50	0.03125		Forb	N	N	CP38E-SWGCA(CP25)D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Silky Aster	Symphyotrichum pratens	0.50	0.03125		Forb	N	N	CP38E-SWGCA(CP25)D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Stiff Goldenrod	Oligoneuron rigidum	0.50	0.03125		Forb	N	N	CP38E-SWGCA(CP25)D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Yellow Coneflower	Ratibida pinnata	0.50	0.03125		Forb	N	N	CP38E-SWGCA(CP25)D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Prairie Cinquefoil	Potentilla arguta	0.25	0.015625		Forb	N	N	CP38E-SWGCA(CP25)D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Spotted Mint	Monarda punctata	0.25	0.015625		Forb	N	N	CP38E-SWGCA(CP25)D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Little Bluestem	Schizachyrium scoparium	24.00	1.5		Grass	N	N	CP38E-SWGCA(CP25)DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Sideoats Grama	Bouteloua curtipendula	24.00	1.5		Grass	N	N	CP38E-SWGCA(CP25)DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Indiangrass	Sorghastrum nutans	8.00	0.5		Grass	N	N	CP38E-SWGCA(CP25)DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Switchgrass	Panicum virgatum	4.00	0.25		Grass	N	N	CP38E-SWGCA(CP25)DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Prairie Junegrass	Koeleria macrantha	2.00	0.125		Grass	N	N	CP38E-SWGCA(CP25)DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Prairie Dropseed	Sporobolus heterolepis	2.00	0.125		Grass	N	N	CP38E-SWGCA(CP25)DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Purple Prairie Clover	Dalea purpurea	2.00	0.125		Legume	N	N	CP38E-SWGCA(CP25)DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Round-Headed Bushclover	Lespedeza capitata	2.00	0.125		Legume	N	N	CP38E-SWGCA(CP25)DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Bergamot	Monarda fistulosa	1.00	0.0625		Forb	N	N	CP38E-SWGCA(CP25)DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Spiderwort	Tradescantia ohiensis	1.00	0.0625		Forb	N	N	CP38E-SWGCA(CP25)DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Yellow Coneflower	Ratibida pinnata	1.00	0.0625		Forb	N	N	CP38E-SWGCA(CP25)DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Leadplant	Amorpha canescens	0.50	0.03125		Legume	N	N	CP38E-SWGCA(CP25)DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Rough Blazing Star	Liatris aspera	0.50	0.03125		Forb	N	N	CP38E-SWGCA(CP25)DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Sky-Blue Aster	Symphyotrichum oolenta	0.50	0.03125		Forb	N	N	CP38E-SWGCA(CP25)DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Stiff Goldenrod	Oligoneuron rigidum	0.50	0.03125		Forb	N	N	CP38E-SWGCA(CP25)DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Prairie Cinquefoil	Potentilla arguta	0.25	0.015625		Forb	N	N	CP38E-SWGCA(CP25)DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-Switch-O	38-CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-	Little Bluestem	Schizachyrium scoparium	24.00	1.5		Grass	N	N	CP38E-SWGCA(CP25)M		Berg-Besus-NEaster-SBAster-Ycone-Croot
38	CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-Switch-O	38-CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-	Indiangrass	Sorghastrum nutans	16.00	1		Grass	N	N	CP38E-SWGCA(CP25)M		Berg-Besus-NEaster-SBAster-Ycone-Croot
38	CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-Switch-O	38-CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-	Big Bluestem	Andropogon gerardii	8.00	0.5		Grass	N	N	CP38E-SWGCA(CP25)M		Berg-Besus-NEaster-SBAster-Ycone-Croot
38	CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-Switch-O	38-CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-	Canada Wildrye	Elymus canadensis	8.00	0.5		Grass	N	N	CP38E-SWGCA(CP25)M		Berg-Besus-NEaster-SBAster-Ycone-Croot

38	CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-Switch-O	38-CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-	Switchgrass	Panicum virgatum	8.00	0.5		Grass	N	N	CP38E-SWGCA(CP25)M	Berg-Besus-NEaster-SBAster-Ycone-Croot
38	CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-Switch-O	38-CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-	Ox-eye Sunflower	Heliopsis helianthoides	1.00	0.0625		Forb	N	N	CP38E-SWGCA(CP25)M	Berg-Besus-NEaster-SBAster-Ycone-Croot
38	CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-Switch-O	38-CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-	Prairie Blazing Star	Liatris pycnostachya	1.00	0.0625		Forb	N	N	CP38E-SWGCA(CP25)M	Berg-Besus-NEaster-SBAster-Ycone-Croot
38	CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-Switch-O	38-CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-	Purple Prairie Clover	Dalea purpurea	1.00	0.0625		Legume	N	N	CP38E-SWGCA(CP25)M	Berg-Besus-NEaster-SBAster-Ycone-Croot
38	CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-Switch-O	38-CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-	Rosinweed	Silphium integrifolium	1.00	0.0625		Forb	N	N	CP38E-SWGCA(CP25)M	Berg-Besus-NEaster-SBAster-Ycone-Croot
38	CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-Switch-O	38-CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-	Bergamot	Monarda fistulosa	0.50	0.03125		Forb	N	N	CP38E-SWGCA(CP25)M	Berg-Besus-NEaster-SBAster-Ycone-Croot
38	CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-Switch-O	38-CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-	Black-eyed Susan	Rudbeckia hirta	0.50	0.03125		Forb	N	N	CP38E-SWGCA(CP25)M	Berg-Besus-NEaster-SBAster-Ycone-Croot
38	CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-Switch-O	38-CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-	New England Aster	Symphyotrichum novae-a	0.50	0.03125		Forb	N	N	CP38E-SWGCA(CP25)M	Berg-Besus-NEaster-SBAster-Ycone-Croot
38	CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-Switch-O	38-CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-	Smooth Blue Aster	Symphyotrichum laeve	0.50	0.03125		Forb	N	N	CP38E-SWGCA(CP25)M	Berg-Besus-NEaster-SBAster-Ycone-Croot
38	CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-Switch-O	38-CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-	Yellow Coneflower	Ratibida pinnata	0.50	0.03125		Forb	N	N	CP38E-SWGCA(CP25)M	Berg-Besus-NEaster-SBAster-Ycone-Croot
38	CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-Switch-O	38-CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-	Culver's Root	Veronicastrum virginicum	0.25	0.015625		Forb	N	N	CP38E-SWGCA(CP25)M	Berg-Besus-NEaster-SBAster-Ycone-Croot
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-	Canada Wildrye	Elymus canadensis	16.00	1		Grass	N	N	CP38E-SWGCA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-	Switchgrass	Panicum virgatum	16.00	1		Grass	N	N	CP38E-SWGCA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-	Indiangrass	Sorghastrum nutans	12.00	0.75		Grass	N	N	CP38E-SWGCA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-	Big Bluestem	Andropogon gerardii	8.00	0.5		Grass	N	N	CP38E-SWGCA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-	Prairie Cordgrass	Spartina pectinata	8.00	0.5		Grass	N	N	CP38E-SWGCA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-	Fowl Mannagrass	Glyceria striata	4.00	0.25		Grass	N	N	CP38E-SWGCA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-	Fox Sedge	Carex vulpinoidea	4.00	0.25		Sedge	N	N	CP38E-SWGCA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-	Cupplant	Silphium perfoliatum	2.00	0.125		Forb	N	N	CP38E-SWGCA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-	Showy Tick Trefoil	Desmodium canadense	2.00	0.125		Legume	N	N	CP38E-SWGCA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-	Blue Vervain	Verbena hastata	1.00	0.0625		Forb	N	N	CP38E-SWGCA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-	Golden Alexanders	Zizia aurea	1.00	0.0625		Forb	N	N	CP38E-SWGCA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-	Marsh Milkweed	Asclepias incarnata	1.00	0.0625		Forb	N	N	CP38E-SWGCA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-	Boneset	Eupatorium perfoliatum	0.50	0.03125		Forb	N	N	CP38E-SWGCA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-	Common Ironweed	Vernonia fasciculata	0.50	0.03125		Forb	N	N	CP38E-SWGCA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-	Joe-pye Weed	Eutrochium maculatum	0.50	0.03125		Forb	N	N	CP38E-SWGCA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-	Culver's Root	Veronicastrum virginicum	0.25	0.015625		Forb	N	N	CP38E-SWGCA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-Indian-Pco	38-CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-I	Switchgrass	Panicum virgatum	24.00	1.5		Grass	N	N	CP38E-SWGCA(CP25)WM	Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
38	CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-Indian-Pco	38-CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-I	Big Bluestem	Andropogon gerardii	20.00	1.25		Grass	N	N	CP38E-SWGCA(CP25)WM	Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
38	CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-Indian-Pco	38-CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-I	Canada Wildrye	Elymus canadensis	16.00	1		Grass	N	N	CP38E-SWGCA(CP25)WM	Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
38	CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-Indian-Pco	38-CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-I	Indiangrass	Sorghastrum nutans	12.00	0.75		Grass	N	N	CP38E-SWGCA(CP25)WM	Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
38	CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-Indian-Pco	38-CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-I	Prairie Cordgrass	Spartina pectinata	4.00	0.25		Grass	N	N	CP38E-SWGCA(CP25)WM	Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
38	CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-Indian-Pco	38-CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-I	Cupplant	Silphium perfoliatum	2.00	0.125		Forb	N	N	CP38E-SWGCA(CP25)WM	Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
38	CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-Indian-Pco	38-CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-I	White wild indigo	Baptisia alba	1.50	0.09375		Legume	N	N	CP38E-SWGCA(CP25)WM	Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
38	CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-Indian-Pco	38-CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-I	Black-eyed Susan	Rudbeckia hirta	0.50	0.03125		Forb	N	N	CP38E-SWGCA(CP25)WM	Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
38	CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-Indian-Pco	38-CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-I	Common Ironweed	Vernonia fasciculata	0.50	0.03125		Forb	N	N	CP38E-SWGCA(CP25)WM	Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
38	CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-Indian-Pco	38-CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-I	Golden Alexanders	Zizia aurea	0.50	0.03125		Forb	N	N	CP38E-SWGCA(CP25)WM	Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
38	CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-Indian-Pco	38-CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-I	New England Aster	Symphyotrichum novae-a	0.50	0.03125		Forb	N	N	CP38E-SWGCA(CP25)WM	Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
38	CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-Indian-Pco	38-CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-I	Prairie Blazing Star	Liatris pycnostachya	0.50	0.03125		Forb	N	N	CP38E-SWGCA(CP25)WM	Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
38	CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-Indian-Pco	38-CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-I	Yellow Coneflower	Ratibida pinnata	0.50	0.03125		Forb	N	N	CP38E-SWGCA(CP25)WM	Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
38	CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-Indian-Pco	38-CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-I	Bergamot	Monarda fistulosa	0.25	0.015625		Forb	N	N	CP38E-SWGCA(CP25)WM	Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
38	CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-Indian-Pco	38-CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-I	Great St. John's Wort	Hypericum ascyron	0.25	0.015625		Forb	N	N	CP38E-SWGCA(CP25)WM	Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop-	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pju	Little Bluestem	Schizachyrium scoparium	32.00	2		Grass	N	N	CP38E-WPHRA(CP25)D	Swort-Berg-Lplant-Rblzstar-SkyAster-Besus-Pcinque-Sgrod-
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop-	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pju	Sideoats Grama	Bouteloua curtipendula	24.00	1.5		Grass	N	N	CP38E-WPHRA(CP25)D	Swort-Berg-Lplant-Rblzstar-SkyAster-Besus-Pcinque-Sgrod-
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop-	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pju	Indiangrass	Sorghastrum nutans	4.00	0.25		Grass	N	N	CP38E-WPHRA(CP25)D	Swort-Berg-Lplant-Rblzstar-SkyAster-Besus-Pcinque-Sgrod-
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop-	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pju	Prairie Junegrass	Koeleria macrantha	4.00	0.25		Grass	N	N	CP38E-WPHRA(CP25)D	Swort-Berg-Lplant-Rblzstar-SkyAster-Besus-Pcinque-Sgrod-
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop-	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pju	Prairie Dropseed	Sporobolus heterolepis	4.00	0.25		Grass	N	N	CP38E-WPHRA(CP25)D	Swort-Berg-Lplant-Rblzstar-SkyAster-Besus-Pcinque-Sgrod-
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop-	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pju	Switchgrass	Panicum virgatum	4.00	0.25		Grass	N	N	CP38E-WPHRA(CP25)D	Swort-Berg-Lplant-Rblzstar-SkyAster-Besus-Pcinque-Sgrod-
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop-	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pju	Purple Prairie Clover	Dalea purpurea	2.00	0.125		Legume	N	N	CP38E-WPHRA(CP25)D	Swort-Berg-Lplant-Rblzstar-SkyAster-Besus-Pcinque-Sgrod-

38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop-	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjur	Round-Headed Bushclover	Lespedeza capitata	2.00	0.125		Legume	N	N	CP38E-WPHRA(CP25)D	Swort-Berg-Lplant-Rblzstar-SkyAster-Besus-Pcinque-Sgrod-
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop-	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjur	Spiderwort	Tradescantia ohiensis	1.00	0.0625		Forb	N	N	CP38E-WPHRA(CP25)D	Swort-Berg-Lplant-Rblzstar-SkyAster-Besus-Pcinque-Sgrod-
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop-	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjur	Bergamot	Monarda fistulosa	0.50	0.03125		Forb	N	N	CP38E-WPHRA(CP25)D	Swort-Berg-Lplant-Rblzstar-SkyAster-Besus-Pcinque-Sgrod-
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop-	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjur	Leadplant	Amorpha canescens	0.50	0.03125		Legume	N	N	CP38E-WPHRA(CP25)D	Swort-Berg-Lplant-Rblzstar-SkyAster-Besus-Pcinque-Sgrod-
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop-	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjur	Rough Blazing Star	Liatris aspera	0.50	0.03125		Forb	N	N	CP38E-WPHRA(CP25)D	Swort-Berg-Lplant-Rblzstar-SkyAster-Besus-Pcinque-Sgrod-
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop-	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjur	Sky-Blue Aster	Symphyotrichum oolenta	0.50	0.03125		Forb	N	N	CP38E-WPHRA(CP25)D	Swort-Berg-Lplant-Rblzstar-SkyAster-Besus-Pcinque-Sgrod-
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop-	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjur	Black-eyed Susan	Rudbeckia hirta	0.25	0.015625		Forb	N	N	CP38E-WPHRA(CP25)D	Swort-Berg-Lplant-Rblzstar-SkyAster-Besus-Pcinque-Sgrod-
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop-	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjur	Prairie Cinquefoil	Potentilla arguta	0.25	0.015625		Forb	N	N	CP38E-WPHRA(CP25)D	Swort-Berg-Lplant-Rblzstar-SkyAster-Besus-Pcinque-Sgrod-
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop-	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjur	Stiff Goldenrod	Oligoneuron rigidum	0.25	0.015625		Forb	N	N	CP38E-WPHRA(CP25)D	Swort-Berg-Lplant-Rblzstar-SkyAster-Besus-Pcinque-Sgrod-
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop-	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjur	Yellow Coneflower	Ratibida pinnata	0.25	0.015625		Forb	N	N	CP38E-WPHRA(CP25)D	Swort-Berg-Lplant-Rblzstar-SkyAster-Besus-Pcinque-Sgrod-
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BI	Little Bluestem	Schizachyrium scoparium	32.00	2		Grass	N	N	CP38E-WPHRA(CP25)DM	Hvervain-Lplant-Ptick-SilkAster-Pcinque-Smint-Sgrod-Ycone
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BI	Sideoats Grama	Bouteloua curtipendula	24.00	1.5		Grass	N	N	CP38E-WPHRA(CP25)DM	Hvervain-Lplant-Ptick-SilkAster-Pcinque-Smint-Sgrod-Ycone
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BI	Prairie Junegrass	Koeleria macrantha	6.00	0.375		Grass	N	N	CP38E-WPHRA(CP25)DM	Hvervain-Lplant-Ptick-SilkAster-Pcinque-Smint-Sgrod-Ycone
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BI	Big Bluestem	Andropogon gerardii	4.00	0.25		Grass	N	N	CP38E-WPHRA(CP25)DM	Hvervain-Lplant-Ptick-SilkAster-Pcinque-Smint-Sgrod-Ycone
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BI	Indiangrass	Sorghastrum nutans	4.00	0.25		Grass	N	N	CP38E-WPHRA(CP25)DM	Hvervain-Lplant-Ptick-SilkAster-Pcinque-Smint-Sgrod-Ycone
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BI	Sand Dropseed	Sporobolus cryptandrus	4.00	0.25		Grass	N	N	CP38E-WPHRA(CP25)DM	Hvervain-Lplant-Ptick-SilkAster-Pcinque-Smint-Sgrod-Ycone
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BI	Butterfly Milkweed	Asclepias tuberosa	1.00	0.0625		Forb	N	N	CP38E-WPHRA(CP25)DM	Hvervain-Lplant-Ptick-SilkAster-Pcinque-Smint-Sgrod-Ycone
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BI	Purple Prairie Clover	Dalea purpurea	1.00	0.0625		Legume	N	N	CP38E-WPHRA(CP25)DM	Hvervain-Lplant-Ptick-SilkAster-Pcinque-Smint-Sgrod-Ycone
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BI	Spiderwort	Tradescantia ohiensis	1.00	0.0625		Forb	N	N	CP38E-WPHRA(CP25)DM	Hvervain-Lplant-Ptick-SilkAster-Pcinque-Smint-Sgrod-Ycone
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BI	Hoary Vervain	Verbena stricta	0.50	0.03125		Forb	N	N	CP38E-WPHRA(CP25)DM	Hvervain-Lplant-Ptick-SilkAster-Pcinque-Smint-Sgrod-Ycone
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BI	Leadplant	Amorpha canescens	0.50	0.03125		Legume	N	N	CP38E-WPHRA(CP25)DM	Hvervain-Lplant-Ptick-SilkAster-Pcinque-Smint-Sgrod-Ycone
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BI	Prairie Tickseed	Coreopsis palmata	0.50	0.03125		Forb	N	N	CP38E-WPHRA(CP25)DM	Hvervain-Lplant-Ptick-SilkAster-Pcinque-Smint-Sgrod-Ycone
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BI	Silky Aster	Symphyotrichum pratens	0.50	0.03125		Forb	N	N	CP38E-WPHRA(CP25)DM	Hvervain-Lplant-Ptick-SilkAster-Pcinque-Smint-Sgrod-Ycone
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BI	Prairie Cinquefoil	Potentilla arguta	0.25	0.015625		Forb	N	N	CP38E-WPHRA(CP25)DM	Hvervain-Lplant-Ptick-SilkAster-Pcinque-Smint-Sgrod-Ycone
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BI	Spotted Mint	Monarda punctata	0.25	0.015625		Forb	N	N	CP38E-WPHRA(CP25)DM	Hvervain-Lplant-Ptick-SilkAster-Pcinque-Smint-Sgrod-Ycone
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BI	Stiff Goldenrod	Oligoneuron rigidum	0.25	0.015625		Forb	N	N	CP38E-WPHRA(CP25)DM	Hvervain-Lplant-Ptick-SilkAster-Pcinque-Smint-Sgrod-Ycone
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BI	Yellow Coneflower	Ratibida pinnata	0.25	0.015625		Forb	N	N	CP38E-WPHRA(CP25)DM	Hvervain-Lplant-Ptick-SilkAster-Pcinque-Smint-Sgrod-Ycone
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BE	Little Bluestem	Schizachyrium scoparium	28.00	1.75		Grass	N	N	CP38E-WPHRA(CP25)M	Pblzstar-PPclover-Berg-Besus-NEaster-SkyAster-SBAster-Ycone-
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BE	Canada Wildrye	Elymus canadensis	12.00	0.75		Grass	N	N	CP38E-WPHRA(CP25)M	Pblzstar-PPclover-Berg-Besus-NEaster-SkyAster-SBAster-Ycone-
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BE	Sideoats Grama	Bouteloua curtipendula	12.00	0.75		Grass	N	N	CP38E-WPHRA(CP25)M	Pblzstar-PPclover-Berg-Besus-NEaster-SkyAster-SBAster-Ycone-
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BE	Big Bluestem	Andropogon gerardii	4.00	0.25		Grass	N	N	CP38E-WPHRA(CP25)M	Pblzstar-PPclover-Berg-Besus-NEaster-SkyAster-SBAster-Ycone-
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BE	Indiangrass	Sorghastrum nutans	4.00	0.25		Grass	N	N	CP38E-WPHRA(CP25)M	Pblzstar-PPclover-Berg-Besus-NEaster-SkyAster-SBAster-Ycone-
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BE	Switchgrass	Panicum virgatum	4.00	0.25		Grass	N	N	CP38E-WPHRA(CP25)M	Pblzstar-PPclover-Berg-Besus-NEaster-SkyAster-SBAster-Ycone-
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BE	Canada Milkvetch	Astragalus canadensis	2.00	0.125		Legume	N	N	CP38E-WPHRA(CP25)M	Pblzstar-PPclover-Berg-Besus-NEaster-SkyAster-SBAster-Ycone-
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BE	Ox-eye Sunflower	Heliopsis helianthoides	1.00	0.0625		Forb	N	N	CP38E-WPHRA(CP25)M	Pblzstar-PPclover-Berg-Besus-NEaster-SkyAster-SBAster-Ycone-
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BE	Prairie Blazing Star	Liatris pycnostachya	1.00	0.0625		Forb	N	N	CP38E-WPHRA(CP25)M	Pblzstar-PPclover-Berg-Besus-NEaster-SkyAster-SBAster-Ycone-
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BE	Purple Prairie Clover	Dalea purpurea	1.00	0.0625		Legume	N	N	CP38E-WPHRA(CP25)M	Pblzstar-PPclover-Berg-Besus-NEaster-SkyAster-SBAster-Ycone-
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BE	Bergamot	Monarda fistulosa	0.50	0.03125		Forb	N	N	CP38E-WPHRA(CP25)M	Pblzstar-PPclover-Berg-Besus-NEaster-SkyAster-SBAster-Ycone-
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BE	Black-eyed Susan	Rudbeckia hirta	0.50	0.03125		Forb	N	N	CP38E-WPHRA(CP25)M	Pblzstar-PPclover-Berg-Besus-NEaster-SkyAster-SBAster-Ycone-
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BE	New England Aster	Symphyotrichum novae-a	0.50	0.03125		Forb	N	N	CP38E-WPHRA(CP25)M	Pblzstar-PPclover-Berg-Besus-NEaster-SkyAster-SBAster-Ycone-
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BE	Sky-Blue Aster	Symphyotrichum oolenta	0.50	0.03125		Forb	N	N	CP38E-WPHRA(CP25)M	Pblzstar-PPclover-Berg-Besus-NEaster-SkyAster-SBAster-Ycone-
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BE	Smooth Blue Aster	Symphyotrichum laeve	0.50	0.03125		Forb	N	N	CP38E-WPHRA(CP25)M	Pblzstar-PPclover-Berg-Besus-NEaster-SkyAster-SBAster-Ycone-
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BE	Yellow Coneflower	Ratibida pinnata	0.50	0.03125		Forb	N	N	CP38E-WPHRA(CP25)M	Pblzstar-PPclover-Berg-Besus-NEaster-SkyAster-SBAster-Ycone-
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BE	Culver's Root	Veronicastrum virginicum	0.25	0.015625		Forb	N	N	CP38E-WPHRA(CP25)M	Pblzstar-PPclover-Berg-Besus-NEaster-SkyAster-SBAster-Ycone-
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsedg	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-	Canada Wildrye	Elymus canadensis	16.00	1		Grass	N	N	CP38E-WPHRA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsedg	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-	Indiangrass	Sorghastrum nutans	12.00	0.75		Grass	N	N	CP38E-WPHRA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsedg	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-	Switchgrass	Panicum virgatum	12.00	0.75		Grass	N	N	CP38E-WPHRA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsedg	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-	Big Bluestem	Andropogon gerardii	8.00	0.5		Grass	N	N	CP38E-WPHRA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsedg	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-	Fox Sedge	Carex vulpinoidea	8.00	0.5		Sedge	N	N	CP38E-WPHRA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot

38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsedg	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-	Prairie Cordgrass	Spartina pectinata	8.00	0.5		Grass	N	N	CP38E-WPHRA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsedg	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-	Fowl Mannagrass	Glyceria striata	4.00	0.25		Grass	N	N	CP38E-WPHRA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsedg	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-	Cupplant	Silphium perfoliatum	2.00	0.125		Forb	N	N	CP38E-WPHRA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsedg	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-	Showy Tick Trefoil	Desmodium canadense	2.00	0.125		Legume	N	N	CP38E-WPHRA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsedg	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-	Blue Vervain	Verbena hastata	1.00	0.0625		Forb	N	N	CP38E-WPHRA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsedg	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-	Golden Alexanders	Zizia aurea	1.00	0.0625		Forb	N	N	CP38E-WPHRA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsedg	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-	Marsh Milkweed	Asclepias incarnata	1.00	0.0625		Forb	N	N	CP38E-WPHRA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsedg	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-	Boneset	Eupatorium perfoliatum	0.50	0.03125		Forb	N	N	CP38E-WPHRA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsedg	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-	Common Ironweed	Vernonia fasciculata	0.50	0.03125		Forb	N	N	CP38E-WPHRA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsedg	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-	Joe-pye Weed	Eutrochium maculatum	0.50	0.03125		Forb	N	N	CP38E-WPHRA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsedg	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-	Culver's Root	Veronicastrum virginicum	0.25	0.015625		Forb	N	N	CP38E-WPHRA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-Monarch(CP1)-Tim-Orc-RC-Cmilkweed-Besus-Ox	38-CP38E-Monarch(CP1)-Tim-Orc-RC-Cmilkweed-	Timothy	Phleum pratense	8.00	0.5	14.2	Grass	I	X	CP38E-Monarch(CP1)	Tim-Orc-RC-Cmilkweed-Besus-Oxeyesun-Sgrod
38	CP38E-Monarch(CP1)-Tim-Orc-RC-Cmilkweed-Besus-Ox	38-CP38E-Monarch(CP1)-Tim-Orc-RC-Cmilkweed-	Orchardgrass	Dactylis glomerata L.	8.00	0.5	7.5	Grass	I	X	CP38E-Monarch(CP1)	Tim-Orc-RC-Cmilkweed-Besus-Oxeyesun-Sgrod
38	CP38E-Monarch(CP1)-Tim-Orc-RC-Cmilkweed-Besus-Ox	38-CP38E-Monarch(CP1)-Tim-Orc-RC-Cmilkweed-	Red Clover	Trifolium pratense	4.80	0.3	1.9	Legume	I	X	CP38E-Monarch(CP1)	Tim-Orc-RC-Cmilkweed-Besus-Oxeyesun-Sgrod
38	CP38E-Monarch(CP1)-Tim-Orc-RC-Cmilkweed-Besus-Ox	38-CP38E-Monarch(CP1)-Tim-Orc-RC-Cmilkweed-	Common Milkweed	Asclepias syriaca	6.05	0.38	0.6	Forb	N	X	CP38E-Monarch(CP1)	Tim-Orc-RC-Cmilkweed-Besus-Oxeyesun-Sgrod
38	CP38E-Monarch(CP1)-Tim-Orc-RC-Cmilkweed-Besus-Ox	38-CP38E-Monarch(CP1)-Tim-Orc-RC-Cmilkweed-	Black-Eyed Susan	Rudbeckia hirta	0.96	0.06	2.2	Forb	N	X	CP38E-Monarch(CP1)	Tim-Orc-RC-Cmilkweed-Besus-Oxeyesun-Sgrod
38	CP38E-Monarch(CP1)-Tim-Orc-RC-Cmilkweed-Besus-Ox	38-CP38E-Monarch(CP1)-Tim-Orc-RC-Cmilkweed-	Ox-eye Sunflower	Heliopsis helianthoides	0.96	0.06	0.20	Forb	N	X	CP38E-Monarch(CP1)	Tim-Orc-RC-Cmilkweed-Besus-Oxeyesun-Sgrod
38	CP38E-Monarch(CP1)-Tim-Orc-RC-Cmilkweed-Besus-Ox	38-CP38E-Monarch(CP1)-Tim-Orc-RC-Cmilkweed-	Stiff Goldenrod	Oligoneuron rigidum	0.96	0.06	1.1	Forb	N	X	CP38E-Monarch(CP1)	Tim-Orc-RC-Cmilkweed-Besus-Oxeyesun-Sgrod
38	CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cwrye-Wpc	38-CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cv	Big Bluestem	Andropogon gerardii	4.00	0.25	1	Grass	N	X	CP38E-Monarch(CP2)	Sgrod-Shwgrod-NEaster
38	CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cwrye-Wpc	38-CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cv	Little Bluestem	Schizachyrium scopariu	24.00	1.5	8.3	Grass	N	X	CP38E-Monarch(CP2)	Sgrod-Shwgrod-NEaster
38	CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cwrye-Wpc	38-CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cv	Indiangrass	Sorghastrum nutans	4.00	0.25	1.2	Grass	N	X	CP38E-Monarch(CP2)	Sgrod-Shwgrod-NEaster
38	CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cwrye-Wpc	38-CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cv	Sideoats Grama	Bouteloua curtipendula	12.00	0.75	2.2	Grass	N	X	CP38E-Monarch(CP2)	Sgrod-Shwgrod-NEaster
38	CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cwrye-Wpc	38-CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cv	Canada Wildrye	Elymus canadensis	16.00	1	2	Grass	N	X	CP38E-Monarch(CP2)	Sgrod-Shwgrod-NEaster
38	CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cwrye-Wpc	38-CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cv	white prairie clover	Dalea candida	3.04	0.19	1.2	Legume	N	X	CP38E-Monarch(CP2)	Sgrod-Shwgrod-NEaster
38	CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cwrye-Wpc	38-CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cv	Common Milkweed	Asclepias syriaca	4.96	0.31	0.5	Forb	N	X	CP38E-Monarch(CP2)	Sgrod-Shwgrod-NEaster
38	CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cwrye-Wpc	38-CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cv	Black-eyed Susan	Rudbeckia hirta	0.96	0.06	2.2	Forb	N	X	CP38E-Monarch(CP2)	Sgrod-Shwgrod-NEaster
38	CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cwrye-Wpc	38-CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cv	Bergamot	Monarda fistulosa	0.96	0.06	1.8	Forb	N	X	CP38E-Monarch(CP2)	Sgrod-Shwgrod-NEaster
38	CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cwrye-Wpc	38-CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cv	Stiff Goldenrod	Oligoneuron rigidum	0.96	0.06	1.1	Forb	N	X	CP38E-Monarch(CP2)	Sgrod-Shwgrod-NEaster
38	CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cwrye-Wpc	38-CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cv	Showy Goldenrod	Solidago speciosa	0.48	0.03	1.1	Forb	N	X	CP38E-Monarch(CP2)	Sgrod-Shwgrod-NEaster
38	CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cwrye-Wpc	38-CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cv	New England Aster	Symphyotrichum novae	0.48	0.03	0.8	Forb	N	X	CP38E-Monarch(CP2)	Sgrod-Shwgrod-NEaster
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-Cwrye-Wp	38-CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	Big Bluestem	Andropogon gerardii	4.00	0.25	1	Grass	N	X	CP38E-Monarch(CP25)	Sgrod-Shwgrod-NEaster-Rblzstar-Rtlsnkmaster-Cup-SkyAster
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-Cwrye-Wp	38-CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	Little Bluestem	Schizachyrium scopariu	16.00	1	5.6	Grass	N	X	CP38E-Monarch(CP25)	Sgrod-Shwgrod-NEaster-Rblzstar-Rtlsnkmaster-Cup-SkyAster
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-Cwrye-Wp	38-CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	Indiangrass	Sorghastrum nutans	4.00	0.25	1.2	Grass	N	X	CP38E-Monarch(CP25)	Sgrod-Shwgrod-NEaster-Rblzstar-Rtlsnkmaster-Cup-SkyAster
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-Cwrye-Wp	38-CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	Sideoats Grama	Bouteloua curtipendula	8.00	0.5	1.5	Grass	N	X	CP38E-Monarch(CP25)	Sgrod-Shwgrod-NEaster-Rblzstar-Rtlsnkmaster-Cup-SkyAster
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-Cwrye-Wp	38-CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	Canada Wildrye	Elymus canadensis	8.00	0.5	1	Grass	N	X	CP38E-Monarch(CP25)	Sgrod-Shwgrod-NEaster-Rblzstar-Rtlsnkmaster-Cup-SkyAster
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-Cwrye-Wp	38-CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	white prairie clover	Dalea candida	3.04	0.19	1.2	Legume	N	X	CP38E-Monarch(CP25)	Sgrod-Shwgrod-NEaster-Rblzstar-Rtlsnkmaster-Cup-SkyAster
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-Cwrye-Wp	38-CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	Common Milkweed	Asclepias syriaca	4.96	0.31	0.5	Forb	N	X	CP38E-Monarch(CP25)	Sgrod-Shwgrod-NEaster-Rblzstar-Rtlsnkmaster-Cup-SkyAster
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-Cwrye-Wp	38-CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	Black-eyed Susan	Rudbeckia hirta	0.96	0.06	2.2	Forb	N	X	CP38E-Monarch(CP25)	Sgrod-Shwgrod-NEaster-Rblzstar-Rtlsnkmaster-Cup-SkyAster
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-Cwrye-Wp	38-CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	Bergamot	Monarda fistulosa	0.96	0.06	1.8	Forb	N	X	CP38E-Monarch(CP25)	Sgrod-Shwgrod-NEaster-Rblzstar-Rtlsnkmaster-Cup-SkyAster
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-Cwrye-Wp	38-CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	Stiff Goldenrod	Oligoneuron rigidum	0.96	0.06	1.1	Forb	N	X	CP38E-Monarch(CP25)	Sgrod-Shwgrod-NEaster-Rblzstar-Rtlsnkmaster-Cup-SkyAster
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-Cwrye-Wp	38-CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	Showy Goldenrod	Solidago speciosa	0.48	0.03	1.1	Forb	N	X	CP38E-Monarch(CP25)	Sgrod-Shwgrod-NEaster-Rblzstar-Rtlsnkmaster-Cup-SkyAster
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-Cwrye-Wp	38-CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	New England Aster	Symphyotrichum novae	0.48	0.03	0.8	Forb	N	X	CP38E-Monarch(CP25)	Sgrod-Shwgrod-NEaster-Rblzstar-Rtlsnkmaster-Cup-SkyAster
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-Cwrye-Wp	38-CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	Rough Blazing Star	Liatris aspera	0.48	0.03	0.2	Forb	N	X	CP38E-Monarch(CP25)	Sgrod-Shwgrod-NEaster-Rblzstar-Rtlsnkmaster-Cup-SkyAster
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-Cwrye-Wp	38-CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	Rattlesnake Master	Eryngium yuccifolium	0.96	0.06	0.2	Forb	N	X	CP38E-Monarch(CP25)	Sgrod-Shwgrod-NEaster-Rblzstar-Rtlsnkmaster-Cup-SkyAster
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-Cwrye-Wp	38-CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	Cupplant	Silphium perfoliatum	2.08	0.13	0.1	Forb	N	X	CP38E-Monarch(CP25)	Sgrod-Shwgrod-NEaster-Rblzstar-Rtlsnkmaster-Cup-SkyAster
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-Cwrye-Wp	38-CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	Sky-Blue Aster	Symphyotrichum oolen	0.96	0.06	1.9	Forb	N	X	CP38E-Monarch(CP25)	BB-LB-Indian-Sgrama-Cwrye-Wpclover-Cmilkweed-Besus-Berg-Sgrod-Shwgrod-NEaster-Rblzstar-Rtlsnkmaster-Cup-SkyAster
38	CP38E-GHRA(CP1)1-Alf-Rtop-Tim-Orc	38-CP38E-GHRA(CP1)1-Alf-Rtop-Tim-Orc	Alfalfa	Medicago sativa	96.00	6	30.2	Legume	I	X	CP38E-GHRA(CP1)1	Alf-Rtop-Tim-Orc
38	CP38E-GHRA(CP1)1-Alf-Rtop-Tim-Orc	38-CP38E-GHRA(CP1)1-Alf-Rtop-Tim-Orc	Redtop	Agrostis gigantea	32.00	2	229.2	Grass	I		CP38E-GHRA(CP1)1	Alf-Rtop-Tim-Orc

38	CP38E-GHRA(CP1)1-Alf-Rtop-Tim-Orc	38-CP38E-GHRA(CP1)1-Alf-Rtop-Tim-Orc	timothy	Phleum pratense	32.00	2	56.5	Grass	I	X	CP38E-GHRA(CP1)1		Alf-Rtop-Tim-Orc
38	CP38E-GHRA(CP1)1-Alf-Rtop-Tim-Orc	38-CP38E-GHRA(CP1)1-Alf-Rtop-Tim-Orc	Orchardgrass	Dactylis glomerata L.	16.00	1	15	Grass	I	X	CP38E-GHRA(CP1)1		Alf-Rtop-Tim-Orc
38	CP38E-GHRA(CP1)2-RC-KB-Orc-Rtop	38-CP38E-GHRA(CP1)2-RC-KB-Orc-Rtop	Red Clover	Trifolium pratense	80.00	5	31.6	Legume	I	X	CP38E-GHRA(CP1)2		RC-KB-Orc-Rtop
38	CP38E-GHRA(CP1)2-RC-KB-Orc-Rtop	38-CP38E-GHRA(CP1)2-RC-KB-Orc-Rtop	Kentucky Bluegrass	Poa pratensis	32.00	2	100	Grass	I		CP38E-GHRA(CP1)2		RC-KB-Orc-Rtop
38	CP38E-GHRA(CP1)2-RC-KB-Orc-Rtop	38-CP38E-GHRA(CP1)2-RC-KB-Orc-Rtop	Orchardgrass	Dactylis glomerata L.	16.00	1	15	Grass	I	X	CP38E-GHRA(CP1)2		RC-KB-Orc-Rtop
38	CP38E-GHRA(CP1)2-RC-KB-Orc-Rtop	38-CP38E-GHRA(CP1)2-RC-KB-Orc-Rtop	Redtop	Agrostis gigantea	16.00	1	114.6	Grass	I		CP38E-GHRA(CP1)2		RC-KB-Orc-Rtop
38	CP38E-GHRA(CP1)3-RC-SB-Tim	38-CP38E-GHRA(CP1)3-RC-SB-Tim	Red Clover	Trifolium pratense	80.00	5	31.6	Legume	I	X	CP38E-GHRA(CP1)3		RC-SB-Tim
38	CP38E-GHRA(CP1)3-RC-SB-Tim	38-CP38E-GHRA(CP1)3-RC-SB-Tim	Smooth Bromegrass	Bromus inermis	48.00	3	9.4	Grass	I		CP38E-GHRA(CP1)3		RC-SB-Tim
38	CP38E-GHRA(CP1)3-RC-SB-Tim	38-CP38E-GHRA(CP1)3-RC-SB-Tim	Timothy	Phleum pratense	32.00	2	56.5	Grass	I	X	CP38E-GHRA(CP1)3		RC-SB-Tim
38	CP38E-GHRA(CP1)4-RC-Tim-Orc-Rtop	38-CP38E-GHRA(CP1)4-RC-Tim-Orc-Rtop	Red Clover	Trifolium pratense	80.00	5	31.6	Legume	I	X	CP38E-GHRA(CP1)4		RC-Tim-Orc-Rtop
38	CP38E-GHRA(CP1)4-RC-Tim-Orc-Rtop	38-CP38E-GHRA(CP1)4-RC-Tim-Orc-Rtop	Timothy	Phleum pratense	32.00	2	56.5	Grass	I	X	CP38E-GHRA(CP1)4		RC-Tim-Orc-Rtop
38	CP38E-GHRA(CP1)4-RC-Tim-Orc-Rtop	38-CP38E-GHRA(CP1)4-RC-Tim-Orc-Rtop	Orchardgrass	Dactylis glomerata L.	16.00	1	15	Grass	I	X	CP38E-GHRA(CP1)4		RC-Tim-Orc-Rtop
38	CP38E-GHRA(CP1)4-RC-Tim-Orc-Rtop	38-CP38E-GHRA(CP1)4-RC-Tim-Orc-Rtop	Redtop	Agrostis gigantea	16.00	1	114.6	Grass	I		CP38E-GHRA(CP1)4		RC-Tim-Orc-Rtop
38	CP3-1-BB-LB-Indian-Sgrama-Sgrod-Ycone-PPclover	38-CP3-1-BB-LB-Indian-Sgrama-Sgrod-Ycone-PPcl	Big Bluestem	Andropogon gerardii	8.00	0.5	1.9	Grass	N	X	CP3-1		BB-LB-Indian-Sgrama-Sgrod-Ycone-PPclover
38	CP3-1-BB-LB-Indian-Sgrama-Sgrod-Ycone-PPclover	38-CP3-1-BB-LB-Indian-Sgrama-Sgrod-Ycone-PPcl	Little Bluestem	Schizachyrium scopariu	24.00	1.5	8.3	Grass	N	X	CP3-1		BB-LB-Indian-Sgrama-Sgrod-Ycone-PPclover
38	CP3-1-BB-LB-Indian-Sgrama-Sgrod-Ycone-PPclover	38-CP3-1-BB-LB-Indian-Sgrama-Sgrod-Ycone-PPcl	Indiangrass	Sorghastrum nutans	8.00	0.5	2.3	Grass	N	X	CP3-1		BB-LB-Indian-Sgrama-Sgrod-Ycone-PPclover
38	CP3-1-BB-LB-Indian-Sgrama-Sgrod-Ycone-PPclover	38-CP3-1-BB-LB-Indian-Sgrama-Sgrod-Ycone-PPcl	Sideoats Grama	Bouteloua curtipendula	24.00	1.5	4.4	Grass	N	X	CP3-1		BB-LB-Indian-Sgrama-Sgrod-Ycone-PPclover
38	CP3-1-BB-LB-Indian-Sgrama-Sgrod-Ycone-PPclover	38-CP3-1-BB-LB-Indian-Sgrama-Sgrod-Ycone-PPcl	Stiff Goldenrod	Oligoneuron rigidum	1.00	0.0625	1.1	Forb	N	X	CP3-1		BB-LB-Indian-Sgrama-Sgrod-Ycone-PPclover
38	CP3-1-BB-LB-Indian-Sgrama-Sgrod-Ycone-PPclover	38-CP3-1-BB-LB-Indian-Sgrama-Sgrod-Ycone-PPcl	Yellow Coneflower	Ratibida pinnata	1.00	0.0625	0.7	Forb	N	X	CP3-1		BB-LB-Indian-Sgrama-Sgrod-Ycone-PPclover
38	CP3-1-BB-LB-Indian-Sgrama-Sgrod-Ycone-PPclover	38-CP3-1-BB-LB-Indian-Sgrama-Sgrod-Ycone-PPcl	Purple Prairie Clover	Dalea purpurea	2.00	0.125	1	Legume	N	X	CP3-1		BB-LB-Indian-Sgrama-Sgrod-Ycone-PPclover
38	CP3-2-BB-Switch-LB-Indian-Cwrye-Ycone-Besus-Berg	38-CP3-2-BB-Switch-LB-Indian-Cwrye-Ycone-Besu	Big Bluestem	Andropogon gerardii	8.00	0.5	1.9	Grass	N	X	CP3-2		BB-Switch-LB-Indian-Cwrye-Ycone-Besus-Berg
38	CP3-2-BB-Switch-LB-Indian-Cwrye-Ycone-Besus-Berg	38-CP3-2-BB-Switch-LB-Indian-Cwrye-Ycone-Besu	Switchgrass	Panicum virgatum	8.00	0.5	4.5	Grass	N	X	CP3-2		BB-Switch-LB-Indian-Cwrye-Ycone-Besus-Berg
38	CP3-2-BB-Switch-LB-Indian-Cwrye-Ycone-Besus-Berg	38-CP3-2-BB-Switch-LB-Indian-Cwrye-Ycone-Besu	Little Bluestem	Schizachyrium scopariu	20.00	1.25	6.9	Grass	N	X	CP3-2		BB-Switch-LB-Indian-Cwrye-Ycone-Besus-Berg
38	CP3-2-BB-Switch-LB-Indian-Cwrye-Ycone-Besus-Berg	38-CP3-2-BB-Switch-LB-Indian-Cwrye-Ycone-Besu	Indiangrass	Sorghastrum nutans	16.00	1	4.5	Grass	N	X	CP3-2		BB-Switch-LB-Indian-Cwrye-Ycone-Besus-Berg
38	CP3-2-BB-Switch-LB-Indian-Cwrye-Ycone-Besus-Berg	38-CP3-2-BB-Switch-LB-Indian-Cwrye-Ycone-Besu	Canada Wildrye	Elymus canadensis	16.00	1	2	Grass	N	X	CP3-2		BB-Switch-LB-Indian-Cwrye-Ycone-Besus-Berg
38	CP3-2-BB-Switch-LB-Indian-Cwrye-Ycone-Besus-Berg	38-CP3-2-BB-Switch-LB-Indian-Cwrye-Ycone-Besu	Yellow Coneflower	Ratibida pinnata	1.00	0.0625	0.7	Forb	N	X	CP3-2		BB-Switch-LB-Indian-Cwrye-Ycone-Besus-Berg
38	CP3-2-BB-Switch-LB-Indian-Cwrye-Ycone-Besus-Berg	38-CP3-2-BB-Switch-LB-Indian-Cwrye-Ycone-Besu	Black-Eyed Susan	Rudbeckia hirta	1.00	0.0625	2.3	Forb	N	X	CP3-2		BB-Switch-LB-Indian-Cwrye-Ycone-Besus-Berg
38	CP3-2-BB-Switch-LB-Indian-Cwrye-Ycone-Besus-Berg	38-CP3-2-BB-Switch-LB-Indian-Cwrye-Ycone-Besu	Bergamot	Monarda fistulosa	1.00	0.0625	1.8	Forb	N	X	CP3-2		BB-Switch-LB-Indian-Cwrye-Ycone-Besus-Berg
38	CP3-3-BB-LB-Indian-Switch-Sgrama-PPclover-Berg-Ycon	38-CP3-3-BB-LB-Indian-Switch-Sgrama-PPclover-B	Big Bluestem	Andropogon gerardii	8.00	0.5	1.9	Grass	N	X	CP3-3		BB-LB-Indian-Switch-Sgrama-PPclover-Berg-Ycone
38	CP3-3-BB-LB-Indian-Switch-Sgrama-PPclover-Berg-Ycon	38-CP3-3-BB-LB-Indian-Switch-Sgrama-PPclover-B	Little Bluestem	Schizachyrium scopariu	24.00	1.5	8.3	Grass	N	X	CP3-3		BB-LB-Indian-Switch-Sgrama-PPclover-Berg-Ycone
38	CP3-3-BB-LB-Indian-Switch-Sgrama-PPclover-Berg-Ycon	38-CP3-3-BB-LB-Indian-Switch-Sgrama-PPclover-B	Indiangrass	Sorghastrum nutans	8.00	0.5	2.3	Grass	N	X	CP3-3		BB-LB-Indian-Switch-Sgrama-PPclover-Berg-Ycone
38	CP3-3-BB-LB-Indian-Switch-Sgrama-PPclover-Berg-Ycon	38-CP3-3-BB-LB-Indian-Switch-Sgrama-PPclover-B	Switchgrass	Panicum virgatum	8.00	0.5	4.5	Grass	N	X	CP3-3		BB-LB-Indian-Switch-Sgrama-PPclover-Berg-Ycone
38	CP3-3-BB-LB-Indian-Switch-Sgrama-PPclover-Berg-Ycon	38-CP3-3-BB-LB-Indian-Switch-Sgrama-PPclover-B	Sideoats Grama	Bouteloua curtipendula	16.00	1	3	Grass	N	X	CP3-3		BB-LB-Indian-Switch-Sgrama-PPclover-Berg-Ycone
38	CP3-3-BB-LB-Indian-Switch-Sgrama-PPclover-Berg-Ycon	38-CP3-3-BB-LB-Indian-Switch-Sgrama-PPclover-B	Purple Prairie Clover	Dalea purpurea	2.00	0.125	1	Legume	N	X	CP3-3		BB-LB-Indian-Switch-Sgrama-PPclover-Berg-Ycone
38	CP3-3-BB-LB-Indian-Switch-Sgrama-PPclover-Berg-Ycon	38-CP3-3-BB-LB-Indian-Switch-Sgrama-PPclover-B	Bergamot	Monarda fistulosa	1.00	0.0625	1.8	Forb	N	X	CP3-3		BB-LB-Indian-Switch-Sgrama-PPclover-Berg-Ycone
38	CP3-3-BB-LB-Indian-Switch-Sgrama-PPclover-Berg-Ycon	38-CP3-3-BB-LB-Indian-Switch-Sgrama-PPclover-B	Yellow Coneflower	Ratibida pinnata	1.00	0.0625	0.7	Forb	N	X	CP3-3		BB-LB-Indian-Switch-Sgrama-PPclover-Berg-Ycone
38	CP3-4-Switch-Pcord-BB-Indian-Cwrye-Ciron-Cup-Bvervai	38-CP3-4-Switch-Pcord-BB-Indian-Cwrye-Ciron-Cu	Switchgrass	Panicum virgatum	16.00	1	9	Grass	N	X	CP3-4		Switch-Pcord-BB-Indian-Cwrye-Ciron-Cup-Bvervain
38	CP3-4-Switch-Pcord-BB-Indian-Cwrye-Ciron-Cup-Bvervai	38-CP3-4-Switch-Pcord-BB-Indian-Cwrye-Ciron-Cu	Prairie Cordgrass	Spartina pectinata	8.00	0.5	1.3	Grass	N		CP3-4		Switch-Pcord-BB-Indian-Cwrye-Ciron-Cup-Bvervain
38	CP3-4-Switch-Pcord-BB-Indian-Cwrye-Ciron-Cup-Bvervai	38-CP3-4-Switch-Pcord-BB-Indian-Cwrye-Ciron-Cu	Big Bluestem	Andropogon gerardii	16.00	1	3.8	Grass	N	X	CP3-4		Switch-Pcord-BB-Indian-Cwrye-Ciron-Cup-Bvervain
38	CP3-4-Switch-Pcord-BB-Indian-Cwrye-Ciron-Cup-Bvervai	38-CP3-4-Switch-Pcord-BB-Indian-Cwrye-Ciron-Cu	Indiangrass	Sorghastrum nutans	16.00	1	4.5	Grass	N	X	CP3-4		Switch-Pcord-BB-Indian-Cwrye-Ciron-Cup-Bvervain
38	CP3-4-Switch-Pcord-BB-Indian-Cwrye-Ciron-Cup-Bvervai	38-CP3-4-Switch-Pcord-BB-Indian-Cwrye-Ciron-Cu	Canada Wildrye	Elymus canadensis	16.00	1	2	Grass	N	X	CP3-4		Switch-Pcord-BB-Indian-Cwrye-Ciron-Cup-Bvervain
38	CP3-4-Switch-Pcord-BB-Indian-Cwrye-Ciron-Cup-Bvervai	38-CP3-4-Switch-Pcord-BB-Indian-Cwrye-Ciron-Cu	Common Ironweed	Vernonia fasciculata	1.00	0.0625	0.5	Forb	N	X	CP3-4		Switch-Pcord-BB-Indian-Cwrye-Ciron-Cup-Bvervain
38	CP3-4-Switch-Pcord-BB-Indian-Cwrye-Ciron-Cup-Bvervai	38-CP3-4-Switch-Pcord-BB-Indian-Cwrye-Ciron-Cu	Cupplant	Silphium perfoliatum	2.00	0.125	0.1	Forb	N	X	CP3-4		Switch-Pcord-BB-Indian-Cwrye-Ciron-Cup-Bvervain
38	CP3-4-Switch-Pcord-BB-Indian-Cwrye-Ciron-Cup-Bvervai	38-CP3-4-Switch-Pcord-BB-Indian-Cwrye-Ciron-Cu	Blue Vervain	Verbena hastata	1.00	0.0625	2.2	Forb	N	X	CP3-4		Switch-Pcord-BB-Indian-Cwrye-Ciron-Cup-Bvervain
38	CP3-5-Switch-Pcord-BB-Cwrye-Berg-Ycone-NEaster	38-CP3-5-Switch-Pcord-BB-Cwrye-Berg-Ycone-NEa	Switchgrass	Panicum virgatum	32.00	2	17.9	Grass	N	X	CP3-5		Switch-Pcord-BB-Cwrye-Berg-Ycone-NEaster
38	CP3-5-Switch-Pcord-BB-Cwrye-Berg-Ycone-NEaster	38-CP3-5-Switch-Pcord-BB-Cwrye-Berg-Ycone-NEa	Prairie Cordgrass	Spartina pectinata	4.00	0.25	0.7	Grass	N		CP3-5		Switch-Pcord-BB-Cwrye-Berg-Ycone-NEaster
38	CP3-5-Switch-Pcord-BB-Cwrye-Berg-Ycone-NEaster	38-CP3-5-Switch-Pcord-BB-Cwrye-Berg-Ycone-NEa	Big Bluestem	Andropogon gerardii	16.00	1	3.8	Grass	N	X	CP3-5		Switch-Pcord-BB-Cwrye-Berg-Ycone-NEaster
38	CP3-5-Switch-Pcord-BB-Cwrye-Berg-Ycone-NEaster	38-CP3-5-Switch-Pcord-BB-Cwrye-Berg-Ycone-NEa	Canada Wildrye	Elymus canadensis	16.00	1	2	Grass	N	X	CP3-5		Switch-Pcord-BB-Cwrye-Berg-Ycone-NEaster
38	CP3-5-Switch-Pcord-BB-Cwrye-Berg-Ycone-NEaster	38-CP3-5-Switch-Pcord-BB-Cwrye-Berg-Ycone-NEa	Bergamot	Monarda fistulosa	1.00	0.0625	1.8	Forb	N	X	CP3-5		Switch-Pcord-BB-Cwrye-Berg-Ycone-NEaster

38	CP3-5-Switch-Pcord-BB-Cwrye-Berg-Ycone-NEaster	38-CP3-5-Switch-Pcord-BB-Cwrye-Berg-Ycone-NEa	Yellow Coneflower	Ratibida pinnata	1.00	0.0625	0.7	Forb	N	X	CP3-5		Switch-Pcord-BB-Cwrye-Berg-Ycone-NEaster
38	CP3-5-Switch-Pcord-BB-Cwrye-Berg-Ycone-NEaster	38-CP3-5-Switch-Pcord-BB-Cwrye-Berg-Ycone-NEa	New England Aster	Symphyotrichum novae	1.00	0.0625	1.7	Forb	N	X	CP3-5		Switch-Pcord-BB-Cwrye-Berg-Ycone-NEaster
STD	**Mix #**	**std-mix**	**Common Name**	**Scientific Name**	**(oz./A)**	**(lbs./A)**	**Seeds/Square Foot**	**Type**	**Native**	**(Y/N)**	**I**	**Mix No.**	**MR**
									N				

STD	Mix #	std-mix	Common Name	Scientific Name	PLS (oz./A)	PLS (lbs./A)	Seeds/Square Foot	Type	Intro / Native	Poll. (Y/N)	Mix No.	MR	Mix Components
		LEAVE THIS ROW AS IS							N	Y			
2	CP2_1-BB-Switch-Cmilkvetch-Besus-Ycone	2-CP2_1-BB-Switch-Cmilkvetch-Besus-Ycone	Big Bluestem	Andropogon gerardii	48	3		Grass	N	N	CP2_1		BB-Switch-Cmilkvetch-Besus-Ycone
2	CP2_1-BB-Switch-Cmilkvetch-Besus-Ycone	2-CP2_1-BB-Switch-Cmilkvetch-Besus-Ycone	Switchgrass	Panicum virgatum	16	1		Grass	N	N	CP2_1		BB-Switch-Cmilkvetch-Besus-Ycone
2	CP2_1-BB-Switch-Cmilkvetch-Besus-Ycone	2-CP2_1-BB-Switch-Cmilkvetch-Besus-Ycone	Canada Milkvetch	Astragalus canadensis	2	0.125		Legume	N	N	CP2_1		BB-Switch-Cmilkvetch-Besus-Ycone
2	CP2_1-BB-Switch-Cmilkvetch-Besus-Ycone	2-CP2_1-BB-Switch-Cmilkvetch-Besus-Ycone	Black-eyed Susan	Rudbeckia hirta	1	0.0625		Forb	N	N	CP2_1		BB-Switch-Cmilkvetch-Besus-Ycone
2	CP2_1-BB-Switch-Cmilkvetch-Besus-Ycone	2-CP2_1-BB-Switch-Cmilkvetch-Besus-Ycone	Yellow Coneflower	Ratibida pinnata	1	0.0625		Forb	N	N	CP2_1		BB-Switch-Cmilkvetch-Besus-Ycone
2	CP2_2-BB-Switch-Ttrefoil-Besus-Ycone	2-CP2_2-BB-Switch-Ttrefoil-Besus-Ycone	Big Bluestem	Andropogon gerardii	48	3		Grass	N	N	CP2_2		BB-Switch-Ttrefoil-Besus-Ycone
2	CP2_2-BB-Switch-Ttrefoil-Besus-Ycone	2-CP2_2-BB-Switch-Ttrefoil-Besus-Ycone	Switchgrass	Panicum virgatum	16	1		Grass	N	N	CP2_2		BB-Switch-Ttrefoil-Besus-Ycone
2	CP2_2-BB-Switch-Ttrefoil-Besus-Ycone	2-CP2_2-BB-Switch-Ttrefoil-Besus-Ycone	Showy Tick Trefoil	Desmodium canadense	6	0.375		Legume	N	N	CP2_2		BB-Switch-Ttrefoil-Besus-Ycone
2	CP2_2-BB-Switch-Ttrefoil-Besus-Ycone	2-CP2_2-BB-Switch-Ttrefoil-Besus-Ycone	Black-eyed Susan	Rudbeckia hirta	1	0.0625		Forb	N	N	CP2_2		BB-Switch-Ttrefoil-Besus-Ycone
2	CP2_2-BB-Switch-Ttrefoil-Besus-Ycone	2-CP2_2-BB-Switch-Ttrefoil-Besus-Ycone	Yellow Coneflower	Ratibida pinnata	1	0.0625		Forb	N	N	CP2_2		BB-Switch-Ttrefoil-Besus-Ycone
2	CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Yco	2-CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-B	Little Bluestem	Schizachyrium scoparium	24	1.5		Grass	N	N	CP2_3		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
2	CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Yco	2-CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-B	Sideoats Grama	Bouteloua curtipendula	16	1		Grass	N	N	CP2_3		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
2	CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Yco	2-CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-B	Big Bluestem	Andropogon gerardii	8	0.5		Grass	N	N	CP2_3		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
2	CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Yco	2-CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-B	Indiangrass	Sorghastrum nutans	8	0.5		Grass	N	N	CP2_3		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
2	CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Yco	2-CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-B	Switchgrass	Panicum virgatum	8	0.5		Grass	N	N	CP2_3		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
2	CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Yco	2-CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-B	Purple Prairie Clover	Dalea purpurea	2	0.125		Legume	N	N	CP2_3		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
2	CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Yco	2-CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-B	Bergamot	Monarda fistulosa	1	0.0625		Forb	N	N	CP2_3		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
2	CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Yco	2-CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-B	Yellow Coneflower	Ratibida pinnata	1	0.0625		Forb	N	N	CP2_3		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
2	CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone	2-CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus	Little Bluestem	Schizachyrium scoparium	20	1.25		Grass	N	N	CP2_4		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
2	CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone	2-CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus	Canada Wildrye	Elymus canadensis	16	1		Grass	N	N	CP2_4		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
2	CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone	2-CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus	Indiangrass	Sorghastrum nutans	16	1		Grass	N	N	CP2_4		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
2	CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone	2-CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus	Big Bluestem	Andropogon gerardii	8	0.5		Grass	N	N	CP2_4		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
2	CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone	2-CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus	Switchgrass	Panicum virgatum	8	0.5		Grass	N	N	CP2_4		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
2	CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone	2-CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus	Bergamot	Monarda fistulosa	1	0.0625		Forb	N	N	CP2_4		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
2	CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone	2-CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus	Black-eyed Susan	Rudbeckia hirta	1	0.0625		Forb	N	N	CP2_4		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
2	CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone	2-CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus	Yellow Coneflower	Ratibida pinnata	1	0.0625		Forb	N	N	CP2_4		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
2	CP2_5-BB-Sgrama-Indian-PPclover-Sgrod-Ycone	2-CP2_5-BB-Sgrama-Indian-PPclover-Sgrod-Ycon	Big Bluestem	Andropogon gerardii	24	1.5		Grass	N	N	CP2_5		BB-Sgrama-Indian-PPclover-Sgrod-Ycone
2	CP2_5-BB-Sgrama-Indian-PPclover-Sgrod-Ycone	2-CP2_5-BB-Sgrama-Indian-PPclover-Sgrod-Ycon	Sideoats Grama	Bouteloua curtipendula	24	1.5		Grass	N	N	CP2_5		BB-Sgrama-Indian-PPclover-Sgrod-Ycone
2	CP2_5-BB-Sgrama-Indian-PPclover-Sgrod-Ycone	2-CP2_5-BB-Sgrama-Indian-PPclover-Sgrod-Ycon	Indiangrass	Sorghastrum nutans	8	0.5		Grass	N	N	CP2_5		BB-Sgrama-Indian-PPclover-Sgrod-Ycone
2	CP2_5-BB-Sgrama-Indian-PPclover-Sgrod-Ycone	2-CP2_5-BB-Sgrama-Indian-PPclover-Sgrod-Ycon	Purple Prairie Clover	Dalea purpurea	2	0.125		Legume	N	N	CP2_5		BB-Sgrama-Indian-PPclover-Sgrod-Ycone
2	CP2_5-BB-Sgrama-Indian-PPclover-Sgrod-Ycone	2-CP2_5-BB-Sgrama-Indian-PPclover-Sgrod-Ycon	Stiff Goldenrod	Oligoneuron rigidum	1	0.0625		Forb	N	N	CP2_5		BB-Sgrama-Indian-PPclover-Sgrod-Ycone
2	CP2_5-BB-Sgrama-Indian-PPclover-Sgrod-Ycone	2-CP2_5-BB-Sgrama-Indian-PPclover-Sgrod-Ycon	Yellow Coneflower	Ratibida pinnata	1	0.0625		Forb	N	N	CP2_5		BB-Sgrama-Indian-PPclover-Sgrod-Ycone
2	CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ci	2-CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bve	Big Bluestem	Andropogon gerardii	16	1		Grass	N	N	CP2_6		BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
2	CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ci	2-CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bve	Canada Wildrye	Elymus canadensis	16	1		Grass	N	N	CP2_6		BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
2	CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ci	2-CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bve	Indiangrass	Sorghastrum nutans	16	1		Grass	N	N	CP2_6		BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
2	CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ci	2-CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bve	Switchgrass	Panicum virgatum	16	1		Grass	N	N	CP2_6		BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
2	CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ci	2-CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bve	Prairie Cordgrass	Spartina pectinata	8	0.5		Grass	N	N	CP2_6		BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
2	CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ci	2-CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bve	Cupplant	Silphium perfoliatum	2	0.125		Forb	N	N	CP2_6		BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron

2	CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ci	2-CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bve	Blue Vervain	Verbena hastata	1	0.0625		Forb	N	N	CP2_6	BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
2	CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ci	2-CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bve	Common Ironweed	Vernonia fasciculata	1	0.0625		Forb	N	N	CP2_6	BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
2	CP2_7-Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone	2-CP2_7-Switch-BB-Cwrye-Pcord-Berg-NEaster-Y	Switchgrass	Panicum virgatum	32	2		Grass	N	N	CP2_7	Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
2	CP2_7-Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone	2-CP2_7-Switch-BB-Cwrye-Pcord-Berg-NEaster-Y	Big Bluestem	Andropogon gerardii	16	1		Grass	N	N	CP2_7	Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
2	CP2_7-Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone	2-CP2_7-Switch-BB-Cwrye-Pcord-Berg-NEaster-Y	Canada Wildrye	Elymus canadensis	16	1		Grass	N	N	CP2_7	Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
2	CP2_7-Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone	2-CP2_7-Switch-BB-Cwrye-Pcord-Berg-NEaster-Y	Prairie Cordgrass	Spartina pectinata	4	0.25		Grass	N	N	CP2_7	Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
2	CP2_7-Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone	2-CP2_7-Switch-BB-Cwrye-Pcord-Berg-NEaster-Y	Bergamot	Monarda fistulosa	1	0.0625		Forb	N	N	CP2_7	Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
2	CP2_7-Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone	2-CP2_7-Switch-BB-Cwrye-Pcord-Berg-NEaster-Y	New England Aster	Symphyotrichum novae-a	1	0.0625		Forb	N	N	CP2_7	Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
2	CP2_7-Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone	2-CP2_7-Switch-BB-Cwrye-Pcord-Berg-NEaster-Y	Yellow Coneflower	Ratibida pinnata	1	0.0625		Forb	N	N	CP2_7	Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
4	CP4D-5-Indian-BB-Switch-Cmilkvetch-Besus-Ycone	4-CP4D-5-Indian-BB-Switch-Cmilkvetch-Besus-Yc	Indiangrass	Sorghastrum nutans	48	3		Grass	N	N	CP4D-5	Indian-BB-Switch-Cmilkvetch-Besus-Ycone
4	CP4D-5-Indian-BB-Switch-Cmilkvetch-Besus-Ycone	4-CP4D-5-Indian-BB-Switch-Cmilkvetch-Besus-Yc	Big Bluestem	Andropogon gerardii	16	1		Grass	N	N	CP4D-5	Indian-BB-Switch-Cmilkvetch-Besus-Ycone
4	CP4D-5-Indian-BB-Switch-Cmilkvetch-Besus-Ycone	4-CP4D-5-Indian-BB-Switch-Cmilkvetch-Besus-Yc	Switchgrass	Panicum virgatum	16	1		Grass	N	N	CP4D-5	Indian-BB-Switch-Cmilkvetch-Besus-Ycone
4	CP4D-5-Indian-BB-Switch-Cmilkvetch-Besus-Ycone	4-CP4D-5-Indian-BB-Switch-Cmilkvetch-Besus-Yc	Canada Milkvetch	Astragalus canadensis	2	0.125		Legume	N	N	CP4D-5	Indian-BB-Switch-Cmilkvetch-Besus-Ycone
4	CP4D-5-Indian-BB-Switch-Cmilkvetch-Besus-Ycone	4-CP4D-5-Indian-BB-Switch-Cmilkvetch-Besus-Yc	Black-eyed Susan	Rudbeckia hirta	1	0.0625		Forb	N	N	CP4D-5	Indian-BB-Switch-Cmilkvetch-Besus-Ycone
4	CP4D-5-Indian-BB-Switch-Cmilkvetch-Besus-Ycone	4-CP4D-5-Indian-BB-Switch-Cmilkvetch-Besus-Yc	Yellow Coneflower	Ratibida pinnata	1	0.0625		Forb	N	N	CP4D-5	Indian-BB-Switch-Cmilkvetch-Besus-Ycone
4	CP4D-6-Indian-BB-Switch-LB-Cmilkvetch-Besus-Ycone	4-CP4D-6-Indian-BB-Switch-LB-Cmilkvetch-Besus	Indiangrass	Sorghastrum nutans	48	3		Grass	N	N	CP4D-6	Indian-BB-Switch-LB-Cmilkvetch-Besus-Ycone
4	CP4D-6-Indian-BB-Switch-LB-Cmilkvetch-Besus-Ycone	4-CP4D-6-Indian-BB-Switch-LB-Cmilkvetch-Besus	Big Bluestem	Andropogon gerardii	16	1		Grass	N	N	CP4D-6	Indian-BB-Switch-LB-Cmilkvetch-Besus-Ycone
4	CP4D-6-Indian-BB-Switch-LB-Cmilkvetch-Besus-Ycone	4-CP4D-6-Indian-BB-Switch-LB-Cmilkvetch-Besus	Switchgrass	Panicum virgatum	16	1		Grass	N	N	CP4D-6	Indian-BB-Switch-LB-Cmilkvetch-Besus-Ycone
4	CP4D-6-Indian-BB-Switch-LB-Cmilkvetch-Besus-Ycone	4-CP4D-6-Indian-BB-Switch-LB-Cmilkvetch-Besus	Little Bluestem	Schizachyrium scoparium	16	1		Grass	N	N	CP4D-6	Indian-BB-Switch-LB-Cmilkvetch-Besus-Ycone
4	CP4D-6-Indian-BB-Switch-LB-Cmilkvetch-Besus-Ycone	4-CP4D-6-Indian-BB-Switch-LB-Cmilkvetch-Besus	Canada Milkvetch	Astragalus canadensis	2	0.125		Legume	N	N	CP4D-6	Indian-BB-Switch-LB-Cmilkvetch-Besus-Ycone
4	CP4D-6-Indian-BB-Switch-LB-Cmilkvetch-Besus-Ycone	4-CP4D-6-Indian-BB-Switch-LB-Cmilkvetch-Besus	Black-eyed Susan	Rudbeckia hirta	1	0.0625		Forb	N	N	CP4D-6	Indian-BB-Switch-LB-Cmilkvetch-Besus-Ycone
4	CP4D-6-Indian-BB-Switch-LB-Cmilkvetch-Besus-Ycone	4-CP4D-6-Indian-BB-Switch-LB-Cmilkvetch-Besus	Yellow Coneflower	Ratibida pinnata	1	0.0625		Forb	N	N	CP4D-6	Indian-BB-Switch-LB-Cmilkvetch-Besus-Ycone
4	CP4D-7-Indian-BB-Switch-PPclover-Besus-Ycone	4-CP4D-7-Indian-BB-Switch-PPclover-Besus-Ycon	Indiangrass	Sorghastrum nutans	48	3		Grass	N	N	CP4D-7	Indian-BB-Switch-PPclover-Besus-Ycone
4	CP4D-7-Indian-BB-Switch-PPclover-Besus-Ycone	4-CP4D-7-Indian-BB-Switch-PPclover-Besus-Ycon	Big Bluestem	Andropogon gerardii	16	1		Grass	N	N	CP4D-7	Indian-BB-Switch-PPclover-Besus-Ycone
4	CP4D-7-Indian-BB-Switch-PPclover-Besus-Ycone	4-CP4D-7-Indian-BB-Switch-PPclover-Besus-Ycon	Switchgrass	Panicum virgatum	16	1		Grass	N	N	CP4D-7	Indian-BB-Switch-PPclover-Besus-Ycone
4	CP4D-7-Indian-BB-Switch-PPclover-Besus-Ycone	4-CP4D-7-Indian-BB-Switch-PPclover-Besus-Ycon	Purple Prairie Clover	Dalea purpurea	2	0.125		Legume	N	N	CP4D-7	Indian-BB-Switch-PPclover-Besus-Ycone
4	CP4D-7-Indian-BB-Switch-PPclover-Besus-Ycone	4-CP4D-7-Indian-BB-Switch-PPclover-Besus-Ycon	Black-eyed Susan	Rudbeckia hirta	1	0.0625		Forb	N	N	CP4D-7	Indian-BB-Switch-PPclover-Besus-Ycone
4	CP4D-7-Indian-BB-Switch-PPclover-Besus-Ycone	4-CP4D-7-Indian-BB-Switch-PPclover-Besus-Ycon	Yellow Coneflower	Ratibida pinnata	1	0.0625		Forb	N	N	CP4D-7	Indian-BB-Switch-PPclover-Besus-Ycone
4	CP4D-8-Indian-BB-LB-Switch-PPclover-Besus-Ycone	4-CP4D-8-Indian-BB-LB-Switch-PPclover-Besus-Y	Indiangrass	Sorghastrum nutans	48	3		Grass	N	N	CP4D-8	Indian-BB-LB-Switch-PPclover-Besus-Ycone
4	CP4D-8-Indian-BB-LB-Switch-PPclover-Besus-Ycone	4-CP4D-8-Indian-BB-LB-Switch-PPclover-Besus-Y	Big Bluestem	Andropogon gerardii	16	1		Grass	N	N	CP4D-8	Indian-BB-LB-Switch-PPclover-Besus-Ycone
4	CP4D-8-Indian-BB-LB-Switch-PPclover-Besus-Ycone	4-CP4D-8-Indian-BB-LB-Switch-PPclover-Besus-Y	Little Bluestem	Schizachyrium scoparium	16	1		Grass	N	N	CP4D-8	Indian-BB-LB-Switch-PPclover-Besus-Ycone
4	CP4D-8-Indian-BB-LB-Switch-PPclover-Besus-Ycone	4-CP4D-8-Indian-BB-LB-Switch-PPclover-Besus-Y	Switchgrass	Panicum virgatum	16	1		Grass	N	N	CP4D-8	Indian-BB-LB-Switch-PPclover-Besus-Ycone
4	CP4D-8-Indian-BB-LB-Switch-PPclover-Besus-Ycone	4-CP4D-8-Indian-BB-LB-Switch-PPclover-Besus-Y	Purple Prairie Clover	Dalea purpurea	2	0.125		Legume	N	N	CP4D-8	Indian-BB-LB-Switch-PPclover-Besus-Ycone
4	CP4D-8-Indian-BB-LB-Switch-PPclover-Besus-Ycone	4-CP4D-8-Indian-BB-LB-Switch-PPclover-Besus-Y	Black-eyed Susan	Rudbeckia hirta	1	0.0625		Forb	N	N	CP4D-8	Indian-BB-LB-Switch-PPclover-Besus-Ycone
4	CP4D-8-Indian-BB-LB-Switch-PPclover-Besus-Ycone	4-CP4D-8-Indian-BB-LB-Switch-PPclover-Besus-Y	Yellow Coneflower	Ratibida pinnata	1	0.0625		Forb	N	N	CP4D-8	Indian-BB-LB-Switch-PPclover-Besus-Ycone
4	CP4D-9-Indian-BB-Switch-PPclover-Berg-Ycone	4-CP4D-9-Indian-BB-Switch-PPclover-Berg-Ycone	Indiangrass	Sorghastrum nutans	48	3		Grass	N	N	CP4D-9	Indian-BB-Switch-PPclover-Berg-Ycone
4	CP4D-9-Indian-BB-Switch-PPclover-Berg-Ycone	4-CP4D-9-Indian-BB-Switch-PPclover-Berg-Ycone	Big Bluestem	Andropogon gerardii	16	1		Grass	N	N	CP4D-9	Indian-BB-Switch-PPclover-Berg-Ycone
4	CP4D-9-Indian-BB-Switch-PPclover-Berg-Ycone	4-CP4D-9-Indian-BB-Switch-PPclover-Berg-Ycone	Switchgrass	Panicum virgatum	16	1		Grass	N	N	CP4D-9	Indian-BB-Switch-PPclover-Berg-Ycone
4	CP4D-9-Indian-BB-Switch-PPclover-Berg-Ycone	4-CP4D-9-Indian-BB-Switch-PPclover-Berg-Ycone	Purple Prairie Clover	Dalea purpurea	2	0.125		Legume	N	N	CP4D-9	Indian-BB-Switch-PPclover-Berg-Ycone
4	CP4D-9-Indian-BB-Switch-PPclover-Berg-Ycone	4-CP4D-9-Indian-BB-Switch-PPclover-Berg-Ycone	Bergamot	Monarda fistulosa	1	0.0625		Forb	N	N	CP4D-9	Indian-BB-Switch-PPclover-Berg-Ycone
4	CP4D-9-Indian-BB-Switch-PPclover-Berg-Ycone	4-CP4D-9-Indian-BB-Switch-PPclover-Berg-Ycone	Yellow Coneflower	Ratibida pinnata	1	0.0625		Forb	N	N	CP4D-9	Indian-BB-Switch-PPclover-Berg-Ycone
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Sv	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover	Little Bluestem	Schizachyrium scoparium	24	1.5		Grass	N	N	CP25-D	LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swort-Hvervain-Lpla
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Sv	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover	Sideoats Grama	Bouteloua curtipendula	24	1.5		Grass	N	N	CP25-D	LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swort-Hvervain-Lpla
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Sv	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover	Indiangrass	Sorghastrum nutans	8	0.5		Grass	N	N	CP25-D	LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swort-Hvervain-Lpla
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Sv	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover	Big Bluestem	Andropogon gerardii	4	0.25		Grass	N	N	CP25-D	LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swort-Hvervain-Lpla
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Sv	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover	Prairie Junegrass	Koeleria macrantha	2	0.125		Grass	N	N	CP25-D	LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swort-Hvervain-Lpla
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Sv	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover	Purple Prairie Clover	Dalea purpurea	2	0.125		Legume	N	N	CP25-D	LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swort-Hvervain-Lpla
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Sv	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover	Sand Dropseed	Sporobolus cryptandrus	2	0.125		Grass	N	N	CP25-D	LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swort-Hvervain-Lpla
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Sv	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover	Spiderwort	Tradescantia ohiensis	1	0.0625		Forb	N	N	CP25-D	LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swort-Hvervain-Lpla
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Sv	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover	Hoary Vervain	Verbena stricta	0.5	0.03125		Forb	N	N	CP25-D	LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swort-Hvervain-Lpla
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Sv	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover	Leadplant	Amorpha canescens	0.5	0.03125		Legume	N	N	CP25-D	LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swort-Hvervain-Lpla
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Sv	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover	Prairie Tickseed	Coreopsis palmata	0.5	0.03125		Forb	N	N	CP25-D	LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swort-Hvervain-Lpla
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Sv	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover	Silky Aster	Symphyotrichum pratens	0.5	0.03125		Forb	N	N	CP25-D	LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swort-Hvervain-Lpla
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Sv	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover	Stiff Goldenrod	Oligoneuron rigidum	0.5	0.03125		Forb	N	N	CP25-D	LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swort-Hvervain-Lpla
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Sv	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover	Yellow Coneflower	Ratibida pinnata	1	0.03125		Forb	N	N	CP25-D	LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swort-Hvervain-Lpla
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Sv	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover	Prairie Cinquefoil	Potentilla arguta	0.25	0.015625		Forb	N	N	CP25-D	LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swort-Hvervain-Lpla
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Sv	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover	Spotted Mint	Monarda punctata	0	0.015625		Forb	N	N	CP25-D	LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swort-Hvervain-Lpla
25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclo	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pd	Little Bluestem	Schizachyrium scoparium	24	1.5		Grass	N	N	CP25-DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-Bi
25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclo	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pd	Sideoats Grama	Bouteloua curtipendula	24	1.5		Grass	N	N	CP25-DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-Bi
25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclo	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pd	Indiangrass	Sorghastrum nutans	8	0.5		Grass	N	N	CP25-DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-Bi
25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclo	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pd	Switchgrass	Panicum virgatum	4	0.25		Grass	N	N	CP25-DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-Bi
25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclo	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pd	Prairie Junegrass	Koeleria macrantha	2	0.125		Grass	N	N	CP25-DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-Bi
25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclo	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pd	Prairie Dropseed	Sporobolus heterolepis	2	0.125		Grass	N	N	CP25-DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-Bi
25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclo	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pd	Purple Prairie Clover	Dalea purpurea	2	0.125		Legume	N	N	CP25-DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-Bi
25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclo	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pd	Round-Headed Bushclover	Lespedeza capitata	2	0.125		Legume	N	N	CP25-DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-Bi
25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclo	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pd	Bergamot	Monarda fistulosa	1	0.0625		Forb	N	N	CP25-DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-Bi
25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclo	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pd	Spiderwort	Tradescantia ohiensis	1	0.0625		Forb	N	N	CP25-DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-Bi
25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclo	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pd	Yellow Coneflower	Ratibida pinnata	1	0.0625		Forb	N	N	CP25-DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-Bi
25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclo	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pd	Leadplant	Amorpha canescens	0.5	0.03125		Legume	N	N	CP25-DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-Bi
25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclo	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pd	Rough Blazing Star	Liatris aspera	1	0.03125		Forb	N	N	CP25-DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-Bi
25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclo	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pd	Sky-Blue Aster	Symphyotrichum oolenta	1	0.03125		Forb	N	N	CP25-DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-Bi

25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclo	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pd	Stiff Goldenrod	Oligoneuron rigidum	0.5	0.03125		Forb	N	N	CP25-DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclo	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pd	Prairie Cinquefoil	Potentilla arguta	0.25	0.015625		Forb	N	N	CP25-DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pju	Little Bluestem	Schizachyrium scoparium	24	1.5		Grass	N	N	CP25-KBB	LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-PPclover-PPCone-Lp
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pju	Sideoats Grama	Bouteloua curtipendula	24	1.5		Grass	N	N	CP25-KBB	LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-PPclover-PPCone-Lp
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pju	Indiangrass	Sorghastrum nutans	8	0.5		Grass	N	N	CP25-KBB	LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-PPclover-PPCone-Lp
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pju	Switchgrass	Panicum virgatum	8	0.5		Grass	N	N	CP25-KBB	LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-PPclover-PPCone-Lp
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pju	Wild Lupine	Lupinus perennis	3	0.1875		Legume	N	N	CP25-KBB	LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-PPclover-PPCone-Lp
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pju	Prairie Junegrass	Koeleria macrantha	2	0.125		Grass	N	N	CP25-KBB	LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-PPclover-PPCone-Lp
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pju	Prairie Dropseed	Sporobolus heterolepis	2	0.125		Grass	N	N	CP25-KBB	LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-PPclover-PPCone-Lp
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pju	Purple Prairie Clover	Dalea purpurea	2	0.125		Legume	N	N	CP25-KBB	LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-PPclover-PPCone-Lp
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pju	Pale Purple Coneflower	Echinacea pallida	1	0.0625		Forb	N	N	CP25-KBB	LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-PPclover-PPCone-Lp
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pju	Leadplant	Amorpha canescens	0.5	0.03125		Legume	N	N	CP25-KBB	LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-PPclover-PPCone-Lp
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pju	Rough Blazing Star	Liatris aspera	0.5	0.03125		Forb	N	N	CP25-KBB	LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-PPclover-PPCone-Lp
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pju	Stiff Goldenrod	Oligoneuron rigidum	0.5	0.03125		Forb	N	N	CP25-KBB	LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-PPclover-PPCone-Lp
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pju	Yellow Coneflower	Ratibida pinnata	1	0.03125		Forb	N	N	CP25-KBB	LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-PPclover-PPCone-Lp
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pju	Bergamot	Monarda fistulosa	0	0.015625		Forb	N	N	CP25-KBB	LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-PPclover-PPCone-Lp
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pju	Prairie Cinquefoil	Potentilla arguta	0.25	0.015625		Forb	N	N	CP25-KBB	LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-PPclover-PPCone-Lp
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pju	Sky-Blue Aster	Symphyotrichum oolenta	0.25	0.015625		Forb	N	N	CP25-KBB	LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-PPclover-PPCone-Lp
25	CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzsta	25-CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesu	Little Bluestem	Schizachyrium scoparium	24	1.5		Grass	N	N	CP25-M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
25	CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzsta	25-CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesu	Indiangrass	Sorghastrum nutans	16	1		Grass	N	N	CP25-M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
25	CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzsta	25-CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesu	Big Bluestem	Andropogon gerardii	8	0.5		Grass	N	N	CP25-M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
25	CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzsta	25-CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesu	Canada Wildrye	Elymus canadensis	8	0.5		Grass	N	N	CP25-M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
25	CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzsta	25-CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesu	Switchgrass	Panicum virgatum	8	0.5		Grass	N	N	CP25-M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
25	CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzsta	25-CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesu	Ox-eye Sunflower	Heliopsis helianthoides	1	0.0625		Forb	N	N	CP25-M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
25	CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzsta	25-CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesu	Prairie Blazing Star	Liatris pycnostachya	1	0.0625		Forb	N	N	CP25-M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
25	CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzsta	25-CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesu	Purple Prairie Clover	Dalea purpurea	1	0.0625		Legume	N	N	CP25-M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
25	CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzsta	25-CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesu	Rosinweed	Silphium integrifolium	1	0.0625		Forb	N	N	CP25-M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
25	CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzsta	25-CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesu	Bergamot	Monarda fistulosa	0.5	0.03125		Forb	N	N	CP25-M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
25	CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzsta	25-CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesu	Black-eyed Susan	Rudbeckia hirta	0.5	0.03125		Forb	N	N	CP25-M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
25	CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzsta	25-CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesu	New England Aster	Symphyotrichum novae-a	0.5	0.03125		Forb	N	N	CP25-M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
25	CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzsta	25-CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesu	Sky-Blue Aster	Symphyotrichum oolenta	0.5	0.03125		Forb	N	N	CP25-M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
25	CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzsta	25-CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesu	Yellow Coneflower	Ratibida pinnata	0.5	0.03125		Forb	N	N	CP25-M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
25	CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzsta	25-CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesu	Culver's Root	Veronicastrum virginicum	0	0.015625		Forb	N	N	CP25-M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsed	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgr	Canada Wildrye	Elymus canadensis	16	1		Grass	N	N	CP25-W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsed	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgr	Switchgrass	Panicum virgatum	16	1		Grass	N	N	CP25-W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsed	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgr	Indiangrass	Sorghastrum nutans	12	0.75		Grass	N	N	CP25-W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsed	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgr	Big Bluestem	Andropogon gerardii	8	0.5		Grass	N	N	CP25-W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsed	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgr	Prairie Cordgrass	Spartina pectinata	8	0.5		Grass	N	N	CP25-W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsed	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgr	Fowl Mannagrass	Glyceria striata	4	0.25		Grass	N	N	CP25-W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsed	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgr	Fox Sedge	Carex vulpinoidea	4	0.25		Sedge	N	N	CP25-W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsed	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgr	Cupplant	Silphium perfoliatum	2	0.125		Forb	N	N	CP25-W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsed	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgr	Showy Tick Trefoil	Desmodium canadense	2	0.125		Legume	N	N	CP25-W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsed	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgr	Blue Vervain	Verbena hastata	1	0.0625		Forb	N	N	CP25-W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsed	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgr	Golden Alexanders	Zizia aurea	1	0.0625		Forb	N	N	CP25-W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsed	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgr	Marsh Milkweed	Asclepias incarnata	1	0.0625		Forb	N	N	CP25-W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsed	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgr	Boneset	Eupatorium perfoliatum	0.5	0.03125		Forb	N	N	CP25-W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsed	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgr	Common Ironweed	Vernonia fasciculata	1	0.03125		Forb	N	N	CP25-W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsed	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgr	Joe-pye Weed	Eutrochium maculatum	1	0.03125		Forb	N	N	CP25-W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsed	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgr	Culver's Root	Veronicastrum virginicum	0	0.015625		Forb	N	N	CP25-W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
25	CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-WWInd	25-CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cu	Switchgrass	Panicum virgatum	24	1.5		Grass	N	N	CP25-WM	Switch-Cwrye-Indian-BB-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
25	CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-WWInd	25-CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cu	Canada Wildrye	Elymus canadensis	16	1		Grass	N	N	CP25-WM	Switch-Cwrye-Indian-BB-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
25	CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-WWInd	25-CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cu	Indiangrass	Sorghastrum nutans	12	0.75		Grass	N	N	CP25-WM	Switch-Cwrye-Indian-BB-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
25	CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-WWInd	25-CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cu	Big Bluestem	Andropogon gerardii	8	0.5		Grass	N	N	CP25-WM	Switch-Cwrye-Indian-BB-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
25	CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-WWInd	25-CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cu	Prairie Cordgrass	Spartina pectinata	4	0.25		Grass	N	N	CP25-WM	Switch-Cwrye-Indian-BB-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
25	CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-WWInd	25-CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cu	Cupplant	Silphium perfoliatum	2	0.125		Forb	N	N	CP25-WM	Switch-Cwrye-Indian-BB-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
25	CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-WWInd	25-CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cu	White wild indigo	Baptisia alba	1.5	0.09375		Legume	N	N	CP25-WM	Switch-Cwrye-Indian-BB-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
25	CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-WWInd	25-CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cu	Black-eyed Susan	Rudbeckia hirta	0.5	0.03125		Forb	N	N	CP25-WM	Switch-Cwrye-Indian-BB-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
25	CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-WWInd	25-CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cu	Common Ironweed	Vernonia fasciculata	0.5	0.03125		Forb	N	N	CP25-WM	Switch-Cwrye-Indian-BB-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
25	CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-WWInd	25-CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cu	Golden Alexanders	Zizia aurea	0.5	0.03125		Forb	N	N	CP25-WM	Switch-Cwrye-Indian-BB-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
25	CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-WWInd	25-CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cu	New England Aster	Symphyotrichum novae-a	0.5	0.03125		Forb	N	N	CP25-WM	Switch-Cwrye-Indian-BB-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
25	CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-WWInd	25-CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cu	Prairie Blazing Star	Liatris pycnostachya	0.5	0.03125		Forb	N	N	CP25-WM	Switch-Cwrye-Indian-BB-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
25	CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-WWInd	25-CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cu	Yellow Coneflower	Ratibida pinnata	0.5	0.03125		Forb	N	N	CP25-WM	Switch-Cwrye-Indian-BB-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
25	CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-WWInd	25-CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cu	Bergamot	Monarda fistulosa	0.25	0.015625		Forb	N	N	CP25-WM	Switch-Cwrye-Indian-BB-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
25	CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-WWInd	25-CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cu	Great St. John's Wort	Hypericum ascyron	0	0.015625		Forb	N	N	CP25-WM	Switch-Cwrye-Indian-BB-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
33	CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHbushclov	33-CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RH	Little Bluestem	Schizachyrium scoparium	32	2		Grass	N	N	CP33-1	LB-Sgrama-Cwrye-Indian-PPclover-RHbushclover-PPcone-Sgrod-\
33	CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHbushclov	33-CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RH	Sideoats Grama	Bouteloua curtipendula	32	2		Grass	N	N	CP33-1	LB-Sgrama-Cwrye-Indian-PPclover-RHbushclover-PPcone-Sgrod-\
33	CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHbushclov	33-CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RH	Canada Wildrye	Elymus canadensis	8	0.5		Grass	N	N	CP33-1	LB-Sgrama-Cwrye-Indian-PPclover-RHbushclover-PPcone-Sgrod-\
33	CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHbushclov	33-CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RH	Indiangrass	Sorghastrum nutans	8	0.5		Grass	N	N	CP33-1	LB-Sgrama-Cwrye-Indian-PPclover-RHbushclover-PPcone-Sgrod-\
33	CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHbushclov	33-CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RH	Purple Prairie Clover	Dalea purpurea	2	0.125		Legume	N	N	CP33-1	LB-Sgrama-Cwrye-Indian-PPclover-RHbushclover-PPcone-Sgrod-\
33	CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHbushclov	33-CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RH	Round-Headed Bushclover	Lespedeza capitata	2	0.125		Legume	N	N	CP33-1	LB-Sgrama-Cwrye-Indian-PPclover-RHbushclover-PPcone-Sgrod-\
33	CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHbushclov	33-CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RH	Purple Coneflower	Echinacea purpurea	1	0.0625		Forb	N	N	CP33-1	LB-Sgrama-Cwrye-Indian-PPclover-RHbushclover-PPcone-Sgrod-\

33	CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHbushclov	33-CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RH	Stiff Goldenrod	Oligoneuron rigidum	1	0.0625		Forb	N	N	CP33-1	LB-Sgrama-Cwrye-Indian-PPclover-RHbushclover-PPcone-Sgrod-\
33	CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHbushclov	33-CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RH	Fewleaf Sunflower	Helianthus occidentalis	1	0.0625		Forb	N	N	CP33-1	LB-Sgrama-Cwrye-Indian-PPclover-RHbushclover-PPcone-Sgrod-\
33	CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHbushclov	33-CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RH	Yellow Coneflower	Ratibida pinnata	1	0.0625		Forb	N	N	CP33-1	LB-Sgrama-Cwrye-Indian-PPclover-RHbushclover-PPcone-Sgrod-\
33	CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHbushclov	33-CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RH	Black-eyed Susan	Rudbeckia hirta	0.75	0.046875		Forb	N	N	CP33-1	LB-Sgrama-Cwrye-Indian-PPclover-RHbushclover-PPcone-Sgrod-\
33	CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rbl	33-CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPc	Little Bluestem	Schizachyrium scoparium	24	1.5		Grass	N	N	CP33-2	LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rblzstar-Besus-SkyAst
33	CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rbl	33-CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPc	Sideoats Grama	Bouteloua curtipendula	20	1.25		Grass	N	N	CP33-2	LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rblzstar-Besus-SkyAst
33	CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rbl	33-CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPc	Indiangrass	Sorghastrum nutans	16	1		Grass	N	N	CP33-2	LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rblzstar-Besus-SkyAst
33	CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rbl	33-CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPc	Canada Wildrye	Elymus canadensis	8	0.5		Grass	N	N	CP33-2	LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rblzstar-Besus-SkyAst
33	CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rbl	33-CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPc	Purple Coneflower	Echinacea purpurea	2	0.125		Forb	N	N	CP33-2	LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rblzstar-Besus-SkyAst
33	CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rbl	33-CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPc	Purple Prairie Clover	Dalea purpurea	2	0.125		Legume	N	N	CP33-2	LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rblzstar-Besus-SkyAst
33	CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rbl	33-CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPc	Rough Blazing Star	Liatris aspera	2	0.125		Forb	N	N	CP33-2	LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rblzstar-Besus-SkyAst
33	CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rbl	33-CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPc	Black-eyed Susan	Rudbeckia hirta	1	0.0625		Forb	N	N	CP33-2	LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rblzstar-Besus-SkyAst
33	CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rbl	33-CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPc	Sky-Blue Aster	Symphyotrichum oolenta	1	0.0625		Forb	N	N	CP33-2	LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rblzstar-Besus-SkyAst
33	CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rbl	33-CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPc	Stiff Goldenrod	Oligoneuron rigidum	1	0.0625		Forb	N	N	CP33-2	LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rblzstar-Besus-SkyAst
33	CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rbl	33-CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPc	Fewleaf Sunflower	Helianthus occidentalis	1	0.0625		Forb	N	N	CP33-2	LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rblzstar-Besus-SkyAst
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsed	Canada Wildrye	Elymus canadensis	16	1		Grass	N	N	CP38B-WPHRA	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsed	Indiangrass	Sorghastrum nutans	12	0.75		Grass	N	N	CP38B-WPHRA	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsed	Switchgrass	Panicum virgatum	12	0.75		Grass	N	N	CP38B-WPHRA	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsed	Big Bluestem	Andropogon gerardii	8	0.5		Grass	N	N	CP38B-WPHRA	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsed	Fox Sedge	Carex vulpinoidea	8	0.5		Sedge	N	N	CP38B-WPHRA	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsed	Prairie Cordgrass	Spartina pectinata	8	0.5		Grass	N	N	CP38B-WPHRA	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsed	Fowl Mannagrass	Glyceria striata	4	0.25		Grass	N	N	CP38B-WPHRA	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsed	Cupplant	Silphium perfoliatum	2	0.125		Forb	N	N	CP38B-WPHRA	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsed	Showy Tick Trefoil	Desmodium canadense	2	0.125		Legume	N	N	CP38B-WPHRA	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsed	Blue Vervain	Verbena hastata	1	0.0625		Forb	N	N	CP38B-WPHRA	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsed	Golden Alexanders	Zizia aurea	1	0.0625		Forb	N	N	CP38B-WPHRA	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsed	Marsh Milkweed	Asclepias incarnata	1	0.0625		Forb	N	N	CP38B-WPHRA	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsed	Boneset	Eupatorium perfoliatum	0.5	0.03125		Forb	N	N	CP38B-WPHRA	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsed	Common Ironweed	Vernonia fasciculata	1	0.03125		Forb	N	N	CP38B-WPHRA	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsed	Joe-pye Weed	Eutrochium maculatum	1	0.03125		Forb	N	N	CP38B-WPHRA	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsed	Culver's Root	Veronicastrum virginicum	0	0.015625		Forb	N	N	CP38B-WPHRA	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-B	38-CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-P	Little Bluestem	Schizachyrium scoparium	24	1.5		Grass	N	N	CP38E-CWGCA(CP2)D	LB-Sgrama-BB-Indian-PPclover-Besus-Rblzstar-Sgrod-Ycone
38	CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-B	38-CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-P	Sideoats Grama	Bouteloua curtipendula	24	1.5		Grass	N	N	CP38E-CWGCA(CP2)D	LB-Sgrama-BB-Indian-PPclover-Besus-Rblzstar-Sgrod-Ycone
38	CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-B	38-CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-P	Big Bluestem	Andropogon gerardii	8	0.5		Grass	N	N	CP38E-CWGCA(CP2)D	LB-Sgrama-BB-Indian-PPclover-Besus-Rblzstar-Sgrod-Ycone
38	CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-B	38-CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-P	Indiangrass	Sorghastrum nutans	8	0.5		Grass	N	N	CP38E-CWGCA(CP2)D	LB-Sgrama-BB-Indian-PPclover-Besus-Rblzstar-Sgrod-Ycone
38	CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-B	38-CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-P	Purple Prairie Clover	Dalea purpurea	2	0.125		Legume	N	N	CP38E-CWGCA(CP2)D	LB-Sgrama-BB-Indian-PPclover-Besus-Rblzstar-Sgrod-Ycone
38	CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-B	38-CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-P	Black-eyed Susan	Rudbeckia hirta	1	0.0625		Forb	N	N	CP38E-CWGCA(CP2)D	LB-Sgrama-BB-Indian-PPclover-Besus-Rblzstar-Sgrod-Ycone
38	CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-B	38-CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-P	Rough Blazing Star	Liatris aspera	1	0.0625		Forb	N	N	CP38E-CWGCA(CP2)D	LB-Sgrama-BB-Indian-PPclover-Besus-Rblzstar-Sgrod-Ycone
38	CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-B	38-CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-P	Stiff Goldenrod	Oligoneuron rigidum	1	0.0625		Forb	N	N	CP38E-CWGCA(CP2)D	LB-Sgrama-BB-Indian-PPclover-Besus-Rblzstar-Sgrod-Ycone
38	CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-B	38-CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-P	Yellow Coneflower	Ratibida pinnata	1	0.0625		Forb	N	N	CP38E-CWGCA(CP2)D	LB-Sgrama-BB-Indian-PPclover-Besus-Rblzstar-Sgrod-Ycone
38	CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-I	38-CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian	Little Bluestem	Schizachyrium scoparium	24	1.5		Grass	N	N	CP38E-CWGCA(CP2)DM	LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Besus-Rblzstar-Shwg
38	CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-I	38-CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian	Sideoats Grama	Bouteloua curtipendula	16	1		Grass	N	N	CP38E-CWGCA(CP2)DM	LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Besus-Rblzstar-Shwg
38	CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-I	38-CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian	Big Bluestem	Andropogon gerardii	8	0.5		Grass	N	N	CP38E-CWGCA(CP2)DM	LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Besus-Rblzstar-Shwg
38	CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-I	38-CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian	Indiangrass	Sorghastrum nutans	8	0.5		Grass	N	N	CP38E-CWGCA(CP2)DM	LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Besus-Rblzstar-Shwg
38	CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-I	38-CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian	Switchgrass	Panicum virgatum	8	0.5		Grass	N	N	CP38E-CWGCA(CP2)DM	LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Besus-Rblzstar-Shwg
38	CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-I	38-CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian	Purple Prairie Clover	Dalea purpurea	2	0.125		Legume	N	N	CP38E-CWGCA(CP2)DM	LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Besus-Rblzstar-Shwg
38	CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-I	38-CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian	Bergamot	Monarda fistulosa	1	0.0625		Forb	N	N	CP38E-CWGCA(CP2)DM	LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Besus-Rblzstar-Shwg
38	CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-I	38-CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian	Black-eyed Susan	Rudbeckia hirta	1	0.0625		Forb	N	N	CP38E-CWGCA(CP2)DM	LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Besus-Rblzstar-Shwg
38	CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-I	38-CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian	Rough Blazing Star	Liatris aspera	1	0.0625		Forb	N	N	CP38E-CWGCA(CP2)DM	LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Besus-Rblzstar-Shwg
38	CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-I	38-CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian	Showy Goldenrod	Solidago speciosa	1	0.0625		Forb	N	N	CP38E-CWGCA(CP2)DM	LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Besus-Rblzstar-Shwg
38	CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-I	38-CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian	Stiff Goldenrod	Oligoneuron rigidum	1	0.0625		Forb	N	N	CP38E-CWGCA(CP2)DM	LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Besus-Rblzstar-Shwg
38	CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-I	38-CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian	Yellow Coneflower	Ratibida pinnata	1	0.0625		Forb	N	N	CP38E-CWGCA(CP2)DM	LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Besus-Rblzstar-Shwg
38	CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Pbl	38-CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Little Bluestem	Schizachyrium scoparium	20	1.25		Grass	N	N	CP38E-CWGCA(CP2)M	LB-Cwrye-Indian-BB-Switch-Pblzstar-Rblzstar-Berg-Besus-Shwgro
38	CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Pbl	38-CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Canada Wildrye	Elymus canadensis	16	1		Grass	N	N	CP38E-CWGCA(CP2)M	LB-Cwrye-Indian-BB-Switch-Pblzstar-Rblzstar-Berg-Besus-Shwgro
38	CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Pbl	38-CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Indiangrass	Sorghastrum nutans	16	1		Grass	N	N	CP38E-CWGCA(CP2)M	LB-Cwrye-Indian-BB-Switch-Pblzstar-Rblzstar-Berg-Besus-Shwgro
38	CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Pbl	38-CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Big Bluestem	Andropogon gerardii	8	0.5		Grass	N	N	CP38E-CWGCA(CP2)M	LB-Cwrye-Indian-BB-Switch-Pblzstar-Rblzstar-Berg-Besus-Shwgro
38	CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Pbl	38-CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Switchgrass	Panicum virgatum	8	0.5		Grass	N	N	CP38E-CWGCA(CP2)M	LB-Cwrye-Indian-BB-Switch-Pblzstar-Rblzstar-Berg-Besus-Shwgro
38	CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Pbl	38-CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Prairie Blazing Star	Liatris pycnostachya	2	0.125		Forb	N	N	CP38E-CWGCA(CP2)M	LB-Cwrye-Indian-BB-Switch-Pblzstar-Rblzstar-Berg-Besus-Shwgro
38	CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Pbl	38-CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Rough Blazing Star	Liatris aspera	2	0.125		Forb	N	N	CP38E-CWGCA(CP2)M	LB-Cwrye-Indian-BB-Switch-Pblzstar-Rblzstar-Berg-Besus-Shwgro
38	CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Pbl	38-CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Bergamot	Monarda fistulosa	1	0.0625		Forb	N	N	CP38E-CWGCA(CP2)M	LB-Cwrye-Indian-BB-Switch-Pblzstar-Rblzstar-Berg-Besus-Shwgro
38	CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Pbl	38-CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Black-eyed Susan	Rudbeckia hirta	1	0.0625		Forb	N	N	CP38E-CWGCA(CP2)M	LB-Cwrye-Indian-BB-Switch-Pblzstar-Rblzstar-Berg-Besus-Shwgro
38	CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Pbl	38-CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Showy Goldenrod	Solidago speciosa	1	0.0625		Forb	N	N	CP38E-CWGCA(CP2)M	LB-Cwrye-Indian-BB-Switch-Pblzstar-Rblzstar-Berg-Besus-Shwgro
38	CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Pbl	38-CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Stiff Goldenrod	Oligoneuron rigidum	1	0.0625		Forb	N	N	CP38E-CWGCA(CP2)M	LB-Cwrye-Indian-BB-Switch-Pblzstar-Rblzstar-Berg-Besus-Shwgro
38	CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Pbl	38-CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Yellow Coneflower	Ratibida pinnata	1	0.0625		Forb	N	N	CP38E-CWGCA(CP2)M	LB-Cwrye-Indian-BB-Switch-Pblzstar-Rblzstar-Berg-Besus-Shwgro
38	CP38E-CWGCA(CP2)W-BB-Cwrye-Switch-Pcord-Cup-Bv	38-CP38E-CWGCA(CP2)W-BB-Cwrye-Switch-Pcor	Big Bluestem	Andropogon gerardii	16	1		Grass	N	N	CP38E-CWGCA(CP2)W	BB-Cwrye-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-CWGCA(CP2)W-BB-Cwrye-Switch-Pcord-Cup-Bv	38-CP38E-CWGCA(CP2)W-BB-Cwrye-Switch-Pcor	Canada Wildrye	Elymus canadensis	16	1		Grass	N	N	CP38E-CWGCA(CP2)W	BB-Cwrye-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-CWGCA(CP2)W-BB-Cwrye-Switch-Pcord-Cup-Bv	38-CP38E-CWGCA(CP2)W-BB-Cwrye-Switch-Pcor	Switchgrass	Panicum virgatum	16	1		Grass	N	N	CP38E-CWGCA(CP2)W	BB-Cwrye-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-CWGCA(CP2)W-BB-Cwrye-Switch-Pcord-Cup-Bv	38-CP38E-CWGCA(CP2)W-BB-Cwrye-Switch-Pcor	Prairie Cordgrass	Spartina pectinata	8	0.5		Grass	N	N	CP38E-CWGCA(CP2)W	BB-Cwrye-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-CWGCA(CP2)W-BB-Cwrye-Switch-Pcord-Cup-Bv	38-CP38E-CWGCA(CP2)W-BB-Cwrye-Switch-Pcor	Cupplant	Silphium perfoliatum	2	0.125		Forb	N	N	CP38E-CWGCA(CP2)W	BB-Cwrye-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-CWGCA(CP2)W-BB-Cwrye-Switch-Pcord-Cup-Bv	38-CP38E-CWGCA(CP2)W-BB-Cwrye-Switch-Pcor	Blue Vervain	Verbena hastata	1	0.0625		Forb	N	N	CP38E-CWGCA(CP2)W	BB-Cwrye-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-CWGCA(CP2)W-BB-Cwrye-Switch-Pcord-Cup-Bv	38-CP38E-CWGCA(CP2)W-BB-Cwrye-Switch-Pcor	Common Ironweed	Vernonia fasciculata	1	0.0625		Forb	N	N	CP38E-CWGCA(CP2)W	BB-Cwrye-Switch-Pcord-Cup-Bvervain-Ciron

38	CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Pblzs	38-CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pc	Switchgrass	Panicum virgatum	32	2		Grass	N	N	CP38E-CWGCA(CP2)WM	Switch-BB-Cwrye-Pcord-Pblzstar-Berg-Besus-NEaster-Ycone
38	CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Pblzs	38-CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pc	Big Bluestem	Andropogon gerardii	16	1		Grass	N	N	CP38E-CWGCA(CP2)WM	Switch-BB-Cwrye-Pcord-Pblzstar-Berg-Besus-NEaster-Ycone
38	CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Pblzs	38-CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pc	Canada Wildrye	Elymus canadensis	16	1		Grass	N	N	CP38E-CWGCA(CP2)WM	Switch-BB-Cwrye-Pcord-Pblzstar-Berg-Besus-NEaster-Ycone
38	CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Pblzs	38-CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pc	Prairie Cordgrass	Spartina pectinata	4	0.25		Grass	N	N	CP38E-CWGCA(CP2)WM	Switch-BB-Cwrye-Pcord-Pblzstar-Berg-Besus-NEaster-Ycone
38	CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Pblzs	38-CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pc	Prairie Blazing Star	Liatris pycnostachya	2	0.125		Forb	N	N	CP38E-CWGCA(CP2)WM	Switch-BB-Cwrye-Pcord-Pblzstar-Berg-Besus-NEaster-Ycone
38	CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Pblzs	38-CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pc	Bergamot	Monarda fistulosa	1	0.0625		Forb	N	N	CP38E-CWGCA(CP2)WM	Switch-BB-Cwrye-Pcord-Pblzstar-Berg-Besus-NEaster-Ycone
38	CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Pblzs	38-CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pc	Black-eyed Susan	Rudbeckia hirta	1	0.0625		Forb	N	N	CP38E-CWGCA(CP2)WM	Switch-BB-Cwrye-Pcord-Pblzstar-Berg-Besus-NEaster-Ycone
38	CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Pblzs	38-CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pc	New England Aster	Symphyotrichum novae-a	1	0.0625		Forb	N	N	CP38E-CWGCA(CP2)WM	Switch-BB-Cwrye-Pcord-Pblzstar-Berg-Besus-NEaster-Ycone
38	CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Pblzs	38-CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pc	Yellow Coneflower	Ratibida pinnata	1	0.0625		Forb	N	N	CP38E-CWGCA(CP2)WM	Switch-BB-Cwrye-Pcord-Pblzstar-Berg-Besus-NEaster-Ycone
38	CP38E-GHRA(CP2)D-LB-Sgrama-BB-Indian-PPclover-Sg	38-CP38E-GHRA(CP2)D-LB-Sgrama-BB-Indian-PP	Little Bluestem	Schizachyrium scoparium	24	1.5		Grass	N	N	CP38E-GHRA(CP2)D	LB-Sgrama-BB-Indian-PPclover-Sgrod-Ycone
38	CP38E-GHRA(CP2)D-LB-Sgrama-BB-Indian-PPclover-Sg	38-CP38E-GHRA(CP2)D-LB-Sgrama-BB-Indian-PP	Sideoats Grama	Bouteloua curtipendula	24	1.5		Grass	N	N	CP38E-GHRA(CP2)D	LB-Sgrama-BB-Indian-PPclover-Sgrod-Ycone
38	CP38E-GHRA(CP2)D-LB-Sgrama-BB-Indian-PPclover-Sg	38-CP38E-GHRA(CP2)D-LB-Sgrama-BB-Indian-PP	Big Bluestem	Andropogon gerardii	8	0.5		Grass	N	N	CP38E-GHRA(CP2)D	LB-Sgrama-BB-Indian-PPclover-Sgrod-Ycone
38	CP38E-GHRA(CP2)D-LB-Sgrama-BB-Indian-PPclover-Sg	38-CP38E-GHRA(CP2)D-LB-Sgrama-BB-Indian-PP	Indiangrass	Sorghastrum nutans	8	0.5		Grass	N	N	CP38E-GHRA(CP2)D	LB-Sgrama-BB-Indian-PPclover-Sgrod-Ycone
38	CP38E-GHRA(CP2)D-LB-Sgrama-BB-Indian-PPclover-Sg	38-CP38E-GHRA(CP2)D-LB-Sgrama-BB-Indian-PP	Purple Prairie Clover	Dalea purpurea	2	0.125		Legume	N	N	CP38E-GHRA(CP2)D	LB-Sgrama-BB-Indian-PPclover-Sgrod-Ycone
38	CP38E-GHRA(CP2)D-LB-Sgrama-BB-Indian-PPclover-Sg	38-CP38E-GHRA(CP2)D-LB-Sgrama-BB-Indian-PP	Stiff Goldenrod	Oligoneuron rigidum	1	0.0625		Forb	N	N	CP38E-GHRA(CP2)D	LB-Sgrama-BB-Indian-PPclover-Sgrod-Ycone
38	CP38E-GHRA(CP2)D-LB-Sgrama-BB-Indian-PPclover-Sg	38-CP38E-GHRA(CP2)D-LB-Sgrama-BB-Indian-PP	Yellow Coneflower	Ratibida pinnata	1	0.0625		Forb	N	N	CP38E-GHRA(CP2)D	LB-Sgrama-BB-Indian-PPclover-Sgrod-Ycone
38	CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-Switch-PP	38-CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-S	Little Bluestem	Schizachyrium scoparium	24	1.5		Grass	N	N	CP38E-GHRA(CP2)DM	LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-Switch-PP	38-CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-S	Sideoats Grama	Bouteloua curtipendula	16	1		Grass	N	N	CP38E-GHRA(CP2)DM	LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-Switch-PP	38-CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-S	Big Bluestem	Andropogon gerardii	8	0.5		Grass	N	N	CP38E-GHRA(CP2)DM	LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-Switch-PP	38-CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-S	Indiangrass	Sorghastrum nutans	8	0.5		Grass	N	N	CP38E-GHRA(CP2)DM	LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-Switch-PP	38-CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-S	Switchgrass	Panicum virgatum	8	0.5		Grass	N	N	CP38E-GHRA(CP2)DM	LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-Switch-PP	38-CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-S	Purple Prairie Clover	Dalea purpurea	2	0.125		Legume	N	N	CP38E-GHRA(CP2)DM	LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-Switch-PP	38-CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-S	Bergamot	Monarda fistulosa	1	0.0625		Forb	N	N	CP38E-GHRA(CP2)DM	LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-Switch-PP	38-CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-S	Yellow Coneflower	Ratibida pinnata	1	0.0625		Forb	N	N	CP38E-GHRA(CP2)DM	LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Switch-Berg-	38-CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Swi	Little Bluestem	Schizachyrium scoparium	20	1.25		Grass	N	N	CP38E-GHRA(CP2)M	LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Switch-Berg-	38-CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Swi	Canada Wildrye	Elymus canadensis	16	1		Grass	N	N	CP38E-GHRA(CP2)M	LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Switch-Berg-	38-CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Swi	Indiangrass	Sorghastrum nutans	16	1		Grass	N	N	CP38E-GHRA(CP2)M	LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Switch-Berg-	38-CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Swi	Big Bluestem	Andropogon gerardii	8	0.5		Grass	N	N	CP38E-GHRA(CP2)M	LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Switch-Berg-	38-CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Swi	Switchgrass	Panicum virgatum	8	0.5		Grass	N	N	CP38E-GHRA(CP2)M	LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Switch-Berg-	38-CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Swi	Bergamot	Monarda fistulosa	1	0.0625		Forb	N	N	CP38E-GHRA(CP2)M	LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Switch-Berg-	38-CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Swi	Black-eyed Susan	Rudbeckia hirta	1	0.0625		Forb	N	N	CP38E-GHRA(CP2)M	LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Switch-Berg-	38-CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Swi	Yellow Coneflower	Ratibida pinnata	1	0.0625		Forb	N	N	CP38E-GHRA(CP2)M	LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-C	38-CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch	Big Bluestem	Andropogon gerardii	16	1		Grass	N	N	CP38E-GHRA(CP2)W	BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-C	38-CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch	Canada Wildrye	Elymus canadensis	16	1		Grass	N	N	CP38E-GHRA(CP2)W	BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-C	38-CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch	Indiangrass	Sorghastrum nutans	16	1		Grass	N	N	CP38E-GHRA(CP2)W	BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-C	38-CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch	Switchgrass	Panicum virgatum	16	1		Grass	N	N	CP38E-GHRA(CP2)W	BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-C	38-CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch	Prairie Cordgrass	Spartina pectinata	8	0.5		Grass	N	N	CP38E-GHRA(CP2)W	BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-C	38-CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch	Cupplant	Silphium perfoliatum	2	0.125		Forb	N	N	CP38E-GHRA(CP2)W	BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-C	38-CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch	Blue Vervain	Verbena hastata	1	0.0625		Forb	N	N	CP38E-GHRA(CP2)W	BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-C	38-CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch	Common Ironweed	Vernonia fasciculata	1	0.0625		Forb	N	N	CP38E-GHRA(CP2)W	BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-GHRA(CP2)WM-Switch-BB-Cwrye-Pcord-Berg-N	38-CP38E-GHRA(CP2)WM-Switch-BB-Cwrye-Pco	Switchgrass	Panicum virgatum	32	2		Grass	N	N	CP38E-GHRA(CP2)WM	Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
38	CP38E-GHRA(CP2)WM-Switch-BB-Cwrye-Pcord-Berg-N	38-CP38E-GHRA(CP2)WM-Switch-BB-Cwrye-Pco	Big Bluestem	Andropogon gerardii	16	1		Grass	N	N	CP38E-GHRA(CP2)WM	Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
38	CP38E-GHRA(CP2)WM-Switch-BB-Cwrye-Pcord-Berg-N	38-CP38E-GHRA(CP2)WM-Switch-BB-Cwrye-Pco	Canada Wildrye	Elymus canadensis	16	1		Grass	N	N	CP38E-GHRA(CP2)WM	Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
38	CP38E-GHRA(CP2)WM-Switch-BB-Cwrye-Pcord-Berg-N	38-CP38E-GHRA(CP2)WM-Switch-BB-Cwrye-Pco	Prairie Cordgrass	Spartina pectinata	4	0.25		Grass	N	N	CP38E-GHRA(CP2)WM	Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
38	CP38E-GHRA(CP2)WM-Switch-BB-Cwrye-Pcord-Berg-N	38-CP38E-GHRA(CP2)WM-Switch-BB-Cwrye-Pco	Bergamot	Monarda fistulosa	1	0.0625		Forb	N	N	CP38E-GHRA(CP2)WM	Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
38	CP38E-GHRA(CP2)WM-Switch-BB-Cwrye-Pcord-Berg-N	38-CP38E-GHRA(CP2)WM-Switch-BB-Cwrye-Pco	New England Aster	Symphyotrichum novae-a	1	0.0625		Forb	N	N	CP38E-GHRA(CP2)WM	Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
38	CP38E-GHRA(CP2)WM-Switch-BB-Cwrye-Pcord-Berg-N	38-CP38E-GHRA(CP2)WM-Switch-BB-Cwrye-Pco	Yellow Coneflower	Ratibida pinnata	1	0.0625		Forb	N	N	CP38E-GHRA(CP2)WM	Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Little Bluestem	Schizachyrium scoparium	24	1.5		Grass	N	N	CP38E-GHRA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Sideoats Grama	Bouteloua curtipendula	24	1.5		Grass	N	N	CP38E-GHRA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Indiangrass	Sorghastrum nutans	8	0.5		Grass	N	N	CP38E-GHRA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Big Bluestem	Andropogon gerardii	4	0.25		Grass	N	N	CP38E-GHRA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Purple Prairie Clover	Dalea purpurea	2	0.125		Legume	N	N	CP38E-GHRA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Sand Dropseed	Sporobolus cryptandrus	2	0.125		Grass	N	N	CP38E-GHRA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Prairie Junegrass	Koeleria macrantha	1	0.0625		Grass	N	N	CP38E-GHRA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Spiderwort	Tradescantia ohiensis	1	0.0625		Forb	N	N	CP38E-GHRA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Hoary Vervain	Verbena stricta	0.5	0.03125		Forb	N	N	CP38E-GHRA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Leadplant	Amorpha canescens	0.5	0.03125		Legume	N	N	CP38E-GHRA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Prairie Tickseed	Coreopsis palmata	0.5	0.03125		Forb	N	N	CP38E-GHRA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Silky Aster	Symphyotrichum pratens	0.5	0.03125		Forb	N	N	CP38E-GHRA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Stiff Goldenrod	Oligoneuron rigidum	0.5	0.03125		Forb	N	N	CP38E-GHRA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Yellow Coneflower	Ratibida pinnata	0.5	0.03125		Forb	N	N	CP38E-GHRA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Prairie Cinquefoil	Potentilla arguta	0.25	0.015625		Forb	N	N	CP38E-GHRA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Spotted Mint	Monarda punctata	0	0.015625		Forb	N	N	CP38E-GHRA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjun	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Little Bluestem	Schizachyrium scoparium	24	1.5		Grass	N	N	CP38E-GHRA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjun	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Sideoats Grama	Bouteloua curtipendula	24	1.5		Grass	N	N	CP38E-GHRA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjun	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Indiangrass	Sorghastrum nutans	8	0.5		Grass	N	N	CP38E-GHRA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjun	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Switchgrass	Panicum virgatum	4	0.25		Grass	N	N	CP38E-GHRA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjun	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Prairie Junegrass	Koeleria macrantha	2	0.125		Grass	N	N	CP38E-GHRA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjun	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Prairie Dropseed	Sporobolus heterolepis	2	0.125		Grass	N	N	CP38E-GHRA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjun	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Purple Prairie Clover	Dalea purpurea	2	0.125		Legume	N	N	CP38E-GHRA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjun	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Round-Headed Bushclover	Lespedeza capitata	2	0.125		Legume	N	N	CP38E-GHRA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B

38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjun	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Bergamot	Monarda fistulosa	1	0.0625		Forb	N	N	CP38E-GHRA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjun	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Spiderwort	Tradescantia ohiensis	1	0.0625		Forb	N	N	CP38E-GHRA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjun	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Yellow Coneflower	Ratibida pinnata	1	0.0625		Forb	N	N	CP38E-GHRA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjun	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Leadplant	Amorpha canescens	0.5	0.03125		Legume	N	N	CP38E-GHRA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjun	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Rough Blazing Star	Liatris aspera	1	0.03125		Forb	N	N	CP38E-GHRA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjun	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Sky-Blue Aster	Symphyotrichum oolenta	1	0.03125		Forb	N	N	CP38E-GHRA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjun	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Stiff Goldenrod	Oligoneuron rigidum	0.5	0.03125		Forb	N	N	CP38E-GHRA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjun	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Prairie Cinquefoil	Potentilla arguta	0.25	0.015625		Forb	N	N	CP38E-GHRA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
38	CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Switch-Oxe	38-CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Sw	Little Bluestem	Schizachyrium scoparium	24	1.5		Grass	N	N	CP38E-GHRA(CP25)M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
38	CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Switch-Oxe	38-CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Sw	Indiangrass	Sorghastrum nutans	16	1		Grass	N	N	CP38E-GHRA(CP25)M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
38	CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Switch-Oxe	38-CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Sw	Big Bluestem	Andropogon gerardii	8	0.5		Grass	N	N	CP38E-GHRA(CP25)M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
38	CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Switch-Oxe	38-CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Sw	Canada Wildrye	Elymus canadensis	8	0.5		Grass	N	N	CP38E-GHRA(CP25)M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
38	CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Switch-Oxe	38-CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Sw	Switchgrass	Panicum virgatum	8	0.5		Grass	N	N	CP38E-GHRA(CP25)M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
38	CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Switch-Oxe	38-CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Sw	Ox-eye Sunflower	Heliopsis helianthoides	1	0.0625		Forb	N	N	CP38E-GHRA(CP25)M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
38	CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Switch-Oxe	38-CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Sw	Prairie Blazing Star	Liatris pycnostachya	1	0.0625		Forb	N	N	CP38E-GHRA(CP25)M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
38	CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Switch-Oxe	38-CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Sw	Purple Prairie Clover	Dalea purpurea	1	0.0625		Legume	N	N	CP38E-GHRA(CP25)M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
38	CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Switch-Oxe	38-CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Sw	Rosinweed	Silphium integrifolium	1	0.0625		Forb	N	N	CP38E-GHRA(CP25)M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
38	CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Switch-Oxe	38-CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Sw	Bergamot	Monarda fistulosa	0.5	0.03125		Forb	N	N	CP38E-GHRA(CP25)M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
38	CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Switch-Oxe	38-CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Sw	Black-eyed Susan	Rudbeckia hirta	0.5	0.03125		Forb	N	N	CP38E-GHRA(CP25)M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
38	CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Switch-Oxe	38-CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Sw	New England Aster	Symphyotrichum novae-a	0.5	0.03125		Forb	N	N	CP38E-GHRA(CP25)M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
38	CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Switch-Oxe	38-CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Sw	Smooth Blue Aster	Symphyotrichum laeve	0.5	0.03125		Forb	N	N	CP38E-GHRA(CP25)M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
38	CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Switch-Oxe	38-CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Sw	Yellow Coneflower	Ratibida pinnata	0.5	0.03125		Forb	N	N	CP38E-GHRA(CP25)M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
38	CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Switch-Oxe	38-CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Sw	Culver's Root	Veronicastrum virginicum	0	0.015625		Forb	N	N	CP38E-GHRA(CP25)M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-B	Canada Wildrye	Elymus canadensis	16	1		Grass	N	N	CP38E-GHRA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-B	Switchgrass	Panicum virgatum	16	1		Grass	N	N	CP38E-GHRA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-B	Indiangrass	Sorghastrum nutans	12	0.75		Grass	N	N	CP38E-GHRA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-B	Big Bluestem	Andropogon gerardii	8	0.5		Grass	N	N	CP38E-GHRA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-B	Prairie Cordgrass	Spartina pectinata	8	0.5		Grass	N	N	CP38E-GHRA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-B	Fowl Mannagrass	Glyceria striata	4	0.25		Grass	N	N	CP38E-GHRA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-B	Fox Sedge	Carex vulpinoidea	4	0.25		Sedge	N	N	CP38E-GHRA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-B	Cupplant	Silphium perfoliatum	2	0.125		Forb	N	N	CP38E-GHRA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-B	Showy Tick Trefoil	Desmodium canadense	2	0.125		Legume	N	N	CP38E-GHRA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-B	Blue Vervain	Verbena hastata	1	0.0625		Forb	N	N	CP38E-GHRA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-B	Golden Alexanders	Zizia aurea	1	0.0625		Forb	N	N	CP38E-GHRA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-B	Marsh Milkweed	Asclepias incarnata	1	0.0625		Forb	N	N	CP38E-GHRA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-B	Boneset	Eupatorium perfoliatum	0.5	0.03125		Forb	N	N	CP38E-GHRA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-B	Common Ironweed	Vernonia fasciculata	1	0.03125		Forb	N	N	CP38E-GHRA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-B	Joe-pye Weed	Eutrochium maculatum	1	0.03125		Forb	N	N	CP38E-GHRA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-B	Culver's Root	Veronicastrum virginicum	0	0.015625		Forb	N	N	CP38E-GHRA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Indian-Pcor	38-CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Ind	Switchgrass	Panicum virgatum	24	1.5		Grass	N	N	CP38E-GHRA(CP25)WM	Switch-BB-Cwrye-Indian-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
38	CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Indian-Pcor	38-CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Ind	Big Bluestem	Andropogon gerardii	20	1.25		Grass	N	N	CP38E-GHRA(CP25)WM	Switch-BB-Cwrye-Indian-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
38	CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Indian-Pcor	38-CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Ind	Canada Wildrye	Elymus canadensis	16	1		Grass	N	N	CP38E-GHRA(CP25)WM	Switch-BB-Cwrye-Indian-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
38	CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Indian-Pcor	38-CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Ind	Indiangrass	Sorghastrum nutans	12	0.75		Grass	N	N	CP38E-GHRA(CP25)WM	Switch-BB-Cwrye-Indian-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
38	CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Indian-Pcor	38-CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Ind	Prairie Cordgrass	Spartina pectinata	4	0.25		Grass	N	N	CP38E-GHRA(CP25)WM	Switch-BB-Cwrye-Indian-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
38	CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Indian-Pcor	38-CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Ind	Cupplant	Silphium perfoliatum	2	0.125		Forb	N	N	CP38E-GHRA(CP25)WM	Switch-BB-Cwrye-Indian-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
38	CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Indian-Pcor	38-CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Ind	White wild indigo	Baptisia alba	1.5	0.09375		Legume	N	N	CP38E-GHRA(CP25)WM	Switch-BB-Cwrye-Indian-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
38	CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Indian-Pcor	38-CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Ind	Black-eyed Susan	Rudbeckia hirta	0.5	0.03125		Forb	N	N	CP38E-GHRA(CP25)WM	Switch-BB-Cwrye-Indian-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
38	CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Indian-Pcor	38-CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Ind	Common Ironweed	Vernonia fasciculata	0.5	0.03125		Forb	N	N	CP38E-GHRA(CP25)WM	Switch-BB-Cwrye-Indian-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
38	CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Indian-Pcor	38-CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Ind	Golden Alexanders	Zizia aurea	0.5	0.03125		Forb	N	N	CP38E-GHRA(CP25)WM	Switch-BB-Cwrye-Indian-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
38	CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Indian-Pcor	38-CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Ind	New England Aster	Symphyotrichum novae-a	0.5	0.03125		Forb	N	N	CP38E-GHRA(CP25)WM	Switch-BB-Cwrye-Indian-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
38	CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Indian-Pcor	38-CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Ind	Prairie Blazing Star	Liatris pycnostachya	0.5	0.03125		Forb	N	N	CP38E-GHRA(CP25)WM	Switch-BB-Cwrye-Indian-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
38	CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Indian-Pcor	38-CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Ind	Yellow Coneflower	Ratibida pinnata	0.5	0.03125		Forb	N	N	CP38E-GHRA(CP25)WM	Switch-BB-Cwrye-Indian-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
38	CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Indian-Pcor	38-CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Ind	Bergamot	Monarda fistulosa	0.25	0.015625		Forb	N	N	CP38E-GHRA(CP25)WM	Switch-BB-Cwrye-Indian-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
38	CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Indian-Pcor	38-CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Ind	Great St. John's Wort	Hypericum ascyron	0	0.015625		Forb	N	N	CP38E-GHRA(CP25)WM	Switch-BB-Cwrye-Indian-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Little Bluestem	Schizachyrium scoparium	24	1.5		Grass	N	N	CP38E-KBB	LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-PPclover-Bmilkweed-F
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Canada Wildrye	Elymus canadensis	16	1		Grass	N	N	CP38E-KBB	LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-PPclover-Bmilkweed-F
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Indiangrass	Sorghastrum nutans	16	1		Grass	N	N	CP38E-KBB	LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-PPclover-Bmilkweed-F
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Big Bluestem	Andropogon gerardii	8	0.5		Grass	N	N	CP38E-KBB	LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-PPclover-Bmilkweed-F
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Sideoats Grama	Bouteloua curtipendula	8	0.5		Grass	N	N	CP38E-KBB	LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-PPclover-Bmilkweed-F
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Switchgrass	Panicum virgatum	8	0.5		Grass	N	N	CP38E-KBB	LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-PPclover-Bmilkweed-F
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Wild Lupine	Lupinus perennis	3	0.1875		Legume	N	N	CP38E-KBB	LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-PPclover-Bmilkweed-F
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Purple Prairie Clover	Dalea purpurea	2	0.125		Legume	N	N	CP38E-KBB	LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-PPclover-Bmilkweed-F
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Butterfly Milkweed	Asclepias tuberosa	1	0.0625		Forb	N	N	CP38E-KBB	LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-PPclover-Bmilkweed-F
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Flowering Spurge	Euphorbia corollata	1	0.0625		Forb	N	N	CP38E-KBB	LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-PPclover-Bmilkweed-F
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Golden Alexanders	Zizia aurea	1	0.0625		Forb	N	N	CP38E-KBB	LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-PPclover-Bmilkweed-F
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Rough Blazing Star	Liatris aspera	1	0.0625		Forb	N	N	CP38E-KBB	LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-PPclover-Bmilkweed-F
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Round-Headed Bushclover	Lespedeza capitata	1	0.0625		Legume	N	N	CP38E-KBB	LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-PPclover-Bmilkweed-F
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Fewleaf Sunflower	Helianthus occidentalis	1	0.0625		Forb	N	N	CP38E-KBB	LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-PPclover-Bmilkweed-F
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Bergamot	Monarda fistulosa	0.5	0.03125		Forb	N	N	CP38E-KBB	LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-PPclover-Bmilkweed-F
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Prairie Tickseed	Coreopsis palmata	1	0.03125		Forb	N	N	CP38E-KBB	LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-PPclover-Bmilkweed-F
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Black-eyed Susan	Rudbeckia hirta	0	0.025		Forb	N	N	CP38E-KBB	LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-PPclover-Bmilkweed-F

38	CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlup-PPclove	38-CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlup	Little Bluestem	Schizachyrium scoparium	36	2.25		Grass	N	N	CP38E-KBB(WHIP)	LB-Sgrama-BB-Pjune-Wlup-PPclover-Rblzstar-Ptick-Besus
38	CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlup-PPclove	38-CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlup	Sideoats Grama	Bouteloua curtipendula	16	1		Grass	N	N	CP38E-KBB(WHIP)	LB-Sgrama-BB-Pjune-Wlup-PPclover-Rblzstar-Ptick-Besus
38	CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlup-PPclove	38-CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlup	Big Bluestem	Andropogon gerardii	8	0.5		Grass	N	N	CP38E-KBB(WHIP)	LB-Sgrama-BB-Pjune-Wlup-PPclover-Rblzstar-Ptick-Besus
38	CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlup-PPclove	38-CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlup	Prairie Junegrass	Koeleria macrantha	4	0.25		Grass	N	N	CP38E-KBB(WHIP)	LB-Sgrama-BB-Pjune-Wlup-PPclover-Rblzstar-Ptick-Besus
38	CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlup-PPclove	38-CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlup	Wild Lupine	Lupinus perennis	3	0.1875		Legume	N	N	CP38E-KBB(WHIP)	LB-Sgrama-BB-Pjune-Wlup-PPclover-Rblzstar-Ptick-Besus
38	CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlup-PPclove	38-CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlup	Purple Prairie Clover	Dalea purpurea	2	0.125		Legume	N	N	CP38E-KBB(WHIP)	LB-Sgrama-BB-Pjune-Wlup-PPclover-Rblzstar-Ptick-Besus
38	CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlup-PPclove	38-CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlup	Rough Blazing Star	Liatris aspera	2	0.125		Forb	N	N	CP38E-KBB(WHIP)	LB-Sgrama-BB-Pjune-Wlup-PPclover-Rblzstar-Ptick-Besus
38	CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlup-PPclove	38-CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlup	Prairie Tickseed	Coreopsis palmata	1	0.0625		Forb	N	N	CP38E-KBB(WHIP)	LB-Sgrama-BB-Pjune-Wlup-PPclover-Rblzstar-Ptick-Besus
38	CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlup-PPclove	38-CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlup	Black-eyed Susan	Rudbeckia hirta	0.25	0.015625		Forb	N	N	CP38E-KBB(WHIP)	LB-Sgrama-BB-Pjune-Wlup-PPclover-Rblzstar-Ptick-Besus
38	CP38E-SWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-S	38-CP38E-SWGCA(CP2)D-LB-Sgrama-BB-Indian-P	Little Bluestem	Schizachyrium scoparium	24	1.5		Grass	N	N	CP38E-SWGCA(CP2)D	LB-Sgrama-BB-Indian-PPclover-Sgrod-Ycone
38	CP38E-SWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-S	38-CP38E-SWGCA(CP2)D-LB-Sgrama-BB-Indian-P	Sideoats Grama	Bouteloua curtipendula	24	1.5		Grass	N	N	CP38E-SWGCA(CP2)D	LB-Sgrama-BB-Indian-PPclover-Sgrod-Ycone
38	CP38E-SWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-S	38-CP38E-SWGCA(CP2)D-LB-Sgrama-BB-Indian-P	Big Bluestem	Andropogon gerardii	8	0.5		Grass	N	N	CP38E-SWGCA(CP2)D	LB-Sgrama-BB-Indian-PPclover-Sgrod-Ycone
38	CP38E-SWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-S	38-CP38E-SWGCA(CP2)D-LB-Sgrama-BB-Indian-P	Indiangrass	Sorghastrum nutans	8	0.5		Grass	N	N	CP38E-SWGCA(CP2)D	LB-Sgrama-BB-Indian-PPclover-Sgrod-Ycone
38	CP38E-SWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-S	38-CP38E-SWGCA(CP2)D-LB-Sgrama-BB-Indian-P	Purple Prairie Clover	Dalea purpurea	2	0.125		Legume	N	N	CP38E-SWGCA(CP2)D	LB-Sgrama-BB-Indian-PPclover-Sgrod-Ycone
38	CP38E-SWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-S	38-CP38E-SWGCA(CP2)D-LB-Sgrama-BB-Indian-P	Stiff Goldenrod	Oligoneuron rigidum	1	0.0625		Forb	N	N	CP38E-SWGCA(CP2)D	LB-Sgrama-BB-Indian-PPclover-Sgrod-Ycone
38	CP38E-SWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-S	38-CP38E-SWGCA(CP2)D-LB-Sgrama-BB-Indian-P	Yellow Coneflower	Ratibida pinnata	1	0.0625		Forb	N	N	CP38E-SWGCA(CP2)D	LB-Sgrama-BB-Indian-PPclover-Sgrod-Ycone
38	CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-P	38-CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian	Little Bluestem	Schizachyrium scoparium	24	1.5		Grass	N	N	CP38E-SWGCA(CP2)DM	LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-P	38-CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian	Sideoats Grama	Bouteloua curtipendula	16	1		Grass	N	N	CP38E-SWGCA(CP2)DM	LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-P	38-CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian	Big Bluestem	Andropogon gerardii	8	0.5		Grass	N	N	CP38E-SWGCA(CP2)DM	LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-P	38-CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian	Indiangrass	Sorghastrum nutans	8	0.5		Grass	N	N	CP38E-SWGCA(CP2)DM	LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-P	38-CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian	Switchgrass	Panicum virgatum	8	0.5		Grass	N	N	CP38E-SWGCA(CP2)DM	LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-P	38-CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian	Purple Prairie Clover	Dalea purpurea	2	0.125		Legume	N	N	CP38E-SWGCA(CP2)DM	LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-P	38-CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian	Bergamot	Monarda fistulosa	1	0.0625		Forb	N	N	CP38E-SWGCA(CP2)DM	LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-P	38-CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian	Yellow Coneflower	Ratibida pinnata	1	0.0625		Forb	N	N	CP38E-SWGCA(CP2)DM	LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Ber	38-CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-Sv	Little Bluestem	Schizachyrium scoparium	20	1.25		Grass	N	N	CP38E-SWGCA(CP2)M	LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Ber	38-CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-Sv	Canada Wildrye	Elymus canadensis	16	1		Grass	N	N	CP38E-SWGCA(CP2)M	LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Ber	38-CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-Sv	Indiangrass	Sorghastrum nutans	16	1		Grass	N	N	CP38E-SWGCA(CP2)M	LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Ber	38-CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-Sv	Big Bluestem	Andropogon gerardii	8	0.5		Grass	N	N	CP38E-SWGCA(CP2)M	LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Ber	38-CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-Sv	Switchgrass	Panicum virgatum	8	0.5		Grass	N	N	CP38E-SWGCA(CP2)M	LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Ber	38-CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-Sv	Bergamot	Monarda fistulosa	1	0.0625		Forb	N	N	CP38E-SWGCA(CP2)M	LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Ber	38-CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-Sv	Black-eyed Susan	Rudbeckia hirta	1	0.0625		Forb	N	N	CP38E-SWGCA(CP2)M	LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Ber	38-CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-Sv	Yellow Coneflower	Ratibida pinnata	1	0.0625		Forb	N	N	CP38E-SWGCA(CP2)M	LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-	38-CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Swit	Big Bluestem	Andropogon gerardii	16	1		Grass	N	N	CP38E-SWGCA(CP2)W	BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-	38-CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Swit	Canada Wildrye	Elymus canadensis	16	1		Grass	N	N	CP38E-SWGCA(CP2)W	BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-	38-CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Swit	Indiangrass	Sorghastrum nutans	16	1		Grass	N	N	CP38E-SWGCA(CP2)W	BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-	38-CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Swit	Switchgrass	Panicum virgatum	16	1		Grass	N	N	CP38E-SWGCA(CP2)W	BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-	38-CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Swit	Prairie Cordgrass	Spartina pectinata	8	0.5		Grass	N	N	CP38E-SWGCA(CP2)W	BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-	38-CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Swit	Silphium perfoliatum	Cupplant	2	0.125		Forb	N	N	CP38E-SWGCA(CP2)W	BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-	38-CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Swit	Blue Vervain	Verbena hastata	1	0.0625		Forb	N	N	CP38E-SWGCA(CP2)W	BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-	38-CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Swit	Common Ironweed	Vernonia fasciculata	1	0.0625		Forb	N	N	CP38E-SWGCA(CP2)W	BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-SWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Berg	38-CP38E-SWGCA(CP2)WM-Switch-BB-Cwrye-Pc	Switchgrass	Panicum virgatum	32	2		Grass	N	N	CP38E-SWGCA(CP2)WM	Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
38	CP38E-SWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Berg	38-CP38E-SWGCA(CP2)WM-Switch-BB-Cwrye-Pc	Big Bluestem	Andropogon gerardii	16	1		Grass	N	N	CP38E-SWGCA(CP2)WM	Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
38	CP38E-SWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Berg	38-CP38E-SWGCA(CP2)WM-Switch-BB-Cwrye-Pc	Canada Wildrye	Elymus canadensis	16	1		Grass	N	N	CP38E-SWGCA(CP2)WM	Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
38	CP38E-SWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Berg	38-CP38E-SWGCA(CP2)WM-Switch-BB-Cwrye-Pc	Prairie Cordgrass	Spartina pectinata	4	0.25		Grass	N	N	CP38E-SWGCA(CP2)WM	Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
38	CP38E-SWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Berg	38-CP38E-SWGCA(CP2)WM-Switch-BB-Cwrye-Pc	Bergamot	Monarda fistulosa	1	0.0625		Forb	N	N	CP38E-SWGCA(CP2)WM	Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
38	CP38E-SWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Berg	38-CP38E-SWGCA(CP2)WM-Switch-BB-Cwrye-Pc	New England Aster	Symphyotrichum novae-a	1	0.0625		Forb	N	N	CP38E-SWGCA(CP2)WM	Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
38	CP38E-SWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Berg	38-CP38E-SWGCA(CP2)WM-Switch-BB-Cwrye-Pc	Yellow Coneflower	Ratibida pinnata	1	0.0625		Forb	N	N	CP38E-SWGCA(CP2)WM	Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Little Bluestem	Schizachyrium scoparium	24	1.5		Grass	N	N	CP38E-SWGCA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Sideoats Grama	Bouteloua curtipendula	24	1.5		Grass	N	N	CP38E-SWGCA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Indiangrass	Sorghastrum nutans	8	0.5		Grass	N	N	CP38E-SWGCA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Big Bluestem	Andropogon gerardii	4	0.25		Grass	N	N	CP38E-SWGCA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Purple Prairie Clover	Dalea purpurea	2	0.125		Legume	N	N	CP38E-SWGCA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Sand Dropseed	Sporobolus cryptandrus	2	0.125		Grass	N	N	CP38E-SWGCA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Prairie Junegrass	Koeleria macrantha	1	0.0625		Grass	N	N	CP38E-SWGCA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Spiderwort	Tradescantia ohiensis	1	0.0625		Forb	N	N	CP38E-SWGCA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Hoary Vervain	Verbena stricta	0.5	0.03125		Forb	N	N	CP38E-SWGCA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Leadplant	Amorpha canescens	0.5	0.03125		Legume	N	N	CP38E-SWGCA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Prairie Tickseed	Coreopsis palmata	0.5	0.03125		Forb	N	N	CP38E-SWGCA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Silky Aster	Symphyotrichum pratens	0.5	0.03125		Forb	N	N	CP38E-SWGCA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Stiff Goldenrod	Oligoneuron rigidum	1	0.03125		Forb	N	N	CP38E-SWGCA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Yellow Coneflower	Ratibida pinnata	0.5	0.03125		Forb	N	N	CP38E-SWGCA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Prairie Cinquefoil	Potentilla arguta	0.25	0.015625		Forb	N	N	CP38E-SWGCA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Spotted Mint	Monarda punctata	0	0.015625		Forb	N	N	CP38E-SWGCA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Little Bluestem	Schizachyrium scoparium	24	1.5		Grass	N	N	CP38E-SWGCA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Sideoats Grama	Bouteloua curtipendula	24	1.5		Grass	N	N	CP38E-SWGCA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Indiangrass	Sorghastrum nutans	8	0.5		Grass	N	N	CP38E-SWGCA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Switchgrass	Panicum virgatum	4	0.25		Grass	N	N	CP38E-SWGCA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Prairie Junegrass	Koeleria macrantha	2	0.125		Grass	N	N	CP38E-SWGCA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Prairie Dropseed	Sporobolus heterolepis	2	0.125		Grass	N	N	CP38E-SWGCA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Purple Prairie Clover	Dalea purpurea	2	0.125		Legume	N	N	CP38E-SWGCA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Round-Headed Bushclover	Lespedeza capitata	2	0.125		Legume	N	N	CP38E-SWGCA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B

38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Bergamot	Monarda fistulosa	1	0.0625		Forb	N	N	CP38E-SWGCA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Spiderwort	Tradescantia ohiensis	1	0.0625		Forb	N	N	CP38E-SWGCA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Yellow Coneflower	Ratibida pinnata	1	0.0625		Forb	N	N	CP38E-SWGCA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Leadplant	Amorpha canescens	0.5	0.03125		Legume	N	N	CP38E-SWGCA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Rough Blazing Star	Liatris aspera	1	0.03125		Forb	N	N	CP38E-SWGCA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Sky-Blue Aster	Symphyotrichum oolenta	1	0.03125		Forb	N	N	CP38E-SWGCA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Stiff Goldenrod	Oligoneuron rigidum	0.5	0.03125		Forb	N	N	CP38E-SWGCA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Prairie Cinquefoil	Potentilla arguta	0.25	0.015625		Forb	N	N	CP38E-SWGCA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
38	CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-Switch-Ox	38-CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-S	Little Bluestem	Schizachyrium scoparium	24	1.5		Grass	N	N	CP38E-SWGCA(CP25)M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
38	CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-Switch-Ox	38-CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-S	Indiangrass	Sorghastrum nutans	16	1		Grass	N	N	CP38E-SWGCA(CP25)M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
38	CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-Switch-Ox	38-CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-S	Big Bluestem	Andropogon gerardii	8	0.5		Grass	N	N	CP38E-SWGCA(CP25)M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
38	CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-Switch-Ox	38-CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-S	Canada Wildrye	Elymus canadensis	8	0.5		Grass	N	N	CP38E-SWGCA(CP25)M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
38	CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-Switch-Ox	38-CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-S	Switchgrass	Panicum virgatum	8	0.5		Grass	N	N	CP38E-SWGCA(CP25)M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
38	CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-Switch-Ox	38-CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-S	Ox-eye Sunflower	Heliopsis helianthoides	1	0.0625		Forb	N	N	CP38E-SWGCA(CP25)M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
38	CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-Switch-Ox	38-CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-S	Prairie Blazing Star	Liatris pycnostachya	1	0.0625		Forb	N	N	CP38E-SWGCA(CP25)M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
38	CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-Switch-Ox	38-CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-S	Purple Prairie Clover	Dalea purpurea	1	0.0625		Legume	N	N	CP38E-SWGCA(CP25)M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
38	CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-Switch-Ox	38-CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-S	Rosinweed	Silphium integrifolium	1	0.0625		Forb	N	N	CP38E-SWGCA(CP25)M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
38	CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-Switch-Ox	38-CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-S	Bergamot	Monarda fistulosa	0.5	0.03125		Forb	N	N	CP38E-SWGCA(CP25)M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
38	CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-Switch-Ox	38-CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-S	Black-eyed Susan	Rudbeckia hirta	0.5	0.03125		Forb	N	N	CP38E-SWGCA(CP25)M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
38	CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-Switch-Ox	38-CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-S	New England Aster	Symphyotrichum novae-a	0.5	0.03125		Forb	N	N	CP38E-SWGCA(CP25)M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
38	CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-Switch-Ox	38-CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-S	Smooth Blue Aster	Symphyotrichum laeve	0.5	0.03125		Forb	N	N	CP38E-SWGCA(CP25)M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
38	CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-Switch-Ox	38-CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-S	Yellow Coneflower	Ratibida pinnata	0.5	0.03125		Forb	N	N	CP38E-SWGCA(CP25)M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
38	CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-Switch-Ox	38-CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-S	Culver's Root	Veronicastrum virginicum	0	0.015625		Forb	N	N	CP38E-SWGCA(CP25)M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian	Canada Wildrye	Elymus canadensis	16	1		Grass	N	N	CP38E-SWGCA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian	Switchgrass	Panicum virgatum	16	1		Grass	N	N	CP38E-SWGCA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian	Indiangrass	Sorghastrum nutans	12	0.75		Grass	N	N	CP38E-SWGCA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian	Big Bluestem	Andropogon gerardii	8	0.5		Grass	N	N	CP38E-SWGCA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian	Prairie Cordgrass	Spartina pectinata	8	0.5		Grass	N	N	CP38E-SWGCA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian	Fowl Mannagrass	Glyceria striata	4	0.25		Grass	N	N	CP38E-SWGCA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian	Fox Sedge	Carex vulpinoidea	4	0.25		Sedge	N	N	CP38E-SWGCA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian	Cupplant	Silphium perfoliatum	2	0.125		Forb	N	N	CP38E-SWGCA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian	Showy Tick Trefoil	Desmodium canadense	2	0.125		Legume	N	N	CP38E-SWGCA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian	Blue Vervain	Verbena hastata	1	0.0625		Forb	N	N	CP38E-SWGCA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian	Golden Alexanders	Zizia aurea	1	0.0625		Forb	N	N	CP38E-SWGCA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian	Marsh Milkweed	Asclepias incarnata	1	0.0625		Forb	N	N	CP38E-SWGCA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian	Boneset	Eupatorium perfoliatum	0.5	0.03125		Forb	N	N	CP38E-SWGCA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian	Common Ironweed	Vernonia fasciculata	1	0.03125		Forb	N	N	CP38E-SWGCA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian	Joe-pye Weed	Eutrochium maculatum	1	0.03125		Forb	N	N	CP38E-SWGCA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian	Culver's Root	Veronicastrum virginicum	0	0.015625		Forb	N	N	CP38E-SWGCA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-Indian-Pco	38-CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-I	Switchgrass	Panicum virgatum	24	1.5		Grass	N	N	CP38E-SWGCA(CP25)WM	Switch-BB-Cwrye-Indian-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
38	CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-Indian-Pco	38-CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-I	Big Bluestem	Andropogon gerardii	20	1.25		Grass	N	N	CP38E-SWGCA(CP25)WM	Switch-BB-Cwrye-Indian-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
38	CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-Indian-Pco	38-CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-I	Canada Wildrye	Elymus canadensis	16	1		Grass	N	N	CP38E-SWGCA(CP25)WM	Switch-BB-Cwrye-Indian-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
38	CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-Indian-Pco	38-CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-I	Indiangrass	Sorghastrum nutans	12	0.75		Grass	N	N	CP38E-SWGCA(CP25)WM	Switch-BB-Cwrye-Indian-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
38	CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-Indian-Pco	38-CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-I	Prairie Cordgrass	Spartina pectinata	4	0.25		Grass	N	N	CP38E-SWGCA(CP25)WM	Switch-BB-Cwrye-Indian-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
38	CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-Indian-Pco	38-CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-I	Cupplant	Silphium perfoliatum	2	0.125		Forb	N	N	CP38E-SWGCA(CP25)WM	Switch-BB-Cwrye-Indian-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
38	CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-Indian-Pco	38-CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-I	White wild indigo	Baptisia alba	1.5	0.09375		Legume	N	N	CP38E-SWGCA(CP25)WM	Switch-BB-Cwrye-Indian-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
38	CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-Indian-Pco	38-CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-I	Black-eyed Susan	Rudbeckia hirta	0.5	0.03125		Forb	N	N	CP38E-SWGCA(CP25)WM	Switch-BB-Cwrye-Indian-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
38	CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-Indian-Pco	38-CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-I	Common Ironweed	Vernonia fasciculata	0.5	0.03125		Forb	N	N	CP38E-SWGCA(CP25)WM	Switch-BB-Cwrye-Indian-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
38	CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-Indian-Pco	38-CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-I	Golden Alexanders	Zizia aurea	0.5	0.03125		Forb	N	N	CP38E-SWGCA(CP25)WM	Switch-BB-Cwrye-Indian-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
38	CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-Indian-Pco	38-CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-I	New England Aster	Symphyotrichum novae-a	0.5	0.03125		Forb	N	N	CP38E-SWGCA(CP25)WM	Switch-BB-Cwrye-Indian-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
38	CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-Indian-Pco	38-CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-I	Prairie Blazing Star	Liatris pycnostachya	0.5	0.03125		Forb	N	N	CP38E-SWGCA(CP25)WM	Switch-BB-Cwrye-Indian-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
38	CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-Indian-Pco	38-CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-I	Yellow Coneflower	Ratibida pinnata	0.5	0.03125		Forb	N	N	CP38E-SWGCA(CP25)WM	Switch-BB-Cwrye-Indian-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
38	CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-Indian-Pco	38-CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-I	Bergamot	Monarda fistulosa	0.25	0.015625		Forb	N	N	CP38E-SWGCA(CP25)WM	Switch-BB-Cwrye-Indian-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
38	CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-Indian-Pco	38-CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-I	Great St. John's Wort	Hypericum ascyron	0	0.015625		Forb	N	N	CP38E-SWGCA(CP25)WM	Switch-BB-Cwrye-Indian-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pju	Little Bluestem	Schizachyrium scoparium	32	2		Grass	N	N	CP38E-WPHRA(CP25)D	LB-Sgrama-Indian-Pjune-Pdrop-Switch-PPclover-RHbushclover-S
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pju	Sideoats Grama	Bouteloua curtipendula	24	1.5		Grass	N	N	CP38E-WPHRA(CP25)D	LB-Sgrama-Indian-Pjune-Pdrop-Switch-PPclover-RHbushclover-S
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pju	Indiangrass	Sorghastrum nutans	4	0.25		Grass	N	N	CP38E-WPHRA(CP25)D	LB-Sgrama-Indian-Pjune-Pdrop-Switch-PPclover-RHbushclover-S
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pju	Prairie Junegrass	Koeleria macrantha	4	0.25		Grass	N	N	CP38E-WPHRA(CP25)D	LB-Sgrama-Indian-Pjune-Pdrop-Switch-PPclover-RHbushclover-S
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pju	Prairie Dropseed	Sporobolus heterolepis	4	0.25		Grass	N	N	CP38E-WPHRA(CP25)D	LB-Sgrama-Indian-Pjune-Pdrop-Switch-PPclover-RHbushclover-S
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pju	Switchgrass	Panicum virgatum	4	0.25		Grass	N	N	CP38E-WPHRA(CP25)D	LB-Sgrama-Indian-Pjune-Pdrop-Switch-PPclover-RHbushclover-S
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pju	Purple Prairie Clover	Dalea purpurea	2	0.125		Legume	N	N	CP38E-WPHRA(CP25)D	LB-Sgrama-Indian-Pjune-Pdrop-Switch-PPclover-RHbushclover-S
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pju	Round-Headed Bushclover	Lespedeza capitata	2	0.125		Legume	N	N	CP38E-WPHRA(CP25)D	LB-Sgrama-Indian-Pjune-Pdrop-Switch-PPclover-RHbushclover-S
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pju	Spiderwort	Tradescantia ohiensis	1	0.0625		Forb	N	N	CP38E-WPHRA(CP25)D	LB-Sgrama-Indian-Pjune-Pdrop-Switch-PPclover-RHbushclover-S
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pju	Bergamot	Monarda fistulosa	0.5	0.03125		Forb	N	N	CP38E-WPHRA(CP25)D	LB-Sgrama-Indian-Pjune-Pdrop-Switch-PPclover-RHbushclover-S
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pju	Leadplant	Amorpha canescens	0.5	0.03125		Legume	N	N	CP38E-WPHRA(CP25)D	LB-Sgrama-Indian-Pjune-Pdrop-Switch-PPclover-RHbushclover-S
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pju	Rough Blazing Star	Liatris aspera	0.5	0.03125		Forb	N	N	CP38E-WPHRA(CP25)D	LB-Sgrama-Indian-Pjune-Pdrop-Switch-PPclover-RHbushclover-S
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pju	Sky-Blue Aster	Symphyotrichum oolenta	0.5	0.03125		Forb	N	N	CP38E-WPHRA(CP25)D	LB-Sgrama-Indian-Pjune-Pdrop-Switch-PPclover-RHbushclover-S
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pju	Black-eyed Susan	Rudbeckia hirta	0.25	0.015625		Forb	N	N	CP38E-WPHRA(CP25)D	LB-Sgrama-Indian-Pjune-Pdrop-Switch-PPclover-RHbushclover-S
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pju	Prairie Cinquefoil	Potentilla arguta	0.25	0.015625		Forb	N	N	CP38E-WPHRA(CP25)D	LB-Sgrama-Indian-Pjune-Pdrop-Switch-PPclover-RHbushclover-S
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pju	Stiff Goldenrod	Oligoneuron rigidum	0	0.015625		Forb	N	N	CP38E-WPHRA(CP25)D	LB-Sgrama-Indian-Pjune-Pdrop-Switch-PPclover-RHbushclover-S
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pju	Yellow Coneflower	Ratibida pinnata	0	0.015625		Forb	N	N	CP38E-WPHRA(CP25)D	LB-Sgrama-Indian-Pjune-Pdrop-Switch-PPclover-RHbushclover-S

38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-B	Little Bluestem	Schizachyrium scoparium	32	2		Grass	N	N	CP38E-WPHRA(CP25)DM	LB-Sgrama-Pjune-BB-Indian-Sdrop-Bmilkweed-PPclover-Swort-H
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-B	Sideoats Grama	Bouteloua curtipendula	24	1.5		Grass	N	N	CP38E-WPHRA(CP25)DM	LB-Sgrama-Pjune-BB-Indian-Sdrop-Bmilkweed-PPclover-Swort-H
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-B	Prairie Junegrass	Koeleria macrantha	6	0.375		Grass	N	N	CP38E-WPHRA(CP25)DM	LB-Sgrama-Pjune-BB-Indian-Sdrop-Bmilkweed-PPclover-Swort-H
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-B	Big Bluestem	Andropogon gerardii	4	0.25		Grass	N	N	CP38E-WPHRA(CP25)DM	LB-Sgrama-Pjune-BB-Indian-Sdrop-Bmilkweed-PPclover-Swort-H
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-B	Indiangrass	Sorghastrum nutans	4	0.25		Grass	N	N	CP38E-WPHRA(CP25)DM	LB-Sgrama-Pjune-BB-Indian-Sdrop-Bmilkweed-PPclover-Swort-H
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-B	Sand Dropseed	Sporobolus cryptandrus	4	0.25		Grass	N	N	CP38E-WPHRA(CP25)DM	LB-Sgrama-Pjune-BB-Indian-Sdrop-Bmilkweed-PPclover-Swort-H
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-B	Butterfly Milkweed	Asclepias tuberosa	1	0.0625		Forb	N	N	CP38E-WPHRA(CP25)DM	LB-Sgrama-Pjune-BB-Indian-Sdrop-Bmilkweed-PPclover-Swort-H
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-B	Purple Prairie Clover	Dalea purpurea	1	0.0625		Legume	N	N	CP38E-WPHRA(CP25)DM	LB-Sgrama-Pjune-BB-Indian-Sdrop-Bmilkweed-PPclover-Swort-H
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-B	Spiderwort	Tradescantia ohiensis	1	0.0625		Forb	N	N	CP38E-WPHRA(CP25)DM	LB-Sgrama-Pjune-BB-Indian-Sdrop-Bmilkweed-PPclover-Swort-H
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-B	Hoary Vervain	Verbena stricta	0.5	0.03125		Forb	N	N	CP38E-WPHRA(CP25)DM	LB-Sgrama-Pjune-BB-Indian-Sdrop-Bmilkweed-PPclover-Swort-H
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-B	Leadplant	Amorpha canescens	0.5	0.03125		Legume	N	N	CP38E-WPHRA(CP25)DM	LB-Sgrama-Pjune-BB-Indian-Sdrop-Bmilkweed-PPclover-Swort-H
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-B	Prairie Tickseed	Coreopsis palmata	0.5	0.03125		Forb	N	N	CP38E-WPHRA(CP25)DM	LB-Sgrama-Pjune-BB-Indian-Sdrop-Bmilkweed-PPclover-Swort-H
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-B	Silky Aster	Symphyotrichum pratens	0.5	0.03125		Forb	N	N	CP38E-WPHRA(CP25)DM	LB-Sgrama-Pjune-BB-Indian-Sdrop-Bmilkweed-PPclover-Swort-H
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-B	Prairie Cinquefoil	Potentilla arguta	0.25	0.015625		Forb	N	N	CP38E-WPHRA(CP25)DM	LB-Sgrama-Pjune-BB-Indian-Sdrop-Bmilkweed-PPclover-Swort-H
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-B	Spotted Mint	Monarda punctata	0.25	0.015625		Forb	N	N	CP38E-WPHRA(CP25)DM	LB-Sgrama-Pjune-BB-Indian-Sdrop-Bmilkweed-PPclover-Swort-H
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-B	Stiff Goldenrod	Oligoneuron rigidum	0	0.015625		Forb	N	N	CP38E-WPHRA(CP25)DM	LB-Sgrama-Pjune-BB-Indian-Sdrop-Bmilkweed-PPclover-Swort-H
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-B	Yellow Coneflower	Ratibida pinnata	0	0.015625		Forb	N	N	CP38E-WPHRA(CP25)DM	LB-Sgrama-Pjune-BB-Indian-Sdrop-Bmilkweed-PPclover-Swort-H
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB	Little Bluestem	Schizachyrium scoparium	28	1.75		Grass	N	N	CP38E-WPHRA(CP25)M	LB-Cwrye-Sgrama-BB-Indian-Switch-Cmilkvetch-Oxeyesun-Pblzst
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB	Canada Wildrye	Elymus canadensis	12	0.75		Grass	N	N	CP38E-WPHRA(CP25)M	LB-Cwrye-Sgrama-BB-Indian-Switch-Cmilkvetch-Oxeyesun-Pblzst
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB	Sideoats Grama	Bouteloua curtipendula	12	0.75		Grass	N	N	CP38E-WPHRA(CP25)M	LB-Cwrye-Sgrama-BB-Indian-Switch-Cmilkvetch-Oxeyesun-Pblzst
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB	Big Bluestem	Andropogon gerardii	4	0.25		Grass	N	N	CP38E-WPHRA(CP25)M	LB-Cwrye-Sgrama-BB-Indian-Switch-Cmilkvetch-Oxeyesun-Pblzst
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB	Indiangrass	Sorghastrum nutans	4	0.25		Grass	N	N	CP38E-WPHRA(CP25)M	LB-Cwrye-Sgrama-BB-Indian-Switch-Cmilkvetch-Oxeyesun-Pblzst
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB	Switchgrass	Panicum virgatum	4	0.25		Grass	N	N	CP38E-WPHRA(CP25)M	LB-Cwrye-Sgrama-BB-Indian-Switch-Cmilkvetch-Oxeyesun-Pblzst
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB	Canada Milkvetch	Astragalus canadensis	2	0.125		Legume	N	N	CP38E-WPHRA(CP25)M	LB-Cwrye-Sgrama-BB-Indian-Switch-Cmilkvetch-Oxeyesun-Pblzst
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB	Ox-eye Sunflower	Heliopsis helianthoides	1	0.0625		Forb	N	N	CP38E-WPHRA(CP25)M	LB-Cwrye-Sgrama-BB-Indian-Switch-Cmilkvetch-Oxeyesun-Pblzst
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB	Prairie Blazing Star	Liatris pycnostachya	1	0.0625		Forb	N	N	CP38E-WPHRA(CP25)M	LB-Cwrye-Sgrama-BB-Indian-Switch-Cmilkvetch-Oxeyesun-Pblzst
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB	Purple Prairie Clover	Dalea purpurea	1	0.0625		Legume	N	N	CP38E-WPHRA(CP25)M	LB-Cwrye-Sgrama-BB-Indian-Switch-Cmilkvetch-Oxeyesun-Pblzst
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB	Bergamot	Monarda fistulosa	0.5	0.03125		Forb	N	N	CP38E-WPHRA(CP25)M	LB-Cwrye-Sgrama-BB-Indian-Switch-Cmilkvetch-Oxeyesun-Pblzst
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB	Black-eyed Susan	Rudbeckia hirta	0.5	0.03125		Forb	N	N	CP38E-WPHRA(CP25)M	LB-Cwrye-Sgrama-BB-Indian-Switch-Cmilkvetch-Oxeyesun-Pblzst
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB	New England Aster	Symphyotrichum novae-a	0.5	0.03125		Forb	N	N	CP38E-WPHRA(CP25)M	LB-Cwrye-Sgrama-BB-Indian-Switch-Cmilkvetch-Oxeyesun-Pblzst
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB	Sky-Blue Aster	Symphyotrichum oolenta	0.5	0.03125		Forb	N	N	CP38E-WPHRA(CP25)M	LB-Cwrye-Sgrama-BB-Indian-Switch-Cmilkvetch-Oxeyesun-Pblzst
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB	Smooth Blue Aster	Symphyotrichum laeve	0.5	0.03125		Forb	N	N	CP38E-WPHRA(CP25)M	LB-Cwrye-Sgrama-BB-Indian-Switch-Cmilkvetch-Oxeyesun-Pblzst
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB	Yellow Coneflower	Ratibida pinnata	1	0.03125		Forb	N	N	CP38E-WPHRA(CP25)M	LB-Cwrye-Sgrama-BB-Indian-Switch-Cmilkvetch-Oxeyesun-Pblzst
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB	Culver's Root	Veronicastrum virginicum	0	0.015625		Forb	N	N	CP38E-WPHRA(CP25)M	LB-Cwrye-Sgrama-BB-Indian-Switch-Cmilkvetch-Oxeyesun-Pblzst
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsed	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch	Canada Wildrye	Elymus canadensis	16	1		Grass	N	N	CP38E-WPHRA(CP25)W	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsed	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch	Indiangrass	Sorghastrum nutans	12	0.75		Grass	N	N	CP38E-WPHRA(CP25)W	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsed	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch	Switchgrass	Panicum virgatum	12	0.75		Grass	N	N	CP38E-WPHRA(CP25)W	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsed	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch	Big Bluestem	Andropogon gerardii	8	0.5		Grass	N	N	CP38E-WPHRA(CP25)W	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsed	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch	Fox Sedge	Carex vulpinoidea	8	0.5		Sedge	N	N	CP38E-WPHRA(CP25)W	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsed	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch	Prairie Cordgrass	Spartina pectinata	8	0.5		Grass	N	N	CP38E-WPHRA(CP25)W	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsed	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch	Fowl Mannagrass	Glyceria striata	4	0.25		Grass	N	N	CP38E-WPHRA(CP25)W	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsed	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch	Cupplant	Silphium perfoliatum	2	0.125		Forb	N	N	CP38E-WPHRA(CP25)W	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsed	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch	Showy Tick Trefoil	Desmodium canadense	2	0.125		Legume	N	N	CP38E-WPHRA(CP25)W	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsed	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch	Blue Vervain	Verbena hastata	1	0.0625		Forb	N	N	CP38E-WPHRA(CP25)W	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsed	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch	Golden Alexanders	Zizia aurea	1	0.0625		Forb	N	N	CP38E-WPHRA(CP25)W	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsed	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch	Marsh Milkweed	Asclepias incarnata	1	0.0625		Forb	N	N	CP38E-WPHRA(CP25)W	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsed	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch	Boneset	Eupatorium perfoliatum	0.5	0.03125		Forb	N	N	CP38E-WPHRA(CP25)W	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsed	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch	Common Ironweed	Vernonia fasciculata	1	0.03125		Forb	N	N	CP38E-WPHRA(CP25)W	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsed	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch	Joe-pye Weed	Eutrochium maculatum	1	0.03125		Forb	N	N	CP38E-WPHRA(CP25)W	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsed	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch	Culver's Root	Veronicastrum virginicum	0	0.015625		Forb	N	N	CP38E-WPHRA(CP25)W	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38E-Monarch(CP1)-Tim-Orc-RC-Cmilkweed-Besus-O	38-CP38E-Monarch(CP1)-Tim-Orc-RC-Cmilkweed	Common Milkweed	Asclepias syriaca	6	0.378	0.6	Forb	N	X	CP38E-Monarch(CP1)	Tim-Orc-RC-Cmilkweed-Besus-Oxeyesun-Sgrod
38	CP38E-Monarch(CP1)-Tim-Orc-RC-Cmilkweed-	38-CP38E-Monarch(CP1)-Tim-Orc-RC-Cm	Black-Eyed Susan	Rudbeckia hirta	0.96	0.06	2.2	Forb	N	X	CP38E-Monarch(CP1)	Tim-Orc-RC-Cmilkweed-Besus-Oxeyesun-Sgrod
38	CP38E-Monarch(CP1)-Tim-Orc-RC-Cmilkweed-	38-CP38E-Monarch(CP1)-Tim-Orc-RC-Cm	Ox-eye Sunflower	Heliopsis helianthoides	0.96	0.06	0.2	Forb	N	X	CP38E-Monarch(CP1)	Tim-Orc-RC-Cmilkweed-Besus-Oxeyesun-Sgrod
38	CP38E-Monarch(CP1)-Tim-Orc-RC-Cmilkweed-	38-CP38E-Monarch(CP1)-Tim-Orc-RC-Cm	Stiff Goldenrod	Oligoneuron rigidum	0.96	0.06	1.1	Forb	N	X	CP38E-Monarch(CP1)	Tim-Orc-RC-Cmilkweed-Besus-Oxeyesun-Sgrod
38	CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cv	38-CP38E-Monarch(CP2)-BB-LB-Indian-Sg	Big Bluestem	Andropogon gerardii	4	0.25	1	Grass	N	X	CP38E-Monarch(CP2)	BB-LB-Indian-Sgrama-Cwrye-Wpclover-Cmilkweed-Besus-Berg-Sg
38	CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cv	38-CP38E-Monarch(CP2)-BB-LB-Indian-Sg	Little Bluestem	Schizachyrium scoparium	24	1.5	8.3	Grass	N	X	CP38E-Monarch(CP2)	BB-LB-Indian-Sgrama-Cwrye-Wpclover-Cmilkweed-Besus-Berg-Sg
38	CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cv	38-CP38E-Monarch(CP2)-BB-LB-Indian-Sg	Indiangrass	Sorghastrum nutans	4	0.25	1.2	Grass	N	X	CP38E-Monarch(CP2)	BB-LB-Indian-Sgrama-Cwrye-Wpclover-Cmilkweed-Besus-Berg-Sg
38	CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cv	38-CP38E-Monarch(CP2)-BB-LB-Indian-Sg	Sideoats Grama	Bouteloua curtipendula	12	0.75	2.2	Grass	N	X	CP38E-Monarch(CP2)	BB-LB-Indian-Sgrama-Cwrye-Wpclover-Cmilkweed-Besus-Berg-Sg
38	CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cv	38-CP38E-Monarch(CP2)-BB-LB-Indian-Sg	Canada Wildrye	Elymus canadensis	16	1	2	Grass	N	X	CP38E-Monarch(CP2)	BB-LB-Indian-Sgrama-Cwrye-Wpclover-Cmilkweed-Besus-Berg-Sg
38	CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cv	38-CP38E-Monarch(CP2)-BB-LB-Indian-Sg	white prairie clover	Dalea candida	3.04	0.19	1.2	Legume	N	X	CP38E-Monarch(CP2)	BB-LB-Indian-Sgrama-Cwrye-Wpclover-Cmilkweed-Besus-Berg-Sg
38	CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cv	38-CP38E-Monarch(CP2)-BB-LB-Indian-Sg	Common Milkweed	Asclepias syriaca	4.96	0.31	0.5	Forb	N	X	CP38E-Monarch(CP2)	BB-LB-Indian-Sgrama-Cwrye-Wpclover-Cmilkweed-Besus-Berg-Sg
38	CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cv	38-CP38E-Monarch(CP2)-BB-LB-Indian-Sg	Black-eyed Susan	Rudbeckia hirta	0.96	0.06	2.2	Forb	N	X	CP38E-Monarch(CP2)	BB-LB-Indian-Sgrama-Cwrye-Wpclover-Cmilkweed-Besus-Berg-Sg
38	CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cv	38-CP38E-Monarch(CP2)-BB-LB-Indian-Sg	Bergamot	Monarda fistulosa	0.96	0.06	1.8	Forb	N	X	CP38E-Monarch(CP2)	BB-LB-Indian-Sgrama-Cwrye-Wpclover-Cmilkweed-Besus-Berg-Sg
38	CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cv	38-CP38E-Monarch(CP2)-BB-LB-Indian-Sg	Stiff Goldenrod	Oligoneuron rigidum	0.96	0.06	1.1	Forb	N	X	CP38E-Monarch(CP2)	BB-LB-Indian-Sgrama-Cwrye-Wpclover-Cmilkweed-Besus-Berg-Sg
38	CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cv	38-CP38E-Monarch(CP2)-BB-LB-Indian-Sg	Showy Goldenrod	Solidago speciosa	0.48	0.03	1.1	Forb	N	X	CP38E-Monarch(CP2)	BB-LB-Indian-Sgrama-Cwrye-Wpclover-Cmilkweed-Besus-Berg-Sg
38	CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cv	38-CP38E-Monarch(CP2)-BB-LB-Indian-Sg	New England Aster	Symphyotrichum novae-angliae	0.48	0.03	0.8	Forb	N	X	CP38E-Monarch(CP2)	BB-LB-Indian-Sgrama-Cwrye-Wpclover-Cmilkweed-Besus-Berg-Sg

38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	38-CP38E-Monarch(CP25)-BB-LB-Indian-S	Big Bluestem	Andropogon gerardii	4	0.25	1	Grass	N	X	CP38E-Monarch(CP25)	BB-LB-Indian-Sgrama-Cwrye-Wpclover-Cmilkweed-Besus-Berg-Sg
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	38-CP38E-Monarch(CP25)-BB-LB-Indian-S	Little Bluestem	Schizachyrium scoparium	16	1	5.6	Grass	N	X	CP38E-Monarch(CP25)	BB-LB-Indian-Sgrama-Cwrye-Wpclover-Cmilkweed-Besus-Berg-Sg
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	38-CP38E-Monarch(CP25)-BB-LB-Indian-S	Indiangrass	Sorghastrum nutans	4	0.25	1.2	Grass	N	X	CP38E-Monarch(CP25)	BB-LB-Indian-Sgrama-Cwrye-Wpclover-Cmilkweed-Besus-Berg-Sg
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	38-CP38E-Monarch(CP25)-BB-LB-Indian-S	Sideoats Grama	Bouteloua curtipendula	8	0.5	1.5	Grass	N	X	CP38E-Monarch(CP25)	BB-LB-Indian-Sgrama-Cwrye-Wpclover-Cmilkweed-Besus-Berg-Sg
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	38-CP38E-Monarch(CP25)-BB-LB-Indian-S	Canada Wildrye	Elymus canadensis	8	0.5	1	Grass	N	X	CP38E-Monarch(CP25)	BB-LB-Indian-Sgrama-Cwrye-Wpclover-Cmilkweed-Besus-Berg-Sg
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	38-CP38E-Monarch(CP25)-BB-LB-Indian-S	white prairie clover	Dalea candida	3.04	0.19	1.2	Legume	N	X	CP38E-Monarch(CP25)	BB-LB-Indian-Sgrama-Cwrye-Wpclover-Cmilkweed-Besus-Berg-Sg
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	38-CP38E-Monarch(CP25)-BB-LB-Indian-S	Common Milkweed	Asclepias syriaca	4.96	0.31	0.5	Forb	N	X	CP38E-Monarch(CP25)	BB-LB-Indian-Sgrama-Cwrye-Wpclover-Cmilkweed-Besus-Berg-Sg
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	38-CP38E-Monarch(CP25)-BB-LB-Indian-S	Black-eyed Susan	Rudbeckia hirta	0.96	0.06	2.2	Forb	N	X	CP38E-Monarch(CP25)	BB-LB-Indian-Sgrama-Cwrye-Wpclover-Cmilkweed-Besus-Berg-Sg
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	38-CP38E-Monarch(CP25)-BB-LB-Indian-S	Bergamot	Monarda fistulosa	0.96	0.06	1.8	Forb	N	X	CP38E-Monarch(CP25)	BB-LB-Indian-Sgrama-Cwrye-Wpclover-Cmilkweed-Besus-Berg-Sg
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	38-CP38E-Monarch(CP25)-BB-LB-Indian-S	Stiff Goldenrod	Oligoneuron rigidum	0.96	0.06	1.1	Forb	N	X	CP38E-Monarch(CP25)	BB-LB-Indian-Sgrama-Cwrye-Wpclover-Cmilkweed-Besus-Berg-Sg
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	38-CP38E-Monarch(CP25)-BB-LB-Indian-S	Showy Goldenrod	Solidago speciosa	0.48	0.03	1.1	Forb	N	X	CP38E-Monarch(CP25)	BB-LB-Indian-Sgrama-Cwrye-Wpclover-Cmilkweed-Besus-Berg-Sg
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	38-CP38E-Monarch(CP25)-BB-LB-Indian-S	New England Aster	Symphyotrichum novae-angliae	0.48	0.03	0.8	Forb	N	X	CP38E-Monarch(CP25)	BB-LB-Indian-Sgrama-Cwrye-Wpclover-Cmilkweed-Besus-Berg-Sg
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	38-CP38E-Monarch(CP25)-BB-LB-Indian-S	Rough Blazing Star	Liatris aspera	0.48	0.03	0.2	Forb	N	X	CP38E-Monarch(CP25)	BB-LB-Indian-Sgrama-Cwrye-Wpclover-Cmilkweed-Besus-Berg-Sg
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	38-CP38E-Monarch(CP25)-BB-LB-Indian-S	Rattlesnake Master	Eryngium yuccifolium	0.96	0.06	0.2	Forb	N	X	CP38E-Monarch(CP25)	BB-LB-Indian-Sgrama-Cwrye-Wpclover-Cmilkweed-Besus-Berg-Sg
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	38-CP38E-Monarch(CP25)-BB-LB-Indian-S	Cupplant	Silphium perfoliatum	2.08	0.13	0.1	Forb	N	X	CP38E-Monarch(CP25)	BB-LB-Indian-Sgrama-Cwrye-Wpclover-Cmilkweed-Besus-Berg-Sg
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	38-CP38E-Monarch(CP25)-BB-LB-Indian-S	Sky-Blue Aster	Symphyotrichum oolentangiense	0.96	0.06	1.9	Forb	N	X	CP38E-Monarch(CP25)	BB-LB-Indian-Sgrama-Cwrye-Wpclover-Cmilkweed-Besus-Berg-Sg
38	CP3-1-BB-LB-Indian-Sgrama-Sgrod-Ycone-PPcl	38-CP3-1-BB-LB-Indian-Sgrama-Sgrod-Yc	Big Bluestem	Andropogon gerardii	8	0.5	1.9	Grass	N	X	CP3-1	BB-LB-Indian-Sgrama-Sgrod-Ycone-PPclover
38	CP3-1-BB-LB-Indian-Sgrama-Sgrod-Ycone-PPcl	38-CP3-1-BB-LB-Indian-Sgrama-Sgrod-Yc	Little Bluestem	Schizachyrium scoparium	24	1.5	8.3	Grass	N	X	CP3-1	BB-LB-Indian-Sgrama-Sgrod-Ycone-PPclover
38	CP3-1-BB-LB-Indian-Sgrama-Sgrod-Ycone-PPcl	38-CP3-1-BB-LB-Indian-Sgrama-Sgrod-Yc	Indiangrass	Sorghastrum nutans	8	0.5	2.3	Grass	N	X	CP3-1	BB-LB-Indian-Sgrama-Sgrod-Ycone-PPclover
38	CP3-1-BB-LB-Indian-Sgrama-Sgrod-Ycone-PPcl	38-CP3-1-BB-LB-Indian-Sgrama-Sgrod-Yc	Sideoats Grama	Bouteloua curtipendula	24	1.5	4.4	Grass	N	X	CP3-1	BB-LB-Indian-Sgrama-Sgrod-Ycone-PPclover
38	CP3-1-BB-LB-Indian-Sgrama-Sgrod-Ycone-PPcl	38-CP3-1-BB-LB-Indian-Sgrama-Sgrod-Yc	Stiff Goldenrod	Oligoneuron rigidum	1	0.0625	1.1	Forb	N	X	CP3-1	BB-LB-Indian-Sgrama-Sgrod-Ycone-PPclover
38	CP3-1-BB-LB-Indian-Sgrama-Sgrod-Ycone-PPcl	38-CP3-1-BB-LB-Indian-Sgrama-Sgrod-Yc	Yellow Coneflower	Ratibida pinnata	1	0.0625	0.7	Forb	N	X	CP3-1	BB-LB-Indian-Sgrama-Sgrod-Ycone-PPclover
38	CP3-1-BB-LB-Indian-Sgrama-Sgrod-Ycone-PPcl	38-CP3-1-BB-LB-Indian-Sgrama-Sgrod-Yc	Purple Prairie Clover	Dalea purpurea	2	0.125	1	Legume	N	X	CP3-1	BB-LB-Indian-Sgrama-Sgrod-Ycone-PPclover
38	CP3-2-BB-Switch-LB-Indian-Cwrye-Ycone-Besu	38-CP3-2-BB-Switch-LB-Indian-Cwrye-Yc	Big Bluestem	Andropogon gerardii	8	0.5	1.9	Grass	N	X	CP3-2	BB-Switch-LB-Indian-Cwrye-Ycone-Besus-Berg
38	CP3-2-BB-Switch-LB-Indian-Cwrye-Ycone-Besu	38-CP3-2-BB-Switch-LB-Indian-Cwrye-Yc	Switchgrass	Panicum virgatum	8	0.5	4.5	Grass	N	X	CP3-2	BB-Switch-LB-Indian-Cwrye-Ycone-Besus-Berg
38	CP3-2-BB-Switch-LB-Indian-Cwrye-Ycone-Besu	38-CP3-2-BB-Switch-LB-Indian-Cwrye-Yc	Little Bluestem	Schizachyrium scoparium	20	1.25	6.9	Grass	N	X	CP3-2	BB-Switch-LB-Indian-Cwrye-Ycone-Besus-Berg
38	CP3-2-BB-Switch-LB-Indian-Cwrye-Ycone-Besu	38-CP3-2-BB-Switch-LB-Indian-Cwrye-Yc	Indiangrass	Sorghastrum nutans	16	1	4.5	Grass	N	X	CP3-2	BB-Switch-LB-Indian-Cwrye-Ycone-Besus-Berg
38	CP3-2-BB-Switch-LB-Indian-Cwrye-Ycone-Besu	38-CP3-2-BB-Switch-LB-Indian-Cwrye-Yc	Canada Wildrye	Elymus canadensis	16	1	2	Grass	N	X	CP3-2	BB-Switch-LB-Indian-Cwrye-Ycone-Besus-Berg
38	CP3-2-BB-Switch-LB-Indian-Cwrye-Ycone-Besu	38-CP3-2-BB-Switch-LB-Indian-Cwrye-Yc	Yellow Coneflower	Ratibida pinnata	1	0.0625	0.7	Forb	N	X	CP3-2	BB-Switch-LB-Indian-Cwrye-Ycone-Besus-Berg
38	CP3-2-BB-Switch-LB-Indian-Cwrye-Ycone-Besu	38-CP3-2-BB-Switch-LB-Indian-Cwrye-Yc	Black-Eyed Susan	Rudbeckia hirta	1	0.0625	2.3	Forb	N	X	CP3-2	BB-Switch-LB-Indian-Cwrye-Ycone-Besus-Berg
38	CP3-2-BB-Switch-LB-Indian-Cwrye-Ycone-Besu	38-CP3-2-BB-Switch-LB-Indian-Cwrye-Yc	Bergamot	Monarda fistulosa	1	0.0625	1.8	Forb	N	X	CP3-2	BB-Switch-LB-Indian-Cwrye-Ycone-Besus-Berg
38	CP3-3-BB-LB-Indian-Switch-Sgrama-PPclover-B	38-CP3-3-BB-LB-Indian-Switch-Sgrama-PP	Big Bluestem	Andropogon gerardii	8	0.5	1.9	Grass	N	X	CP3-3	BB-LB-Indian-Switch-Sgrama-PPclover-Berg-Ycone
38	CP3-3-BB-LB-Indian-Switch-Sgrama-PPclover-B	38-CP3-3-BB-LB-Indian-Switch-Sgrama-PP	Little Bluestem	Schizachyrium scoparium	24	1.5	8.3	Grass	N	X	CP3-3	BB-LB-Indian-Switch-Sgrama-PPclover-Berg-Ycone
38	CP3-3-BB-LB-Indian-Switch-Sgrama-PPclover-B	38-CP3-3-BB-LB-Indian-Switch-Sgrama-PP	Indiangrass	Sorghastrum nutans	8	0.5	2.3	Grass	N	X	CP3-3	BB-LB-Indian-Switch-Sgrama-PPclover-Berg-Ycone
38	CP3-3-BB-LB-Indian-Switch-Sgrama-PPclover-B	38-CP3-3-BB-LB-Indian-Switch-Sgrama-PP	Switchgrass	Panicum virgatum	8	0.5	4.5	Grass	N	X	CP3-3	BB-LB-Indian-Switch-Sgrama-PPclover-Berg-Ycone
38	CP3-3-BB-LB-Indian-Switch-Sgrama-PPclover-B	38-CP3-3-BB-LB-Indian-Switch-Sgrama-PP	Sideoats Grama	Bouteloua curtipendula	16	1	3	Grass	N	X	CP3-3	BB-LB-Indian-Switch-Sgrama-PPclover-Berg-Ycone
38	CP3-3-BB-LB-Indian-Switch-Sgrama-PPclover-B	38-CP3-3-BB-LB-Indian-Switch-Sgrama-PP	Purple Prairie Clover	Dalea purpurea	2	0.125	1	Legume	N	X	CP3-3	BB-LB-Indian-Switch-Sgrama-PPclover-Berg-Ycone
38	CP3-3-BB-LB-Indian-Switch-Sgrama-PPclover-B	38-CP3-3-BB-LB-Indian-Switch-Sgrama-PP	Bergamot	Monarda fistulosa	1	0.0625	1.8	Forb	N	X	CP3-3	BB-LB-Indian-Switch-Sgrama-PPclover-Berg-Ycone
38	CP3-3-BB-LB-Indian-Switch-Sgrama-PPclover-B	38-CP3-3-BB-LB-Indian-Switch-Sgrama-PP	Yellow Coneflower	Ratibida pinnata	1	0.0625	0.7	Forb	N	X	CP3-3	BB-LB-Indian-Switch-Sgrama-PPclover-Berg-Ycone
38	CP3-4-Switch-Pcord-BB-Indian-Cwrye-Ciron-Cu	38-CP3-4-Switch-Pcord-BB-Indian-Cwrye-C	Switchgrass	Panicum virgatum	16	1	9	Grass	N	X	CP3-4	Switch-Pcord-BB-Indian-Cwrye-Ciron-Cup-Bvervain
38	CP3-4-Switch-Pcord-BB-Indian-Cwrye-Ciron-Cu	38-CP3-4-Switch-Pcord-BB-Indian-Cwrye-C	Prairie Cordgrass	Spartina pectinata	8	0.5	1.3	Grass	N		CP3-4	Switch-Pcord-BB-Indian-Cwrye-Ciron-Cup-Bvervain
38	CP3-4-Switch-Pcord-BB-Indian-Cwrye-Ciron-Cu	38-CP3-4-Switch-Pcord-BB-Indian-Cwrye-C	Big Bluestem	Andropogon gerardii	16	1	3.8	Grass	N	X	CP3-4	Switch-Pcord-BB-Indian-Cwrye-Ciron-Cup-Bvervain
38	CP3-4-Switch-Pcord-BB-Indian-Cwrye-Ciron-Cu	38-CP3-4-Switch-Pcord-BB-Indian-Cwrye-C	Indiangrass	Sorghastrum nutans	16	1	4.5	Grass	N	X	CP3-4	Switch-Pcord-BB-Indian-Cwrye-Ciron-Cup-Bvervain
38	CP3-4-Switch-Pcord-BB-Indian-Cwrye-Ciron-Cu	38-CP3-4-Switch-Pcord-BB-Indian-Cwrye-C	Canada Wildrye	Elymus canadensis	16	1	2	Grass	N	X	CP3-4	Switch-Pcord-BB-Indian-Cwrye-Ciron-Cup-Bvervain
38	CP3-4-Switch-Pcord-BB-Indian-Cwrye-Ciron-Cu	38-CP3-4-Switch-Pcord-BB-Indian-Cwrye-C	Common Ironweed	Vernonia fasciculata	1	0.0625	0.5	Forb	N	X	CP3-4	Switch-Pcord-BB-Indian-Cwrye-Ciron-Cup-Bvervain
38	CP3-4-Switch-Pcord-BB-Indian-Cwrye-Ciron-Cu	38-CP3-4-Switch-Pcord-BB-Indian-Cwrye-C	Cupplant	Silphium perfoliatum	2	0.125	0.1	Forb	N	X	CP3-4	Switch-Pcord-BB-Indian-Cwrye-Ciron-Cup-Bvervain
38	CP3-4-Switch-Pcord-BB-Indian-Cwrye-Ciron-Cu	38-CP3-4-Switch-Pcord-BB-Indian-Cwrye-C	Blue Vervain	Verbena hastata	1	0.0625	2.2	Forb	N	X	CP3-4	Switch-Pcord-BB-Indian-Cwrye-Ciron-Cup-Bvervain
38	CP3-5-Switch-Pcord-BB-Cwrye-Berg-Ycone-NEA	38-CP3-5-Switch-Pcord-BB-Cwrye-Berg-Yc	Switchgrass	Panicum virgatum	32	2	17.9	Grass	N	X	CP3-5	Switch-Pcord-BB-Cwrye-Berg-Ycone-NEaster
38	CP3-5-Switch-Pcord-BB-Cwrye-Berg-Ycone-NEA	38-CP3-5-Switch-Pcord-BB-Cwrye-Berg-Yc	Prairie Cordgrass	Spartina pectinata	4	0.25	0.7	Grass	N		CP3-5	Switch-Pcord-BB-Cwrye-Berg-Ycone-NEaster
38	CP3-5-Switch-Pcord-BB-Cwrye-Berg-Ycone-NEA	38-CP3-5-Switch-Pcord-BB-Cwrye-Berg-Yc	Big Bluestem	Andropogon gerardii	16	1	3.8	Grass	N	X	CP3-5	Switch-Pcord-BB-Cwrye-Berg-Ycone-NEaster
38	CP3-5-Switch-Pcord-BB-Cwrye-Berg-Ycone-NEA	38-CP3-5-Switch-Pcord-BB-Cwrye-Berg-Yc	Canada Wildrye	Elymus canadensis	16	1	2	Grass	N	X	CP3-5	Switch-Pcord-BB-Cwrye-Berg-Ycone-NEaster
38	CP3-5-Switch-Pcord-BB-Cwrye-Berg-Ycone-NEA	38-CP3-5-Switch-Pcord-BB-Cwrye-Berg-Yc	Monarda fistulosa	Monarda fistulosa	1	0.0625	1.8	Forb	N	X	CP3-5	Switch-Pcord-BB-Cwrye-Berg-Ycone-NEaster
38	CP3-5-Switch-Pcord-BB-Cwrye-Berg-Ycone-NEA	38-CP3-5-Switch-Pcord-BB-Cwrye-Berg-Yc	Yellow Coneflower	Ratibida pinnata	1	0.0625	0.7	Forb	N	X	CP3-5	Switch-Pcord-BB-Cwrye-Berg-Ycone-NEaster
38	CP3-5-Switch-Pcord-BB-Cwrye-Berg-Ycone-NEA	38-CP3-5-Switch-Pcord-BB-Cwrye-Berg-Yc	New England Aster	Symphyotrichum novae-angliae	1	0.0625	1.7	Forb	N	X	CP3-5	Switch-Pcord-BB-Cwrye-Berg-Ycone-NEaster

STD	Mix #	std-mix	Common Name	Scientific Name	PLS (oz./A)	PLS (lbs./A)	Seeds/Square Foot	Type	Intro / Native	Poll. (Y/N)	MIXDescrip	Mix No.	MR
	0												

STD	Mix #	std-mix	Common Name	Scientific Name	PLS (oz./A)	PLS (lbs./A)	Seeds/Square Foot	Type	Intro / Native	Poll. (Y/N)	Mix No.	MR	Mix Components
38	CP3-1-BB-LB-Indian-Sgrama-Sgrod-Ycone-PPcl	38-CP3-1-BB-LB-Indian-Sgrama-Sgrod-Yc	Big Bluestem	Andropogon gerardii	8	0.5	1.9	Grass	N	X	CP3-1		BB-LB-Indian-Sgrama-Sgrod-Ycone-PPclover
38	CP3-1-BB-LB-Indian-Sgrama-Sgrod-Ycone-PPcl	38-CP3-1-BB-LB-Indian-Sgrama-Sgrod-Yc	Indiangrass	Sorghastrum nutans	8	0.5	2.3	Grass	N	X	CP3-1		BB-LB-Indian-Sgrama-Sgrod-Ycone-PPclover
38	CP3-1-BB-LB-Indian-Sgrama-Sgrod-Ycone-PPcl	38-CP3-1-BB-LB-Indian-Sgrama-Sgrod-Yc	Little Bluestem	Schizachyrium scoparium	24	1.5	8.3	Grass	N	X	CP3-1		BB-LB-Indian-Sgrama-Sgrod-Ycone-PPclover
38	CP3-1-BB-LB-Indian-Sgrama-Sgrod-Ycone-PPcl	38-CP3-1-BB-LB-Indian-Sgrama-Sgrod-Yc	Purple Prairie Clover	Dalea purpurea	2	0.125	1	Legume	N	X	CP3-1		BB-LB-Indian-Sgrama-Sgrod-Ycone-PPclover
38	CP3-1-BB-LB-Indian-Sgrama-Sgrod-Ycone-PPcl	38-CP3-1-BB-LB-Indian-Sgrama-Sgrod-Yc	Sideoats Grama	Bouteloua curtipendula	24	1.5	4.4	Grass	N	X	CP3-1		BB-LB-Indian-Sgrama-Sgrod-Ycone-PPclover
38	CP3-1-BB-LB-Indian-Sgrama-Sgrod-Ycone-PPcl	38-CP3-1-BB-LB-Indian-Sgrama-Sgrod-Yc	Stiff Goldenrod	Oligoneuron rigidum	1	0.0625	1.1	Forb	N	X	CP3-1		BB-LB-Indian-Sgrama-Sgrod-Ycone-PPclover
38	CP3-1-BB-LB-Indian-Sgrama-Sgrod-Ycone-PPcl	38-CP3-1-BB-LB-Indian-Sgrama-Sgrod-Yc	Yellow Coneflower	Ratibida pinnata	1	0.0625	0.7	Forb	N	X	CP3-1		BB-LB-Indian-Sgrama-Sgrod-Ycone-PPclover

Albert Lea M500 E-line

Stormwater Pollution Prevention Plan

Ventura to Farmington A-line Abandonment and Capacity Replacement Project –Albert Lea M500 E-line

Northern Natural Gas

Steele County, Minnesota

February 2026

Project Number: 172608813

FERC Docket CP26- -000

CERTIFICATION STATEMENT

In accordance with Northern Natural Gas and Minnesota National Pollutant Discharge Elimination System (NPDES)/State Disposal System (SDS) General Permit No. MNR100001, all contractors and subcontractors identified in this Stormwater Pollution Prevention Plan will sign a copy of the following certification statement before conducting any professional service at the Project area:

> I certify under penalty of law that I understand the terms and conditions of the Minnesota NPDES/SDS general permit that authorizes the storm water discharges associated with construction activity from the project site as part of this certification. Further, by my signature, I understand that I am becoming a co-permittee, along with the owner(s) and other contractors and subcontractors signing such certifications, to the Minnesota Pollution Control Agency NPDES/SDS General Permit No. MNR100001 for "Stormwater Associated with Construction Activity" at the identified site. As a co-permittee, I understand that I, and my company, are legally required under the Clean Water Act and the Code of Minnesota, to ensure compliance with the terms and conditions of the storm water pollution prevention plan developed under this NPDES/SDS permit and the terms of this NPDES/SDS permit.
>
> I certify under penalty of law that I have reviewed, understand and will comply with this document, the NPDES/SDS permit, and all attachments. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Authorized Signature	Authorized Signature
Date	Date
TBD	TBD
Name – Contractor’s Contact	Name – Contractor’s Contact
Title	Title
Company Name	Company Name
Address	Address
Telephone Number	Telephone Number

Stormwater Pollution Prevention Plan (SWPPP)
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ATTACHMENT A: Project Location Map
ATTACHMENT B: Soils Map
ATTACHMENT C: Erosion Control Map
ATTACHMENT D: Northern's Engineering Standard 7507
ATTACHMENT E: NRCS Mapped Soils Table
ATTACHMENT F: Spill Prevention, Containment, and Countermeasure Plan
ATTACHMENT G: SWPPP Inspection & Maintenance Report and Rainfall Inspection Chart
ATTACHMENT H: Upland Erosion Control, Revegetation, and Maintenance Plan
ATTACHMENT I: Wetland and Waterbody Construction and Mitigation Procedures
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ATTACHMENT K: MPCA Authorization Request for NPDES Coverage Under MNR100001 - Pending
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ATTACHMENT O: Erosion Control Certification Documentation for Northern Natural Gas Environmental Inspection Staff – Pending Selection of Environmental Inspector
ATTACHMENT P: Northern's Horizontal Directional Drill Monitoring, Inadvertent Return Response, and Contingency Plan (included by reference only)
ATTACHMENT Q: Noxious Weed Plan (included by reference only)
ATTACHMENT R: Steep Slopes Table
ATTACHMENT S: NRCS/Minnesota Board of Water and Soil Resources (BWSR) seed mix

INTRODUCTION

The following documents and related information are incorporated by reference to comprise the Northern Natural Gas (Northern) Stormwater Pollution Prevention Plan (SWPPP). This Plan and the referenced materials must be retained at the construction site from the date of project initiation to the date of permit termination conditions and provided to the Minnesota Pollution Control Agency (MPCA), U.S. Environmental Protection Agency (EPA) or other regulatory agency upon request to satisfy the requirements of MPCA's Stormwater Permit for Construction Activity (MNR100001). The MPCA has approval to administer the EPA's National Pollutant Discharge Elimination System (NPDES) program and the Minnesota State Disposal System (SDS). As needed, this SWPPP will be amended to reflect any changes in design, construction, operation, or maintenance.

1. PROJECT LOCATION AND DESCRIPTION

1. PROJECT LOCATION

Northern proposes to construct and operate an approximately 2.09-mile extension of its M500 E-line pipeline in Steele County, Minnesota. The proposed extension will be tied in below ground at the current terminus of the M500 E-line on the north side of 340th Street in Section 31, T105N, R21W, Steele County, Minnesota. Northern also will remove a hot tap fitting on its existing 30-inch diameter D-line and tie over from the M500 E-line to the M500 D-line at the take off to remove the existing connection. The terminus of the proposed extension will continue below ground into the south end of the NL27 Albert Lea M500 E-line on the north side of State Highway 30, in Section 19, T105N, R21W, Steele County, Minnesota. This work is known as the Albert Lea M500 E-Line Extension Project (Project).

To minimize methane venting to the atmosphere during tie-in activities, Northern will utilize temporary compression to evacuate gas from the D- and E-lines to adjacent mainlines prior to the tie-ins. The location for the temporary compression is the Owatonna compressor station, located south of County Highway 7, Section 29, T106N, R21W, Steele County, Minnesota.

Due to its proximity to the Albert Lea M500 E-line, Northern also is including the proposed temporary compression for the A-line abandonment at the La Crosse BL MNB73201 launcher /ABA05, which will be utilized to evacuate gas from approximately 105.76 miles of A-line and 25.35 miles of the J-line to an adjacent mainline. Approximately six portable natural-gas fired 300 HP units will be utilized continuously for approximately 80 hours to reduce the pressure in the A-line to approximately 10 to 15 psig. No land disturbing activities are planned at the La Crosse BL MNB73201 launcher /ABA05 as part of this project.

A Project location map is included in Attachment A.

2. PROJECT DESCRIPTION

As described above, The Project will involve the installation of a pipeline extension of Northern's E-line. There will be no facility at the north end of the V2F Albert Lea M500 E-line. There will be a below-grade continuation to the NL27 Albert Lea M500 E-line on the north side of Highway 30 West.

Northern will utilize its existing Owatonna compressor station for temporary compression. Approximately two portable natural-gas fired 300-horsepower units will be utilized for about 55 hours to reduce the pressure to approximately 10 to 15 psig. No land disturbing activities are planned at the Owatonna compressor station as part of this project.

The Project will generally be installed parallel, utilizing a 25-foot-offset, to existing Northern mainlines. The pipeline will be installed within a 100-foot-wide nominal construction corridor and a 75-foot-wide construction corridor in a wetland except in ALO-W010 where Northern will neck down to 70 feet. In addition to the construction corridor, Northern will utilize extra temporary workspace (ETWS), existing driveways and farm roads, temporary access roads (TAR), and staging areas during construction.

The purpose of this Project is to enhance the safety, reliability, security, and operational efficiency of Northern's pipeline system and to serve the firm transportation requirements of Northern's customers in Minnesota.

Northern plans to construct the Project components in accordance with the Federal Energy Regulatory Commission's (FERC) requirements for Section 7 authorizations. The Project duration will be approximately seven months and is scheduled to begin in spring 2027, or as soon as all required permits are obtained. The A-line abandonment will occur in 2029.

The proposed Project workspaces and additional features are shown on the attached maps (Attachments A-C).

Construction activities will include: clearing, grading, excavation, installation of the pipeline (via horizontal directional drill (HDD) and open trench), pressure testing, backfilling, clean up and site restoration. The Project workspace will be returned, as near as practicable, to pre-existing conditions. Temporary compression sites will be used to park trailers that contain compressor units.

The Project will include approximately 43.49 acres of temporary disturbance. The workspaces for the temporary compression are not included as no ground disturbance is planned. No permanent impacts are included with this project. There are approximately 0.21 acre of existing impervious surface within the Project area. The Project will result in 0.0 acre of new impervious surface within the Project area.

Project Acreage Summary	
Existing Impervious Area	Approximately 0.21 acre
Post Construction New Impervious Area	0.0 acre
Post Construction Total Impervious Area	0.21 acre
Total Potentially Disturbed Area	43.49 acres

2. SWPPP AND TRAINING DOCUMENTATION

1. POSTING NOTIFICATION

A copy of the NPDES/SDS Certification by the MPCA will be posted on-site or available in the SWPPP within 72 hours upon MPCA request.

2. LOCATION OF THE SWPPP

A copy of the SWPPP will be provided to the contractor prior to construction. The SWPPP (original or copies), all changes and amendments to it, and inspections and maintenance records will be kept at the site or electronically available during construction by the contractor who has operational control of that portion of the site and by Northern's environmental inspector (EI). The SWPPP will be available either electronically, in the field, or an on-site vehicle during normal working hours.

3. TRAINING AND/OR CERTIFICATION DOCUMENTATION

The MPCA requires stormwater training for certain individuals for construction projects. The content and extent of training must be commensurate with the individual's job duties and responsibilities with regard to activities covered under the NPDES/SDS permit for the Project. At least one individual present on the permitted project site (or available to the project site in 72 hours) must be trained in the job duties described below.

This SWPPP has been prepared under the direction of and reviewed by Chad Johnson at Stantec Consulting Services Inc. (Stantec). Mr. Johnson holds the following state and national certifications relevant to SWPPP design:

- University of Minnesota – SWPPP Design and Site Management Certification http://www.erosion.umn.edu
- Certified Professional in Erosion and Sediment Control (#3797)
- Certified Professional in Storm Water Quality (#476)
- Certified Erosion, Sediment and Storm Water Inspector (#195)

Northern company and third-party inspection personnel associated with this Project have been trained in accordance with the permit's training requirements through the University of Minnesota's Erosion and Sediment Control Program. Northern's on-site EIs have been trained and are certified in the areas of construction stormwater inspector/installer. The EIs are supervised by Northern's Project environmental specialist who has been trained and is certified in the areas of SWPPP design, construction stormwater site management and inspector/installer.

Mr. Terry Plucker, Environmental Compliance Manager, holds the following state certifications relevant to SWPPP design:

- University of Minnesota – SWPPP Design and Site Management Certification http://www.erosion.umn.edu
- Professional Geoscientist – Soil Science Texas (#11893)

Northern's contractor personnel responsible for performing or supervising the installation of erosion and sediment control devices best management practices (BMPs) are required to provide proof of training in accordance with the permit requirements prior to construction activities. Prior to construction, Northern will review the requirements of the Minnesota NPDES/SDS permit number MNR100001 and this SWPPP with the contractor. Copies of the EI's training certifications will be included in Attachment O.

4. SWPPP IMPLEMENTATION OR AMENDMENTS

The contractor is responsible for providing trained and knowledgeable personnel to implement the SWPPP. Northern's EIs will be responsible for conducting the required

inspections every seven days or within 24 hours after each rain event 0.5 inch or greater. Northern will provide the contractor with the results of the inspections and corrective actions that may be required. It will be Northern's responsibility to provide adequate documentation in the SWPPP.

5. BMP INSTALLATION, MAINTENANCE OR REPAIR

The contractor is also responsible for providing trained and knowledgeable personnel responsible for the installation, maintenance, or repair of the erosion and sediment control BMPs described in the SWPPP, Project plans or Project specifications. It will be the contractor's responsibility to provide appropriate documentation in the SWPPP prior to construction. A notification roster for this SWPPP is included in Attachment N.

3. RESPONSIBLE PARTIES

The Project is owned by:
Northern Natural Gas
1111 South 103rd Street
Omaha, Nebraska 68124
Contact: Mr. Terry Plucker, Environmental Compliance Manager
402-398-7226

Northern has developed a chain of responsibility with all operators on the site to ensure that the SWPPP will be implemented and stay in effect until construction of the Project is complete, the entire site has achieved permit termination conditions, and a Notice of Termination (NOT) has been submitted to the MPCA. The following responsibilities have been assigned for this Project:

- SWPPP development: Stantec on behalf of Northern
- Oversee SWPPP implementation/amendments: Northern
- Conduct required inspections: Northern
- Conduct BMP installation, maintenance and repair: contractor – to be determined

4. RECEIVING WATERS

The following list of receiving waters are located within 1-mile of the Project and have the potential to receive stormwater runoff from the Project site. Receiving waters were identified using U.S. Geological Survey topographic maps, National Hydrography Dataset (NHD), National Wetland Inventory (NWI) data, aerial photography, Minnesota Public Waters Inventory (PWI), National Resources Conservation Service (NRCS) soils data and field survey (within the Project area).

Based on the wetland and waterbody determination and delineation surveys, one waterway is crossed by the Project. Waterway ALO-S01 is an intermittent waterway crossed by the project at MP 2.28. The crossing will be conducted via HDD, which will minimize potential direct impacts on the extent practicable and eliminate the need for restoration. Another intermittent waterway ALO-S02 is located within the environmental survey boundary (ESB) but will not be crossed by the project. An additional 13 NHD mapped waterways are located within a 1-mile radius of the project. Two of these waterways, the Le Sueur River and County Ditch 46, are listed on the MPCA Impaired Waters List for fish bioassessments and turbidity and fish bioassessments impairments, respectively. No other special or protected waterways are located within 1 mile of the

Project. As required by the Minnesota NPDES/SDS permit number MNR100001, Northern implement additional BMPs to further reduce the potential for Project runoff to these waterways. No impacts on the waterways are anticipated from construction stormwater runoff

Based on the wetland and waterbody determination and delineation surveys, no waterbodies are located with the ESB for the Project. One NHD mapped waterbody (Fosilen Lake) is located within one mile of the Project but is not listed as an impaired or special waterbody. No impacts on the waterbody are anticipated from construction stormwater runoff.

Based on the wetland and waterbody determination and delineation surveys, 20 wetlands are located with the ESB for the Project. Of the 20 wetlands identified, only four wetlands will be crossed by the Project. The following is a list of wetlands crossed by the Project:

Unique Wetland Identifier	MP		Field Determined Wetland Classification[1]	Length of Crossing (feet)	Area Affected by Construction (acres)
ALO-W03	2.04		Seasonally flooded basin/farmed wetland / PEM1Af \	N/A	0.04[6]
ALO-W04	2.14	2.39	Seasonally flooded basin/farmed wetland / PEM1Af	1,239	0.17[9]
ALO-W13	3.45	3.45	Seasonally flooded basin/farmed wetland / PEM1Af	11	0.02[6]
ALO-W16	3.60	3.61	Degraded wet meadow / PEM1B, Shrub-carr / PSS1B	53	<0.01[8,9]
				Total	**0.24**

[1] Wetland Classification based on Cowardin, Classification of Wetlands and Deepwater Habitats: PSS1B – Palustrine Scrub-Shrub - broad-leaved deciduous - saturated (Shrub-Carr), PEM1B - Palustrine Emergent – seasonally saturated (Wet Meadow / Disturbed wet meadow), PEM1Bf - Palustrine Emergent – seasonally saturated - farmed (Wet Meadow / Disturbed wet meadow / Farmed),

[6] Construction related wetland impacts will not include below ground impacts

[8] Impacts are less than 0.01 acre in size

[9] Impacts will be limited to foot traffic within a six-foot-wide travel lane between the HDD entry and exit points.

Several NWI mapped wetlands occur within a mile radius of the project, however no impacts to these wetlands are anticipated from construction stormwater runoff. The Project will result in 0.24 acre of temporary wetland impacts during construction. No permanent fill or conversion will occur.

Northern will implement BMPs throughout the Project area and redundant BMPs within 50 feet of the wetland boundaries to reduce potential for additional Project impacts on wetland and waterways. See information on the location of erosion and sediment control locations in the erosion control map (attachment C).

Discharge of test water and construction trench water will be conducted in accordance with issued NPDES permits, including the use of meters to control flow rates, and will employ an energy-dissipating device such as a straw bale dewatering structure. Discharge rates will be controlled to prevent erosion, scouring and sedimentation, flooding, or the introduction of foreign or toxic substances into adjacent waterbodies. Hydrostatic test waters will be transported offsite for disposal at an approved facility or discharged in an

upland area onsite in accordance with the state discharge permits. Dewatering discharges will be inspected and photographed at the beginning of dewatering operations and at least once every 24 hours during operation.

During trench dewatering, water will be pumped from the trench via a submersible pump equipped with a float and screen and then discharged through a geotextile filter bag and/or straw bale dewatering structure to a well-vegetated upland area. Dewatering rates will be controlled through the use of meters and will be conducted to avoid the flow of silt-laden water directly into waterbodies.

5. SOILS AND SLOPES INFORMATION

Soil units mapped within the Project area by the NRCS are identified in detail within a table, located in Attachment E. A map indicating the typical soil types within the Project area has been provided as Attachment B.

Steep slopes within the Project area were characterized into three categories, slopes between 5% and 15%, greater than 15% and less than 30%, and greater than 30%. Steep slope categories are identified by milepost in a table located in Attachment R.

At a minimum, the contractor will install temporary and permanent slope breakers every 300 feet on slopes ranging between 5% and 15%, every 200 feet on slopes ranging between greater than 15% and less than 30%, and every 100 feet on slopes greater than 30%. Temporary and permanent slope breakers are discussed further in Section 8.

The contractor also will install hydro mulch, or comparable alternative for temporary and permanent stabilization on all slopes greater than 15% within non-agricultural areas. Hydro mulch is discussed further in Section 8.

6. PERMANENT STORMWATER MANAGEMENT

The Project will not result in any new impervious surface; therefore, infiltration or other volume reduction practices are not required.

7. SEQUENCE OF CONSTRUCTION ACTIVITIES

All sediment control measures will be in place prior to any removal or grading work and will be maintained until the potential for erosion has been eliminated. Additional information on sequencing can be found in the attached Engineering Standard 7507 in Attachment D. The Project will generally follow the sequencing identified below.

1. Preconstruction meeting. Prior to construction, a pre-construction meeting will be held at which the EI will provide environmental compliance training for all personnel working on the Project.
2. Staking. A Northern contractor will stake the construction boundaries, sensitive areas boundaries, and proposed facility locations.
3. The contractor will obtain soil samples in areas to be seeded for agronomic testing. Soils will be analyzed for nitrogen, phosphorus, potassium, and lime amendment recommendations.
4. Install necessary perimeter controls and temporary erosion and sediment controls. Prior to the start of any ground disturbing activities at any given location, the contractor will install soil erosion and sedimentation control measures within the temporary construction footprint in accordance with this SWPPP. The SWPPP

incorporates the FERC Upland Erosion Control, Revegetation, and Maintenance Plan (Plan) and the Wetland and Waterbody Construction and Mitigation procedures (Procedures) requirements, recommendations from the Minnesota Department of Transportation (DOT) and site-specific erosion control information.

a. The contractor will install and maintain temporary sediment barriers, such as silt fences and/or straw bales at areas as indicated in Northern's Procedures or direction of the Project EI. As directed, these sediment barriers will be left in place after final clean up to provide protection until a vegetative cover is established. The contractor will be responsible for maintaining erosion control devices until adequate re-vegetation has been established for a period of up to 24 months and removing erosion control devices after adequate re-vegetation has been established as determined by a Northern representative. Once original erosion control devices have been placed, the cost to replace and maintain original devices will be the responsibility of the contractor.

b. The contractor will provide an environmental crew as required to install and maintain erosion control devices through the duration and following completion of the Project. Erosion control devices will be installed under the direction of the environmental inspector.

5. Clear and grade the workspaces. Large obstacles such as trees and rocks will be removed, and grading will be performed as required to provide a safe, level working surface for construction activities. A maximum of 12 inches or the actual depth of the existing topsoil horizon, whichever is less, will be segregated. The topsoil and subsoil will be stored in separate windrows on the construction ROW and will not be allowed to mix.

6. Install pipeline. Construction materials and equipment will be transported throughout the Project workspaces. Additional sediment and erosion control BMPs will be installed as field conditions warrant during construction and the request of the EI or as the contractor deems necessary.

   a. The contractor and contractor's subcontractor(s) will each be responsible for complying with the appropriate State One Call System regulations before any excavation activities begin. The contractor and contractor's subcontractor(s) will each display a copy of the One Call documentation on-site. Contractor and contractor's subcontractor will each be responsible for locating, supporting, protecting, and repairing any foreign lines, cables, or other facilities located or exposed during excavation.

   b. The contractor must comply with all state and local regulations when transporting equipment including the breaking down of equipment for relocation.

c. Construction site practices will follow FERC regulatory procedures, including the Plan and Procedures, except for the project-specific modifications identified in the table below. These plans are included in Attachments H and I.

Albert Lea M500 E-Line					
MP	**Wetland Type**	**Temporary Impact on Wetland (Acres)**	**Description**	**Alternatives to Procedures**	**Justification**
3.59	Degraded wet meadow, Shrub-carr	0.00	ALO TAR-003 and ALO ETWS-001 is within 30 feet and 37 feet of wetland ALO-W16, respectively	VI.B.1.a	Utilizing existing driveway to access an HDD pit

d. ALL CONSTRUCTION OPERATIONS ARE TO BE CONFINED TO DEFINED CORRIDORS, ACCESS ROADS, STAGING AREAS, TEMPORARY WORKSPACES, AND EXTRA TEMPRAORY WORKAPCES. THE CONTRACTOR WILL NOT USE ANY ADDITIONAL WORKSPACE, ACCESS ROADS OR STAGING AREAS FOR THIS PROJECT UNLESS APPROVED BY THE COMPANY'S REPRESENTATIVE. THE CONTRACTOR WILL NOT GO BEYOND DEFINED WORK AREAS AND ACCESS ROADS AS STATED BY THE COMPANY. NO EQUIPMENT MAY BE MOVED TO THESE AREAS UNTIL THE COMPANY'S REPRESENTATIVE HAS RECEIVED ENVIRONMENTAL CLEARANCES. NONCOMPLIANCE WILL BE CONSIDERED A BREACH OF THIS AGREEMENT.

e. Open Cut / Trenching. The open cut trench method will be the primary technique used to install pipeline throughout the Project. During construction, the contractor will not open more trench area than they can reasonably install BMPs on, stabilize or restore within a 24-hour period.

   The Minnesota CWA Section 401 Water Quality Certification program will limit the amount of open trench to less than 5,280 feet at any one time to limit the potential for unforeseen weather events to cause erosion and discharges to Waters of the United States. Northern will restrict the amount of open trench per individual project component to less than 5,280 feet. The 5,280 feet of open trench will be a 'moving mile'; as the contractor removes topsoil and excavates trench on the front end of the mile, they will backfill and restore the area on the back end of the trench so no more than one mile of trench will be open at any one time. Final restoration will be required as they move; therefore, final restoration activities will be conducted concurrently with the installation of the next section of pipeline.

f. HDD: Two HDDs will be utilized to install pipeline across wetland ALO-W04 and waterway ALO-S01 and W Highway 30 and wetland ALO-W16.

g. Sediment buildup on paved surfaces will be monitored. Sediment must be swept off the road at the end of each working day. Dewatering will be conducted in accordance with the FERC Procedure, Minnesota Department of Natural Resources (MDNR), and MPCA requirement. All BMPs will be maintained throughout Project construction and follow-up restoration until the site is considered stabilized and permits are closed out.

7. Conduct Hydrostatic Testing. Northern will conduct hydrostatic testing of the new pipeline and transport it off-site to disposal facility or discharged in an upland area onsite in accordance with the state discharge permits.

8. Erect aboveground facilities. No aboveground facility installation is planned for this project.

9. Restore contours. Site restoration will be based on the degree of disturbance caused by construction activities, the ecological setting of the site, and the preferences of the affected landowner/land manager. Final grading of the Project area will begin immediately upon completion of construction within a given area. Within agricultural lands, topsoil and subsoil will be tested for compaction following construction and abandonment in agricultural areas. Northern's contractor will de-compact subsoil in accordance with the soil compaction mitigation procedures described in the FERC Plan. Final grading will occur to match preconstruction conditions, with the exception of steep slopes requiring permanent slope breaks.

10. Perform final restoration activities. Clean and restore Project area in accordance with the Engineering Standard 7507 (Attachment D), NPDES/SDS permit number MNR100001, and FERC requirements. Complete final grading and seed and mulch with grass or applicable vegetation per landowner specifications or NRCS/Minnesota Board of Water and Soil Resources (BWSR) seed mix (Attachment S). Per Northern's Engineering Standard 7507 (Attachment D), drill seeding or hydroseeding should be applied for all disturbed upland areas larger than 500 square feet. Any area seeded after October 1 will be seeded with a temporary seed mix, and the contractor will be required to remobilize the following spring to complete permanent seeding and fertilization. Remove temporary erosion control devices, where appropriate.

8. SWPPP BEST MANAGEMENT PRACTICES

Prior to the start of any ground disturbing activities within the Project, Northern's contractor will implement appropriate erosion and sediment control BMPs. Potential BMPs are identified below.

1. Erosion control

a. Preservation of Existing Vegetation: The contractor will preserve existing vegetation and vegetative buffer strips to the extent possible.

b. Mulch: Mulch such as wood chips, straw, or compost can be used independently as a temporary soil stabilization practice or in conjunction with seeding activities. Mulch should not be installed in active agricultural lands. Mulch, if used, will not contain synthetic (plastic) fiber additives in areas that drain to a Minnesota public water.

c. Erosion Control Blankets: Erosion control blankets are available in a variety of natural and synthetic materials (i.e., coconut fiber, jute, straw, hay or wood

excelsior). Erosion control blankets will be installed to the manufacturer's instruction, FERC Plan and Procedures and Northern's instruction. Erosion control blankets will be used for temporary permanent stabilization in areas of concentrated flow in non-agricultural areas. Erosion control mesh, if used, will be limited to bio-netting or natural netting, specifically Category 3N or 4N in the 2016 and 2018 Minnesota DOT standards. Additional guidance on types of erosion control materials is included in Attachment D.

d. Hydro Mulch: Hydro mulch typically consists of applying a mixture of wood fiber, seed, fertilizer, and stabilizing emulsion with hydro mulch equipment. Equipment should be equipped with either an auger-type agitator or jet spray. The agitator must be used at all times to ensure a uniform seed coverage. Hydro mulch should be applied at a rate of 3,000 pounds per acre or per manufacturer guidelines. Do not apply mulch to standing water or in wetlands. Hydro mulch will be used in place of erosion control blanket on steep slopes per Northern's Engineering Standard 7507: Erosion and Sediment Control Technical Standards.

e. Dust Control: To abate dust resulting from construction activities, the contractor will employ dust control measures such as watering access roads, storage piles, and disturbed surfaces during construction to minimize fugitive emissions, where necessary. Additional measures include vehicle speed restrictions on unpaved roadways to 15 miles per hour, use of gravel or asphalt at site exit points to remove dirt from tires and tracks and replanting disturbed areas as quickly as possible after construction.

f. Temporary Stabilization: Soil stabilization measures will be initiated by the following workday whenever earth-disturbing activities have temporarily ceased on any portion of the site. Temporary stabilization must be completed as soon as practicable, but no later than seven calendar days after stabilization measures have been initiated. Temporary seeding will occur as a part of the temporary stabilization. Seed disturbed areas in accordance with seed mixes, rates, and dates obtained from previous coordination with the NRCS, BWSR, or as requested by the landowner. Seeding is not required in cultivated croplands unless requested by the landowner.

g. Permanent Stabilization: Soil stabilization measures will be initiated by the following workday whenever earth-disturbing activities have permanently ceased on any portion of the site. Typical establishment practices are provided within Northern's Engineering Standard 7507 (Attachment D). Per Northern's Engineering Standard 7507, drill seeding or hydroseeding should be applied for all disturbed upland areas larger than 500 square feet. Any area seeded after October 1 will be seeded with a temporary seed mix, and the contractor will be required to remobilize the following spring to complete permanent seeding and fertilization.

2. Sediment Control

a. Construction Entrance/Exit: Stabilized temporary construction entrances will be installed, as appropriate, for portions of this Project where existing roadways do not exist. Additionally, sediment tracked off-site onto paved surfaces will be removed at the end of each workday. The contractor will employ standard

pipeline construction practices to protect the roadside ditches and water flow, if present.

b. Storm Drain Inlet Protection: There are no known stormwater inlets or culverts on this Project which require inlet protection. If storm drain inlets are present along the existing access roads, protection will be determined by the Project EI. Inlet protection may be removed to alleviate documented flooding but will be replaced upon completion of the rain event.

c. Stockpile Protection: Any portion of a stockpile (topsoil or subsoil) for this Project that will not be touched for seven days will be temporarily stabilized with a temporary cover seed. In addition, silt fence or other effective sediment controls will be placed at the base of all stockpiles on the downgradient perimeter prior to the initiation of stockpiling. Downstream silt fence will be in place above all wetland and waterbody areas to protect runoff from stockpiles. Stockpiles will be located outside of natural buffers or surface waters.

d. Silt fence, Straw bales, and Fiber Logs: Silt fence, straw bales, or fiber logs can be used as a perimeter control down-gradient of exposed soils during construction. Straw bales and fiber logs alone are not considered an adequate or effective sediment control device and should only be used in conjunction with silt fence. Silt fence will be installed prior to initial grading activities and will remain in place until final site stabilization has occurred. Silt fence will be held in place with 2-inch by 2-inch posts not to exceed 10-foot spacing and the base of the fence will be buried 6 inches in the ground. Once construction has begun, the site will be analyzed to determine whether additional silt fencing is required. Fiber logs or straw bales are used as a sediment and storm water velocity control device. Straw bales should be excavated the width of a bale and the length of the proposed barrier to a minimum depth of four inches. The trench must be deep enough to remove all grass and other material which might allow underflow. After the bales are staked (two stakes per bale) and chinked (filled by wedging), the excavated soil should be backfilled against the barrier. Fiber Logs are tubes of plastic netting or biodegradable burlap material filled with straw, rice straw, or coconut fiber. If straw bales or fiber logs are used, they should be Certified Weed Free.

e. Berms: Berms are a dike of material (topsoil, sub soil, compost, rock, etc.) that is placed perpendicular to sheet flow runoff to control erosion in disturbed areas and retain sediment. Berms can be used in place of a traditional sediment and erosion control tool such as a silt fence. If topsoil is used in a berm, subsoil cannot be mixed in, and the berm cannot be driven over with equipment.

f. Trench Breakers: Trench breakers are intended to slow the flow of subsurface water along the trench. Trench breakers may be constructed of materials such as sandbags or polyurethane foam. Do not use topsoil in trench breakers. Trench breakers should be installed per the following spacing:

Slope (%)	Spacing (feet)
5-15	300
>15-30	200
> 30	100

At a minimum, trench breakers should be installed at the base of slopes greater than 5%, where the base of the slope is less than 50 feet from a waterbody or wetland, and at each wetland and waterbody that is crossed via open cut methods, as specified in the FERC Procedures. Do not install trench breakers within a wetland.

g. Slope Breakers: Slope breakers are intended to reduce runoff velocity and divert water off the construction ROW. Temporary slope breakers may be constructed of materials such as soil, silt fence, staked hay or straw bales, or sandbags; whereas, permanent slope breakers consist of soil. The outfall of each slope breaker should be directed to a stable, well vegetated upland area or construct an energy-dissipating device at the end of the slope breaker and off the construction ROW. The outfall of each slope breaker should be positioned to prevent sediment discharge into wetlands, waterbodies, or other sensitive environmental resource areas. Slope breakers should be installed per the following spacing:

Slope (%)	Spacing (feet)
5-15	300
>15-30	200
> 30	100

h. Redundant Sediment Controls: Where the preservation of a natural 50-foot-wide buffer is infeasible, redundant sediment controls will be installed when a wetland or waterbody is within 50 feet of the Project's earth disturbances and stormwater flows to the surface water. Northern will install perimeter sediment controls at least five feet apart unless limited by lack of available space. Natural buffers are not required adjacent to road ditches, judicial ditches, county ditches, stormwater conveyance channels, storm drain inlets, and sediment basins. If preserving the buffer is infeasible, Northern will document the reason why in the SWPPP.

i. Dewatering Activities: Discharge from pit trench dewatering will be completed in accordance with FERC Plan and Procedures, MDNR water appropriation permit, and NPDES General Permit NPDES/SDS Permit MNR100001. Dewatering must occur in a manner that does not cause erosion. Dewatering structures must be removed as soon as possible after the completion of dewatering activities. All pumps will be equipped with a float and screen or a functional equivalent to maintain the intake above the trench bottom. Water will be discharged through geotextiles, and hay or straw bales. Dewatering will be conducted to avoid the flow of silt-laden water directly into waterbodies, wetlands or other surface water features. Dewatering discharges will be inspected and photographed at the beginning of dewatering operations and at least once every 24 hours during operation.

   For areas where consistent dewatering is anticipated, the contractor may implement a dewatering structure, consisting of a double row of weed-free strawbales, with offset cracks, as a de-watering structure. The water will be discharged via a non-woven geotextile filter bag within a straw bale dewatering/filtering structure. If needed, a polymer sock may be added in the filter bag to regulate Total Suspended Solids limits to below permit threshold, the contractor to coordinate with Northern before the use a polymer.

j. Hydrostatic Test Activities: Hydrostatic test activities are planned for the Project. Water may be re-used for hydrostatic testing between the new pipeline segments. The test water is expected to only contact new pipe, and no additives or chemicals will be added to the test water. The hydrostatic test water will be hauled off for disposal at an approved facility or discharged in an upland area onsite in accordance with the state discharge permits. No chemicals will be used after testing (e.g., to dry the pipe).

3. Temporary Clear-Span Bridge (TCSB)

No TCSBs are planned for the Project.

4. Pollution Prevention

a. Engine Degreasing: No engine degreasing will occur at the Project site. A copy of Northern's standard Spill Prevention, Containment, and Countermeasure (SPCC) plan is included in Attachment F.

b. Concrete Washout: All liquid and solid wastes generated by concrete washout operations will be confined in a containment basin lined with impermeable plastic. The liquid and solid wastes must not contact the ground and there must not be runoff from the concrete washout area. Concrete may only be washed out at designated areas approved by Northern's EI greater than 100 feet from a wetland, waterbody or designated municipal watershed area. The wash out stations will be removable and will be hauled off site at Project completion. The washout stations will be marked by a large sign stating, "concrete washout."

c. Material Storage: Northern place building products (including pesticides, fertilizers and treatment chemicals) and landscape materials under cover (e.g., plastic sheeting or temporary roofs) or protect them by similarly effective means designed to minimize contact with stormwater. Northern may choose to not to cover or protect products which are either not a source of contamination to stormwater or are designed to be exposed to stormwater.

d. Toilet Facility Project: Northern will position portable toilets so they are secure and will not tip or be knocked over and will properly dispose sanitary waste in accordance with Minn. R. ch. 7041.

e. Solid Waste: All solid waste generated from the Project site will be properly disposed of according to state and local requirements.

f. Inadvertent Release Plan: In the event of an inadvertent release during hydrostatic testing or other construction activity, Northern's Inadvertent Release Plan will be followed. The Plan is included in Attachment P.

g. Hazardous Material Management: In general, no hazardous material will be stored on the jobsite which requires secondary containment. However, should hazardous materials such as fuels and hydraulic fluid be stored on site, they must be stored in secondary containment. Spill kits or other suitable emergency action procedures to handle small chemical, petroleum, hazardous, or other non-stormwater material which has the potential to contaminate groundwater or surface waters must be properly contained and mitigated by the contractor.

1. In Minnesota, any hazardous spills above 5 gallons will be reported to the Minnesota State Duty Officer (1-800-422-0798). Spill kits or other suitable emergency action procedures to handle small chemical, petroleum, hazardous, or other non-stormwater material which has the potential to contaminate groundwater or surface waters must be properly contained and mitigated by the contractor. Reporting of spills will also be in accordance with Minn. Stat 115.061.
2. Fueling Exclusion Zones: Refueling for equipment and vehicles or storage of hazardous liquids will not take place within 100 feet of a waterbody or wetland, within 200 feet of private wells and 400 feet of public water supplies. Wells and exclusion zones are shown on Figure 3 in Attachment C. These zones will be clearly marked in the field as 'No Refueling Beyond This Point'. Due to the nature of the construction operation, certain equipment cannot be moved for refueling and may therefore be located within a fueling exclusion zone. In cases where refueling needs to occur within the fueling exclusion zone, Northern will have an EI present for the operation and will have spill response equipment onsite and readily available. Specific procedures are provided in the SPCC plan.

9. SITE-SPECIFIC EROSION CONTROL PLAN

Northern has completed an estimate of the total erosion control devices that may be utilized during construction of the Project - see Attachment C. The following estimate will be amended, and erosion control devices installed per the discretion of the trained EIs. The actual total number, type, and location will be determined in the field by the EIs.

Potential Erosion Control Devices – Preferred Route	**Estimated Number/Volume Anticipated during Construction**
Temporary	
Silt Fence, Straw Bales, or Fiber Logs	Approximately 27,120 linear feet
Timber Mats	200 linear feet
Hydro mulch/Mulch (certified weed free)	0.77 acre
Erosion Blanket	0.29 acre
Seeding – Upland	1.06 acres [1]
Temporary Slope Breakers	7
Construction Entrances	6
Permanent	
Hydro mulch/Mulch (certified weed free)	0.77 acres
Upland Seeding	1.06 acres [1]
Restoration of Agricultural land[2]	41.98 acres
Erosion Blanket	0.29 acre
Trench Breakers	7
Permanent Slope Breakers	7

[1] Acreage represents non-agricultural areas within the Project area where gravel will not be permanently installed.
[2] Seeding will be completed per landowner requirements due to predominance of agricultural cropland within the Project area.
[3] Trench breakers should be installed at the same locations at Permanent Slope Breakers, as determined by Northern based on field conditions.

10. TEMPORARY SEDIMENT BASINS

This Project does not require a temporary sediment basin, according to the MPCA, as the project will sequence work to not disturb five or more acres of soils that drain to one common location at one time; therefore, this Project does not require a temporary sediment basin. Should Northern's EI determine that a temporary sediment basin or additional BMPs are needed, the SWPPP should be modified to reflect the additional measures taken

11. INSPECTION AND MAINTENANCE

Northern's EI's will inspect disturbed areas that have not reached permit termination conditions, structural control measures, and locations where vehicles enter or exit the ROW at least once per week and within 24 hours of a storm event of 0.5 inch of rain or greater during active construction. Where parts of the Project site have permanent cover, but work remains on other parts of the site, inspections of the areas with permanent cover will be reduced to once per month. Inspections will be temporarily suspended during winter at the onset of frozen ground conditions where construction activities have ceased and will resume at the onset of spring runoff, in accordance with Part 11.11 of the general permit (MNR100001).

EIs will conduct inspections to ensure erosion and sediment control measures have been installed and are maintained properly, and to identify ineffective measures needing contractor repairs. EI's will prepare reports documenting construction activities such as dates when major grading occurs, dates when construction activities temporarily or permanently cease on a portion of the site, and dates when stabilization measures are initiated.

1. Inspections will be performed every seven days and within 24 hours of a 0.5-inch or greater rainfall event. An example SWPPP Inspection & Maintenance Report is included as Attachment G.
2. Maintenance will be performed within the timeframes of the NPDES permit when the following site conditions indicate:
    a. Silt fence and other BMP repairs should be made when it becomes non-functional or sediment reaches half the height of the device.
    b. Tracked sediment must be removed within 24 hours of discovery of off-site tracking onto paved surfaces.
    c. BMPs in disrepair must be repaired, replaced or supplemented by the end of the next business day after discovery or before the next storm event, which ever comes first, as field conditions allow.
    d. The contractor is responsible for maintaining all BMPs until work has been completed, site has achieved final termination conditions, and the NOT has been submitted to the MPCA.

12. POST CONSTRUCTION SITE CONDITIONS

No above-grade facility (new valve setting) will be required; therefore no permanent stormwater management is required as the net increase of impervious surface is less than one acre.

13. RESTORATION

The contractor will remove all rock or concrete from paths, walkways, driveways, parking areas or other paved areas.

The contractor will level and grade the site after all facilities have been installed and equipment has been removed from the Project site. The contractor will level and grade disturbed areas to match the surrounding elevations. The contractor will restore topsoil with seven days of backfill of the trench. As per the MPCA requirements, soil stabilization is to commence as soon as practicable ("immediately"), but no later than seven days from when land-disturbing activities have temporarily or permanently ceased. As such, the contractor must seed and mulch restored areas (as required) once topsoil restoration has occurred. In ditch bottoms with little to no slope (e.g., less than 2%), mulch may be disc-anchored in lieu of installing erosion control blanket. If disc-anchoring is found to be inadequate at minimizing erosion from ditches or swales, another more effective BMP must be utilized. The contractor will provide soil or suitable material for areas that require fill material. The top one foot of imported fill must consist of topsoil. All imported fill material must be approved by Northern prior to arriving on-site. Imported fill will be adequately compacted to prevent settling.

After grading has been completed, contractor to seed Project site with a grass seed mixture specified by Northern or restored per landowner's requirement. The contractor will apply fertilizer and soil amendments based upon agronomic testing recommendations obtained at the start of the Project. Seed disturbed areas in accordance with seed mixes, rates, and dates obtained from previous coordination with NRCS, BWSR, or as requested by the landowner.

14. UPDATING AND MODIFYING THE SWPPP

Northern can revise the SWPPP at any time; however, prior to revisions, all BMPs will be selected, installed and maintained in accordance with the manufacturer's specifications and accepted engineering practices. All SWPPP changes will be done by a.) Individuals preparing the SWPPP for the Project; b.) Individuals overseeing implementation of, revising and/or amending the SWPPP and individuals performing inspections for the Project; c.) Individuals performing or supervising the installation, maintenance and repair of BMPs; or d.) Another qualified individual. If less stringent BMPs are proposed in the revision, justification in effectiveness of the replacement BMP will be provided.

Northern will amend the SWPPP as necessary and within seven days to correct problems identified or address situations whenever:

1. There is a change in design, construction, operation, maintenance, weather or seasonal conditions that has a significant effect on the discharge of pollutants to surface waters or underground waters.
2. Inspections or investigations by site operators, local, state or federal officials indicate the SWPPP is not effective in eliminating or significantly minimizing the discharge of pollutants to surface waters or underground waters or that the discharges are causing water quality standard exceedances.
3. The SWPPP is not achieving the general objectives of controlling pollutants in stormwater discharges associated with construction activity, or the SWPPP is not consistent with the terms and conditions of this permit.

4. At any time after permit coverage is effective, the MPCA determines that the Project's stormwater discharges may cause, have reasonable potential to cause, or contribute to non-attainment of any applicable water quality standard, or that the SWPPP does not incorporate the requirements in an approved Total Maximum Daily Load (TMDL) Implementation Plan approved after the Project starts that contains construction stormwater related requirements. The permit requirements provide the protection required for no net increase in pollutant loading.

SWPPP amendments will be documented in Attachment M.

15. NOTICE OF TERMINATION

Compliance NPDES/SDS Permit No. MNR100001 is required until a NOT is submitted. The owner and contractor authorization to discharge under this permit terminates at midnight on the day the NOT is signed.

The owner and contractor must submit a NOT within 30 days after one or more of the following conditions have been met:

1. Permit termination conditions will be considered achieved on all portions of the site for which the contractor is responsible when land is restored to pre-construction agricultural use or achieved permanent uniform perennial vegetative cover at 70% of its expected final growth. At that time, all temporary BMPs such as silt fence, straw bales, and fiber logs must be removed. When submitting the NOT either ground or aerial photographs showing the NOT requirements have been met must be included.
2. Another owner or contractor has assumed control over all areas of the site that have not been finally stabilized.

16. CERTIFICATION OF COMPLIANCE WITH FEDERAL, STATE, AND LOCAL REGULATIONS

This SWPPP was prepared in accordance with the NPDES general permit for stormwater discharge associated with a construction activity. Northern operates under strict compliance with the rules and regulations of the FERC. Construction site practices follow FERC regulatory procedures, including the Upland Erosion Control, Revegetation, and Maintenance Plan and the Wetland and Waterbody Construction and Mitigation Procedures, except for the modifications identified in the table located in section 7.6(c). The plan and procedures are included in Attachments H and I. Other sections of this SWPPP include specific practices utilized by Northern to ensure compliance with the general FERC procedures and federal NPDES/SDS standards.

All other applicable federal, state, or local requirements for erosion and sediment control site plans (or permits), or stormwater management site plans (or permits) have been taken into account and will be met. A copy of the Minnesota Permit authorizing Stormwater discharge associated with Construction Activities on Northern's pipeline routes (MNR100001) is included as Attachment J. A copy of Northern's Notice of Intent submittal for coverage under the MPCA NPDES Permit Number MNR100001 will be included in Attachment K in the final SWPPP. MPCA's authorization letter for coverage under Permit Number MNR100001 will be included in Attachment L in the final SWPPP.

17. RECORD RETENTION

A copy of the SWPPP will be kept on-site for the entire duration of the Project. The materials included in the SWPPP will include documentation of any changes, inspection and maintenance records, permanent operation and maintenance agreements, and calculations for design of both temporary and permanent stormwater management systems. Copies of the SWPPP and all inspection reports will be forwarded to Northern and kept on file for a period of three years.

ATTACHMENT A

PROJECT LOCATION MAP

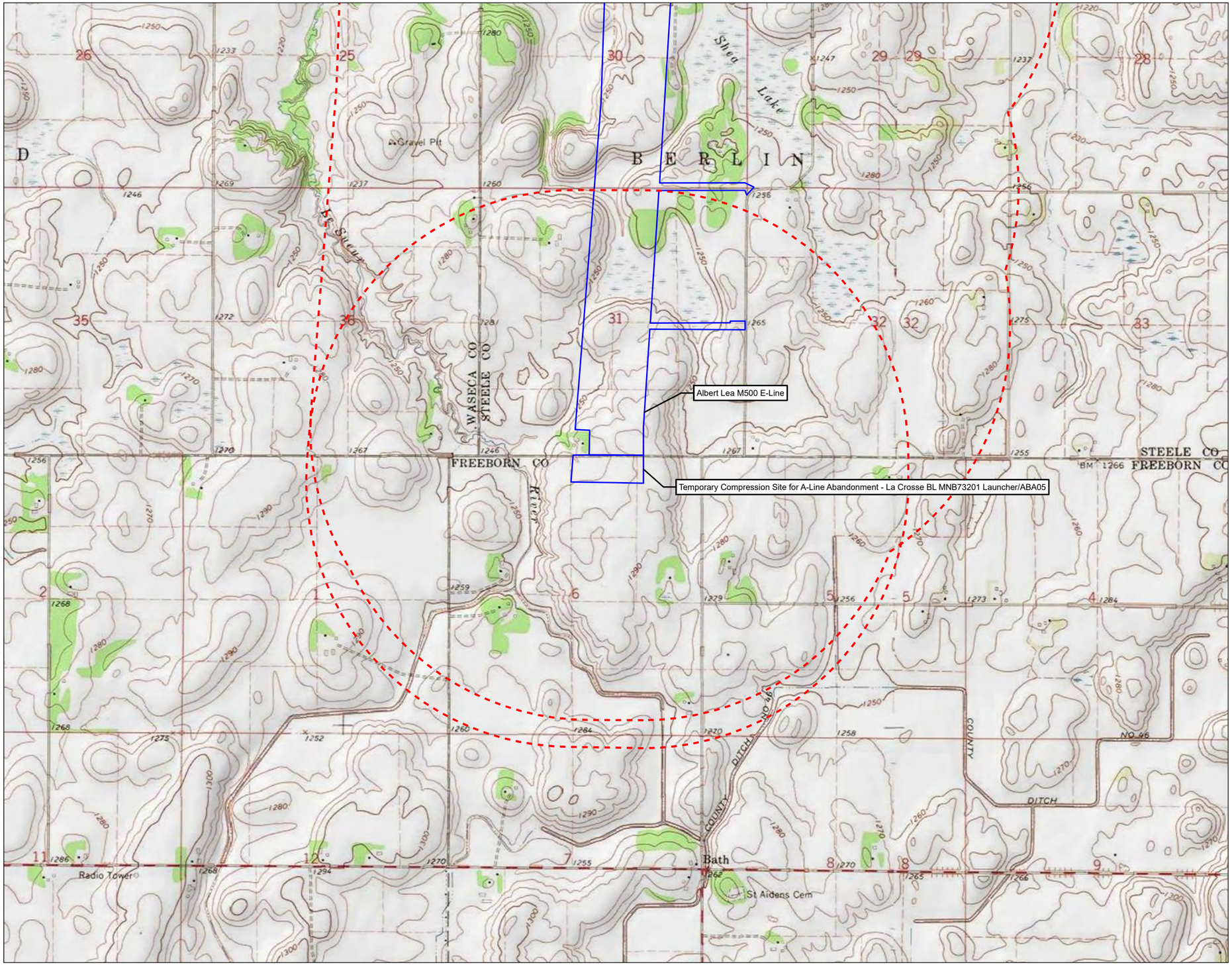


Figure No.

1

Title

Project Location & Topography
V2F - Albert Lea M500 E-Line

Client/Project 172608813

Northern Natural Gas
Ventura to Farmington A-Line Abandonment & Capacity Replacement Project

Project Location
Steele County, Minnesota

Prepared by JM on 2025-10-24
TR by JL on 2025-10-27
IR by SK on 2026-01-29

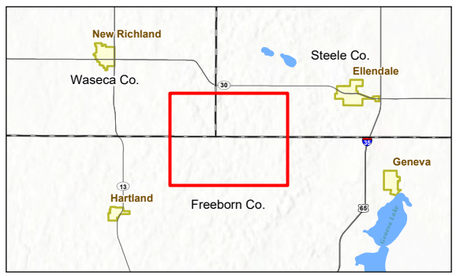
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Legend

- Environmental Survey Boundary
- 1-Mile Buffer



Notes
1. Coordinate System: NAD 1983 UTM Zone 15N
2. Data Sources: Stantec, NNG, Esri, USCB, USGS
3. Background: USGS 7.5' Topographic Quadrangles

Stantec

Northern Natural Gas

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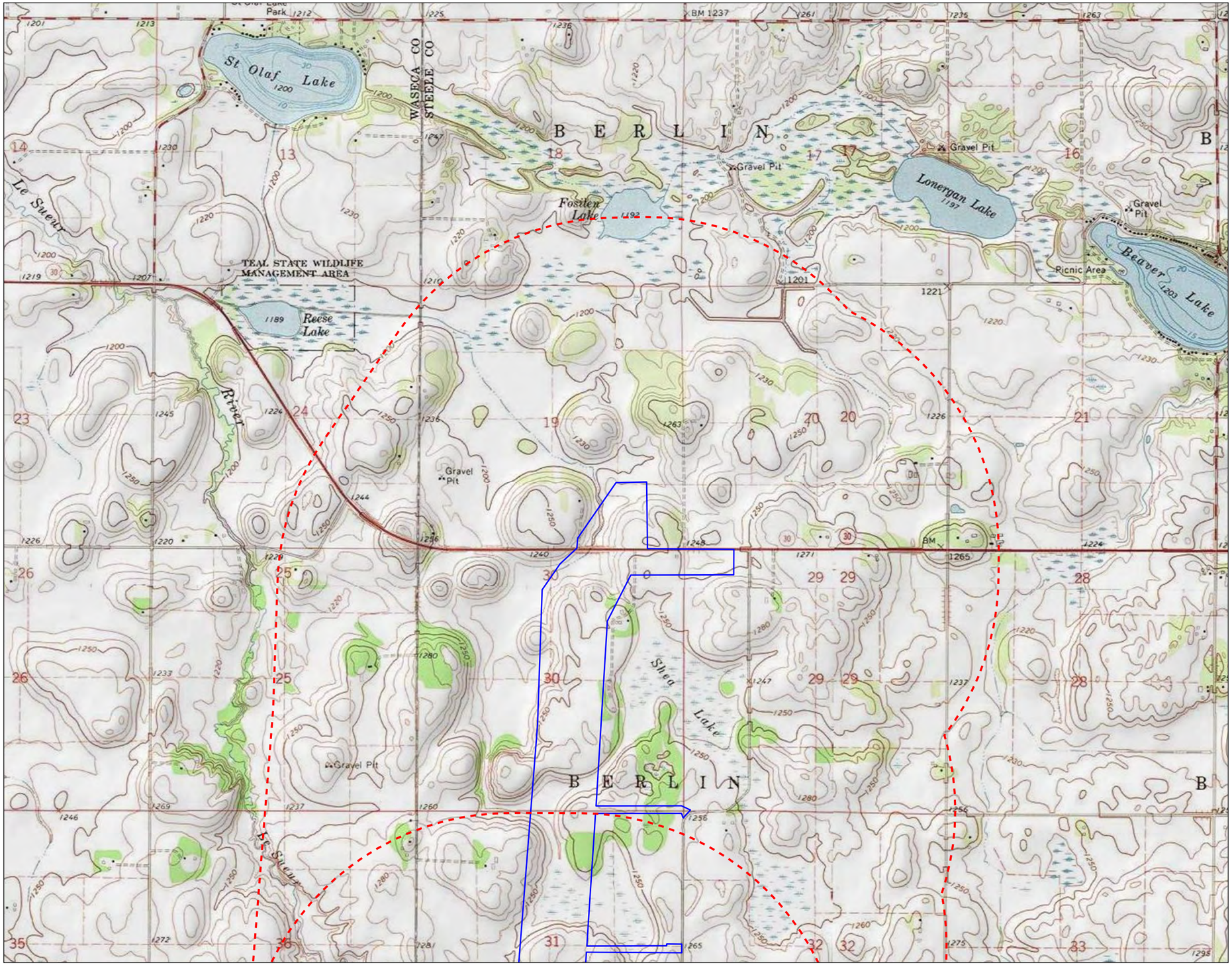


Figure No.

1

Title

Project Location & Topography
V2F - Albert Lea M500 E-Line

Client/Project 172608813

Northern Natural Gas
Ventura to Farmington A-Line Abandonment & Capacity Replacement Project

Project Location
Steele County, Minnesota

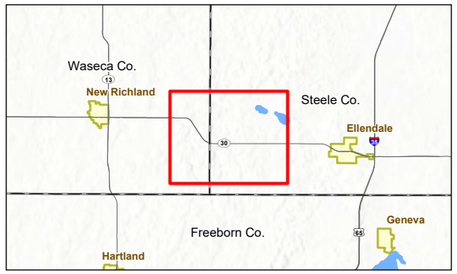
Prepared by JM on 2025-10-24
TR by JL on 2025-10-27
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Legend

- Environmental Survey Boundary
- 1-Mile Buffer



Notes
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ATTACHMENT B

SOILS MAP

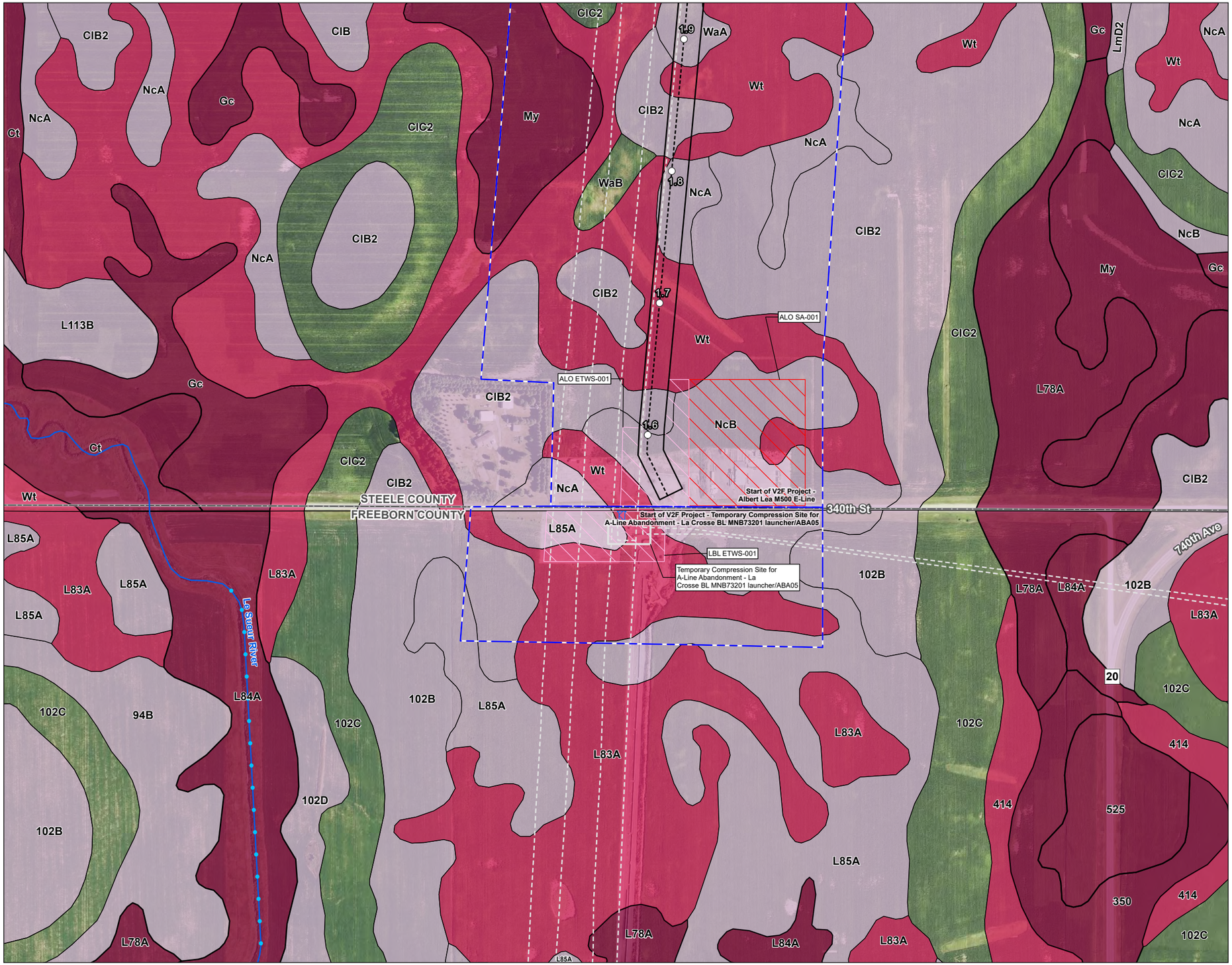


Figure No.

2

Title

NRCS Soil Series Map
V2F - Albert Lea M500 E-Line

Client/Project 172608813

Northern Natural Gas
Ventura to Farmington A-Line Abandonment & Capacity Replacement Project

Project Location
Steele County, Minnesota

Prepared by JM on 2025-10-24
TR by JL on 2025-10-27
IR by SK on 2026-01-29

N

0 200 400 Feet
(At original document size of 11x17)
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Legend

- Environmental Survey Boundary
- Existing Lot
- Existing Access Road
- Temporary Workspace
- Extra Temporary Workspace
- Staging Area
- Proposed Pipeline
- Existing Pipeline
- Mile Post

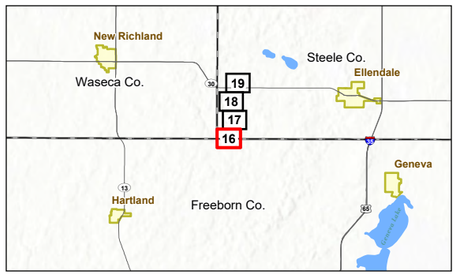
NRCS Soil Survey Data

Hydric Soil Rating

- Hydric
- Predominantly Hydric
- Partially Hydric
- Predominantly Non-Hydric
- Non-Hydric

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Ephemeral Stream
- Canal/Ditch
- Waterbody



Notes
1. Coordinate System: NAD 1983 UTM Zone 15N
2. Data Sources: Stantec, NNG, Esri, USCB, USGS, NRCS
3. Background: 2023 NAIP

Stantec

Northern Natural Gas

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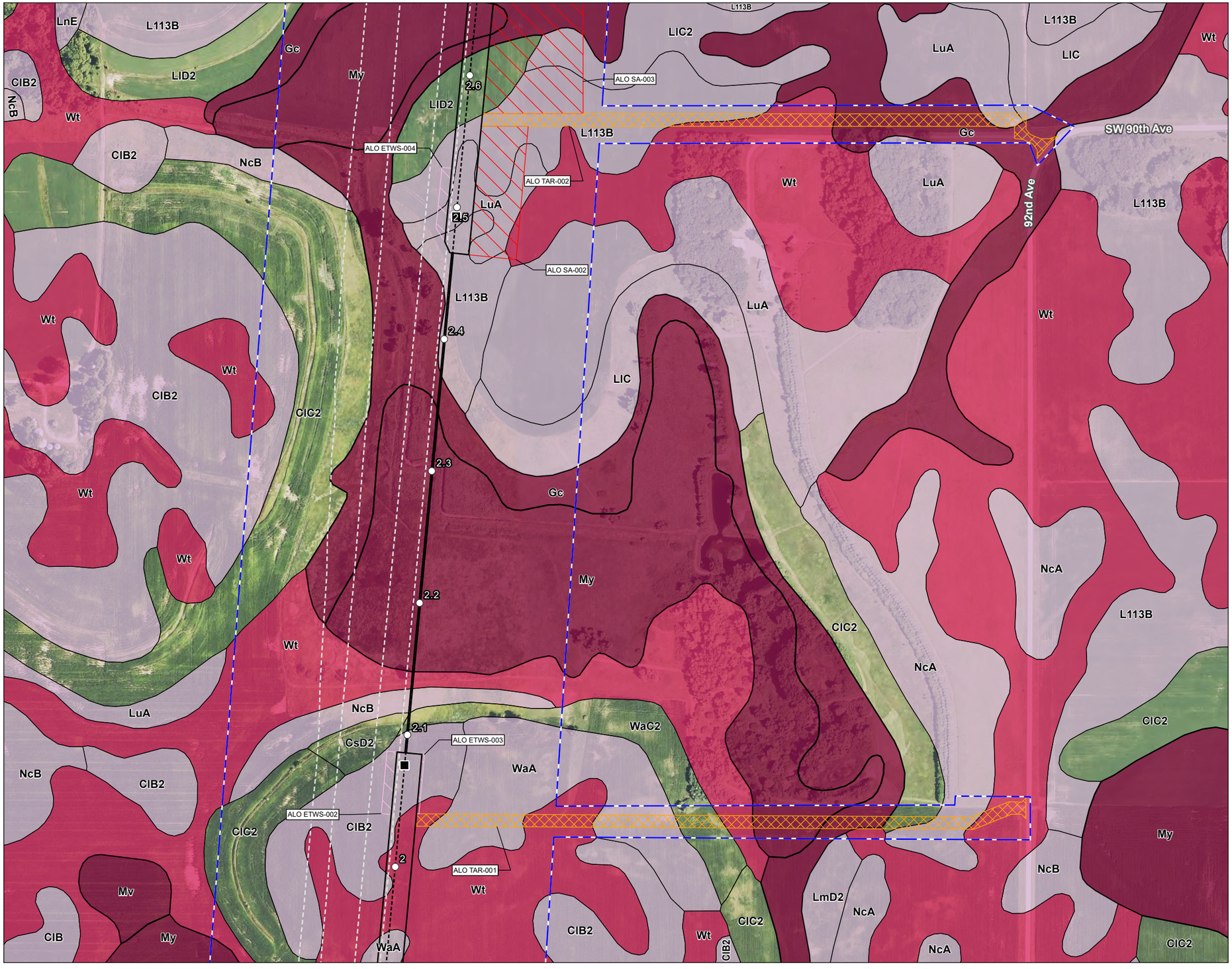


Figure No.

2

Title

NRCS Soil Series Map
V2F - Albert Lea M500 E-Line

Client/Project 172608813

Northern Natural Gas
Ventura to Farmington A-Line Abandonment & Capacity Replacement Project

Project Location
Steele County, Minnesota

Prepared by JM on 2025-10-24
TR by JL on 2025-10-27
IR by SK on 2026-01-29

N

0 200 400 Feet
(At original document size of 11x17)
1:4,800

Legend

- Environmental Survey Boundary
- Temporary Workspace
- Extra Temporary Workspace
- Staging Area
- Temporary Access Road
- Proposed Pipeline
- Existing Pipeline
- Mile Post
- HDD

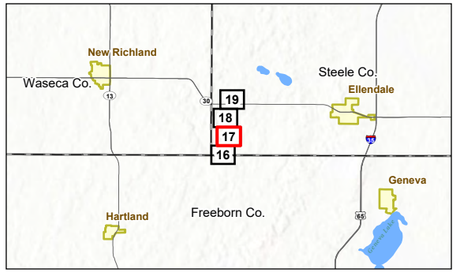
NRCS Soil Survey Data

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- Non-Hydric

National Hydrography Dataset

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2. Data Sources: Stantec, NNG, Esri, USCB, USGS, NRCS
3. Background: 2023 NAIP

Stantec

Northern Natural Gas

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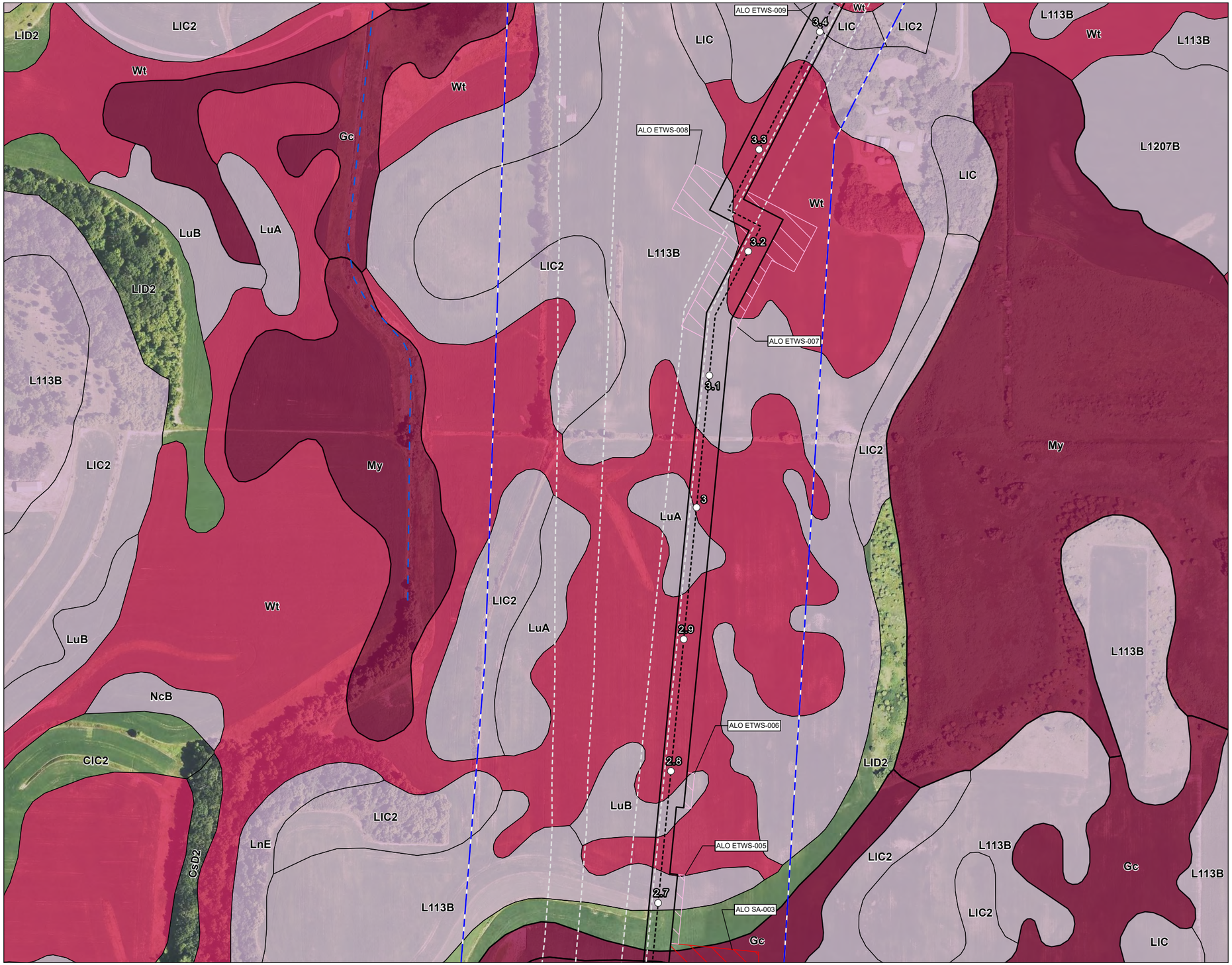


Figure No.

2

Title

NRCS Soil Series Map
V2F - Albert Lea M500 E-Line

Client/Project 172608813

Northern Natural Gas
Ventura to Farmington A-Line Abandonment & Capacity Replacement Project

Project Location
Steele County, Minnesota

Prepared by JM on 2025-10-24
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Legend

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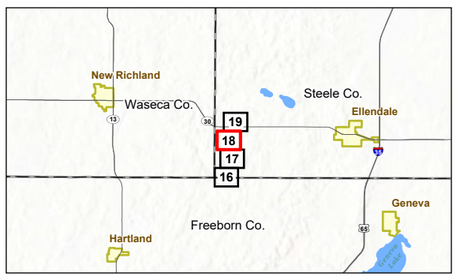
NRCS Soil Survey Data

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Notes

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2. Data Sources: Stantec, NNG, Esri, USCB, USGS, NRCS
3. Background: 2023 NAIP

Stantec

Northern Natural Gas

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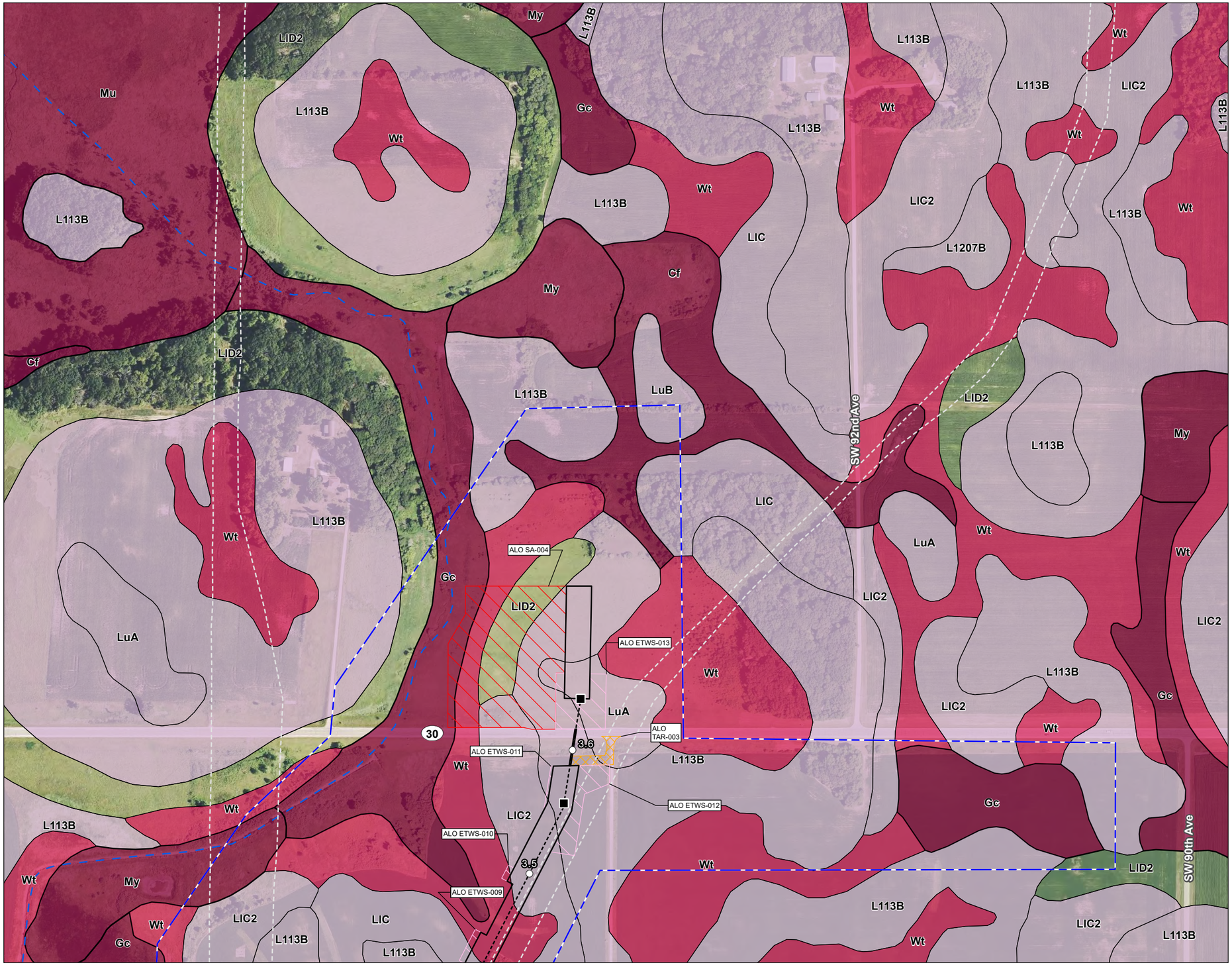


Figure No.

2

Title

NRCS Soil Series Map
V2F - Albert Lea M500 E-Line

Client/Project 172608813

Northern Natural Gas
Ventura to Farmington A-Line Abandonment & Capacity Replacement Project

Project Location
Steele County, Minnesota

Prepared by JM on 2025-10-24
TR by JL on 2025-10-27
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(At original document size of 11x17)
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Legend

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- Mile Post
- HDD

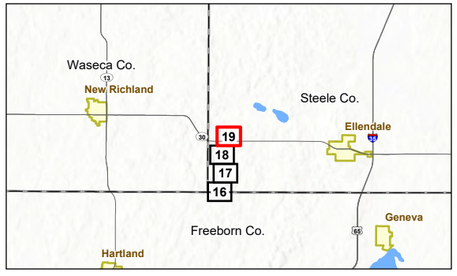
NRCS Soil Survey Data

Hydric Soil Rating

- Hydric
- Predominantly Hydric
- Partially Hydric
- Predominantly Non-Hydric
- Non-Hydric

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Ephemeral Stream
- Canal/Ditch
- Waterbody



Notes
1. Coordinate System: NAD 1983 UTM Zone 15N
2. Data Sources: Stantec, NNG, Esri, USCB, USGS, NRCS
3. Background: 2023 NAIP

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Northern Natural Gas

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ATTACHMENT C

EROSION CONTROL MAP

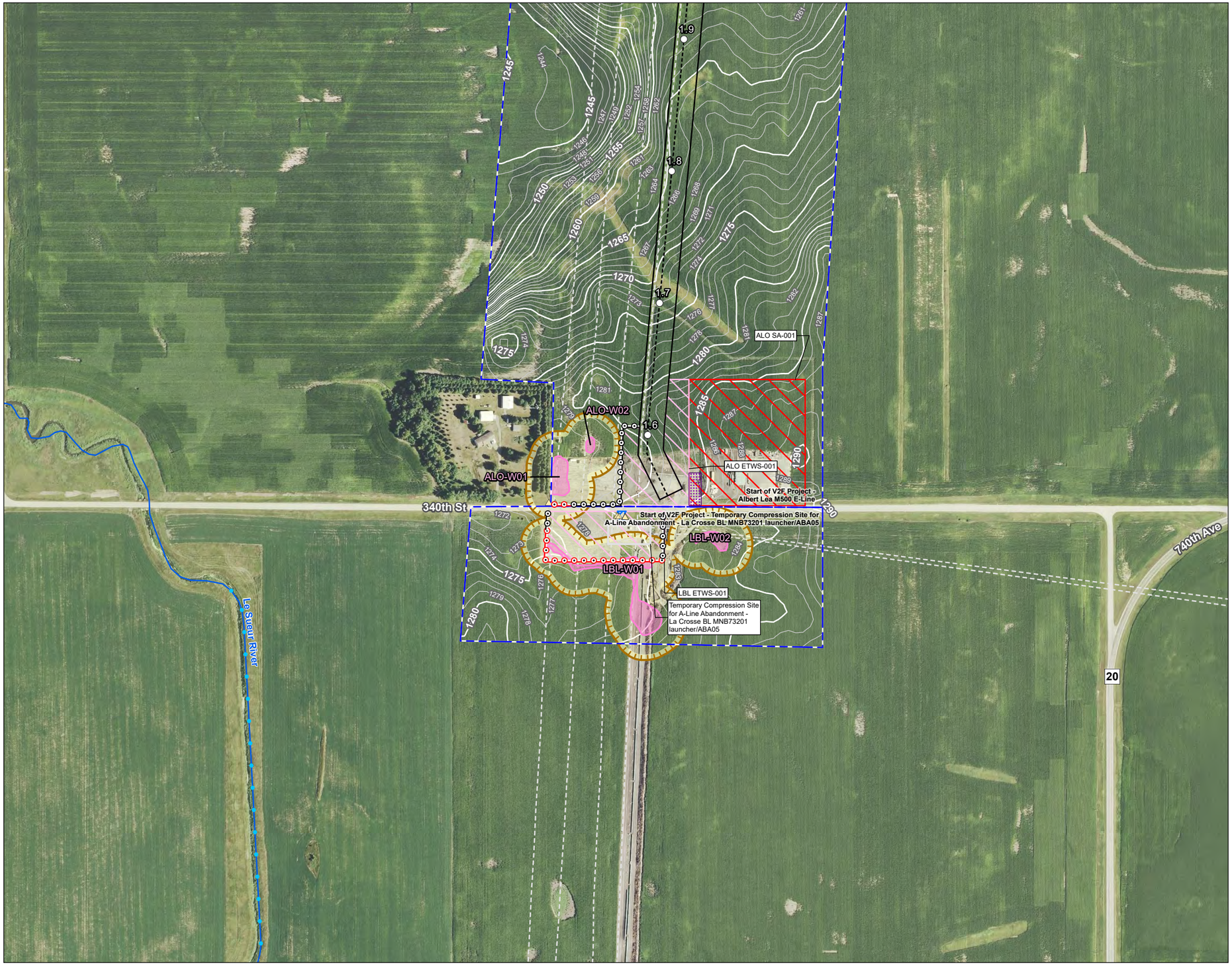


Figure No.

1

Title

Erosion Control Plan
V2F - Albert Lea M500 E-Line

Client/Project 172608813

Northern Natural Gas
Ventura to Farmington A-Line Abandonment & Capacity Replacement Project

Project Location
Steele County, Minnesota

Prepared by JM on 2025-10-24
TR by JL on 2025-10-27
IR by SK on 2026-01-29

N

0 200 400 Feet
(At original document size of 11x17)
1:4,800

Legend

- Environmental Survey Boundary
- Existing Lot
- Existing Access Road
- Temporary Workspace
- Extra Temporary Workspace
- Staging Area
- Proposed Pipeline
- Existing Pipeline
- Mile Post
- 1' Elevation Contour
- Culvert
- Field Delineated Wetland
- Redundant Silt Fence
- Tracking Pad
- Hazardous Liquid Storage Exclusion Zone
- Wellhead Protection Area
- Drinking Water Supply Management Area

FEMA Flood Hazard Areas

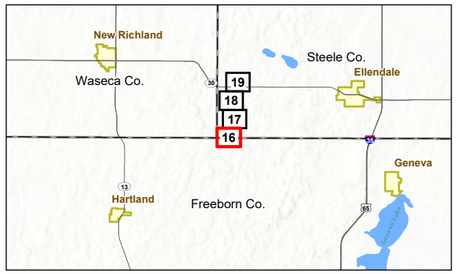
- Floodway
- 100-Year Floodplain
- 500-Year Floodplain

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody

*Percent slope only displayed within 10 feet of centerline and slope 5% or greater.

Erosion Control Notes:
1. Erosion control devices and tracking pad locations will be determined in the field by the EI and contractor, based on site conditions and safety.
2. Slope breakers and other BMPs will be installed in areas with slopes greater than 5%.
3. Erosion mats may be used during final restoration in areas with slopes greater than 5%.
4. Dewatering locations may be determined in the field by the EI as needed.
5. Silt fence that crosses the centerline will be placed prior to and post-excavation activities.



Notes
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3. Background: 2023 NAIP

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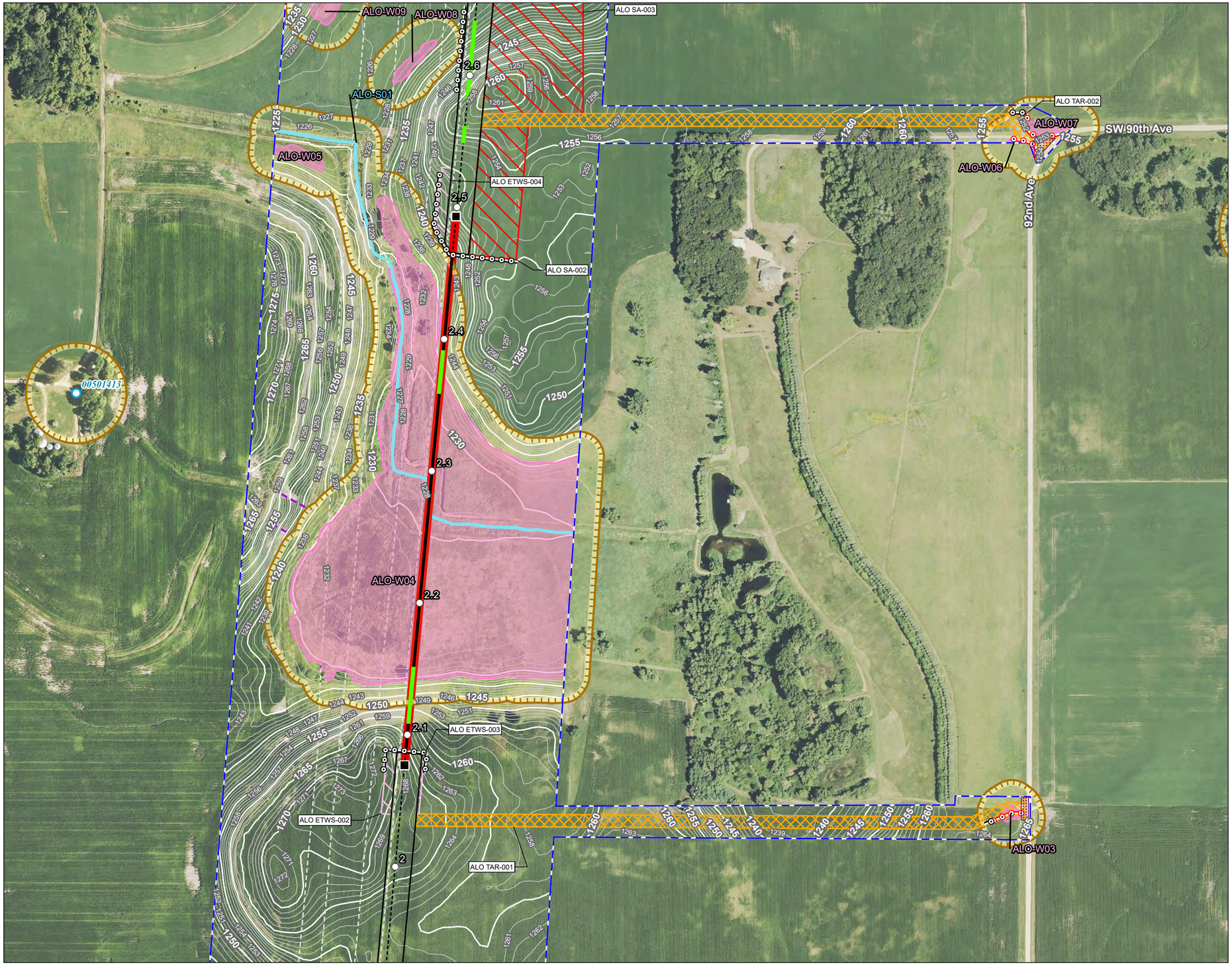


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Legend

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- Existing Pipeline
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- HDD
- HDD Segment
- 1' Elevation Contour
- Culvert
- Upland Drainage Feature
- Field Delineated Waterway
- Field Delineated Wetland
- Well Location
- Silt Fence
- Redundant Silt Fence
- 5+ Percent Slope*
- Tracking Pad
- Hazardous Liquid Storage Exclusion Zone
- Wellhead Protection Area
- Drinking Water Supply Management Area

FEMA Flood Hazard Areas

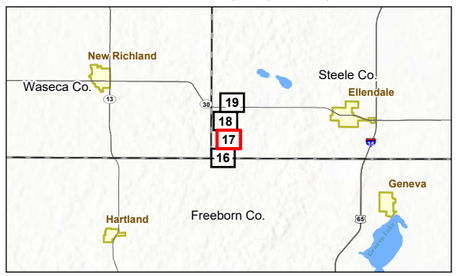
- Floodway
- 100-Year Floodplain
- 500-Year Floodplain

National Hydrography Dataset

- Perennial Stream
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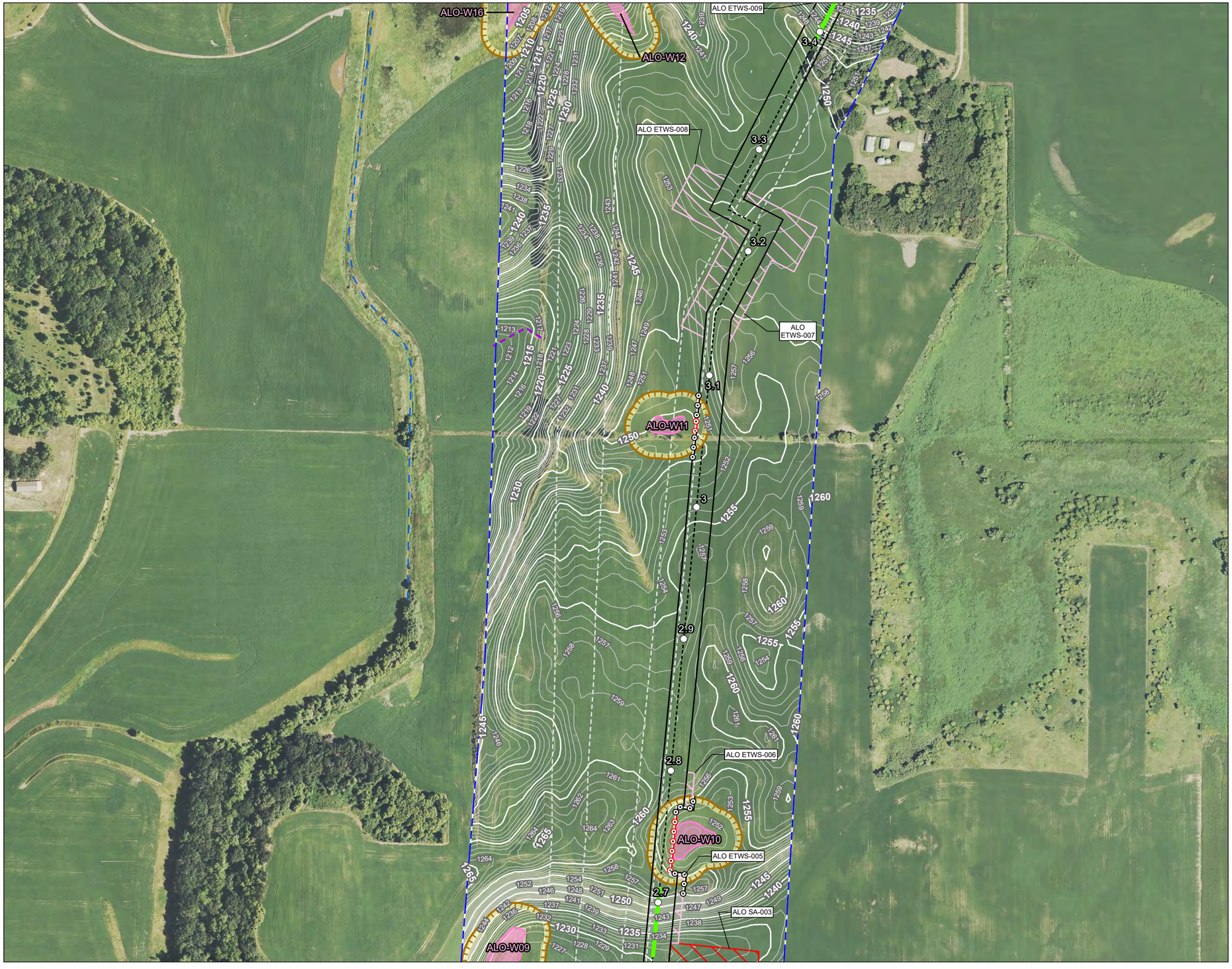


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- Field Delineated Wetland
- Redundant Silt Fence
- 5+ Percent Slope*
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- Wellhead Protection Area
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FEMA Flood Hazard Areas

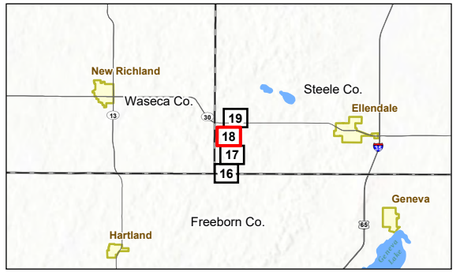
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- 500-Year Floodplain

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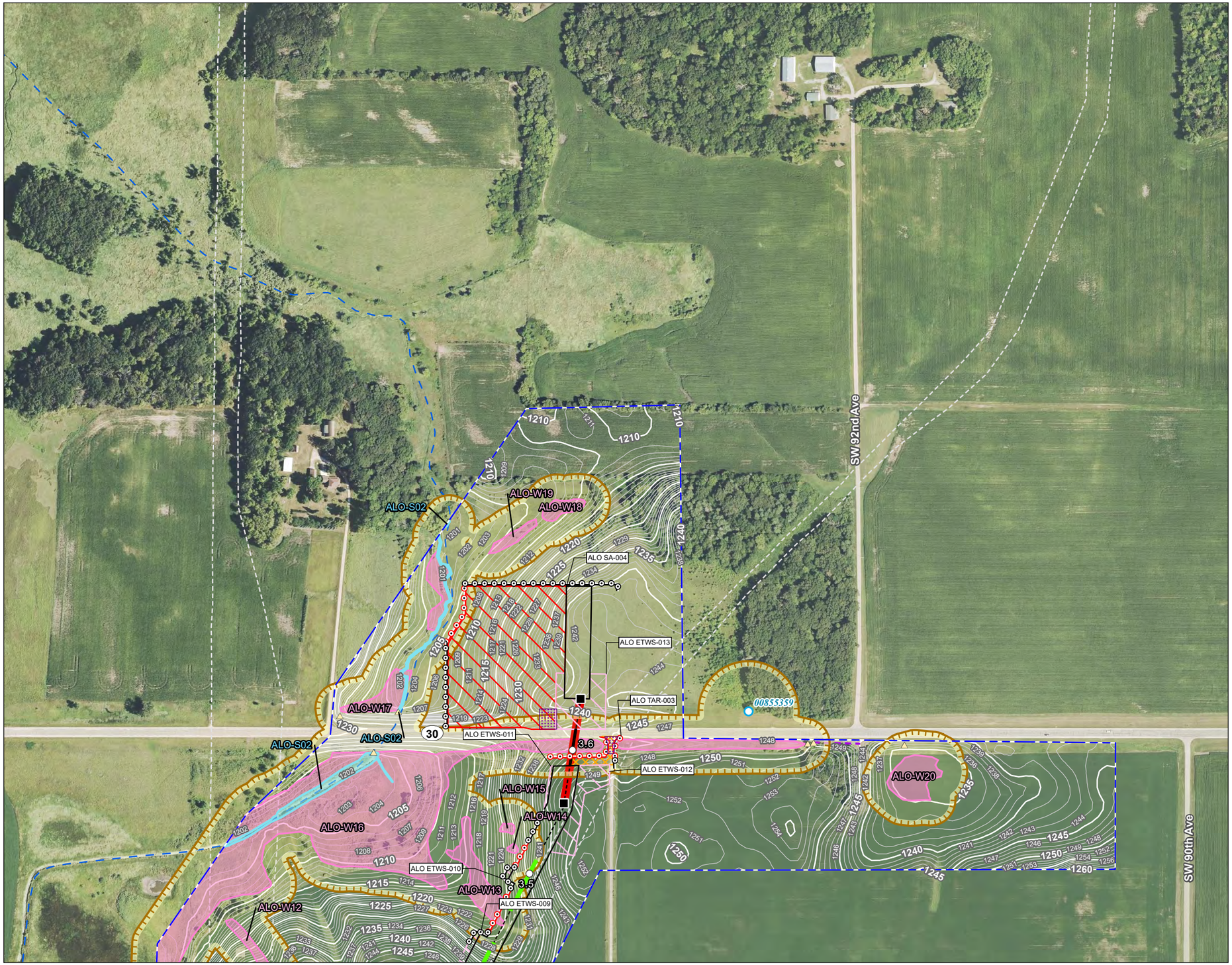


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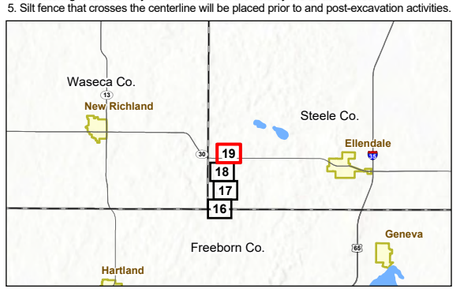
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ATTACHMENT D

NORTHERN'S ENGINEERING STANDARD 7507

Stantec



Northern Natural Gas Company

Erosion and Sediment Control

Technical Standards

Engineering Standard 7507

December 2025

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Abbreviations and Acronyms

BMPs	Best Management Practices
Company	Northern Natural Gas Company
Contractor	Prime Contractor
ECB	Erosion Control Blanket
EI	Environmental Inspector
FERC	Federal Energy Regulatory Commission
HI	Hand Installed
MS	Machine Sliced
NPDES/SDS	National Pollutant Discharge Elimination System
PA	Pre-Assembled
Plan	FERC's Upland Erosion Control, Revegetation, and Maintenance Plan
Procedures	FERC's Wetland and Waterbody Construction and Mitigation Procedures
SD	Super Duty
SDS	Safety Data Sheet
SPCC	Spill Prevention, Containment, and Countermeasure Plan
Spec.	Specifications
SWPPP	Stormwater Pollution Prevention Plan

ENVIRONMENTAL REQUIREMENTS

1 GENERAL

These technical standards identify the minimum controls and practices to be implemented by Contractors working on projects owned and operated by Company. Additionally, the technical standards provide the Company's contractor with material options for erosion prevention and sediment controls to meet requirements of the federal NPDES program, state and local-level pollution control programs, and the FERC Plan and Procedures. The contractor retains liability and responsibility for compliance with the NPDES requirements until all conditions, including final stabilization, have been met and any applicable permit(s) have been closed. Project specific plans may be more restrictive than and supersede this standard.

The Contractor will schedule and conduct construction operations to prevent, control, minimize, or abate pollution of air, land, and water in accordance with all applicable permits, agency consultation, mitigation plans and the FERC Plan and Procedures. In the event of non-compliance with any of the standards, Contractor will immediately provide verbal notification to Company and provide written notification within 24 hours.

1.1 Environmental Items

Company has identified environmental materials to be used as erosion prevention and sediment control and implementation will be governed based upon the terms of the Capital Construction Agreement and/or Work Offer for the project. Contractor is required to provide the material, equipment, installation, maintenance, and removal of each item.

1.1.1 Environmental Items

a. Sediment Control Log: Maintenance of the sediment log includes removal and disposal of trapped sediment.
b. Silt Fence: Maintenance of silt fence includes removal and disposal of trapped sediment.
c. Silt Curtain: Maintenance of the silt curtain includes removal and disposal of trapped sediment.
d. Straw Bales-Certified Weed-Free (per bale): Maintenance of the straw bales includes removal and disposal of trapped sediment. Used straw bales may be broken up and used as mulch onsite, where allowable.
e. Slope Breakers Permanent: Permanent slope breakers are not to be removed upon final stabilization.
f. Filter Berms: Installation of the topsoil filter berm includes immediate seed and mulch. Installation for rock or rock weeper filter berm when converted from temporary to permanent conditions, as applicable, includes modification of the berm dimensions. Temporary filter berms will be removed upon final stabilization.
g. Storm Drain Inlet Protection: Maintenance of the inlet protection devices includes the removal and disposal of trapped sediment or sediment deposited in or plugging drainage systems protected by the devices.
h. Mats: Mats to be installed are to be clean and free of debris.
i. Construction Exit Controls: Rock access pads will be maintained to mitigate track out onto public roads. Place synthetic fabric beneath the rock to aid in recovery during restoration.

j. Filter Bags: Filter bags must be replaced/removed when they have reached their limit of use, are no longer functional, damaged, and/or otherwise require replacement.
k. Erosion Control Blanket (square yards): Installation includes the erosion control blanket, trenching and staking.
l. Mulch-Certified Weed-Free, Slash Mulch (per acre): Includes crimping or anchoring to prevent loss due to wind and water.
m. Seeding: Temporary and permanent seeding includes soil bed preparation, soil amendments and reseeding, as necessary.

1.2 Environmental Training Requirements

Environmental training is provided to increase awareness of the environmental requirements applicable to the project, to prevent incidents of environmental non-compliance and damage, and to meet state-specific requirements. Issues addressed in environmental training include but are not limited to approved project work areas; erosion and sediment control; material storage and disposal; spill prevention, control, countermeasures, and reporting; and environmental requirements contained in project permits and approvals. The Contractor staff will complete the required training in VeriForce. Environmental training is required of project personnel before they can enter the project site or related work areas, per Environmental Procedure 380.201.

Contractor staff must provide proof of completion of all VeriForce training at the start of the project. Upon verification of training, each staff is issued an environmental training sticker and card. All Contractor personnel must display the sticker or card.

The Contractor will provide workers with sufficient skill and experience to perform the Work assigned to them. Upon request by Company, the Contractor will submit evidence of qualification for any person engaged in special work requiring professional training or certification; including, but not limited to, the state-specific requirements for Erosion Prevention and Sediment Control Practices installation and/or Erosion Control Supervisor.

1.2.1 Erosion Prevention and Sediment Control Practices Installer

The Contractor will provide a certified installer (crew supervisor or laborer), as required by the respective state, to install or to direct installations, maintenance, repairs, or removals of erosion prevention or sediment control practices. Documentation of applicable certification from at least one installer will be provided to Company prior to initiation of construction activities.

1.2.2 Erosion Control Supervisor

The Contractor will provide an Erosion Control Supervisor with a valid state-specific Erosion and Stormwater Construction Site Management certification, where applicable, The Erosion Control Supervisor will be authorized to represent the Contractor and meeting contractual requirements for Erosion and Stormwater Management. The certification must be obtained from state agency approved provider, where required.

The Erosion Control Supervisor will be required to be available to respond to the work site within 72 hours of initial disturbance, or as required by the state, and at the site daily when work is taking

place until final stabilization. The following list describes the duties of the Erosion Control Supervisor:

1) Ensures quality control when implementing application plans and permit conditions.

2) Ensures proper installation, functionality, and maintenance, clean-up, and removal of all erosion prevention and non-biodegradable sediment control BMPs and in accordance with manufacturer's recommendations.

3) Implements the erosion and sediment control schedule.

4) Coordinates the work of subcontractors and ensures the full execution of erosion and sediment control measures for each operation and stage of work.

5) Oversees the work of subcontractors and ensures the subcontractors undertake erosion and sediment preventive measures at each stage of the work.

6) Attends construction meetings to discuss the erosion and sediment control schedule.

7) Provides for erosion and sediment control methods for temporary work not shown on the plans.

8) Ensures activities are completed in compliance with all applicable permits.

9) Ensures the full installation of erosion and sediment control devices before suspension of any work.

10) Ensures that proper cleanup occurs from vehicle tracking on paved surfaces and in other locations where sediment migrates and accumulates outside of the approved workspace.

11) Ensures that all non-biodegradable erosion and sediment controls are removed upon final stabilization of the Project.

12) Ensures that installers of erosion and sediment control have proper certifications.

13) The Erosion Control Supervisor is authorized to install, fix, or repair erosion or sediment control practices when a certified installer is unavailable, as applicable.

2 APPROVED WORK AREAS AND SITE ACCESS

Project-related ground disturbance will be limited to the construction right of way, extra workspace areas, pipe storage yards, borrow and disposal areas, access roads, and other areas approved by the Company. Any project-related ground disturbing activities outside these areas will require prior approval. This requirement does not apply to activities needed to comply with the FERC Plan and Procedures, Environmental Procedures 380.201a and 380.201b respectively, (i.e., slope breakers, energy-dissipating devices, dewatering structures, drain tile system repairs). All construction or restoration activities outside of authorized areas are subject to all applicable survey and permit requirements, and landowner easement agreements.

2.1 Approved Work Area

Per the FERC Plan and Procedures, the Company will establish the right of way boundaries and construction limits confining construction operations. Signs and highly visible flagging per colors specified in engineering procedure 7000.100A2 will be installed marking the boundaries of sensitive resource areas, waterbodies, wetlands, or areas with special requirements along the construction work area. Wetland boundaries and buffers must be clearly marked in the field with signs and/or highly visible flagging until construction-related ground disturbing activities are complete. Once established, the Contractor is responsible for maintaining all markings installed by civil survey and/or the environmental inspector throughout construction.

All extra work areas (such as staging areas and additional spoil storage areas) will be sited at least 50 feet away from wetland boundaries, except where the adjacent upland consists of cultivated or rotated cropland or other disturbed land and/or where site-specific approval from the FERC has been obtained.

2.2 Access Roads and Right of Way Access

The Contractor will implement efforts to control unauthorized off-road vehicle use throughout the life of the project. The Contractor will maintain signs, gates, and roads as necessary, per the FERC Plan and Procedures.

A combination of 50-foot-long crushed stone access pads (or as indicated in project documents), matting, and culverts will be installed at ingresses and egresses to access roads and at road crossings, as necessary, as determined by the EI, to minimize the tracking of mud onto roads. If crushed stone access pads are used, place the stone on synthetic fabric to facilitate removal, or follow requirements from state or local authorities. Crushed stone is not to be placed in waterbodies or wetlands. If mud is tracked onto a road, it must be shoveled or swept off the road immediately.

The Contractor will provide clean equipment prior to entering new workspaces to reduce the potential for invasion or spread of undesirable or noxious vegetation. The EI will inspect tracked equipment to confirm the adequacy of cleaning and will not allow equipment to be brought on-site unless the inspection is satisfactory.

If purple loosestrife or other noxious weed is encountered in the approved work area at any time, equipment will be thoroughly cleaned as described above prior to exiting the area of purple loosestrife, even if cleaning must occur in a wetland or within 500 feet of a wetland or waterbody. In such cases, equipment may be cleaned within containment on the right-of-way, as approved by the EI. Soil and vegetative debris resulting from cleaning will be immediately collected and disposed of at a licensed facility, per state regulations and the project noxious weed management plan.

In wetlands that cannot be appropriately stabilized, all construction equipment other than that needed to install the wetland crossing will use access roads located in upland areas. See FERC Plan and Procedures for additional details.

3 MATERIALS HANDLING AND DISPOSAL

3.1 General

Company's materials handling and disposal requirements must be implemented during construction of a project. Company's SPCC Plan, Environmental Procedure 380.201d, includes procedures for disposal of any soil or materials contaminated by a fuel or chemical spill.

Construction debris must be collected as needed and placed in solid waste storage containers to keep the project area tidy.

The Contractor will provide on-site sanitary facilities as needed for personnel, including inspectors and subcontractors. The facilities must be sited in an upland area away from wetlands, waterbodies, stormwater conveyances, curb and gutter, and storm sewers. It must be securely anchored, and it must be within secondary containment.

3.2 Hazardous Materials and Petroleum Products Management

The Contractor will provide the Company a list of petroleum products, hazardous materials and chemicals brought on-site and a copy of the SDS for each. No such material will be brought on-site without prior consent by the Company. The Contractor will retain each SDS on site in accordance with Company's Safety Procedure 110.180. The Contractor will make its SDSs available to the Company.

Petroleum products and potentially hazardous chemicals/materials on-site must be stored in accordance with Environmental Procedures 380.201d and 390.104.

3.3 Hazardous and Liquid Waste Disposal

If hazardous wastes are generated by the Contractor, the Contractor will follow Company's Environmental Procedures 390 series.

3.4 Non-Hazardous Solid Wastes

Construction debris must be collected as needed and placed in solid waste storage containers to keep the project area tidy. Contractor will provide adequate on-site containers with proper labels for secure storage of rubbish and wastes. Contractor will label waste containers, regardless of size. Non-biodegradable sediment controls left onsite after final stabilization are considered construction waste and are the responsibility of the Contractor to remove within 14 days of final stabilization.

3.4.1 Non-Combustible Wastes

Non-woody construction waste (e.g., trash, used filter bags, used silt fence, pallets, metal bindings, welding rods, epoxy coating, abrasive blasting waste, excess rock, excess drilling mud, and drill cuttings) will be removed from the right-of-way by Contractor and be disposed of in existing solid waste landfill/recycling facilities operating under a valid permit. Construction waste must be disposed of by Contractor according to applicable state and local requirements.

If desired, excess rock may be disposed of at an existing commercial facility, such as a gravel pit, provided Contractor obtains written permission from the facility and provides a copy of the permission to Company prior to disposal. If a landowner requests that excess rock be left on their property, the Contractor will notify the Company of the request. The Company, in its sole discretion, will determine whether such a request will be authorized. The Company's decision on the matter will be final. If authorization is granted, the Contractor will be responsible for ensuring rock is stored within the approved work area, but outside of the post-construction permanent right-of-way.

3.4.2 Chipping Procedures for Woody Vegetation

Non-merchantable timber, slash, and stumps may be chipped and used as mulch in upland areas, if approved by the landowner or land-managing agency. Contractor may request permission from Company to use wood chips as mulch, provided Contractor has obtained written permission from the landowner or land-managing agency. Company, in its sole discretion, will determine whether such a request will be authorized. Company's decision on the matter will be final.

If slash, brush, and timber generated during wetland clearing are to be chipped, the material must be removed from the wetland and chipped in an upland area, unless specifically authorized by project authorizations.

4 CLEARING, GRADING, AND TOPSOIL SEGREGATION

4.1.1 Noxious and Invasive Weeds

Contractor will follow all requirements of the state's noxious and invasive weed laws with regards to treatment and movement of noxious and invasive weeds located within the construction limits. Each state within Company's pipeline system issues a state noxious weed list.

The Contractor will provide clean equipment prior to entering new workspaces to reduce the potential for invasion or spread of undesirable or noxious vegetation. The EI will inspect tracked equipment to confirm the adequacy of cleaning and will not allow equipment to be brought on-site unless the inspection is satisfactory.

If purple loosestrife or other noxious weed is encountered in the approved work area at any time, equipment will be thoroughly cleaned as described above prior to exiting the area of purple loosestrife, even if cleaning must occur in a wetland or within 500 feet of a wetland or waterbody. In such cases, equipment may be cleaned within containment on the right-of-way, as approved by the EI. Soil and vegetative debris resulting from cleaning will be immediately collected and disposed of at a licensed facility, per state regulations and the project noxious weed management plan.

Contractor will adhere to all plant pest quarantine orders imposed by each respective state. Common requirements include, but are not limited to:

a. Untreated wood from areas known to have plant pest is prohibited from entering non-infested areas;

b. Movement of materials or equipment out of quarantine areas is prohibited without inspection and/or compliance agreements; and

c. Wood may not be offered as firewood or otherwise to an industry or individual without compliance agreements.

The Contractor will:

a. Dispose of quarantined wood in accordance with existing quarantine requirements;

b. Salvage topsoil in accordance with the FERC Plan and Procedures;

c. Where project phasing and/or exclusion areas and/or buffers have been identified, the Contractor will isolate those areas using temporary fence, and perform clearing and grubbing operations in a manner that will not damage or jeopardize the surrounding plant life and property; and

Contractor will prune branches for the following reasons, and only with DES approval:

a. For pedestrian, vehicle, and infrastructure clearance;

b. To reduce risk of branch failure; and

c. To improve a site line and sign visibility.

4.1.2 Quarantined Wood

Contractor will follow all species-specific quarantine regulation posted by the respective state agency. Contractor will not market quarantined trees to the wood-using industries or individuals without having a compliance agreement from the respective state agency. No wood with bark attached will be made available to the public for use as firewood from the quarantined area. Do not remove any part of the quarantined tree, including roots, outside of a quarantined county without fulfilling the requirements of a compliance agreement from the respective state agency. Contractor may chip quarantined wood through a chipping machine or tub grinder to create wood mulch for use within the construction limits, as allowed by state regulations.

Contractor will dispose of quarantined trees, brush, stumps, roots, and debris by chipping or tub grinding and using the mulch within the construction limits for erosion control, construction of exit pads or landscaping purposes. No mulch may be placed in wetland areas.

Contractor will dispose of stumps, roots, and debris from oak wilt infected oak trees by chipping or tub grinding and using the mulch within the construction limits for erosion control, construction of exit pads or landscaping purposes.

4.2 Grading and Topsoil Segregation

Contractor shall comply with all provisions of the FERC Plan and Procedures.

4.3 ***Excess Vegetation Removal**

Excess vegetation may require mowing or cutting prior to topsoil segregation. Crops and dense grass over 18 inches in height should be segregated and removed from the right of way as construction waste to avoid impeding revegetation efforts and anerobic breakdown within topsoil piles.*

5 SEDIMENT CONTROLS

Sediment control practices are designed to prevent or minimize loss of eroded soil at a site and/or discharges of sediment laden water into surface waters or stormwater conveyances. Sediment control practices may be constructed of materials such as silt fence, fiber logs, staked hay or straw bales, compacted earth (e.g., drivable berms across travel ways), sandbags, or other appropriate materials. The section has been developed based on the FERC Plan and Procedures and the NPDES regulations and additional, more stringent requirements associated with permit conditions or mitigations plans may be applicable based on the state. In this case, the most stringent requirement will apply.

Contractor will install temporary sediment barriers during clearing and grading activities. Temporary sediment barriers will be installed and maintained as directed by the EI at the following locations:

1) Across the entire width of the approved work area at approaches to waterbodies and at the base of slopes adjacent to wetlands and roads;

2) Along the edge of the approved work area where waterbodies and wetlands are bordering the approved work area;

3) Where necessary to contain spoil and sediment within the approved work area (e.g., on steep side slopes or in saturated wetlands);

4) At other locations as directed by the EI.

Sediment barriers located across the active portion of the work area may be removed during the day when work is being conducted but must be replaced each night or at the onset of inclement weather (e.g., rainstorm). Sediment barriers will be inspected daily in areas of active construction and repaired as needed throughout construction.

5.1.1.1 Winter Construction

*When construction will either extend into or be suspended through the winter months, contractor shall submit to Northern a winter construction plan in writing for approval prior to conducting work or demobilizing from the project in winter conditions. The winter construction plan should cover methods of erosion and sediment control to be employed, plan to address maintenance of the controls, snow removal, worker safety, and restoration of subsoil and topsoil to alleviate compaction and settlement. These methods must address the remaining scope of the project and must achieve environmental compliance in frozen conditions.

During frozen conditions, sediment controls and stabilization must be installed during active construction and prior to cessation of construction activities.* Contractor may establish a packed snow berm in areas with sufficient winter snow that will act as a temporary sediment barrier during construction. This temporary sediment barrier will be established and maintained as needed along the edge of the disturbed work areas, access roads, and extra work areas to prevent sediment runoff.

During frozen conditions, if the snow berms are ineffective or if sediment discharge off the right-of-way is observed, Contractor will attempt to install silt fence, staked straw bales and/or other types of sediment barrier in those areas to prevent further offsite sedimentation. Installation of silt fence can be accomplished using a ditch-witch trencher and backfilled with saturated organic soil that will freeze and anchor the silt fence to the wetland surface. Straw bales can be used alone or in conjunction with silt fence, following state-specific standards. These will be anchored to the ground with rebar. Contractor will attempt to retrieve the sediment, as practicable, without disturbing the surface of the approved work areas.

Temporary sediment barriers will remain in place until permanent vegetation has become successfully reestablished as determined by Company. Once permanent vegetation has become successfully reestablished, the barriers will be removed and disposed of as construction waste. During frozen conditions, remove temporary sediment barriers at the completion of construction only if the area will be inaccessible after spring thaw precluding proper retrieval of the barriers, and if so, approved by the EI.

5.2 Installation, Maintenance and Removal of Sediment Control Practices

5.2.1.1 Installation

1) Install sediment controls on all downgradient perimeters of the site and downgradient areas of the site that drain to any surface water, including curb and gutter systems. Contractors must locate sediment control practices **upgradient** of any buffer zones.
2) Contractors must install sediment control practices **before any upgradient land-disturbing activities begin** and must keep the sediment control practices in place and in functional condition until they establish permanent cover.
3) Contractors must provide silt fence or other effective sediment controls at the base of stockpiles on the downgradient perimeter.
4) The Contractor must preserve a **50-foot natural buffer** or, if a buffer is infeasible on the site, provide **redundant (double) perimeter sediment controls** when a surface water is located within 50 feet of the project's earth disturbances and stormwater flows to the surface water. {Natural buffers are not required adjacent to road ditches, judicial ditches, county ditches, stormwater conveyance channels, storm drain inlets, and sediment basins.} Larger buffer zones may be required but will be noted in the SWPPP.
5) When redundant sediment controls are required, the Contractor will install them at least **5 feet apart** unless otherwise noted on the SWPPP or directed by the on-site EI.
6) If downgradient sediment controls are overloaded, based on frequent failure or excessive maintenance requirements, contractors must install additional up-gradient sediment control practices or redundant BMPs to eliminate the overloading and amend the SWPPP to identify these additional practices as required.
7) Measures will be installed, maintained, and repaired per applicable permit conditions.

8) The contractor will recover any sediment lost from the project site, restore property to the pre-existing conditions for loss of sediment off the project, or both at no additional cost to the Company. If sediment is lost in a water of the state, applicable regulatory authorization must be obtained by the Company before removing the sediment.

5.2.1.2 Maintenance

1) All nonfunctional BMPs must be repaired, replaced, or supplemented immediately, but no later than 24 hours, after discovery unless a more stringent time frame is specified in site specific plans. All perimeter control devices, which have become **nonfunctional,** or **sediment has reached 1/2 of the height of the device** must be repaired, replaced or supplemented immediately, but no later than 24 hours, after discovery unless a more stringent time frame is specified in site specific plans.
2) Sediment tracked onto public roadways must be removed immediately.

5.2.1.3 Removal

1) Remove temporary sediment controls (unless biodegradable) after permanent restoration has been achieved. All removed materials become the property of the Contractor.
2) Remove the silt curtain upon completion of instream work. All instream work requirements still apply while removing silt curtains.
3) Remove sediment control logs upon permanent restoration. For compost logs, the outer shell material, if not biodegradable (i.e., jute), must be removed completely and contents of logs may be left in place and spread out over the ground to decay.

5.3 Sediment Control Practices

5.3.1 Vegetated Buffers

Incorporating an existing vegetated buffer along the perimeter of the site and upslope of structural perimeter controls provides an effective and inexpensive sediment control. Maintaining a buffer zone during clearing and grubbing operations may provide sediment controls prior to the installation of structural controls.

5.3.2 Sediment Control Log

Sediment control logs may be used as perimeter control, ditch checks, and as part of dewatering structures. Installation of the sediment control log is provided below by type and Table 5.2.2-1 provides the material specifications for the sediment control logs.

Table 5.2.2-1
Sediment Control Logs Material Specifications

Material	Material Specification	Netting	Diameter (inches)	Material make-up	Dry Weight	Biodegradable
Straw Logs	Refer to State Specification	Encased in photodegradable synthetic or natural netting with a service life from 6 months to 9 months and with openings ½ inch × ½ inch	8 to 9	Consisting of at least 80% of the fiber material at least 3 in long	2 to 4 lbs. per cu. ft.	No

Wood Fiber Logs	Refer to State Specification	Encased in a photodegradable synthetic or natural netting with a service life from 6 to 9 months and with openings ½ inch × ½ inch	6 to 8	Consisting of at least 80% of the fiber material at least 6 in long	1.4 lbs per cu. ft. to 5.7 lbs per cu. ft.	No
Wood Chip Logs	Refer to State Specification	Encased in a photodegradable synthetic or natural fiber casing with 1/8 to 3/8 openings with a service life from 12 months to 24 months.	8 to 10	NA	NA	Yes
Compost Logs	Refer to State Specification	Encased in photodegradable synthetic woven or natural fiber casing with 1/8 to 3/8 in. openings, with a target service life from 12 to 24 months.	7 to 9	30-40% compost/p60-70% - wood chip	NA	Yes
Rock Logs	Refer to State Specification	Encased in a geotextile material with a minimum grab tensile strength of 130 lb. ASTM D6818 and a minimum Mullen Burst Strength of 175 psi	4 to 6	NA	NA	No

5.3.2.1 Installation of Straw and Wood Fiber Logs

Place logs on smooth prepped soils and prepare a shallow, less than 1/4 of the total height of the log, trench for the sediment control log to be placed. Backfill and compact the upgrade side of the sediment control log with soil. Stake logs through the back half of the log at a 45-degree angle with the top of the stake pointed upstream. Stakes will be spaced every 2 feet. If using more than one sediment control log for length, overlap the ends 6 inches and stake both ends. See typical drawing Figure S-5B in Appendix B.

5.3.2.2 Wood Fiber, Wood Chip, Compost, and Rock Logs

Place logs on smooth, prepped soils or paved surfaces and ensure no gaps are between logs and soil or paved surface. Install logs along contours with ends turned up slope in a J-hook manner. Compost and wood chip logs are considered biodegradable if the netting is biodegradable. Contractor will need approval from the Company prior to onsite spreading of wood chips to ensure compliance with all applicable permits. See typical drawing Figure S-5B in Appendix B.

5.3.3 Ditch Checks

Ditch checks are practices placed in ditches and other stormwater conveyances designed to slow the flow of water.

If used as a ditch check without erosion control blanket: Follow installation above for sediment control log type Wood Fiber, Wood Chip, Compost, or Rock and place perpendicular to flow and in a crescent shape with ends facing upstream. Use logs with a center section of the ditch check one log diameter lower than the ends. Space stakes every 1 foot. Provide 2 stakes in a crisscross pattern at each location with the sediment control log.

If used as a ditch check with erosion control blankets: Install a wood fiber ECB as show in plan, at least one role width, and perpendicular to the ditch flow. Burry the leading edge in a trench 4 inches deep and 4 inches wide. Backfill and compact the trench with soil. Staple the ECB at spacing no greater than 1 foot on center. Place the Wood Fiber log without the trench, on top of the ECB. If using more than one sediment control log for length, overlap the ends 6 inches and stake both ends. See typical drawing Figure S-5B in Appendix B.

5.3.3.1 Anchoring

Provide wood stakes for straw and wood fiber logs with the following dimensions: 1 inch × 2 inches and 22 inches to 24 inches long with a pointed end.

5.3.3.2 Removal

Upon final stabilization of the right of way, the contractor will remove all sediment control logs. The exception are compost logs with biodegradable netting. If the netting is not biodegradable, it may be removed, and the compost left onsite to decompose.

5.3.4 Silt Fence

Silt fence is the most commonly used perimeter control. It can also be used as slope breakers and/or ditch checks in low flow areas. Four types of silt fence are presented below.

1) **Machine Sliced (MS)/ Hand Installed (HI)** high flow **silt fence**: consists of a woven geotextile fabric installed by machine or hand supported by wood posts and geotextile is attached using three staples. A typical installation Figure S-1 is provided in Appendix B.

2) **Machine Sliced (MS)/ Hand Installed (HI) wire backed silt fence**: consists of a woven geotextile fabric mesh fence fabric will be standard woven wire fence fabric installed by machine/hand and supported by steel backed by Wire posts and geotextile is attached using three zip ties. A typical installation Figure S-2 is provided in Appendix B.

3) **Super Duty (SD) silt fence:** consists of concrete jersey barriers with fabric wrapped around the front face of the barrier. The Contractor may provide woven or non-woven geotextile fabric or poly/poly-reinforced sheeting.

Silt Fence Material Specifications

Table 5.2.4-1 provides the material specifications for the silt fence.

Table 5.2.4-1
Silt Fence Material Specifications

Silt Fence Type [a]	Width (inches)	Grab Tensile (machine direction), lb.	Apparent Opening Size	Puncture Strength (ASTM D 4833)	Maximum Permittivity (ASTM D 4491)	Flow Rates (gpm/sq. ft)
Machine Sliced /Hand Installed (MS/HI), high flow geotextile [b]	36	130	No. 30 sieve	NA	1.0 s−1	100
Wire backed silt fence	36	NA	No. 30 sieve	NA	NA	100
Super Duty (SD), woven or non-woven geotextile [c]	36	100	No. 30 sieve	NA	NA	NA

[a] UV Stability 500h must be 70% and meet ASTM D 4355.
[b] Provide MS, HI woven geotextile with monofilament in both directions. Do not make substitutions.
[c] The Contractor may use poly/poly-reinforced sheeting with a thickness of at least 6 mil or an equivalent.

A. Fasteners

Provide fasteners with a tensile strength of at least 50 lbs. Use a minimum of three staples to fasten geotextile to wooden posts on MS/HI applications. Use wire ties or plastic ties to fasten geotextile to anchor points on SD applications.

B. Fabric Requirements:

1) Provide geotextiles from Table 5.2.4-1

2) Provide fabric meeting the following requirements and characteristics:

   a. Uniform in texture

   b. Uniform in appearance

   c. Contains no defects, flaws, or tears affecting the physical properties

   d. Contains UV inhibitors and stabilizers providing a minimum service life of at least 2 years during outdoor exposure, and meets the requirements specified in the table 5.2.4-1

5.3.4.1 Supports

Company only allows hardwood posts which is a variance from Department of Transportation specifications, see Table 5.2.4-2 below. However, steel t-posts may be required in manufacturer's specifications for wire backed silt fence. In this case manufacturer's specifications will be followed.

Table 5.2.4-2 Silt Fence Post Requirements	
Characteristic	**Requirement**
Type	Hardwood
Weight	≥ 2 in × 2 in
Length	≥ 4.0 ft
Embedment	≥ 18 in
Post Spacing	<5.0 ft

5.3.4.2 Installation of Silt Fence

A trench is excavated, or machine sliced to a depth between 6 inches (HI) or 8 to 12 inches (MS/PA). The stakes are installed on the downslope side from the site and are embedded to a minimum depth of 2 feet. The excavated material is backfilled over the geotextile fabric and compacted. Spacing of stakes is typically 5-foot minimum and 6-foot maximum.

5.3.4.3 Installation of Portable Precast Concrete Jersey Barriers (Super Duty)

Place the bottom edge of the geotextile fabric 4 to 6 inches under the face of the median barrier. Place barriers end to end to minimize any gap in the barrier. The geotextile fabric should be attached to the face of the barrier with wire or plastic zip ties and secured to each cable ring on the barrier.

5.3.5 Flotation Silt Curtain

Flotation silt curtain may be used as a primary sediment control, only while in-water work is occurring. Once work within the water feature is completed, perimeter control should be installed on the adjacent upland to keep material out of the water. Flotation silt curtain is not considered a sediment control once in-water work is completed. It can be used in moving or still water and is used to contain suspended sediment and floating debris in open water and must meet the following requirements and characteristics:

a. Made of fabric fastened to a flotation carrier

b. Weighted along the bottom edge

c. Depth as shown on the plans and typical Figure S-3 (Appendix B) and referring to the dimension of the curtain fabric extending below the flotation portion of the curtain

d. Material must be disinfected prior to coming onsite and must be disinfected and dried prior to removing the material offsite

e. If the surface water has invasive species and the material is moved offsite for disinfection a state transport permit may be required

Material specifications for flotation silt curtain is provided in Table 5.2.5-1 below.

Table 5.2.5-1
Flotation Silt Curtain Requirements

Characteristic	Type	
	Light Duty	Heavy Duty
Curtain fabric materials type	Impermeable, vinyl-nylon laminate	Impermeable, vinyl-coated nylon
Weight (oz per sq. yd)	18	0.22
Grab tensile strength, lbs	300	500
Depth of curtain [a]	2 ft – 10 ft	2ft – 10 ft
Flotation (in)	6 diameter marine quality expanded polystyrene	8 diameter marine quality expanded polystyrene
Net buoyancy, lb. per ft	13	20
Top load carrying components	Fabric only	Fabric plus 5/16 in [8 mm] galvanized steel cable at least 9,800 lb. break strength
Ballast	≥0.7 lb per ft [1.0 kg per m] enclosed ¼ in [6 mm] galvanized chain	≥1.1 lb per ft [1.6 kg per m] enclosed 5/16 in [8 mm] galvanized chain
Connections between Sections	Laced grommets	Aluminum collar reinforced quick disconnects

[a] Minimum average roll value meeting the requirements of ASTM D 4632.

5.3.6 Filter Berms

Filter berms are an economical option for sediment control; typically constructed from materials readily available on site. Filter berms are used as perimeter control, slope breakers and ditch checks.

5.3.6.1 Filter Berms Material Specification

Table 5.2.6-1 below provides the material and construction specifications for each of the four types presented which include compost, slash mulch, topsoil, and rock. For high flow or high velocity areas, rock is the strongest of the options.

Table 5.2.6-1
Filter Berm Specifications

Type	Material	Shape and Base	Height	Side Slopes
Compost	Refer to State Specification	Trapezoidal shape with 5 ft. base width	Min. height 2 ft. in loose volume, and	2:1 (V:H) side slopes
Slash Mulch	Refer to State Specification	Trapezoidal shape with 5 ft. base width	2:1 (V:H) side slopes	2:1 (V:H) side slopes
Topsoil	Refer to State Specification	Trapezoid shape with 7 ft. base width	Min. height 2 ft.	2:1 (V:H) side slopes
Type 4	Refer to State Specification	Trapezoid shape with 5 ft. base width	Max. Height 2.0 ft., and	2:1 (V:H) side slopes

5.3.6.2 Installation of Filter Berms

For use as perimeter control, or a slope breaker, filter berms should be installed along the contour of the slope and perpendicular to sheet flow. “J-hooks” should be included at the beginning and end of the berm. Refer to typical Figure ERO-13, Appendix B.

As a ditch check, in very low flow areas, slash mulch may be used, if allowed by the applicable regulatory agency. Neither compost nor topsoil should be used as a ditch check.

5.3.7 Temporary Down Drains

Temporary down drains may be used to convey concentrated runoff down the face of a slope to reduce the potential for erosion on the slope.

5.3.7.1 Installation of a Temporary Down Drain

Temporary down drains are effective at isolating overland flow on disturbed slopes. Provide a minimum slope on pipe of 3%.

5.3.7.2 Temporary Down Drain Material Specification

Table 5.2.7-1 below provides the suggested pipe diameter based on the drainage area. The maximum allowable drainage area is 5 acres per slope drain.

Table 5.2.7-1
Temporary Down Drains
Slope Drain Sizing

Drainage Area, acres	Pipe Diameter, inches
0-0.5	12
>0.5-1.5	18
>1.5-2.5	21
>2.5-3.5	24

At the top of the slope, prepare a channel to direct flow into the mouth of the pipe (e.g., earthen dike, sandbags, curb). Provide a dike made of compacted Class V, dirt, or sandbags to channel the flow to the temporary slope drain. The top of the dike should be 1 foot higher than the top of the inlet pipe. The pipe should be anchored along the slope with the spacing no greater than 8 feet apart. A watertight connection should be used to attach the flared end section to the inlet end of drainpipe. Extend the pipe beyond the toe of slope and terminate in a 4-foot level section where practicable. Install a dewatering structure at the base to collect the water leaving the pipe. Refer to typical Figure S-7, Appendix B.

5.3.8 Storm Drain Inlet Protection

Inlet protection devices are used as a preventative measure from allowing sediment-laden water from entering a storm drain. The inlet protection device must meet the following criteria:

1) All inlet devices must have an emergency overflow or bypass feature equivalent in size to the grate opening size,
2) Devices may include using rock logs (with local governmental approval); or
3) Filtering devices housed inside the catch basin (drop-in prefabricated units).

5.3.8.1 Installation of a Storm Drain Inlet Protection

Inlet protection must be installed prior to disturbing soils that will drain directly to the inlet. The protection device should fit the inlet properly with no gaps. Refer to typical Figure ERO-16, Appendix B.

5.3.8.2 Maintenance of Storm Drain Inlet Protection

1) Inspect and clean out devices regularly.
2) Inlet protection may be removed for a particular inlet if a specific safety concern (e.g., freeze or flood event) has been identified. They may not be pulled during winter construction unless approved by the appropriate stormwater regulatory agency.

5.3.9 Triangular Silt Dikes

Triangular Silt Dikes (TSD) are an alternative sediment control measure for use in site-specific conditions. They consist of urethane foam and geotextile fabric and are typically designed with protective aprons on one or both sides of the barrier. They are typically used in areas where the staking of materials into surfaces (e.g., pavement) is not possible. They are reusable, and easily relocated and installed. **Per manufacturers specifications, these are not a drivable barrier.** These must be used and installed per manufacturer's specifications. The TSD typically comes in three sizes and one option with steel mesh as indicated in Table 5.2.9-1 below.

Table 5.2.9-1
Triangular Silt Dike Use and Specifications

Size	Use	Design
10-inch foam	Ditch check dams Diversion Dikes Drop Inlet Protection Temporary Ditch Liner Stream & Pond Protection	Designed to be used in multiple configurations. Protective aprons on both sides of the barrier with one sewn seam (on the front upstream side).
8-inch foam	Curb Protection Continuous Barrier Diversion Dikes Drop Inlet Protection Stream & Pond Protection Installations on Concrete and Asphalt	Typically designed for smaller development areas where vehicle traffic is greater. Protective aprons on both sides and has the front and back apron sewn into the barrier. With both aprons sewn, it allows this product to be easily installed on concrete and asphalt.
5-inch foam	Along Curbs in Developments Diversion Dikes Inlet Protection Continuous Barrier Small Surface Drainage Areas Roadway Shoulder Protection Installations on Concrete and Asphalt	Typically used in areas with lower runoff. designed It has a protective apron on the front or upstream side of the barrier and no protective apron on the backside or down- stream side. Backside should be installed along curbs or on hard surfaces where overtopping the barrier will not cause erosion on the backside.
Reinforced Steel	Ditch check dams Diversion Dikes Drop Inlet Protection Temporary Ditch Liner Stream & Pond Protection	Can be used where drainage are is limited to 0.25 acre per 100 linear feet of dike. Filter dike is a self-contained silt fence consisting of filter fabric wrapped around welded wire fabric and shaped into a triangular cross section.

5.3.9.1 Installation of Triangular Silt Dikes

Installation method will vary based on the size of the silt dike, the proposed use, and the manufacturer of the materials. The Contractor shall use and install this product in compliance with the manufacturer's specifications. Refer to typical Figure S-5A, Appendix B.

5.3.10 Construction Exit Controls

All construction exits onto paved surfaces must be stabilized with appropriate controls to minimize vehicle tracking of sediment from the project onto paved surfaces. The Contractor will:

1) Maintain safe and accessible conditions at all road crossings and access points during construction.
2) Minimize the use of tracked equipment on public roadways. Remove any soil or gravel spilled or tracked onto roadways immediately to maintain safe road conditions. Repair any damages to roadway surfaces, shoulders, and bar ditches.

5.3.10.1 Materials for Construction Exit Controls

There are a variety of acceptable materials for use in construction exit controls. The appropriate material will be based on the project site conditions, soil type, vehicle size, amount of vehicle traffic, time of year, and duration of use. The vehicle tracking pad should be at least 50-foot-long but longer pads may be required to adequately clean tires. All materials must be removed upon achieving final stabilization of the project.

Examples of acceptable materials for construction exit controls include the following:

- Crushed rock
- Slash mulch
- Temporary paving
- Timber mats
- Floating reusable mats
- Rumble pad
- Wheel wash-off

5.3.10.2 Installation of Construction Exit Controls

1) If crushed stone access pads are used place the stone on synthetic fabric to facilitate removal.
2) The size and depth of the aggregate will be dependent on the project site conditions. In general, aggregate used is 1.5 to 3 inches in size and placed in a layer approximately 6 inches thick. However, coarser aggregate materials (2 to 6 inches in size) may be more effective.
3) A sediment control measure may be required at the entrance to the construction exit, in addition to the stabilization measure. Optional sediment controls may include a small rock berm, compost log, or other sediment control designed as a drivable control and approved by the Company on a project specific basis. Triangular silt dikes are not a drivable sediment control.
4) Refer to Typical Figure ERO-12 in Appendix B.

6 EROSION CONTROLS

Erosion control practices are designed to reduce the erosion potential of the soil as a result of construction activities. Erosion controls are key to minimizing the amount of sediment produced from a site. Erosion controls may consist of both temporary and permanent measures. Temporary measures are required throughout construction and are subject to specific time frames required by permits or construction plans. A good erosion control installation begins with appropriate site preparation to provide good contact with the soil and the erosion control measures.

Temporary cover is the most efficient means of erosion control and is typically accomplished with the application of a temporary seed mix and disk-anchored mulch. This section has been developed based on the FERC Plan and Procedures and the state NPDES regulations. Additional, more stringent requirements associated with permit conditions or mitigations plans may be applicable. In this case, the most stringent requirement will apply.

Prior to the installation of temporary or permanent erosion control measures, the Contractor will complete site preparation by grading the area to remove clods of soil greater than 3 inches diameter and any ruts, erosion rills, or washouts that are deeper than 3 inches.

6.1 Installation and Maintenance of Erosion Control Practices

6.1.1.1 Installation

1) Temporary erosion controls must be properly maintained throughout construction (on a daily basis) and reinstalled as necessary (such as after backfilling of the trench) until replaced by permanent erosion controls or restoration is complete.
2) Project plans and permits may require that disturbance on steep slopes must be minimized, when steep slopes must be disturbed, contractors must use techniques such as phasing and stabilization practices designed for steep slopes (e.g., slope draining and terracing). **Refer to SWPPP.**
3) Project plans and permits may require that all exposed soil areas, including stockpiles must be stabilized. Stabilization must be **initiated immediately** to limit soil erosion when construction activity has **permanently or temporarily ceased on any portion of the site** and **will not resume for a period exceeding 14 calendar days. Timelines may vary from state to state, refer to SWPPP.**
4) Stabilization must be completed **no later than 14 calendar days** after the construction activity has ceased. Stabilization is not required on constructed base components of roads, parking lots and similar surfaces. Stabilization is not required on temporary stockpiles without significant silt, clay, or organic components (e.g., clean aggregate stockpiles, demolition concrete stockpiles, sand stockpiles) but contractors must provide sediment controls at the base of the stockpile. **Timelines may vary from state to state, refer to SWPPP.**
5) Contractors must stabilize the **normal wetted perimeter of the last 200 linear feet** of temporary or permanent drainage ditches or swales that drain water from the site **within 24 hours** after connecting to a surface water or property edge. Contractors must complete stabilization of remaining portions of temporary or permanent ditches or swales within **14**

calendar days after connecting to a surface water or property edge and construction in that portion of the ditch temporarily or permanently ceases. **Timelines may vary from state to state, refer to SWPPP.**

6) Contractors must **not** use mulch, hydromulch, tackifier, polyacrylamide or similar erosion prevention practices within any portion of the normal wetted perimeter of a temporary or **permanent drainage ditch or swale section with a continuous slope of greater than 2 percent**. **Requirements may vary from state to state, refer to SWPPP.**
7) The Contractor must not disturb more land (i.e., phasing) than can be effectively inspected and maintained in accordance with the NPDES permit or other applicable state or federal permits.
8) Install erosion control fabric or a functional equivalent on waterbody banks at the time of final bank recontouring. Do not use synthetic monofilament mesh/netted erosion control materials in areas designated as sensitive wildlife habitat unless the product is specifically designed to minimize harm to wildlife. Anchor erosion control fabric with staples or other appropriate devices. **Requirements may vary from state to state, refer to SWPPP.**
9) Contractors must provide silt fence or other effective sediment controls at the base of stockpiles on the downgradient perimeter.

6.1.1.2 Maintenance

1) All nonfunctional BMPs must be repaired, replaced, or supplemented immediately, but no later than **24 hours of discovery unless another time frame is specified** in the SWPPP. **Requirements may vary from state to state, refer to SWPPP.**
2) Sediment tracked onto public roadways must be removed immediately. **Requirements may vary from state to state, refer to SWPPP.**

6.2 Erosion Control Practices

6.2.1 Horizontal Slope Grading

Horizontal slope grading or cat tracking reduces erosion potential by creating horizontal groves on exposed slopes. This is achieved by driving tracked equipment vertically up and down the slope, resulting in the tracks being oriented horizontally. This provides support for mulch and seed to stay in place during rain events.

6.2.1.1 Implementation of Horizontal Slope Grading

On all slopes 1:3 and greater with a length of 50 feet or more, tracking may be done at the end of each day the slope is worked. This is not as efficient on clay soils. Refer to typical Figure E-1, Appendix B.

6.2.2 Temporary Slope Breakers

Temporary slope breakers may be used to reduce runoff velocity and divert water off the construction right of way.

6.2.2.1 Temporary Slope Breakers Material Specifications

Temporary slope breakers may be constructed using soil, silt fence, staked hay or straw bales or sandbags.

6.2.2.2 Installation of Temporary Slope Breakers

Temporary slope breakers may be installed, as necessary, on all disturbed areas to avoid excessive erosion by slowing overland flow and diverting it to well-vegetated areas.

1) Temporary slope breakers must be installed on slopes greater than 5 percent where the base of the slope is less than 50 feet from waterbodies, wetlands, and road crossings. The following space is a guidance, however, closer spacing will be used if necessary.

Slope %	Spacing (feet)
5 – 15	300
>15 – 30	200
>30	100

2) Outfalls will be directed to a stable, well vegetated area or a constructed energy dissipation device at the end of the slope breaker and off the construction right of way.

3) Temporary slope breaker outfalls will be positioned to prevent sediment discharge into wetlands, waterbodies, or other sensitive environmental resource areas.

6.2.3 Mulch

Mulch is used as both a temporary and permanent erosion control measure. Temporary mulch follows the same requirements as permanent mulch, although the application timing is different. Temporary mulch is typically used to stabilize spoil piles, construction areas where construction activities have ceased for 14 days or more, or within 7 days if within a mile of an impaired or special water. Mulch shall be applied as soon as construction ceases with no plan to resume construction, but no later than the seventh or fourteenth day as required under the FERC Plan, or the project permits.

Mulch may consist of weed-free straw or hay, slash mulch, or prairie hay.

6.2.3.1 Mulch Material Specifications

Table 6.2.3-1 below identifies four types of mulch, acceptable for use on Company projects.

Table 6.2.3-1
Mulch Material Specifications

Type	Material	Conditions	Application Rate
Certified Noxious weed-free Straw	Clean agricultural grain straw (wheat, oats, rye, barley) or clean straw harvested from native grass production fields.	1.Certified as noxious-weed free with inspection tag. 2.Free of cattail, reed canary grass, birds-foot trefoil, and crown vetch. 3. Bales are in an air-dried condition at the time of delivery.	2 Tons per acre, unless otherwise noted in construction plans.

Table 6.2.3-1
Mulch Material Specifications

Type	Material	Conditions	Application Rate
Certified Noxious weed-free Straw- with Overspray	Clean agricultural grain straw (wheat, oats, rye, barley) or clean straw harvested from native grass production fields. Overspray with hydraulic fiber matrix	1.Certified as noxious-weed free with inspection tag. 2.Free of cattail, reed canary grass, birds-foot trefoil, and crown vetch. 3. Bales are in an air-dried condition at the time of delivery. 4. Hydraulic fiber matrix will be used to overspray straw in lieu of disc anchoring.	1.5 Tons per acre with overspray of hydraulic fiber matrix at 750 lbs per acre.
Slash Mulch	Raw wood slash from hard or soft timber harvested during clearing and grubbing operations on the project.	1.Raw wood slash from hard or soft timber harvested during clearing and grubbing operations on the project or hauled in; 2.Maximum length of individual pieces will not exceed 20 in. 3.Maximum width of individual pieces will not exceed 2 in. 4. Must come from an area outside any quarantine area.	Project specific
Prairie hay	Prairie hay	1.Has not been thrashed to remove seeds so it consists of directly bailed material. 2.Has not been thrashed to remove seeds so it consists of directly bailed material. 3.Free of noxious weeds as defined by MNDA. 4.Free of cattail, reed canary grass, birds-foot trefoil, and crown vetch.	2 Tons per Acre

6.2.3.2 Application Requirements

1) Apply mulch on all slopes (except in cultivated cropland) concurrent with or immediately after seeding, where necessary to stabilize the soil surface and to reduce wind and water erosion. Spread mulch uniformly over the area to cover at least 90 percent of the ground surface at a rate of 2 tons/acre of straw or its equivalent, unless the local soil conservation authority, landowner, or land managing agency approves otherwise in writing.
2) Mulch all disturbed upland areas (except cultivated cropland) before seeding if:

    a. final grading and installation of permanent erosion control measures will not be completed in an area within 20 days after the trench in that area is backfilled (10 days in residential areas), as required in section V.A.1 of the FERC Plan; or
    b. construction or restoration activity is interrupted for extended periods, such as when seeding cannot be completed due to seeding period restrictions.

3) If mulching before seeding, increase mulch application on all slopes within 100 feet of waterbodies and wetlands to a rate of 3 tons/acre of straw or equivalent.

4) If wood chips are used as mulch, do not use more than 1 ton/acre, and add the equivalent of 11 lbs/acre available nitrogen (at least 50 percent of which is slow release).

6.2.3.3 Installation of Mulch Materials

1) Apply mulch material at a rate which provides approximately 90 percent uniform distribution over all exposed soils. Mulch shall be reapplied any time the combined coverage of non-nuisance vegetation and mulch falls below 70 percent.
2) Even application will be completed, where too little or too much has been applied, re-mulch area or remove the excess coverage.
3) Do not operate mulch-blowing equipment on slopes steeper than 1:2.5 (V:H) on slopes where rutting will occur or where wind velocities are greater than 15 miles per hour.

6.2.3.3.1 Straw Mulch/Prairie Hay

1) Disk anchor immediately after placement unless otherwise approved.
2) Reduce application rate and overspray with tackifier in lieu of disk anchoring.

6.2.3.4 Winter Application

1) Place mulch on bare frozen ground.
2) At temperatures above 20 degrees F., apply mulch at a reduced rated of 1.5 tons per acre and overspray with a natural tackifier or hydraulic fiber matrix in lieu of disc anchoring.
3) At temperatures below 20 degrees F., delay mulching if possible until ground is snow covered, perform mulching over the snow and crimp in with tracked equipment.

6.2.4 Erosion Control Blankets

Erosion control blankets are used to control erosion, aid the establishment of vegetation, reinforce vegetation, and temporarily reinforce slopes, ditch bottoms, and shorelines. Blanket materials must provide netting opening dimensions large enough to germinate plants, reduce animal entanglement, and keep fill material intact.

Erosion control blankets are typically used wherever mulch would be ineffective, including but not limited to; slopes steeper than 1:3, areas where the mulch would blow away and areas of concentrated water flows (e.g., ditch bottoms or banks). All slopes requiring revegetation with a slope of greater than 15% must be stabilized with either an erosion control blanket or hydraulically applied bonded fiber matrix product per manufacturers specifications. The preferred method is to utilize appropriate hydraulically applied erosion control products, as detailed in Section 6.2.5.

Erosion control blankets are comprised of a fill material and netting or stitching and have a wide range of target service life.

6.2.4.1 Application of Erosion Control Blankets

a. **Type 1** – Flat areas, very low flow ditch bottoms.
b. **Type 2** – Moderate slopes, ditch bottoms less than 3% grade.
c. **Type 3** – Steep slopes; higher flowing ditches up to 4% grade.
d. **Type 4** – Steeper slopes and higher flowing ditch bottoms.

6.2.4.2 Erosion Control Blanket Material Specification

Table 6.2.4-1 identifies four categories of erosion control blankets authorized for Company projects.

Table 6.2.4-1
Erosion Control Blanket Material Specifications

		Type 1		Type 2		Type 3		Type 4	
		Wood Cellulose	Wood Fiber	Straw	Wood Fiber	Straw-Coconut	Wood Fiber	Straw-Coconut	Wood Fiber
Target Service Life		**< 3 months**	**< 3 months**	**1 growing season**	**1 growing season**	**2 years**	**2 years**	**3 years**	**3 years**
Fill	Fiber Length	80% > 0.5 in.	80% > 6 in.	80% > 3 in.	80% > 6 in.	80% > 3 in.	80% > 6 in.	80% > 3 in.	80% > 6 in.
	Material	100% wood cellulose	100% Excelsior	100% Straw	100% Excelsior	70% Straw 30% Coconut	100% Excelsior	70% Straw 30% Coconut	100% Excelsior
Netting/ Stitching	Location	1S	Stitching only	2S	2S	2S	2S	3S	3S
	Material	Degradable	Degradable/Glue	Degradable/ Synthetic or Natural	Degradable/ Synthetic or Natural	Degradable/ Synthetic or Natural	Degradable /Synthetic or Natural	Black UV Stabilized polypropylene	Black UV Stabilized polypropylene

1S: Netting on one side, **2S**: Netting on 2 sides, **3S**: Netting forms 3-idmensional matrix

Table 6.2.4-2 identifies the staples/anchors for use with the erosion control blankets.

Table 6.2.4-2
Erosion Control Blanket Anchors

Blanket Category	Materials	Type	Min. Length
Type 1	Biodegradable	Stake	5 in.
Type 2 and 3	Steel wire	11 Gauge	6 in.
Type 4	Steel wire	11 Gauge	8 in.

6.2.4.3 Installation of Erosion Control Blankets

1) Complete site grading to ensure that the soil surface is free of soil clods 3-inches or greater and/or ruts 3-inches or greater.
2) Blankets should be installed flat and parallel to the direction of water flow. If the blanket has netting on 2 sides, place the side with the majority of the stitching on the bottom.
3) The uphill edge of the blanket must be buried and stapled into a 6-inch-deep by 6-inch-wide check slot or glued in place. The soil should be tamped back over the check slot.
4) Shingle and/or overlap the edges parallel to the water flow by at least 4 inches. Edges perpendicular to water flow should overlap by 7 inches.
5) Staple pattern should be based on the steepness of the slope or the ditch bottom. Follow the manufacturer's recommendations for staple installation.
6) The blanket should be installed within 24 hours of seeding.
7) Refer to typical installation Figures E-2A and E-2B in Appendix B.

6.2.4.4 Winter Stabilization

1) Blankets may be used for winter stabilization. Remove the snow from the area prior to placing the blanket and use appropriate anchors.

6.2.5 Hydraulic Erosion Control Products

Hydraulic erosion control products are hydraulically applied tackifiers (glue) or mulch materials with a tackifier added. These are comprised of a tackifier, a hydraulic matrix, and are applied using a water stream. Temporary or permanent seed mixes may be included in the matrix or applied prior to the matrix. These are used for areas where equipment cannot easily access (spoil piles), areas of steep slopes but should never be used in areas with concentrated water flows. All slopes requiring revegetation with a slope of greater than 15% must be stabilized with either an erosion control blanket or hydraulically applied bonded fiber matrix product per manufacturers specifications. Hydromulch may also be utilized for spoil pile stabilization and is preferred because it is less likely to require reapplication. The preferred method is to utilize appropriate hydraulically applied bonded fiber matrix or reinforced fiber matrix products, as detailed below.

6.2.5.1 Hydraulic Erosion Control Products Material Specification

Table 6.2.5-1 below provides the material specifications for approved hydraulic erosion control products.

Table 6.2.5-1
Hydraulic Erosion Control Products

Type	Matrix	Application	Performance Time Frame	Application Rate
Natural Tackifier	Water soluble natural proteins, vegetable gums, guar gums, starch, psyllium, or a water-soluble blend of hydrophilic polymers, sticking aids or other gums	1. Used as overspray with straw mulch. 2. Combined with matrices below. 3. Do not apply within 24 hours of a rain event or freeze.	Provides erosion control performance for no greater than 3 months	Per Manufacturers specifications.
Synthetic tackifier	Organic, biodegradable, nonpolluting, non-toxic materials, water soluble, remains flexible, does not inhibit water infiltration	1. May be used as overspray or part of matrices below. 2. Cures within 48 hours.	Provides erosion control performance for no greater than 18 months.	Per Manufacturers specifications.
Hydromulch	Blend of shredded wood paper fibers, natural fibers, or both along with 2.5-5% tackifier by weight.	1. Used as temporary cover on steep slopes. 2. Applied with or without seed. 3. Can be used as permanent mulch in flat areas without concentrated flow.	Functional for up to 3 months.	Per Manufacturers specifications (typically 2,500 lbs/acre)
Bonded Fiber Matrix (BFM)	Composed of wood or wood byproducts. Contains 10% blended hydrocolloid crosslinked polymers by volume and up to 2% fertilizer by volume.	1. Primarily used on inaccessible steep slopes. 2. Seed should be applied before the application of BFM.	Functional at least 6 months	Per Manufacturers specifications. (Typically, 3,500 lbs/acre)

Table 6.2.5-1 Hydraulic Erosion Control Products				
Type	**Matrix**	**Application**	**Performance Time Frame**	**Application Rate**
	Binder and crosslinked polymers do not dissolve or disperse upon rewetting	3. Applied in two stages, allow first stage to dewater before applying second.		
Reinforced Fiber Matrix (RFM)	Defibrated organic fibers, cross-linked insoluble or linear hydro-colloidal tackifiers, reinforcing natural or synthetic fibers.	1. Cure time is within 2 hours.	Functional for at least 12 months.	Per Manufacturers specifications (typically 3,900 lbs/acre)

6.2.5.2 Application of Hydraulic Erosion Control Products

1) Application of this material should be 100% ground coverage, with no shadowing visible.
2) Application should not be made within 24 hours of a rain event or freeze.
3) Apply seed per manufacturer's recommendation. If seed is applied with the hydraulic product, an agitator will be used to maintain the seed in the material stream for even application.
4) Do not apply in water bearing soils or by itself in ditch bottoms carrying concentrated flows.
5) Contractor will apply per the manufacturer's specification.

6.2.6 Poly Sheeting and Geotextile

Poly sheeting and geotextile may be used as an erosion prevention method to cover exposed soils. It is typically used to cover stockpiles when the establishment of vegetation on the stockpile is not preferred. Poly sheeting may also be used as a cover on potentially contaminated soil piles.

6.2.6.1 Poly Sheeting and Geotextile Material Specification

Table 6.2.6-1 below provides the material specifications for approved hydraulic erosion control products. Refer to typical Figures ERO-17a and ERO-17b, Appendix B.

Table 6.2.6-1 Poly Sheeting and Geotextile Material for Stockpile Coverage			
Type	**Material**	**Targeted Lifespan**	**Acceptable Anchors**
Poly Sheeting	Must be at least 6 mil. thick and may be composed of either reinforced polyethylene sheeting or reinforced polyester tarps.	6 months	No-puncture type anchor weights, sandbags with cords, chain link fence, metal posts, wood. Stockpiles must have perimeter control in addition to cover.
Geotextile Fabric	Should meet requirements under AASHTO M-288-06 for Class 3 Stabilization and Separation.	NA	No-puncture type anchor weights, sandbags with cords, chain link fence, metal posts, wood. Stockpiles must have perimeter control in addition to cover.

6.2.6.2 Installation of Poly Sheeting and Geotextile

1) Cover exposed soil with poly sheeting or geotextile fabric.
2) Secure material tightly in place using an anchoring system.
3) If applicable, trench material at the top of slope.
4) Provide a water diversion to direct water away from the stockpile.
5) Install perimeter controls around stockpile.

6.2.7 Rapid Stabilization

Rapid stabilization measures, as identified by the Department of Transportation, are optional materials to be used to temporarily stabilize an area quickly. Do not use these measures in wetlands. Optional measures are provided in Table 6.2.7-1 below. Please note the appropriate measure should be selected based on site conditions and agency requirements. Variations to the seed mixes may be required based on site-specific conditions and timing.

Table 6.2.7-1
Rapid Stabilization

Method	Materials
1	Straw mulch placed at a rate of 2 ton per acre with disc anchoring.
2	Straw mulch placed at a rate of 1.5 ton per acre. Hydromulch, placed at a rate of 750 lbs per acre.
3	Hydromulch, placed at 330 lb. per 1000 gal. of slurry mix. Seed mixture 22-111 placed at a rate of 10 lb. per 1,000 gal. of slurry mix. Type 3 slow-release fertilizer 10-10-10 placed at a rate of 50 lb. per 1000 gal. of slurry mix. Water placed at a rate of 875 gal per 1,000 gal of slurry mix. Apply mixture at a rate of 6000 gal per acre.
4	Natural net erosion control blanket. Seed mixture 22-111 placed at a rate of 2 lb. per 100 sq. yd. Type 3 Slow-Release Fertilizer 10-10-10 placed at a rate of 8 lb. per 100 sq. yd.
5	Rip Rap Class II Geotextile Type III

7 WATER MANAGEMENT, TRENCHING AND EXCAVATION

7.1 Construction Dewatering

Dewatering may be required at construction excavations to remove accumulated stormwater or groundwater. Regulation of dewatering activities may vary from state to state and project specific documents will be reviewed to determine if more restrictive conditions apply.

1) Dewatering may occur through pumping water out of a trench or pumping water using well points to lower the ground water table. Dewatering is also a state regulated activity requiring a permit. Specific dewatering requirements, such as measuring and recording water volumes, will be provided in project authorizations.
2) Intake hoses will be raised above the bottom of the excavation to avoid the uptake of sediments from the excavation.
3) Surface water pump intakes must be screened to prevent fish from being drawn into the system.

4) All equipment used within surface waters must be free of prohibited invasive species and aquatic plants prior to be transporting into or within the site.
5) All materials used in surface waters must be decontaminated prior to leaving the site and/or if transported for offsite decontamination, a transport permit may be required.
6) Each installation will be equipped with a flow meter and the actual amount of water withdrawn will be recorded and reported per the state-specific requirements.
7) Suspension of appropriations may be required during periods of low flow; refer to project specific documentation.
8) Surface water appropriations will be sampled at the time of appropriation.

7.1.1.1 Dewatering Procedures

During trench dewatering, Contractor will suspend the intake hose above the bottom of the trench to minimize sediment uptake. Water will be discharged through a dewatering structure into a stable, well vegetated upland area at least 100 feet from wetlands and waterbodies. Trench discharge containing high sediment content must not be allowed to flow into any wetland, waterbody, ditch, or stormwater conveyance. Contractor will monitor dewatering operations to ensure that discharge rates and sediment loads do not exceed the capacity of the dewatering devices. If filter bags are used, one filter bag is required per dewatering pump. Sediment trapped by dewatering devices may be worked into the subsoil of an upland area or disposed of with the spent dewatering device at an appropriate facility. Operation and refueling of dewatering pumps will also be accomplished in accordance with Company's SPCC Plan.

Typically, water discharges will be made onto the non-working side of the Company's right-of-way and confined to the approved work area. If filtering devices prove to be ineffective due to freezing water, conduct dewatering activities in a manner that will best minimize sediment runoff. The discharge rate and volume will be monitored to prevent scouring of the right-of-way and to prevent sediment discharge off approved working areas. Dewatering activities will be conducted in a manner that does not result in erosion on or off right of way. Dewatering activities will be monitored to ensure that deposition of sediment into sensitive environmental resource areas, including but not limited to wetlands, waterbodies, cultural resource sites, and sensitive species habitats. If deposition occurs, dewatering will cease, and the design of the dewatering measures revised to prevent reoccurrence.

Dewatering structures will be removed as soon as practicable after completion of discharge activities. Sampling protocols may be required and will be provided in the project authorizations. In winter conditions, dewatering activities may be adjusted to account for the lack of infiltration.

Discharged water will be confined to the approved work area unless both Company and the impacted landowner or land-managing agency provide prior written approval to Contractor stating that water may leave the approved work area on their property. At no time will the discharge event result in a state-defined "Nuisance Conditions."

7.1.1.2 Dewatering Structure Material Specifications

Dewatering activities will include at least two of the following best management practices per discharge event as provided in Table 7.2-1.

Table 7.2-1 Dewatering Structure			
Type	**Materials**	**Application**	**Supplement BMP**
Vegetative Filter	Existing grassy buffer	1. Water will be discharged to dewatering structure/bag located within a well-vegetated upland area. 2. Cropland is not considered a well-vegetated area. 3. Discharge rates will be managed to ensure no scouring at the discharge location or flow path.	1. Sediment logs may be incorporated to slow the path of the water. 2. If scouring occurs along the flow path, erosion control blanket may be installed to minimize the potential for erosion.
Straw Bale Structure	Certified noxious weed free straw bales, geotextile fabric, wooden stakes.	1. Dewatering structure will be sized appropriately for the maximum discharge rate and water volume.	1. A geotextile filter bag may be incorporated into the structure to provide additional sediment control.
Dewatering Filter Bag	Nonwoven geotextile bag	1. One hose may be used per bag. 2. The hose will be secured in the bag. 3. The bag will be monitored for maintenance needs and/or flow rate.	1. Dewatering bags may be used in well-vegetated upland areas or with a straw bale dewatering structure.

7.1.1.3 Winter Construction

Construction dewatering relies on infiltration of water along the discharge path as part of the best management practices. In winter conditions, frozen soils will minimize infiltration and may create flooding conditions. Discharge locations will be sited to account for reduced infiltration.

7.1.1.4 Coagulation and Flocculation Aids

Construction dewatering through filter bags and dewatering structures may not achieve the required water quality results. With division environmental specialist approval, it may be beneficial to utilize a coagulant, polymer, or flocculant aid in the dewatering structure and/or hose to facilitate settling of fine clay particles within the structure/bag. Polyacrylamides cannot be used for any discharges reaching wetlands, waterbodies, or storm drains. Other non-toxic polymers and chitosan are permissible for use, with approval from or at the direction of the division environmental specialist.

7.2 Upland Trenching

Trenching in uplands will be completed in accordance with the FERC Plan. Excavated materials will be stockpiled within the approved construction right of way and separation will be maintained between the subsoil and topsoil stockpiles.

In Minnesota, the Contractor may not have more than one mile of open trench at any one time, as required in project authorizations.

7.2.1 Trench Breakers

Trench breakers will be installed to protect against subsurface water flow along the pipe. Trench breakers may be constructed of bags filled with rock-free subsoil or sand, or foam trench breakers may be used with Company's approval. Topsoil may not be used for trench breakers.

7.2.1.1 Trench Breaker Installation

1) Trench breakers will be installed at the base of slopes greater than 5 percent where the base of the slope is less than 50 feet from a waterbody or wetland and where needed to avoid draining a waterbody or wetland.
2) Trench breakers will be installed as required in the FERC Plan and Procedures.
3) Trench breakers will not be installed within a wetland.
4) Spacing will be determined by an engineer or will follow the spacing of slope breakers as indicated in section 6.2.2.(1).
5) *Trench breakers will fully encircle the pipe by a minimum of 6 inches.
6) Trench breakers must be keyed into the walls and bottom of the trench a minimum of 6 inches deep and 12 inches along the pipe.*

7.3 Drain Tiles

Contractor will furnish materials, labor, equipment and supervision for the repair and replacement of drain tile. Contractor's cost for such repair and replacement of drain tile will be included in the applicable unit prices set forth in the Agreement with Company.

For new pipelines in areas where drain tiles exist or are planned, ensure that the depth of cover over the pipeline is sufficient to avoid interference with drain tile systems. For adjacent pipeline loops in agricultural areas, install the new pipeline with at least the same depth of cover as the existing pipeline(s) and so that a minimum of *one foot* of clearance is present between the repaired section of tile and the top of the pipeline.

Contractor will probe tile systems cut by trenching to determine if damage has occurred during construction and repair/replace damaged tiles to this specification. A qualified specialist must be used for drain tile repairs and to adequately probe and test repaired drainage systems. Filter-covered drain tiles will not be used unless approved by the local soil conservation authority or at the landowner's or land-managing agency's request.

Drain tile replacement or repairs will be performed such that:

a. Repair damaged drain tiles to their original or better condition.
b. Broken or crushed tile will be removed for a sufficient distance from the trench to provide satisfactory drainage, joints, and adequate support.
c. Drain tile furnished by Contractor for replacement purposes will be of the rigid type, either vitrified clay or schedule 40 P.V.C. perforated pipe, unless the landowner or land-managing agency requests otherwise.
d. Replacement tile will be of a quality and size at least equal to that of the tile being replaced;
e. Drain tile will be replaced so that its former gradient and alignment are restored; and
f. The soil beneath and around replaced tile lines will be firmly compacted.

When tile lines are cut during trenching operations, Contractor will:

1) Make immediate temporary repairs so that the tile system can continue to function until permanent repairs can be made after the pipe is lowered into the trench; unless prior written

consent is obtained from the landowner or land-managing agency and Contractor requests from Company permission to interrupt flow or usability; and

2) Make permanent replacements in accordance with directions from a qualified drain tile specialist and the following requirements, if clay drain tiles or flexible drain duct are used in the repair:

    a. a single continuous supporting member will be placed across the trench as a trough in which to lay replaced tile;
    b. the supporting member will be placed across the trench with at least two feet solid bearing under the ends; and
    c. Contractor will fabricate and weld the supporting member material into shapes and lengths to properly support the tile line.

3) In cases where the original tile line is intersected at an angle, the tile line will be replaced for some distance on both sides of the trench to insure adequate tile performance.

    a. Before completing permanent tile replacements, Contractor will examine by suitable means the adjacent tile located beneath the working side of the approved work area to assure that drainage tile has not been crushed, plugged, misaligned, or otherwise disturbed as a result of Contractor's activities.

4) When the tile lines are otherwise damaged by Contractor's operation, regardless of location, Contractor will make repairs necessary to satisfy the tenant, landowner, or land-managing agency at no additional expense to Company.
5) Contractor will be responsible for damages resulting from improper functioning of tile when caused by Contractor's failure to keep such tile in good repair and to keep tile lines free from clogging.
6) Tile replacements will be documented and approved by Company prior to placing backfill over tile lines.

7.4 Pipe Coating Wastes, Pipe Cutting and Removal of Pipe

Pipeline coating (including asphalt or asbestos wrap coating, epoxy, or paint) may need to be removed and re-applied for projects such as digs, tie-ins, or pipe replacements. Pipe coating along portions of Company's pipeline is presumed, by the Company, to contain non-friable asbestos. Methods for removal and disposal of pipe coating must be in accordance with applicable regulations and Company's Environmental Procedures.

Asbestos-containing pipe coating materials must be removed using the wet method technique, prior to abrasive blasting. After the pipe coating has been removed, the pipe may be cleaned using an abrasive blasting technique. Procedures for blast waste collection and disposal are described in Company's Environmental Procedure 340.102.

In some situations, blast wastes may be defined as hazardous wastes under state and federal law. If the structure to be blasted includes paint made with metals such as lead, chromium, zinc, or cadmium or other hazardous waste characteristics, specific procedures may be required of the

Contractor. Procedures for managing blast paint waste are described in Company's Environmental Procedure 340.102.

Overspray and overspill from pipe coating / painting activities are considered construction waste and must be collected, stored, and disposed of accordingly. Where in-service pipe must be cut or removed, liquids and other materials encountered in the in-service pipe will be contained and stored as hazardous waste. Company will test the liquids and other materials to determine if they are non-hazardous. Any materials contaminated by the liquids will be managed as appropriate for such contamination. Procedures for managing liquids encountered when cutting pipe and procedures for removal of pipe are described in Company's Environmental Procedure 320.300.

8 STREAM AND RIVER CROSSINGS

8.1 General Planning and Site Preparation

Contractor will provide the EI six-work-day prior notification of construction across any waterbody. Temporary sediment barriers will be installed and maintained near waterbodies (i.e., rivers, streams, or drain) as specified in Section 5.

Contractor will not store hazardous materials, chemicals, fuels, lubricating oils, or equipment; or perform concrete coating or concrete weight manufacturing within 100 feet of waterbodies or wetlands as specified in Section 3. Refueling within 100 feet of waterbodies and wetlands will be conducted as specified in the FERC Procedures.

8.2 Bridges

Construction equipment, including clearing crews, must cross waterbodies on bridges. Clearing equipment will not be allowed to ford waterbodies, unless specifically authorized by Company. Where bridges are used, single-span, solid deck equipment bridges will be installed across the waterbodies above the top of bank. Temporary culverts or concrete supports may be used for spans over 20 feet in length, **if provided for in project authorizations**. Bridges, culverts, and supports must be sized and placed to allow highest water flow during construction. Bridges will be installed with geotextile below the bridge deck wrapped over the sides and sediment controls installed at the toe boards to prevent sediment from entering the waterbody. Timber mat bridges will be anchored on one side to allow for the bridge to swing, but remain anchored, during flood events. Soil exposed during bridge installation will be covered with erosion control fabric. Where bridges are not installed, Contractor will move equipment around the waterbodies on approved access roads. Contractor will not install bridges across horizontally directionally drilled waterbodies, unless specifically permitted.

Contractor will remove bridges at the earliest time possible after construction, or as indicated in project authorizations, provided the bridge is not needed to access other parts of the right-of-way for final grading, clean-up, seeding, hydrostatic testing, or other project activities. Once bridges are removed, they may not be reinstalled.

8.3 Clearing and Grading

Grassy vegetation and root stock will be left intact within 100 feet of waterbodies until just before construction across the waterbody begins, except as necessary to install an equipment bridge across the waterbody. Where waterbodies are crossed using the horizontal directional drill technique, no clearing or access is allowed on the stream side of the workspace for the drill entry and exit holes, except for civil survey manual line-of-sight clearing, sensor grid installation and removal, and water appropriation. Fencing, orange construction or silt fence will be installed and maintained across the entry and exit hole to prevent unauthorized access to the waterbody.

8.4 In-Stream Work

Construction across waterbodies will be conducted using the techniques specified in project authorizations, project alignment sheets, drawings, and/or the project line lists. In the absences of specific crossing techniques, Contractor will use the flume technique to construct across cold water fisheries and cool water and warm water fisheries considered significant by the state that are less than or equal to 10 feet wide. Contractor may request permission from Company to use alternate techniques (e.g., the dam-and-pump technique). Company, in its sole discretion, will determine whether such a request will be authorized and the Company's decision on the matter will be final. Other waterbodies may be open cut in the absence of specific crossing techniques, if permitted.

8.4.1 Flume Crossing Method

Where the flume technique is implemented, properly sized, and aligned flume pipe(s) will be placed in the waterbody to allow water to flow through the pipe(s) and across the construction site. The flume pipe(s) will be installed prior to trenching, but after blasting if blasting is required. Flume pipe(s) will not be removed until after the in-stream trench is backfilled and the waterbody banks are seeded and stabilized.

Sand or pea gravel bags will be installed in the waterbody at the upstream end of the flume pipe to dam the waterbody and funnel the water into the flume. After installing sand or pea gravel bags on the upstream end, bags also will be installed on the downstream end. Contractor will ensure that dams spaced far enough apart, and the flume pipe(s) are long enough to allow adequate room for excavating the trench in the waterbody bed.

Adequate water flow through the flume pipe(s) must be maintained to protect aquatic life, provide for alternative uses of the stream, and provide for downstream withdrawals of water by users. Stand-by pumps, within secondary containment structures, and hoses will be readily available during flume crossing construction.

Prior to in-stream excavation, Contractor will create a dry work area by pumping standing water from between the dams into a stable, well vegetated upland area or a dewatering device (e.g., filter bag or straw bale structure) located at least 100 feet away from the waterbody banks in accordance with project authorizations.

In-stream work where the flume technique is implemented will be conducted from equipment positioned on the waterbody banks or bridge. Equipment will not be allowed to ford, drive into, or work from within the waterbody.

8.4.2 Dam and Pump Crossing Method

For waterbodies where the dam-and-pump technique is implemented, sand or pea gravel bags will be installed in the waterbody at the upstream and downstream ends of the proposed trench. Contractor will ensure that dams are spaced far enough apart to allow adequate room for excavating the trench in the waterbody bed.

Using an adequate size and number of water pumps within secondary containment structures, water will be pumped from the upstream dam around the work area to the downstream side. The intake hose will be suspended above the waterbody bed and screened to minimize the intake of sediment and prevent entrainment of fish. Water pumped across the work area will be discharged onto an energy dissipation device (e.g., plywood boards or a splash pup) to prevent scouring of the waterbody bed on the downstream end.

Adequate water flow through the pumps must be maintained to protect aquatic life, provide for alternative uses of the stream, and provide for downstream withdrawals of water by users. Stand-by pumps, within secondary containment structures, and hoses will be readily available at times during dam-and-pump crossing construction. A pump watch must be maintained if pumps will run outside of working hours.

Prior to in-stream excavation, Contractor will create a dry work area by pumping standing water from between the dams into a stable, well-vegetated upland area or dewatering device (e.g., filter bag or straw bale structure) located at least 100 feet away from the waterbody banks in accordance with project authorizations.

In-stream work where the dam-and-pump technique is implemented will be conducted from equipment positioned on the waterbody banks or bridge. Equipment will not be allowed to ford, drive into, or work from within the waterbody.

8.4.3 Open Cut Crossing Method

For waterbodies less than or equal to 10 feet wide that are not crossed using a dry construction technique (e.g., flume or dam-and-pump), complete work in the waterbody (not including blasting) within 24 hours, except as otherwise specified in the project authorizations and the FERC Procedures, the project alignment sheets, and/or the project line lists. Where blasting is required, the time frame for completing work in the waterbody commences immediately after blasting. In-stream work will be conducted from equipment positioned on the waterbody banks or bridge. Equipment will not be allowed to ford, drive into, or work from within the waterbody.

For waterbodies greater than 10 feet wide and less than or equal to 100 feet wide that are not crossed using a dry construction technique (e.g., flume or dam-and-pump), complete work in the waterbody (not including blasting) within 48 hours, except as otherwise specified in the project authorizations, the project alignment sheets, drawings, and/or the project line lists. Where blasting

is required, the time frame for completing work in the waterbody commences immediately after blasting. Equipment operating in the waterbody will be limited to that needed to construct the crossing. Other equipment must cross on an equipment bridge or move around the waterbody on approved access roads.

Waterbodies greater than 100 feet wide must be crossed as specified in the project authorizations, the project alignment sheets, drawings, and/or the project line lists.

8.5 Spoil Storage, and Restoration

During construction across waterbodies, spoil from in-stream excavation will be stored a minimum of 10 feet from the waterbody banks, or greater based on project authorizations. A silt fence and/or straw bale containment structure or redundant BMPs will be used as necessary to contain spoil in the approved work area and prevent sediment runoff into the waterbody. Until installation of pipe, an earthen plug will be left in place in the trench on both banks of the waterbodies to separate the waterbody trench from upland trench and prevent water from the upland trench from flowing into the waterbody trench. During backfilling, Contractor will backfill waterbody trenches with native spoil so that the waterbody bottom is restored to its original contour. In cold water fisheries, clean, washed, non-limestone gravel or native cobbles will be used for the upper one foot of backfill.

Final grading will begin immediately after backfilling by restoring waterbody banks to their preconstruction contours. For removal of larger diameter pipes, the Contractor will need to haul in acceptable fill material to restore the contours. Bank stabilization must be considered in design and permitting. Banks will be seeded immediately following final grading. Erosion control fabric will be placed on top of the seed and will be anchored with staples, metal stakes, or other appropriate devices. Final grading, seeding, and bank stabilization will be completed no later than 24 hours after backfilling waterbody trench, weather and soil conditions permitting.

Trench breakers and permanent slope breakers will be installed at the base of slopes adjacent to waterbodies, and mulch will be applied in accordance with Sections 5 and 6. For waterbodies crossed using a dry construction technique (e.g., flume or dam-and-pump), bank stabilization will be completed before returning flow to the waterbody channel per the FERC Procedures.

9 WETLANDS

9.1 General Planning and Site Preparation

Temporary sediment barriers will be installed and maintained in and near wetlands as specified in Section 5.

Contractor will not store hazardous materials, chemicals, fuels, lubricating oils, or equipment; or perform concrete coating or concrete weight manufacturing within 100 feet of wetlands as specified in Section 3. Refueling within 100 feet of waterbodies and wetlands will be conducted as specified in the FERC Procedures and Environmental Procedure 380.201d.

Construction equipment operating in wetlands will be limited to the amount necessary to construct the crossing. Construction equipment not used to construct the crossing will use approved access

roads to move around wetlands to the maximum extent practicable. Where the use of approved access roads does not provide adequate access around a wetland, each piece of equipment used to construct the crossing may pass through the wetland only once, unless otherwise specified in project authorizations, the project alignment sheets, drawings, and/or the project line lists. Equipment operating from mats may cross on the mats more than once, if permitted.

9.2 Ground Stabilization

If a wetland cannot support construction equipment, and low-ground-pressure equipment is not used, Contractor will use a temporary platform of equipment mats to stabilize the right-of-way. Equipment mats will be removed from wetlands following construction and will be disposed of or reused. Duration of matting may be restricted by wetland permits. Tree stumps, brush riprap, imported dirt and rock fill may not be used to stabilize the approved work area in wetlands.

9.3 Grading, Trench Excavation, Backfilling

Contractor will not grade or remove stumps or root systems from the approved work area in wetlands, except over the ditch line. If Contractor believes that there is an adverse safety impact from this restriction, Contractor may request permission from Company to remove stumps and root systems from other areas in the approved work area. Company, in its sole discretion, will determine whether such a request will be authorized. Company's decision on the matter will be final.

Contractor will segregate topsoil from subsoil over the trench line as specified the FERC Plan and Procedures, except where saturated soils or ponded water make this impractical. Upland spoil or spoil from another wetland may not be imported into or stored in a wetland.

Contractor will minimize the duration of construction-related disturbance in wetlands to the maximum extent practicable. Where wetland conditions allow, the pipeline will be assembled in an upland area and pushed or pulled into place. Prior to backfilling, trench breakers will be installed at the base of slopes adjacent to wetlands and where an unmitigated trench poses a risk of draining a wetland in accordance with the FERC Procedures. During backfilling, segregated topsoil will be replaced to the top of the trench. Where wetlands overlie weathered bedrock, clean sand padding may be imported to the wetland trench to protect the pipe. Only the amount of padding necessary to protect the pipe may be imported to the wetland trench. In no case may sand padding be backfilled above the bedrock profile.

9.4 Restoration

Final grading will begin within six days of backfilling by restoring wetlands to their preconstruction contours, leaving no crown over the trench, or as required in the applicable permits, whichever is more restrictive. Wetlands will be seeded in accordance with Section 10.3. Fertilizer, lime, and mulch will not be applied in wetlands. Permanent slope breakers will be installed at the base of slopes adjacent to wetlands in accordance with Section 7. Timber riprap, equipment mats, pipe skids, and other construction debris will be removed from wetlands upon completion of construction. Existing culverts will be restored to their pre-construction condition after construction, including elevation, diameter, and length.

10 BACKFILLING, CLEAN-UP, AND FINAL RESTORATION

10.1 Backfilling

Prior to backfilling, Contractor will install trench breakers in the pipeline trench as directed by the EI, or absent directions from the EI, immediately up-slope of every temporary slope breaker, at the base of slopes adjacent to wetlands and waterbodies, and where the pipeline trench poses a risk of draining a wetland. Trench breakers will be constructed of materials such as sandbags (no topsoil) and will be notched into the sidewalls of the trench. Topsoil must be restored within 20 days of backfill. A travel lane may remain for access but must be restored as soon as access is no longer needed. In Minnesota, no more than one mile of trench may be open at any time, accelerating the backfill schedule.

In residential areas, the trench will be backfilled as soon as possible after the pipe is lowered in the trench. Topsoil must be restored within 10 days of backfill in residential areas.

Topsoil will not be used to pad the pipe during backfilling. In areas where topsoil has been segregated, the subsoil will be replaced first, and the topsoil will be spread over the area from which it was removed. Contractor may request from Company permission to import and use topsoil in lieu of topsoil separation and replacement. Company, in its sole discretion, will determine whether such a request will be authorized. Company's decision on the matter will be final and require compliance with Environmental Procedure 400.105. Blast rock may be used to backfill the trench to the top of the natural bedrock profile provided adequate padding is placed around the pipe in accordance with technical specifications. A twelve-inch earth crown will be constructed over the trench line (except in wetlands) to allow for future settling of the backfill material, per engineering standards ES-7503 or ES-7510 as appropriate. Cross drains will be left in the crown at 100-foot intervals, in swales and drains, and immediately up-slope of slope breakers.

10.2 Clean-up

Contractor will make every effort to complete final clean-up (including final grading) within twenty days after the trench is backfilled and complete installation of permanent erosion control measures within six days of topsoil restoration, or as required in the applicable permits, whichever is more restrictive and weather and soil conditions permitting. Debris will be disposed of in accordance with Section 3, and original ground contours will be restored, except for a crown over the trench in upland areas.

A travel lane, including bridges over waterbodies, will be left open during final grading and clean-up to allow for construction equipment access. This travel lane must be restored when access is no longer necessary.

10.3 Final Restoration and Revegetation

All compacted or rutted upland areas must be decompacted during restoration with a para-plow or other deep tillage implement. If plowing is employed, the stripped construction right-of-way will be decompacted first followed by replacement of the segregated topsoil. Where necessary, additional plowing of the topsoil will be performed to alleviate subsurface compaction. If

subsequent grading and clean-up activities result in further compaction, additional plowing will be required. If frozen conditions preclude plowing activities, remediation of compacted or rutted areas may need to be conducted after spring thaw occurs.

To aid in revegetation, remove excess rock from the top 12 inches of soil within the approved work area such that the size, density, and distribution of rock within the work area is similar to adjacent areas not disturbed by construction. If a landowner requests excess rock be left on their property, Contractor will notify Company of the request from the landowner for storage of rock within the approved work area outside of the post-construction permanent right-of-way. Company, in its sole discretion, will determine whether such a request will be authorized. Company's decision on the matter will be final. If authorization is granted, Contractor will be responsible for ensuring rock is stored within an upland area of the approved work area, but outside of the post-construction permanent right-of-way.

Permanent slope breakers will be installed and maintained in locations similar to temporary slope breakers as described in Sections 5 and 6 and as directed by the EI. Permanent slope breakers must be constructed of soil compacted to a minimum height of 1.5 feet, 4 feet in bottom width, and have an eight-foot-wide parabolic channel on the up-slope side. The down-slope angle and outfall will be the same as temporary slope breakers.

Fences and all-terrain-vehicle barriers removed during construction must be repaired or replaced during restoration. New all-terrain-vehicle barriers requested by landowners or land-managing agencies must be installed during restoration. Barriers will be constructed using stumps, boulders, or blast rock collected on land within the approved work area or other material as requested by landowners or land-managing agencies. Barriers will extend across the entire width of the approved work area and will be positioned in such a manner to prevent vehicle passage through or around the barrier. Barrier material will be sufficient type, size, and placement to prevent removal by all-terrain-vehicle users.

Contractor will be responsible for successful revegetation of the right-of-way. Disturbed areas will be seeded as required in permit authorizations, weather and soil conditions permitting. Slopes steeper than 33 percent and stream banks will be seeded immediately following final grading.

10.4 Seeding

Temporary and permanent seeding of the right-of-way will be completed within the recommended seeding dates as specified in agency consultations, the project alignment sheets, drawings, and/or the project line lists. If seeding cannot be completed during the recommended seeding period, temporary seed and mulch will be applied to disturbed areas except wetlands. Permanent seeding will be initiated at the beginning of the next seeding season. Typical temporary seed mixes include annual rye, oats, barley, and/or wheat. If dormant seeding, do not seed when ground is frozen or snow-covered.

10.4.1 Seeding Preparation

Prior to seeding, remove construction debris and grade the right-of-way to leave the soil in the proper condition for seedbed preparation. Excessive depth of mulch or vegetative debris must be

avoided to support proper germination. Prepare the seedbed to a depth of three to four inches using appropriate equipment to provide a firm uniform seedbed free of excess rock and large soil clods. If the right-of-way will be hydroseeded, the seedbed will be scarified to facilitate seed lodging and germination. If seeding is temporary and at locations (e.g., spoil stockpiles) where site prep access is not available, seed bed preparation is not expected.

10.4.2 Soil Amendments

Contractor will complete a soil test prior to seeding to determine the appropriate soil additives (i.e., fertilizer and/or lime) for the Project, as directed by Company or as requested by the landowner or land-managing agency. All Company SWPPPs will require testing for nitrogen, phosphorus, potassium, and lime amendments. In the absence of a SWPPP, the contractor shall apply 50 lbs of nitrogen/Acre of a 10-10-10 fertilizer where half of the nitrogen is a slow-release variety. Where soil additives are required, incorporate the fertilizer and/or lime into the top two inches of soil as soon as possible after application. Use of lime and fertilizer are prohibited in wetland areas.

10.4.3 Seeding

Uplands and wetlands will be seeded with mixes and at rates as specified in the project authorizations, the project alignment sheets, drawings, and/or the project line lists. Final seeding and restoration must occur with six days of backfill. Active cropland will not be seeded, unless requested by the landowner. In the absence of specific seed mixes for the Project the state-specific seeding guide published by the USDA Natural Resources Conservation service or state Department of Transportation may be utilized. *Northern's preference is to utilize pollinator/monarch butterfly seed mixtures to implement provisions of voluntary species habitat agreements.* Any area seeded after October 1 will be seeded with a temporary seed mix, and the contractor will be required to remobilize the following spring to complete permanent seeding and fertilization. Wetlands will be seeded with annual ryegrass at a rate of 40 lbs/acre in the absence of specific seed mixes for wetlands. Seed must be purchased in accordance with pure live seed specifications and be certified weed free. Seed will be used within nine months of testing. Any legumes in the seed mix will be treated with inoculants specific to the species. For conventional seeding, use four times the manufacturer's recommended rate of inoculants, and ten times the recommended rate if hydro-seeding methods are used.

Seed will be uniformly applied and incorporated into the top one inch of soil. For areas greater than 500 ft^2 either drill seeding or hydroseeding is required in uplands. A seed drill equipped with a culti-packer is the preferred method of seeding, however, if the seed is broadcast or applied using a hydro-seeder, the seed will be applied at double the recommended seeding rate. Where seed is broadcast, the seed will be incorporated into the soil by raking or dragging. Where a hydro-seeder is used, the seed bed will be scarified prior to application to allow the seeds to lodge and germinate.

Immediately after or concurrent with seeding, mulch will be uniformly applied to cover 90 percent of the ground surface at a rate of two tons per acre of straw except those areas located in actively cultivated croplands, and other areas at the EI's discretion. Mulch specifications are discussed in Section 6. Mulch will not be applied in wetlands.

After seeding, Contractor will restore turf, ornamental trees and shrubs and other landscaping in residential areas in accordance with the landowner's request or compensation will be made to the landowner. Restoration work will be performed by Contractor personnel familiar with local horticultural and turf establishment practices. In addition, Contractor may be required to install vegetative visual screening at critical viewpoints in the project area in accordance with the project authorizations, the project alignment sheets, drawings, and/or the project line lists. Vegetative visual screening will involve planting native shrub and tree species within the approved work area at naturally occurring densities and distributions (not on a grid) to blend with the surrounding landscape.

Revegetation will be considered successful when the surface of the approved work area is similar to adjacent undisturbed lands in terms of species richness and density, or at least 70 percent perennial vegetation.

10.4.4 Post-Construction Monitoring and Maintenance

Contractor will be responsible for maintaining erosion and sediment controls, making repairs on the right of way, and success of any vegetation, including trees, until final stabilization has been achieved. Company expects and requires the Contractor to respond to repairs such as BMP repair and/or replacement, reseeding, regrading, removal of non-biodegradable BMPs in a timely manner and within the time frame outlined in any application project authorizations (e.g., construction stormwater permit). Upon achieving final stabilization, Contractor will walk the Project and remove any construction waste (e.g., mats) and non-biodegradable sediment controls.

11 REVISION HISTORY:

Responsibility for Procedure:

Address all questions on this procedure to the director of environmental.

Revisions:

Rev. 0	04/01/21	
Rev. 1	07/21/21	Revised to require the use of erosion control blankets or hydraulically applied bonded fiber matrix on all slopes 15% or greater, that require revegetation.
Rev. 2	05/04/23	Revised to include paragraph on coagulation/flocculation aids.
Rev. 3	12/08/23	Revised to include soil testing requirements and editorial/style changes.
Rev. 4	07/23/25	Changes to required seeding methods.
Rev. 5	12/05/25	Clarified trench breaker, excess vegetation disposal, and expectations for winter construction plans. Corrected minimum drain tile offset from pipe. Stated preference for pollinator seed mix.

Appendix A

380.203b SWPPP Inspection and Maintenance Report

NORTHERN NATURAL GAS
STORMWATER INSPECTION AND MAINTENANCE FORM

Project Name:		**Work Order #:**	**Inspection Date:** **Inspection Time:**
Project Description:			**Stormwater Permit Agency:**
Nearest Town, County and State:			**Stormwater Permit Authorization #:**
GPS Lat:	**GPS Long:**		**Initial Grading Date:** **Final Grading Date:**
Full Contractor Company Name:			**Final Seeding Date:**
Contractor Contact Info (Name/Phone):			**Final Stabilization Date:**
Inspection Event:	☐ Routine ☐ Rain Event ☐ Maintenance		
Inspection Schedule (IL, IA, MI, MN, OK, SD, WI)	☐ Every 7 days and within 24 hours of a rain event 0.5 inches or greater (inches of rain)		
Inspection Schedule (KS, NE, OK, SD)	☐ Every 14 days and within 24 hours of a rain event 0.5 inches or greater (inches of rain)		
Inspection Schedule (NM and all EPA permits)	☐ Every 7 days or every 14 days and within 24 hours of a rain event 0.25 inches or greater (inches)		
Reduced Inspection Schedule and Reason Behind Reduced Schedule (Must follow stormwater permit authorization requirements, which may vary per state/project.)	☐ Every 30 days	☐ Site temporarily stabilized and winter conditions ☐ Arid, semi-arid or drought stricken area ☐ Frozen conditions ☐ Other, explain:	
Current Weather and Site Conditions (i.e., 66°F and dry):			
Construction Phase:	☐ **Active** ☐ **Suspended** ☐ **Post-Construction**		

SUBMITTED TO: (Enter names and email addresses below.)

Project Manager: Click here to enter text.
Construction Coordinator: Click here to enter text.
Field Operations Contact: Click here to enter text.
Division Environmental Specialist (DES): Click here to enter text.
Construction Environmental Compliance Contact: Christa Webber

NORTHERN NATURAL GAS
STORMWATER INSPECTION AND MAINTENANCE FORM

Table 1.0 – Inspection Observations and Corrective Actions

Stormwater Inspection Item	**Maintenance Required:** If yes, complete columns to the right.	**Observations:** Describe locations where controls require maintenance or additional controls are needed.	**Recommended Corrective Actions:** Describe actions taken while on-site, and/or recommendations to resolve observed issues. Update items with notes to detail status, including ongoing communications to ensure progress toward resolution.	**Assigned to:**	**Repair Status**	**Completion Date[1]**
Contract Yards and Storage Areas	☐ Yes ☐ No ☐ N/A				☐ Pending ☐ In progress ☐ Complete	
Vehicle Exit Points	☐ Yes ☐ No ☐ N/A				☐ Pending ☐ In progress ☐ Complete	
Sediment Controls	☐ Yes ☐ No ☐ N/A				☐ Pending ☐ In progress ☐ Complete	
Erosion Controls	☐ Yes ☐ No ☐ N/A				☐ Pending ☐ In progress ☐ Complete	
Disturbed Areas Stabilization	☐ Yes ☐ No ☐ N/A				☐ Pending ☐ In progress ☐ Complete	
Dewatering Activities and Structures	☐ Yes ☐ No ☐ N/A				☐ Pending ☐ In progress ☐ Complete	
Material Storage (e.g., containment, spill kits, etc.)	☐ Yes ☐ No ☐ N/A				☐ Pending ☐ In progress ☐ Complete	
Final Restoration Activities	☐ Yes ☐ No ☐ N/A				☐ Pending ☐ In progress ☐ Complete	

[1]Action items that were dated complete on the previous report should not appear on subsequent reports.

SUBMITTED TO: (Enter names and email addresses below.)

Project Manager: Click here to enter text.
Construction Coordinator: Click here to enter text.
Field Operations Contact: Click here to enter text.
Division Environmental Specialist (DES): Click here to enter text.
Construction Environmental Compliance Contact: Christa Webber

Table 2.0 – Erosion Control Devices (Separately list each area where ECDs have been either temporarily or permanently installed.)

Exact location of erosion/sediment control inspected *(Ex. east road-side ditch of HWY 20)*	**Temporary (T) or Permanent (P)**	**Type of erosion/sediment control** *(Ex. hay bales, silt fence, wattles, slope breakers, erosion blankets, construction entrances, electric/barbed-wire fence, dewatering devices/structures, etc.)*	**Date Installed**	**Date Removed**	**Dates and Comments Regarding Completed Repair/Maintenance Activities**

Table 3.0 – Revegetation (Separately list each area where revegetation is required to report status toward "final stabilization", as defined by the respective permit.)

Location	**Status**	**Land Use**	**Seed/Over-seed Date(s)**	**Comments**

SUBMITTED TO: (Enter names and email addresses below.)
Project Manager: Click here to enter text.
Construction Coordinator: Click here to enter text.
Field Operations Contact: Click here to enter text.
Division Environmental Specialist (DES): Click here to enter text.
Construction Environmental Compliance Contact: Christa Webber

NORTHERN NATURAL GAS
STORMWATER INSPECTION AND MAINTENANCE FORM

General Observations:	
Is there a violation affecting water quality?	
☐ Yes, and I immediately called the environmental specialist for instruction.	☐ No: No further action required.
Has the entire site achieved Final Stabilization per the permit requirements and have all temporary ECDs have been removed.	
☐ Yes, and I immediately called the environmental specialist for instruction.	☐ No: The next SWPPP inspection is due on or before this date:

Certification: I certify that: (1) the information contained in this report is true, accurate and complete; (2) I am qualified to complete this inspection based on my training and knowledge of the principles and practice of erosion and sediment controls; and (3) the project is in compliance with the SWPPP. I understand the terms and conditions of the general National Pollutant Discharge Elimination System (NPDES) permit authorization for this project, which authorizes the storm water discharges associated with industrial activity from the construction site identified as part of this certification.	
Inspector Printed Name:	
Inspector Signature:	**Date:**
Certification: I certify that: (1) the information contained in this report is true, accurate and complete; (2) I understand that I am required to take the listed corrective actions within 24 hours of this notification, or as soon as possible if field conditions prevent access, under the conditions of the National Pollutant Discharge Elimination System (NPDES) permit authorization for this project and the FERC Plan and Procedures; and (3) the project is in compliance with the SWPPP. I understand the terms and conditions of the general National Pollutant Discharge Elimination System (NPDES) permit authorization for this project, which authorizes the storm water discharges associated with industrial activity from the construction site identified as part of this certification.	
Contractor Environmental Lead Printed Name:	
Contractor Environmental Lead Signature:	**Date:**

SUBMITTED TO: (Enter names and email addresses below.)

Project Manager: Click here to enter text.
Construction Coordinator: Click here to enter text.
Field Operations Contact: Click here to enter text.
Division Environmental Specialist (DES): Click here to enter text.
Construction Environmental Compliance Contact: Christa Webber

INSPECTION PHOTOS

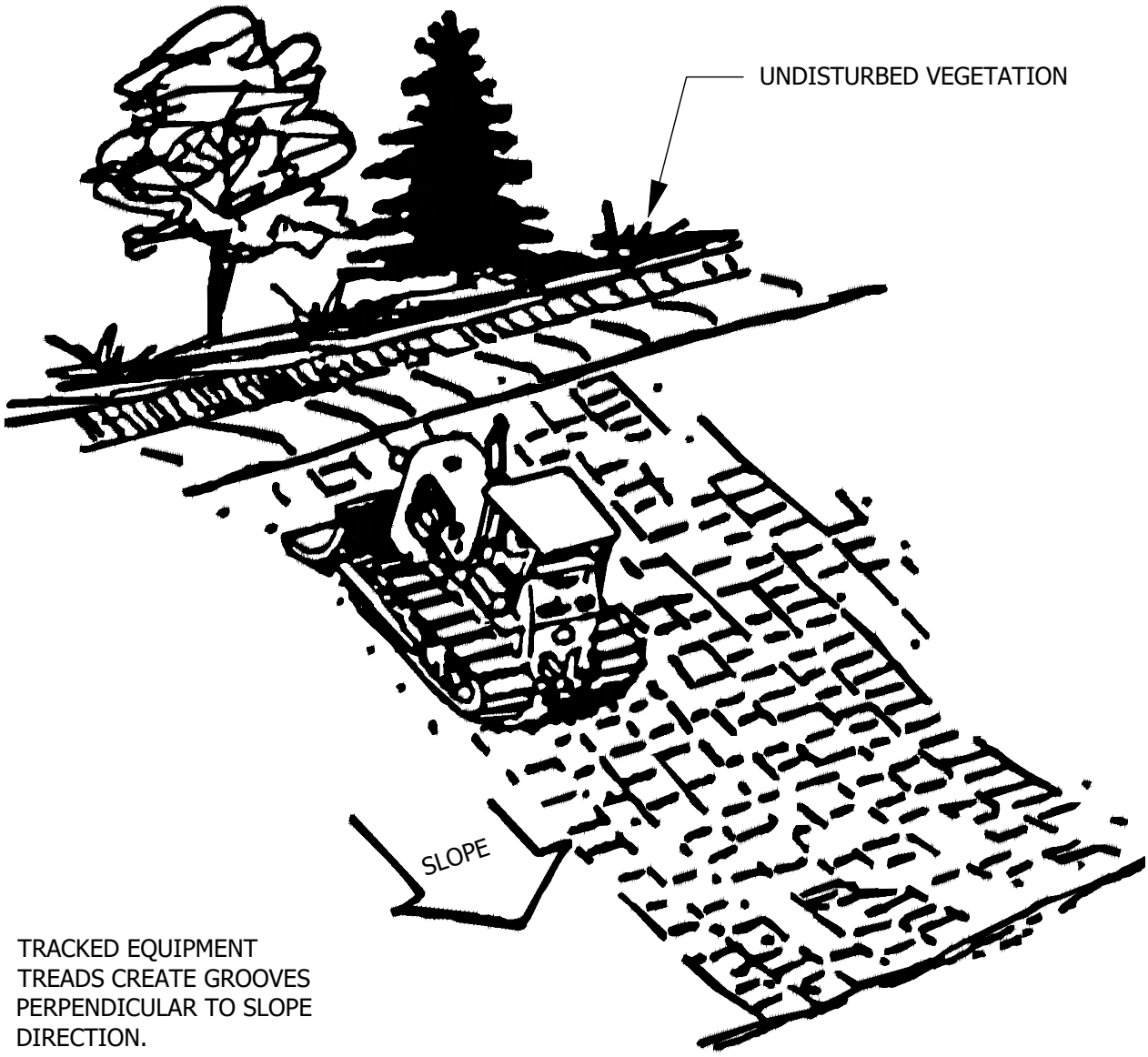
(Insert a minimum of two to three photos on the next pages, followed directly by captions detailing: 1) direction of view, 2) location within the temporary workspace, and 3) other significant information to reference the information noted above. Photos must be provided for any areas noted above as requiring maintenance. If those areas were corrected during the inspection, simply include photos showing the corrected concern.)

SUBMITTED TO: (Enter names and email addresses below.)

Project Manager: Click here to enter text.
Construction Coordinator: Click here to enter text.
Field Operations Contact: Click here to enter text.
Division Environmental Specialist (DES): Click here to enter text.
Construction Environmental Compliance Contact: Christa Webber

Appendix B

Typical Erosion and Sediment Control Details



TRACKED EQUIPMENT
TREADS CREATE GROOVES
PERPENDICULAR TO SLOPE
DIRECTION.

NOTE:
ALL SLOPES WITH A GRADE EQUAL TO OR STEEPER THAN 3:1 REQUIRE SLOPE TRACKING. SLOPES WITH A GRADE MORE GRADUAL THAN 3:1 REQUIRE SLOPE TRACKING IF THE STABILIZATION METHOD IS EROSION CONTROL BLANKET OR HYDROMULCH.

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PL#. N/A		CONST. YR 2019
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DRAWN		1/7/2020
ASBUILT		
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SCALE: N/A		

Northern Natural Gas

HORIZONTAL SLOPE GRADING

Figure E-1

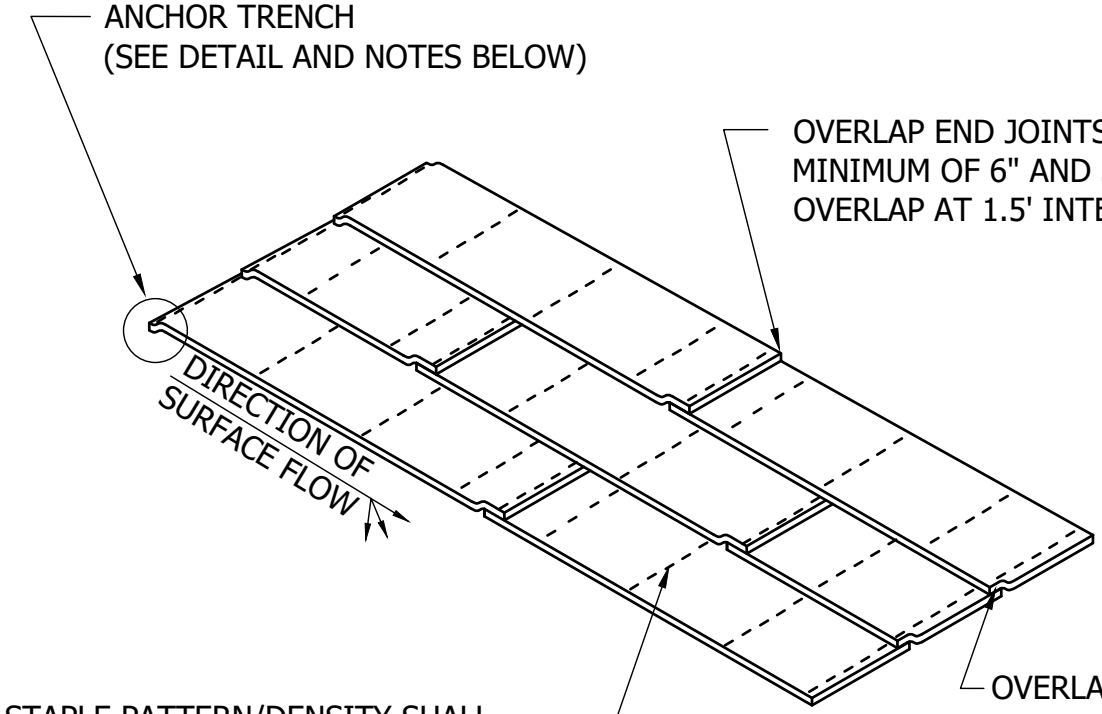
PROJECT NO.
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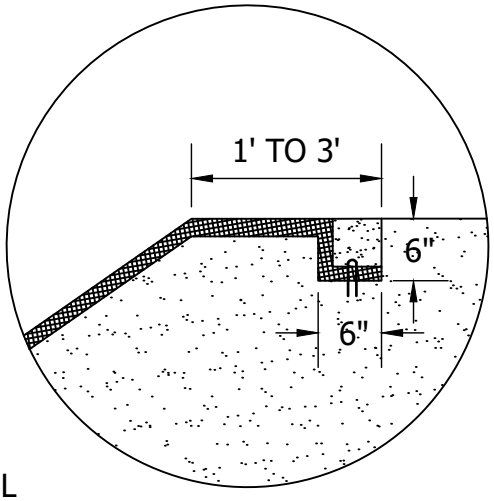
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ANCHOR TRENCH

1. DIG 6" X 6" TRENCH
2. LAY BLANKET IN TRENCH
3. STAPLE AT 1.5' INTERVALS
4. BACKFILL WITH NATURAL SOIL AND COMPACT
5. BLANKET LENGTH SHALL NOT EXCEED 100' WITHOUT AN ANCHOR TRENCH

NOTE:

1. SLOPE SURFACE SHALL BE FREE OF ROCKS, SOIL CLUMPS, STICKS, VEHICLE IMPRINTS, AND GRASS. BLANKETS SHALL HAVE GOOD SOIL CONTACT.
2. EROSION CONTROL BLANKET TYPE TO BE SPECIFIED BY ENGINEER.

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FILE NO.: N/A		
SCALE: N/A		

Northern Natural Gas

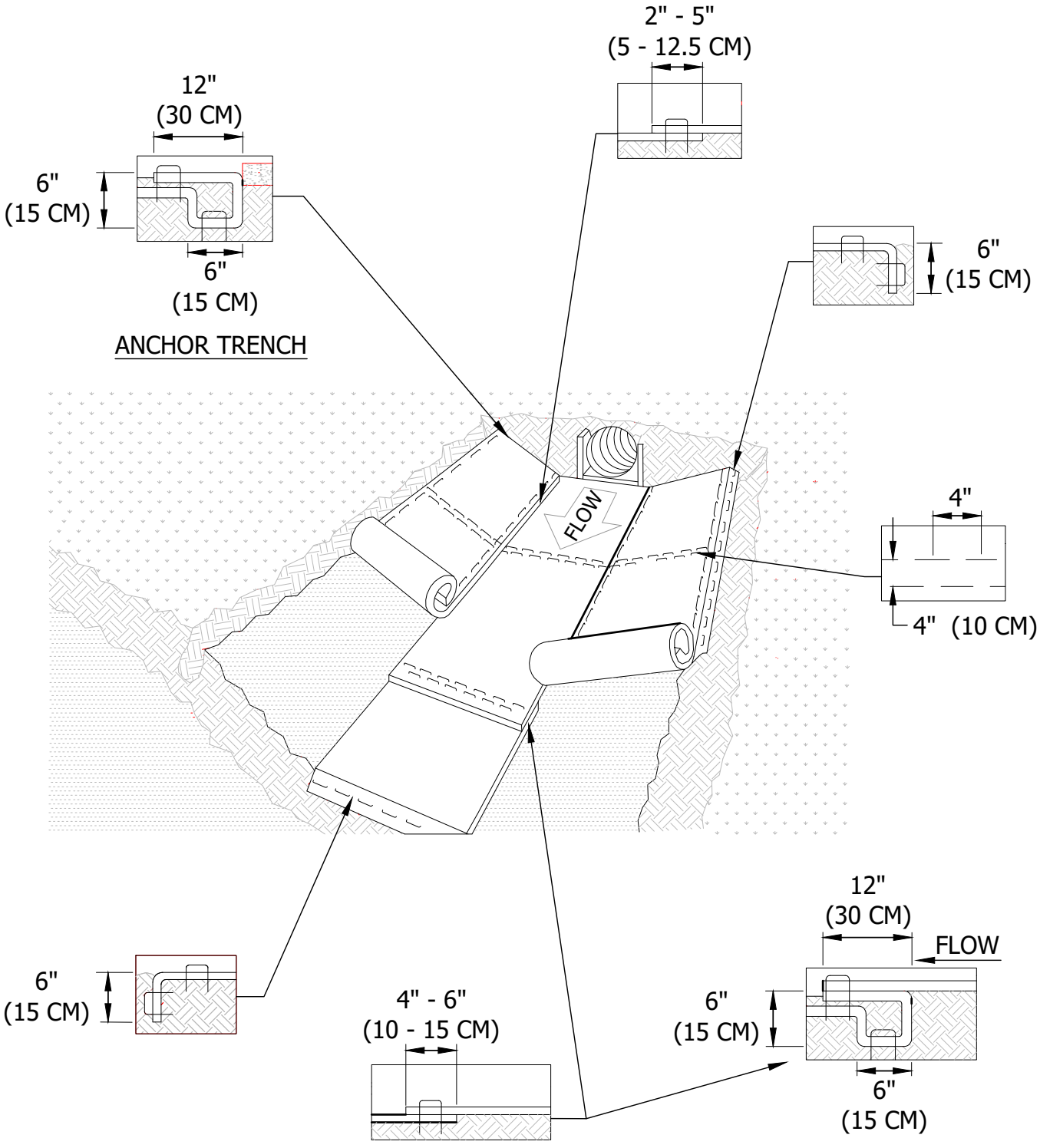
EROSION CONTROL BLANKET INSTALLATION

Figure E-2A

PROJECT NO.
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NOTE:
EROSION CONTROL CHANNEL BLANKET TYPE TO BE SPECIFIED BY ENGINEER.

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FILE NO.: N/A		
SCALE: N/A		

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EROSION CONTROL BLANKET CHANNEL INSTALLATION

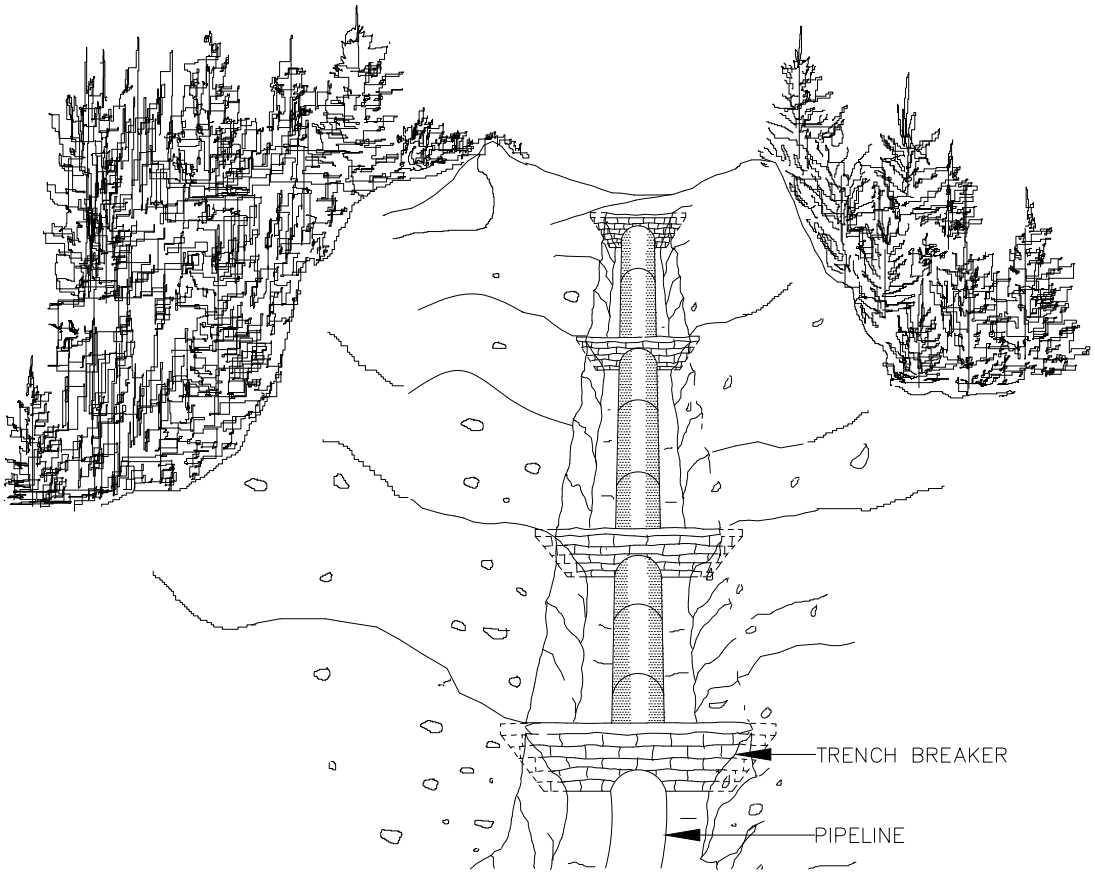
Figure E-2B

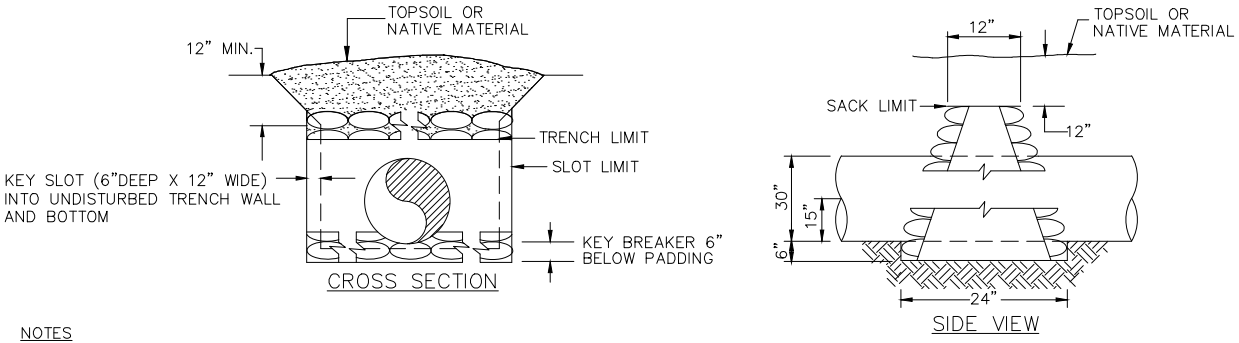
PROJECT NO.
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NOTES

1. TRENCH BREAKERS SHALL BE INSTALLED:
   - ON SLOPES ALONG THE TRENCH LINE WHERE THE NATURAL DRAINAGE PATTERN, PROFILE, AND TYPE OF BACKFILL MATERIAL MAY RESULT IN LOSS OF BACKFILL MATERIAL OR ALTERATION OF THE NATURAL PATTERN;
   - AT THE BASE OF SLOPES ADJACENT TO WATERBODIES AND WETLANDS;
   - WHERE NEEDED TO AVOID DRAINING A WETLAND;
   - ON UPLAND SLOPES, AT THE SAME SPACING AS SLOPE BREAKERS AND UP SLOPE OF SLOPE BREAKERS;
   - IN CULTIVATED LAND AND RESIDENTIAL AREAS WHERE PERMANENT SLOPE BREAKERS ARE NOT TYPICALLY INSTALLED, AT THE SAME SPACING AS IF PERMANENT SLOPE BREAKERS WHERE REQUIRED.
2. OPEN WEAVE HEMP OR JUTE SACKS SHALL BE FILLED WITH A MINIMUM OF 55lbs. MIXTURE OF 1 PART CEMENT TO 6 PARTS SAND OR SUBSOIL SO THAT NATURAL GROUND WATER WILL PERMIT MIXTURE TO EXUDE AND BOND SACKS TOGETHER. FOAM MAY REPLACE MIXTURE.
3. BREAKER SPACING AND CONFIGURATION MAY BE CHANGED AS DIRECTED BY COMPANY. DEPTH OF DITCH MAY VARY WITH SITE CONDITIONS. SEE FERC'S PLANS AND PROCEDURES, FOR TYPICAL SPACING.
4. ALL MATERIALS SHALL BE SUPPLIED BY CONTRACTOR.
5. TRENCH BREAKERS MUST FULLY ENCIRCLE THE PIPE.

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FILE NO.: N/A		
SCALE: NTS		

Northern Natural Gas.

TYPICAL TRENCH BREAKER REQUIREMENTS

Northern Natural Gas.

PROJECT NO.

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FIGURE 6

F

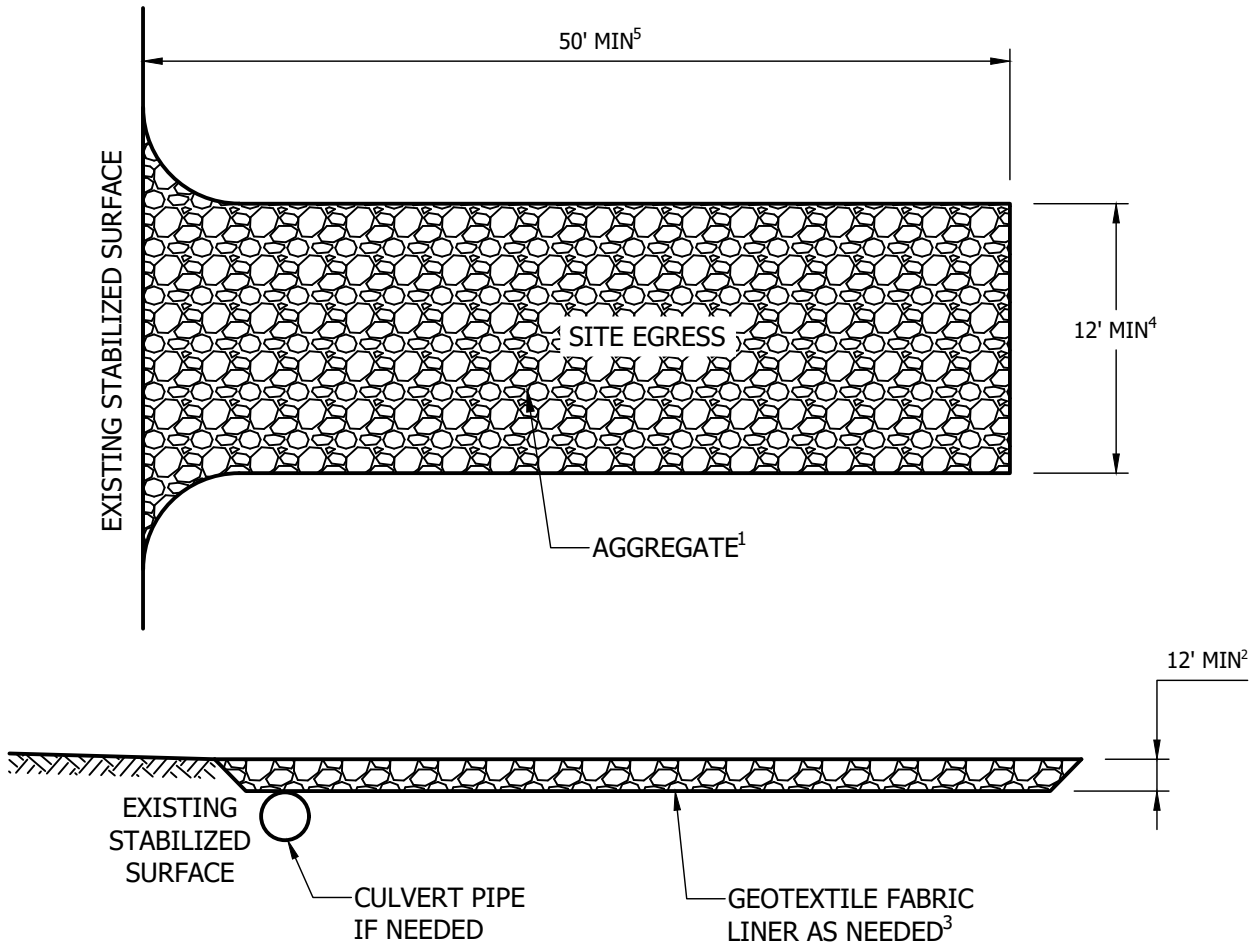


Table 1. Gradation for stone tracking pads	
Sieve Size	Percent by weight passing
3"	100
2-1/2"	90-100
1-1/2"	25-60
3/4"	0-20
3/8"	0-5

NOTE

1. USE HARD, DURABLE, ANGULAR STONE OR RECYCLED CONCRETE MEETING THE GRADATION IN TABLE 1. WHERE THIS GRADATION IS NOT AVAILABLE, MEET THE GRADATION IN WISCONSIN DEPARTMENT OF TRANSPORTATION (DOT) 2018 STANDARD SPECIFICATIONS, SECTION 312, SELECT CRUSHED MATERIAL.
2. SLOPE THE STONE TRACKING PAD IN A MANNER TO DIRECT RUNOFF TO AN APPROVED TREATMENT PLACE.
3. SELECT FABRIC TYPE BASED ON SOIL CONDITIONS AND VEHICLES LOADING.
4. INSTALL TRACKING PAD ACROSS FULL WIDTH OF THE ACCESS POINT, OR RESTRICT EXISTING TRAFFIC TO A DEDICATED EGRESS LAND A LEAST 12 FEET WIDE ACROSS THE TOP OF THE PAD.
5. IF A 50' PAD LENGTH IS NOT POSSIBLE DUE TO SITE GEOMETRY, INSTALL THE MAXIMUM LENGTH PRACTICABLE AND SUPPLEMENT WITH ADDITIONAL PRACTICES AS NEEDED.

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FILE NO.: N/A		
SCALE: N/A		

Northern Natural Gas

CONSTRUCTION ENTRANCE

Figure ERO-12

PROJECT NO. N/A

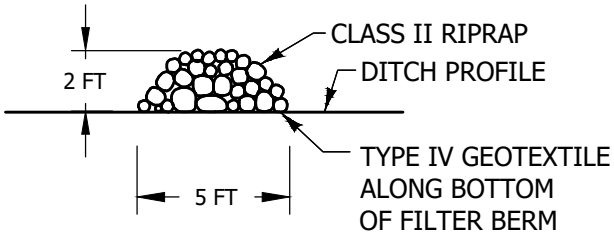
DWG. NO. TYP1

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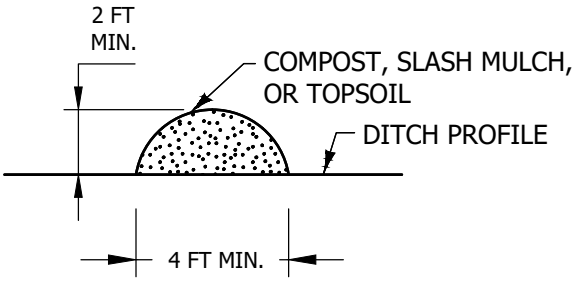
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TYPE 5 (ROCK)



TYPE 1 (COMPOST), TYPE 2 (SLASH MULCH), OR TYPE 4 (TOPSOIL)

NOTE

1. FOR PERMANENT DITCH CHECK REDUCE THE HEIGHT TO 16 IN. AND MODIFY THE 1:2 (V:H) SIDE SLOPE TO 1:6 (V:H).

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SCALE: N/A			

Northern Natural Gas

SEDIMENT CONTROL FILTER BERM

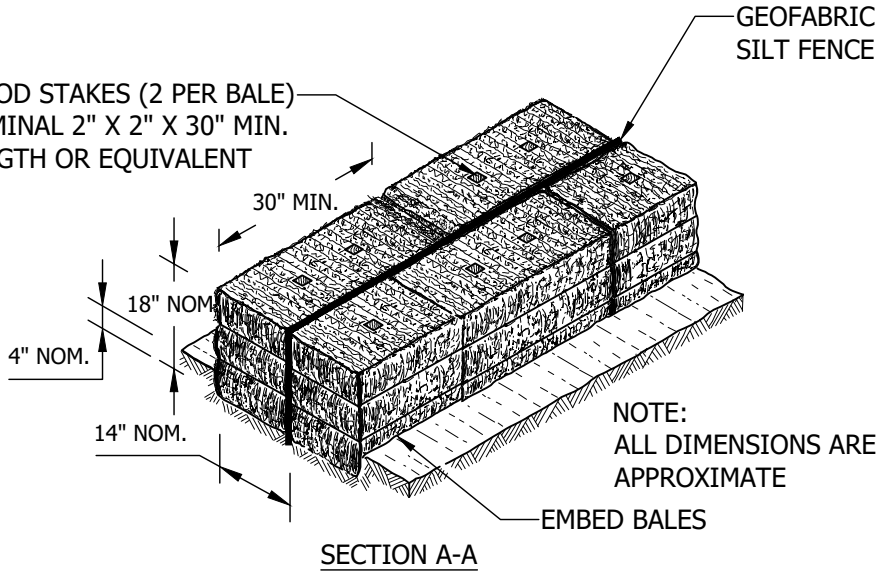
Figure ERO-13

PROJECT NO. N/A

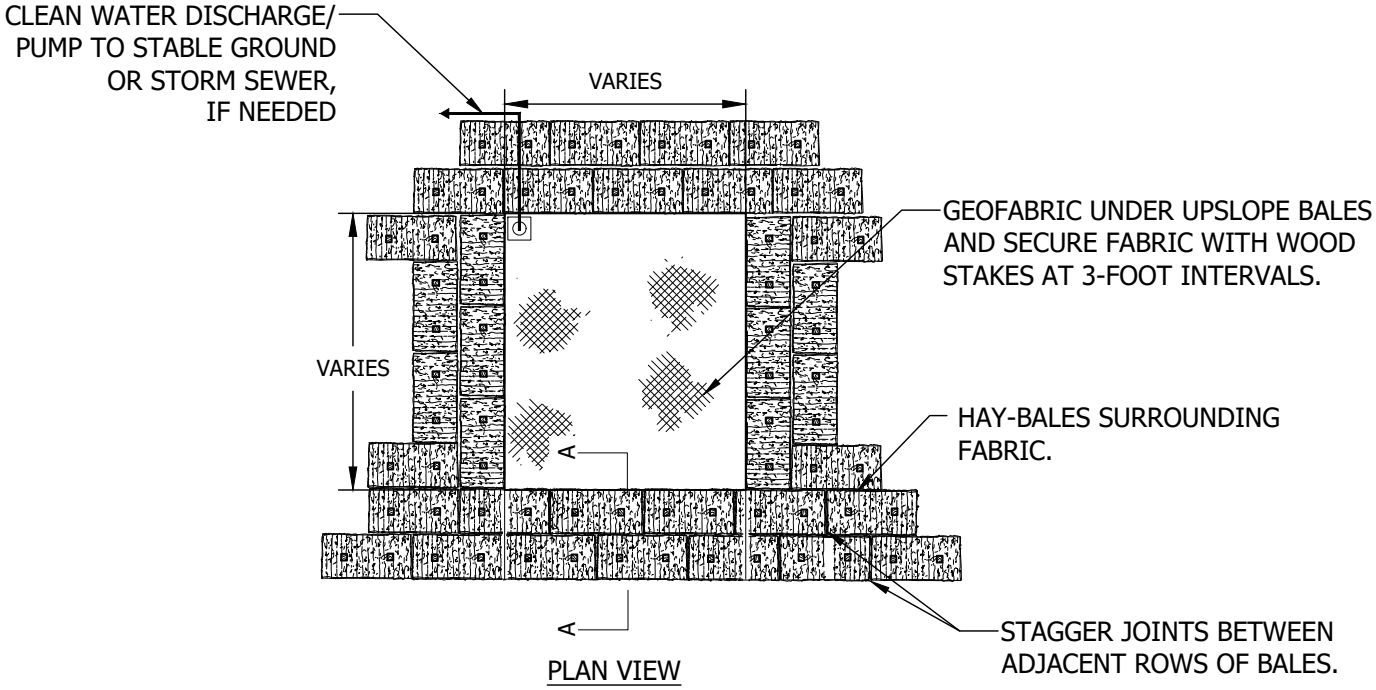
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SECTION A-A



PLAN VIEW

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	BY	DATE
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FILE NO.: N/A		
SCALE: N/A		

Northern Natural Gas

STRAW BALE DEWATERING STRUCTURE

Figure ERO-14

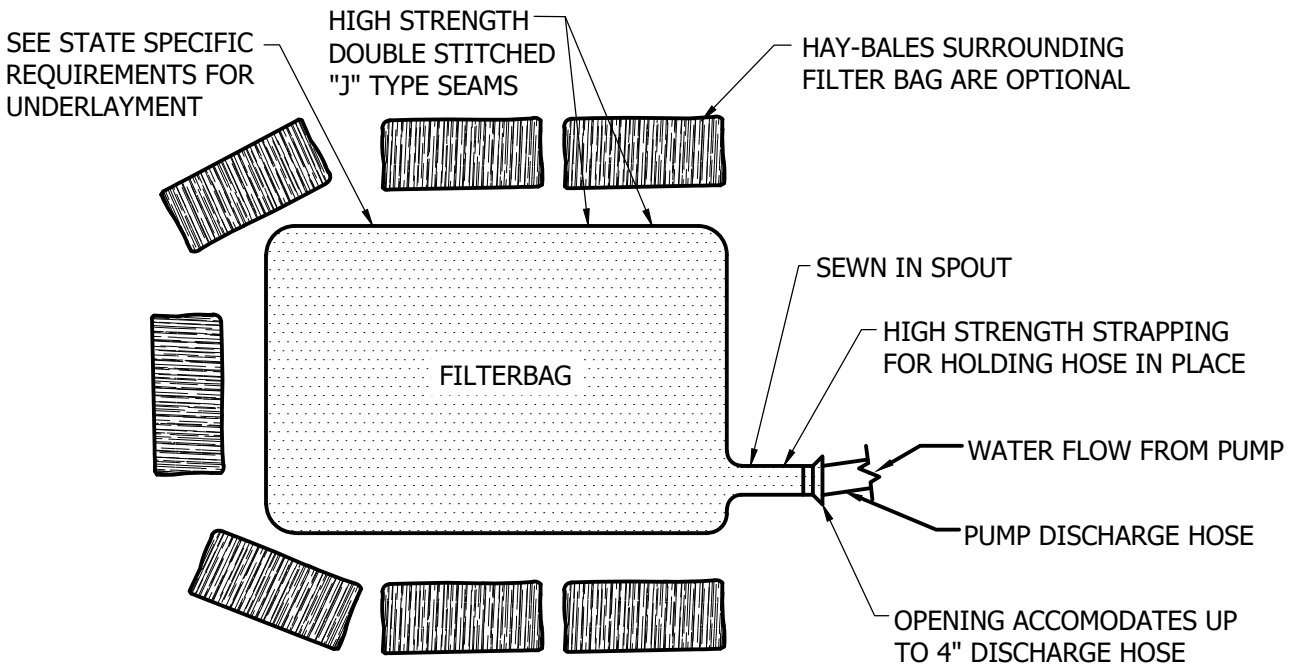
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TYP1
SHT. 1 OF 1

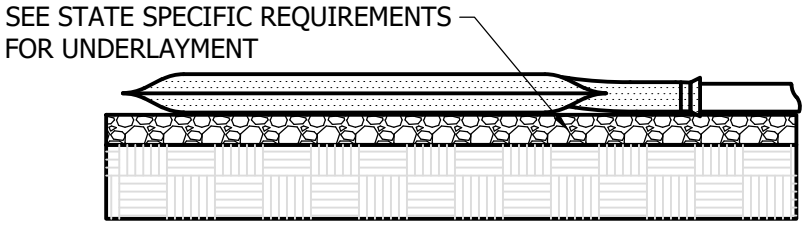
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TOP VIEW



SIDE VIEW

FAC. CODE: N/A		REL. W.O. N/A
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SCALE: N/A		

Northern Natural Gas

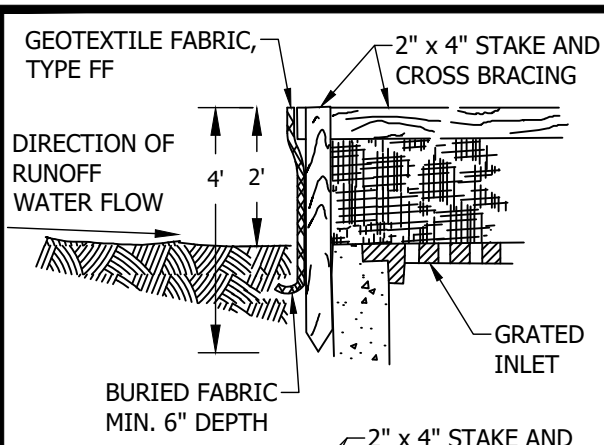
GEOTEXTILE FILTER BAG

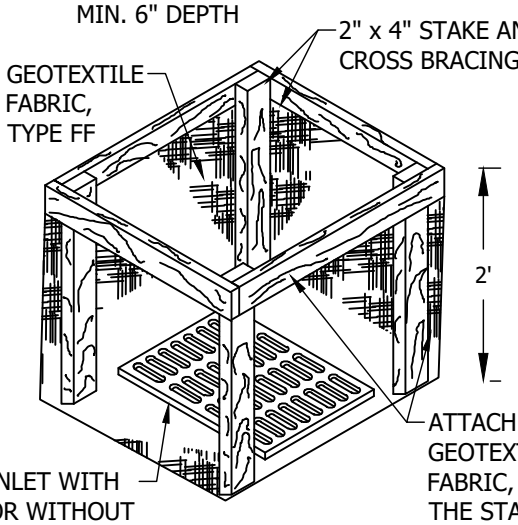
Figure ERO-15

PROJECT NO.
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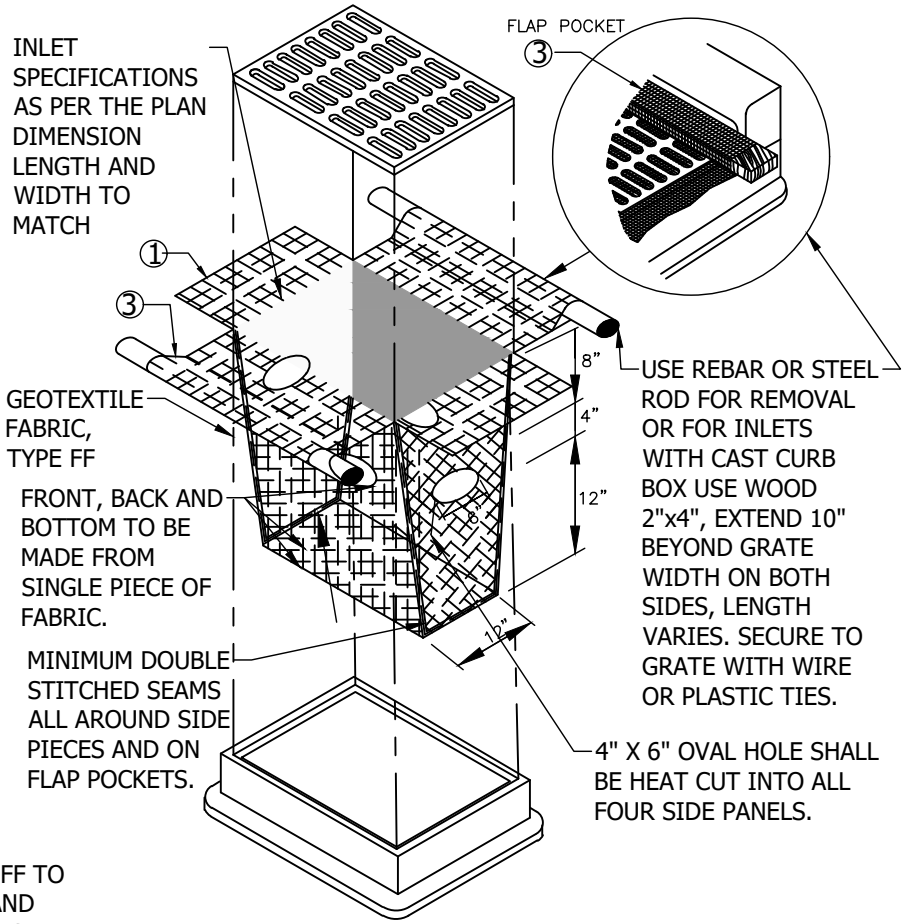
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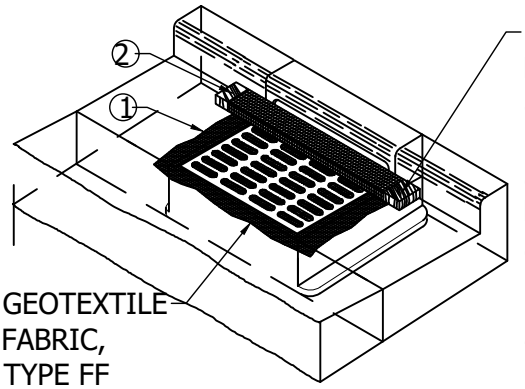




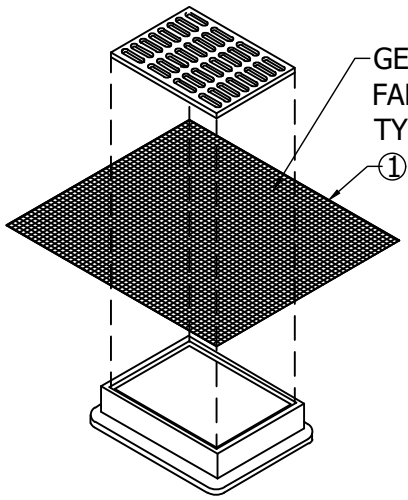
INLET PROTECTION, TYPE A



INLET PROTECTION, TYPE D
(CAN BE INSTALLED IN ANY INLET TYPE WITH OR WITHOUT A CURB BOX AS PER NOTE ②)



INLET PROTECTION, TYPE C (WITH CURB BOX)



INLET PROTECTION, TYPE B (WITHOUT CURB BOX)
(CAN BE INSTALLED IN ANY INLET WITHOUT A CURB BOX)

1. FINISHED SIZE, INCLUDING FLAP POCKETS WHERE REQUIRED, SHALL EXTEND A MINIMUM OF 10" AROUND THE PERIMETER TO FACILITATE MAINTENANCE OR REMOVAL.
2. FOR INLET PROTECTION, TYPE C (WITH CURB BOX), AN ADDITIONAL 18" OF FABRIC IS WRAPPED AROUND THE WOOD AND SECURED WITH STAPLES. THE WOOD SHALL NOT BLOCK THE ENTIRE HEIGHT OF THE CURB BOX OPENING.
3. FLAP POCKETS SHALL BE LARGE ENOUGH TO ACCEPT WOOD 2X4.

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DRAWN		1/8/2020	
ASBUILT			
FILE NO.: N/A			
SCALE: N/A			

Northern Natural Gas

INLET PROTECTION DROP-IN BAG

Figure ER0-16

PROJECT NO. N/A

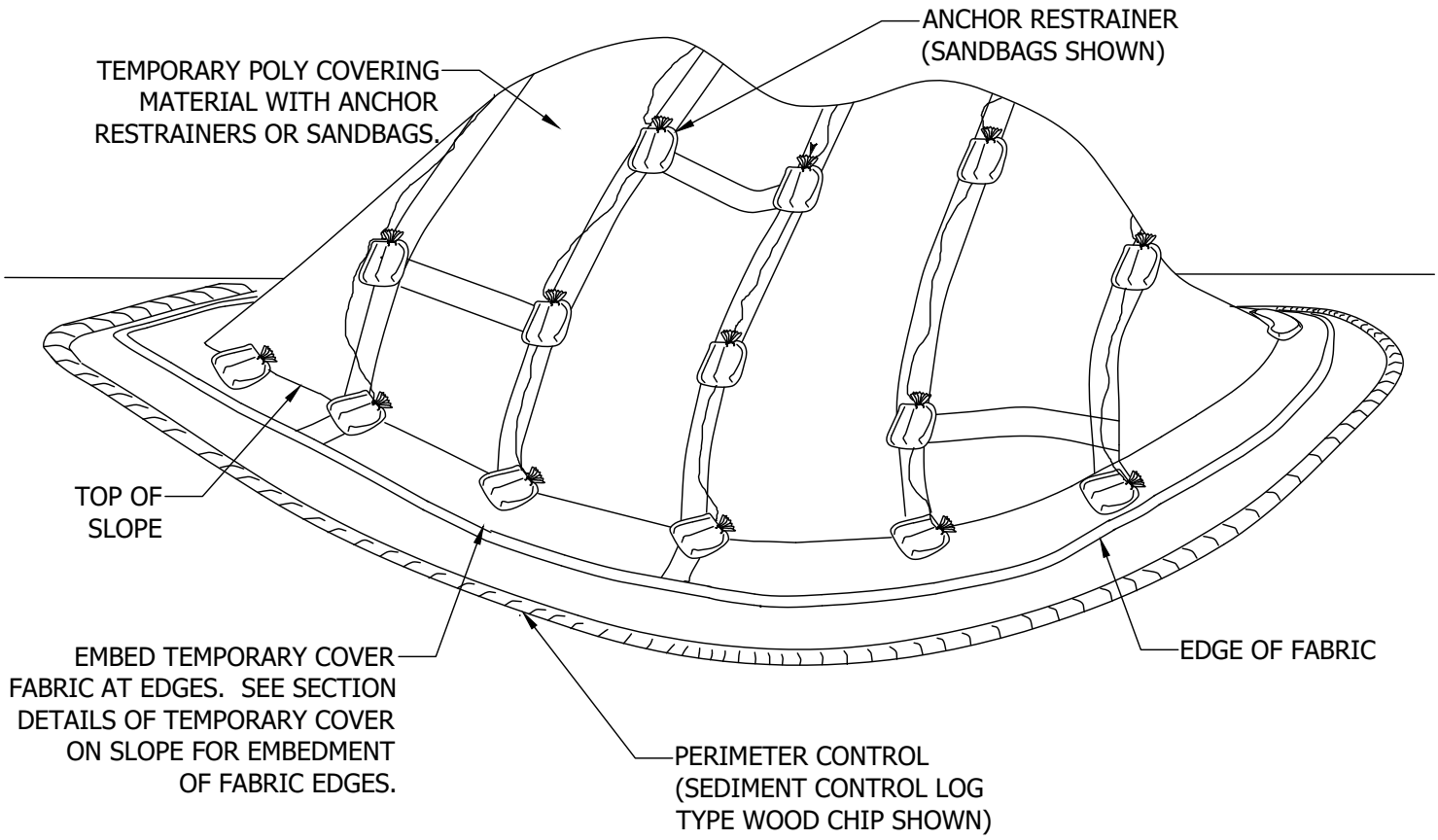
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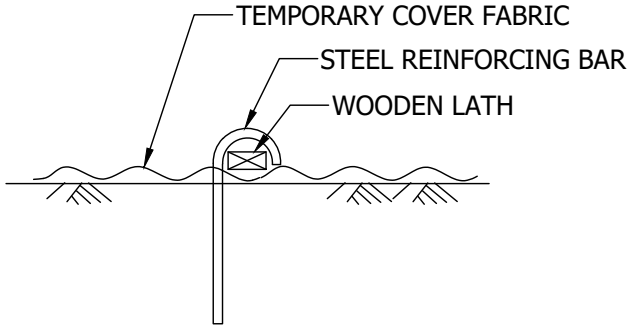
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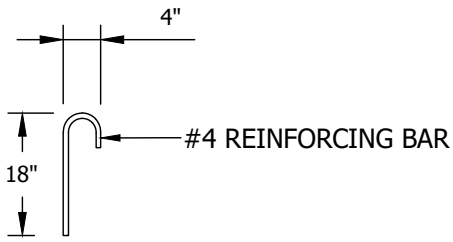
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ANCHOR RESTRAINER
(STEEL BAR AND WOODEN LATH OPTION)



STEEL REINFORCING BAR DETAIL

NOTES

1. ANCHOR RESTRAINERS: TYPE, QUANTITY, AND SPACING ARE INCIDENTAL TO POLY COVER. PROVIDE ON CORNERS AND SEAMS OF POLY COVER MATERIAL TO KEEP FROM BLOWING OFF. NO MINIMUM SPACING REQUIRED.
2. PERIMETER CONTROL: USE SEDIMENT CONTROL LOGS TYPE WOOD CHIP OR COMPOST, INCIDENTAL.

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Northern Natural Gas

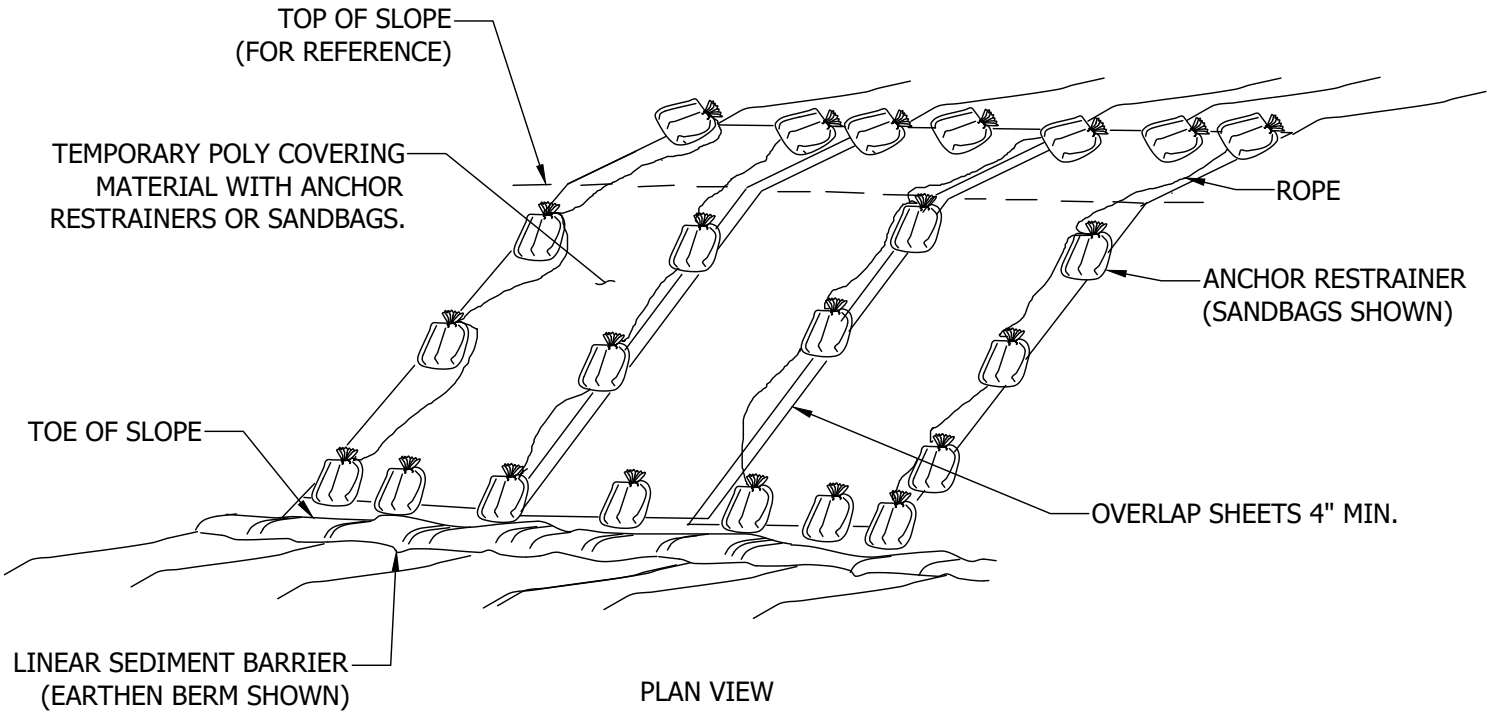
POLY COVER ON SLOPE

Figure ERO-17a

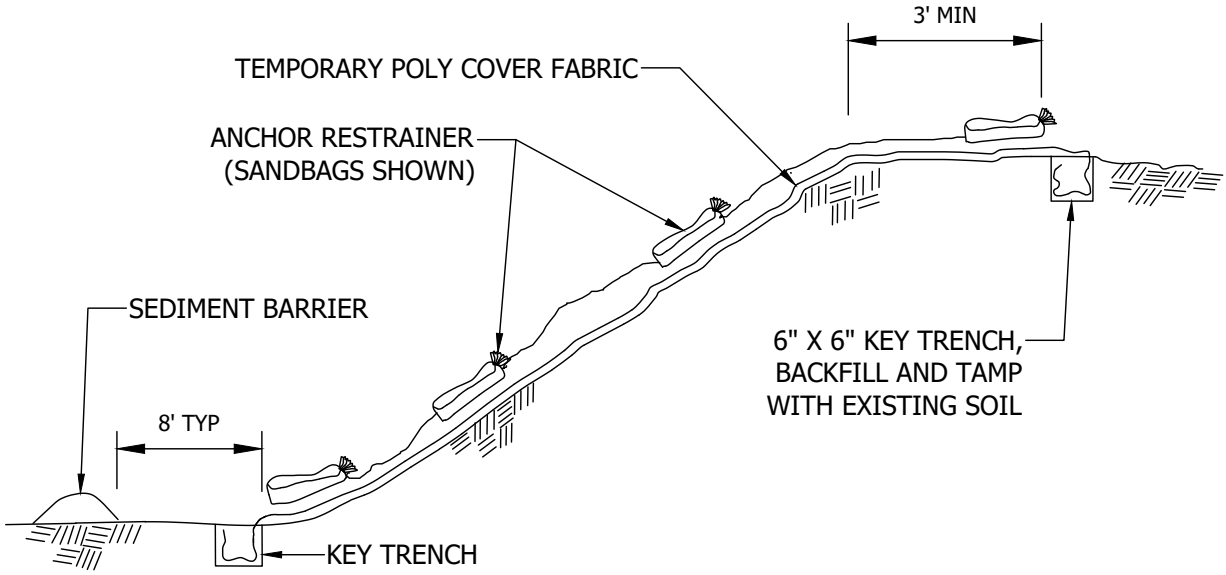
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PLAN VIEW



ELEVATION VIEW

NOTES

1. ANCHOR RESTRAINERS: TYPE, QUANTITY, AND SPACING ARE INCIDENTAL TO POLY COVER. PROVIDE ON CORNERS AND SEAMS OF POLY COVER MATERIAL TO KEEP FROM BLOWING OFF. NO MINIMUM SPACING REQUIRED.
2. PERIMETER CONTROL: USE SEDIMENT CONTROL LOGS TYPE WOOD CHIP OR COMPOST, INCIDENTAL.

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SCALE: N/A			

Northern Natural Gas

POLY COVER ON STOCKPILE

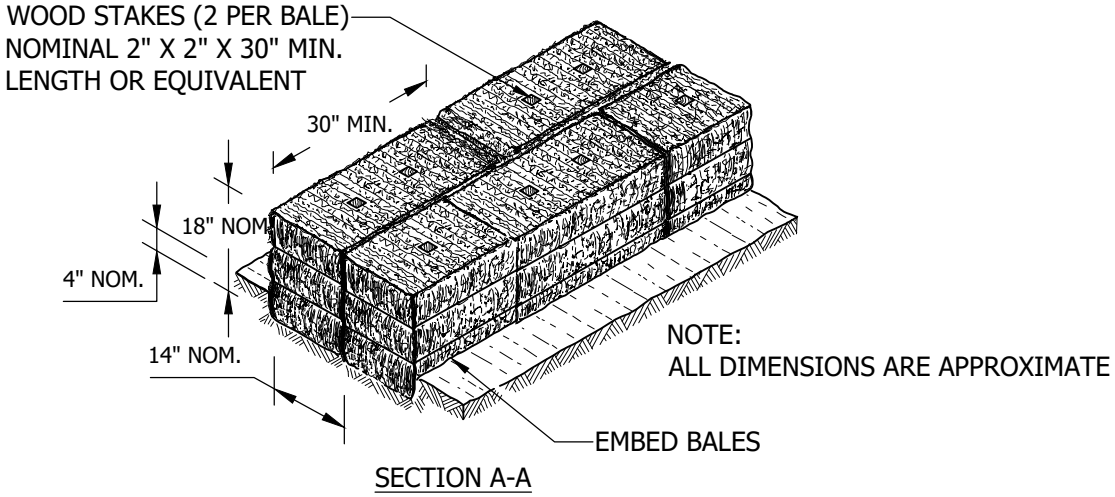
Figure ERO-17b

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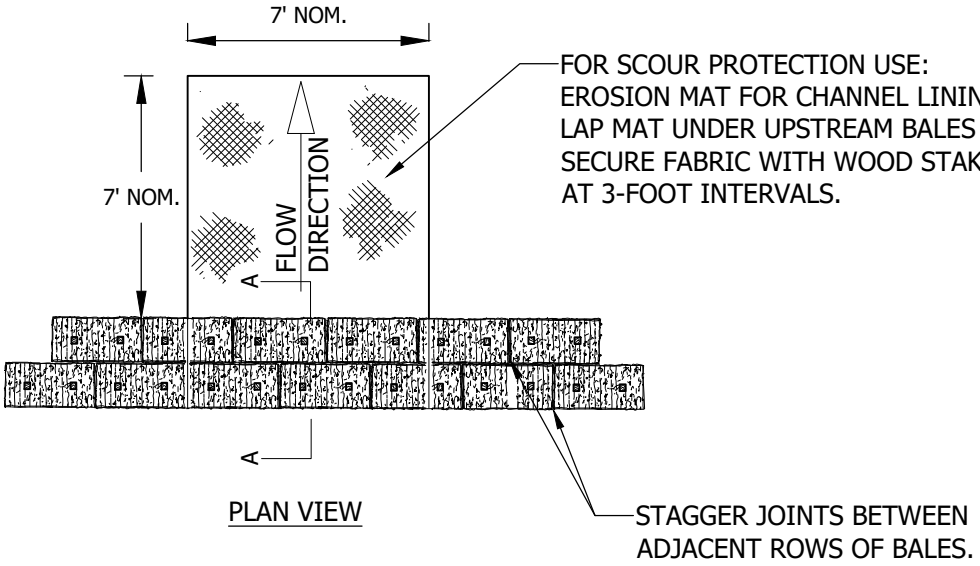
DWG. NO.
TYP1
SHT. 1 OF 1

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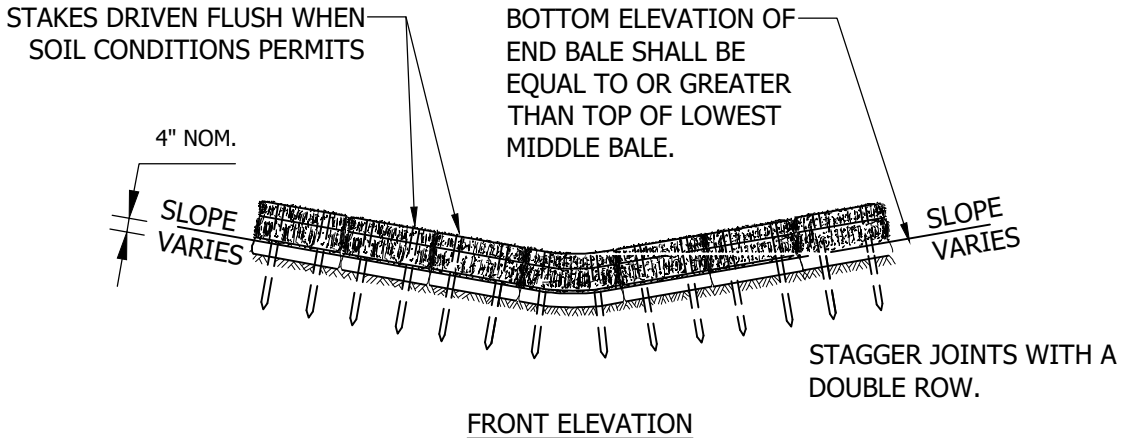
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SECTION A-A



PLAN VIEW



FRONT ELEVATION

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FILE NO.: N/A		
SCALE: N/A		

Northern Natural Gas

BALE BARRIER DITCH CHECK

Figure ERO-19

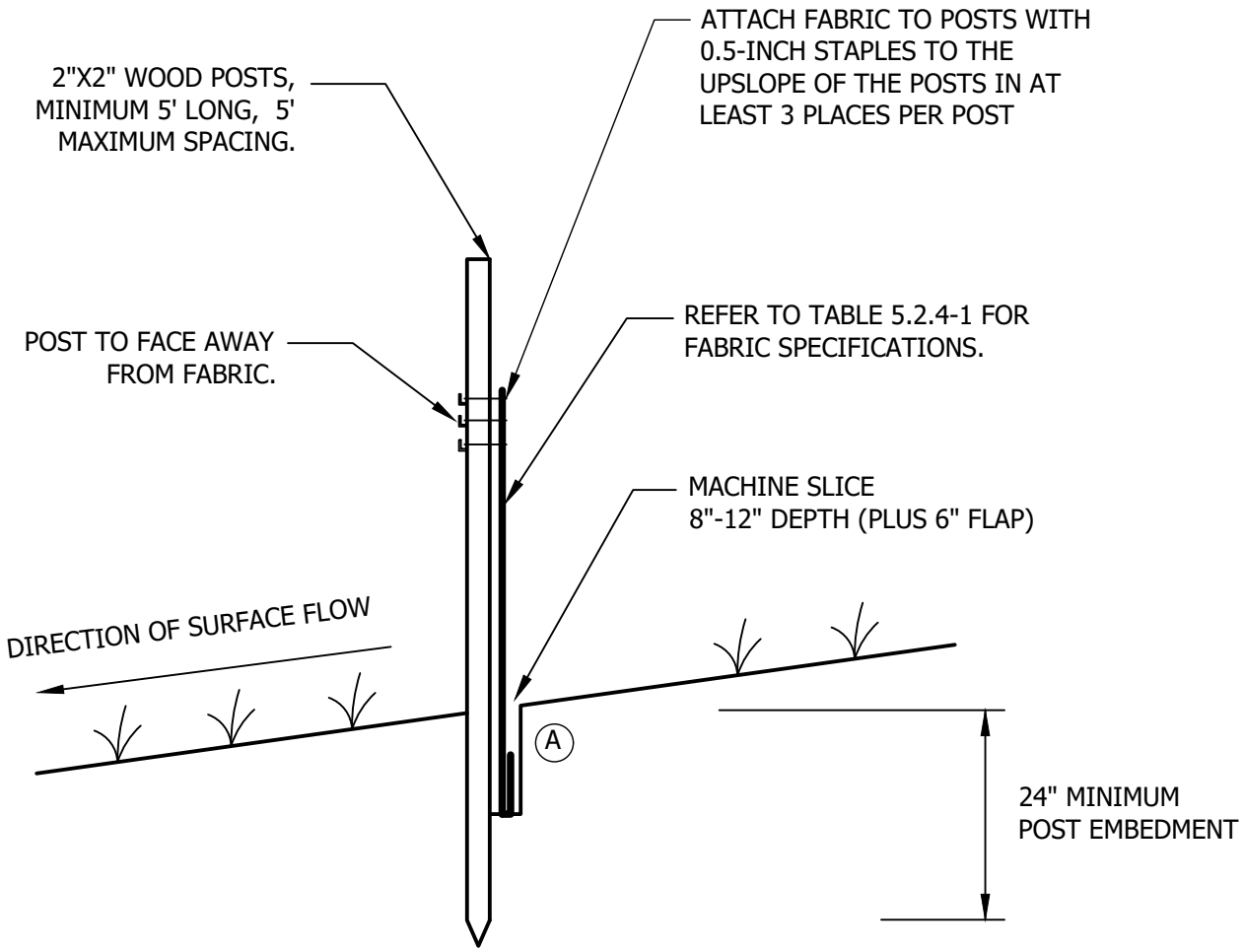
PROJECT NO. N/A

DWG. NO. TYP1

SHT. 1 OF 1

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NOTE:
THE MACHINE SLICED METHOD (THIS DETAIL) IS THE STANDARD SILT FENCE INSTALLATION METHOD. HEAVY-DUTY (S-2) SILT FENCE INSTALLATION METHODS SHOULD ONLY BE USED WHEN APPROVED OR DIRECTED BY THE NORTHERN NATURAL GAS.

(A) COMPACTION:
AFTER "SLICING" IN THE FABRIC AND *BEFORE* INSTALLATION OF WOOD POSTS, DRIVE INSTALLATION EQUIPMENT OVER THE "SLICE" WHILE FABRIC IS LAYING ON THE GROUND. *THEN* INSTALL WOOD POSTS AND PULL UP FABRIC TO ATTACH AT A UNIFORM HEIGHT.

FAC. CODE: N/A		REL. W.O. N/A
PL#. N/A		CONST. YR 2019
STA# N/A		
	BY	DATE
DESIGN		12/20/2019
DRAWN		1/7/2020
ASBUILT		
FILE NO.: N/A		
SCALE: N/A		

Northern Natural Gas

SILT FENCE MACHINE SLICED

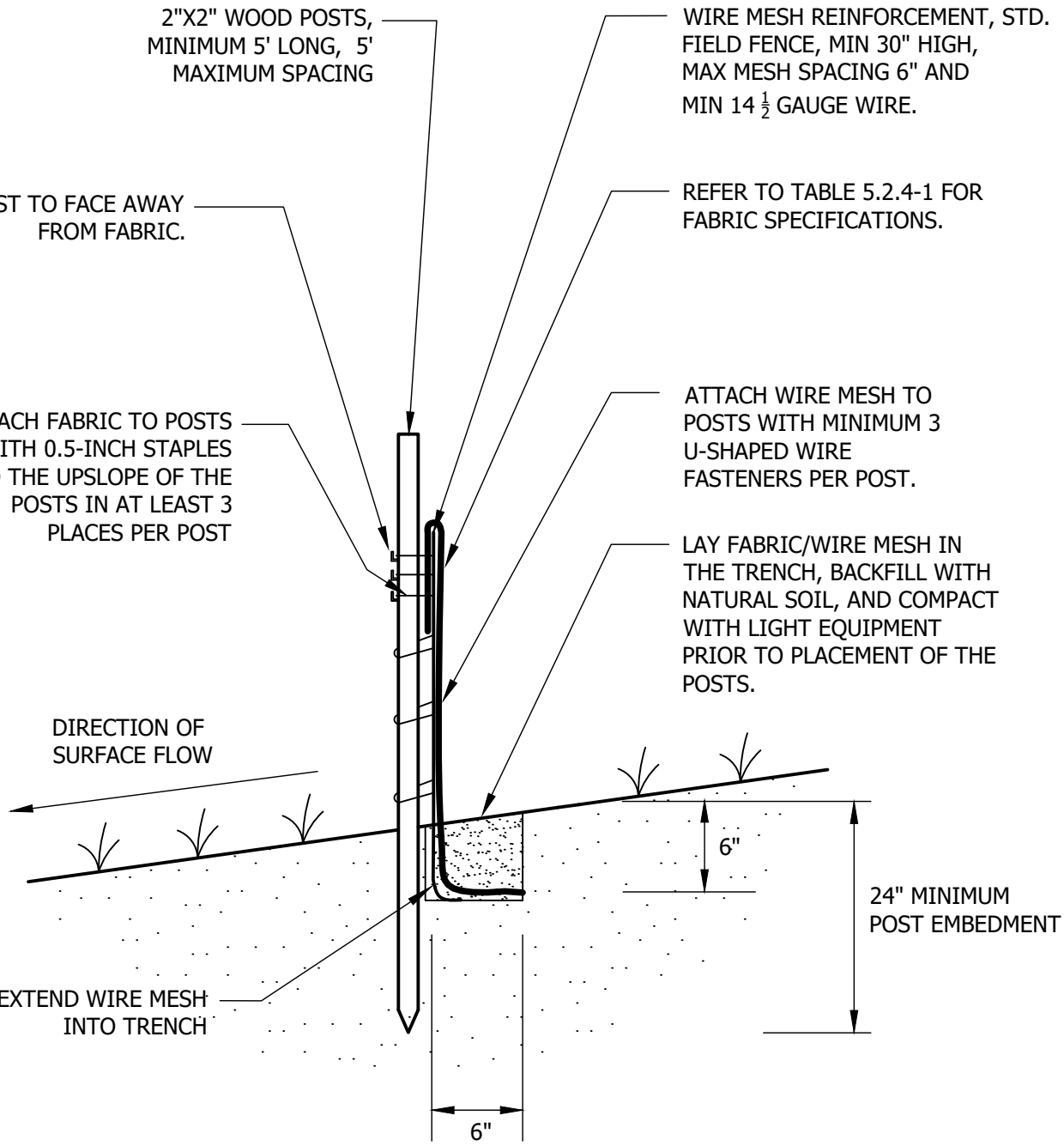
Figure S-1

PROJECT NO.
N/A

DWG. NO.
TYP1
SHT. 1 OF 1

A

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FAC. CODE: N/A		REL. W.O. N/A
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STA# N/A		
	BY	DATE
DESIGN		12/21/2019
DRAWN		1/7/2020
ASBUILT		
FILE NO.: N/A		
SCALE: N/A		

Northern Natural Gas

SILT FENCE WIRE BACKED (HEAVY-DUTY)

Figure S-2

PROJECT NO. N/A

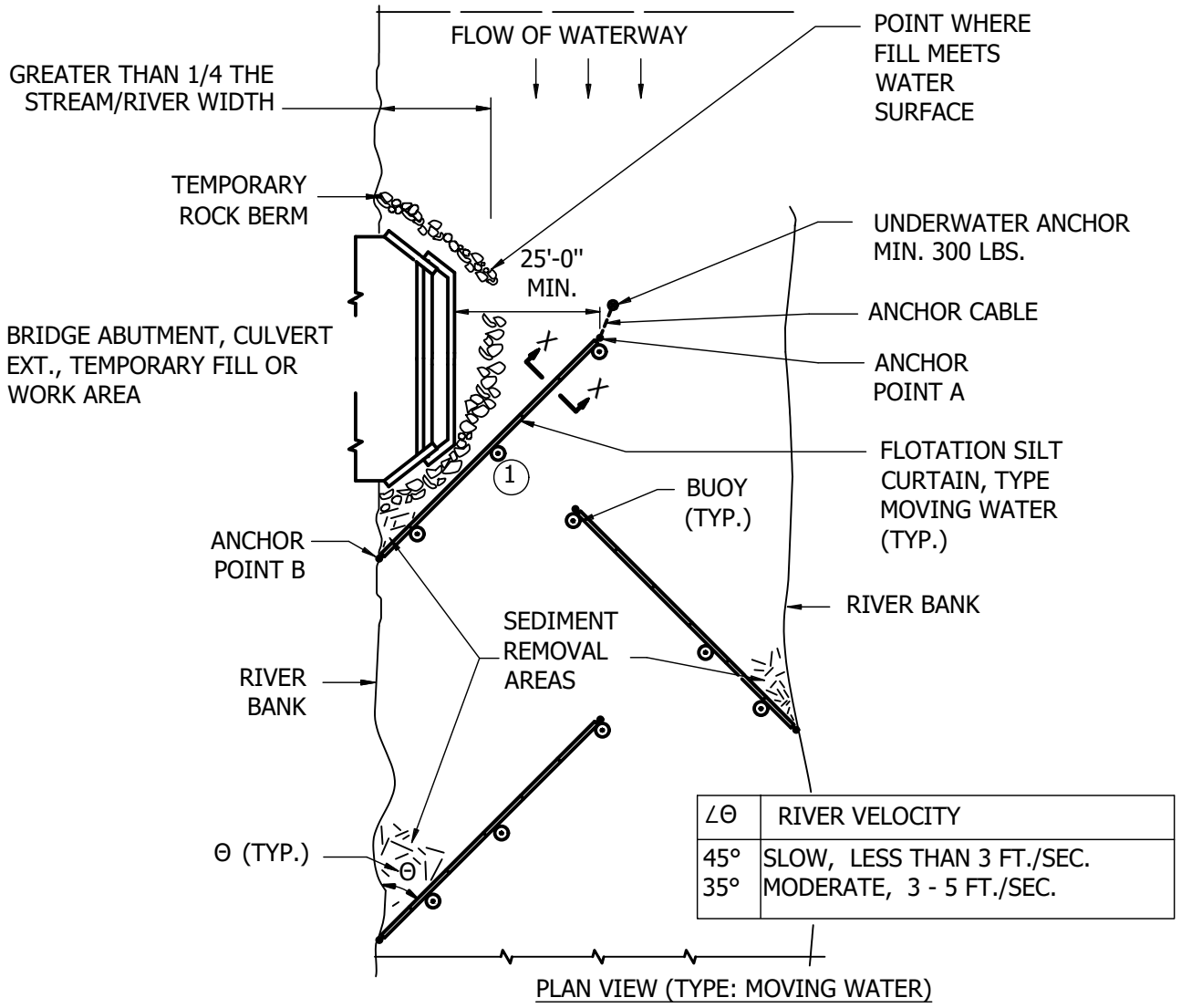
DWG. NO. TYP1

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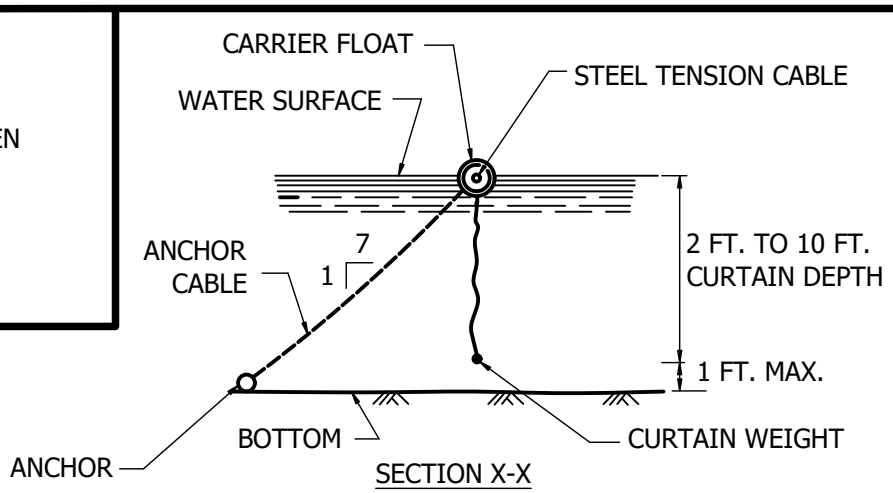
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∠Θ	RIVER VELOCITY
45°	SLOW, LESS THAN 3 FT./SEC.
35°	MODERATE, 3 - 5 FT./SEC.

PLAN VIEW (TYPE: MOVING WATER)

NOTE:
1 100 FT. MAX. SPACING BETWEEN ANCHORS. ANCHORS WEIGH MIN. 40 LBS.



SECTION X-X

FAC. CODE: N/A		REL. W.O. N/A	
PL#. N/A		CONST. YR 2019	
STA# N/A			
	BY	DATE	
DESIGN		12/22/2019	
DRAWN		1/7/2020	
ASBUILT			
FILE NO.: N/A			
SCALE: N/A			

Northern Natural Gas

FLOATATION SILT CURTAIN IN MOVING WATER

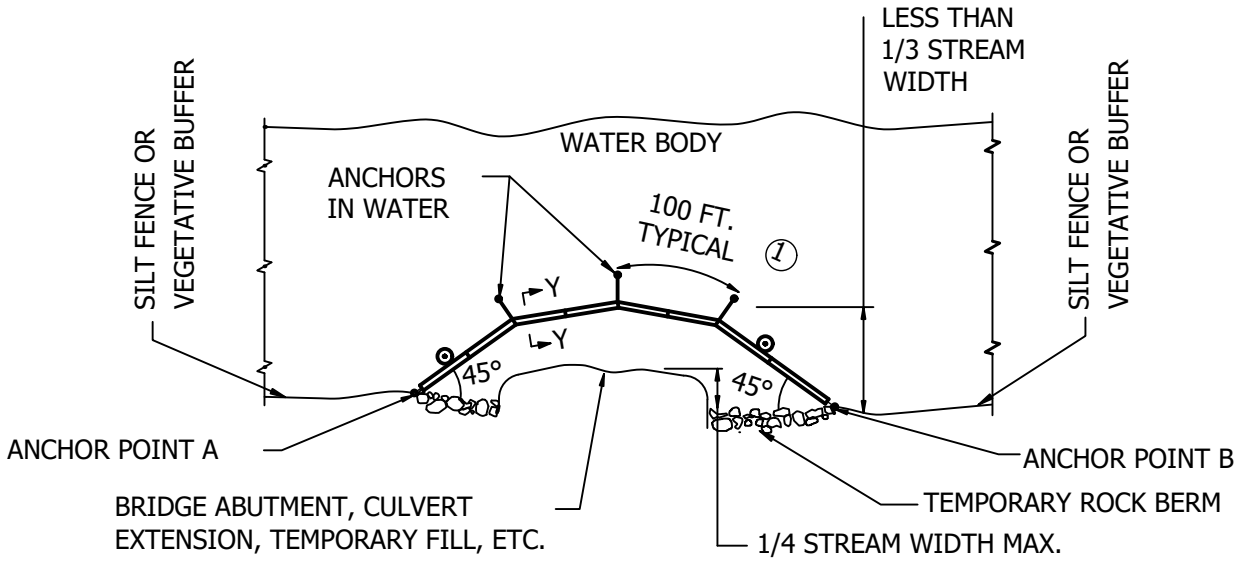
Figure S-3A

PROJECT NO. N/A

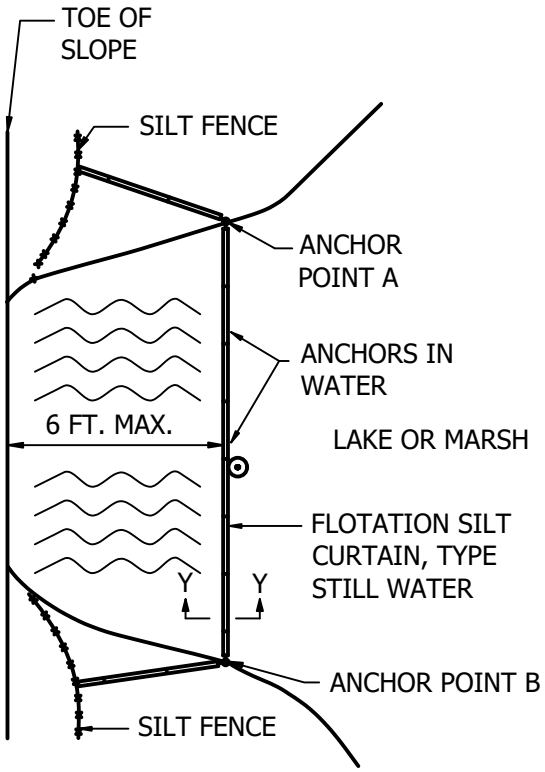
DWG. NO. TYP1

SHT. 1 OF 1

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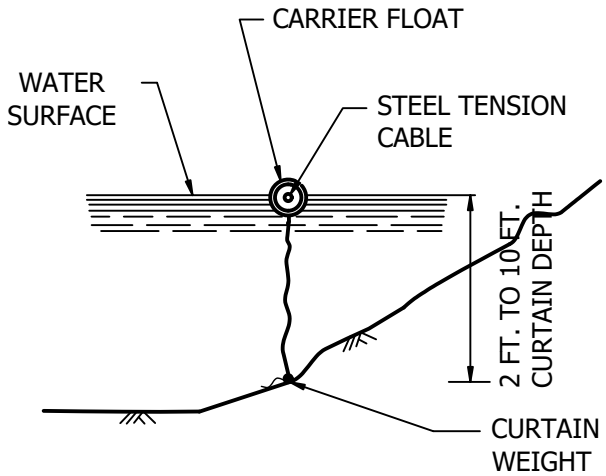
PLAN VIEW (TYPE: WORK AREA)



PLAN VIEW (TYPE: STILL WATER)

NOTES:

1. 100 FT. MAX. SPACING BETWEEN ANCHORS. ANCHORS WEIGH MIN. 40 LBS.



SECTION Y-Y

FAC. CODE: N/A		REL. W.O. N/A	
PL#. N/A		CONST. YR 2019	
STA# N/A			
	BY	DATE	
DESIGN		12/22/2019	
DRAWN		1/7/2020	
ASBUILT			
FILE NO.: N/A			
SCALE: N/A			

Northern Natural Gas

FLOATATION SILT CURTAIN IN STILL WATER

Figure S-3B

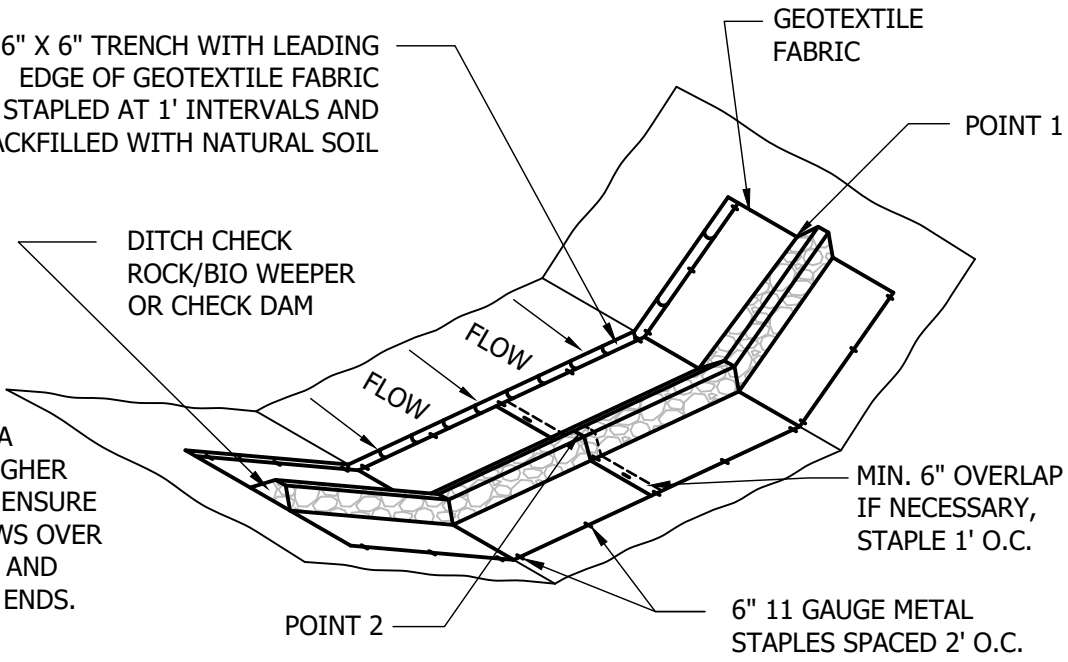
PROJECT NO. N/A

DWG. NO. TYP1

SHT. 1 OF 1

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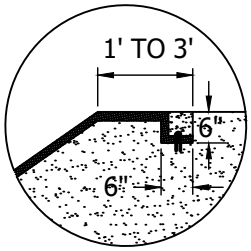
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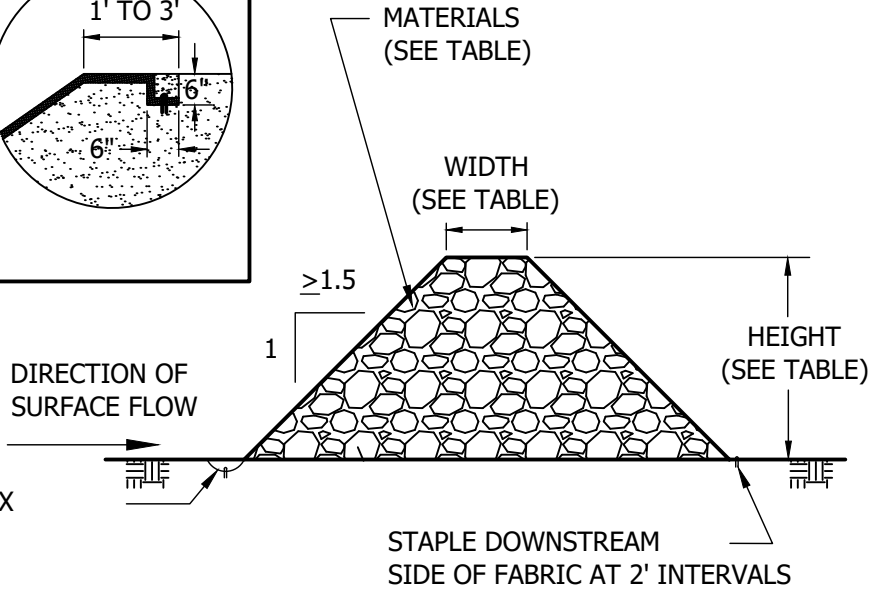


NOTE:
POINT 1 MUST BE A MINIMUM OF 6" HIGHER THAN POINT 2 TO ENSURE THAT WATER FLOWS OVER THE DITCH CHECK AND NOT AROUND THE ENDS.

	HEIGHT (INCHES)	WIDTH (INCHES)	MATERIAL
SMALL CHECK	24	12 - 18	2"-12" ANGULAR WASHED ROCK
LARGE CHECK	36	24 - 30	3"-18" ANGULAR WASHED ROCK
ROCK WEEPER	18	6 - 12	1 1/2" WASHED ROCK

ANCHOR TRENCH
1. DIG 6" X 6" TRENCH
2. LAY BLANKET IN TRENCH
3. STAPLE AT 1.5' INTERVALS
4. BACKFILL WITH NATURAL SOIL AND COMPACT





GEOTEXTILE FABRIC ANCHORED IN 6" X 6" TRENCH WITH 6", 11 GAUGE METAL STAPLES AT 1' INTERVALS

FAC. CODE: N/A		REL. W.O. N/A	
PL#. N/A		CONST. YR 2019	
STA# N/A			
	BY	DATE	
DESIGN		12/23/2019	
DRAWN		1/7/2020	
ASBUILT			
FILE NO.: N/A			
SCALE: N/A			

Northern Natural Gas

ROCK DITCH CHECK/WEEPER SIZING & MATERIALS

Figure S-4

PROJECT NO.
N/A

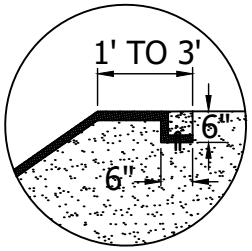
DWG. NO.
TYP1
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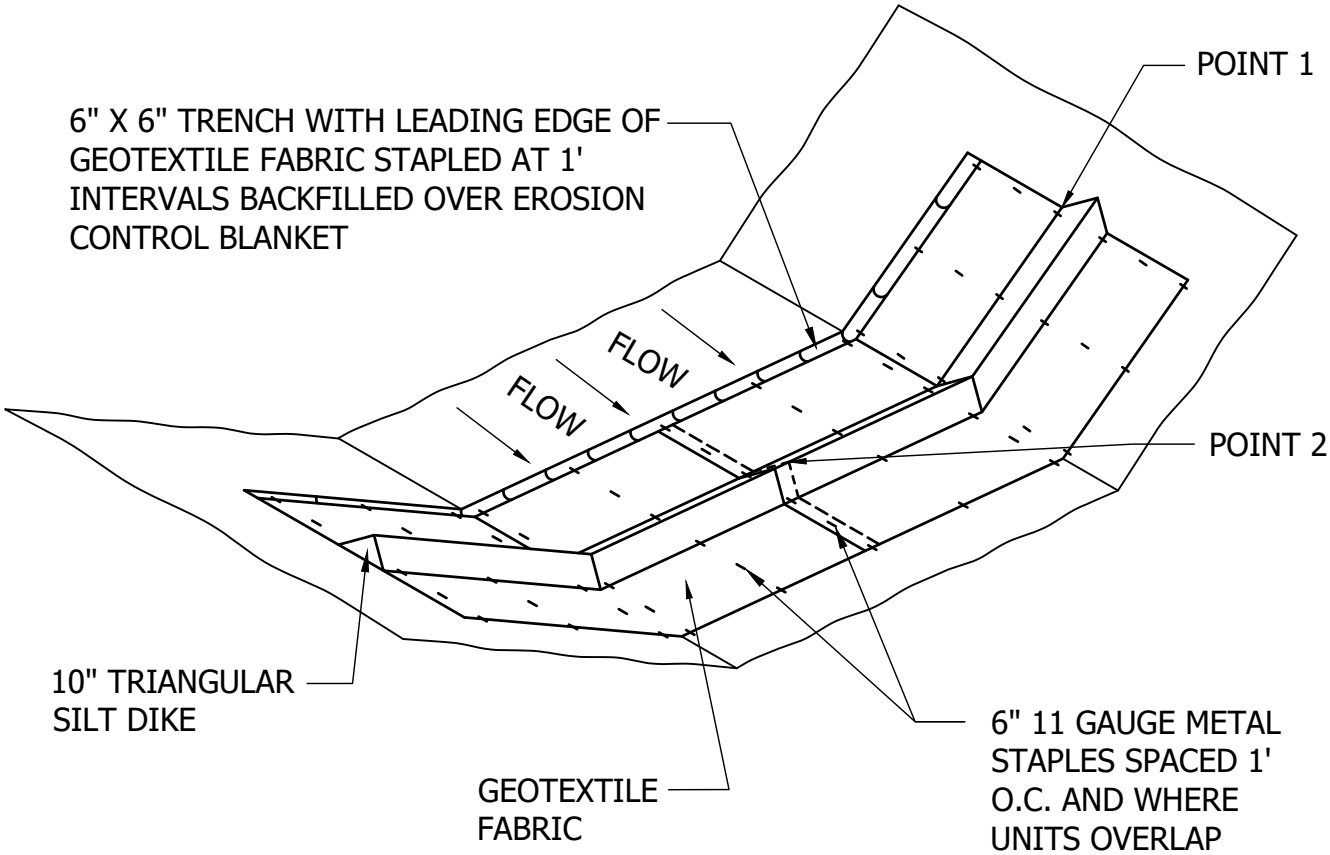
ANCHOR TRENCH

1. DIG 6" X 6" TRENCH
2. LAY BLANKET IN TRENCH
3. STAPLE AT 1.5' INTERVALS
4. BACKFILL WITH NATURAL SOIL AND COMPACT



NOTE:
STAPLE DENSITY SHALL CONFORM TO MANUFACTURERS SPECIFICATIONS.

NOTE:
POINT 1 MUST BE A MINIMUM OF 6" HIGHER THAN POINT 2 TO ENSURE THAT WATER FLOWS OVER THE DIKE AND NOT AROUND THE ENDS.



FAC. CODE: N/A		REL. W.O. N/A	
PL#. N/A		CONST. YR 2019	
STA# N/A			
	BY	DATE	
DESIGN		12/23/2019	
DRAWN		1/7/2020	
ASBUILT			
FILE NO.: N/A			
SCALE: N/A			

Northern Natural Gas

DITCH CHECK
TRIANGULAR SILT DIKE

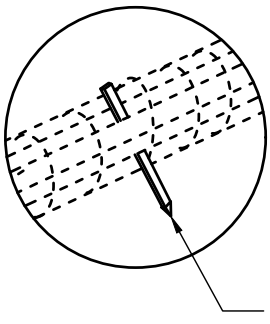
Figure S-5A

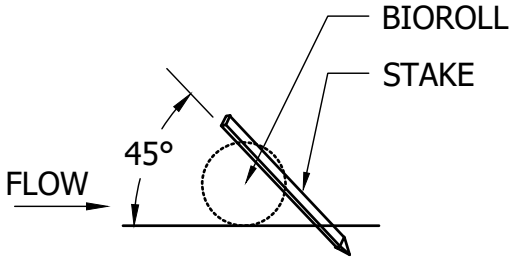
PROJECT NO.
N/A

DWG. NO.
TYP1
SHT. 1 OF 1

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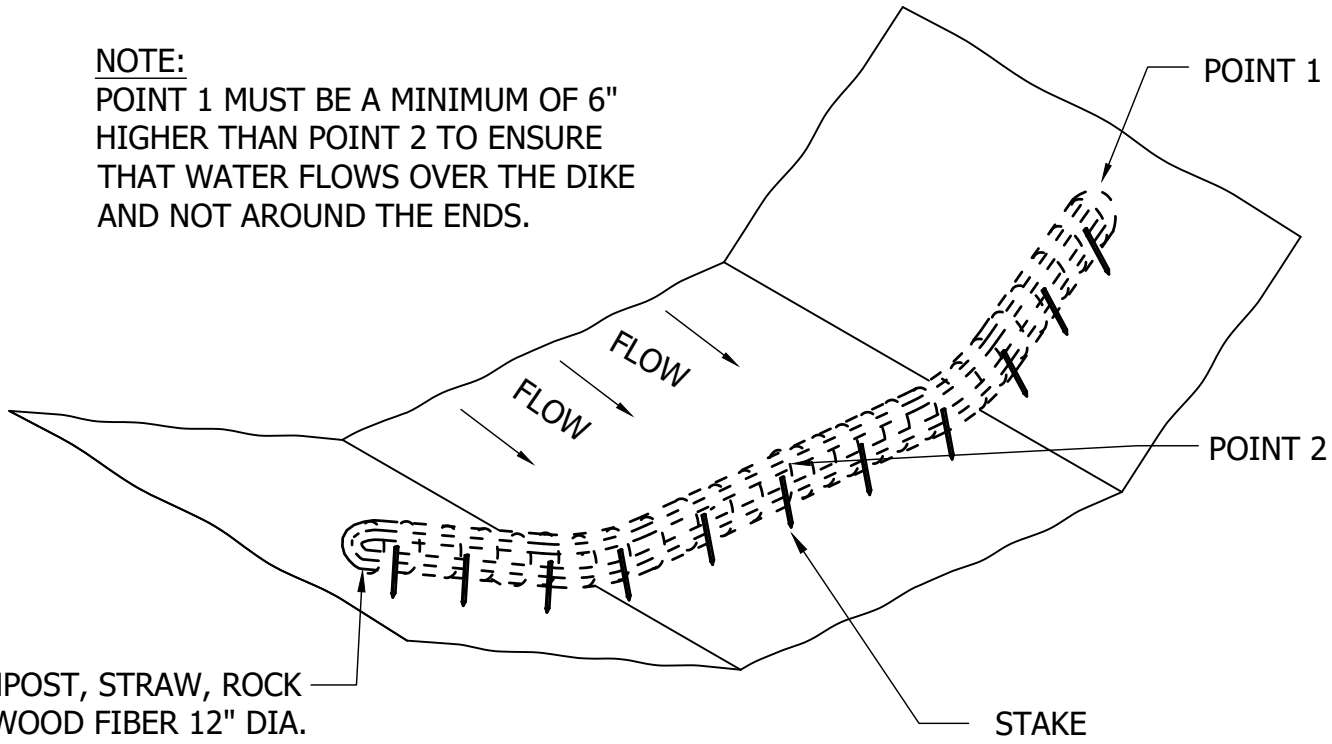
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2" x 2" x 16" LONG WOODEN STAKES AT 1'-0" SPACING . STAKES SHALL BE DRIVEN THROUGH THE BACK HALF OF THE FILTER LOG AT AN ANGLE OF 45° WITH THE TOP OF THE STAKE POINTING UPSTREAM.

NOTE:
POINT 1 MUST BE A MINIMUM OF 6" HIGHER THAN POINT 2 TO ENSURE THAT WATER FLOWS OVER THE DIKE AND NOT AROUND THE ENDS.



COMPOST, STRAW, ROCK OR WOOD FIBER 12" DIA. ROLL ENCLOSED IN POLYPROPYLENE NETTING OR A GEOTEXTILE BAG.

FAC. CODE: N/A		REL. W.O. N/A
PL#. N/A		CONST. YR 2019
STA# N/A		
	BY	DATE
DESIGN		12/24/2019
DRAWN		1/7/2020
ASBUILT		
FILE NO.: N/A		
SCALE: N/A		

Northern Natural Gas

FILTER LOG DITCH CHECK

Figure S-5B

PROJECT NO. N/A

DWG. NO. TYP1

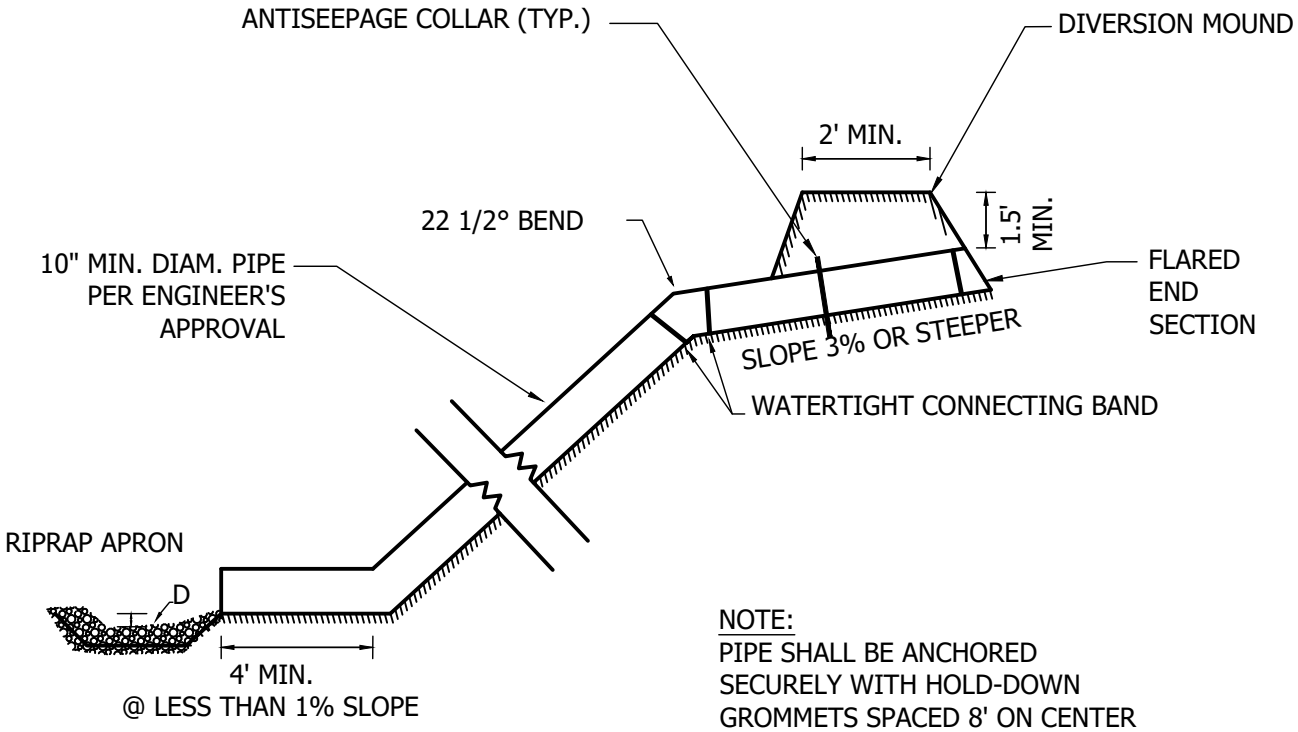
SHT. 1 OF 1

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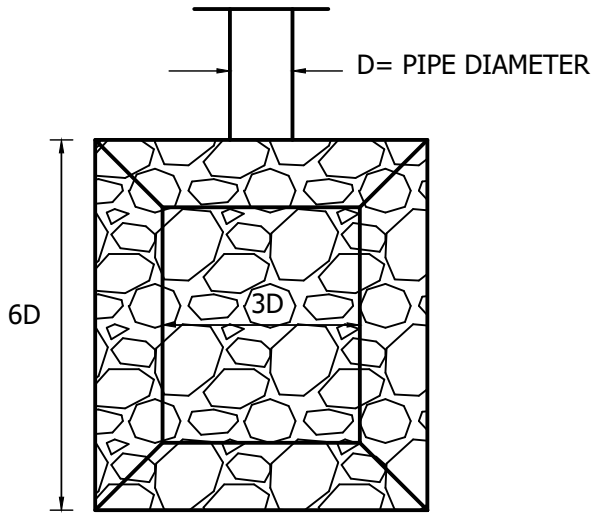
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PROFILE VIEW

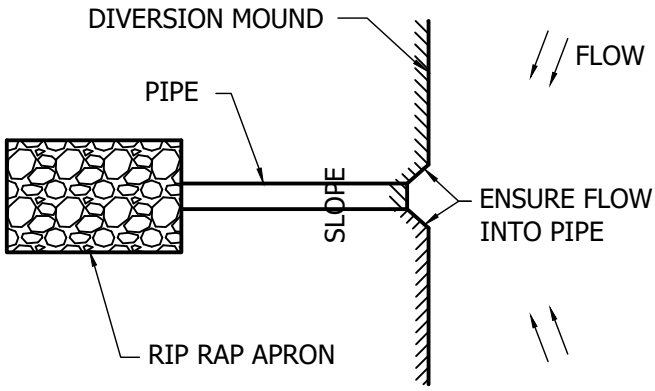


NOTE:
PIPE SHALL BE ANCHORED SECURELY WITH HOLD-DOWN GROMMETS SPACED 8' ON CENTER

RIPRAP APRON PLAN



PLAN VIEW



FAC. CODE: N/A		REL. W.O. N/A	
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STA# N/A			
	BY	DATE	
DESIGN		12/25/2019	
DRAWN		1/7/2020	
ASBUILT			
FILE NO.: N/A			
SCALE: N/A			

Northern Natural Gas

DIVERSION MOUND AND TEMPORARY PIPE DOWNDRAIN

Figure S-7

PROJECT NO. N/A

DWG. NO. TYP1

SHT. 1 OF 1

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Appendix C

State DOT Cross Reference Table

Control Type	BMP	Typical Detail	Illinois	Iowa	Michigan	Minnesota	Nebraska	New Mexico	Oklahoma	South Dakota	Texas	Wisconsin
Sediment	**Straw Logs Log**	Figure S-5B	N/A	IA DOT Spec 4169.12A	MI DTMB Spec ES32	MN DOT Spec 3882- Type 3 Mulch	NDOT Spec 806.02 (1); NDOT Spec 806.02 (1.); 812.02	N/A	N/A	SD DOT Spec 734.2.B.2	TX DOT Item 506 (2.10)	WI DOT Temporary ditch check- Bid Item 628.7504
Sediment	**Wood Fiber Log**	Figure S-5B	IL DOT CSSWPC Spec 41-3.01(d)	IA DOT Spec 4169.12A	MI DTMB Spec ES32	Excelsior wood fibers	NDOT Spec 806.02 (1); NE DOT Spec 806.02 (1.); 812/02	N/A	N/A	SD DOT Spec 734.2.B.2	TX DOT Item 506 (2.10)	WI DOT Temporary ditch check- Bid Item 628.7504
Sediment	**Wood Chip Log**	Figure S-5B	N/A	N/A	MI DTMB Spec ES32	MN DOT Spec 3882- Type 6 Mulch	NDOT Spec 806.02 (1); NDOT Spec 806.02 (1.); 812.02	N/A	N/A	N/A	TX DOT Item 506 (2.10)	WI DOT Temporary ditch check- Bid Item 628.7504
Sediment	**Compost/Wood Chip blend Log**	Figure S-5B	N/A	IA DOT Spec 4169.12B	MI DTMB Spec ES32	MN DOT Spec 3890-Grade 2 Compost MN DOT Spec 3882- Type 6 Mulch Consisting of the following blend of compost and wood chips: (a) From 30% to 40%, Grade 2 compost in accordance with MN DOT Spec 3890, "Compost" with at least 70% compost retained on the ⅜ in. sieve, (b) From 60% to 70%, Type 6 mulch in accordance to MN DOT Spec 3882, "Mulch Material"	NDOT Spec 807.02 (d.); 812.02	NM DOT Spec 603.2.6 and 632.2.6	N/A	N/A	TX DOT Item 506 (2.10)	N/A
Sediment	**Rock Log**	Figure S-5B	N/A	N/A	N/A	MN DOT Spec 3137 - Washed 3/4 in to 1 ½ in, Class A, B, C, or D rock	NDOT Spec 812.02	N/A	N/A	N/A	N/A	N/A
Sediment	**Machine Sliced /Hand Installed (MS/HI), high flow geotextile[2]**	Figure S-1	IL DOT CSSWPC Spec 41-3.01(b)	N/A	MI DTMB Spec S51 with post spacing modified to a maximum of 6 foot	MN DOT Spec 3886-modified to use only wooden posts	NDOT Spec 810.02; 811.02	N/A	OK DOT Spec 221.04C and 712.06	N/A	N/A	N/A
Sediment	**Machine Sliced /Hand Installed (MS/HI), wire backed.**	Figure S-2	N/A	N/A	N/A	N/A	NDOT Spec 810.02; 811.02	N/A	N/A	SD DOT Spec 734.2.B.1	TX DOT Item 506 (2.9)	N/A
Sediment	**Pre-Assembled (PA), woven geotextile**	N/A	N/A	N/A	N/A	MN DOT Spec 3886-modified to use only wooden posts	NDOT Spec 810.02; 811.02	N/A	N/A	N/A	N/A	N/A
Sediment	**Super Duty (SD), woven or non-woven geotextile3**	N/A	N/A	N/A	N/A	MN DOT Spec 3886	NDOT Spec 810.02; 811.02	N/A	N/A	N/A	N/A	N/A
Sediment	**Flotation Silt Curtain**	Figures S-3A and S3B	N/A	N/A	MI DTMB Spec S61	MN DOT Spec 3887	NDOT Spec 812.02; 820.02	N/A	N/A	N/A	N/A	WI DOT 1070; 1069
Sediment	**Compost Filter Berms**	Figure ERO-13	N/A	N/A	N/A	MN DOT Spec 3874 (A) MN DOT Spec 3890 (Grade 2)	NDOT Spec 813.02	N/A	N/A	N/A	N/A	WI DOT 1066
Sediment	**Slash Mulch Filter Berms**	Figure ERO-13	N/A	N/A	N/A	MN DOT Spec 3874 (B) MN DOT Spec 3882 (Type 5)	NDOT Spec 813.02	N/A	OK DOT Spec 221.04F	N/A	N/A	WI DOT 1066; 1058
Sediment	**Topsoil Berm**	Figure ERO-13	N/A	N/A	N/A	MN DOT Spec 3874 (D) MN DOT Spec 2105	NDOT Spec 813.02	N/A	OK DOT Spec 221.04F	N/A	N/A	WI DOT 1066
Sediment	**Rock Berm**	Figure ERO-13	IL DOT Spec 1005.01 IL DOT Spec 1005.02	N/A	MI DTMB Spec ES32	MN DOT Spec 3874 (E) MN DOT Spec 3733 (liner) MN DOT Spec 3601 (Class II riprap)	NDOT Spec Table 905.02; 814.02	N/A	OK DOT Spec 221.04G	N/A	TX DOT Item 506 (2.1)	N/A
Sediment	**Down Drains**	Figure S-7	IL DOT CSSWPC Spec 41-2.04(b)	N/A	MI DTMB Spec E15	MN DOT Spec 3892	NDOT Spec 814.02	NM DOT Spec 603.2.2	OK DOT Spec 221.02A	N/A	TX DOT Item 506 (2.2)	N/A
Erosion	**Horizontal Slope Grading**	Figure E-1	N/A	N/A	MI DTMB Spec E3	N/A	NDOT Spec 818.02	N/A	N/A	N/A	N/A	N/A
Erosion/Sediment	**Ditch Checks**	Figure S-4 or Figure ERO-19	IL DOT CSSWPC Spec 41-3.03(a)	N/A	MI DTMB Spec ES31	N/A	NDOT 814.02	N/A	N/A	N/A	TX DOT Item 506 (2.2)	N/A

Control Type	BMP	Typical Detail	Illinois	Iowa	Michigan	Minnesota	Nebraska	New Mexico	Oklahoma	South Dakota	Texas	Wisconsin
Erosion	**Certified Noxious weed free: agricultural grain straw (wheat, oats, rye, barley) or clean straw harvested from native grass production fields.**	N/A	IL DOT CSSWPC Spec 41-2.02(a)	IA DOT Spec 4169.07A	MI DTMB Spec E6	MN DOT Spec 3882.3(D) Type 3	NDOT Spec 810.02	N/A	N/A	SD DOT Spec 732.2.A	TX DOT Item 164 (3.2)	WI DOT 1058
Erosion	**Certified Noxious weed free: agricultural grain straw with hydraulic fiber matrix overspray**	N/A	IL DOT CSSWPC Spec 41-2.02(a)	N/A	MI DTMB Spec E6	MN DOT Spec 3882.3(D) Type 3 MN DOT Spec 3884	NDOT Spec 810.02	N/A	N/A	N/A	N/A	WI DOT 1058
Erosion	**Wood Mulch**	N/A	N/A	N/A	MI DTMB Spec E6	MN DOT Spec 3882.3(E/F) Type 5/6	NDOT Spec 806.02	N/A	N/A	N/A	N/A	WI DOT 1058
Erosion	**Prairie Hay**	N/A	N/A	N/A	N/A	MN DOT Spec 3882.3(H) Type 8	NDOT Spec 806.02	N/A	N/A	SD DOT Spec 732.2.A	TX DOT Item 164 (3.2)	WI DOT 1055
Erosion	**Type 1-erosion control blanket**	Figures E-2A and E-2B	IL DOT CSSWPC Spec 41-2.02(d)	IA DOT Spec 4169.10B1	MI DTMB Spec E9	MN DOT Spec 2575 MN DOT Spec 3885 (Category 0)	NDOT Spec 810.02	NM DOT Spec 603.2.3.2	N/A	SD DOT Spec 734.2.C.1	TX DOT Item 169 (2.1.1)	WI DOT Erosion mat Class I Types A and B - Bid Items 628.2002,628.2004 , 628.2006, and 628.2008
Erosion	**Type 2-erosion control blanket**	Figures E-2A and E-2B	N/A	IA DOT Spec 4169.10C1	N/A	MN DOT Spec 2575 MN DOT Spec 3885 (Category 3)	NDOT Spec 810.02	N/A	N/A	N/A	TX DOT Item 169 (2.1.2)	WI DOT Erosion mat Class II Types B and C - Bid Items 628.2023, and 628.2027
Erosion	**Type 3- erosion control blanket**	Figures E-2A and E-2B	N/A	IA DOT Spec 4169.10B2 and 4169.10C2	N/A	MN DOT Spec 2575 MN DOT Spec 3885 (Category 4)	NDOT Spec 810.02	N/A	N/A	N/A	TX DOT Item 169 (2.1.3 and 2.1.4)	WI DOT Erosion mat Class III Types A - D - Bid Items 628.2031,628.2033 , 628.2037, and 628.2039
Erosion	**Type 4-erosion control blanket**	Figures E-2A and E-2B	N/A	IA DOT Spec 4169.10E	N/A	MN DOT Spec 2575 MN DOT Spec 3885 (Category 6)	NDOT Spec 810.02	N/A	OK DOT Spec 228.04	SD DOT Spec 734.2.C.2	TX DOT Item 169 (2.2)	N/A
Erosion	**Natural Tackifier**	N/A	N/A	N/A	N/A	MN DOT Spec 2575.3.E	NDOT Spec 807.02 (b) Type HM2	N/A	N/A	N/A	N/A	N/A
Erosion	**Synthetic Tackifier**	N/A	IL DOT CSSWPC Spec 41-2.03	N/A	N/A	MN DOT Spec 2575.3.E	NDOT Spec 807.02 (c) Type HM3	N/A	N/A	N/A	N/A	N/A
Erosion	**Hydromulch**	N/A	IL DOT CSSWPC Spec 41-2.02(b)	IA DOT Spec 4169.07B1	N/A	MN DOT Spec 3884.3-B.2	NDOT Spec 807.02 (b.,c.,and d.)	N/A	N/A	SD DOT Spec 732.2.B	TX DOT Item 164 (3.3)	WI DOT Soil Stabilizer Type B Bid Item 628.6510
Erosion	**Bonded Fiber Matrix**	N/A	N/A	IA DOT Spec 4169.07B2	N/A	MN DOT Spec 3884.3-B.4	NDOT spec 811.02	N/A	N/A	SD DOT Spec 732.2.C	N/A - considered as direct substitute for blankets by TX DOT	WI DOT Soil Stabilizer Type A Bid Item 628.6505
Erosion	**Reinforced Fiber Matrix**	N/A	N/A	IA DOT Spec 4169.07B3	N/A	MN DOT Spec 3884.3-B.5	NDOT spec 811.02	N/A	N/A	SD DOT Spec 732.2.D	N/A - considered as direct substitute for blankets by TX DOT	N/A
Erosion	**Poly Sheeting**	Figures ERO-17a and ERO-17b	N/A	N/A	MI DTMB Spec E18	MN DOT Spec 2575.518 MN DOT Spec 3888	NDOT spec 811.02	N/A	N/A	N/A	N/A	N/A

Control Type	BMP	Typical Detail	Illinois	Iowa	Michigan	Minnesota	Nebraska	New Mexico	Oklahoma	South Dakota	Texas	Wisconsin
Erosion	**Geotextile Fabric**	N/A	N/A	IA DOT Spec 4169.11	N/A	MN DOT Spec: Type V	NDOT spec 811.02	N/A	N/A	N/A	N/A	N/A
Erosion/Sediment	**Straw Bale Dewatering Structure**	Figure ERO-14	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	WI DOT 1061
Erosion/Sediment	**Geotextile Filter Bag**	Figure ERO-15	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	WI DOT 1061
Sediment	**Inlet Protection-Drop-in Bag**	Figure ERO-16	IL DOT CSSWPC Spec 41-3.02(a)	N/A	MI DTMB Spec S58	N/A	N/A	N/A	N/A	N/A	N/A	WI DOT Inlet Protection Type A - Bid Item 628.7005
Sediment	**Triangular Silt Dike**	Figure S-5A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	WI DOT Temporary ditch check- Bid Item 628.7504

This table is provided for cross reference only to aid the contractor in obtaining materials. For installation specifications refer to the body of Northern Natural Gas Company's Erosion and Sediment Control Technical Standards. The standards are not intended to address every situation, project specific permits and site conditions may require alteration of the Stormwater Pollution Prevention Plan or practices not outlined in the Technical Standards.

ATTACHMENT E

NRCS MAPPED SOIL TABLE

Attachment E- NRCS Mapped Soils

Map Label	Mile Post		Soil Map Unit Name	Local Component Phase	Component Percent	Percent Slope	Depth of A Horizon (in)	Surface Texture	Drainage Class	Permeability	Landforms
	From	To									
Albert Lea M500 E-line Extension											
ClB2	1.60 1.81 2.04	1.63 1.86 2.10	Clarion loam, 2 to 6 percent slopes, moderately eroded	Clarion-moderately eroded	70-95	3	8	Loam	Moderately well drained	Moderately high	Ground moraines
CsD2	2.12	2.12	Omsrud-Storden complex, 10 to 16 percent slopes, moderately eroded	Omsrud-moderately eroded	40-60	12	9	Loam	Well drained	Moderately high	Ground moraines
Gc	2.35 2.62 2.66	2.37 2.63 2.66	Glencoe clay loam, 0 to 1 percent slopes	Glencoe	65-95	0	39	Clay loam	Poorly drained	Moderately high	Depressions
L113B	2.37 2.55 2.69 3.05 3.24 3.38 3.54	2.48 2.56 2.72 3.17 3.26 3.40 3.63	Reedslake-Le Sueur complex, 1 to 6 percent slopes	Reedslake	40-80	4	15	Loam	Moderately well drained	Moderately high	Hillslopes
LlC	3.40	3.42	Lester loam, 6 to 10 percent slopes	Lester	65-90	7	9	Loam	Well drained	Moderately high	Ground moraines
LlC2	3.47	3.54	Lester loam, 6 to 10 percent slopes, moderately eroded	Lester-moderately eroded	75-90	8	6	Loam	Well drained	Moderately high	Ground moraines
LlD2	2.56 2.66	2.62 2.69	Lester loam, 10 to 16 slopes, moderately eroded	Lester-moderately eroded	75-90	14	6	Loam	Well drained	Moderately high	Not rated
LuA	2.48 2.94 3.63	2.55 3.00 3.64	Le Sueur loam, 1 to 3 percent slopes	Le Sueur	65-90	2	14	Loam	Somewhat poorly drained	Moderately high	Not rated
LuB	2.75	2.78	Le Sueur clay loam, 2 to 4 percent slopes	Le Sueur	85	3	14	Loam	Moderately well drained	Moderately high	Rises

Map Label	Mile Post		Soil Map Unit Name	Local Component Phase	Component Percent	Percent Slope	Depth of A Horizon (in)	Surface Texture	Drainage Class	Permeability	Landforms
	From	To									
My	2.15 2.63	2.35 2.66	Kloosner muck, 0 to 1 percent slopes	Klossner-drained	85-95	0	46*	Muck	Very poorly drained	High	Depressions
NcA	1.74	1.81	Nicollet clay loam, 1 to 3 percent slopes	Nicollet	75-95	2	17	Clay loam	Somewhat poorly drained	Moderately high	Ground moraines
NcB	1.55 2.12	1.60 2.14	Nicollet clay loam, 2 to 4 percent slopes	Nicollet	85	3	17	Clay loam	Somewhat poorly drained	Moderately high	Rises
WaA	1.88	1.95	Wadena loam, 0 to 2 percent slopes	Wadena	75-95	1	17	Loam	Well drained	Moderately high	Outwash plains
WaC2	2.10	2.12	Wadena loam, 6 to 12 percent slopes, moderately eroded	Wadena-moderately eroded	75-95	8	14	Loam	Well drained	Moderately high	Outwash plains
Wt	1.63 1.81 1.86 1.95 2.14 2.72 2.78 3.00 3.17 3.26 3.42	1.74 1.81 1.88 2.04 2.15 2.75 2.94 3.05 3.24 3.38 3.47	Webster clay loam, 0 to 2 percent slopes	Webster	75-95	1	20	Clay loam	Poorly drained	Moderately high	Ground moraines

ATTACHMENT F

SPILL PREVENTION, CONTAINMENT, AND COUNTERMEASURE PLAN

Stantec

Northern Natural Gas
Spill Prevention, Control and Countermeasure (SPCC) Plan
For Construction Projects

Introduction

This SPCC Plan describes planning, prevention and control measures to minimize impacts resulting from spills of fuels, petroleum products, or other regulated substances as a result of pipeline facility construction. These measures will be implemented by the contractor, unless otherwise indicated, during Northern Natural Gas (Northern) pipeline facility construction projects. This SPCC Plan was developed in accordance with the Federal Energy Regulatory Commission's Wetland and Waterbody Construction and Mitigation Procedures (FERC Procedures) and satisfies the requirements for SPCC Plans described therein. This plan must remain on-site.

1 Planning and Prevention

Northern requires its contractors to implement proper planning and preventative measures to minimize the likelihood of spills, and to quickly and successfully clean up a spill should one occur. Northern developed this SPCC Plan to set forth the minimum standards for handling and storing regulated substances, and for cleaning up spills. Potential sources of construction-related spills include storage tank leaks, machinery and equipment failure, and fuel handling and transfer accidents. The contractor will be responsible for implementing, at a minimum, the following planning and prevention measures.

1.1 Roles and Responsibilities:

Contractor Spill Coordinator

1.1.1 A contractor spill coordinator shall be designated and employed by the contractor, subject to approval by Northern on projects where outside contractors are used for construction. The spill coordinator may also be a designated Northern employee.

1.1.2 The contractor spill coordinator shall notify the environmental inspector (EI) immediately of any spill, regardless of volume. If the EI is not available, the contractor spill coordinator shall notify Northern's Operations Communication Center (OCC) at 888-367-6671 within 30 minutes of the occurrence.

1.1.3 The contractor spill coordinator shall mobilize on-site personnel, equipment, and materials for containment and/or clean-up commensurate with the extent of the spill.

1.1.4 The contractor spill coordinator will assist the EI in completion of the Spill Release/Report form (environmental procedure 320.101a, Appendix A: Spill/Release Report Form).

1.1.5 The contractor spill coordinator will identify available emergency response contractors. The emergency response contractors will be subject to Northern's approval.

1.1.6 The contractor spill coordinator shall assist the emergency response contractor and monitor containment activities to ensure the actions are consistent with the requirements of this SPCC Plan.

1.1.7 The contractor spill coordinator, in consultation with the Division Environmental Specialist (DES), on-site Northern representative or appropriate agencies, will assist in determining when it is necessary to evacuate spill sites to safeguard human health.

1.1.8 The contractor spill coordinator should **not** contact any agency regarding a spill without authorization from Northern's environmental department.

Environmental Inspector (EI)

1.1.9 The EI may be a designated Northern employee or a third-party inspector assigned to monitor environmental compliance on the project.

1.1.10 The EI will monitor the contractor's compliance with the provisions of this SPCC Plan.

1.1.11 The EI will immediately report all spills to the OCC at 888-367-6671, the construction coordinator and other Northern personnel, as required.

1.1.12 The EI, with assistance from the contractor spill coordinator, is responsible for completing a Spill Release/Report Form and submitting it to the DES within 24 hours of the occurrence for all spills, regardless of volume.

1.1.13 Both the contractor spill coordinator and the EI, in conjunction with the DES or appropriate agencies, will assist in determining when it is necessary to evacuate spill sites to safeguard human health.

1.1.14 The EI should not contact any agency regarding a spill without authorization from the DES.

Construction Coordinator

1.1.15 The construction coordinator is a designated Northern representative who is responsible for the management of construction activities on the project.

1.1.16 The construction coordinator is responsible for documenting the general information regarding any spills such as, work stoppages, injuries, fires and the extent of exposure to on-site personnel.

1.1.17 The construction coordinator, in consultation with the DES or appropriate agencies, will assist in determining when it is necessary to evacuate spill sites to safeguard human health.

1.1.18 The construction coordinator is responsible for coordinating any emergency response services that may be required such as the Fire Department, the Sherriff's Department, or for contacting emergency response contractors.

Authorized Personnel

1.1.19 Authorized personnel are representatives of the contractor who are designated to handle fuel, lubricants or other regulated substances.

1.1.20 Authorized personnel shall be familiar with the requirements of this SPCC Plan and the consequences of non-compliance.

Contractor's Construction Superintendent

1.1.21 The contractor's construction superintendent, or representative, must immediately notify the EI of any spill of any liquid, (i.e. a petroleum product, hazardous liquid, water, casing wax, etc.), regardless of volume.

1.1.22 The contractor's construction superintendent is ultimately responsible for ensuring that construction personnel understand and comply with this SPCC Plan.

Construction Personnel

1.1.23 Construction personnel are representatives of the contractor involved with installation of the pipeline facility.

1.1.24 Construction personnel shall notify the crew foreman and/or contractor's spill coordinator immediately of any spill of any liquid (i.e. a petroleum product or hazardous liquid, water, casing wax, etc.), regardless of volume.

1.1.25 Construction personnel are responsible for beginning the initial spill containment and clean-up.

Environmental Specialist

1.1.26 The environmental specialist is a designated Northern employee who is responsible for the management of environmental compliance on the project.

1.1.27 The environmental specialist is the EI's initial point of contact when a spill occurs and will assist in determining the containment measures that may be required.

1.1.28 The environmental specialist will promptly report spills to appropriate Federal, State, and local agencies as required.

1.1.29 The environmental specialist will coordinate with these agencies regarding contacting additional parties or agencies.

1.1.30 The environmental specialist will promptly notify the U.S. Coast Guard National Response Center of spills, regardless of size, that enter lakes, streams or other standing or flowing waters. (The National Response Center phone number is listed in section 4.2 of this SPCC Plan).

1.1.31 The environmental specialist, in consultation with appropriate agencies, will assist in determining when spill sites will be evacuated, as necessary, to safeguard human health.

1.2 Training:

1.2.1 The contractor spill coordinator shall train all employees handling fuels and other regulated substances to follow and comply with this SPCC Plan.

1.2.2 The contractor's construction superintendent will be responsible for ensuring that such training is received prior to construction activities.

1.2.3 The EI will specifically address compliance with this SPCC Plan while delivering Environmental Training-Construction, environmental training Type B to contractor personnel and/or while reviewing safety procedure 110.180b, Contractor Orientation Checklist and Roster with contractor personnel. (See

environmental procedure 380.201, Environmental Compliance for Construction Projects, for training program requirements.)

1.3 Equipment:

1.3.1 All equipment must be thoroughly cleaned prior to arrival on-site. Equipment with existing fluid leaks will not be allowed on-site.

1.3.2 All equipment repairs and maintenance must be completed offsite. In the event that a repair is required to remove the equipment, or removing the equipment is more likely to cause a spill than an onsite repair, adequate liquid storage must be utilized in addition to secondary containment to contain any liquids during the repair. Ensure the capacity of existing secondary containment is adequate for the repair.

1.3.3 Each piece of self-propelled equipment (i.e. dozers, excavators, side booms, etc.) must be equipped with a spill kit. At a minimum, the spill kit must include sufficient absorbent pads and plastic lining material to contain spills resulting from mechanical failure.

1.3.4 Directional drilling rigs must be equipped with a spill kit of appropriate size to contain any potential spills. At a minimum, spill kits must include absorbent pads, booms, a temporary disposal bag, disposable nitrile gloves and plastic lining material to contain spills resulting from mechanical failure.

1.3.5 Each piece of stationary equipment, excluding directional drilling rigs, (i.e. generators, air compressors, water pumps, etc.) must have access to a spill kit. The spill kit must be located in the immediate vicinity of the stationary equipment and in an easily accessible area no farther than 100 yards. At a minimum, spill kits must include absorbent pads, booms, a temporary disposal bag, disposable nitrile gloves and plastic lining material to contain spills resulting from mechanical failure. The appropriate quantities will depend on the number of pieces of stationary equipment and are subject to approval by the on-site Northern representatives.

1.3.6 Each piece of stationary equipment, including drilling rigs, must be parked inside appropriately sized and constructed secondary containment. Any self-propelled equipment parked for more than 24 hours is considered stationary.

1.3.7 Each contractor vehicle must be equipped with a catch pan and a spill kit containing a sufficient quantity of absorbent and barrier materials to adequately contain and recover foreseeable spills. These kits may include, but are not limited to absorbent pads, straw bales, absorbent clay, sawdust, floor-drying agents, spill containment barriers, plastic sheeting, skimmer pumps and holding tanks.

1.3.8 For personal vehicles driven by contractor personnel and parked daily at construction project contractor yards, the contractor spill coordinator must provide on-site spill kits of adequate size to be stationed in easily accessible areas in the event of a spill resulting from a personal vehicle.

1.3.9 All fuel and service vehicles shall carry materials that are adequate to control foreseeable spills. Such material may include, but is not limited to, absorbent pads, commercial absorbent material, plastic bags with ties and a shovel.

1.3.10 Suitable plastic lining materials must also be available for placement below and on top of temporarily stored contaminated soils and materials.

1.3.11 The contractor spill coordinator will make known to authorized personnel, construction personnel, and the EI, the locations of spill control equipment and materials and have them readily accessible during construction activity. Spill kits must be replenished following each spill clean-up.

1.3.12 Construction equipment shall not be parked overnight or fueled within 200 feet of residential water wells, within 400 feet of municipal or community water wells, or within 100 feet of a wetland or waterbody. These activities may occur closer only if the EI finds, in advance, no reasonable alternative and the contractor has taken appropriate steps to prevent spills. These steps include secondary containment structures.

1.3.13 All fuel nozzles shall be equipped with functional automatic shut-offs.

1.3.14 In large wetlands where no upland site is available for refueling, auxiliary fuel tanks on construction equipment are recommended.

1.3.15 Fuel trucks transporting fuel to on-site construction equipment shall travel only on approved access roads.

1.4 Supervision and Inspection:

1.4.1 Prior to construction, the contractor spill coordinator, or designee, shall perform an inspection and test of all equipment to ensure that it is in good condition and free of leaks.

1.4.2 During construction, the contractor spill coordinator, or designee, shall perform daily inspections on hoses, hydraulic cylinders, fluid reservoirs, hydraulic connections, valves, pipes and tanks to ensure equipment is free of leaks.

1.4.3 On a daily basis, prior to commencing construction activities, the contractor spill coordinator, or designee, must complete Northern's Daily Equipment Spill Prevention Checklist (environmental procedure 380.201c, Daily Equipment Spill Prevention Checklist) and provide the original copy to the on-site EI or a Northern representative. The EI maintains these documents in a file for the course of a week. If a spill occurs within the week, this document is attached to the Spill/Release Report Form.

2 Liquid Transfer Plans:

2.1 The contractor spill coordinator will prepare a site-specific liquid transfer plan prior to the transfer of any liquids for construction activities which require manipulation of valves or removal of plugs (e.g., pipeline liquids, hydrostatic test water, fuel, glycol or oil) where spills can occur.

2.2 The liquid transfer plan must also address any other activities that have potential to result in a liquid release without proper planning (e.g., pipeline cutting pig launching/removing or draining of drips).

2.2.1 For pipeline cutting activities, the liquid transfer plan must include step-by-step instructions with diagramed drawings for how to check for liquids prior to performing any cutting activities.

2.3 At a minimum, the liquid transfer plan must include detail for the correct location of secondary containment and positioning of all valves, plugs and hoses prior to, during and at the completion of the liquid transfer process.

2.4 The liquid transfer plan must be reviewed by the EI prior to execution of any liquid transfer. In the EI's absence, the chief inspector will review the liquid transfer plan.

2.5 The liquid transfer plan must be maintained by contractor personnel responsible for the respective liquid transfer process and updated as needed when procedures or processes change.

2.6 Contractor personnel will review the status of liquid transfer configurations during shift changes to ensure proper communication between crews.

3 Storage and Handling of Fuels/Hazardous Liquids

3.1 Typical Fuels, Lubricant and Hazardous Liquids:

3.1.1 The following table identifies fuels, lubricants and coolants generally present on pipeline construction spreads and identifies typical total volumes, storage and transportation methods. Contractors will have appropriate Safety Data Sheets (SDS) on-site, as required by the Occupation Safety and Health Administration (OSHA).

Typical Petroleum Storage and Handling Volumes on a Construction Spread

	Fluids	Typical Amounts	Storage	Typical Transport Mode
Fuels	Diesel	6,000-12,000 Gallons	1-3 Tanks or Tankers stored at contractor yard 5 gallon cans, 100 gallon storage in pickups, etc.	1-3 Fuel Trucks 1-3 "Fuel Skids"
	Military Aviation Kerosene [1]	6,000-12,000 Gallons		
	Kerosene [1]	6,000-12,000 Gallons		
	Gasoline	5,000 Gallons		
Lubricant	Engine Oil	< 500 Gallons	Bulk Storage or Retail Packaging at contractor yard warehouse	1-3 "Grease" Trucks
	Transmission/ Drive Train Oil	< 500 Gallons		
	Hydraulic Oil	< 500 Gallons		
	Gear Oil	< 500 Gallons		
	Lubricating Grease	20-30 cases of 24 cans per case		
Coolants	Ethylene Glycol	100 Gallons		
	Propylene Glycol	100 Gallons		

[1] Used straight or as additives only in extremely cold weather.

3.2 Storage of Fuel and Hazardous Liquids – General:

3.2.1 The contractor shall follow proper storage practices for fuels and hazardous liquids including, but not limited to, the following:

3.2.1.1 Fuel storage shall be at contractor yards only, or as approved by Northern.

3.2.1.2 Tools and materials to stop the flow of leaking tanks and pipes shall be kept on-site. Such equipment must include, but not be limited to, plugs of various sizes, a hammer, assorted sizes of metal screws with rubber washers, a screwdriver and plastic tape.

3.2.1.3 Fuels, lubricants, waste oil and any other regulated substances shall be stored in aboveground tanks only.

3.2.1.4 Storage tanks and containers must conform to all applicable industry codes.

3.2.1.5 A suitable secondary containment structure must be utilized at each fuel storage site. Portable secondary containment structures are preferred over site-constructed structures. If portable structures are not available, the site-constructed structures must be lined with seamless plastic sheeting. All structures must provide a minimum containment volume equal to the volume of the largest storage vessel; and provide at least 1 foot of freeboard.

3.2.1.6 If earthen containment dikes are used, they shall be constructed with slopes no steeper than 3:1 (horizontal to vertical) to limit erosion and provide structural stability.

3.2.1.7 It is the contractor's responsibility to remove all secondary containment structures at the conclusion of the project. The contractor is also responsible for returning the storage impoundment area to its original contour and appearance upon completion of the project.

3.2.1.8 Secondary containment areas must not have drains. If visual inspection indicates that no spillage has occurred in the secondary containment structure, accumulated water may be drawn off and sprayed on the surrounding upland areas in accordance with applicable permits. If spillage has occurred in the structure, accumulated waste shall be drawn off and pumped into drum storage for disposal. Water with a visible sheen must not be discharged on-site and must be hauled out for proper disposal.

3.2.1.9 Vehicle wastes resulting from equipment failure, including used oils and other fluids, shall be handled and managed by personnel trained in the procedures outlined in this Plan. Vehicle wastes will be stored and disposed of in accordance with section 6.0 of this SPCC Plan.

3.3 Refueling:

3.3.1 Fuels shall be dispensed by authorized personnel only. The contractor must provide adequate lighting for refueling after dark.

3.3.2 Personnel shall be actively holding the nozzle during all refueling. Absorbent pads shall be within reaching distance in the event of a nozzle malfunction.

3.3.3 Refueling shall not occur within 100 feet of a wetland or waterbody. These activities may occur closer only if the EI finds, in advance, no reasonable alternative and the contractor has taken appropriate steps to prevent spills. These steps include secondary containment structures.

3.3.4 Refueling shall not occur within 200 feet of residential water wells or within 400 feet of municipal or community water wells.

3.4 Refueling and Fuel Storage near Wetlands, Waterbodies or Rural Residences:

3.4.1 Northern requires that the storage of petroleum products, refueling and lubricating operations take place in upland areas that are more than 100 feet from wetlands, streams, and waterbodies (including drainage ditches), and 200 feet of residential water wells or within 400 feet of municipal or community water wells. In addition, the contractor must store hazardous materials, chemicals, fuel and lubricating oils, and perform concrete coating activities outside of these areas. Auxiliary fuel tanks solidly attached to construction equipment or pumps are not considered storage and are acceptable.

3.4.2 In certain instances, refueling or fuel storage may be unavoidable due to site-specific conditions or unique construction requirements. Examples include continuously operating pumps and temporary stationary equipment associated with horizontal directional drilling (HDD) activities. These locations must be approved in advance by the EI. In addition to those practices described above, the following precautions will be taken when refueling within 100 feet of streams, wetlands, and waterbodies; within 200 feet of private water wells; or within 400 feet of municipal or community water wells:

3.4.2.1 Adequate amounts of absorbent materials and containment booms must be kept on-site by each construction crew to enable the rapid containment and clean-up of a spill incident.

3.4.2.2 If fuel must be stored within wetlands or near streams for refueling of continuously operating pumps, secondary containment must be provided.

3.4.2.3 A suitable secondary containment structure must be utilized at each fuel storage site. Portable secondary containment structures are preferred over site-constructed structures. If portable structures are not available, the site-constructed structures must be lined with seamless plastic sheeting. All structures must provide a minimum

containment volume equal to the volume of the largest storage vessel; and provide at least 1 foot of freeboard.

3.4.2.4 Procedures regarding excavation and disposal of contaminated soil material from wetlands or near waterbodies are described in section 6.3 of this SPCC Plan.

3.4.2.5 Equipment operating within wetlands must be manned continuously or placed within proper secondary containment.

4 Initial Spill Management

4.1 Immediate Response:

4.1.1 Immediately upon learning of any fuel, oil, hazardous material or other regulated substance spill, or upon learning of conditions that will lead to an imminent spill, the person discovering the situation must:

4.1.1.1 Initiate actions to contain the fluid that has spilled or is about to spill, and initiate action to eliminate the source of the spill to the maximum extent that is safely possible.

4.1.1.2 Notify the contractor spill coordinator and the EI, and provide them with the following information:

4.1.1.2.1 Location and cause of the spill

4.1.1.2.2 The type and amount of material that has spilled

4.1.1.2.3 Whether the spill has reached, or is likely to reach, any surface water

4.1.1.3 Upon learning of a spill or a potential spill the contractor spill coordinator shall:

4.1.1.3.1 Assess the situation and determine the need for further action.

4.1.1.3.2 Direct subsequent activities and/or further assign responsibilities to other personnel.

4.1.1.3.3 Notify the EI

4.1.2 The EI will notify the OCC at 888-367-6671 and the construction coordinator.

4.2 Mobilization:

4.2.1 The contractor spill coordinator shall mobilize on-site personnel, equipment, and materials for containment and/or clean-up commensurate with the extent of the spill and notify the EI.

4.2.2 The DES will work with the EI and contractor spill coordinator to determine if a spill is reportable to an agency.

4.2.3 If the contractor spill coordinator and/or the EI determine that a spill is beyond the scope of on-site equipment and personnel, the contractor spill coordinator and/or the EI will immediately notify the contractor construction superintendent that an emergency response contractor is needed to contain

and/or clean up the spill. The contractor is responsible for obtaining the services of an emergency response contractor.

4.2.4 The contractor spill coordinator shall assist the emergency response contractor and monitor containment procedures to ensure that the actions are consistent with the requirements of this SPCC Plan.

5 Spill Notification Responsibilities

5.1 The EI will immediately report all spills, regardless of volume, to Northern's OCC at 888-367-6671. The EI, or an applicable company representative, will participate on the OCC call to assess the spill. An environmental department representative will determine any requirements for further agency notification(s).

5.2 Spill Release/Report Form:

5.2.1 The EI, with assistance from the contractor spill coordinator, shall complete a Spill Release/Report Form for each release of a regulated substance, regardless of volume. The Spill Release/Report Form must be submitted to the DES within 24 hours of the occurrence of the spill.

5.2.2 All associated laboratory analysis and other documentation that may be required separately, on a case-specific basis, will be the responsibility of the contractor and should be provided to the EI. The EI will forward the information to the DES.

5.3 Agency Notification:

5.3.1 In the event of a reportable spill the DES will determine who is responsible for any required agency notification(s).

5.3.2 For projects in Minnesota, if there is any discharge of any substance or material, including hazardous materials, which, if not recovered, may cause pollution to waters of the state, the Minnesota Duty Officer shall be notified immediately. The Minnesota Duty Officer's phone numbers are 651-649-5451 and 800-422-0798.

5.3.3 For any spills that are determined to be the responsibility of Northern, the DES will promptly notify the appropriate Federal, State, and/or local agencies.

5.3.4 For any spills that are determined to be the responsibility of the contractor, the DES will request that the contractor spill coordinator promptly notify the appropriate Federal, State and/or local agencies.

5.3.5 The DES will promptly notify the National Response Center (NRC) at 800-424-8802 for all spills that impact streams, lakes or other waterbodies containing standing or flowing water.

5.3.6 The contractor spill coordinator will provide the EI and/or the Northern on-site representative all Spill Release/Report forms and associated information resulting from agency contact no later than 24 hours from the receipt of such documentation.

5.3.7 Northern's DESs and construction compliance personnel are listed below.

Name	Office Phone	Cell Phone
Kelly Henry	651-456-1712	612-759-8287
Naomi Cavalieri	402-398-7847	531-301-1176
*Steve San Miguel	402-398-7305	402-595-8554*
Michelle Brown	402-530-3502	806-231-4960
Christa Webber	402-398-7980	402-810-3769
Terry Plucker	402-398-7226	402-332-7081

6 Spill Containment and Clean-Up

6.1 In the event of a spill, the contractor will abide by applicable Federal, State and local regulations, in respect to cleaning up the spill. All clean-up and other construction related spill activities must be completed by, and costs assumed by, the contractor. Specific control and clean-up measures for both upland and wetland/waterbody spills are described below.

6.2 Spill Control and Clean-Up for Upland Areas:

6.2.1 If a spill should occur during refueling operations, **STOP** the operation until the spill can be controlled and the situation corrected.

6.2.1.1 Spill sources must be immediately identified and contained.

6.2.1.2 For large spills on land, the spills must be contained and pumped immediately into tank trucks. The contractor or, if necessary, an emergency response contractor, shall excavate the contaminated soil. It is the responsibility of the contractor to obtain Northern's approval prior to activities if waste vendors other than those approved by Northern (Clean Harbors and Safety-Kleen) may be used.

6.2.1.3 Spilled material and contaminated soil must be treated and/or disposed of in accordance with applicable Federal, State, and local requirements (section 6.0) and Northern's procedures.

6.2.1.4 Smaller spills on land shall be cleaned up with absorbent materials. Contaminated soil or other materials associated with these releases shall also be collected and disposed of in accordance with applicable regulations (section 6.0) and Northern's procedures.

6.2.1.5 Flowing spills must be contained and/or absorbed before reaching surface waters or wetlands.

6.2.1.6 Absorbent material(s) shall be placed over spills to minimize spreading and to reduce penetration into the soil.

6.2.1.7 The contractor spill coordinator and/or the DES, in consultation with appropriate agencies, shall determine when spill sites will be evacuated, as necessary, to safeguard human health. Evacuation parameters shall include consideration for the potential of fire, explosion, and hazardous gases.

6.3 Spill Control and Clean-Up for Wetlands and Waterbodies:

6.3.1 In addition to the measures described previously in this SPCC Plan, the following conditions shall apply if a spill, regardless of size, occurs near or into a stream, wetland or other waterbody:

6.3.1.1 If a spill should occur during refueling operations, **STOP** the operation until the spill can be controlled and the situation corrected.

6.3.1.2 For spills into streams, lakes or other waterbodies containing standing or flowing water, the contractor spill coordinator will immediately notify the nearest Northern representative and the OCC at 888-367-6671. The DES will promptly notify the NRC. (The NRC phone number is listed in section 4.2 of this SPCC Plan).

6.3.1.3 For spills in standing water floating booms, skimmer pumps and holding tanks shall be on-hand and used by the contractor to recover and contain released materials on the surface of the water.

6.3.1.4 If deemed necessary for large spills in waterbodies, the contractor must secure an emergency response contractor to further contain and clean up the spill. All contractors must be approved by Northern prior to construction.

6.3.1.5 Contaminated soils in wetlands must be excavated, and placed on, and covered by, plastic sheeting in bermed areas a minimum of 100 feet away from the wetland. Dispose of contaminated soil as soon as possible in accordance with section 6.0 of this SPCC Pan and Northern's procedures.

6.4 Inadvertent Mud Releases:

6.4.1 In the event of a drilling mud release (i.e., frac-out) to a sensitive resource area, including a waterbody, the contractor shall follow environmental procedure 380.203i, Appendix I: Plan for Inadvertent Release of Drilling Mud.

7 Storage and Disposal of Contaminated Materials

7.1 Environmental procedure 390.107, Approved Disposal Facilities, describes that all selected wastes generated at Northern facilities must be disposed of at Northern-approved waste facilities. The procedure also lists the locations of each Northern-approved disposal facility.

7.2 All contaminated soils, absorbent materials, and other wastes shall be stored and properly disposed by the contractor in accordance with applicable Federal and State regulations and Northern's procedures.

7.3 Only approved and licensed waste vendors and carriers may be used to transport contaminated material from the site to a Northern-approved disposal facility.

7.4 Used oil, glycol or hazardous wastes must be disposed by a Northern-approved contractor.

7.5 Environmental procedures regarding hazardous waste are located in the 390.000, Hazardous Waste Management, series of Northern's environmental operating procedures manual. The series includes procedures on manifesting and other transport requirements for off-site disposal.

7.6 Disposal of domestic wastes must be determined by the contractor and the information provided to the EI.

7.7 If it is necessary to temporarily store excavated soils on-site, these materials shall be 1) contained in plastic bags or, 2) placed on and covered by plastic sheeting. In addition, the perimeter of the storage area must include a berm to prevent and contain runoff.

8 REVISION HISTORY:

Responsibility for Procedure:

Address all questions on this procedure to the director of environmental.

Revisions:

Rev. 0	05/17/11	Initial procedure released.
Rev. 1	08/15/12	Changed Northern employee to Northern representative in section 1.1, Roles and Responsibilities, under Construction Coordinator. Updated information regarding spill kits in section 1.3, Equipment. Referenced Environmental Training-Construction. Included Minnesota Duty Officer contact information. Stated that the contractor shall follow Northern's Inadvertent Mud Release Plan for frac-outs. Added requirement for all contractor vehicles to be equipped with a catch pan. Updated formatting.
Rev. 2	12/14/12	Publish Only: Updated DES contact information.
Rev. 3	02/26/14	Added a section for liquid transfer planning and updated environmental department staff contact information.
Rev. 4	08/19/15	Publish Only: Updated DES and construction compliance personnel contact information.
Rev. 5	01/30/19	Publish Only: Division environmental specialists and construction compliance personnel contact information were updated in this procedure revision.
Rev. 6	01/06/21	Publish Only: Added section 1.3.5 stating existing practice for secondary containment for stationary equipment.
Rev. 7	02/17/21	Publish Only: Stated requirements for equipment repairs and maintenance.
Rev. 8	02/01/22	Publish Only: Division environmental specialist contact information was updated.

ATTACHMENT G

SWPPP INSPECTION AND MAINTENANCE REPORT AND RAINFALL INSPECTION CHART

NORTHERN NATURAL GAS
STORMWATER INSPECTION AND MAINTENANCE FORM

Project Name:	**Work Order #:**	**Inspection Date:**	**Inspection Time:**
Project Description:		**Stormwater Permit Agency:**	
Nearest Town, County and State:		**Stormwater Permit Authorization #:**	
GPS Lat:	**GPS Long:**	**Initial Grading Date:**	**Final Grading Date:**
Full Contractor Company Name:		**Final Seeding Date:**	
Contractor Contact Info (Name/Phone):		**Final Stabilization Date:**	

Inspection Event:	☐ Routine ☐ Rain Event ☐ Maintenance	
Inspection Schedule (IL, IA, MI, MN, OK, SD, WI)	☐ Every 7 days and within 24 hours of a rain event 0.5 inches or greater (inches of rain)	
Inspection Schedule (KS, NE, OK, SD)	☐ Every 14 days and within 24 hours of a rain event 0.5 inches or greater (inches of rain)	
Inspection Schedule (NM and all EPA permits)	☐ Every 7 days or every 14 days and within 24 hours of a rain event 0.25 inches or greater (inches)	
Reduced Inspection Schedule and Reason Behind Reduced Schedule (Must follow stormwater permit authorization requirements, which may vary per state/project.)	☐ Every 30 days	☐ Site temporarily stabilized and winter conditions ☐ Arid, semi-arid or drought stricken area ☐ Frozen conditions ☐ Other, explain:
Current Weather and Site Conditions (i.e., 66°F and dry):		
Construction Phase:	☐ **Active** ☐ **Suspended** ☐ **Post-Construction**	

SUBMITTED TO: (Enter names and email addresses below.)

Project Manager: Click here to enter text.
Construction Coordinator: Click here to enter text.
Field Operations Contact: Click here to enter text.
Division Environmental Specialist (DES): Click here to enter text.
Construction Environmental Compliance Contact: Christa Webber

NORTHERN NATURAL GAS
STORMWATER INSPECTION AND MAINTENANCE FORM

Table 1.0 – Inspection Observations and Corrective Actions

Stormwater Inspection Item	**Maintenance Required:** If yes, complete columns to the right.	**Observations:** Describe locations where controls require maintenance or additional controls are needed.	**Recommended Corrective Actions:** Describe actions taken while on-site, and/or recommendations to resolve observed issues. Update items with notes to detail status, including ongoing communications to ensure progress toward resolution.	**Assigned to:**	**Repair Status**	**Completion Date[1]**
Contract Yards and Storage Areas	☐ Yes ☐ No ☐ N/A				☐ Pending ☐ In progress ☐ Complete	
Vehicle Exit Points	☐ Yes ☐ No ☐ N/A				☐ Pending ☐ In progress ☐ Complete	
Sediment Controls	☐ Yes ☐ No ☐ N/A				☐ Pending ☐ In progress ☐ Complete	
Erosion Controls	☐ Yes ☐ No ☐ N/A				☐ Pending ☐ In progress ☐ Complete	
Disturbed Areas Stabilization	☐ Yes ☐ No ☐ N/A				☐ Pending ☐ In progress ☐ Complete	
Dewatering Activities and Structures	☐ Yes ☐ No ☐ N/A				☐ Pending ☐ In progress ☐ Complete	
Material Storage (e.g., containment, spill kits, etc.)	☐ Yes ☐ No ☐ N/A				☐ Pending ☐ In progress ☐ Complete	
Final Restoration Activities	☐ Yes ☐ No ☐ N/A				☐ Pending ☐ In progress ☐ Complete	

[1]Action items that were dated complete on the previous report should not appear on subsequent reports.

SUBMITTED TO: (Enter names and email addresses below.)

Project Manager: Click here to enter text.
Construction Coordinator: Click here to enter text.
Field Operations Contact: Click here to enter text.
Division Environmental Specialist (DES): Click here to enter text.
Construction Environmental Compliance Contact: Christa Webber

NORTHERN NATURAL GAS
STORMWATER INSPECTION AND MAINTENANCE FORM

Table 2.0 – Erosion Control Devices (Separately list each area where ECDs have been either temporarily or permanently installed.)

Exact location of erosion/sediment control inspected *(Ex. east road-side ditch of HWY 20)*	**Temporary (T) or Permanent (P)**	**Type of erosion/sediment control** *(Ex. hay bales, silt fence, wattles, slope breakers, erosion blankets, construction entrances, electric/barbed-wire fence, dewatering devices/structures, etc.)*	**Date Installed**	**Date Removed**	**Dates and Comments Regarding Completed Repair/Maintenance Activities**

Table 3.0 – Revegetation (Separately list each area where revegetation is required to report status toward "final stabilization", as defined by the respective permit.)

Location	**Status**	**Land Use**	**Seed/Over-seed Date(s)**	**Comments**

SUBMITTED TO: (Enter names and email addresses below.)

Project Manager: Click here to enter text.
Construction Coordinator: Click here to enter text.
Field Operations Contact: Click here to enter text.
Division Environmental Specialist (DES): Click here to enter text.
Construction Environmental Compliance Contact: Christa Webber

NORTHERN NATURAL GAS
STORMWATER INSPECTION AND MAINTENANCE FORM

General Observations:

Is there a violation affecting water quality?	
☐ Yes, and I immediately called the environmental specialist for instruction.	☐ No: No further action required.
Has the entire site achieved Final Stabilization per the permit requirements and have all temporary ECDs have been removed.	
☐ Yes, and I immediately called the environmental specialist for instruction.	☐ No: The next SWPPP inspection is due on or before this date:

Certification: I certify that: (1) the information contained in this report is true, accurate and complete; (2) I am qualified to complete this inspection based on my training and knowledge of the principles and practice of erosion and sediment controls; and (3) the project is in compliance with the SWPPP. I understand the terms and conditions of the general National Pollutant Discharge Elimination System (NPDES) permit authorization for this project, which authorizes the storm water discharges associated with industrial activity from the construction site identified as part of this certification.	
Inspector Printed Name:	
Inspector Signature:	**Date:**
Certification: I certify that: (1) the information contained in this report is true, accurate and complete; (2) I understand that I am required to take the listed corrective actions within 24 hours of this notification, or as soon as possible if field conditions prevent access, under the conditions of the National Pollutant Discharge Elimination System (NPDES) permit authorization for this project and the FERC Plan and Procedures; and (3) the project is in compliance with the SWPPP. I understand the terms and conditions of the general National Pollutant Discharge Elimination System (NPDES) permit authorization for this project, which authorizes the storm water discharges associated with industrial activity from the construction site identified as part of this certification.	
Contractor Environmental Lead Printed Name:	
Contractor Environmental Lead Signature:	**Date:**

SUBMITTED TO: (Enter names and email addresses below.)

Project Manager: Click here to enter text.
Construction Coordinator: Click here to enter text.
Field Operations Contact: Click here to enter text.
Division Environmental Specialist (DES): Click here to enter text.
Construction Environmental Compliance Contact: Christa Webber

INSPECTION PHOTOS

(Insert a minimum of two to three photos on the next pages, followed directly by captions detailing: 1) direction of view, 2) location within the temporary workspace, and 3) other significant information to reference the information noted above. Photos must be provided for any areas noted above as requiring maintenance. If those areas were corrected during the inspection, simply include photos showing the corrected concern.)

SUBMITTED TO: (Enter names and email addresses below.)

Project Manager: Click here to enter text.
Construction Coordinator: Click here to enter text.
Field Operations Contact: Click here to enter text.
Division Environmental Specialist (DES): Click here to enter text.
Construction Environmental Compliance Contact: Christa Webber

ATTACHMENT H

UPLAND EROSION CONTROL, REVEGETATION, AND MAINTENANCE PLAN

Stantec

UPLAND EROSION CONTROL, REVEGETATION, AND MAINTENANCE PLAN

MAY 2013 VERSION

UPLAND EROSION CONTROL, REVEGETATION, AND MAINTENANCE PLAN

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UPLAND EROSION CONTROL, REVEGETATION, AND MAINTENANCE PLAN (PLAN)

I. APPLICABILITY

A. The intent of this Plan is to assist project sponsors by identifying baseline mitigation measures for minimizing erosion and enhancing revegetation. Project sponsors shall specify in their applications for a new FERC authorization and in prior notice and advance notice filings, any individual measures in this Plan they consider unnecessary, technically infeasible, or unsuitable due to local conditions and fully describe any alternative measures they would use. Project sponsors shall also explain how those alternative measures would achieve a comparable level of mitigation.

Once a project is authorized, project sponsors can request further changes as variances to the measures in this Plan (or the applicant's approved plan). The Director of the Office of Energy Projects (Director) will consider approval of variances upon the project sponsor's written request, if the Director agrees that a variance:

1. provides equal or better environmental protection;

2. is necessary because a portion of this Plan is infeasible or unworkable based on project-specific conditions; or

3. is specifically required in writing by another federal, state, or Native American land management agency for the portion of the project on its land or under its jurisdiction.

Sponsors of projects planned for construction under the automatic authorization provisions in the FERC's regulations must receive written approval for any variances in advance of construction.

Project-related impacts on wetland and waterbody systems are addressed in the staff's Wetland and Waterbody Construction and Mitigation Procedures (Procedures).

II. SUPERVISION AND INSPECTION

A. ENVIRONMENTAL INSPECTION

1. At least one Environmental Inspector is required for each construction spread during construction and restoration (as defined by section V). The number and experience of Environmental Inspectors assigned to each construction spread shall be appropriate for the length of the construction spread and the number/significance of resources affected.

2. Environmental Inspectors shall have peer status with all other activity inspectors.

3. Environmental Inspectors shall have the authority to stop activities that violate the environmental conditions of the FERC's Orders, stipulations of other environmental permits or approvals, or landowner easement agreements; and to order appropriate corrective action.

B. RESPONSIBILITIES OF ENVIRONMENTAL INSPECTORS

At a minimum, the Environmental Inspector(s) shall be responsible for:

1. Inspecting construction activities for compliance with the requirements of this Plan, the Procedures, the environmental conditions of the FERC's Orders, the mitigation measures proposed by the project sponsor (as approved and/or modified by the Order), other environmental permits and approvals, and environmental requirements in landowner easement agreements.

2. Identifying, documenting, and overseeing corrective actions, as necessary to bring an activity back into compliance;

3. Verifying that the limits of authorized construction work areas and locations of access roads are visibly marked before clearing, and maintained throughout construction;

4. Verifying the location of signs and highly visible flagging marking the boundaries of sensitive resource areas, waterbodies, wetlands, or areas with special requirements along the construction work area;

5. Identifying erosion/sediment control and soil stabilization needs in all areas;

6. Ensuring that the design of slope breakers will not cause erosion or direct water into sensitive environmental resource areas, including cultural resource sites, wetlands, waterbodies, and sensitive species habitats;

7. Verifying that dewatering activities are properly monitored and do not result in the deposition of sand, silt, and/or sediment into sensitive environmental resource areas, including wetlands, waterbodies, cultural resource sites, and sensitive species habitats; stopping dewatering activities if such deposition is occurring and ensuring the design of the discharge is changed to prevent reoccurrence; and verifying that dewatering structures are removed after completion of dewatering activities;

8. Ensuring that subsoil and topsoil are tested in agricultural and residential areas to measure compaction and determine the need for corrective action;

9. Advising the Chief Construction Inspector when environmental conditions (such as wet weather or frozen soils) make it advisable to restrict or delay construction activities to avoid topsoil mixing or excessive compaction;

10. Ensuring restoration of contours and topsoil;

11. Verifying that the soils imported for agricultural or residential use are certified as free of noxious weeds and soil pests, unless otherwise approved by the landowner;

12. Ensuring that erosion control devices are properly installed to prevent sediment flow into sensitive environmental resource areas (e.g., wetlands, waterbodies, cultural resource sites, and sensitive species habitats) and onto roads, and determining the need for additional erosion control devices;

13. Inspecting and ensuring the maintenance of temporary erosion control measures at least:

    a. on a daily basis in areas of active construction or equipment operation;

    b. on a weekly basis in areas with no construction or equipment operation; and

    c. within 24 hours of each 0.5 inch of rainfall;

14. Ensuring the repair of all ineffective temporary erosion control measures within 24 hours of identification, or as soon as conditions allow if compliance with this time frame would result in greater environmental impacts;

15. Keeping records of compliance with the environmental conditions of the FERC's Orders, and the mitigation measures proposed by the project sponsor in the application submitted to the FERC, and other federal or state environmental permits during active construction and restoration;

16. Identifying areas that should be given special attention to ensure stabilization and restoration after the construction phase; and

17. Verifying that locations for any disposal of excess construction materials for beneficial reuse comply with section III.E.

III. PRECONSTRUCTION PLANNING

The project sponsor shall do the following before construction:

A. CONSTRUCTION WORK AREAS

1. Identify all construction work areas (e.g., construction right-of-way, extra work space areas, pipe storage and contractor yards, borrow and disposal areas, access roads) that would be needed for safe construction. The project sponsor must ensure that appropriate cultural resources and biological surveys are conducted, as determined necessary by the appropriate federal and state agencies.

2. Project sponsors are encouraged to consider expanding any required cultural resources and endangered species surveys in anticipation of the need for activities outside of authorized work areas.

3. Plan construction sequencing to limit the amount and duration of open trench sections, as necessary, to prevent excessive erosion or sediment flow into sensitive environmental resource areas.

B. DRAIN TILE AND IRRIGATION SYSTEMS

1. Attempt to locate existing drain tiles and irrigation systems.

2. Contact landowners and local soil conservation authorities to determine the locations of future drain tiles that are likely to be installed within 3 years of the authorized construction.

3. Develop procedures for constructing through drain-tiled areas, maintaining irrigation systems during construction, and repairing drain tiles and irrigation systems after construction.

4. Engage qualified drain tile specialists, as needed to conduct or monitor repairs to drain tile systems affected by construction. Use drain tile specialists from the project area, if available.

C. GRAZING DEFERMENT

Develop grazing deferment plans with willing landowners, grazing permittees, and land management agencies to minimize grazing disturbance of revegetation efforts.

D. ROAD CROSSINGS AND ACCESS POINTS

Plan for safe and accessible conditions at all roadway crossings and access points during construction and restoration.

E. DISPOSAL PLANNING

Determine methods and locations for the regular collection, containment, and disposal of excess construction materials and debris (e.g., timber, slash, mats, garbage, drill cuttings and fluids, excess rock) throughout the construction process. Disposal of materials for beneficial reuse must not result in adverse environmental impact and is subject to compliance with all applicable survey, landowner or land management agency approval, and permit requirements.

F. AGENCY COORDINATION

The project sponsor must coordinate with the appropriate local, state, and federal agencies as outlined in this Plan and/or required by the FERC's Orders.

1. Obtain written recommendations from the local soil conservation authorities or land management agencies regarding permanent erosion control and revegetation specifications.

2. Develop specific procedures in coordination with the appropriate agencies to prevent the introduction or spread of invasive species, noxious weeds, and soil pests resulting from construction and restoration activities.

3. Develop specific procedures in coordination with the appropriate agencies and landowners, as necessary, to allow for livestock and wildlife movement and protection during construction.

4. Develop specific blasting procedures in coordination with the appropriate agencies that address pre- and post-blast inspections; advanced public notification; and mitigation measures for building foundations, groundwater wells, and springs. Use appropriate methods (e.g., blasting mats) to prevent damage to nearby structures and to prevent debris from entering sensitive environmental resource areas.

G. SPILL PREVENTION AND RESPONSE PROCEDURES

The project sponsor shall develop project-specific Spill Prevention and Response Procedures, as specified in section IV of the staff's Procedures. A copy must be filed with the Secretary of the FERC (Secretary) prior to construction and made available in the field on each construction spread. The filing requirement does not apply to projects constructed under the automatic authorization provisions in the FERC's regulations.

H. RESIDENTIAL CONSTRUCTION

For all properties with residences located within 50 feet of construction work areas, project sponsors shall: avoid removal of mature trees and landscaping within the construction work area unless necessary for safe operation of construction equipment, or as specified in landowner agreements; fence the edge of the construction work area for a distance of 100 feet on either side of the residence; and restore all lawn areas and landscaping immediately following clean up operations, or as specified in landowner agreements. If seasonal or other weather conditions prevent compliance with these time frames, maintain and monitor temporary erosion controls (sediment barriers and mulch) until conditions allow completion of restoration.

I. WINTER CONSTRUCTION PLANS

If construction is planned to occur during winter weather conditions, project sponsors shall develop and file a project-specific winter construction plan with the FERC application. This filing requirement does not apply to projects constructed under the automatic authorization provisions of the FERC's regulations.

The plan shall address:

1. winter construction procedures (e.g., snow handling and removal, access road construction and maintenance, soil handling under saturated or frozen conditions, topsoil stripping);

2. stabilization and monitoring procedures if ground conditions will delay restoration until the following spring (e.g., mulching and erosion controls, inspection and reporting, stormwater control during spring thaw conditions); and

3. final restoration procedures (e.g., subsidence and compaction repair, topsoil replacement, seeding).

IV. INSTALLATION

A. APPROVED AREAS OF DISTURBANCE

1. Project-related ground disturbance shall be limited to the construction right-of-way, extra work space areas, pipe storage yards, borrow and disposal areas, access roads, and other areas approved in the FERC's Orders. Any project-related ground disturbing activities outside these areas will require prior Director approval. This requirement does not apply to activities needed to comply with the Plan and Procedures (i.e., slope breakers, energy-dissipating devices, dewatering structures, drain tile system repairs) or minor field realignments and workspace shifts per landowner needs and requirements that do not affect other landowners or sensitive environmental resource areas. All construction or restoration activities outside of authorized areas are subject to all applicable survey and permit requirements, and landowner easement agreements.

2. The construction right-of-way width for a project shall not exceed 75 feet or that described in the FERC application unless otherwise modified by a FERC Order. However, in limited, non-wetland areas, this construction right-of-way width may be expanded by up to 25 feet without Director approval to accommodate full construction right-of-way topsoil segregation and to ensure safe construction where topographic conditions (e.g., side-slopes) or soil limitations require it. Twenty-five feet of extra construction right-of-way width may also be used in limited, non-wetland or non-forested areas for truck turn-arounds where no reasonable alternative access exists.

   Project use of these additional limited areas is subject to landowner or land management agency approval and compliance with all applicable survey and permit requirements. When additional areas are used, each one shall be identified and the need explained in the weekly or biweekly construction reports to the FERC, if required. The following material shall be included in the reports:

   a. the location of each additional area by station number and reference to previously filed alignment sheets, or updated alignment sheets showing the additional areas;

   b. identification of the filing at FERC containing evidence that the additional areas were previously surveyed; and

c. a statement that landowner approval has been obtained and is available in project files.

Prior written approval of the Director is required when the authorized construction right-of-way width would be expanded by more than 25 feet.

B. TOPSOIL SEGREGATION

1. Unless the landowner or land management agency specifically approves otherwise, prevent the mixing of topsoil with subsoil by stripping topsoil from either the full work area or from the trench and subsoil storage area (ditch plus spoil side method) in:

   a. cultivated or rotated croplands, and managed pastures;

   b. residential areas;

   c. hayfields; and

   d. other areas at the landowner's or land managing agency's request.

2. In residential areas, importation of topsoil is an acceptable alternative to topsoil segregation.

3. Where topsoil segregation is required, the project sponsor must:

   a. segregate at least 12 inches of topsoil in deep soils (more than 12 inches of topsoil); and

   b. make every effort to segregate the entire topsoil layer in soils with less than 12 inches of topsoil.

4. Maintain separation of salvaged topsoil and subsoil throughout all construction activities.

5. Segregated topsoil may not be used for padding the pipe, constructing temporary slope breakers or trench plugs, improving or maintaining roads, or as a fill material.

6. Stabilize topsoil piles and minimize loss due to wind and water erosion with use of sediment barriers, mulch, temporary seeding, tackifiers, or functional equivalents, where necessary.

C. DRAIN TILES

1. Mark locations of drain tiles damaged during construction.

2. Probe all drainage tile systems within the area of disturbance to check for damage.

3. Repair damaged drain tiles to their original or better condition. Do not use filter-covered drain tiles unless the local soil conservation authorities and the landowner agree. Use qualified specialists for testing and repairs.

4. For new pipelines in areas where drain tiles exist or are planned, ensure that the depth of cover over the pipeline is sufficient to avoid interference with drain tile systems. For adjacent pipeline loops in agricultural areas, install the new pipeline with at least the same depth of cover as the existing pipeline(s).

D. IRRIGATION

Maintain water flow in crop irrigation systems, unless shutoff is coordinated with affected parties.

E. ROAD CROSSINGS AND ACCESS POINTS

1. Maintain safe and accessible conditions at all road crossings and access points during construction.

2. If crushed stone access pads are used in residential or agricultural areas, place the stone on synthetic fabric to facilitate removal.

3. Minimize the use of tracked equipment on public roadways. Remove any soil or gravel spilled or tracked onto roadways daily or more frequent as necessary to maintain safe road conditions. Repair any damages to roadway surfaces, shoulders, and bar ditches.

F. TEMPORARY EROSION CONTROL

Install temporary erosion controls immediately after initial disturbance of the soil. Temporary erosion controls must be properly maintained throughout construction (on a daily basis) and reinstalled as necessary (such as after backfilling of the trench) until replaced by permanent erosion controls or restoration is complete.

1. Temporary Slope Breakers

   a. Temporary slope breakers are intended to reduce runoff velocity and divert water off the construction right-of-way. Temporary slope

breakers may be constructed of materials such as soil, silt fence, staked hay or straw bales, or sand bags.

b. Install temporary slope breakers on all disturbed areas, as necessary to avoid excessive erosion. Temporary slope breakers must be installed on slopes greater than 5 percent where the base of the slope is less than 50 feet from waterbody, wetland, and road crossings at the following spacing (closer spacing shall be used if necessary):

Slope (%)	Spacing (feet)
5 - 15	300
>15 - 30	200
>30	100

c. Direct the outfall of each temporary slope breaker to a stable, well vegetated area or construct an energy-dissipating device at the end of the slope breaker and off the construction right-of-way.

d. Position the outfall of each temporary slope breaker to prevent sediment discharge into wetlands, waterbodies, or other sensitive environmental resource areas.

2. Temporary Trench Plugs

Temporary trench plugs are intended to segment a continuous open trench prior to backfill.

a. Temporary trench plugs may consist of unexcavated portions of the trench, compacted subsoil, sandbags, or some functional equivalent.

b. Position temporary trench plugs, as necessary, to reduce trenchline erosion and minimize the volume and velocity of trench water flow at the base of slopes.

3. Sediment Barriers

Sediment barriers are intended to stop the flow of sediments and to prevent the deposition of sediments beyond approved workspaces or into sensitive resources.

a. Sediment barriers may be constructed of materials such as silt fence, staked hay or straw bales, compacted earth (e.g., driveable berms across travelways), sand bags, or other appropriate materials.

b. At a minimum, install and maintain temporary sediment barriers across the entire construction right-of-way at the base of slopes greater than 5 percent where the base of the slope is less than 50 feet from a waterbody, wetland, or road crossing until revegetation is successful as defined in this Plan. Leave adequate room between the base of the slope and the sediment barrier to accommodate ponding of water and sediment deposition.

c. Where wetlands or waterbodies are adjacent to and downslope of construction work areas, install sediment barriers along the edge of these areas, as necessary to prevent sediment flow into the wetland or waterbody.

4. Mulch

a. Apply mulch on all slopes (except in cultivated cropland) concurrent with or immediately after seeding, where necessary to stabilize the soil surface and to reduce wind and water erosion. Spread mulch uniformly over the area to cover at least 75 percent of the ground surface at a rate of 2 tons/acre of straw or its equivalent, unless the local soil conservation authority, landowner, or land managing agency approves otherwise in writing.

b. Mulch can consist of weed-free straw or hay, wood fiber hydromulch, erosion control fabric, or some functional equivalent.

c. Mulch all disturbed upland areas (except cultivated cropland) before seeding if:

(1) final grading and installation of permanent erosion control measures will not be completed in an area within 20 days after the trench in that area is backfilled (10 days in residential areas), as required in section V.A.1; or

(2) construction or restoration activity is interrupted for extended periods, such as when seeding cannot be completed due to seeding period restrictions.

d. If mulching before seeding, increase mulch application on all slopes within 100 feet of waterbodies and wetlands to a rate of 3 tons/acre of straw or equivalent.

e. If wood chips are used as mulch, do not use more than 1 ton/acre and add the equivalent of 11 lbs/acre available nitrogen (at least 50 percent of which is slow release).

f. Ensure that mulch is adequately anchored to minimize loss due to wind and water.

g. When anchoring with liquid mulch binders, use rates recommended by the manufacturer. Do not use liquid mulch binders within 100 feet of wetlands or waterbodies, except where the product is certified environmentally non-toxic by the appropriate state or federal agency or independent standards-setting organization.

h. Do not use synthetic monofilament mesh/netted erosion control materials in areas designated as sensitive wildlife habitat, unless the product is specifically designed to minimize harm to wildlife. Anchor erosion control fabric with staples or other appropriate devices.

V. RESTORATION

A. CLEANUP

1. Commence cleanup operations immediately following backfill operations. Complete final grading, topsoil replacement, and installation of permanent erosion control structures within 20 days after backfilling the trench (10 days in residential areas). If seasonal or other weather conditions prevent compliance with these time frames, maintain temporary erosion controls (i.e., temporary slope breakers, sediment barriers, and mulch) until conditions allow completion of cleanup.

   If construction or restoration unexpectedly continues into the winter season when conditions could delay successful decompaction, topsoil replacement, or seeding until the following spring, file with the Secretary for the review and written approval of the Director, a winter construction plan (as specified in section III.I). This filing requirement does not apply to projects constructed under the automatic authorization provisions of the FERC's regulations.

2. A travel lane may be left open temporarily to allow access by construction traffic if the temporary erosion control structures are installed as specified in section IV.F. and inspected and maintained as specified in sections II.B.12 through 14. When access is no longer required the travel lane must be removed and the right-of-way restored.

3. Rock excavated from the trench may be used to backfill the trench only to the top of the existing bedrock profile. Rock that is not returned to the trench shall be considered construction debris, unless approved for use as mulch or for some other use on the construction work areas by the landowner or land managing agency.

4. Remove excess rock from at least the top 12 inches of soil in all cultivated or rotated cropland, managed pastures, hayfields, and residential areas, as well as other areas at the landowner's request. The size, density, and distribution of rock on the construction work area shall be similar to adjacent areas not disturbed by construction. The landowner or land management agency may approve other provisions in writing.

5. Grade the construction right-of-way to restore pre-construction contours and leave the soil in the proper condition for planting.

6. Remove construction debris from all construction work areas unless the landowner or land managing agency approves leaving materials onsite for beneficial reuse, stabilization, or habitat restoration.

7. Remove temporary sediment barriers when replaced by permanent erosion control measures or when revegetation is successful.

B. PERMANENT EROSION CONTROL DEVICES

1. Trench Breakers

a. Trench breakers are intended to slow the flow of subsurface water along the trench. Trench breakers may be constructed of materials such as sand bags or polyurethane foam. Do not use topsoil in trench breakers.

b. An engineer or similarly qualified professional shall determine the need for and spacing of trench breakers. Otherwise, trench breakers shall be installed at the same spacing as and upslope of permanent slope breakers.

c. In agricultural fields and residential areas where slope breakers are not typically required, install trench breakers at the same spacing as if permanent slope breakers were required.

d. At a minimum, install a trench breaker at the base of slopes greater than 5 percent where the base of the slope is less than 50 feet from a waterbody or wetland and where needed to avoid draining a waterbody or wetland. Install trench breakers at wetland boundaries, as specified in the Procedures. Do not install trench breakers within a wetland.

2. Permanent Slope Breakers

a. Permanent slope breakers are intended to reduce runoff velocity, divert water off the construction right-of-way, and prevent sediment deposition into sensitive resources. Permanent slope breakers may be constructed of materials such as soil, stone, or some functional equivalent.

b. Construct and maintain permanent slope breakers in all areas, except cultivated areas and lawns, unless requested by the landowner, using spacing recommendations obtained from the local soil conservation authority or land managing agency.

In the absence of written recommendations, use the following spacing unless closer spacing is necessary to avoid excessive erosion on the construction right-of-way:

Slope (%)	Spacing (feet)
5 - 15	300
>15 - 30	200
>30	100

c. Construct slope breakers to divert surface flow to a stable area without causing water to pool or erode behind the breaker. In the absence of a stable area, construct appropriate energy-dissipating devices at the end of the breaker.

d. Slope breakers may extend slightly (about 4 feet) beyond the edge of the construction right-of-way to effectively drain water off the disturbed area. Where slope breakers extend beyond the edge of the construction right-of-way, they are subject to compliance with all applicable survey requirements.

C. SOIL COMPACTION MITIGATION

1. Test topsoil and subsoil for compaction at regular intervals in agricultural and residential areas disturbed by construction activities. Conduct tests on the same soil type under similar moisture conditions in undisturbed areas to approximate preconstruction conditions. Use penetrometers or other appropriate devices to conduct tests.

2. Plow severely compacted agricultural areas with a paraplow or other deep tillage implement. In areas where topsoil has been segregated, plow the subsoil before replacing the segregated topsoil.

If subsequent construction and cleanup activities result in further compaction, conduct additional tilling.

3. Perform appropriate soil compaction mitigation in severely compacted residential areas.

D. REVEGETATION

1. General

a. The project sponsor is responsible for ensuring successful revegetation of soils disturbed by project-related activities, except as noted in section V.D.1.b.

b. Restore all turf, ornamental shrubs, and specialized landscaping in accordance with the landowner's request, or compensate the landowner. Restoration work must be performed by personnel familiar with local horticultural and turf establishment practices.

2. Soil Additives

Fertilize and add soil pH modifiers in accordance with written recommendations obtained from the local soil conservation authority, land management agencies, or landowner. Incorporate recommended soil pH modifier and fertilizer into the top 2 inches of soil as soon as practicable after application.

3. Seeding Requirements

a. Prepare a seedbed in disturbed areas to a depth of 3 to 4 inches using appropriate equipment to provide a firm seedbed. When hydroseeding, scarify the seedbed to facilitate lodging and germination of seed.

b. Seed disturbed areas in accordance with written recommendations for seed mixes, rates, and dates obtained from the local soil conservation authority or the request of the landowner or land management agency. Seeding is not required in cultivated croplands unless requested by the landowner.

c. Perform seeding of permanent vegetation within the recommended seeding dates. If seeding cannot be done within those dates, use appropriate temporary erosion control measures discussed in section IV.F and perform seeding of permanent vegetation at the beginning of the next recommended seeding season. Dormant seeding or temporary

seeding of annual species may also be used, if necessary, to establish cover, as approved by the Environmental Inspector. Lawns may be seeded on a schedule established with the landowner.

d. In the absence of written recommendations from the local soil conservation authorities, seed all disturbed soils within 6 working days of final grading, weather and soil conditions permitting, subject to the specifications in section V.D.3.a through V.D.3.c.

e. Base seeding rates on Pure Live Seed. Use seed within 12 months of seed testing.

f. Treat legume seed with an inoculant specific to the species using the manufacturer's recommended rate of inoculant appropriate for the seeding method (broadcast, drill, or hydro).

g. In the absence of written recommendations from the local soil conservation authorities, landowner, or land managing agency to the contrary, a seed drill equipped with a cultipacker is preferred for seed application.

Broadcast or hydroseeding can be used in lieu of drilling at double the recommended seeding rates. Where seed is broadcast, firm the seedbed with a cultipacker or roller after seeding. In rocky soils or where site conditions may limit the effectiveness of this equipment, other alternatives may be appropriate (e.g., use of a chain drag) to lightly cover seed after application, as approved by the Environmental Inspector.

VI. OFF-ROAD VEHICLE CONTROL

To each owner or manager of forested lands, offer to install and maintain measures to control unauthorized vehicle access to the right-of-way. These measures may include:

A. signs;

B. fences with locking gates;

C. slash and timber barriers, pipe barriers, or a line of boulders across the right-of-way; and

D. conifers or other appropriate trees or shrubs across the right-of-way.

VII. POST-CONSTRUCTION ACTIVITIES AND REPORTING

A. MONITORING AND MAINTENANCE

1. Conduct follow-up inspections of all disturbed areas, as necessary, to determine the success of revegetation and address landowner concerns. At a minimum, conduct inspections after the first and second growing seasons.

2. Revegetation in non-agricultural areas shall be considered successful if upon visual survey the density and cover of non-nuisance vegetation are similar in density and cover to adjacent undisturbed lands. In agricultural areas, revegetation shall be considered successful when upon visual survey, crop growth and vigor are similar to adjacent undisturbed portions of the same field, unless the easement agreement specifies otherwise.

   Continue revegetation efforts until revegetation is successful.

3. Monitor and correct problems with drainage and irrigation systems resulting from pipeline construction in agricultural areas until restoration is successful.

4. Restoration shall be considered successful if the right-of-way surface condition is similar to adjacent undisturbed lands, construction debris is removed (unless otherwise approved by the landowner or land managing agency per section V.A.6), revegetation is successful, and proper drainage has been restored.

5. Routine vegetation mowing or clearing over the full width of the permanent right-of-way in uplands shall not be done more frequently than every 3 years. However, to facilitate periodic corrosion/leak surveys, a corridor not exceeding 10 feet in width centered on the pipeline may be cleared at a frequency necessary to maintain the 10-foot corridor in an herbaceous state. In no case shall routine vegetation mowing or clearing occur during the migratory bird nesting season between April 15 and August 1 of any year unless specifically approved in writing by the responsible land management agency or the U.S. Fish and Wildlife Service.

6. Efforts to control unauthorized off-road vehicle use, in cooperation with the landowner, shall continue throughout the life of the project. Maintain signs, gates, and permanent access roads as necessary.

B. REPORTING

1. The project sponsor shall maintain records that identify by milepost:

   a. method of application, application rate, and type of fertilizer, pH modifying agent, seed, and mulch used;

   b. acreage treated;

   c. dates of backfilling and seeding;

   d. names of landowners requesting special seeding treatment and a description of the follow-up actions;

   e. the location of any subsurface drainage repairs or improvements made during restoration; and

   f. any problem areas and how they were addressed.

2. The project sponsor shall file with the Secretary quarterly activity reports documenting the results of follow-up inspections required by section VII.A.1; any problem areas, including those identified by the landowner; and corrective actions taken for at least 2 years following construction.

   The requirement to file quarterly activity reports with the Secretary does not apply to projects constructed under the automatic authorization, prior notice, or advanced notice provisions in the FERC's regulations.

ATTACHMENT I

WETLAND AND WATERBODY CONSTRUCTION AND MITIGATION PROCEDURES

Stantec

WETLAND AND WATERBODY CONSTRUCTION AND MITIGATION PROCEDURES

MAY 2013 VERSION

WETLAND AND WATERBODY CONSTRUCTION AND MITIGATION PROCEDURES

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WETLAND AND WATERBODY
CONSTRUCTION AND MITIGATION PROCEDURES (PROCEDURES)

I. APPLICABILITY

A. The intent of these Procedures is to assist project sponsors by identifying baseline mitigation measures for minimizing the extent and duration of project-related disturbance on wetlands and waterbodies. Project sponsors shall specify in their applications for a new FERC authorization, and in prior notice and advance notice filings, any individual measures in these Procedures they consider unnecessary, technically infeasible, or unsuitable due to local conditions and fully describe any alternative measures they would use. Project sponsors shall also explain how those alternative measures would achieve a comparable level of mitigation.

Once a project is authorized, project sponsors can request further changes as variances to the measures in these Procedures (or the applicant's approved procedures). The Director of the Office of Energy Projects (Director) will consider approval of variances upon the project sponsor's written request, if the Director agrees that a variance:

1. provides equal or better environmental protection;

2. is necessary because a portion of these Procedures is infeasible or unworkable based on project-specific conditions; or

3. is specifically required in writing by another federal, state, or Native American land management agency for the portion of the project on its land or under its jurisdiction.

Sponsors of projects planned for construction under the automatic authorization provisions in the FERC's regulations must receive written approval for any variances in advance of construction.

Project-related impacts on non-wetland areas are addressed in the staff's Upland Erosion Control, Revegetation, and Maintenance Plan (Plan).

B. DEFINITIONS

1. "Waterbody" includes any natural or artificial stream, river, or drainage with perceptible flow at the time of crossing, and other permanent waterbodies such as ponds and lakes:

   a. "minor waterbody" includes all waterbodies less than or equal to 10 feet wide at the water's edge at the time of crossing;

   b. "intermediate waterbody" includes all waterbodies greater than 10 feet wide but less than or equal to 100 feet wide at the water's edge at the time of crossing; and

   c. "major waterbody" includes all waterbodies greater than 100 feet wide at the water's edge at the time of crossing.

2. "Wetland" includes any area that is not in actively cultivated or rotated cropland and that satisfies the requirements of the current federal methodology for identifying and delineating wetlands.

II. PRECONSTRUCTION FILING

A. The following information must be filed with the Secretary of the FERC (Secretary) prior to the beginning of construction, for the review and written approval by the Director:

1. site-specific justifications for extra work areas that would be closer than 50 feet from a waterbody or wetland; and

2. site-specific justifications for the use of a construction right-of-way greater than 75-feet-wide in wetlands.

B. The following information must be filed with the Secretary prior to the beginning of construction. These filing requirements do not apply to projects constructed under the automatic authorization provisions in the FERC's regulations:

1. Spill Prevention and Response Procedures specified in section IV.A;

2. a schedule identifying when trenching or blasting will occur within each waterbody greater than 10 feet wide, within any designated coldwater fishery, and within any waterbody identified as habitat for federally-listed threatened or endangered species. The project sponsor will revise the schedule as necessary to provide FERC staff at least 14 days advance notice. Changes within this last 14-day period must provide for at least 48 hours advance notice;

3. plans for horizontal directional drills (HDD) under wetlands or waterbodies, specified in section V.B.6.d;

4. site-specific plans for major waterbody crossings, described in section V.B.9;

5. a wetland delineation report as described in section VI.A.1, if applicable; and

6. the hydrostatic testing information specified in section VII.B.3.

III. ENVIRONMENTAL INSPECTORS

A. At least one Environmental Inspector having knowledge of the wetland and waterbody conditions in the project area is required for each construction spread. The number and experience of Environmental Inspectors assigned to each construction spread shall be appropriate for the length of the construction spread and the number/significance of resources affected.

B. The Environmental Inspector's responsibilities are outlined in the Upland Erosion Control, Revegetation, and Maintenance Plan (Plan).

IV. PRECONSTRUCTION PLANNING

A. The project sponsor shall develop project-specific Spill Prevention and Response Procedures that meet applicable requirements of state and federal agencies. A copy must be filed with the Secretary prior to construction and made available in the field on each construction spread. This filing requirement does not apply to projects constructed under the automatic authorization provisions in the FERC's regulations.

1. It shall be the responsibility of the project sponsor and its contractors to structure their operations in a manner that reduces the risk of spills or the accidental exposure of fuels or hazardous materials to waterbodies or wetlands. The project sponsor and its contractors must, at a minimum, ensure that:

a. all employees handling fuels and other hazardous materials are properly trained;

b. all equipment is in good operating order and inspected on a regular basis;

c. fuel trucks transporting fuel to on-site equipment travel only on approved access roads;

d. all equipment is parked overnight and/or fueled at least 100 feet from a waterbody or in an upland area at least 100 feet from a wetland boundary. These activities can occur closer only if the Environmental Inspector determines that there is no reasonable alternative, and the

project sponsor and its contractors have taken appropriate steps (including secondary containment structures) to prevent spills and provide for prompt cleanup in the event of a spill;

e. hazardous materials, including chemicals, fuels, and lubricating oils, are not stored within 100 feet of a wetland, waterbody, or designated municipal watershed area, unless the location is designated for such use by an appropriate governmental authority. This applies to storage of these materials and does not apply to normal operation or use of equipment in these areas;

f. concrete coating activities are not performed within 100 feet of a wetland or waterbody boundary, unless the location is an existing industrial site designated for such use. These activities can occur closer only if the Environmental Inspector determines that there is no reasonable alternative, and the project sponsor and its contractors have taken appropriate steps (including secondary containment structures) to prevent spills and provide for prompt cleanup in the event of a spill;

g. pumps operating within 100 feet of a waterbody or wetland boundary utilize appropriate secondary containment systems to prevent spills; and

h. bulk storage of hazardous materials, including chemicals, fuels, and lubricating oils have appropriate secondary containment systems to prevent spills.

2. The project sponsor and its contractors must structure their operations in a manner that provides for the prompt and effective cleanup of spills of fuel and other hazardous materials. At a minimum, the project sponsor and its contractors must:

a. ensure that each construction crew (including cleanup crews) has on hand sufficient supplies of absorbent and barrier materials to allow the rapid containment and recovery of spilled materials and knows the procedure for reporting spills and unanticipated discoveries of contamination;

b. ensure that each construction crew has on hand sufficient tools and material to stop leaks;

c. know the contact names and telephone numbers for all local, state, and federal agencies (including, if necessary, the U. S. Coast Guard and the National Response Center) that must be notified of a spill; and

d. follow the requirements of those agencies in cleaning up the spill, in excavating and disposing of soils or other materials contaminated by a spill, and in collecting and disposing of waste generated during spill cleanup.

B. AGENCY COORDINATION

The project sponsor must coordinate with the appropriate local, state, and federal agencies as outlined in these Procedures and in the FERC's Orders.

V. WATERBODY CROSSINGS

A. NOTIFICATION PROCEDURES AND PERMITS

1. Apply to the U.S. Army Corps of Engineers (COE), or its delegated agency, for the appropriate wetland and waterbody crossing permits.

2. Provide written notification to authorities responsible for potable surface water supply intakes located within 3 miles downstream of the crossing at least 1 week before beginning work in the waterbody, or as otherwise specified by that authority.

3. Apply for state-issued waterbody crossing permits and obtain individual or generic section 401 water quality certification or waiver.

4. Notify appropriate federal and state authorities at least 48 hours before beginning trenching or blasting within the waterbody, or as specified in applicable permits.

B. INSTALLATION

1. Time Window for Construction

Unless expressly permitted or further restricted by the appropriate federal or state agency in writing on a site-specific basis, instream work, except that required to install or remove equipment bridges, must occur during the following time windows:

a. coldwater fisheries - June 1 through September 30; and

b. coolwater and warmwater fisheries - June 1 through November 30.

2. Extra Work Areas

a. Locate all extra work areas (such as staging areas and additional spoil storage areas) at least 50 feet away from water's edge, except where

the adjacent upland consists of cultivated or rotated cropland or other disturbed land.

b. The project sponsor shall file with the Secretary for review and written approval by the Director, site-specific justification for each extra work area with a less than 50-foot setback from the water's edge, except where the adjacent upland consists of cultivated or rotated cropland or other disturbed land. The justification must specify the conditions that will not permit a 50-foot setback and measures to ensure the waterbody is adequately protected.

c. Limit the size of extra work areas to the minimum needed to construct the waterbody crossing.

3. General Crossing Procedures

a. Comply with the COE, or its delegated agency, permit terms and conditions.

b. Construct crossings as close to perpendicular to the axis of the waterbody channel as engineering and routing conditions permit.

c. Where pipelines parallel a waterbody, maintain at least 15 feet of undisturbed vegetation between the waterbody (and any adjacent wetland) and the construction right-of-way, except where maintaining this offset will result in greater environmental impact.

d. Where waterbodies meander or have multiple channels, route the pipeline to minimize the number of waterbody crossings.

e. Maintain adequate waterbody flow rates to protect aquatic life, and prevent the interruption of existing downstream uses.

f. Waterbody buffers (e.g., extra work area setbacks, refueling restrictions) must be clearly marked in the field with signs and/or highly visible flagging until construction-related ground disturbing activities are complete.

g. Crossing of waterbodies when they are dry or frozen and not flowing may proceed using standard upland construction techniques in accordance with the Plan, provided that the Environmental Inspector verifies that water is unlikely to flow between initial disturbance and final stabilization of the feature. In the event of perceptible flow, the project sponsor must comply with all applicable Procedure requirements for "waterbodies" as defined in section I.B.1.

4. Spoil Pile Placement and Control

   a. All spoil from minor and intermediate waterbody crossings, and upland spoil from major waterbody crossings, must be placed in the construction right-of-way at least 10 feet from the water's edge or in additional extra work areas as described in section V.B.2.

   b. Use sediment barriers to prevent the flow of spoil or silt-laden water into any waterbody.

5. Equipment Bridges

   a. Only clearing equipment and equipment necessary for installation of equipment bridges may cross waterbodies prior to bridge installation. Limit the number of such crossings of each waterbody to one per piece of clearing equipment.

   b. Construct and maintain equipment bridges to allow unrestricted flow and to prevent soil from entering the waterbody. Examples of such bridges include:

      (1) equipment pads and culvert(s);
      (2) equipment pads or railroad car bridges without culverts;
      (3) clean rock fill and culvert(s); and
      (4) flexi-float or portable bridges.

      Additional options for equipment bridges may be utilized that achieve the performance objectives noted above. Do not use soil to construct or stabilize equipment bridges.

   c. Design and maintain each equipment bridge to withstand and pass the highest flow expected to occur while the bridge is in place. Align culverts to prevent bank erosion or streambed scour. If necessary, install energy dissipating devices downstream of the culverts.

   d. Design and maintain equipment bridges to prevent soil from entering the waterbody.

   e. Remove temporary equipment bridges as soon as practicable after permanent seeding.

   f. If there will be more than 1 month between final cleanup and the beginning of permanent seeding and reasonable alternative access to the right-of-way is available, remove temporary equipment bridges as soon as practicable after final cleanup.

g. Obtain any necessary approval from the COE, or the appropriate state agency for permanent bridges.

6. Dry-Ditch Crossing Methods

a. Unless approved otherwise by the appropriate federal or state agency, install the pipeline using one of the dry-ditch methods outlined below for crossings of waterbodies up to 30 feet wide (at the water's edge at the time of construction) that are state-designated as either coldwater or significant coolwater or warmwater fisheries, or federally-designated as critical habitat.

b. Dam and Pump

(1) The dam-and-pump method may be used without prior approval for crossings of waterbodies where pumps can adequately transfer streamflow volumes around the work area, and there are no concerns about sensitive species passage.

(2) Implementation of the dam-and-pump crossing method must meet the following performance criteria:

(i) use sufficient pumps, including on-site backup pumps, to maintain downstream flows;
(ii) construct dams with materials that prevent sediment and other pollutants from entering the waterbody (e.g., sandbags or clean gravel with plastic liner);
(iii) screen pump intakes to minimize entrainment of fish;
(iv) prevent streambed scour at pump discharge; and
(v) continuously monitor the dam and pumps to ensure proper operation throughout the waterbody crossing.

c. Flume Crossing

The flume crossing method requires implementation of the following steps:

(1) install flume pipe after blasting (if necessary), but before any trenching;

(2) use sand bag or sand bag and plastic sheeting diversion structure or equivalent to develop an effective seal and to divert stream flow through the flume pipe (some modifications to the stream bottom may be required to achieve an effective seal);

(3) properly align flume pipe(s) to prevent bank erosion and streambed scour;

(4) do not remove flume pipe during trenching, pipelaying, or backfilling activities, or initial streambed restoration efforts; and

(5) remove all flume pipes and dams that are not also part of the equipment bridge as soon as final cleanup of the stream bed and bank is complete.

d. Horizontal Directional Drill

For each waterbody or wetland that would be crossed using the HDD method, file with the Secretary for the review and written approval by the Director, a plan that includes:

(1) site-specific construction diagrams that show the location of mud pits, pipe assembly areas, and all areas to be disturbed or cleared for construction;

(2) justification that disturbed areas are limited to the minimum needed to construct the crossing;

(3) identification of any aboveground disturbance or clearing between the HDD entry and exit workspaces during construction;

(4) a description of how an inadvertent release of drilling mud would be contained and cleaned up; and

(5) a contingency plan for crossing the waterbody or wetland in the event the HDD is unsuccessful and how the abandoned drill hole would be sealed, if necessary.

The requirement to file HDD plans does not apply to projects constructed under the automatic authorization provisions in the FERC's regulations.

7. Crossings of Minor Waterbodies

Where a dry-ditch crossing is not required, minor waterbodies may be crossed using the open-cut crossing method, with the following restrictions:

a. except for blasting and other rock breaking measures, complete instream construction activities (including trenching, pipe installation, backfill, and restoration of the streambed contours) within 24 hours.

Streambanks and unconsolidated streambeds may require additional restoration after this period;

b. limit use of equipment operating in the waterbody to that needed to construct the crossing; and

c. equipment bridges are not required at minor waterbodies that do not have a state-designated fishery classification or protected status (e.g., agricultural or intermittent drainage ditches). However, if an equipment bridge is used it must be constructed as described in section V.B.5.

8. Crossings of Intermediate Waterbodies

Where a dry-ditch crossing is not required, intermediate waterbodies may be crossed using the open-cut crossing method, with the following restrictions:

a. complete instream construction activities (not including blasting and other rock breaking measures) within 48 hours, unless site-specific conditions make completion within 48 hours infeasible;

b. limit use of equipment operating in the waterbody to that needed to construct the crossing; and

c. all other construction equipment must cross on an equipment bridge as specified in section V.B.5.

9. Crossings of Major Waterbodies

Before construction, the project sponsor shall file with the Secretary for the review and written approval by the Director a detailed, site-specific construction plan and scaled drawings identifying all areas to be disturbed by construction for each major waterbody crossing (the scaled drawings are not required for any offshore portions of pipeline projects). This plan must be developed in consultation with the appropriate state and federal agencies and shall include extra work areas, spoil storage areas, sediment control structures, etc., as well as mitigation for navigational issues. The requirement to file major waterbody crossing plans does not apply to projects constructed under the automatic authorization provisions of the FERC's regulations.

The Environmental Inspector may adjust the final placement of the erosion and sediment control structures in the field to maximize effectiveness.

10. Temporary Erosion and Sediment Control

Install sediment barriers (as defined in section IV.F.3.a of the Plan) immediately after initial disturbance of the waterbody or adjacent upland.

Sediment barriers must be properly maintained throughout construction and reinstalled as necessary (such as after backfilling of the trench) until replaced by permanent erosion controls or restoration of adjacent upland areas is complete. Temporary erosion and sediment control measures are addressed in more detail in the Plan; however, the following specific measures must be implemented at stream crossings:

a. install sediment barriers across the entire construction right-of-way at all waterbody crossings, where necessary to prevent the flow of sediments into the waterbody. Removable sediment barriers (or driveable berms) must be installed across the travel lane. These removable sediment barriers can be removed during the construction day, but must be re-installed after construction has stopped for the day and/or when heavy precipitation is imminent;

b. where waterbodies are adjacent to the construction right-of-way and the right-of-way slopes toward the waterbody, install sediment barriers along the edge of the construction right-of-way as necessary to contain spoil within the construction right-of-way and prevent sediment flow into the waterbody; and

c. use temporary trench plugs at all waterbody crossings, as necessary, to prevent diversion of water into upland portions of the pipeline trench and to keep any accumulated trench water out of the waterbody.

11. Trench Dewatering

Dewater the trench (either on or off the construction right-of-way) in a manner that does not cause erosion and does not result in silt-laden water flowing into any waterbody. Remove the dewatering structures as soon as practicable after the completion of dewatering activities.

C. RESTORATION

1. Use clean gravel or native cobbles for the upper 1 foot of trench backfill in all waterbodies that contain coldwater fisheries.

2. For open-cut crossings, stabilize waterbody banks and install temporary sediment barriers within 24 hours of completing instream construction activities. For dry-ditch crossings, complete streambed and bank stabilization before returning flow to the waterbody channel.

3. Return all waterbody banks to preconstruction contours or to a stable angle of repose as approved by the Environmental Inspector.

4. Install erosion control fabric or a functional equivalent on waterbody banks at the time of final bank recontouring. Do not use synthetic monofilament

mesh/netted erosion control materials in areas designated as sensitive wildlife habitat unless the product is specifically designed to minimize harm to wildlife. Anchor erosion control fabric with staples or other appropriate devices.

5. Application of riprap for bank stabilization must comply with COE, or its delegated agency, permit terms and conditions.

6. Unless otherwise specified by state permit, limit the use of riprap to areas where flow conditions preclude effective vegetative stabilization techniques such as seeding and erosion control fabric.

7. Revegetate disturbed riparian areas with native species of conservation grasses, legumes, and woody species, similar in density to adjacent undisturbed lands.

8. Install a permanent slope breaker across the construction right-of-way at the base of slopes greater than 5 percent that are less than 50 feet from the waterbody, or as needed to prevent sediment transport into the waterbody. In addition, install sediment barriers as outlined in the Plan.

   In some areas, with the approval of the Environmental Inspector, an earthen berm may be suitable as a sediment barrier adjacent to the waterbody.

9. Sections V.C.3 through V.C.7 above also apply to those perennial or intermittent streams not flowing at the time of construction.

D. POST-CONSTRUCTION MAINTENANCE

1. Limit routine vegetation mowing or clearing adjacent to waterbodies to allow a riparian strip at least 25 feet wide, as measured from the waterbody's mean high water mark, to permanently revegetate with native plant species across the entire construction right-of-way. However, to facilitate periodic corrosion/leak surveys, a corridor centered on the pipeline and up to 10 feet wide may be cleared at a frequency necessary to maintain the 10-foot corridor in an herbaceous state. In addition, trees that are located within 15 feet of the pipeline that have roots that could compromise the integrity of the pipeline coating may be cut and removed from the permanent right-of-way. Do not conduct any routine vegetation mowing or clearing in riparian areas that are between HDD entry and exit points.

2. Do not use herbicides or pesticides in or within 100 feet of a waterbody except as allowed by the appropriate land management or state agency.

3. Time of year restrictions specified in section VII.A.5 of the Plan (April 15 – August 1 of any year) apply to routine mowing and clearing of riparian areas.

VI. WETLAND CROSSINGS

A. GENERAL

1. The project sponsor shall conduct a wetland delineation using the current federal methodology and file a wetland delineation report with the Secretary before construction. The requirement to file a wetland delineation report does not apply to projects constructed under the automatic authorization provisions in the FERC's regulations.

   This report shall identify:

   a. by milepost all wetlands that would be affected;

   b. the National Wetlands Inventory (NWI) classification for each wetland;

   c. the crossing length of each wetland in feet; and

   d. the area of permanent and temporary disturbance that would occur in each wetland by NWI classification type.

   The requirements outlined in this section do not apply to wetlands in actively cultivated or rotated cropland. Standard upland protective measures, including workspace and topsoiling requirements, apply to these agricultural wetlands.

2. Route the pipeline to avoid wetland areas to the maximum extent possible. If a wetland cannot be avoided or crossed by following an existing right-of-way, route the new pipeline in a manner that minimizes disturbance to wetlands. Where looping an existing pipeline, overlap the existing pipeline right-of-way with the new construction right-of-way. In addition, locate the loop line no more than 25 feet away from the existing pipeline unless site-specific constraints would adversely affect the stability of the existing pipeline.

3. Limit the width of the construction right-of-way to 75 feet or less. Prior written approval of the Director is required where topographic conditions or soil limitations require that the construction right-of-way width within the boundaries of a federally delineated wetland be expanded beyond 75 feet. Early in the planning process the project sponsor is encouraged to identify site-specific areas where excessively wide trenches could occur and/or where spoil piles could be difficult to maintain because existing soils lack adequate unconfined compressive strength.

4. Wetland boundaries and buffers must be clearly marked in the field with signs and/or highly visible flagging until construction-related ground disturbing activities are complete.

5. Implement the measures of sections V and VI in the event a waterbody crossing is located within or adjacent to a wetland crossing. If all measures of sections V and VI cannot be met, the project sponsor must file with the Secretary a site-specific crossing plan for review and written approval by the Director before construction. This crossing plan shall address at a minimum:

   a. spoil control;

   b. equipment bridges;

   c. restoration of waterbody banks and wetland hydrology;

   d. timing of the waterbody crossing;

   e. method of crossing; and

   f. size and location of all extra work areas.

6. Do not locate aboveground facilities in any wetland, except where the location of such facilities outside of wetlands would prohibit compliance with U.S. Department of Transportation regulations.

B. INSTALLATION

1. Extra Work Areas and Access Roads

   a. Locate all extra work areas (such as staging areas and additional spoil storage areas) at least 50 feet away from wetland boundaries, except where the adjacent upland consists of cultivated or rotated cropland or other disturbed land.

   b. The project sponsor shall file with the Secretary for review and written approval by the Director, site-specific justification for each extra work area with a less than 50-foot setback from wetland boundaries, except where adjacent upland consists of cultivated or rotated cropland or other disturbed land. The justification must specify the site-specific conditions that will not permit a 50-foot setback and measures to ensure the wetland is adequately protected.

   c. The construction right-of-way may be used for access when the wetland soil is firm enough to avoid rutting or the construction right-of-way has been appropriately stabilized to avoid rutting (e.g., with timber riprap, prefabricated equipment mats, or terra mats).

      In wetlands that cannot be appropriately stabilized, all construction equipment other than that needed to install the wetland crossing shall

use access roads located in upland areas. Where access roads in upland areas do not provide reasonable access, limit all other construction equipment to one pass through the wetland using the construction right-of-way.

d. The only access roads, other than the construction right-of-way, that can be used in wetlands are those existing roads that can be used with no modifications or improvements, other than routine repair, and no impact on the wetland.

2. Crossing Procedures

a. Comply with COE, or its delegated agency, permit terms and conditions.

b. Assemble the pipeline in an upland area unless the wetland is dry enough to adequately support skids and pipe.

c. Use “push-pull” or “float” techniques to place the pipe in the trench where water and other site conditions allow.

d. Minimize the length of time that topsoil is segregated and the trench is open. Do not trench the wetland until the pipeline is assembled and ready for lowering in.

e. Limit construction equipment operating in wetland areas to that needed to clear the construction right-of-way, dig the trench, fabricate and install the pipeline, backfill the trench, and restore the construction right-of-way.

f. Cut vegetation just above ground level, leaving existing root systems in place, and remove it from the wetland for disposal.

The project sponsor can burn woody debris in wetlands, if approved by the COE and in accordance with state and local regulations, ensuring that all remaining woody debris is removed for disposal.

g. Limit pulling of tree stumps and grading activities to directly over the trenchline. Do not grade or remove stumps or root systems from the rest of the construction right-of-way in wetlands unless the Chief Inspector and Environmental Inspector determine that safety-related construction constraints require grading or the removal of tree stumps from under the working side of the construction right-of-way.

h. Segregate the top 1 foot of topsoil from the area disturbed by trenching, except in areas where standing water is present or soils are

saturated. Immediately after backfilling is complete, restore the segregated topsoil to its original location.

i. Do not use rock, soil imported from outside the wetland, tree stumps, or brush riprap to support equipment on the construction right-of-way.

j. If standing water or saturated soils are present, or if construction equipment causes ruts or mixing of the topsoil and subsoil in wetlands, use low-ground-weight construction equipment, or operate normal equipment on timber riprap, prefabricated equipment mats, or terra mats.

k. Remove all project-related material used to support equipment on the construction right-of-way upon completion of construction.

3. Temporary Sediment Control

Install sediment barriers (as defined in section IV.F.3.a of the Plan) immediately after initial disturbance of the wetland or adjacent upland. Sediment barriers must be properly maintained throughout construction and reinstalled as necessary (such as after backfilling of the trench). Except as noted below in section VI.B.3.c, maintain sediment barriers until replaced by permanent erosion controls or restoration of adjacent upland areas is complete. Temporary erosion and sediment control measures are addressed in more detail in the Plan.

a. Install sediment barriers across the entire construction right-of-way immediately upslope of the wetland boundary at all wetland crossings where necessary to prevent sediment flow into the wetland.

b. Where wetlands are adjacent to the construction right-of-way and the right-of-way slopes toward the wetland, install sediment barriers along the edge of the construction right-of-way as necessary to contain spoil within the construction right-of-way and prevent sediment flow into the wetland.

c. Install sediment barriers along the edge of the construction right-of-way as necessary to contain spoil and sediment within the construction right-of-way through wetlands. Remove these sediment barriers during right-of-way cleanup.

4. Trench Dewatering

Dewater the trench (either on or off the construction right-of-way) in a manner that does not cause erosion and does not result in silt-laden water flowing into any wetland. Remove the dewatering structures as soon as practicable after the completion of dewatering activities.

C. RESTORATION

1. Where the pipeline trench may drain a wetland, construct trench breakers at the wetland boundaries and/or seal the trench bottom as necessary to maintain the original wetland hydrology.

2. Restore pre-construction wetland contours to maintain the original wetland hydrology.

3. For each wetland crossed, install a trench breaker at the base of slopes near the boundary between the wetland and adjacent upland areas. Install a permanent slope breaker across the construction right-of-way at the base of slopes greater than 5 percent where the base of the slope is less than 50 feet from the wetland, or as needed to prevent sediment transport into the wetland. In addition, install sediment barriers as outlined in the Plan. In some areas, with the approval of the Environmental Inspector, an earthen berm may be suitable as a sediment barrier adjacent to the wetland.

4. Do not use fertilizer, lime, or mulch unless required in writing by the appropriate federal or state agency.

5. Consult with the appropriate federal or state agencies to develop a project-specific wetland restoration plan. The restoration plan shall include measures for re-establishing herbaceous and/or woody species, controlling the invasion and spread of invasive species and noxious weeds (e.g., purple loosestrife and phragmites), and monitoring the success of the revegetation and weed control efforts. Provide this plan to the FERC staff upon request.

6. Until a project-specific wetland restoration plan is developed and/or implemented, temporarily revegetate the construction right-of-way with annual ryegrass at a rate of 40 pounds/acre (unless standing water is present).

7. Ensure that all disturbed areas successfully revegetate with wetland herbaceous and/or woody plant species.

8. Remove temporary sediment barriers located at the boundary between wetland and adjacent upland areas after revegetation and stabilization of adjacent upland areas are judged to be successful as specified in section VII.A.4 of the Plan.

D. POST-CONSTRUCTION MAINTENANCE AND REPORTING

1. Do not conduct routine vegetation mowing or clearing over the full width of the permanent right-of-way in wetlands. However, to facilitate periodic corrosion/leak surveys, a corridor centered on the pipeline and up to 10 feet wide may be cleared at a frequency necessary to maintain the 10-foot corridor in an herbaceous state. In addition, trees within 15 feet of the pipeline with roots that could compromise the integrity of pipeline coating may be selectively cut and removed from the permanent right-of-way. Do not conduct any routine vegetation mowing or clearing in wetlands that are between HDD entry and exit points.

2. Do not use herbicides or pesticides in or within 100 feet of a wetland, except as allowed by the appropriate federal or state agency.

3. Time of year restrictions specified in section VII.A.5 of the Plan (April 15 – August 1 of any year) apply to routine mowing and clearing of wetland areas.

4. Monitor and record the success of wetland revegetation annually until wetland revegetation is successful.

5. Wetland revegetation shall be considered successful if all of the following criteria are satisfied:

    a. the affected wetland satisfies the current federal definition for a wetland (i.e., soils, hydrology, and vegetation);

    b. vegetation is at least 80 percent of either the cover documented for the wetland prior to construction, or at least 80 percent of the cover in adjacent wetland areas that were not disturbed by construction;

    c. if natural rather than active revegetation was used, the plant species composition is consistent with early successional wetland plant communities in the affected ecoregion; and

    d. invasive species and noxious weeds are absent, unless they are abundant in adjacent areas that were not disturbed by construction.

6. Within 3 years after construction, file a report with the Secretary identifying the status of the wetland revegetation efforts and documenting success as defined in section VI.D.5, above. The requirement to file wetland restoration reports with the Secretary does not apply to projects constructed under the automatic authorization, prior notice, or advance notice provisions in the FERC's regulations.

    For any wetland where revegetation is not successful at the end of 3 years after construction, develop and implement (in consultation with a

professional wetland ecologist) a remedial revegetation plan to actively revegetate wetlands. Continue revegetation efforts and file a report annually documenting progress in these wetlands until wetland revegetation is successful.

VII. HYDROSTATIC TESTING

A. NOTIFICATION PROCEDURES AND PERMITS

1. Apply for state-issued water withdrawal permits, as required.

2. Apply for National Pollutant Discharge Elimination System (NPDES) or state-issued discharge permits, as required.

3. Notify appropriate state agencies of intent to use specific sources at least 48 hours before testing activities unless they waive this requirement in writing.

B. GENERAL

1. Perform 100 percent radiographic inspection of all pipeline section welds or hydrotest the pipeline sections, before installation under waterbodies or wetlands.

2. If pumps used for hydrostatic testing are within 100 feet of any waterbody or wetland, address secondary containment and refueling of these pumps in the project's Spill Prevention and Response Procedures.

3. The project sponsor shall file with the Secretary before construction a list identifying the location of all waterbodies proposed for use as a hydrostatic test water source or discharge location. This filing requirement does not apply to projects constructed under the automatic authorization provisions of the FERC's regulations.

C. INTAKE SOURCE AND RATE

1. Screen the intake hose to minimize the potential for entrainment of fish.

2. Do not use state-designated exceptional value waters, waterbodies which provide habitat for federally listed threatened or endangered species, or waterbodies designated as public water supplies, unless appropriate federal, state, and/or local permitting agencies grant written permission.

3. Maintain adequate flow rates to protect aquatic life, provide for all waterbody uses, and provide for downstream withdrawals of water by existing users.

4. Locate hydrostatic test manifolds outside wetlands and riparian areas to the maximum extent practicable.

D. DISCHARGE LOCATION, METHOD, AND RATE

1. Regulate discharge rate, use energy dissipation device(s), and install sediment barriers, as necessary, to prevent erosion, streambed scour, suspension of sediments, or excessive streamflow.

2. Do not discharge into state-designated exceptional value waters, waterbodies which provide habitat for federally listed threatened or endangered species, or waterbodies designated as public water supplies, unless appropriate federal, state, and local permitting agencies grant written permission.

ATTACHMENT J

MINNESOTA NPDES/SDS PERMIT
NO. MNR100001

Stantec

MINNESOTA POLLUTION CONTROL AGENCY

AUTHORIZATION TO DISCHARGE

STORMWATER ASSOCIATED WITH CONSTRUCTION ACTIVITY

UNDER THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)/

STATE DISPOSAL SYSTEM (SDS) PROGRAM

MNR100001

Permittee:	Multiple
Project Name:	Construction Stormwater General Permit
Issuance date:	August 1, 2023
Expiration date:	July 31, 2028

The state of Minnesota, on behalf of its citizens through the Minnesota Pollution Control Agency (MPCA), authorizes the Permittee(s) named above seeking coverage under this general permit to discharge stormwater associated with construction activity to waters of the state of Minnesota in accordance with the requirements of this permit.

The goal of this permit is to reduce pollutant levels in point source discharges and protect water quality in accordance with the U.S. Clean Water Act, Minnesota statutes and rules, and federal laws and regulations.

This permit is effective on the issuance date identified above. This permit expires at midnight on the expiration date identified above.

Signature: Ryan Anderson

This document has been electronically signed.

for the Minnesota Pollution Control Agency

Ryan Anderson
Manager
Stormwater Section
Municipal Division

Permit application:
Submit via MPCA e-Services at
https://rsp.pca.state.mn.us/

Questions on this permit?
Contact e-Services at
651-757-2728 or 844-828-0942

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1.1	**Permit Coverage**. [Minn. R. 7090]
1.2	This permit is required for construction activity that results in land disturbance of equal to or greater than one (1) acre or if a project is part of a common plan of development or sale that ultimately will disturb greater than one (1) acre, and authorizes, subject to the terms and conditions of this permit, the discharge of stormwater associated with construction activity. [Minn. R. 7090]
1.3	Construction activity covered by this permit cannot commence until coverage under this permit is effective as described in item 3.3 through 3.4 or, if applicable, until the Minnesota Pollution Control Agency (MPCA) has issued an individual National Pollutant Discharge Elimination System (NPDES)/State Disposal System (SDS) construction stormwater permit for the project. [Minn. R. 7090]
1.4	This permit covers all areas of the State of Minnesota except land wholly within the boundaries of a federally recognized Indian Reservation owned by a tribe or a tribal member or land held in trust by the federal government for a tribe or tribal member. [Minn. R. 7090]
1.5	Coverage under this permit is not required when all stormwater from construction activity is routed directly to and treated by a "treatment works," as defined in Minn. Stat. Section 115.01, subd. 21, operated under an individual NPDES/SDS permit with a Total Suspended Solids (TSS) effluent limit. [Minn. R. 7090]
1.6	This permit covers ongoing projects covered under any previous construction stormwater permit that are not complete on the issuance date of this permit. Permittees must either remain in compliance with the previous permit and terminate coverage within 18 months of the issuance date of this permit or comply with this permit, including updating the Stormwater Pollution Prevention Plan (SWPPP), within the 18-month period. Permittees of previously permitted projects are not required to incorporate any additional requirements regarding the permanent stormwater treatment system included in this reissued permit. [Minn. R. 7090]
1.7	Coverage for projects that extend beyond the expiration date of this permit remains effective for a grace period of 18 months. If Permittees cannot complete projects during the grace period, the MPCA will extend coverage under the next permit and permittees must comply with the requirements of the new permit including updating the SWPPP. Permittees are not required to follow changes to the permanent stormwater treatment section of the next permit. [Minn. R. 7090]
2.1	**Prohibitions and Limitations of Coverage**. [Minn. R. 7090]
2.2	The owner must develop a complete and accurate SWPPP that complies with item 5.2 prior to submitting the application for coverage and starting construction activity. Failure to prepare a SWPPP prior to submitting the application may result in permit revocation. [Minn. R. 7090]
2.3	This permit prohibits discharges of any material other than stormwater treated in compliance with this permit and discharges from dewatering or basin draining activities in accordance with Section 10. Prohibited discharges include, but are not limited to, wastewater from washout of concrete, stucco, paint, form release oils, curing compounds and other construction materials, fuels, oils, or other pollutants used in vehicle and equipment operation and maintenance, soaps or solvents used in vehicle and equipment washing and maintenance, and other hazardous substances or wastes. [Minn. R. 7090]
2.4	This permit does not authorize stormwater discharges related to the placement of fill into waters of the state requiring local, state or federal authorizations (such as U.S. Army Corps of Engineers Section 404 permits, Minnesota Department of Natural Resources (DNR) Public Waters Work permits or local governmental unit (LGU) Wetland Conservation Act replacement plans or determinations). [Minn. R. 7090]
2.5	This permit does not authorize stormwater discharges associated with industrial activity except for construction activity. Permittees must obtain coverage for discharges associated with industrial activity under a separate NPDES/SDS permit once day-to-day operational activities commence even if construction is ongoing. [Minn. R. 7090]
2.6	This permit does not authorize discharges from non-point source agricultural and silvicultural activities excluded from NPDES permit requirements under 40 CFR pt. 122.3(e). [Minn. R. 7090]
2.7	This permit does not authorize stormwater discharges to Prohibited, Restricted, Special or Impaired waters unless permittees follow the additional stormwater requirements in Section 23. [Minn. R. 7090]
2.8	This permit does not replace or satisfy any environmental review requirements including those under the Minnesota Environmental Policy Act or the National Environmental Policy Act. The owner must verify completion of any environmental review required by law, including any required Environmental Assessment Work Sheets or Environmental Impact Statements, Federal environmental review, or other required review prior to applying for coverage under this permit. If any part of your common plan of development or sale requires environmental review, coverage under this permit cannot be

	obtained until such environmental review is complete. [Minn. R. 7090]
2.9	This permit does not replace or satisfy any review requirements for discharges adversely impacting State or Federally designated endangered or threatened species or a designated critical habitat. The owner must comply with the National Historic Preservation Act and conduct all required review and coordination related to historic preservation, including significant anthropological sites and any burial sites, with the Minnesota Historic Preservation Officer. [Minn. R. 7090]
2.10	This permit does not authorize discharges to wetlands unless the permittee complies with the requirements in Section 22. Coverage under this permit cannot be issued until the requirements for wetland permits, decisions, other determinations, or the mitigative sequence required in section 22 have been finalized and documented. [Minn. R. 7050.0186]
3.1	**Application and Coverage Effective Date**. [Minn. R. 7090]
3.2	The owner and operator must submit a complete and accurate on-line application with the appropriate fee to the MPCA for each project that disturbs one (1) or more acres of land or for a common plan of development or sale that will ultimately disturb one (1) or more acres. [Minn. R. 7090]
3.3	For projects or common plans of development or sale that disturb less than 50 acres or do not discharge stormwater within 1 mile (aerial radius measurement) of a special or impaired water, permittees do not need to submit the SWPPP with the application. Permit coverage for these projects is effective upon application and completing the payment process. [Minn. R. 7090]
3.4	For certain projects or common plans of development or sale disturbing 50 acres or more, the complete SWPPP must be included with the application and submitted at least 30 days before the start of construction activity. This applies if there is a discharge point on the project within one mile (aerial radius measurement) of, and flows to, a special water listed in item 23.3 through 23.6 or an impaired water as described in item 23.7. Permit coverage for these projects is effective upon submitting the application and complete SWPPP, completing the payment process and receiving a determination from the MPCA that the review of the SWPPP is complete. The determination may take longer than 30 days if the SWPPP is incomplete. If the MPCA fails to contact the permittees within 30 days of application receipt, coverage is effective 30 days after completing the payment process. [Minn. R. 7090]
3.5	The application requires listing all persons meeting the definition of owner and operator as permittees. The owner is responsible for compliance with all terms and conditions of this permit. The operator is responsible for compliance with Sections 3, 4, 6-22, 24 and applicable requirements for construction activity in Section 23. [Minn. R. 7090]
3.6	Permittees will receive coverage notification in a manner determined by the MPCA. [Minn. R. 7090]
3.7	For construction projects where the owner or operator changes (e.g., an original developer sells portions of the property to various homebuilders or sells the entire site to a new owner), the current owner and the new owner or operator must submit a complete permit modification form provided by the MPCA. The current owner and the new owner or operator must submit the form prior to the new owner or operator commencing construction activity or no later than 30 days after taking ownership of the property. [Minn. R. 7090]
3.8	For construction projects where the owner or operator changes, the current owner must provide a SWPPP to the new owner and operator that specifically addresses the remaining construction activity. The new owner or operator can implement the original SWPPP, modify the SWPPP, or develop a new SWPPP. Permittees must ensure their activities do not render another party's erosion prevention and sediment control BMPs ineffective. [Minn. R. 7090]
4.1	**Termination of Coverage**. [Minn. R. 7090]
4.2	Permittees must submit a NOT within 30 days after all termination conditions listed in Section 13 are complete. [Minn. R. 7090]
4.3	Permittees must submit a NOT within 30 days after selling or otherwise legally transferring the entire site, including permit responsibility for roads (e.g., street sweeping) and stormwater infrastructure final clean out, or transferring portions of a site to another party. The permittees' coverage under this permit terminates at midnight on the submission date of the NOT. [Minn. R. 7090]
4.4	Permittees may terminate permit coverage prior to completion of all construction activity if they meet all of the following conditions: a. construction activity has ceased for at least 90 days; and b. at least 90 percent (by area) of all originally proposed construction activity has been completed and permanent cover has been established on those areas; and c. on areas where construction activity is not complete, permanent cover has been established; and d. the site complies with item 13.3 through 13.7.

	After permit coverage is terminated under this item, any subsequent development on the remaining portions of the site will require permit coverage if the subsequent development itself or as part of the remaining common plan of development or sale will result in land disturbing activities of one (1) or more acres in size. [Minn. R. 7090]
4.5	Permittees may terminate coverage upon MPCA approval after submitting information documenting the owner cancelled the project. [Minn. R. 7090]
5.1	**Stormwater Pollution Prevention Plan (SWPPP) Content**. [Minn. R. 7090]
5.2	The owner must develop and implement a SWPPP. The SWPPP must include items 5.3 through 5.26. [Minn. R. 7090]
5.3	The SWPPP must incorporate specific Best Management Practices (BMP) used to comply with the requirements of this permit. [Minn. R. 7090]
5.4	The SWPPP must include a narrative describing the timing for installation of all erosion prevention and sediment control BMPs and a description of the permanent stormwater treatment systems. [Minn. R. 7090]
5.5	The SWPPP must include the location and type of all temporary and permanent erosion prevention and sediment control BMPs along with procedures used to establish additional temporary BMPs as necessary for the site conditions during construction. Standard details and/or specifications for BMPs must be included in the final plans and specifications for the project. [Minn. R. 7090]
5.6	The SWPPP must include the calculations and other information used for the design of temporary sediment basins and any of the permanent stormwater treatment systems required in Section 15. [Minn. R. 7090]
5.7	The SWPPP must include estimated quantities anticipated at the start of the project for the life of the project for all erosion prevention and sediment control BMPs (e.g., linear feet of silt fence or square feet of erosion control blanket). [Minn. R. 7090]
5.8	The SWPPP must include the number of acres of impervious surface for both pre- and post-construction. [Minn. R. 7090]
5.9	The SWPPP must include a site map with existing and final grades, including drainage area boundaries, directions of flow and all discharge points where stormwater is leaving the site or entering a surface water. The site map must indicate the areas of steep slopes. The site map must also include impervious surfaces, soil types and locations of potential pollutant-generating activities as identified in Section 12. [Minn. R. 7090]
5.10	The SWPPP must include a map of all surface waters, existing wetlands, and stormwater ponds or basins that can be identified on maps such as United States Geological Survey 7.5-minute quadrangle maps, the National Wetland Inventory map or equivalent maps and are within one mile (aerial radius measurement) from the project boundaries that will receive stormwater from the construction site, during or after construction. The SWPPP must identify if the surface waters are special or impaired waters. [Minn. R. 7090]
5.11	The SWPPP must include a site map showing construction activity areas that are adjacent to and drain to Public Waters for which the DNR has promulgated "work in water restrictions" during specified fish spawning time frames. [Minn. R. 7090]
5.12	Permittees must identify locations of 50' buffer zones as required in item 9.17 and 100' permanent buffer zones as required in item 23.11, on plan sheets in the SWPPP. [Minn. R. 7090]
5.13	If permittees determine compliance with the following requirements is infeasible, they must document the determination in the SWPPP: a. temporary sediment basins as described in Section 14; and b. for linear projects, if the permanent stormwater treatment system cannot be constructed within the right-of-way, a reasonable attempt must be made to obtain additional right-of-way (item 15.9); and c. buffer zones as described in item 9.17 and item 23.11. [Minn. R. 7090]
5.14	If permittees determine that a temporary sediment basin is infeasible as described in item 14.10, the SWPPP must describe the alternative BMPs used. [Minn. R. 7090]
5.15	Where systems cannot meet the full volume reduction requirement on-site, (e.g., the site has infiltration prohibitions, see item 16.14 through item 16.21) the permittee must document the reasons in the SWPPP. [Minn. R. 7090]
5.16	The SWPPP must include any stormwater mitigation measures proposed to be part of the final project in any environmental review document, endangered species review, archeological or other required local, state or federal review conducted for the project. For purposes of this permit, mitigation measures mean actions necessary to avoid, minimize, or mitigate for impacts related to erosion prevention, sediment control, the permanent stormwater treatment system, pollution prevention management measures and discharges associated with the project's construction activity. [Minn. R. 7090]

5.17	The SWPPP must describe the methods used for permanent cover of all exposed soil areas. [Minn. R. 7090]
5.18	Permittees must identify the locations of areas where construction will be phased to minimize the duration of exposed soil areas in the SWPPP. [Minn. R. 7090]
5.19	For projects with a discharge point on the project within one (1) mile (aerial radius measurement) of and which flows to an impaired water, permittees must identify the impaired water(s), and any United States Environmental Protection Agency (USEPA)-approved Total Maximum Daily Load (TMDL) for the pollutant(s) or stressor(s) described in item 23.7. Permittees' identification must include those TMDLs approved at any time prior to permit application submittal and are still in effect. [Minn. R. 7090]
5.20	Permittees must document in the SWPPP, all trained individuals identified in item 21.2. Documentation must include: a. names of personnel required to be trained; and b. dates of training and name of instructor(s) and entity providing training; and c. content of training course. If permittees do not know the names of the individuals at the time of application, the permittees must ensure they document training before construction activity commences. [Minn. R. 7090]
5.21	The SWPPP must identify a person knowledgeable and experienced in the application of erosion prevention and sediment control BMPs who will coordinate with all contractors, subcontractors, and operators on-site to oversee the implementation of the SWPPP. [Minn. R. 7090]
5.22	The SWPPP must describe any specific chemicals and chemical treatment systems used for enhancing the sedimentation process and how it achieves compliance with item 9.19. [Minn. R. 7090]
5.23	The SWPPP must identify the person(s), organizations, or entities responsible for long-term operation and maintenance of permanent stormwater treatment systems. [Minn. R. 7090]
5.24	The SWPPP must describe methods to minimize soil compaction and preserve topsoil. Minimizing soil compaction is not required where the function of a specific area dictates compaction. [Minn. R. 7090]
5.25	The SWPPP must include any site assessments for groundwater or soil contamination required in item 16.15. [Minn. R. 7090]
5.26	The SWPPP must account for the following factors in designing temporary erosion prevention and sediment control BMPs: a. the expected amount, frequency, intensity, and duration of precipitation; and b. the nature of stormwater runoff and run-on at the site, including factors such as expected flow from impervious surfaces, slopes, and site drainage features; and c. the stormwater volume, velocity, and peak flowrates to minimize discharge of pollutants in stormwater and to minimize channel and streambank erosion and scour in the immediate vicinity of discharge points; and d. the range of soil particle sizes expected to be present. [Minn. R. 7090]
6.1	**SWPPP Amendments**. [Minn. R. 7090]
6.2	One of the individuals described in item 21.2.a or item 21.2.b or another qualified individual must complete all SWPPP changes. Changes involving the use of a less stringent BMP must include a justification describing how the replacement BMP is effective for the site characteristics. [Minn. R. 7090]
6.3	Permittees must amend the SWPPP within 7 days to include additional or modified BMPs whenever there is a change in design, construction, operation, maintenance, weather or seasonal conditions having a significant effect on the discharge of pollutants to surface waters or groundwater. [Minn. R. 7090]
6.4	Permittees must amend the SWPPP within 7 days to include additional or modified BMPs whenever inspections or investigations by the site owner or operator, USEPA or MPCA officials indicate the SWPPP is not effective in eliminating or significantly minimizing the discharge of pollutants to surface waters or groundwater or the discharges are causing water quality standard exceedances (e.g., nuisance conditions as defined in Minn. R. 7050.0210, subp. 2) or the SWPPP is not consistent with the objectives of a USEPA approved TMDL. [Minn. R. 7050.0210]
7.1	**BMP Selection and Stormwater Management**. [Minn. R. 7090]
7.2	Permittees must select, install, and maintain the BMPs identified in the SWPPP and in this permit in an appropriate and functional manner and in accordance with relevant manufacturer specifications and accepted engineering practices to minimize the discharge of pollutants in stormwater from construction activities. Examples of stormwater management practices for this section include but are not limited to wet sedimentation basins, temporary depressions to hold

	stormwater, stormwater routing, dikes, berms, pumping, and stormwater treatment BMPs. Permittees must phase and incorporate stormwater management principles as the construction progresses. Unless infeasible, temporary or permanent wet sedimentation basins (when required, see section 14 and 15) should be constructed as a first step in the process and stormwater routed to these. [Minn. R. 7090]
7.3	Permittees must not disturb more land (i.e., phasing) than can be effectively inspected and maintained in accordance with Section 11. [Minn. R. 7090]
7.4	If permittees will be using some type of erosion control netting on the site as part of the soil stabilization techniques, permittees are encouraged to use products that have been shown to minimize impacts on wildlife. The U.S. Fish & Wildlife Service recommends using types of netting practices that are considered "wildlife friendly," including those that use natural fiber or 100 percent biodegradable materials and that use a loose weave with a non-welded, movable jointed netting. Products that are not wildlife friendly include square plastic netting that are degradable (e.g., photodegradable, UV-degradable, oxo-degradable), netting made from polypropylene, nylon, polyethylene, or polyester. Other recommendations include removing the netting product when it is no longer needed. More information may be found at: https://www.fws.gov/initiative/protecting-wildlife/make-change-wildlife-friendly-erosion-control-products. There also may be State, Tribal, or local requirements about using wildlife friendly erosion control products. See Minnesota Department of Transportation requirements at: https://www.mndot.org/environment/erosion/rolled-erosion-prevention-products.html. [Minn. R. 7050]
8.1	**Erosion Prevention Practices**. [Minn. R. 7090]
8.2	Before work begins, permittees must delineate the location of areas not to be disturbed. [Minn. R. 7090]
8.3	Permittees must minimize the need for disturbance of portions of the project with steep slopes. When steep slopes must be disturbed, permittees must use techniques such as phasing and stabilization practices designed for steep slopes (e.g., slope draining and terracing). [Minn. R. 7090]
8.4	Permittees must stabilize all exposed soil areas, including stockpiles. Stabilization must be initiated immediately to limit soil erosion when construction activity has permanently or temporarily ceased on any portion of the site and will not resume for a period exceeding 14 calendar days (7 days for sites discharging to special or impaired waters, see section 24). Stabilization must be completed no later than 14 calendar days after the construction activity has ceased. Stabilization is not required on constructed base components of roads, parking lots and similar surfaces. Stabilization is not required on temporary stockpiles without significant silt, clay or organic components (e.g., clean aggregate stockpiles, demolition concrete stockpiles, sand stockpiles) but permittees must provide sediment controls at the base of the stockpile. [Minn. R. 7090]
8.5	For Public Waters that the Minnesota DNR has promulgated "work in water restrictions" during specified fish spawning time frames, permittees must complete stabilization of all exposed soil areas within 200 feet of the water's edge, and that drain to these waters, within 24 hours during the restriction period. [Minn. R. 7090]
8.6	Permittees must stabilize the normal wetted perimeter of the last 200 linear feet of temporary or permanent drainage ditches or swales that drain water from the site within 24 hours after connecting to a surface water or property edge. Permittees must complete stabilization of remaining portions of temporary or permanent ditches or swales within 14 calendar days (7 days for sites discharging to special or impaired waters, see section 24) after connecting to a surface water or property edge and construction in that portion of the ditch temporarily or permanently ceases. [Minn. R. 7090]
8.7	Temporary or permanent ditches or swales being used as a sediment containment system during construction (with properly designed rock-ditch checks, bio rolls, silt dikes, etc.) do not need to be stabilized. Permittees must stabilize these areas within 24 hours after their use as a sediment containment system ceases. [Minn. R. 7090]
8.8	Permittees must not use mulch, hydromulch, tackifier, polyacrylamide or similar erosion prevention practices within any portion of the normal wetted perimeter of a temporary or permanent drainage ditch or swale section with a continuous slope of greater than 2 percent. Examples of acceptable erosion prevention practices include blankets, poly, riprap, etc. [Minn. R. 7090]
8.9	Permittees must provide temporary or permanent energy dissipation at all pipe outlets within 24 hours after connection to a surface water or permanent stormwater treatment system. [Minn. R. 7090]
9.1	**Sediment Control Practices**. [Minn. R. 7090]
9.2	Permittees must establish sediment control BMPs on all downgradient perimeters of the site and downgradient areas of the site that drain to any surface water, including curb and gutter systems. Permittees must locate sediment control practices upgradient of any buffer zones. Permittees must install sediment control practices before any upgradient land-disturbing activities begin and must keep the sediment control practices in place until they establish permanent cover. [Minn. R. 7090]
9.3	If downgradient sediment controls are overloaded, based on frequent failure or excessive maintenance requirements,

	permittees must install additional upgradient sediment control practices or redundant BMPs to eliminate the overloading and amend the SWPPP to identify these additional practices as required in item 6.3. [Minn. R. 7090]
9.4	Temporary or permanent drainage ditches and sediment basins designed as part of a sediment containment system (e.g., ditches with rock-check dams) require sediment control practices only as appropriate for site conditions. [Minn. R. 7090]
9.5	A floating silt curtain placed in the water is not a sediment control BMP to satisfy item 9.2 except when working on a shoreline or below the waterline. Immediately after the construction activity (e.g., installation of rip rap along the shoreline) in that area is complete, permittees must install an upland perimeter control practice if exposed soils still drain to a surface water. [Minn. R. 7090]
9.6	Permittees must re-install all sediment control practices adjusted or removed to accommodate short-term activities such as clearing or grubbing, or passage of vehicles, immediately after the short-term activity is completed. Permittees must re-install sediment control practices before the next precipitation event even if the short-term activity is not complete. [Minn. R. 7090]
9.7	Permittees must protect all storm drain inlets using appropriate BMPs during construction until they establish permanent cover on all areas with potential for discharging to the inlet. [Minn. R. 7090]
9.8	Permittees may remove inlet protection for a particular inlet if a specific safety concern (e.g. street flooding/freezing) is identified by the permittees or the jurisdictional authority (e.g., city/county/township/Minnesota Department of Transportation engineer). Permittees must document the need for removal in the SWPPP. [Minn. R. 7090]
9.9	Permittees must provide silt fence or other effective sediment controls at the base of stockpiles on the downgradient perimeter prior to the initiation of stockpiling. Sediment controls must be managed in accordance with section 9.6. [Minn. R. 7090]
9.10	Permittees must locate stockpiles outside of natural buffers or surface waters, including stormwater conveyances such as curb and gutter systems unless there is a bypass in place for the stormwater. [Minn. R. 7090]
9.11	Permittees must install a vehicle tracking BMP to minimize the track out of sediment from the construction site or onto paved roads within the site. [Minn. R. 7090]
9.12	Permittees must use street sweeping in addition to vehicle tracking BMPs if vehicle tracking BMPs alone are not adequate to prevent sediment tracking onto the street. [Minn. R. 7090]
9.13	Permittees must install temporary sediment basins as required in Section 14. [Minn. R. 7090]
9.14	In any areas of the site where final vegetative stabilization will occur, permittees must restrict vehicle and equipment use to minimize soil compaction. [Minn. R. 7090]
9.15	Permittees must preserve topsoil on the site, unless infeasible. [Minn. R. 7090]
9.16	Permittees must direct discharges from BMPs to vegetated areas unless infeasible. [Minn. R. 7090]
9.17	Permittees must preserve a 50-foot natural buffer or, if a buffer is infeasible on the site, provide redundant (double) perimeter sediment controls when a surface water is located within 50 feet of the project's earth disturbances and stormwater flows to the surface water. Permittees must install perimeter sediment controls at least 5 feet apart unless limited by lack of available space. Natural buffers are not required adjacent to road ditches, judicial ditches, county ditches, stormwater conveyance channels, storm drain inlets, and sediment basins. If preserving the buffer is infeasible, permittees must document the reasons in the SWPPP. Sheet piling and other impermeable barriers installed in a manner that retains all stormwater are considered redundant perimeter control. [Minn. R. 7090]
9.18	Any sediment control made of soil must be temporarily or permanently stabilized within 24 hours. [Minn. R. 7090]
9.19	Permittees must use polymers, flocculants, or other sedimentation treatment chemicals in accordance with accepted engineering practices, dosing specifications and sediment removal design specifications provided by the manufacturer or supplier. The permittees must use conventional erosion and sediment controls prior to chemical addition and must direct treated stormwater to a sediment control system for filtration or settlement of the floc prior to discharge. [Minn. R. 7090]
10.1	**Dewatering and Basin Draining**. [Minn. R. 7090]
10.2	Permittees must not cause nuisance conditions (see Minn. R. 7050.0210, subp. 2) in surface waters from dewatering and basin draining (e.g., pumped discharges, trench/ditch cuts for drainage) discharges. Permittees must discharge turbid or sediment-laden waters related to dewatering or basin draining to a sediment control (e.g. sediment trap or basin, filter bag) designed to prevent discharges with visual turbidity. To the extent feasible, use well-vegetated (e.g., grassy or wooded), upland areas of the site to infiltrate dewatering water before discharge. Permittees are prohibited from using receiving waters as part of the treatment area. Permittees must visually check and photograph the discharge at the beginning and at least once every 24 hours of operation to ensure adequate treatment has been obtained and nuisance conditions will not

	result from the discharge. [Minn. R. 7050.0210]
10.3	If nuisance conditions result from the discharge, Permittees must cease dewatering immediately and corrective actions must occur before dewatering is resumed. Nuisance conditions includes, but is not limited to, a sediment plume in the discharge or the discharge appears cloudy, or opaque, or has a visible contrast, or has a visible oil film, or has aquatic habitat degradation that can be identified by an observer. [Minn. R. 7050.0210]
10.4	If permittees must discharge water containing oil or grease, they must use an oil-water separator or suitable filtration device (e.g., cartridge filters, absorbents pads) prior to discharge. [Minn. R. 7090]
10.5	Permittees must discharge all water from dewatering or basin-draining activities in a manner that does not cause erosion or scour in the immediate vicinity of discharge points or inundation of wetlands in the immediate vicinity of discharge points that causes significant adverse impact to the wetland. [Minn. R. 7090]
10.6	If permittees use filters with backwash water, they must haul the backwash water away for disposal, return the backwash water to the beginning of the treatment process, or incorporate the backwash water into the site in a manner that does not cause erosion. [Minn. R. 7090]
11.1	**Inspections and Maintenance**. [Minn. R. 7090]
11.2	Permittees must ensure a trained person, as identified in item 21.2.b, will inspect the entire construction site at least once every seven (7) days during active construction and within 24 hours after a rainfall event greater than 1/2 inch in 24 hours. [Minn. R. 7090]
11.3	Permittees must inspect and maintain all permanent stormwater treatment BMPs. [Minn. R. 7090]
11.4	Permittees must inspect all erosion prevention and sediment control BMPs and Pollution Prevention Management Measures to ensure integrity and effectiveness. Permittees must repair, replace or supplement all nonfunctional BMPs with functional BMPs by the end of the next business day after discovery unless another time frame is specified in item 11.5 or 11.6. Permittees may take additional time if field conditions prevent access to the area. [Minn. R. 7090]
11.5	During each inspection, permittees must inspect areas adjacent to the project, surface waters, including drainage ditches and conveyance systems but not curb and gutter systems, for evidence of erosion and sediment deposition. Permittees must remove all deltas and sediment deposited in areas adjacent to the project, surface waters, including drainage ways, catch basins, and other drainage systems and restabilize the areas where sediment removal results in exposed soil. Permittees must complete removal and stabilization within seven (7) calendar days of discovery unless precluded by legal, regulatory, or physical access constraints. Permittees must use all reasonable efforts to obtain access. If precluded, removal and stabilization must take place within seven (7) days of obtaining access. Permittees are responsible for contacting all local, regional, state and federal authorities and receiving any applicable permits, prior to conducting any work in surface waters. [Minn. R. 7090]
11.6	Permittees must inspect construction site vehicle exit locations, streets and curb and gutter systems within and adjacent to the project for sedimentation from erosion or tracked sediment from vehicles. Permittees must remove sediment from all paved surfaces within one (1) calendar day of discovery or, if applicable, within a shorter time to avoid a safety hazard to users of public streets. [Minn. R. 7090]
11.7	Permittees must repair, replace or supplement all perimeter control devices when they become nonfunctional or the sediment reaches 1/2 of the height of the device. [Minn. R. 7090]
11.8	Permittees must drain temporary and permanent sedimentation basins and remove the sediment when the depth of sediment collected in the basin reaches 1/2 the storage volume within 72 hours of discovery. [Minn. R. 7090]
11.9	Permittee's must inspect and photograph dewatering discharges at the beginning and at least once every 24 hours during operation. Dewatering discharges that only last for minutes, as opposed to hours, and do not reach a surface water, do not require photographs or documentation. [Minn. R. 7090]
11.10	Permittees must ensure that at least one individual present on the site (or available to the project site in three (3) calendar days) is trained in the job duties described in item 21.2.b. [Minn. R. 7090]
11.11	Permittees may adjust the inspection schedule described in item 11.2 as follows: a. inspections of areas with permanent cover can be reduced to once per month, even if construction activity continues on other portions of the site; or b. where sites have permanent cover on all exposed soil and no construction activity is occurring anywhere on the site, inspections can be reduced to once per month and, after 12 months, may be suspended completely until construction activity resumes. The MPCA may require inspections to resume if conditions warrant; or c. where construction activity has been suspended due to frozen ground conditions, inspections may be suspended.

	Inspections must resume within 24 hours of runoff occurring, or upon resuming construction, whichever comes first. d. for projects where a pollinator habitat or native prairie type vegetated cover is being established, inspections may be reduced to once per month if the site has temporary vegetation with a density of 70% temporary uniform cover. If after 24 months no significant erosion problems are observed, inspections may be suspended completely until the termination requirements in section 13 have been met. [Minn. R. 7090]
11.12	Permittees must record all inspections and maintenance activities within 24 hours of being conducted and these records must be retained with the SWPPP. These records must include: a. date and time of inspections; and b. name of persons conducting inspections; and c. accurate findings of inspections, including the specific location where corrective actions are needed; and d. corrective actions taken (including dates, times, and party completing maintenance activities); and e. date of all rainfall events greater than 1/2 inches in 24 hours, and the amount of rainfall for each event. Permittees must obtain rainfall amounts by either a properly maintained rain gauge installed on-site, a weather station that is within one (1) mile of your location, or a weather reporting system that provides site specific rainfall data from radar summaries; and f. if permittees observe a discharge during the inspection, they must record and should photograph and describe the location of the discharge (i.e., color, odor, settled or suspended solids, oil sheen, and other obvious indicators of pollutants); and g. any amendments to the SWPPP proposed as a result of the inspection must be documented as required in Section 6 within seven (7) calendar days; and h. all photographs of dewatering activities and documentation of nuisance conditions resulting from dewatering activities as described in section 10. [Minn. R. 7090]
12.1	**Pollution Prevention Management Measures**. [Minn. R. 7090]
12.2	Permittees must place construction materials and landscape materials under cover (e.g., plastic sheeting or temporary roofs) or protect them by similarly effective means designed to minimize contact with stormwater. Permittees are not required to cover or protect products which are either not a source of contamination to stormwater or are designed to be exposed to stormwater. [Minn. R. 7090]
12.3	Permittees must place pesticides, fertilizers and treatment chemicals under cover (e.g., plastic sheeting or temporary roofs) or protect them by similarly effective means designed to minimize contact with stormwater. [Minn. R. 7090]
12.4	Permittees must store hazardous materials and toxic waste, (including oil, diesel fuel, gasoline, hydraulic fluids, paint solvents, petroleum-based products, wood preservatives, additives, curing compounds, and acids) in sealed containers to prevent spills, leaks or other discharge. Storage and disposal of hazardous waste materials must be in compliance with Minn. R. ch. 7045 including secondary containment as applicable. [Minn. R. 7090]
12.5	Permittees must properly store, collect and dispose solid waste in compliance with Minn. R. ch. 7035. [Minn. R. 7035]
12.6	Permittees must position portable toilets so they are secure and will not tip or be knocked over. Permittees must properly dispose sanitary waste in accordance with Minn. R. ch. 7041. [Minn. R. 7041]
12.7	Permittees must take reasonable steps to prevent the discharge of spilled or leaked chemicals, including fuel, from any area where chemicals or fuel will be loaded or unloaded including the use of drip pans or absorbents unless infeasible. Permittees must ensure adequate supplies are available at all times to clean up discharged materials and that an appropriate disposal method is available for recovered spilled materials. Permittees must report and clean up spills immediately as required by Minn. Stat. 115.061, using dry clean up measures where possible. [Minn. Stat. 115.061]
12.8	Permittees must limit vehicle exterior washing and equipment to a defined area of the site. Permittees must contain runoff from the washing area in a sediment basin or other similarly effective controls and must dispose waste from the washing activity properly. Permittees must properly use and store soaps, detergents, or solvents. [Minn. R. 7090]
12.9	Permittees must provide effective containment for all liquid and solid wastes generated by washout operations (e.g., concrete, stucco, paint, form release oils, curing compounds and other construction materials) related to the construction activity. Permittees must prevent liquid and solid washout wastes from contacting the ground and must design the containment so it does not result in runoff from the washout operations or areas. Permittees must properly dispose liquid and solid wastes in compliance with MPCA rules. Permittees must install a sign indicating the location of the washout facility. [Minn. R. 7035, Minn. R. 7090]
13.1	**Permit Termination Conditions**. [Minn. R. 7090]
13.2	Permittees must complete all construction activity and must install permanent cover over all areas prior to submitting the NOT. Vegetative cover must consist of a uniform perennial vegetation with a density of 70 percent of its expected final

	growth. Vegetation is not required where the function of a specific area dictates no vegetation, such as impervious surfaces or the base of a sand filter. [Minn. R. 7090]
13.3	Permittees must clean the permanent stormwater treatment system of any accumulated sediment and must ensure the system meets all applicable requirements in Section 15 through 19 and is operating as designed. [Minn. R. 7090]
13.4	Permittees must remove all sediment from conveyance systems prior to submitting the NOT. [Minn. R. 7090]
13.5	Permittees must remove all temporary synthetic erosion prevention and sediment control BMPs prior to submitting the NOT. Permittees may leave BMPs designed to decompose on-site in place. [Minn. R. 7090]
13.6	For residential construction only, permit coverage terminates on individual lots if the lot is sold to the homeowner, structures are finished, and permanent cover has been established. For lots that are sold to the homeowner where permanent cover has not been established, coverage terminates if temporary erosion prevention and downgradient perimeter control is properly installed and the permittee distributes the MPCA's "Homeowner Fact Sheet" to the homeowner. [Minn. R. 7090]
13.7	For construction projects on agricultural land (e.g., pipelines across cropland), permittees must return the disturbed land to its preconstruction agricultural use prior to submitting the NOT. [Minn. R. 7090]
13.8	When submitting the NOT, Permittees must include either ground or aerial photographs showing the requirements of 13.2 have been met. Permittees are not required to take photographs of every distinct part of the site, however the conditions portrayed must be substantially similar to those areas that are not photographed. Photographs must be clear and in focus and must include the date the photo was taken. [Minn. R. 7090]
14.1	**Temporary Sediment Basins**. [Minn. R. 7090]
14.2	Where ten (10) or more acres of disturbed soil (5 acres for sites discharging to special or impaired waters, see section 24) drain to a common location, permittees must provide a temporary sediment basin to provide treatment of the runoff before it leaves the construction site or enters surface waters. Permittees may convert a temporary sediment basin to a permanent basin after construction is complete. The temporary basin is no longer required when permanent cover has reduced the acreage of disturbed soil to less than ten (10) acres draining to a common location. [Minn. R. 7090]
14.3	The temporary basin must provide live storage for a calculated volume of runoff from a two (2)-year, 24-hour storm from each acre drained to the basin or 1,800 cubic feet of live storage per acre drained, whichever is greater. [Minn. R. 7090]
14.4	Where permittees have not calculated the two (2)-year, 24-hour storm runoff amount, the temporary basin must provide 3,600 cubic feet of live storage per acre of the basins' drainage area. [Minn. R. 7090]
14.5	Permittees must design basin outlets to prevent short-circuiting and the discharge of floating debris. [Minn. R. 7090]
14.6	Permittees must design the outlet structure to withdraw water from the surface to minimize the discharge of pollutants. Permittees may temporarily suspend the use of a surface withdrawal mechanism during frozen conditions. The basin must include a stabilized emergency overflow to prevent failure of pond integrity. [Minn. R. 7090]
14.7	Permittees must provide energy dissipation for the basin outlet within 24 hours after connection to a surface water. [Minn. R. 7090]
14.8	Permittees must locate temporary basins outside of surface waters and any buffer zone required in item 23.11. [Minn. R. 7090]
14.9	Permittees must construct the temporary basins prior to disturbing 10 or more acres of soil draining to a common location. [Minn. R. 7090]
14.10	Where a temporary sediment basin meeting the requirements of item 14.3 through 14.9 is infeasible, permittees must install effective sediment controls such as smaller sediment basins and/or sediment traps, silt fences, vegetative buffer strips or any appropriate combination of measures as dictated by individual site conditions. In determining whether installing a sediment basin is infeasible, permittees must consider public safety and may consider factors such as site soils, slope, and available area on-site. Permittees must document this determination of infeasibility in the SWPPP. [Minn. R. 7090]
15.1	**Permanent Stormwater Treatment System**. [Minn. R. 7090]
15.2	Permittees must design and implement the project so all stormwater discharged from the project during and after construction activities does not cause a violation of state water quality standards, including nuisance conditions, erosion in receiving channels or on downslope properties, or a significant adverse impact to wetlands caused by inundation or decrease of flow. [Minn. R. 7090]
15.3	Permittees must design and construct a permanent stormwater treatment system to treat the water quality volume if the project's ultimate development replaces vegetation and/or other pervious surfaces creating a net increase of one (1) or

	more acres of cumulative impervious surface. [Minn. R. 7090]
15.4	Permittees must calculate the water quality volume as one (1) inch times the net increase of impervious surfaces created by the project. [Minn. R. 7090]
15.5	Permittees must first consider volume reduction practices on-site (e.g., infiltration or other) when designing the permanent stormwater treatment system. If this permit prohibits infiltration as described in item 16.14 through item 16.21, permittees may consider a wet sedimentation basin, filtration basin or regional pond. This permit does not consider wet sedimentation basins and filtration systems to be volume reduction practices. [Minn. R. 7090]
15.6	For projects where the full volume reduction requirement cannot be met on-site, (e.g., the site has infiltration prohibitions), permittees must document the reasons in the SWPPP. [Minn. R. 7090]
15.7	Permittees must discharge the water quality volume to a permanent stormwater treatment system prior to discharge to a surface water. For purposes of this item, surface waters do not include man-made drainage systems that convey stormwater to a permanent stormwater treatment system. [Minn. R. 7090]
15.8	Where the proximity to bedrock precludes the installation of any of the permanent stormwater treatment practices required by Sections 15 through 19, permittees must install other treatment such as grassed swales, smaller ponds, or grit chambers, prior to the discharge of stormwater to surface waters. [Minn. R. 7090]
15.9	For linear projects where permittees cannot treat the entire water quality volume within the existing right-of-way, permittees must make a reasonable attempt to obtain additional right-of-way, easement or other permission for stormwater treatment during the project planning process. Documentation of these attempts must be in the SWPPP. Permittees must still consider volume reduction practices first as described in item 15.5. If permittees cannot obtain additional right-of-way, easement or other permission, they must maximize the treatment of the water quality volume prior to discharge to surface waters. [Minn. R. 7090]
16.1	**Infiltration Systems**. [Minn. R. 7090]
16.2	Infiltration options include, but are not limited to: infiltration basins, infiltration trenches, rainwater gardens, bioretention areas without underdrains, swales with impermeable check dams, and natural depressions. If permittees utilize an infiltration system to meet the requirements of this permit, they must incorporate the design parameters in item 16.3 through item 16.21. Permittees must follow the infiltration prohibition in item 16.14 anytime an infiltration system is designed, including those not required by this permit. [Minn. R. 7090]
16.3	Permittees must design infiltration systems such that pre-existing hydrologic conditions of wetlands in the vicinity are not impacted (e.g., inundation or breaching a perched water table supporting a wetland). [Minn. R. 7090]
16.4	Permittees must not excavate infiltration systems to final grade, or within three (3) feet of final grade, until the contributing drainage area has been constructed and fully stabilized unless they provide rigorous erosion prevention and sediment controls (e.g., diversion berms) to keep sediment and runoff completely away from the infiltration area. [Minn. R. 7090]
16.5	When excavating an infiltration system to within three (3) feet of final grade, permittees must stake off and mark the area so heavy construction vehicles or equipment do not compact the soil in the infiltration area. [Minn. R. 7090]
16.6	Permittees must use a pretreatment device such as a vegetated filter strip, forebay, or water quality inlet (e.g., grit chamber) to remove solids, floating materials, and oil and grease from the runoff, to the maximum extent practicable, before the system routes stormwater to the infiltration system. [Minn. R. 7090]
16.7	Permittees must design infiltration systems to provide a water quality volume (calculated as an instantaneous volume) of one (1) inch of runoff, or one (1) inch minus the volume of stormwater treated by another system on the site, from the net increase of impervious surfaces created by the project. [Minn. R. 7090]
16.8	Permittees must design the infiltration system to discharge all stormwater (including stormwater in excess of the water quality volume) routed to the system through the uppermost soil surface or engineered media surface within 48 hours. Permittees must route additional flows that cannot infiltrate within 48 hours to bypass the system through a stabilized discharge point. [Minn. R. 7090]
16.9	Permittees must provide a means to visually verify the infiltration system is discharging through the soil surface or filter media surface within 48 hours or less. [Minn. R. 7090]
16.10	Permittees must provide at least one soil boring, test pit or infiltrometer test in the location of the infiltration practice for determining infiltration rates. [Minn. R. 7090]
16.11	For design purposes, permittees must divide field measured infiltration rates by 2 as a safety factor or permittees can use soil-boring results with the infiltration rate chart in the Minnesota Stormwater Manual to determine design infiltration rates. When soil borings indicate type A soils, permittees should perform field measurements to verify the rate is not above

	8.3 inches per hour. This permit prohibits infiltration if the field measured infiltration rate is above 8.3 inches per hour. [Minn. R. 7090]
16.12	Permittees must employ appropriate on-site testing to ensure a minimum of three (3) feet of separation from the seasonally saturated soils (or from bedrock) and the bottom of the proposed infiltration system. [Minn. R. 7090]
16.13	Permittees must design a maintenance access, typically eight (8) feet wide, for the infiltration system. [Minn. R. 7090]
16.14	This permit prohibits permittees from constructing infiltration systems that receive runoff from vehicle fueling and maintenance areas including construction of infiltration systems not required by this permit. [Minn. R. 7090]
16.15	This permit prohibits permittees from constructing infiltration systems where infiltrating stormwater may mobilize high levels of contaminants in soil or groundwater. Permittees must either complete the MPCA's contamination screening checklist or conduct their own assessment to determine the suitability for infiltration. Permittees must retain the checklist or assessment with the SWPPP. For more information and to access the MPCA's "contamination screening checklist" see the Minnesota Stormwater Manual. [Minn. R. 7090]
16.16	This permit prohibits permittees from constructing infiltration systems in areas where soil infiltration rates are field measured at more than 8.3 inches per hour unless they amend soils to slow the infiltration rate below 8.3 inches per hour. [Minn. R. 7090]
16.17	This permit prohibits permittees from constructing infiltration systems in areas with less than three (3) feet of separation distance from the bottom of the infiltration system to the elevation of the seasonally saturated soils or the top of bedrock. [Minn. R. 7090]
16.18	This permit prohibits permittees from constructing infiltration systems in areas of predominately Hydrologic Soil Group type D soils (clay). [Minn. R. 7090]
16.19	This permit prohibits permittees from constructing infiltration systems within a Drinking Water Supply Management Area (DWSMA) as defined in Minn. R. 4720.5100, subp. 13, if the system will be located: a. in an Emergency Response Area (ERA) within a DWSMA classified as having high or very high vulnerability as defined by the Minnesota Department of Health; or b. in an ERA within a DWSMA classified as moderate vulnerability unless a regulated MS4 Permittee performed or approved a higher level of engineering review sufficient to provide a functioning treatment system and to prevent adverse impacts to groundwater; or c. outside of an ERA within a DWSMA classified as having high or very high vulnerability, unless a regulated MS4 Permittee performed or approved a higher level of engineering review sufficient to provide a functioning treatment system and to prevent adverse impacts to groundwater. See "higher level of engineering review" in the Minnesota Stormwater Manual for more information. [Minn. R. 7090]
16.20	This permit prohibits permittees from constructing infiltration systems in areas within 1,000 feet upgradient or 100 feet downgradient of active karst features. [Minn. R. 7090]
16.21	This permit prohibits permittees from constructing infiltration systems in areas that receive runoff from the following industrial facilities not authorized to infiltrate stormwater under the NPDES stormwater permit for industrial activities: wood preserving facilities; automobile salvage yards; scrap recycling and waste recycling facilities; hazardous waste treatment, storage, or disposal facilities; or air transportation facilities that conduct deicing activities. [Minn. R. 7090]
17.1	**Filtration Systems**. [Minn. R. 7090]
17.2	Filtration options include but are not limited to: sand filters with underdrains, biofiltration areas, swales using underdrains with impermeable check dams and underground sand filters. If permittees utilize a filtration system to meet the permanent stormwater treatment requirements of this permit, they must comply with items 17.3 through 17.11. [Minn. R. 7090]
17.3	Permittees must not install filter media until they construct and fully stabilize the contributing drainage area unless they provide rigorous erosion prevention and sediment controls (e.g., diversion berms) to keep sediment and runoff completely away from the filtration area. [Minn. R. 7090]
17.4	Permittees must design filtration systems to remove at least 80 percent of TSS. [Minn. R. 7090]
17.5	Permittees must use a pretreatment device such as a vegetated filter strip, small sedimentation basin, water quality inlet, forebay or hydrodynamic separator to remove settleable solids, floating materials, and oils and grease from the runoff, to the maximum extent practicable, before runoff enters the filtration system. [Minn. R. 7090]

17.6	Permittees must design filtration systems to treat a water quality volume (calculated as an instantaneous volume) of one (1) inch of runoff, or one (1) inch minus the volume of stormwater treated by another system on the site, from the net increase of impervious surfaces created by the project. [Minn. R. 7090]
17.7	Permittees must design the filtration system to discharge all stormwater (including stormwater in excess of the water quality volume) routed to the system through the uppermost soil surface or engineered media surface within 48 hours. Additional flows that the system cannot filter within 48 hours must bypass the system or discharge through an emergency overflow. [Minn. R. 7090]
17.8	Permittees must design the filtration system to provide a means to visually verify the system is discharging through the soil surface or filter media within 48 hours. [Minn. R. 7090]
17.9	Permittees must employ appropriate on-site testing to ensure a minimum of three (3) feet of separation between the seasonally saturated soils (or from bedrock) and the bottom of the proposed filtration system. [Minn. R. 7090]
17.10	Permittees must ensure that filtration systems with less than three (3) feet of separation between seasonally saturated soils or from bedrock are constructed with an impermeable liner. [Minn. R. 7090]
17.11	The permittees must design a maintenance access, typically eight (8) feet wide, for the filtration system. [Minn. R. 7090]
18.1	**Wet Sedimentation Basin**. [Minn. R. 7090]
18.2	Permittees using a wet sedimentation basin to meet the permanent stormwater treatment requirements of this permit must incorporate the design parameters in item 18.3 through 18.10. [Minn. R. 7090]
18.3	Permittees must design the basin to have a permanent volume of 1,800 cubic feet of storage below the outlet pipe for each acre that drains to the basin. The basin's permanent volume must reach a minimum depth of at least three (3) feet and must have no depth greater than 10 feet. Permittees must configure the basin to minimize scour or resuspension of solids. [Minn. R. 7090]
18.4	Permittees must design the basin to provide live storage for a water quality volume (calculated as an instantaneous volume) of one (1) inch of runoff, or one (1) inch minus the volume of stormwater treated by another system on the site, from the net increase in impervious surfaces created by the project. [Minn. R. 7090]
18.5	Permittees must design basin outlets so the water quality volume discharges at no more than 5.66 cubic feet per second (cfs) per acre of surface area of the basin. [Minn. R. 7090]
18.6	Permittees must design basin outlets to prevent short-circuiting and the discharge of floating debris. Basin outlets must have energy dissipation. [Minn. R. 7090]
18.7	Permittees must design the basin to include a stabilized emergency overflow to accommodate storm events in excess of the basin's hydraulic design. [Minn. R. 7090]
18.8	Permittees must design a maintenance access, typically eight (8) feet wide, for the basin. [Minn. R. 7090]
18.9	Permittees must locate basins outside of surface waters and any buffer zone required in item 23.11. Permittees must design basins to avoid draining water from wetlands unless the impact to the wetland complies with the requirements of Section 22. [Minn. R. 7090]
18.10	Permittees must design basins using an impermeable liner if located within active karst terrain. [Minn. R. 7090]
19.1	**Regional Wet Sedimentation Basins**. [Minn. R. 7090]
19.2	When the entire water quality volume cannot be treated by volume reduction practices on-site, permittees can use or create regional wet sedimentation basins provided they are constructed basins, not a natural wetland or water body, (wetlands used as regional basins must be mitigated for, see Section 22). The owner must ensure the regional basin conforms to all requirements for a wet sedimentation basin as described in items 18.3 through 18.10 and must be large enough to account for the entire area that drains to the regional basin. Permittees must verify that the regional basin will discharge at no more than 5.66 cfs per acre of surface area of the basin and must provide a live storage volume of one-inch times all the impervious area draining to the basin. Permittees cannot significantly degrade waterways between the project and the regional basin. The owner must obtain written authorization from the applicable LGU or private entity that owns and maintains the regional basin. [Minn. R. 7090]
20.1	**SWPPP Availability**. [Minn. R. 7090]
20.2	Permittees must keep the SWPPP on-site, or electronically available on-site, during normal working hours with personnel who have operational control over the applicable portion of the site, including all changes to the SWPPP, inspections, and maintenance records. [Minn. R. 7090]
21.1	**Training Requirements**. [Minn. R. 7090]

21.2	Permittees must ensure all of the following individuals receive training and the content and extent of the training is commensurate with the individual's job duties and responsibilities with regard to activities covered under this permit: a. Individuals preparing the SWPPP for the project. b. Individuals overseeing implementation of, revising and/or amending the SWPPP and individuals performing inspections for the project. One of these individuals must be available for an on-site inspection within 72 hours upon request by the MPCA. c. Individuals performing or supervising the installation, maintenance and repair of BMPs. [Minn. R. 7090]
21.3	Permittees must ensure individuals identified in Section 21 receive training from local, state, federal agencies, professional organizations, or other entities with expertise in erosion prevention, sediment control, permanent stormwater treatment and the Minnesota NPDES/SDS Construction Stormwater permit. Permittees must ensure these individuals attend a refresher-training course every three (3) years. [Minn. R. 7090]
22.1	**Requirements for Discharges to Wetlands**. [Minn. R. 7050.0186]
22.2	If the project has any discharges with the potential for significant adverse impacts to a wetland, (e.g., conversion of a natural wetland to a stormwater pond) permittees must demonstrate that the wetland mitigative sequence has been followed in accordance with items 22.3 or 22.4. [Minn. R. 7050.0186]
22.3	If the potential adverse impacts to a wetland on a specific project site are addressed by permits or other approvals from an official statewide program (U.S. Army Corps of Engineers 404 program, Minnesota Department of Natural Resources, or the State of Minnesota Wetland Conservation Act) that are issued specifically for the project and project site, permittees may use the permit, decision or other determination issued by these agencies to show the potential adverse impacts are addressed. For purposes of this permit, deminimus actions are determinations by the permitting agency that address the project impacts, whereas a non-jurisdictional determination does not address project impacts. [Minn. R. 7090]
22.4	If there are impacts from the project not addressed in one of the permits, decisions or other determinations discussed in item 22.3 (e.g., permanent inundation or flooding of the wetland, significant degradation of water quality, excavation, filling, draining), permittees must minimize all adverse impacts to wetlands by utilizing appropriate measures. Permittees must use measures based on the nature of the wetland, its vegetative community types and the established hydrology. These measures include in order of preference: a. avoid all significant adverse impacts to wetlands from the project and post-project discharge; b. minimize any unavoidable impacts from the project and post-project discharge; c. provide compensatory mitigation when the permittees determine(s) that there is no reasonable and practicable alternative to having a significant adverse impact on a wetland. For compensatory mitigation, wetland restoration or creation must be of the same type, size and whenever reasonable and practicable in the same watershed as the impacted wetland. [Minn. R. 7050.0186]
23.1	**Additional Requirements for Discharges to Special (Prohibited, Restricted, Other) and Impaired Waters**. [Minn. R. 7090]
23.2	The BMPs identified for each special or impaired water are required for those areas of the project draining to a discharge point on the project that is within one mile (aerial radius measurement) of special or impaired water and flows to that special or impaired water. [Minn. R. 7090]
23.3	Discharges to the following special waters identified as Prohibited in Minn. R. 7050.0335 subp. 3 must incorporate the BMPs outlined in items 23.9, 23.10, 23.11, 23.13 and 23.14: a. Boundary Waters Canoe Area Wilderness; Voyageurs National Park; Kettle River from the site of the former dam at Sandstone to its confluence with the Saint Croix River; Rum River from Ogechie Lake spillway to the northernmost confluence with Lake Onamia. b. Those portions of Lake Superior North of latitude 47 degrees, 57 minutes, 13 seconds, East of Hat Point, South of the Minnesota-Ontario boundary, and West of the Minnesota-Michigan boundary; c. Scientific and Natural Areas identified as in Minn. R. 7050.0335 Subp. 3: Boot Lake, Anoka County; Kettle River in sections 15, 22, 23, T 41 N, R 20, Pine County; Pennington Bog, Beltrami County; Purvis Lake-Ober Foundation, Saint Louis County; waters within the borders of Itasca Wilderness Sanctuary, Clearwater County; Iron Springs Bog, Clearwater County; Wolsfeld Woods, Hennepin County; Green Water Lake, Becker County; Blackdog Preserve, Dakota County; Prairie Bush Clover, Jackson County; Black Lake Bog, Pine County; Pembina Trail Preserve, Polk County; and Falls Creek, Washington County. [Minn. R. 7050.0335, subp. 3]
23.4	Discharges to the following special waters identified as Restricted in Minn. R. 7050.0335 subp.1 must incorporate the BMPs

	outlined in items 23.9, 23.10 and 23.11: a. Lake Superior, except those portions identified as prohibited in item 23.3.b; b. Mississippi River in those portions from Lake Itasca to the southerly boundary of Morrison County that are included in the Mississippi Headwaters Board comprehensive plan dated February 12, 1981; c. Scenic or Recreational River Segments: Saint Croix River, entire length; Cannon River from northern city limits of Faribault to its confluence with the Mississippi River; North Fork of the Crow River from Lake Koronis outlet to the Meeker-Wright county line; Kettle River from north Pine County line to the site of the former dam at Sandstone; Minnesota River from Lac que Parle dam to Redwood County State Aid Highway 11; Mississippi River from County State Aid Highway 7 bridge in Saint Cloud to northwestern city limits of Anoka; and Rum River from State Highway 27 bridge in Onamia to Madison and Rice streets in Anoka; d. Lake Trout Lakes identified in Minn. R. 7050.0335 including lake trout lakes inside the boundaries of the Boundary Waters Canoe Area Wilderness and Voyageurs National Park; e. Calcareous Fens listed in Minn. R. 7050.0335, subp. 1. [Minn. R. 7050.0335, subp. 1]
23.5	Discharges to the Trout Lakes (other special water) identified in Minn. R. 6264.0050, subp. 2 and Minn. R. 7050.0420 must incorporate the BMPs outlined in items 23.9, 23.10 and 23.11. [Minn. R. 6264.0050, subp. 2, Minn. R. 7050]
23.6	Discharges to the Trout Streams (other special water) listed in Minn. R. 6264.0050, subp. 4 and Minn. R. 7050.0420 must incorporate the BMPs outlined in items 23.9, 23.10, 23.11 and 23.12. [Minn. R. 6264.0050, subp. 4, Minn. R. 7050]
23.7	Discharges to impaired waters or a water with an USEPA approved TMDL for any of the impairments listed in this item must incorporate the BMPs outlined in items 23.9 and 23.10. Impaired waters are waters identified as impaired under section 303 (d) of the federal Clean Water Act for phosphorus (nutrient eutrophication biological indicators, nutrients), turbidity, TSS, dissolved oxygen or aquatic biota (fish bioassessment, aquatic plant bioassessment and aquatic macroinvertebrate bioassessment, benthic macroinvertebrate bioassessment). Terms used for the pollutants or stressors in this item are subject to change. [Minn. R. 7090]
23.8	Where the additional BMPs in this Section conflict with requirements elsewhere in this permit, items 23.9 through 23.14 take precedence. [Minn. R. 7090]
23.9	Permittees must immediately initiate stabilization of exposed soil areas, as described in item 8.5 & 8.8, and complete the stabilization within seven (7) calendar days after the construction activity in that portion of the site temporarily or permanently ceases. [Minn. R. 7090]
23.10	Permittees must provide a temporary sediment basin as described in Section 14 for common drainage locations that serve an area with five (5) or more acres disturbed at one time. [Minn. R. 7090]
23.11	Permittees must include an undisturbed buffer zone of not less than 100 linear feet from a special water (not including tributaries) and must maintain this buffer zone at all times, both during construction and as a permanent feature post construction, except where a water crossing or other encroachment is necessary to complete the project. Permittees must fully document the circumstance and reasons the buffer encroachment is necessary in the SWPPP and include restoration activities. This permit allows replacement of existing impervious surface within the buffer. Permittees must minimize all potential water quality, scenic and other environmental impacts of these exceptions by the use of additional or redundant (double) BMPs and must document this in the SWPPP for the project. [Minn. R. 7090]
23.12	Permittees must design the permanent stormwater treatment system so the discharge from the project minimizes any increase in the temperature of trout streams resulting from the one (1) and two (2) year 24-hour precipitation events. This includes all tributaries of designated trout streams located within the same Public Land Survey System (PLSS) Section. Permittees must incorporate one or more of the following measures, in order of preference: a. Provide stormwater infiltration or other volume reduction practices as described in item 15.4 and 15.5, to reduce runoff. Infiltration systems must discharge all stormwater routed to the system within 24 hours. b. Provide stormwater filtration as described in Section 17. Filtration systems must discharge all stormwater routed to the system within 24 hours. c. Minimize the discharge from connected impervious surfaces by discharging to vegetated areas, or grass swales, and through the use of other non-structural controls. d. If ponding is used, the design must include an appropriate combination of measures such as shading, vegetated swale discharges or constructed wetland treatment cells that limit temperature increases. The pond must be designed as a dry pond and should draw down in 24 hours or less. e. Other methods that minimize any increase in the temperature of the trout stream. [Minn. R. 7090]

23.13	Permittees must conduct routine site inspections once every three (3) days as described in item 11.2 for projects that discharge to prohibited waters. [Minn. R. 7090]
23.14	If discharges to prohibited waters cannot provide volume reduction equal to one (1) inch times the net increase of impervious surfaces as required in item 15.4 and 15.5, permittees must develop a permanent stormwater treatment system design that will result in no net increase of TSS or phosphorus to the prohibited water. Permittees must keep the plan in the SWPPP for the project. [Minn. R. 7090]
24.1	**General Provisions**. [Minn. R. 7090]
24.2	If the MPCA determines that an individual permit would more appropriately regulate the construction activity, the MPCA may require an individual permit to continue the construction activity. Coverage under this general permit will remain in effect until the MPCA issues an individual permit. [Minn. R. 7001.0210, subp. 6]
24.3	If the permittee cannot meet the terms and conditions of this general permit, an owner may request an individual permit, in accordance with Minn. R. 7001.0210 subp. 6. [Minn. R. 7001.0210, subp. 6]
24.4	Any interested person may petition the MPCA to require an individual NPDES/SDS permit in accordance with 40 CFR 122.28(b)(3). [40 CFR 122.28(b)(3)]
24.5	In addition to the requirement found in section 20, permittees must make the SWPPP, including all inspection reports, maintenance records, training records and other information required by this permit, available to federal, state, and local officials within three (3) days upon request for the duration of the permit and for three (3) years following the NOT. [Minn. R. 7090]
24.6	Permittees may not assign or transfer this permit except when the transfer occurs in accordance with the applicable requirements of item 3.7 and 3.8. [Minn. R. 7090]
24.7	Nothing in this permit must be construed to relieve the permittees from civil or criminal penalties for noncompliance with the terms and conditions provided herein. Nothing in this permit must be construed to preclude the initiation of any legal action or relieve the permittees from any responsibilities, liabilities, or penalties to which the permittees is/are or may be subject to under Section 311 of the Clean Water Act and Minn. Stat. Section 115 and 116, as amended. Permittees are not liable for permit requirements for activities occurring on those portions of a site where the permit has been transferred to another party as required in item 3.7 or the permittees have submitted the NOT as required in Section 4. [Minn. R. 7090]
24.8	The provisions of this permit are severable. If any provision of this permit or the application of any provision of this permit to any circumstances is held invalid, the application of such provision to other circumstances, and the remainder of this permit must not be affected thereby. [Minn. R. 7090]
24.9	The permittees must comply with the provisions of Minn. R. 7001.0150, subp. 3 and Minn. R. 7001.1090, subp. 1(A), 1(B), 1(C), 1(H), 1(I), 1(J), 1(K), and 1(L). [Minn. R. 7001]
24.10	The permittees must allow access as provided in 40 CFR 122.41(i) and Minn. Stat. Section 115.04. The permittees must allow representatives of the MPCA or any member, employee or agent thereof, when authorized by it, upon presentation of credentials, to enter upon any property, public or private, for the purpose of obtaining information or examination of records or conducting surveys or investigations. [40 CFR 122.41(i)]
24.11	For the purposes of Minn. R. 7090 and other documents that reference specific sections of this permit, "Stormwater Discharge Design Requirements" corresponds to Sections 5, 6 and 14 through 21; "Construction Activity Requirements" corresponds to Sections 7 through 13; and "Appendix A" corresponds to Sections 22 and 23. [Minn. R. 7090]
25.1	**Definitions**. [Minn. R. 7090]
25.2	"Active karst" means a terrain having distinctive landforms and hydrology created primarily from the dissolution of soluble rocks within 50 feet of the land surface. [Minn. R. 7090]
25.3	"Aerial radius measurement" means the shortest straight line distance measurement between the point of stormwater discharge from a project construction site to the nearest edge of the water body receiving the stormwater. This measurement does not follow the meander flow path. [Minn. R. 7090]
25.4	"Best Management Practices (BMPs)" means the most effective and practicable means of erosion prevention and sediment control, and water quality management practices that are the most effective and practicable means of to control, prevent, and minimize degradation of surface water, including avoidance of impacts, construction-phasing, minimizing the length of time soil areas are exposed, prohibitions, pollution prevention through good housekeeping, and other management practices published by state or designated area-wide planning agencies. [Minn. R. 7090]
25.5	"Common Plan of Development or Sale" means one proposed plan for a contiguous area where multiple separate and distinct land-disturbing activities may be taking place at different times, on different schedules, but under one proposed

	plan. One plan is broadly defined to include design, permit application, advertisement or physical demarcation indicating that land-disturbing activities may occur. [Minn. R. 7090]
25.6	"Construction Activity" means activities including clearing, grading, and excavating, that result in land disturbance of equal to or greater than one acre, including the disturbance of less than one acre of total land area that is part of a larger common plan of development or sale if the larger common plan will ultimately disturb equal to or greater than one acre. This includes a disturbance to the land that results in a change in the topography, existing soil cover, both vegetative and nonvegetative, or the existing soil topography that may result in accelerated stormwater runoff that may lead to soil erosion and movement of sediment. Construction activity does not include a disturbance to the land of less than five acres for the purpose of routine maintenance performed to maintain the original line and grade, hydraulic capacity, and original purpose of the facility. Routine maintenance does not include activities such as repairs, replacement and other types of non-routine maintenance. Pavement rehabilitation that does not disturb the underlying soils (e.g., mill and overlay projects) is not construction activity. [Minn. R. 7090]
25.7	"Dewatering" means the removal of surface or ground water to dry and/or solidify a construction site to enable construction activity. Dewatering may require a Minnesota Department of Natural Resources water appropriation permit and, if dewatering water is contaminated, discharge of such water may require an individual MPCA NPDES/SDS permit. [Minn. R. 7090]
25.8	"Energy Dissipation" means methods employed at pipe outlets to prevent erosion caused by the rapid discharge of water scouring soils. [Minn. R. 7090]
25.9	"Erosion Prevention" means measures employed to prevent erosion such as soil stabilization practices, permanent cover or construction phasing. [Minn. R. 7090]
25.10	"General Contractor" means the party who signs the construction contract with the owner to construct the entire project described in the final plans and specifications. Where the construction project involves more than one contractor, the general contractor is the party responsible for managing the entire project on behalf of the owner. In some cases, the owner is the general contractor. In these cases, the owner signs the permit application as the operator and becomes the sole permittee. [Minn. R. 7090]
25.11	"Groundwater" means the water contained below the surface of the earth in the saturated zone including, without limitation, all waters whether under confined, unconfined, or perched conditions, in near surface unconsolidated sediment or regolith, or in rock formations deeper underground. [Minn. R. 7060]
25.12	"Homeowner Fact Sheet" means an MPCA fact sheet available on the MPCA Construction Stormwater website for permittees to give to homeowners at the time of sale. [Minn. R. 7090]
25.13	"Infeasible" means not technologically possible or not economically practicable and achievable in light of the best industry practices. [Minn. R. 7090]
25.14	"Initiated immediately" means taking an action to commence soil stabilization as soon as practicable, but no later than the end of the workday, following the day when the land-disturbing activities temporarily or permanently cease, if the permittees know that construction work on that portion of the site will be temporarily ceased for 14 or more additional calendar days or 7 calendar days where item 23.9 applies. Permittees can initiate stabilization by: a. prepping the soil for vegetative or non-vegetative stabilization; or b. applying mulch or other non-vegetative product to the exposed soil area; or c. seeding or planting the exposed area; or d. starting any of the activities in a - c on a portion of the area to be stabilized, but not on the entire area; or e. finalizing arrangements to have stabilization product fully installed in compliance with the applicable deadline for completing stabilization. [Minn. R. 7090]
25.15	"Impervious Surface" means a constructed hard surface that either prevents or retards the entry of water into the soil and causes water to run off the surface in greater quantities and at an increased rate of flow than prior to development. Examples include rooftops, driveways, parking lots, and concrete, asphalt, or gravel roads. Bridges over surface waters are considered impervious surfaces. Recreational trails that are distinctly set apart from a roadway (i.e. not parallel) and intended for non-motorized recreational uses are not considered impervious surfaces. Sidewalks that are parallel to a roadway (or generally following alongside a roadway) must still be included as impervious surfaces. [Minn. R. 7090]
25.16	"National Pollutant Discharge Elimination System (NPDES)" means the program for issuing, modifying, revoking, reissuing, terminating, monitoring, and enforcing permits under the Clean Water Act, as amended (33 U.S.C. 1251 et seq. Section 1342 and 40 CFR parts 122, 123, 124 and 450). [Minn. R. 7001.1020]
25.17	"Natural Buffer" means an area of undisturbed cover surrounding surface waters within which construction activities are

	restricted. Natural buffer includes the vegetation, exposed rock, or barren ground that exists prior to commencement of earth-disturbing activities. [Minn. R. 7090]
25.18	"Normal Wetted Perimeter" means the area of a conveyance, such as a ditch or channel, that is in contact with water during flow events that are expected to occur from a two-year, 24-hour storm event. [Minn. R. 7090]
25.19	"Notice of Termination (NOT)" means the form (electronic or paper) required for terminating coverage under the Construction General permit. [Minn. R. 7090]
25.20	"Operator" means the person (usually the general contractor), firm, governmental agency, or other entity designated by the owner who has day to day operational control and/or the ability to modify project plans and specifications related to the SWPPP. The permit application must list the operator as a permittee. Subcontractors hired by and under supervision of the general contractor are not operators. [Minn. R. 7090]
25.21	"Owner" means the person, firm, governmental agency, or other entity possessing the title of the land on which the construction activities will occur or, if the construction activity is for a lease, easement, or mineral rights license holder, the party or individual identified as the lease, easement or mineral rights license holder; or the contracting government agency responsible for the construction activity. [Minn. R. 7090]
25.22	"Permanent Cover" means surface types that will prevent soil failure under erosive conditions. Examples include: gravel, concrete, perennial cover, or other landscaped material that will permanently arrest soil erosion. Permittees must establish a uniform perennial vegetative cover (i.e., evenly distributed, without large bare areas) with a density of 70 percent of the vegetative cover native to local undisturbed areas on all areas not covered by permanent structures, or equivalent permanent stabilization measures. Permanent cover does not include temporary BMPs such as wood fiber blanket, mulch, and rolled erosion control products. [Minn. R. 7090]
25.23	"Permittee(s)" means the person(s), firm, governmental agency, or other entity identified as the owner and operator on the application submitted to the MPCA and are responsible for compliance with the terms and conditions of this permit. [Minn. R. 7090]
25.24	"Project(s)" means all construction activity planned and/or conducted under a particular permit. The project occurs on the site or sites described in the permit application, the SWPPP and in the associated plans, specifications and contract documents. [Minn. R. 7090]
25.25	"Public Waters" means all water basins and watercourses described in Minn. Stat. Section 103G.005 subd. 15. [Minn. Stat. 103G.005, subd.15]
25.26	"Redoximorphic Features" means a color pattern in soil, formed by oxidation and reduction process of iron and/or manganese in seasonally saturated soil. [Minn. R. 7090]
25.27	"Section" includes all item numbers of the same whole number. For example, "Section 3" of the permit refers to items 3.1 through 3.8. [Minn. R. 7090]
25.28	"Seasonally Saturated Soil" means the highest seasonal elevation in the soil in a reduced chemical state because of soil voids filled with water causing anaerobic conditions. Seasonally saturated soil is evidenced by the presence of redoximorphic features or other information determined by scientifically established methods or empirical field measurements. [Minn. R. 7090]
25.29	"Sediment Control" means methods employed to prevent suspended sediment in stormwater from leaving the site (e.g. silt fences, compost logs and storm drain inlet protection). [Minn. R. 7090]
25.30	"Stabilize", "Stabilized", "Stabilization" means the exposed ground surface has been covered by appropriate materials such as mulch, staked sod, riprap, erosion control blanket, mats or other material that prevents erosion from occurring. Grass seeding, agricultural crop seeding or other seeding alone is not stabilization. Mulch materials must achieve approximately 90 percent ground coverage (typically 2 ton/acre). [Minn. R. 7090]
25.31	"Stormwater" means precipitation runoff, stormwater runoff, snowmelt runoff, and any other surface runoff and drainage. [Minn. R. 7090]
25.32	"Steep Slopes" means slopes that are 1:3 (V:H) (33.3 percent) or steeper in grade. [Minn. R. 7090]
25.33	"Storm Water Pollution Prevention Plan (SWPPP)" means a plan for stormwater discharge that includes all required content under in Section 5 that describes the erosion prevention, sediment control and waste control BMPs and permanent stormwater treatment systems. [Minn. R. 7090]
25.34	"Surface Water or Waters" means all streams, lakes, ponds, marshes, wetlands, reservoirs, springs, rivers, drainage systems, waterways, watercourses, and irrigation systems whether natural or artificial, public or private, except that surface waters do not include stormwater treatment systems constructed from upland. This permit does not consider stormwater

	treatment systems constructed in wetlands and mitigated in accordance with Section 22 as surface waters. [Minn. R. 7090]
25.35	"Waters of the State" means all streams, lakes, ponds, marshes, watercourses, waterways, wells, springs, reservoirs, aquifers, irrigation systems, drainage systems and all other bodies or accumulations of water, surface or underground, natural or artificial, public or private, which are contained within, flow through, or border upon the state or any portion thereof. [Minn. Stat. 115.01, subd. 22]
25.36	"Water Quality Volume" means one (1) inch of runoff from the net increase in impervious surfaces created by the project (calculated as an instantaneous volume). [Minn. R. 7090]
25.37	"Wetlands" means those areas that are inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support, and under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas. Constructed wetlands designed for wastewater treatment are not waters of the state. Wetlands must have the following attributes: a. a predominance of hydric soils; and b. inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support a prevalence of hydrophytic vegetation typically adapted for life in a saturated soil condition; and c. under normal circumstances support a prevalence of such vegetation. [Minn. R. 7050.0186, subp. 1(a)B]

ATTACHMENT K

MPCA AUTHORIZATION REQUEST FOR NPDES COVERAGE UNDER MNR100001 -PENDING

ATTACHMENT L

MPCA AUTHORIZATION LETTER - PENDING

ATTACHMENT M

SWPPP AMENDMENTS

Stantec

ATTACHMENT N

NOTIFICATION ROSTER

Notification Roster - Spill Response

Company	Name	Role	Phone Number	Email
Northern Natural Gas	Terry Plucker	Environmental Compliance Manager	402-332-7081	Terry.Plucker@nngco.com
Northern Natural Gas	Christa Webber	Environmental Specialist	402-398-7980	Christa.Webber@nngco.com

Contractor

State

Minnesota State Duty Officer	800-422-0798

Notification Roster - SWPPP

Company	Name	Role	Phone Number	Email
Northern Natural Gas	Terry Plucker	Environmental Compliance Manager	402-332-7081	Terry.Plucker@nngco.com
Northern Natural Gas	Christa Webber	Environmental Specialist	402-398-7980	Christa.Webber@nngco.com

Contractor

State

Minnesota State Duty Officer			800-422-0798	
Minnesota State Duty Officer			800-422-0798	

ATTACHMENT O

EROSION CONTROL CERTIFICATION DOCUMENTATION FOR NORTHERN NATURAL GAS ENVIRONMENTAL INSPECTION STAFF -PENDING SELECTION OF ENVIRONMENTAL INSPECTOR

Stantec

ATTACHMENT P

NORTHERN'S HORIZONTAL DIRECTIONAL DRILL MONITORING, INADVERTENT RETURN RESPONSE, AND CONTINGENCY PLAN

FOUND UNDER THE "NORTHERN SUBMISSIONS TO FERC"
TAP ON NORTHERN'S WEBSITE:

HTTPS://WWW.NORTHERNNATURALGAS.COM/EXPANSIONPROJECTS

Stantec

ATTACHMENT Q

NOXIOUS WEED PLAN

FOUND UNDER THE “NORTHERN SUBMISSIONS TO FERC”
TAP ON NORTHERN’S WEBSITE:

HTTPS://WWW.NORTHERNNATURALGAS.COM/EXPANSIONPROJECTS

ATTACHMENT R

STEEP SLOPES TABLE

Attachment R Steep Slopes Within the Project Area

MP Begin	MP End	Slope Category[1]	Length (feet)
Albert Lea M500 E-Line			
2.11	2.15	5-15	204[2]
2.36	2.39	5-15	171[2]
2.55	2.56	5-15	73
2.58	2.64	5-15	297
2.66	2.71	5-15	264
3.39	3.44	5-15	242
3.47	3.51	5-15	194

[1]Slopes were obtained from civil survey data.

[2]Area is within a drill or bore.

ATTACHMENT S

NRCS/MINNESOTA BOARD OF WATER AND SOIL RESOURCES (BWSR) SEED MIX

From: Bartsch, Zachary
Sent: Thursday, December 21, 2023 12:57 PM
To: Blount, Veronica - NRCS, Sparta, WI
Subject: 2023 Seed mixes
Attachments: 484_WI_CPS_Mulching_2016.pdf; Standard_Mix_Calc2020-30-11.xlsm

Hello Veronica,

I hope 2023 has treated you well. I am reaching out again for a similar project to the one you helped me with in 2022.

This project is located in Monroe County, and will disturbing cropland, forest, and grass ditches/right of ways. Are the two resources you provided in 2022 (attached) still acceptable for use to plan seed mixes and erosion control practices?

Thank you,

Zach Bartsch
Soil Scientist

Mobile: 701-318-9364
zachary.bartsch@stantec.com

Stantec
3303 Fiechtner Drive Suite 100
Fargo ND 58103

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From: Blount, Veronica - NRCS, Sparta, WI <veronica.blount@usda.gov>
Sent: Wednesday, January 12, 2022 8:19 AM
To: Bartsch, Zachary <zachary.bartsch@stantec.com>
Subject: RE: [External Email]Seed mixes

Zach,

I apologize for the delay; this one got away from me!

I've attached:

1. The standard mix NRCS seed calculator. You'll need to Enable Macros in the yellow ribbon at the top, then:
    a. For sites where erosion control is the main concern, select "342" in STEP 1. For a habitat/wildlife concern, select "327."
    b. Then, for STEP 2, select "Introduced"
    c. For STEP 3, select a mix from the alternatives listed. On the "342Mixes" tab, you can see the Moisture Regimes they are designed for (Column N)

2. NRCS Standard 484, Mulching. This will describe soil coverage/erosion control considerations.

I hope this is helpful,
Veronica

Veronica Blount | District Conservationist (Acting)| Onalaska & Sparta Field Offices
U.S. Department of Agriculture | Natural Resources Conservation Service
Onalaska Office 608-433-7365 | Sparta Office 608-269-8136 x. 113 | Cell 608-633-8780

From: Bartsch, Zachary <zachary.bartsch@stantec.com>
Sent: Friday, January 7, 2022 9:49 AM
To: Blount, Veronica - NRCS, Sparta, WI <veronica.blount@usda.gov>
Subject: [External Email]Seed mixes

[External Email]
If this message comes from an **unexpected sender** or references a **vague/unexpected topic;**
Use caution before clicking links or opening attachments.
Please send any concerns or suspicious messages to: Spam.Abuse@usda.gov

Veronica,

Apologies for the wait, I had a meeting come up.

One thing I forgot to follow up with was if your office (or Monroe Co) has any erosion control practice guidelines that it would want the project to follow or use?

Thanks,

Zach Bartsch
Soil Scientist

Mobile: 701-318-9364
zachary.bartsch@stantec.com

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3303 Fiechtner Drive Suite 100
Fargo ND 58103



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TABLE 1 - GUIDE[1] TO MULCH MATERIALS, RATES, AND USES

Mulch Material	Quality Standards	Applicable Rate	Depth of Application	Remarks
Organic Mulches				
Grass Hay or Cereal Grain Straw[2]	Air dried; free of undesirable seeds, coarse material and moldy chunks	1.5 – 2 tons / acre	Lightly cover 75 – 90% of surface	Use where mulch effect is to be maintained for more than three months. Subject to blowing unless kept moist or anchored.
Wood Fiber Hydromulch	Natural wood fiber with green dye and dispersing agent added	0.75 – 1 ton / acre	Lightly cover 100% of the surface	Apply with hydromulcher, on 0-2% slopes. Use material with tacking agent for anchoring.
Wood Fiber / Paper Blend hydromulch	Blend of natural wood fiber and paper	0.75 – 1 ton / acre	Lightly cover 100% of the surface	Apply with hydromulcher, on 0-2% slopes. Use material with tacking agent for anchoring.
Wood Long-Fiber Excelsior	Air dried burred wood fibers, 4” or longer	1 – 2 tons / acre		Effective for erosion control. Anchoring usually not required except on critical areas or sites subject to high winds.
Compost	Commonly made from yard waste (leaves, branches, etc.) or manure	Cover 100% of the ground	2 inches	Applied with a blower truck. Anchoring is not required. Excellent for water infiltration and moisture conservation.
Manure	Well shredded, free of coarse materials	8 – 10 tons / acre		May create a problem with weeds. Excellent moisture conserver. Resistant to wind blowing. Do not use manure for water erosion control because surface water may be contaminated. Anchoring is required.

Mulch Material	Quality Standards	Applicable Rate	Depth of Application	Remarks
Organic Mulches				
Sawdust and ground corn cobs	Green or composted, free from weed seeds, trash and coarse materials.	5 tons / acre	2 – 7 inches	Sawdust from hardwood species is preferred to avoid possible toxicity from pitch or resins contained in conifers. Most effective as mulch around ornamentals, small fruits and other nursery stock. Special application rates: fruit trees 5-7"; blueberries 6", vegetables and flowers, 2-3", blackberries and raspberries 4-7"; strawberries 3". Resistance to blowing. Requires 30-35 lbs. N/ton to prevent nitrogen deficiency during decay. Rate based on weight of 24 lbs./cubic foot. Anchoring is required.
Wood Chips or Bark, Shavings	Green or air dried; free of weed seeds, trash and coarse material	10 – 20 tons / acre	2 – 7 inches	Chips or shavings from hardwood species are preferred to avoid possible toxicity from pitch or resins contained in conifers. Has same use and application as sawdust. Requires 20-25 lbs. N/ton to prevent nitrogen deficiency during decay. Resistant to blowing. Decomposes slowly. Anchoring not required.
Cornstalks, shredded or chopped	Air dried; shredded into 8” to 12” lengths	4 – 6 tons/ acre		Effective for erosion control. Slow to decompose. Excellent mulch for field crops. Resistant to wind blowing. Anchoring not required.
Non-Organic Mulches				
Gravel, crushed stone or slag	Washed	90% ground cover	2-3 inches	Use for permanent erosion control; on short slopes; around woody plants and ornamentals.

Mulch Material	Quality Standards	Applicable Rate	Depth of Application	Remarks
Non-Organic Mulches				
Plastic	2-4 mils	Apply according to manufacturer's specifications	Thickness of one layer	Use black for weed control and white for seedling establishment without organic mulch. Release plastic after seeding is established. Effective moisture conservation and weed control for small fruits. Large areas should have holes or slits cut to let rainfall percolate. Anchoring is required.
1. This table is not all-inclusive. There may be additional mulch materials or variations of the materials listed here that would be equivalent to achieve the intended effect.				
2. Mulch used on native seedings should not consist of pasture hay containing introduced species. Use grain straw mulches only.				

TABLE 2- GUIDE TO MULCH ANCHORING MATERIALS		
Anchoring Method or Material	**Kind of Mulch to be Anchored**	**How to Apply**
Mechanical		
Mulch Anchoring Tool or Disk	Grass hay, straw or manure	Apply mulch and pull the mulch anchoring tool or disk over mulch. Use equipment with serrated straight disks spaced 6-10" apart or other suitable equipment. Operate as close to the contour as possible. Mulch material should be tucked into the soil surface 2-3 inches. Use on areas of concentrated flow when velocity is less than approximately 4 feet per second.
Tackifier or Binder	Grass hay, straw, Hydromulch materials	Method and rate of application shall be according to manufacturers' recommendation. Use on areas without concentrated flow. Usually applied with a hydromulcher after seeding has been completed.
Wood Hydromulch Fibers	Grass, hay, straw	Use on areas without concentrated flow. Apply with hydromulcher immediately after seeding. Use 3000 lbs. Of mulch material and apply 750 lbs. of wood fiber with tacking agent per acre.
Asphalt Spray (Emulsion)	Grass hay, straw, compost, wood chips, wood shavings	Apply with suitable equipment to spray asphalt into the mulch as it is applied. Materials shall conform to the requirements of ASTM Specifications D 977. Application rate is 0.05 gallons per square yard (242 gallons per acres). Material shall be non-toxic to plant life. Use on areas without concentrated flow.
Manual		
Polypropylene plastic netting	Grass hay, straw, compost, wood shavings, wood long-fiber excelsior.	Apply plastic netting over mulch immediately after mulching and staple with 11 gauge or heavier wire staples. Installation is the same as for fiber blankets, mats and netting. Use when concentrated flow velocity is less than 4 feet per second.[1]
Wood Excelsior Fiber Blanket: interlocking web of excelsior fibers with netting on one or both sides. 80% of fibers are 8 inches or longer.	Use without additional mulch.	Anchor per manufacturer's specifications. Effective for erosion control on steep slopes and areas of concentrated flow.[1]

Anchoring Method or Material	Kind of Mulch to be Anchored	How to Apply
Chopped straw or straw and coconut fiber blanket: Uniform agricultural wheat straw or straw and coconut fiber between photodegradable or biodegradable netting.	Use without additional mulch.	Anchor per manufacturer's specifications. Effective for erosion control on moderate or steep slopes and low flow channels.[1]
Peg and twine	Grass hay, straw, wood shavings, wood long-fiber excelsior	After mulching, divide the area into blocks approximately 1 square yard in size. Drive 4-6 pegs per block to within 2-3" of soil surface. Anchor mulch by stretching twine between pegs in a criss-cross pattern on each block. Secure twin around each peg with two or more turns. Where mowing is planned, drive pegs flush with the soil surface.
Spade	Grass hay, straw, wood shavings, wood long-fiber excelsior	Cut mulch into soil surface with square edge spade. Make cuts in contour rows spaced 18 inches apart.
Soil and Stones	Plastic	Bury edge of plastic in a trench 6 inches deep. Firm soil over plastic. Use stones to hold plastic down in other places as needed.

1. Placing and anchoring Blankets, Mats and Netting: In areas of concentrated flow, lay the mat parallel to the direction of water flow, with netting on top. Spread blankets evenly without stretching so fibers are in direct contact with the soil. Adjacent strip edges shall be overlapped 2-4 inches. Strip ends shall overlap a minimum of 10 inches with the upgrade strip on top. The upgrade end of each blanket shall be buried at least 6 inches in a vertical slot with the soil pressed firmly against the embedded mat. Additional check slots at 50-foot intervals may be desirable on steep grades or long flow patterns. Strip ends and end overlaps shall be stapled with not more than 12 inches between staples. All other joints and edges shall be stapled at 4 foot intervals. Additional staples shall be placed down the center of each blanket in a diamond pattern at a maximum of 4-foot intervals. Where velocities exceed 5 cfs, place edge and center staples at 2-foot intervals. All staples shall be inserted flush with the ground surface. Staples shall be 11 gauge or heavier U shaped with a 1-2 inch crown. Staple length shall be determined by soil conditions as follows: Highly compacted soils – 6 inch: Friable soils – 8 inches; Loose or sandy soils – 10 inch.

2. In areas of broad sheet flow, mats may be placed either parallel or perpendicular to slope direction. Spread blankets evenly without stretching so fibers are in direct contact with the soil. Adjacent strip edges shall be overlapped 2-4 inches with upgrade strip on top. Ends of each mat shall be stapled with not more than 12 inches between staples. All other edges and mat centers shall be stapled to hold the mat in place with not more than 4-6 feet between staples. All staples shall be inserted flush with the ground surface. Staples shall be 11 gauge or heavier, U shaped with a 1-2 inch crown. Staple length shall be determined by soil condition as listed above.

USDA NRCS
Natural Resources Conservation Service

SEEDING PLAN
Standard and CRP Mixes

Ver. 1/2015

Landowner:	
TRACT #:	
Field(s):	
Plan by:	
County:	
Date:	
Total Acres:	

○ 327 ○ 342 ○ 512 ○ CRP NRCS STD.

Mix Type: ○ Introduced ○ Native

Mix #

GRASSES					
Common Name	Scientific Name	Intro/ Native	PLS (lbs / Acre)	Total Lbs.	
TOTAL GRASSES:			0.0	0.0	

FORBS/LEGUMES						
Common Name	Scientific Name	Intro/ Native	PLS (lbs / Acre)	Total Lbs.	PLS (oz./Acre)	Total Oz.

USDA NRCS
Natural Resources Conservation Service

SEEDING PLAN
Standard and CRP Mixes

Ver. 1/2015

Landowner:
TRACT #:
Field(s):
Plan by:
County:
Date:
Total Acres:

○ 327 ○ 342 ○ 512 ○ CRP — NRCS STD.
Mix Type: ○ Introduced ○ Native
Mix #

TOTAL FORBS/LEGUMES:						

SEEDING DATES	Spring Seeding	Late Summer	Fall Dormant Seeding		Frost Seeding Allowed?

		lbs/acre	Total lbs.	*OR*	Bu./Acre	Total Bu.
Temporary Cover Crop:						
Companion Crop: ○ YES ○ NO **You must pick Yes or No**						

Fertilizer & Lime		Lbs./Acre	Total Needed (lbs)
80-89 Lime		N/R	
Nitrogen		N/R	
Phosphate (P205)		N/R	
Potash (K20)		N/R	

☐ **General**
☐ **Soil Test**
☐ Fert./Lime Not Needed

N/R=Not Recommended for Pure Native Mixes

Seeding was completed on: _____ **according to the above requirements.**
(Date)

STANDARD 327 MIXES

REVISION DATE: 12/14/2012

criteria: 0

STD	Mix #	std-mix	Common Name	Scientific Name	PLS (oz./A)	PLS (lbs./A)	Seeds/Square Foot	Type	Intro / Native	Poll. (Y/N)		Mix No.	MR	Mix Components
327	(D)-1-Sgrod-Ycone-PPclover-BB-LE	327-(D)-1-Sgrod-Ycone-PPclover	Stiff Goldenrod	Oligoneuron rigidum	1	0.06	1	Forb	N	N		1	D	Sgrod-Ycone-PPclover-BB-LB-Indian-Sgrama
327	(D)-1-Sgrod-Ycone-PPclover-BB-LE	327-(D)-1-Sgrod-Ycone-PPclover	Yellow Coneflower	Ratibida pinnata	1	0.06	0.6	Forb	N	N		1	D	Sgrod-Ycone-PPclover-BB-LB-Indian-Sgrama
327	(D)-1-Sgrod-Ycone-PPclover-BB-LE	327-(D)-1-Sgrod-Ycone-PPclover	Purple Prairie Clover	Dalea purpurea	2	0.13	0.9	Legume	N	N		1	D	Sgrod-Ycone-PPclover-BB-LB-Indian-Sgrama
327	(D)-1-Sgrod-Ycone-PPclover-BB-LE	327-(D)-1-Sgrod-Ycone-PPclover	Big Bluestem	Andropogon gerardii	16	1	3.8	Grass	N	N		1	D	Sgrod-Ycone-PPclover-BB-LB-Indian-Sgrama
327	(D)-1-Sgrod-Ycone-PPclover-BB-LE	327-(D)-1-Sgrod-Ycone-PPclover	Little Bluestem	Schizachyrium scoparium	28	1.75	9.6	Grass	N	N		1	D	Sgrod-Ycone-PPclover-BB-LB-Indian-Sgrama
327	(D)-1-Sgrod-Ycone-PPclover-BB-LE	327-(D)-1-Sgrod-Ycone-PPclover	Indiangrass	Sorghastrum nutans	16	1	4.4	Grass	N	N		1	D	Sgrod-Ycone-PPclover-BB-LB-Indian-Sgrama
327	(D)-1-Sgrod-Ycone-PPclover-BB-LE	327-(D)-1-Sgrod-Ycone-PPclover	Sideoats Grama	Bouteloua curtipendula	28	1.75	5.1	Grass	N	N		1	D	Sgrod-Ycone-PPclover-BB-LB-Indian-Sgrama
327	(DM)-2-LB-Indian-Sgrama-BB-Swit	327-(DM)-2-LB-Indian-Sgrama-B	Little Bluestem	Schizachyrium scoparium	24	1.5	8.2	Grass	N	N		2	DM	LB-Indian-Sgrama-BB-Switch-PPclover-Berg-Y
327	(DM)-2-LB-Indian-Sgrama-BB-Swit	327-(DM)-2-LB-Indian-Sgrama-B	Indiangrass	Sorghastrum nutans	16	1	4	Grass	N	N		2	DM	LB-Indian-Sgrama-BB-Switch-PPclover-Berg-Y
327	(DM)-2-LB-Indian-Sgrama-BB-Swit	327-(DM)-2-LB-Indian-Sgrama-B	Sideoats Grama	Bouteloua curtipendula	16	1	2.9	Grass	N	N		2	DM	LB-Indian-Sgrama-BB-Switch-PPclover-Berg-Y
327	(DM)-2-LB-Indian-Sgrama-BB-Swit	327-(DM)-2-LB-Indian-Sgrama-B	Big Bluestem	Andropogon gerardii	8	0.5	1.5	Grass	N	N		2	DM	LB-Indian-Sgrama-BB-Switch-PPclover-Berg-Y
327	(DM)-2-LB-Indian-Sgrama-BB-Swit	327-(DM)-2-LB-Indian-Sgrama-B	Switchgrass	Panicum virgatum	8	0.5	4.5	Grass	N	N		2	DM	LB-Indian-Sgrama-BB-Switch-PPclover-Berg-Y
327	(DM)-2-LB-Indian-Sgrama-BB-Swit	327-(DM)-2-LB-Indian-Sgrama-B	Purple Prairie Clover	Dalea purpurea	2	0.13	0.9	Legume	N	N		2	DM	LB-Indian-Sgrama-BB-Switch-PPclover-Berg-Y
327	(DM)-2-LB-Indian-Sgrama-BB-Swit	327-(DM)-2-LB-Indian-Sgrama-B	Bergamot	Monarda fistulosa	1	0.06	1.8	Forb	N	N		2	DM	LB-Indian-Sgrama-BB-Switch-PPclover-Berg-Y
327	(DM)-2-LB-Indian-Sgrama-BB-Swit	327-(DM)-2-LB-Indian-Sgrama-B	Yellow Coneflower	Ratibida pinnata	1	0.06	0.6	Forb	N	N		2	DM	LB-Indian-Sgrama-BB-Switch-PPclover-Berg-Y
327	(M)-3-LB-BB-Cwrye-Indian-Switch-	327-(M)-3-LB-BB-Cwrye-Indian-	Little Bluestem	Schizachyrium scoparium	20	1.25	6.8	Grass	N	N		3	M	LB-BB-Cwrye-Indian-Switch-Berg-Besus-Ycon
327	(M)-3-LB-BB-Cwrye-Indian-Switch-	327-(M)-3-LB-BB-Cwrye-Indian-	Big Bluestem	Andropogon gerardii	16	1	3.8	Grass	N	N		3	M	LB-BB-Cwrye-Indian-Switch-Berg-Besus-Ycon
327	(M)-3-LB-BB-Cwrye-Indian-Switch-	327-(M)-3-LB-BB-Cwrye-Indian-	Canada Wildrye	Elymus canadensis	16	1	2.5	Grass	N	N		3	M	LB-BB-Cwrye-Indian-Switch-Berg-Besus-Ycon
327	(M)-3-LB-BB-Cwrye-Indian-Switch-	327-(M)-3-LB-BB-Cwrye-Indian-	Indiangrass	Sorghastrum nutans	16	1	4	Grass	N	N		3	M	LB-BB-Cwrye-Indian-Switch-Berg-Besus-Ycon
327	(M)-3-LB-BB-Cwrye-Indian-Switch-	327-(M)-3-LB-BB-Cwrye-Indian-	Switchgrass	Panicum virgatum	8	0.5	4.5	Grass	N	N		3	M	LB-BB-Cwrye-Indian-Switch-Berg-Besus-Ycon
327	(M)-3-LB-BB-Cwrye-Indian-Switch-	327-(M)-3-LB-BB-Cwrye-Indian-	Bergamot	Monarda fistulosa	1	0.06	1.8	Forb	N	N		3	M	LB-BB-Cwrye-Indian-Switch-Berg-Besus-Ycon
327	(M)-3-LB-BB-Cwrye-Indian-Switch-	327-(M)-3-LB-BB-Cwrye-Indian-	Black-Eyed Susan	Rudbeckia hirta	1	0.06	2.2	Forb	N	N		3	M	LB-BB-Cwrye-Indian-Switch-Berg-Besus-Ycon
327	(M)-3-LB-BB-Cwrye-Indian-Switch-	327-(M)-3-LB-BB-Cwrye-Indian-	Yellow Coneflower	Ratibida pinnata	1	0.06	0.6	Forb	N	N		3	M	LB-BB-Cwrye-Indian-Switch-Berg-Besus-Ycon
327	(WM)-4-BB-Indian-Switch-Vwrye-P	327-(WM)-4-BB-Indian-Switch-V	Big Bluestem	Andropogon gerardii	24	1.5	5.7	Grass	N	N		4	WM	BB-Indian-Switch-Vwrye-Pcord-Berg-NEaster
327	(WM)-4-BB-Indian-Switch-Vwrye-P	327-(WM)-4-BB-Indian-Switch-V	Indiangrass	Sorghastrum nutans	16	1	4	Grass	N	N		4	WM	BB-Indian-Switch-Vwrye-Pcord-Berg-NEaster
327	(WM)-4-BB-Indian-Switch-Vwrye-P	327-(WM)-4-BB-Indian-Switch-V	Switchgrass	Panicum virgatum	16	1	9	Grass	N	N		4	WM	BB-Indian-Switch-Vwrye-Pcord-Berg-NEaster
327	(WM)-4-BB-Indian-Switch-Vwrye-P	327-(WM)-4-BB-Indian-Switch-V	Virginia Wildrye	Elymus virginicus	16	1	1.5	Grass	N	N		4	WM	BB-Indian-Switch-Vwrye-Pcord-Berg-NEaster
327	(WM)-4-BB-Indian-Switch-Vwrye-P	327-(WM)-4-BB-Indian-Switch-V	Prairie Cordgrass	Spartina pectinata	8	0.5	0.6	Grass	N	N		4	WM	BB-Indian-Switch-Vwrye-Pcord-Berg-NEaster
327	(WM)-4-BB-Indian-Switch-Vwrye-P	327-(WM)-4-BB-Indian-Switch-V	Bergamot	Monarda fistulosa	1	0.06	1.8	Forb	N	N		4	WM	BB-Indian-Switch-Vwrye-Pcord-Berg-NEaster
327	(WM)-4-BB-Indian-Switch-Vwrye-P	327-(WM)-4-BB-Indian-Switch-V	New England Aster	Symphyotrichum novae-angliae	1	0.06	1.6	Forb	N	N		4	WM	BB-Indian-Switch-Vwrye-Pcord-Berg-NEaster
327	(WM)-4-BB-Indian-Switch-Vwrye-P	327-(WM)-4-BB-Indian-Switch-V	Yellow Coneflower	Ratibida pinnata	1	0.06	0.6	Forb	N	N		4	WM	BB-Indian-Switch-Vwrye-Pcord-Berg-NEaster
327	(W)-5-Ciron-Cup-Bvervain-Switch-P	327-(W)-5-Ciron-Cup-Bvervain-S	Common Ironweed	Vernonia fasciculata	1	0.06	0.5	Forb	N	N		5	W	Ciron-Cup-Bvervain-Switch-Pcord-BB-Indian-V
327	(W)-5-Ciron-Cup-Bvervain-Switch-P	327-(W)-5-Ciron-Cup-Bvervain-S	Cupplant	Silphium perfoliatum	2	0.13	0.1	Forb	N	N		5	W	Ciron-Cup-Bvervain-Switch-Pcord-BB-Indian-V
327	(W)-5-Ciron-Cup-Bvervain-Switch-P	327-(W)-5-Ciron-Cup-Bvervain-S	Blue Vervain	Verbena hastata	1	0.06	2.1	Forb	N	N		5	W	Ciron-Cup-Bvervain-Switch-Pcord-BB-Indian-V
327	(W)-5-Ciron-Cup-Bvervain-Switch-P	327-(W)-5-Ciron-Cup-Bvervain-S	Switchgrass	Panicum virgatum	16	1	8.9	Grass	N	N		5	W	Ciron-Cup-Bvervain-Switch-Pcord-BB-Indian-V
327	(W)-5-Ciron-Cup-Bvervain-Switch-P	327-(W)-5-Ciron-Cup-Bvervain-S	Prairie Cordgrass	Spartina pectinata	8	0.5	1.2	Grass	N	N		5	W	Ciron-Cup-Bvervain-Switch-Pcord-BB-Indian-V
327	(W)-5-Ciron-Cup-Bvervain-Switch-P	327-(W)-5-Ciron-Cup-Bvervain-S	Big Bluestem	Andropogon gerardii	16	1	3.8	Grass	N	N		5	W	Ciron-Cup-Bvervain-Switch-Pcord-BB-Indian-V
327	(W)-5-Ciron-Cup-Bvervain-Switch-P	327-(W)-5-Ciron-Cup-Bvervain-S	Indiangrass	Sorghastrum nutans	16	1	4.4	Grass	N	N		5	W	Ciron-Cup-Bvervain-Switch-Pcord-BB-Indian-V
327	(W)-5-Ciron-Cup-Bvervain-Switch-P	327-(W)-5-Ciron-Cup-Bvervain-S	Virginia Wildrye	Elymus virginicus	20	1.25	1.9	Grass	N	N		5	W	Ciron-Cup-Bvervain-Switch-Pcord-BB-Indian-V
327	(D)-6-Pcinque-SilkAster-Lplant-Smi	327-(D)-6-Pcinque-SilkAster-Lpl	Prairie Cinquefoil	Potentilla arguta	0.5	0.03	2.3	Forb	N	N		6	D	Pcinque-SilkAster-Lplant-Smint-Ptick-Sgrod-H
327	(D)-6-Pcinque-SilkAster-Lplant-Smi	327-(D)-6-Pcinque-SilkAster-Lpl	Silky Aster	Symphyotrichum sericeum	1	0.06	1.3	Forb	N	N		6	D	Pcinque-SilkAster-Lplant-Smint-Ptick-Sgrod-H
327	(D)-6-Pcinque-SilkAster-Lplant-Smi	327-(D)-6-Pcinque-SilkAster-Lpl	Leadplant	Amorpha canescens	1	0.06	0.4	Legume	N	N		6	D	Pcinque-SilkAster-Lplant-Smint-Ptick-Sgrod-H
327	(D)-6-Pcinque-SilkAster-Lplant-Smi	327-(D)-6-Pcinque-SilkAster-Lpl	Spotted Mint	Monarda punctata	0.5	0.03	1.1	Forb	N	N		6	D	Pcinque-SilkAster-Lplant-Smint-Ptick-Sgrod-H
327	(D)-6-Pcinque-SilkAster-Lplant-Smi	327-(D)-6-Pcinque-SilkAster-Lpl	Prairie Tickseed	Coreopsis palmata	1	0.06	0.3	Forb	N	N		6	D	Pcinque-SilkAster-Lplant-Smint-Ptick-Sgrod-H
327	(D)-6-Pcinque-SilkAster-Lplant-Smi	327-(D)-6-Pcinque-SilkAster-Lpl	Stiff Goldenrod	Oligoneuron rigidum	1	0.06	1	Forb	N	N		6	D	Pcinque-SilkAster-Lplant-Smint-Ptick-Sgrod-H
327	(D)-6-Pcinque-SilkAster-Lplant-Smi	327-(D)-6-Pcinque-SilkAster-Lpl	Hoary Vervain	Verbena stricta	1	0.06	0.7	Forb	N	N		6	D	Pcinque-SilkAster-Lplant-Smint-Ptick-Sgrod-H
327	(D)-6-Pcinque-SilkAster-Lplant-Smi	327-(D)-6-Pcinque-SilkAster-Lpl	Yellow Coneflower	Ratibida pinnata	1	0.06	0.6	Forb	N	N		6	D	Pcinque-SilkAster-Lplant-Smint-Ptick-Sgrod-H
327	(D)-6-Pcinque-SilkAster-Lplant-Smi	327-(D)-6-Pcinque-SilkAster-Lpl	Spiderwort	Tradescantia ohiensis	2	0.13	0.4	Forb	N	N		6	D	Pcinque-SilkAster-Lplant-Smint-Ptick-Sgrod-H
327	(D)-6-Pcinque-SilkAster-Lplant-Smi	327-(D)-6-Pcinque-SilkAster-Lpl	Purple Prairie Clover	Dalea purpurea	4	0.25	1.8	Legume	N	N		6	D	Pcinque-SilkAster-Lplant-Smint-Ptick-Sgrod-H
327	(D)-6-Pcinque-SilkAster-Lplant-Smi	327-(D)-6-Pcinque-SilkAster-Lpl	Big Bluestem	Andropogon gerardii	4	0.25	1	Grass	N	N		6	D	Pcinque-SilkAster-Lplant-Smint-Ptick-Sgrod-H
327	(D)-6-Pcinque-SilkAster-Lplant-Smi	327-(D)-6-Pcinque-SilkAster-Lpl	Sideoats Grama	Bouteloua curtipendula	24	1.5	4.4	Grass	N	N		6	D	Pcinque-SilkAster-Lplant-Smint-Ptick-Sgrod-H
327	(D)-6-Pcinque-SilkAster-Lplant-Smi	327-(D)-6-Pcinque-SilkAster-Lpl	Little Bluestem	Schizachyrium scoparium	24	1.5	8.3	Grass	N	N		6	D	Pcinque-SilkAster-Lplant-Smint-Ptick-Sgrod-H

327	(D)-6-Pcinque-SilkAster-Lplant-Smi	327-(D)-6-Pcinque-SilkAster-Lpl	Indiangrass	Sorghastrum nutans	8	0.5	2.2	Grass	N	N		6	D	Pcinque-SilkAster-Lplant-Smint-Ptick-Sgrod-H
327	(D)-6-Pcinque-SilkAster-Lplant-Smi	327-(D)-6-Pcinque-SilkAster-Lpl	Prairie Junegrass	Koeleria macrantha	2	0.13	6.6	Grass	N	N		6	D	Pcinque-SilkAster-Lplant-Smint-Ptick-Sgrod-H
327	(D)-6-Pcinque-SilkAster-Lplant-Smi	327-(D)-6-Pcinque-SilkAster-Lpl	Sand Dropseed	Sporobolus cryptandrus	2	0.13	15.3	Grass	N	N		6	D	Pcinque-SilkAster-Lplant-Smint-Ptick-Sgrod-H
327	(DM)-7-LB-Sgrama-Indian-Switch-P	327-(DM)-7-LB-Sgrama-Indian-S	Little Bluestem	Schizachyrium scoparium	24	1.5	8.2	Grass	N	N		7	DM	LB-Sgrama-Indian-Switch-PPclover-RHbushclo
327	(DM)-7-LB-Sgrama-Indian-Switch-P	327-(DM)-7-LB-Sgrama-Indian-S	Sideoats Grama	Bouteloua curtipendula	24	1.5	4.4	Grass	N	N		7	DM	LB-Sgrama-Indian-Switch-PPclover-RHbushclo
327	(DM)-7-LB-Sgrama-Indian-Switch-P	327-(DM)-7-LB-Sgrama-Indian-S	Indiangrass	Sorghastrum nutans	8	0.5	2	Grass	N	N		7	DM	LB-Sgrama-Indian-Switch-PPclover-RHbushclo
327	(DM)-7-LB-Sgrama-Indian-Switch-P	327-(DM)-7-LB-Sgrama-Indian-S	Switchgrass	Panicum virgatum	4	0.25	2.2	Grass	N	N		7	DM	LB-Sgrama-Indian-Switch-PPclover-RHbushclo
327	(DM)-7-LB-Sgrama-Indian-Switch-P	327-(DM)-7-LB-Sgrama-Indian-S	Purple Prairie Clover	Dalea purpurea	3	0.19	1.4	Legume	N	N		7	DM	LB-Sgrama-Indian-Switch-PPclover-RHbushclo
327	(DM)-7-LB-Sgrama-Indian-Switch-P	327-(DM)-7-LB-Sgrama-Indian-S	Round-Headed Bushclover	Lespedeza capitata	3	0.19	0.8	Legume	N	N		7	DM	LB-Sgrama-Indian-Switch-PPclover-RHbushclo
327	(DM)-7-LB-Sgrama-Indian-Switch-P	327-(DM)-7-LB-Sgrama-Indian-S	Prairie Junegrass	Koeleria macrantha	2	0.13	6.6	Grass	N	N		7	DM	LB-Sgrama-Indian-Switch-PPclover-RHbushclo
327	(DM)-7-LB-Sgrama-Indian-Switch-P	327-(DM)-7-LB-Sgrama-Indian-S	Prairie Dropseed	Sporobolus heterolepis	2	0.13	0.6	Grass	N	N		7	DM	LB-Sgrama-Indian-Switch-PPclover-RHbushclo
327	(DM)-7-LB-Sgrama-Indian-Switch-P	327-(DM)-7-LB-Sgrama-Indian-S	Bergamot	Monarda fistulosa	1	0.06	1.8	Forb	N	N		7	DM	LB-Sgrama-Indian-Switch-PPclover-RHbushclo
327	(DM)-7-LB-Sgrama-Indian-Switch-P	327-(DM)-7-LB-Sgrama-Indian-S	Leadplant	Amorpha canescens	1	0.06	0.4	Legume	N	N		7	DM	LB-Sgrama-Indian-Switch-PPclover-RHbushclo
327	(DM)-7-LB-Sgrama-Indian-Switch-P	327-(DM)-7-LB-Sgrama-Indian-S	Silky Aster	Symphyotrichum sericeum	1	0.06	0.6	Forb	N	N		7	DM	LB-Sgrama-Indian-Switch-PPclover-RHbushclo
327	(DM)-7-LB-Sgrama-Indian-Switch-P	327-(DM)-7-LB-Sgrama-Indian-S	Spiderwort	Tradescantia ohiensis	1	0.06	0.2	Forb	N	N		7	DM	LB-Sgrama-Indian-Switch-PPclover-RHbushclo
327	(DM)-7-LB-Sgrama-Indian-Switch-P	327-(DM)-7-LB-Sgrama-Indian-S	Stiff Goldenrod	Oligoneuron rigidum	1	0.06	1	Forb	N	N		7	DM	LB-Sgrama-Indian-Switch-PPclover-RHbushclo
327	(DM)-7-LB-Sgrama-Indian-Switch-P	327-(DM)-7-LB-Sgrama-Indian-S	Yellow Coneflower	Ratibida pinnata	1	0.06	0.6	Forb	N	N		7	DM	LB-Sgrama-Indian-Switch-PPclover-RHbushclo
327	(DM)-7-LB-Sgrama-Indian-Switch-P	327-(DM)-7-LB-Sgrama-Indian-S	Rough Blazing Star	Liatris aspera	0.5	0.03	0.2	Forb	N	N		7	DM	LB-Sgrama-Indian-Switch-PPclover-RHbushclo
327	(DM)-7-LB-Sgrama-Indian-Switch-P	327-(DM)-7-LB-Sgrama-Indian-S	Prairie Cinquefoil	Potentilla arguta	0.25	0.02	1.1	Forb	N	N		7	DM	LB-Sgrama-Indian-Switch-PPclover-RHbushclo
327	(M)-8-LB-BB-Indian-Cwrye-Switch-	327-(M)-8-LB-BB-Indian-Cwrye-	Little Bluestem	Schizachyrium scoparium	24	1.5	8.2	Grass	N	N		8	M	LB-BB-Indian-Cwrye-Switch-Oxeyesun-Pblzsta
327	(M)-8-LB-BB-Indian-Cwrye-Switch-	327-(M)-8-LB-BB-Indian-Cwrye-	Big Bluestem	Andropogon gerardii	16	1	3.8	Grass	N	N		8	M	LB-BB-Indian-Cwrye-Switch-Oxeyesun-Pblzsta
327	(M)-8-LB-BB-Indian-Cwrye-Switch-	327-(M)-8-LB-BB-Indian-Cwrye-	Indiangrass	Sorghastrum nutans	16	1	4	Grass	N	N		8	M	LB-BB-Indian-Cwrye-Switch-Oxeyesun-Pblzsta
327	(M)-8-LB-BB-Indian-Cwrye-Switch-	327-(M)-8-LB-BB-Indian-Cwrye-	Canada Wildrye	Elymus canadensis	8	0.5	1.3	Grass	N	N		8	M	LB-BB-Indian-Cwrye-Switch-Oxeyesun-Pblzsta
327	(M)-8-LB-BB-Indian-Cwrye-Switch-	327-(M)-8-LB-BB-Indian-Cwrye-	Switchgrass	Panicum virgatum	8	0.5	4.5	Grass	N	N		8	M	LB-BB-Indian-Cwrye-Switch-Oxeyesun-Pblzsta
327	(M)-8-LB-BB-Indian-Cwrye-Switch-	327-(M)-8-LB-BB-Indian-Cwrye-	Ox-eye Sunflower	Heliopsis helianthoides	1	0.06	0.1	Forb	N	N		8	M	LB-BB-Indian-Cwrye-Switch-Oxeyesun-Pblzsta
327	(M)-8-LB-BB-Indian-Cwrye-Switch-	327-(M)-8-LB-BB-Indian-Cwrye-	Prairie Blazing Star	Liatris pycnostachya	1	0.06	0.3	Forb	N	N		8	M	LB-BB-Indian-Cwrye-Switch-Oxeyesun-Pblzsta
327	(M)-8-LB-BB-Indian-Cwrye-Switch-	327-(M)-8-LB-BB-Indian-Cwrye-	Purple Prairie Clover	Dalea purpurea	1	0.06	0.5	Legume	N	N		8	M	LB-BB-Indian-Cwrye-Switch-Oxeyesun-Pblzsta
327	(M)-8-LB-BB-Indian-Cwrye-Switch-	327-(M)-8-LB-BB-Indian-Cwrye-	Rosinweed	Silphium integrifolium	1	0.06	0.1	Forb	N	N		8	M	LB-BB-Indian-Cwrye-Switch-Oxeyesun-Pblzsta
327	(M)-8-LB-BB-Indian-Cwrye-Switch-	327-(M)-8-LB-BB-Indian-Cwrye-	Bergamot	Monarda fistulosa	0.5	0.03	0.9	Forb	N	N		8	M	LB-BB-Indian-Cwrye-Switch-Oxeyesun-Pblzsta
327	(M)-8-LB-BB-Indian-Cwrye-Switch-	327-(M)-8-LB-BB-Indian-Cwrye-	Black-Eyed Susan	Rudbeckia hirta	0.5	0.03	1.1	Forb	N	N		8	M	LB-BB-Indian-Cwrye-Switch-Oxeyesun-Pblzsta
327	(M)-8-LB-BB-Indian-Cwrye-Switch-	327-(M)-8-LB-BB-Indian-Cwrye-	New England Aster	Symphyotrichum novae-angliae	0.5	0.03	0.8	Forb	N	N		8	M	LB-BB-Indian-Cwrye-Switch-Oxeyesun-Pblzsta
327	(M)-8-LB-BB-Indian-Cwrye-Switch-	327-(M)-8-LB-BB-Indian-Cwrye-	Sky-Blue Aster	Symphyotrichum oolentangiense	0.5	0.03	0.9	Forb	N	N		8	M	LB-BB-Indian-Cwrye-Switch-Oxeyesun-Pblzsta
327	(M)-8-LB-BB-Indian-Cwrye-Switch-	327-(M)-8-LB-BB-Indian-Cwrye-	Yellow Coneflower	Ratibida pinnata	0.5	0.03	0.3	Forb	N	N		8	M	LB-BB-Indian-Cwrye-Switch-Oxeyesun-Pblzsta
327	(M)-8-LB-BB-Indian-Cwrye-Switch-	327-(M)-8-LB-BB-Indian-Cwrye-	Culver's Root	Veronicastrum virginicum	0.25	0.02	4.3	Forb	N	N		8	M	LB-BB-Indian-Cwrye-Switch-Oxeyesun-Pblzsta
327	(WM)-9-BB-Cwrye-Switch-Indian-C	327-(WM)-9-BB-Cwrye-Switch-I	Big Bluestem	Andropogon gerardii	20	1.25	4.8	Grass	N	N		9	WM	BB-Cwrye-Switch-Indian-Cup-Pcord-WWIndig
327	(WM)-9-BB-Cwrye-Switch-Indian-C	327-(WM)-9-BB-Cwrye-Switch-I	Canada Wildrye	Elymus canadensis	16	1	2.5	Grass	N	N		9	WM	BB-Cwrye-Switch-Indian-Cup-Pcord-WWIndig
327	(WM)-9-BB-Cwrye-Switch-Indian-C	327-(WM)-9-BB-Cwrye-Switch-I	Switchgrass	Panicum virgatum	16	1	9	Grass	N	N		9	WM	BB-Cwrye-Switch-Indian-Cup-Pcord-WWIndig
327	(WM)-9-BB-Cwrye-Switch-Indian-C	327-(WM)-9-BB-Cwrye-Switch-I	Indiangrass	Sorghastrum nutans	12	0.75	3	Grass	N	N		9	WM	BB-Cwrye-Switch-Indian-Cup-Pcord-WWIndig
327	(WM)-9-BB-Cwrye-Switch-Indian-C	327-(WM)-9-BB-Cwrye-Switch-I	Cupplant	Silphium perfoliatum	4	0.25	0.1	Forb	N	N		9	WM	BB-Cwrye-Switch-Indian-Cup-Pcord-WWIndig
327	(WM)-9-BB-Cwrye-Switch-Indian-C	327-(WM)-9-BB-Cwrye-Switch-I	Prairie Cordgrass	Spartina pectinata	4	0.25	0.6	Grass	N	N		9	WM	BB-Cwrye-Switch-Indian-Cup-Pcord-WWIndig
327	(WM)-9-BB-Cwrye-Switch-Indian-C	327-(WM)-9-BB-Cwrye-Switch-I	White Wild Indigo	Baptisia alba	1.5	0.09	0.1	Legume	N	N		9	WM	BB-Cwrye-Switch-Indian-Cup-Pcord-WWIndig
327	(WM)-9-BB-Cwrye-Switch-Indian-C	327-(WM)-9-BB-Cwrye-Switch-I	Bergamot	Monarda fistulosa	1	0.06	1.8	Forb	N	N		9	WM	BB-Cwrye-Switch-Indian-Cup-Pcord-WWIndig
327	(WM)-9-BB-Cwrye-Switch-Indian-C	327-(WM)-9-BB-Cwrye-Switch-I	Black-Eyed Susan	Rudbeckia hirta	1	0.06	2.2	Forb	N	N		9	WM	BB-Cwrye-Switch-Indian-Cup-Pcord-WWIndig
327	(WM)-9-BB-Cwrye-Switch-Indian-C	327-(WM)-9-BB-Cwrye-Switch-I	Common Ironweed	Vernonia fasciculata	1	0.06	0.4	Forb	N	N		9	WM	BB-Cwrye-Switch-Indian-Cup-Pcord-WWIndig
327	(WM)-9-BB-Cwrye-Switch-Indian-C	327-(WM)-9-BB-Cwrye-Switch-I	Golden Alexanders	Zizia aurea	1	0.06	0.2	Forb	N	N		9	WM	BB-Cwrye-Switch-Indian-Cup-Pcord-WWIndig
327	(WM)-9-BB-Cwrye-Switch-Indian-C	327-(WM)-9-BB-Cwrye-Switch-I	New England Aster	Symphyotrichum novae-angliae	1	0.06	1.6	Forb	N	N		9	WM	BB-Cwrye-Switch-Indian-Cup-Pcord-WWIndig
327	(WM)-9-BB-Cwrye-Switch-Indian-C	327-(WM)-9-BB-Cwrye-Switch-I	Prairie Blazing Star	Liatris pycnostachya	1	0.06	0.4	Forb	N	N		9	WM	BB-Cwrye-Switch-Indian-Cup-Pcord-WWIndig
327	(WM)-9-BB-Cwrye-Switch-Indian-C	327-(WM)-9-BB-Cwrye-Switch-I	Yellow Coneflower	Ratibida pinnata	1	0.06	0.6	Forb	N	N		9	WM	BB-Cwrye-Switch-Indian-Cup-Pcord-WWIndig
327	(WM)-9-BB-Cwrye-Switch-Indian-C	327-(WM)-9-BB-Cwrye-Switch-I	Great St. John's Wort	Hypericum ascyron	0.25	0.02	1.1	Forb	N	N		9	WM	BB-Cwrye-Switch-Indian-Cup-Pcord-WWIndig
327	(W)-10-Croot-Ciron-Cup-MM-Jpye-	327-(W)-10-Croot-Ciron-Cup-M	Culver's Root	Veronicastrum virginicum	0.25	0.02	4.3	Forb	N	N		10	W	Croot-Ciron-Cup-MM-Jpye-Bvervain-Shwgroo
327	(W)-10-Croot-Ciron-Cup-MM-Jpye-	327-(W)-10-Croot-Ciron-Cup-M	Common Ironweed	Vernonia fasciculata	0.5	0.03	0.2	Forb	N	N		10	W	Croot-Ciron-Cup-MM-Jpye-Bvervain-Shwgroo
327	(W)-10-Croot-Ciron-Cup-MM-Jpye-	327-(W)-10-Croot-Ciron-Cup-M	Cupplant	Silphium perfoliatum	2	0.13	0.1	Forb	N	N		10	W	Croot-Ciron-Cup-MM-Jpye-Bvervain-Shwgroo
327	(W)-10-Croot-Ciron-Cup-MM-Jpye-	327-(W)-10-Croot-Ciron-Cup-M	Marsh Milkweed	Asclepias incarnata	2	0.13	0.2	Forb	N	N		10	W	Croot-Ciron-Cup-MM-Jpye-Bvervain-Shwgroo
327	(W)-10-Croot-Ciron-Cup-MM-Jpye-	327-(W)-10-Croot-Ciron-Cup-M	Joe-Pye Weed	Eutrochium maculatum	1	0.06	2.2	Forb	N	N		10	W	Croot-Ciron-Cup-MM-Jpye-Bvervain-Shwgroo
327	(W)-10-Croot-Ciron-Cup-MM-Jpye-	327-(W)-10-Croot-Ciron-Cup-M	Blue Vervain	Verbena hastata	2	0.13	4.3	Forb	N	N		10	W	Croot-Ciron-Cup-MM-Jpye-Bvervain-Shwgroo
327	(W)-10-Croot-Ciron-Cup-MM-Jpye-	327-(W)-10-Croot-Ciron-Cup-M	Showy Tick Trefoil	Desmodium canadense	3	0.19	0.3	Forb	N	N		10	W	Croot-Ciron-Cup-MM-Jpye-Bvervain-Shwgroo
327	(W)-10-Croot-Ciron-Cup-MM-Jpye-	327-(W)-10-Croot-Ciron-Cup-M	Boneset	Eupatorium perfoliatum	0.5	0.03	1.8	Forb	N	N		10	W	Croot-Ciron-Cup-MM-Jpye-Bvervain-Shwgroo

327	(W)-10-Croot-Ciron-Cup-MM-Jpye-	327-(W)-10-Croot-Ciron-Cup-M	Golden Alexanders	Zizia aurea	2	0.13	0.5	Forb	N	N		10	W	Croot-Ciron-Cup-MM-Jpye-Bvervain-Shwgroc
327	(W)-10-Croot-Ciron-Cup-MM-Jpye-	327-(W)-10-Croot-Ciron-Cup-M	Switchgrass	Panicum virgatum	8	0.5	4.5	Grass	N	N		10	W	Croot-Ciron-Cup-MM-Jpye-Bvervain-Shwgroc
327	(W)-10-Croot-Ciron-Cup-MM-Jpye-	327-(W)-10-Croot-Ciron-Cup-M	Prairie Cordgrass	Spartina pectinata	4	0.25	0.6	Grass	N	N		10	W	Croot-Ciron-Cup-MM-Jpye-Bvervain-Shwgroc
327	(W)-10-Croot-Ciron-Cup-MM-Jpye-	327-(W)-10-Croot-Ciron-Cup-M	Big Bluestem	Andropogon gerardii	4	0.25	1	Grass	N	N		10	W	Croot-Ciron-Cup-MM-Jpye-Bvervain-Shwgroc
327	(W)-10-Croot-Ciron-Cup-MM-Jpye-	327-(W)-10-Croot-Ciron-Cup-M	Canada Wildrye	Elymus canadensis	8	0.5	1	Grass	N	N		10	W	Croot-Ciron-Cup-MM-Jpye-Bvervain-Shwgroc
327	(W)-10-Croot-Ciron-Cup-MM-Jpye-	327-(W)-10-Croot-Ciron-Cup-M	Indiangrass	Sorghastrum nutans	4	0.25	1.1	Grass	N	N		10	W	Croot-Ciron-Cup-MM-Jpye-Bvervain-Shwgroc
327	(W)-10-Croot-Ciron-Cup-MM-Jpye-	327-(W)-10-Croot-Ciron-Cup-M	Fowl Mannagrass	Glyceria striata	4	0.25	14.7	Grass	N	N		10	W	Croot-Ciron-Cup-MM-Jpye-Bvervain-Shwgroc
327	(W)-10-Croot-Ciron-Cup-MM-Jpye-	327-(W)-10-Croot-Ciron-Cup-M	Fox Sedge	Carex vulpinoidea	4	0.25	9.2	Sedge	N	N		10	W	Croot-Ciron-Cup-MM-Jpye-Bvervain-Shwgroc
327	(DM)-11-Pcinque-Lplant-SilkAster-I	327-(DM)-11-Pcinque-Lplant-Sil	Prairie Cinquefoil	Potentilla arguta	0.5	0.03	2.2	Forb	N	N		11	DM	Pcinque-Lplant-SilkAster-PPclover-Rblzstar-W
327	(DM)-11-Pcinque-Lplant-SilkAster-I	327-(DM)-11-Pcinque-Lplant-Sil	Leadplant	Amorpha canescens	1	0.06	0.4	Legume	N	N		11	DM	Pcinque-Lplant-SilkAster-PPclover-Rblzstar-W
327	(DM)-11-Pcinque-Lplant-SilkAster-I	327-(DM)-11-Pcinque-Lplant-Sil	Silky Aster	Symphyotrichum sericeum	1	0.06	1.3	Forb	N	N		11	DM	Pcinque-Lplant-SilkAster-PPclover-Rblzstar-W
327	(DM)-11-Pcinque-Lplant-SilkAster-I	327-(DM)-11-Pcinque-Lplant-Sil	Purple Prairie Clover	Dalea purpurea	4	0.25	1.8	Legume	N	N		11	DM	Pcinque-Lplant-SilkAster-PPclover-Rblzstar-W
327	(DM)-11-Pcinque-Lplant-SilkAster-I	327-(DM)-11-Pcinque-Lplant-Sil	Rough Blazing Star	Liatris aspera	1	0.06	0.3	Forb	N	N		11	DM	Pcinque-Lplant-SilkAster-PPclover-Rblzstar-W
327	(DM)-11-Pcinque-Lplant-SilkAster-I	327-(DM)-11-Pcinque-Lplant-Sil	Wild Lupine	Lupinus perennis	6	0.38	0.1	Legume	N	N		11	DM	Pcinque-Lplant-SilkAster-PPclover-Rblzstar-W
327	(DM)-11-Pcinque-Lplant-SilkAster-I	327-(DM)-11-Pcinque-Lplant-Sil	Bergamot	Monarda fistulosa	0.5	0.03	0.9	Forb	N	N		11	DM	Pcinque-Lplant-SilkAster-PPclover-Rblzstar-W
327	(DM)-11-Pcinque-Lplant-SilkAster-I	327-(DM)-11-Pcinque-Lplant-Sil	Yellow Coneflower	Ratibida pinnata	1	0.06	0.6	Forb	N	N		11	DM	Pcinque-Lplant-SilkAster-PPclover-Rblzstar-W
327	(DM)-11-Pcinque-Lplant-SilkAster-I	327-(DM)-11-Pcinque-Lplant-Sil	Stiff Goldenrod	Oligoneuron rigidum	1	0.06	1.1	Forb	N	N		11	DM	Pcinque-Lplant-SilkAster-PPclover-Rblzstar-W
327	(DM)-11-Pcinque-Lplant-SilkAster-I	327-(DM)-11-Pcinque-Lplant-Sil	Pale Purple Coneflower	Echinacea pallida	2	0.13	0.2	Forb	N	N		11	DM	Pcinque-Lplant-SilkAster-PPclover-Rblzstar-W
327	(DM)-11-Pcinque-Lplant-SilkAster-I	327-(DM)-11-Pcinque-Lplant-Sil	Sideoats Grama	Bouteloua curtipendula	20	1.25	3.7	Grass	N	N		11	DM	Pcinque-Lplant-SilkAster-PPclover-Rblzstar-W
327	(DM)-11-Pcinque-Lplant-SilkAster-I	327-(DM)-11-Pcinque-Lplant-Sil	Little Bluestem	Schizachyrium scoparium	24	1.5	8.3	Grass	N	N		11	DM	Pcinque-Lplant-SilkAster-PPclover-Rblzstar-W
327	(DM)-11-Pcinque-Lplant-SilkAster-I	327-(DM)-11-Pcinque-Lplant-Sil	Indiangrass	Sorghastrum nutans	8	0.5	2.2	Grass	N	N		11	DM	Pcinque-Lplant-SilkAster-PPclover-Rblzstar-W
327	(DM)-11-Pcinque-Lplant-SilkAster-I	327-(DM)-11-Pcinque-Lplant-Sil	Prairie Junegrass	Koeleria macrantha	1	0.06	3.3	Grass	N	N		11	DM	Pcinque-Lplant-SilkAster-PPclover-Rblzstar-W
327	(DM)-11-Pcinque-Lplant-SilkAster-I	327-(DM)-11-Pcinque-Lplant-Sil	Prairie Dropseed	Sporobolus heterolepis	2	0.13	0.7	Grass	N	N		11	DM	Pcinque-Lplant-SilkAster-PPclover-Rblzstar-W
327	(DM)-11-Pcinque-Lplant-SilkAster-I	327-(DM)-11-Pcinque-Lplant-Sil	Switchgrass	Panicum virgatum	4	0.25	2.2	Grass	N	N		11	DM	Pcinque-Lplant-SilkAster-PPclover-Rblzstar-W
327	(DM)-12-LB-Sgrama-0-Swort-PPclo	327-(DM)-12-LB-Sgrama-0-Swo	Little Bluestem	Schizachyrium scoparium	16	1	5.5	Grass	N	Y		12	DM	LB-Sgrama-0-Swort-PPclover-Ycone-Pblzstar-
327	(DM)-12-LB-Sgrama-0-Swort-PPclo	327-(DM)-12-LB-Sgrama-0-Swo	Sideoats Grama	Bouteloua curtipendula	16	1	2.2	Grass	N	Y		12	DM	LB-Sgrama-0-Swort-PPclover-Ycone-Pblzstar-
327	(DM)-12-LB-Sgrama-0-Swort-PPclo	327-(DM)-12-LB-Sgrama-0-Swo	Illinois Tick Trefoil	Desmodium illinoense	5	0.31	0.5	Legume	N	Y		12	DM	LB-Sgrama-0-Swort-PPclover-Ycone-Pblzstar-
327	(DM)-12-LB-Sgrama-0-Swort-PPclo	327-(DM)-12-LB-Sgrama-0-Swo	Spiderwort	Tradescantia ohiensis	5	0.31	0.9	Forb	N	Y		12	DM	LB-Sgrama-0-Swort-PPclover-Ycone-Pblzstar-
327	(DM)-12-LB-Sgrama-0-Swort-PPclo	327-(DM)-12-LB-Sgrama-0-Swo	Purple Prairie Clover	Dalea purpurea	6	0.38	2.7	Legume	N	Y		12	DM	LB-Sgrama-0-Swort-PPclover-Ycone-Pblzstar-
327	(DM)-12-LB-Sgrama-0-Swort-PPclo	327-(DM)-12-LB-Sgrama-0-Swo	Yellow Coneflower	Ratibida pinnata	1	0.06	0.6	Forb	N	Y		12	DM	LB-Sgrama-0-Swort-PPclover-Ycone-Pblzstar-
327	(DM)-12-LB-Sgrama-0-Swort-PPclo	327-(DM)-12-LB-Sgrama-0-Swo	Prairie Blazing Star	Liatris pycnostachya	3	0.19	0.8	Forb	N	Y		12	DM	LB-Sgrama-0-Swort-PPclover-Ycone-Pblzstar-
327	(DM)-12-LB-Sgrama-0-Swort-PPclo	327-(DM)-12-LB-Sgrama-0-Swo	Rattlesnake Master	Eryngium yuccifolium	6	0.38	1.1	Forb	N	Y		12	DM	LB-Sgrama-0-Swort-PPclover-Ycone-Pblzstar-
327	(DM)-12-LB-Sgrama-0-Swort-PPclo	327-(DM)-12-LB-Sgrama-0-Swo	Showy Goldenrod	Solidago speciosa	4	0.25	8.7	Forb	N	Y		12	DM	LB-Sgrama-0-Swort-PPclover-Ycone-Pblzstar-
327	(DM)-12-LB-Sgrama-0-Swort-PPclo	327-(DM)-12-LB-Sgrama-0-Swo	Stiff Goldenrod	Oligoneuron rigidum	3	0.19	3.2	Forb	N	Y		12	DM	LB-Sgrama-0-Swort-PPclover-Ycone-Pblzstar-
327	(DM)-12-LB-Sgrama-0-Swort-PPclo	327-(DM)-12-LB-Sgrama-0-Swo	Smooth Blue Aster	Symphyotricum laeve	2	0.13	2.2	Forb	N	Y		12	DM	LB-Sgrama-0-Swort-PPclover-Ycone-Pblzstar-
327	(DM)-12-LB-Sgrama-0-Swort-PPclo	327-(DM)-12-LB-Sgrama-0-Swo	Prairie Cinquefoil	Potentilla arguta	2	0.13	9.2	Forb	N	Y		12	DM	LB-Sgrama-0-Swort-PPclover-Ycone-Pblzstar-
327	(M)-13-LB-Sgrama-Fbtongue-Swort-	327-(M)-13-LB-Sgrama-Fbtongu	Little Bluestem	Schizachyrium scoparium	16	1	5.5	Grass	N	Y		13	M	LB-Sgrama-Fbtongue-Swort-Galex-Ycone-PPc
327	(M)-13-LB-Sgrama-Fbtongue-Swort-	327-(M)-13-LB-Sgrama-Fbtongu	Sideoats Grama	Bouteloua curtipendula	16	1	2.2	Grass	N	Y		13	M	LB-Sgrama-Fbtongue-Swort-Galex-Ycone-PPc
327	(M)-13-LB-Sgrama-Fbtongue-Swort-	327-(M)-13-LB-Sgrama-Fbtongu	Foxglove Beardtongue	Penstemon digitalis	4	0.25	10.6	Forb	N	Y		13	M	LB-Sgrama-Fbtongue-Swort-Galex-Ycone-PPc
327	(M)-13-LB-Sgrama-Fbtongue-Swort-	327-(M)-13-LB-Sgrama-Fbtongu	Spiderwort	Tradescantia ohiensis	6	0.38	1.1	Forb	N	Y		13	M	LB-Sgrama-Fbtongue-Swort-Galex-Ycone-PPc
327	(M)-13-LB-Sgrama-Fbtongue-Swort-	327-(M)-13-LB-Sgrama-Fbtongu	Golden Alexanders	Zizia aurea	6	0.38	1.5	Forb	N	Y		13	M	LB-Sgrama-Fbtongue-Swort-Galex-Ycone-PPc
327	(M)-13-LB-Sgrama-Fbtongue-Swort-	327-(M)-13-LB-Sgrama-Fbtongu	Yellow Coneflower	Ratibida pinnata	1	0.06	0.6	Forb	N	Y		13	M	LB-Sgrama-Fbtongue-Swort-Galex-Ycone-PPc
327	(M)-13-LB-Sgrama-Fbtongue-Swort-	327-(M)-13-LB-Sgrama-Fbtongu	Purple Prairie Clover	Dalea purpurea	6	0.38	2.7	Legume	N	Y		13	M	LB-Sgrama-Fbtongue-Swort-Galex-Ycone-PPc
327	(M)-13-LB-Sgrama-Fbtongue-Swort-	327-(M)-13-LB-Sgrama-Fbtongu	Prairie Blazing Star	Liatris pycnostachya	4	0.25	1.1	Forb	N	Y		13	M	LB-Sgrama-Fbtongue-Swort-Galex-Ycone-PPc
327	(M)-13-LB-Sgrama-Fbtongue-Swort-	327-(M)-13-LB-Sgrama-Fbtongu	Rattlesnake Master	Eryngium yuccifolium	6	0.38	1.1	Forb	N	Y		13	M	LB-Sgrama-Fbtongue-Swort-Galex-Ycone-PPc
327	(M)-13-LB-Sgrama-Fbtongue-Swort-	327-(M)-13-LB-Sgrama-Fbtongu	New England Aster	Symphyotrichum novae-angliae	3	0.19	4.8	Forb	N	Y		13	M	LB-Sgrama-Fbtongue-Swort-Galex-Ycone-PPc
327	(M)-13-LB-Sgrama-Fbtongue-Swort-	327-(M)-13-LB-Sgrama-Fbtongu	Stiff Goldenrod	Oligoneuron rigidum	3	0.19	3.2	Forb	N	Y		13	M	LB-Sgrama-Fbtongue-Swort-Galex-Ycone-PPc
327	(M)-13-LB-Sgrama-Fbtongue-Swort-	327-(M)-13-LB-Sgrama-Fbtongu	Smooth Blue Aster	Symphyotrichum laeve	3	0.19	3.3	Forb	N	Y		13	M	LB-Sgrama-Fbtongue-Swort-Galex-Ycone-PPc
327	(WM)-14-BB-Indian-Fbtongue-Swor	327-(WM)-14-BB-Indian-Fbtong	Big Bluestem	Andropogon gerardii	16	1	3.8	Grass	N	Y		14	WM	BB-Indian-Fbtongue-Swort-Galex-Ycone-Pblz
327	(WM)-14-BB-Indian-Fbtongue-Swor	327-(WM)-14-BB-Indian-Fbtong	Indiangrass	Sorghastrum nutans	16	1	4.4	Grass	N	Y		14	WM	BB-Indian-Fbtongue-Swort-Galex-Ycone-Pblz
327	(WM)-14-BB-Indian-Fbtongue-Swor	327-(WM)-14-BB-Indian-Fbtong	Foxglove Beardtongue	Penstemon digitalis	4	0.25	10.6	Forb	N	Y		14	WM	BB-Indian-Fbtongue-Swort-Galex-Ycone-Pblz
327	(WM)-14-BB-Indian-Fbtongue-Swor	327-(WM)-14-BB-Indian-Fbtong	Spiderwort	Tradescantia ohiensis	6	0.38	1.1	Forb	N	Y		14	WM	BB-Indian-Fbtongue-Swort-Galex-Ycone-Pblz
327	(WM)-14-BB-Indian-Fbtongue-Swor	327-(WM)-14-BB-Indian-Fbtong	Golden Alexanders	Zizia aurea	5	0.31	1.3	Forb	N	Y		14	WM	BB-Indian-Fbtongue-Swort-Galex-Ycone-Pblz
327	(WM)-14-BB-Indian-Fbtongue-Swor	327-(WM)-14-BB-Indian-Fbtong	Yellow Coneflower	Ratibida pinnata	1	0.06	0.6	Forb	N	Y		14	WM	BB-Indian-Fbtongue-Swort-Galex-Ycone-Pblz
327	(WM)-14-BB-Indian-Fbtongue-Swor	327-(WM)-14-BB-Indian-Fbtong	Prairie Blazing Star	Liatris pycnostachya	3	0.19	0.8	Forb	N	Y		14	WM	BB-Indian-Fbtongue-Swort-Galex-Ycone-Pblz
327	(WM)-14-BB-Indian-Fbtongue-Swor	327-(WM)-14-BB-Indian-Fbtong	Rattlesnake Master	Eryngium yuccifolium	6	0.38	1.1	Forb	N	Y		14	WM	BB-Indian-Fbtongue-Swort-Galex-Ycone-Pblz
327	(WM)-14-BB-Indian-Fbtongue-Swor	327-(WM)-14-BB-Indian-Fbtong	New England Aster	Symphyotrichum novae-angliae	3	0.19	4.8	Forb	N	Y		14	WM	BB-Indian-Fbtongue-Swort-Galex-Ycone-Pblz
327	(WM)-14-BB-Indian-Fbtongue-Swor	327-(WM)-14-BB-Indian-Fbtong	Blue Vervain	Verbena hastata	4	0.25	8.5	Forb	N	Y		14	WM	BB-Indian-Fbtongue-Swort-Galex-Ycone-Pblz

327	(WM)-14-BB-Indian-Fbtongue-Swor	327-(WM)-14-BB-Indian-Fbtongu	Common Ironweed	Vernonia fasciculata	3	0.19	1.4	Forb	N	Y		14	WM	BB-Indian-Fbtongue-Swort-Galex-Ycone-Pblz
327	(WM)-14-BB-Indian-Fbtongue-Swor	327-(WM)-14-BB-Indian-Fbtongu	Cupplant	Silphium perfoliatum	3	0.19	0.1	Forb	N	Y		14	WM	BB-Indian-Fbtongue-Swort-Galex-Ycone-Pblz
327	(D-W)-15A-Switch	327-(D-W)-15A-Switch	Switchgrass	Panicum virgatum	112	7	63	Grass	N	N		15A	D-W	Switch
327	(D-W)-15B-BB	327-(D-W)-15B-BB	Big Bluestem	Andropogon gerardii	176	11	42	Grass	N	N		15B	D-W	BB
327	(D-W)-15C-Indian	327-(D-W)-15C-Indian	Indiangrass	Sorghastrum nutans	160	10	44	Grass	N	N		15C	D-W	Indian
327	(DM-M)-16A-SB-Tim-Alf	327-(DM-M)-16A-SB-Tim-Alf	Smooth Bromegrass	Bromus inermis	48	3	9	Grass	I	N		16A	DM-M	SB-Tim-Alf
327	(DM-M)-16A-SB-Tim-Alf	327-(DM-M)-16A-SB-Tim-Alf	Timothy	Phleum pratense	40	2.5	71	Grass	I	N		16A	DM-M	SB-Tim-Alf
327	(DM-M)-16A-SB-Tim-Alf	327-(DM-M)-16A-SB-Tim-Alf	Alfalfa	Medicago sativa	96	6	30	Legume	I	N		16A	DM-M	SB-Tim-Alf
327	(M-W)-16B-Orc-Tim-RC	327-(M-W)-16B-Orc-Tim-RC	Orchardgrass	Dactylis glomerata L.	32	2	30	Grass	I	N		16B	M-W	Orc-Tim-RC
327	(M-W)-16B-Orc-Tim-RC	327-(M-W)-16B-Orc-Tim-RC	Timothy	Phleum pratense	32	2	57	Grass	I	N		16B	M-W	Orc-Tim-RC
327	(M-W)-16B-Orc-Tim-RC	327-(M-W)-16B-Orc-Tim-RC	Red Clover	Trifolium pratense	80	5	30	Legume	I	N		16B	M-W	Orc-Tim-RC
327	(DM-M)-16C-Orc-Tim-Alf	327-(DM-M)-16C-Orc-Tim-Alf	Orchardgrass	Dactylis glomerata L.	32	2	30	Grass	I	N		16C	DM-M	Orc-Tim-Alf
327	(DM-M)-16C-Orc-Tim-Alf	327-(DM-M)-16C-Orc-Tim-Alf	Timothy	Phleum pratense	32	2	57	Grass	I	N		16C	DM-M	Orc-Tim-Alf
327	(DM-M)-16C-Orc-Tim-Alf	327-(DM-M)-16C-Orc-Tim-Alf	Alfalfa	Medicago sativa	96	6	30	Legume	I	N		16C	DM-M	Orc-Tim-Alf
327	(M-WM)-16D-SB-Tim-RC	327-(M-WM)-16D-SB-Tim-RC	Smooth Bromegrass	Bromus inermis	48	3	9	Grass	I	N		16D	M-WM	SB-Tim-RC
327	(M-WM)-16D-SB-Tim-RC	327-(M-WM)-16D-SB-Tim-RC	Timothy	Phleum pratense	40	2.5	71	Grass	I	N		16D	M-WM	SB-Tim-RC
327	(M-WM)-16D-SB-Tim-RC	327-(M-WM)-16D-SB-Tim-RC	Red Clover	Trifolium pratense	80	5	30	Legume	I	N		16D	M-WM	SB-Tim-RC
327	(M-WM)-16E-SB-Tim-Orc-RC-Lad(	327-(M-WM)-16E-SB-Tim-Orc-I	Smooth Bromegrass	Bromus inermis	32	2	6	Grass	I	N		16E	M-WM	SB-Tim-Orc-RC-LadC
327	(M-WM)-16E-SB-Tim-Orc-RC-Lad(	327-(M-WM)-16E-SB-Tim-Orc-I	Timothy	Phleum pratense	32	2	57	Grass	I	N		16E	M-WM	SB-Tim-Orc-RC-LadC
327	(M-WM)-16E-SB-Tim-Orc-RC-Lad(	327-(M-WM)-16E-SB-Tim-Orc-I	Orchardgrass	Dactylis glomerata L.	16	1	15	Grass	I	N		16E	M-WM	SB-Tim-Orc-RC-LadC
327	(M-WM)-16E-SB-Tim-Orc-RC-Lad(	327-(M-WM)-16E-SB-Tim-Orc-I	Red Clover	Trifolium pratense	80	5	30	Legume	I	N		16E	M-WM	SB-Tim-Orc-RC-LadC
327	(M-WM)-16E-SB-Tim-Orc-RC-Lad(	327-(M-WM)-16E-SB-Tim-Orc-I	White Ladino Clover	Trifolium repens	8	0.5	10	Legume	I	N		16E	M-WM	SB-Tim-Orc-RC-LadC
327	(M-WM)-16F-Orc-Tim-RC-LadC	327-(M-WM)-16F-Orc-Tim-RC-I	Orchardgrass	Dactylis glomerata L.	32	2	30	Grass	I	N		16F	M-WM	Orc-Tim-RC-LadC
327	(M-WM)-16F-Orc-Tim-RC-LadC	327-(M-WM)-16F-Orc-Tim-RC-I	Timothy	Phleum pratense	32	2	57	Grass	I	N		16F	M-WM	Orc-Tim-RC-LadC
327	(M-WM)-16F-Orc-Tim-RC-LadC	327-(M-WM)-16F-Orc-Tim-RC-I	Red Clover	Trifolium pratense	80	5	30	Legume	I	N		16F	M-WM	Orc-Tim-RC-LadC
327	(M-WM)-16F-Orc-Tim-RC-LadC	327-(M-WM)-16F-Orc-Tim-RC-I	White Ladino Clover	Trifolium repens	8	0.5	10	Legume	I	N		16F	M-WM	Orc-Tim-RC-LadC
327	(DM-WM)-16G-Orc-Tim-Btrefoil	327-(DM-WM)-16G-Orc-Tim-Bt	Orchardgrass	Dactylis glomerata L.	32	2	30	Grass	I	N		16G	DM-WM	Orc-Tim-Btrefoil
327	(DM-WM)-16G-Orc-Tim-Btrefoil	327-(DM-WM)-16G-Orc-Tim-Bt	Timothy	Phleum pratense	32	2	57	Grass	I	N		16G	DM-WM	Orc-Tim-Btrefoil
327	(DM-WM)-16G-Orc-Tim-Btrefoil	327-(DM-WM)-16G-Orc-Tim-Bt	Birdsfoot Trefoil	Lotus corniculatus	64	4	36	Legume	I	N		16G	DM-WM	Orc-Tim-Btrefoil
327	(M-WM)-16H-Tfesc-Tim-RC-LadC	327-(M-WM)-16H-Tfesc-Tim-RC	Tall Fescue	Schedonorus arundinaceus	48	3	15	Grass	I	N		16H	M-WM	Tfesc-Tim-RC-LadC
327	(M-WM)-16H-Tfesc-Tim-RC-LadC	327-(M-WM)-16H-Tfesc-Tim-RC	Timothy	Phleum pratense	32	2	57	Grass	I	N		16H	M-WM	Tfesc-Tim-RC-LadC
327	(M-WM)-16H-Tfesc-Tim-RC-LadC	327-(M-WM)-16H-Tfesc-Tim-RC	Red Clover	Trifolium pratense	64	4	24	Legume	I	N		16H	M-WM	Tfesc-Tim-RC-LadC
327	(M-WM)-16H-Tfesc-Tim-RC-LadC	327-(M-WM)-16H-Tfesc-Tim-RC	White Ladino Clover	Trifolium repens	16	1	20	Legume	I	N		16H	M-WM	Tfesc-Tim-RC-LadC
327	(DM-M)-17A-Orc-Tim-Alf-LadC	327-(DM-M)-17A-Orc-Tim-Alf-I	Orchardgrass	Dactylis glomerata L.	16	1	15	Grass	I	Y		17A	DM-M	Orc-Tim-Alf-LadC
327	(DM-M)-17A-Orc-Tim-Alf-LadC	327-(DM-M)-17A-Orc-Tim-Alf-I	Timothy	Phleum pratense	8	0.5	14	Grass	I	Y		17A	DM-M	Orc-Tim-Alf-LadC
327	(DM-M)-17A-Orc-Tim-Alf-LadC	327-(DM-M)-17A-Orc-Tim-Alf-I	Alfalfa	Medicago sativa	64	4	20	Legume	I	Y		17A	DM-M	Orc-Tim-Alf-LadC
327	(DM-M)-17A-Orc-Tim-Alf-LadC	327-(DM-M)-17A-Orc-Tim-Alf-I	White Ladino Clover	Trifolium repens	24	1.5	30	Legume	I	Y		17A	DM-M	Orc-Tim-Alf-LadC
327	(WM-W)-17B-Prye-Tfesc-RC-Aclov	327-(WM-W)-17B-Prye-Tfesc-R	Perennial Ryegrass	Lolium perenne	48	3	15	Grass	I	Y		17B	WM-W	Prye-Tfesc-RC-Aclover
327	(WM-W)-17B-Prye-Tfesc-RC-Aclov	327-(WM-W)-17B-Prye-Tfesc-R	Tall Fescue	Schedonorus arundinaceus	48	3	15	Grass	I	Y		17B	WM-W	Prye-Tfesc-RC-Aclover
327	(WM-W)-17B-Prye-Tfesc-RC-Aclov	327-(WM-W)-17B-Prye-Tfesc-R	Red Clover	Trifolium pratense	64	4	20	Legume	I	Y		17B	WM-W	Prye-Tfesc-RC-Aclover
327	(WM-W)-17B-Prye-Tfesc-RC-Aclov	327-(WM-W)-17B-Prye-Tfesc-R	Alsike Clover	Trifolium hybridum	24	1.5	23.4	Legume	I	X		17B	WM-W	Prye-Tfesc-RC-Aclover

STANDARD 342 MIXES REVISION DATE: 1/23/2013

criteria 0

STD	Mix #	std-mix	Common Name	Scientific Name	PLS (oz./A)	PLS (lbs./A)	Seeds/Square Foot	Type	Intro / Native	Poll. (Y/N)		Mix No.	MR	Mix Components
	No 342 mixes meet this criterion	LEAVE THIS ROW AS IS							N	Y				
	No 342 mixes meet this criterion	LEAVE THIS ROW AS IS							N	N				
		LEAVE THIS ROW AS IS							I	Y				
342	(DM-M)-1-SB-Crfesc-KB-Alf-R	342-(DM-M)-1-SB-Crfesc-KB	Smooth Bromegrass	Bromus inermis	160.0	10	30	Grass	I	N		1	DM-M	SB-Crfesc-KB-Alf-RC
342	(DM-M)-1-SB-Crfesc-KB-Alf-R	342-(DM-M)-1-SB-Crfesc-KB	Creeping Red Fescue	Festuca rubra	48.0	3	24	Grass	I	N		1	DM-M	SB-Crfesc-KB-Alf-RC
342	(DM-M)-1-SB-Crfesc-KB-Alf-R	342-(DM-M)-1-SB-Crfesc-KB	Kentucky Bluegrass	Poa pratensis	24.0	1.5	75	Grass	I	N		1	DM-M	SB-Crfesc-KB-Alf-RC
342	(DM-M)-1-SB-Crfesc-KB-Alf-R	342-(DM-M)-1-SB-Crfesc-KB	Alfalfa	Medicago sativa	48.0	3	15	Legume	I	N		1	DM-M	SB-Crfesc-KB-Alf-RC
342	(DM-M)-1-SB-Crfesc-KB-Alf-R	342-(DM-M)-1-SB-Crfesc-KB	Red Clover	Trifolium pratense	48.0	3	18	Legume	I	N		1	DM-M	SB-Crfesc-KB-Alf-RC
342	(DM-M)-2-SB-Tim-Alf	342-(DM-M)-2-SB-Tim-Alf	Smooth Bromegrass	Bromus inermis	240.0	15	46	Grass	I	N		2	DM-M	SB-Tim-Alf
342	(DM-M)-2-SB-Tim-Alf	342-(DM-M)-2-SB-Tim-Alf	Timothy	Phleum pratense	48.0	3	84	Grass	I	N		2	DM-M	SB-Tim-Alf
342	(DM-M)-2-SB-Tim-Alf	342-(DM-M)-2-SB-Tim-Alf	Alfalfa	Medicago sativa	112.0	7	35	Legume	I	N		2	DM-M	SB-Tim-Alf
342	(DM-M)-3-SB-Prye-Tfesc-Tim-I	342-(DM-M)-3-SB-Prye-Tfesc	Smooth Bromegrass	Bromus inermis	160.0	10	30	Grass	I	N		3	DM-M	SB-Prye-Tfesc-Tim-KB
342	(DM-M)-3-SB-Prye-Tfesc-Tim-I	342-(DM-M)-3-SB-Prye-Tfesc	Perennial Ryegrass	Lolium perenne	80.0	5	25	Grass	I	N		3	DM-M	SB-Prye-Tfesc-Tim-KB
342	(DM-M)-3-SB-Prye-Tfesc-Tim-I	342-(DM-M)-3-SB-Prye-Tfesc	Tall Fescue	Schedonorus arundinaceus	32.0	2	10	Grass	I	N		3	DM-M	SB-Prye-Tfesc-Tim-KB
342	(DM-M)-3-SB-Prye-Tfesc-Tim-I	342-(DM-M)-3-SB-Prye-Tfesc	Timothy	Phleum pratense	32.0	2	57	Grass	I	N		3	DM-M	SB-Prye-Tfesc-Tim-KB
342	(DM-M)-3-SB-Prye-Tfesc-Tim-I	342-(DM-M)-3-SB-Prye-Tfesc	Kentucky Bluegrass	Poa pratensis	16.0	1	50	Grass	I	N		3	DM-M	SB-Prye-Tfesc-Tim-KB
342	(DM-M)-4-SB-Crfesc-Alf-RC	342-(DM-M)-4-SB-Crfesc-Alf	Smooth Bromegrass	Bromus inermis	320.0	20	62	Grass	I	N		4	DM-M	SB-Crfesc-Alf-RC
342	(DM-M)-4-SB-Crfesc-Alf-RC	342-(DM-M)-4-SB-Crfesc-Alf	Creeping Red Fescue	Festuca rubra	80.0	5	40	Grass	I	N		4	DM-M	SB-Crfesc-Alf-RC
342	(DM-M)-4-SB-Crfesc-Alf-RC	342-(DM-M)-4-SB-Crfesc-Alf	Alfalfa	Medicago sativa	128.0	8	40	Legume	I	N		4	DM-M	SB-Crfesc-Alf-RC
342	(DM-M)-4-SB-Crfesc-Alf-RC	342-(DM-M)-4-SB-Crfesc-Alf	Red Clover	Trifolium pratense	64.0	4	24	Legume	I	N		4	DM-M	SB-Crfesc-Alf-RC
342	(DM-M)-5-SB-Alf	342-(DM-M)-5-SB-Alf	Smooth Bromegrass	Bromus inermis	480.0	30	93	Grass	I	N		5	DM-M	SB-Alf
342	(DM-M)-5-SB-Alf	342-(DM-M)-5-SB-Alf	Alfalfa	Medicago sativa	224.0	14	70	Legume	I	N		5	DM-M	SB-Alf
342	(DM-WM)-6-SB-Prye-Tim-Crfe	342-(DM-WM)-6-SB-Prye-Tim	Smooth Bromegrass	Bromus inermis	112.0	7	21	Grass	I	N		6	DM-WM	SB-Prye-Tim-Crfesc-KB-RC
342	(DM-WM)-6-SB-Prye-Tim-Crfe	342-(DM-WM)-6-SB-Prye-Tim	Perennial Ryegrass	Lolium perenne	48.0	3	15	Grass	I	N		6	DM-WM	SB-Prye-Tim-Crfesc-KB-RC
342	(DM-WM)-6-SB-Prye-Tim-Crfe	342-(DM-WM)-6-SB-Prye-Tim	Timothy	Phleum pratense	32.0	2	57	Grass	I	N		6	DM-WM	SB-Prye-Tim-Crfesc-KB-RC
342	(DM-WM)-6-SB-Prye-Tim-Crfe	342-(DM-WM)-6-SB-Prye-Tim	Creeping Red Fescue	Festuca rubra	16.0	1	8	Grass	I	N		6	DM-WM	SB-Prye-Tim-Crfesc-KB-RC
342	(DM-WM)-6-SB-Prye-Tim-Crfe	342-(DM-WM)-6-SB-Prye-Tim	Kentucky Bluegrass	Poa pratensis	16.0	1	50	Grass	I	N		6	DM-WM	SB-Prye-Tim-Crfesc-KB-RC
342	(DM-WM)-6-SB-Prye-Tim-Crfe	342-(DM-WM)-6-SB-Prye-Tim	Red Clover	Trifolium pratense	48.0	3	18	Legume	I	N		6	DM-WM	SB-Prye-Tim-Crfesc-KB-RC
342	(M)-7-SB-KB-Crfesc-Btrefoil	342-(M)-7-SB-KB-Crfesc-Btre	Smooth Bromegrass	Bromus inermis	112.0	7	21	Grass	I	N		7	M	SB-KB-Crfesc-Btrefoil
342	(M)-7-SB-KB-Crfesc-Btrefoil	342-(M)-7-SB-KB-Crfesc-Btre	Kentucky Bluegrass	Poa pratensis	48.0	3	150	Grass	I	N		7	M	SB-KB-Crfesc-Btrefoil
342	(M)-7-SB-KB-Crfesc-Btrefoil	342-(M)-7-SB-KB-Crfesc-Btre	Creeping Red Fescue	Festuca rubra	32.0	2	16	Grass	I	N		7	M	SB-KB-Crfesc-Btrefoil
342	(M)-7-SB-KB-Crfesc-Btrefoil	342-(M)-7-SB-KB-Crfesc-Btre	Birdsfoot Trefoil	Lotus corniculatus	32.0	2	18	Legume	I	N		7	M	SB-KB-Crfesc-Btrefoil
342	(M)-8-SB-Crfesc-KB	342-(M)-8-SB-Crfesc-KB	Smooth Bromegrass	Bromus inermis	240.0	15	45	Grass	I	N		8	M	SB-Crfesc-KB
342	(M)-8-SB-Crfesc-KB	342-(M)-8-SB-Crfesc-KB	Creeping Red Fescue	Festuca rubra	32.0	2	16	Grass	I	N		8	M	SB-Crfesc-KB
342	(M)-8-SB-Crfesc-KB	342-(M)-8-SB-Crfesc-KB	Kentucky Bluegrass	Poa pratensis	32.0	2	100	Grass	I	N		8	M	SB-Crfesc-KB
342	(M)-9-Prye-Crfesc-KB	342-(M)-9-Prye-Crfesc-KB	Perennial Ryegrass	Lolium perenne	160.0	10	50	Grass	I	N		9	M	Prye-Crfesc-KB
342	(M)-9-Prye-Crfesc-KB	342-(M)-9-Prye-Crfesc-KB	Creeping Red Fescue	Festuca rubra	64.0	4	32	Grass	I	N		9	M	Prye-Crfesc-KB
342	(M)-9-Prye-Crfesc-KB	342-(M)-9-Prye-Crfesc-KB	Kentucky Bluegrass	Poa pratensis	48.0	3	150	Grass	I	N		9	M	Prye-Crfesc-KB
342	(M)-10-SB-Prye-Tim-RC	342-(M)-10-SB-Prye-Tim-RC	Smooth Bromegrass	Bromus inermis	224.0	14	42	Grass	I	N		10	M	SB-Prye-Tim-RC
342	(M)-10-SB-Prye-Tim-RC	342-(M)-10-SB-Prye-Tim-RC	Perennial Ryegrass	Lolium perenne	64.0	4	20	Grass	I	N		10	M	SB-Prye-Tim-RC
342	(M)-10-SB-Prye-Tim-RC	342-(M)-10-SB-Prye-Tim-RC	Timothy	Phleum pratense	48.0	3	84	Grass	I	N		10	M	SB-Prye-Tim-RC
342	(M)-10-SB-Prye-Tim-RC	342-(M)-10-SB-Prye-Tim-RC	Red Clover	Trifolium pratense	48.0	3	18	Legume	I	N		10	M	SB-Prye-Tim-RC
342	(M)-11-SB-Crfesc	342-(M)-11-SB-Crfesc	Smooth Bromegrass	Bromus inermis	512.0	32	96	Grass	I	N		11	M	SB-Crfesc
342	(M)-11-SB-Crfesc	342-(M)-11-SB-Crfesc	Creeping Red Fescue	Festuca rubra	128.0	8	64	Grass	I	N		11	M	SB-Crfesc
342	(M)-12-KB-Crfesc	342-(M)-12-KB-Crfesc	Kentucky Bluegrass	Poa pratensis	64.0	4	200	Grass	I	N		12	M	KB-Crfesc
342	(M)-12-KB-Crfesc	342-(M)-12-KB-Crfesc	Creeping Red Fescue	Festuca rubra	48.0	3	24	Grass	I	N		12	M	KB-Crfesc
342	(M)-13-SB-Tim-RC	342-(M)-13-SB-Tim-RC	Smooth Bromegrass	Bromus inermis	224.0	14	43	Grass	I	N		13	M	SB-Tim-RC
342	(M)-13-SB-Tim-RC	342-(M)-13-SB-Tim-RC	Timothy	Phleum pratense	64.0	4	112	Grass	I	N		13	M	SB-Tim-RC
342	(M)-13-SB-Tim-RC	342-(M)-13-SB-Tim-RC	Red Clover	Trifolium pratense	48.0	3	18	Legume	I	N		13	M	SB-Tim-RC
342	(M)-14-SB-Tim-Aclover	342-(M)-14-SB-Tim-Aclover	Smooth Bromegrass	Bromus inermis	240.0	15	43	Grass	I	N		14	M	SB-Tim-Aclover
342	(M)-14-SB-Tim-Aclover	342-(M)-14-SB-Tim-Aclover	Timothy	Phleum pratense	56.0	3.5	112	Grass	I	N		14	M	SB-Tim-Aclover
342	(M)-14-SB-Tim-Aclover	342-(M)-14-SB-Tim-Aclover	Alsike Clover	Trifolium hybridum	32.0	2	32	Legume	I	N		14	M	SB-Tim-Aclover
342	(M)-15-SB-Tim-Btrefoil	342-(M)-15-SB-Tim-Btrefoil	Smooth Bromegrass	Bromus inermis	240.0	15	43	Grass	I	N		15	M	SB-Tim-Btrefoil
342	(M)-15-SB-Tim-Btrefoil	342-(M)-15-SB-Tim-Btrefoil	Timothy	Phleum pratense	56.0	3.5	112	Grass	I	N		15	M	SB-Tim-Btrefoil
342	(M)-15-SB-Tim-Btrefoil	342-(M)-15-SB-Tim-Btrefoil	Birdsfoot Trefoil	Lotus corniculatus	48.0	3	26	Legume	I	N		15	M	SB-Tim-Btrefoil
342	(WM)-16-SB-Tfesc-Prye-Tim-K	342-(WM)-16-SB-Tfesc-Prye-	Smooth Bromegrass	Bromus inermis	96.0	6	18	Grass	I	N		16	WM	SB-Tfesc-Prye-Tim-KB-RC
342	(WM)-16-SB-Tfesc-Prye-Tim-K	342-(WM)-16-SB-Tfesc-Prye-	Tall Fescue	Schedonorus arundinaceus	80.0	5	25	Grass	I	N		16	WM	SB-Tfesc-Prye-Tim-KB-RC
342	(WM)-16-SB-Tfesc-Prye-Tim-K	342-(WM)-16-SB-Tfesc-Prye-	Perennial Ryegrass	Lolium perenne	48.0	3	15	Grass	I	N		16	WM	SB-Tfesc-Prye-Tim-KB-RC
342	(WM)-16-SB-Tfesc-Prye-Tim-K	342-(WM)-16-SB-Tfesc-Prye-	Timothy	Phleum pratense	48.0	3	84	Grass	I	N		16	WM	SB-Tfesc-Prye-Tim-KB-RC
342	(WM)-16-SB-Tfesc-Prye-Tim-K	342-(WM)-16-SB-Tfesc-Prye-	Kentucky Bluegrass	Poa pratensis	32.0	2	100	Grass	I	N		16	WM	SB-Tfesc-Prye-Tim-KB-RC
342	(WM)-16-SB-Tfesc-Prye-Tim-K	342-(WM)-16-SB-Tfesc-Prye-	Red Clover	Trifolium pratense	48.0	3	18	Legume	I	N		16	WM	SB-Tfesc-Prye-Tim-KB-RC
342	(WM)-17-Rtop-Tim-RC	342-(WM)-17-Rtop-Tim-RC	Redtop	Agrostis gigantea	16.0	1	114	Grass	I	N		17	WM	Rtop-Tim-RC
342	(WM)-17-Rtop-Tim-RC	342-(WM)-17-Rtop-Tim-RC	Timothy	Phleum pratense	48.0	3	84	Grass	I	N		17	WM	Rtop-Tim-RC
342	(WM)-17-Rtop-Tim-RC	342-(WM)-17-Rtop-Tim-RC	Red Clover	Trifolium pratense	80.0	5	30	Legume	I	N		17	WM	Rtop-Tim-RC
342	(WM)-18-SB-Tim-Prye-KB-RC	342-(WM)-18-SB-Tim-Prye-K	Smooth Bromegrass	Bromus inermis	96.0	6	18	Grass	I	N		18	WM	SB-Tim-Prye-KB-RC
342	(WM)-18-SB-Tim-Prye-KB-RC	342-(WM)-18-SB-Tim-Prye-K	Timothy	Phleum pratense	48.0	3	84	Grass	I	N		18	WM	SB-Tim-Prye-KB-RC
342	(WM)-18-SB-Tim-Prye-KB-RC	342-(WM)-18-SB-Tim-Prye-K	Perennial Ryegrass	Lolium perenne	48.0	3	15	Grass	I	N		18	WM	SB-Tim-Prye-KB-RC
342	(WM)-18-SB-Tim-Prye-KB-RC	342-(WM)-18-SB-Tim-Prye-K	Kentucky Bluegrass	Poa pratensis	32.0	2	100	Grass	I	N		18	WM	SB-Tim-Prye-KB-RC
342	(WM)-18-SB-Tim-Prye-KB-RC	342-(WM)-18-SB-Tim-Prye-K	Red Clover	Trifolium pratense	48.0	3	18	Legume	I	N		18	WM	SB-Tim-Prye-KB-RC
342	(WM)-19-KB-Rtop-Tim-RC	342-(WM)-19-KB-Rtop-Tim-R	Kentucky Bluegrass	Poa pratensis	32.0	2	100	Grass	I	N		19	WM	KB-Rtop-Tim-RC
342	(WM)-19-KB-Rtop-Tim-RC	342-(WM)-19-KB-Rtop-Tim-R	Redtop	Agrostis gigantea	16.0	1	114	Grass	I	N		19	WM	KB-Rtop-Tim-RC
342	(WM)-19-KB-Rtop-Tim-RC	342-(WM)-19-KB-Rtop-Tim-R	Timothy	Phleum pratense	16.0	1	28	Grass	I	N		19	WM	KB-Rtop-Tim-RC
342	(WM)-19-KB-Rtop-Tim-RC	342-(WM)-19-KB-Rtop-Tim-R	Red Clover	Trifolium pratense	64.0	4	24	Legume	I	N		19	WM	KB-Rtop-Tim-RC
342	(W)-20-KB-Rtop-Aclover	342-(W)-20-KB-Rtop-Aclover	Kentucky Bluegrass	Poa pratensis	32.0	2	100	Grass	I	N		20	W	KB-Rtop-Aclover
342	(W)-20-KB-Rtop-Aclover	342-(W)-20-KB-Rtop-Aclover	Redtop	Agrostis gigantea	32.0	2	228	Grass	I	N		20	W	KB-Rtop-Aclover
342	(W)-20-KB-Rtop-Aclover	342-(W)-20-KB-Rtop-Aclover	Alsike Clover	Trifolium hybridum	32.0	2	32	Legume	I	N		20	W	KB-Rtop-Aclover
342	(W)-21-Rtop-Aclover	342-(W)-21-Rtop-Aclover	Redtop	Agrostis gigantea	48.0	3	342	Grass	I	N		21	W	Rtop-Aclover
342	(W)-21-Rtop-Aclover	342-(W)-21-Rtop-Aclover	Alsike Clover	Trifolium hybridum	48.0	3	48	Legume	I	N		21	W	Rtop-Aclover

STANDARD 512 MIXES

criteria: H-1

STD	Mix #	std-mix	Common Name	Scientific Name
		LEAVE THIS ROW AS IS		
		LEAVE THIS ROW AS IS		
512	(FSG 1)-H1-RC-Tfesc-Tim	512-(FSG 1)-H1-RC-Tfesc-Tim	Red Clover	Trifolium pratense
512	(FSG 1)-H1-RC-Tfesc-Tim	512-(FSG 1)-H1-RC-Tfesc-Tim	Tall Fescue	Schedonorus arundinaceus
512	(FSG 1)-H1-RC-Tfesc-Tim	512-(FSG 1)-H1-RC-Tfesc-Tim	Timothy	Phleum pratense
512	(FSG 2)-H2-Alf	512-(FSG 2)-H2-Alf	Alfalfa	Medicago sativa
512	(FSG 2,3,5,6)-H3-Alf-SB	512-(FSG 2,3,5,6)-H3-Alf-SB	Alfalfa	Medicago sativa
512	(FSG 2,3,5,6)-H3-Alf-SB	512-(FSG 2,3,5,6)-H3-Alf-SB	Smooth Bromegrass	Bromus inermis
512	(FSG 4,7)-H4-Aclover-Tfesc-Tim	512-(FSG 4,7)-H4-Aclover-Tfesc-Tim	Alsike Clover	Trifolium hybridum
512	(FSG 4,7)-H4-Aclover-Tfesc-Tim	512-(FSG 4,7)-H4-Aclover-Tfesc-Tim	Tall Fescue	Schedonorus arundinaceus
512	(FSG 4,7)-H4-Aclover-Tfesc-Tim	512-(FSG 4,7)-H4-Aclover-Tfesc-Tim	Timothy	Phleum pratense
512	(FSG 8)-H5-Alf-Tim	512-(FSG 8)-H5-Alf-Tim	Alfalfa	Medicago sativa
512	(FSG 8)-H5-Alf-Tim	512-(FSG 8)-H5-Alf-Tim	Timothy	Phleum pratense
512	(FSG 9)-H6-Alf-SB-Tim	512-(FSG 9)-H6-Alf-SB-Tim	Alfalfa	Medicago sativa
512	(FSG 9)-H6-Alf-SB-Tim	512-(FSG 9)-H6-Alf-SB-Tim	Smooth Bromegrass	Bromus inermis
512	(FSG 9)-H6-Alf-SB-Tim	512-(FSG 9)-H6-Alf-SB-Tim	Timothy	Phleum pratense
512	(FSG 1-9)-H7-Switch	512-(FSG 1-9)-H7-Switch	Switchgrass	Panicum virgatum
512	(FSG 1-9)-H8-BB	512-(FSG 1-9)-H8-BB	Big Bluestem	Andropogon gerardii
512	(FSG 1-9)-H9-Indian	512-(FSG 1-9)-H9-Indian	Indiangrass	Sorghastrum nutans
512	(FSG 1)-PP1-Aclover-Mfesc	512-(FSG 1)-PP1-Aclover-Mfesc	Alsike Clover	Trifolium hybridum
512	(FSG 1)-PP1-Aclover-Mfesc	512-(FSG 1)-PP1-Aclover-Mfesc	Meadow Fescue	Schedonorus pratensis
512	(FSG 1)-PP1A-Aclover-Orc	512-(FSG 1)-PP1A-Aclover-Orc	Alsike Clover	Trifolium hybridum
512	(FSG 1)-PP1A-Aclover-Orc	512-(FSG 1)-PP1A-Aclover-Orc	Orchardgrass	Dactylis glomerata L.
512	(FSG 1)-PP1B-Aclover-Tim	512-(FSG 1)-PP1B-Aclover-Tim	Alsike Clover	Trifolium hybridum
512	(FSG 1)-PP1B-Aclover-Tim	512-(FSG 1)-PP1B-Aclover-Tim	Timothy	Phleum pratense
512	(FSG 2-3)-PP2-Alf-SB-Orc	512-(FSG 2-3)-PP2-Alf-SB-Orc	Alfalfa	Medicago sativa
512	(FSG 2-3)-PP2-Alf-SB-Orc	512-(FSG 2-3)-PP2-Alf-SB-Orc	Smooth Bromegrass	Bromus inermis
512	(FSG 2-3)-PP2-Alf-SB-Orc	512-(FSG 2-3)-PP2-Alf-SB-Orc	Orchardgrass	Dactylis glomerata L.
512	(FSG 4)-PP4-Aclover-Mfesc-Tim	512-(FSG 4)-PP4-Aclover-Mfesc-Tim	Alsike Clover	Trifolium hybridum
512	(FSG 4)-PP4-Aclover-Mfesc-Tim	512-(FSG 4)-PP4-Aclover-Mfesc-Tim	Meadow Fescue	Schedonorus pratensis
512	(FSG 4)-PP4-Aclover-Mfesc-Tim	512-(FSG 4)-PP4-Aclover-Mfesc-Tim	Timothy	Phleum pratense
512	(FSG 4)-PP4B-Btrefoil-Mfesc-Tim	512-(FSG 4)-PP4B-Btrefoil-Mfesc-Tim	Birdsfoot Trefoil	Lotus corniculatus
512	(FSG 4)-PP4B-Btrefoil-Mfesc-Tim	512-(FSG 4)-PP4B-Btrefoil-Mfesc-Tim	Meadow Fescue	Schedonorus pratensis
512	(FSG 4)-PP4B-Btrefoil-Mfesc-Tim	512-(FSG 4)-PP4B-Btrefoil-Mfesc-Tim	Timothy	Phleum pratense
512	(FSG 5)-PP5-RC-LadC-Orc-Mfesc	512-(FSG 5)-PP5-RC-LadC-Orc-Mfesc	Red Clover	Trifolium pratense
512	(FSG 5)-PP5-RC-LadC-Orc-Mfesc	512-(FSG 5)-PP5-RC-LadC-Orc-Mfesc	White Ladino Clover	Trifolium repens
512	(FSG 5)-PP5-RC-LadC-Orc-Mfesc	512-(FSG 5)-PP5-RC-LadC-Orc-Mfesc	Orchardgrass	Dactylis glomerata L.
512	(FSG 5)-PP5-RC-LadC-Orc-Mfesc	512-(FSG 5)-PP5-RC-LadC-Orc-Mfesc	Meadow Fescue	Schedonorus pratensis
512	(FSG 5)-PP5B-RC-LadC-Festu-Mfesc	512-(FSG 5)-PP5B-RC-LadC-Festu-Mfesc	Red Clover	Trifolium pratense
512	(FSG 5)-PP5B-RC-LadC-Festu-Mfesc	512-(FSG 5)-PP5B-RC-LadC-Festu-Mfesc	White Ladino Clover	Trifolium repens
512	(FSG 5)-PP5B-RC-LadC-Festu-Mfesc	512-(FSG 5)-PP5B-RC-LadC-Festu-Mfesc	Festulolium	Festuca x Lolium
512	(FSG 5)-PP5B-RC-LadC-Festu-Mfesc	512-(FSG 5)-PP5B-RC-LadC-Festu-Mfesc	Meadow Fescue	Schedonorus pratensis
512	(FSG 6)-PP6-RC-Orc-SB	512-(FSG 6)-PP6-RC-Orc-SB	Red Clover	Trifolium pratense
512	(FSG 6)-PP6-RC-Orc-SB	512-(FSG 6)-PP6-RC-Orc-SB	Orchardgrass	Dactylis glomerata L.
512	(FSG 6)-PP6-RC-Orc-SB	512-(FSG 6)-PP6-RC-Orc-SB	Smooth Bromegrass	Bromus inermis
512	(FSG 7)-PP7-Aclover-Mfesc-Tim-Rtop	512-(FSG 7)-PP7-Aclover-Mfesc-Tim-Rtop	Alsike Clover	Trifolium hybridum
512	(FSG 7)-PP7-Aclover-Mfesc-Tim-Rtop	512-(FSG 7)-PP7-Aclover-Mfesc-Tim-Rtop	Meadow Fescue	Schedonorus pratensis
512	(FSG 7)-PP7-Aclover-Mfesc-Tim-Rtop	512-(FSG 7)-PP7-Aclover-Mfesc-Tim-Rtop	Timothy	Phleum pratense
512	(FSG 7)-PP7-Aclover-Mfesc-Tim-Rtop	512-(FSG 7)-PP7-Aclover-Mfesc-Tim-Rtop	Redtop	Agrostis gigantea
512	(FSG 7)-PP7B-Btrefoil-Mfesc-Tim-Rtop	512-(FSG 7)-PP7B-Btrefoil-Mfesc-Tim-Rtop	Birdsfoot Trefoil	Lotus corniculatus
512	(FSG 7)-PP7B-Btrefoil-Mfesc-Tim-Rtop	512-(FSG 7)-PP7B-Btrefoil-Mfesc-Tim-Rtop	Meadow Fescue	Schedonorus pratensis
512	(FSG 7)-PP7B-Btrefoil-Mfesc-Tim-Rtop	512-(FSG 7)-PP7B-Btrefoil-Mfesc-Tim-Rtop	Timothy	Phleum pratense
512	(FSG 7)-PP7B-Btrefoil-Mfesc-Tim-Rtop	512-(FSG 7)-PP7B-Btrefoil-Mfesc-Tim-Rtop	Redtop	Agrostis gigantea
512	(FSG 8)-PP8-LadC-Orc-Mfesc	512-(FSG 8)-PP8-LadC-Orc-Mfesc	White Ladino Clover	Trifolium repens
512	(FSG 8)-PP8-LadC-Orc-Mfesc	512-(FSG 8)-PP8-LadC-Orc-Mfesc	Orchardgrass	Dactylis glomerata L.
512	(FSG 8)-PP8-LadC-Orc-Mfesc	512-(FSG 8)-PP8-LadC-Orc-Mfesc	Meadow Fescue	Schedonorus pratensis
512	(FSG 8)-PP8B-LadC-Festu-Mfesc	512-(FSG 8)-PP8B-LadC-Festu-Mfesc	White Ladino Clover	Trifolium repens
512	(FSG 8)-PP8B-LadC-Festu-Mfesc	512-(FSG 8)-PP8B-LadC-Festu-Mfesc	Festulolium	Festuca x Lolium
512	(FSG 8)-PP8B-LadC-Festu-Mfesc	512-(FSG 8)-PP8B-LadC-Festu-Mfesc	Meadow Fescue	Schedonorus pratensis
512	(FSG 9)-PP9-RC-Orc-Mfesc	512-(FSG 9)-PP9-RC-Orc-Mfesc	Red Clover	Trifolium pratense
512	(FSG 9)-PP9-RC-Orc-Mfesc	512-(FSG 9)-PP9-RC-Orc-Mfesc	Orchardgrass	Dactylis glomerata L.
512	(FSG 9)-PP9-RC-Orc-Mfesc	512-(FSG 9)-PP9-RC-Orc-Mfesc	Meadow Fescue	Schedonorus pratensis
512	(FSG 1,4,7)-PHS1-KB-Mfesc-LadC	512-(FSG 1,4,7)-PHS1-KB-Mfesc-LadC	Kentucky Bluegrass	Poa pratensis
512	(FSG 1,4,7)-PHS1-KB-Mfesc-LadC	512-(FSG 1,4,7)-PHS1-KB-Mfesc-LadC	Meadow Fescue	Schedonorus pratensis
512	(FSG 1,4,7)-PHS1-KB-Mfesc-LadC	512-(FSG 1,4,7)-PHS1-KB-Mfesc-LadC	White Ladino Clover	Trifolium repens
512	(FSG 1,4,7)-PHS1A-KB-Mfesc-Btrefoil	512-(FSG 1,4,7)-PHS1A-KB-Mfesc-Btrefoil	Kentucky Bluegrass	Poa pratensis
512	(FSG 1,4,7)-PHS1A-KB-Mfesc-Btrefoil	512-(FSG 1,4,7)-PHS1A-KB-Mfesc-Btrefoil	Meadow Fescue	Schedonorus pratensis
512	(FSG 1,4,7)-PHS1A-KB-Mfesc-Btrefoil	512-(FSG 1,4,7)-PHS1A-KB-Mfesc-Btrefoil	Birdsfoot Trefoil	Lotus corniculatus
512	(FSG 5-8)-PHS2-KB-Festu-LadC	512-(FSG 5-8)-PHS2-KB-Festu-LadC	Kentucky Bluegrass	Poa pratensis

512	(FSG 5-8)-PHS2-KB-Festu-LadC	512-(FSG 5-8)-PHS2-KB-Festu-LadC	Festulolium	Festuca x Lolium
512	(FSG 5-8)-PHS2-KB-Festu-LadC	512-(FSG 5-8)-PHS2-KB-Festu-LadC	White Ladino Clover	Trifolium repens
512	(FSG 5-8)-PHS2A-KB-Prye-LadC	512-(FSG 5-8)-PHS2A-KB-Prye-LadC	Kentucky Bluegrass	Poa pratensis
512	(FSG 5-8)-PHS2A-KB-Prye-LadC	512-(FSG 5-8)-PHS2A-KB-Prye-LadC	Perennial Ryegrass	Lolium perenne
512	(FSG 5-8)-PHS2A-KB-Prye-LadC	512-(FSG 5-8)-PHS2A-KB-Prye-LadC	White Ladino Clover	Trifolium repens
512	(FSG 2-3)-PHS3-Alf-Orc	512-(FSG 2-3)-PHS3-Alf-Orc	Alfalfa	Medicago sativa
512	(FSG 2-3)-PHS3-Alf-Orc	512-(FSG 2-3)-PHS3-Alf-Orc	Orchardgrass	Dactylis glomerata L.

REVISION DATE: 12/14/2012

PLS (oz./A)	PLS (lbs./A)	Seeds/Square Foot	Type	Intro / Native	Poll. (Y/N)		Mix No.	FSG-MIX #	Mix Components	FSG
				I	Y					
				N	Y					
96.0	6	36	Legume	I	N		H1	FSG 1	RC-Tfesc-Tim	1
96.0	6	32	Grass	I	N		H1	FSG 1	RC-Tfesc-Tim	1
16.0	1	28	Grass	I	N		H1	FSG 1	RC-Tfesc-Tim	1
192.0	12	60	Legume	I	N		H2	FSG 2	Alf	2
160.0	10	50	Legume	I	N		H3	FSG 2,3,5,6	Alf-SB	2,3,5,6
64.0	4	12	Grass	I	N		H3	FSG 2,3,5,6	Alf-SB	2,3,5,6
48.0	3	48	Legume	I	N		H4	FSG 4,7	Aclover-Tfesc-Tim	4,7
96.0	6	32	Grass	I	N		H4	FSG 4,7	Aclover-Tfesc-Tim	4,7
16.0	1	28	Grass	I	N		H4	FSG 4,7	Aclover-Tfesc-Tim	4,7
128.0	8	40	Legume	I	N		H5	FSG 8	Alf-Tim	8
32.0	2	56	Grass	I	N		H5	FSG 8	Alf-Tim	8
128.0	8	40	Legume	I	N		H6	FSG 9	Alf-SB-Tim	9
64.0	4	12	Grass	I	N		H6	FSG 9	Alf-SB-Tim	9
16.0	1	28	Grass	I	N		H6	FSG 9	Alf-SB-Tim	9
112.0	7	63	Grass	N	N		H7	FSG 1-9	Switch	1-9
176.0	11	42	Grass	N	N		H8	FSG 1-9	BB	1-9
160.0	10	44	Grass	N	N		H9	FSG 1-9	Indian	1-9
32.0	2	32	Legume	I	N		PP1	FSG 1	Aclover-Mfesc	1
96.0	6	30	Grass	I	N		PP1	FSG 1	Aclover-Mfesc	1
32.0	2	32	Legume	I	N		PP1A	FSG 1	Aclover-Orc	1
48.0	3	48	Grass	I	N		PP1A	FSG 1	Aclover-Orc	1
32.0	2	32	Legume	I	N		PP1B	FSG 1	Aclover-Tim	1
24.0	1.5	42	Grass	I	N		PP1B	FSG 1	Aclover-Tim	1
96.0	6	30	Legume	I	N		PP2	FSG 2-3	Alf-SB-Orc	2-3
64.0	4	12	Grass	I	N		PP2	FSG 2-3	Alf-SB-Orc	2-3
64.0	4	64	Grass	I	N		PP2	FSG 2-3	Alf-SB-Orc	2-3
32.0	2	32	Legume	I	N		PP4	FSG 4	Aclover-Mfesc-Tim	4
96.0	6	30	Grass	I	N		PP4	FSG 4	Aclover-Mfesc-Tim	4
16.0	1	28	Grass	I	N		PP4	FSG 4	Aclover-Mfesc-Tim	4
48.0	3	26	Legume	I	N		PP4B	FSG 4	Btrefoil-Mfesc-Tim	4
96.0	6	30	Grass	I	N		PP4B	FSG 4	Btrefoil-Mfesc-Tim	4
16.0	1	28	Grass	I	N		PP4B	FSG 4	Btrefoil-Mfesc-Tim	4
80.0	5	30	Legume	I	N		PP5	FSG 5	RC-LadC-Orc-Mfesc	5
16.0	1	20	Legume	I	N		PP5	FSG 5	RC-LadC-Orc-Mfesc	5
48.0	3	48	Grass	I	N		PP5	FSG 5	RC-LadC-Orc-Mfesc	5
96.0	6	30	Grass	I	N		PP5	FSG 5	RC-LadC-Orc-Mfesc	5
80.0	5	30	Legume	I	N		PP5B	FSG 5	RC-LadC-Festu-Mfesc	5
16.0	1	20	Legume	I	N		PP5B	FSG 5	RC-LadC-Festu-Mfesc	5
112.0	7	36	Grass	I	N		PP5B	FSG 5	RC-LadC-Festu-Mfesc	5
96.0	6	30	Grass	I	N		PP5B	FSG 5	RC-LadC-Festu-Mfesc	5
80.0	5	30	Legume	I	N		PP6	FSG 6	RC-Orc-SB	6
64.0	4	64	Grass	I	N		PP6	FSG 6	RC-Orc-SB	6
64.0	4	12	Grass	I	N		PP6	FSG 6	RC-Orc-SB	6
32.0	2	32	Legume	I	N		PP7	FSG 7	Aclover-Mfesc-Tim-Rtop	7
96.0	6	30	Grass	I	N		PP7	FSG 7	Aclover-Mfesc-Tim-Rtop	7
16.0	1	28	Grass	I	N		PP7	FSG 7	Aclover-Mfesc-Tim-Rtop	7
16.0	1	114	Grass	I	N		PP7	FSG 7	Aclover-Mfesc-Tim-Rtop	7
48.0	3	26	Legume	I	N		PP7B	FSG 7	Btrefoil-Mfesc-Tim-Rtop	7
96.0	6	30	Grass	I	N		PP7B	FSG 7	Btrefoil-Mfesc-Tim-Rtop	7
16.0	1	28	Grass	I	N		PP7B	FSG 7	Btrefoil-Mfesc-Tim-Rtop	7
16.0	1	114	Grass	I	N		PP7B	FSG 7	Btrefoil-Mfesc-Tim-Rtop	7
16.0	1	20	Legume	I	N		PP8	FSG 8	LadC-Orc-Mfesc	8
48.0	3	48	Grass	I	N		PP8	FSG 8	LadC-Orc-Mfesc	8
96.0	6	30	Grass	I	N		PP8	FSG 8	LadC-Orc-Mfesc	8
16.0	1	20	Legume	I	N		PP8B	FSG 8	LadC-Festu-Mfesc	8
112.0	7	36	Grass	I	N		PP8B	FSG 8	LadC-Festu-Mfesc	8
96.0	6	30	Grass	I	N		PP8B	FSG 8	LadC-Festu-Mfesc	8
80.0	5	30	Legume	I	N		PP9	FSG 9	RC-Orc-Mfesc	9
48.0	3	48	Grass	I	N		PP9	FSG 9	RC-Orc-Mfesc	9
96.0	6	30	Grass	I	N		PP9	FSG 9	RC-Orc-Mfesc	9
64.0	4	200	Grass	I	N		PHS1	FSG 1,4,7	KB-Mfesc-LadC	1,4,7
64.0	4	20	Grass	I	N		PHS1	FSG 1,4,7	KB-Mfesc-LadC	1,4,7
16.0	1	20	Legume	I	N		PHS1	FSG 1,4,7	KB-Mfesc-LadC	1,4,7
64.0	4	200	Grass	I	N		PHS1A	FSG 1,4,7	KB-Mfesc-Btrefoil	1,4,7
64.0	4	20	Grass	I	N		PHS1A	FSG 1,4,7	KB-Mfesc-Btrefoil	1,4,7
48.0	3	26	Legume	I	N		PHS1A	FSG 1,4,7	KB-Mfesc-Btrefoil	1,4,7
32.0	2	100	Grass	I	N		PHS2	FSG 5-8	KB-Festu-LadC	5-8

112.0	7	35	Grass	I	N		PHS2	FSG 5-8	KB-Festu-LadC	5-8
16.0	1	20	Legume	I	N		PHS2	FSG 5-8	KB-Festu-LadC	5-8
32.0	2	100	Grass	I	N		PHS2A	FSG 5-8	KB-Prye-LadC	5-8
112.0	7	35	Grass	I	N		PHS2A	FSG 5-8	KB-Prye-LadC	5-8
16.0	1	20	Legume	I	N		PHS2A	FSG 5-8	KB-Prye-LadC	5-8
96.0	6	30	Legume	I	N		PHS3	FSG 2-3	Alf-Orc	2-3
48.0	3	48	Grass	I	N		PHS3	FSG 2-3	Alf-Orc	2-3

CRP MIXES

REVISION DATE: 11/30/2020

criteria: 0

STD	Mix #	std-mix	Common Name	Scientific Name	PLS (oz./A)	PLS (lbs./A)	Seeds/Square Foot	Type	Intro / Native	Poll. (Y/N)	Mix No.	MR	Mix Components
		LEAVE THIS ROW AS IS							I	Y			
		LEAVE THIS ROW AS IS							N	Y			
1	CP1-1-Alf-SB-Tim	1-CP1-1-Alf-SB-Tim	Alfalfa	Medicago sativa	96.00	6		Legume	I	N	CP1-1		Alf-SB-Tim
1	CP1-1-Alf-SB-Tim	1-CP1-1-Alf-SB-Tim	Smooth Bromegrass	Bromus inermis	48.00	3		Grass	I	N	CP1-1		Alf-SB-Tim
1	CP1-1-Alf-SB-Tim	1-CP1-1-Alf-SB-Tim	Timothy	Phleum pratense	32.00	2		Grass	I	N	CP1-1		Alf-SB-Tim
1	CP1-2-RC-Orc-Tim	1-CP1-2-RC-Orc-Tim	Red Clover	Trifolium pratense	80.00	5		Legume	I	N	CP1-2		RC-Orc-Tim
1	CP1-2-RC-Orc-Tim	1-CP1-2-RC-Orc-Tim	Orchardgrass	Dactylis glomerata L.	48.00	3		Grass	I	N	CP1-2		RC-Orc-Tim
1	CP1-2-RC-Orc-Tim	1-CP1-2-RC-Orc-Tim	Timothy	Phleum pratense	32.00	2		Grass	I	N	CP1-2		RC-Orc-Tim
1	CP1-3-Alf-Orc-Tim	1-CP1-3-Alf-Orc-Tim	Alfalfa	Medicago sativa	96.00	6		Legume	I	N	CP1-3		Alf-Orc-Tim
1	CP1-3-Alf-Orc-Tim	1-CP1-3-Alf-Orc-Tim	Orchardgrass	Dactylis glomerata L.	48.00	3		Grass	I	N	CP1-3		Alf-Orc-Tim
1	CP1-3-Alf-Orc-Tim	1-CP1-3-Alf-Orc-Tim	Timothy	Phleum pratense	32.00	2		Grass	I	N	CP1-3		Alf-Orc-Tim
1	CP1-4-RC-SB-Tim	1-CP1-4-RC-SB-Tim	Red Clover	Trifolium pratense	80.00	5		Legume	I	N	CP1-4		RC-SB-Tim
1	CP1-4-RC-SB-Tim	1-CP1-4-RC-SB-Tim	Smooth Bromegrass	Bromus inermis	48.00	3		Grass	I	N	CP1-4		RC-SB-Tim
1	CP1-4-RC-SB-Tim	1-CP1-4-RC-SB-Tim	Timothy	Phleum pratense	32.00	2		Grass	I	N	CP1-4		RC-SB-Tim
1	CP1-5-RC-SB-Tim-Orc	1-CP1-5-RC-SB-Tim-Orc	Red Clover	Trifolium pratense	80.00	5		Legume	I	N	CP1-5		RC-SB-Tim-Orc
1	CP1-5-RC-SB-Tim-Orc	1-CP1-5-RC-SB-Tim-Orc	Smooth Bromegrass	Bromus inermis	32.00	2		Grass	I	N	CP1-5		RC-SB-Tim-Orc
1	CP1-5-RC-SB-Tim-Orc	1-CP1-5-RC-SB-Tim-Orc	Timothy	Phleum pratense	32.00	2		Grass	I	N	CP1-5		RC-SB-Tim-Orc
1	CP1-5-RC-SB-Tim-Orc	1-CP1-5-RC-SB-Tim-Orc	Orchardgrass	Dactylis glomerata L.	16.00	1		Grass	I	N	CP1-5		RC-SB-Tim-Orc
1	CP1-6-RC-Tim-Orc-Rtop-LadC	1-CP1-6-RC-Tim-Orc-Rtop-LadC	Red Clover	Trifolium pratense	80.00	5		Legume	I	N	CP1-6		RC-Tim-Orc-Rtop-LadC
1	CP1-6-RC-Tim-Orc-Rtop-LadC	1-CP1-6-RC-Tim-Orc-Rtop-LadC	Timothy	Phleum pratense	32.00	2		Grass	I	N	CP1-6		RC-Tim-Orc-Rtop-LadC
1	CP1-6-RC-Tim-Orc-Rtop-LadC	1-CP1-6-RC-Tim-Orc-Rtop-LadC	Orchardgrass	Dactylis glomerata L.	16.00	1		Grass	I	N	CP1-6		RC-Tim-Orc-Rtop-LadC
1	CP1-6-RC-Tim-Orc-Rtop-LadC	1-CP1-6-RC-Tim-Orc-Rtop-LadC	Redtop	Agrostis gigantea	16.00	1		Grass	I	N	CP1-6		RC-Tim-Orc-Rtop-LadC
1	CP1-6-RC-Tim-Orc-Rtop-LadC	1-CP1-6-RC-Tim-Orc-Rtop-LadC	White Ladino Clover	Trifolium repens	8.00	0.5		Legume	I	N	CP1-6		RC-Tim-Orc-Rtop-LadC
1	CP1-7-Alf-Rtop-Tim-Orc	1-CP1-7-Alf-Rtop-Tim-Orc	Alfalfa	Medicago sativa	96.00	6		Legume	I	N	CP1-7		Alf-Rtop-Tim-Orc
1	CP1-7-Alf-Rtop-Tim-Orc	1-CP1-7-Alf-Rtop-Tim-Orc	Redtop	Agrostis gigantea	32.00	2		Grass	I	N	CP1-7		Alf-Rtop-Tim-Orc
1	CP1-7-Alf-Rtop-Tim-Orc	1-CP1-7-Alf-Rtop-Tim-Orc	Timothy	Phleum pratense	32.00	2		Grass	I	N	CP1-7		Alf-Rtop-Tim-Orc
1	CP1-7-Alf-Rtop-Tim-Orc	1-CP1-7-Alf-Rtop-Tim-Orc	Orchardgrass	Dactylis glomerata L.	16.00	1		Grass	I	N	CP1-7		Alf-Rtop-Tim-Orc
1	CP1-8-RC-KB-Orc-Rtop	1-CP1-8-RC-KB-Orc-Rtop	Red Clover	Trifolium pratense	80.00	5		Legume	I	N	CP1-8		RC-KB-Orc-Rtop
1	CP1-8-RC-KB-Orc-Rtop	1-CP1-8-RC-KB-Orc-Rtop	Kentucky Bluegrass	Poa pratensis	32.00	2		Grass	I	N	CP1-8		RC-KB-Orc-Rtop
1	CP1-8-RC-KB-Orc-Rtop	1-CP1-8-RC-KB-Orc-Rtop	Orchardgrass	Dactylis glomerata L.	16.00	1		Grass	I	N	CP1-8		RC-KB-Orc-Rtop
1	CP1-8-RC-KB-Orc-Rtop	1-CP1-8-RC-KB-Orc-Rtop	Redtop	Agrostis gigantea	16.00	1		Grass	I	N	CP1-8		RC-KB-Orc-Rtop
2	CP2_1-BB-Switch-Cmilkvetch-Besus-Ycone	2-CP2_1-BB-Switch-Cmilkvetch-Besus-Ycone	Big Bluestem	Andropogon gerardii	48.00	3		Grass	N	N	CP2_1		BB-Switch-Cmilkvetch-Besus-Ycone
2	CP2_1-BB-Switch-Cmilkvetch-Besus-Ycone	2-CP2_1-BB-Switch-Cmilkvetch-Besus-Ycone	Switchgrass	Panicum virgatum	16.00	1		Grass	N	N	CP2_1		BB-Switch-Cmilkvetch-Besus-Ycone
2	CP2_1-BB-Switch-Cmilkvetch-Besus-Ycone	2-CP2_1-BB-Switch-Cmilkvetch-Besus-Ycone	Canada Milkvetch	Astragalus canadensis	2.00	0.125		Legume	N	N	CP2_1		BB-Switch-Cmilkvetch-Besus-Ycone
2	CP2_1-BB-Switch-Cmilkvetch-Besus-Ycone	2-CP2_1-BB-Switch-Cmilkvetch-Besus-Ycone	Black-eyed Susan	Rudbeckia hirta	1.00	0.0625		Forb	N	N	CP2_1		BB-Switch-Cmilkvetch-Besus-Ycone
2	CP2_1-BB-Switch-Cmilkvetch-Besus-Ycone	2-CP2_1-BB-Switch-Cmilkvetch-Besus-Ycone	Yellow Coneflower	Ratibida pinnata	1.00	0.0625		Forb	N	N	CP2_1		BB-Switch-Cmilkvetch-Besus-Ycone
2	CP2_2-BB-Switch-Ttrefoil-Besus-Ycone	2-CP2_2-BB-Switch-Ttrefoil-Besus-Ycone	Big Bluestem	Andropogon gerardii	48.00	3		Grass	N	N	CP2_2		BB-Switch-Ttrefoil-Besus-Ycone
2	CP2_2-BB-Switch-Ttrefoil-Besus-Ycone	2-CP2_2-BB-Switch-Ttrefoil-Besus-Ycone	Switchgrass	Panicum virgatum	16.00	1		Grass	N	N	CP2_2		BB-Switch-Ttrefoil-Besus-Ycone
2	CP2_2-BB-Switch-Ttrefoil-Besus-Ycone	2-CP2_2-BB-Switch-Ttrefoil-Besus-Ycone	Showy Tick Trefoil	Desmodium canadense	6.00	0.375		Legume	N	N	CP2_2		BB-Switch-Ttrefoil-Besus-Ycone
2	CP2_2-BB-Switch-Ttrefoil-Besus-Ycone	2-CP2_2-BB-Switch-Ttrefoil-Besus-Ycone	Black-eyed Susan	Rudbeckia hirta	1.00	0.0625		Forb	N	N	CP2_2		BB-Switch-Ttrefoil-Besus-Ycone
2	CP2_2-BB-Switch-Ttrefoil-Besus-Ycone	2-CP2_2-BB-Switch-Ttrefoil-Besus-Ycone	Yellow Coneflower	Ratibida pinnata	1.00	0.0625		Forb	N	N	CP2_2		BB-Switch-Ttrefoil-Besus-Ycone
2	CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycon	2-CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-Be	Little Bluestem	Schizachyrium scoparium	24.00	1.5		Grass	N	N	CP2_3		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
2	CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycon	2-CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-Be	Sideoats Grama	Bouteloua curtipendula	16.00	1		Grass	N	N	CP2_3		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
2	CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycon	2-CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-Be	Big Bluestem	Andropogon gerardii	8.00	0.5		Grass	N	N	CP2_3		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
2	CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycon	2-CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-Be	Indiangrass	Sorghastrum nutans	8.00	0.5		Grass	N	N	CP2_3		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone

2	CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycon	2-CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-Be	Switchgrass	Panicum virgatum	8.00	0.5		Grass	N	N	CP2_3		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
2	CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycon	2-CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-Be	Purple Prairie Clover	Dalea purpurea	2.00	0.125		Legume	N	N	CP2_3		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
2	CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycon	2-CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-Be	Bergamot	Monarda fistulosa	1.00	0.0625		Forb	N	N	CP2_3		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
2	CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycon	2-CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-Be	Yellow Coneflower	Ratibida pinnata	1.00	0.0625		Forb	N	N	CP2_3		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
2	CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone	2-CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus-Y	Little Bluestem	Schizachyrium scoparium	20.00	1.25		Grass	N	N	CP2_4		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
2	CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone	2-CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus-Y	Canada Wildrye	Elymus canadensis	16.00	1		Grass	N	N	CP2_4		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
2	CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone	2-CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus-Y	Indiangrass	Sorghastrum nutans	16.00	1		Grass	N	N	CP2_4		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
2	CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone	2-CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus-Y	Big Bluestem	Andropogon gerardii	8.00	0.5		Grass	N	N	CP2_4		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
2	CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone	2-CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus-Y	Switchgrass	Panicum virgatum	8.00	0.5		Grass	N	N	CP2_4		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
2	CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone	2-CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus-Y	Bergamot	Monarda fistulosa	1.00	0.0625		Forb	N	N	CP2_4		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
2	CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone	2-CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus-Y	Black-eyed Susan	Rudbeckia hirta	1.00	0.0625		Forb	N	N	CP2_4		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
2	CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone	2-CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus-Y	Yellow Coneflower	Ratibida pinnata	1.00	0.0625		Forb	N	N	CP2_4		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
2	CP2_5-BB-Sgrama-Indian-PPclover-Sgrod-Ycone	2-CP2_5-BB-Sgrama-Indian-PPclover-Sgrod-Ycone	Big Bluestem	Andropogon gerardii	24.00	1.5		Grass	N	N	CP2_5		BB-Sgrama-Indian-PPclover-Sgrod-Ycone
2	CP2_5-BB-Sgrama-Indian-PPclover-Sgrod-Ycone	2-CP2_5-BB-Sgrama-Indian-PPclover-Sgrod-Ycone	Sideoats Grama	Bouteloua curtipendula	24.00	1.5		Grass	N	N	CP2_5		BB-Sgrama-Indian-PPclover-Sgrod-Ycone
2	CP2_5-BB-Sgrama-Indian-PPclover-Sgrod-Ycone	2-CP2_5-BB-Sgrama-Indian-PPclover-Sgrod-Ycone	Indiangrass	Sorghastrum nutans	8.00	0.5		Grass	N	N	CP2_5		BB-Sgrama-Indian-PPclover-Sgrod-Ycone
2	CP2_5-BB-Sgrama-Indian-PPclover-Sgrod-Ycone	2-CP2_5-BB-Sgrama-Indian-PPclover-Sgrod-Ycone	Purple Prairie Clover	Dalea purpurea	2.00	0.125		Legume	N	N	CP2_5		BB-Sgrama-Indian-PPclover-Sgrod-Ycone
2	CP2_5-BB-Sgrama-Indian-PPclover-Sgrod-Ycone	2-CP2_5-BB-Sgrama-Indian-PPclover-Sgrod-Ycone	Stiff Goldenrod	Oligoneuron rigidum	1.00	0.0625		Forb	N	N	CP2_5		BB-Sgrama-Indian-PPclover-Sgrod-Ycone
2	CP2_5-BB-Sgrama-Indian-PPclover-Sgrod-Ycone	2-CP2_5-BB-Sgrama-Indian-PPclover-Sgrod-Ycone	Yellow Coneflower	Ratibida pinnata	1.00	0.0625		Forb	N	N	CP2_5		BB-Sgrama-Indian-PPclover-Sgrod-Ycone
2	CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciro	2-CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bverv	Big Bluestem	Andropogon gerardii	16.00	1		Grass	N	N	CP2_6		BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
2	CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciro	2-CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bverv	Canada Wildrye	Elymus canadensis	16.00	1		Grass	N	N	CP2_6		BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
2	CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciro	2-CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bverv	Indiangrass	Sorghastrum nutans	16.00	1		Grass	N	N	CP2_6		BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
2	CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciro	2-CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bverv	Switchgrass	Panicum virgatum	16.00	1		Grass	N	N	CP2_6		BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
2	CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciro	2-CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bverv	Prairie Cordgrass	Spartina pectinata	8.00	0.5		Grass	N	N	CP2_6		BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
2	CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciro	2-CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bverv	Cupplant	Silphium perfoliatum	2.00	0.125		Forb	N	N	CP2_6		BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
2	CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciro	2-CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bverv	Blue Vervain	Verbena hastata	1.00	0.0625		Forb	N	N	CP2_6		BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
2	CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciro	2-CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bverv	Common Ironweed	Vernonia fasciculata	1.00	0.0625		Forb	N	N	CP2_6		BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
2	CP2_7-Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone	2-CP2_7-Switch-BB-Cwrye-Pcord-Berg-NEaster-Yc	Switchgrass	Panicum virgatum	32.00	2		Grass	N	N	CP2_7		Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
2	CP2_7-Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone	2-CP2_7-Switch-BB-Cwrye-Pcord-Berg-NEaster-Yc	Big Bluestem	Andropogon gerardii	16.00	1		Grass	N	N	CP2_7		Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
2	CP2_7-Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone	2-CP2_7-Switch-BB-Cwrye-Pcord-Berg-NEaster-Yc	Canada Wildrye	Elymus canadensis	16.00	1		Grass	N	N	CP2_7		Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
2	CP2_7-Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone	2-CP2_7-Switch-BB-Cwrye-Pcord-Berg-NEaster-Yc	Prairie Cordgrass	Spartina pectinata	4.00	0.25		Grass	N	N	CP2_7		Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
2	CP2_7-Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone	2-CP2_7-Switch-BB-Cwrye-Pcord-Berg-NEaster-Yc	Bergamot	Monarda fistulosa	1.00	0.0625		Forb	N	N	CP2_7		Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
2	CP2_7-Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone	2-CP2_7-Switch-BB-Cwrye-Pcord-Berg-NEaster-Yc	New England Aster	Symphyotrichum novae-a	1.00	0.0625		Forb	N	N	CP2_7		Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
2	CP2_7-Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone	2-CP2_7-Switch-BB-Cwrye-Pcord-Berg-NEaster-Yc	Yellow Coneflower	Ratibida pinnata	1.00	0.0625		Forb	N	N	CP2_7		Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
4	CP4D-1-RC-SB-Tim-Orc-RC	4-CP4D-1-RC-SB-Tim-Orc-RC	Red Clover	Trifolium pratense	96.00	6		Legume	I	N	CP4D-1		RC-SB-Tim-Orc-RC
4	CP4D-1-RC-SB-Tim-Orc-RC	4-CP4D-1-RC-SB-Tim-Orc-RC	Smooth Bromegrass	Bromus inermis	32.00	2		Grass	I	N	CP4D-1		RC-SB-Tim-Orc-RC
4	CP4D-1-RC-SB-Tim-Orc-RC	4-CP4D-1-RC-SB-Tim-Orc-RC	Timothy	Phleum pratense	32.00	2		Grass	I	N	CP4D-1		RC-SB-Tim-Orc-RC
4	CP4D-1-RC-SB-Tim-Orc-RC	4-CP4D-1-RC-SB-Tim-Orc-RC	Orchardgrass	Dactylis glomerata L.	8.00	0.5		Grass	I	N	CP4D-1		RC-SB-Tim-Orc-RC
4	CP4D-1-RC-SB-Tim-Orc-RC	4-CP4D-1-RC-SB-Tim-Orc-RC	Red Clover	Trifolium pratense	8.00	0.5		Legume	I	N	CP4D-1		RC-SB-Tim-Orc-RC
4	CP4D-2-Alf-SB-Tim-Orc	4-CP4D-2-Alf-SB-Tim-Orc	Alfalfa	Medicago sativa	112.00	7		Legume	I	N	CP4D-2		Alf-SB-Tim-Orc
4	CP4D-2-Alf-SB-Tim-Orc	4-CP4D-2-Alf-SB-Tim-Orc	Smooth Bromegrass	Bromus inermis	32.00	2		Grass	I	N	CP4D-2		Alf-SB-Tim-Orc
4	CP4D-2-Alf-SB-Tim-Orc	4-CP4D-2-Alf-SB-Tim-Orc	Timothy	Phleum pratense	16.00	1		Grass	I	N	CP4D-2		Alf-SB-Tim-Orc
4	CP4D-2-Alf-SB-Tim-Orc	4-CP4D-2-Alf-SB-Tim-Orc	Orchardgrass	Dactylis glomerata L.	8.00	0.5		Grass	I	N	CP4D-2		Alf-SB-Tim-Orc
4	CP4D-3-RC-Tim-SB-Orc	4-CP4D-3-RC-Tim-SB-Orc	Red Clover	Trifolium pratense	96.00	6		Legume	I	N	CP4D-3		RC-Tim-SB-Orc
4	CP4D-3-RC-Tim-SB-Orc	4-CP4D-3-RC-Tim-SB-Orc	Timothy	Phleum pratense	32.00	2		Grass	I	N	CP4D-3		RC-Tim-SB-Orc
4	CP4D-3-RC-Tim-SB-Orc	4-CP4D-3-RC-Tim-SB-Orc	Smooth Bromegrass	Bromus inermis	32.00	2		Grass	I	N	CP4D-3		RC-Tim-SB-Orc
4	CP4D-3-RC-Tim-SB-Orc	4-CP4D-3-RC-Tim-SB-Orc	Orchardgrass	Dactylis glomerata L.	8.00	0.5		Grass	I	N	CP4D-3		RC-Tim-SB-Orc
4	CP4D-4-RC-Tim-Orc-LadC	4-CP4D-4-RC-Tim-Orc-LadC	Red Clover	Trifolium pratense	96.00	6		Legume	I	N	CP4D-4		RC-Tim-Orc-LadC
4	CP4D-4-RC-Tim-Orc-LadC	4-CP4D-4-RC-Tim-Orc-LadC	Timothy	Phleum pratense	32.00	2		Grass	I	N	CP4D-4		RC-Tim-Orc-LadC
4	CP4D-4-RC-Tim-Orc-LadC	4-CP4D-4-RC-Tim-Orc-LadC	Orchardgrass	Dactylis glomerata L.	16.00	1		Grass	I	N	CP4D-4		RC-Tim-Orc-LadC

4	CP4D-4-RC-Tim-Orc-LadC	4-CP4D-4-RC-Tim-Orc-LadC	White Ladino Clover	Trifolium repens	8.00	0.5		Legume	I	N	CP4D-4		RC-Tim-Orc-LadC
4	CP4D-5-Indian-BB-Switch-Cmilkvetch-Besus-Ycone	4-CP4D-5-Indian-BB-Switch-Cmilkvetch-Besus-Yco	Indiangrass	Sorghastrum nutans	48.00	3		Grass	N	N	CP4D-5		Indian-BB-Switch-Cmilkvetch-Besus-Ycone
4	CP4D-5-Indian-BB-Switch-Cmilkvetch-Besus-Ycone	4-CP4D-5-Indian-BB-Switch-Cmilkvetch-Besus-Yco	Big Bluestem	Andropogon gerardii	16.00	1		Grass	N	N	CP4D-5		Indian-BB-Switch-Cmilkvetch-Besus-Ycone
4	CP4D-5-Indian-BB-Switch-Cmilkvetch-Besus-Ycone	4-CP4D-5-Indian-BB-Switch-Cmilkvetch-Besus-Yco	Switchgrass	Panicum virgatum	16.00	1		Grass	N	N	CP4D-5		Indian-BB-Switch-Cmilkvetch-Besus-Ycone
4	CP4D-5-Indian-BB-Switch-Cmilkvetch-Besus-Ycone	4-CP4D-5-Indian-BB-Switch-Cmilkvetch-Besus-Yco	Canada Milkvetch	Astragalus canadensis	2.00	0.125		Legume	N	N	CP4D-5		Indian-BB-Switch-Cmilkvetch-Besus-Ycone
4	CP4D-5-Indian-BB-Switch-Cmilkvetch-Besus-Ycone	4-CP4D-5-Indian-BB-Switch-Cmilkvetch-Besus-Yco	Black-eyed Susan	Rudbeckia hirta	1.00	0.0625		Forb	N	N	CP4D-5		Indian-BB-Switch-Cmilkvetch-Besus-Ycone
4	CP4D-5-Indian-BB-Switch-Cmilkvetch-Besus-Ycone	4-CP4D-5-Indian-BB-Switch-Cmilkvetch-Besus-Yco	Yellow Coneflower	Ratibida pinnata	1.00	0.0625		Forb	N	N	CP4D-5		Indian-BB-Switch-Cmilkvetch-Besus-Ycone
4	CP4D-6-Indian-BB-Switch-LB-Cmilkvetch-Besus-Ycone	4-CP4D-6-Indian-BB-Switch-LB-Cmilkvetch-Besus-	Indiangrass	Sorghastrum nutans	48.00	3		Grass	N	N	CP4D-6		Indian-BB-Switch-LB-Cmilkvetch-Besus-Ycone
4	CP4D-6-Indian-BB-Switch-LB-Cmilkvetch-Besus-Ycone	4-CP4D-6-Indian-BB-Switch-LB-Cmilkvetch-Besus-	Big Bluestem	Andropogon gerardii	16.00	1		Grass	N	N	CP4D-6		Indian-BB-Switch-LB-Cmilkvetch-Besus-Ycone
4	CP4D-6-Indian-BB-Switch-LB-Cmilkvetch-Besus-Ycone	4-CP4D-6-Indian-BB-Switch-LB-Cmilkvetch-Besus-	Switchgrass	Panicum virgatum	16.00	1		Grass	N	N	CP4D-6		Indian-BB-Switch-LB-Cmilkvetch-Besus-Ycone
4	CP4D-6-Indian-BB-Switch-LB-Cmilkvetch-Besus-Ycone	4-CP4D-6-Indian-BB-Switch-LB-Cmilkvetch-Besus-	Little Bluestem	Schizachyrium scoparium	16.00	1		Grass	N	N	CP4D-6		Indian-BB-Switch-LB-Cmilkvetch-Besus-Ycone
4	CP4D-6-Indian-BB-Switch-LB-Cmilkvetch-Besus-Ycone	4-CP4D-6-Indian-BB-Switch-LB-Cmilkvetch-Besus-	Canada Milkvetch	Astragalus canadensis	2.00	0.125		Legume	N	N	CP4D-6		Indian-BB-Switch-LB-Cmilkvetch-Besus-Ycone
4	CP4D-6-Indian-BB-Switch-LB-Cmilkvetch-Besus-Ycone	4-CP4D-6-Indian-BB-Switch-LB-Cmilkvetch-Besus-	Black-eyed Susan	Rudbeckia hirta	1.00	0.0625		Forb	N	N	CP4D-6		Indian-BB-Switch-LB-Cmilkvetch-Besus-Ycone
4	CP4D-6-Indian-BB-Switch-LB-Cmilkvetch-Besus-Ycone	4-CP4D-6-Indian-BB-Switch-LB-Cmilkvetch-Besus-	Yellow Coneflower	Ratibida pinnata	1.00	0.0625		Forb	N	N	CP4D-6		Indian-BB-Switch-LB-Cmilkvetch-Besus-Ycone
4	CP4D-7-Indian-BB-Switch-PPclover-Besus-Ycone	4-CP4D-7-Indian-BB-Switch-PPclover-Besus-Ycone	Indiangrass	Sorghastrum nutans	48.00	3		Grass	N	N	CP4D-7		Indian-BB-Switch-PPclover-Besus-Ycone
4	CP4D-7-Indian-BB-Switch-PPclover-Besus-Ycone	4-CP4D-7-Indian-BB-Switch-PPclover-Besus-Ycone	Big Bluestem	Andropogon gerardii	16.00	1		Grass	N	N	CP4D-7		Indian-BB-Switch-PPclover-Besus-Ycone
4	CP4D-7-Indian-BB-Switch-PPclover-Besus-Ycone	4-CP4D-7-Indian-BB-Switch-PPclover-Besus-Ycone	Switchgrass	Panicum virgatum	16.00	1		Grass	N	N	CP4D-7		Indian-BB-Switch-PPclover-Besus-Ycone
4	CP4D-7-Indian-BB-Switch-PPclover-Besus-Ycone	4-CP4D-7-Indian-BB-Switch-PPclover-Besus-Ycone	Purple Prairie Clover	Dalea purpurea	2.00	0.125		Legume	N	N	CP4D-7		Indian-BB-Switch-PPclover-Besus-Ycone
4	CP4D-7-Indian-BB-Switch-PPclover-Besus-Ycone	4-CP4D-7-Indian-BB-Switch-PPclover-Besus-Ycone	Black-eyed Susan	Rudbeckia hirta	1.00	0.0625		Forb	N	N	CP4D-7		Indian-BB-Switch-PPclover-Besus-Ycone
4	CP4D-7-Indian-BB-Switch-PPclover-Besus-Ycone	4-CP4D-7-Indian-BB-Switch-PPclover-Besus-Ycone	Yellow Coneflower	Ratibida pinnata	1.00	0.0625		Forb	N	N	CP4D-7		Indian-BB-Switch-PPclover-Besus-Ycone
4	CP4D-8-Indian-BB-LB-Switch-PPclover-Besus-Ycone	4-CP4D-8-Indian-BB-LB-Switch-PPclover-Besus-Yc	Indiangrass	Sorghastrum nutans	48.00	3		Grass	N	N	CP4D-8		Indian-BB-LB-Switch-PPclover-Besus-Ycone
4	CP4D-8-Indian-BB-LB-Switch-PPclover-Besus-Ycone	4-CP4D-8-Indian-BB-LB-Switch-PPclover-Besus-Yc	Big Bluestem	Andropogon gerardii	16.00	1		Grass	N	N	CP4D-8		Indian-BB-LB-Switch-PPclover-Besus-Ycone
4	CP4D-8-Indian-BB-LB-Switch-PPclover-Besus-Ycone	4-CP4D-8-Indian-BB-LB-Switch-PPclover-Besus-Yc	Little Bluestem	Schizachyrium scoparium	16.00	1		Grass	N	N	CP4D-8		Indian-BB-LB-Switch-PPclover-Besus-Ycone
4	CP4D-8-Indian-BB-LB-Switch-PPclover-Besus-Ycone	4-CP4D-8-Indian-BB-LB-Switch-PPclover-Besus-Yc	Switchgrass	Panicum virgatum	16.00	1		Grass	N	N	CP4D-8		Indian-BB-LB-Switch-PPclover-Besus-Ycone
4	CP4D-8-Indian-BB-LB-Switch-PPclover-Besus-Ycone	4-CP4D-8-Indian-BB-LB-Switch-PPclover-Besus-Yc	Purple Prairie Clover	Dalea purpurea	2.00	0.125		Legume	N	N	CP4D-8		Indian-BB-LB-Switch-PPclover-Besus-Ycone
4	CP4D-8-Indian-BB-LB-Switch-PPclover-Besus-Ycone	4-CP4D-8-Indian-BB-LB-Switch-PPclover-Besus-Yc	Black-eyed Susan	Rudbeckia hirta	1.00	0.0625		Forb	N	N	CP4D-8		Indian-BB-LB-Switch-PPclover-Besus-Ycone
4	CP4D-8-Indian-BB-LB-Switch-PPclover-Besus-Ycone	4-CP4D-8-Indian-BB-LB-Switch-PPclover-Besus-Yc	Yellow Coneflower	Ratibida pinnata	1.00	0.0625		Forb	N	N	CP4D-8		Indian-BB-LB-Switch-PPclover-Besus-Ycone
4	CP4D-9-Indian-BB-Switch-PPclover-Berg-Ycone	4-CP4D-9-Indian-BB-Switch-PPclover-Berg-Ycone	Indiangrass	Sorghastrum nutans	48.00	3		Grass	N	N	CP4D-9		Indian-BB-Switch-PPclover-Berg-Ycone
4	CP4D-9-Indian-BB-Switch-PPclover-Berg-Ycone	4-CP4D-9-Indian-BB-Switch-PPclover-Berg-Ycone	Big Bluestem	Andropogon gerardii	16.00	1		Grass	N	N	CP4D-9		Indian-BB-Switch-PPclover-Berg-Ycone
4	CP4D-9-Indian-BB-Switch-PPclover-Berg-Ycone	4-CP4D-9-Indian-BB-Switch-PPclover-Berg-Ycone	Switchgrass	Panicum virgatum	16.00	1		Grass	N	N	CP4D-9		Indian-BB-Switch-PPclover-Berg-Ycone
4	CP4D-9-Indian-BB-Switch-PPclover-Berg-Ycone	4-CP4D-9-Indian-BB-Switch-PPclover-Berg-Ycone	Purple Prairie Clover	Dalea purpurea	2.00	0.125		Legume	N	N	CP4D-9		Indian-BB-Switch-PPclover-Berg-Ycone
4	CP4D-9-Indian-BB-Switch-PPclover-Berg-Ycone	4-CP4D-9-Indian-BB-Switch-PPclover-Berg-Ycone	Bergamot	Monarda fistulosa	1.00	0.0625		Forb	N	N	CP4D-9		Indian-BB-Switch-PPclover-Berg-Ycone
4	CP4D-9-Indian-BB-Switch-PPclover-Berg-Ycone	4-CP4D-9-Indian-BB-Switch-PPclover-Berg-Ycone	Yellow Coneflower	Ratibida pinnata	1.00	0.0625		Forb	N	N	CP4D-9		Indian-BB-Switch-PPclover-Berg-Ycone
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swd	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-S	Little Bluestem	Schizachyrium scoparium	24.00	1.5		Grass	N	N	CP25-D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swd	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-S	Sideoats Grama	Bouteloua curtipendula	24.00	1.5		Grass	N	N	CP25-D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swd	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-S	Indiangrass	Sorghastrum nutans	8.00	0.5		Grass	N	N	CP25-D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swd	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-S	Big Bluestem	Andropogon gerardii	4.00	0.25		Grass	N	N	CP25-D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swd	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-S	Prairie Junegrass	Koeleria macrantha	2.00	0.125		Grass	N	N	CP25-D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swd	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-S	Purple Prairie Clover	Dalea purpurea	2.00	0.125		Legume	N	N	CP25-D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swd	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-S	Sand Dropseed	Sporobolus cryptandrus	2.00	0.125		Grass	N	N	CP25-D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swd	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-S	Spiderwort	Tradescantia ohiensis	1.00	0.0625		Forb	N	N	CP25-D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swd	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-S	Hoary Vervain	Verbena stricta	0.50	0.03125		Forb	N	N	CP25-D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swd	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-S	Leadplant	Amorpha canescens	0.50	0.03125		Legume	N	N	CP25-D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swd	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-S	Prairie Tickseed	Coreopsis palmata	0.50	0.03125		Forb	N	N	CP25-D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swd	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-S	Silky Aster	Symphyotrichum pratens	0.50	0.03125		Forb	N	N	CP25-D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swd	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-S	Stiff Goldenrod	Oligoneuron rigidum	0.50	0.03125		Forb	N	N	CP25-D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swd	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-S	Yellow Coneflower	Ratibida pinnata	0.50	0.03125		Forb	N	N	CP25-D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swd	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-S	Prairie Cinquefoil	Potentilla arguta	0.25	0.015625		Forb	N	N	CP25-D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swd	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-S	Spotted Mint	Monarda punctata	0.25	0.015625		Forb	N	N	CP25-D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint

25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclove	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdro	Little Bluestem	Schizachyrium scoparium	24.00	1.5		Grass	N	N	CP25-DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclove	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdro	Sideoats Grama	Bouteloua curtipendula	24.00	1.5		Grass	N	N	CP25-DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclove	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdro	Indiangrass	Sorghastrum nutans	8.00	0.5		Grass	N	N	CP25-DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclove	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdro	Switchgrass	Panicum virgatum	4.00	0.25		Grass	N	N	CP25-DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclove	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdro	Prairie Junegrass	Koeleria macrantha	2.00	0.125		Grass	N	N	CP25-DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclove	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdro	Prairie Dropseed	Sporobolus heterolepis	2.00	0.125		Grass	N	N	CP25-DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclove	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdro	Purple Prairie Clover	Dalea purpurea	2.00	0.125		Legume	N	N	CP25-DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclove	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdro	Round-Headed Bushclover	Lespedeza capitata	2.00	0.125		Legume	N	N	CP25-DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclove	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdro	Bergamot	Monarda fistulosa	1.00	0.0625		Forb	N	N	CP25-DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclove	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdro	Spiderwort	Tradescantia ohiensis	1.00	0.0625		Forb	N	N	CP25-DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclove	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdro	Yellow Coneflower	Ratibida pinnata	1.00	0.0625		Forb	N	N	CP25-DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclove	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdro	Leadplant	Amorpha canescens	0.50	0.03125		Legume	N	N	CP25-DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclove	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdro	Rough Blazing Star	Liatris aspera	0.50	0.03125		Forb	N	N	CP25-DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclove	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdro	Sky-Blue Aster	Symphyotrichum oolenta	0.50	0.03125		Forb	N	N	CP25-DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclove	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdro	Stiff Goldenrod	Oligoneuron rigidum	0.50	0.03125		Forb	N	N	CP25-DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclove	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdro	Prairie Cinquefoil	Potentilla arguta	0.25	0.015625		Forb	N	N	CP25-DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjur	Little Bluestem	Schizachyrium scoparium	24.00	1.5		Grass	N	N	CP25-KBB		Lplant-Rblzstar-Sgrod-Ycone-Berg-Pcinque-SkyAster
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjur	Sideoats Grama	Bouteloua curtipendula	24.00	1.5		Grass	N	N	CP25-KBB		Lplant-Rblzstar-Sgrod-Ycone-Berg-Pcinque-SkyAster
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjur	Indiangrass	Sorghastrum nutans	8.00	0.5		Grass	N	N	CP25-KBB		Lplant-Rblzstar-Sgrod-Ycone-Berg-Pcinque-SkyAster
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjur	Switchgrass	Panicum virgatum	8.00	0.5		Grass	N	N	CP25-KBB		Lplant-Rblzstar-Sgrod-Ycone-Berg-Pcinque-SkyAster
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjur	Wild Lupine	Lupinus perennis	3.00	0.1875		Legume	N	N	CP25-KBB		Lplant-Rblzstar-Sgrod-Ycone-Berg-Pcinque-SkyAster
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjur	Prairie Junegrass	Koeleria macrantha	2.00	0.125		Grass	N	N	CP25-KBB		Lplant-Rblzstar-Sgrod-Ycone-Berg-Pcinque-SkyAster
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjur	Prairie Dropseed	Sporobolus heterolepis	2.00	0.125		Grass	N	N	CP25-KBB		Lplant-Rblzstar-Sgrod-Ycone-Berg-Pcinque-SkyAster
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjur	Purple Prairie Clover	Dalea purpurea	2.00	0.125		Legume	N	N	CP25-KBB		Lplant-Rblzstar-Sgrod-Ycone-Berg-Pcinque-SkyAster
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjur	Pale Purple Coneflower	Echinacea pallida	1.00	0.0625		Forb	N	N	CP25-KBB		Lplant-Rblzstar-Sgrod-Ycone-Berg-Pcinque-SkyAster
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjur	Leadplant	Amorpha canescens	0.50	0.03125		Legume	N	N	CP25-KBB		Lplant-Rblzstar-Sgrod-Ycone-Berg-Pcinque-SkyAster
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjur	Rough Blazing Star	Liatris aspera	0.50	0.03125		Forb	N	N	CP25-KBB		Lplant-Rblzstar-Sgrod-Ycone-Berg-Pcinque-SkyAster
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjur	Stiff Goldenrod	Oligoneuron rigidum	0.50	0.03125		Forb	N	N	CP25-KBB		Lplant-Rblzstar-Sgrod-Ycone-Berg-Pcinque-SkyAster
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjur	Yellow Coneflower	Ratibida pinnata	0.50	0.03125		Forb	N	N	CP25-KBB		Lplant-Rblzstar-Sgrod-Ycone-Berg-Pcinque-SkyAster
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjur	Bergamot	Monarda fistulosa	0.25	0.015625		Forb	N	N	CP25-KBB		Lplant-Rblzstar-Sgrod-Ycone-Berg-Pcinque-SkyAster
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjur	Prairie Cinquefoil	Potentilla arguta	0.25	0.015625		Forb	N	N	CP25-KBB		Lplant-Rblzstar-Sgrod-Ycone-Berg-Pcinque-SkyAster
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjur	Sky-Blue Aster	Symphyotrichum oolenta	0.25	0.015625		Forb	N	N	CP25-KBB		Lplant-Rblzstar-Sgrod-Ycone-Berg-Pcinque-SkyAster
25	CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-	25-CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun	Little Bluestem	Schizachyrium scoparium	24.00	1.5		Grass	N	N	CP25-M		Berg-Besus-NEaster-SkyAster-Ycone-Croot
25	CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-	25-CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun	Indiangrass	Sorghastrum nutans	16.00	1		Grass	N	N	CP25-M		Berg-Besus-NEaster-SkyAster-Ycone-Croot
25	CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-	25-CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun	Big Bluestem	Andropogon gerardii	8.00	0.5		Grass	N	N	CP25-M		Berg-Besus-NEaster-SkyAster-Ycone-Croot
25	CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-	25-CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun	Canada Wildrye	Elymus canadensis	8.00	0.5		Grass	N	N	CP25-M		Berg-Besus-NEaster-SkyAster-Ycone-Croot
25	CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-	25-CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun	Switchgrass	Panicum virgatum	8.00	0.5		Grass	N	N	CP25-M		Berg-Besus-NEaster-SkyAster-Ycone-Croot
25	CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-	25-CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun	Ox-eye Sunflower	Heliopsis helianthoides	1.00	0.0625		Forb	N	N	CP25-M		Berg-Besus-NEaster-SkyAster-Ycone-Croot
25	CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-	25-CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun	Prairie Blazing Star	Liatris pycnostachya	1.00	0.0625		Forb	N	N	CP25-M		Berg-Besus-NEaster-SkyAster-Ycone-Croot
25	CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-	25-CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun	Purple Prairie Clover	Dalea purpurea	1.00	0.0625		Legume	N	N	CP25-M		Berg-Besus-NEaster-SkyAster-Ycone-Croot
25	CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-	25-CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun	Rosinweed	Silphium integrifolium	1.00	0.0625		Forb	N	N	CP25-M		Berg-Besus-NEaster-SkyAster-Ycone-Croot
25	CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-	25-CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun	Bergamot	Monarda fistulosa	0.50	0.03125		Forb	N	N	CP25-M		Berg-Besus-NEaster-SkyAster-Ycone-Croot
25	CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-	25-CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun	Black-eyed Susan	Rudbeckia hirta	0.50	0.03125		Forb	N	N	CP25-M		Berg-Besus-NEaster-SkyAster-Ycone-Croot
25	CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-	25-CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun	New England Aster	Symphyotrichum novae-a	0.50	0.03125		Forb	N	N	CP25-M		Berg-Besus-NEaster-SkyAster-Ycone-Croot
25	CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-	25-CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun	Sky-Blue Aster	Symphyotrichum oolenta	0.50	0.03125		Forb	N	N	CP25-M		Berg-Besus-NEaster-SkyAster-Ycone-Croot
25	CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-	25-CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun	Yellow Coneflower	Ratibida pinnata	0.50	0.03125		Forb	N	N	CP25-M		Berg-Besus-NEaster-SkyAster-Ycone-Croot
25	CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-	25-CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun	Culver's Root	Veronicastrum virginicum	0.25	0.015625		Forb	N	N	CP25-M		Berg-Besus-NEaster-SkyAster-Ycone-Croot
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgras	Canada Wildrye	Elymus canadensis	16.00	1		Grass	N	N	CP25-W		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgras	Switchgrass	Panicum virgatum	16.00	1		Grass	N	N	CP25-W		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot

25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgras	Indiangrass	Sorghastrum nutans	12.00	0.75		Grass	N	N	CP25-W		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgras	Big Bluestem	Andropogon gerardii	8.00	0.5		Grass	N	N	CP25-W		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgras	Prairie Cordgrass	Spartina pectinata	8.00	0.5		Grass	N	N	CP25-W		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgras	Fowl Mannagrass	Glyceria striata	4.00	0.25		Grass	N	N	CP25-W		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgras	Fox Sedge	Carex vulpinoidea	4.00	0.25		Sedge	N	N	CP25-W		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgras	Cupplant	Silphium perfoliatum	2.00	0.125		Forb	N	N	CP25-W		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgras	Showy Tick Trefoil	Desmodium canadense	2.00	0.125		Legume	N	N	CP25-W		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgras	Blue Vervain	Verbena hastata	1.00	0.0625		Forb	N	N	CP25-W		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgras	Golden Alexanders	Zizia aurea	1.00	0.0625		Forb	N	N	CP25-W		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgras	Marsh Milkweed	Asclepias incarnata	1.00	0.0625		Forb	N	N	CP25-W		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgras	Boneset	Eupatorium perfoliatum	0.50	0.03125		Forb	N	N	CP25-W		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgras	Common Ironweed	Vernonia fasciculata	0.50	0.03125		Forb	N	N	CP25-W		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgras	Joe-pye Weed	Eutrochium maculatum	0.50	0.03125		Forb	N	N	CP25-W		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgras	Culver's Root	Veronicastrum virginicum	0.25	0.015625		Forb	N	N	CP25-W		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
25	CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-WWIndig	25-CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-	Switchgrass	Panicum virgatum	24.00	1.5		Grass	N	N	CP25-WM		Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
25	CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-WWIndig	25-CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-	Canada Wildrye	Elymus canadensis	16.00	1		Grass	N	N	CP25-WM		Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
25	CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-WWIndig	25-CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-	Indiangrass	Sorghastrum nutans	12.00	0.75		Grass	N	N	CP25-WM		Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
25	CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-WWIndig	25-CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-	Big Bluestem	Andropogon gerardii	8.00	0.5		Grass	N	N	CP25-WM		Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
25	CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-WWIndig	25-CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-	Prairie Cordgrass	Spartina pectinata	4.00	0.25		Grass	N	N	CP25-WM		Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
25	CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-WWIndig	25-CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-	Cupplant	Silphium perfoliatum	2.00	0.125		Forb	N	N	CP25-WM		Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
25	CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-WWIndig	25-CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-	White wild indigo	Baptisia alba	1.50	0.09375		Legume	N	N	CP25-WM		Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
25	CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-WWIndig	25-CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-	Black-eyed Susan	Rudbeckia hirta	0.50	0.03125		Forb	N	N	CP25-WM		Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
25	CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-WWIndig	25-CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-	Common Ironweed	Vernonia fasciculata	0.50	0.03125		Forb	N	N	CP25-WM		Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
25	CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-WWIndig	25-CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-	Golden Alexanders	Zizia aurea	0.50	0.03125		Forb	N	N	CP25-WM		Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
25	CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-WWIndig	25-CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-	New England Aster	Symphyotrichum novae-a	0.50	0.03125		Forb	N	N	CP25-WM		Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
25	CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-WWIndig	25-CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-	Prairie Blazing Star	Liatris pycnostachya	0.50	0.03125		Forb	N	N	CP25-WM		Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
25	CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-WWIndig	25-CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-	Yellow Coneflower	Ratibida pinnata	0.50	0.03125		Forb	N	N	CP25-WM		Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
25	CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-WWIndig	25-CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-	Bergamot	Monarda fistulosa	0.25	0.015625		Forb	N	N	CP25-WM		Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
25	CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-WWIndig	25-CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-	Great St. John's Wort	Hypericum ascyron	0.25	0.015625		Forb	N	N	CP25-WM		Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
33	CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHbushclover	33-CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHb	Little Bluestem	Schizachyrium scoparium	32.00	2		Grass	N	N	CP33-1		Wsun-Ycone-Besus
33	CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHbushclover	33-CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHb	Sideoats Grama	Bouteloua curtipendula	32.00	2		Grass	N	N	CP33-1		Wsun-Ycone-Besus
33	CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHbushclover	33-CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHb	Canada Wildrye	Elymus canadensis	8.00	0.5		Grass	N	N	CP33-1		Wsun-Ycone-Besus
33	CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHbushclover	33-CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHb	Indiangrass	Sorghastrum nutans	8.00	0.5		Grass	N	N	CP33-1		Wsun-Ycone-Besus
33	CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHbushclover	33-CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHb	Purple Prairie Clover	Dalea purpurea	2.00	0.125		Legume	N	N	CP33-1		Wsun-Ycone-Besus
33	CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHbushclover	33-CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHb	Round-Headed Bushclover	Lespedeza capitata	2.00	0.125		Legume	N	N	CP33-1		Wsun-Ycone-Besus
33	CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHbushclover	33-CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHb	Purple Coneflower	Echinacea purpurea	1.00	0.0625		Forb	N	N	CP33-1		Wsun-Ycone-Besus
33	CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHbushclover	33-CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHb	Stiff Goldenrod	Oligoneuron rigidum	1.00	0.0625		Forb	N	N	CP33-1		Wsun-Ycone-Besus
33	CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHbushclover	33-CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHb	Fewleaf Sunflower	Helianthus occidentalis	1.00	0.0625		Forb	N	N	CP33-1		Wsun-Ycone-Besus
33	CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHbushclover	33-CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHb	Yellow Coneflower	Ratibida pinnata	1.00	0.0625		Forb	N	N	CP33-1		Wsun-Ycone-Besus
33	CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHbushclover	33-CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHb	Black-eyed Susan	Rudbeckia hirta	0.75	0.046875		Forb	N	N	CP33-1		Wsun-Ycone-Besus
33	CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rblzst	33-CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclo	Little Bluestem	Schizachyrium scoparium	24.00	1.5		Grass	N	N	CP33-2		SkyAster-Sgrod-Wsun
33	CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rblzst	33-CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclo	Sideoats Grama	Bouteloua curtipendula	20.00	1.25		Grass	N	N	CP33-2		SkyAster-Sgrod-Wsun
33	CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rblzst	33-CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclo	Indiangrass	Sorghastrum nutans	16.00	1		Grass	N	N	CP33-2		SkyAster-Sgrod-Wsun
33	CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rblzst	33-CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclo	Canada Wildrye	Elymus canadensis	8.00	0.5		Grass	N	N	CP33-2		SkyAster-Sgrod-Wsun
33	CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rblzst	33-CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclo	Purple Coneflower	Echinacea purpurea	2.00	0.125		Forb	N	N	CP33-2		SkyAster-Sgrod-Wsun
33	CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rblzst	33-CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclo	Purple Prairie Clover	Dalea purpurea	2.00	0.125		Legume	N	N	CP33-2		SkyAster-Sgrod-Wsun
33	CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rblzst	33-CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclo	Rough Blazing Star	Liatris aspera	2.00	0.125		Forb	N	N	CP33-2		SkyAster-Sgrod-Wsun
33	CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rblzst	33-CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclo	Black-eyed Susan	Rudbeckia hirta	1.00	0.0625		Forb	N	N	CP33-2		SkyAster-Sgrod-Wsun
33	CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rblzst	33-CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclo	Sky-Blue Aster	Symphyotrichum oolenta	1.00	0.0625		Forb	N	N	CP33-2		SkyAster-Sgrod-Wsun

33	CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rblzs	33-CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclov	Stiff Goldenrod	Oligoneuron rigidum	1.00	0.0625		Forb	N	N	CP33-2		SkyAster-Sgrod-Wsun
33	CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rblzs	33-CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclov	Fewleaf Sunflower	Helianthus occidentalis	1.00	0.0625		Forb	N	N	CP33-2		SkyAster-Sgrod-Wsun
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord-I	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedg	Canada Wildrye	Elymus canadensis	16.00	1		Grass	N	N	CP38B-WPHRA		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord-I	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedg	Indiangrass	Sorghastrum nutans	12.00	0.75		Grass	N	N	CP38B-WPHRA		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord-I	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedg	Switchgrass	Panicum virgatum	12.00	0.75		Grass	N	N	CP38B-WPHRA		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord-I	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedg	Big Bluestem	Andropogon gerardii	8.00	0.5		Grass	N	N	CP38B-WPHRA		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord-I	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedg	Fox Sedge	Carex vulpinoidea	8.00	0.5		Sedge	N	N	CP38B-WPHRA		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord-I	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedg	Prairie Cordgrass	Spartina pectinata	8.00	0.5		Grass	N	N	CP38B-WPHRA		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord-I	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedg	Fowl Mannagrass	Glyceria striata	4.00	0.25		Grass	N	N	CP38B-WPHRA		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord-I	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedg	Cupplant	Silphium perfoliatum	2.00	0.125		Forb	N	N	CP38B-WPHRA		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord-I	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedg	Showy Tick Trefoil	Desmodium canadense	2.00	0.125		Legume	N	N	CP38B-WPHRA		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord-I	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedg	Blue Vervain	Verbena hastata	1.00	0.0625		Forb	N	N	CP38B-WPHRA		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord-I	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedg	Golden Alexanders	Zizia aurea	1.00	0.0625		Forb	N	N	CP38B-WPHRA		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord-I	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedg	Marsh Milkweed	Asclepias incarnata	1.00	0.0625		Forb	N	N	CP38B-WPHRA		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord-I	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedg	Boneset	Eupatorium perfoliatum	0.50	0.03125		Forb	N	N	CP38B-WPHRA		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord-I	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedg	Common Ironweed	Vernonia fasciculata	0.50	0.03125		Forb	N	N	CP38B-WPHRA		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord-I	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedg	Joe-pye Weed	Eutrochium maculatum	0.50	0.03125		Forb	N	N	CP38B-WPHRA		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord-I	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedg	Culver's Root	Veronicastrum virginicum	0.25	0.015625		Forb	N	N	CP38B-WPHRA		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-CWGCA(CP1)1-RC-Orc-Tim	38-CP38E-CWGCA(CP1)1-RC-Orc-Tim	Red Clover	Trifolium pratense	80.00	5		Legume	I	N	CP38E-CWGCA(CP1)1		RC-Orc-Tim
38	CP38E-CWGCA(CP1)1-RC-Orc-Tim	38-CP38E-CWGCA(CP1)1-RC-Orc-Tim	Orchardgrass	Dactylis glomerata L.	48.00	3		Grass	I	N	CP38E-CWGCA(CP1)1		RC-Orc-Tim
38	CP38E-CWGCA(CP1)1-RC-Orc-Tim	38-CP38E-CWGCA(CP1)1-RC-Orc-Tim	Timothy	Phleum pratense	32.00	2		Grass	I	N	CP38E-CWGCA(CP1)1		RC-Orc-Tim
38	CP38E-CWGCA(CP1)2-Alf-Orc-Tim	38-CP38E-CWGCA(CP1)2-Alf-Orc-Tim	Alfalfa	Medicago sativa	96.00	6		Legume	I	N	CP38E-CWGCA(CP1)2		Alf-Orc-Tim
38	CP38E-CWGCA(CP1)2-Alf-Orc-Tim	38-CP38E-CWGCA(CP1)2-Alf-Orc-Tim	Orchardgrass	Dactylis glomerata L.	48.00	3		Grass	I	N	CP38E-CWGCA(CP1)2		Alf-Orc-Tim
38	CP38E-CWGCA(CP1)2-Alf-Orc-Tim	38-CP38E-CWGCA(CP1)2-Alf-Orc-Tim	Timothy	Phleum pratense	32.00	2		Grass	I	N	CP38E-CWGCA(CP1)2		Alf-Orc-Tim
38	CP38E-CWGCA(CP1)3-RC-Tim-Orc-Rtop-LadC	38-CP38E-CWGCA(CP1)3-RC-Tim-Orc-Rtop-LadC	Red Clover	Trifolium pratense	80.00	5		Legume	I	N	CP38E-CWGCA(CP1)3		RC-Tim-Orc-Rtop-LadC
38	CP38E-CWGCA(CP1)3-RC-Tim-Orc-Rtop-LadC	38-CP38E-CWGCA(CP1)3-RC-Tim-Orc-Rtop-LadC	Timothy	Phleum pratense	32.00	2		Grass	I	N	CP38E-CWGCA(CP1)3		RC-Tim-Orc-Rtop-LadC
38	CP38E-CWGCA(CP1)3-RC-Tim-Orc-Rtop-LadC	38-CP38E-CWGCA(CP1)3-RC-Tim-Orc-Rtop-LadC	Orchardgrass	Dactylis glomerata L.	16.00	1		Grass	I	N	CP38E-CWGCA(CP1)3		RC-Tim-Orc-Rtop-LadC
38	CP38E-CWGCA(CP1)3-RC-Tim-Orc-Rtop-LadC	38-CP38E-CWGCA(CP1)3-RC-Tim-Orc-Rtop-LadC	Redtop	Agrostis gigantea	16.00	1		Grass	I	N	CP38E-CWGCA(CP1)3		RC-Tim-Orc-Rtop-LadC
38	CP38E-CWGCA(CP1)3-RC-Tim-Orc-Rtop-LadC	38-CP38E-CWGCA(CP1)3-RC-Tim-Orc-Rtop-LadC	White Ladino Clover	Trifolium repens	8.00	0.5		Legume	I	N	CP38E-CWGCA(CP1)3		RC-Tim-Orc-Rtop-LadC
38	CP38E-CWGCA(CP1)4-Alf-Rtop-Tim-Orc	38-CP38E-CWGCA(CP1)4-Alf-Rtop-Tim-Orc	Alfalfa	Medicago sativa	96.00	6		Legume	I	N	CP38E-CWGCA(CP1)4		Alf-Rtop-Tim-Orc
38	CP38E-CWGCA(CP1)4-Alf-Rtop-Tim-Orc	38-CP38E-CWGCA(CP1)4-Alf-Rtop-Tim-Orc	Redtop	Agrostis gigantea	32.00	2		Grass	I	N	CP38E-CWGCA(CP1)4		Alf-Rtop-Tim-Orc
38	CP38E-CWGCA(CP1)4-Alf-Rtop-Tim-Orc	38-CP38E-CWGCA(CP1)4-Alf-Rtop-Tim-Orc	Timothy	Phleum pratense	32.00	2		Grass	I	N	CP38E-CWGCA(CP1)4		Alf-Rtop-Tim-Orc
38	CP38E-CWGCA(CP1)4-Alf-Rtop-Tim-Orc	38-CP38E-CWGCA(CP1)4-Alf-Rtop-Tim-Orc	Orchardgrass	Dactylis glomerata L.	16.00	1		Grass	I	N	CP38E-CWGCA(CP1)4		Alf-Rtop-Tim-Orc
38	CP38E-CWGCA(CP1)5-RC-KB-Orc-Rtop	38-CP38E-CWGCA(CP1)5-RC-KB-Orc-Rtop	Red Clover	Trifolium pratense	80.00	5		Legume	I	N	CP38E-CWGCA(CP1)5		RC-KB-Orc-Rtop
38	CP38E-CWGCA(CP1)5-RC-KB-Orc-Rtop	38-CP38E-CWGCA(CP1)5-RC-KB-Orc-Rtop	Kentucky Bluegrass	Poa pratensis	32.00	2		Grass	I	N	CP38E-CWGCA(CP1)5		RC-KB-Orc-Rtop
38	CP38E-CWGCA(CP1)5-RC-KB-Orc-Rtop	38-CP38E-CWGCA(CP1)5-RC-KB-Orc-Rtop	Orchardgrass	Dactylis glomerata L.	16.00	1		Grass	I	N	CP38E-CWGCA(CP1)5		RC-KB-Orc-Rtop
38	CP38E-CWGCA(CP1)5-RC-KB-Orc-Rtop	38-CP38E-CWGCA(CP1)5-RC-KB-Orc-Rtop	Redtop	Agrostis gigantea	16.00	1		Grass	I	N	CP38E-CWGCA(CP1)5		RC-KB-Orc-Rtop
38	CP38E-CWGCA(CP1)6-Alf-SB-Tim	38-CP38E-CWGCA(CP1)6-Alf-SB-Tim	Alfalfa	Medicago sativa	96.00	6		Legume	I	N	CP38E-CWGCA(CP1)6		Alf-SB-Tim
38	CP38E-CWGCA(CP1)6-Alf-SB-Tim	38-CP38E-CWGCA(CP1)6-Alf-SB-Tim	Smooth Bromegrass	Bromus inermis	48.00	3		Grass	I	N	CP38E-CWGCA(CP1)6		Alf-SB-Tim
38	CP38E-CWGCA(CP1)6-Alf-SB-Tim	38-CP38E-CWGCA(CP1)6-Alf-SB-Tim	Timothy	Phleum pratense	32.00	2		Grass	I	N	CP38E-CWGCA(CP1)6		Alf-SB-Tim
38	CP38E-CWGCA(CP1)7-RC-SB-Tim-Orc-LadC	38-CP38E-CWGCA(CP1)7-RC-SB-Tim-Orc-LadC	Red Clover	Trifolium pratense	80.00	5		Legume	I	N	CP38E-CWGCA(CP1)7		RC-SB-Tim-Orc-LadC
38	CP38E-CWGCA(CP1)7-RC-SB-Tim-Orc-LadC	38-CP38E-CWGCA(CP1)7-RC-SB-Tim-Orc-LadC	Smooth Bromegrass	Bromus inermis	32.00	2		Grass	I	N	CP38E-CWGCA(CP1)7		RC-SB-Tim-Orc-LadC
38	CP38E-CWGCA(CP1)7-RC-SB-Tim-Orc-LadC	38-CP38E-CWGCA(CP1)7-RC-SB-Tim-Orc-LadC	Timothy	Phleum pratense	32.00	2		Grass	I	N	CP38E-CWGCA(CP1)7		RC-SB-Tim-Orc-LadC
38	CP38E-CWGCA(CP1)7-RC-SB-Tim-Orc-LadC	38-CP38E-CWGCA(CP1)7-RC-SB-Tim-Orc-LadC	Orchardgrass	Dactylis glomerata L.	16.00	1		Grass	I	N	CP38E-CWGCA(CP1)7		RC-SB-Tim-Orc-LadC
38	CP38E-CWGCA(CP1)7-RC-SB-Tim-Orc-LadC	38-CP38E-CWGCA(CP1)7-RC-SB-Tim-Orc-LadC	White Ladino Clover	Trifolium repens	8.00	0.5		Legume	I	N	CP38E-CWGCA(CP1)7		RC-SB-Tim-Orc-LadC
38	CP38E-CWGCA(CP1)8-RC-SB-Tim	38-CP38E-CWGCA(CP1)8-RC-SB-Tim	Red Clover	Trifolium pratense	80.00	5		Legume	I	N	CP38E-CWGCA(CP1)8		RC-SB-Tim
38	CP38E-CWGCA(CP1)8-RC-SB-Tim	38-CP38E-CWGCA(CP1)8-RC-SB-Tim	Smooth Bromegrass	Bromus inermis	48.00	3		Grass	I	N	CP38E-CWGCA(CP1)8		RC-SB-Tim
38	CP38E-CWGCA(CP1)8-RC-SB-Tim	38-CP38E-CWGCA(CP1)8-RC-SB-Tim	Timothy	Phleum pratense	32.00	2		Grass	I	N	CP38E-CWGCA(CP1)8		RC-SB-Tim
38	CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-	38-CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-I	Little Bluestem	Schizachyrium scoparium	24.00	1.5		Grass	N	N	CP38E-CWGCA(CP2)D		LB-Sgrama-BB-Indian-PPclover-Besus-Rblzstar-Sgrod-Ycone

38	CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-	38-CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-I	Sideoats Grama	Bouteloua curtipendula	24.00	1.5		Grass	N	N	CP38E-CWGCA(CP2)D		LB-Sgrama-BB-Indian-PPclover-Besus-Rblzstar-Sgrod-Ycone
38	CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-	38-CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-I	Big Bluestem	Andropogon gerardii	8.00	0.5		Grass	N	N	CP38E-CWGCA(CP2)D		LB-Sgrama-BB-Indian-PPclover-Besus-Rblzstar-Sgrod-Ycone
38	CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-	38-CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-I	Indiangrass	Sorghastrum nutans	8.00	0.5		Grass	N	N	CP38E-CWGCA(CP2)D		LB-Sgrama-BB-Indian-PPclover-Besus-Rblzstar-Sgrod-Ycone
38	CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-	38-CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-I	Purple Prairie Clover	Dalea purpurea	2.00	0.125		Legume	N	N	CP38E-CWGCA(CP2)D		LB-Sgrama-BB-Indian-PPclover-Besus-Rblzstar-Sgrod-Ycone
38	CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-	38-CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-I	Black-eyed Susan	Rudbeckia hirta	1.00	0.0625		Forb	N	N	CP38E-CWGCA(CP2)D		LB-Sgrama-BB-Indian-PPclover-Besus-Rblzstar-Sgrod-Ycone
38	CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-	38-CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-I	Rough Blazing Star	Liatris aspera	1.00	0.0625		Forb	N	N	CP38E-CWGCA(CP2)D		LB-Sgrama-BB-Indian-PPclover-Besus-Rblzstar-Sgrod-Ycone
38	CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-	38-CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-I	Stiff Goldenrod	Oligoneuron rigidum	1.00	0.0625		Forb	N	N	CP38E-CWGCA(CP2)D		LB-Sgrama-BB-Indian-PPclover-Besus-Rblzstar-Sgrod-Ycone
38	CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-	38-CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-I	Yellow Coneflower	Ratibida pinnata	1.00	0.0625		Forb	N	N	CP38E-CWGCA(CP2)D		LB-Sgrama-BB-Indian-PPclover-Besus-Rblzstar-Sgrod-Ycone
38	CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-	38-CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian	Little Bluestem	Schizachyrium scoparium	24.00	1.5		Grass	N	N	CP38E-CWGCA(CP2)DM		Shwgrod-Sgrod-Ycone
38	CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-	38-CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian	Sideoats Grama	Bouteloua curtipendula	16.00	1		Grass	N	N	CP38E-CWGCA(CP2)DM		Shwgrod-Sgrod-Ycone
38	CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-	38-CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian	Big Bluestem	Andropogon gerardii	8.00	0.5		Grass	N	N	CP38E-CWGCA(CP2)DM		Shwgrod-Sgrod-Ycone
38	CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-	38-CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian	Indiangrass	Sorghastrum nutans	8.00	0.5		Grass	N	N	CP38E-CWGCA(CP2)DM		Shwgrod-Sgrod-Ycone
38	CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-	38-CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian	Switchgrass	Panicum virgatum	8.00	0.5		Grass	N	N	CP38E-CWGCA(CP2)DM		Shwgrod-Sgrod-Ycone
38	CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-	38-CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian	Purple Prairie Clover	Dalea purpurea	2.00	0.125		Legume	N	N	CP38E-CWGCA(CP2)DM		Shwgrod-Sgrod-Ycone
38	CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-	38-CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian	Bergamot	Monarda fistulosa	1.00	0.0625		Forb	N	N	CP38E-CWGCA(CP2)DM		Shwgrod-Sgrod-Ycone
38	CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-	38-CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian	Black-eyed Susan	Rudbeckia hirta	1.00	0.0625		Forb	N	N	CP38E-CWGCA(CP2)DM		Shwgrod-Sgrod-Ycone
38	CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-	38-CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian	Rough Blazing Star	Liatris aspera	1.00	0.0625		Forb	N	N	CP38E-CWGCA(CP2)DM		Shwgrod-Sgrod-Ycone
38	CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-	38-CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian	Showy Goldenrod	Solidago speciosa	1.00	0.0625		Forb	N	N	CP38E-CWGCA(CP2)DM		Shwgrod-Sgrod-Ycone
38	CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-	38-CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian	Stiff Goldenrod	Oligoneuron rigidum	1.00	0.0625		Forb	N	N	CP38E-CWGCA(CP2)DM		Shwgrod-Sgrod-Ycone
38	CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-	38-CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian	Yellow Coneflower	Ratibida pinnata	1.00	0.0625		Forb	N	N	CP38E-CWGCA(CP2)DM		Shwgrod-Sgrod-Ycone
38	CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Pb	38-CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Little Bluestem	Schizachyrium scoparium	20.00	1.25		Grass	N	N	CP38E-CWGCA(CP2)M		Shwgrod-Sgrod-Ycone
38	CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Pb	38-CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Canada Wildrye	Elymus canadensis	16.00	1		Grass	N	N	CP38E-CWGCA(CP2)M		Shwgrod-Sgrod-Ycone
38	CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Pb	38-CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Indiangrass	Sorghastrum nutans	16.00	1		Grass	N	N	CP38E-CWGCA(CP2)M		Shwgrod-Sgrod-Ycone
38	CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Pb	38-CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Big Bluestem	Andropogon gerardii	8.00	0.5		Grass	N	N	CP38E-CWGCA(CP2)M		Shwgrod-Sgrod-Ycone
38	CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Pb	38-CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Switchgrass	Panicum virgatum	8.00	0.5		Grass	N	N	CP38E-CWGCA(CP2)M		Shwgrod-Sgrod-Ycone
38	CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Pb	38-CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Big Bluestem	Andropogon gerardii	8.00	0.5		Grass	N	N	CP38E-CWGCA(CP2)M		Shwgrod-Sgrod-Ycone
38	CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Pb	38-CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Switchgrass	Panicum virgatum	8.00	0.5		Grass	N	N	CP38E-CWGCA(CP2)M		Shwgrod-Sgrod-Ycone
38	CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Pb	38-CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Prairie Blazing Star	Liatris pycnostachya	2.00	0.125		Forb	N	N	CP38E-CWGCA(CP2)M		Shwgrod-Sgrod-Ycone
38	CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Pb	38-CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Rough Blazing Star	Liatris aspera	2.00	0.125		Forb	N	N	CP38E-CWGCA(CP2)M		Shwgrod-Sgrod-Ycone
38	CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Pb	38-CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Bergamot	Monarda fistulosa	1.00	0.0625		Forb	N	N	CP38E-CWGCA(CP2)M		Shwgrod-Sgrod-Ycone
38	CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Pb	38-CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Black-eyed Susan	Rudbeckia hirta	1.00	0.0625		Forb	N	N	CP38E-CWGCA(CP2)M		Shwgrod-Sgrod-Ycone
38	CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Pb	38-CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Showy Goldenrod	Solidago speciosa	1.00	0.0625		Forb	N	N	CP38E-CWGCA(CP2)M		Shwgrod-Sgrod-Ycone
38	CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Pb	38-CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Stiff Goldenrod	Oligoneuron rigidum	1.00	0.0625		Forb	N	N	CP38E-CWGCA(CP2)M		Shwgrod-Sgrod-Ycone
38	CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Pb	38-CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Yellow Coneflower	Ratibida pinnata	1.00	0.0625		Forb	N	N	CP38E-CWGCA(CP2)M		Shwgrod-Sgrod-Ycone
38	CP38E-CWGCA(CP2)W-BB-Cwrye-Switch-Pcord-Cup-Bv	38-CP38E-CWGCA(CP2)W-BB-Cwrye-Switch-Pcor	Big Bluestem	Andropogon gerardii	16.00	1		Grass	N	N	CP38E-CWGCA(CP2)W		BB-Cwrye-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-CWGCA(CP2)W-BB-Cwrye-Switch-Pcord-Cup-Bv	38-CP38E-CWGCA(CP2)W-BB-Cwrye-Switch-Pcor	Canada Wildrye	Elymus canadensis	16.00	1		Grass	N	N	CP38E-CWGCA(CP2)W		BB-Cwrye-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-CWGCA(CP2)W-BB-Cwrye-Switch-Pcord-Cup-Bv	38-CP38E-CWGCA(CP2)W-BB-Cwrye-Switch-Pcor	Switchgrass	Panicum virgatum	16.00	1		Grass	N	N	CP38E-CWGCA(CP2)W		BB-Cwrye-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-CWGCA(CP2)W-BB-Cwrye-Switch-Pcord-Cup-Bv	38-CP38E-CWGCA(CP2)W-BB-Cwrye-Switch-Pcor	Prairie Cordgrass	Spartina pectinata	8.00	0.5		Grass	N	N	CP38E-CWGCA(CP2)W		BB-Cwrye-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-CWGCA(CP2)W-BB-Cwrye-Switch-Pcord-Cup-Bv	38-CP38E-CWGCA(CP2)W-BB-Cwrye-Switch-Pcor	Cupplant	Silphium perfoliatum	2.00	0.125		Forb	N	N	CP38E-CWGCA(CP2)W		BB-Cwrye-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-CWGCA(CP2)W-BB-Cwrye-Switch-Pcord-Cup-Bv	38-CP38E-CWGCA(CP2)W-BB-Cwrye-Switch-Pcor	Blue Vervain	Verbena hastata	1.00	0.0625		Forb	N	N	CP38E-CWGCA(CP2)W		BB-Cwrye-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-CWGCA(CP2)W-BB-Cwrye-Switch-Pcord-Cup-Bv	38-CP38E-CWGCA(CP2)W-BB-Cwrye-Switch-Pcor	Common Ironweed	Vernonia fasciculata	1.00	0.0625		Forb	N	N	CP38E-CWGCA(CP2)W		BB-Cwrye-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Pblzs	38-CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pc	Switchgrass	Panicum virgatum	32.00	2		Grass	N	N	CP38E-CWGCA(CP2)WM		Switch-BB-Cwrye-Pcord-Pblzstar-Berg-Besus-NEaster-Ycone
38	CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Pblzs	38-CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pc	Big Bluestem	Andropogon gerardii	16.00	1		Grass	N	N	CP38E-CWGCA(CP2)WM		Switch-BB-Cwrye-Pcord-Pblzstar-Berg-Besus-NEaster-Ycone
38	CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Pblzs	38-CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pc	Canada Wildrye	Elymus canadensis	16.00	1		Grass	N	N	CP38E-CWGCA(CP2)WM		Switch-BB-Cwrye-Pcord-Pblzstar-Berg-Besus-NEaster-Ycone
38	CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Pblzs	38-CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pc	Prairie Cordgrass	Spartina pectinata	4.00	0.25		Grass	N	N	CP38E-CWGCA(CP2)WM		Switch-BB-Cwrye-Pcord-Pblzstar-Berg-Besus-NEaster-Ycone
38	CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Pblzs	38-CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pc	Prairie Blazing Star	Liatris pycnostachya	2.00	0.125		Forb	N	N	CP38E-CWGCA(CP2)WM		Switch-BB-Cwrye-Pcord-Pblzstar-Berg-Besus-NEaster-Ycone
38	CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Pblzs	38-CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pc	Bergamot	Monarda fistulosa	1.00	0.0625		Forb	N	N	CP38E-CWGCA(CP2)WM		Switch-BB-Cwrye-Pcord-Pblzstar-Berg-Besus-NEaster-Ycone
38	CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Pblzs	38-CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pc	Black-eyed Susan	Rudbeckia hirta	1.00	0.0625		Forb	N	N	CP38E-CWGCA(CP2)WM		Switch-BB-Cwrye-Pcord-Pblzstar-Berg-Besus-NEaster-Ycone
38	CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Pblzs	38-CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pc	New England Aster	Symphyotrichum novae-a	1.00	0.0625		Forb	N	N	CP38E-CWGCA(CP2)WM		Switch-BB-Cwrye-Pcord-Pblzstar-Berg-Besus-NEaster-Ycone
38	CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Pblzs	38-CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pc	Yellow Coneflower	Ratibida pinnata	1.00	0.0625		Forb	N	N	CP38E-CWGCA(CP2)WM		Switch-BB-Cwrye-Pcord-Pblzstar-Berg-Besus-NEaster-Ycone
38	CP38E-GHRA(CP2)D-LB-Sgrama-BB-Indian-PPclover-Sg	38-CP38E-GHRA(CP2)D-LB-Sgrama-BB-Indian-PP	Little Bluestem	Schizachyrium scoparium	24.00	1.5		Grass	N	N	CP38E-GHRA(CP2)D		LB-Sgrama-BB-Indian-PPclover-Sgrod-Ycone

38	CP38E-GHRA(CP2)D-LB-Sgrama-BB-Indian-PPclover-Sg	38-CP38E-GHRA(CP2)D-LB-Sgrama-BB-Indian-PP	Sideoats Grama	Bouteloua curtipendula	24.00	1.5		Grass	N	N	CP38E-GHRA(CP2)D		LB-Sgrama-BB-Indian-PPclover-Sgrod-Ycone
38	CP38E-GHRA(CP2)D-LB-Sgrama-BB-Indian-PPclover-Sg	38-CP38E-GHRA(CP2)D-LB-Sgrama-BB-Indian-PP	Big Bluestem	Andropogon gerardii	8.00	0.5		Grass	N	N	CP38E-GHRA(CP2)D		LB-Sgrama-BB-Indian-PPclover-Sgrod-Ycone
38	CP38E-GHRA(CP2)D-LB-Sgrama-BB-Indian-PPclover-Sg	38-CP38E-GHRA(CP2)D-LB-Sgrama-BB-Indian-PP	Indiangrass	Sorghastrum nutans	8.00	0.5		Grass	N	N	CP38E-GHRA(CP2)D		LB-Sgrama-BB-Indian-PPclover-Sgrod-Ycone
38	CP38E-GHRA(CP2)D-LB-Sgrama-BB-Indian-PPclover-Sg	38-CP38E-GHRA(CP2)D-LB-Sgrama-BB-Indian-PP	Purple Prairie Clover	Dalea purpurea	2.00	0.125		Legume	N	N	CP38E-GHRA(CP2)D		LB-Sgrama-BB-Indian-PPclover-Sgrod-Ycone
38	CP38E-GHRA(CP2)D-LB-Sgrama-BB-Indian-PPclover-Sg	38-CP38E-GHRA(CP2)D-LB-Sgrama-BB-Indian-PP	Stiff Goldenrod	Oligoneuron rigidum	1.00	0.0625		Forb	N	N	CP38E-GHRA(CP2)D		LB-Sgrama-BB-Indian-PPclover-Sgrod-Ycone
38	CP38E-GHRA(CP2)D-LB-Sgrama-BB-Indian-PPclover-Sg	38-CP38E-GHRA(CP2)D-LB-Sgrama-BB-Indian-PP	Yellow Coneflower	Ratibida pinnata	1.00	0.0625		Forb	N	N	CP38E-GHRA(CP2)D		LB-Sgrama-BB-Indian-PPclover-Sgrod-Ycone
38	CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-Switch-PP	38-CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-S	Little Bluestem	Schizachyrium scoparium	24.00	1.5		Grass	N	N	CP38E-GHRA(CP2)DM		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-Switch-PP	38-CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-S	Sideoats Grama	Bouteloua curtipendula	16.00	1		Grass	N	N	CP38E-GHRA(CP2)DM		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-Switch-PP	38-CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-S	Big Bluestem	Andropogon gerardii	8.00	0.5		Grass	N	N	CP38E-GHRA(CP2)DM		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-Switch-PP	38-CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-S	Indiangrass	Sorghastrum nutans	8.00	0.5		Grass	N	N	CP38E-GHRA(CP2)DM		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-Switch-PP	38-CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-S	Switchgrass	Panicum virgatum	8.00	0.5		Grass	N	N	CP38E-GHRA(CP2)DM		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-Switch-PP	38-CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-S	Purple Prairie Clover	Dalea purpurea	2.00	0.125		Legume	N	N	CP38E-GHRA(CP2)DM		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-Switch-PP	38-CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-S	Bergamot	Monarda fistulosa	1.00	0.0625		Forb	N	N	CP38E-GHRA(CP2)DM		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-Switch-PP	38-CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-S	Yellow Coneflower	Ratibida pinnata	1.00	0.0625		Forb	N	N	CP38E-GHRA(CP2)DM		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Switch-Berg	38-CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Sw	Little Bluestem	Schizachyrium scoparium	20.00	1.25		Grass	N	N	CP38E-GHRA(CP2)M		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Switch-Berg	38-CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Sw	Canada Wildrye	Elymus canadensis	16.00	1		Grass	N	N	CP38E-GHRA(CP2)M		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Switch-Berg	38-CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Sw	Indiangrass	Sorghastrum nutans	16.00	1		Grass	N	N	CP38E-GHRA(CP2)M		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Switch-Berg	38-CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Sw	Big Bluestem	Andropogon gerardii	8.00	0.5		Grass	N	N	CP38E-GHRA(CP2)M		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Switch-Berg	38-CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Sw	Switchgrass	Panicum virgatum	8.00	0.5		Grass	N	N	CP38E-GHRA(CP2)M		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Switch-Berg	38-CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Sw	Bergamot	Monarda fistulosa	1.00	0.0625		Forb	N	N	CP38E-GHRA(CP2)M		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Switch-Berg	38-CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Sw	Black-eyed Susan	Rudbeckia hirta	1.00	0.0625		Forb	N	N	CP38E-GHRA(CP2)M		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Switch-Berg	38-CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Sw	Yellow Coneflower	Ratibida pinnata	1.00	0.0625		Forb	N	N	CP38E-GHRA(CP2)M		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-Cu	38-CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch	Big Bluestem	Andropogon gerardii	16.00	1		Grass	N	N	CP38E-GHRA(CP2)W		BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-Cu	38-CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch	Canada Wildrye	Elymus canadensis	16.00	1		Grass	N	N	CP38E-GHRA(CP2)W		BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-Cu	38-CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch	Indiangrass	Sorghastrum nutans	16.00	1		Grass	N	N	CP38E-GHRA(CP2)W		BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-Cu	38-CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch	Switchgrass	Panicum virgatum	16.00	1		Grass	N	N	CP38E-GHRA(CP2)W		BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-Cu	38-CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch	Prairie Cordgrass	Spartina pectinata	8.00	0.5		Grass	N	N	CP38E-GHRA(CP2)W		BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-Cu	38-CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch	Cupplant	Silphium perfoliatum	2.00	0.125		Forb	N	N	CP38E-GHRA(CP2)W		BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-Cu	38-CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch	Blue Vervain	Verbena hastata	1.00	0.0625		Forb	N	N	CP38E-GHRA(CP2)W		BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-Cu	38-CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch	Common Ironweed	Vernonia fasciculata	1.00	0.0625		Forb	N	N	CP38E-GHRA(CP2)W		BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-GHRA(CP2)WM-Switch-BB-Cwrye-Pcord-Berg-N	38-CP38E-GHRA(CP2)WM-Switch-BB-Cwrye-Pcor	Switchgrass	Panicum virgatum	32.00	2		Grass	N	N	CP38E-GHRA(CP2)WM		Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
38	CP38E-GHRA(CP2)WM-Switch-BB-Cwrye-Pcord-Berg-N	38-CP38E-GHRA(CP2)WM-Switch-BB-Cwrye-Pcor	Big Bluestem	Andropogon gerardii	16.00	1		Grass	N	N	CP38E-GHRA(CP2)WM		Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
38	CP38E-GHRA(CP2)WM-Switch-BB-Cwrye-Pcord-Berg-N	38-CP38E-GHRA(CP2)WM-Switch-BB-Cwrye-Pcor	Canada Wildrye	Elymus canadensis	16.00	1		Grass	N	N	CP38E-GHRA(CP2)WM		Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
38	CP38E-GHRA(CP2)WM-Switch-BB-Cwrye-Pcord-Berg-N	38-CP38E-GHRA(CP2)WM-Switch-BB-Cwrye-Pcor	Prairie Cordgrass	Spartina pectinata	4.00	0.25		Grass	N	N	CP38E-GHRA(CP2)WM		Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
38	CP38E-GHRA(CP2)WM-Switch-BB-Cwrye-Pcord-Berg-N	38-CP38E-GHRA(CP2)WM-Switch-BB-Cwrye-Pcor	Bergamot	Monarda fistulosa	1.00	0.0625		Forb	N	N	CP38E-GHRA(CP2)WM		Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
38	CP38E-GHRA(CP2)WM-Switch-BB-Cwrye-Pcord-Berg-N	38-CP38E-GHRA(CP2)WM-Switch-BB-Cwrye-Pcor	New England Aster	Symphyotrichum novae-a	1.00	0.0625		Forb	N	N	CP38E-GHRA(CP2)WM		Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
38	CP38E-GHRA(CP2)WM-Switch-BB-Cwrye-Pcord-Berg-N	38-CP38E-GHRA(CP2)WM-Switch-BB-Cwrye-Pcor	Yellow Coneflower	Ratibida pinnata	1.00	0.0625		Forb	N	N	CP38E-GHRA(CP2)WM		Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Little Bluestem	Schizachyrium scoparium	24.00	1.5		Grass	N	N	CP38E-GHRA(CP25)D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Sideoats Grama	Bouteloua curtipendula	24.00	1.5		Grass	N	N	CP38E-GHRA(CP25)D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Indiangrass	Sorghastrum nutans	8.00	0.5		Grass	N	N	CP38E-GHRA(CP25)D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Big Bluestem	Andropogon gerardii	4.00	0.25		Grass	N	N	CP38E-GHRA(CP25)D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Purple Prairie Clover	Dalea purpurea	2.00	0.125		Legume	N	N	CP38E-GHRA(CP25)D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Sand Dropseed	Sporobolus cryptandrus	2.00	0.125		Grass	N	N	CP38E-GHRA(CP25)D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Prairie Junegrass	Koeleria macrantha	1.00	0.0625		Grass	N	N	CP38E-GHRA(CP25)D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Spiderwort	Tradescantia ohiensis	1.00	0.0625		Forb	N	N	CP38E-GHRA(CP25)D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Hoary Vervain	Verbena stricta	0.50	0.03125		Forb	N	N	CP38E-GHRA(CP25)D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Leadplant	Amorpha canescens	0.50	0.03125		Legume	N	N	CP38E-GHRA(CP25)D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Prairie Tickseed	Coreopsis palmata	0.50	0.03125		Forb	N	N	CP38E-GHRA(CP25)D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Silky Aster	Symphyotrichum pratens	0.50	0.03125		Forb	N	N	CP38E-GHRA(CP25)D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint

38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Stiff Goldenrod	Oligoneuron rigidum	0.50	0.03125		Forb	N	N	CP38E-GHRA(CP25)D	Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Yellow Coneflower	Ratibida pinnata	0.50	0.03125		Forb	N	N	CP38E-GHRA(CP25)D	Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Prairie Cinquefoil	Potentilla arguta	0.25	0.015625		Forb	N	N	CP38E-GHRA(CP25)D	Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Spotted Mint	Monarda punctata	0.25	0.015625		Forb	N	N	CP38E-GHRA(CP25)D	Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjune	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Little Bluestem	Schizachyrium scoparium	24.00	1.5		Grass	N	N	CP38E-GHRA(CP25)DM	Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjune	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Sideoats Grama	Bouteloua curtipendula	24.00	1.5		Grass	N	N	CP38E-GHRA(CP25)DM	Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjune	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Indiangrass	Sorghastrum nutans	8.00	0.5		Grass	N	N	CP38E-GHRA(CP25)DM	Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjune	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Switchgrass	Panicum virgatum	4.00	0.25		Grass	N	N	CP38E-GHRA(CP25)DM	Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjune	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Prairie Junegrass	Koeleria macrantha	2.00	0.125		Grass	N	N	CP38E-GHRA(CP25)DM	Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjune	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Prairie Dropseed	Sporobolus heterolepis	2.00	0.125		Grass	N	N	CP38E-GHRA(CP25)DM	Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjune	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Purple Prairie Clover	Dalea purpurea	2.00	0.125		Legume	N	N	CP38E-GHRA(CP25)DM	Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjune	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Round-Headed Bushclover	Lespedeza capitata	2.00	0.125		Legume	N	N	CP38E-GHRA(CP25)DM	Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjune	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Bergamot	Monarda fistulosa	1.00	0.0625		Forb	N	N	CP38E-GHRA(CP25)DM	Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjune	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Spiderwort	Tradescantia ohiensis	1.00	0.0625		Forb	N	N	CP38E-GHRA(CP25)DM	Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjune	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Yellow Coneflower	Ratibida pinnata	1.00	0.0625		Forb	N	N	CP38E-GHRA(CP25)DM	Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjune	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Leadplant	Amorpha canescens	0.50	0.03125		Legume	N	N	CP38E-GHRA(CP25)DM	Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjune	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Rough Blazing Star	Liatris aspera	0.50	0.03125		Forb	N	N	CP38E-GHRA(CP25)DM	Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjune	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Sky-Blue Aster	Symphyotrichum oolenta	0.50	0.03125		Forb	N	N	CP38E-GHRA(CP25)DM	Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjune	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Stiff Goldenrod	Oligoneuron rigidum	0.50	0.03125		Forb	N	N	CP38E-GHRA(CP25)DM	Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjune	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Prairie Cinquefoil	Potentilla arguta	0.25	0.015625		Forb	N	N	CP38E-GHRA(CP25)DM	Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Switch-Oxe	38-CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Sv	Little Bluestem	Schizachyrium scoparium	24.00	1.5		Grass	N	N	CP38E-GHRA(CP25)M	Berg-Besus-NEaster-SBAster-Ycone-Croot
38	CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Switch-Oxe	38-CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Sv	Indiangrass	Sorghastrum nutans	16.00	1		Grass	N	N	CP38E-GHRA(CP25)M	Berg-Besus-NEaster-SBAster-Ycone-Croot
38	CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Switch-Oxe	38-CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Sv	Big Bluestem	Andropogon gerardii	8.00	0.5		Grass	N	N	CP38E-GHRA(CP25)M	Berg-Besus-NEaster-SBAster-Ycone-Croot
38	CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Switch-Oxe	38-CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Sv	Canada Wildrye	Elymus canadensis	8.00	0.5		Grass	N	N	CP38E-GHRA(CP25)M	Berg-Besus-NEaster-SBAster-Ycone-Croot
38	CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Switch-Oxe	38-CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Sv	Switchgrass	Panicum virgatum	8.00	0.5		Grass	N	N	CP38E-GHRA(CP25)M	Berg-Besus-NEaster-SBAster-Ycone-Croot
38	CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Switch-Oxe	38-CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Sv	Ox-eye Sunflower	Heliopsis helianthoides	1.00	0.0625		Forb	N	N	CP38E-GHRA(CP25)M	Berg-Besus-NEaster-SBAster-Ycone-Croot
38	CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Switch-Oxe	38-CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Sv	Prairie Blazing Star	Liatris pycnostachya	1.00	0.0625		Forb	N	N	CP38E-GHRA(CP25)M	Berg-Besus-NEaster-SBAster-Ycone-Croot
38	CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Switch-Oxe	38-CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Sv	Purple Prairie Clover	Dalea purpurea	1.00	0.0625		Legume	N	N	CP38E-GHRA(CP25)M	Berg-Besus-NEaster-SBAster-Ycone-Croot
38	CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Switch-Oxe	38-CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Sv	Rosinweed	Silphium integrifolium	1.00	0.0625		Forb	N	N	CP38E-GHRA(CP25)M	Berg-Besus-NEaster-SBAster-Ycone-Croot
38	CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Switch-Oxe	38-CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Sv	Bergamot	Monarda fistulosa	0.50	0.03125		Forb	N	N	CP38E-GHRA(CP25)M	Berg-Besus-NEaster-SBAster-Ycone-Croot
38	CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Switch-Oxe	38-CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Sv	Black-eyed Susan	Rudbeckia hirta	0.50	0.03125		Forb	N	N	CP38E-GHRA(CP25)M	Berg-Besus-NEaster-SBAster-Ycone-Croot
38	CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Switch-Oxe	38-CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Sv	New England Aster	Symphyotrichum novae-a	0.50	0.03125		Forb	N	N	CP38E-GHRA(CP25)M	Berg-Besus-NEaster-SBAster-Ycone-Croot
38	CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Switch-Oxe	38-CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Sv	Smooth Blue Aster	Symphyotrichum laeve	0.50	0.03125		Forb	N	N	CP38E-GHRA(CP25)M	Berg-Besus-NEaster-SBAster-Ycone-Croot
38	CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Switch-Oxe	38-CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Sv	Yellow Coneflower	Ratibida pinnata	0.50	0.03125		Forb	N	N	CP38E-GHRA(CP25)M	Berg-Besus-NEaster-SBAster-Ycone-Croot
38	CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Switch-Oxe	38-CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Sv	Culver's Root	Veronicastrum virginicum	0.25	0.015625		Forb	N	N	CP38E-GHRA(CP25)M	Berg-Besus-NEaster-SBAster-Ycone-Croot
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-F	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BI	Canada Wildrye	Elymus canadensis	16.00	1		Grass	N	N	CP38E-GHRA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-F	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BI	Switchgrass	Panicum virgatum	16.00	1		Grass	N	N	CP38E-GHRA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-F	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BI	Indiangrass	Sorghastrum nutans	12.00	0.75		Grass	N	N	CP38E-GHRA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-F	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BI	Big Bluestem	Andropogon gerardii	8.00	0.5		Grass	N	N	CP38E-GHRA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-F	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BI	Prairie Cordgrass	Spartina pectinata	8.00	0.5		Grass	N	N	CP38E-GHRA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-F	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BI	Fowl Mannagrass	Glyceria striata	4.00	0.25		Grass	N	N	CP38E-GHRA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-F	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BI	Fox Sedge	Carex vulpinoidea	4.00	0.25		Sedge	N	N	CP38E-GHRA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-F	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BI	Cupplant	Silphium perfoliatum	2.00	0.125		Forb	N	N	CP38E-GHRA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-F	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BI	Showy Tick Trefoil	Desmodium canadense	2.00	0.125		Legume	N	N	CP38E-GHRA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-F	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BI	Blue Vervain	Verbena hastata	1.00	0.0625		Forb	N	N	CP38E-GHRA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-F	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BI	Golden Alexanders	Zizia aurea	1.00	0.0625		Forb	N	N	CP38E-GHRA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-F	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BI	Marsh Milkweed	Asclepias incarnata	1.00	0.0625		Forb	N	N	CP38E-GHRA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-F	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BI	Boneset	Eupatorium perfoliatum	0.50	0.03125		Forb	N	N	CP38E-GHRA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-F	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BI	Common Ironweed	Vernonia fasciculata	0.50	0.03125		Forb	N	N	CP38E-GHRA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot

38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-F	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BI	Joe-pye Weed	Eutrochium maculatum	0.50	0.03125		Forb	N	N	CP38E-GHRA(CP25)W		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-F	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BI	Culver's Root	Veronicastrum virginicum	0.25	0.015625		Forb	N	N	CP38E-GHRA(CP25)W		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Indian-Pcord	38-CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Ind	Switchgrass	Panicum virgatum	24.00	1.5		Grass	N	N	CP38E-GHRA(CP25)WM		Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
38	CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Indian-Pcord	38-CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Ind	Big Bluestem	Andropogon gerardii	20.00	1.25		Grass	N	N	CP38E-GHRA(CP25)WM		Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
38	CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Indian-Pcord	38-CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Ind	Canada Wildrye	Elymus canadensis	16.00	1		Grass	N	N	CP38E-GHRA(CP25)WM		Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
38	CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Indian-Pcord	38-CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Ind	Indiangrass	Sorghastrum nutans	12.00	0.75		Grass	N	N	CP38E-GHRA(CP25)WM		Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
38	CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Indian-Pcord	38-CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Ind	Prairie Cordgrass	Spartina pectinata	4.00	0.25		Grass	N	N	CP38E-GHRA(CP25)WM		Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
38	CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Indian-Pcord	38-CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Ind	Cupplant	Silphium perfoliatum	2.00	0.125		Forb	N	N	CP38E-GHRA(CP25)WM		Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
38	CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Indian-Pcord	38-CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Ind	White wild indigo	Baptisia alba	1.50	0.09375		Legume	N	N	CP38E-GHRA(CP25)WM		Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
38	CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Indian-Pcord	38-CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Ind	Black-eyed Susan	Rudbeckia hirta	0.50	0.03125		Forb	N	N	CP38E-GHRA(CP25)WM		Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
38	CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Indian-Pcord	38-CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Ind	Common Ironweed	Vernonia fasciculata	0.50	0.03125		Forb	N	N	CP38E-GHRA(CP25)WM		Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
38	CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Indian-Pcord	38-CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Ind	Golden Alexanders	Zizia aurea	0.50	0.03125		Forb	N	N	CP38E-GHRA(CP25)WM		Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
38	CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Indian-Pcord	38-CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Ind	New England Aster	Symphyotrichum novae-a	0.50	0.03125		Forb	N	N	CP38E-GHRA(CP25)WM		Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
38	CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Indian-Pcord	38-CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Ind	Prairie Blazing Star	Liatris pycnostachya	0.50	0.03125		Forb	N	N	CP38E-GHRA(CP25)WM		Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
38	CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Indian-Pcord	38-CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Ind	Yellow Coneflower	Ratibida pinnata	0.50	0.03125		Forb	N	N	CP38E-GHRA(CP25)WM		Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
38	CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Indian-Pcord	38-CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Ind	Bergamot	Monarda fistulosa	0.25	0.015625		Forb	N	N	CP38E-GHRA(CP25)WM		Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
38	CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Indian-Pcord	38-CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Ind	Great St. John's Wort	Hypericum ascyron	0.25	0.015625		Forb	N	N	CP38E-GHRA(CP25)WM		Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Little Bluestem	Schizachyrium scoparium	24.00	1.5		Grass	N	N	CP38E-KBB		Fspurge-Galex-Rblzstar-RHbushclover-Wsun-Berg-Ptick-Besus
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Canada Wildrye	Elymus canadensis	16.00	1		Grass	N	N	CP38E-KBB		Fspurge-Galex-Rblzstar-RHbushclover-Wsun-Berg-Ptick-Besus
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Indiangrass	Sorghastrum nutans	16.00	1		Grass	N	N	CP38E-KBB		Fspurge-Galex-Rblzstar-RHbushclover-Wsun-Berg-Ptick-Besus
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Big Bluestem	Andropogon gerardii	8.00	0.5		Grass	N	N	CP38E-KBB		Fspurge-Galex-Rblzstar-RHbushclover-Wsun-Berg-Ptick-Besus
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Sideoats Grama	Bouteloua curtipendula	8.00	0.5		Grass	N	N	CP38E-KBB		Fspurge-Galex-Rblzstar-RHbushclover-Wsun-Berg-Ptick-Besus
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Switchgrass	Panicum virgatum	8.00	0.5		Grass	N	N	CP38E-KBB		Fspurge-Galex-Rblzstar-RHbushclover-Wsun-Berg-Ptick-Besus
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Wild Lupine	Lupinus perennis	3.00	0.1875		Legume	N	N	CP38E-KBB		Fspurge-Galex-Rblzstar-RHbushclover-Wsun-Berg-Ptick-Besus
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Purple Prairie Clover	Dalea purpurea	2.00	0.125		Legume	N	N	CP38E-KBB		Fspurge-Galex-Rblzstar-RHbushclover-Wsun-Berg-Ptick-Besus
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Butterfly Milkweed	Asclepias tuberosa	1.00	0.0625		Forb	N	N	CP38E-KBB		Fspurge-Galex-Rblzstar-RHbushclover-Wsun-Berg-Ptick-Besus
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Flowering Spurge	Euphorbia corollata	1.00	0.0625		Forb	N	N	CP38E-KBB		Fspurge-Galex-Rblzstar-RHbushclover-Wsun-Berg-Ptick-Besus
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Golden Alexanders	Zizia aurea	1.00	0.0625		Forb	N	N	CP38E-KBB		Fspurge-Galex-Rblzstar-RHbushclover-Wsun-Berg-Ptick-Besus
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Rough Blazing Star	Liatris aspera	1.00	0.0625		Forb	N	N	CP38E-KBB		Fspurge-Galex-Rblzstar-RHbushclover-Wsun-Berg-Ptick-Besus
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Round-Headed Bushclover	Lespedeza capitata	1.00	0.0625		Legume	N	N	CP38E-KBB		Fspurge-Galex-Rblzstar-RHbushclover-Wsun-Berg-Ptick-Besus
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Fewleaf Sunflower	Helianthus occidentalis	1.00	0.0625		Forb	N	N	CP38E-KBB		Fspurge-Galex-Rblzstar-RHbushclover-Wsun-Berg-Ptick-Besus
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Bergamot	Monarda fistulosa	0.50	0.03125		Forb	N	N	CP38E-KBB		Fspurge-Galex-Rblzstar-RHbushclover-Wsun-Berg-Ptick-Besus
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Prairie Tickseed	Coreopsis palmata	0.50	0.03125		Forb	N	N	CP38E-KBB		Fspurge-Galex-Rblzstar-RHbushclover-Wsun-Berg-Ptick-Besus
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Black-eyed Susan	Rudbeckia hirta	0.40	0.025		Forb	N	N	CP38E-KBB		Fspurge-Galex-Rblzstar-RHbushclover-Wsun-Berg-Ptick-Besus
38	CP38E-KBB(CP1)1-Alf-Rtop-Tim-Orc	38-CP38E-KBB(CP1)1-Alf-Rtop-Tim-Orc	Alfalfa	Medicago sativa	96.00	6		Legume	I	N	CP38E-KBB(CP1)1		Alf-Rtop-Tim-Orc
38	CP38E-KBB(CP1)1-Alf-Rtop-Tim-Orc	38-CP38E-KBB(CP1)1-Alf-Rtop-Tim-Orc	Redtop	Agrostis gigantea	32.00	2		Grass	I	N	CP38E-KBB(CP1)1		Alf-Rtop-Tim-Orc
38	CP38E-KBB(CP1)1-Alf-Rtop-Tim-Orc	38-CP38E-KBB(CP1)1-Alf-Rtop-Tim-Orc	Timothy	Phleum pratense	32.00	2		Grass	I	N	CP38E-KBB(CP1)1		Alf-Rtop-Tim-Orc
38	CP38E-KBB(CP1)1-Alf-Rtop-Tim-Orc	38-CP38E-KBB(CP1)1-Alf-Rtop-Tim-Orc	Orchardgrass	Dactylis glomerata L.	16.00	1		Grass	I	N	CP38E-KBB(CP1)1		Alf-Rtop-Tim-Orc
38	CP38E-KBB(CP1)2-RC-KB-Orc-Rtop	38-CP38E-KBB(CP1)2-RC-KB-Orc-Rtop	Red Clover	Trifolium pratense	80.00	5		Legume	I	N	CP38E-KBB(CP1)2		RC-KB-Orc-Rtop
38	CP38E-KBB(CP1)2-RC-KB-Orc-Rtop	38-CP38E-KBB(CP1)2-RC-KB-Orc-Rtop	Kentucky Bluegrass	Poa pratensis	32.00	2		Grass	I	N	CP38E-KBB(CP1)2		RC-KB-Orc-Rtop
38	CP38E-KBB(CP1)2-RC-KB-Orc-Rtop	38-CP38E-KBB(CP1)2-RC-KB-Orc-Rtop	Orchardgrass	Dactylis glomerata L.	16.00	1		Grass	I	N	CP38E-KBB(CP1)2		RC-KB-Orc-Rtop
38	CP38E-KBB(CP1)2-RC-KB-Orc-Rtop	38-CP38E-KBB(CP1)2-RC-KB-Orc-Rtop	Redtop	Agrostis gigantea	16.00	1		Grass	I	N	CP38E-KBB(CP1)2		RC-KB-Orc-Rtop
38	CP38E-KBB(CP1)3-RC-SB-Tim	38-CP38E-KBB(CP1)3-RC-SB-Tim	Red Clover	Trifolium pratense	80.00	5		Legume	I	N	CP38E-KBB(CP1)3		RC-SB-Tim
38	CP38E-KBB(CP1)3-RC-SB-Tim	38-CP38E-KBB(CP1)3-RC-SB-Tim	Smooth Bromegrass	Bromus inermis	48.00	3		Grass	I	N	CP38E-KBB(CP1)3		RC-SB-Tim
38	CP38E-KBB(CP1)3-RC-SB-Tim	38-CP38E-KBB(CP1)3-RC-SB-Tim	Timothy	Phleum pratense	32.00	2		Grass	I	N	CP38E-KBB(CP1)3		RC-SB-Tim
38	CP38E-KBB(CP1)4-RC-Tim-Orc-Rtop	38-CP38E-KBB(CP1)4-RC-Tim-Orc-Rtop	Red Clover	Trifolium pratense	80.00	5		Legume	I	N	CP38E-KBB(CP1)4		RC-Tim-Orc-Rtop
38	CP38E-KBB(CP1)4-RC-Tim-Orc-Rtop	38-CP38E-KBB(CP1)4-RC-Tim-Orc-Rtop	Timothy	Phleum pratense	32.00	2		Grass	I	N	CP38E-KBB(CP1)4		RC-Tim-Orc-Rtop
38	CP38E-KBB(CP1)4-RC-Tim-Orc-Rtop	38-CP38E-KBB(CP1)4-RC-Tim-Orc-Rtop	Orchardgrass	Dactylis glomerata L.	16.00	1		Grass	I	N	CP38E-KBB(CP1)4		RC-Tim-Orc-Rtop
38	CP38E-KBB(CP1)4-RC-Tim-Orc-Rtop	38-CP38E-KBB(CP1)4-RC-Tim-Orc-Rtop	Redtop	Agrostis gigantea	16.00	1		Grass	I	N	CP38E-KBB(CP1)4		RC-Tim-Orc-Rtop

38	CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlup-PPclove	38-CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlu	Little Bluestem	Schizachyrium scoparium	36.00	2.25		Grass	N	N	CP38E-KBB(WHIP)		LB-Sgrama-BB-Pjune-Wlup-PPclover-Rblzstar-Ptick-Besus
38	CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlup-PPclove	38-CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlu	Sideoats Grama	Bouteloua curtipendula	16.00	1		Grass	N	N	CP38E-KBB(WHIP)		LB-Sgrama-BB-Pjune-Wlup-PPclover-Rblzstar-Ptick-Besus
38	CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlup-PPclove	38-CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlu	Big Bluestem	Andropogon gerardii	8.00	0.5		Grass	N	N	CP38E-KBB(WHIP)		LB-Sgrama-BB-Pjune-Wlup-PPclover-Rblzstar-Ptick-Besus
38	CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlup-PPclove	38-CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlu	Prairie Junegrass	Koeleria macrantha	4.00	0.25		Grass	N	N	CP38E-KBB(WHIP)		LB-Sgrama-BB-Pjune-Wlup-PPclover-Rblzstar-Ptick-Besus
38	CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlup-PPclove	38-CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlu	Wild Lupine	Lupinus perennis	3.00	0.1875		Legume	N	N	CP38E-KBB(WHIP)		LB-Sgrama-BB-Pjune-Wlup-PPclover-Rblzstar-Ptick-Besus
38	CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlup-PPclove	38-CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlu	Purple Prairie Clover	Dalea purpurea	2.00	0.125		Legume	N	N	CP38E-KBB(WHIP)		LB-Sgrama-BB-Pjune-Wlup-PPclover-Rblzstar-Ptick-Besus
38	CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlup-PPclove	38-CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlu	Rough Blazing Star	Liatris aspera	2.00	0.125		Forb	N	N	CP38E-KBB(WHIP)		LB-Sgrama-BB-Pjune-Wlup-PPclover-Rblzstar-Ptick-Besus
38	CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlup-PPclove	38-CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlu	Prairie Tickseed	Coreopsis palmata	1.00	0.0625		Forb	N	N	CP38E-KBB(WHIP)		LB-Sgrama-BB-Pjune-Wlup-PPclover-Rblzstar-Ptick-Besus
38	CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlup-PPclove	38-CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlu	Black-eyed Susan	Rudbeckia hirta	0.25	0.015625		Forb	N	N	CP38E-KBB(WHIP)		LB-Sgrama-BB-Pjune-Wlup-PPclover-Rblzstar-Ptick-Besus
38	CP38E-SWGCA(CP1)1-Alf-Rtop-Tim-Orc	38-CP38E-SWGCA(CP1)1-Alf-Rtop-Tim-Orc	Alfalfa	Medicago sativa	96.00	6		Legume	I	N	CP38E-SWGCA(CP1)1		Alf-Rtop-Tim-Orc
38	CP38E-SWGCA(CP1)1-Alf-Rtop-Tim-Orc	38-CP38E-SWGCA(CP1)1-Alf-Rtop-Tim-Orc	Redtop	Agrostis gigantea	32.00	2		Grass	I	N	CP38E-SWGCA(CP1)1		Alf-Rtop-Tim-Orc
38	CP38E-SWGCA(CP1)1-Alf-Rtop-Tim-Orc	38-CP38E-SWGCA(CP1)1-Alf-Rtop-Tim-Orc	Timothy	Phleum pratense	32.00	2		Grass	I	N	CP38E-SWGCA(CP1)1		Alf-Rtop-Tim-Orc
38	CP38E-SWGCA(CP1)1-Alf-Rtop-Tim-Orc	38-CP38E-SWGCA(CP1)1-Alf-Rtop-Tim-Orc	Orchardgrass	Dactylis glomerata L.	16.00	1		Grass	I	N	CP38E-SWGCA(CP1)1		Alf-Rtop-Tim-Orc
38	CP38E-SWGCA(CP1)2-RC-KB-Orc-Rtop	38-CP38E-SWGCA(CP1)2-RC-KB-Orc-Rtop	Red Clover	Trifolium pratense	80.00	5		Legume	I	N	CP38E-SWGCA(CP1)2		RC-KB-Orc-Rtop
38	CP38E-SWGCA(CP1)2-RC-KB-Orc-Rtop	38-CP38E-SWGCA(CP1)2-RC-KB-Orc-Rtop	Kentucky Bluegrass	Poa pratensis	32.00	2		Grass	I	N	CP38E-SWGCA(CP1)2		RC-KB-Orc-Rtop
38	CP38E-SWGCA(CP1)2-RC-KB-Orc-Rtop	38-CP38E-SWGCA(CP1)2-RC-KB-Orc-Rtop	Orchardgrass	Dactylis glomerata L.	16.00	1		Grass	I	N	CP38E-SWGCA(CP1)2		RC-KB-Orc-Rtop
38	CP38E-SWGCA(CP1)2-RC-KB-Orc-Rtop	38-CP38E-SWGCA(CP1)2-RC-KB-Orc-Rtop	Redtop	Agrostis gigantea	16.00	1		Grass	I	N	CP38E-SWGCA(CP1)2		RC-KB-Orc-Rtop
38	CP38E-SWGCA(CP1)3-RC-SB-Tim	38-CP38E-SWGCA(CP1)3-RC-SB-Tim	Red Clover	Trifolium pratense	80.00	5		Legume	I	N	CP38E-SWGCA(CP1)3		RC-SB-Tim
38	CP38E-SWGCA(CP1)3-RC-SB-Tim	38-CP38E-SWGCA(CP1)3-RC-SB-Tim	Smooth Bromegrass	Bromus inermis	48.00	3		Grass	I	N	CP38E-SWGCA(CP1)3		RC-SB-Tim
38	CP38E-SWGCA(CP1)3-RC-SB-Tim	38-CP38E-SWGCA(CP1)3-RC-SB-Tim	Timothy	Phleum pratense	32.00	2		Grass	I	N	CP38E-SWGCA(CP1)3		RC-SB-Tim
38	CP38E-SWGCA(CP1)4-RC-Tim-Orc-Rtop	38-CP38E-SWGCA(CP1)4-RC-Tim-Orc-Rtop	Red Clover	Trifolium pratense	80.00	5		Legume	I	N	CP38E-SWGCA(CP1)4		RC-Tim-Orc-Rtop
38	CP38E-SWGCA(CP1)4-RC-Tim-Orc-Rtop	38-CP38E-SWGCA(CP1)4-RC-Tim-Orc-Rtop	Timothy	Phleum pratense	32.00	2		Grass	I	N	CP38E-SWGCA(CP1)4		RC-Tim-Orc-Rtop
38	CP38E-SWGCA(CP1)4-RC-Tim-Orc-Rtop	38-CP38E-SWGCA(CP1)4-RC-Tim-Orc-Rtop	Orchardgrass	Dactylis glomerata L.	16.00	1		Grass	I	N	CP38E-SWGCA(CP1)4		RC-Tim-Orc-Rtop
38	CP38E-SWGCA(CP1)4-RC-Tim-Orc-Rtop	38-CP38E-SWGCA(CP1)4-RC-Tim-Orc-Rtop	Redtop	Agrostis gigantea	16.00	1		Grass	I	N	CP38E-SWGCA(CP1)4		RC-Tim-Orc-Rtop
38	CP38E-SWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-S	38-CP38E-SWGCA(CP2)D-LB-Sgrama-BB-Indian-I	Little Bluestem	Schizachyrium scoparium	24.00	1.5		Grass	N	N	CP38E-SWGCA(CP2)D		LB-Sgrama-BB-Indian-PPclover-Sgrod-Ycone
38	CP38E-SWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-S	38-CP38E-SWGCA(CP2)D-LB-Sgrama-BB-Indian-I	Sideoats Grama	Bouteloua curtipendula	24.00	1.5		Grass	N	N	CP38E-SWGCA(CP2)D		LB-Sgrama-BB-Indian-PPclover-Sgrod-Ycone
38	CP38E-SWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-S	38-CP38E-SWGCA(CP2)D-LB-Sgrama-BB-Indian-I	Big Bluestem	Andropogon gerardii	8.00	0.5		Grass	N	N	CP38E-SWGCA(CP2)D		LB-Sgrama-BB-Indian-PPclover-Sgrod-Ycone
38	CP38E-SWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-S	38-CP38E-SWGCA(CP2)D-LB-Sgrama-BB-Indian-I	Indiangrass	Sorghastrum nutans	8.00	0.5		Grass	N	N	CP38E-SWGCA(CP2)D		LB-Sgrama-BB-Indian-PPclover-Sgrod-Ycone
38	CP38E-SWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-S	38-CP38E-SWGCA(CP2)D-LB-Sgrama-BB-Indian-I	Purple Prairie Clover	Dalea purpurea	2.00	0.125		Legume	N	N	CP38E-SWGCA(CP2)D		LB-Sgrama-BB-Indian-PPclover-Sgrod-Ycone
38	CP38E-SWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-S	38-CP38E-SWGCA(CP2)D-LB-Sgrama-BB-Indian-I	Stiff Goldenrod	Oligoneuron rigidum	1.00	0.0625		Forb	N	N	CP38E-SWGCA(CP2)D		LB-Sgrama-BB-Indian-PPclover-Sgrod-Ycone
38	CP38E-SWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-S	38-CP38E-SWGCA(CP2)D-LB-Sgrama-BB-Indian-I	Yellow Coneflower	Ratibida pinnata	1.00	0.0625		Forb	N	N	CP38E-SWGCA(CP2)D		LB-Sgrama-BB-Indian-PPclover-Sgrod-Ycone
38	CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-I	38-CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian	Little Bluestem	Schizachyrium scoparium	24.00	1.5		Grass	N	N	CP38E-SWGCA(CP2)DM		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-I	38-CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian	Sideoats Grama	Bouteloua curtipendula	16.00	1		Grass	N	N	CP38E-SWGCA(CP2)DM		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-I	38-CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian	Big Bluestem	Andropogon gerardii	8.00	0.5		Grass	N	N	CP38E-SWGCA(CP2)DM		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-I	38-CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian	Indiangrass	Sorghastrum nutans	8.00	0.5		Grass	N	N	CP38E-SWGCA(CP2)DM		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-I	38-CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian	Switchgrass	Panicum virgatum	8.00	0.5		Grass	N	N	CP38E-SWGCA(CP2)DM		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-I	38-CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian	Purple Prairie Clover	Dalea purpurea	2.00	0.125		Legume	N	N	CP38E-SWGCA(CP2)DM		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-I	38-CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian	Bergamot	Monarda fistulosa	1.00	0.0625		Forb	N	N	CP38E-SWGCA(CP2)DM		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-I	38-CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian	Yellow Coneflower	Ratibida pinnata	1.00	0.0625		Forb	N	N	CP38E-SWGCA(CP2)DM		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Ber	38-CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Little Bluestem	Schizachyrium scoparium	20.00	1.25		Grass	N	N	CP38E-SWGCA(CP2)M		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Ber	38-CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Canada Wildrye	Elymus canadensis	16.00	1		Grass	N	N	CP38E-SWGCA(CP2)M		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Ber	38-CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Indiangrass	Sorghastrum nutans	16.00	1		Grass	N	N	CP38E-SWGCA(CP2)M		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Ber	38-CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Big Bluestem	Andropogon gerardii	8.00	0.5		Grass	N	N	CP38E-SWGCA(CP2)M		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Ber	38-CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Switchgrass	Panicum virgatum	8.00	0.5		Grass	N	N	CP38E-SWGCA(CP2)M		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Ber	38-CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Bergamot	Monarda fistulosa	1.00	0.0625		Forb	N	N	CP38E-SWGCA(CP2)M		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Ber	38-CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Black-eyed Susan	Rudbeckia hirta	1.00	0.0625		Forb	N	N	CP38E-SWGCA(CP2)M		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Ber	38-CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Yellow Coneflower	Ratibida pinnata	1.00	0.0625		Forb	N	N	CP38E-SWGCA(CP2)M		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-	38-CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Switc	Big Bluestem	Andropogon gerardii	16.00	1		Grass	N	N	CP38E-SWGCA(CP2)W		BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-	38-CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Switc	Canada Wildrye	Elymus canadensis	16.00	1		Grass	N	N	CP38E-SWGCA(CP2)W		BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron

38	CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-C	38-CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Switc	Indiangrass	Sorghastrum nutans	16.00	1		Grass	N	N	CP38E-SWGCA(CP2)W		BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-C	38-CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Switc	Switchgrass	Panicum virgatum	16.00	1		Grass	N	N	CP38E-SWGCA(CP2)W		BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-C	38-CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Switc	Prairie Cordgrass	Spartina pectinata	8.00	0.5		Grass	N	N	CP38E-SWGCA(CP2)W		BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-C	38-CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Switc	Cupplant	Silphium perfoliatum	2.00	0.125		Forb	N	N	CP38E-SWGCA(CP2)W		BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-C	38-CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Switc	Blue Vervain	Verbena hastata	1.00	0.0625		Forb	N	N	CP38E-SWGCA(CP2)W		BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-C	38-CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Switc	Common Ironweed	Vernonia fasciculata	1.00	0.0625		Forb	N	N	CP38E-SWGCA(CP2)W		BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-SWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Berg-	38-CP38E-SWGCA(CP2)WM-Switch-BB-Cwrye-Pc	Switchgrass	Panicum virgatum	32.00	2		Grass	N	N	CP38E-SWGCA(CP2)WM		Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
38	CP38E-SWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Berg-	38-CP38E-SWGCA(CP2)WM-Switch-BB-Cwrye-Pc	Big Bluestem	Andropogon gerardii	16.00	1		Grass	N	N	CP38E-SWGCA(CP2)WM		Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
38	CP38E-SWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Berg-	38-CP38E-SWGCA(CP2)WM-Switch-BB-Cwrye-Pc	Canada Wildrye	Elymus canadensis	16.00	1		Grass	N	N	CP38E-SWGCA(CP2)WM		Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
38	CP38E-SWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Berg-	38-CP38E-SWGCA(CP2)WM-Switch-BB-Cwrye-Pc	Prairie Cordgrass	Spartina pectinata	4.00	0.25		Grass	N	N	CP38E-SWGCA(CP2)WM		Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
38	CP38E-SWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Berg-	38-CP38E-SWGCA(CP2)WM-Switch-BB-Cwrye-Pc	Bergamot	Monarda fistulosa	1.00	0.0625		Forb	N	N	CP38E-SWGCA(CP2)WM		Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
38	CP38E-SWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Berg-	38-CP38E-SWGCA(CP2)WM-Switch-BB-Cwrye-Pc	New England Aster	Symphyotrichum novae-a	1.00	0.0625		Forb	N	N	CP38E-SWGCA(CP2)WM		Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
38	CP38E-SWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Berg-	38-CP38E-SWGCA(CP2)WM-Switch-BB-Cwrye-Pc	Yellow Coneflower	Ratibida pinnata	1.00	0.0625		Forb	N	N	CP38E-SWGCA(CP2)WM		Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Little Bluestem	Schizachyrium scoparium	24.00	1.5		Grass	N	N	CP38E-SWGCA(CP25)D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Sideoats Grama	Bouteloua curtipendula	24.00	1.5		Grass	N	N	CP38E-SWGCA(CP25)D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Indiangrass	Sorghastrum nutans	8.00	0.5		Grass	N	N	CP38E-SWGCA(CP25)D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Big Bluestem	Andropogon gerardii	4.00	0.25		Grass	N	N	CP38E-SWGCA(CP25)D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Purple Prairie Clover	Dalea purpurea	2.00	0.125		Legume	N	N	CP38E-SWGCA(CP25)D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Sand Dropseed	Sporobolus cryptandrus	2.00	0.125		Grass	N	N	CP38E-SWGCA(CP25)D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Prairie Junegrass	Koeleria macrantha	1.00	0.0625		Grass	N	N	CP38E-SWGCA(CP25)D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Spiderwort	Tradescantia ohiensis	1.00	0.0625		Forb	N	N	CP38E-SWGCA(CP25)D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Hoary Vervain	Verbena stricta	0.50	0.03125		Forb	N	N	CP38E-SWGCA(CP25)D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Leadplant	Amorpha canescens	0.50	0.03125		Legume	N	N	CP38E-SWGCA(CP25)D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Prairie Tickseed	Coreopsis palmata	0.50	0.03125		Forb	N	N	CP38E-SWGCA(CP25)D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Silky Aster	Symphyotrichum pratens	0.50	0.03125		Forb	N	N	CP38E-SWGCA(CP25)D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Stiff Goldenrod	Oligoneuron rigidum	0.50	0.03125		Forb	N	N	CP38E-SWGCA(CP25)D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Yellow Coneflower	Ratibida pinnata	0.50	0.03125		Forb	N	N	CP38E-SWGCA(CP25)D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Prairie Cinquefoil	Potentilla arguta	0.25	0.015625		Forb	N	N	CP38E-SWGCA(CP25)D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Spotted Mint	Monarda punctata	0.25	0.015625		Forb	N	N	CP38E-SWGCA(CP25)D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Little Bluestem	Schizachyrium scoparium	24.00	1.5		Grass	N	N	CP38E-SWGCA(CP25)DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Sideoats Grama	Bouteloua curtipendula	24.00	1.5		Grass	N	N	CP38E-SWGCA(CP25)DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Indiangrass	Sorghastrum nutans	8.00	0.5		Grass	N	N	CP38E-SWGCA(CP25)DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Switchgrass	Panicum virgatum	4.00	0.25		Grass	N	N	CP38E-SWGCA(CP25)DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Prairie Junegrass	Koeleria macrantha	2.00	0.125		Grass	N	N	CP38E-SWGCA(CP25)DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Prairie Dropseed	Sporobolus heterolepis	2.00	0.125		Grass	N	N	CP38E-SWGCA(CP25)DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Purple Prairie Clover	Dalea purpurea	2.00	0.125		Legume	N	N	CP38E-SWGCA(CP25)DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Round-Headed Bushclover	Lespedeza capitata	2.00	0.125		Legume	N	N	CP38E-SWGCA(CP25)DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Bergamot	Monarda fistulosa	1.00	0.0625		Forb	N	N	CP38E-SWGCA(CP25)DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Spiderwort	Tradescantia ohiensis	1.00	0.0625		Forb	N	N	CP38E-SWGCA(CP25)DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Yellow Coneflower	Ratibida pinnata	1.00	0.0625		Forb	N	N	CP38E-SWGCA(CP25)DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Leadplant	Amorpha canescens	0.50	0.03125		Legume	N	N	CP38E-SWGCA(CP25)DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Rough Blazing Star	Liatris aspera	0.50	0.03125		Forb	N	N	CP38E-SWGCA(CP25)DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Sky-Blue Aster	Symphyotrichum oolenta	0.50	0.03125		Forb	N	N	CP38E-SWGCA(CP25)DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Stiff Goldenrod	Oligoneuron rigidum	0.50	0.03125		Forb	N	N	CP38E-SWGCA(CP25)DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Prairie Cinquefoil	Potentilla arguta	0.25	0.015625		Forb	N	N	CP38E-SWGCA(CP25)DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-Switch-O	38-CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-	Little Bluestem	Schizachyrium scoparium	24.00	1.5		Grass	N	N	CP38E-SWGCA(CP25)M		Berg-Besus-NEaster-SBAster-Ycone-Croot
38	CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-Switch-O	38-CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-	Indiangrass	Sorghastrum nutans	16.00	1		Grass	N	N	CP38E-SWGCA(CP25)M		Berg-Besus-NEaster-SBAster-Ycone-Croot
38	CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-Switch-O	38-CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-	Big Bluestem	Andropogon gerardii	8.00	0.5		Grass	N	N	CP38E-SWGCA(CP25)M		Berg-Besus-NEaster-SBAster-Ycone-Croot
38	CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-Switch-O	38-CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-	Canada Wildrye	Elymus canadensis	8.00	0.5		Grass	N	N	CP38E-SWGCA(CP25)M		Berg-Besus-NEaster-SBAster-Ycone-Croot

38	CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-Switch-O	38-CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-	Switchgrass	Panicum virgatum	8.00	0.5		Grass	N	N	CP38E-SWGCA(CP25)M	Berg-Besus-NEaster-SBAster-Ycone-Croot
38	CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-Switch-O	38-CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-	Ox-eye Sunflower	Heliopsis helianthoides	1.00	0.0625		Forb	N	N	CP38E-SWGCA(CP25)M	Berg-Besus-NEaster-SBAster-Ycone-Croot
38	CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-Switch-O	38-CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-	Prairie Blazing Star	Liatris pycnostachya	1.00	0.0625		Forb	N	N	CP38E-SWGCA(CP25)M	Berg-Besus-NEaster-SBAster-Ycone-Croot
38	CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-Switch-O	38-CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-	Purple Prairie Clover	Dalea purpurea	1.00	0.0625		Legume	N	N	CP38E-SWGCA(CP25)M	Berg-Besus-NEaster-SBAster-Ycone-Croot
38	CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-Switch-O	38-CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-	Rosinweed	Silphium integrifolium	1.00	0.0625		Forb	N	N	CP38E-SWGCA(CP25)M	Berg-Besus-NEaster-SBAster-Ycone-Croot
38	CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-Switch-O	38-CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-	Bergamot	Monarda fistulosa	0.50	0.03125		Forb	N	N	CP38E-SWGCA(CP25)M	Berg-Besus-NEaster-SBAster-Ycone-Croot
38	CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-Switch-O	38-CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-	Black-eyed Susan	Rudbeckia hirta	0.50	0.03125		Forb	N	N	CP38E-SWGCA(CP25)M	Berg-Besus-NEaster-SBAster-Ycone-Croot
38	CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-Switch-O	38-CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-	New England Aster	Symphyotrichum novae-a	0.50	0.03125		Forb	N	N	CP38E-SWGCA(CP25)M	Berg-Besus-NEaster-SBAster-Ycone-Croot
38	CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-Switch-O	38-CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-	Smooth Blue Aster	Symphyotrichum laeve	0.50	0.03125		Forb	N	N	CP38E-SWGCA(CP25)M	Berg-Besus-NEaster-SBAster-Ycone-Croot
38	CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-Switch-O	38-CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-	Yellow Coneflower	Ratibida pinnata	0.50	0.03125		Forb	N	N	CP38E-SWGCA(CP25)M	Berg-Besus-NEaster-SBAster-Ycone-Croot
38	CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-Switch-O	38-CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-	Culver's Root	Veronicastrum virginicum	0.25	0.015625		Forb	N	N	CP38E-SWGCA(CP25)M	Berg-Besus-NEaster-SBAster-Ycone-Croot
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-	Canada Wildrye	Elymus canadensis	16.00	1		Grass	N	N	CP38E-SWGCA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-	Switchgrass	Panicum virgatum	16.00	1		Grass	N	N	CP38E-SWGCA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-	Indiangrass	Sorghastrum nutans	12.00	0.75		Grass	N	N	CP38E-SWGCA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-	Big Bluestem	Andropogon gerardii	8.00	0.5		Grass	N	N	CP38E-SWGCA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-	Prairie Cordgrass	Spartina pectinata	8.00	0.5		Grass	N	N	CP38E-SWGCA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-	Fowl Mannagrass	Glyceria striata	4.00	0.25		Grass	N	N	CP38E-SWGCA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-	Fox Sedge	Carex vulpinoidea	4.00	0.25		Sedge	N	N	CP38E-SWGCA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-	Cupplant	Silphium perfoliatum	2.00	0.125		Forb	N	N	CP38E-SWGCA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-	Showy Tick Trefoil	Desmodium canadense	2.00	0.125		Legume	N	N	CP38E-SWGCA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-	Blue Vervain	Verbena hastata	1.00	0.0625		Forb	N	N	CP38E-SWGCA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-	Golden Alexanders	Zizia aurea	1.00	0.0625		Forb	N	N	CP38E-SWGCA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-	Marsh Milkweed	Asclepias incarnata	1.00	0.0625		Forb	N	N	CP38E-SWGCA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-	Boneset	Eupatorium perfoliatum	0.50	0.03125		Forb	N	N	CP38E-SWGCA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-	Common Ironweed	Vernonia fasciculata	0.50	0.03125		Forb	N	N	CP38E-SWGCA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-	Joe-pye Weed	Eutrochium maculatum	0.50	0.03125		Forb	N	N	CP38E-SWGCA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-	Culver's Root	Veronicastrum virginicum	0.25	0.015625		Forb	N	N	CP38E-SWGCA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-Indian-Pco	38-CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-I	Switchgrass	Panicum virgatum	24.00	1.5		Grass	N	N	CP38E-SWGCA(CP25)WM	Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
38	CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-Indian-Pco	38-CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-I	Big Bluestem	Andropogon gerardii	20.00	1.25		Grass	N	N	CP38E-SWGCA(CP25)WM	Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
38	CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-Indian-Pco	38-CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-I	Canada Wildrye	Elymus canadensis	16.00	1		Grass	N	N	CP38E-SWGCA(CP25)WM	Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
38	CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-Indian-Pco	38-CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-I	Indiangrass	Sorghastrum nutans	12.00	0.75		Grass	N	N	CP38E-SWGCA(CP25)WM	Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
38	CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-Indian-Pco	38-CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-I	Prairie Cordgrass	Spartina pectinata	4.00	0.25		Grass	N	N	CP38E-SWGCA(CP25)WM	Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
38	CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-Indian-Pco	38-CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-I	Cupplant	Silphium perfoliatum	2.00	0.125		Forb	N	N	CP38E-SWGCA(CP25)WM	Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
38	CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-Indian-Pco	38-CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-I	White wild indigo	Baptisia alba	1.50	0.09375		Legume	N	N	CP38E-SWGCA(CP25)WM	Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
38	CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-Indian-Pco	38-CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-I	Black-eyed Susan	Rudbeckia hirta	0.50	0.03125		Forb	N	N	CP38E-SWGCA(CP25)WM	Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
38	CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-Indian-Pco	38-CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-I	Common Ironweed	Vernonia fasciculata	0.50	0.03125		Forb	N	N	CP38E-SWGCA(CP25)WM	Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
38	CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-Indian-Pco	38-CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-I	Golden Alexanders	Zizia aurea	0.50	0.03125		Forb	N	N	CP38E-SWGCA(CP25)WM	Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
38	CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-Indian-Pco	38-CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-I	New England Aster	Symphyotrichum novae-a	0.50	0.03125		Forb	N	N	CP38E-SWGCA(CP25)WM	Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
38	CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-Indian-Pco	38-CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-I	Prairie Blazing Star	Liatris pycnostachya	0.50	0.03125		Forb	N	N	CP38E-SWGCA(CP25)WM	Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
38	CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-Indian-Pco	38-CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-I	Yellow Coneflower	Ratibida pinnata	0.50	0.03125		Forb	N	N	CP38E-SWGCA(CP25)WM	Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
38	CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-Indian-Pco	38-CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-I	Bergamot	Monarda fistulosa	0.25	0.015625		Forb	N	N	CP38E-SWGCA(CP25)WM	Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
38	CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-Indian-Pco	38-CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-I	Great St. John's Wort	Hypericum ascyron	0.25	0.015625		Forb	N	N	CP38E-SWGCA(CP25)WM	Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop-	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pju	Little Bluestem	Schizachyrium scoparium	32.00	2		Grass	N	N	CP38E-WPHRA(CP25)D	Swort-Berg-Lplant-Rblzstar-SkyAster-Besus-Pcinque-Sgrod-
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop-	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pju	Sideoats Grama	Bouteloua curtipendula	24.00	1.5		Grass	N	N	CP38E-WPHRA(CP25)D	Swort-Berg-Lplant-Rblzstar-SkyAster-Besus-Pcinque-Sgrod-
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop-	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pju	Indiangrass	Sorghastrum nutans	4.00	0.25		Grass	N	N	CP38E-WPHRA(CP25)D	Swort-Berg-Lplant-Rblzstar-SkyAster-Besus-Pcinque-Sgrod-
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop-	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pju	Prairie Junegrass	Koeleria macrantha	4.00	0.25		Grass	N	N	CP38E-WPHRA(CP25)D	Swort-Berg-Lplant-Rblzstar-SkyAster-Besus-Pcinque-Sgrod-
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop-	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pju	Prairie Dropseed	Sporobolus heterolepis	4.00	0.25		Grass	N	N	CP38E-WPHRA(CP25)D	Swort-Berg-Lplant-Rblzstar-SkyAster-Besus-Pcinque-Sgrod-
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop-	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pju	Switchgrass	Panicum virgatum	4.00	0.25		Grass	N	N	CP38E-WPHRA(CP25)D	Swort-Berg-Lplant-Rblzstar-SkyAster-Besus-Pcinque-Sgrod-
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop-	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pju	Purple Prairie Clover	Dalea purpurea	2.00	0.125		Legume	N	N	CP38E-WPHRA(CP25)D	Swort-Berg-Lplant-Rblzstar-SkyAster-Besus-Pcinque-Sgrod-

38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop-	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjur	Round-Headed Bushclover	Lespedeza capitata	2.00	0.125		Legume	N	N	CP38E-WPHRA(CP25)D	Swort-Berg-Lplant-Rblzstar-SkyAster-Besus-Pcinque-Sgrod-
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop-	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjur	Spiderwort	Tradescantia ohiensis	1.00	0.0625		Forb	N	N	CP38E-WPHRA(CP25)D	Swort-Berg-Lplant-Rblzstar-SkyAster-Besus-Pcinque-Sgrod-
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop-	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjur	Bergamot	Monarda fistulosa	0.50	0.03125		Forb	N	N	CP38E-WPHRA(CP25)D	Swort-Berg-Lplant-Rblzstar-SkyAster-Besus-Pcinque-Sgrod-
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop-	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjur	Leadplant	Amorpha canescens	0.50	0.03125		Legume	N	N	CP38E-WPHRA(CP25)D	Swort-Berg-Lplant-Rblzstar-SkyAster-Besus-Pcinque-Sgrod-
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop-	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjur	Rough Blazing Star	Liatris aspera	0.50	0.03125		Forb	N	N	CP38E-WPHRA(CP25)D	Swort-Berg-Lplant-Rblzstar-SkyAster-Besus-Pcinque-Sgrod-
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop-	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjur	Sky-Blue Aster	Symphyotrichum oolenta	0.50	0.03125		Forb	N	N	CP38E-WPHRA(CP25)D	Swort-Berg-Lplant-Rblzstar-SkyAster-Besus-Pcinque-Sgrod-
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop-	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjur	Black-eyed Susan	Rudbeckia hirta	0.25	0.015625		Forb	N	N	CP38E-WPHRA(CP25)D	Swort-Berg-Lplant-Rblzstar-SkyAster-Besus-Pcinque-Sgrod-
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop-	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjur	Prairie Cinquefoil	Potentilla arguta	0.25	0.015625		Forb	N	N	CP38E-WPHRA(CP25)D	Swort-Berg-Lplant-Rblzstar-SkyAster-Besus-Pcinque-Sgrod-
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop-	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjur	Stiff Goldenrod	Oligoneuron rigidum	0.25	0.015625		Forb	N	N	CP38E-WPHRA(CP25)D	Swort-Berg-Lplant-Rblzstar-SkyAster-Besus-Pcinque-Sgrod-
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop-	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjur	Yellow Coneflower	Ratibida pinnata	0.25	0.015625		Forb	N	N	CP38E-WPHRA(CP25)D	Swort-Berg-Lplant-Rblzstar-SkyAster-Besus-Pcinque-Sgrod-
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BI	Little Bluestem	Schizachyrium scoparium	32.00	2		Grass	N	N	CP38E-WPHRA(CP25)DM	Hvervain-Lplant-Ptick-SilkAster-Pcinque-Smint-Sgrod-Ycone
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BI	Sideoats Grama	Bouteloua curtipendula	24.00	1.5		Grass	N	N	CP38E-WPHRA(CP25)DM	Hvervain-Lplant-Ptick-SilkAster-Pcinque-Smint-Sgrod-Ycone
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BI	Prairie Junegrass	Koeleria macrantha	6.00	0.375		Grass	N	N	CP38E-WPHRA(CP25)DM	Hvervain-Lplant-Ptick-SilkAster-Pcinque-Smint-Sgrod-Ycone
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BI	Big Bluestem	Andropogon gerardii	4.00	0.25		Grass	N	N	CP38E-WPHRA(CP25)DM	Hvervain-Lplant-Ptick-SilkAster-Pcinque-Smint-Sgrod-Ycone
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BI	Indiangrass	Sorghastrum nutans	4.00	0.25		Grass	N	N	CP38E-WPHRA(CP25)DM	Hvervain-Lplant-Ptick-SilkAster-Pcinque-Smint-Sgrod-Ycone
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BI	Sand Dropseed	Sporobolus cryptandrus	4.00	0.25		Grass	N	N	CP38E-WPHRA(CP25)DM	Hvervain-Lplant-Ptick-SilkAster-Pcinque-Smint-Sgrod-Ycone
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BI	Butterfly Milkweed	Asclepias tuberosa	1.00	0.0625		Forb	N	N	CP38E-WPHRA(CP25)DM	Hvervain-Lplant-Ptick-SilkAster-Pcinque-Smint-Sgrod-Ycone
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BI	Purple Prairie Clover	Dalea purpurea	1.00	0.0625		Legume	N	N	CP38E-WPHRA(CP25)DM	Hvervain-Lplant-Ptick-SilkAster-Pcinque-Smint-Sgrod-Ycone
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BI	Spiderwort	Tradescantia ohiensis	1.00	0.0625		Forb	N	N	CP38E-WPHRA(CP25)DM	Hvervain-Lplant-Ptick-SilkAster-Pcinque-Smint-Sgrod-Ycone
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BI	Hoary Vervain	Verbena stricta	0.50	0.03125		Forb	N	N	CP38E-WPHRA(CP25)DM	Hvervain-Lplant-Ptick-SilkAster-Pcinque-Smint-Sgrod-Ycone
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BI	Leadplant	Amorpha canescens	0.50	0.03125		Legume	N	N	CP38E-WPHRA(CP25)DM	Hvervain-Lplant-Ptick-SilkAster-Pcinque-Smint-Sgrod-Ycone
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BI	Prairie Tickseed	Coreopsis palmata	0.50	0.03125		Forb	N	N	CP38E-WPHRA(CP25)DM	Hvervain-Lplant-Ptick-SilkAster-Pcinque-Smint-Sgrod-Ycone
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BI	Silky Aster	Symphyotrichum pratens	0.50	0.03125		Forb	N	N	CP38E-WPHRA(CP25)DM	Hvervain-Lplant-Ptick-SilkAster-Pcinque-Smint-Sgrod-Ycone
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BI	Prairie Cinquefoil	Potentilla arguta	0.25	0.015625		Forb	N	N	CP38E-WPHRA(CP25)DM	Hvervain-Lplant-Ptick-SilkAster-Pcinque-Smint-Sgrod-Ycone
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BI	Spotted Mint	Monarda punctata	0.25	0.015625		Forb	N	N	CP38E-WPHRA(CP25)DM	Hvervain-Lplant-Ptick-SilkAster-Pcinque-Smint-Sgrod-Ycone
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BI	Stiff Goldenrod	Oligoneuron rigidum	0.25	0.015625		Forb	N	N	CP38E-WPHRA(CP25)DM	Hvervain-Lplant-Ptick-SilkAster-Pcinque-Smint-Sgrod-Ycone
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BI	Yellow Coneflower	Ratibida pinnata	0.25	0.015625		Forb	N	N	CP38E-WPHRA(CP25)DM	Hvervain-Lplant-Ptick-SilkAster-Pcinque-Smint-Sgrod-Ycone
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BE	Little Bluestem	Schizachyrium scoparium	28.00	1.75		Grass	N	N	CP38E-WPHRA(CP25)M	Pblzstar-PPclover-Berg-Besus-NEaster-SkyAster-SBAster-Ycone-
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BE	Canada Wildrye	Elymus canadensis	12.00	0.75		Grass	N	N	CP38E-WPHRA(CP25)M	Pblzstar-PPclover-Berg-Besus-NEaster-SkyAster-SBAster-Ycone-
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BE	Sideoats Grama	Bouteloua curtipendula	12.00	0.75		Grass	N	N	CP38E-WPHRA(CP25)M	Pblzstar-PPclover-Berg-Besus-NEaster-SkyAster-SBAster-Ycone-
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BE	Big Bluestem	Andropogon gerardii	4.00	0.25		Grass	N	N	CP38E-WPHRA(CP25)M	Pblzstar-PPclover-Berg-Besus-NEaster-SkyAster-SBAster-Ycone-
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BE	Indiangrass	Sorghastrum nutans	4.00	0.25		Grass	N	N	CP38E-WPHRA(CP25)M	Pblzstar-PPclover-Berg-Besus-NEaster-SkyAster-SBAster-Ycone-
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BE	Switchgrass	Panicum virgatum	4.00	0.25		Grass	N	N	CP38E-WPHRA(CP25)M	Pblzstar-PPclover-Berg-Besus-NEaster-SkyAster-SBAster-Ycone-
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BE	Canada Milkvetch	Astragalus canadensis	2.00	0.125		Legume	N	N	CP38E-WPHRA(CP25)M	Pblzstar-PPclover-Berg-Besus-NEaster-SkyAster-SBAster-Ycone-
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BE	Ox-eye Sunflower	Heliopsis helianthoides	1.00	0.0625		Forb	N	N	CP38E-WPHRA(CP25)M	Pblzstar-PPclover-Berg-Besus-NEaster-SkyAster-SBAster-Ycone-
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BE	Prairie Blazing Star	Liatris pycnostachya	1.00	0.0625		Forb	N	N	CP38E-WPHRA(CP25)M	Pblzstar-PPclover-Berg-Besus-NEaster-SkyAster-SBAster-Ycone-
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BE	Purple Prairie Clover	Dalea purpurea	1.00	0.0625		Legume	N	N	CP38E-WPHRA(CP25)M	Pblzstar-PPclover-Berg-Besus-NEaster-SkyAster-SBAster-Ycone-
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BE	Bergamot	Monarda fistulosa	0.50	0.03125		Forb	N	N	CP38E-WPHRA(CP25)M	Pblzstar-PPclover-Berg-Besus-NEaster-SkyAster-SBAster-Ycone-
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BE	Black-eyed Susan	Rudbeckia hirta	0.50	0.03125		Forb	N	N	CP38E-WPHRA(CP25)M	Pblzstar-PPclover-Berg-Besus-NEaster-SkyAster-SBAster-Ycone-
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BE	New England Aster	Symphyotrichum novae-a	0.50	0.03125		Forb	N	N	CP38E-WPHRA(CP25)M	Pblzstar-PPclover-Berg-Besus-NEaster-SkyAster-SBAster-Ycone-
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BE	Sky-Blue Aster	Symphyotrichum oolenta	0.50	0.03125		Forb	N	N	CP38E-WPHRA(CP25)M	Pblzstar-PPclover-Berg-Besus-NEaster-SkyAster-SBAster-Ycone-
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BE	Smooth Blue Aster	Symphyotrichum laeve	0.50	0.03125		Forb	N	N	CP38E-WPHRA(CP25)M	Pblzstar-PPclover-Berg-Besus-NEaster-SkyAster-SBAster-Ycone-
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BE	Yellow Coneflower	Ratibida pinnata	0.50	0.03125		Forb	N	N	CP38E-WPHRA(CP25)M	Pblzstar-PPclover-Berg-Besus-NEaster-SkyAster-SBAster-Ycone-
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BE	Culver's Root	Veronicastrum virginicum	0.25	0.015625		Forb	N	N	CP38E-WPHRA(CP25)M	Pblzstar-PPclover-Berg-Besus-NEaster-SkyAster-SBAster-Ycone-
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsedg	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-	Canada Wildrye	Elymus canadensis	16.00	1		Grass	N	N	CP38E-WPHRA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsedg	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-	Indiangrass	Sorghastrum nutans	12.00	0.75		Grass	N	N	CP38E-WPHRA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsedg	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-	Switchgrass	Panicum virgatum	12.00	0.75		Grass	N	N	CP38E-WPHRA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsedg	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-	Big Bluestem	Andropogon gerardii	8.00	0.5		Grass	N	N	CP38E-WPHRA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsedg	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-	Fox Sedge	Carex vulpinoidea	8.00	0.5		Sedge	N	N	CP38E-WPHRA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot

38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsedg	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-	Prairie Cordgrass	Spartina pectinata	8.00	0.5		Grass	N	N	CP38E-WPHRA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsedg	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-	Fowl Mannagrass	Glyceria striata	4.00	0.25		Grass	N	N	CP38E-WPHRA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsedg	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-	Cupplant	Silphium perfoliatum	2.00	0.125		Forb	N	N	CP38E-WPHRA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsedg	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-	Showy Tick Trefoil	Desmodium canadense	2.00	0.125		Legume	N	N	CP38E-WPHRA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsedg	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-	Blue Vervain	Verbena hastata	1.00	0.0625		Forb	N	N	CP38E-WPHRA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsedg	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-	Golden Alexanders	Zizia aurea	1.00	0.0625		Forb	N	N	CP38E-WPHRA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsedg	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-	Marsh Milkweed	Asclepias incarnata	1.00	0.0625		Forb	N	N	CP38E-WPHRA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsedg	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-	Boneset	Eupatorium perfoliatum	0.50	0.03125		Forb	N	N	CP38E-WPHRA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsedg	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-	Common Ironweed	Vernonia fasciculata	0.50	0.03125		Forb	N	N	CP38E-WPHRA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsedg	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-	Joe-pye Weed	Eutrochium maculatum	0.50	0.03125		Forb	N	N	CP38E-WPHRA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsedg	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-	Culver's Root	Veronicastrum virginicum	0.25	0.015625		Forb	N	N	CP38E-WPHRA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-Monarch(CP1)-Tim-Orc-RC-Cmilkweed-Besus-Ox	38-CP38E-Monarch(CP1)-Tim-Orc-RC-Cmilkweed-	Timothy	Phleum pratense	8.00	0.5	14.2	Grass	I	X	CP38E-Monarch(CP1)	Tim-Orc-RC-Cmilkweed-Besus-Oxeyesun-Sgrod
38	CP38E-Monarch(CP1)-Tim-Orc-RC-Cmilkweed-Besus-Ox	38-CP38E-Monarch(CP1)-Tim-Orc-RC-Cmilkweed-	Orchardgrass	Dactylis glomerata L.	8.00	0.5	7.5	Grass	I	X	CP38E-Monarch(CP1)	Tim-Orc-RC-Cmilkweed-Besus-Oxeyesun-Sgrod
38	CP38E-Monarch(CP1)-Tim-Orc-RC-Cmilkweed-Besus-Ox	38-CP38E-Monarch(CP1)-Tim-Orc-RC-Cmilkweed-	Red Clover	Trifolium pratense	4.80	0.3	1.9	Legume	I	X	CP38E-Monarch(CP1)	Tim-Orc-RC-Cmilkweed-Besus-Oxeyesun-Sgrod
38	CP38E-Monarch(CP1)-Tim-Orc-RC-Cmilkweed-Besus-Ox	38-CP38E-Monarch(CP1)-Tim-Orc-RC-Cmilkweed-	Common Milkweed	Asclepias syriaca	6.05	0.38	0.6	Forb	N	X	CP38E-Monarch(CP1)	Tim-Orc-RC-Cmilkweed-Besus-Oxeyesun-Sgrod
38	CP38E-Monarch(CP1)-Tim-Orc-RC-Cmilkweed-Besus-Ox	38-CP38E-Monarch(CP1)-Tim-Orc-RC-Cmilkweed-	Black-Eyed Susan	Rudbeckia hirta	0.96	0.06	2.2	Forb	N	X	CP38E-Monarch(CP1)	Tim-Orc-RC-Cmilkweed-Besus-Oxeyesun-Sgrod
38	CP38E-Monarch(CP1)-Tim-Orc-RC-Cmilkweed-Besus-Ox	38-CP38E-Monarch(CP1)-Tim-Orc-RC-Cmilkweed-	Ox-eye Sunflower	Heliopsis helianthoides	0.96	0.06	0.20	Forb	N	X	CP38E-Monarch(CP1)	Tim-Orc-RC-Cmilkweed-Besus-Oxeyesun-Sgrod
38	CP38E-Monarch(CP1)-Tim-Orc-RC-Cmilkweed-Besus-Ox	38-CP38E-Monarch(CP1)-Tim-Orc-RC-Cmilkweed-	Stiff Goldenrod	Oligoneuron rigidum	0.96	0.06	1.1	Forb	N	X	CP38E-Monarch(CP1)	Tim-Orc-RC-Cmilkweed-Besus-Oxeyesun-Sgrod
38	CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cwrye-Wpc	38-CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cv	Big Bluestem	Andropogon gerardii	4.00	0.25	1	Grass	N	X	CP38E-Monarch(CP2)	Sgrod-Shwgrod-NEaster
38	CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cwrye-Wpc	38-CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cv	Little Bluestem	Schizachyrium scopariu	24.00	1.5	8.3	Grass	N	X	CP38E-Monarch(CP2)	Sgrod-Shwgrod-NEaster
38	CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cwrye-Wpc	38-CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cv	Indiangrass	Sorghastrum nutans	4.00	0.25	1.2	Grass	N	X	CP38E-Monarch(CP2)	Sgrod-Shwgrod-NEaster
38	CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cwrye-Wpc	38-CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cv	Sideoats Grama	Bouteloua curtipendula	12.00	0.75	2.2	Grass	N	X	CP38E-Monarch(CP2)	Sgrod-Shwgrod-NEaster
38	CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cwrye-Wpc	38-CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cv	Canada Wildrye	Elymus canadensis	16.00	1	2	Grass	N	X	CP38E-Monarch(CP2)	Sgrod-Shwgrod-NEaster
38	CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cwrye-Wpc	38-CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cv	white prairie clover	Dalea candida	3.04	0.19	1.2	Legume	N	X	CP38E-Monarch(CP2)	Sgrod-Shwgrod-NEaster
38	CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cwrye-Wpc	38-CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cv	Common Milkweed	Asclepias syriaca	4.96	0.31	0.5	Forb	N	X	CP38E-Monarch(CP2)	Sgrod-Shwgrod-NEaster
38	CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cwrye-Wpc	38-CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cv	Black-eyed Susan	Rudbeckia hirta	0.96	0.06	2.2	Forb	N	X	CP38E-Monarch(CP2)	Sgrod-Shwgrod-NEaster
38	CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cwrye-Wpc	38-CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cv	Bergamot	Monarda fistulosa	0.96	0.06	1.8	Forb	N	X	CP38E-Monarch(CP2)	Sgrod-Shwgrod-NEaster
38	CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cwrye-Wpc	38-CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cv	Stiff Goldenrod	Oligoneuron rigidum	0.96	0.06	1.1	Forb	N	X	CP38E-Monarch(CP2)	Sgrod-Shwgrod-NEaster
38	CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cwrye-Wpc	38-CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cv	Showy Goldenrod	Solidago speciosa	0.48	0.03	1.1	Forb	N	X	CP38E-Monarch(CP2)	Sgrod-Shwgrod-NEaster
38	CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cwrye-Wpc	38-CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cv	New England Aster	Symphyotrichum novae	0.48	0.03	0.8	Forb	N	X	CP38E-Monarch(CP2)	Sgrod-Shwgrod-NEaster
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-Cwrye-Wp	38-CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	Big Bluestem	Andropogon gerardii	4.00	0.25	1	Grass	N	X	CP38E-Monarch(CP25)	Sgrod-Shwgrod-NEaster-Rblzstar-Rtlsnkmaster-Cup-SkyAster
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-Cwrye-Wp	38-CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	Little Bluestem	Schizachyrium scopariu	16.00	1	5.6	Grass	N	X	CP38E-Monarch(CP25)	Sgrod-Shwgrod-NEaster-Rblzstar-Rtlsnkmaster-Cup-SkyAster
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-Cwrye-Wp	38-CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	Indiangrass	Sorghastrum nutans	4.00	0.25	1.2	Grass	N	X	CP38E-Monarch(CP25)	Sgrod-Shwgrod-NEaster-Rblzstar-Rtlsnkmaster-Cup-SkyAster
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-Cwrye-Wp	38-CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	Sideoats Grama	Bouteloua curtipendula	8.00	0.5	1.5	Grass	N	X	CP38E-Monarch(CP25)	Sgrod-Shwgrod-NEaster-Rblzstar-Rtlsnkmaster-Cup-SkyAster
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-Cwrye-Wp	38-CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	Canada Wildrye	Elymus canadensis	8.00	0.5	1	Grass	N	X	CP38E-Monarch(CP25)	Sgrod-Shwgrod-NEaster-Rblzstar-Rtlsnkmaster-Cup-SkyAster
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-Cwrye-Wp	38-CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	white prairie clover	Dalea candida	3.04	0.19	1.2	Legume	N	X	CP38E-Monarch(CP25)	Sgrod-Shwgrod-NEaster-Rblzstar-Rtlsnkmaster-Cup-SkyAster
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-Cwrye-Wp	38-CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	Common Milkweed	Asclepias syriaca	4.96	0.31	0.5	Forb	N	X	CP38E-Monarch(CP25)	Sgrod-Shwgrod-NEaster-Rblzstar-Rtlsnkmaster-Cup-SkyAster
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-Cwrye-Wp	38-CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	Black-eyed Susan	Rudbeckia hirta	0.96	0.06	2.2	Forb	N	X	CP38E-Monarch(CP25)	Sgrod-Shwgrod-NEaster-Rblzstar-Rtlsnkmaster-Cup-SkyAster
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-Cwrye-Wp	38-CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	Bergamot	Monarda fistulosa	0.96	0.06	1.8	Forb	N	X	CP38E-Monarch(CP25)	Sgrod-Shwgrod-NEaster-Rblzstar-Rtlsnkmaster-Cup-SkyAster
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-Cwrye-Wp	38-CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	Stiff Goldenrod	Oligoneuron rigidum	0.96	0.06	1.1	Forb	N	X	CP38E-Monarch(CP25)	Sgrod-Shwgrod-NEaster-Rblzstar-Rtlsnkmaster-Cup-SkyAster
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-Cwrye-Wp	38-CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	Showy Goldenrod	Solidago speciosa	0.48	0.03	1.1	Forb	N	X	CP38E-Monarch(CP25)	Sgrod-Shwgrod-NEaster-Rblzstar-Rtlsnkmaster-Cup-SkyAster
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-Cwrye-Wp	38-CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	New England Aster	Symphyotrichum novae	0.48	0.03	0.8	Forb	N	X	CP38E-Monarch(CP25)	Sgrod-Shwgrod-NEaster-Rblzstar-Rtlsnkmaster-Cup-SkyAster
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-Cwrye-Wp	38-CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	Rough Blazing Star	Liatris aspera	0.48	0.03	0.2	Forb	N	X	CP38E-Monarch(CP25)	Sgrod-Shwgrod-NEaster-Rblzstar-Rtlsnkmaster-Cup-SkyAster
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-Cwrye-Wp	38-CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	Rattlesnake Master	Eryngium yuccifolium	0.96	0.06	0.2	Forb	N	X	CP38E-Monarch(CP25)	Sgrod-Shwgrod-NEaster-Rblzstar-Rtlsnkmaster-Cup-SkyAster
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-Cwrye-Wp	38-CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	Cupplant	Silphium perfoliatum	2.08	0.13	0.1	Forb	N	X	CP38E-Monarch(CP25)	Sgrod-Shwgrod-NEaster-Rblzstar-Rtlsnkmaster-Cup-SkyAster
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-Cwrye-Wp	38-CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	Sky-Blue Aster	Symphyotrichum oolen	0.96	0.06	1.9	Forb	N	X	CP38E-Monarch(CP25)	BB-LB-Indian-Sgrama-Cwrye-Wpclover-Cmilkweed-Besus-Berg-Sgrod-Shwgrod-NEaster-Rblzstar-Rtlsnkmaster-Cup-SkyAster
38	CP38E-GHRA(CP1)1-Alf-Rtop-Tim-Orc	38-CP38E-GHRA(CP1)1-Alf-Rtop-Tim-Orc	Alfalfa	Medicago sativa	96.00	6	30.2	Legume	I	X	CP38E-GHRA(CP1)1	Alf-Rtop-Tim-Orc
38	CP38E-GHRA(CP1)1-Alf-Rtop-Tim-Orc	38-CP38E-GHRA(CP1)1-Alf-Rtop-Tim-Orc	Redtop	Agrostis gigantea	32.00	2	229.2	Grass	I		CP38E-GHRA(CP1)1	Alf-Rtop-Tim-Orc

38	CP38E-GHRA(CP1)1-Alf-Rtop-Tim-Orc	38-CP38E-GHRA(CP1)1-Alf-Rtop-Tim-Orc	timothy	Phleum pratense	32.00	2	56.5	Grass	I	X	CP38E-GHRA(CP1)1		Alf-Rtop-Tim-Orc
38	CP38E-GHRA(CP1)1-Alf-Rtop-Tim-Orc	38-CP38E-GHRA(CP1)1-Alf-Rtop-Tim-Orc	Orchardgrass	Dactylis glomerata L.	16.00	1	15	Grass	I	X	CP38E-GHRA(CP1)1		Alf-Rtop-Tim-Orc
38	CP38E-GHRA(CP1)2-RC-KB-Orc-Rtop	38-CP38E-GHRA(CP1)2-RC-KB-Orc-Rtop	Red Clover	Trifolium pratense	80.00	5	31.6	Legume	I	X	CP38E-GHRA(CP1)2		RC-KB-Orc-Rtop
38	CP38E-GHRA(CP1)2-RC-KB-Orc-Rtop	38-CP38E-GHRA(CP1)2-RC-KB-Orc-Rtop	Kentucky Bluegrass	Poa pratensis	32.00	2	100	Grass	I		CP38E-GHRA(CP1)2		RC-KB-Orc-Rtop
38	CP38E-GHRA(CP1)2-RC-KB-Orc-Rtop	38-CP38E-GHRA(CP1)2-RC-KB-Orc-Rtop	Orchardgrass	Dactylis glomerata L.	16.00	1	15	Grass	I	X	CP38E-GHRA(CP1)2		RC-KB-Orc-Rtop
38	CP38E-GHRA(CP1)2-RC-KB-Orc-Rtop	38-CP38E-GHRA(CP1)2-RC-KB-Orc-Rtop	Redtop	Agrostis gigantea	16.00	1	114.6	Grass	I		CP38E-GHRA(CP1)2		RC-KB-Orc-Rtop
38	CP38E-GHRA(CP1)3-RC-SB-Tim	38-CP38E-GHRA(CP1)3-RC-SB-Tim	Red Clover	Trifolium pratense	80.00	5	31.6	Legume	I	X	CP38E-GHRA(CP1)3		RC-SB-Tim
38	CP38E-GHRA(CP1)3-RC-SB-Tim	38-CP38E-GHRA(CP1)3-RC-SB-Tim	Smooth Bromegrass	Bromus inermis	48.00	3	9.4	Grass	I		CP38E-GHRA(CP1)3		RC-SB-Tim
38	CP38E-GHRA(CP1)3-RC-SB-Tim	38-CP38E-GHRA(CP1)3-RC-SB-Tim	Timothy	Phleum pratense	32.00	2	56.5	Grass	I	X	CP38E-GHRA(CP1)3		RC-SB-Tim
38	CP38E-GHRA(CP1)4-RC-Tim-Orc-Rtop	38-CP38E-GHRA(CP1)4-RC-Tim-Orc-Rtop	Red Clover	Trifolium pratense	80.00	5	31.6	Legume	I	X	CP38E-GHRA(CP1)4		RC-Tim-Orc-Rtop
38	CP38E-GHRA(CP1)4-RC-Tim-Orc-Rtop	38-CP38E-GHRA(CP1)4-RC-Tim-Orc-Rtop	Timothy	Phleum pratense	32.00	2	56.5	Grass	I	X	CP38E-GHRA(CP1)4		RC-Tim-Orc-Rtop
38	CP38E-GHRA(CP1)4-RC-Tim-Orc-Rtop	38-CP38E-GHRA(CP1)4-RC-Tim-Orc-Rtop	Orchardgrass	Dactylis glomerata L.	16.00	1	15	Grass	I	X	CP38E-GHRA(CP1)4		RC-Tim-Orc-Rtop
38	CP38E-GHRA(CP1)4-RC-Tim-Orc-Rtop	38-CP38E-GHRA(CP1)4-RC-Tim-Orc-Rtop	Redtop	Agrostis gigantea	16.00	1	114.6	Grass	I		CP38E-GHRA(CP1)4		RC-Tim-Orc-Rtop
38	CP3-1-BB-LB-Indian-Sgrama-Sgrod-Ycone-PPclover	38-CP3-1-BB-LB-Indian-Sgrama-Sgrod-Ycone-PPcl	Big Bluestem	Andropogon gerardii	8.00	0.5	1.9	Grass	N	X	CP3-1		BB-LB-Indian-Sgrama-Sgrod-Ycone-PPclover
38	CP3-1-BB-LB-Indian-Sgrama-Sgrod-Ycone-PPclover	38-CP3-1-BB-LB-Indian-Sgrama-Sgrod-Ycone-PPcl	Little Bluestem	Schizachyrium scopariu	24.00	1.5	8.3	Grass	N	X	CP3-1		BB-LB-Indian-Sgrama-Sgrod-Ycone-PPclover
38	CP3-1-BB-LB-Indian-Sgrama-Sgrod-Ycone-PPclover	38-CP3-1-BB-LB-Indian-Sgrama-Sgrod-Ycone-PPcl	Indiangrass	Sorghastrum nutans	8.00	0.5	2.3	Grass	N	X	CP3-1		BB-LB-Indian-Sgrama-Sgrod-Ycone-PPclover
38	CP3-1-BB-LB-Indian-Sgrama-Sgrod-Ycone-PPclover	38-CP3-1-BB-LB-Indian-Sgrama-Sgrod-Ycone-PPcl	Sideoats Grama	Bouteloua curtipendula	24.00	1.5	4.4	Grass	N	X	CP3-1		BB-LB-Indian-Sgrama-Sgrod-Ycone-PPclover
38	CP3-1-BB-LB-Indian-Sgrama-Sgrod-Ycone-PPclover	38-CP3-1-BB-LB-Indian-Sgrama-Sgrod-Ycone-PPcl	Stiff Goldenrod	Oligoneuron rigidum	1.00	0.0625	1.1	Forb	N	X	CP3-1		BB-LB-Indian-Sgrama-Sgrod-Ycone-PPclover
38	CP3-1-BB-LB-Indian-Sgrama-Sgrod-Ycone-PPclover	38-CP3-1-BB-LB-Indian-Sgrama-Sgrod-Ycone-PPcl	Yellow Coneflower	Ratibida pinnata	1.00	0.0625	0.7	Forb	N	X	CP3-1		BB-LB-Indian-Sgrama-Sgrod-Ycone-PPclover
38	CP3-1-BB-LB-Indian-Sgrama-Sgrod-Ycone-PPclover	38-CP3-1-BB-LB-Indian-Sgrama-Sgrod-Ycone-PPcl	Purple Prairie Clover	Dalea purpurea	2.00	0.125	1	Legume	N	X	CP3-1		BB-LB-Indian-Sgrama-Sgrod-Ycone-PPclover
38	CP3-2-BB-Switch-LB-Indian-Cwrye-Ycone-Besus-Berg	38-CP3-2-BB-Switch-LB-Indian-Cwrye-Ycone-Besu	Big Bluestem	Andropogon gerardii	8.00	0.5	1.9	Grass	N	X	CP3-2		BB-Switch-LB-Indian-Cwrye-Ycone-Besus-Berg
38	CP3-2-BB-Switch-LB-Indian-Cwrye-Ycone-Besus-Berg	38-CP3-2-BB-Switch-LB-Indian-Cwrye-Ycone-Besu	Switchgrass	Panicum virgatum	8.00	0.5	4.5	Grass	N	X	CP3-2		BB-Switch-LB-Indian-Cwrye-Ycone-Besus-Berg
38	CP3-2-BB-Switch-LB-Indian-Cwrye-Ycone-Besus-Berg	38-CP3-2-BB-Switch-LB-Indian-Cwrye-Ycone-Besu	Little Bluestem	Schizachyrium scopariu	20.00	1.25	6.9	Grass	N	X	CP3-2		BB-Switch-LB-Indian-Cwrye-Ycone-Besus-Berg
38	CP3-2-BB-Switch-LB-Indian-Cwrye-Ycone-Besus-Berg	38-CP3-2-BB-Switch-LB-Indian-Cwrye-Ycone-Besu	Indiangrass	Sorghastrum nutans	16.00	1	4.5	Grass	N	X	CP3-2		BB-Switch-LB-Indian-Cwrye-Ycone-Besus-Berg
38	CP3-2-BB-Switch-LB-Indian-Cwrye-Ycone-Besus-Berg	38-CP3-2-BB-Switch-LB-Indian-Cwrye-Ycone-Besu	Canada Wildrye	Elymus canadensis	16.00	1	2	Grass	N	X	CP3-2		BB-Switch-LB-Indian-Cwrye-Ycone-Besus-Berg
38	CP3-2-BB-Switch-LB-Indian-Cwrye-Ycone-Besus-Berg	38-CP3-2-BB-Switch-LB-Indian-Cwrye-Ycone-Besu	Yellow Coneflower	Ratibida pinnata	1.00	0.0625	0.7	Forb	N	X	CP3-2		BB-Switch-LB-Indian-Cwrye-Ycone-Besus-Berg
38	CP3-2-BB-Switch-LB-Indian-Cwrye-Ycone-Besus-Berg	38-CP3-2-BB-Switch-LB-Indian-Cwrye-Ycone-Besu	Black-Eyed Susan	Rudbeckia hirta	1.00	0.0625	2.3	Forb	N	X	CP3-2		BB-Switch-LB-Indian-Cwrye-Ycone-Besus-Berg
38	CP3-2-BB-Switch-LB-Indian-Cwrye-Ycone-Besus-Berg	38-CP3-2-BB-Switch-LB-Indian-Cwrye-Ycone-Besu	Bergamot	Monarda fistulosa	1.00	0.0625	1.8	Forb	N	X	CP3-2		BB-Switch-LB-Indian-Cwrye-Ycone-Besus-Berg
38	CP3-3-BB-LB-Indian-Switch-Sgrama-PPclover-Berg-Ycon	38-CP3-3-BB-LB-Indian-Switch-Sgrama-PPclover-B	Big Bluestem	Andropogon gerardii	8.00	0.5	1.9	Grass	N	X	CP3-3		BB-LB-Indian-Switch-Sgrama-PPclover-Berg-Ycone
38	CP3-3-BB-LB-Indian-Switch-Sgrama-PPclover-Berg-Ycon	38-CP3-3-BB-LB-Indian-Switch-Sgrama-PPclover-B	Little Bluestem	Schizachyrium scopariu	24.00	1.5	8.3	Grass	N	X	CP3-3		BB-LB-Indian-Switch-Sgrama-PPclover-Berg-Ycone
38	CP3-3-BB-LB-Indian-Switch-Sgrama-PPclover-Berg-Ycon	38-CP3-3-BB-LB-Indian-Switch-Sgrama-PPclover-B	Indiangrass	Sorghastrum nutans	8.00	0.5	2.3	Grass	N	X	CP3-3		BB-LB-Indian-Switch-Sgrama-PPclover-Berg-Ycone
38	CP3-3-BB-LB-Indian-Switch-Sgrama-PPclover-Berg-Ycon	38-CP3-3-BB-LB-Indian-Switch-Sgrama-PPclover-B	Switchgrass	Panicum virgatum	8.00	0.5	4.5	Grass	N	X	CP3-3		BB-LB-Indian-Switch-Sgrama-PPclover-Berg-Ycone
38	CP3-3-BB-LB-Indian-Switch-Sgrama-PPclover-Berg-Ycon	38-CP3-3-BB-LB-Indian-Switch-Sgrama-PPclover-B	Sideoats Grama	Bouteloua curtipendula	16.00	1	3	Grass	N	X	CP3-3		BB-LB-Indian-Switch-Sgrama-PPclover-Berg-Ycone
38	CP3-3-BB-LB-Indian-Switch-Sgrama-PPclover-Berg-Ycon	38-CP3-3-BB-LB-Indian-Switch-Sgrama-PPclover-B	Purple Prairie Clover	Dalea purpurea	2.00	0.125	1	Legume	N	X	CP3-3		BB-LB-Indian-Switch-Sgrama-PPclover-Berg-Ycone
38	CP3-3-BB-LB-Indian-Switch-Sgrama-PPclover-Berg-Ycon	38-CP3-3-BB-LB-Indian-Switch-Sgrama-PPclover-B	Bergamot	Monarda fistulosa	1.00	0.0625	1.8	Forb	N	X	CP3-3		BB-LB-Indian-Switch-Sgrama-PPclover-Berg-Ycone
38	CP3-3-BB-LB-Indian-Switch-Sgrama-PPclover-Berg-Ycon	38-CP3-3-BB-LB-Indian-Switch-Sgrama-PPclover-B	Yellow Coneflower	Ratibida pinnata	1.00	0.0625	0.7	Forb	N	X	CP3-3		BB-LB-Indian-Switch-Sgrama-PPclover-Berg-Ycone
38	CP3-4-Switch-Pcord-BB-Indian-Cwrye-Ciron-Cup-Bvervai	38-CP3-4-Switch-Pcord-BB-Indian-Cwrye-Ciron-Cu	Switchgrass	Panicum virgatum	16.00	1	9	Grass	N	X	CP3-4		Switch-Pcord-BB-Indian-Cwrye-Ciron-Cup-Bvervain
38	CP3-4-Switch-Pcord-BB-Indian-Cwrye-Ciron-Cup-Bvervai	38-CP3-4-Switch-Pcord-BB-Indian-Cwrye-Ciron-Cu	Prairie Cordgrass	Spartina pectinata	8.00	0.5	1.3	Grass	N		CP3-4		Switch-Pcord-BB-Indian-Cwrye-Ciron-Cup-Bvervain
38	CP3-4-Switch-Pcord-BB-Indian-Cwrye-Ciron-Cup-Bvervai	38-CP3-4-Switch-Pcord-BB-Indian-Cwrye-Ciron-Cu	Big Bluestem	Andropogon gerardii	16.00	1	3.8	Grass	N	X	CP3-4		Switch-Pcord-BB-Indian-Cwrye-Ciron-Cup-Bvervain
38	CP3-4-Switch-Pcord-BB-Indian-Cwrye-Ciron-Cup-Bvervai	38-CP3-4-Switch-Pcord-BB-Indian-Cwrye-Ciron-Cu	Indiangrass	Sorghastrum nutans	16.00	1	4.5	Grass	N	X	CP3-4		Switch-Pcord-BB-Indian-Cwrye-Ciron-Cup-Bvervain
38	CP3-4-Switch-Pcord-BB-Indian-Cwrye-Ciron-Cup-Bvervai	38-CP3-4-Switch-Pcord-BB-Indian-Cwrye-Ciron-Cu	Canada Wildrye	Elymus canadensis	16.00	1	2	Grass	N	X	CP3-4		Switch-Pcord-BB-Indian-Cwrye-Ciron-Cup-Bvervain
38	CP3-4-Switch-Pcord-BB-Indian-Cwrye-Ciron-Cup-Bvervai	38-CP3-4-Switch-Pcord-BB-Indian-Cwrye-Ciron-Cu	Common Ironweed	Vernonia fasciculata	1.00	0.0625	0.5	Forb	N	X	CP3-4		Switch-Pcord-BB-Indian-Cwrye-Ciron-Cup-Bvervain
38	CP3-4-Switch-Pcord-BB-Indian-Cwrye-Ciron-Cup-Bvervai	38-CP3-4-Switch-Pcord-BB-Indian-Cwrye-Ciron-Cu	Cupplant	Silphium perfoliatum	2.00	0.125	0.1	Forb	N	X	CP3-4		Switch-Pcord-BB-Indian-Cwrye-Ciron-Cup-Bvervain
38	CP3-4-Switch-Pcord-BB-Indian-Cwrye-Ciron-Cup-Bvervai	38-CP3-4-Switch-Pcord-BB-Indian-Cwrye-Ciron-Cu	Blue Vervain	Verbena hastata	1.00	0.0625	2.2	Forb	N	X	CP3-4		Switch-Pcord-BB-Indian-Cwrye-Ciron-Cup-Bvervain
38	CP3-5-Switch-Pcord-BB-Cwrye-Berg-Ycone-NEaster	38-CP3-5-Switch-Pcord-BB-Cwrye-Berg-Ycone-NEa	Switchgrass	Panicum virgatum	32.00	2	17.9	Grass	N	X	CP3-5		Switch-Pcord-BB-Cwrye-Berg-Ycone-NEaster
38	CP3-5-Switch-Pcord-BB-Cwrye-Berg-Ycone-NEaster	38-CP3-5-Switch-Pcord-BB-Cwrye-Berg-Ycone-NEa	Prairie Cordgrass	Spartina pectinata	4.00	0.25	0.7	Grass	N		CP3-5		Switch-Pcord-BB-Cwrye-Berg-Ycone-NEaster
38	CP3-5-Switch-Pcord-BB-Cwrye-Berg-Ycone-NEaster	38-CP3-5-Switch-Pcord-BB-Cwrye-Berg-Ycone-NEa	Big Bluestem	Andropogon gerardii	16.00	1	3.8	Grass	N	X	CP3-5		Switch-Pcord-BB-Cwrye-Berg-Ycone-NEaster
38	CP3-5-Switch-Pcord-BB-Cwrye-Berg-Ycone-NEaster	38-CP3-5-Switch-Pcord-BB-Cwrye-Berg-Ycone-NEa	Canada Wildrye	Elymus canadensis	16.00	1	2	Grass	N	X	CP3-5		Switch-Pcord-BB-Cwrye-Berg-Ycone-NEaster
38	CP3-5-Switch-Pcord-BB-Cwrye-Berg-Ycone-NEaster	38-CP3-5-Switch-Pcord-BB-Cwrye-Berg-Ycone-NEa	Bergamot	Monarda fistulosa	1.00	0.0625	1.8	Forb	N	X	CP3-5		Switch-Pcord-BB-Cwrye-Berg-Ycone-NEaster

38	CP3-5-Switch-Pcord-BB-Cwrye-Berg-Ycone-NEaster	38-CP3-5-Switch-Pcord-BB-Cwrye-Berg-Ycone-NEa	Yellow Coneflower	Ratibida pinnata	1.00	0.0625	0.7	Forb	N	X	CP3-5		Switch-Pcord-BB-Cwrye-Berg-Ycone-NEaster
38	CP3-5-Switch-Pcord-BB-Cwrye-Berg-Ycone-NEaster	38-CP3-5-Switch-Pcord-BB-Cwrye-Berg-Ycone-NEa	New England Aster	Symphyotrichum novae	1.00	0.0625	1.7	Forb	N	X	CP3-5		Switch-Pcord-BB-Cwrye-Berg-Ycone-NEaster
STD	**Mix #**	**std-mix**	**Common Name**	**Scientific Name**	**(oz./A)**	**(lbs./A)**	**Seeds/Square Foot**	**Type**	**Native**	**(Y/N)**	**I**	**Mix No.**	**MR**
									N				

STD	Mix #	std-mix	Common Name	Scientific Name	PLS (oz./A)	PLS (lbs./A)	Seeds/Square Foot	Type	Intro / Native	Poll. (Y/N)	Mix No.	MR	Mix Components
		LEAVE THIS ROW AS IS							N	Y			
2	CP2_1-BB-Switch-Cmilkvetch-Besus-Ycone	2-CP2_1-BB-Switch-Cmilkvetch-Besus-Ycone	Big Bluestem	Andropogon gerardii	48	3		Grass	N	N	CP2_1		BB-Switch-Cmilkvetch-Besus-Ycone
2	CP2_1-BB-Switch-Cmilkvetch-Besus-Ycone	2-CP2_1-BB-Switch-Cmilkvetch-Besus-Ycone	Switchgrass	Panicum virgatum	16	1		Grass	N	N	CP2_1		BB-Switch-Cmilkvetch-Besus-Ycone
2	CP2_1-BB-Switch-Cmilkvetch-Besus-Ycone	2-CP2_1-BB-Switch-Cmilkvetch-Besus-Ycone	Canada Milkvetch	Astragalus canadensis	2	0.125		Legume	N	N	CP2_1		BB-Switch-Cmilkvetch-Besus-Ycone
2	CP2_1-BB-Switch-Cmilkvetch-Besus-Ycone	2-CP2_1-BB-Switch-Cmilkvetch-Besus-Ycone	Black-eyed Susan	Rudbeckia hirta	1	0.0625		Forb	N	N	CP2_1		BB-Switch-Cmilkvetch-Besus-Ycone
2	CP2_1-BB-Switch-Cmilkvetch-Besus-Ycone	2-CP2_1-BB-Switch-Cmilkvetch-Besus-Ycone	Yellow Coneflower	Ratibida pinnata	1	0.0625		Forb	N	N	CP2_1		BB-Switch-Cmilkvetch-Besus-Ycone
2	CP2_2-BB-Switch-Ttrefoil-Besus-Ycone	2-CP2_2-BB-Switch-Ttrefoil-Besus-Ycone	Big Bluestem	Andropogon gerardii	48	3		Grass	N	N	CP2_2		BB-Switch-Ttrefoil-Besus-Ycone
2	CP2_2-BB-Switch-Ttrefoil-Besus-Ycone	2-CP2_2-BB-Switch-Ttrefoil-Besus-Ycone	Switchgrass	Panicum virgatum	16	1		Grass	N	N	CP2_2		BB-Switch-Ttrefoil-Besus-Ycone
2	CP2_2-BB-Switch-Ttrefoil-Besus-Ycone	2-CP2_2-BB-Switch-Ttrefoil-Besus-Ycone	Showy Tick Trefoil	Desmodium canadense	6	0.375		Legume	N	N	CP2_2		BB-Switch-Ttrefoil-Besus-Ycone
2	CP2_2-BB-Switch-Ttrefoil-Besus-Ycone	2-CP2_2-BB-Switch-Ttrefoil-Besus-Ycone	Black-eyed Susan	Rudbeckia hirta	1	0.0625		Forb	N	N	CP2_2		BB-Switch-Ttrefoil-Besus-Ycone
2	CP2_2-BB-Switch-Ttrefoil-Besus-Ycone	2-CP2_2-BB-Switch-Ttrefoil-Besus-Ycone	Yellow Coneflower	Ratibida pinnata	1	0.0625		Forb	N	N	CP2_2		BB-Switch-Ttrefoil-Besus-Ycone
2	CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Yco	2-CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-B	Little Bluestem	Schizachyrium scoparium	24	1.5		Grass	N	N	CP2_3		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
2	CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Yco	2-CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-B	Sideoats Grama	Bouteloua curtipendula	16	1		Grass	N	N	CP2_3		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
2	CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Yco	2-CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-B	Big Bluestem	Andropogon gerardii	8	0.5		Grass	N	N	CP2_3		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
2	CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Yco	2-CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-B	Indiangrass	Sorghastrum nutans	8	0.5		Grass	N	N	CP2_3		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
2	CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Yco	2-CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-B	Switchgrass	Panicum virgatum	8	0.5		Grass	N	N	CP2_3		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
2	CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Yco	2-CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-B	Purple Prairie Clover	Dalea purpurea	2	0.125		Legume	N	N	CP2_3		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
2	CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Yco	2-CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-B	Bergamot	Monarda fistulosa	1	0.0625		Forb	N	N	CP2_3		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
2	CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Yco	2-CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-B	Yellow Coneflower	Ratibida pinnata	1	0.0625		Forb	N	N	CP2_3		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
2	CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone	2-CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus	Little Bluestem	Schizachyrium scoparium	20	1.25		Grass	N	N	CP2_4		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
2	CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone	2-CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus	Canada Wildrye	Elymus canadensis	16	1		Grass	N	N	CP2_4		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
2	CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone	2-CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus	Indiangrass	Sorghastrum nutans	16	1		Grass	N	N	CP2_4		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
2	CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone	2-CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus	Big Bluestem	Andropogon gerardii	8	0.5		Grass	N	N	CP2_4		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
2	CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone	2-CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus	Switchgrass	Panicum virgatum	8	0.5		Grass	N	N	CP2_4		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
2	CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone	2-CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus	Bergamot	Monarda fistulosa	1	0.0625		Forb	N	N	CP2_4		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
2	CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone	2-CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus	Black-eyed Susan	Rudbeckia hirta	1	0.0625		Forb	N	N	CP2_4		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
2	CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone	2-CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus	Yellow Coneflower	Ratibida pinnata	1	0.0625		Forb	N	N	CP2_4		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
2	CP2_5-BB-Sgrama-Indian-PPclover-Sgrod-Ycone	2-CP2_5-BB-Sgrama-Indian-PPclover-Sgrod-Ycon	Big Bluestem	Andropogon gerardii	24	1.5		Grass	N	N	CP2_5		BB-Sgrama-Indian-PPclover-Sgrod-Ycone
2	CP2_5-BB-Sgrama-Indian-PPclover-Sgrod-Ycone	2-CP2_5-BB-Sgrama-Indian-PPclover-Sgrod-Ycon	Sideoats Grama	Bouteloua curtipendula	24	1.5		Grass	N	N	CP2_5		BB-Sgrama-Indian-PPclover-Sgrod-Ycone
2	CP2_5-BB-Sgrama-Indian-PPclover-Sgrod-Ycone	2-CP2_5-BB-Sgrama-Indian-PPclover-Sgrod-Ycon	Indiangrass	Sorghastrum nutans	8	0.5		Grass	N	N	CP2_5		BB-Sgrama-Indian-PPclover-Sgrod-Ycone
2	CP2_5-BB-Sgrama-Indian-PPclover-Sgrod-Ycone	2-CP2_5-BB-Sgrama-Indian-PPclover-Sgrod-Ycon	Purple Prairie Clover	Dalea purpurea	2	0.125		Legume	N	N	CP2_5		BB-Sgrama-Indian-PPclover-Sgrod-Ycone
2	CP2_5-BB-Sgrama-Indian-PPclover-Sgrod-Ycone	2-CP2_5-BB-Sgrama-Indian-PPclover-Sgrod-Ycon	Stiff Goldenrod	Oligoneuron rigidum	1	0.0625		Forb	N	N	CP2_5		BB-Sgrama-Indian-PPclover-Sgrod-Ycone
2	CP2_5-BB-Sgrama-Indian-PPclover-Sgrod-Ycone	2-CP2_5-BB-Sgrama-Indian-PPclover-Sgrod-Ycon	Yellow Coneflower	Ratibida pinnata	1	0.0625		Forb	N	N	CP2_5		BB-Sgrama-Indian-PPclover-Sgrod-Ycone
2	CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ci	2-CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bve	Big Bluestem	Andropogon gerardii	16	1		Grass	N	N	CP2_6		BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
2	CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ci	2-CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bve	Canada Wildrye	Elymus canadensis	16	1		Grass	N	N	CP2_6		BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
2	CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ci	2-CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bve	Indiangrass	Sorghastrum nutans	16	1		Grass	N	N	CP2_6		BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
2	CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ci	2-CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bve	Switchgrass	Panicum virgatum	16	1		Grass	N	N	CP2_6		BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
2	CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ci	2-CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bve	Prairie Cordgrass	Spartina pectinata	8	0.5		Grass	N	N	CP2_6		BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
2	CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ci	2-CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bve	Cupplant	Silphium perfoliatum	2	0.125		Forb	N	N	CP2_6		BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron

2	CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ci	2-CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bve	Blue Vervain	Verbena hastata	1	0.0625		Forb	N	N	CP2_6	BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
2	CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ci	2-CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bve	Common Ironweed	Vernonia fasciculata	1	0.0625		Forb	N	N	CP2_6	BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
2	CP2_7-Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone	2-CP2_7-Switch-BB-Cwrye-Pcord-Berg-NEaster-Y	Switchgrass	Panicum virgatum	32	2		Grass	N	N	CP2_7	Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
2	CP2_7-Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone	2-CP2_7-Switch-BB-Cwrye-Pcord-Berg-NEaster-Y	Big Bluestem	Andropogon gerardii	16	1		Grass	N	N	CP2_7	Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
2	CP2_7-Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone	2-CP2_7-Switch-BB-Cwrye-Pcord-Berg-NEaster-Y	Canada Wildrye	Elymus canadensis	16	1		Grass	N	N	CP2_7	Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
2	CP2_7-Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone	2-CP2_7-Switch-BB-Cwrye-Pcord-Berg-NEaster-Y	Prairie Cordgrass	Spartina pectinata	4	0.25		Grass	N	N	CP2_7	Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
2	CP2_7-Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone	2-CP2_7-Switch-BB-Cwrye-Pcord-Berg-NEaster-Y	Bergamot	Monarda fistulosa	1	0.0625		Forb	N	N	CP2_7	Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
2	CP2_7-Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone	2-CP2_7-Switch-BB-Cwrye-Pcord-Berg-NEaster-Y	New England Aster	Symphyotrichum novae-a	1	0.0625		Forb	N	N	CP2_7	Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
2	CP2_7-Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone	2-CP2_7-Switch-BB-Cwrye-Pcord-Berg-NEaster-Y	Yellow Coneflower	Ratibida pinnata	1	0.0625		Forb	N	N	CP2_7	Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
4	CP4D-5-Indian-BB-Switch-Cmilkvetch-Besus-Ycone	4-CP4D-5-Indian-BB-Switch-Cmilkvetch-Besus-Yc	Indiangrass	Sorghastrum nutans	48	3		Grass	N	N	CP4D-5	Indian-BB-Switch-Cmilkvetch-Besus-Ycone
4	CP4D-5-Indian-BB-Switch-Cmilkvetch-Besus-Ycone	4-CP4D-5-Indian-BB-Switch-Cmilkvetch-Besus-Yc	Big Bluestem	Andropogon gerardii	16	1		Grass	N	N	CP4D-5	Indian-BB-Switch-Cmilkvetch-Besus-Ycone
4	CP4D-5-Indian-BB-Switch-Cmilkvetch-Besus-Ycone	4-CP4D-5-Indian-BB-Switch-Cmilkvetch-Besus-Yc	Switchgrass	Panicum virgatum	16	1		Grass	N	N	CP4D-5	Indian-BB-Switch-Cmilkvetch-Besus-Ycone
4	CP4D-5-Indian-BB-Switch-Cmilkvetch-Besus-Ycone	4-CP4D-5-Indian-BB-Switch-Cmilkvetch-Besus-Yc	Canada Milkvetch	Astragalus canadensis	2	0.125		Legume	N	N	CP4D-5	Indian-BB-Switch-Cmilkvetch-Besus-Ycone
4	CP4D-5-Indian-BB-Switch-Cmilkvetch-Besus-Ycone	4-CP4D-5-Indian-BB-Switch-Cmilkvetch-Besus-Yc	Black-eyed Susan	Rudbeckia hirta	1	0.0625		Forb	N	N	CP4D-5	Indian-BB-Switch-Cmilkvetch-Besus-Ycone
4	CP4D-5-Indian-BB-Switch-Cmilkvetch-Besus-Ycone	4-CP4D-5-Indian-BB-Switch-Cmilkvetch-Besus-Yc	Yellow Coneflower	Ratibida pinnata	1	0.0625		Forb	N	N	CP4D-5	Indian-BB-Switch-Cmilkvetch-Besus-Ycone
4	CP4D-6-Indian-BB-Switch-LB-Cmilkvetch-Besus-Ycone	4-CP4D-6-Indian-BB-Switch-LB-Cmilkvetch-Besus	Indiangrass	Sorghastrum nutans	48	3		Grass	N	N	CP4D-6	Indian-BB-Switch-LB-Cmilkvetch-Besus-Ycone
4	CP4D-6-Indian-BB-Switch-LB-Cmilkvetch-Besus-Ycone	4-CP4D-6-Indian-BB-Switch-LB-Cmilkvetch-Besus	Big Bluestem	Andropogon gerardii	16	1		Grass	N	N	CP4D-6	Indian-BB-Switch-LB-Cmilkvetch-Besus-Ycone
4	CP4D-6-Indian-BB-Switch-LB-Cmilkvetch-Besus-Ycone	4-CP4D-6-Indian-BB-Switch-LB-Cmilkvetch-Besus	Switchgrass	Panicum virgatum	16	1		Grass	N	N	CP4D-6	Indian-BB-Switch-LB-Cmilkvetch-Besus-Ycone
4	CP4D-6-Indian-BB-Switch-LB-Cmilkvetch-Besus-Ycone	4-CP4D-6-Indian-BB-Switch-LB-Cmilkvetch-Besus	Little Bluestem	Schizachyrium scoparium	16	1		Grass	N	N	CP4D-6	Indian-BB-Switch-LB-Cmilkvetch-Besus-Ycone
4	CP4D-6-Indian-BB-Switch-LB-Cmilkvetch-Besus-Ycone	4-CP4D-6-Indian-BB-Switch-LB-Cmilkvetch-Besus	Canada Milkvetch	Astragalus canadensis	2	0.125		Legume	N	N	CP4D-6	Indian-BB-Switch-LB-Cmilkvetch-Besus-Ycone
4	CP4D-6-Indian-BB-Switch-LB-Cmilkvetch-Besus-Ycone	4-CP4D-6-Indian-BB-Switch-LB-Cmilkvetch-Besus	Black-eyed Susan	Rudbeckia hirta	1	0.0625		Forb	N	N	CP4D-6	Indian-BB-Switch-LB-Cmilkvetch-Besus-Ycone
4	CP4D-6-Indian-BB-Switch-LB-Cmilkvetch-Besus-Ycone	4-CP4D-6-Indian-BB-Switch-LB-Cmilkvetch-Besus	Yellow Coneflower	Ratibida pinnata	1	0.0625		Forb	N	N	CP4D-6	Indian-BB-Switch-LB-Cmilkvetch-Besus-Ycone
4	CP4D-7-Indian-BB-Switch-PPclover-Besus-Ycone	4-CP4D-7-Indian-BB-Switch-PPclover-Besus-Ycon	Indiangrass	Sorghastrum nutans	48	3		Grass	N	N	CP4D-7	Indian-BB-Switch-PPclover-Besus-Ycone
4	CP4D-7-Indian-BB-Switch-PPclover-Besus-Ycone	4-CP4D-7-Indian-BB-Switch-PPclover-Besus-Ycon	Big Bluestem	Andropogon gerardii	16	1		Grass	N	N	CP4D-7	Indian-BB-Switch-PPclover-Besus-Ycone
4	CP4D-7-Indian-BB-Switch-PPclover-Besus-Ycone	4-CP4D-7-Indian-BB-Switch-PPclover-Besus-Ycon	Switchgrass	Panicum virgatum	16	1		Grass	N	N	CP4D-7	Indian-BB-Switch-PPclover-Besus-Ycone
4	CP4D-7-Indian-BB-Switch-PPclover-Besus-Ycone	4-CP4D-7-Indian-BB-Switch-PPclover-Besus-Ycon	Purple Prairie Clover	Dalea purpurea	2	0.125		Legume	N	N	CP4D-7	Indian-BB-Switch-PPclover-Besus-Ycone
4	CP4D-7-Indian-BB-Switch-PPclover-Besus-Ycone	4-CP4D-7-Indian-BB-Switch-PPclover-Besus-Ycon	Black-eyed Susan	Rudbeckia hirta	1	0.0625		Forb	N	N	CP4D-7	Indian-BB-Switch-PPclover-Besus-Ycone
4	CP4D-7-Indian-BB-Switch-PPclover-Besus-Ycone	4-CP4D-7-Indian-BB-Switch-PPclover-Besus-Ycon	Yellow Coneflower	Ratibida pinnata	1	0.0625		Forb	N	N	CP4D-7	Indian-BB-Switch-PPclover-Besus-Ycone
4	CP4D-8-Indian-BB-LB-Switch-PPclover-Besus-Ycone	4-CP4D-8-Indian-BB-LB-Switch-PPclover-Besus-Y	Indiangrass	Sorghastrum nutans	48	3		Grass	N	N	CP4D-8	Indian-BB-LB-Switch-PPclover-Besus-Ycone
4	CP4D-8-Indian-BB-LB-Switch-PPclover-Besus-Ycone	4-CP4D-8-Indian-BB-LB-Switch-PPclover-Besus-Y	Big Bluestem	Andropogon gerardii	16	1		Grass	N	N	CP4D-8	Indian-BB-LB-Switch-PPclover-Besus-Ycone
4	CP4D-8-Indian-BB-LB-Switch-PPclover-Besus-Ycone	4-CP4D-8-Indian-BB-LB-Switch-PPclover-Besus-Y	Little Bluestem	Schizachyrium scoparium	16	1		Grass	N	N	CP4D-8	Indian-BB-LB-Switch-PPclover-Besus-Ycone
4	CP4D-8-Indian-BB-LB-Switch-PPclover-Besus-Ycone	4-CP4D-8-Indian-BB-LB-Switch-PPclover-Besus-Y	Switchgrass	Panicum virgatum	16	1		Grass	N	N	CP4D-8	Indian-BB-LB-Switch-PPclover-Besus-Ycone
4	CP4D-8-Indian-BB-LB-Switch-PPclover-Besus-Ycone	4-CP4D-8-Indian-BB-LB-Switch-PPclover-Besus-Y	Purple Prairie Clover	Dalea purpurea	2	0.125		Legume	N	N	CP4D-8	Indian-BB-LB-Switch-PPclover-Besus-Ycone
4	CP4D-8-Indian-BB-LB-Switch-PPclover-Besus-Ycone	4-CP4D-8-Indian-BB-LB-Switch-PPclover-Besus-Y	Black-eyed Susan	Rudbeckia hirta	1	0.0625		Forb	N	N	CP4D-8	Indian-BB-LB-Switch-PPclover-Besus-Ycone
4	CP4D-8-Indian-BB-LB-Switch-PPclover-Besus-Ycone	4-CP4D-8-Indian-BB-LB-Switch-PPclover-Besus-Y	Yellow Coneflower	Ratibida pinnata	1	0.0625		Forb	N	N	CP4D-8	Indian-BB-LB-Switch-PPclover-Besus-Ycone
4	CP4D-9-Indian-BB-Switch-PPclover-Berg-Ycone	4-CP4D-9-Indian-BB-Switch-PPclover-Berg-Ycone	Indiangrass	Sorghastrum nutans	48	3		Grass	N	N	CP4D-9	Indian-BB-Switch-PPclover-Berg-Ycone
4	CP4D-9-Indian-BB-Switch-PPclover-Berg-Ycone	4-CP4D-9-Indian-BB-Switch-PPclover-Berg-Ycone	Big Bluestem	Andropogon gerardii	16	1		Grass	N	N	CP4D-9	Indian-BB-Switch-PPclover-Berg-Ycone
4	CP4D-9-Indian-BB-Switch-PPclover-Berg-Ycone	4-CP4D-9-Indian-BB-Switch-PPclover-Berg-Ycone	Switchgrass	Panicum virgatum	16	1		Grass	N	N	CP4D-9	Indian-BB-Switch-PPclover-Berg-Ycone
4	CP4D-9-Indian-BB-Switch-PPclover-Berg-Ycone	4-CP4D-9-Indian-BB-Switch-PPclover-Berg-Ycone	Purple Prairie Clover	Dalea purpurea	2	0.125		Legume	N	N	CP4D-9	Indian-BB-Switch-PPclover-Berg-Ycone
4	CP4D-9-Indian-BB-Switch-PPclover-Berg-Ycone	4-CP4D-9-Indian-BB-Switch-PPclover-Berg-Ycone	Bergamot	Monarda fistulosa	1	0.0625		Forb	N	N	CP4D-9	Indian-BB-Switch-PPclover-Berg-Ycone
4	CP4D-9-Indian-BB-Switch-PPclover-Berg-Ycone	4-CP4D-9-Indian-BB-Switch-PPclover-Berg-Ycone	Yellow Coneflower	Ratibida pinnata	1	0.0625		Forb	N	N	CP4D-9	Indian-BB-Switch-PPclover-Berg-Ycone
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Sv	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover	Little Bluestem	Schizachyrium scoparium	24	1.5		Grass	N	N	CP25-D	LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swort-Hvervain-Lpla
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Sv	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover	Sideoats Grama	Bouteloua curtipendula	24	1.5		Grass	N	N	CP25-D	LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swort-Hvervain-Lpla
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Sv	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover	Indiangrass	Sorghastrum nutans	8	0.5		Grass	N	N	CP25-D	LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swort-Hvervain-Lpla
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Sv	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover	Big Bluestem	Andropogon gerardii	4	0.25		Grass	N	N	CP25-D	LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swort-Hvervain-Lpla
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Sv	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover	Prairie Junegrass	Koeleria macrantha	2	0.125		Grass	N	N	CP25-D	LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swort-Hvervain-Lpla
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Sv	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover	Purple Prairie Clover	Dalea purpurea	2	0.125		Legume	N	N	CP25-D	LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swort-Hvervain-Lpla
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Sv	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover	Sand Dropseed	Sporobolus cryptandrus	2	0.125		Grass	N	N	CP25-D	LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swort-Hvervain-Lpla
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Sv	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover	Spiderwort	Tradescantia ohiensis	1	0.0625		Forb	N	N	CP25-D	LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swort-Hvervain-Lpla
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Sv	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover	Hoary Vervain	Verbena stricta	0.5	0.03125		Forb	N	N	CP25-D	LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swort-Hvervain-Lpla
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Sv	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover	Leadplant	Amorpha canescens	0.5	0.03125		Legume	N	N	CP25-D	LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swort-Hvervain-Lpla
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Sv	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover	Prairie Tickseed	Coreopsis palmata	0.5	0.03125		Forb	N	N	CP25-D	LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swort-Hvervain-Lpla
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Sv	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover	Silky Aster	Symphyotrichum pratens	0.5	0.03125		Forb	N	N	CP25-D	LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swort-Hvervain-Lpla
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Sv	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover	Stiff Goldenrod	Oligoneuron rigidum	0.5	0.03125		Forb	N	N	CP25-D	LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swort-Hvervain-Lpla
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Sv	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover	Yellow Coneflower	Ratibida pinnata	1	0.03125		Forb	N	N	CP25-D	LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swort-Hvervain-Lpla
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Sv	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover	Prairie Cinquefoil	Potentilla arguta	0.25	0.015625		Forb	N	N	CP25-D	LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swort-Hvervain-Lpla
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Sv	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover	Spotted Mint	Monarda punctata	0	0.015625		Forb	N	N	CP25-D	LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swort-Hvervain-Lpla
25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclo	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pd	Little Bluestem	Schizachyrium scoparium	24	1.5		Grass	N	N	CP25-DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-Bi
25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclo	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pd	Sideoats Grama	Bouteloua curtipendula	24	1.5		Grass	N	N	CP25-DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-Bi
25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclo	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pd	Indiangrass	Sorghastrum nutans	8	0.5		Grass	N	N	CP25-DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-Bi
25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclo	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pd	Switchgrass	Panicum virgatum	4	0.25		Grass	N	N	CP25-DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-Bi
25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclo	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pd	Prairie Junegrass	Koeleria macrantha	2	0.125		Grass	N	N	CP25-DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-Bi
25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclo	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pd	Prairie Dropseed	Sporobolus heterolepis	2	0.125		Grass	N	N	CP25-DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-Bi
25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclo	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pd	Purple Prairie Clover	Dalea purpurea	2	0.125		Legume	N	N	CP25-DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-Bi
25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclo	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pd	Round-Headed Bushclover	Lespedeza capitata	2	0.125		Legume	N	N	CP25-DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-Bi
25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclo	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pd	Bergamot	Monarda fistulosa	1	0.0625		Forb	N	N	CP25-DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-Bi
25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclo	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pd	Spiderwort	Tradescantia ohiensis	1	0.0625		Forb	N	N	CP25-DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-Bi
25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclo	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pd	Yellow Coneflower	Ratibida pinnata	1	0.0625		Forb	N	N	CP25-DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-Bi
25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclo	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pd	Leadplant	Amorpha canescens	0.5	0.03125		Legume	N	N	CP25-DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-Bi
25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclo	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pd	Rough Blazing Star	Liatris aspera	1	0.03125		Forb	N	N	CP25-DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-Bi
25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclo	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pd	Sky-Blue Aster	Symphyotrichum oolenta	1	0.03125		Forb	N	N	CP25-DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-Bi

25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclo	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pd	Stiff Goldenrod	Oligoneuron rigidum	0.5	0.03125		Forb	N	N	CP25-DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclo	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pd	Prairie Cinquefoil	Potentilla arguta	0.25	0.015625		Forb	N	N	CP25-DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pju	Little Bluestem	Schizachyrium scoparium	24	1.5		Grass	N	N	CP25-KBB	LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-PPclover-PPCone-Lp
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pju	Sideoats Grama	Bouteloua curtipendula	24	1.5		Grass	N	N	CP25-KBB	LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-PPclover-PPCone-Lp
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pju	Indiangrass	Sorghastrum nutans	8	0.5		Grass	N	N	CP25-KBB	LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-PPclover-PPCone-Lp
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pju	Switchgrass	Panicum virgatum	8	0.5		Grass	N	N	CP25-KBB	LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-PPclover-PPCone-Lp
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pju	Wild Lupine	Lupinus perennis	3	0.1875		Legume	N	N	CP25-KBB	LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-PPclover-PPCone-Lp
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pju	Prairie Junegrass	Koeleria macrantha	2	0.125		Grass	N	N	CP25-KBB	LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-PPclover-PPCone-Lp
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pju	Prairie Dropseed	Sporobolus heterolepis	2	0.125		Grass	N	N	CP25-KBB	LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-PPclover-PPCone-Lp
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pju	Purple Prairie Clover	Dalea purpurea	2	0.125		Legume	N	N	CP25-KBB	LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-PPclover-PPCone-Lp
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pju	Pale Purple Coneflower	Echinacea pallida	1	0.0625		Forb	N	N	CP25-KBB	LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-PPclover-PPCone-Lp
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pju	Leadplant	Amorpha canescens	0.5	0.03125		Legume	N	N	CP25-KBB	LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-PPclover-PPCone-Lp
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pju	Rough Blazing Star	Liatris aspera	0.5	0.03125		Forb	N	N	CP25-KBB	LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-PPclover-PPCone-Lp
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pju	Stiff Goldenrod	Oligoneuron rigidum	0.5	0.03125		Forb	N	N	CP25-KBB	LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-PPclover-PPCone-Lp
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pju	Yellow Coneflower	Ratibida pinnata	1	0.03125		Forb	N	N	CP25-KBB	LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-PPclover-PPCone-Lp
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pju	Bergamot	Monarda fistulosa	0	0.015625		Forb	N	N	CP25-KBB	LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-PPclover-PPCone-Lp
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pju	Prairie Cinquefoil	Potentilla arguta	0.25	0.015625		Forb	N	N	CP25-KBB	LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-PPclover-PPCone-Lp
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pju	Sky-Blue Aster	Symphyotrichum oolenta	0.25	0.015625		Forb	N	N	CP25-KBB	LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-PPclover-PPCone-Lp
25	CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzsta	25-CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesu	Little Bluestem	Schizachyrium scoparium	24	1.5		Grass	N	N	CP25-M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
25	CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzsta	25-CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesu	Indiangrass	Sorghastrum nutans	16	1		Grass	N	N	CP25-M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
25	CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzsta	25-CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesu	Big Bluestem	Andropogon gerardii	8	0.5		Grass	N	N	CP25-M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
25	CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzsta	25-CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesu	Canada Wildrye	Elymus canadensis	8	0.5		Grass	N	N	CP25-M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
25	CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzsta	25-CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesu	Switchgrass	Panicum virgatum	8	0.5		Grass	N	N	CP25-M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
25	CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzsta	25-CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesu	Ox-eye Sunflower	Heliopsis helianthoides	1	0.0625		Forb	N	N	CP25-M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
25	CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzsta	25-CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesu	Prairie Blazing Star	Liatris pycnostachya	1	0.0625		Forb	N	N	CP25-M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
25	CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzsta	25-CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesu	Purple Prairie Clover	Dalea purpurea	1	0.0625		Legume	N	N	CP25-M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
25	CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzsta	25-CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesu	Rosinweed	Silphium integrifolium	1	0.0625		Forb	N	N	CP25-M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
25	CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzsta	25-CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesu	Bergamot	Monarda fistulosa	0.5	0.03125		Forb	N	N	CP25-M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
25	CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzsta	25-CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesu	Black-eyed Susan	Rudbeckia hirta	0.5	0.03125		Forb	N	N	CP25-M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
25	CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzsta	25-CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesu	New England Aster	Symphyotrichum novae-a	0.5	0.03125		Forb	N	N	CP25-M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
25	CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzsta	25-CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesu	Sky-Blue Aster	Symphyotrichum oolenta	0.5	0.03125		Forb	N	N	CP25-M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
25	CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzsta	25-CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesu	Yellow Coneflower	Ratibida pinnata	0.5	0.03125		Forb	N	N	CP25-M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
25	CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzsta	25-CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesu	Culver's Root	Veronicastrum virginicum	0	0.015625		Forb	N	N	CP25-M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsed	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgr	Canada Wildrye	Elymus canadensis	16	1		Grass	N	N	CP25-W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsed	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgr	Switchgrass	Panicum virgatum	16	1		Grass	N	N	CP25-W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsed	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgr	Indiangrass	Sorghastrum nutans	12	0.75		Grass	N	N	CP25-W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsed	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgr	Big Bluestem	Andropogon gerardii	8	0.5		Grass	N	N	CP25-W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsed	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgr	Prairie Cordgrass	Spartina pectinata	8	0.5		Grass	N	N	CP25-W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsed	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgr	Fowl Mannagrass	Glyceria striata	4	0.25		Grass	N	N	CP25-W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsed	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgr	Fox Sedge	Carex vulpinoidea	4	0.25		Sedge	N	N	CP25-W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsed	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgr	Cupplant	Silphium perfoliatum	2	0.125		Forb	N	N	CP25-W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsed	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgr	Showy Tick Trefoil	Desmodium canadense	2	0.125		Legume	N	N	CP25-W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsed	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgr	Blue Vervain	Verbena hastata	1	0.0625		Forb	N	N	CP25-W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsed	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgr	Golden Alexanders	Zizia aurea	1	0.0625		Forb	N	N	CP25-W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsed	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgr	Marsh Milkweed	Asclepias incarnata	1	0.0625		Forb	N	N	CP25-W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsed	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgr	Boneset	Eupatorium perfoliatum	0.5	0.03125		Forb	N	N	CP25-W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsed	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgr	Common Ironweed	Vernonia fasciculata	1	0.03125		Forb	N	N	CP25-W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsed	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgr	Joe-pye Weed	Eutrochium maculatum	1	0.03125		Forb	N	N	CP25-W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsed	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgr	Culver's Root	Veronicastrum virginicum	0	0.015625		Forb	N	N	CP25-W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
25	CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-WWInd	25-CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cu	Switchgrass	Panicum virgatum	24	1.5		Grass	N	N	CP25-WM	Switch-Cwrye-Indian-BB-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
25	CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-WWInd	25-CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cu	Canada Wildrye	Elymus canadensis	16	1		Grass	N	N	CP25-WM	Switch-Cwrye-Indian-BB-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
25	CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-WWInd	25-CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cu	Indiangrass	Sorghastrum nutans	12	0.75		Grass	N	N	CP25-WM	Switch-Cwrye-Indian-BB-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
25	CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-WWInd	25-CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cu	Big Bluestem	Andropogon gerardii	8	0.5		Grass	N	N	CP25-WM	Switch-Cwrye-Indian-BB-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
25	CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-WWInd	25-CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cu	Prairie Cordgrass	Spartina pectinata	4	0.25		Grass	N	N	CP25-WM	Switch-Cwrye-Indian-BB-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
25	CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-WWInd	25-CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cu	Cupplant	Silphium perfoliatum	2	0.125		Forb	N	N	CP25-WM	Switch-Cwrye-Indian-BB-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
25	CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-WWInd	25-CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cu	White wild indigo	Baptisia alba	1.5	0.09375		Legume	N	N	CP25-WM	Switch-Cwrye-Indian-BB-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
25	CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-WWInd	25-CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cu	Black-eyed Susan	Rudbeckia hirta	0.5	0.03125		Forb	N	N	CP25-WM	Switch-Cwrye-Indian-BB-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
25	CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-WWInd	25-CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cu	Common Ironweed	Vernonia fasciculata	0.5	0.03125		Forb	N	N	CP25-WM	Switch-Cwrye-Indian-BB-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
25	CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-WWInd	25-CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cu	Golden Alexanders	Zizia aurea	0.5	0.03125		Forb	N	N	CP25-WM	Switch-Cwrye-Indian-BB-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
25	CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-WWInd	25-CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cu	New England Aster	Symphyotrichum novae-a	0.5	0.03125		Forb	N	N	CP25-WM	Switch-Cwrye-Indian-BB-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
25	CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-WWInd	25-CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cu	Prairie Blazing Star	Liatris pycnostachya	0.5	0.03125		Forb	N	N	CP25-WM	Switch-Cwrye-Indian-BB-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
25	CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-WWInd	25-CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cu	Yellow Coneflower	Ratibida pinnata	0.5	0.03125		Forb	N	N	CP25-WM	Switch-Cwrye-Indian-BB-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
25	CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-WWInd	25-CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cu	Bergamot	Monarda fistulosa	0.25	0.015625		Forb	N	N	CP25-WM	Switch-Cwrye-Indian-BB-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
25	CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-WWInd	25-CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cu	Great St. John's Wort	Hypericum ascyron	0	0.015625		Forb	N	N	CP25-WM	Switch-Cwrye-Indian-BB-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
33	CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHbushclov	33-CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RH	Little Bluestem	Schizachyrium scoparium	32	2		Grass	N	N	CP33-1	LB-Sgrama-Cwrye-Indian-PPclover-RHbushclover-PPcone-Sgrod-\
33	CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHbushclov	33-CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RH	Sideoats Grama	Bouteloua curtipendula	32	2		Grass	N	N	CP33-1	LB-Sgrama-Cwrye-Indian-PPclover-RHbushclover-PPcone-Sgrod-\
33	CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHbushclov	33-CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RH	Canada Wildrye	Elymus canadensis	8	0.5		Grass	N	N	CP33-1	LB-Sgrama-Cwrye-Indian-PPclover-RHbushclover-PPcone-Sgrod-\
33	CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHbushclov	33-CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RH	Indiangrass	Sorghastrum nutans	8	0.5		Grass	N	N	CP33-1	LB-Sgrama-Cwrye-Indian-PPclover-RHbushclover-PPcone-Sgrod-\
33	CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHbushclov	33-CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RH	Purple Prairie Clover	Dalea purpurea	2	0.125		Legume	N	N	CP33-1	LB-Sgrama-Cwrye-Indian-PPclover-RHbushclover-PPcone-Sgrod-\
33	CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHbushclov	33-CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RH	Round-Headed Bushclover	Lespedeza capitata	2	0.125		Legume	N	N	CP33-1	LB-Sgrama-Cwrye-Indian-PPclover-RHbushclover-PPcone-Sgrod-\
33	CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHbushclov	33-CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RH	Purple Coneflower	Echinacea purpurea	1	0.0625		Forb	N	N	CP33-1	LB-Sgrama-Cwrye-Indian-PPclover-RHbushclover-PPcone-Sgrod-\

33	CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHbushclov	33-CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RH	Stiff Goldenrod	Oligoneuron rigidum	1	0.0625		Forb	N	N	CP33-1	LB-Sgrama-Cwrye-Indian-PPclover-RHbushclover-PPcone-Sgrod-\
33	CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHbushclov	33-CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RH	Fewleaf Sunflower	Helianthus occidentalis	1	0.0625		Forb	N	N	CP33-1	LB-Sgrama-Cwrye-Indian-PPclover-RHbushclover-PPcone-Sgrod-\
33	CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHbushclov	33-CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RH	Yellow Coneflower	Ratibida pinnata	1	0.0625		Forb	N	N	CP33-1	LB-Sgrama-Cwrye-Indian-PPclover-RHbushclover-PPcone-Sgrod-\
33	CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHbushclov	33-CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RH	Black-eyed Susan	Rudbeckia hirta	0.75	0.046875		Forb	N	N	CP33-1	LB-Sgrama-Cwrye-Indian-PPclover-RHbushclover-PPcone-Sgrod-\
33	CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rbl	33-CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPc	Little Bluestem	Schizachyrium scoparium	24	1.5		Grass	N	N	CP33-2	LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rblzstar-Besus-SkyAst
33	CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rbl	33-CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPc	Sideoats Grama	Bouteloua curtipendula	20	1.25		Grass	N	N	CP33-2	LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rblzstar-Besus-SkyAst
33	CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rbl	33-CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPc	Indiangrass	Sorghastrum nutans	16	1		Grass	N	N	CP33-2	LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rblzstar-Besus-SkyAst
33	CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rbl	33-CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPc	Canada Wildrye	Elymus canadensis	8	0.5		Grass	N	N	CP33-2	LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rblzstar-Besus-SkyAst
33	CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rbl	33-CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPc	Purple Coneflower	Echinacea purpurea	2	0.125		Forb	N	N	CP33-2	LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rblzstar-Besus-SkyAst
33	CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rbl	33-CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPc	Purple Prairie Clover	Dalea purpurea	2	0.125		Legume	N	N	CP33-2	LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rblzstar-Besus-SkyAst
33	CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rbl	33-CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPc	Rough Blazing Star	Liatris aspera	2	0.125		Forb	N	N	CP33-2	LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rblzstar-Besus-SkyAst
33	CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rbl	33-CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPc	Black-eyed Susan	Rudbeckia hirta	1	0.0625		Forb	N	N	CP33-2	LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rblzstar-Besus-SkyAst
33	CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rbl	33-CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPc	Sky-Blue Aster	Symphyotrichum oolenta	1	0.0625		Forb	N	N	CP33-2	LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rblzstar-Besus-SkyAst
33	CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rbl	33-CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPc	Stiff Goldenrod	Oligoneuron rigidum	1	0.0625		Forb	N	N	CP33-2	LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rblzstar-Besus-SkyAst
33	CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rbl	33-CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPc	Fewleaf Sunflower	Helianthus occidentalis	1	0.0625		Forb	N	N	CP33-2	LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rblzstar-Besus-SkyAst
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsed	Canada Wildrye	Elymus canadensis	16	1		Grass	N	N	CP38B-WPHRA	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsed	Indiangrass	Sorghastrum nutans	12	0.75		Grass	N	N	CP38B-WPHRA	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsed	Switchgrass	Panicum virgatum	12	0.75		Grass	N	N	CP38B-WPHRA	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsed	Big Bluestem	Andropogon gerardii	8	0.5		Grass	N	N	CP38B-WPHRA	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsed	Fox Sedge	Carex vulpinoidea	8	0.5		Sedge	N	N	CP38B-WPHRA	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsed	Prairie Cordgrass	Spartina pectinata	8	0.5		Grass	N	N	CP38B-WPHRA	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsed	Fowl Mannagrass	Glyceria striata	4	0.25		Grass	N	N	CP38B-WPHRA	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsed	Cupplant	Silphium perfoliatum	2	0.125		Forb	N	N	CP38B-WPHRA	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsed	Showy Tick Trefoil	Desmodium canadense	2	0.125		Legume	N	N	CP38B-WPHRA	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsed	Blue Vervain	Verbena hastata	1	0.0625		Forb	N	N	CP38B-WPHRA	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsed	Golden Alexanders	Zizia aurea	1	0.0625		Forb	N	N	CP38B-WPHRA	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsed	Marsh Milkweed	Asclepias incarnata	1	0.0625		Forb	N	N	CP38B-WPHRA	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsed	Boneset	Eupatorium perfoliatum	0.5	0.03125		Forb	N	N	CP38B-WPHRA	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsed	Common Ironweed	Vernonia fasciculata	1	0.03125		Forb	N	N	CP38B-WPHRA	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsed	Joe-pye Weed	Eutrochium maculatum	1	0.03125		Forb	N	N	CP38B-WPHRA	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsed	Culver's Root	Veronicastrum virginicum	0	0.015625		Forb	N	N	CP38B-WPHRA	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-B	38-CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-P	Little Bluestem	Schizachyrium scoparium	24	1.5		Grass	N	N	CP38E-CWGCA(CP2)D	LB-Sgrama-BB-Indian-PPclover-Besus-Rblzstar-Sgrod-Ycone
38	CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-B	38-CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-P	Sideoats Grama	Bouteloua curtipendula	24	1.5		Grass	N	N	CP38E-CWGCA(CP2)D	LB-Sgrama-BB-Indian-PPclover-Besus-Rblzstar-Sgrod-Ycone
38	CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-B	38-CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-P	Big Bluestem	Andropogon gerardii	8	0.5		Grass	N	N	CP38E-CWGCA(CP2)D	LB-Sgrama-BB-Indian-PPclover-Besus-Rblzstar-Sgrod-Ycone
38	CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-B	38-CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-P	Indiangrass	Sorghastrum nutans	8	0.5		Grass	N	N	CP38E-CWGCA(CP2)D	LB-Sgrama-BB-Indian-PPclover-Besus-Rblzstar-Sgrod-Ycone
38	CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-B	38-CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-P	Purple Prairie Clover	Dalea purpurea	2	0.125		Legume	N	N	CP38E-CWGCA(CP2)D	LB-Sgrama-BB-Indian-PPclover-Besus-Rblzstar-Sgrod-Ycone
38	CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-B	38-CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-P	Black-eyed Susan	Rudbeckia hirta	1	0.0625		Forb	N	N	CP38E-CWGCA(CP2)D	LB-Sgrama-BB-Indian-PPclover-Besus-Rblzstar-Sgrod-Ycone
38	CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-B	38-CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-P	Rough Blazing Star	Liatris aspera	1	0.0625		Forb	N	N	CP38E-CWGCA(CP2)D	LB-Sgrama-BB-Indian-PPclover-Besus-Rblzstar-Sgrod-Ycone
38	CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-B	38-CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-P	Stiff Goldenrod	Oligoneuron rigidum	1	0.0625		Forb	N	N	CP38E-CWGCA(CP2)D	LB-Sgrama-BB-Indian-PPclover-Besus-Rblzstar-Sgrod-Ycone
38	CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-B	38-CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-P	Yellow Coneflower	Ratibida pinnata	1	0.0625		Forb	N	N	CP38E-CWGCA(CP2)D	LB-Sgrama-BB-Indian-PPclover-Besus-Rblzstar-Sgrod-Ycone
38	CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-I	38-CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian	Little Bluestem	Schizachyrium scoparium	24	1.5		Grass	N	N	CP38E-CWGCA(CP2)DM	LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Besus-Rblzstar-Shwg
38	CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-I	38-CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian	Sideoats Grama	Bouteloua curtipendula	16	1		Grass	N	N	CP38E-CWGCA(CP2)DM	LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Besus-Rblzstar-Shwg
38	CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-I	38-CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian	Big Bluestem	Andropogon gerardii	8	0.5		Grass	N	N	CP38E-CWGCA(CP2)DM	LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Besus-Rblzstar-Shwg
38	CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-I	38-CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian	Indiangrass	Sorghastrum nutans	8	0.5		Grass	N	N	CP38E-CWGCA(CP2)DM	LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Besus-Rblzstar-Shwg
38	CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-I	38-CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian	Switchgrass	Panicum virgatum	8	0.5		Grass	N	N	CP38E-CWGCA(CP2)DM	LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Besus-Rblzstar-Shwg
38	CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-I	38-CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian	Purple Prairie Clover	Dalea purpurea	2	0.125		Legume	N	N	CP38E-CWGCA(CP2)DM	LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Besus-Rblzstar-Shwg
38	CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-I	38-CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian	Bergamot	Monarda fistulosa	1	0.0625		Forb	N	N	CP38E-CWGCA(CP2)DM	LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Besus-Rblzstar-Shwg
38	CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-I	38-CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian	Black-eyed Susan	Rudbeckia hirta	1	0.0625		Forb	N	N	CP38E-CWGCA(CP2)DM	LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Besus-Rblzstar-Shwg
38	CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-I	38-CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian	Rough Blazing Star	Liatris aspera	1	0.0625		Forb	N	N	CP38E-CWGCA(CP2)DM	LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Besus-Rblzstar-Shwg
38	CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-I	38-CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian	Showy Goldenrod	Solidago speciosa	1	0.0625		Forb	N	N	CP38E-CWGCA(CP2)DM	LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Besus-Rblzstar-Shwg
38	CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-I	38-CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian	Stiff Goldenrod	Oligoneuron rigidum	1	0.0625		Forb	N	N	CP38E-CWGCA(CP2)DM	LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Besus-Rblzstar-Shwg
38	CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-I	38-CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian	Yellow Coneflower	Ratibida pinnata	1	0.0625		Forb	N	N	CP38E-CWGCA(CP2)DM	LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Besus-Rblzstar-Shwg
38	CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Pbl	38-CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Little Bluestem	Schizachyrium scoparium	20	1.25		Grass	N	N	CP38E-CWGCA(CP2)M	LB-Cwrye-Indian-BB-Switch-Pblzstar-Rblzstar-Berg-Besus-Shwgro
38	CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Pbl	38-CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Canada Wildrye	Elymus canadensis	16	1		Grass	N	N	CP38E-CWGCA(CP2)M	LB-Cwrye-Indian-BB-Switch-Pblzstar-Rblzstar-Berg-Besus-Shwgro
38	CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Pbl	38-CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Indiangrass	Sorghastrum nutans	16	1		Grass	N	N	CP38E-CWGCA(CP2)M	LB-Cwrye-Indian-BB-Switch-Pblzstar-Rblzstar-Berg-Besus-Shwgro
38	CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Pbl	38-CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Big Bluestem	Andropogon gerardii	8	0.5		Grass	N	N	CP38E-CWGCA(CP2)M	LB-Cwrye-Indian-BB-Switch-Pblzstar-Rblzstar-Berg-Besus-Shwgro
38	CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Pbl	38-CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Switchgrass	Panicum virgatum	8	0.5		Grass	N	N	CP38E-CWGCA(CP2)M	LB-Cwrye-Indian-BB-Switch-Pblzstar-Rblzstar-Berg-Besus-Shwgro
38	CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Pbl	38-CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Prairie Blazing Star	Liatris pycnostachya	2	0.125		Forb	N	N	CP38E-CWGCA(CP2)M	LB-Cwrye-Indian-BB-Switch-Pblzstar-Rblzstar-Berg-Besus-Shwgro
38	CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Pbl	38-CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Rough Blazing Star	Liatris aspera	2	0.125		Forb	N	N	CP38E-CWGCA(CP2)M	LB-Cwrye-Indian-BB-Switch-Pblzstar-Rblzstar-Berg-Besus-Shwgro
38	CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Pbl	38-CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Bergamot	Monarda fistulosa	1	0.0625		Forb	N	N	CP38E-CWGCA(CP2)M	LB-Cwrye-Indian-BB-Switch-Pblzstar-Rblzstar-Berg-Besus-Shwgro
38	CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Pbl	38-CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Black-eyed Susan	Rudbeckia hirta	1	0.0625		Forb	N	N	CP38E-CWGCA(CP2)M	LB-Cwrye-Indian-BB-Switch-Pblzstar-Rblzstar-Berg-Besus-Shwgro
38	CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Pbl	38-CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Showy Goldenrod	Solidago speciosa	1	0.0625		Forb	N	N	CP38E-CWGCA(CP2)M	LB-Cwrye-Indian-BB-Switch-Pblzstar-Rblzstar-Berg-Besus-Shwgro
38	CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Pbl	38-CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Stiff Goldenrod	Oligoneuron rigidum	1	0.0625		Forb	N	N	CP38E-CWGCA(CP2)M	LB-Cwrye-Indian-BB-Switch-Pblzstar-Rblzstar-Berg-Besus-Shwgro
38	CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Pbl	38-CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Yellow Coneflower	Ratibida pinnata	1	0.0625		Forb	N	N	CP38E-CWGCA(CP2)M	LB-Cwrye-Indian-BB-Switch-Pblzstar-Rblzstar-Berg-Besus-Shwgro
38	CP38E-CWGCA(CP2)W-BB-Cwrye-Switch-Pcord-Cup-Bv	38-CP38E-CWGCA(CP2)W-BB-Cwrye-Switch-Pcor	Big Bluestem	Andropogon gerardii	16	1		Grass	N	N	CP38E-CWGCA(CP2)W	BB-Cwrye-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-CWGCA(CP2)W-BB-Cwrye-Switch-Pcord-Cup-Bv	38-CP38E-CWGCA(CP2)W-BB-Cwrye-Switch-Pcor	Canada Wildrye	Elymus canadensis	16	1		Grass	N	N	CP38E-CWGCA(CP2)W	BB-Cwrye-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-CWGCA(CP2)W-BB-Cwrye-Switch-Pcord-Cup-Bv	38-CP38E-CWGCA(CP2)W-BB-Cwrye-Switch-Pcor	Switchgrass	Panicum virgatum	16	1		Grass	N	N	CP38E-CWGCA(CP2)W	BB-Cwrye-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-CWGCA(CP2)W-BB-Cwrye-Switch-Pcord-Cup-Bv	38-CP38E-CWGCA(CP2)W-BB-Cwrye-Switch-Pcor	Prairie Cordgrass	Spartina pectinata	8	0.5		Grass	N	N	CP38E-CWGCA(CP2)W	BB-Cwrye-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-CWGCA(CP2)W-BB-Cwrye-Switch-Pcord-Cup-Bv	38-CP38E-CWGCA(CP2)W-BB-Cwrye-Switch-Pcor	Cupplant	Silphium perfoliatum	2	0.125		Forb	N	N	CP38E-CWGCA(CP2)W	BB-Cwrye-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-CWGCA(CP2)W-BB-Cwrye-Switch-Pcord-Cup-Bv	38-CP38E-CWGCA(CP2)W-BB-Cwrye-Switch-Pcor	Blue Vervain	Verbena hastata	1	0.0625		Forb	N	N	CP38E-CWGCA(CP2)W	BB-Cwrye-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-CWGCA(CP2)W-BB-Cwrye-Switch-Pcord-Cup-Bv	38-CP38E-CWGCA(CP2)W-BB-Cwrye-Switch-Pcor	Common Ironweed	Vernonia fasciculata	1	0.0625		Forb	N	N	CP38E-CWGCA(CP2)W	BB-Cwrye-Switch-Pcord-Cup-Bvervain-Ciron

38	CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Pblzs	38-CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pc	Switchgrass	Panicum virgatum	32	2		Grass	N	N	CP38E-CWGCA(CP2)WM	Switch-BB-Cwrye-Pcord-Pblzstar-Berg-Besus-NEaster-Ycone
38	CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Pblzs	38-CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pc	Big Bluestem	Andropogon gerardii	16	1		Grass	N	N	CP38E-CWGCA(CP2)WM	Switch-BB-Cwrye-Pcord-Pblzstar-Berg-Besus-NEaster-Ycone
38	CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Pblzs	38-CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pc	Canada Wildrye	Elymus canadensis	16	1		Grass	N	N	CP38E-CWGCA(CP2)WM	Switch-BB-Cwrye-Pcord-Pblzstar-Berg-Besus-NEaster-Ycone
38	CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Pblzs	38-CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pc	Prairie Cordgrass	Spartina pectinata	4	0.25		Grass	N	N	CP38E-CWGCA(CP2)WM	Switch-BB-Cwrye-Pcord-Pblzstar-Berg-Besus-NEaster-Ycone
38	CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Pblzs	38-CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pc	Prairie Blazing Star	Liatris pycnostachya	2	0.125		Forb	N	N	CP38E-CWGCA(CP2)WM	Switch-BB-Cwrye-Pcord-Pblzstar-Berg-Besus-NEaster-Ycone
38	CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Pblzs	38-CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pc	Bergamot	Monarda fistulosa	1	0.0625		Forb	N	N	CP38E-CWGCA(CP2)WM	Switch-BB-Cwrye-Pcord-Pblzstar-Berg-Besus-NEaster-Ycone
38	CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Pblzs	38-CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pc	Black-eyed Susan	Rudbeckia hirta	1	0.0625		Forb	N	N	CP38E-CWGCA(CP2)WM	Switch-BB-Cwrye-Pcord-Pblzstar-Berg-Besus-NEaster-Ycone
38	CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Pblzs	38-CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pc	New England Aster	Symphyotrichum novae-a	1	0.0625		Forb	N	N	CP38E-CWGCA(CP2)WM	Switch-BB-Cwrye-Pcord-Pblzstar-Berg-Besus-NEaster-Ycone
38	CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Pblzs	38-CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pc	Yellow Coneflower	Ratibida pinnata	1	0.0625		Forb	N	N	CP38E-CWGCA(CP2)WM	Switch-BB-Cwrye-Pcord-Pblzstar-Berg-Besus-NEaster-Ycone
38	CP38E-GHRA(CP2)D-LB-Sgrama-BB-Indian-PPclover-Sg	38-CP38E-GHRA(CP2)D-LB-Sgrama-BB-Indian-PP	Little Bluestem	Schizachyrium scoparium	24	1.5		Grass	N	N	CP38E-GHRA(CP2)D	LB-Sgrama-BB-Indian-PPclover-Sgrod-Ycone
38	CP38E-GHRA(CP2)D-LB-Sgrama-BB-Indian-PPclover-Sg	38-CP38E-GHRA(CP2)D-LB-Sgrama-BB-Indian-PP	Sideoats Grama	Bouteloua curtipendula	24	1.5		Grass	N	N	CP38E-GHRA(CP2)D	LB-Sgrama-BB-Indian-PPclover-Sgrod-Ycone
38	CP38E-GHRA(CP2)D-LB-Sgrama-BB-Indian-PPclover-Sg	38-CP38E-GHRA(CP2)D-LB-Sgrama-BB-Indian-PP	Big Bluestem	Andropogon gerardii	8	0.5		Grass	N	N	CP38E-GHRA(CP2)D	LB-Sgrama-BB-Indian-PPclover-Sgrod-Ycone
38	CP38E-GHRA(CP2)D-LB-Sgrama-BB-Indian-PPclover-Sg	38-CP38E-GHRA(CP2)D-LB-Sgrama-BB-Indian-PP	Indiangrass	Sorghastrum nutans	8	0.5		Grass	N	N	CP38E-GHRA(CP2)D	LB-Sgrama-BB-Indian-PPclover-Sgrod-Ycone
38	CP38E-GHRA(CP2)D-LB-Sgrama-BB-Indian-PPclover-Sg	38-CP38E-GHRA(CP2)D-LB-Sgrama-BB-Indian-PP	Purple Prairie Clover	Dalea purpurea	2	0.125		Legume	N	N	CP38E-GHRA(CP2)D	LB-Sgrama-BB-Indian-PPclover-Sgrod-Ycone
38	CP38E-GHRA(CP2)D-LB-Sgrama-BB-Indian-PPclover-Sg	38-CP38E-GHRA(CP2)D-LB-Sgrama-BB-Indian-PP	Stiff Goldenrod	Oligoneuron rigidum	1	0.0625		Forb	N	N	CP38E-GHRA(CP2)D	LB-Sgrama-BB-Indian-PPclover-Sgrod-Ycone
38	CP38E-GHRA(CP2)D-LB-Sgrama-BB-Indian-PPclover-Sg	38-CP38E-GHRA(CP2)D-LB-Sgrama-BB-Indian-PP	Yellow Coneflower	Ratibida pinnata	1	0.0625		Forb	N	N	CP38E-GHRA(CP2)D	LB-Sgrama-BB-Indian-PPclover-Sgrod-Ycone
38	CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-Switch-PP	38-CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-S	Little Bluestem	Schizachyrium scoparium	24	1.5		Grass	N	N	CP38E-GHRA(CP2)DM	LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-Switch-PP	38-CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-S	Sideoats Grama	Bouteloua curtipendula	16	1		Grass	N	N	CP38E-GHRA(CP2)DM	LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-Switch-PP	38-CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-S	Big Bluestem	Andropogon gerardii	8	0.5		Grass	N	N	CP38E-GHRA(CP2)DM	LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-Switch-PP	38-CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-S	Indiangrass	Sorghastrum nutans	8	0.5		Grass	N	N	CP38E-GHRA(CP2)DM	LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-Switch-PP	38-CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-S	Switchgrass	Panicum virgatum	8	0.5		Grass	N	N	CP38E-GHRA(CP2)DM	LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-Switch-PP	38-CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-S	Purple Prairie Clover	Dalea purpurea	2	0.125		Legume	N	N	CP38E-GHRA(CP2)DM	LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-Switch-PP	38-CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-S	Bergamot	Monarda fistulosa	1	0.0625		Forb	N	N	CP38E-GHRA(CP2)DM	LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-Switch-PP	38-CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-S	Yellow Coneflower	Ratibida pinnata	1	0.0625		Forb	N	N	CP38E-GHRA(CP2)DM	LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Switch-Berg-	38-CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Swi	Little Bluestem	Schizachyrium scoparium	20	1.25		Grass	N	N	CP38E-GHRA(CP2)M	LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Switch-Berg-	38-CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Swi	Canada Wildrye	Elymus canadensis	16	1		Grass	N	N	CP38E-GHRA(CP2)M	LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Switch-Berg-	38-CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Swi	Indiangrass	Sorghastrum nutans	16	1		Grass	N	N	CP38E-GHRA(CP2)M	LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Switch-Berg-	38-CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Swi	Big Bluestem	Andropogon gerardii	8	0.5		Grass	N	N	CP38E-GHRA(CP2)M	LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Switch-Berg-	38-CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Swi	Switchgrass	Panicum virgatum	8	0.5		Grass	N	N	CP38E-GHRA(CP2)M	LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Switch-Berg-	38-CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Swi	Bergamot	Monarda fistulosa	1	0.0625		Forb	N	N	CP38E-GHRA(CP2)M	LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Switch-Berg-	38-CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Swi	Black-eyed Susan	Rudbeckia hirta	1	0.0625		Forb	N	N	CP38E-GHRA(CP2)M	LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Switch-Berg-	38-CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Swi	Yellow Coneflower	Ratibida pinnata	1	0.0625		Forb	N	N	CP38E-GHRA(CP2)M	LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-C	38-CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch	Big Bluestem	Andropogon gerardii	16	1		Grass	N	N	CP38E-GHRA(CP2)W	BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-C	38-CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch	Canada Wildrye	Elymus canadensis	16	1		Grass	N	N	CP38E-GHRA(CP2)W	BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-C	38-CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch	Indiangrass	Sorghastrum nutans	16	1		Grass	N	N	CP38E-GHRA(CP2)W	BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-C	38-CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch	Switchgrass	Panicum virgatum	16	1		Grass	N	N	CP38E-GHRA(CP2)W	BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-C	38-CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch	Prairie Cordgrass	Spartina pectinata	8	0.5		Grass	N	N	CP38E-GHRA(CP2)W	BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-C	38-CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch	Cupplant	Silphium perfoliatum	2	0.125		Forb	N	N	CP38E-GHRA(CP2)W	BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-C	38-CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch	Blue Vervain	Verbena hastata	1	0.0625		Forb	N	N	CP38E-GHRA(CP2)W	BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-C	38-CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch	Common Ironweed	Vernonia fasciculata	1	0.0625		Forb	N	N	CP38E-GHRA(CP2)W	BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-GHRA(CP2)WM-Switch-BB-Cwrye-Pcord-Berg-N	38-CP38E-GHRA(CP2)WM-Switch-BB-Cwrye-Pco	Switchgrass	Panicum virgatum	32	2		Grass	N	N	CP38E-GHRA(CP2)WM	Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
38	CP38E-GHRA(CP2)WM-Switch-BB-Cwrye-Pcord-Berg-N	38-CP38E-GHRA(CP2)WM-Switch-BB-Cwrye-Pco	Big Bluestem	Andropogon gerardii	16	1		Grass	N	N	CP38E-GHRA(CP2)WM	Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
38	CP38E-GHRA(CP2)WM-Switch-BB-Cwrye-Pcord-Berg-N	38-CP38E-GHRA(CP2)WM-Switch-BB-Cwrye-Pco	Canada Wildrye	Elymus canadensis	16	1		Grass	N	N	CP38E-GHRA(CP2)WM	Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
38	CP38E-GHRA(CP2)WM-Switch-BB-Cwrye-Pcord-Berg-N	38-CP38E-GHRA(CP2)WM-Switch-BB-Cwrye-Pco	Prairie Cordgrass	Spartina pectinata	4	0.25		Grass	N	N	CP38E-GHRA(CP2)WM	Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
38	CP38E-GHRA(CP2)WM-Switch-BB-Cwrye-Pcord-Berg-N	38-CP38E-GHRA(CP2)WM-Switch-BB-Cwrye-Pco	Bergamot	Monarda fistulosa	1	0.0625		Forb	N	N	CP38E-GHRA(CP2)WM	Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
38	CP38E-GHRA(CP2)WM-Switch-BB-Cwrye-Pcord-Berg-N	38-CP38E-GHRA(CP2)WM-Switch-BB-Cwrye-Pco	New England Aster	Symphyotrichum novae-a	1	0.0625		Forb	N	N	CP38E-GHRA(CP2)WM	Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
38	CP38E-GHRA(CP2)WM-Switch-BB-Cwrye-Pcord-Berg-N	38-CP38E-GHRA(CP2)WM-Switch-BB-Cwrye-Pco	Yellow Coneflower	Ratibida pinnata	1	0.0625		Forb	N	N	CP38E-GHRA(CP2)WM	Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Little Bluestem	Schizachyrium scoparium	24	1.5		Grass	N	N	CP38E-GHRA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Sideoats Grama	Bouteloua curtipendula	24	1.5		Grass	N	N	CP38E-GHRA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Indiangrass	Sorghastrum nutans	8	0.5		Grass	N	N	CP38E-GHRA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Big Bluestem	Andropogon gerardii	4	0.25		Grass	N	N	CP38E-GHRA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Purple Prairie Clover	Dalea purpurea	2	0.125		Legume	N	N	CP38E-GHRA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Sand Dropseed	Sporobolus cryptandrus	2	0.125		Grass	N	N	CP38E-GHRA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Prairie Junegrass	Koeleria macrantha	1	0.0625		Grass	N	N	CP38E-GHRA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Spiderwort	Tradescantia ohiensis	1	0.0625		Forb	N	N	CP38E-GHRA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Hoary Vervain	Verbena stricta	0.5	0.03125		Forb	N	N	CP38E-GHRA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Leadplant	Amorpha canescens	0.5	0.03125		Legume	N	N	CP38E-GHRA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Prairie Tickseed	Coreopsis palmata	0.5	0.03125		Forb	N	N	CP38E-GHRA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Silky Aster	Symphyotrichum pratens	0.5	0.03125		Forb	N	N	CP38E-GHRA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Stiff Goldenrod	Oligoneuron rigidum	0.5	0.03125		Forb	N	N	CP38E-GHRA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Yellow Coneflower	Ratibida pinnata	0.5	0.03125		Forb	N	N	CP38E-GHRA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Prairie Cinquefoil	Potentilla arguta	0.25	0.015625		Forb	N	N	CP38E-GHRA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Spotted Mint	Monarda punctata	0	0.015625		Forb	N	N	CP38E-GHRA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjun	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Little Bluestem	Schizachyrium scoparium	24	1.5		Grass	N	N	CP38E-GHRA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjun	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Sideoats Grama	Bouteloua curtipendula	24	1.5		Grass	N	N	CP38E-GHRA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjun	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Indiangrass	Sorghastrum nutans	8	0.5		Grass	N	N	CP38E-GHRA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjun	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Switchgrass	Panicum virgatum	4	0.25		Grass	N	N	CP38E-GHRA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjun	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Prairie Junegrass	Koeleria macrantha	2	0.125		Grass	N	N	CP38E-GHRA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjun	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Prairie Dropseed	Sporobolus heterolepis	2	0.125		Grass	N	N	CP38E-GHRA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjun	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Purple Prairie Clover	Dalea purpurea	2	0.125		Legume	N	N	CP38E-GHRA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjun	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Round-Headed Bushclover	Lespedeza capitata	2	0.125		Legume	N	N	CP38E-GHRA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B

38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjun	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Bergamot	Monarda fistulosa	1	0.0625		Forb	N	N	CP38E-GHRA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjun	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Spiderwort	Tradescantia ohiensis	1	0.0625		Forb	N	N	CP38E-GHRA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjun	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Yellow Coneflower	Ratibida pinnata	1	0.0625		Forb	N	N	CP38E-GHRA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjun	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Leadplant	Amorpha canescens	0.5	0.03125		Legume	N	N	CP38E-GHRA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjun	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Rough Blazing Star	Liatris aspera	1	0.03125		Forb	N	N	CP38E-GHRA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjun	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Sky-Blue Aster	Symphyotrichum oolenta	1	0.03125		Forb	N	N	CP38E-GHRA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjun	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Stiff Goldenrod	Oligoneuron rigidum	0.5	0.03125		Forb	N	N	CP38E-GHRA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjun	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Prairie Cinquefoil	Potentilla arguta	0.25	0.015625		Forb	N	N	CP38E-GHRA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
38	CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Switch-Oxe	38-CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Sw	Little Bluestem	Schizachyrium scoparium	24	1.5		Grass	N	N	CP38E-GHRA(CP25)M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
38	CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Switch-Oxe	38-CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Sw	Indiangrass	Sorghastrum nutans	16	1		Grass	N	N	CP38E-GHRA(CP25)M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
38	CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Switch-Oxe	38-CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Sw	Big Bluestem	Andropogon gerardii	8	0.5		Grass	N	N	CP38E-GHRA(CP25)M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
38	CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Switch-Oxe	38-CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Sw	Canada Wildrye	Elymus canadensis	8	0.5		Grass	N	N	CP38E-GHRA(CP25)M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
38	CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Switch-Oxe	38-CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Sw	Switchgrass	Panicum virgatum	8	0.5		Grass	N	N	CP38E-GHRA(CP25)M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
38	CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Switch-Oxe	38-CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Sw	Ox-eye Sunflower	Heliopsis helianthoides	1	0.0625		Forb	N	N	CP38E-GHRA(CP25)M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
38	CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Switch-Oxe	38-CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Sw	Prairie Blazing Star	Liatris pycnostachya	1	0.0625		Forb	N	N	CP38E-GHRA(CP25)M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
38	CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Switch-Oxe	38-CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Sw	Purple Prairie Clover	Dalea purpurea	1	0.0625		Legume	N	N	CP38E-GHRA(CP25)M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
38	CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Switch-Oxe	38-CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Sw	Rosinweed	Silphium integrifolium	1	0.0625		Forb	N	N	CP38E-GHRA(CP25)M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
38	CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Switch-Oxe	38-CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Sw	Bergamot	Monarda fistulosa	0.5	0.03125		Forb	N	N	CP38E-GHRA(CP25)M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
38	CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Switch-Oxe	38-CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Sw	Black-eyed Susan	Rudbeckia hirta	0.5	0.03125		Forb	N	N	CP38E-GHRA(CP25)M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
38	CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Switch-Oxe	38-CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Sw	New England Aster	Symphyotrichum novae-a	0.5	0.03125		Forb	N	N	CP38E-GHRA(CP25)M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
38	CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Switch-Oxe	38-CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Sw	Smooth Blue Aster	Symphyotrichum laeve	0.5	0.03125		Forb	N	N	CP38E-GHRA(CP25)M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
38	CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Switch-Oxe	38-CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Sw	Yellow Coneflower	Ratibida pinnata	0.5	0.03125		Forb	N	N	CP38E-GHRA(CP25)M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
38	CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Switch-Oxe	38-CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Sw	Culver's Root	Veronicastrum virginicum	0	0.015625		Forb	N	N	CP38E-GHRA(CP25)M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-B	Canada Wildrye	Elymus canadensis	16	1		Grass	N	N	CP38E-GHRA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-B	Switchgrass	Panicum virgatum	16	1		Grass	N	N	CP38E-GHRA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-B	Indiangrass	Sorghastrum nutans	12	0.75		Grass	N	N	CP38E-GHRA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-B	Big Bluestem	Andropogon gerardii	8	0.5		Grass	N	N	CP38E-GHRA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-B	Prairie Cordgrass	Spartina pectinata	8	0.5		Grass	N	N	CP38E-GHRA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-B	Fowl Mannagrass	Glyceria striata	4	0.25		Grass	N	N	CP38E-GHRA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-B	Fox Sedge	Carex vulpinoidea	4	0.25		Sedge	N	N	CP38E-GHRA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-B	Cupplant	Silphium perfoliatum	2	0.125		Forb	N	N	CP38E-GHRA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-B	Showy Tick Trefoil	Desmodium canadense	2	0.125		Legume	N	N	CP38E-GHRA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-B	Blue Vervain	Verbena hastata	1	0.0625		Forb	N	N	CP38E-GHRA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-B	Golden Alexanders	Zizia aurea	1	0.0625		Forb	N	N	CP38E-GHRA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-B	Marsh Milkweed	Asclepias incarnata	1	0.0625		Forb	N	N	CP38E-GHRA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-B	Boneset	Eupatorium perfoliatum	0.5	0.03125		Forb	N	N	CP38E-GHRA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-B	Common Ironweed	Vernonia fasciculata	1	0.03125		Forb	N	N	CP38E-GHRA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-B	Joe-pye Weed	Eutrochium maculatum	1	0.03125		Forb	N	N	CP38E-GHRA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-B	Culver's Root	Veronicastrum virginicum	0	0.015625		Forb	N	N	CP38E-GHRA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Indian-Pcor	38-CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Ind	Switchgrass	Panicum virgatum	24	1.5		Grass	N	N	CP38E-GHRA(CP25)WM	Switch-BB-Cwrye-Indian-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
38	CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Indian-Pcor	38-CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Ind	Big Bluestem	Andropogon gerardii	20	1.25		Grass	N	N	CP38E-GHRA(CP25)WM	Switch-BB-Cwrye-Indian-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
38	CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Indian-Pcor	38-CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Ind	Canada Wildrye	Elymus canadensis	16	1		Grass	N	N	CP38E-GHRA(CP25)WM	Switch-BB-Cwrye-Indian-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
38	CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Indian-Pcor	38-CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Ind	Indiangrass	Sorghastrum nutans	12	0.75		Grass	N	N	CP38E-GHRA(CP25)WM	Switch-BB-Cwrye-Indian-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
38	CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Indian-Pcor	38-CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Ind	Prairie Cordgrass	Spartina pectinata	4	0.25		Grass	N	N	CP38E-GHRA(CP25)WM	Switch-BB-Cwrye-Indian-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
38	CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Indian-Pcor	38-CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Ind	Cupplant	Silphium perfoliatum	2	0.125		Forb	N	N	CP38E-GHRA(CP25)WM	Switch-BB-Cwrye-Indian-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
38	CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Indian-Pcor	38-CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Ind	White wild indigo	Baptisia alba	1.5	0.09375		Legume	N	N	CP38E-GHRA(CP25)WM	Switch-BB-Cwrye-Indian-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
38	CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Indian-Pcor	38-CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Ind	Black-eyed Susan	Rudbeckia hirta	0.5	0.03125		Forb	N	N	CP38E-GHRA(CP25)WM	Switch-BB-Cwrye-Indian-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
38	CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Indian-Pcor	38-CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Ind	Common Ironweed	Vernonia fasciculata	0.5	0.03125		Forb	N	N	CP38E-GHRA(CP25)WM	Switch-BB-Cwrye-Indian-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
38	CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Indian-Pcor	38-CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Ind	Golden Alexanders	Zizia aurea	0.5	0.03125		Forb	N	N	CP38E-GHRA(CP25)WM	Switch-BB-Cwrye-Indian-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
38	CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Indian-Pcor	38-CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Ind	New England Aster	Symphyotrichum novae-a	0.5	0.03125		Forb	N	N	CP38E-GHRA(CP25)WM	Switch-BB-Cwrye-Indian-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
38	CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Indian-Pcor	38-CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Ind	Prairie Blazing Star	Liatris pycnostachya	0.5	0.03125		Forb	N	N	CP38E-GHRA(CP25)WM	Switch-BB-Cwrye-Indian-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
38	CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Indian-Pcor	38-CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Ind	Yellow Coneflower	Ratibida pinnata	0.5	0.03125		Forb	N	N	CP38E-GHRA(CP25)WM	Switch-BB-Cwrye-Indian-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
38	CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Indian-Pcor	38-CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Ind	Bergamot	Monarda fistulosa	0.25	0.015625		Forb	N	N	CP38E-GHRA(CP25)WM	Switch-BB-Cwrye-Indian-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
38	CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Indian-Pcor	38-CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Ind	Great St. John's Wort	Hypericum ascyron	0	0.015625		Forb	N	N	CP38E-GHRA(CP25)WM	Switch-BB-Cwrye-Indian-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Little Bluestem	Schizachyrium scoparium	24	1.5		Grass	N	N	CP38E-KBB	LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-PPclover-Bmilkweed-F
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Canada Wildrye	Elymus canadensis	16	1		Grass	N	N	CP38E-KBB	LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-PPclover-Bmilkweed-F
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Indiangrass	Sorghastrum nutans	16	1		Grass	N	N	CP38E-KBB	LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-PPclover-Bmilkweed-F
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Big Bluestem	Andropogon gerardii	8	0.5		Grass	N	N	CP38E-KBB	LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-PPclover-Bmilkweed-F
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Sideoats Grama	Bouteloua curtipendula	8	0.5		Grass	N	N	CP38E-KBB	LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-PPclover-Bmilkweed-F
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Switchgrass	Panicum virgatum	8	0.5		Grass	N	N	CP38E-KBB	LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-PPclover-Bmilkweed-F
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Wild Lupine	Lupinus perennis	3	0.1875		Legume	N	N	CP38E-KBB	LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-PPclover-Bmilkweed-F
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Purple Prairie Clover	Dalea purpurea	2	0.125		Legume	N	N	CP38E-KBB	LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-PPclover-Bmilkweed-F
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Butterfly Milkweed	Asclepias tuberosa	1	0.0625		Forb	N	N	CP38E-KBB	LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-PPclover-Bmilkweed-F
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Flowering Spurge	Euphorbia corollata	1	0.0625		Forb	N	N	CP38E-KBB	LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-PPclover-Bmilkweed-F
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Golden Alexanders	Zizia aurea	1	0.0625		Forb	N	N	CP38E-KBB	LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-PPclover-Bmilkweed-F
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Rough Blazing Star	Liatris aspera	1	0.0625		Forb	N	N	CP38E-KBB	LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-PPclover-Bmilkweed-F
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Round-Headed Bushclover	Lespedeza capitata	1	0.0625		Legume	N	N	CP38E-KBB	LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-PPclover-Bmilkweed-F
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Fewleaf Sunflower	Helianthus occidentalis	1	0.0625		Forb	N	N	CP38E-KBB	LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-PPclover-Bmilkweed-F
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Bergamot	Monarda fistulosa	0.5	0.03125		Forb	N	N	CP38E-KBB	LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-PPclover-Bmilkweed-F
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Prairie Tickseed	Coreopsis palmata	1	0.03125		Forb	N	N	CP38E-KBB	LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-PPclover-Bmilkweed-F
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Black-eyed Susan	Rudbeckia hirta	0	0.025		Forb	N	N	CP38E-KBB	LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-PPclover-Bmilkweed-F

38	CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlup-PPclove	38-CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlup	Little Bluestem	Schizachyrium scoparium	36	2.25		Grass	N	N	CP38E-KBB(WHIP)	LB-Sgrama-BB-Pjune-Wlup-PPclover-Rblzstar-Ptick-Besus
38	CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlup-PPclove	38-CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlup	Sideoats Grama	Bouteloua curtipendula	16	1		Grass	N	N	CP38E-KBB(WHIP)	LB-Sgrama-BB-Pjune-Wlup-PPclover-Rblzstar-Ptick-Besus
38	CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlup-PPclove	38-CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlup	Big Bluestem	Andropogon gerardii	8	0.5		Grass	N	N	CP38E-KBB(WHIP)	LB-Sgrama-BB-Pjune-Wlup-PPclover-Rblzstar-Ptick-Besus
38	CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlup-PPclove	38-CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlup	Prairie Junegrass	Koeleria macrantha	4	0.25		Grass	N	N	CP38E-KBB(WHIP)	LB-Sgrama-BB-Pjune-Wlup-PPclover-Rblzstar-Ptick-Besus
38	CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlup-PPclove	38-CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlup	Wild Lupine	Lupinus perennis	3	0.1875		Legume	N	N	CP38E-KBB(WHIP)	LB-Sgrama-BB-Pjune-Wlup-PPclover-Rblzstar-Ptick-Besus
38	CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlup-PPclove	38-CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlup	Purple Prairie Clover	Dalea purpurea	2	0.125		Legume	N	N	CP38E-KBB(WHIP)	LB-Sgrama-BB-Pjune-Wlup-PPclover-Rblzstar-Ptick-Besus
38	CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlup-PPclove	38-CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlup	Rough Blazing Star	Liatris aspera	2	0.125		Forb	N	N	CP38E-KBB(WHIP)	LB-Sgrama-BB-Pjune-Wlup-PPclover-Rblzstar-Ptick-Besus
38	CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlup-PPclove	38-CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlup	Prairie Tickseed	Coreopsis palmata	1	0.0625		Forb	N	N	CP38E-KBB(WHIP)	LB-Sgrama-BB-Pjune-Wlup-PPclover-Rblzstar-Ptick-Besus
38	CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlup-PPclove	38-CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlup	Black-eyed Susan	Rudbeckia hirta	0.25	0.015625		Forb	N	N	CP38E-KBB(WHIP)	LB-Sgrama-BB-Pjune-Wlup-PPclover-Rblzstar-Ptick-Besus
38	CP38E-SWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-S	38-CP38E-SWGCA(CP2)D-LB-Sgrama-BB-Indian-P	Little Bluestem	Schizachyrium scoparium	24	1.5		Grass	N	N	CP38E-SWGCA(CP2)D	LB-Sgrama-BB-Indian-PPclover-Sgrod-Ycone
38	CP38E-SWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-S	38-CP38E-SWGCA(CP2)D-LB-Sgrama-BB-Indian-P	Sideoats Grama	Bouteloua curtipendula	24	1.5		Grass	N	N	CP38E-SWGCA(CP2)D	LB-Sgrama-BB-Indian-PPclover-Sgrod-Ycone
38	CP38E-SWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-S	38-CP38E-SWGCA(CP2)D-LB-Sgrama-BB-Indian-P	Big Bluestem	Andropogon gerardii	8	0.5		Grass	N	N	CP38E-SWGCA(CP2)D	LB-Sgrama-BB-Indian-PPclover-Sgrod-Ycone
38	CP38E-SWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-S	38-CP38E-SWGCA(CP2)D-LB-Sgrama-BB-Indian-P	Indiangrass	Sorghastrum nutans	8	0.5		Grass	N	N	CP38E-SWGCA(CP2)D	LB-Sgrama-BB-Indian-PPclover-Sgrod-Ycone
38	CP38E-SWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-S	38-CP38E-SWGCA(CP2)D-LB-Sgrama-BB-Indian-P	Purple Prairie Clover	Dalea purpurea	2	0.125		Legume	N	N	CP38E-SWGCA(CP2)D	LB-Sgrama-BB-Indian-PPclover-Sgrod-Ycone
38	CP38E-SWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-S	38-CP38E-SWGCA(CP2)D-LB-Sgrama-BB-Indian-P	Stiff Goldenrod	Oligoneuron rigidum	1	0.0625		Forb	N	N	CP38E-SWGCA(CP2)D	LB-Sgrama-BB-Indian-PPclover-Sgrod-Ycone
38	CP38E-SWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-S	38-CP38E-SWGCA(CP2)D-LB-Sgrama-BB-Indian-P	Yellow Coneflower	Ratibida pinnata	1	0.0625		Forb	N	N	CP38E-SWGCA(CP2)D	LB-Sgrama-BB-Indian-PPclover-Sgrod-Ycone
38	CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-P	38-CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian	Little Bluestem	Schizachyrium scoparium	24	1.5		Grass	N	N	CP38E-SWGCA(CP2)DM	LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-P	38-CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian	Sideoats Grama	Bouteloua curtipendula	16	1		Grass	N	N	CP38E-SWGCA(CP2)DM	LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-P	38-CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian	Big Bluestem	Andropogon gerardii	8	0.5		Grass	N	N	CP38E-SWGCA(CP2)DM	LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-P	38-CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian	Indiangrass	Sorghastrum nutans	8	0.5		Grass	N	N	CP38E-SWGCA(CP2)DM	LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-P	38-CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian	Switchgrass	Panicum virgatum	8	0.5		Grass	N	N	CP38E-SWGCA(CP2)DM	LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-P	38-CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian	Purple Prairie Clover	Dalea purpurea	2	0.125		Legume	N	N	CP38E-SWGCA(CP2)DM	LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-P	38-CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian	Bergamot	Monarda fistulosa	1	0.0625		Forb	N	N	CP38E-SWGCA(CP2)DM	LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-P	38-CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian	Yellow Coneflower	Ratibida pinnata	1	0.0625		Forb	N	N	CP38E-SWGCA(CP2)DM	LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Ber	38-CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-Sv	Little Bluestem	Schizachyrium scoparium	20	1.25		Grass	N	N	CP38E-SWGCA(CP2)M	LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Ber	38-CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-Sv	Canada Wildrye	Elymus canadensis	16	1		Grass	N	N	CP38E-SWGCA(CP2)M	LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Ber	38-CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-Sv	Indiangrass	Sorghastrum nutans	16	1		Grass	N	N	CP38E-SWGCA(CP2)M	LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Ber	38-CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-Sv	Big Bluestem	Andropogon gerardii	8	0.5		Grass	N	N	CP38E-SWGCA(CP2)M	LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Ber	38-CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-Sv	Switchgrass	Panicum virgatum	8	0.5		Grass	N	N	CP38E-SWGCA(CP2)M	LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Ber	38-CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-Sv	Bergamot	Monarda fistulosa	1	0.0625		Forb	N	N	CP38E-SWGCA(CP2)M	LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Ber	38-CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-Sv	Black-eyed Susan	Rudbeckia hirta	1	0.0625		Forb	N	N	CP38E-SWGCA(CP2)M	LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Ber	38-CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-Sv	Yellow Coneflower	Ratibida pinnata	1	0.0625		Forb	N	N	CP38E-SWGCA(CP2)M	LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-	38-CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Swit	Big Bluestem	Andropogon gerardii	16	1		Grass	N	N	CP38E-SWGCA(CP2)W	BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-	38-CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Swit	Canada Wildrye	Elymus canadensis	16	1		Grass	N	N	CP38E-SWGCA(CP2)W	BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-	38-CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Swit	Indiangrass	Sorghastrum nutans	16	1		Grass	N	N	CP38E-SWGCA(CP2)W	BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-	38-CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Swit	Switchgrass	Panicum virgatum	16	1		Grass	N	N	CP38E-SWGCA(CP2)W	BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-	38-CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Swit	Prairie Cordgrass	Spartina pectinata	8	0.5		Grass	N	N	CP38E-SWGCA(CP2)W	BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-	38-CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Swit	Silphium perfoliatum	Cupplant	2	0.125		Forb	N	N	CP38E-SWGCA(CP2)W	BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-	38-CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Swit	Blue Vervain	Verbena hastata	1	0.0625		Forb	N	N	CP38E-SWGCA(CP2)W	BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-	38-CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Swit	Common Ironweed	Vernonia fasciculata	1	0.0625		Forb	N	N	CP38E-SWGCA(CP2)W	BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-SWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Berg	38-CP38E-SWGCA(CP2)WM-Switch-BB-Cwrye-Pc	Switchgrass	Panicum virgatum	32	2		Grass	N	N	CP38E-SWGCA(CP2)WM	Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
38	CP38E-SWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Berg	38-CP38E-SWGCA(CP2)WM-Switch-BB-Cwrye-Pc	Big Bluestem	Andropogon gerardii	16	1		Grass	N	N	CP38E-SWGCA(CP2)WM	Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
38	CP38E-SWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Berg	38-CP38E-SWGCA(CP2)WM-Switch-BB-Cwrye-Pc	Canada Wildrye	Elymus canadensis	16	1		Grass	N	N	CP38E-SWGCA(CP2)WM	Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
38	CP38E-SWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Berg	38-CP38E-SWGCA(CP2)WM-Switch-BB-Cwrye-Pc	Prairie Cordgrass	Spartina pectinata	4	0.25		Grass	N	N	CP38E-SWGCA(CP2)WM	Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
38	CP38E-SWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Berg	38-CP38E-SWGCA(CP2)WM-Switch-BB-Cwrye-Pc	Bergamot	Monarda fistulosa	1	0.0625		Forb	N	N	CP38E-SWGCA(CP2)WM	Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
38	CP38E-SWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Berg	38-CP38E-SWGCA(CP2)WM-Switch-BB-Cwrye-Pc	New England Aster	Symphyotrichum novae-a	1	0.0625		Forb	N	N	CP38E-SWGCA(CP2)WM	Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
38	CP38E-SWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Berg	38-CP38E-SWGCA(CP2)WM-Switch-BB-Cwrye-Pc	Yellow Coneflower	Ratibida pinnata	1	0.0625		Forb	N	N	CP38E-SWGCA(CP2)WM	Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Little Bluestem	Schizachyrium scoparium	24	1.5		Grass	N	N	CP38E-SWGCA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Sideoats Grama	Bouteloua curtipendula	24	1.5		Grass	N	N	CP38E-SWGCA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Indiangrass	Sorghastrum nutans	8	0.5		Grass	N	N	CP38E-SWGCA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Big Bluestem	Andropogon gerardii	4	0.25		Grass	N	N	CP38E-SWGCA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Purple Prairie Clover	Dalea purpurea	2	0.125		Legume	N	N	CP38E-SWGCA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Sand Dropseed	Sporobolus cryptandrus	2	0.125		Grass	N	N	CP38E-SWGCA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Prairie Junegrass	Koeleria macrantha	1	0.0625		Grass	N	N	CP38E-SWGCA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Spiderwort	Tradescantia ohiensis	1	0.0625		Forb	N	N	CP38E-SWGCA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Hoary Vervain	Verbena stricta	0.5	0.03125		Forb	N	N	CP38E-SWGCA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Leadplant	Amorpha canescens	0.5	0.03125		Legume	N	N	CP38E-SWGCA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Prairie Tickseed	Coreopsis palmata	0.5	0.03125		Forb	N	N	CP38E-SWGCA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Silky Aster	Symphyotrichum pratens	0.5	0.03125		Forb	N	N	CP38E-SWGCA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Stiff Goldenrod	Oligoneuron rigidum	1	0.03125		Forb	N	N	CP38E-SWGCA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Yellow Coneflower	Ratibida pinnata	0.5	0.03125		Forb	N	N	CP38E-SWGCA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Prairie Cinquefoil	Potentilla arguta	0.25	0.015625		Forb	N	N	CP38E-SWGCA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Spotted Mint	Monarda punctata	0	0.015625		Forb	N	N	CP38E-SWGCA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Little Bluestem	Schizachyrium scoparium	24	1.5		Grass	N	N	CP38E-SWGCA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Sideoats Grama	Bouteloua curtipendula	24	1.5		Grass	N	N	CP38E-SWGCA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Indiangrass	Sorghastrum nutans	8	0.5		Grass	N	N	CP38E-SWGCA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Switchgrass	Panicum virgatum	4	0.25		Grass	N	N	CP38E-SWGCA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Prairie Junegrass	Koeleria macrantha	2	0.125		Grass	N	N	CP38E-SWGCA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Prairie Dropseed	Sporobolus heterolepis	2	0.125		Grass	N	N	CP38E-SWGCA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Purple Prairie Clover	Dalea purpurea	2	0.125		Legume	N	N	CP38E-SWGCA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Round-Headed Bushclover	Lespedeza capitata	2	0.125		Legume	N	N	CP38E-SWGCA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B

38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Bergamot	Monarda fistulosa	1	0.0625		Forb	N	N	CP38E-SWGCA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Spiderwort	Tradescantia ohiensis	1	0.0625		Forb	N	N	CP38E-SWGCA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Yellow Coneflower	Ratibida pinnata	1	0.0625		Forb	N	N	CP38E-SWGCA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Leadplant	Amorpha canescens	0.5	0.03125		Legume	N	N	CP38E-SWGCA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Rough Blazing Star	Liatris aspera	1	0.03125		Forb	N	N	CP38E-SWGCA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Sky-Blue Aster	Symphyotrichum oolenta	1	0.03125		Forb	N	N	CP38E-SWGCA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Stiff Goldenrod	Oligoneuron rigidum	0.5	0.03125		Forb	N	N	CP38E-SWGCA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Prairie Cinquefoil	Potentilla arguta	0.25	0.015625		Forb	N	N	CP38E-SWGCA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
38	CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-Switch-Ox	38-CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-S	Little Bluestem	Schizachyrium scoparium	24	1.5		Grass	N	N	CP38E-SWGCA(CP25)M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
38	CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-Switch-Ox	38-CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-S	Indiangrass	Sorghastrum nutans	16	1		Grass	N	N	CP38E-SWGCA(CP25)M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
38	CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-Switch-Ox	38-CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-S	Big Bluestem	Andropogon gerardii	8	0.5		Grass	N	N	CP38E-SWGCA(CP25)M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
38	CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-Switch-Ox	38-CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-S	Canada Wildrye	Elymus canadensis	8	0.5		Grass	N	N	CP38E-SWGCA(CP25)M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
38	CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-Switch-Ox	38-CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-S	Switchgrass	Panicum virgatum	8	0.5		Grass	N	N	CP38E-SWGCA(CP25)M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
38	CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-Switch-Ox	38-CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-S	Ox-eye Sunflower	Heliopsis helianthoides	1	0.0625		Forb	N	N	CP38E-SWGCA(CP25)M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
38	CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-Switch-Ox	38-CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-S	Prairie Blazing Star	Liatris pycnostachya	1	0.0625		Forb	N	N	CP38E-SWGCA(CP25)M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
38	CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-Switch-Ox	38-CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-S	Purple Prairie Clover	Dalea purpurea	1	0.0625		Legume	N	N	CP38E-SWGCA(CP25)M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
38	CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-Switch-Ox	38-CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-S	Rosinweed	Silphium integrifolium	1	0.0625		Forb	N	N	CP38E-SWGCA(CP25)M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
38	CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-Switch-Ox	38-CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-S	Bergamot	Monarda fistulosa	0.5	0.03125		Forb	N	N	CP38E-SWGCA(CP25)M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
38	CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-Switch-Ox	38-CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-S	Black-eyed Susan	Rudbeckia hirta	0.5	0.03125		Forb	N	N	CP38E-SWGCA(CP25)M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
38	CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-Switch-Ox	38-CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-S	New England Aster	Symphyotrichum novae-a	0.5	0.03125		Forb	N	N	CP38E-SWGCA(CP25)M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
38	CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-Switch-Ox	38-CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-S	Smooth Blue Aster	Symphyotrichum laeve	0.5	0.03125		Forb	N	N	CP38E-SWGCA(CP25)M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
38	CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-Switch-Ox	38-CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-S	Yellow Coneflower	Ratibida pinnata	0.5	0.03125		Forb	N	N	CP38E-SWGCA(CP25)M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
38	CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-Switch-Ox	38-CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-S	Culver's Root	Veronicastrum virginicum	0	0.015625		Forb	N	N	CP38E-SWGCA(CP25)M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian	Canada Wildrye	Elymus canadensis	16	1		Grass	N	N	CP38E-SWGCA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian	Switchgrass	Panicum virgatum	16	1		Grass	N	N	CP38E-SWGCA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian	Indiangrass	Sorghastrum nutans	12	0.75		Grass	N	N	CP38E-SWGCA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian	Big Bluestem	Andropogon gerardii	8	0.5		Grass	N	N	CP38E-SWGCA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian	Prairie Cordgrass	Spartina pectinata	8	0.5		Grass	N	N	CP38E-SWGCA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian	Fowl Mannagrass	Glyceria striata	4	0.25		Grass	N	N	CP38E-SWGCA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian	Fox Sedge	Carex vulpinoidea	4	0.25		Sedge	N	N	CP38E-SWGCA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian	Cupplant	Silphium perfoliatum	2	0.125		Forb	N	N	CP38E-SWGCA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian	Showy Tick Trefoil	Desmodium canadense	2	0.125		Legume	N	N	CP38E-SWGCA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian	Blue Vervain	Verbena hastata	1	0.0625		Forb	N	N	CP38E-SWGCA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian	Golden Alexanders	Zizia aurea	1	0.0625		Forb	N	N	CP38E-SWGCA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian	Marsh Milkweed	Asclepias incarnata	1	0.0625		Forb	N	N	CP38E-SWGCA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian	Boneset	Eupatorium perfoliatum	0.5	0.03125		Forb	N	N	CP38E-SWGCA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian	Common Ironweed	Vernonia fasciculata	1	0.03125		Forb	N	N	CP38E-SWGCA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian	Joe-pye Weed	Eutrochium maculatum	1	0.03125		Forb	N	N	CP38E-SWGCA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian	Culver's Root	Veronicastrum virginicum	0	0.015625		Forb	N	N	CP38E-SWGCA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-Indian-Pco	38-CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-I	Switchgrass	Panicum virgatum	24	1.5		Grass	N	N	CP38E-SWGCA(CP25)WM	Switch-BB-Cwrye-Indian-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
38	CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-Indian-Pco	38-CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-I	Big Bluestem	Andropogon gerardii	20	1.25		Grass	N	N	CP38E-SWGCA(CP25)WM	Switch-BB-Cwrye-Indian-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
38	CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-Indian-Pco	38-CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-I	Canada Wildrye	Elymus canadensis	16	1		Grass	N	N	CP38E-SWGCA(CP25)WM	Switch-BB-Cwrye-Indian-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
38	CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-Indian-Pco	38-CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-I	Indiangrass	Sorghastrum nutans	12	0.75		Grass	N	N	CP38E-SWGCA(CP25)WM	Switch-BB-Cwrye-Indian-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
38	CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-Indian-Pco	38-CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-I	Prairie Cordgrass	Spartina pectinata	4	0.25		Grass	N	N	CP38E-SWGCA(CP25)WM	Switch-BB-Cwrye-Indian-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
38	CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-Indian-Pco	38-CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-I	Cupplant	Silphium perfoliatum	2	0.125		Forb	N	N	CP38E-SWGCA(CP25)WM	Switch-BB-Cwrye-Indian-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
38	CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-Indian-Pco	38-CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-I	White wild indigo	Baptisia alba	1.5	0.09375		Legume	N	N	CP38E-SWGCA(CP25)WM	Switch-BB-Cwrye-Indian-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
38	CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-Indian-Pco	38-CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-I	Black-eyed Susan	Rudbeckia hirta	0.5	0.03125		Forb	N	N	CP38E-SWGCA(CP25)WM	Switch-BB-Cwrye-Indian-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
38	CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-Indian-Pco	38-CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-I	Common Ironweed	Vernonia fasciculata	0.5	0.03125		Forb	N	N	CP38E-SWGCA(CP25)WM	Switch-BB-Cwrye-Indian-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
38	CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-Indian-Pco	38-CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-I	Golden Alexanders	Zizia aurea	0.5	0.03125		Forb	N	N	CP38E-SWGCA(CP25)WM	Switch-BB-Cwrye-Indian-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
38	CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-Indian-Pco	38-CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-I	New England Aster	Symphyotrichum novae-a	0.5	0.03125		Forb	N	N	CP38E-SWGCA(CP25)WM	Switch-BB-Cwrye-Indian-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
38	CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-Indian-Pco	38-CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-I	Prairie Blazing Star	Liatris pycnostachya	0.5	0.03125		Forb	N	N	CP38E-SWGCA(CP25)WM	Switch-BB-Cwrye-Indian-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
38	CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-Indian-Pco	38-CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-I	Yellow Coneflower	Ratibida pinnata	0.5	0.03125		Forb	N	N	CP38E-SWGCA(CP25)WM	Switch-BB-Cwrye-Indian-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
38	CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-Indian-Pco	38-CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-I	Bergamot	Monarda fistulosa	0.25	0.015625		Forb	N	N	CP38E-SWGCA(CP25)WM	Switch-BB-Cwrye-Indian-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
38	CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-Indian-Pco	38-CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-I	Great St. John's Wort	Hypericum ascyron	0	0.015625		Forb	N	N	CP38E-SWGCA(CP25)WM	Switch-BB-Cwrye-Indian-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pju	Little Bluestem	Schizachyrium scoparium	32	2		Grass	N	N	CP38E-WPHRA(CP25)D	LB-Sgrama-Indian-Pjune-Pdrop-Switch-PPclover-RHbushclover-S
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pju	Sideoats Grama	Bouteloua curtipendula	24	1.5		Grass	N	N	CP38E-WPHRA(CP25)D	LB-Sgrama-Indian-Pjune-Pdrop-Switch-PPclover-RHbushclover-S
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pju	Indiangrass	Sorghastrum nutans	4	0.25		Grass	N	N	CP38E-WPHRA(CP25)D	LB-Sgrama-Indian-Pjune-Pdrop-Switch-PPclover-RHbushclover-S
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pju	Prairie Junegrass	Koeleria macrantha	4	0.25		Grass	N	N	CP38E-WPHRA(CP25)D	LB-Sgrama-Indian-Pjune-Pdrop-Switch-PPclover-RHbushclover-S
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pju	Prairie Dropseed	Sporobolus heterolepis	4	0.25		Grass	N	N	CP38E-WPHRA(CP25)D	LB-Sgrama-Indian-Pjune-Pdrop-Switch-PPclover-RHbushclover-S
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pju	Switchgrass	Panicum virgatum	4	0.25		Grass	N	N	CP38E-WPHRA(CP25)D	LB-Sgrama-Indian-Pjune-Pdrop-Switch-PPclover-RHbushclover-S
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pju	Purple Prairie Clover	Dalea purpurea	2	0.125		Legume	N	N	CP38E-WPHRA(CP25)D	LB-Sgrama-Indian-Pjune-Pdrop-Switch-PPclover-RHbushclover-S
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pju	Round-Headed Bushclover	Lespedeza capitata	2	0.125		Legume	N	N	CP38E-WPHRA(CP25)D	LB-Sgrama-Indian-Pjune-Pdrop-Switch-PPclover-RHbushclover-S
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pju	Spiderwort	Tradescantia ohiensis	1	0.0625		Forb	N	N	CP38E-WPHRA(CP25)D	LB-Sgrama-Indian-Pjune-Pdrop-Switch-PPclover-RHbushclover-S
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pju	Bergamot	Monarda fistulosa	0.5	0.03125		Forb	N	N	CP38E-WPHRA(CP25)D	LB-Sgrama-Indian-Pjune-Pdrop-Switch-PPclover-RHbushclover-S
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pju	Leadplant	Amorpha canescens	0.5	0.03125		Legume	N	N	CP38E-WPHRA(CP25)D	LB-Sgrama-Indian-Pjune-Pdrop-Switch-PPclover-RHbushclover-S
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pju	Rough Blazing Star	Liatris aspera	0.5	0.03125		Forb	N	N	CP38E-WPHRA(CP25)D	LB-Sgrama-Indian-Pjune-Pdrop-Switch-PPclover-RHbushclover-S
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pju	Sky-Blue Aster	Symphyotrichum oolenta	0.5	0.03125		Forb	N	N	CP38E-WPHRA(CP25)D	LB-Sgrama-Indian-Pjune-Pdrop-Switch-PPclover-RHbushclover-S
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pju	Black-eyed Susan	Rudbeckia hirta	0.25	0.015625		Forb	N	N	CP38E-WPHRA(CP25)D	LB-Sgrama-Indian-Pjune-Pdrop-Switch-PPclover-RHbushclover-S
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pju	Prairie Cinquefoil	Potentilla arguta	0.25	0.015625		Forb	N	N	CP38E-WPHRA(CP25)D	LB-Sgrama-Indian-Pjune-Pdrop-Switch-PPclover-RHbushclover-S
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pju	Stiff Goldenrod	Oligoneuron rigidum	0	0.015625		Forb	N	N	CP38E-WPHRA(CP25)D	LB-Sgrama-Indian-Pjune-Pdrop-Switch-PPclover-RHbushclover-S
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pju	Yellow Coneflower	Ratibida pinnata	0	0.015625		Forb	N	N	CP38E-WPHRA(CP25)D	LB-Sgrama-Indian-Pjune-Pdrop-Switch-PPclover-RHbushclover-S

38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-B	Little Bluestem	Schizachyrium scoparium	32	2		Grass	N	N	CP38E-WPHRA(CP25)DM	LB-Sgrama-Pjune-BB-Indian-Sdrop-Bmilkweed-PPclover-Swort-H
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-B	Sideoats Grama	Bouteloua curtipendula	24	1.5		Grass	N	N	CP38E-WPHRA(CP25)DM	LB-Sgrama-Pjune-BB-Indian-Sdrop-Bmilkweed-PPclover-Swort-H
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-B	Prairie Junegrass	Koeleria macrantha	6	0.375		Grass	N	N	CP38E-WPHRA(CP25)DM	LB-Sgrama-Pjune-BB-Indian-Sdrop-Bmilkweed-PPclover-Swort-H
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-B	Big Bluestem	Andropogon gerardii	4	0.25		Grass	N	N	CP38E-WPHRA(CP25)DM	LB-Sgrama-Pjune-BB-Indian-Sdrop-Bmilkweed-PPclover-Swort-H
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-B	Indiangrass	Sorghastrum nutans	4	0.25		Grass	N	N	CP38E-WPHRA(CP25)DM	LB-Sgrama-Pjune-BB-Indian-Sdrop-Bmilkweed-PPclover-Swort-H
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-B	Sand Dropseed	Sporobolus cryptandrus	4	0.25		Grass	N	N	CP38E-WPHRA(CP25)DM	LB-Sgrama-Pjune-BB-Indian-Sdrop-Bmilkweed-PPclover-Swort-H
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-B	Butterfly Milkweed	Asclepias tuberosa	1	0.0625		Forb	N	N	CP38E-WPHRA(CP25)DM	LB-Sgrama-Pjune-BB-Indian-Sdrop-Bmilkweed-PPclover-Swort-H
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-B	Purple Prairie Clover	Dalea purpurea	1	0.0625		Legume	N	N	CP38E-WPHRA(CP25)DM	LB-Sgrama-Pjune-BB-Indian-Sdrop-Bmilkweed-PPclover-Swort-H
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-B	Spiderwort	Tradescantia ohiensis	1	0.0625		Forb	N	N	CP38E-WPHRA(CP25)DM	LB-Sgrama-Pjune-BB-Indian-Sdrop-Bmilkweed-PPclover-Swort-H
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-B	Hoary Vervain	Verbena stricta	0.5	0.03125		Forb	N	N	CP38E-WPHRA(CP25)DM	LB-Sgrama-Pjune-BB-Indian-Sdrop-Bmilkweed-PPclover-Swort-H
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-B	Leadplant	Amorpha canescens	0.5	0.03125		Legume	N	N	CP38E-WPHRA(CP25)DM	LB-Sgrama-Pjune-BB-Indian-Sdrop-Bmilkweed-PPclover-Swort-H
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-B	Prairie Tickseed	Coreopsis palmata	0.5	0.03125		Forb	N	N	CP38E-WPHRA(CP25)DM	LB-Sgrama-Pjune-BB-Indian-Sdrop-Bmilkweed-PPclover-Swort-H
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-B	Silky Aster	Symphyotrichum pratens	0.5	0.03125		Forb	N	N	CP38E-WPHRA(CP25)DM	LB-Sgrama-Pjune-BB-Indian-Sdrop-Bmilkweed-PPclover-Swort-H
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-B	Prairie Cinquefoil	Potentilla arguta	0.25	0.015625		Forb	N	N	CP38E-WPHRA(CP25)DM	LB-Sgrama-Pjune-BB-Indian-Sdrop-Bmilkweed-PPclover-Swort-H
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-B	Spotted Mint	Monarda punctata	0.25	0.015625		Forb	N	N	CP38E-WPHRA(CP25)DM	LB-Sgrama-Pjune-BB-Indian-Sdrop-Bmilkweed-PPclover-Swort-H
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-B	Stiff Goldenrod	Oligoneuron rigidum	0	0.015625		Forb	N	N	CP38E-WPHRA(CP25)DM	LB-Sgrama-Pjune-BB-Indian-Sdrop-Bmilkweed-PPclover-Swort-H
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-B	Yellow Coneflower	Ratibida pinnata	0	0.015625		Forb	N	N	CP38E-WPHRA(CP25)DM	LB-Sgrama-Pjune-BB-Indian-Sdrop-Bmilkweed-PPclover-Swort-H
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB	Little Bluestem	Schizachyrium scoparium	28	1.75		Grass	N	N	CP38E-WPHRA(CP25)M	LB-Cwrye-Sgrama-BB-Indian-Switch-Cmilkvetch-Oxeyesun-Pblzst
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB	Canada Wildrye	Elymus canadensis	12	0.75		Grass	N	N	CP38E-WPHRA(CP25)M	LB-Cwrye-Sgrama-BB-Indian-Switch-Cmilkvetch-Oxeyesun-Pblzst
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB	Sideoats Grama	Bouteloua curtipendula	12	0.75		Grass	N	N	CP38E-WPHRA(CP25)M	LB-Cwrye-Sgrama-BB-Indian-Switch-Cmilkvetch-Oxeyesun-Pblzst
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB	Big Bluestem	Andropogon gerardii	4	0.25		Grass	N	N	CP38E-WPHRA(CP25)M	LB-Cwrye-Sgrama-BB-Indian-Switch-Cmilkvetch-Oxeyesun-Pblzst
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB	Indiangrass	Sorghastrum nutans	4	0.25		Grass	N	N	CP38E-WPHRA(CP25)M	LB-Cwrye-Sgrama-BB-Indian-Switch-Cmilkvetch-Oxeyesun-Pblzst
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB	Switchgrass	Panicum virgatum	4	0.25		Grass	N	N	CP38E-WPHRA(CP25)M	LB-Cwrye-Sgrama-BB-Indian-Switch-Cmilkvetch-Oxeyesun-Pblzst
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB	Canada Milkvetch	Astragalus canadensis	2	0.125		Legume	N	N	CP38E-WPHRA(CP25)M	LB-Cwrye-Sgrama-BB-Indian-Switch-Cmilkvetch-Oxeyesun-Pblzst
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB	Ox-eye Sunflower	Heliopsis helianthoides	1	0.0625		Forb	N	N	CP38E-WPHRA(CP25)M	LB-Cwrye-Sgrama-BB-Indian-Switch-Cmilkvetch-Oxeyesun-Pblzst
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB	Prairie Blazing Star	Liatris pycnostachya	1	0.0625		Forb	N	N	CP38E-WPHRA(CP25)M	LB-Cwrye-Sgrama-BB-Indian-Switch-Cmilkvetch-Oxeyesun-Pblzst
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB	Purple Prairie Clover	Dalea purpurea	1	0.0625		Legume	N	N	CP38E-WPHRA(CP25)M	LB-Cwrye-Sgrama-BB-Indian-Switch-Cmilkvetch-Oxeyesun-Pblzst
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB	Bergamot	Monarda fistulosa	0.5	0.03125		Forb	N	N	CP38E-WPHRA(CP25)M	LB-Cwrye-Sgrama-BB-Indian-Switch-Cmilkvetch-Oxeyesun-Pblzst
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB	Black-eyed Susan	Rudbeckia hirta	0.5	0.03125		Forb	N	N	CP38E-WPHRA(CP25)M	LB-Cwrye-Sgrama-BB-Indian-Switch-Cmilkvetch-Oxeyesun-Pblzst
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB	New England Aster	Symphyotrichum novae-a	0.5	0.03125		Forb	N	N	CP38E-WPHRA(CP25)M	LB-Cwrye-Sgrama-BB-Indian-Switch-Cmilkvetch-Oxeyesun-Pblzst
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB	Sky-Blue Aster	Symphyotrichum oolenta	0.5	0.03125		Forb	N	N	CP38E-WPHRA(CP25)M	LB-Cwrye-Sgrama-BB-Indian-Switch-Cmilkvetch-Oxeyesun-Pblzst
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB	Smooth Blue Aster	Symphyotrichum laeve	0.5	0.03125		Forb	N	N	CP38E-WPHRA(CP25)M	LB-Cwrye-Sgrama-BB-Indian-Switch-Cmilkvetch-Oxeyesun-Pblzst
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB	Yellow Coneflower	Ratibida pinnata	1	0.03125		Forb	N	N	CP38E-WPHRA(CP25)M	LB-Cwrye-Sgrama-BB-Indian-Switch-Cmilkvetch-Oxeyesun-Pblzst
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB	Culver's Root	Veronicastrum virginicum	0	0.015625		Forb	N	N	CP38E-WPHRA(CP25)M	LB-Cwrye-Sgrama-BB-Indian-Switch-Cmilkvetch-Oxeyesun-Pblzst
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsed	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch	Canada Wildrye	Elymus canadensis	16	1		Grass	N	N	CP38E-WPHRA(CP25)W	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsed	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch	Indiangrass	Sorghastrum nutans	12	0.75		Grass	N	N	CP38E-WPHRA(CP25)W	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsed	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch	Switchgrass	Panicum virgatum	12	0.75		Grass	N	N	CP38E-WPHRA(CP25)W	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsed	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch	Big Bluestem	Andropogon gerardii	8	0.5		Grass	N	N	CP38E-WPHRA(CP25)W	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsed	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch	Fox Sedge	Carex vulpinoidea	8	0.5		Sedge	N	N	CP38E-WPHRA(CP25)W	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsed	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch	Prairie Cordgrass	Spartina pectinata	8	0.5		Grass	N	N	CP38E-WPHRA(CP25)W	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsed	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch	Fowl Mannagrass	Glyceria striata	4	0.25		Grass	N	N	CP38E-WPHRA(CP25)W	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsed	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch	Cupplant	Silphium perfoliatum	2	0.125		Forb	N	N	CP38E-WPHRA(CP25)W	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsed	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch	Showy Tick Trefoil	Desmodium canadense	2	0.125		Legume	N	N	CP38E-WPHRA(CP25)W	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsed	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch	Blue Vervain	Verbena hastata	1	0.0625		Forb	N	N	CP38E-WPHRA(CP25)W	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsed	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch	Golden Alexanders	Zizia aurea	1	0.0625		Forb	N	N	CP38E-WPHRA(CP25)W	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsed	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch	Marsh Milkweed	Asclepias incarnata	1	0.0625		Forb	N	N	CP38E-WPHRA(CP25)W	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsed	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch	Boneset	Eupatorium perfoliatum	0.5	0.03125		Forb	N	N	CP38E-WPHRA(CP25)W	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsed	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch	Common Ironweed	Vernonia fasciculata	1	0.03125		Forb	N	N	CP38E-WPHRA(CP25)W	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsed	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch	Joe-pye Weed	Eutrochium maculatum	1	0.03125		Forb	N	N	CP38E-WPHRA(CP25)W	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsed	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch	Culver's Root	Veronicastrum virginicum	0	0.015625		Forb	N	N	CP38E-WPHRA(CP25)W	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38E-Monarch(CP1)-Tim-Orc-RC-Cmilkweed-Besus-O	38-CP38E-Monarch(CP1)-Tim-Orc-RC-Cmilkweed	Common Milkweed	Asclepias syriaca	6	0.378	0.6	Forb	N	X	CP38E-Monarch(CP1)	Tim-Orc-RC-Cmilkweed-Besus-Oxeyesun-Sgrod
38	CP38E-Monarch(CP1)-Tim-Orc-RC-Cmilkweed-	38-CP38E-Monarch(CP1)-Tim-Orc-RC-Cm	Black-Eyed Susan	Rudbeckia hirta	0.96	0.06	2.2	Forb	N	X	CP38E-Monarch(CP1)	Tim-Orc-RC-Cmilkweed-Besus-Oxeyesun-Sgrod
38	CP38E-Monarch(CP1)-Tim-Orc-RC-Cmilkweed-	38-CP38E-Monarch(CP1)-Tim-Orc-RC-Cm	Ox-eye Sunflower	Heliopsis helianthoides	0.96	0.06	0.2	Forb	N	X	CP38E-Monarch(CP1)	Tim-Orc-RC-Cmilkweed-Besus-Oxeyesun-Sgrod
38	CP38E-Monarch(CP1)-Tim-Orc-RC-Cmilkweed-	38-CP38E-Monarch(CP1)-Tim-Orc-RC-Cm	Stiff Goldenrod	Oligoneuron rigidum	0.96	0.06	1.1	Forb	N	X	CP38E-Monarch(CP1)	Tim-Orc-RC-Cmilkweed-Besus-Oxeyesun-Sgrod
38	CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cv	38-CP38E-Monarch(CP2)-BB-LB-Indian-Sg	Big Bluestem	Andropogon gerardii	4	0.25	1	Grass	N	X	CP38E-Monarch(CP2)	BB-LB-Indian-Sgrama-Cwrye-Wpclover-Cmilkweed-Besus-Berg-Sg
38	CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cv	38-CP38E-Monarch(CP2)-BB-LB-Indian-Sg	Little Bluestem	Schizachyrium scoparium	24	1.5	8.3	Grass	N	X	CP38E-Monarch(CP2)	BB-LB-Indian-Sgrama-Cwrye-Wpclover-Cmilkweed-Besus-Berg-Sg
38	CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cv	38-CP38E-Monarch(CP2)-BB-LB-Indian-Sg	Indiangrass	Sorghastrum nutans	4	0.25	1.2	Grass	N	X	CP38E-Monarch(CP2)	BB-LB-Indian-Sgrama-Cwrye-Wpclover-Cmilkweed-Besus-Berg-Sg
38	CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cv	38-CP38E-Monarch(CP2)-BB-LB-Indian-Sg	Sideoats Grama	Bouteloua curtipendula	12	0.75	2.2	Grass	N	X	CP38E-Monarch(CP2)	BB-LB-Indian-Sgrama-Cwrye-Wpclover-Cmilkweed-Besus-Berg-Sg
38	CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cv	38-CP38E-Monarch(CP2)-BB-LB-Indian-Sg	Canada Wildrye	Elymus canadensis	16	1	2	Grass	N	X	CP38E-Monarch(CP2)	BB-LB-Indian-Sgrama-Cwrye-Wpclover-Cmilkweed-Besus-Berg-Sg
38	CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cv	38-CP38E-Monarch(CP2)-BB-LB-Indian-Sg	white prairie clover	Dalea candida	3.04	0.19	1.2	Legume	N	X	CP38E-Monarch(CP2)	BB-LB-Indian-Sgrama-Cwrye-Wpclover-Cmilkweed-Besus-Berg-Sg
38	CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cv	38-CP38E-Monarch(CP2)-BB-LB-Indian-Sg	Common Milkweed	Asclepias syriaca	4.96	0.31	0.5	Forb	N	X	CP38E-Monarch(CP2)	BB-LB-Indian-Sgrama-Cwrye-Wpclover-Cmilkweed-Besus-Berg-Sg
38	CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cv	38-CP38E-Monarch(CP2)-BB-LB-Indian-Sg	Black-eyed Susan	Rudbeckia hirta	0.96	0.06	2.2	Forb	N	X	CP38E-Monarch(CP2)	BB-LB-Indian-Sgrama-Cwrye-Wpclover-Cmilkweed-Besus-Berg-Sg
38	CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cv	38-CP38E-Monarch(CP2)-BB-LB-Indian-Sg	Bergamot	Monarda fistulosa	0.96	0.06	1.8	Forb	N	X	CP38E-Monarch(CP2)	BB-LB-Indian-Sgrama-Cwrye-Wpclover-Cmilkweed-Besus-Berg-Sg
38	CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cv	38-CP38E-Monarch(CP2)-BB-LB-Indian-Sg	Stiff Goldenrod	Oligoneuron rigidum	0.96	0.06	1.1	Forb	N	X	CP38E-Monarch(CP2)	BB-LB-Indian-Sgrama-Cwrye-Wpclover-Cmilkweed-Besus-Berg-Sg
38	CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cv	38-CP38E-Monarch(CP2)-BB-LB-Indian-Sg	Showy Goldenrod	Solidago speciosa	0.48	0.03	1.1	Forb	N	X	CP38E-Monarch(CP2)	BB-LB-Indian-Sgrama-Cwrye-Wpclover-Cmilkweed-Besus-Berg-Sg
38	CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cv	38-CP38E-Monarch(CP2)-BB-LB-Indian-Sg	New England Aster	Symphyotrichum novae-angliae	0.48	0.03	0.8	Forb	N	X	CP38E-Monarch(CP2)	BB-LB-Indian-Sgrama-Cwrye-Wpclover-Cmilkweed-Besus-Berg-Sg

38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	38-CP38E-Monarch(CP25)-BB-LB-Indian-S	Big Bluestem	Andropogon gerardii	4	0.25	1	Grass	N	X	CP38E-Monarch(CP25)	BB-LB-Indian-Sgrama-Cwrye-Wpclover-Cmilkweed-Besus-Berg-Sg
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	38-CP38E-Monarch(CP25)-BB-LB-Indian-S	Little Bluestem	Schizachyrium scoparium	16	1	5.6	Grass	N	X	CP38E-Monarch(CP25)	BB-LB-Indian-Sgrama-Cwrye-Wpclover-Cmilkweed-Besus-Berg-Sg
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	38-CP38E-Monarch(CP25)-BB-LB-Indian-S	Indiangrass	Sorghastrum nutans	4	0.25	1.2	Grass	N	X	CP38E-Monarch(CP25)	BB-LB-Indian-Sgrama-Cwrye-Wpclover-Cmilkweed-Besus-Berg-Sg
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	38-CP38E-Monarch(CP25)-BB-LB-Indian-S	Sideoats Grama	Bouteloua curtipendula	8	0.5	1.5	Grass	N	X	CP38E-Monarch(CP25)	BB-LB-Indian-Sgrama-Cwrye-Wpclover-Cmilkweed-Besus-Berg-Sg
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	38-CP38E-Monarch(CP25)-BB-LB-Indian-S	Canada Wildrye	Elymus canadensis	8	0.5	1	Grass	N	X	CP38E-Monarch(CP25)	BB-LB-Indian-Sgrama-Cwrye-Wpclover-Cmilkweed-Besus-Berg-Sg
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	38-CP38E-Monarch(CP25)-BB-LB-Indian-S	white prairie clover	Dalea candida	3.04	0.19	1.2	Legume	N	X	CP38E-Monarch(CP25)	BB-LB-Indian-Sgrama-Cwrye-Wpclover-Cmilkweed-Besus-Berg-Sg
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	38-CP38E-Monarch(CP25)-BB-LB-Indian-S	Common Milkweed	Asclepias syriaca	4.96	0.31	0.5	Forb	N	X	CP38E-Monarch(CP25)	BB-LB-Indian-Sgrama-Cwrye-Wpclover-Cmilkweed-Besus-Berg-Sg
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	38-CP38E-Monarch(CP25)-BB-LB-Indian-S	Black-eyed Susan	Rudbeckia hirta	0.96	0.06	2.2	Forb	N	X	CP38E-Monarch(CP25)	BB-LB-Indian-Sgrama-Cwrye-Wpclover-Cmilkweed-Besus-Berg-Sg
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	38-CP38E-Monarch(CP25)-BB-LB-Indian-S	Bergamot	Monarda fistulosa	0.96	0.06	1.8	Forb	N	X	CP38E-Monarch(CP25)	BB-LB-Indian-Sgrama-Cwrye-Wpclover-Cmilkweed-Besus-Berg-Sg
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	38-CP38E-Monarch(CP25)-BB-LB-Indian-S	Stiff Goldenrod	Oligoneuron rigidum	0.96	0.06	1.1	Forb	N	X	CP38E-Monarch(CP25)	BB-LB-Indian-Sgrama-Cwrye-Wpclover-Cmilkweed-Besus-Berg-Sg
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	38-CP38E-Monarch(CP25)-BB-LB-Indian-S	Showy Goldenrod	Solidago speciosa	0.48	0.03	1.1	Forb	N	X	CP38E-Monarch(CP25)	BB-LB-Indian-Sgrama-Cwrye-Wpclover-Cmilkweed-Besus-Berg-Sg
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	38-CP38E-Monarch(CP25)-BB-LB-Indian-S	New England Aster	Symphyotrichum novae-angliae	0.48	0.03	0.8	Forb	N	X	CP38E-Monarch(CP25)	BB-LB-Indian-Sgrama-Cwrye-Wpclover-Cmilkweed-Besus-Berg-Sg
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	38-CP38E-Monarch(CP25)-BB-LB-Indian-S	Rough Blazing Star	Liatris aspera	0.48	0.03	0.2	Forb	N	X	CP38E-Monarch(CP25)	BB-LB-Indian-Sgrama-Cwrye-Wpclover-Cmilkweed-Besus-Berg-Sg
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	38-CP38E-Monarch(CP25)-BB-LB-Indian-S	Rattlesnake Master	Eryngium yuccifolium	0.96	0.06	0.2	Forb	N	X	CP38E-Monarch(CP25)	BB-LB-Indian-Sgrama-Cwrye-Wpclover-Cmilkweed-Besus-Berg-Sg
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	38-CP38E-Monarch(CP25)-BB-LB-Indian-S	Cupplant	Silphium perfoliatum	2.08	0.13	0.1	Forb	N	X	CP38E-Monarch(CP25)	BB-LB-Indian-Sgrama-Cwrye-Wpclover-Cmilkweed-Besus-Berg-Sg
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	38-CP38E-Monarch(CP25)-BB-LB-Indian-S	Sky-Blue Aster	Symphyotrichum oolentangiense	0.96	0.06	1.9	Forb	N	X	CP38E-Monarch(CP25)	BB-LB-Indian-Sgrama-Cwrye-Wpclover-Cmilkweed-Besus-Berg-Sg
38	CP3-1-BB-LB-Indian-Sgrama-Sgrod-Ycone-PPcl	38-CP3-1-BB-LB-Indian-Sgrama-Sgrod-Yc	Big Bluestem	Andropogon gerardii	8	0.5	1.9	Grass	N	X	CP3-1	BB-LB-Indian-Sgrama-Sgrod-Ycone-PPclover
38	CP3-1-BB-LB-Indian-Sgrama-Sgrod-Ycone-PPcl	38-CP3-1-BB-LB-Indian-Sgrama-Sgrod-Yc	Little Bluestem	Schizachyrium scoparium	24	1.5	8.3	Grass	N	X	CP3-1	BB-LB-Indian-Sgrama-Sgrod-Ycone-PPclover
38	CP3-1-BB-LB-Indian-Sgrama-Sgrod-Ycone-PPcl	38-CP3-1-BB-LB-Indian-Sgrama-Sgrod-Yc	Indiangrass	Sorghastrum nutans	8	0.5	2.3	Grass	N	X	CP3-1	BB-LB-Indian-Sgrama-Sgrod-Ycone-PPclover
38	CP3-1-BB-LB-Indian-Sgrama-Sgrod-Ycone-PPcl	38-CP3-1-BB-LB-Indian-Sgrama-Sgrod-Yc	Sideoats Grama	Bouteloua curtipendula	24	1.5	4.4	Grass	N	X	CP3-1	BB-LB-Indian-Sgrama-Sgrod-Ycone-PPclover
38	CP3-1-BB-LB-Indian-Sgrama-Sgrod-Ycone-PPcl	38-CP3-1-BB-LB-Indian-Sgrama-Sgrod-Yc	Stiff Goldenrod	Oligoneuron rigidum	1	0.0625	1.1	Forb	N	X	CP3-1	BB-LB-Indian-Sgrama-Sgrod-Ycone-PPclover
38	CP3-1-BB-LB-Indian-Sgrama-Sgrod-Ycone-PPcl	38-CP3-1-BB-LB-Indian-Sgrama-Sgrod-Yc	Yellow Coneflower	Ratibida pinnata	1	0.0625	0.7	Forb	N	X	CP3-1	BB-LB-Indian-Sgrama-Sgrod-Ycone-PPclover
38	CP3-1-BB-LB-Indian-Sgrama-Sgrod-Ycone-PPcl	38-CP3-1-BB-LB-Indian-Sgrama-Sgrod-Yc	Purple Prairie Clover	Dalea purpurea	2	0.125	1	Legume	N	X	CP3-1	BB-LB-Indian-Sgrama-Sgrod-Ycone-PPclover
38	CP3-2-BB-Switch-LB-Indian-Cwrye-Ycone-Besu	38-CP3-2-BB-Switch-LB-Indian-Cwrye-Yc	Big Bluestem	Andropogon gerardii	8	0.5	1.9	Grass	N	X	CP3-2	BB-Switch-LB-Indian-Cwrye-Ycone-Besus-Berg
38	CP3-2-BB-Switch-LB-Indian-Cwrye-Ycone-Besu	38-CP3-2-BB-Switch-LB-Indian-Cwrye-Yc	Switchgrass	Panicum virgatum	8	0.5	4.5	Grass	N	X	CP3-2	BB-Switch-LB-Indian-Cwrye-Ycone-Besus-Berg
38	CP3-2-BB-Switch-LB-Indian-Cwrye-Ycone-Besu	38-CP3-2-BB-Switch-LB-Indian-Cwrye-Yc	Little Bluestem	Schizachyrium scoparium	20	1.25	6.9	Grass	N	X	CP3-2	BB-Switch-LB-Indian-Cwrye-Ycone-Besus-Berg
38	CP3-2-BB-Switch-LB-Indian-Cwrye-Ycone-Besu	38-CP3-2-BB-Switch-LB-Indian-Cwrye-Yc	Indiangrass	Sorghastrum nutans	16	1	4.5	Grass	N	X	CP3-2	BB-Switch-LB-Indian-Cwrye-Ycone-Besus-Berg
38	CP3-2-BB-Switch-LB-Indian-Cwrye-Ycone-Besu	38-CP3-2-BB-Switch-LB-Indian-Cwrye-Yc	Canada Wildrye	Elymus canadensis	16	1	2	Grass	N	X	CP3-2	BB-Switch-LB-Indian-Cwrye-Ycone-Besus-Berg
38	CP3-2-BB-Switch-LB-Indian-Cwrye-Ycone-Besu	38-CP3-2-BB-Switch-LB-Indian-Cwrye-Yc	Yellow Coneflower	Ratibida pinnata	1	0.0625	0.7	Forb	N	X	CP3-2	BB-Switch-LB-Indian-Cwrye-Ycone-Besus-Berg
38	CP3-2-BB-Switch-LB-Indian-Cwrye-Ycone-Besu	38-CP3-2-BB-Switch-LB-Indian-Cwrye-Yc	Black-Eyed Susan	Rudbeckia hirta	1	0.0625	2.3	Forb	N	X	CP3-2	BB-Switch-LB-Indian-Cwrye-Ycone-Besus-Berg
38	CP3-2-BB-Switch-LB-Indian-Cwrye-Ycone-Besu	38-CP3-2-BB-Switch-LB-Indian-Cwrye-Yc	Bergamot	Monarda fistulosa	1	0.0625	1.8	Forb	N	X	CP3-2	BB-Switch-LB-Indian-Cwrye-Ycone-Besus-Berg
38	CP3-3-BB-LB-Indian-Switch-Sgrama-PPclover-B	38-CP3-3-BB-LB-Indian-Switch-Sgrama-PP	Big Bluestem	Andropogon gerardii	8	0.5	1.9	Grass	N	X	CP3-3	BB-LB-Indian-Switch-Sgrama-PPclover-Berg-Ycone
38	CP3-3-BB-LB-Indian-Switch-Sgrama-PPclover-B	38-CP3-3-BB-LB-Indian-Switch-Sgrama-PP	Little Bluestem	Schizachyrium scoparium	24	1.5	8.3	Grass	N	X	CP3-3	BB-LB-Indian-Switch-Sgrama-PPclover-Berg-Ycone
38	CP3-3-BB-LB-Indian-Switch-Sgrama-PPclover-B	38-CP3-3-BB-LB-Indian-Switch-Sgrama-PP	Indiangrass	Sorghastrum nutans	8	0.5	2.3	Grass	N	X	CP3-3	BB-LB-Indian-Switch-Sgrama-PPclover-Berg-Ycone
38	CP3-3-BB-LB-Indian-Switch-Sgrama-PPclover-B	38-CP3-3-BB-LB-Indian-Switch-Sgrama-PP	Switchgrass	Panicum virgatum	8	0.5	4.5	Grass	N	X	CP3-3	BB-LB-Indian-Switch-Sgrama-PPclover-Berg-Ycone
38	CP3-3-BB-LB-Indian-Switch-Sgrama-PPclover-B	38-CP3-3-BB-LB-Indian-Switch-Sgrama-PP	Sideoats Grama	Bouteloua curtipendula	16	1	3	Grass	N	X	CP3-3	BB-LB-Indian-Switch-Sgrama-PPclover-Berg-Ycone
38	CP3-3-BB-LB-Indian-Switch-Sgrama-PPclover-B	38-CP3-3-BB-LB-Indian-Switch-Sgrama-PP	Purple Prairie Clover	Dalea purpurea	2	0.125	1	Legume	N	X	CP3-3	BB-LB-Indian-Switch-Sgrama-PPclover-Berg-Ycone
38	CP3-3-BB-LB-Indian-Switch-Sgrama-PPclover-B	38-CP3-3-BB-LB-Indian-Switch-Sgrama-PP	Bergamot	Monarda fistulosa	1	0.0625	1.8	Forb	N	X	CP3-3	BB-LB-Indian-Switch-Sgrama-PPclover-Berg-Ycone
38	CP3-3-BB-LB-Indian-Switch-Sgrama-PPclover-B	38-CP3-3-BB-LB-Indian-Switch-Sgrama-PP	Yellow Coneflower	Ratibida pinnata	1	0.0625	0.7	Forb	N	X	CP3-3	BB-LB-Indian-Switch-Sgrama-PPclover-Berg-Ycone
38	CP3-4-Switch-Pcord-BB-Indian-Cwrye-Ciron-Cu	38-CP3-4-Switch-Pcord-BB-Indian-Cwrye-C	Switchgrass	Panicum virgatum	16	1	9	Grass	N	X	CP3-4	Switch-Pcord-BB-Indian-Cwrye-Ciron-Cup-Bvervain
38	CP3-4-Switch-Pcord-BB-Indian-Cwrye-Ciron-Cu	38-CP3-4-Switch-Pcord-BB-Indian-Cwrye-C	Prairie Cordgrass	Spartina pectinata	8	0.5	1.3	Grass	N		CP3-4	Switch-Pcord-BB-Indian-Cwrye-Ciron-Cup-Bvervain
38	CP3-4-Switch-Pcord-BB-Indian-Cwrye-Ciron-Cu	38-CP3-4-Switch-Pcord-BB-Indian-Cwrye-C	Big Bluestem	Andropogon gerardii	16	1	3.8	Grass	N	X	CP3-4	Switch-Pcord-BB-Indian-Cwrye-Ciron-Cup-Bvervain
38	CP3-4-Switch-Pcord-BB-Indian-Cwrye-Ciron-Cu	38-CP3-4-Switch-Pcord-BB-Indian-Cwrye-C	Indiangrass	Sorghastrum nutans	16	1	4.5	Grass	N	X	CP3-4	Switch-Pcord-BB-Indian-Cwrye-Ciron-Cup-Bvervain
38	CP3-4-Switch-Pcord-BB-Indian-Cwrye-Ciron-Cu	38-CP3-4-Switch-Pcord-BB-Indian-Cwrye-C	Canada Wildrye	Elymus canadensis	16	1	2	Grass	N	X	CP3-4	Switch-Pcord-BB-Indian-Cwrye-Ciron-Cup-Bvervain
38	CP3-4-Switch-Pcord-BB-Indian-Cwrye-Ciron-Cu	38-CP3-4-Switch-Pcord-BB-Indian-Cwrye-C	Common Ironweed	Vernonia fasciculata	1	0.0625	0.5	Forb	N	X	CP3-4	Switch-Pcord-BB-Indian-Cwrye-Ciron-Cup-Bvervain
38	CP3-4-Switch-Pcord-BB-Indian-Cwrye-Ciron-Cu	38-CP3-4-Switch-Pcord-BB-Indian-Cwrye-C	Cupplant	Silphium perfoliatum	2	0.125	0.1	Forb	N	X	CP3-4	Switch-Pcord-BB-Indian-Cwrye-Ciron-Cup-Bvervain
38	CP3-4-Switch-Pcord-BB-Indian-Cwrye-Ciron-Cu	38-CP3-4-Switch-Pcord-BB-Indian-Cwrye-C	Blue Vervain	Verbena hastata	1	0.0625	2.2	Forb	N	X	CP3-4	Switch-Pcord-BB-Indian-Cwrye-Ciron-Cup-Bvervain
38	CP3-5-Switch-Pcord-BB-Cwrye-Berg-Ycone-NEA	38-CP3-5-Switch-Pcord-BB-Cwrye-Berg-Yc	Switchgrass	Panicum virgatum	32	2	17.9	Grass	N	X	CP3-5	Switch-Pcord-BB-Cwrye-Berg-Ycone-NEaster
38	CP3-5-Switch-Pcord-BB-Cwrye-Berg-Ycone-NEA	38-CP3-5-Switch-Pcord-BB-Cwrye-Berg-Yc	Prairie Cordgrass	Spartina pectinata	4	0.25	0.7	Grass	N		CP3-5	Switch-Pcord-BB-Cwrye-Berg-Ycone-NEaster
38	CP3-5-Switch-Pcord-BB-Cwrye-Berg-Ycone-NEA	38-CP3-5-Switch-Pcord-BB-Cwrye-Berg-Yc	Big Bluestem	Andropogon gerardii	16	1	3.8	Grass	N	X	CP3-5	Switch-Pcord-BB-Cwrye-Berg-Ycone-NEaster
38	CP3-5-Switch-Pcord-BB-Cwrye-Berg-Ycone-NEA	38-CP3-5-Switch-Pcord-BB-Cwrye-Berg-Yc	Canada Wildrye	Elymus canadensis	16	1	2	Grass	N	X	CP3-5	Switch-Pcord-BB-Cwrye-Berg-Ycone-NEaster
38	CP3-5-Switch-Pcord-BB-Cwrye-Berg-Ycone-NEA	38-CP3-5-Switch-Pcord-BB-Cwrye-Berg-Yc	Monarda fistulosa	Monarda fistulosa	1	0.0625	1.8	Forb	N	X	CP3-5	Switch-Pcord-BB-Cwrye-Berg-Ycone-NEaster
38	CP3-5-Switch-Pcord-BB-Cwrye-Berg-Ycone-NEA	38-CP3-5-Switch-Pcord-BB-Cwrye-Berg-Yc	Yellow Coneflower	Ratibida pinnata	1	0.0625	0.7	Forb	N	X	CP3-5	Switch-Pcord-BB-Cwrye-Berg-Ycone-NEaster
38	CP3-5-Switch-Pcord-BB-Cwrye-Berg-Ycone-NEA	38-CP3-5-Switch-Pcord-BB-Cwrye-Berg-Yc	New England Aster	Symphyotrichum novae-angliae	1	0.0625	1.7	Forb	N	X	CP3-5	Switch-Pcord-BB-Cwrye-Berg-Ycone-NEaster

STD	Mix #	std-mix	Common Name	Scientific Name	PLS (oz./A)	PLS (lbs./A)	Seeds/Square Foot	Type	Intro / Native	Poll. (Y/N)	MIXDescrip	Mix No.	MR
	0												

STD	Mix #	std-mix	Common Name	Scientific Name	PLS (oz./A)	PLS (lbs./A)	Seeds/Square Foot	Type	Intro / Native	Poll. (Y/N)	Mix No.	MR	Mix Components
38	CP3-1-BB-LB-Indian-Sgrama-Sgrod-Ycone-PPcl	38-CP3-1-BB-LB-Indian-Sgrama-Sgrod-Yc	Big Bluestem	Andropogon gerardii	8	0.5	1.9	Grass	N	X	CP3-1		BB-LB-Indian-Sgrama-Sgrod-Ycone-PPclover
38	CP3-1-BB-LB-Indian-Sgrama-Sgrod-Ycone-PPcl	38-CP3-1-BB-LB-Indian-Sgrama-Sgrod-Yc	Indiangrass	Sorghastrum nutans	8	0.5	2.3	Grass	N	X	CP3-1		BB-LB-Indian-Sgrama-Sgrod-Ycone-PPclover
38	CP3-1-BB-LB-Indian-Sgrama-Sgrod-Ycone-PPcl	38-CP3-1-BB-LB-Indian-Sgrama-Sgrod-Yc	Little Bluestem	Schizachyrium scoparium	24	1.5	8.3	Grass	N	X	CP3-1		BB-LB-Indian-Sgrama-Sgrod-Ycone-PPclover
38	CP3-1-BB-LB-Indian-Sgrama-Sgrod-Ycone-PPcl	38-CP3-1-BB-LB-Indian-Sgrama-Sgrod-Yc	Purple Prairie Clover	Dalea purpurea	2	0.125	1	Legume	N	X	CP3-1		BB-LB-Indian-Sgrama-Sgrod-Ycone-PPclover
38	CP3-1-BB-LB-Indian-Sgrama-Sgrod-Ycone-PPcl	38-CP3-1-BB-LB-Indian-Sgrama-Sgrod-Yc	Sideoats Grama	Bouteloua curtipendula	24	1.5	4.4	Grass	N	X	CP3-1		BB-LB-Indian-Sgrama-Sgrod-Ycone-PPclover
38	CP3-1-BB-LB-Indian-Sgrama-Sgrod-Ycone-PPcl	38-CP3-1-BB-LB-Indian-Sgrama-Sgrod-Yc	Stiff Goldenrod	Oligoneuron rigidum	1	0.0625	1.1	Forb	N	X	CP3-1		BB-LB-Indian-Sgrama-Sgrod-Ycone-PPclover
38	CP3-1-BB-LB-Indian-Sgrama-Sgrod-Ycone-PPcl	38-CP3-1-BB-LB-Indian-Sgrama-Sgrod-Yc	Yellow Coneflower	Ratibida pinnata	1	0.0625	0.7	Forb	N	X	CP3-1		BB-LB-Indian-Sgrama-Sgrod-Ycone-PPclover

Chan, Ginger

From: Bartsch, Zachary
Sent: Thursday, December 21, 2023 1:32 PM
To: Schaar, Matthew - NRCS, Farmington, MN
Subject: RE: [External Email]Seed mixes and erosion controls
Attachments: MNAgronomyTechNote_No_31_version1_7.pdf; 484_MN_OTH_Mulching_Tables_2021.pdf

Hi Matthew,

It has been a while since the last time we spoke, I hope you are well. I am reaching out for a project that is taking place in Washington County, MN, and similar to the project I contacted you about in 2022 that will be disturbing cropland, ditches, and perennial grasses. I didn't see anyone listed for the NRCS in Chisago or Washington County, but saw you on the Farmington field office (Dakota Co). In 2022, you provided me with the MN Agronomy Technical Note No. 31 and the 484 Mulching table (attached) to use for reseeding and preventing erosion following soil disturbances. Are these documents still acceptable for us and my client to reference now?

Let me know if you have any questions.

Zach Bartsch
Soil Scientist

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From: Schaar, Matthew - NRCS, Farmington, MN <matthew.schaar@usda.gov>
Sent: Friday, January 7, 2022 1:57 PM
To: Bartsch, Zachary <zachary.bartsch@stantec.com>
Subject: RE: [External Email]Seed mixes and erosion controls

Zach,

The attachment named "mulching tables" lists the quantities recommended for different materials used for mulch. The first one on the table "Grass Hay or Cereal Grain Straw" is very commonly used where concentrated flow is not much of an issue. Crimping the mulch after it is spread out is highly recommended.

The other attachment has some recommended seeding mixes and rates. Take a look at page 22 (STANDARD 342 – CRITICAL AREA PLANTING SPECIFICATIONS). If there are no concentrated flow issues or areas of really steep slopes the mixes suitable to construction sites may be appropriate, otherwise take a look at the mixes recommended for critical areas or waterways. Also, if there are native plant communities nearby you may want to be a bit cautious about using smooth brome grass.

Hope this helps,

Matthew Schaar
Soil Conservation Technician
USDA / NRCS
Farmington, MN
651-463-8665 ext. 6419

From: Bartsch, Zachary <zachary.bartsch@stantec.com>
Sent: Friday, January 7, 2022 8:55 AM
To: Schaar, Matthew - NRCS, Farmington, MN <matthew.schaar@usda.gov>
Subject: [External Email]Seed mixes and erosion controls

[External Email]
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Please send any concerns or suspicious messages to: Spam.Abuse@usda.gov

Good morning Matt,

Here is my contact info. Thanks.

Zach Bartsch
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Minnesota Agronomy Technical Note # 31 (Ver. 1.8)
Herbaceous Vegetation Establishment Guide

INTRODUCTION

This technical note may be used to guide establishment of native and introduced plantings of herbaceous vegetation for the purposes of meeting criteria in the Minnesota Natural Resources Conservation Service Field Office Technical Guide (FOTG) Practice Standards; ***327-Conservation Cover, 332-Contour Buffer Strips, 342-Critical Area Planting, 390- Riparian Herbaceous Cover, 393-Filter Strip, 420-Wildlife Habitat Planting, 512-Forage and Biomass Planting, 589C- Cross Wind Trap Strips, 643-Restoration of Rare or Declining Natural Communities, 645-Upland Wildlife Habitat Management, and 657-Wetland Restoration***. Other ecological science and certain engineering standards may refer to this technical note Refer to those standards for specific practice criteria.

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Recommended Plant Species

Varieties of introduced grasses and legumes shall be selected from one of the following sources:

- University of Minnesota Varietal Trials
- Plant Material Center varietal selections
- Varieties listed as recommended by Extension publications, Minnesota Crop Improvement Association or Varietal Trials of states adjacent to Minnesota
- Named varieties known to be locally adapted. Seek Area Office approval for varieties not identified as recommended by University of Minnesota or adjacent State Varietal Trials.

Select varieties that are adapted to specific site conditions, planned harvest schedule and harvest method, if applicable. To ensure longer life, alfalfa varieties shall have a Winter Survival Index of less than three, listed in the Very Good Winter Survival category. Varieties with no Winter Survival Index shall have a third-year yield of at least 105% of check varieties.

Seed Quality

All seed shall be of high quality and be labeled in accordance with Minnesota Seed Law, section 21.82 including limits on noxious weeds. For information about this law, see Minnesota Agronomy Tech Note MN-21 Agronomy Technical Notes | NRCS Minnesota. If *Amaranth* species are found in the test results, it must be identified on the seed test report. The Minnesota Department of Agriculture (MDA) requires that a genetic test must be done to determine if the *Amaranth* species are Palmer amaranth.

*--Non-commercial (bin-run) seed can be used as temporary cover or companion crop if the seed has been tested for germination and scale tickets provided. NRCS payments associated with conservation programs will not be allowed until seeding is established and field verified.

Wild or native harvest mixtures meeting the species diversity and quantity (minimum 35-40 PLS seeds/ft^2 total) requirements will be considered adequate. Seed tests are required to determine pure live seed requirements and presence of noxious weeds. Seed must be cleaned to an extent sufficient to allow passage through appropriate seeding equipment

Landowners who have purchased seed for use in NRCS financial assistance programs, must follow Minnesota state seed laws.

- The germination test date located on the seed label may not be more than 15 months old excluding the month of test for native grass and forb seeds when used as agricultural seed. A sell by date may be listed in addition to or in lieu of the test date and denote the end of the 15-month test date period.
- The germination test date, or sell by date, located on the seed label may not be more than 12 months old for introduced species.
- Landowners will have 12 months after the germination test date expires to plant the native and/or introduced seed and seed mixtures. If seeding will exceed these time limits, the seed shall be re-tested for germination to ensure seed quality. Variances may be granted by the State Resource Conservationist on a case-by-case basis.

Seed should be stored in a cool, dry place to maintain the purity, quality, and viability of the seed.

Inoculate legume seed before seeding with the inoculants specific for the species. Pre-inoculated seed may be used but shall be re-inoculated if used beyond dates specified on the seed tag. This does not apply to native legumes.

Native Seed Origin

Native seed origin must be labeled in accordance with federal and state seed laws including Minnesota Seed Law sections 21.80 through 21.92. Use source-identified local ecotypes, when available. This applicability is dependent upon program and practice requirements. Be aware that deviation from local origin could result in failure of establishment or long-lasting vegetative stand. Producers will document why origin was outside the recommended region and are aware that stand failure will be their responsibility.

The following is recommended when obtaining seeds/plants:

1. It is desirable for seed sources of native grass, forbs, and legumes to originate from as close to the planting site as possible. The preferred sequence: within the ecological sub-section, ecological section and then within a 200-mile radius of the project site, unless otherwise identified as an acceptable cultivar. Exception: Tallgrass Prairie Restoration shall be within a 175-mile radius of the project. Variances may be granted by the State Resource Conservationist on a case-by-case basis.
2. Seed origins native to Minnesota are preferred. When local Minnesota sources are not available, native seed shall originate from Wisconsin, North Dakota, South Dakota, Iowa, Illinois, and the Canadian provinces of Manitoba, or Ontario.
3. For native seed, the origin is the area where the original foundation seed was collected.
4. If the origin of the seed (generation 0) can be certified as one of the accepted states or provinces, then there would be no restriction on where the seed is grown. Certification must be provided by the grower, and responsibility for obtaining certification rests with the producer.
5. Where there are known remnant native prairies or certified native grass, or forb seed production fields present, maintain an isolation distance of 165 feet for grasses and 1320 feet for forbs when planting the same species that have different genetic origins.
6. The use of cultivars should be avoided within ¼ mile of existing remnant native prairie or other sensitive areas. "Yellow Tag" or source identified materials would be preferred.

Potentially Invasive Species

Ask for prior approval from the Area Resource Conservationist or Grazing Specialist before recommending reed canary grass, birdsfoot trefoil, crown vetch, sweet clover, or crested wheatgrass. These may be considered invasive if adjacent to restored native warm season grass stands or prairie remnants.

Seedbed Preparation and Seeding Methods

Prepare a firm seedbed for all planting methods.

Conventional Tillage - Prepare a fine, firm seedbed to a minimum of 3 inches. The seedbed should contain enough fine soil particles for uniform shallow coverage of the seed as well as contact with moisture and nutrients. If possible, use specialized native grass drills with depth bands designed to handle a wide variety of seed. For conventional drills, a minimum, cultipack before seeding.

Do not use heavy drills on conventionally prepared seedbeds as heavy drills tend to sink in the soil and depth control is difficult. Plant seed between ¼" and ½" inch deep depending on species recommendations. **The seedbed is firm enough when an adult footprint penetrates ¼" to ½" deep.** Some seed may be seen on the surface of the ground after seeding. Tillage should only be used on flatter slopes or in conjunction with erosion control measures.

No-Till - No-till drilling reduces the exposure of the newly seeded site to erosion. A drill should be selected that can handle a wide variety of seed (fluffy, smooth, large, and small) and low seeding rates. Plant seed between ¼" and ½" inch deep depending on species recommendations. Seed when the soil is slightly moist but not wet, especially when seeding inoculated legumes. Adjust the coulters and packing wheels of the drill to cover the seed based on the soil texture, moisture, and surface residue conditions.

- No-till Into Existing Vegetation:

  Use of herbicides is essential to kill existing vegetation. (Organic producers will not have this option available to them.) Complete control often requires more than one application. Land that has been in grass for many years usually has a thick residue layer on the soil surface. To allow for the best no-till seedbed this residue must be removed. Three options are: (1) grazing; (2) mowing with residue removed; and (3) prescribed burn. In the fall a burndown herbicide can be applied to prepare for a spring no-till seeding. An additional spring herbicide application may be required, depending on weed growth.

  No-till seeding should be used on existing pastures that lack diversity, either in grasses or legumes, on existing pastures that contain species unsuited to the kind and/or class of livestock, to improve the nutritional value of an existing pasture, improve forage production, and on pastures or grasslands that contain little debris, rocks, or boulders. Do not recommend inter-seeding alfalfa into existing alfalfa stands due to autotoxicity.

- No-Till into Crop Residue:

  When native materials are planted into undisturbed ground, the crop residue should be uniformly distributed over the soil surface prior to planting to minimize the smothering of new seedlings and to provide conditions for the operation of planting equipment. Native material planted into undisturbed corn residue has proven successful at times, however soybean residue is preferred. Soybeans produce a moderate amount of crop residue that can be effectively managed and tend to leave the soil in a mellow condition that is well suited to no-till planting of prairie plants.

- Inter-seeding with Tillage into Existing Coo Season Grass Stands:

  If a no-till drill is not available, it is still possible to inter-seed an existing grass stand by using tillage and a conventional grain drill. Disturb the existing sod with a light disc harrow or a harrow/field cultivator combination.

  If there is an old dense stand of Kentucky bluegrass and quackgrass, fall tillage will help to reduce competition before spring planting. Use enough tillage passes to expose at least 50% bare soil. If the surface is rough after the initial tillage use a drag harrow to level prior to seeding with the drill. Seed into moist but not wet soil. Immediately after drilling, the soil should be run over with a cultipacker.

Broadcast: - Prepare a fine firm seedbed to a minimum of 3 inches. Use a roller, cultipacker or similar implement prior to seeding. The seedbed should contain enough fine soil particles for uniform shallow coverage of the seed as well as contact with moisture and nutrients. **The seedbed is firm enough when a footprint penetrates ¼ to ½ deep.** Broadcast seed at a rate of 1.5 times the normal seeding rate and roll or cultipack again after seeding. Do not harrow in the seed.

Frost seeding (late February or March):

Graze or clip to a 2" of less stubble height the season before seeding or use a suppression rate of herbicide according to label directions. Broadcast the legume seed on top of the ground in late winter or early spring when freezing and thawing help to incorporate the seed into the soil. Do not seed on snow cover, especially on steeper soils because snow melt may carry the seed away in runoff events. Frost seeding also works well on small, disturbed areas within a pasture. Use this method where it is impractical or impossible to use conventional seeding equipment such as steep slopes, rough terrain, and rock outcrops. Red clover and white clover are vigorous and competitive with existing sods and are the ideal species for adding legumes to grass pastures. Use flash grazing after seeding to suppress the grasses and allow legumes to establish.

Seeding Equipment

Seeding equipment that ensures proper seed placement and good seed-soil contact will be used. Modern grass seeding attachments that allow for proper seed flow, seed placement and soil packing are needed to ensure a successful seeding.

Slower seeding speeds should be used for fluffy or rough-coated seed species. Three to five miles per hour should be the seeding speed for most types of grass drills. Seeding speeds in excess of 6 miles per hour may result in uneven or inconsistent grass and legume stands.

If a carrier is needed to help feed seed through the drill; cracked corn, dead barley, granular clay, vermiculite or rolled oats are examples of material that may be added to the mixture.

A. Grass Drill

Grass drills are specifically designed and equipped to properly meter and place various grass, legume and/or forb seed and share the following design characteristics:

1. Different seed boxes are normally required to handle the three types of grass seed commonly used. This includes the relatively clean, smooth seed characteristic of many cool-season grasses, the chaffy or trashy seed characteristic of many warm season grasses, and fine, smooth seed, characteristic of legumes or grasses such as Switchgrass.

   Seed boxes having the capability of seeding chaffy or awned grasses (i.e., blue grama, bluestems, and Indiangrass) are needed, only if such species are planned in the seeding mixture; likewise, fine-seed or legume seed boxes are needed, only if such species are to be seeded.

2. Agitators or similar mechanisms that prevent bridging of chaffy or trashy seed and ensure a constant flow of seed at the desired rate with uniform mixing of the species in the mixture.

3. Feeder mechanism (picker wheels, fluted feed, etc.) that ensures uniform flow of all types of grass seed either separately or in a mixture.

4. Oversized feeder tubes that allow constant flow of chaffy or trashy type seed from boxes to placement point (if such seed is used).

5. Individually mounted, adjustable, spring loaded, double-disc openers.

6. Depth bands or other depth-control systems that provide positive seed placement for final planting depth of one-fourth to one inch over varying degrees of seedbed firmness.

7. Press/packer wheels that provide adequate covering and firming of soil over and around the seed for necessary seed/soil contact after proper seed placement.

They should be mounted individually on each furrow opener or independently to follow behind each opener. Press/packer wheels are not intended to provide the basic "firm seedbed." The firm seedbed must exist before the drilling operation begins.

8. Drill calibration should be completed for both grass and grain drills prior to seeding. Refer to guidance below for completing drill calibration.

B. Small Grain Drill

1. Free-flowing grass seed (i.e., wheatgrasses) and legume seed can be successfully planted with a small grain drill provided proper seeding depth can be maintained throughout the field. Seeding depth is the most limiting factor to seeding success and contributes to most of the seeding failures when using a grain drill. It is extremely important to have a firm seedbed when using a grain drill. Periodic inspections should be done to check seeding depth especially when seeding across different soil types. Seeding depth will vary under actual planting conditions.

2. Checking the drill frequently and hand mixing the seed is essential to achieving a properly blended seed mix and helps ensure that seeds of different sizes are seeded evenly across the field. Periodic feeder mechanism adjustments are usually necessary to ensure proper seeding rates. A separate legume box is desirable for seeding small seeded species. (i.e., switchgrass and alfalfa). Ensure the grain drill's drop tubes are placed in front of the packer wheels to allow for seed-soil contact.

3. Chaffy or awned seeds (i.e., bluestems, Indiangrass, and blue grama) are difficult to plant with a grain drill. It is recommended that a grass drill be used for these types of grasses. Proper agitation is needed to prevent “bridging” of seed in the seed box, and the feeder mechanism must be capable of metering a uniform flow of seed at the desired rate. Very few grain drills have this capability. Use of debearded seeds is strongly recommended when considering seeding chaffy or awned seeds in a grain drill.

C. Broadcast Seeder

Broadcast seeding method may only be used when the slope, soil conditions, and/or size of area to be seeded makes the use of a drill impractical. All broadcast seedings will have a properly prepared seedbed (minimal residual cover with a smooth, firmly packed surface) and an operation which incorporates the seed into the soil at the proper depth (i.e., covering operation using a drag harrow, cultipacker, roller packer, or other suitable implement to cover and press the seed into the soil surface). When using the broadcast method, the seeding rates will be increased by 1.5 times.

D. Air seeders

Some air seeders and similar types of equipment may be used to seed free flowing grass seed (i.e., wheatgrasses) and legume seed if proper seeding depth can be obtained. However, seeding mixtures containing varying seed sizes may require an inert carrier to work properly in air seeders. The shallow planting depths for grasses and legumes can be difficult to maintain with this type of equipment. The equipment must be able to provide a uniform flow of seed at the desired rate. Use the correct seeding plates recommended by the manufacturer for the species to be planted. Use packer wheels or other suitable packing implement to press soil firmly around the seeds. **Air seeders are not recommended for seeding native grass and forb mixtures.**

Drill Calibration

Grass or grain drills may be calibrated using the following methods.

A. Bulk Weight Method

Raise the drill's drive wheel and measure its circumference in **feet**. Next, measure the distance between seed spouts or disc openers. Use Table 1 to determine the number of revolutions (R) to turn the drive wheel for the row spacing and wheel circumference in feet for your drill.

Table 1: Drill Calibration

Row spacing in inches	No. of seed spouts to use	Turns of drive wheel	Row spacing in inches	No. of seed spouts to use	Turns of drive wheel
6	4	96/C = R	24	1	96/C = R
7	4	82/C = R	30	1	77/C = R
8	3	96/C = R	36	1	64/C = R
10	3	77/C = R	42	1	55/C = R
12	2	96/C = R	48	1	48/C = R

Place enough seed in the box to cover spouts from which you will collect seed. Turn the drive wheel until all spouts are feeding. Place a container under the correct number of seed spouts (as determined from the Table 1) and turn the drive wheel the number of revolutions previously determined. Weigh the sample in grams. Multiply this weight by 0.5. The result is the pounds per acre at that setting. Adjust the drill setting and continue trials until the desired seeding rate is obtained.

Remember: Seeding rates as determined by this method are in terms of **bulk seed**. You need to convert your seeding rate from pure live seed per acre to bulk seed per acre when using this calibration method. Seed vendor should be able to provide bulk seed weights and pure live seed weights.

Example:

- Row spacing = 7 inches
- Number of seed spouts = 4
- Circumference of drive wheel (C) = 6.8 ft
- Revolutions of drive wheel (R) = 82/C R = 82/6.8 = 12 revolutions
- Bulk seeding rate is 15.1 lbs/ac. The drill is properly set when the 4 seed spouts yield 30 grams of seed after 12 revolutions of the drive wheel.
    - 30 grams x 0.5 = 15 lbs/ac

B. Seeds Per Row Foot Method

This method of determining the amount of seed being distributed by the seeding equipment is to count the number of seeds per foot of drill row while the machine is in operation.

Fill the drill with seed, make setting, and drive equipment over a hard ground surface or canvas. Count the number of seeds per foot of row and adjust until proper seeding rate is attained.

Use the information below to determine the linear foot of row necessary to equal one square foot planted.

Row spacing in inches	Linear foot of row to equal one square foot
6	2.0 feet
7	1.8 feet
8	1.5 feet
10	1.2 feet
12	1.0 foot

To determine the proper number of seeds per foot of drill row for a specific seeding mixture; you will first need to calculate the bulk seeding rate for each species in the mix. From Table 1, calculate the number of seeds per square foot (ft^2) for each pound seeded (seeds per pound divided by 43,560ft^2/acre).

Multiply the number of seeds per square foot for each pound seeded by the bulk seeding rate for each species. Total the resulting numbers to determine the number of seeds per square foot for the mixture.

Example:

If you want to calibrate a drill for a mixture of 4.5 lbs. PLS/ac green needlegrass (80% purity and 70% germination) and 4.0 lbs PLS/ac western wheatgrass (92% purity and 85% germination), calculate the bulk seeding rate for each species.

Bulk seeding rate would be 8 lbs/ac for green needlegrass and 5.1 lbs/ac for western wheatgrass.

- Green needlegrass – (.80 x .70) = .56. 4.5/.56 = 8.0 lb./ac bulk
- Western wheatgrass – (.92 x .85) = .78. 4.0/.78 = 5.1 lb./ac bulk

Green needlegrass seed contains 180,000 or 4.1 seeds/$ft^2$for each pound seeded (180,000/43560 ft^2/acre).

Western wheatgrass has 112,000 seeds per pound or about 2.6 seeds /ft^2 for each pound seeded.

- 8.0 lbs/ac x 4.1 seeds/ft^2/lb. = 32.8 seeds/ft^2
- 5.1 lbs/ac x 2.6 seeds/ft^2/lb. = 13.3 seeds/ft^2

The total seeds per square foot for the mix would be 46. If the drill we are calibrating has 7-inch row spacing, the drill calibration would be 46 seeds per 1.8 feet of row length.

Broadcast Seeder Calibration

A. Seeds Per Square Foot Method

1. Spread a large tarp or piece of plastic on a smooth level surface and anchor the edges to hold in place.
2. Place seed in the seed compartment(s) and travel across the tarp at the anticipated speed you will travel in the field. Make one pass across the tarp to check seeding rate.
3. Using a one square foot frame count the seeds in one square foot. Count the seeds on three to five samples and average.
4. Compare the results from step #3 with the planned seeding rate number of seeds per square foot of bulk seed for the seed mixture. Use the planned seeds per square foot of bulk seed since you will be counting all seeds on the tarp. If necessary, adjust the control gate for the small seed compartment and/or travel speed and repeat the test until the desired seeding rate is achieved.
5. Make two or three passes across the tarp at a selected spacing to check seed distribution and seeding pattern overlap. Adjust the travel spacing to achieve the desired overlap.
6. It may be desirable to check the seed being delivered from each seed compartment individually. In this case carryout Steps 2 through 4 independently for each seed compartment.

B. Pounds Per Acre Method

1. Measure out some fraction of an acre. For example, 1000 square feet is 2.3% (0.023) of an acre; 2000 square feet is 4.6% (0.046) of an acre; or 10890 square feet is 25% (0.25) of an acre.
2. Calculate the amount of seed required for the measured area. Weigh out the appropriate amount of each seed type and place in the appropriate box(s).

3. Seed the measured area and check if you had sufficient seed to cover the area or ran out before covering the measured area.
4. Adjust the settings and/or travel speed and repeat the trial on a new area as necessary.

Herbicide and Insecticide Carryover

Prior to planting, check to ensure that any herbicides used on previous two crop years will not "carry over" and negatively impact newly seeded plants. Residues of some herbicides may prevent the establishment of some native plant materials for up to two years. If the residual effects of herbicides are possible, delay planting until after the recommended interval to allow residual herbicide levels to dissipate, establish temporary cover or change species to be planted.

To protect pollinators, any seed supplied for projects must be free of pollinator lethal insecticides. Systemic insecticides including but not limited to neonicotinoid insecticides, can persist in the soil, and absorbed by new plantings and transferred to pollinators that forage on them. Use temporary cover such as oats or winter wheat in areas where insecticides may be a problem to allow time for the chemicals to break down.

Planting Dates

Seeding dates are based on long term averages and may be extended based on moisture conditions. See MN Instruction 190-380. Extension of these deadlines shall be based on both favorable moisture and temperature for seed germination.

Seeding of warm season grasses may begin before May 15 when the soil temperature is consistently 50° F or higher. When mixtures containing both warm season native and cool season introduced grasses are to be planted, select the seeding date based on the predominant plants in the mixture.

Table 2: Planting Dates

Cool Season Grasses and Legumes			
	Spring	Late Summer	Dormant
North	4/1 - 6/15	7/15 - 9/1	11/1 or a consistent soil temperature of <40° F.
South	4/1 - 6/1	8/1 - 9/10	11/1 or a consistent soil temperature of <40° F.
Warm Season Grasses, Forbs, and Legumes (includes warm and cool season natives planted in mixtures)			
	Spring	Late Summer	Dormant
Statewide	5/15 - 6/30	Not recommended	11/1 or a consistent soil temperature of <50° F.

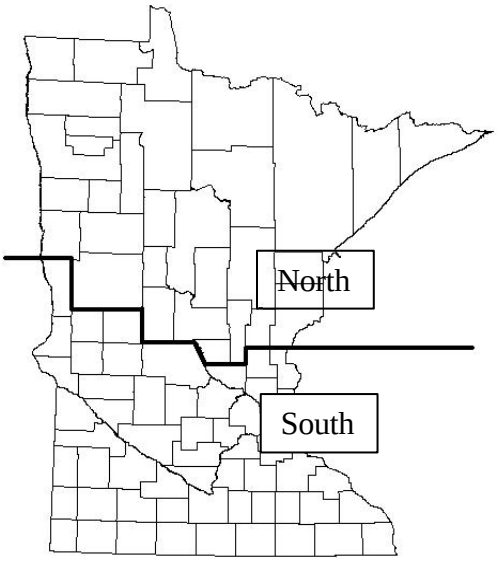


Figure 1: Planting Zones

Seeding Rates

Seed tests must show the percentage of germination and percentage of purity. Seeding rates shall be based on Pure Live Seed (PLS), where **PLS = % germination (+ dormant seed) x % purity**. To calculate the pounds of bulk seed required, divide the PLS requirement for the seeding by the percent PLS (expressed as a decimal). See Table 22: Conversion of Bulk Pounds to Pure Live Seed.

For example, if 1,000 pounds of PLS of Indiangrass is required for the seeding, germination is 90% and purity is 98%. The amount of bulk seed to purchase and apply to the field is: 1,000 lbs./0.882 = 1,134 lbs. of bulk seed.

Legumes will have hard seed, seeds that do not germinate during the first year, and the amount of hard seed will be specified on the seed tag. If there are more than 20% hard seed adjust the seeding rate up to achieve the desired pure, live seed coverage. Do not recommend seeding alfalfa following alfalfa due to problems with autotoxicity. Pasture mixes should not contain more than 50% legumes on a pure live seed basis to avoid bloat in livestock.

Companion Crops

For spring seeding of cool season species, a companion crop may be used for erosion control and weed suppression. No companion crop is required for inter-seeding or for late summer seeding but may be desirable for erosion control and to protect developing seedlings. Companion crop seeding rates may be increased when the companion crop will be harvested for forage.

Companion crops are competition for moisture and sunlight. Early maturing varieties of oats with good lodging resistance are desirable.

Companion crop seeding rates shall be:

Crop	Seeding Rate
Oats	0.75 – 1.25 bu/ac
Barley	0.5 – 1.0 bu/ac
Winter Wheat*	0.5 bu/ac
Ryegrass**	< 2.5 lbs/ac
Cereal Rye***	NOT RECOMMENDED

* Spring seeded only.
** Ryegrass is extremely difficult to dry down after cutting. Haylage is the preferred method of storage.
*** Cereal Rye can have allelopathic effects on competing species and is not recommended as a companion crop.

Companion crops are generally not recommended for warm season seeding. On highly erodible sites it may be desirable unless you are no-tilling into 70% residue cover or standing small grain stubble. Use a seeding of oats at ¾ to 1 ¼ bushels/acre.

Companion crops will be clipped or harvested for forage after jointing but before heading unless otherwise directed. Companion crops will not be harvested for grain. Clipping will be done when moisture conditions will not cause ruts or other field damage. Second and subsequent clippings are necessary when re-growth provides competition. Clipping height should be above developing seedlings – no less than 6". Where excessive growth has accumulated, the vegetation should be chopped and dispersed or harvested for forage rather than swathed. Companion crops seeded with late summer cool season grass seeding do not require clipping.

Temporary Cover Establishment

Where chemical residue carryover is the cause of delayed planting, refer to the product label for crops to rotate to. A bioassay test may be used to better determine chemical carryover.

Small grain temporary cover crops will be clipped in the boot stage to prevent seed formation. Spring seeded winter wheat and spring seeded winter rye will not require clipping. Millet and sorghums need to be clipped in the early heading stage to prevent viable seed formation. Forage sorghums, Sudangrass and sorghum-Sudangrass may need multiple clippings to control biomass accumulation and seed production. Residue from the temporary cover may be fall tilled, leaving a minimum of 40% residue cover.

Temporary Cover	Seeding Rate/Acre	Seeding Dates - Statewide
Oats	2.5 bu.	*-- April 1 to June 15 *-- August 1 to September 10
Barley	1.5 bu.	*--April 1 to June 15 *-- August 1 to September 10
Spring Wheat	1.25 bu.	*--April 1 to June 15
Winter Wheat	1.25 bu.	*-- August 1 to September 30
Spring Rye	1.0 bu.	*--April 1 to June 15
Winter Rye	1.0 bu.	*-- August 1 to September 30
Annual Ryegrass	8.0 lbs.	*--April 1 to June 15 *-- August 1 to September 10
Proso Millet	12.0 lbs.	May 15 to June 10
Sorghum/Sudangrass	12.0 lbs.	May 15 to June 10
Grain Sorghum	10.0 lbs.	May 15 to June 10
Corn	92.0 lbs.	May 15 to June 10

Weed Control

Approved herbicides may be used on both introduced and native plantings to control weed species. During the establishment year, mow weeds after they have reached a 12” height. Mow 2–3 times or as needed based on onsite evaluation, generally on 30-day intervals from the date of seeding. Mow to a height of 6” to 8”. Use a rotary mower or remove the clippings so as not to smother the seedlings. This will slow the weeds but won't harm the prairie plants. Livestock grazing is not an acceptable method of weed control during the establishment period.

The second year, evaluate the stand to determine if weed control is necessary. If it is, spot mow the planting at a height of six inches. If there is enough material for a prescribed burn, this may be an effective method to control weeds, but fire should not be introduced until the third year of establishment.

Fertilizer and Lime Requirements for Practices 327, 332, 342, 393, 512 and 589C

- **Introduced Cool Season Grasses and Legumes**
  - Apply fertilizer, manure, and lime according to University of Minnesota fertilizer recommendations. Soil tests will be completed by a Minnesota Department of Agriculture certified lab. Soil tests will be no older than four years. Manure nutrient samples will be done in the year of application. The sample tests will also be performed by a Minnesota Department of Agriculture certified lab. Apply manure with a calibrated spreader using guidelines from the Nutrient Management (590) practice standard. Refer to Table 17, Fertilizer Recommendations for Grass, Grass/Legume Mixes, and Alfalfa Hay for University of Minnesota fertilizer recommendations.

For Conservation Cover (327), Filter Strip (393), and Critical Area Planting (342), use a two ton per acre yield goal. If soil tests are not available, fertilizer will be applied in equal amounts of Nitrogen-Phosphorus-Potassium (N-P-K) for grass and legume establishment. An example fertilizer blend would be 60-60-60.

- The recommended rate per acre of liming materials shall be used to raise pH to 6.5 for alfalfa or 6.0 for other legume species. Liming materials will meet University of Minnesota recommendations for fineness of material and will be applied and incorporated a minimum of one year prior to seeding to achieve the desired pH.

- **Native Grasses, Forbs, and Legumes**

  Fertilizer is not required for seeding native grasses, forbs, and legumes.

Stand Evaluation

To determine adequacy of stands and to determine if reseeding or reinforcement seeding is required, please follow Agronomy Technical Note No. 17 "Guidelines for Herbaceous Stand Evaluation", FOTG > Section 1 > Reference List > Technical Notes and References by Discipline > Agronomy

Seeding Tools

Optional seeding plan tools and calculators are located on the MN FOTG at: Technical Resources/Seeding Tools.

STANDARD 327 – CONSERVATION COVER SEEDING SPECIFICATIONS
And
STANDARD 420 - WILDLIFE HABITAT PLANTING SPECIFICATIONS

Permanent, perennial vegetative cover should be established during the first recommended seeding or planting period for the selected species within the first year of the land use conversion. If this is not possible, a temporary cover may be used, and the permanent vegetative cover must be established during the next seeding period.

1. Specifications for Establishment of Upland Cover, and Upland Wildlife Habitat - Grasses, Legumes, Forbs

Commonly recommended native and introduced grass, legume and forb species are listed in Tables 3-5. Native plants and plant communities are encouraged since they are well-adapted to sites, less invasive, and likely to provide quality habitat without costly long-term maintenance. Native plants are required for Wildlife Habitat Plantings (420); however, due to cost, availability and landscape position, native plants may not be feasible in all Conservation Cover (327) situations.

A. Native Grasses, Forbs, and Legumes:

- Mixtures will comprise a minimum of 5 native species consisting of at least 3 native grasses and at least 2 native forbs/legumes. Mixtures will result in a minimum 35-40 total seeds/ft^2.
- Grasses shall not exceed 90% of the total mixture based on seeds/ft^2.
- No more than 20% of the grass component will be comprised of cool season grass species based on seeds/ft^2.

- Switchgrass in mixtures shall not exceed 10% of the grass component based on seeds/ft^2.
- Solid stands of Switchgrass seeded at 6.0 lbs/ac are allowed for site specific purposes such as providing winter cover in landscapes lacking adequate emergent wetlands or woody vegetation.
- When multiple forbs/legumes are included in a seed mixture, no individual species shall comprise more than 50% of the mixture based on seeds/ft^2.
- Refer to Biology Job Sheet #9 – "Establishment of Native Grass and Forbs" for additional establishment specifications. Refer to practice standard ***Upland Wildlife Habitat Management (645)*** for management recommendations.

B. Introduced Grasses and Legumes:

- Mixtures will comprise a minimum of 4 species consisting of at least 3 grasses and at least 1 forb or legume.
- Total recommended seeding rate is a minimum 35-40 total seeds/ft^2.
- At least 50% of the mixture shall be comprised of grasses based on seeds/ft^2.
- Introduced grass/legume mixtures may include up to 20% Switchgrass and/or Western Wheatgrass.
- The use of introduced species should be avoided adjacent to native prairie or other sensitive areas.
- Refer to Biology Job Sheet #8 - "Establishment of Introduced Grasses/Legumes" for additional establishment specifications. Refer to practice standard ***Upland Wildlife Habitat Management (645)*** for management recommendations.

2. Specifications for Native Pollinator, Honeybee and Monarch Habitat Establishment

Encourage blocks of cover as opposed to narrow linear plantings to improve habitat for grassland nesting birds and to decrease weed pressure along the edges of a native planting.

- Minimum size shall be 0.5 ac., with a minimum width of 20'.
- Apply techniques to prevent or mitigate offsite insecticide risks from drift from areas treated with insecticides (e.g., cropland). Achieve a target mitigation index value of ≥20 from Table 3 of Agronomy Technical Note #9 – "Preventing or Mitigating Potential Negative Impacts of Pesticides on Pollinators using Integrated Pest Management and Other Conservation Practices". Commonly recommended options which meet a target mitigation index value of 20 include, but are not limited to:

  1. Establish a ≥ 100' pesticide free setback from the edge of the planting into adjacent cropland. Pesticide free includes planting un-treated seed.
  2. Establish or incorporate an existing ≥30' flower free vegetated buffer between the habitat planting and cropland, and apply one of the following mitigation techniques to cropland beyond the vegetated buffer:
     - Utilize high volume/low pressure spray nozzles, and/or
     - Apply insecticides on adjacent cropland when wind speed is between 2 and 9 mph.
  3. Where cropland is adjacent to the planting, no application of insecticides within 30 feet of the habitat planting, and apply one of the following mitigation techniques to cropland beyond the insecticide free setback:
     - Utilize high volume/low pressure spray nozzles, and/or
     - Apply insecticides when wind speed is between 2 and 9 mph.

A. Native Grass and Forbs (Native Pollinator, Monarch, and Honeybee)

Plantings shall contain:

- A minimum of nine species of pollinator friendly native forbs – additional forbs are strongly encouraged.
- At least three species shall be from each bloom period – early, mid, and late flowering season so that pollinators have continuous food sources.
- A minimum of two native bunch grasses to provide nest sites.

Composition:

- The mixture will result in a minimum 35-40 seeds/ft² total. See Tables 6 and 10 for recommended species and individual composition.
- Forbs will comprise 50-75% of the mixture based on seeds/ft². No individual forb shall comprise more than 20% of the forb mixture based on seeds/ft². At least one forb shall be a legume.
- Grasses will comprise 25-50% of the mixture based on seeds/ft².
    - Canada or Virginia wildrye may be included in the mixture on erodible sites and shall comprise no more than 20% of the total grass mixture based on seeds/ft².
    - Certain species of native grass are restricted due to potential for aggressive growth and suppression of planted wildflowers or reducing the available bare soil in plantings. The seed mix cannot contain more than 10% total (by seeds/ft²) of any combination of the three grasses listed below.
        - Big bluestem (*Andropogon gerardii*)
        - Indiangrass (*Sorghastrum nutans*)
        - Switchgrass (*Panicum virgatum*)
- Mixtures designed to benefit monarch butterflies shall include nectar and larval plants beneficial to the monarch butterfly from Table 6. To provide food for monarch butterfly larvae, plantings shall include at least one species of milkweed (Asclepias spp.). Milkweed species shall comprise at least 1.5% of the total mixture (grass and forbs) based on seeds/ft². To provide food for adult Monarchs, at least 60% of the forbs in the mix shall be from the monarch butterfly planting list in Table 6.
- Blooming shrubs and trees can be an important source of pollen and nectar for pollinators, usually blooming well before many forb species. See Table 9 for native shrubs beneficial to pollinators.

Seeding Date: Fall dormant seeding favors forbs due to moist cold stratification. Fall dormant seeding is recommended unless the forb seed has been pre-stratified before purchase. See Table 2 for planting dates.

B. Introduced Perennial Grass and Legumes (Honeybee) - See Table 7 for recommended species and composition.

Refer to ***Biology Job Sheet #16 – "Native Habitat Development for Pollinators, Honeybees and Monarchs"*** and ***Biology Job Sheet #18 – "Introduced Grasses and Legumes – Honeybee Habitat"*** for additional establishment specifications. Refer to practice standard ***Upland Wildlife Habitat Management (645)*** for annual habitat recommendations.

STANDARD 645 – UPLAND WILDLIFE HABITAT MANAGEMENT SPECIFICATIONS

Specifications for Annual Forbs and Legumes for Honeybee Habitat

Encourage blocks of cover as opposed to narrow linear plantings.

- Minimum size shall be 0.5 ac., with a minimum width of 20'.

- Apply techniques to prevent or mitigate offsite insecticide risks from drift from areas treated with insecticides (e.g., cropland). Achieve a target mitigation index value of $\geq$ 20 from Table 3 of

Agronomy Technical Note #9 – "Preventing or Mitigating Potential Negative Impacts of Pesticides on Pollinators using Integrated Pest Management and Other Conservation Practices". Commonly recommended options which meet a target mitigation index value of 20 include but are not limited to:

1. Establish a ≥ 100' pesticide free setback from the edge of the planting into adjacent cropland. Pesticide free includes planting un-treated seed.
2. Establish or incorporate an existing ≥30' flower free vegetated buffer between the habitat planting and cropland, and apply one of the following mitigation techniques to cropland beyond the vegetated buffer:
   - Utilize high volume/low pressure spray nozzles, and/or
   - Apply insecticides on adjacent cropland when wind speed is between 2 and 9 mph.
3. Where cropland is adjacent to the planting, no application of insecticides within 30 feet of the habitat planting, and apply one of the following mitigation techniques to cropland beyond the insecticide free setback:
   - Utilize high volume/low pressure spray nozzles, and/or
   - Apply insecticides when wind speed is between 2 and 9 mph.

See Table 8 for species and seeding rates. Planting dates specific to annual forb/legume mixtures:

- South of Interstate 94 5/1 – 5/15
- North of Interstate 94 5/15 –6/1

Refer to ***Biology Job Sheet #20 – "Annual Forbs and Legumes – Pollinator and Honeybee Habitat"*** for additional establishment specifications.

This practice is intended to increase breeding habitat for monarchs by inter-seeding milkweed into an existing stand of vegetation that has sufficient nectar plant richness and abundance but lacks reproductive habitat, as determined by a monarch butterfly wildlife habitat evaluation guide (WHEG).

Inter-seeding milkweed should follow a disturbance such as prescribed burning, haying, grazing and/or herbicide spraying.

Option 1: Use a late summer or fall prescribed burn to remove above ground vegetation. Dormant inter-seed milkweed directly into seedbed. The following growing season, mow, or hay to a height of 6" whenever vegetation reaches 12-18" in height.

Option 2: Use a spring prescribed burn to remove previous year's residues. Inter-seed milkweed in strips with a no-till drill. Apply a grass selective herbicide to the planted strips during the growing season: warm season grasses (early summer), cool season grasses (spring, or late fall). Follow manufacturer's label directions. Mow or hay to a height of 6" when vegetation reaches 12-18" in height during the first year of establishment.

Seeding rates
Milkweed species (*Asclepias* sp.) should be seeded at a minimum rate of 0.15 seeds/sq. ft. and planted with a no-till drill at 1/4" depth.

STANDARD 643 – RESTORATION OF RARE OR DECLINING NATURAL COMMUNITIES – TALLGRASS PRAIRIE SEEDING SPECIFICATIONS

High species diversity is recommended to promote native community stability and function, to provide benefits to multiple wildlife species and to prevent establishment of invasive species.

Native prairie plant communities will be established utilizing seed harvested from existing Minnesota native prairies, or utilizing seed mixes comprised of Minnesota ecotype grasses, legumes, and forbs, developed to reflect "native prairie" communities as determined suitable for specific site conditions.

All seed, including native harvest, shall be supplied as pure-live seed (PLS) and conform to Minnesota Seed Law including limits on noxious weed content and State labeling requirements.

Restoration on Agricultural Fields and Other Disturbed Sites:

Seed Origin

It is desirable for seed sources of native grass, forbs, and legumes to originate from as close to the planting site as possible. When available, "Yellow Tag" or source identified materials are preferred. The following sequence defines the preferred wild/native harvest seed source for the project. Areas with similar site conditions and located as close to the project site as possible:

- Ecological Sub-sections
- Ecological Section
- Maximum distance of 175 miles of project
- Field tested native grass varieties and natural germplasm materials of known origin and adaptability. Refer to Table 21 for a listing of grass varieties/natural germplasm materials and their zone of adaptability.

Seeding Requirements

Diversity - Seed mixes will consist of a minimum 15 native species. The mixture will be comprised of a minimum 5 grasses, and a minimum 5 forbs. At least one forb shall be a legume.

Quantity - The mixture will result in a minimum 35-40 PLS seeds/ft^2 total, with a maximum 60% grass component based on seeds per square foot.

Composition

- No more than 20% of the grass component will be comprised of cool season grasses based on seeds/ft^2.
- Switchgrass shall not exceed 5% of the grass component based on seeds/ft^2
- No individual forb specie will comprise more than 20% of the forb mixture based on seeds/ft^2.
- Constructed mixtures may be developed using Tables 3 and 6**.**

Optional criteria to benefit monarchs, pollinators, and beneficial

insects:

- Consider designing the mixture to benefit both pollinators and monarch butterflies by adding nectar and larval plants beneficial to monarchs and pollinators.
- A minimum 3 forbs from each bloom period (early, mid, and late) should be included in the mixture.
- To provide food for monarch butterfly larvae, plantings should include at least one species of

milkweed (*Asclepias* spp.). Milkweed species should comprise at least 1.0% of the total mixture (grass and forbs) based on seeds/ft^2.

- Consider specific pollinator habitat requirements and select appropriate forb species using the columns listed in Table 6.

Refer to ***Biology Job Sheet #12 – "Restoration of Rare or Declining Plant Communities – Tallgrass Prairie"*** for additional establishment specifications. Refer to practice standard ***Upland Wildlife Habitat Management (645)*** for management recommendations.
Refer to ***Biology Technical Note #16 - Wild and Rare Riparian Habitat Guide*** for additional establishment specifications.

Table 3: Commonly Recommended Native Grasses

The following list identifies native grasses beneficial to upland wildlife and native habitat restoration. The list is not exhaustive and identifies species that are readily commercially available.

Species	% of Grass Component Seeds/Ft^2	Seeds/Ft^2 (1 lb/ac)	pH Min.	Wet Soils[1]	Drought[2] Tolerance	Flood Tolerance
Warm Season Grasses						
Big Bluestem *Andropogon gerardii*	0-30[3]	4.0	>6.0	Good	Fair	Fair
Indiangrass *Sorgastrum nutans*	0-30[3]	4.4	>4.8	Fair	Fair	Good
Blue Grama *Bouteloua gracilis*	0-20	17.2	>6.6	Poor	Good	Poor
Switchgrass *Panicum virgatum*	0-100[4]	9.0	>4.5	Good	Fair	Good
Little Bluestem *Schizachryrium scoparium*	0-30	6.6	>5.0	Poor	Good	Poor
Sideoats Grama *Bouteloua curtipendula*	0-30	4.1	>5.5	Poor	Good	Poor
Prairie Sandreed *Calamovilfa longifolia*	0-30	6.3	>5.6	Poor	Good	Poor
Prairie Cordgrass *Spartina pectinata*	0-5	4.2	>6.0	Excellent	Poor	Excellent
Prairie Dropseed *Sporopolus heterolepis*	0-10	5.1	>6.0	Fair	Fair	Good
Cool Season Grasses						
# Green Needlegrass *Stipa viridula*	0-10	4.1	>6.6	Poor	Good	Fair
# Canada Wildrye *Elymus canadensis*	0-10	2.6	>5.0	Good	Fair	Fair
# Slender Wheatgrass *Agropyron caninum*	0-10	3.6	>5.6	Fair	Good	Good
# Western Wheatgrass *Agropyron smithii*	0-10	2.6	>4.5	Fair	Good	Good
# Canada Bluejoint *Calamagrostis canadensis*	0-5	102.8	>4.5	Excellent	Poor	Excellent
# Virginia Wildrye *Elymus virginicus*	0-10	2.2	>5.0	Good	Fair	Good
# Kalms Brome *Bromus kalmii*	0-10	2.9	>5.5	Good	Fair	Fair
# Porcupine Grass *Hesperostipa spartea*	0-10	1.3	>6.6	Poor	Good	Fair
# Junegrass *Koeleria macrantha*	0-5	53.1	> 6.0	Poor	Good	Poor

Seeding rates are listed in pounds pure live seed per acre.

1/ Wet soils are those classified as somewhat poorly drained to very poorly drained.
2/ Droughty soils are those classified as excessively drained.
3/ Big bluestem or Indiangrass may not individually exceed 25% of the grass component in 643 – Restoration of Rare and Declining Habitat and 327 – Native Pollinator, Honeybee, and Monarch Habitat mixtures.
4/ Switchgrass may not exceed 10% of the grass component in 327 – Conservation Cover mixtures. Switchgrass may not exceed 5% of the grass component in 643 – Restoration of Rare and Declining Habitat mixtures.

Table 5: Commonly Recommended Introduced Grasses and Legumes

The following list identifies introduced grass and legumes beneficial to upland wildlife and native habitat restoration. The list is not inclusive, and identifies those species, which are readily available through private vendor seed supplies.

Species	% of Grass Component Seeds/Ft^2	Seeds/Ft^2 (1.0 lb./ac)	pH Range	Wet Soils 1/	Drought Tolerance 2/	Flood Tolerance	Invasiveness 3/
Orchard grass	0-25	15.0	5.6 – 8.4	Yes	Fair	Poor	Low
Timothy	0-25	29.8	5.1 – 8.4	Yes	Poor	Good	Low
Intermediate Wheatgrass	0-50	2.0	7.0 - 8.5	No	Fair	Fair	Low
Tall Wheatgrass	0-50	1.8	7.0 - 8.5	Yes	Poor	Good	Low
Western Wheatgrass 4/	0-10	2.5	4.5 – 9.0	Yes	Good	Good	Low
Switchgrass 4/	0-10	9.0	4.5 – 8.0	Yes	Fair	Good	Low
Alfalfa	0-50	5.2	6.0 - 8.5	No	Good	Poor	Low
Red Clover	0-25	6.3	5.5 - 7.6	Yes	Fair	Fair	Low
White Clover	0-25	18.4	5.2 – 8.0	Yes	Poor	Good	Low
Alsike Clover	0-25	15.6	5.6 - 7.5	Yes	Poor	Good	Low

[1]Wet soils are those classified as somewhat poorly drained to poorly drained.
[2]Droughty soils are those classified as excessively drained.
[3]Refers to the potential for a species to spread into adjoining areas.
[4]Switchgrass and/or Western Wheatgrass may be included in introduced grass-legume mixtures.

Table 6: Native Forb Species Beneficial to Pollinators, Monarchs and Other Beneficial Insects					
Species		**Bloom Color**	**Honey bee**	**Monarch**	**Flowering Season** Early = April - June Mid = June - August Late = August - October
DRY to MESIC					
Butterfly Weed	*Asclepias tuberosa*	Orange	H	LH	Mid
Canada Milkvetch	*Astragalus canadensis*	Cream	H		Mid
Compass Plant	*Silphium laciniatum*	Yellow		H	Mid
Dotted Blazing Star	*Liatris punctata*	Rose		VH	Mid
Evening Primrose	*Oenothera biennis*	Yellow			Mid
Foxglove Beardtongue	*Penstemon digitalis*	White	H		Early
Gray goldenrod	*Solidago nemoralis*	Yellow	H	H	Late
Hoary Vervain	*Verbena stricta*	Blue	H	H	Mid
Lance-leaved Coreopsis	*Coreopsis lanceolata*	Yellow	H	H	Early
Leadplant	*Amorpha canescens*	Purple	H	H	Mid
Long-headed Coneflower	*Ratibida columnifera*	Yellow			Mid
Ontario Blazing Star	*Liatris cylindracea*	Purple	H	VH	Late
Prairie onion	*Allium stellatum*	Pink	H		Mid
Purple Coneflower Narrow	*Echinacea angustifolia*	Pink	H	H	Mid
Purple Coneflower - Eastern	*Echinacea purpurea*	Pink	H	VH	Mid
Rough Blazing Star	*Liatris aspera*	Purple	H	VH	Late
Showy Goldenrod	*Solidago speciosa*	Yellow	H	VH	Late
Large-flowered Penstemon	*Penstemon grandiflorus*	Lavender	H		Early
Showy Milkweed	*Asclepias speciosa*	Pink	H	VH	Late
Silky Aster	*Symphyotrichum sericeum*	Purple		H	Late
Skyblue Aster	*Symphyotrichum oolentangiense*	Blue	H	H	Late
Smooth Aster	*Symphyotrichum laeva*	Blue	H	H	Late
Spotted Beebalm	*Monarda punctata*	Lavender	H	H	Mid
Stiff Sunflower	*Helianthus pauciflorus*	Yellow		H	Mid
Stiff Tickseed	*Coreopsis palmata*	Yellow		H	Mid
Wild Columbine	*Aquilegia canadensis*	Red	H		Early
Wild Lupine	*Lupinis perennis*	Lavender			Early
Wild White Indigo	*Baptista albaa*	White			Early
Whorled Milkweed	*Asclepias verticillata*	White	H	LH	Mid - Late
Yarrow	*Achillea millefolium*	White	H		Mid
MESIC to WET MESIC					
Blue Vervain	*Verbena hastata*	Blue		H	Mid - Late
Bottle Gentian	*Gentiana andrewsii*	Blue			Late
Canada Tick Trefoil	*Desmodium canadense*	Purple	H		Mid
Common Oxeye	*Heliopsis helianthoides*	Yellow		VH	Mid
Culvers Root	*Veronicastrum virginicum*	White	H	H	Mid
Giant Sunflower	*Helianthus giganteus*	Yellow	H	H	Late
Golden Alexanders	*Zizia aurea*	Yellow			Early
Great Blue Lobelia	*Lobelia siphilitica*	Blue		H	Late
Ironweed	*Veronia fasciculata*	Purple	H	H	Late
Meadow Blazing Star	*Liatris lingulistylis*	Purple		VH	Late
Mountain Mint	*Pycnanthemum virginianum*	White	VH	H	Mid
Obedient plant	*Physostegia virginiana*	Pink	H	H	Mid - Late
Partridge Pea	*Chamaechrista fasciculata*	Yellow	H		Mid
Rattlesnake Master	*Eryngium yuccifolium*	White		H	Mid
Sawtooth Sunflower	*Helianthus grosseserratus*	Yellow		VH	Late
Tall Blazing Star	*Liatris pycnostachya*	Purple		VH	Mid

Wild Bergamot	*Monarda fistulosa*	Lavender		H	Mid
Yellow Coneflower	*Ratibida pinnata*	Yellow			Mid
WET					
Blue Flag Iris	*Iris versicolor*	Blue	H		Early
Boneset	*Eupatorium perfoliatum*	White	H	H	Late
Cup Plant	*Silphium perfoliatum*	Yellow	H	H	Mid
Joe-pye Weed	*Eupatorium maculatum*	Rose	H	VH	Mid - Late
Giant Goldenrod	*Solidago gigantea*	Yellow	H	H	Mid - Late
New England Aster	*Symphyotrichum novae-angliae*	Purple	H	VH	Late
Panicled Aster	*Symphyotrichum lanceolatum*	White	H	H	Late
Sneezeweed	*Helenium autumnale*	Yellow	VH		Late
*Swamp Milkweed	*Asclepias incarnata*	Red	H	VH	Mid
DRY to WET MESIC					
Anise Hyssop	*Agastache foeniculum*	Purple	H	H	Mid
Black-eyed Susan	*Rudbeckia hirta*	Yellow		H	Mid - Late
*Common Milkweed	*Asclepias syriaca*	Purple	H	VH	Mid
Cream Gentian	*Gentiana flavida*	Cream			Late
Field thistle	*Cirsium doscolor*	Pink	H	VH	Late
Grass-leaved Goldenrod	*Euthamia graminifolia*	Yellow	H	VH	Mid
Heath aster	*Symphyotrichum ericoides*	White	H	H	Late
Prairie phlox	*Phlox pilosa*	Pink		H	Early
Purple Prairie Clover	*Dalea purpurea*	Purple	VH		Mid
Maximilian Sunflower	*Helianthus maximiliani*	Yellow	H	H	Late
Spiderworts	*Tradescantia spp.*	Blue			Early
Stiff Goldenrod	*Solidago rigida*	Yellow	H	VH	Late
White Prairie Clover	*Dalea candida*	White	H	H	Mid

Monarch larval host = * Honeybee and Monarch nectar value = Very High, High

Table 7: Introduced Perennial Grasses and Legumes - Honey Bee Habitat		
Recommended Basic Mixture	**Rate in lbs./acres PLS**	**Flowering Season**
Timothy	0.5	
Alfalfa	2.0	Mid-Late
White Clover	3.0	Early - Mid
Alsike Clover	4.0	Early - Mid
Red Clover	3.0	Early
Buckwheat **1/**	16.0	Early - Mid
Additional Optional Species		
Purple Prairie Clover	0.5	Mid
Canada Milkvetch	0.25	Late

1/ Plantings containing buckwheat may not be seeded within 30 feet of an existing commodity wheat field, or in a field with a planned rotation to commodity wheat within two years. Note should be taken that buckwheat is an annual.

Table 8: Annual Forbs and Legumes - Honeybee Habitat			
Recommended Basic Mixture	**Rate in lbs./acres PLS**		**Flowering Season**
	Drill	**Broadcast**	
Mustard *(Sinapis alba or Brassica juncea)*	2.0	2.5	Early
Buckwheat 1/	16.0	22.0	Early - Mid
Cowpea	18.0	25.0	Mid
Annual Sunflower Cultivar	0.5	0.5	Mid - Late
Additional Optional Species			
Dwarf Essex Rapeseed	1.0	1.5	Mid
Berseem Clover	3.5	5.0	Season Long
Red/Crimson Clover 2/	4.0	6.0	Early

1/ Plantings containing buckwheat may not be seeded within 30 feet of an existing commodity wheat field, or in a field with a planned rotation to commodity wheat within two years.

2/ This is only true for red clover that is already established (i.e., not an annual planting).

Table 9: Woody Species Beneficial to Native Pollinators and Honeybees			
Species		**Value to Pollinators 1/**	**Flowering Season**
American Basswood	*Tilia americana*	VH	Early - Mid
American Plum	*Prunus americana*	VH	Early
Black Cherry	*Prunus serotina*	VH	Early - Mid
Black Chokeberry	*Aronia melanocarpa*	VH	Early
Black Elderberry	*Sambucus nigra*	VH	Early
Black Willow	*Salix nigra*	VH	Early
Button Bush	*Cephalanthus occidentalis*	VH	Mid
Chokecherry	*Prunus virginiana*	VH	Early
Cockspur Hawthorn	*Crataegus crus-galli*	VH	Early
Common Chokecherry	*Prunus virginiana*	VH	Early
Common Ninebark	*Physocarpus opulifolius*	VH	Early
Currant/Gooseberry	*Ribes spp.*	VH	Early - Mid
Dogwoods	*Cornus spp.*	H	Early
Downy Arrowwood	*Viburnum rafinesqueanum*	VH	Early - Mid
False Indigo Bush	*Amorpha fruticosa*	VH	Mid
Fragrant False Indigo	*Amorpha nana*	VH	Mid
Lowbush Blueberry	*Vaccinium angustifolium*	VH	Mid
Nannyberry	*Viburnum lentago*	VH	Early - Mid
Native Rose Species	*Rosa spp.*	VH	Mid
New Jersey Tea	*Ceanothus americanus*	VH	Mid
Northern bush honeysuckle	*Diervilla lonicera*	VH	Early - Mid
Pagoda dogwood	*Cornus alternifolia*	H	Early
Pin cherry	*Prunus pensylvanica*	VH	Early
Prairie rose	*Rosa arkansana*	VH	Mid
Raspberries/Blackberries	*Rubus spp.*	VH	Early
Redosier dogwood	*Cornus sericea*	VH	Early
Sandcherry	*Prunus pumila*	VH	Early - Mid
Saskatoon Serviceberry	*Amelanchier alnifolia*	VH	Early
Serviceberries	*Amelanchier spp.*	H	Early - Mid
Smooth rose	*Rosa blanda*	VH	Mid

Smooth Sumac	*Rhus glabra*	VH	Early
Western snowberry	*Symphoricarpos occidentalis*	H	Mid
Willow, Pussy or Black	*Salix spp.*	VH	Early

1/ H = High VH = Very High

Table 10: Native Grasses for Native Pollinator, Monarch, and Honeybee Habitat

Species	Percentage of Grass Mixture – Seeds/Ft^2
Big Bluestem and/or Indiangrass	0-25%
Little Bluestem	0-50%
Prairie Dropseed	0-50%
Rough Dropseed	0-25%
Sideoats Grama	0-25%
Wildrye (Canada or Virginia)	0-20%

STANDARD 342 – CRITICAL AREA PLANTING SPECIFICATIONS

Recommended seed mixtures are found in Table 11. Seeding rates are based on pounds of Pure Live Seed (PLS) per acre. Design custom seed mixtures as follows:

Introduced Grass/Legume: Mixture will result in a minimum 150 seeds/ft^2, at least 50% of the mixture must be grass. Sod forming grasses will comprise a minimum 30% of the mixture. Legume seed shall be inoculated with the appropriate strain of nitrogen fixing bacteria prior to planting.

Native Grasses: Mixture will result in a minimum 75 seeds/ft^2. Sod forming grasses will comprise a minimum 30% of the mixture.

Table 11: Recommended Seed Mixtures for Critical Area Planting

Seeding Mixture	Lbs/ ac	Seeds/ft^2 Total Mix	% Sod Forming	Suitable Uses [1/]	Drainage	Capacity Retardance	Remarks
Smooth Brome [2] Perennial Ryegrass	28 10	150	58	CO, WW, CA	Moderate to well, excessively drained	B	Add Red Clover or Alsike Clover if desired
Smooth Brome [2] Timothy Perennial Ryegrass	15 3 3	155	30	CO, WW, CA	Moderate to well, excessively drained	B	Add Red Clover or Alsike Clover if desired
Smooth Brome [2] Red Top Perennial Ryegrass	15 1 5	190	83	CO	Moderate to excessively drained	B	Add Alfalfa or Alsike Clover if desired
Int. Wheatgrass Timothy Canada Wildrye	23 3 7	155	30	CO, WW	Well to somewhat poorly drained	B	Add Alsike clover or Alfalfa if desired
Kentucky Bluegrass [2] Creeping Red Fescue Perennial Ryegrass	3 5 10	210	70	CO, CA	Well to somewhat poorly drained	C	Add alsike or red clover if desired
Creeping Foxtail Timothy Red Top Perennial Ryegrass	10 2 1 3	362	78	CO, WW, CA	Somewhat poorly to poorly drained	C	Add Red Clover if desired
Timothy Perennial Ryegrass Kentucky Bluegrass [2] Tall Fescue Annual Ryegrass	2 4.5 2.5 3 3	198	40	CO, WW, CA	Moderate to somewhat poorly drained	C	
Big Bluestem Indiangrass Switchgrass Canada Wildrye	6 6 6 7	123	63	CO, CA	Moderate to well drained	B	
Big Bluestem Indiangrass Switchgrass Sideoats grama Little Bluestem	4 4 3 3 3	93	60	CO	Moderate to Excessively drained	B	
Switchgrass Sideoats Grama Canada Wildrye Western Wheatgrass	4 4 7 5	84	78	CO, CA	Moderately to well drained	B	
Prairie Cordgrass Switchgrass Western Wheatgrass Canada Wildrye	3 3 7 7	76	76	CO, CA, WW	Somewhat poorly to poorly drained	B	

[1] Suitable Uses: **CO** = construction sites **CA** = critical areas **WW** = waterways

[2] Do not recommend these species adjacent to native prairie.

STANDARD 332 – CONTOUR BUFFER STRIP SEEDING SPECIFICATIONS AND STANDARD 393 – FILTER STRIP SEEDING SPECIFICATIONS AND STANDARD 589C – CROSS WIND TRAP STRIP SEEDING SPECIFICATIONS

Refer to the applicable practice standard for design and vegetation criteria.

Acceptable plant species and seeding rates are found in Tables 12 and 13. See Table 23 for a summary of plant species characteristics.

Seeding mixture will result in a minimum 55 seeds/ft^2 total.

Introduced grass/legume mixtures shall contain no more than one legume component not to exceed the maximum mixture composition in Table 12.

Native forbs may be added to native grass mixtures to enhance the practices for wildlife, pollinators, monarchs, and beneficial insects. Forbs can be added to a native species mixture. However, the criteria for pollutant reduction must be met. Forbs may comprise up to 10% of the mixture. For seedings ≤ 30 feet wide, and adjacent to cropland where pesticides are applied, forbs or legumes are not recommended. Refer to National Agronomy Technical Note #9 for mitigation recommendations related to pesticide application. Refer to Table 13 for recommended native forbs which can withstand sheet flow.

Table 12: Recommended Species for Contour Buffer (332), Cross Wind Trap (589c) and Filter Strip (393) Seed Mixtures

SPECIES C = Cool season W = Warm season R = Rhizomatous	% Allowed in Mix	Seeds/ft^2 based on 1.0 PLS lb./Ac 1/	Drought	Flooding	Salts	Wet Soil	Effective Height	Longevity	Rooting Depth
Native Grasses									
Canada Wildrye C	0-25	2.6	Fair	Fair	Good	No	>12”	Short	M
Slender Wheatgrass # C	0-25	3.6	Good	Good	Good	No	< 12”	Short	M
Virginia Wildrye C	0-25	2.2	Fair	Good	Fair	S	>12”	Short	M
Green Needlegrass C	0-25	4.1	Good	Fair	Fair-Good	No	>12”	Long	D
Western Wheatgrass #C/R	0-50	2.6	Good	Good	Good-Ex	Yes	>12”	Long	D
Kalms Brome C	0-25	2.9	Fair	Fair	Poor	No	>12”	Short	M
Fringed Brome C	0-50	3.7	Fair	Fair	Poor	Yes	>12”	Moderate	M
Switchgrass # W/R	0-100	9.0	Fair	Good	Fair	Yes	>12”	Long	D
Prairie Cordgrass[4] W/R	0-100	4.2	Poor	Excellent	Poor	Yes	>12”	Long	D
Big Bluestem # W/R	0-50	4.0	Fair	Fair	Fair	No	>12”	Long	D
Indiangrass # W/R	0-25	4.4	Fair	Good	Fair	No	>12”	Long	M to D
Sideoats Grama # W/R	0-25	4.1	Good	Poor	Poor	No	< 12”	Long	S to M
Little Bluestem # W	0-25	6.6	Good	Poor	Poor	No	>12”	Long	D
Blue Grama W/R	0-25	17.2	Good	Poor	Fair	No	< 12”	Long	S

SPECIES C = Cool season W = Warm season R = Rhizomatous	% Allowed in Mix	Seeds/ft^2 based on 1.0 PLS lb./Ac 1/	Drought	Flooding	Salts	Wet Soil	Effective Height	Longevity	Rooting Depth
Introduced Grasses and Legumes[2]									
Creeping Foxtail # C/R	0-100	17.2	Poor	Good	Poor-Fair	Yes	>12”	Long	S to M
Smooth Bromegrass[3] C/R	0-100	3.1	Fair	Good	Poor-Fair	No	>12”	Long	S to M
Redtop C/R	0-100	111.4	Poor	Good	Poor-Fair	Yes	>12”	Short	S to M
Meadow Brome C	0-100	1.8	Fair	Fair	Poor	No	>12”	Moderate	M
Int. Wheatgrass # C/R	0-100	2.0	Fair	Fair	Fair-Good	No	>12”	Long	D
Tall Wheatgrass # C	0-50	1.8	Fair	Good	Good-Ex	Yes	>12”	Moderate	D
Timothy # C	0-25	29.8	Poor	Good	Poor	Yes	>12”	Short	S to M
Alfalfa # C	0-25	5.2	Good	Poor	Fair	No	>12”	Moderate	D
Red Clover # C	0-25	6.3	Fair	Fair	Poor-Fair	No	< 12”	Short	D
Alsike Clover C	0-25	15.6	Fair	Good	Poor-Fair	Yes	< 12”	Short	D

[#] **Varietal selection important**. See current edition of Minnesota Varietal Trials for Select Crops.

[1] PLS is Pure Live Seed.
[2] Do not mix introduced grass species with native grass species.
[3] Do not recommend these species adjacent to native prairie.
[4] Prairie Cordgrass should not exceed 20% of the mixture when combined with Big Bluestem, Indiangrass or Switchgrass.

Flooding ratings: **None** <1 week; **Poor** 1-2 weeks; **Fair** 2-4 weeks; **Good** 4-6 weeks; **Excellent** >6 weeks
Soluble salts ratings: **Poor** 0-2 mmhos; **Fair** 3-4 mmhos; **Good** 5-7 mmhos; **Excellent** 8-16 mmhos
Longevity: **Short** 1-4 Years; **Moderate** 5-10 Years; **Long** > 10 Years
Wet soils: **Yes**-tolerates poorly or very poorly drained. **S**-Tolerates somewhat poorly drained sites.
Rooting Depth: Rooting depths are based on typical growing conditions of the species
S (Shallow) = 0-12 inches, **M** (Medium) = 12-24 inches, **D** (Deep) = 24+ inches

Table 13: Native Forbs Suitable for Contour Buffer (332), Cross Wind Trap (589c) and Filter Strips (393)

The following list identifies native forbs and wildflowers beneficial to wildlife, pollinators, monarchs, and other beneficial insects and support higher volumes of water flow and sedimentation.

Common Name	Scientific Name	Bloom Period	Handle sheet flow	Dense stems to slow water flow	Rooting Depth
Canada Goldenrod	*Solidago canadensis*	Late	Yes	Yes	S
Cup Plant	*Silphium perfoliatum*	Mid	Yes		D
Giant Goldenrod	*Solidago gigantea*	Late	Yes		M to D
Giant Hyssop	*Agastache foeniculum*	Mid	Yes		M
Grass-leaved Goldenrod	*Euthamia graminifolia*	Late	Yes	Yes	D
Ironweed	*Vernonia fasciculata*	Mid	Yes		D
Joe-Pye Weed	*Eutrochium maculatum*	Mid	Yes		S
Marsh Milkweed	*Asclepias incarnata*	Mid	Yes		D
Mountain Mint	*Pycnanthemum virginianum*	Mid	Yes	Yes	D
New England Aster	*Symphyotrichum novae-angliae*	Late	Yes		S
Sneezeweed	*Helenium autumnale*	Late	Yes		S
Stiff Goldenrod	*Solidago rigida*	Late	Yes		D
Panicled Aster	*Symphyotrichum lanceolatum*	Late	Yes		S
White Sage	*Artemisia ludoviciana*	Late	Yes	Yes	D
Wild Bergamot	*Monarda fistulosa*	Mid	Yes	Yes	D
Yellow Coneflower	*Ratibida pinnata*	Mid	Yes		M

STANDARD 512 – PASTURE AND HAYLAND PLANTING SPECIFICATIONS

The following information contains specific requirements, recommendations, references, and guidelines to fully develop and implement a successful pasture or hayland planting.

When selecting or developing a seeding mixture, planners must consider what kind and class of livestock will consume the planned forage stand.

Experienced livestock producers may have preferences for forages, and the planner should consider those options. However, it is possible that the producer has overlooked additional species that might meet their goals.

Species Selection and Mix Development

Seed mixes shall be developed using the Pasture and Hay Planting Seed Tool available under the Pasture and Hayland Planting (512) conservation practice in Section IV of the FOTG. Refer to Tables 16, 17 and 24 for assistance with developing and/or approving seed mixes. If needed, consult an Area Resource Conservationist or Grazing/Rangeland Management Specialist for assistance with developing or certifying seed mixes.

When developing seed mixes, select species based on the following factors:

- Soil Drainage Classes present
- Soil Types present
- Management needs of the producer
- Soil fertility
- Soil pH
- Kind and class of animal (avoid planting species that may cause health concerns)
- Client suggestions.

Table 14 below contains seeding mixes that are adapted to a variety of soil drainage classes and livestock found in Minnesota. The mixes included in Table 14 should cover most situations and are a resource that conservation planners may use to assist with developing pasture and hayland seed mixes. **Do not use switchgrass in mixes consumed by sheep or horses. Do not use alsike clover in mixes consumed by horses.**

Seed mixes must be approved by an Area Resource Conservationist, Grazing/Rangeland Management Specialist, or field office staff with the appropriate Job Approval Authority if the planner does not possess the appropriate level of JAA for the plan.

Fundamentally, a seed mix must provide sufficient perennial ground cover. A rate of **64-120 pure live seeds (PLS) per square foot of perennial species** are required to achieve a dense stand for pasture or hay production. The lower end of this range of seed concentration may be used when seedbed conditions are expected to be optimal. Use higher seeding rates when:

- the seedbed is clumpy/rough or too loose
- when broadcast seeding
- into high residue situations (examples: dead perennial sod or un-tilled corn stalks)
- variable soil drainage classes are present (example: poorly drained and well drained soils need to be covered by the same mix).
- Overall site preparation may be undesirable

General recommendations for seeds/square foot based on site conditions:

- Good site prep with adequate weed control and a firm seed bed: 64-80+ seeds/sq ft
- Broadcast with a spinner-type spreader: 150% of the drilled rate.
    - Broadcast with an airflow machine where seed is evenly spaced (example: terragator) may not need additional seed over drilled rate.
- No-till into high residue (such as dead perennial sod or un-tilled corn stalks): 100+ seeds/sq ft
- Variable soil drainage conditions present: 100+ seeds/sq ft
- Frost seeding legumes: 64+ seeds/sq ft
- Note: These are general recommendations. Exact amounts may vary based on site conditions/characteristics.

Pasture plantings

- Usually contain 4-6 species or more, depending on site-specific conditions and management objectives of the producers. Based on those factors, more or less species may be desirable.
    - Generally, pasture mixes contain 2-4 grass species and 1-3 legume species.
- 30-50% legumes are usually recommended to improve forage quality of the stand and provide good nitrogen fixing capabilities. Legume content in the seed mix will depend upon:
    - Kind and class of livestock
    - Soil conditions/drainage class
    - Soil fertility
    - Producer input
    - Types of legumes used. Most legumes used commonly in plantings (except for birsdfoot trefoil) cause bloat. When using all bloat causing legumes, keep legume content down to less than 40% of the seed mix (on a seeds/square foot basis).

Hayland Plantings

For Hayland plantings, the harvest method must also be considered. Some species do not dry down very easily for dry hay and the producer must have access to harvest equipment and storage facilities that correspond to the forages planted. Forage species that meet nutrient needs and palatability requirements of the livestock shall be selected. Soil drainage class, Forage Suitability Groups, and nutrient status will determine which forage species are adapted to the site. Seed mixes for hay may contain pure stands of grasses or a mixture of grasses and legumes. For ease of management, no more than two grass species per mix for hay production are recommended.

- Match species to producer's operation and harvest/storage capabilities. For example, does the producer make haylage/baleage or harvest everything as dry hay.
- Seed mixes generally contain 60-80% legumes. Exact amount depends on the goals/objectives of the producer.
- Usually contain 2-4 species.
    - Recommend no more than two grasses to ensure the quality of the forage at harvest can be easily managed.
    - Select varieties with similar maturity/growth curves to allow for consistent quality at harvest.
    - Note more or less species may be desirable based on site conditions and the goals/objectives of the producer.

Perennial ryegrass, Italian ryegrass, festulolium, annual ryegrass, and other short-lived perennials and annuals do not meet the 512 standard because they do not live long enough to meet the 5-year lifespan

of the practice. When including short-term perennials or annuals into the seed mix, do not count them towards the required minimum number of seeds/square foot.
Seeding rates are developed on a pure live seed basis. Refer to the Pasture and Hay Planting Seed Tool for assistance with calculating PLS prior to seeding as needed. Also, refer to table 23 in this tech note for assistance calculating PLS based on the purity and total germination of the seed. Make certain the seed mix meets the nutrient requirements of the kind and class of animal, the level of performance desired by the producer, and the harvest and storage method available to the producer.

Native grasses/forbs usually require special seeding equipment. Refer to the section on seeding equipment for details on equipment characteristics and calibration methods.

Variety Selection

Refer to the Recommended Plant Species section at the beginning of this document for more information about variety selection. Table 15 lists some recommended varieties but is not all-encompassing due the large number of varieties present that may work for the various species. Producers should select varieties that:

- have resistance for insects or diseases that may be present,
- that match the harvest schedule and method of the producer,
- match the intended livestock species, class, and utilization method,
- are adapted to climatic and microclimatic conditions in the area to be seeded
- fit the overall management needs of the producer

Avoid species with "Variety Not Stated", if possible. Named varieties have specific documented traits that can be referred to with regards to persistence, production, etc.

Legumes

Use pre-inoculated legume seed with the rhizobia species specific to the legume(s) in the seed mix. If there are two kinds of legumes, each one will be inoculated with its specific rhizobia species.

Legumes may have relatively high amounts of hard seed, which are seeds that do not germinate during the first year, and the amount of hard seed will be specified on the seed tag. In many cases, these seeds may germinate in subsequent years. Increasing the seeding rate for species with higher than 20% hard seed may be desirable to ensure an adequate number of seedlings become established during the seeding year. Do not recommend seeding alfalfa following alfalfa due to problems with autotoxicity. Pasture mixes should not contain more than 50% legumes on a pure live seed basis to avoid bloat in livestock.

Management of New Seedings

Management during the seeding year is critical. Little or no grazing should be expected under normal conditions during the seeding year. Companion crops may be planted with new seedings and removed as hay. If growing conditions are favorable, grazing during the seeding year may be possible late in the season when the plants are dormant, and the ground is dry and/or frozen. Any grazing during the seeding year should result in low utilization/light grazing intensity. Avoid grazing or haying new seedings in the month of September and leave a minimum of six inches of residual height going into the winter. If growing conditions are not favorable, (such as excessive moisture or drought conditions that have affected establishment), then grazing must be deferred until the stand is fully established and conditions improve. If hay was harvested from new seedings, fertilizer may need to be applied based on soil test results to replace the amount of nutrients removed in the harvested hay.

Practice Certification

Use the Pasture and Hay Planting Seed Tool to determine the number of pure live seeds per square foot applied. **A minimum of 64 pure live seeds per square foot of acceptable perennial species are required to meet this practice standard.** When certifying this practice, do not include annual species or short-term perennials, such as annual ryegrass, perennial ryegrass, festulolium, warn season annual grasses, cool season annual grasses, annual legumes, brassicas, etc. when calculating the number of pure live seeds per square foot as these species do not meet the lifespan of this practice for growing conditions in Minnesota. Obtain copies of soil tests from an approved soil testing laboratory that are four years old or less. Also seed tags are required to allow for calculating the amount of pure live seed applied based on the purity and germination of the species in the seed mix.

Table 14: SEEDING MIXES FOR HAYLAND AND PASTURE

Cool Season Introduced Hay Mixes

Soil Drainage Class: Very Poorly to Poorly Drained			
Species	**Variety**	**Seeding Rate (PLS LBS/Acre)**	**% in Mixture**
Creeping Foxtail	Garrison	1	24
Alsike Clover	Named Variety	4	76
Soil Drainage Class: Poorly Drained			
Species	**Variety**	**Seeding Rate (PLS LBS/Acre)**	**% in Mixture**
Timothy	Climax	2	57
Birdsfoot Trefoil[1]	Norcen	5	43

Table 14: Cool Season Introduced Hay Mixes

Soil Drainage Class: Poorly Drained			
Species	**Variety**	**Seeding Rate (PLS LBS/Acre)**	**% in Mixture**
Creeping Foxtail	Named Variety	0.5	13
Timothy	Named Variety	0.5	18
Reed Canary Grass[1]	Named Variety	1	15
Meadow Fescue	Named Variety	3	20
White Clover	Named Variety	1	23
Birdsfoot Trefoil[1]	Named Variety	1	11
Note: This mix is best suited to baleage or silage.			

Soil Drainage Class: Somewhat Poorly to Moderately Well Drained			
Species	**Variety**	**Seeding Rate (PLS LBS/Acre)**	**% in Mixture**
Meadow Bromegrass	Fleet	10	16
Orchard grass	Orion	2	26
Tall Fescue	Bull	6	27
Birdsfoot Trefoil[1]	Roseau	1	7
White Clover	Alice	0.5	8
Red Clover	Medium	3	16

Soil Drainage Class: Moderately Well Drained to Well Drained			
Species	**Variety**	**Seeding Rate (PLS LBS/Acre)**	**% in Mixture**
Orchard grass	Named Variety	0.5	9
Meadow Fescue	Named Variety	6	40
Alfalfa*	Named Variety	8	51

Soil Drainage Class: Moderately Well Drained to Excessively Drained			
Species	**Variety**	**Seeding Rate (PLS LBS/Acre)**	**% in Mixture**
Intermediate Wheatgrass	Named Variety	8.5	23
Meadow Bromegrass	Named Variety	6.5	16
Alfalfa*	Named Variety	9	61

Table 14: Cool Season Introduced Hay Mixes			
Soil Drainage Class: Moderately Well Drained to Excessively Drained			
Species	**Variety**	**Seeding Rate (PLS LBS/Acre)**	**% in Mixture**
Timothy	Named Variety	0.5	19
Orchard grass	Named Variety	0.5	10
Intermediate Wheatgrass**	Named Variety	6	16
Meadow Bromegrass	Named Variety	3	7
Smooth Bromegrass	Named Variety	1.5	6
Alfalfa*	Hay Type	6	41

Cool Season Introduced Pasture Mixes			
Soil Drainage Class: Very Poorly to Poorly Drained			
Species	**Variety**	**Seeding Rate (PLS LBS/Acre)**	**% in Mix**
Creeping Foxtail	Garrison	2	34.6
Timothy	Climax	0.5	11.8
Tall Fescue	Bull	6	26.2
Alsike Clover	Recommended	1.5	20.2
Birdsfoot Trefoil[1]	Norcen	1	7.2
Soil Drainage Class: Very Poorly to Poorly Drained			
Species	**Variety**	**Seeding Rate (PLS LBS/Acre)**	**% in Mix**
Reed Canary Grass[1]	Named Variety	3	21.3
Creeping Foxtail	Named Variety	3	36.5
Timothy	Named Variety	0.5	8.3
Alsike Clover	Named Variety	3	28.4
Ladino Clover	Named Variety	0.5	5.4
Soil Drainage Class: Somewhat Poorly to Moderately Well Drained			
Species	**Variety**	**Seeding Rate (PLS LBS/Acre)**	**% in Mix**
Meadow Bromegrass	Fleet	10	15.8
Orchard grass	Orion	2	25.8
Tall Fescue	Bull	6	26.9
Birdsfoot Trefoil[1]	Roseau	1	7.3
White Clover	Alice	0.5	7.9
Red Clover	Medium	3	16.3

Table 14: Cool Season Introduced Pasture Mixes

Soil Drainage Class: Somewhat Poorly Drained to Well Drained			
Species	**Variety**	**Seeding Rate (PLS LBS/Acre)**	**% in Mix**
Perennial Ryegrass	Named Variety	2	12
Orchard grass	Named Variety	0.5	9
Meadow Fescue	Named Variety	5	31
Tall Fescue	Named Variety	2	12
Red Clover	Named Variety	2	15
White Clover	Named Variety	0.5	11
Birdsfoot Trefoil[1]	Named Variety	1	10

Soil Drainage Class: Moderately Well Drained to Well Drained (All Grass)			
Species	**Variety**	**Seeding Rate (PLS LBS/Acre)**	**% in Mix**
Timothy	Named Variety	0.5	20.6
Orchard grass	Named Variety	0.5	10.9
Intermediate Wheatgrass**	Named Variety	11.5	33.8
Smooth Bromegrass	Named Variety	3.5	15.9
Meadow Bromegrass	Named Variety	7	18.7

Soil Drainage Class: Moderately Well Drained to Well Drained			
Species	**Variety**	**Seeding Rate (PLS LBS/Acre)**	**% in Mix**
Timothy	Named Variety	0.5	18.9
Orchard grass	Named Variety	0.5	10
Intermediate Wheatgrass**	Named Variety	5	13.5
Meadow Bromegrass	Named Variety	5.5	10.4
Smooth Bromegrass	Named Variety	2.5	13.5
Alfalfa*	Grazing Type	5	33.7

Soil Drainage Class: Moderately Well Drained to Well Drained			
Species	**Variety**	**Seeding Rate (PLS LBS/Acre)**	**% in Mix**
Intermediate Wheatgrass**	Named Variety	8.5	25.4
Smooth Bromegrass	Named Variety	6.5	30
Orchard grass	Named Variety	0.5	11.1
Alfalfa*	Grazing Type	4.5	33.6

Table 14: Cool Season Introduced Pasture Mixes			
Soil Drainage Class: Moderately Well Drained to Excessively Drained			
Species	**Variety**	**Seeding Rate (PLS LBS/Acre)**	**% in Mix**
Meadow Bromegrass	Fleet	12	20.3
Intermediate Wheatgrass**	Oahe	10	18.6
Tall Fescue	Fawn	4	19.2
Alfalfa*	Grazing Type	4	18.6
Red Clover	Medium	4	23.3
Soil Drainage Class: Moderately Well Drained to Excessively Drained			
Species	**Variety**	**Seeding Rate (PLS LBS/Acre)**	**% in Mix**
Smooth Brome	Named Variety	5	23.4
Intermediate Wheatgrass**	Named Variety	5	15.2
Tall Fescue	Named Variety	3	23.5
Alfalfa*	Grazing Type	5	37.9

1/ Use birdsfoot trefoil or reed canary grass only in site specific circumstances and when it will not be invasive in native plant communities. Prior approval is required from the Area Grazing/Rangeland Management Specialist or Area Resource Conservationist Specialist.

*Alfalfa requires a minimum soil pH to be 6.5 or greater for optimum production.

**Intermediate wheatgrass requires a minimum soil pH of 6.0 or greater for optimum production.

Table 14: Legume Inter-seeding/Frost Seeding Mixes

Soil Drainage Class: Very Poorly Drained to Well Drained			
Species	**Variety**	**Seeding Rate (PLS LBS/Acre)**	**% in Mix**
Alsike Clover	Named Variety	4	100
Soil Drainage Class: Very Poorly Drained to Well Drained			
Species	**Variety**	**Seeding Rate (PLS LBS/Acre)**	**% in Mix**
Alsike Clover	Named Variety	3	60.4
Red Clover	Named Variety	5	39.6
Soil Drainage Class: Somewhat Poorly Drained to Well Drained			
Species	**Variety**	**Seeding Rate (PLS LBS/Acre)**	**% in Mix**
Red Clover	Named Variety	10	100
Soil Drainage Class: Well Drained to Excessively Drained			
Species	**Variety**	**Seeding Rate (PLS LBS/Acre)**	**% in Mix**
Alfalfa	Named Variety	5	31.3
Birsdfoot Trefoil	Named Variety	5	53
Red Clover	Named Variety	2	23.5

Table 15: RECOMMENDED NATIVE AND INTRODUCED GRASS, FORB AND LEGUME FORAGE VARIETIES.					
Recommended Introduced Grasses		**Recommended Legumes and Forbs**		**Recommended Native Grasses**	
Meadow Brome	Paddock Fleet	**Alfalfa**	Winter hardy grazing varieties	**Big Bluestem**	Bison Sunnyview Rountree Champ
Smooth Brome	Superior, Alpha Manchar, Bravo Carlton, Polar, Jubilee, Saratoga	**White Clover**	Ladino Alice	**Little Bluestem**	Itasca Badlands Blaze Camper
Orchard Grass	Potomac Orion Ambassador	**Alsike Clover**	Named Variety	**Switchgrass**	Dacotah Summer Sunburst Pathfinder Forestburg
Timothy	Climax Colt	**Kura Clover**	Named Variety	**Indiangrass**	Tomahawk Holt Oto
Tall Fescue	Courtenay Select	**Birdsfoot Trefoil[1]**	Roseau	**Side-oats Grama**	Killdeer Pierre
Reed Canary Grass[1]	Palaton Chieftan Venture	**Cicer Milkvetch**	Named Variety	**Western Wheatgrass**	Rodan
Intermediate Wheatgrass	Oahe Manska	**Forage Chickory**	Named Variety		
Tall Wheatgrass	Alkar	**Red Clover**	Named Variety		
Meadow Fescue	Pradel				
Creeping Foxtail	Garrison Retain				

1/ Use birdsfoot trefoil or reed canary grass only in site specific circumstances and when it will not be invasive in native plant communities. Prior approval is required from the Area Grazing Specialist.

Table 16: SELECTED FORAGE SPECIES ADAPTABILITY BY SOIL DRAINAGE CLASS

INTRODUCED GRASSES							
Soil Drainage Classes	**Very Poorly Drained**	**Poorly Drained**	**Somewhat Poorly Drained**	**Moderately Well Drained**	**Well Drained**	**Somewhat Excessively Drained**	**Excessively Drained**
Kentucky Bluegrass	N	N	Y	Y	Y	N	N
Meadow Bromegrass	N	N	Y	Y	Y	Y	Y
Smooth Bromegrass	N	N	Y	Y	Y	Y	Y
Reed Canary grass	Y	Y	Y	Y	Y	Y	Y
Meadow Fescue	N	Y	Y	Y	Y	Y	N
Tall Fescue	N	Y	Y	Y	Y	Y	Y
Creeping Foxtail	Y	Y	N	N	N	N	N
Orchard grass	N	N	Y	Y	Y	N	N
Timothy	N	Y	Y	Y	Y	N	N
Intermediate Wheatgrass	N	N	Y	Y	Y	Y	Y
Pubescent Wheatgrass	N	N	Y	Y	Y	Y	Y
Tall Wheatgrass	N	N	Y	Y	Y	Y	Y
NATIVE GRASSES							
Big Bluestem	N	Y	Y	Y	Y	Y	Y
Little Bluestem	N	N	N	Y	Y	Y	Y
Side Oats Grama	N	N	N	Y	Y	Y	Y
Indiangrass	N	Y	Y	Y	Y	N	N
Switchgrass	N	Y	Y	Y	Y	N	N
Slender Wheatgrass	N	Y	Y	Y	Y	Y	N
Western Wheatgrass	N	Y	Y	Y	Y	Y	N
Canada Wildrye	N	N	N	Y	Y	Y	Y
Virginia Wildrye	N	Y	Y	Y	N	N	N
LEGUMES/FORBS							
Alfalfa	N	N	N	Y	Y	Y	Y
Alsike Clover	Y	Y	Y	Y	Y	N	N
Kura Clover	N	Y	Y	Y	Y	N	N
Ladino Clover	N	Y	Y	Y	Y	N	N
Red Clover	N	N	Y	Y	Y	N	N
White Clover	N	N	Y	Y	Y	N	N
Cicer Milkvetch	N	Y	Y	Y	Y	Y	Y
Birdsfoot Trefoil	N	Y	Y	Y	Y	Y	Y
Forage Chickory	N	N	N	Y	Y	N	N

Table 17: FERTILIZER RECOMMENDATIONS FOR GRASS, GRASS/LEGUME AND ALFALFA FORAGE

Nitrogen Recommendations

	Conditions	N to Apply (units/Ac.)
>20% Legume		Nitrogen not recommended
< 20% Legume	Rotational grazing and adequate rainfall	150
	Continuous grazing and adequate rainfall	100
	Grazing and moderate rainfall	50
	Practice 327, 393, 342	60
	Sandy soils, steep slopes, low precipitation areas	30
	Organic Soils	50

Phosphorous Recommendations for Pasture > 20% Legume

	0-5	6-10	11-15	16-20	21+	Bray
	0-3	**4-7**	**8-11**	**12-15**	**16+**	**Olson**
Yield Goal Tons/Acre						
2	35	25	15	0	0	
3	55	40	25	10	0	
4	70	50	30	10	0	
5	90	65	40	15	0	
6	90	65	40	15	0	
7+	90	65	40	15	0	

Phosphorous Recommendations for Pasture < 20% Legume

	0-5	6-10	11-15	16-20	21+	Bray
	0-3	**4-7**	**8-11**	**12-15**	**16+**	**Olson**
Yield Goal Tons/Acre						
2	40	30	20	10	0	
3	50	40	30	20	0	
4	60	50	40	30	0	
5	70	60	50	40	0	
6	70	60	50	40	0	
7+	70	60	50	40	0	

Phosphorous Recommendations for Alfalfa Hay

	0-5	6-10	11-15	16-20	21+	Bray
	0-3	**4-7**	**8-11**	**12-15**	**16+**	**Olson**
Yield Goal Tons/Acre						
2	45	35	20	10	0	
3	65	45	25	10	0	
4	80	55	30	15	0	
5	95	65	40	15	0	
6	110	80	45	20	0	
7+	125	90	55	25	0	

Table 17: FERTILIZER RECOMMENDATIONS FOR GRASS, GRASS/LEGUME AND ALFALFA FORAGE cont.

Phosphorous Recommendations for Other Legume Hay						
	0-5	6-10	11-15	16-20	21+	Bray
	0-3	4-7	8-11	12-15	16+	Olson
Yield Goal Tons/Ac.						
2	40	30	20	10	0	
3	50	40	30	20	0	
4	60	50	40	30	0	
5	70	60	50	40	0	
6	70	60	50	40	0	
7+	70	60	50	40	0	
Potassium Recommendations for Pasture >20% Legume						
	0-40	41-80	81-120	121-160	161+	Soil Test Result
Yield Goal Tons/Ac.						
2	95	65	40	15	0	
3	140	100	60	20	0	
4	185	135	80	25	0	
5	230	165	100	35	0	
6	230	165	100	35	0	
7+	230	165	100	35	0	
Potassium Recommendations for Pasture <20% Legume						
	0-40	41-80	81-120	121-160	161+	Soil Test Result
Yield Goal Tons/Ac.						
2	90	60	30	0	0	
3	100	70	40	10	0	
4	110	80	50	20	0	
5	120	90	60	30	0	
6	120	90	60	30	0	
7+	120	90	60	30	0	
Potassium Recommendations for Alfalfa Hay						
	0-40	41-80	81-120	121-160	161+	Soil Test Result
Yield Goal Tons/Ac.						
2	145	100	55	10	0	
3	190	130	70	10	0	
4	240	165	90	15	0	
5	290	195	105	15	0	
6	335	230	125	20	0	
7+	380	265	145	20	0	

Table 17: FERTILIZER RECOMMENDATIONS FOR GRASS, GRASS/LEGUME AND ALFALFA FORAGE cont.

Potassium Recommendations for Other Legume Hay						
	0-40	41-80	81-120	121-160	161+	Soil Test Result
Yield Goal Tons/Ac.						
2	90	60	30	0	0	
3	100	70	40	10	0	
4	110	80	50	20	0	
5	120	90	60	30	0	
6	120	90	60	30	0	
7+	120	90	60	30	0	

TABLE 18: FORAGE SPECIES CHARACTERISTICS KEY - Livestock Grazing and Mechanical Harvesting

Increaser, Decreaser & Invader Describe Plant Species Reaction to Increased Livestock Grazing Pressure.	Increaser	Decreaser	Invader	Cattle	Horses	Sheep	Goats	Hay	Haylage	Silage	Baleage	Recovery After Harvest
NATIVE COOL SEASON GRASSES												
American mannagrass												
Fowl bluegrass				P								P
Needlegrass												
Green needlegrass		X		G				G				G
Needleandthread	X			F		P						F
Porcupine grass		X		F		P						G
Mountain brome				G								P
Prairie junegrass		X		G								P
Wheatgrass												
Bearded		X		G								
Bluebunch		X		G								F
Slender		X		G								F
Western		X		G				G				F
Whitetop		X		G								F
Wildrye												
Basin				G								F
Beardless				F								P
Canada		X		F								F
Virginia				F								P
NATIVE WARM SEASON GRASSES												
Alkali sacaton				F								F
Bluestem												
Big		X		G				G				G
Little		X		F								F
Sand		X		G								F
Buffalo grass	X			G								F
Grama												
Blue	X			G								P
Sideoats		X		G				G				F
Indian rice grass		X		G								F
Indiangrass				G				G				G
Inland Saltgrass	X			P								P
Prairie cordgrass				F								F
Prairie sandreed		X		F								F
Prairie dropseed				F								F
Reed canary grass		X		G	G							G
Sand dropseed				P								P
Switchgrass		X		F								F

Increaser, Decreaser & Invader Describe Plant Species Reaction to Increased Livestock Grazing Pressure.	Increaser	Decreaser	Invader	Cattle	Horses	Sheep	Goats	Hay	Haylage	Silage	Baleage	Recovery After Harvest
INTRODUCED COOL SEASON GRASSES												
Bromegrass												
Meadow				G								G
Smooth			X	G								G
Creeping foxtail				G								G
Kentucky bluegrass												
Orchard grass				G								G
Fescue												
Tall												
Meadow			X									
Timothy				F	G							G
Wheatgrass												
Crested				F								F
Intermediate				G								F
Pubescent				G								F
Siberian				F								F
Tall				P								F
Wildrye												
Altai				F								P
Mammoth				P								F
Russian				G								G
LEGUMES												
Alfalfa				G	P							G
Birdsfoot trefoil				G	P							G
Crown vetch					P							
Cicer milkvetch				G	P							G
Clover												
Alsike				G	P							G
Kura				G	P	G						
Ladino (white)				G	P							F
Red				G	P	G						F
Strawberry				G	P							F
Sweet				F	P							P
Sainfoin				G	P							F
Small burnet				F	P							

STANDARD 657 – WETLAND RESTORATION: HERBACEOUS SEEDING SPECIFICATIONS

Vegetative Restoration
Restoration of sites involves planting with appropriate native species. Species planted may vary depending on the type of wetland being restored. Planting specifications should be developed for the different zones where vegetation is to be established. Zones range from shallow open water, deep marsh, shallow/emergent marsh, and sedge/wet meadow. This technical note addresses shallow/emergent marsh fringe and sedge/wet meadow zones. Reference ***Section 5 of the Minnesota Wetland Restoration Guide*** for additional vegetative establishment recommendations: BWSR Wetland Restoration Guide.

Use of Native Seedbank
Maximizing the use of native seedbank is encouraged for wetland projects to promote the establishment of local seed/species. Seedbanks often contain annual species that provide important environmental benefits and often are not included in seed mixes. Survey information from nearby remnant communities can be used as a guide for developing a diversity standard and determining what additional species may be beneficial.

Seeding Wetlands
Wet meadow and sedge meadow seed mixes are designed to be used from the planned edge of open water (pool elevation) to around 1-1.5 feet in elevation depending on soil texture and capillary action of soil. Emergent seed mixes are commonly used in a 6 to 10-foot band that straddles the edge of open water. This strip of emergent seed is typically hand broadcast after water levels have stabilized within the wetland. It is not recommended to seed in areas that will have open water, as most wetland seed will float.

In most cases, wetland seed can be broadcast-seeded followed by rolling or packing, as most wetland seed needs light to germinate. Wetland grasses can be drill-seeded 1/8 to 1/4-inch-deep followed by broadcasting forbs and sedges. If a seed drill is used for installation of wetland seed the drill must be calibrated appropriately to ensure that small seed is planted correctly.

Establishment - Wetlands are typically dormant seeded in the fall or seeded in spring after hydrology conditions have stabilized. An advantage of fall dormant seeding is that forb and sedge seed is allowed to stratify over winter. Emergent wetland species may be seeded but are also commonly planted on the edge of open water and allowed to move to deeper areas on their own. Aggressive wetland species such as reed canary grass, non-native cattails and non-native phragmites need to be thoroughly controlled prior to wetland seeding or plantings will likely not be successful.

Seed Planting Density - Wetland seed mixes shall provide seed densities ranging from 110 to 200 seeds/ft^2. Wet/sedge meadow seed mixes shall contain 20-30 species. Shallow emergent marsh communities may be seeded with mixes of 10-20 species. For recommended species and optional seeding calculator refer to the MN NRCS Home Page at Field Office Technical Guide. Higher diversity mixes will help support pollinators and other invertebrates that play a key role in the health of wetland habitats. Recommended composition of mixes, based on seeds/ft^2:

Emergent Fringe		Sedge Meadow		Wet Meadow	
Grasses	20 – 65%	Grasses	20 – 50%	Grasses	20 – 60%
Sedges - Rushes	20 – 65%	Sedges - Rushes	40 – 70%	Sedges - Rushes	15 – 60%
Forbs	15 – 30%	Forbs	15 – 35%	Forbs	15 – 35%

*-- **NOTE** – Wet/Sedge meadow class wetland restorations that are intended to be short-term in duration, may utilize the following Conservation Practice Standards; Conservation Cover (327) or Restoration of Rare or Declining Natural Communities (643) specifications in lieu of 657 seeding specifications. Species shall be selected from Wet– Mesic drainage classes.

Early Successional Floodplain – The following mixtures are recommended on sites where natural regeneration of woody or herbaceous vegetation is expected to establish over time.

1.	Switchgrass	6.0 lbs/ac		
2.	Virginia Wildrye	3.0 lbs/ac		
	Slender Wheatgrass	5.0 lbs/ac		
	Switchgrass	3.0 lbs/ac		
*-- 3.	Riverbank Wild Rye	0.09 lb/ac		
	Slender Wheatgrass	0.99 lb/ac		
	Virginia Wild Rye	5.19 lbs/ac		
	Fowl Bluegrass	0.42 lb/ac		
	Marsh Milkweed	0.06 lb/ac		
	Autumn Sneezeweed	0.04 lb/ac		
	Tall Coneflower	0.02 lb/ac		
	Blue Vervain	0.09 lb/ac		

Table 21: Key Plant Species for Herbaceous Wetland Restoration

Grasses, forbs, sedges, and rushes are all commonly used as part of herbaceous wetland restoration projects. Species should be selected that are native to the area and well adapted to site conditions. The listed seeds per square foot are a general recommendation for seed mixes.

Shallow/Emergent Wetland Fringe (Saturated soils to water depths up to 6 inches)

Common Name	Botanical Name	Succession	Zone	Seeds/ft^2 at 1.0 lb/ac.	Seeds/ft^2 at 1.0 oz/ac.
Sweet flag	*Acorus americanus*	L	E	2.4	0.2
Water plantain	*Alisma subcordatum*	M	E	22.0	1.5
Marsh milkweed	*Asclepias incarnata*	L	S	1.76	0.1
American slough grass	*Beckmannia syzigachne*	E	S	18.4	1.2
Canada bluejoint grass	*Calamagrostis canadensis*	L	S	102.8	6.4
Slough sedge	*Carex atherodes*	L	E	10.7	0.7
Bottlebrush sedge	*Carex comosa*	L	E	11.0	0.7
Porcupine sedge	*Carex hystericina*	L	E	11.0	0.7
Lake sedge	*Carex lacustris*	L	E	11.8	0.7
Tussock sedge	*Carex stricta*	L	E	19.5	1.2
Fox sedge	*Carex vulpinoidea*	L	E	36.7	2.3
Least spike-rush	*Eleocharis acicularis*	M	E	25.7	1.6
Marsh spike-rush	*Eleocharis palustris*	M	E	18.7	1.2
Joe-pye weed	*Eutrochium maculatum*	L	S	34.9	2.2
Rattlesnake manna grass	*Glyceria canadensis*	M	E	58.8	3.7
Tall/Reed manna grass	*Glyceria grandis*	L	E	29.4	1.8
Soft rush	*Juncus effusus*	L	E	367.3	23.0
Knotted rush	*Juncus nodosus*	L	E	679.9	42.5
Torrey's rush	*Juncus torreyi*	M	E	587.7	36.7
Rice cutgrass	*Leersia oryzoides*	M	S	12.5	0.8
Water smartweed	*Polygonum amphibium*	E	E	2.9	0.2
Great water dock	*Rumex orbiculatus*	M	S	4.3	0.3
Broad-leaved arrowhead	*Sagittaria latifolia*	M	E	22.4	1.4
Hard-stem bulrush	*Schoenoplectus acutus*	L	E	4.7	0.3
River bulrush	*Schoenoplectus fluviatilis*	L	E	1.6	0.1
Three-square bulrush	*Schoenoplectus pungens*	L	E	4.4	0.3
Soft-stem bulrush	*Schoenoplectus tabernaemontani*	M	E	11.4	0.7
Wool grass	*Scirpus cyperinus*	L	S	624.4	39.0
Giant bur-reed	*Sparganium eurycarpum*	L	E	.01	NA

Wet Meadow – Sedge Meadow Wetland (saturated soils dominated by grasses, sedges, and forbs)					
Common Name	**Botanical Name**	**Succession**	**Zone**	**Seeds/ft^2 at 1.0 lb/ac.**	**Seeds/ft^2 at 1.0 oz/ac.**
Blue giant hyssop	*Agastache foeniculum*	L	S	33.4	2.1
Big bluestem	*Andropogon gerardi*	M	S	4.0	0.3
Canada anemone	*Anemone canadensis*	L	S	2.9	0.2
Marsh milkweed	*Asclepias incarnata*	L	S	1.8	0.1
American slough grass	*Beckmannia syzigachne*	E	S	18.4	1.2
Beggar's ticks	*Bidens cernua*	E	S	7.7	0.5
Fringed brome	*Bromus ciliata*	M	S	3.7	0.2
Canada bluejoint grass	*Calamagrostis canadensis*	L	S	102.8	6.4
Bebb's sedge	*Carex bebbii*	L	S	12.5	0.8
Bottlebrush sedge	*Carex comosa*	L	S	11.0	0.7
Wooly sedge	*Carex pellita*	L	E	10.3	0.6
Retrorsa sedge	*Carex retrorsa*	L	S	4.0	0.3
Pointed broom sedge	*Carex scoparia*	L	S	30.9	1.9
Awl-fruited sedge	*Carex stipata*	L	S	12.5	0.8
Tussock sedge	*Carex stricta*	L	E	19.5	1.2
Fox sedge	*Carex vulpinoidea*	E	S	36.7	2.3
Canada tick trefoil	*Desmodium canadense*	M	S	2.1	0.1
Flat-topped aster	*Doellingeria umbellata*	L	S	24.6	1.5
Spike-rush	*Eleocharis acicularis*	M	S	25.7	1.6
Creeping spike-rush	*Eleocharis palustris*	M	S	18.7	1.2
Virginia wild-rye	*Elymus vriginicus*	M	S	2.2	0.1
Boneset	*Eupatorium perfoliatum*	L	S	58.7	3.7
Grass-leaved goldenrod	*Euthamia graminifolia*	M	S	128.5	8.0
Joe-pye weed	*Eutrochium maculatum*	L	S	34.9	2.2
Tall/Reed manna grass	*Glyceria grandis*	L	S	29.4	1.8
Fowl manna grass	*Glyceria striata*	M	S	58.8	3.7
Sneezeweed	*Helenium autumnale*	M	S	47.7	3.0
Sawtooth sunflower	*Helianthus grossesserratus*	L	S	3.7	0.2
Blue-flag iris	*Iris versicolor*	L	S	.32	0.1
Knotted rush	*Juncus nodosus*	L	S	679.9	42.5
Slender rush	*Juncus tenuis*	M	S	367.3	23.0
Torrey's rush	*Juncus torreyii*	M	S	587.7	36.7
Rice-cut grass	*Leersia oryzoides*	M	S	12.5	0.8
Meadow blazingstar	*Liatris ligulistylis*	L	S	4.0	0.3
Tall blazingstar	*Liatris pycnostachya*	L	S	4.0	0.3
Great blue lobelia	*Lobelia siphilitica*	M	S	183.7	11.5
Water horehound	*Lycopus americanus*	E	S	47.7	2.98
Monkeyflower	*Mimulus ringens*	M	S	844.8	52.80
Switchgrass	*Panicum virgatum*	M	S	9.0	0.6
Fowl bluegrass	*Poa palustris*	M	S	47.8	3.0
Mountain mint	*Pycnanthemum virginianum*	L	S	80.8	5.1
Green bulrush	*Scirpus atrovirens*	M	S	168.9	10.6
Wool grass	*Scirpus cyperinus*	L	S	624.4	39.0
Giant goldenrod	*Solidago gigantea*	L	S	91.8	5.7
Indiangrass	*Sorgastrum nutans*	M	S	4.8	0.3

Common Name	Botanical Name	Succession	Zone	Seeds/ft^2 at 1.0 lb/ac.	Seeds/ft^2 at 1.0 oz/ac.
Prairie cordgrass	*Spartina pectinata*	M	S	4.2	0.3
Panicled aster	*Symphyotrichum lanceolatum*	L	S	57.3	3.6
New England aster	*Symphyotrichum novae-angliae*	L	S	24.3	1.5
Red-stem aster	*Symphyotrichum puniceum*	L	S	29.4	1.8
Tall meadow rue	*Thalictrum dasycarpum*	L	S	4.0	0.3
Blue vervain	*Verbena hastata*	M	S	34.1	2.1
Ironweed	*Veronia fasciculata*	L	S	8.8	0.6
Culver's root	*Veronicastrum virginicum*	L	S	293.9	18.3
Golden alexanders	*Zizia aurea*	M	S	4.0	0.3

Succession Definitions:

E = Early successional. Species is an annual or biennial.
M = Middle successional. Species is a short-term perennial or subdominant in the plant community. They generally establish in two years.
L = Late successional. Species is a dominant. Generally slow to establish from seed (3-5 years).

Zone Definitions:

E = Emergent – Plants are partially submerged with leaves, stems, and flowering parts partially or entirely out of the water. They can often grow under saturated conditions and may survive short periods of dry-down. The seed should be placed either on a mud flat or at the water's edge.
S = Saturated – Soils are saturated most of the year, plants will tolerate periodic flooding and dry-down periods. Species categorized as "Saturated" should generally be planted at the water's edge.

Table 22: Varieties and Natural Germplasm for Select Grass and Forbs for All Practice Standards						
Species	**Variety**	**Adaptability Zone Ratings**				
		A	**B**	**C**	**D**	**E**
Switchgrass	Forestburg*, Sunburst*	1	1	1	2	3
	Dacotah*	3	2	1	1	1
	Nebraska 28	1	1	2	3	4
	Pathfinder, Summer, Trailblazer	1	2	3	4	4
Big Bluestem	Bonilla*, Bounty*, Sunnyview	1	1	1	2	3
	Bison*	3	2	1	1	1
	Champ	1	1	2	3	4
	Roundtree	1	2	3	4	4
	Bonanza, Pawnee	1	2	3	3	4
Indiangrass	Tomahawk*	2	1	1	1	1
	Oto	2	3	4	4	4
	Holt	1	1	2	3	4
Sideoats Grama	Pierre*	1	1	1	2	3
	Killdeer*	3	2	1	1	1
	Butte	1	1	2	3	4
	Trailway	1	2	3	4	4
Little Bluestem	Itasca*	1	1	1	1	1
	Badlands*	2	1	1	1	1
	Camper	2	3	3	4	4
	Blaze	2	3	4	4	4
Prairie Sandreed	Goshen	1	1	2	4	4
Prairie Cordgrass	Red River*	Adapted in all zones				
Green Needlegrass	Lodorm*; MN, ND, SD Common*	Adapted in all zones				
Blue Grama	Bad River Ecotype*; ND or SD Common*	Adapted in all zones				
Slender Wheatgrass	Revenue*, Adanac, Primar, Pryor	Adapted in all zones				
Western Wheatgrass	Rodan*, Flintlock, Rosana	Adapted in all zones				
Canada Wildrye	Mandan*	Adapted in all zones				
Pubescent/Intermediate Wheatgrass	Beefmaker, Chief, Clarke, Haymaker, Manifest, Manska, Oahe, Reliant, Slate, Tegmar	Adapted in all zones				
Tall Wheatgrass	Alkar, Jose, Orbit, Platte	Adapted in all zones				
Maximilian Sunflower	Medicine Creek*	Adapted in all zones				
Stiff Sunflower	Bismarck Natural Germplasm*	Adapted in all zones				
Purple Prairie Clover	Bismarck Natural Germplasm*	Adapted in all zones				
Narrow-leaf Purple Coneflower	Bismarck Natural Germplasm*	Adapted in all zones				
Yellow Coneflower	Stillwater	Adapted in all zones				

***** Varieties/natural germplasm materials suitable for Tallgrass Prairie Restoration.

Figure 2: Grass Variety and Natural Germplasm Adaptability Zones and Ratings

1. Adapted with optimum performance.
2. Moderately adapted under haying or grazing, may not always produce mature seed.
3. Poorly adapted.
4. Not adapted

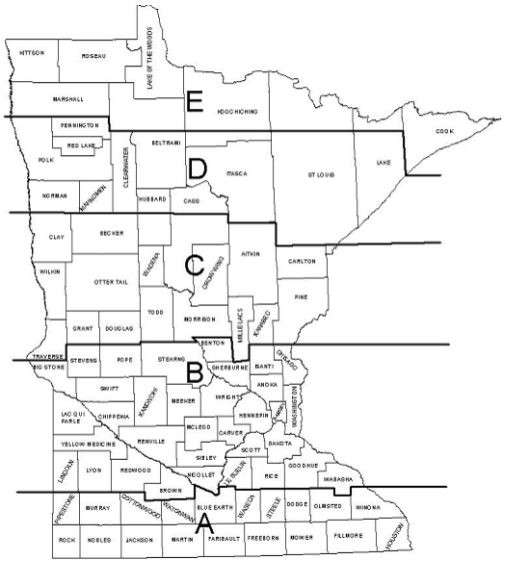


Table 23: Conversion of Bulk Pounds To Pure Live Seed

POUNDS OF GRASS SEED; BULK MATERIAL REQUIRED TO YIELD ONE POUND OF PURE LIVE SEED

Percent Germination

Percent Purity	100	99	98	97	96	95	94	93	92	91	90	89	88	87	86	85	84	83	82	81	80	75	70	65	60	55	50	45	40	35	30	25
100	1.00	1.01	1.02	1.03	1.04	1.05	1.06	1.08	1.09	1.10	1.11	1.12	1.14	1.15	1.16	1.18	1.19	1.20	1.22	1.23	1.25	1.33	1.43	1.54	1.67	1.82	2.00	2.22	2.50	2.86	3.33	4.00
99	1.01	1.02	1.03	1.04	1.05	1.06	1.07	1.09	1.10	1.11	1.12	1.13	1.15	1.16	1.17	1.19	1.20	1.22	1.23	1.25	1.26	1.35	1.44	1.55	1.68	1.84	2.02	2.24	2.53	2.89	3.37	4.04
98	1.02	1.03	1.04	1.05	1.06	1.07	1.09	1.10	1.11	1.12	1.13	1.15	1.16	1.17	1.19	1.20	1.21	1.23	1.24	1.26	1.28	1.36	1.46	1.57	1.70	1.86	2.04	2.27	2.55	2.92	3.40	4.08
97	1.03	1.04	1.05	1.06	1.07	1.09	1.10	1.11	1.12	1.13	1.15	1.16	1.17	1.18	1.20	1.21	1.23	1.24	1.26	1.27	1.29	1.37	1.47	1.59	1.72	1.87	2.06	2.29	2.58	2.95	3.44	4.12
96	1.04	1.05	1.06	1.07	1.09	1.10	1.11	1.12	1.13	1.14	1.16	1.17	1.18	1.20	1.21	1.23	1.24	1.26	1.27	1.29	1.30	1.39	1.49	1.60	1.74	1.89	2.08	2.31	2.60	2.98	3.47	4.17
95	1.05	1.06	1.07	1.09	1.10	1.11	1.12	1.13	1.14	1.16	1.17	1.18	1.20	1.21	1.22	1.24	1.25	1.27	1.28	1.30	1.32	1.40	1.50	1.62	1.75	1.91	2.11	2.34	2.63	3.01	3.51	4.21
94	1.06	1.07	1.09	1.10	1.11	1.12	1.13	1.14	1.16	1.17	1.18	1.20	1.21	1.22	1.24	1.25	1.27	1.28	1.30	1.31	1.33	1.42	1.52	1.64	1.77	1.93	2.13	2.36	2.66	3.04	3.55	4.26
93	1.08	1.09	1.10	1.11	1.12	1.13	1.14	1.16	1.17	1.18	1.19	1.21	1.22	1.24	1.25	1.27	1.28	1.30	1.31	1.33	1.34	1.43	1.54	1.65	1.79	1.96	2.15	2.39	2.69	3.07	3.58	4.30
92	1.09	1.10	1.11	1.12	1.13	1.14	1.16	1.17	1.18	1.19	1.21	1.22	1.24	1.25	1.26	1.28	1.29	1.31	1.33	1.34	1.36	1.45	1.55	1.67	1.81	1.98	2.17	2.42	2.72	3.11	3.62	4.35
91	1.10	1.11	1.12	1.13	1.14	1.16	1.17	1.18	1.19	1.21	1.22	1.23	1.25	1.26	1.28	1.29	1.31	1.32	1.34	1.36	1.37	1.47	1.57	1.69	1.83	2.00	2.20	2.44	2.75	3.14	3.66	4.40
90	1.11	1.12	1.13	1.15	1.16	1.17	1.18	1.19	1.21	1.22	1.23	1.25	1.26	1.28	1.29	1.31	1.32	1.34	1.36	1.37	1.39	1.48	1.59	1.71	1.85	2.02	2.22	2.47	2.78	3.17	3.70	4.44
89	1.12	1.13	1.15	1.16	1.17	1.18	1.20	1.21	1.22	1.23	1.25	1.26	1.28	1.29	1.31	1.32	1.34	1.35	1.37	1.39	1.40	1.50	1.61	1.73	1.87	2.04	2.25	2.50	2.81	3.21	3.75	4.49
88	1.14	1.15	1.16	1.17	1.18	1.20	1.21	1.22	1.24	1.25	1.26	1.28	1.29	1.31	1.32	1.34	1.35	1.37	1.39	1.40	1.42	1.52	1.62	1.75	1.89	2.07	2.27	2.53	2.84	3.25	3.79	4.55
87	1.15	1.16	1.17	1.18	1.20	1.21	1.22	1.24	1.25	1.26	1.28	1.29	1.31	1.32	1.34	1.35	1.37	1.38	1.40	1.42	1.44	1.53	1.64	1.77	1.92	2.09	2.30	2.55	2.87	3.28	3.83	4.60
86	1.16	1.17	1.19	1.20	1.21	1.22	1.24	1.25	1.26	1.28	1.29	1.31	1.32	1.34	1.35	1.37	1.38	1.40	1.42	1.44	1.45	1.55	1.66	1.79	1.94	2.11	2.33	2.58	2.91	3.32	3.88	4.65
85	1.18	1.19	1.20	1.21	1.23	1.24	1.25	1.27	1.28	1.29	1.31	1.32	1.34	1.35	1.37	1.38	1.40	1.42	1.43	1.45	1.47	1.57	1.68	1.81	1.96	2.14	2.35	2.61	2.94	3.36	3.92	4.71
84	1.19	1.20	1.21	1.23	1.24	1.25	1.27	1.28	1.29	1.31	1.32	1.34	1.35	1.37	1.38	1.40	1.42	1.43	1.45	1.47	1.49	1.59	1.70	1.83	1.98	2.16	2.38	2.65	2.98	3.40	3.97	4.76
83	1.20	1.22	1.23	1.24	1.26	1.27	1.28	1.30	1.31	1.32	1.34	1.35	1.37	1.38	1.40	1.42	1.43	1.45	1.47	1.49	1.51	1.61	1.72	1.85	2.01	2.19	2.41	2.68	3.01	3.44	4.02	4.82
82	1.22	1.23	1.24	1.26	1.27	1.28	1.30	1.31	1.33	1.34	1.36	1.37	1.39	1.40	1.42	1.43	1.45	1.47	1.49	1.51	1.52	1.63	1.74	1.88	2.03	2.22	2.44	2.71	3.05	3.48	4.07	4.88
81	1.23	1.25	1.26	1.27	1.29	1.30	1.31	1.33	1.34	1.36	1.37	1.39	1.40	1.42	1.44	1.45	1.47	1.49	1.51	1.52	1.54	1.65	1.76	1.90	2.06	2.24	2.47	2.74	3.09	3.53	4.12	4.94
80	1.25	1.26	1.28	1.29	1.30	1.32	1.33	1.34	1.36	1.37	1.39	1.40	1.42	1.44	1.45	1.47	1.49	1.51	1.52	1.54	1.56	1.67	1.79	1.92	2.08	2.27	2.50	2.78	3.13	3.57	4.17	5.00
75	1.33	1.35	1.36	1.37	1.39	1.40	1.42	1.43	1.45	1.47	1.48	1.50	1.52	1.53	1.55	1.57	1.59	1.61	1.63	1.65	1.67	1.78	1.90	2.05	2.22	2.42	2.67	2.96	3.33	3.81	4.44	5.33
70	1.43	1.44	1.46	1.47	1.49	1.50	1.52	1.54	1.55	1.57	1.59	1.61	1.62	1.64	1.66	1.68	1.70	1.72	1.74	1.76	1.79	1.90	2.04	2.20	2.38	2.60	2.86	3.17	3.57	4.08	4.76	5.71
65	1.54	1.55	1.57	1.59	1.60	1.62	1.64	1.65	1.67	1.69	1.71	1.73	1.75	1.77	1.79	1.81	1.83	1.85	1.88	1.90	1.92	2.05	2.20	2.37	2.56	2.80	3.08	3.42	3.85	4.40	5.13	6.15
60	1.67	1.68	1.70	1.72	1.74	1.75	1.77	1.79	1.81	1.83	1.85	1.87	1.89	1.92	1.94	1.96	1.98	2.01	2.03	2.06	2.08	2.22	2.38	2.56	2.78	3.03	3.33	3.70	4.17	4.76	5.56	6.67
55	1.82	1.84	1.86	1.87	1.89	1.91	1.93	1.96	1.98	2.00	2.02	2.04	2.07	2.09	2.11	2.14	2.16	2.19	2.22	2.24	2.27	2.42	2.60	2.80	3.03	3.31	3.64	4.04	4.55	5.19	6.06	7.27
50	2.00	2.02	2.04	2.06	2.08	2.11	2.13	2.15	2.17	2.20	2.22	2.25	2.27	2.30	2.33	2.35	2.38	2.41	2.44	2.47	2.50	2.67	2.86	3.08	3.33	3.64	4.00	4.44	5.00	5.71	6.67	8.00
45	2.22	2.24	2.27	2.29	2.31	2.34	2.36	2.39	2.42	2.44	2.47	2.50	2.53	2.55	2.58	2.61	2.65	2.68	2.71	2.74	2.78	2.96	3.17	3.42	3.70	4.04	4.44	4.94	5.56	6.35	7.41	8.89
40	2.50	2.53	2.55	2.58	2.60	2.63	2.66	2.69	2.72	2.75	2.78	2.81	2.84	2.87	2.91	2.94	2.98	3.01	3.05	3.09	3.13	3.33	3.57	3.85	4.17	4.55	5.00	5.56	6.25	7.14	8.33	10.00
35	2.86	2.89	2.92	2.95	2.98	3.01	3.04	3.07	3.11	3.14	3.17	3.21	3.25	3.28	3.32	3.36	3.40	3.44	3.48	3.53	3.57	3.81	4.08	4.40	4.76	5.19	5.71	6.35	7.14	8.16	9.52	11.43
30	3.33	3.37	3.40	3.44	3.47	3.51	3.55	3.58	3.62	3.66	3.70	3.75	3.79	3.83	3.88	3.92	3.97	4.02	4.07	4.12	4.17	4.44	4.76	5.13	5.56	6.06	6.67	7.41	8.33	9.52	11.11	13.33
25	4.00	4.04	4.08	4.12	4.17	4.21	4.26	4.30	4.35	4.40	4.44	4.49	4.55	4.60	4.65	4.71	4.76	4.82	4.88	4.94	5.00	5.33	5.71	6.15	6.67	7.27	8.00	8.89	10.00	11.43	13.33	16.00

Table 24: Characteristics of Common Grass, Legume and Forb Species for All Practice Standards

	Growth Habit 1	Drought Tolerance 2	Flood Tolerance 3	Longevity 4	Stand Establishment 5	Moisture Regime 6	Height 7	Growth Form 8	Salt Tolerance	Shade Tolerance	pH	Seeds/ Lb
Introduced Cool - Season Grasses												
Bromegrass												
Meadow	P	Fair	Fair	Medium	Medium	WM - D	M	B	Poor	Intolerant	5.6-8.4	80,000
Smooth	P	Fair	Good	Long	Rapid	M - D	M	S/R	Poor	Intolerant	5.6-8.4	135,000
Creeping foxtail	P	Poor	Good	Long	Medium	W - M	M	S/R	Poor	Intolerant	6.1-8.4	750,000
Fescue												
Tall	P	Good	Good	Medium	Medium	M - D	M	B	Fair	Tolerant	4.5-9.0	210,000
Meadow	P	Good	Good	Medium	Medium	M - D	M	B	Fair	Tolerant	4.5-9.0	235,955
Kentucky bluegrass	P	Poor	Fair	Long	Rapid	WM - DM	S	S/R	Poor	Intolerant	5.6-7.3	1,389,840
Orchard grass	P	Fair	Fair	Medium	Medium	WM – DW	M	B	Poor	Tolerant	5.6-8.4	654,000
Timothy	P	Poor	Good	Short	Rapid	DM - D	M	B	Poor	Moderate	5.1-8.4	1,163200
Red top	P	Poor	Good	Short	Medium	W - M	M	S/R	Poor	Intolerant	4.5-8.0	4,851,200
Wheatgrass												
Intermediate	P	Fair	Fair	Long	Medium	M - D	M	S/R	Fair	Intolerant	7.0-8.5	88,000
Pubescent	P	Fair	Fair	Long	Medium	M – D	M	S/R	Fair	Intolerant	7.0-8.5	88,000
Tall	P	Fair	Good	Medium	Medium	W - M	T	B	Good	Intolerant	7.0-8.5	79,000
Wildrye												
Altai	P	Fair	Good	Medium	Slow	M - D	M	B	Good	Intolerant	5.9-9.0	68,000
Mammoth	P	Good	Poor	Good	Slow	M - D	T	S/R	Fair	Intolerant	5.6-9.0	150,000
Russian	P	Good	Fair	Medium	Medium	M - D	M	B	Fair	Intolerant	6.0-9.0	55,000
Introduced Legumes												
Alfalfa	P	Good	Poor	Medium	Rapid	M - D	M	Crown	Fair	Intolerant	6.0-8.5	226,800
Birdsfoot trefoil	P	Fair	Fair	Medium	Rapid	W - DM	M	Pr	Good	Intolerant	5.8-8.0	369,840
Crown vetch	P	Good	Poor	Long	Medium	M - D	M	Pr	Poor	Intolerant	5.5-7.0	110,000
Cicer milkvetch	P	Good	Fair	Long	Medium	W - DM	T	Pr	Fair	Intolerant	6.0-8.1	134,000
Clover												
Alsike	P	Fair	Good		Medium	W - M	M	Crown	Poor	Intolerant	5.6-7.5	680,000
White	P	Poor	Good	Medium	Medium	WM - DM	S	Crown	Poor	Intolerant	5.2-8.0	800,000
Red	P	Fair	Fair	Short	Medium	WM - DM	M	Crown	Poor	Intolerant	5.5-7.6	275,000
Kura	P	Poor	Fair	Long	Medium	M - DM	S	P/Crown	Poor	Moderate	6.0-7.0	215,000
Sweet	P	Good	Fair	Medium	Rapid	WM - DM	T	Crown	Good	Intolerant	6.5-8.0	285,560

	Growth Habit 1	Drought Tolerance 2	Flood Tolerance 3	Longevity 4	Stand Establishment 5	Moisture Regime 6	Height 7	Growth Form 8	Salt Tolerance	Shade Tolerance	pH	Seeds/ Lb
Native Cool-Season Grasses												
Canada Bluejoint grass	P	Poor	Good	Long	Medium	W - M	T	S/R	Poor	Intolerant	4.5-8.0	4,480,000
Fowl bluegrass	P	Poor	Good	Medium	Med	W - WM	M	B	Poor	Intolerant	4.9-7.5	2,080,000
Fringed brome	P	Fair	Fair	Medium	Rapid	W - WM	M	B	Poor	Tolerant	5.5-7.5	160,000
Green needlegrass	P	Good	Fair	Long	Medium	DM - D	M	B	Fair	Intolerant	6.6-8.4	180,000
Kalms brome	P	Fair	Fair	Short	Medium	WM - M	M	B	Poor	Tolerant	5.5-7.5	128,000
Needle and thread grass	P	Good	Fair	Long	Slow	DM - D	M	B	Poor	Intolerant	6.6-8.4	25,600
Porcupine grass	P	Good	Fair	Long	Slow	DM - D	M	B	Poor	Intolerant	6.6-8.4	57,000
Prairie junegrass	P	Good	Poor	Long	Slow	DM - D	S	B	Poor	Tolerant	6.0-8.0	2,315,000
Reed canary grass	P	Fair	Good	Long	Medium	W - M	T	S/R	Fair	Intolerant	5.5-8.0	530,000
Wheatgrass												
Bearded	P	Good	Good	Short	Rapid	WM - D	M	B	Fair	Intolerant	5.6-9.0	155,000
Bluebunch	P	Good	Poor	Long	Medium	DM-D	T	B	Fair	Intolerant	6.6-8.4	125,680
Slender	P	Good	Good	Short	Rapid	WM - D	M	B	Good	Intolerant	5.6-9.0	155,000
Western	P	Good	Good	Long	Medium	DM - D	M	S/R	Good	Intolerant	4.5-9.0	112,000
Wildrye												
Canada	P	Fair	Fair	Short	Rapid	WM - D	M	B	Good	Tolerant	5.0-7.9	115,000
Virginia	P	Fair	Good	Short	Rapid	W - M	M	B	Fair	Tolerant	5.0-7.0	96,000
Native Warm-Season Grasses												
American slough grass	A	Poor	Good	NR	NR	W – WM	S	B	Fair	Moderate	5.5-7.5	800,000
Bluestem												
Big	P	Fair	Fair	Long	Slow	WM – D	T	R	Fair	Intolerant	6.0-7.5	176,000
Little	P	Good	Poor	Long	Medium	M - D	M	B	Poor	Intolerant	5.0-8.4	286,000
Sand	P	Good	Fair	Long	Slow	DM - D	T	R	Poor	Intolerant	5.6-8.4	100,000
Buffalo grass	P	Good	Fair	Long	Medium	M - D	S	S/St	Good	Intolerant	6.0-8.5	57,600
Grama												
Blue	P	Good	Poor	Long	Medium	DM - D	S	S/St	Fair	Intolerant	6.6-8.4	750,000
Sideoats	P	Good	Poor	Long	Medium	M - D	S	S/R	Poor	Intolerant	5.5-8.5	180,000
Indiangrass	P	Fair	Good	Long	Medium	M - D	T	B	Fair	Intolerant	4.8-8.0	193,000
Prairie cordgrass	P	Poor	Good	Long	Slow	W - M	T	S/R	Poor	Intolerant	6.0-8.5	183,000
Prairie slandered	P	Good	Poor	Long	Slow	D	T	S/R	Poor	Intolerant	5.6-8.4	275,000
Prairie dropseed	P	Fair	Good	Long	Slow	DM - D	M	B	Fair	Intolerant	6.0-7.2	224,000
Rough dropseed	P	Fair	Good	Long	Slow	DM - D	M	B	Fair	Intolerant	NR	480,000
Sand dropseed	P	Good	Poor	Short	Rapid	DM - D	M	B	Fair	Intolerant	6.6-8.0	3,200,000
Switchgrass	P	Fair	Good	Long	Medium	WM - D	T	S/R	Fair	Intolerant	4.5-8.0	390,000

	Growth Habit 1	Drought Tolerance 2	Flood Tolerance 3	Longevity 4	Stand Establishment 5	Moisture Regime 6	Height 7	Growth Form 8	Salt Tolerance	Shade Tolerance	pH	Seeds/ Oz
Native Forbs and Legumes												
American vetch	P	Good	Poor	Medium	Medium	WM – DM	S	Pr	Poor	Intolerant	5.9-7.2	2,052
Aster												
Heath	P	Good	Fair	Long	NR	M - D	M	E/R	NR	Intolerant	NR	200,000
New England	P	NR	Good	Long	Medium	W - DM	T	E/R	NR	Intolerant	5.5-7.0	66,000
Panicled	P	Fair	Fair	Long	Medium	WM - M	T	E	NR	Intolerant	NR	156,000
Silky	P	Good	Poor	Medium	Slow	DM - D	S	E	NR	Intolerant	NR	26,000
Smooth	P	Good	Poor	Long	Medium	WM – DM	T	E	NR	Intolerant	6.0-6.5	55,000
Swamp	P	NR	Good	Long	Medium	W - WM	T	E	NR	Intolerant	NR	80,000
Black-eyed Susan	Bi	Good	Good	Short	Rapid	WM - D	M	E	Poor	Intolerant	6.0-7.0	92,000
Blanket flower	P	Good	Fair	Medium	Medium	W - M	M	E	Poor	Intolerant	5.5-7.9	9,813
Blazingstar												
Dotted	P	Good	Poor	Long	Slow	DM - D	M	E	Poor	Intolerant	6.0-7.8	7,000
Ontario	P	Good	Poor	Long	Medium	DM - D	M	E	Poor	Intolerant	NR	14,000
Meadow	P	Good	Poor	Long	Medium	WM - M	T	E	Poor	Intolerant	6.0-8.5	11,000
Rough	P	Fair	Poor	Long	Medium	M - D	T	E	Poor	Intolerant	NR	16,000
Tall/Prairie	P	Good	Poor	Long	Medium	WM - M	T	E	Poor	Intolerant	6.0-8.5	11,000
Boneset	P	Good	Poor	Medium	Slow	W – WM	T	E	NR	Moderate	NR	160,000
Bush clover	P	Good	Poor	Long	Slow	DM - D	T	E/R	Poor	Intolerant	5.7-8.2	8,000
Canada milkvetch	P	Fair	Good	Short	Medium	WM - DM	T	E/R	Poor	Intolerant	6.0-8.0	17,000
Canada tick trefoil	P	Fair	Fair	Medium	NR	WM - DM	T	E	NR	Tolerant	NR	5,500
Common ox-eye	P	Good	Short	Short	Medium	WM - DM	T	E	NR	Moderate	NR	6,300
Compass plant	P	NR	NR	NR	NR	WM - D	T	E	NR	Moderate	4.5-7.5	660
Coneflower												
Yellow	Bi/P	Good	Fair	Medium	Medium	M - DM	T	E	Poor	Intolerant	5.6-6.8	30,000
Narrow-leaved purple	P	Good	Poor	Long	Slow	DM - D	M	E	Poor	Intolerant	6.5-7.2	7,000
Purple	P	Good	Poor	Long	Medium	WM - DM	T	E	Poor	Intolerant	6.5-7.2	7,000
Culver's root	P	NR	Fair	Long	NR	WM - DM	T	E	NR	Moderate	NR	800,000
Cup plant	P	Poor	Fair	Long	Medium	WM - M	T	E	Poor	Moderate	4.5-7.5	1,400
Evening primrose	Bi/P	Good	Poor	Long	Rapid	WM - D	T	E	Poor	Tolerant	5.0-7.0	90,000
Gentian												
Bottle	Bi	Poor	Poor	Short	Medium	WM - M	M	E	NR	Tolerant	NR	280,000
Cream	Bi	Poor	Poor	Short	Slow	WM - DM	T	E	NR	Tolerant	NR	140,000
Blue Giant hyssop	P	Poor	Fair	Medium	Rapid	M - DM	T	E/R	NR	Moderate	NR	91,000
Golden alexanders	P	NR	NR	NR	NR	WM - DM	T	E	NR	Moderate	NR	11,000

	Growth Habit 1	Drought Tolerance 2	Flood Tolerance 3	Longevity 4	Stand Establishment 5	Moisture Regime 6	Height 7	Growth Form 8	Salt Tolerance	Shade Tolerance	pH	Seeds/ Oz
Goldenrod												
Canada	P	Fair	NR	Long	NR	DM - D	T	E	Poor	Moderate	NR	287,500
Giant	P	NR	Fair	NR	NR	W - M	T	E	Poor	Moderate	NR	250,000
Grass-leaved	P	NR	Fair	NR	NR	W - M	T	E	Poor	Moderate	NR	350,000
Stiff	P	Good	Poor	Medium	Medium	WM - D	T	E	Poor	Moderate	5.0-7.5	41,000
Showy	P	NR	NR	NR	NR	M - D	T	E	NR	NR	NR	95,000
Great blue lobelia	P	Poor	Good	NR	Medium	W - M	T	E	NR	Moderate	NR	500,000
Ground plum	P	Fair	Poor	NR	NR	DM - D	S	Pr	Poor	NR	NR	5,200
Heart-leaved alexander	P	NR	NR	NR	NR	M - DM	M	E	NR	Moderate	NR	12,000
Illinois bundleflower	P	Fair	Poor	Long	Rapid	M - D	T	E	Poor	Intolerant	5.0-8.0	4,200
Ironweed	P	Fair	Good	Short	Rapid	WM - M	T	E	NR	Moderate	5.6-7.0	24,000
Joe pye weed	P	Fair	Good	Medium	NR	W - WM	T	E	NR	Moderate	NR	95,000
Lance-leaved coreopsis	P	Good	Good	Short	Rapid	M - D	M	E/R	Poor	NR	NR	20,000
Leadplant	P	Good	Poor	Long	Slow	M - D	M	E	Poor	Tolerant	5.5-8.0	16,000
Milkweed												
Butterfly	P	Good	Medium	Medium	Slow	M - D	M	E/R	Poor	Intolerant	4.8-6.8	4,300
Common	P	NR	NR	NR	Rapid	WM - D	T	E/R	NR	Intolerant	NR	4,000
Swamp - Marsh	P	Poor	Good	Medium	Slow	W - M	T	E/R	Poor	Intolerant	5.0-8.0	4,800
Whorled	P	Good	Poor	Long	Slow	M - D	M	E/R	NR	Intolerant	NR	11,000
Mountain Mint	P	Good	Poor	NR	NR	WM - M	T	E/R	Poor	Moderate	5.0-7.0	220,000
Partridge pea	A	NR	NR	NR	NR	M - D	M	E	NR	Tolerant	5.5-7.5	2,700
Penstemon												
Large-flowered	P	Good	Poor	Short	Medium	DM - D	M	E	Poor	Moderate	NR	14,000
Foxglove	P	Good	Poor	Short	Medium	M - DM	T	E	Poor	Tolerant	NR	130,000
Prairie cinquefoil	P	Poor	Fair	Short	Slow	DM - D	M	E	Poor	Moderate	NR	230,000
Prairie phlox	P	Good	Poor	Medium	Medium	WM - D	M	E	Poor	NR	NR	19,000
Prairie smoke	P	Good	Poor	Medium	Medium	WM - D	S	Pr	Poor	NR	NR	27,000
Purple prairie clover	P	Good	Fair	Medium	Medium	M - D	M	E	Fair	Moderate	5.5-6.6	18,000
Rattlesnake master	P	Good	Poor	Long	Medium	WM - DM	T	E	Poor	NR	NR	7,500
Sneezeweed	P	Poor	NR	Medium	NR	W - WM	T	E	Poor	Moderate	6.0-7.0	130,000
Spiderwort	P	Fair	Good	NR	NR	WM - D	S	E	NR	NR	NR	10,000
Spotted beebalm	Bi/P	Good	Poor	Short	Medium	M - D	M	E	Poor	Moderate	6.0-8.0	70,000
Sunflower												
Stiff	P	Good	Good	Long	Medium	DM - D	T	E/R	Poor	NR	NR	85,000
Maximilian	P	Poor	Good	Long	Medium	WM - DM	T	E/R	Poor	Intolerant	6.0-8.0	13,000
Giant	P	Poor	Good	Long	Medium	WM - M	T	E/R	Poor	NR	NR	10,000
Sawtooth	P	Fair	Poor	Medium	Medium	WM - DM	T	E/R	Poor	NR	5.8-7.3	10,000
Vervain												
Hoary	P	NR	NR	NR	NR	DM - D	M	E	NR	Moderate	NR	28,000
Blue	P	NR	NR	NR	NR	W - M	T	E	NR	Moderate	6.0-7.0	93,000
White prairie clover	P	Good	Fair	Medium	Medium	M - D	M	E	Fair	Moderate	5.5-6.6	19,000

	Growth Habit 1	Drought Tolerance 2	Flood Tolerance 3	Longevity 4	Stand Establishment 5	Moisture Regime 6	Height 7	Growth Form 8	Salt Tolerance	Shade Tolerance	pH	Seeds/ Oz
White sage	P	Good	NR	Short	Medium	DM - D	T	E/R	Good	Intolerant	6.0-9.0	4,048,000
White wild indigo	P	Fair	Fair	Medium	Medium	WM - D	T	E	NR	Moderate	< 6.8	1,700
Wild bergamot	P	Poor	Good	Medium	Medium	WM - D	T	E/R	Poor	Moderate	6.0-8.0	70,000
Wild lupine	P	Fair	Poor	Short	Medium	DM - D	M	E	Poor	Moderate	4.2-5.6	1,200
Wingstem	P	Poor	Fair	Medium	NR	WM - M	T	E/R	Poor	Tolerant	NR	9,000
Yarrow	P	Good	Good	Long	Medium	WM - D	M	E/R	Fair	Moderate	6.0-8.0	180,000

1. **Growth Habit**
   - A - Annual
   - P – Perennial
   - Bi – Biannual

2. **Drought Tolerance**
   Based on species recommended on an adapted site.

3. **Flood Tolerance**
   - Good - 28-42 days.
   - Fair - 14-28 days.
   - Poor - less than 14 days.
   - Creeping foxtail/ reed canary grass can tolerate up to 60 days.

4. **Longevity**
   - Short - 1-4 years.
   - Medium - 5-10 years.
   - Long – longer than 10 years with proper management.

5. **Stand Establishment**
   - Rapid – usually 1 growing season after planting.
   - Medium – usually 1-2 growing seasons after planting.
   - Slow - usually 2-3 growing seasons after planting.

6. **Moisture Regime**
   - W -Wet
   - WM – Wet Mesic
   - M - Mesic
   - DM – Dry Mesic
   - D – Dry

7. **Height**
   - S – Short <18”
   - M – Mid 18” – 36”
   - T – Tall >36”

8. **Growth Form**
   - B – Bunch
   - S – Sod Forming
   - Pr – Prostrate
   - E - Erect
   - R – Rhizomatous
   - St – Stoloniferous

NR – Not Rated

TABLE 1 - GUIDE[1] TO MULCH MATERIALS, RATES, AND USES

Mulch Material	Quality Standards	Applicable Rate	Depth of Application	Remarks
Organic Mulches				
Grass Hay or Cereal Grain Straw[2]	Air dried; free of undesirable seeds, coarse material and moldy chunks	1.5 – 2 tons / acre	Lightly cover 75 – 90% of surface	Use where mulch effect is to be maintained for more than three months. Subject to blowing unless kept moist or anchored.
Wood Fiber Hydromulch	Natural wood fiber with green dye and dispersing agent added	0.75 – 1 ton / acre	Lightly cover 100% of the surface	Apply with hydromulcher, on 0-2% slopes. Use material with tacking agent for anchoring.
Wood Fiber / Paper Blend hydromulch	Blend of natural wood fiber and paper	0.75 – 1 ton / acre	Lightly cover 100% of the surface	Apply with hydromulcher, on 0-2% slopes. Use material with tacking agent for anchoring.
Wood Long-Fiber Excelsior	Air dried burred wood fibers, 4” or longer	1 – 2 tons / acre		Effective for erosion control. Anchoring usually not required except on critical areas or sites subject to high winds.
Compost	Commonly made from yard waste (leaves, branches, etc.) or manure	Cover 100% of the ground	2 inches	Applied with a blower truck. Anchoring is not required. Excellent for water infiltration and moisture conservation.
Manure	Well shredded, free of coarse materials	8 – 10 tons / acre		May create a problem with weeds. Excellent moisture conserver. Resistant to wind blowing. Do not use manure for water erosion control because surface water may be contaminated. Anchoring is required.

Mulch Material	Quality Standards	Applicable Rate	Depth of Application	Remarks
Organic Mulches				
Sawdust and ground corn cobs	Green or composted, free from weed seeds, trash and coarse materials.	5 tons / acre	2 – 7 inches	Sawdust from hardwood species is preferred to avoid possible toxicity from pitch or resins contained in conifers. Most effective as mulch around ornamentals, small fruits and other nursery stock. Special application rates: fruit trees 5-7"; blueberries 6", vegetables and flowers, 2-3", blackberries and raspberries 4-7"; strawberries 3". Resistance to blowing. Requires 30-35 lbs. N/ton to prevent nitrogen deficiency during decay. Rate based on weight of 24 lbs./cubic foot. Anchoring is required.
Wood Chips or Bark, Shavings	Green or air dried; free of weed seeds, trash and coarse material	10 – 20 tons / acre	2 – 7 inches	Chips or shavings from hardwood species are preferred to avoid possible toxicity from pitch or resins contained in conifers. Has same use and application as sawdust. Requires 20-25 lbs. N/ton to prevent nitrogen deficiency during decay. Resistant to blowing. Decomposes slowly. Anchoring not required.
Cornstalks, shredded or chopped	Air dried; shredded into 8” to 12” lengths	4 – 6 tons/ acre		Effective for erosion control. Slow to decompose. Excellent mulch for field crops. Resistant to wind blowing. Anchoring not required.
Non-Organic Mulches				
Gravel, crushed stone or slag	Washed	90% ground cover	2-3 inches	Use for permanent erosion control; on short slopes; around woody plants and ornamentals.

Mulch Material	Quality Standards	Applicable Rate	Depth of Application	Remarks
Non-Organic Mulches				
Plastic	2-4 mils	Apply according to manufacturer's specifications	Thickness of one layer	Use black for weed control and white for seedling establishment without organic mulch. Release plastic after seeding is established. Effective moisture conservation and weed control for small fruits. Large areas should have holes or slits cut to let rainfall percolate. Anchoring is required.
1. This table is not all-inclusive. There may be additional mulch materials or variations of the materials listed here that would be equivalent to achieve the intended effect.				
2. Mulch used on native seedings should not consist of pasture hay containing introduced species. Use grain straw mulches only.				

TABLE 2- GUIDE TO MULCH ANCHORING MATERIALS		
Anchoring Method or Material	**Kind of Mulch to be Anchored**	**How to Apply**
Mechanical		
Mulch Anchoring Tool or Disk	Grass hay, straw or manure	Apply mulch and pull the mulch anchoring tool or disk over mulch. Use equipment with serrated straight disks spaced 6-10" apart or other suitable equipment. Operate as close to the contour as possible. Mulch material should be tucked into the soil surface 2-3 inches. Use on areas of concentrated flow when velocity is less than approximately 4 feet per second.
Tackifier or Binder	Grass hay, straw, Hydromulch materials	Method and rate of application shall be according to manufacturers' recommendation. Use on areas without concentrated flow. Usually applied with a hydromulcher after seeding has been completed.
Wood Hydromulch Fibers	Grass, hay, straw	Use on areas without concentrated flow. Apply with hydromulcher immediately after seeding. Use 3000 lbs. Of mulch material and apply 750 lbs. of wood fiber with tacking agent per acre.
Asphalt Spray (Emulsion)	Grass hay, straw, compost, wood chips, wood shavings	Apply with suitable equipment to spray asphalt into the mulch as it is applied. Materials shall conform to the requirements of ASTM Specifications D 977. Application rate is 0.05 gallons per square yard (242 gallons per acres). Material shall be non-toxic to plant life. Use on areas without concentrated flow.
Manual		
Polypropylene plastic netting	Grass hay, straw, compost, wood shavings, wood long-fiber excelsior.	Apply plastic netting over mulch immediately after mulching and staple with 11 gauge or heavier wire staples. Installation is the same as for fiber blankets, mats and netting. Use when concentrated flow velocity is less than 4 feet per second.[1]
Wood Excelsior Fiber Blanket: interlocking web of excelsior fibers with netting on one or both sides. 80% of fibers are 8 inches or longer.	Use without additional mulch.	Anchor per manufacturer's specifications. Effective for erosion control on steep slopes and areas of concentrated flow.[1]

Anchoring Method or Material	Kind of Mulch to be Anchored	How to Apply
Chopped straw or straw and coconut fiber blanket: Uniform agricultural wheat straw or straw and coconut fiber between photodegradable or biodegradable netting.	Use without additional mulch.	Anchor per manufacturer's specifications. Effective for erosion control on moderate or steep slopes and low flow channels.[1]
Peg and twine	Grass hay, straw, wood shavings, wood long-fiber excelsior	After mulching, divide the area into blocks approximately 1 square yard in size. Drive 4-6 pegs per block to within 2-3" of soil surface. Anchor mulch by stretching twine between pegs in a criss-cross pattern on each block. Secure twin around each peg with two or more turns. Where mowing is planned, drive pegs flush with the soil surface.
Spade	Grass hay, straw, wood shavings, wood long-fiber excelsior	Cut mulch into soil surface with square edge spade. Make cuts in contour rows spaced 18 inches apart.
Soil and Stones	Plastic	Bury edge of plastic in a trench 6 inches deep. Firm soil over plastic. Use stones to hold plastic down in other places as needed.

1. Placing and anchoring Blankets, Mats and Netting: In areas of concentrated flow, lay the mat parallel to the direction of water flow, with netting on top. Spread blankets evenly without stretching so fibers are in direct contact with the soil. Adjacent strip edges shall be overlapped 2-4 inches. Strip ends shall overlap a minimum of 10 inches with the upgrade strip on top. The upgrade end of each blanket shall be buried at least 6 inches in a vertical slot with the soil pressed firmly against the embedded mat. Additional check slots at 50-foot intervals may be desirable on steep grades or long flow patterns. Strip ends and end overlaps shall be stapled with not more than 12 inches between staples. All other joints and edges shall be stapled at 4 foot intervals. Additional staples shall be placed down the center of each blanket in a diamond pattern at a maximum of 4-foot intervals. Where velocities exceed 5 cfs, place edge and center staples at 2-foot intervals. All staples shall be inserted flush with the ground surface. Staples shall be 11 gauge or heavier U shaped with a 1-2 inch crown. Staple length shall be determined by soil conditions as follows: Highly compacted soils – 6 inch: Friable soils – 8 inches; Loose or sandy soils – 10 inch.

2. In areas of broad sheet flow, mats may be placed either parallel or perpendicular to slope direction. Spread blankets evenly without stretching so fibers are in direct contact with the soil. Adjacent strip edges shall be overlapped 2-4 inches with upgrade strip on top. Ends of each mat shall be stapled with not more than 12 inches between staples. All other edges and mat centers shall be stapled to hold the mat in place with not more than 4-6 feet between staples. All staples shall be inserted flush with the ground surface. Staples shall be 11 gauge or heavier, U shaped with a 1-2 inch crown. Staple length shall be determined by soil condition as listed above.

Chan, Ginger

From: Hytry, Ryan - FPAC-NRCS, MN <ryan.hytry@usda.gov>
Sent: Wednesday, December 27, 2023 6:55 AM
To: Bartsch, Zachary
Subject: RE: [External Email]Seed mixes and restoration technical notes
Attachments: 000_MN_EST_MNNRCS_Seedcalc_ver2_5_seedtag_checkout_May_2021.xlsm

> You don't often get email from ryan.hytry@usda.gov. Learn why this is important

Zach,

For a seeding after a conservation practice/disturbance we recommend a Critical Area Planting, CP342. The requirements for a 342 seeding are minimum 150 seeds per sq foot, minimum 30% sod forming grasses, and grasses shall comprise at least 50% of the mix. The mix we typically recommend is BLM#4 at a rate of 15 pls lbs per acre. If you have a different mix in mind you could run it through the attached seed mix calculator to see if it would meet a 342.

Ryan Hytry
Office: 507-724-5261 ext 109
Cell: 507-318-1978
District Conservationist
Houston County Field Office
USDA/NRCS



United States Department of Agriculture

From: Bartsch, Zachary <zachary.bartsch@stantec.com>
Sent: Thursday, December 21, 2023 3:21 PM
To: Hytry, Ryan - FPAC-NRCS, MN <ryan.hytry@usda.gov>; Bollman, Machele - FPAC-NRCS, IA <machele.bollman@usda.gov>
Subject: [External Email]Seed mixes and restoration technical notes

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Hello Ryan and Machele,

My name is Zach and I am a soil scientist at Stantec. I am reaching out to your NRCS office due to my involvement on a project taking place in Houston County that will disturb soil in cropland, and potentially hayfields. Does your county/district have any recommended or required seed mixes, seed mix calculators, or guides to follow for restoration of previously vegetated areas? For example, I have found the Agronomy Technical Note No. 31 and Mulching Tables (CPS 484) to use in other MN counties. Are there any other publications or resources you might have in addition to these items?

Thank you,

Zach Bartsch
Soil Scientist

Mobile: 701-318-9364
zachary.bartsch@stantec.com

Stantec
3303 Fiechtner Drive Suite 100
Fargo ND 58103



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Seeding Plan

Name **John Diersen** Date **2/12/2024**

Prepared by **RH** Tract No./ Field No. **16637**

Type of Seeding: 342 - Critical Area Planting

Field Area (acres): 2.00

10

Seeding Mix Summary

342 CRITICAL AREA PLANTING - INTRODUCED GRASS/LEGUME

Grasses/ Sedges	Common Name	Scientific Name	PLS Lbs/Acre	PLS Lbs
1	Kentucky Bluegrass	Poa pratensis	2.5	5.00
2	Annual Ryegrass	Lolium multiflorum	3	6.00
3	Perennial Ryegrass	Lolium perenne	4.5	9.00
4	Tall Fescue	Festuca arundinacea	3	6.00
5	Timothy	Phleum pratense	2	4.00
			15.00	**30.00**

Forbs/ Legumes	Common Name	Scientific Name	PLS Lbs/Acre	Total PLS/Lbs
		SUBTOTAL FORBS/Legumes	**0.00**	**0.00**
		DRILLED RATE [1]		

1/ Broadcast seeding rate is 1.5 times the drilled rate.

Seeding Dates

Cool Season Grasses and Legumes. South: Spring 4/1 - 6/1. Late Summer 8/1 - 9/10.

Seeding Method and Seedbed Preparation

Broadcasting via terrigator or vicon seeder: Seedbed should be tilled and clean of all vegetation and weeds, packed and firm enough to make a 1/2' or less boot imprint. Pack or light harrow following application to ensure proper seed to soil contact. Broadcast seed at 1.5 times the recommended drilled rate.

Companion Crop

Oats 3/4-1.25 BU/Ac

Fertilizer is Only Recommended For Introduced Grass or Grass/Legume Mixtures

Nitrogen Recommended (units/ac)	
Grass w/Legume >20%	0
Grass w/Legume <20%	60

Phosphorous Recommendations for Grass w/ >20% Legume (lb/ac)					
Bray	0-5	6-10	11-15	16-20	21+
Olsen	0-3	4-7	8-11	12-15	16+
	35	25	15	0	0
Phosphorous Recommendations for Grass w/ <20% Legume (lb/ac)					
Bray	0-5	6-10	11-15	16-20	21+
Olsen	0-3	4-7	8-11	12-15	16+
	40	30	20	10	0

Potassium Recommendations for Grass w/ >20% Legume (lb/ac)					
Soil Test Result	0-40	41-80	81-120	121-160	161+
	95	65	40	15	0
Potassium Recommendations for Grass w/ <20% Legume (lb/ac)					

Soil Test Result	0-40	41-80	81-120	121-160	161+
	90	60	30	0	0

If soil tests are not available, fertilizer will be applied in equal amounts of Nitrogen-Phosphorus-Potassium (N-P-K) for grass and legume establishment. An example fertilizer blend would be 60-60-60.

Checkout and Certification

Name | Date 2/12/2024

Prepared by | Tract No./ Field No.

Type of Seeding:

Field Area (acres): 10.00

Planting Date 6/28/20

Seeding Mix Summary

327 CONSERVATION COVER - INTRODUCED GRASS/LEGUME

Grasses/ Sedges	Common Name	Scientific Name	PLS Lbs/Acre		PLS Lbs
1	Orchardgrass	Dactylis glomerata	2.728		27.28
2	Int. Wheatgrass	Thinopyrum intermedium	5.58		55.80
		SUBTOTAL GRASS/SEDGE	**8.31**		**83.08**
		DRILLED RATE[1]			

Forbs/ Legumes	Common Name	Scientific Name	PLS Lbs/Acre	Total PLS/Lbs
1	Alfalfa	Medicago sativa	3.038	30.38
		SUBTOTAL FORBS	**3.04**	**30.38**
		DRILLED RATE [1]		

1/ Broadcast seeding rate is 1.5 times the drilled rate.

Seeding Evlauation and Checkout

TOTAL SEEDS/FT	**0.0**	**LOW**
Percent Grass	**#DIV/0!**	**#DIV/0!**
percent forb	**#DIV/0!**	**#DIV/0!**

Chan, Ginger

From: Bartsch, Zachary
Sent: Thursday, December 21, 2023 2:21 PM
To: ryan.hytry@usda.gov; machele.bollman@usda.gov
Subject: Seed mixes and restoration technical notes

Hello Ryan and Machele,

My name is Zach and I am a soil scientist at Stantec. I am reaching out to your NRCS office due to my involvement on a project taking place in Houston County that will disturb soil in cropland, and potentially hayfields. Does your county/district have any recommended or required seed mixes, seed mix calculators, or guides to follow for restoration of previously vegetated areas? For example, I have found the Agronomy Technical Note No. 31 and Mulching Tables (CPS 484) to use in other MN counties. Are there any other publications or resources you might have in addition to these items?

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Chan, Ginger

From: Blount, Veronica - FPAC-NRCS, WI <veronica.blount@usda.gov>
Sent: Wednesday, January 3, 2024 8:32 AM
To: Bartsch, Zachary
Subject: RE: 2023 Seed mixes

You don't often get email from veronica.blount@usda.gov. Learn why this is important

Hi Zach!

Yes, these resources are still applicable.

Thank you, have a wonderful 2024.
Ronnie

Veronica "Ronnie" Blount | Soil Conservationist | Sparta Field Office
U.S. Department of Agriculture | Natural Resources Conservation Service
Office 608-269-8136 x. 116 | Cell 608-633-8780

From: Bartsch, Zachary <zachary.bartsch@stantec.com>
Sent: Thursday, December 21, 2023 1:57 PM
To: Blount, Veronica - FPAC-NRCS, WI <veronica.blount@usda.gov>
Subject: 2023 Seed mixes

Hello Veronica,

I hope 2023 has treated you well. I am reaching out again for a similar project to the one you helped me with in 2022.

This project is located in Monroe County, and will disturbing cropland, forest, and grass ditches/right of ways. Are the two resources you provided in 2022 (attached) still acceptable for use to plan seed mixes and erosion control practices?

Thank you,

Zach Bartsch
Soil Scientist

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From: Blount, Veronica - NRCS, Sparta, WI <veronica.blount@usda.gov>
Sent: Wednesday, January 12, 2022 8:19 AM
To: Bartsch, Zachary <zachary.bartsch@stantec.com>
Subject: RE: [External Email]Seed mixes

Zach,

I apologize for the delay; this one got away from me!

I've attached:

1. The standard mix NRCS seed calculator. You'll need to Enable Macros in the yellow ribbon at the top, then:
    a. For sites where erosion control is the main concern, select "342" in STEP 1. For a habitat/wildlife concern, select "327."
    b. Then, for STEP 2, select "Introduced"
    c. For STEP 3, select a mix from the alternatives listed. On the "342Mixes" tab, you can see the Moisture Regimes they are designed for (Column N)

2. NRCS Standard 484, Mulching. This will describe soil coverage/erosion control considerations.

I hope this is helpful,
Veronica

Veronica Blount | District Conservationist (Acting)| Onalaska & Sparta Field Offices
U.S. Department of Agriculture | Natural Resources Conservation Service
Onalaska Office 608-433-7365 | Sparta Office 608-269-8136 x. 113 | Cell 608-633-8780

From: Bartsch, Zachary <zachary.bartsch@stantec.com>
Sent: Friday, January 7, 2022 9:49 AM
To: Blount, Veronica - NRCS, Sparta, WI <veronica.blount@usda.gov>
Subject: [External Email]Seed mixes

[External Email]
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Veronica,

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One thing I forgot to follow up with was if your office (or Monroe Co) has any erosion control practice guidelines that it would want the project to follow or use?

Thanks,

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From: Bartsch, Zachary
Sent: Thursday, December 21, 2023 12:57 PM
To: Blount, Veronica - NRCS, Sparta, WI
Subject: 2023 Seed mixes
Attachments: 484_WI_CPS_Mulching_2016.pdf; Standard_Mix_Calc2020-30-11.xlsm

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TABLE 1 - GUIDE[1] TO MULCH MATERIALS, RATES, AND USES

Mulch Material	Quality Standards	Applicable Rate	Depth of Application	Remarks
Organic Mulches				
Grass Hay or Cereal Grain Straw[2]	Air dried; free of undesirable seeds, coarse material and moldy chunks	1.5 – 2 tons / acre	Lightly cover 75 – 90% of surface	Use where mulch effect is to be maintained for more than three months. Subject to blowing unless kept moist or anchored.
Wood Fiber Hydromulch	Natural wood fiber with green dye and dispersing agent added	0.75 – 1 ton / acre	Lightly cover 100% of the surface	Apply with hydromulcher, on 0-2% slopes. Use material with tacking agent for anchoring.
Wood Fiber / Paper Blend hydromulch	Blend of natural wood fiber and paper	0.75 – 1 ton / acre	Lightly cover 100% of the surface	Apply with hydromulcher, on 0-2% slopes. Use material with tacking agent for anchoring.
Wood Long-Fiber Excelsior	Air dried burred wood fibers, 4” or longer	1 – 2 tons / acre		Effective for erosion control. Anchoring usually not required except on critical areas or sites subject to high winds.
Compost	Commonly made from yard waste (leaves, branches, etc.) or manure	Cover 100% of the ground	2 inches	Applied with a blower truck. Anchoring is not required. Excellent for water infiltration and moisture conservation.
Manure	Well shredded, free of coarse materials	8 – 10 tons / acre		May create a problem with weeds. Excellent moisture conserver. Resistant to wind blowing. Do not use manure for water erosion control because surface water may be contaminated. Anchoring is required.

Mulch Material	Quality Standards	Applicable Rate	Depth of Application	Remarks
Organic Mulches				
Sawdust and ground corn cobs	Green or composted, free from weed seeds, trash and coarse materials.	5 tons / acre	2 – 7 inches	Sawdust from hardwood species is preferred to avoid possible toxicity from pitch or resins contained in conifers. Most effective as mulch around ornamentals, small fruits and other nursery stock. Special application rates: fruit trees 5-7"; blueberries 6", vegetables and flowers, 2-3", blackberries and raspberries 4-7"; strawberries 3". Resistance to blowing. Requires 30-35 lbs. N/ton to prevent nitrogen deficiency during decay. Rate based on weight of 24 lbs./cubic foot. Anchoring is required.
Wood Chips or Bark, Shavings	Green or air dried; free of weed seeds, trash and coarse material	10 – 20 tons / acre	2 – 7 inches	Chips or shavings from hardwood species are preferred to avoid possible toxicity from pitch or resins contained in conifers. Has same use and application as sawdust. Requires 20-25 lbs. N/ton to prevent nitrogen deficiency during decay. Resistant to blowing. Decomposes slowly. Anchoring not required.
Cornstalks, shredded or chopped	Air dried; shredded into 8” to 12” lengths	4 – 6 tons/ acre		Effective for erosion control. Slow to decompose. Excellent mulch for field crops. Resistant to wind blowing. Anchoring not required.
Non-Organic Mulches				
Gravel, crushed stone or slag	Washed	90% ground cover	2-3 inches	Use for permanent erosion control; on short slopes; around woody plants and ornamentals.

Mulch Material	Quality Standards	Applicable Rate	Depth of Application	Remarks
Non-Organic Mulches				
Plastic	2-4 mils	Apply according to manufacturer's specifications	Thickness of one layer	Use black for weed control and white for seedling establishment without organic mulch. Release plastic after seeding is established. Effective moisture conservation and weed control for small fruits. Large areas should have holes or slits cut to let rainfall percolate. Anchoring is required.
1. This table is not all-inclusive. There may be additional mulch materials or variations of the materials listed here that would be equivalent to achieve the intended effect.				
2. Mulch used on native seedings should not consist of pasture hay containing introduced species. Use grain straw mulches only.				

TABLE 2- GUIDE TO MULCH ANCHORING MATERIALS		
Anchoring Method or Material	**Kind of Mulch to be Anchored**	**How to Apply**
Mechanical		
Mulch Anchoring Tool or Disk	Grass hay, straw or manure	Apply mulch and pull the mulch anchoring tool or disk over mulch. Use equipment with serrated straight disks spaced 6-10" apart or other suitable equipment. Operate as close to the contour as possible. Mulch material should be tucked into the soil surface 2-3 inches. Use on areas of concentrated flow when velocity is less than approximately 4 feet per second.
Tackifier or Binder	Grass hay, straw, Hydromulch materials	Method and rate of application shall be according to manufacturers' recommendation. Use on areas without concentrated flow. Usually applied with a hydromulcher after seeding has been completed.
Wood Hydromulch Fibers	Grass, hay, straw	Use on areas without concentrated flow. Apply with hydromulcher immediately after seeding. Use 3000 lbs. Of mulch material and apply 750 lbs. of wood fiber with tacking agent per acre.
Asphalt Spray (Emulsion)	Grass hay, straw, compost, wood chips, wood shavings	Apply with suitable equipment to spray asphalt into the mulch as it is applied. Materials shall conform to the requirements of ASTM Specifications D 977. Application rate is 0.05 gallons per square yard (242 gallons per acres). Material shall be non-toxic to plant life. Use on areas without concentrated flow.
Manual		
Polypropylene plastic netting	Grass hay, straw, compost, wood shavings, wood long-fiber excelsior.	Apply plastic netting over mulch immediately after mulching and staple with 11 gauge or heavier wire staples. Installation is the same as for fiber blankets, mats and netting. Use when concentrated flow velocity is less than 4 feet per second.[1]
Wood Excelsior Fiber Blanket: interlocking web of excelsior fibers with netting on one or both sides. 80% of fibers are 8 inches or longer.	Use without additional mulch.	Anchor per manufacturer's specifications. Effective for erosion control on steep slopes and areas of concentrated flow.[1]

Anchoring Method or Material	Kind of Mulch to be Anchored	How to Apply
Chopped straw or straw and coconut fiber blanket: Uniform agricultural wheat straw or straw and coconut fiber between photodegradable or biodegradable netting.	Use without additional mulch.	Anchor per manufacturer's specifications. Effective for erosion control on moderate or steep slopes and low flow channels.[1]
Peg and twine	Grass hay, straw, wood shavings, wood long-fiber excelsior	After mulching, divide the area into blocks approximately 1 square yard in size. Drive 4-6 pegs per block to within 2-3" of soil surface. Anchor mulch by stretching twine between pegs in a criss-cross pattern on each block. Secure twin around each peg with two or more turns. Where mowing is planned, drive pegs flush with the soil surface.
Spade	Grass hay, straw, wood shavings, wood long-fiber excelsior	Cut mulch into soil surface with square edge spade. Make cuts in contour rows spaced 18 inches apart.
Soil and Stones	Plastic	Bury edge of plastic in a trench 6 inches deep. Firm soil over plastic. Use stones to hold plastic down in other places as needed.

1. Placing and anchoring Blankets, Mats and Netting: In areas of concentrated flow, lay the mat parallel to the direction of water flow, with netting on top. Spread blankets evenly without stretching so fibers are in direct contact with the soil. Adjacent strip edges shall be overlapped 2-4 inches. Strip ends shall overlap a minimum of 10 inches with the upgrade strip on top. The upgrade end of each blanket shall be buried at least 6 inches in a vertical slot with the soil pressed firmly against the embedded mat. Additional check slots at 50-foot intervals may be desirable on steep grades or long flow patterns. Strip ends and end overlaps shall be stapled with not more than 12 inches between staples. All other joints and edges shall be stapled at 4 foot intervals. Additional staples shall be placed down the center of each blanket in a diamond pattern at a maximum of 4-foot intervals. Where velocities exceed 5 cfs, place edge and center staples at 2-foot intervals. All staples shall be inserted flush with the ground surface. Staples shall be 11 gauge or heavier U shaped with a 1-2 inch crown. Staple length shall be determined by soil conditions as follows: Highly compacted soils – 6 inch: Friable soils – 8 inches; Loose or sandy soils – 10 inch.

2. In areas of broad sheet flow, mats may be placed either parallel or perpendicular to slope direction. Spread blankets evenly without stretching so fibers are in direct contact with the soil. Adjacent strip edges shall be overlapped 2-4 inches with upgrade strip on top. Ends of each mat shall be stapled with not more than 12 inches between staples. All other edges and mat centers shall be stapled to hold the mat in place with not more than 4-6 feet between staples. All staples shall be inserted flush with the ground surface. Staples shall be 11 gauge or heavier, U shaped with a 1-2 inch crown. Staple length shall be determined by soil condition as listed above.

USDA NRCS
Natural Resources Conservation Service

SEEDING PLAN
Standard and CRP Mixes

Ver. 1/2015

Landowner:	
TRACT #:	
Field(s):	
Plan by:	
County:	
Date:	
Total Acres:	

○ 327 ○ 342 ○ 512 ○ CRP NRCS STD.

Mix Type: ○ Introduced ○ Native

Mix #

GRASSES					
Common Name	Scientific Name	Intro/ Native	PLS (lbs / Acre)	Total Lbs.	
TOTAL GRASSES:			0.0	0.0	

FORBS/LEGUMES						
Common Name	Scientific Name	Intro/ Native	PLS (lbs / Acre)	Total Lbs.	PLS (oz./Acre)	Total Oz.

USDA NRCS
Natural Resources Conservation Service

SEEDING PLAN
Standard and CRP Mixes

Ver. 1/2015

Landowner:
TRACT #:
Field(s):
Plan by:
County:
Date:
Total Acres:

○ 327 ○ 342 ○ 512 ○ CRP — NRCS STD.
Mix Type: ○ Introduced ○ Native
Mix #

TOTAL FORBS/LEGUMES:						

SEEDING DATES	Spring Seeding	Late Summer	Fall Dormant Seeding		Frost Seeding Allowed?

		lbs/acre	Total lbs.	*OR*	Bu./Acre	Total Bu.
Temporary Cover Crop:						
Companion Crop: ○ YES ○ NO **You must pick Yes or No**						

Fertilizer & Lime		Lbs./Acre	Total Needed (lbs)
80-89 Lime		N/R	
Nitrogen		N/R	
Phosphate (P205)		N/R	
Potash (K20)		N/R	

☐ **General**
☐ **Soil Test**
☐ Fert./Lime Not Needed

N/R=Not Recommended for Pure Native Mixes

Seeding was completed on: _____ **according to the above requirements.**
(Date)

STANDARD 327 MIXES

REVISION DATE: 12/14/2012

criteria: 0

STD	Mix #	std-mix	Common Name	Scientific Name	PLS (oz./A)	PLS (lbs./A)	Seeds/Square Foot	Type	Intro / Native	Poll. (Y/N)		Mix No.	MR	Mix Components
327	(D)-1-Sgrod-Ycone-PPclover-BB-LE	327-(D)-1-Sgrod-Ycone-PPclover	Stiff Goldenrod	Oligoneuron rigidum	1	0.06	1	Forb	N	N		1	D	Sgrod-Ycone-PPclover-BB-LB-Indian-Sgrama
327	(D)-1-Sgrod-Ycone-PPclover-BB-LE	327-(D)-1-Sgrod-Ycone-PPclover	Yellow Coneflower	Ratibida pinnata	1	0.06	0.6	Forb	N	N		1	D	Sgrod-Ycone-PPclover-BB-LB-Indian-Sgrama
327	(D)-1-Sgrod-Ycone-PPclover-BB-LE	327-(D)-1-Sgrod-Ycone-PPclover	Purple Prairie Clover	Dalea purpurea	2	0.13	0.9	Legume	N	N		1	D	Sgrod-Ycone-PPclover-BB-LB-Indian-Sgrama
327	(D)-1-Sgrod-Ycone-PPclover-BB-LE	327-(D)-1-Sgrod-Ycone-PPclover	Big Bluestem	Andropogon gerardii	16	1	3.8	Grass	N	N		1	D	Sgrod-Ycone-PPclover-BB-LB-Indian-Sgrama
327	(D)-1-Sgrod-Ycone-PPclover-BB-LE	327-(D)-1-Sgrod-Ycone-PPclover	Little Bluestem	Schizachyrium scoparium	28	1.75	9.6	Grass	N	N		1	D	Sgrod-Ycone-PPclover-BB-LB-Indian-Sgrama
327	(D)-1-Sgrod-Ycone-PPclover-BB-LE	327-(D)-1-Sgrod-Ycone-PPclover	Indiangrass	Sorghastrum nutans	16	1	4.4	Grass	N	N		1	D	Sgrod-Ycone-PPclover-BB-LB-Indian-Sgrama
327	(D)-1-Sgrod-Ycone-PPclover-BB-LE	327-(D)-1-Sgrod-Ycone-PPclover	Sideoats Grama	Bouteloua curtipendula	28	1.75	5.1	Grass	N	N		1	D	Sgrod-Ycone-PPclover-BB-LB-Indian-Sgrama
327	(DM)-2-LB-Indian-Sgrama-BB-Swit	327-(DM)-2-LB-Indian-Sgrama-B	Little Bluestem	Schizachyrium scoparium	24	1.5	8.2	Grass	N	N		2	DM	LB-Indian-Sgrama-BB-Switch-PPclover-Berg-Y
327	(DM)-2-LB-Indian-Sgrama-BB-Swit	327-(DM)-2-LB-Indian-Sgrama-B	Indiangrass	Sorghastrum nutans	16	1	4	Grass	N	N		2	DM	LB-Indian-Sgrama-BB-Switch-PPclover-Berg-Y
327	(DM)-2-LB-Indian-Sgrama-BB-Swit	327-(DM)-2-LB-Indian-Sgrama-B	Sideoats Grama	Bouteloua curtipendula	16	1	2.9	Grass	N	N		2	DM	LB-Indian-Sgrama-BB-Switch-PPclover-Berg-Y
327	(DM)-2-LB-Indian-Sgrama-BB-Swit	327-(DM)-2-LB-Indian-Sgrama-B	Big Bluestem	Andropogon gerardii	8	0.5	1.5	Grass	N	N		2	DM	LB-Indian-Sgrama-BB-Switch-PPclover-Berg-Y
327	(DM)-2-LB-Indian-Sgrama-BB-Swit	327-(DM)-2-LB-Indian-Sgrama-B	Switchgrass	Panicum virgatum	8	0.5	4.5	Grass	N	N		2	DM	LB-Indian-Sgrama-BB-Switch-PPclover-Berg-Y
327	(DM)-2-LB-Indian-Sgrama-BB-Swit	327-(DM)-2-LB-Indian-Sgrama-B	Purple Prairie Clover	Dalea purpurea	2	0.13	0.9	Legume	N	N		2	DM	LB-Indian-Sgrama-BB-Switch-PPclover-Berg-Y
327	(DM)-2-LB-Indian-Sgrama-BB-Swit	327-(DM)-2-LB-Indian-Sgrama-B	Bergamot	Monarda fistulosa	1	0.06	1.8	Forb	N	N		2	DM	LB-Indian-Sgrama-BB-Switch-PPclover-Berg-Y
327	(DM)-2-LB-Indian-Sgrama-BB-Swit	327-(DM)-2-LB-Indian-Sgrama-B	Yellow Coneflower	Ratibida pinnata	1	0.06	0.6	Forb	N	N		2	DM	LB-Indian-Sgrama-BB-Switch-PPclover-Berg-Y
327	(M)-3-LB-BB-Cwrye-Indian-Switch-	327-(M)-3-LB-BB-Cwrye-Indian-	Little Bluestem	Schizachyrium scoparium	20	1.25	6.8	Grass	N	N		3	M	LB-BB-Cwrye-Indian-Switch-Berg-Besus-Ycon
327	(M)-3-LB-BB-Cwrye-Indian-Switch-	327-(M)-3-LB-BB-Cwrye-Indian-	Big Bluestem	Andropogon gerardii	16	1	3.8	Grass	N	N		3	M	LB-BB-Cwrye-Indian-Switch-Berg-Besus-Ycon
327	(M)-3-LB-BB-Cwrye-Indian-Switch-	327-(M)-3-LB-BB-Cwrye-Indian-	Canada Wildrye	Elymus canadensis	16	1	2.5	Grass	N	N		3	M	LB-BB-Cwrye-Indian-Switch-Berg-Besus-Ycon
327	(M)-3-LB-BB-Cwrye-Indian-Switch-	327-(M)-3-LB-BB-Cwrye-Indian-	Indiangrass	Sorghastrum nutans	16	1	4	Grass	N	N		3	M	LB-BB-Cwrye-Indian-Switch-Berg-Besus-Ycon
327	(M)-3-LB-BB-Cwrye-Indian-Switch-	327-(M)-3-LB-BB-Cwrye-Indian-	Switchgrass	Panicum virgatum	8	0.5	4.5	Grass	N	N		3	M	LB-BB-Cwrye-Indian-Switch-Berg-Besus-Ycon
327	(M)-3-LB-BB-Cwrye-Indian-Switch-	327-(M)-3-LB-BB-Cwrye-Indian-	Bergamot	Monarda fistulosa	1	0.06	1.8	Forb	N	N		3	M	LB-BB-Cwrye-Indian-Switch-Berg-Besus-Ycon
327	(M)-3-LB-BB-Cwrye-Indian-Switch-	327-(M)-3-LB-BB-Cwrye-Indian-	Black-Eyed Susan	Rudbeckia hirta	1	0.06	2.2	Forb	N	N		3	M	LB-BB-Cwrye-Indian-Switch-Berg-Besus-Ycon
327	(M)-3-LB-BB-Cwrye-Indian-Switch-	327-(M)-3-LB-BB-Cwrye-Indian-	Yellow Coneflower	Ratibida pinnata	1	0.06	0.6	Forb	N	N		3	M	LB-BB-Cwrye-Indian-Switch-Berg-Besus-Ycon
327	(WM)-4-BB-Indian-Switch-Vwrye-P	327-(WM)-4-BB-Indian-Switch-V	Big Bluestem	Andropogon gerardii	24	1.5	5.7	Grass	N	N		4	WM	BB-Indian-Switch-Vwrye-Pcord-Berg-NEaster
327	(WM)-4-BB-Indian-Switch-Vwrye-P	327-(WM)-4-BB-Indian-Switch-V	Indiangrass	Sorghastrum nutans	16	1	4	Grass	N	N		4	WM	BB-Indian-Switch-Vwrye-Pcord-Berg-NEaster
327	(WM)-4-BB-Indian-Switch-Vwrye-P	327-(WM)-4-BB-Indian-Switch-V	Switchgrass	Panicum virgatum	16	1	9	Grass	N	N		4	WM	BB-Indian-Switch-Vwrye-Pcord-Berg-NEaster
327	(WM)-4-BB-Indian-Switch-Vwrye-P	327-(WM)-4-BB-Indian-Switch-V	Virginia Wildrye	Elymus virginicus	16	1	1.5	Grass	N	N		4	WM	BB-Indian-Switch-Vwrye-Pcord-Berg-NEaster
327	(WM)-4-BB-Indian-Switch-Vwrye-P	327-(WM)-4-BB-Indian-Switch-V	Prairie Cordgrass	Spartina pectinata	8	0.5	0.6	Grass	N	N		4	WM	BB-Indian-Switch-Vwrye-Pcord-Berg-NEaster
327	(WM)-4-BB-Indian-Switch-Vwrye-P	327-(WM)-4-BB-Indian-Switch-V	Bergamot	Monarda fistulosa	1	0.06	1.8	Forb	N	N		4	WM	BB-Indian-Switch-Vwrye-Pcord-Berg-NEaster
327	(WM)-4-BB-Indian-Switch-Vwrye-P	327-(WM)-4-BB-Indian-Switch-V	New England Aster	Symphyotrichum novae-angliae	1	0.06	1.6	Forb	N	N		4	WM	BB-Indian-Switch-Vwrye-Pcord-Berg-NEaster
327	(WM)-4-BB-Indian-Switch-Vwrye-P	327-(WM)-4-BB-Indian-Switch-V	Yellow Coneflower	Ratibida pinnata	1	0.06	0.6	Forb	N	N		4	WM	BB-Indian-Switch-Vwrye-Pcord-Berg-NEaster
327	(W)-5-Ciron-Cup-Bvervain-Switch-P	327-(W)-5-Ciron-Cup-Bvervain-S	Common Ironweed	Vernonia fasciculata	1	0.06	0.5	Forb	N	N		5	W	Ciron-Cup-Bvervain-Switch-Pcord-BB-Indian-V
327	(W)-5-Ciron-Cup-Bvervain-Switch-P	327-(W)-5-Ciron-Cup-Bvervain-S	Cupplant	Silphium perfoliatum	2	0.13	0.1	Forb	N	N		5	W	Ciron-Cup-Bvervain-Switch-Pcord-BB-Indian-V
327	(W)-5-Ciron-Cup-Bvervain-Switch-P	327-(W)-5-Ciron-Cup-Bvervain-S	Blue Vervain	Verbena hastata	1	0.06	2.1	Forb	N	N		5	W	Ciron-Cup-Bvervain-Switch-Pcord-BB-Indian-V
327	(W)-5-Ciron-Cup-Bvervain-Switch-P	327-(W)-5-Ciron-Cup-Bvervain-S	Switchgrass	Panicum virgatum	16	1	8.9	Grass	N	N		5	W	Ciron-Cup-Bvervain-Switch-Pcord-BB-Indian-V
327	(W)-5-Ciron-Cup-Bvervain-Switch-P	327-(W)-5-Ciron-Cup-Bvervain-S	Prairie Cordgrass	Spartina pectinata	8	0.5	1.2	Grass	N	N		5	W	Ciron-Cup-Bvervain-Switch-Pcord-BB-Indian-V
327	(W)-5-Ciron-Cup-Bvervain-Switch-P	327-(W)-5-Ciron-Cup-Bvervain-S	Big Bluestem	Andropogon gerardii	16	1	3.8	Grass	N	N		5	W	Ciron-Cup-Bvervain-Switch-Pcord-BB-Indian-V
327	(W)-5-Ciron-Cup-Bvervain-Switch-P	327-(W)-5-Ciron-Cup-Bvervain-S	Indiangrass	Sorghastrum nutans	16	1	4.4	Grass	N	N		5	W	Ciron-Cup-Bvervain-Switch-Pcord-BB-Indian-V
327	(W)-5-Ciron-Cup-Bvervain-Switch-P	327-(W)-5-Ciron-Cup-Bvervain-S	Virginia Wildrye	Elymus virginicus	20	1.25	1.9	Grass	N	N		5	W	Ciron-Cup-Bvervain-Switch-Pcord-BB-Indian-V
327	(D)-6-Pcinque-SilkAster-Lplant-Smi	327-(D)-6-Pcinque-SilkAster-Lpl	Prairie Cinquefoil	Potentilla arguta	0.5	0.03	2.3	Forb	N	N		6	D	Pcinque-SilkAster-Lplant-Smint-Ptick-Sgrod-H
327	(D)-6-Pcinque-SilkAster-Lplant-Smi	327-(D)-6-Pcinque-SilkAster-Lpl	Silky Aster	Symphyotrichum sericeum	1	0.06	1.3	Forb	N	N		6	D	Pcinque-SilkAster-Lplant-Smint-Ptick-Sgrod-H
327	(D)-6-Pcinque-SilkAster-Lplant-Smi	327-(D)-6-Pcinque-SilkAster-Lpl	Leadplant	Amorpha canescens	1	0.06	0.4	Legume	N	N		6	D	Pcinque-SilkAster-Lplant-Smint-Ptick-Sgrod-H
327	(D)-6-Pcinque-SilkAster-Lplant-Smi	327-(D)-6-Pcinque-SilkAster-Lpl	Spotted Mint	Monarda punctata	0.5	0.03	1.1	Forb	N	N		6	D	Pcinque-SilkAster-Lplant-Smint-Ptick-Sgrod-H
327	(D)-6-Pcinque-SilkAster-Lplant-Smi	327-(D)-6-Pcinque-SilkAster-Lpl	Prairie Tickseed	Coreopsis palmata	1	0.06	0.3	Forb	N	N		6	D	Pcinque-SilkAster-Lplant-Smint-Ptick-Sgrod-H
327	(D)-6-Pcinque-SilkAster-Lplant-Smi	327-(D)-6-Pcinque-SilkAster-Lpl	Stiff Goldenrod	Oligoneuron rigidum	1	0.06	1	Forb	N	N		6	D	Pcinque-SilkAster-Lplant-Smint-Ptick-Sgrod-H
327	(D)-6-Pcinque-SilkAster-Lplant-Smi	327-(D)-6-Pcinque-SilkAster-Lpl	Hoary Vervain	Verbena stricta	1	0.06	0.7	Forb	N	N		6	D	Pcinque-SilkAster-Lplant-Smint-Ptick-Sgrod-H
327	(D)-6-Pcinque-SilkAster-Lplant-Smi	327-(D)-6-Pcinque-SilkAster-Lpl	Yellow Coneflower	Ratibida pinnata	1	0.06	0.6	Forb	N	N		6	D	Pcinque-SilkAster-Lplant-Smint-Ptick-Sgrod-H
327	(D)-6-Pcinque-SilkAster-Lplant-Smi	327-(D)-6-Pcinque-SilkAster-Lpl	Spiderwort	Tradescantia ohiensis	2	0.13	0.4	Forb	N	N		6	D	Pcinque-SilkAster-Lplant-Smint-Ptick-Sgrod-H
327	(D)-6-Pcinque-SilkAster-Lplant-Smi	327-(D)-6-Pcinque-SilkAster-Lpl	Purple Prairie Clover	Dalea purpurea	4	0.25	1.8	Legume	N	N		6	D	Pcinque-SilkAster-Lplant-Smint-Ptick-Sgrod-H
327	(D)-6-Pcinque-SilkAster-Lplant-Smi	327-(D)-6-Pcinque-SilkAster-Lpl	Big Bluestem	Andropogon gerardii	4	0.25	1	Grass	N	N		6	D	Pcinque-SilkAster-Lplant-Smint-Ptick-Sgrod-H
327	(D)-6-Pcinque-SilkAster-Lplant-Smi	327-(D)-6-Pcinque-SilkAster-Lpl	Sideoats Grama	Bouteloua curtipendula	24	1.5	4.4	Grass	N	N		6	D	Pcinque-SilkAster-Lplant-Smint-Ptick-Sgrod-H
327	(D)-6-Pcinque-SilkAster-Lplant-Smi	327-(D)-6-Pcinque-SilkAster-Lpl	Little Bluestem	Schizachyrium scoparium	24	1.5	8.3	Grass	N	N		6	D	Pcinque-SilkAster-Lplant-Smint-Ptick-Sgrod-H

327	(D)-6-Pcinque-SilkAster-Lplant-Smi	327-(D)-6-Pcinque-SilkAster-Lpl	Indiangrass	Sorghastrum nutans	8	0.5	2.2	Grass	N	N		6	D	Pcinque-SilkAster-Lplant-Smint-Ptick-Sgrod-H
327	(D)-6-Pcinque-SilkAster-Lplant-Smi	327-(D)-6-Pcinque-SilkAster-Lpl	Prairie Junegrass	Koeleria macrantha	2	0.13	6.6	Grass	N	N		6	D	Pcinque-SilkAster-Lplant-Smint-Ptick-Sgrod-H
327	(D)-6-Pcinque-SilkAster-Lplant-Smi	327-(D)-6-Pcinque-SilkAster-Lpl	Sand Dropseed	Sporobolus cryptandrus	2	0.13	15.3	Grass	N	N		6	D	Pcinque-SilkAster-Lplant-Smint-Ptick-Sgrod-H
327	(DM)-7-LB-Sgrama-Indian-Switch-P	327-(DM)-7-LB-Sgrama-Indian-S	Little Bluestem	Schizachyrium scoparium	24	1.5	8.2	Grass	N	N		7	DM	LB-Sgrama-Indian-Switch-PPclover-RHbushclo
327	(DM)-7-LB-Sgrama-Indian-Switch-P	327-(DM)-7-LB-Sgrama-Indian-S	Sideoats Grama	Bouteloua curtipendula	24	1.5	4.4	Grass	N	N		7	DM	LB-Sgrama-Indian-Switch-PPclover-RHbushclo
327	(DM)-7-LB-Sgrama-Indian-Switch-P	327-(DM)-7-LB-Sgrama-Indian-S	Indiangrass	Sorghastrum nutans	8	0.5	2	Grass	N	N		7	DM	LB-Sgrama-Indian-Switch-PPclover-RHbushclo
327	(DM)-7-LB-Sgrama-Indian-Switch-P	327-(DM)-7-LB-Sgrama-Indian-S	Switchgrass	Panicum virgatum	4	0.25	2.2	Grass	N	N		7	DM	LB-Sgrama-Indian-Switch-PPclover-RHbushclo
327	(DM)-7-LB-Sgrama-Indian-Switch-P	327-(DM)-7-LB-Sgrama-Indian-S	Purple Prairie Clover	Dalea purpurea	3	0.19	1.4	Legume	N	N		7	DM	LB-Sgrama-Indian-Switch-PPclover-RHbushclo
327	(DM)-7-LB-Sgrama-Indian-Switch-P	327-(DM)-7-LB-Sgrama-Indian-S	Round-Headed Bushclover	Lespedeza capitata	3	0.19	0.8	Legume	N	N		7	DM	LB-Sgrama-Indian-Switch-PPclover-RHbushclo
327	(DM)-7-LB-Sgrama-Indian-Switch-P	327-(DM)-7-LB-Sgrama-Indian-S	Prairie Junegrass	Koeleria macrantha	2	0.13	6.6	Grass	N	N		7	DM	LB-Sgrama-Indian-Switch-PPclover-RHbushclo
327	(DM)-7-LB-Sgrama-Indian-Switch-P	327-(DM)-7-LB-Sgrama-Indian-S	Prairie Dropseed	Sporobolus heterolepis	2	0.13	0.6	Grass	N	N		7	DM	LB-Sgrama-Indian-Switch-PPclover-RHbushclo
327	(DM)-7-LB-Sgrama-Indian-Switch-P	327-(DM)-7-LB-Sgrama-Indian-S	Bergamot	Monarda fistulosa	1	0.06	1.8	Forb	N	N		7	DM	LB-Sgrama-Indian-Switch-PPclover-RHbushclo
327	(DM)-7-LB-Sgrama-Indian-Switch-P	327-(DM)-7-LB-Sgrama-Indian-S	Leadplant	Amorpha canescens	1	0.06	0.4	Legume	N	N		7	DM	LB-Sgrama-Indian-Switch-PPclover-RHbushclo
327	(DM)-7-LB-Sgrama-Indian-Switch-P	327-(DM)-7-LB-Sgrama-Indian-S	Silky Aster	Symphyotrichum sericeum	1	0.06	0.6	Forb	N	N		7	DM	LB-Sgrama-Indian-Switch-PPclover-RHbushclo
327	(DM)-7-LB-Sgrama-Indian-Switch-P	327-(DM)-7-LB-Sgrama-Indian-S	Spiderwort	Tradescantia ohiensis	1	0.06	0.2	Forb	N	N		7	DM	LB-Sgrama-Indian-Switch-PPclover-RHbushclo
327	(DM)-7-LB-Sgrama-Indian-Switch-P	327-(DM)-7-LB-Sgrama-Indian-S	Stiff Goldenrod	Oligoneuron rigidum	1	0.06	1	Forb	N	N		7	DM	LB-Sgrama-Indian-Switch-PPclover-RHbushclo
327	(DM)-7-LB-Sgrama-Indian-Switch-P	327-(DM)-7-LB-Sgrama-Indian-S	Yellow Coneflower	Ratibida pinnata	1	0.06	0.6	Forb	N	N		7	DM	LB-Sgrama-Indian-Switch-PPclover-RHbushclo
327	(DM)-7-LB-Sgrama-Indian-Switch-P	327-(DM)-7-LB-Sgrama-Indian-S	Rough Blazing Star	Liatris aspera	0.5	0.03	0.2	Forb	N	N		7	DM	LB-Sgrama-Indian-Switch-PPclover-RHbushclo
327	(DM)-7-LB-Sgrama-Indian-Switch-P	327-(DM)-7-LB-Sgrama-Indian-S	Prairie Cinquefoil	Potentilla arguta	0.25	0.02	1.1	Forb	N	N		7	DM	LB-Sgrama-Indian-Switch-PPclover-RHbushclo
327	(M)-8-LB-BB-Indian-Cwrye-Switch-	327-(M)-8-LB-BB-Indian-Cwrye-	Little Bluestem	Schizachyrium scoparium	24	1.5	8.2	Grass	N	N		8	M	LB-BB-Indian-Cwrye-Switch-Oxeyesun-Pblzsta
327	(M)-8-LB-BB-Indian-Cwrye-Switch-	327-(M)-8-LB-BB-Indian-Cwrye-	Big Bluestem	Andropogon gerardii	16	1	3.8	Grass	N	N		8	M	LB-BB-Indian-Cwrye-Switch-Oxeyesun-Pblzsta
327	(M)-8-LB-BB-Indian-Cwrye-Switch-	327-(M)-8-LB-BB-Indian-Cwrye-	Indiangrass	Sorghastrum nutans	16	1	4	Grass	N	N		8	M	LB-BB-Indian-Cwrye-Switch-Oxeyesun-Pblzsta
327	(M)-8-LB-BB-Indian-Cwrye-Switch-	327-(M)-8-LB-BB-Indian-Cwrye-	Canada Wildrye	Elymus canadensis	8	0.5	1.3	Grass	N	N		8	M	LB-BB-Indian-Cwrye-Switch-Oxeyesun-Pblzsta
327	(M)-8-LB-BB-Indian-Cwrye-Switch-	327-(M)-8-LB-BB-Indian-Cwrye-	Switchgrass	Panicum virgatum	8	0.5	4.5	Grass	N	N		8	M	LB-BB-Indian-Cwrye-Switch-Oxeyesun-Pblzsta
327	(M)-8-LB-BB-Indian-Cwrye-Switch-	327-(M)-8-LB-BB-Indian-Cwrye-	Ox-eye Sunflower	Heliopsis helianthoides	1	0.06	0.1	Forb	N	N		8	M	LB-BB-Indian-Cwrye-Switch-Oxeyesun-Pblzsta
327	(M)-8-LB-BB-Indian-Cwrye-Switch-	327-(M)-8-LB-BB-Indian-Cwrye-	Prairie Blazing Star	Liatris pycnostachya	1	0.06	0.3	Forb	N	N		8	M	LB-BB-Indian-Cwrye-Switch-Oxeyesun-Pblzsta
327	(M)-8-LB-BB-Indian-Cwrye-Switch-	327-(M)-8-LB-BB-Indian-Cwrye-	Purple Prairie Clover	Dalea purpurea	1	0.06	0.5	Legume	N	N		8	M	LB-BB-Indian-Cwrye-Switch-Oxeyesun-Pblzsta
327	(M)-8-LB-BB-Indian-Cwrye-Switch-	327-(M)-8-LB-BB-Indian-Cwrye-	Rosinweed	Silphium integrifolium	1	0.06	0.1	Forb	N	N		8	M	LB-BB-Indian-Cwrye-Switch-Oxeyesun-Pblzsta
327	(M)-8-LB-BB-Indian-Cwrye-Switch-	327-(M)-8-LB-BB-Indian-Cwrye-	Bergamot	Monarda fistulosa	0.5	0.03	0.9	Forb	N	N		8	M	LB-BB-Indian-Cwrye-Switch-Oxeyesun-Pblzsta
327	(M)-8-LB-BB-Indian-Cwrye-Switch-	327-(M)-8-LB-BB-Indian-Cwrye-	Black-Eyed Susan	Rudbeckia hirta	0.5	0.03	1.1	Forb	N	N		8	M	LB-BB-Indian-Cwrye-Switch-Oxeyesun-Pblzsta
327	(M)-8-LB-BB-Indian-Cwrye-Switch-	327-(M)-8-LB-BB-Indian-Cwrye-	New England Aster	Symphyotrichum novae-angliae	0.5	0.03	0.8	Forb	N	N		8	M	LB-BB-Indian-Cwrye-Switch-Oxeyesun-Pblzsta
327	(M)-8-LB-BB-Indian-Cwrye-Switch-	327-(M)-8-LB-BB-Indian-Cwrye-	Sky-Blue Aster	Symphyotrichum oolentangiense	0.5	0.03	0.9	Forb	N	N		8	M	LB-BB-Indian-Cwrye-Switch-Oxeyesun-Pblzsta
327	(M)-8-LB-BB-Indian-Cwrye-Switch-	327-(M)-8-LB-BB-Indian-Cwrye-	Yellow Coneflower	Ratibida pinnata	0.5	0.03	0.3	Forb	N	N		8	M	LB-BB-Indian-Cwrye-Switch-Oxeyesun-Pblzsta
327	(M)-8-LB-BB-Indian-Cwrye-Switch-	327-(M)-8-LB-BB-Indian-Cwrye-	Culver's Root	Veronicastrum virginicum	0.25	0.02	4.3	Forb	N	N		8	M	LB-BB-Indian-Cwrye-Switch-Oxeyesun-Pblzsta
327	(WM)-9-BB-Cwrye-Switch-Indian-C	327-(WM)-9-BB-Cwrye-Switch-I	Big Bluestem	Andropogon gerardii	20	1.25	4.8	Grass	N	N		9	WM	BB-Cwrye-Switch-Indian-Cup-Pcord-WWIndig
327	(WM)-9-BB-Cwrye-Switch-Indian-C	327-(WM)-9-BB-Cwrye-Switch-I	Canada Wildrye	Elymus canadensis	16	1	2.5	Grass	N	N		9	WM	BB-Cwrye-Switch-Indian-Cup-Pcord-WWIndig
327	(WM)-9-BB-Cwrye-Switch-Indian-C	327-(WM)-9-BB-Cwrye-Switch-I	Switchgrass	Panicum virgatum	16	1	9	Grass	N	N		9	WM	BB-Cwrye-Switch-Indian-Cup-Pcord-WWIndig
327	(WM)-9-BB-Cwrye-Switch-Indian-C	327-(WM)-9-BB-Cwrye-Switch-I	Indiangrass	Sorghastrum nutans	12	0.75	3	Grass	N	N		9	WM	BB-Cwrye-Switch-Indian-Cup-Pcord-WWIndig
327	(WM)-9-BB-Cwrye-Switch-Indian-C	327-(WM)-9-BB-Cwrye-Switch-I	Cupplant	Silphium perfoliatum	4	0.25	0.1	Forb	N	N		9	WM	BB-Cwrye-Switch-Indian-Cup-Pcord-WWIndig
327	(WM)-9-BB-Cwrye-Switch-Indian-C	327-(WM)-9-BB-Cwrye-Switch-I	Prairie Cordgrass	Spartina pectinata	4	0.25	0.6	Grass	N	N		9	WM	BB-Cwrye-Switch-Indian-Cup-Pcord-WWIndig
327	(WM)-9-BB-Cwrye-Switch-Indian-C	327-(WM)-9-BB-Cwrye-Switch-I	White Wild Indigo	Baptisia alba	1.5	0.09	0.1	Legume	N	N		9	WM	BB-Cwrye-Switch-Indian-Cup-Pcord-WWIndig
327	(WM)-9-BB-Cwrye-Switch-Indian-C	327-(WM)-9-BB-Cwrye-Switch-I	Bergamot	Monarda fistulosa	1	0.06	1.8	Forb	N	N		9	WM	BB-Cwrye-Switch-Indian-Cup-Pcord-WWIndig
327	(WM)-9-BB-Cwrye-Switch-Indian-C	327-(WM)-9-BB-Cwrye-Switch-I	Black-Eyed Susan	Rudbeckia hirta	1	0.06	2.2	Forb	N	N		9	WM	BB-Cwrye-Switch-Indian-Cup-Pcord-WWIndig
327	(WM)-9-BB-Cwrye-Switch-Indian-C	327-(WM)-9-BB-Cwrye-Switch-I	Common Ironweed	Vernonia fasciculata	1	0.06	0.4	Forb	N	N		9	WM	BB-Cwrye-Switch-Indian-Cup-Pcord-WWIndig
327	(WM)-9-BB-Cwrye-Switch-Indian-C	327-(WM)-9-BB-Cwrye-Switch-I	Golden Alexanders	Zizia aurea	1	0.06	0.2	Forb	N	N		9	WM	BB-Cwrye-Switch-Indian-Cup-Pcord-WWIndig
327	(WM)-9-BB-Cwrye-Switch-Indian-C	327-(WM)-9-BB-Cwrye-Switch-I	New England Aster	Symphyotrichum novae-angliae	1	0.06	1.6	Forb	N	N		9	WM	BB-Cwrye-Switch-Indian-Cup-Pcord-WWIndig
327	(WM)-9-BB-Cwrye-Switch-Indian-C	327-(WM)-9-BB-Cwrye-Switch-I	Prairie Blazing Star	Liatris pycnostachya	1	0.06	0.4	Forb	N	N		9	WM	BB-Cwrye-Switch-Indian-Cup-Pcord-WWIndig
327	(WM)-9-BB-Cwrye-Switch-Indian-C	327-(WM)-9-BB-Cwrye-Switch-I	Yellow Coneflower	Ratibida pinnata	1	0.06	0.6	Forb	N	N		9	WM	BB-Cwrye-Switch-Indian-Cup-Pcord-WWIndig
327	(WM)-9-BB-Cwrye-Switch-Indian-C	327-(WM)-9-BB-Cwrye-Switch-I	Great St. John's Wort	Hypericum ascyron	0.25	0.02	1.1	Forb	N	N		9	WM	BB-Cwrye-Switch-Indian-Cup-Pcord-WWIndig
327	(W)-10-Croot-Ciron-Cup-MM-Jpye-	327-(W)-10-Croot-Ciron-Cup-M	Culver's Root	Veronicastrum virginicum	0.25	0.02	4.3	Forb	N	N		10	W	Croot-Ciron-Cup-MM-Jpye-Bvervain-Shwgroo
327	(W)-10-Croot-Ciron-Cup-MM-Jpye-	327-(W)-10-Croot-Ciron-Cup-M	Common Ironweed	Vernonia fasciculata	0.5	0.03	0.2	Forb	N	N		10	W	Croot-Ciron-Cup-MM-Jpye-Bvervain-Shwgroo
327	(W)-10-Croot-Ciron-Cup-MM-Jpye-	327-(W)-10-Croot-Ciron-Cup-M	Cupplant	Silphium perfoliatum	2	0.13	0.1	Forb	N	N		10	W	Croot-Ciron-Cup-MM-Jpye-Bvervain-Shwgroo
327	(W)-10-Croot-Ciron-Cup-MM-Jpye-	327-(W)-10-Croot-Ciron-Cup-M	Marsh Milkweed	Asclepias incarnata	2	0.13	0.2	Forb	N	N		10	W	Croot-Ciron-Cup-MM-Jpye-Bvervain-Shwgroo
327	(W)-10-Croot-Ciron-Cup-MM-Jpye-	327-(W)-10-Croot-Ciron-Cup-M	Joe-Pye Weed	Eutrochium maculatum	1	0.06	2.2	Forb	N	N		10	W	Croot-Ciron-Cup-MM-Jpye-Bvervain-Shwgroo
327	(W)-10-Croot-Ciron-Cup-MM-Jpye-	327-(W)-10-Croot-Ciron-Cup-M	Blue Vervain	Verbena hastata	2	0.13	4.3	Forb	N	N		10	W	Croot-Ciron-Cup-MM-Jpye-Bvervain-Shwgroo
327	(W)-10-Croot-Ciron-Cup-MM-Jpye-	327-(W)-10-Croot-Ciron-Cup-M	Showy Tick Trefoil	Desmodium canadense	3	0.19	0.3	Forb	N	N		10	W	Croot-Ciron-Cup-MM-Jpye-Bvervain-Shwgroo
327	(W)-10-Croot-Ciron-Cup-MM-Jpye-	327-(W)-10-Croot-Ciron-Cup-M	Boneset	Eupatorium perfoliatum	0.5	0.03	1.8	Forb	N	N		10	W	Croot-Ciron-Cup-MM-Jpye-Bvervain-Shwgroo

327	(W)-10-Croot-Ciron-Cup-MM-Jpye-	327-(W)-10-Croot-Ciron-Cup-M	Golden Alexanders	Zizia aurea	2	0.13	0.5	Forb	N	N		10	W	Croot-Ciron-Cup-MM-Jpye-Bvervain-Shwgroc
327	(W)-10-Croot-Ciron-Cup-MM-Jpye-	327-(W)-10-Croot-Ciron-Cup-M	Switchgrass	Panicum virgatum	8	0.5	4.5	Grass	N	N		10	W	Croot-Ciron-Cup-MM-Jpye-Bvervain-Shwgroc
327	(W)-10-Croot-Ciron-Cup-MM-Jpye-	327-(W)-10-Croot-Ciron-Cup-M	Prairie Cordgrass	Spartina pectinata	4	0.25	0.6	Grass	N	N		10	W	Croot-Ciron-Cup-MM-Jpye-Bvervain-Shwgroc
327	(W)-10-Croot-Ciron-Cup-MM-Jpye-	327-(W)-10-Croot-Ciron-Cup-M	Big Bluestem	Andropogon gerardii	4	0.25	1	Grass	N	N		10	W	Croot-Ciron-Cup-MM-Jpye-Bvervain-Shwgroc
327	(W)-10-Croot-Ciron-Cup-MM-Jpye-	327-(W)-10-Croot-Ciron-Cup-M	Canada Wildrye	Elymus canadensis	8	0.5	1	Grass	N	N		10	W	Croot-Ciron-Cup-MM-Jpye-Bvervain-Shwgroc
327	(W)-10-Croot-Ciron-Cup-MM-Jpye-	327-(W)-10-Croot-Ciron-Cup-M	Indiangrass	Sorghastrum nutans	4	0.25	1.1	Grass	N	N		10	W	Croot-Ciron-Cup-MM-Jpye-Bvervain-Shwgroc
327	(W)-10-Croot-Ciron-Cup-MM-Jpye-	327-(W)-10-Croot-Ciron-Cup-M	Fowl Mannagrass	Glyceria striata	4	0.25	14.7	Grass	N	N		10	W	Croot-Ciron-Cup-MM-Jpye-Bvervain-Shwgroc
327	(W)-10-Croot-Ciron-Cup-MM-Jpye-	327-(W)-10-Croot-Ciron-Cup-M	Fox Sedge	Carex vulpinoidea	4	0.25	9.2	Sedge	N	N		10	W	Croot-Ciron-Cup-MM-Jpye-Bvervain-Shwgroc
327	(DM)-11-Pcinque-Lplant-SilkAster-I	327-(DM)-11-Pcinque-Lplant-Sil	Prairie Cinquefoil	Potentilla arguta	0.5	0.03	2.2	Forb	N	N		11	DM	Pcinque-Lplant-SilkAster-PPclover-Rblzstar-W
327	(DM)-11-Pcinque-Lplant-SilkAster-I	327-(DM)-11-Pcinque-Lplant-Sil	Leadplant	Amorpha canescens	1	0.06	0.4	Legume	N	N		11	DM	Pcinque-Lplant-SilkAster-PPclover-Rblzstar-W
327	(DM)-11-Pcinque-Lplant-SilkAster-I	327-(DM)-11-Pcinque-Lplant-Sil	Silky Aster	Symphyotrichum sericeum	1	0.06	1.3	Forb	N	N		11	DM	Pcinque-Lplant-SilkAster-PPclover-Rblzstar-W
327	(DM)-11-Pcinque-Lplant-SilkAster-I	327-(DM)-11-Pcinque-Lplant-Sil	Purple Prairie Clover	Dalea purpurea	4	0.25	1.8	Legume	N	N		11	DM	Pcinque-Lplant-SilkAster-PPclover-Rblzstar-W
327	(DM)-11-Pcinque-Lplant-SilkAster-I	327-(DM)-11-Pcinque-Lplant-Sil	Rough Blazing Star	Liatris aspera	1	0.06	0.3	Forb	N	N		11	DM	Pcinque-Lplant-SilkAster-PPclover-Rblzstar-W
327	(DM)-11-Pcinque-Lplant-SilkAster-I	327-(DM)-11-Pcinque-Lplant-Sil	Wild Lupine	Lupinus perennis	6	0.38	0.1	Legume	N	N		11	DM	Pcinque-Lplant-SilkAster-PPclover-Rblzstar-W
327	(DM)-11-Pcinque-Lplant-SilkAster-I	327-(DM)-11-Pcinque-Lplant-Sil	Bergamot	Monarda fistulosa	0.5	0.03	0.9	Forb	N	N		11	DM	Pcinque-Lplant-SilkAster-PPclover-Rblzstar-W
327	(DM)-11-Pcinque-Lplant-SilkAster-I	327-(DM)-11-Pcinque-Lplant-Sil	Yellow Coneflower	Ratibida pinnata	1	0.06	0.6	Forb	N	N		11	DM	Pcinque-Lplant-SilkAster-PPclover-Rblzstar-W
327	(DM)-11-Pcinque-Lplant-SilkAster-I	327-(DM)-11-Pcinque-Lplant-Sil	Stiff Goldenrod	Oligoneuron rigidum	1	0.06	1.1	Forb	N	N		11	DM	Pcinque-Lplant-SilkAster-PPclover-Rblzstar-W
327	(DM)-11-Pcinque-Lplant-SilkAster-I	327-(DM)-11-Pcinque-Lplant-Sil	Pale Purple Coneflower	Echinacea pallida	2	0.13	0.2	Forb	N	N		11	DM	Pcinque-Lplant-SilkAster-PPclover-Rblzstar-W
327	(DM)-11-Pcinque-Lplant-SilkAster-I	327-(DM)-11-Pcinque-Lplant-Sil	Sideoats Grama	Bouteloua curtipendula	20	1.25	3.7	Grass	N	N		11	DM	Pcinque-Lplant-SilkAster-PPclover-Rblzstar-W
327	(DM)-11-Pcinque-Lplant-SilkAster-I	327-(DM)-11-Pcinque-Lplant-Sil	Little Bluestem	Schizachyrium scoparium	24	1.5	8.3	Grass	N	N		11	DM	Pcinque-Lplant-SilkAster-PPclover-Rblzstar-W
327	(DM)-11-Pcinque-Lplant-SilkAster-I	327-(DM)-11-Pcinque-Lplant-Sil	Indiangrass	Sorghastrum nutans	8	0.5	2.2	Grass	N	N		11	DM	Pcinque-Lplant-SilkAster-PPclover-Rblzstar-W
327	(DM)-11-Pcinque-Lplant-SilkAster-I	327-(DM)-11-Pcinque-Lplant-Sil	Prairie Junegrass	Koeleria macrantha	1	0.06	3.3	Grass	N	N		11	DM	Pcinque-Lplant-SilkAster-PPclover-Rblzstar-W
327	(DM)-11-Pcinque-Lplant-SilkAster-I	327-(DM)-11-Pcinque-Lplant-Sil	Prairie Dropseed	Sporobolus heterolepis	2	0.13	0.7	Grass	N	N		11	DM	Pcinque-Lplant-SilkAster-PPclover-Rblzstar-W
327	(DM)-11-Pcinque-Lplant-SilkAster-I	327-(DM)-11-Pcinque-Lplant-Sil	Switchgrass	Panicum virgatum	4	0.25	2.2	Grass	N	N		11	DM	Pcinque-Lplant-SilkAster-PPclover-Rblzstar-W
327	(DM)-12-LB-Sgrama-0-Swort-PPclo	327-(DM)-12-LB-Sgrama-0-Swo	Little Bluestem	Schizachyrium scoparium	16	1	5.5	Grass	N	Y		12	DM	LB-Sgrama-0-Swort-PPclover-Ycone-Pblzstar-
327	(DM)-12-LB-Sgrama-0-Swort-PPclo	327-(DM)-12-LB-Sgrama-0-Swo	Sideoats Grama	Bouteloua curtipendula	16	1	2.2	Grass	N	Y		12	DM	LB-Sgrama-0-Swort-PPclover-Ycone-Pblzstar-
327	(DM)-12-LB-Sgrama-0-Swort-PPclo	327-(DM)-12-LB-Sgrama-0-Swo	Illinois Tick Trefoil	Desmodium illinoense	5	0.31	0.5	Legume	N	Y		12	DM	LB-Sgrama-0-Swort-PPclover-Ycone-Pblzstar-
327	(DM)-12-LB-Sgrama-0-Swort-PPclo	327-(DM)-12-LB-Sgrama-0-Swo	Spiderwort	Tradescantia ohiensis	5	0.31	0.9	Forb	N	Y		12	DM	LB-Sgrama-0-Swort-PPclover-Ycone-Pblzstar-
327	(DM)-12-LB-Sgrama-0-Swort-PPclo	327-(DM)-12-LB-Sgrama-0-Swo	Purple Prairie Clover	Dalea purpurea	6	0.38	2.7	Legume	N	Y		12	DM	LB-Sgrama-0-Swort-PPclover-Ycone-Pblzstar-
327	(DM)-12-LB-Sgrama-0-Swort-PPclo	327-(DM)-12-LB-Sgrama-0-Swo	Yellow Coneflower	Ratibida pinnata	1	0.06	0.6	Forb	N	Y		12	DM	LB-Sgrama-0-Swort-PPclover-Ycone-Pblzstar-
327	(DM)-12-LB-Sgrama-0-Swort-PPclo	327-(DM)-12-LB-Sgrama-0-Swo	Prairie Blazing Star	Liatris pycnostachya	3	0.19	0.8	Forb	N	Y		12	DM	LB-Sgrama-0-Swort-PPclover-Ycone-Pblzstar-
327	(DM)-12-LB-Sgrama-0-Swort-PPclo	327-(DM)-12-LB-Sgrama-0-Swo	Rattlesnake Master	Eryngium yuccifolium	6	0.38	1.1	Forb	N	Y		12	DM	LB-Sgrama-0-Swort-PPclover-Ycone-Pblzstar-
327	(DM)-12-LB-Sgrama-0-Swort-PPclo	327-(DM)-12-LB-Sgrama-0-Swo	Showy Goldenrod	Solidago speciosa	4	0.25	8.7	Forb	N	Y		12	DM	LB-Sgrama-0-Swort-PPclover-Ycone-Pblzstar-
327	(DM)-12-LB-Sgrama-0-Swort-PPclo	327-(DM)-12-LB-Sgrama-0-Swo	Stiff Goldenrod	Oligoneuron rigidum	3	0.19	3.2	Forb	N	Y		12	DM	LB-Sgrama-0-Swort-PPclover-Ycone-Pblzstar-
327	(DM)-12-LB-Sgrama-0-Swort-PPclo	327-(DM)-12-LB-Sgrama-0-Swo	Smooth Blue Aster	Symphyotricum laeve	2	0.13	2.2	Forb	N	Y		12	DM	LB-Sgrama-0-Swort-PPclover-Ycone-Pblzstar-
327	(DM)-12-LB-Sgrama-0-Swort-PPclo	327-(DM)-12-LB-Sgrama-0-Swo	Prairie Cinquefoil	Potentilla arguta	2	0.13	9.2	Forb	N	Y		12	DM	LB-Sgrama-0-Swort-PPclover-Ycone-Pblzstar-
327	(M)-13-LB-Sgrama-Fbtongue-Swort-	327-(M)-13-LB-Sgrama-Fbtongu	Little Bluestem	Schizachyrium scoparium	16	1	5.5	Grass	N	Y		13	M	LB-Sgrama-Fbtongue-Swort-Galex-Ycone-PPc
327	(M)-13-LB-Sgrama-Fbtongue-Swort-	327-(M)-13-LB-Sgrama-Fbtongu	Sideoats Grama	Bouteloua curtipendula	16	1	2.2	Grass	N	Y		13	M	LB-Sgrama-Fbtongue-Swort-Galex-Ycone-PPc
327	(M)-13-LB-Sgrama-Fbtongue-Swort-	327-(M)-13-LB-Sgrama-Fbtongu	Foxglove Beardtongue	Penstemon digitalis	4	0.25	10.6	Forb	N	Y		13	M	LB-Sgrama-Fbtongue-Swort-Galex-Ycone-PPc
327	(M)-13-LB-Sgrama-Fbtongue-Swort-	327-(M)-13-LB-Sgrama-Fbtongu	Spiderwort	Tradescantia ohiensis	6	0.38	1.1	Forb	N	Y		13	M	LB-Sgrama-Fbtongue-Swort-Galex-Ycone-PPc
327	(M)-13-LB-Sgrama-Fbtongue-Swort-	327-(M)-13-LB-Sgrama-Fbtongu	Golden Alexanders	Zizia aurea	6	0.38	1.5	Forb	N	Y		13	M	LB-Sgrama-Fbtongue-Swort-Galex-Ycone-PPc
327	(M)-13-LB-Sgrama-Fbtongue-Swort-	327-(M)-13-LB-Sgrama-Fbtongu	Yellow Coneflower	Ratibida pinnata	1	0.06	0.6	Forb	N	Y		13	M	LB-Sgrama-Fbtongue-Swort-Galex-Ycone-PPc
327	(M)-13-LB-Sgrama-Fbtongue-Swort-	327-(M)-13-LB-Sgrama-Fbtongu	Purple Prairie Clover	Dalea purpurea	6	0.38	2.7	Legume	N	Y		13	M	LB-Sgrama-Fbtongue-Swort-Galex-Ycone-PPc
327	(M)-13-LB-Sgrama-Fbtongue-Swort-	327-(M)-13-LB-Sgrama-Fbtongu	Prairie Blazing Star	Liatris pycnostachya	4	0.25	1.1	Forb	N	Y		13	M	LB-Sgrama-Fbtongue-Swort-Galex-Ycone-PPc
327	(M)-13-LB-Sgrama-Fbtongue-Swort-	327-(M)-13-LB-Sgrama-Fbtongu	Rattlesnake Master	Eryngium yuccifolium	6	0.38	1.1	Forb	N	Y		13	M	LB-Sgrama-Fbtongue-Swort-Galex-Ycone-PPc
327	(M)-13-LB-Sgrama-Fbtongue-Swort-	327-(M)-13-LB-Sgrama-Fbtongu	New England Aster	Symphyotrichum novae-angliae	3	0.19	4.8	Forb	N	Y		13	M	LB-Sgrama-Fbtongue-Swort-Galex-Ycone-PPc
327	(M)-13-LB-Sgrama-Fbtongue-Swort-	327-(M)-13-LB-Sgrama-Fbtongu	Stiff Goldenrod	Oligoneuron rigidum	3	0.19	3.2	Forb	N	Y		13	M	LB-Sgrama-Fbtongue-Swort-Galex-Ycone-PPc
327	(M)-13-LB-Sgrama-Fbtongue-Swort-	327-(M)-13-LB-Sgrama-Fbtongu	Smooth Blue Aster	Symphyotrichum laeve	3	0.19	3.3	Forb	N	Y		13	M	LB-Sgrama-Fbtongue-Swort-Galex-Ycone-PPc
327	(WM)-14-BB-Indian-Fbtongue-Swor	327-(WM)-14-BB-Indian-Fbtong	Big Bluestem	Andropogon gerardii	16	1	3.8	Grass	N	Y		14	WM	BB-Indian-Fbtongue-Swort-Galex-Ycone-Pblz
327	(WM)-14-BB-Indian-Fbtongue-Swor	327-(WM)-14-BB-Indian-Fbtong	Indiangrass	Sorghastrum nutans	16	1	4.4	Grass	N	Y		14	WM	BB-Indian-Fbtongue-Swort-Galex-Ycone-Pblz
327	(WM)-14-BB-Indian-Fbtongue-Swor	327-(WM)-14-BB-Indian-Fbtong	Foxglove Beardtongue	Penstemon digitalis	4	0.25	10.6	Forb	N	Y		14	WM	BB-Indian-Fbtongue-Swort-Galex-Ycone-Pblz
327	(WM)-14-BB-Indian-Fbtongue-Swor	327-(WM)-14-BB-Indian-Fbtong	Spiderwort	Tradescantia ohiensis	6	0.38	1.1	Forb	N	Y		14	WM	BB-Indian-Fbtongue-Swort-Galex-Ycone-Pblz
327	(WM)-14-BB-Indian-Fbtongue-Swor	327-(WM)-14-BB-Indian-Fbtong	Golden Alexanders	Zizia aurea	5	0.31	1.3	Forb	N	Y		14	WM	BB-Indian-Fbtongue-Swort-Galex-Ycone-Pblz
327	(WM)-14-BB-Indian-Fbtongue-Swor	327-(WM)-14-BB-Indian-Fbtong	Yellow Coneflower	Ratibida pinnata	1	0.06	0.6	Forb	N	Y		14	WM	BB-Indian-Fbtongue-Swort-Galex-Ycone-Pblz
327	(WM)-14-BB-Indian-Fbtongue-Swor	327-(WM)-14-BB-Indian-Fbtong	Prairie Blazing Star	Liatris pycnostachya	3	0.19	0.8	Forb	N	Y		14	WM	BB-Indian-Fbtongue-Swort-Galex-Ycone-Pblz
327	(WM)-14-BB-Indian-Fbtongue-Swor	327-(WM)-14-BB-Indian-Fbtong	Rattlesnake Master	Eryngium yuccifolium	6	0.38	1.1	Forb	N	Y		14	WM	BB-Indian-Fbtongue-Swort-Galex-Ycone-Pblz
327	(WM)-14-BB-Indian-Fbtongue-Swor	327-(WM)-14-BB-Indian-Fbtong	New England Aster	Symphyotrichum novae-angliae	3	0.19	4.8	Forb	N	Y		14	WM	BB-Indian-Fbtongue-Swort-Galex-Ycone-Pblz
327	(WM)-14-BB-Indian-Fbtongue-Swor	327-(WM)-14-BB-Indian-Fbtong	Blue Vervain	Verbena hastata	4	0.25	8.5	Forb	N	Y		14	WM	BB-Indian-Fbtongue-Swort-Galex-Ycone-Pblz

327	(WM)-14-BB-Indian-Fbtongue-Swor	327-(WM)-14-BB-Indian-Fbtongu	Common Ironweed	Vernonia fasciculata	3	0.19	1.4	Forb	N	Y		14	WM	BB-Indian-Fbtongue-Swort-Galex-Ycone-Pblz
327	(WM)-14-BB-Indian-Fbtongue-Swor	327-(WM)-14-BB-Indian-Fbtongu	Cupplant	Silphium perfoliatum	3	0.19	0.1	Forb	N	Y		14	WM	BB-Indian-Fbtongue-Swort-Galex-Ycone-Pblz
327	(D-W)-15A-Switch	327-(D-W)-15A-Switch	Switchgrass	Panicum virgatum	112	7	63	Grass	N	N		15A	D-W	Switch
327	(D-W)-15B-BB	327-(D-W)-15B-BB	Big Bluestem	Andropogon gerardii	176	11	42	Grass	N	N		15B	D-W	BB
327	(D-W)-15C-Indian	327-(D-W)-15C-Indian	Indiangrass	Sorghastrum nutans	160	10	44	Grass	N	N		15C	D-W	Indian
327	(DM-M)-16A-SB-Tim-Alf	327-(DM-M)-16A-SB-Tim-Alf	Smooth Bromegrass	Bromus inermis	48	3	9	Grass	I	N		16A	DM-M	SB-Tim-Alf
327	(DM-M)-16A-SB-Tim-Alf	327-(DM-M)-16A-SB-Tim-Alf	Timothy	Phleum pratense	40	2.5	71	Grass	I	N		16A	DM-M	SB-Tim-Alf
327	(DM-M)-16A-SB-Tim-Alf	327-(DM-M)-16A-SB-Tim-Alf	Alfalfa	Medicago sativa	96	6	30	Legume	I	N		16A	DM-M	SB-Tim-Alf
327	(M-W)-16B-Orc-Tim-RC	327-(M-W)-16B-Orc-Tim-RC	Orchardgrass	Dactylis glomerata L.	32	2	30	Grass	I	N		16B	M-W	Orc-Tim-RC
327	(M-W)-16B-Orc-Tim-RC	327-(M-W)-16B-Orc-Tim-RC	Timothy	Phleum pratense	32	2	57	Grass	I	N		16B	M-W	Orc-Tim-RC
327	(M-W)-16B-Orc-Tim-RC	327-(M-W)-16B-Orc-Tim-RC	Red Clover	Trifolium pratense	80	5	30	Legume	I	N		16B	M-W	Orc-Tim-RC
327	(DM-M)-16C-Orc-Tim-Alf	327-(DM-M)-16C-Orc-Tim-Alf	Orchardgrass	Dactylis glomerata L.	32	2	30	Grass	I	N		16C	DM-M	Orc-Tim-Alf
327	(DM-M)-16C-Orc-Tim-Alf	327-(DM-M)-16C-Orc-Tim-Alf	Timothy	Phleum pratense	32	2	57	Grass	I	N		16C	DM-M	Orc-Tim-Alf
327	(DM-M)-16C-Orc-Tim-Alf	327-(DM-M)-16C-Orc-Tim-Alf	Alfalfa	Medicago sativa	96	6	30	Legume	I	N		16C	DM-M	Orc-Tim-Alf
327	(M-WM)-16D-SB-Tim-RC	327-(M-WM)-16D-SB-Tim-RC	Smooth Bromegrass	Bromus inermis	48	3	9	Grass	I	N		16D	M-WM	SB-Tim-RC
327	(M-WM)-16D-SB-Tim-RC	327-(M-WM)-16D-SB-Tim-RC	Timothy	Phleum pratense	40	2.5	71	Grass	I	N		16D	M-WM	SB-Tim-RC
327	(M-WM)-16D-SB-Tim-RC	327-(M-WM)-16D-SB-Tim-RC	Red Clover	Trifolium pratense	80	5	30	Legume	I	N		16D	M-WM	SB-Tim-RC
327	(M-WM)-16E-SB-Tim-Orc-RC-Lad(	327-(M-WM)-16E-SB-Tim-Orc-I	Smooth Bromegrass	Bromus inermis	32	2	6	Grass	I	N		16E	M-WM	SB-Tim-Orc-RC-LadC
327	(M-WM)-16E-SB-Tim-Orc-RC-Lad(	327-(M-WM)-16E-SB-Tim-Orc-I	Timothy	Phleum pratense	32	2	57	Grass	I	N		16E	M-WM	SB-Tim-Orc-RC-LadC
327	(M-WM)-16E-SB-Tim-Orc-RC-Lad(	327-(M-WM)-16E-SB-Tim-Orc-I	Orchardgrass	Dactylis glomerata L.	16	1	15	Grass	I	N		16E	M-WM	SB-Tim-Orc-RC-LadC
327	(M-WM)-16E-SB-Tim-Orc-RC-Lad(	327-(M-WM)-16E-SB-Tim-Orc-I	Red Clover	Trifolium pratense	80	5	30	Legume	I	N		16E	M-WM	SB-Tim-Orc-RC-LadC
327	(M-WM)-16E-SB-Tim-Orc-RC-Lad(	327-(M-WM)-16E-SB-Tim-Orc-I	White Ladino Clover	Trifolium repens	8	0.5	10	Legume	I	N		16E	M-WM	SB-Tim-Orc-RC-LadC
327	(M-WM)-16F-Orc-Tim-RC-LadC	327-(M-WM)-16F-Orc-Tim-RC-I	Orchardgrass	Dactylis glomerata L.	32	2	30	Grass	I	N		16F	M-WM	Orc-Tim-RC-LadC
327	(M-WM)-16F-Orc-Tim-RC-LadC	327-(M-WM)-16F-Orc-Tim-RC-I	Timothy	Phleum pratense	32	2	57	Grass	I	N		16F	M-WM	Orc-Tim-RC-LadC
327	(M-WM)-16F-Orc-Tim-RC-LadC	327-(M-WM)-16F-Orc-Tim-RC-I	Red Clover	Trifolium pratense	80	5	30	Legume	I	N		16F	M-WM	Orc-Tim-RC-LadC
327	(M-WM)-16F-Orc-Tim-RC-LadC	327-(M-WM)-16F-Orc-Tim-RC-I	White Ladino Clover	Trifolium repens	8	0.5	10	Legume	I	N		16F	M-WM	Orc-Tim-RC-LadC
327	(DM-WM)-16G-Orc-Tim-Btrefoil	327-(DM-WM)-16G-Orc-Tim-Bt	Orchardgrass	Dactylis glomerata L.	32	2	30	Grass	I	N		16G	DM-WM	Orc-Tim-Btrefoil
327	(DM-WM)-16G-Orc-Tim-Btrefoil	327-(DM-WM)-16G-Orc-Tim-Bt	Timothy	Phleum pratense	32	2	57	Grass	I	N		16G	DM-WM	Orc-Tim-Btrefoil
327	(DM-WM)-16G-Orc-Tim-Btrefoil	327-(DM-WM)-16G-Orc-Tim-Bt	Birdsfoot Trefoil	Lotus corniculatus	64	4	36	Legume	I	N		16G	DM-WM	Orc-Tim-Btrefoil
327	(M-WM)-16H-Tfesc-Tim-RC-LadC	327-(M-WM)-16H-Tfesc-Tim-RC	Tall Fescue	Schedonorus arundinaceus	48	3	15	Grass	I	N		16H	M-WM	Tfesc-Tim-RC-LadC
327	(M-WM)-16H-Tfesc-Tim-RC-LadC	327-(M-WM)-16H-Tfesc-Tim-RC	Timothy	Phleum pratense	32	2	57	Grass	I	N		16H	M-WM	Tfesc-Tim-RC-LadC
327	(M-WM)-16H-Tfesc-Tim-RC-LadC	327-(M-WM)-16H-Tfesc-Tim-RC	Red Clover	Trifolium pratense	64	4	24	Legume	I	N		16H	M-WM	Tfesc-Tim-RC-LadC
327	(M-WM)-16H-Tfesc-Tim-RC-LadC	327-(M-WM)-16H-Tfesc-Tim-RC	White Ladino Clover	Trifolium repens	16	1	20	Legume	I	N		16H	M-WM	Tfesc-Tim-RC-LadC
327	(DM-M)-17A-Orc-Tim-Alf-LadC	327-(DM-M)-17A-Orc-Tim-Alf-I	Orchardgrass	Dactylis glomerata L.	16	1	15	Grass	I	Y		17A	DM-M	Orc-Tim-Alf-LadC
327	(DM-M)-17A-Orc-Tim-Alf-LadC	327-(DM-M)-17A-Orc-Tim-Alf-I	Timothy	Phleum pratense	8	0.5	14	Grass	I	Y		17A	DM-M	Orc-Tim-Alf-LadC
327	(DM-M)-17A-Orc-Tim-Alf-LadC	327-(DM-M)-17A-Orc-Tim-Alf-I	Alfalfa	Medicago sativa	64	4	20	Legume	I	Y		17A	DM-M	Orc-Tim-Alf-LadC
327	(DM-M)-17A-Orc-Tim-Alf-LadC	327-(DM-M)-17A-Orc-Tim-Alf-I	White Ladino Clover	Trifolium repens	24	1.5	30	Legume	I	Y		17A	DM-M	Orc-Tim-Alf-LadC
327	(WM-W)-17B-Prye-Tfesc-RC-Aclov	327-(WM-W)-17B-Prye-Tfesc-R	Perennial Ryegrass	Lolium perenne	48	3	15	Grass	I	Y		17B	WM-W	Prye-Tfesc-RC-Aclover
327	(WM-W)-17B-Prye-Tfesc-RC-Aclov	327-(WM-W)-17B-Prye-Tfesc-R	Tall Fescue	Schedonorus arundinaceus	48	3	15	Grass	I	Y		17B	WM-W	Prye-Tfesc-RC-Aclover
327	(WM-W)-17B-Prye-Tfesc-RC-Aclov	327-(WM-W)-17B-Prye-Tfesc-R	Red Clover	Trifolium pratense	64	4	20	Legume	I	Y		17B	WM-W	Prye-Tfesc-RC-Aclover
327	(WM-W)-17B-Prye-Tfesc-RC-Aclov	327-(WM-W)-17B-Prye-Tfesc-R	Alsike Clover	Trifolium hybridum	24	1.5	23.4	Legume	I	X		17B	WM-W	Prye-Tfesc-RC-Aclover

STANDARD 342 MIXES REVISION DATE: 1/23/2013

criteria 0

STD	Mix #	std-mix	Common Name	Scientific Name	PLS (oz./A)	PLS (lbs./A)	Seeds/Square Foot	Type	Intro / Native	Poll. (Y/N)		Mix No.	MR	Mix Components
	No 342 mixes meet this criterion	LEAVE THIS ROW AS IS							N	Y				
	No 342 mixes meet this criterion	LEAVE THIS ROW AS IS							N	N				
		LEAVE THIS ROW AS IS							I	Y				
342	(DM-M)-1-SB-Crfesc-KB-Alf-R	342-(DM-M)-1-SB-Crfesc-KB	Smooth Bromegrass	Bromus inermis	160.0	10	30	Grass	I	N		1	DM-M	SB-Crfesc-KB-Alf-RC
342	(DM-M)-1-SB-Crfesc-KB-Alf-R	342-(DM-M)-1-SB-Crfesc-KB	Creeping Red Fescue	Festuca rubra	48.0	3	24	Grass	I	N		1	DM-M	SB-Crfesc-KB-Alf-RC
342	(DM-M)-1-SB-Crfesc-KB-Alf-R	342-(DM-M)-1-SB-Crfesc-KB	Kentucky Bluegrass	Poa pratensis	24.0	1.5	75	Grass	I	N		1	DM-M	SB-Crfesc-KB-Alf-RC
342	(DM-M)-1-SB-Crfesc-KB-Alf-R	342-(DM-M)-1-SB-Crfesc-KB	Alfalfa	Medicago sativa	48.0	3	15	Legume	I	N		1	DM-M	SB-Crfesc-KB-Alf-RC
342	(DM-M)-1-SB-Crfesc-KB-Alf-R	342-(DM-M)-1-SB-Crfesc-KB	Red Clover	Trifolium pratense	48.0	3	18	Legume	I	N		1	DM-M	SB-Crfesc-KB-Alf-RC
342	(DM-M)-2-SB-Tim-Alf	342-(DM-M)-2-SB-Tim-Alf	Smooth Bromegrass	Bromus inermis	240.0	15	46	Grass	I	N		2	DM-M	SB-Tim-Alf
342	(DM-M)-2-SB-Tim-Alf	342-(DM-M)-2-SB-Tim-Alf	Timothy	Phleum pratense	48.0	3	84	Grass	I	N		2	DM-M	SB-Tim-Alf
342	(DM-M)-2-SB-Tim-Alf	342-(DM-M)-2-SB-Tim-Alf	Alfalfa	Medicago sativa	112.0	7	35	Legume	I	N		2	DM-M	SB-Tim-Alf
342	(DM-M)-3-SB-Prye-Tfesc-Tim-I	342-(DM-M)-3-SB-Prye-Tfesc	Smooth Bromegrass	Bromus inermis	160.0	10	30	Grass	I	N		3	DM-M	SB-Prye-Tfesc-Tim-KB
342	(DM-M)-3-SB-Prye-Tfesc-Tim-I	342-(DM-M)-3-SB-Prye-Tfesc	Perennial Ryegrass	Lolium perenne	80.0	5	25	Grass	I	N		3	DM-M	SB-Prye-Tfesc-Tim-KB
342	(DM-M)-3-SB-Prye-Tfesc-Tim-I	342-(DM-M)-3-SB-Prye-Tfesc	Tall Fescue	Schedonorus arundinaceus	32.0	2	10	Grass	I	N		3	DM-M	SB-Prye-Tfesc-Tim-KB
342	(DM-M)-3-SB-Prye-Tfesc-Tim-I	342-(DM-M)-3-SB-Prye-Tfesc	Timothy	Phleum pratense	32.0	2	57	Grass	I	N		3	DM-M	SB-Prye-Tfesc-Tim-KB
342	(DM-M)-3-SB-Prye-Tfesc-Tim-I	342-(DM-M)-3-SB-Prye-Tfesc	Kentucky Bluegrass	Poa pratensis	16.0	1	50	Grass	I	N		3	DM-M	SB-Prye-Tfesc-Tim-KB
342	(DM-M)-4-SB-Crfesc-Alf-RC	342-(DM-M)-4-SB-Crfesc-Alf	Smooth Bromegrass	Bromus inermis	320.0	20	62	Grass	I	N		4	DM-M	SB-Crfesc-Alf-RC
342	(DM-M)-4-SB-Crfesc-Alf-RC	342-(DM-M)-4-SB-Crfesc-Alf	Creeping Red Fescue	Festuca rubra	80.0	5	40	Grass	I	N		4	DM-M	SB-Crfesc-Alf-RC
342	(DM-M)-4-SB-Crfesc-Alf-RC	342-(DM-M)-4-SB-Crfesc-Alf	Alfalfa	Medicago sativa	128.0	8	40	Legume	I	N		4	DM-M	SB-Crfesc-Alf-RC
342	(DM-M)-4-SB-Crfesc-Alf-RC	342-(DM-M)-4-SB-Crfesc-Alf	Red Clover	Trifolium pratense	64.0	4	24	Legume	I	N		4	DM-M	SB-Crfesc-Alf-RC
342	(DM-M)-5-SB-Alf	342-(DM-M)-5-SB-Alf	Smooth Bromegrass	Bromus inermis	480.0	30	93	Grass	I	N		5	DM-M	SB-Alf
342	(DM-M)-5-SB-Alf	342-(DM-M)-5-SB-Alf	Alfalfa	Medicago sativa	224.0	14	70	Legume	I	N		5	DM-M	SB-Alf
342	(DM-WM)-6-SB-Prye-Tim-Crfe	342-(DM-WM)-6-SB-Prye-Tim	Smooth Bromegrass	Bromus inermis	112.0	7	21	Grass	I	N		6	DM-WM	SB-Prye-Tim-Crfesc-KB-RC
342	(DM-WM)-6-SB-Prye-Tim-Crfe	342-(DM-WM)-6-SB-Prye-Tim	Perennial Ryegrass	Lolium perenne	48.0	3	15	Grass	I	N		6	DM-WM	SB-Prye-Tim-Crfesc-KB-RC
342	(DM-WM)-6-SB-Prye-Tim-Crfe	342-(DM-WM)-6-SB-Prye-Tim	Timothy	Phleum pratense	32.0	2	57	Grass	I	N		6	DM-WM	SB-Prye-Tim-Crfesc-KB-RC
342	(DM-WM)-6-SB-Prye-Tim-Crfe	342-(DM-WM)-6-SB-Prye-Tim	Creeping Red Fescue	Festuca rubra	16.0	1	8	Grass	I	N		6	DM-WM	SB-Prye-Tim-Crfesc-KB-RC
342	(DM-WM)-6-SB-Prye-Tim-Crfe	342-(DM-WM)-6-SB-Prye-Tim	Kentucky Bluegrass	Poa pratensis	16.0	1	50	Grass	I	N		6	DM-WM	SB-Prye-Tim-Crfesc-KB-RC
342	(DM-WM)-6-SB-Prye-Tim-Crfe	342-(DM-WM)-6-SB-Prye-Tim	Red Clover	Trifolium pratense	48.0	3	18	Legume	I	N		6	DM-WM	SB-Prye-Tim-Crfesc-KB-RC
342	(M)-7-SB-KB-Crfesc-Btrefoil	342-(M)-7-SB-KB-Crfesc-Btre	Smooth Bromegrass	Bromus inermis	112.0	7	21	Grass	I	N		7	M	SB-KB-Crfesc-Btrefoil
342	(M)-7-SB-KB-Crfesc-Btrefoil	342-(M)-7-SB-KB-Crfesc-Btre	Kentucky Bluegrass	Poa pratensis	48.0	3	150	Grass	I	N		7	M	SB-KB-Crfesc-Btrefoil
342	(M)-7-SB-KB-Crfesc-Btrefoil	342-(M)-7-SB-KB-Crfesc-Btre	Creeping Red Fescue	Festuca rubra	32.0	2	16	Grass	I	N		7	M	SB-KB-Crfesc-Btrefoil
342	(M)-7-SB-KB-Crfesc-Btrefoil	342-(M)-7-SB-KB-Crfesc-Btre	Birdsfoot Trefoil	Lotus corniculatus	32.0	2	18	Legume	I	N		7	M	SB-KB-Crfesc-Btrefoil
342	(M)-8-SB-Crfesc-KB	342-(M)-8-SB-Crfesc-KB	Smooth Bromegrass	Bromus inermis	240.0	15	45	Grass	I	N		8	M	SB-Crfesc-KB
342	(M)-8-SB-Crfesc-KB	342-(M)-8-SB-Crfesc-KB	Creeping Red Fescue	Festuca rubra	32.0	2	16	Grass	I	N		8	M	SB-Crfesc-KB
342	(M)-8-SB-Crfesc-KB	342-(M)-8-SB-Crfesc-KB	Kentucky Bluegrass	Poa pratensis	32.0	2	100	Grass	I	N		8	M	SB-Crfesc-KB
342	(M)-9-Prye-Crfesc-KB	342-(M)-9-Prye-Crfesc-KB	Perennial Ryegrass	Lolium perenne	160.0	10	50	Grass	I	N		9	M	Prye-Crfesc-KB
342	(M)-9-Prye-Crfesc-KB	342-(M)-9-Prye-Crfesc-KB	Creeping Red Fescue	Festuca rubra	64.0	4	32	Grass	I	N		9	M	Prye-Crfesc-KB
342	(M)-9-Prye-Crfesc-KB	342-(M)-9-Prye-Crfesc-KB	Kentucky Bluegrass	Poa pratensis	48.0	3	150	Grass	I	N		9	M	Prye-Crfesc-KB
342	(M)-10-SB-Prye-Tim-RC	342-(M)-10-SB-Prye-Tim-RC	Smooth Bromegrass	Bromus inermis	224.0	14	42	Grass	I	N		10	M	SB-Prye-Tim-RC
342	(M)-10-SB-Prye-Tim-RC	342-(M)-10-SB-Prye-Tim-RC	Perennial Ryegrass	Lolium perenne	64.0	4	20	Grass	I	N		10	M	SB-Prye-Tim-RC
342	(M)-10-SB-Prye-Tim-RC	342-(M)-10-SB-Prye-Tim-RC	Timothy	Phleum pratense	48.0	3	84	Grass	I	N		10	M	SB-Prye-Tim-RC
342	(M)-10-SB-Prye-Tim-RC	342-(M)-10-SB-Prye-Tim-RC	Red Clover	Trifolium pratense	48.0	3	18	Legume	I	N		10	M	SB-Prye-Tim-RC
342	(M)-11-SB-Crfesc	342-(M)-11-SB-Crfesc	Smooth Bromegrass	Bromus inermis	512.0	32	96	Grass	I	N		11	M	SB-Crfesc
342	(M)-11-SB-Crfesc	342-(M)-11-SB-Crfesc	Creeping Red Fescue	Festuca rubra	128.0	8	64	Grass	I	N		11	M	SB-Crfesc
342	(M)-12-KB-Crfesc	342-(M)-12-KB-Crfesc	Kentucky Bluegrass	Poa pratensis	64.0	4	200	Grass	I	N		12	M	KB-Crfesc
342	(M)-12-KB-Crfesc	342-(M)-12-KB-Crfesc	Creeping Red Fescue	Festuca rubra	48.0	3	24	Grass	I	N		12	M	KB-Crfesc
342	(M)-13-SB-Tim-RC	342-(M)-13-SB-Tim-RC	Smooth Bromegrass	Bromus inermis	224.0	14	43	Grass	I	N		13	M	SB-Tim-RC
342	(M)-13-SB-Tim-RC	342-(M)-13-SB-Tim-RC	Timothy	Phleum pratense	64.0	4	112	Grass	I	N		13	M	SB-Tim-RC
342	(M)-13-SB-Tim-RC	342-(M)-13-SB-Tim-RC	Red Clover	Trifolium pratense	48.0	3	18	Legume	I	N		13	M	SB-Tim-RC
342	(M)-14-SB-Tim-Aclover	342-(M)-14-SB-Tim-Aclover	Smooth Bromegrass	Bromus inermis	240.0	15	43	Grass	I	N		14	M	SB-Tim-Aclover
342	(M)-14-SB-Tim-Aclover	342-(M)-14-SB-Tim-Aclover	Timothy	Phleum pratense	56.0	3.5	112	Grass	I	N		14	M	SB-Tim-Aclover
342	(M)-14-SB-Tim-Aclover	342-(M)-14-SB-Tim-Aclover	Alsike Clover	Trifolium hybridum	32.0	2	32	Legume	I	N		14	M	SB-Tim-Aclover
342	(M)-15-SB-Tim-Btrefoil	342-(M)-15-SB-Tim-Btrefoil	Smooth Bromegrass	Bromus inermis	240.0	15	43	Grass	I	N		15	M	SB-Tim-Btrefoil
342	(M)-15-SB-Tim-Btrefoil	342-(M)-15-SB-Tim-Btrefoil	Timothy	Phleum pratense	56.0	3.5	112	Grass	I	N		15	M	SB-Tim-Btrefoil
342	(M)-15-SB-Tim-Btrefoil	342-(M)-15-SB-Tim-Btrefoil	Birdsfoot Trefoil	Lotus corniculatus	48.0	3	26	Legume	I	N		15	M	SB-Tim-Btrefoil
342	(WM)-16-SB-Tfesc-Prye-Tim-K	342-(WM)-16-SB-Tfesc-Prye-	Smooth Bromegrass	Bromus inermis	96.0	6	18	Grass	I	N		16	WM	SB-Tfesc-Prye-Tim-KB-RC
342	(WM)-16-SB-Tfesc-Prye-Tim-K	342-(WM)-16-SB-Tfesc-Prye-	Tall Fescue	Schedonorus arundinaceus	80.0	5	25	Grass	I	N		16	WM	SB-Tfesc-Prye-Tim-KB-RC
342	(WM)-16-SB-Tfesc-Prye-Tim-K	342-(WM)-16-SB-Tfesc-Prye-	Perennial Ryegrass	Lolium perenne	48.0	3	15	Grass	I	N		16	WM	SB-Tfesc-Prye-Tim-KB-RC
342	(WM)-16-SB-Tfesc-Prye-Tim-K	342-(WM)-16-SB-Tfesc-Prye-	Timothy	Phleum pratense	48.0	3	84	Grass	I	N		16	WM	SB-Tfesc-Prye-Tim-KB-RC
342	(WM)-16-SB-Tfesc-Prye-Tim-K	342-(WM)-16-SB-Tfesc-Prye-	Kentucky Bluegrass	Poa pratensis	32.0	2	100	Grass	I	N		16	WM	SB-Tfesc-Prye-Tim-KB-RC
342	(WM)-16-SB-Tfesc-Prye-Tim-K	342-(WM)-16-SB-Tfesc-Prye-	Red Clover	Trifolium pratense	48.0	3	18	Legume	I	N		16	WM	SB-Tfesc-Prye-Tim-KB-RC
342	(WM)-17-Rtop-Tim-RC	342-(WM)-17-Rtop-Tim-RC	Redtop	Agrostis gigantea	16.0	1	114	Grass	I	N		17	WM	Rtop-Tim-RC
342	(WM)-17-Rtop-Tim-RC	342-(WM)-17-Rtop-Tim-RC	Timothy	Phleum pratense	48.0	3	84	Grass	I	N		17	WM	Rtop-Tim-RC
342	(WM)-17-Rtop-Tim-RC	342-(WM)-17-Rtop-Tim-RC	Red Clover	Trifolium pratense	80.0	5	30	Legume	I	N		17	WM	Rtop-Tim-RC
342	(WM)-18-SB-Tim-Prye-KB-RC	342-(WM)-18-SB-Tim-Prye-K	Smooth Bromegrass	Bromus inermis	96.0	6	18	Grass	I	N		18	WM	SB-Tim-Prye-KB-RC
342	(WM)-18-SB-Tim-Prye-KB-RC	342-(WM)-18-SB-Tim-Prye-K	Timothy	Phleum pratense	48.0	3	84	Grass	I	N		18	WM	SB-Tim-Prye-KB-RC
342	(WM)-18-SB-Tim-Prye-KB-RC	342-(WM)-18-SB-Tim-Prye-K	Perennial Ryegrass	Lolium perenne	48.0	3	15	Grass	I	N		18	WM	SB-Tim-Prye-KB-RC
342	(WM)-18-SB-Tim-Prye-KB-RC	342-(WM)-18-SB-Tim-Prye-K	Kentucky Bluegrass	Poa pratensis	32.0	2	100	Grass	I	N		18	WM	SB-Tim-Prye-KB-RC
342	(WM)-18-SB-Tim-Prye-KB-RC	342-(WM)-18-SB-Tim-Prye-K	Red Clover	Trifolium pratense	48.0	3	18	Legume	I	N		18	WM	SB-Tim-Prye-KB-RC
342	(WM)-19-KB-Rtop-Tim-RC	342-(WM)-19-KB-Rtop-Tim-R	Kentucky Bluegrass	Poa pratensis	32.0	2	100	Grass	I	N		19	WM	KB-Rtop-Tim-RC
342	(WM)-19-KB-Rtop-Tim-RC	342-(WM)-19-KB-Rtop-Tim-R	Redtop	Agrostis gigantea	16.0	1	114	Grass	I	N		19	WM	KB-Rtop-Tim-RC
342	(WM)-19-KB-Rtop-Tim-RC	342-(WM)-19-KB-Rtop-Tim-R	Timothy	Phleum pratense	16.0	1	28	Grass	I	N		19	WM	KB-Rtop-Tim-RC
342	(WM)-19-KB-Rtop-Tim-RC	342-(WM)-19-KB-Rtop-Tim-R	Red Clover	Trifolium pratense	64.0	4	24	Legume	I	N		19	WM	KB-Rtop-Tim-RC
342	(W)-20-KB-Rtop-Aclover	342-(W)-20-KB-Rtop-Aclover	Kentucky Bluegrass	Poa pratensis	32.0	2	100	Grass	I	N		20	W	KB-Rtop-Aclover
342	(W)-20-KB-Rtop-Aclover	342-(W)-20-KB-Rtop-Aclover	Redtop	Agrostis gigantea	32.0	2	228	Grass	I	N		20	W	KB-Rtop-Aclover
342	(W)-20-KB-Rtop-Aclover	342-(W)-20-KB-Rtop-Aclover	Alsike Clover	Trifolium hybridum	32.0	2	32	Legume	I	N		20	W	KB-Rtop-Aclover
342	(W)-21-Rtop-Aclover	342-(W)-21-Rtop-Aclover	Redtop	Agrostis gigantea	48.0	3	342	Grass	I	N		21	W	Rtop-Aclover
342	(W)-21-Rtop-Aclover	342-(W)-21-Rtop-Aclover	Alsike Clover	Trifolium hybridum	48.0	3	48	Legume	I	N		21	W	Rtop-Aclover

STANDARD 512 MIXES

criteria: H-1

STD	Mix #	std-mix	Common Name	Scientific Name
		LEAVE THIS ROW AS IS		
		LEAVE THIS ROW AS IS		
512	(FSG 1)-H1-RC-Tfesc-Tim	512-(FSG 1)-H1-RC-Tfesc-Tim	Red Clover	Trifolium pratense
512	(FSG 1)-H1-RC-Tfesc-Tim	512-(FSG 1)-H1-RC-Tfesc-Tim	Tall Fescue	Schedonorus arundinaceus
512	(FSG 1)-H1-RC-Tfesc-Tim	512-(FSG 1)-H1-RC-Tfesc-Tim	Timothy	Phleum pratense
512	(FSG 2)-H2-Alf	512-(FSG 2)-H2-Alf	Alfalfa	Medicago sativa
512	(FSG 2,3,5,6)-H3-Alf-SB	512-(FSG 2,3,5,6)-H3-Alf-SB	Alfalfa	Medicago sativa
512	(FSG 2,3,5,6)-H3-Alf-SB	512-(FSG 2,3,5,6)-H3-Alf-SB	Smooth Bromegrass	Bromus inermis
512	(FSG 4,7)-H4-Aclover-Tfesc-Tim	512-(FSG 4,7)-H4-Aclover-Tfesc-Tim	Alsike Clover	Trifolium hybridum
512	(FSG 4,7)-H4-Aclover-Tfesc-Tim	512-(FSG 4,7)-H4-Aclover-Tfesc-Tim	Tall Fescue	Schedonorus arundinaceus
512	(FSG 4,7)-H4-Aclover-Tfesc-Tim	512-(FSG 4,7)-H4-Aclover-Tfesc-Tim	Timothy	Phleum pratense
512	(FSG 8)-H5-Alf-Tim	512-(FSG 8)-H5-Alf-Tim	Alfalfa	Medicago sativa
512	(FSG 8)-H5-Alf-Tim	512-(FSG 8)-H5-Alf-Tim	Timothy	Phleum pratense
512	(FSG 9)-H6-Alf-SB-Tim	512-(FSG 9)-H6-Alf-SB-Tim	Alfalfa	Medicago sativa
512	(FSG 9)-H6-Alf-SB-Tim	512-(FSG 9)-H6-Alf-SB-Tim	Smooth Bromegrass	Bromus inermis
512	(FSG 9)-H6-Alf-SB-Tim	512-(FSG 9)-H6-Alf-SB-Tim	Timothy	Phleum pratense
512	(FSG 1-9)-H7-Switch	512-(FSG 1-9)-H7-Switch	Switchgrass	Panicum virgatum
512	(FSG 1-9)-H8-BB	512-(FSG 1-9)-H8-BB	Big Bluestem	Andropogon gerardii
512	(FSG 1-9)-H9-Indian	512-(FSG 1-9)-H9-Indian	Indiangrass	Sorghastrum nutans
512	(FSG 1)-PP1-Aclover-Mfesc	512-(FSG 1)-PP1-Aclover-Mfesc	Alsike Clover	Trifolium hybridum
512	(FSG 1)-PP1-Aclover-Mfesc	512-(FSG 1)-PP1-Aclover-Mfesc	Meadow Fescue	Schedonorus pratensis
512	(FSG 1)-PP1A-Aclover-Orc	512-(FSG 1)-PP1A-Aclover-Orc	Alsike Clover	Trifolium hybridum
512	(FSG 1)-PP1A-Aclover-Orc	512-(FSG 1)-PP1A-Aclover-Orc	Orchardgrass	Dactylis glomerata L.
512	(FSG 1)-PP1B-Aclover-Tim	512-(FSG 1)-PP1B-Aclover-Tim	Alsike Clover	Trifolium hybridum
512	(FSG 1)-PP1B-Aclover-Tim	512-(FSG 1)-PP1B-Aclover-Tim	Timothy	Phleum pratense
512	(FSG 2-3)-PP2-Alf-SB-Orc	512-(FSG 2-3)-PP2-Alf-SB-Orc	Alfalfa	Medicago sativa
512	(FSG 2-3)-PP2-Alf-SB-Orc	512-(FSG 2-3)-PP2-Alf-SB-Orc	Smooth Bromegrass	Bromus inermis
512	(FSG 2-3)-PP2-Alf-SB-Orc	512-(FSG 2-3)-PP2-Alf-SB-Orc	Orchardgrass	Dactylis glomerata L.
512	(FSG 4)-PP4-Aclover-Mfesc-Tim	512-(FSG 4)-PP4-Aclover-Mfesc-Tim	Alsike Clover	Trifolium hybridum
512	(FSG 4)-PP4-Aclover-Mfesc-Tim	512-(FSG 4)-PP4-Aclover-Mfesc-Tim	Meadow Fescue	Schedonorus pratensis
512	(FSG 4)-PP4-Aclover-Mfesc-Tim	512-(FSG 4)-PP4-Aclover-Mfesc-Tim	Timothy	Phleum pratense
512	(FSG 4)-PP4B-Btrefoil-Mfesc-Tim	512-(FSG 4)-PP4B-Btrefoil-Mfesc-Tim	Birdsfoot Trefoil	Lotus corniculatus
512	(FSG 4)-PP4B-Btrefoil-Mfesc-Tim	512-(FSG 4)-PP4B-Btrefoil-Mfesc-Tim	Meadow Fescue	Schedonorus pratensis
512	(FSG 4)-PP4B-Btrefoil-Mfesc-Tim	512-(FSG 4)-PP4B-Btrefoil-Mfesc-Tim	Timothy	Phleum pratense
512	(FSG 5)-PP5-RC-LadC-Orc-Mfesc	512-(FSG 5)-PP5-RC-LadC-Orc-Mfesc	Red Clover	Trifolium pratense
512	(FSG 5)-PP5-RC-LadC-Orc-Mfesc	512-(FSG 5)-PP5-RC-LadC-Orc-Mfesc	White Ladino Clover	Trifolium repens
512	(FSG 5)-PP5-RC-LadC-Orc-Mfesc	512-(FSG 5)-PP5-RC-LadC-Orc-Mfesc	Orchardgrass	Dactylis glomerata L.
512	(FSG 5)-PP5-RC-LadC-Orc-Mfesc	512-(FSG 5)-PP5-RC-LadC-Orc-Mfesc	Meadow Fescue	Schedonorus pratensis
512	(FSG 5)-PP5B-RC-LadC-Festu-Mfesc	512-(FSG 5)-PP5B-RC-LadC-Festu-Mfesc	Red Clover	Trifolium pratense
512	(FSG 5)-PP5B-RC-LadC-Festu-Mfesc	512-(FSG 5)-PP5B-RC-LadC-Festu-Mfesc	White Ladino Clover	Trifolium repens
512	(FSG 5)-PP5B-RC-LadC-Festu-Mfesc	512-(FSG 5)-PP5B-RC-LadC-Festu-Mfesc	Festulolium	Festuca x Lolium
512	(FSG 5)-PP5B-RC-LadC-Festu-Mfesc	512-(FSG 5)-PP5B-RC-LadC-Festu-Mfesc	Meadow Fescue	Schedonorus pratensis
512	(FSG 6)-PP6-RC-Orc-SB	512-(FSG 6)-PP6-RC-Orc-SB	Red Clover	Trifolium pratense
512	(FSG 6)-PP6-RC-Orc-SB	512-(FSG 6)-PP6-RC-Orc-SB	Orchardgrass	Dactylis glomerata L.
512	(FSG 6)-PP6-RC-Orc-SB	512-(FSG 6)-PP6-RC-Orc-SB	Smooth Bromegrass	Bromus inermis
512	(FSG 7)-PP7-Aclover-Mfesc-Tim-Rtop	512-(FSG 7)-PP7-Aclover-Mfesc-Tim-Rtop	Alsike Clover	Trifolium hybridum
512	(FSG 7)-PP7-Aclover-Mfesc-Tim-Rtop	512-(FSG 7)-PP7-Aclover-Mfesc-Tim-Rtop	Meadow Fescue	Schedonorus pratensis
512	(FSG 7)-PP7-Aclover-Mfesc-Tim-Rtop	512-(FSG 7)-PP7-Aclover-Mfesc-Tim-Rtop	Timothy	Phleum pratense
512	(FSG 7)-PP7-Aclover-Mfesc-Tim-Rtop	512-(FSG 7)-PP7-Aclover-Mfesc-Tim-Rtop	Redtop	Agrostis gigantea
512	(FSG 7)-PP7B-Btrefoil-Mfesc-Tim-Rtop	512-(FSG 7)-PP7B-Btrefoil-Mfesc-Tim-Rtop	Birdsfoot Trefoil	Lotus corniculatus
512	(FSG 7)-PP7B-Btrefoil-Mfesc-Tim-Rtop	512-(FSG 7)-PP7B-Btrefoil-Mfesc-Tim-Rtop	Meadow Fescue	Schedonorus pratensis
512	(FSG 7)-PP7B-Btrefoil-Mfesc-Tim-Rtop	512-(FSG 7)-PP7B-Btrefoil-Mfesc-Tim-Rtop	Timothy	Phleum pratense
512	(FSG 7)-PP7B-Btrefoil-Mfesc-Tim-Rtop	512-(FSG 7)-PP7B-Btrefoil-Mfesc-Tim-Rtop	Redtop	Agrostis gigantea
512	(FSG 8)-PP8-LadC-Orc-Mfesc	512-(FSG 8)-PP8-LadC-Orc-Mfesc	White Ladino Clover	Trifolium repens
512	(FSG 8)-PP8-LadC-Orc-Mfesc	512-(FSG 8)-PP8-LadC-Orc-Mfesc	Orchardgrass	Dactylis glomerata L.
512	(FSG 8)-PP8-LadC-Orc-Mfesc	512-(FSG 8)-PP8-LadC-Orc-Mfesc	Meadow Fescue	Schedonorus pratensis
512	(FSG 8)-PP8B-LadC-Festu-Mfesc	512-(FSG 8)-PP8B-LadC-Festu-Mfesc	White Ladino Clover	Trifolium repens
512	(FSG 8)-PP8B-LadC-Festu-Mfesc	512-(FSG 8)-PP8B-LadC-Festu-Mfesc	Festulolium	Festuca x Lolium
512	(FSG 8)-PP8B-LadC-Festu-Mfesc	512-(FSG 8)-PP8B-LadC-Festu-Mfesc	Meadow Fescue	Schedonorus pratensis
512	(FSG 9)-PP9-RC-Orc-Mfesc	512-(FSG 9)-PP9-RC-Orc-Mfesc	Red Clover	Trifolium pratense
512	(FSG 9)-PP9-RC-Orc-Mfesc	512-(FSG 9)-PP9-RC-Orc-Mfesc	Orchardgrass	Dactylis glomerata L.
512	(FSG 9)-PP9-RC-Orc-Mfesc	512-(FSG 9)-PP9-RC-Orc-Mfesc	Meadow Fescue	Schedonorus pratensis
512	(FSG 1,4,7)-PHS1-KB-Mfesc-LadC	512-(FSG 1,4,7)-PHS1-KB-Mfesc-LadC	Kentucky Bluegrass	Poa pratensis
512	(FSG 1,4,7)-PHS1-KB-Mfesc-LadC	512-(FSG 1,4,7)-PHS1-KB-Mfesc-LadC	Meadow Fescue	Schedonorus pratensis
512	(FSG 1,4,7)-PHS1-KB-Mfesc-LadC	512-(FSG 1,4,7)-PHS1-KB-Mfesc-LadC	White Ladino Clover	Trifolium repens
512	(FSG 1,4,7)-PHS1A-KB-Mfesc-Btrefoil	512-(FSG 1,4,7)-PHS1A-KB-Mfesc-Btrefoil	Kentucky Bluegrass	Poa pratensis
512	(FSG 1,4,7)-PHS1A-KB-Mfesc-Btrefoil	512-(FSG 1,4,7)-PHS1A-KB-Mfesc-Btrefoil	Meadow Fescue	Schedonorus pratensis
512	(FSG 1,4,7)-PHS1A-KB-Mfesc-Btrefoil	512-(FSG 1,4,7)-PHS1A-KB-Mfesc-Btrefoil	Birdsfoot Trefoil	Lotus corniculatus
512	(FSG 5-8)-PHS2-KB-Festu-LadC	512-(FSG 5-8)-PHS2-KB-Festu-LadC	Kentucky Bluegrass	Poa pratensis

512	(FSG 5-8)-PHS2-KB-Festu-LadC	512-(FSG 5-8)-PHS2-KB-Festu-LadC	Festulolium	Festuca x Lolium
512	(FSG 5-8)-PHS2-KB-Festu-LadC	512-(FSG 5-8)-PHS2-KB-Festu-LadC	White Ladino Clover	Trifolium repens
512	(FSG 5-8)-PHS2A-KB-Prye-LadC	512-(FSG 5-8)-PHS2A-KB-Prye-LadC	Kentucky Bluegrass	Poa pratensis
512	(FSG 5-8)-PHS2A-KB-Prye-LadC	512-(FSG 5-8)-PHS2A-KB-Prye-LadC	Perennial Ryegrass	Lolium perenne
512	(FSG 5-8)-PHS2A-KB-Prye-LadC	512-(FSG 5-8)-PHS2A-KB-Prye-LadC	White Ladino Clover	Trifolium repens
512	(FSG 2-3)-PHS3-Alf-Orc	512-(FSG 2-3)-PHS3-Alf-Orc	Alfalfa	Medicago sativa
512	(FSG 2-3)-PHS3-Alf-Orc	512-(FSG 2-3)-PHS3-Alf-Orc	Orchardgrass	Dactylis glomerata L.

REVISION DATE: 12/14/2012

PLS (oz./A)	PLS (lbs./A)	Seeds/Square Foot	Type	Intro / Native	Poll. (Y/N)		Mix No.	FSG-MIX #	Mix Components	FSG
				I	Y					
				N	Y					
96.0	6	36	Legume	I	N		H1	FSG 1	RC-Tfesc-Tim	1
96.0	6	32	Grass	I	N		H1	FSG 1	RC-Tfesc-Tim	1
16.0	1	28	Grass	I	N		H1	FSG 1	RC-Tfesc-Tim	1
192.0	12	60	Legume	I	N		H2	FSG 2	Alf	2
160.0	10	50	Legume	I	N		H3	FSG 2,3,5,6	Alf-SB	2,3,5,6
64.0	4	12	Grass	I	N		H3	FSG 2,3,5,6	Alf-SB	2,3,5,6
48.0	3	48	Legume	I	N		H4	FSG 4,7	Aclover-Tfesc-Tim	4,7
96.0	6	32	Grass	I	N		H4	FSG 4,7	Aclover-Tfesc-Tim	4,7
16.0	1	28	Grass	I	N		H4	FSG 4,7	Aclover-Tfesc-Tim	4,7
128.0	8	40	Legume	I	N		H5	FSG 8	Alf-Tim	8
32.0	2	56	Grass	I	N		H5	FSG 8	Alf-Tim	8
128.0	8	40	Legume	I	N		H6	FSG 9	Alf-SB-Tim	9
64.0	4	12	Grass	I	N		H6	FSG 9	Alf-SB-Tim	9
16.0	1	28	Grass	I	N		H6	FSG 9	Alf-SB-Tim	9
112.0	7	63	Grass	N	N		H7	FSG 1-9	Switch	1-9
176.0	11	42	Grass	N	N		H8	FSG 1-9	BB	1-9
160.0	10	44	Grass	N	N		H9	FSG 1-9	Indian	1-9
32.0	2	32	Legume	I	N		PP1	FSG 1	Aclover-Mfesc	1
96.0	6	30	Grass	I	N		PP1	FSG 1	Aclover-Mfesc	1
32.0	2	32	Legume	I	N		PP1A	FSG 1	Aclover-Orc	1
48.0	3	48	Grass	I	N		PP1A	FSG 1	Aclover-Orc	1
32.0	2	32	Legume	I	N		PP1B	FSG 1	Aclover-Tim	1
24.0	1.5	42	Grass	I	N		PP1B	FSG 1	Aclover-Tim	1
96.0	6	30	Legume	I	N		PP2	FSG 2-3	Alf-SB-Orc	2-3
64.0	4	12	Grass	I	N		PP2	FSG 2-3	Alf-SB-Orc	2-3
64.0	4	64	Grass	I	N		PP2	FSG 2-3	Alf-SB-Orc	2-3
32.0	2	32	Legume	I	N		PP4	FSG 4	Aclover-Mfesc-Tim	4
96.0	6	30	Grass	I	N		PP4	FSG 4	Aclover-Mfesc-Tim	4
16.0	1	28	Grass	I	N		PP4	FSG 4	Aclover-Mfesc-Tim	4
48.0	3	26	Legume	I	N		PP4B	FSG 4	Btrefoil-Mfesc-Tim	4
96.0	6	30	Grass	I	N		PP4B	FSG 4	Btrefoil-Mfesc-Tim	4
16.0	1	28	Grass	I	N		PP4B	FSG 4	Btrefoil-Mfesc-Tim	4
80.0	5	30	Legume	I	N		PP5	FSG 5	RC-LadC-Orc-Mfesc	5
16.0	1	20	Legume	I	N		PP5	FSG 5	RC-LadC-Orc-Mfesc	5
48.0	3	48	Grass	I	N		PP5	FSG 5	RC-LadC-Orc-Mfesc	5
96.0	6	30	Grass	I	N		PP5	FSG 5	RC-LadC-Orc-Mfesc	5
80.0	5	30	Legume	I	N		PP5B	FSG 5	RC-LadC-Festu-Mfesc	5
16.0	1	20	Legume	I	N		PP5B	FSG 5	RC-LadC-Festu-Mfesc	5
112.0	7	36	Grass	I	N		PP5B	FSG 5	RC-LadC-Festu-Mfesc	5
96.0	6	30	Grass	I	N		PP5B	FSG 5	RC-LadC-Festu-Mfesc	5
80.0	5	30	Legume	I	N		PP6	FSG 6	RC-Orc-SB	6
64.0	4	64	Grass	I	N		PP6	FSG 6	RC-Orc-SB	6
64.0	4	12	Grass	I	N		PP6	FSG 6	RC-Orc-SB	6
32.0	2	32	Legume	I	N		PP7	FSG 7	Aclover-Mfesc-Tim-Rtop	7
96.0	6	30	Grass	I	N		PP7	FSG 7	Aclover-Mfesc-Tim-Rtop	7
16.0	1	28	Grass	I	N		PP7	FSG 7	Aclover-Mfesc-Tim-Rtop	7
16.0	1	114	Grass	I	N		PP7	FSG 7	Aclover-Mfesc-Tim-Rtop	7
48.0	3	26	Legume	I	N		PP7B	FSG 7	Btrefoil-Mfesc-Tim-Rtop	7
96.0	6	30	Grass	I	N		PP7B	FSG 7	Btrefoil-Mfesc-Tim-Rtop	7
16.0	1	28	Grass	I	N		PP7B	FSG 7	Btrefoil-Mfesc-Tim-Rtop	7
16.0	1	114	Grass	I	N		PP7B	FSG 7	Btrefoil-Mfesc-Tim-Rtop	7
16.0	1	20	Legume	I	N		PP8	FSG 8	LadC-Orc-Mfesc	8
48.0	3	48	Grass	I	N		PP8	FSG 8	LadC-Orc-Mfesc	8
96.0	6	30	Grass	I	N		PP8	FSG 8	LadC-Orc-Mfesc	8
16.0	1	20	Legume	I	N		PP8B	FSG 8	LadC-Festu-Mfesc	8
112.0	7	36	Grass	I	N		PP8B	FSG 8	LadC-Festu-Mfesc	8
96.0	6	30	Grass	I	N		PP8B	FSG 8	LadC-Festu-Mfesc	8
80.0	5	30	Legume	I	N		PP9	FSG 9	RC-Orc-Mfesc	9
48.0	3	48	Grass	I	N		PP9	FSG 9	RC-Orc-Mfesc	9
96.0	6	30	Grass	I	N		PP9	FSG 9	RC-Orc-Mfesc	9
64.0	4	200	Grass	I	N		PHS1	FSG 1,4,7	KB-Mfesc-LadC	1,4,7
64.0	4	20	Grass	I	N		PHS1	FSG 1,4,7	KB-Mfesc-LadC	1,4,7
16.0	1	20	Legume	I	N		PHS1	FSG 1,4,7	KB-Mfesc-LadC	1,4,7
64.0	4	200	Grass	I	N		PHS1A	FSG 1,4,7	KB-Mfesc-Btrefoil	1,4,7
64.0	4	20	Grass	I	N		PHS1A	FSG 1,4,7	KB-Mfesc-Btrefoil	1,4,7
48.0	3	26	Legume	I	N		PHS1A	FSG 1,4,7	KB-Mfesc-Btrefoil	1,4,7
32.0	2	100	Grass	I	N		PHS2	FSG 5-8	KB-Festu-LadC	5-8

112.0	7	35	Grass	I	N		PHS2	FSG 5-8	KB-Festu-LadC	5-8
16.0	1	20	Legume	I	N		PHS2	FSG 5-8	KB-Festu-LadC	5-8
32.0	2	100	Grass	I	N		PHS2A	FSG 5-8	KB-Prye-LadC	5-8
112.0	7	35	Grass	I	N		PHS2A	FSG 5-8	KB-Prye-LadC	5-8
16.0	1	20	Legume	I	N		PHS2A	FSG 5-8	KB-Prye-LadC	5-8
96.0	6	30	Legume	I	N		PHS3	FSG 2-3	Alf-Orc	2-3
48.0	3	48	Grass	I	N		PHS3	FSG 2-3	Alf-Orc	2-3

CRP MIXES

REVISION DATE: 11/30/2020

criteria: 0

STD	Mix #	std-mix	Common Name	Scientific Name	PLS (oz./A)	PLS (lbs./A)	Seeds/Square Foot	Type	Intro / Native	Poll. (Y/N)	Mix No.	MR	Mix Components
		LEAVE THIS ROW AS IS							I	Y			
		LEAVE THIS ROW AS IS							N	Y			
1	CP1-1-Alf-SB-Tim	1-CP1-1-Alf-SB-Tim	Alfalfa	Medicago sativa	96.00	6		Legume	I	N	CP1-1		Alf-SB-Tim
1	CP1-1-Alf-SB-Tim	1-CP1-1-Alf-SB-Tim	Smooth Bromegrass	Bromus inermis	48.00	3		Grass	I	N	CP1-1		Alf-SB-Tim
1	CP1-1-Alf-SB-Tim	1-CP1-1-Alf-SB-Tim	Timothy	Phleum pratense	32.00	2		Grass	I	N	CP1-1		Alf-SB-Tim
1	CP1-2-RC-Orc-Tim	1-CP1-2-RC-Orc-Tim	Red Clover	Trifolium pratense	80.00	5		Legume	I	N	CP1-2		RC-Orc-Tim
1	CP1-2-RC-Orc-Tim	1-CP1-2-RC-Orc-Tim	Orchardgrass	Dactylis glomerata L.	48.00	3		Grass	I	N	CP1-2		RC-Orc-Tim
1	CP1-2-RC-Orc-Tim	1-CP1-2-RC-Orc-Tim	Timothy	Phleum pratense	32.00	2		Grass	I	N	CP1-2		RC-Orc-Tim
1	CP1-3-Alf-Orc-Tim	1-CP1-3-Alf-Orc-Tim	Alfalfa	Medicago sativa	96.00	6		Legume	I	N	CP1-3		Alf-Orc-Tim
1	CP1-3-Alf-Orc-Tim	1-CP1-3-Alf-Orc-Tim	Orchardgrass	Dactylis glomerata L.	48.00	3		Grass	I	N	CP1-3		Alf-Orc-Tim
1	CP1-3-Alf-Orc-Tim	1-CP1-3-Alf-Orc-Tim	Timothy	Phleum pratense	32.00	2		Grass	I	N	CP1-3		Alf-Orc-Tim
1	CP1-4-RC-SB-Tim	1-CP1-4-RC-SB-Tim	Red Clover	Trifolium pratense	80.00	5		Legume	I	N	CP1-4		RC-SB-Tim
1	CP1-4-RC-SB-Tim	1-CP1-4-RC-SB-Tim	Smooth Bromegrass	Bromus inermis	48.00	3		Grass	I	N	CP1-4		RC-SB-Tim
1	CP1-4-RC-SB-Tim	1-CP1-4-RC-SB-Tim	Timothy	Phleum pratense	32.00	2		Grass	I	N	CP1-4		RC-SB-Tim
1	CP1-5-RC-SB-Tim-Orc	1-CP1-5-RC-SB-Tim-Orc	Red Clover	Trifolium pratense	80.00	5		Legume	I	N	CP1-5		RC-SB-Tim-Orc
1	CP1-5-RC-SB-Tim-Orc	1-CP1-5-RC-SB-Tim-Orc	Smooth Bromegrass	Bromus inermis	32.00	2		Grass	I	N	CP1-5		RC-SB-Tim-Orc
1	CP1-5-RC-SB-Tim-Orc	1-CP1-5-RC-SB-Tim-Orc	Timothy	Phleum pratense	32.00	2		Grass	I	N	CP1-5		RC-SB-Tim-Orc
1	CP1-5-RC-SB-Tim-Orc	1-CP1-5-RC-SB-Tim-Orc	Orchardgrass	Dactylis glomerata L.	16.00	1		Grass	I	N	CP1-5		RC-SB-Tim-Orc
1	CP1-6-RC-Tim-Orc-Rtop-LadC	1-CP1-6-RC-Tim-Orc-Rtop-LadC	Red Clover	Trifolium pratense	80.00	5		Legume	I	N	CP1-6		RC-Tim-Orc-Rtop-LadC
1	CP1-6-RC-Tim-Orc-Rtop-LadC	1-CP1-6-RC-Tim-Orc-Rtop-LadC	Timothy	Phleum pratense	32.00	2		Grass	I	N	CP1-6		RC-Tim-Orc-Rtop-LadC
1	CP1-6-RC-Tim-Orc-Rtop-LadC	1-CP1-6-RC-Tim-Orc-Rtop-LadC	Orchardgrass	Dactylis glomerata L.	16.00	1		Grass	I	N	CP1-6		RC-Tim-Orc-Rtop-LadC
1	CP1-6-RC-Tim-Orc-Rtop-LadC	1-CP1-6-RC-Tim-Orc-Rtop-LadC	Redtop	Agrostis gigantea	16.00	1		Grass	I	N	CP1-6		RC-Tim-Orc-Rtop-LadC
1	CP1-6-RC-Tim-Orc-Rtop-LadC	1-CP1-6-RC-Tim-Orc-Rtop-LadC	White Ladino Clover	Trifolium repens	8.00	0.5		Legume	I	N	CP1-6		RC-Tim-Orc-Rtop-LadC
1	CP1-7-Alf-Rtop-Tim-Orc	1-CP1-7-Alf-Rtop-Tim-Orc	Alfalfa	Medicago sativa	96.00	6		Legume	I	N	CP1-7		Alf-Rtop-Tim-Orc
1	CP1-7-Alf-Rtop-Tim-Orc	1-CP1-7-Alf-Rtop-Tim-Orc	Redtop	Agrostis gigantea	32.00	2		Grass	I	N	CP1-7		Alf-Rtop-Tim-Orc
1	CP1-7-Alf-Rtop-Tim-Orc	1-CP1-7-Alf-Rtop-Tim-Orc	Timothy	Phleum pratense	32.00	2		Grass	I	N	CP1-7		Alf-Rtop-Tim-Orc
1	CP1-7-Alf-Rtop-Tim-Orc	1-CP1-7-Alf-Rtop-Tim-Orc	Orchardgrass	Dactylis glomerata L.	16.00	1		Grass	I	N	CP1-7		Alf-Rtop-Tim-Orc
1	CP1-8-RC-KB-Orc-Rtop	1-CP1-8-RC-KB-Orc-Rtop	Red Clover	Trifolium pratense	80.00	5		Legume	I	N	CP1-8		RC-KB-Orc-Rtop
1	CP1-8-RC-KB-Orc-Rtop	1-CP1-8-RC-KB-Orc-Rtop	Kentucky Bluegrass	Poa pratensis	32.00	2		Grass	I	N	CP1-8		RC-KB-Orc-Rtop
1	CP1-8-RC-KB-Orc-Rtop	1-CP1-8-RC-KB-Orc-Rtop	Orchardgrass	Dactylis glomerata L.	16.00	1		Grass	I	N	CP1-8		RC-KB-Orc-Rtop
1	CP1-8-RC-KB-Orc-Rtop	1-CP1-8-RC-KB-Orc-Rtop	Redtop	Agrostis gigantea	16.00	1		Grass	I	N	CP1-8		RC-KB-Orc-Rtop
2	CP2_1-BB-Switch-Cmilkvetch-Besus-Ycone	2-CP2_1-BB-Switch-Cmilkvetch-Besus-Ycone	Big Bluestem	Andropogon gerardii	48.00	3		Grass	N	N	CP2_1		BB-Switch-Cmilkvetch-Besus-Ycone
2	CP2_1-BB-Switch-Cmilkvetch-Besus-Ycone	2-CP2_1-BB-Switch-Cmilkvetch-Besus-Ycone	Switchgrass	Panicum virgatum	16.00	1		Grass	N	N	CP2_1		BB-Switch-Cmilkvetch-Besus-Ycone
2	CP2_1-BB-Switch-Cmilkvetch-Besus-Ycone	2-CP2_1-BB-Switch-Cmilkvetch-Besus-Ycone	Canada Milkvetch	Astragalus canadensis	2.00	0.125		Legume	N	N	CP2_1		BB-Switch-Cmilkvetch-Besus-Ycone
2	CP2_1-BB-Switch-Cmilkvetch-Besus-Ycone	2-CP2_1-BB-Switch-Cmilkvetch-Besus-Ycone	Black-eyed Susan	Rudbeckia hirta	1.00	0.0625		Forb	N	N	CP2_1		BB-Switch-Cmilkvetch-Besus-Ycone
2	CP2_1-BB-Switch-Cmilkvetch-Besus-Ycone	2-CP2_1-BB-Switch-Cmilkvetch-Besus-Ycone	Yellow Coneflower	Ratibida pinnata	1.00	0.0625		Forb	N	N	CP2_1		BB-Switch-Cmilkvetch-Besus-Ycone
2	CP2_2-BB-Switch-Ttrefoil-Besus-Ycone	2-CP2_2-BB-Switch-Ttrefoil-Besus-Ycone	Big Bluestem	Andropogon gerardii	48.00	3		Grass	N	N	CP2_2		BB-Switch-Ttrefoil-Besus-Ycone
2	CP2_2-BB-Switch-Ttrefoil-Besus-Ycone	2-CP2_2-BB-Switch-Ttrefoil-Besus-Ycone	Switchgrass	Panicum virgatum	16.00	1		Grass	N	N	CP2_2		BB-Switch-Ttrefoil-Besus-Ycone
2	CP2_2-BB-Switch-Ttrefoil-Besus-Ycone	2-CP2_2-BB-Switch-Ttrefoil-Besus-Ycone	Showy Tick Trefoil	Desmodium canadense	6.00	0.375		Legume	N	N	CP2_2		BB-Switch-Ttrefoil-Besus-Ycone
2	CP2_2-BB-Switch-Ttrefoil-Besus-Ycone	2-CP2_2-BB-Switch-Ttrefoil-Besus-Ycone	Black-eyed Susan	Rudbeckia hirta	1.00	0.0625		Forb	N	N	CP2_2		BB-Switch-Ttrefoil-Besus-Ycone
2	CP2_2-BB-Switch-Ttrefoil-Besus-Ycone	2-CP2_2-BB-Switch-Ttrefoil-Besus-Ycone	Yellow Coneflower	Ratibida pinnata	1.00	0.0625		Forb	N	N	CP2_2		BB-Switch-Ttrefoil-Besus-Ycone
2	CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycon	2-CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-Be	Little Bluestem	Schizachyrium scoparium	24.00	1.5		Grass	N	N	CP2_3		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
2	CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycon	2-CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-Be	Sideoats Grama	Bouteloua curtipendula	16.00	1		Grass	N	N	CP2_3		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
2	CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycon	2-CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-Be	Big Bluestem	Andropogon gerardii	8.00	0.5		Grass	N	N	CP2_3		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
2	CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycon	2-CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-Be	Indiangrass	Sorghastrum nutans	8.00	0.5		Grass	N	N	CP2_3		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone

2	CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycon	2-CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-Be	Switchgrass	Panicum virgatum	8.00	0.5		Grass	N	N	CP2_3		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
2	CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycon	2-CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-Be	Purple Prairie Clover	Dalea purpurea	2.00	0.125		Legume	N	N	CP2_3		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
2	CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycon	2-CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-Be	Bergamot	Monarda fistulosa	1.00	0.0625		Forb	N	N	CP2_3		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
2	CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycon	2-CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-Be	Yellow Coneflower	Ratibida pinnata	1.00	0.0625		Forb	N	N	CP2_3		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
2	CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone	2-CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus-Y	Little Bluestem	Schizachyrium scoparium	20.00	1.25		Grass	N	N	CP2_4		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
2	CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone	2-CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus-Y	Canada Wildrye	Elymus canadensis	16.00	1		Grass	N	N	CP2_4		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
2	CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone	2-CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus-Y	Indiangrass	Sorghastrum nutans	16.00	1		Grass	N	N	CP2_4		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
2	CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone	2-CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus-Y	Big Bluestem	Andropogon gerardii	8.00	0.5		Grass	N	N	CP2_4		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
2	CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone	2-CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus-Y	Switchgrass	Panicum virgatum	8.00	0.5		Grass	N	N	CP2_4		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
2	CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone	2-CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus-Y	Bergamot	Monarda fistulosa	1.00	0.0625		Forb	N	N	CP2_4		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
2	CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone	2-CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus-Y	Black-eyed Susan	Rudbeckia hirta	1.00	0.0625		Forb	N	N	CP2_4		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
2	CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone	2-CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus-Y	Yellow Coneflower	Ratibida pinnata	1.00	0.0625		Forb	N	N	CP2_4		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
2	CP2_5-BB-Sgrama-Indian-PPclover-Sgrod-Ycone	2-CP2_5-BB-Sgrama-Indian-PPclover-Sgrod-Ycone	Big Bluestem	Andropogon gerardii	24.00	1.5		Grass	N	N	CP2_5		BB-Sgrama-Indian-PPclover-Sgrod-Ycone
2	CP2_5-BB-Sgrama-Indian-PPclover-Sgrod-Ycone	2-CP2_5-BB-Sgrama-Indian-PPclover-Sgrod-Ycone	Sideoats Grama	Bouteloua curtipendula	24.00	1.5		Grass	N	N	CP2_5		BB-Sgrama-Indian-PPclover-Sgrod-Ycone
2	CP2_5-BB-Sgrama-Indian-PPclover-Sgrod-Ycone	2-CP2_5-BB-Sgrama-Indian-PPclover-Sgrod-Ycone	Indiangrass	Sorghastrum nutans	8.00	0.5		Grass	N	N	CP2_5		BB-Sgrama-Indian-PPclover-Sgrod-Ycone
2	CP2_5-BB-Sgrama-Indian-PPclover-Sgrod-Ycone	2-CP2_5-BB-Sgrama-Indian-PPclover-Sgrod-Ycone	Purple Prairie Clover	Dalea purpurea	2.00	0.125		Legume	N	N	CP2_5		BB-Sgrama-Indian-PPclover-Sgrod-Ycone
2	CP2_5-BB-Sgrama-Indian-PPclover-Sgrod-Ycone	2-CP2_5-BB-Sgrama-Indian-PPclover-Sgrod-Ycone	Stiff Goldenrod	Oligoneuron rigidum	1.00	0.0625		Forb	N	N	CP2_5		BB-Sgrama-Indian-PPclover-Sgrod-Ycone
2	CP2_5-BB-Sgrama-Indian-PPclover-Sgrod-Ycone	2-CP2_5-BB-Sgrama-Indian-PPclover-Sgrod-Ycone	Yellow Coneflower	Ratibida pinnata	1.00	0.0625		Forb	N	N	CP2_5		BB-Sgrama-Indian-PPclover-Sgrod-Ycone
2	CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciro	2-CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bverv	Big Bluestem	Andropogon gerardii	16.00	1		Grass	N	N	CP2_6		BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
2	CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciro	2-CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bverv	Canada Wildrye	Elymus canadensis	16.00	1		Grass	N	N	CP2_6		BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
2	CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciro	2-CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bverv	Indiangrass	Sorghastrum nutans	16.00	1		Grass	N	N	CP2_6		BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
2	CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciro	2-CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bverv	Switchgrass	Panicum virgatum	16.00	1		Grass	N	N	CP2_6		BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
2	CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciro	2-CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bverv	Prairie Cordgrass	Spartina pectinata	8.00	0.5		Grass	N	N	CP2_6		BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
2	CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciro	2-CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bverv	Cupplant	Silphium perfoliatum	2.00	0.125		Forb	N	N	CP2_6		BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
2	CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciro	2-CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bverv	Blue Vervain	Verbena hastata	1.00	0.0625		Forb	N	N	CP2_6		BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
2	CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciro	2-CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bverv	Common Ironweed	Vernonia fasciculata	1.00	0.0625		Forb	N	N	CP2_6		BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
2	CP2_7-Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone	2-CP2_7-Switch-BB-Cwrye-Pcord-Berg-NEaster-Yc	Switchgrass	Panicum virgatum	32.00	2		Grass	N	N	CP2_7		Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
2	CP2_7-Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone	2-CP2_7-Switch-BB-Cwrye-Pcord-Berg-NEaster-Yc	Big Bluestem	Andropogon gerardii	16.00	1		Grass	N	N	CP2_7		Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
2	CP2_7-Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone	2-CP2_7-Switch-BB-Cwrye-Pcord-Berg-NEaster-Yc	Canada Wildrye	Elymus canadensis	16.00	1		Grass	N	N	CP2_7		Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
2	CP2_7-Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone	2-CP2_7-Switch-BB-Cwrye-Pcord-Berg-NEaster-Yc	Prairie Cordgrass	Spartina pectinata	4.00	0.25		Grass	N	N	CP2_7		Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
2	CP2_7-Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone	2-CP2_7-Switch-BB-Cwrye-Pcord-Berg-NEaster-Yc	Bergamot	Monarda fistulosa	1.00	0.0625		Forb	N	N	CP2_7		Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
2	CP2_7-Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone	2-CP2_7-Switch-BB-Cwrye-Pcord-Berg-NEaster-Yc	New England Aster	Symphyotrichum novae-a	1.00	0.0625		Forb	N	N	CP2_7		Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
2	CP2_7-Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone	2-CP2_7-Switch-BB-Cwrye-Pcord-Berg-NEaster-Yc	Yellow Coneflower	Ratibida pinnata	1.00	0.0625		Forb	N	N	CP2_7		Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
4	CP4D-1-RC-SB-Tim-Orc-RC	4-CP4D-1-RC-SB-Tim-Orc-RC	Red Clover	Trifolium pratense	96.00	6		Legume	I	N	CP4D-1		RC-SB-Tim-Orc-RC
4	CP4D-1-RC-SB-Tim-Orc-RC	4-CP4D-1-RC-SB-Tim-Orc-RC	Smooth Bromegrass	Bromus inermis	32.00	2		Grass	I	N	CP4D-1		RC-SB-Tim-Orc-RC
4	CP4D-1-RC-SB-Tim-Orc-RC	4-CP4D-1-RC-SB-Tim-Orc-RC	Timothy	Phleum pratense	32.00	2		Grass	I	N	CP4D-1		RC-SB-Tim-Orc-RC
4	CP4D-1-RC-SB-Tim-Orc-RC	4-CP4D-1-RC-SB-Tim-Orc-RC	Orchardgrass	Dactylis glomerata L.	8.00	0.5		Grass	I	N	CP4D-1		RC-SB-Tim-Orc-RC
4	CP4D-1-RC-SB-Tim-Orc-RC	4-CP4D-1-RC-SB-Tim-Orc-RC	Red Clover	Trifolium pratense	8.00	0.5		Legume	I	N	CP4D-1		RC-SB-Tim-Orc-RC
4	CP4D-2-Alf-SB-Tim-Orc	4-CP4D-2-Alf-SB-Tim-Orc	Alfalfa	Medicago sativa	112.00	7		Legume	I	N	CP4D-2		Alf-SB-Tim-Orc
4	CP4D-2-Alf-SB-Tim-Orc	4-CP4D-2-Alf-SB-Tim-Orc	Smooth Bromegrass	Bromus inermis	32.00	2		Grass	I	N	CP4D-2		Alf-SB-Tim-Orc
4	CP4D-2-Alf-SB-Tim-Orc	4-CP4D-2-Alf-SB-Tim-Orc	Timothy	Phleum pratense	16.00	1		Grass	I	N	CP4D-2		Alf-SB-Tim-Orc
4	CP4D-2-Alf-SB-Tim-Orc	4-CP4D-2-Alf-SB-Tim-Orc	Orchardgrass	Dactylis glomerata L.	8.00	0.5		Grass	I	N	CP4D-2		Alf-SB-Tim-Orc
4	CP4D-3-RC-Tim-SB-Orc	4-CP4D-3-RC-Tim-SB-Orc	Red Clover	Trifolium pratense	96.00	6		Legume	I	N	CP4D-3		RC-Tim-SB-Orc
4	CP4D-3-RC-Tim-SB-Orc	4-CP4D-3-RC-Tim-SB-Orc	Timothy	Phleum pratense	32.00	2		Grass	I	N	CP4D-3		RC-Tim-SB-Orc
4	CP4D-3-RC-Tim-SB-Orc	4-CP4D-3-RC-Tim-SB-Orc	Smooth Bromegrass	Bromus inermis	32.00	2		Grass	I	N	CP4D-3		RC-Tim-SB-Orc
4	CP4D-3-RC-Tim-SB-Orc	4-CP4D-3-RC-Tim-SB-Orc	Orchardgrass	Dactylis glomerata L.	8.00	0.5		Grass	I	N	CP4D-3		RC-Tim-SB-Orc
4	CP4D-4-RC-Tim-Orc-LadC	4-CP4D-4-RC-Tim-Orc-LadC	Red Clover	Trifolium pratense	96.00	6		Legume	I	N	CP4D-4		RC-Tim-Orc-LadC
4	CP4D-4-RC-Tim-Orc-LadC	4-CP4D-4-RC-Tim-Orc-LadC	Timothy	Phleum pratense	32.00	2		Grass	I	N	CP4D-4		RC-Tim-Orc-LadC
4	CP4D-4-RC-Tim-Orc-LadC	4-CP4D-4-RC-Tim-Orc-LadC	Orchardgrass	Dactylis glomerata L.	16.00	1		Grass	I	N	CP4D-4		RC-Tim-Orc-LadC

4	CP4D-4-RC-Tim-Orc-LadC	4-CP4D-4-RC-Tim-Orc-LadC	White Ladino Clover	Trifolium repens	8.00	0.5		Legume	I	N	CP4D-4		RC-Tim-Orc-LadC
4	CP4D-5-Indian-BB-Switch-Cmilkvetch-Besus-Ycone	4-CP4D-5-Indian-BB-Switch-Cmilkvetch-Besus-Yco	Indiangrass	Sorghastrum nutans	48.00	3		Grass	N	N	CP4D-5		Indian-BB-Switch-Cmilkvetch-Besus-Ycone
4	CP4D-5-Indian-BB-Switch-Cmilkvetch-Besus-Ycone	4-CP4D-5-Indian-BB-Switch-Cmilkvetch-Besus-Yco	Big Bluestem	Andropogon gerardii	16.00	1		Grass	N	N	CP4D-5		Indian-BB-Switch-Cmilkvetch-Besus-Ycone
4	CP4D-5-Indian-BB-Switch-Cmilkvetch-Besus-Ycone	4-CP4D-5-Indian-BB-Switch-Cmilkvetch-Besus-Yco	Switchgrass	Panicum virgatum	16.00	1		Grass	N	N	CP4D-5		Indian-BB-Switch-Cmilkvetch-Besus-Ycone
4	CP4D-5-Indian-BB-Switch-Cmilkvetch-Besus-Ycone	4-CP4D-5-Indian-BB-Switch-Cmilkvetch-Besus-Yco	Canada Milkvetch	Astragalus canadensis	2.00	0.125		Legume	N	N	CP4D-5		Indian-BB-Switch-Cmilkvetch-Besus-Ycone
4	CP4D-5-Indian-BB-Switch-Cmilkvetch-Besus-Ycone	4-CP4D-5-Indian-BB-Switch-Cmilkvetch-Besus-Yco	Black-eyed Susan	Rudbeckia hirta	1.00	0.0625		Forb	N	N	CP4D-5		Indian-BB-Switch-Cmilkvetch-Besus-Ycone
4	CP4D-5-Indian-BB-Switch-Cmilkvetch-Besus-Ycone	4-CP4D-5-Indian-BB-Switch-Cmilkvetch-Besus-Yco	Yellow Coneflower	Ratibida pinnata	1.00	0.0625		Forb	N	N	CP4D-5		Indian-BB-Switch-Cmilkvetch-Besus-Ycone
4	CP4D-6-Indian-BB-Switch-LB-Cmilkvetch-Besus-Ycone	4-CP4D-6-Indian-BB-Switch-LB-Cmilkvetch-Besus-	Indiangrass	Sorghastrum nutans	48.00	3		Grass	N	N	CP4D-6		Indian-BB-Switch-LB-Cmilkvetch-Besus-Ycone
4	CP4D-6-Indian-BB-Switch-LB-Cmilkvetch-Besus-Ycone	4-CP4D-6-Indian-BB-Switch-LB-Cmilkvetch-Besus-	Big Bluestem	Andropogon gerardii	16.00	1		Grass	N	N	CP4D-6		Indian-BB-Switch-LB-Cmilkvetch-Besus-Ycone
4	CP4D-6-Indian-BB-Switch-LB-Cmilkvetch-Besus-Ycone	4-CP4D-6-Indian-BB-Switch-LB-Cmilkvetch-Besus-	Switchgrass	Panicum virgatum	16.00	1		Grass	N	N	CP4D-6		Indian-BB-Switch-LB-Cmilkvetch-Besus-Ycone
4	CP4D-6-Indian-BB-Switch-LB-Cmilkvetch-Besus-Ycone	4-CP4D-6-Indian-BB-Switch-LB-Cmilkvetch-Besus-	Little Bluestem	Schizachyrium scoparium	16.00	1		Grass	N	N	CP4D-6		Indian-BB-Switch-LB-Cmilkvetch-Besus-Ycone
4	CP4D-6-Indian-BB-Switch-LB-Cmilkvetch-Besus-Ycone	4-CP4D-6-Indian-BB-Switch-LB-Cmilkvetch-Besus-	Canada Milkvetch	Astragalus canadensis	2.00	0.125		Legume	N	N	CP4D-6		Indian-BB-Switch-LB-Cmilkvetch-Besus-Ycone
4	CP4D-6-Indian-BB-Switch-LB-Cmilkvetch-Besus-Ycone	4-CP4D-6-Indian-BB-Switch-LB-Cmilkvetch-Besus-	Black-eyed Susan	Rudbeckia hirta	1.00	0.0625		Forb	N	N	CP4D-6		Indian-BB-Switch-LB-Cmilkvetch-Besus-Ycone
4	CP4D-6-Indian-BB-Switch-LB-Cmilkvetch-Besus-Ycone	4-CP4D-6-Indian-BB-Switch-LB-Cmilkvetch-Besus-	Yellow Coneflower	Ratibida pinnata	1.00	0.0625		Forb	N	N	CP4D-6		Indian-BB-Switch-LB-Cmilkvetch-Besus-Ycone
4	CP4D-7-Indian-BB-Switch-PPclover-Besus-Ycone	4-CP4D-7-Indian-BB-Switch-PPclover-Besus-Ycone	Indiangrass	Sorghastrum nutans	48.00	3		Grass	N	N	CP4D-7		Indian-BB-Switch-PPclover-Besus-Ycone
4	CP4D-7-Indian-BB-Switch-PPclover-Besus-Ycone	4-CP4D-7-Indian-BB-Switch-PPclover-Besus-Ycone	Big Bluestem	Andropogon gerardii	16.00	1		Grass	N	N	CP4D-7		Indian-BB-Switch-PPclover-Besus-Ycone
4	CP4D-7-Indian-BB-Switch-PPclover-Besus-Ycone	4-CP4D-7-Indian-BB-Switch-PPclover-Besus-Ycone	Switchgrass	Panicum virgatum	16.00	1		Grass	N	N	CP4D-7		Indian-BB-Switch-PPclover-Besus-Ycone
4	CP4D-7-Indian-BB-Switch-PPclover-Besus-Ycone	4-CP4D-7-Indian-BB-Switch-PPclover-Besus-Ycone	Purple Prairie Clover	Dalea purpurea	2.00	0.125		Legume	N	N	CP4D-7		Indian-BB-Switch-PPclover-Besus-Ycone
4	CP4D-7-Indian-BB-Switch-PPclover-Besus-Ycone	4-CP4D-7-Indian-BB-Switch-PPclover-Besus-Ycone	Black-eyed Susan	Rudbeckia hirta	1.00	0.0625		Forb	N	N	CP4D-7		Indian-BB-Switch-PPclover-Besus-Ycone
4	CP4D-7-Indian-BB-Switch-PPclover-Besus-Ycone	4-CP4D-7-Indian-BB-Switch-PPclover-Besus-Ycone	Yellow Coneflower	Ratibida pinnata	1.00	0.0625		Forb	N	N	CP4D-7		Indian-BB-Switch-PPclover-Besus-Ycone
4	CP4D-8-Indian-BB-LB-Switch-PPclover-Besus-Ycone	4-CP4D-8-Indian-BB-LB-Switch-PPclover-Besus-Yc	Indiangrass	Sorghastrum nutans	48.00	3		Grass	N	N	CP4D-8		Indian-BB-LB-Switch-PPclover-Besus-Ycone
4	CP4D-8-Indian-BB-LB-Switch-PPclover-Besus-Ycone	4-CP4D-8-Indian-BB-LB-Switch-PPclover-Besus-Yc	Big Bluestem	Andropogon gerardii	16.00	1		Grass	N	N	CP4D-8		Indian-BB-LB-Switch-PPclover-Besus-Ycone
4	CP4D-8-Indian-BB-LB-Switch-PPclover-Besus-Ycone	4-CP4D-8-Indian-BB-LB-Switch-PPclover-Besus-Yc	Little Bluestem	Schizachyrium scoparium	16.00	1		Grass	N	N	CP4D-8		Indian-BB-LB-Switch-PPclover-Besus-Ycone
4	CP4D-8-Indian-BB-LB-Switch-PPclover-Besus-Ycone	4-CP4D-8-Indian-BB-LB-Switch-PPclover-Besus-Yc	Switchgrass	Panicum virgatum	16.00	1		Grass	N	N	CP4D-8		Indian-BB-LB-Switch-PPclover-Besus-Ycone
4	CP4D-8-Indian-BB-LB-Switch-PPclover-Besus-Ycone	4-CP4D-8-Indian-BB-LB-Switch-PPclover-Besus-Yc	Purple Prairie Clover	Dalea purpurea	2.00	0.125		Legume	N	N	CP4D-8		Indian-BB-LB-Switch-PPclover-Besus-Ycone
4	CP4D-8-Indian-BB-LB-Switch-PPclover-Besus-Ycone	4-CP4D-8-Indian-BB-LB-Switch-PPclover-Besus-Yc	Black-eyed Susan	Rudbeckia hirta	1.00	0.0625		Forb	N	N	CP4D-8		Indian-BB-LB-Switch-PPclover-Besus-Ycone
4	CP4D-8-Indian-BB-LB-Switch-PPclover-Besus-Ycone	4-CP4D-8-Indian-BB-LB-Switch-PPclover-Besus-Yc	Yellow Coneflower	Ratibida pinnata	1.00	0.0625		Forb	N	N	CP4D-8		Indian-BB-LB-Switch-PPclover-Besus-Ycone
4	CP4D-9-Indian-BB-Switch-PPclover-Berg-Ycone	4-CP4D-9-Indian-BB-Switch-PPclover-Berg-Ycone	Indiangrass	Sorghastrum nutans	48.00	3		Grass	N	N	CP4D-9		Indian-BB-Switch-PPclover-Berg-Ycone
4	CP4D-9-Indian-BB-Switch-PPclover-Berg-Ycone	4-CP4D-9-Indian-BB-Switch-PPclover-Berg-Ycone	Big Bluestem	Andropogon gerardii	16.00	1		Grass	N	N	CP4D-9		Indian-BB-Switch-PPclover-Berg-Ycone
4	CP4D-9-Indian-BB-Switch-PPclover-Berg-Ycone	4-CP4D-9-Indian-BB-Switch-PPclover-Berg-Ycone	Switchgrass	Panicum virgatum	16.00	1		Grass	N	N	CP4D-9		Indian-BB-Switch-PPclover-Berg-Ycone
4	CP4D-9-Indian-BB-Switch-PPclover-Berg-Ycone	4-CP4D-9-Indian-BB-Switch-PPclover-Berg-Ycone	Purple Prairie Clover	Dalea purpurea	2.00	0.125		Legume	N	N	CP4D-9		Indian-BB-Switch-PPclover-Berg-Ycone
4	CP4D-9-Indian-BB-Switch-PPclover-Berg-Ycone	4-CP4D-9-Indian-BB-Switch-PPclover-Berg-Ycone	Bergamot	Monarda fistulosa	1.00	0.0625		Forb	N	N	CP4D-9		Indian-BB-Switch-PPclover-Berg-Ycone
4	CP4D-9-Indian-BB-Switch-PPclover-Berg-Ycone	4-CP4D-9-Indian-BB-Switch-PPclover-Berg-Ycone	Yellow Coneflower	Ratibida pinnata	1.00	0.0625		Forb	N	N	CP4D-9		Indian-BB-Switch-PPclover-Berg-Ycone
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swd	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-S	Little Bluestem	Schizachyrium scoparium	24.00	1.5		Grass	N	N	CP25-D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swd	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-S	Sideoats Grama	Bouteloua curtipendula	24.00	1.5		Grass	N	N	CP25-D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swd	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-S	Indiangrass	Sorghastrum nutans	8.00	0.5		Grass	N	N	CP25-D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swd	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-S	Big Bluestem	Andropogon gerardii	4.00	0.25		Grass	N	N	CP25-D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swd	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-S	Prairie Junegrass	Koeleria macrantha	2.00	0.125		Grass	N	N	CP25-D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swd	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-S	Purple Prairie Clover	Dalea purpurea	2.00	0.125		Legume	N	N	CP25-D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swd	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-S	Sand Dropseed	Sporobolus cryptandrus	2.00	0.125		Grass	N	N	CP25-D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swd	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-S	Spiderwort	Tradescantia ohiensis	1.00	0.0625		Forb	N	N	CP25-D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swd	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-S	Hoary Vervain	Verbena stricta	0.50	0.03125		Forb	N	N	CP25-D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swd	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-S	Leadplant	Amorpha canescens	0.50	0.03125		Legume	N	N	CP25-D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swd	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-S	Prairie Tickseed	Coreopsis palmata	0.50	0.03125		Forb	N	N	CP25-D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swd	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-S	Silky Aster	Symphyotrichum pratens	0.50	0.03125		Forb	N	N	CP25-D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swd	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-S	Stiff Goldenrod	Oligoneuron rigidum	0.50	0.03125		Forb	N	N	CP25-D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swd	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-S	Yellow Coneflower	Ratibida pinnata	0.50	0.03125		Forb	N	N	CP25-D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swd	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-S	Prairie Cinquefoil	Potentilla arguta	0.25	0.015625		Forb	N	N	CP25-D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swd	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-S	Spotted Mint	Monarda punctata	0.25	0.015625		Forb	N	N	CP25-D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint

25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclove	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdro	Little Bluestem	Schizachyrium scoparium	24.00	1.5		Grass	N	N	CP25-DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclove	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdro	Sideoats Grama	Bouteloua curtipendula	24.00	1.5		Grass	N	N	CP25-DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclove	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdro	Indiangrass	Sorghastrum nutans	8.00	0.5		Grass	N	N	CP25-DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclove	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdro	Switchgrass	Panicum virgatum	4.00	0.25		Grass	N	N	CP25-DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclove	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdro	Prairie Junegrass	Koeleria macrantha	2.00	0.125		Grass	N	N	CP25-DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclove	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdro	Prairie Dropseed	Sporobolus heterolepis	2.00	0.125		Grass	N	N	CP25-DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclove	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdro	Purple Prairie Clover	Dalea purpurea	2.00	0.125		Legume	N	N	CP25-DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclove	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdro	Round-Headed Bushclover	Lespedeza capitata	2.00	0.125		Legume	N	N	CP25-DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclove	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdro	Bergamot	Monarda fistulosa	1.00	0.0625		Forb	N	N	CP25-DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclove	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdro	Spiderwort	Tradescantia ohiensis	1.00	0.0625		Forb	N	N	CP25-DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclove	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdro	Yellow Coneflower	Ratibida pinnata	1.00	0.0625		Forb	N	N	CP25-DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclove	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdro	Leadplant	Amorpha canescens	0.50	0.03125		Legume	N	N	CP25-DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclove	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdro	Rough Blazing Star	Liatris aspera	0.50	0.03125		Forb	N	N	CP25-DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclove	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdro	Sky-Blue Aster	Symphyotrichum oolenta	0.50	0.03125		Forb	N	N	CP25-DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclove	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdro	Stiff Goldenrod	Oligoneuron rigidum	0.50	0.03125		Forb	N	N	CP25-DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclove	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdro	Prairie Cinquefoil	Potentilla arguta	0.25	0.015625		Forb	N	N	CP25-DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjur	Little Bluestem	Schizachyrium scoparium	24.00	1.5		Grass	N	N	CP25-KBB		Lplant-Rblzstar-Sgrod-Ycone-Berg-Pcinque-SkyAster
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjur	Sideoats Grama	Bouteloua curtipendula	24.00	1.5		Grass	N	N	CP25-KBB		Lplant-Rblzstar-Sgrod-Ycone-Berg-Pcinque-SkyAster
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjur	Indiangrass	Sorghastrum nutans	8.00	0.5		Grass	N	N	CP25-KBB		Lplant-Rblzstar-Sgrod-Ycone-Berg-Pcinque-SkyAster
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjur	Switchgrass	Panicum virgatum	8.00	0.5		Grass	N	N	CP25-KBB		Lplant-Rblzstar-Sgrod-Ycone-Berg-Pcinque-SkyAster
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjur	Wild Lupine	Lupinus perennis	3.00	0.1875		Legume	N	N	CP25-KBB		Lplant-Rblzstar-Sgrod-Ycone-Berg-Pcinque-SkyAster
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjur	Prairie Junegrass	Koeleria macrantha	2.00	0.125		Grass	N	N	CP25-KBB		Lplant-Rblzstar-Sgrod-Ycone-Berg-Pcinque-SkyAster
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjur	Prairie Dropseed	Sporobolus heterolepis	2.00	0.125		Grass	N	N	CP25-KBB		Lplant-Rblzstar-Sgrod-Ycone-Berg-Pcinque-SkyAster
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjur	Purple Prairie Clover	Dalea purpurea	2.00	0.125		Legume	N	N	CP25-KBB		Lplant-Rblzstar-Sgrod-Ycone-Berg-Pcinque-SkyAster
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjur	Pale Purple Coneflower	Echinacea pallida	1.00	0.0625		Forb	N	N	CP25-KBB		Lplant-Rblzstar-Sgrod-Ycone-Berg-Pcinque-SkyAster
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjur	Leadplant	Amorpha canescens	0.50	0.03125		Legume	N	N	CP25-KBB		Lplant-Rblzstar-Sgrod-Ycone-Berg-Pcinque-SkyAster
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjur	Rough Blazing Star	Liatris aspera	0.50	0.03125		Forb	N	N	CP25-KBB		Lplant-Rblzstar-Sgrod-Ycone-Berg-Pcinque-SkyAster
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjur	Stiff Goldenrod	Oligoneuron rigidum	0.50	0.03125		Forb	N	N	CP25-KBB		Lplant-Rblzstar-Sgrod-Ycone-Berg-Pcinque-SkyAster
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjur	Yellow Coneflower	Ratibida pinnata	0.50	0.03125		Forb	N	N	CP25-KBB		Lplant-Rblzstar-Sgrod-Ycone-Berg-Pcinque-SkyAster
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjur	Bergamot	Monarda fistulosa	0.25	0.015625		Forb	N	N	CP25-KBB		Lplant-Rblzstar-Sgrod-Ycone-Berg-Pcinque-SkyAster
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjur	Prairie Cinquefoil	Potentilla arguta	0.25	0.015625		Forb	N	N	CP25-KBB		Lplant-Rblzstar-Sgrod-Ycone-Berg-Pcinque-SkyAster
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjur	Sky-Blue Aster	Symphyotrichum oolenta	0.25	0.015625		Forb	N	N	CP25-KBB		Lplant-Rblzstar-Sgrod-Ycone-Berg-Pcinque-SkyAster
25	CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-	25-CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun	Little Bluestem	Schizachyrium scoparium	24.00	1.5		Grass	N	N	CP25-M		Berg-Besus-NEaster-SkyAster-Ycone-Croot
25	CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-	25-CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun	Indiangrass	Sorghastrum nutans	16.00	1		Grass	N	N	CP25-M		Berg-Besus-NEaster-SkyAster-Ycone-Croot
25	CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-	25-CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun	Big Bluestem	Andropogon gerardii	8.00	0.5		Grass	N	N	CP25-M		Berg-Besus-NEaster-SkyAster-Ycone-Croot
25	CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-	25-CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun	Canada Wildrye	Elymus canadensis	8.00	0.5		Grass	N	N	CP25-M		Berg-Besus-NEaster-SkyAster-Ycone-Croot
25	CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-	25-CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun	Switchgrass	Panicum virgatum	8.00	0.5		Grass	N	N	CP25-M		Berg-Besus-NEaster-SkyAster-Ycone-Croot
25	CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-	25-CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun	Ox-eye Sunflower	Heliopsis helianthoides	1.00	0.0625		Forb	N	N	CP25-M		Berg-Besus-NEaster-SkyAster-Ycone-Croot
25	CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-	25-CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun	Prairie Blazing Star	Liatris pycnostachya	1.00	0.0625		Forb	N	N	CP25-M		Berg-Besus-NEaster-SkyAster-Ycone-Croot
25	CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-	25-CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun	Purple Prairie Clover	Dalea purpurea	1.00	0.0625		Legume	N	N	CP25-M		Berg-Besus-NEaster-SkyAster-Ycone-Croot
25	CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-	25-CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun	Rosinweed	Silphium integrifolium	1.00	0.0625		Forb	N	N	CP25-M		Berg-Besus-NEaster-SkyAster-Ycone-Croot
25	CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-	25-CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun	Bergamot	Monarda fistulosa	0.50	0.03125		Forb	N	N	CP25-M		Berg-Besus-NEaster-SkyAster-Ycone-Croot
25	CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-	25-CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun	Black-eyed Susan	Rudbeckia hirta	0.50	0.03125		Forb	N	N	CP25-M		Berg-Besus-NEaster-SkyAster-Ycone-Croot
25	CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-	25-CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun	New England Aster	Symphyotrichum novae-a	0.50	0.03125		Forb	N	N	CP25-M		Berg-Besus-NEaster-SkyAster-Ycone-Croot
25	CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-	25-CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun	Sky-Blue Aster	Symphyotrichum oolenta	0.50	0.03125		Forb	N	N	CP25-M		Berg-Besus-NEaster-SkyAster-Ycone-Croot
25	CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-	25-CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun	Yellow Coneflower	Ratibida pinnata	0.50	0.03125		Forb	N	N	CP25-M		Berg-Besus-NEaster-SkyAster-Ycone-Croot
25	CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-	25-CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun	Culver's Root	Veronicastrum virginicum	0.25	0.015625		Forb	N	N	CP25-M		Berg-Besus-NEaster-SkyAster-Ycone-Croot
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgras	Canada Wildrye	Elymus canadensis	16.00	1		Grass	N	N	CP25-W		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgras	Switchgrass	Panicum virgatum	16.00	1		Grass	N	N	CP25-W		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot

25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgras	Indiangrass	Sorghastrum nutans	12.00	0.75		Grass	N	N	CP25-W		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgras	Big Bluestem	Andropogon gerardii	8.00	0.5		Grass	N	N	CP25-W		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgras	Prairie Cordgrass	Spartina pectinata	8.00	0.5		Grass	N	N	CP25-W		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgras	Fowl Mannagrass	Glyceria striata	4.00	0.25		Grass	N	N	CP25-W		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgras	Fox Sedge	Carex vulpinoidea	4.00	0.25		Sedge	N	N	CP25-W		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgras	Cupplant	Silphium perfoliatum	2.00	0.125		Forb	N	N	CP25-W		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgras	Showy Tick Trefoil	Desmodium canadense	2.00	0.125		Legume	N	N	CP25-W		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgras	Blue Vervain	Verbena hastata	1.00	0.0625		Forb	N	N	CP25-W		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgras	Golden Alexanders	Zizia aurea	1.00	0.0625		Forb	N	N	CP25-W		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgras	Marsh Milkweed	Asclepias incarnata	1.00	0.0625		Forb	N	N	CP25-W		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgras	Boneset	Eupatorium perfoliatum	0.50	0.03125		Forb	N	N	CP25-W		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgras	Common Ironweed	Vernonia fasciculata	0.50	0.03125		Forb	N	N	CP25-W		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgras	Joe-pye Weed	Eutrochium maculatum	0.50	0.03125		Forb	N	N	CP25-W		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgras	Culver's Root	Veronicastrum virginicum	0.25	0.015625		Forb	N	N	CP25-W		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
25	CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-WWIndig	25-CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-	Switchgrass	Panicum virgatum	24.00	1.5		Grass	N	N	CP25-WM		Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
25	CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-WWIndig	25-CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-	Canada Wildrye	Elymus canadensis	16.00	1		Grass	N	N	CP25-WM		Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
25	CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-WWIndig	25-CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-	Indiangrass	Sorghastrum nutans	12.00	0.75		Grass	N	N	CP25-WM		Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
25	CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-WWIndig	25-CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-	Big Bluestem	Andropogon gerardii	8.00	0.5		Grass	N	N	CP25-WM		Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
25	CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-WWIndig	25-CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-	Prairie Cordgrass	Spartina pectinata	4.00	0.25		Grass	N	N	CP25-WM		Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
25	CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-WWIndig	25-CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-	Cupplant	Silphium perfoliatum	2.00	0.125		Forb	N	N	CP25-WM		Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
25	CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-WWIndig	25-CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-	White wild indigo	Baptisia alba	1.50	0.09375		Legume	N	N	CP25-WM		Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
25	CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-WWIndig	25-CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-	Black-eyed Susan	Rudbeckia hirta	0.50	0.03125		Forb	N	N	CP25-WM		Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
25	CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-WWIndig	25-CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-	Common Ironweed	Vernonia fasciculata	0.50	0.03125		Forb	N	N	CP25-WM		Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
25	CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-WWIndig	25-CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-	Golden Alexanders	Zizia aurea	0.50	0.03125		Forb	N	N	CP25-WM		Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
25	CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-WWIndig	25-CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-	New England Aster	Symphyotrichum novae-a	0.50	0.03125		Forb	N	N	CP25-WM		Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
25	CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-WWIndig	25-CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-	Prairie Blazing Star	Liatris pycnostachya	0.50	0.03125		Forb	N	N	CP25-WM		Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
25	CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-WWIndig	25-CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-	Yellow Coneflower	Ratibida pinnata	0.50	0.03125		Forb	N	N	CP25-WM		Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
25	CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-WWIndig	25-CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-	Bergamot	Monarda fistulosa	0.25	0.015625		Forb	N	N	CP25-WM		Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
25	CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-WWIndig	25-CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-	Great St. John's Wort	Hypericum ascyron	0.25	0.015625		Forb	N	N	CP25-WM		Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
33	CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHbushclover	33-CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHb	Little Bluestem	Schizachyrium scoparium	32.00	2		Grass	N	N	CP33-1		Wsun-Ycone-Besus
33	CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHbushclover	33-CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHb	Sideoats Grama	Bouteloua curtipendula	32.00	2		Grass	N	N	CP33-1		Wsun-Ycone-Besus
33	CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHbushclover	33-CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHb	Canada Wildrye	Elymus canadensis	8.00	0.5		Grass	N	N	CP33-1		Wsun-Ycone-Besus
33	CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHbushclover	33-CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHb	Indiangrass	Sorghastrum nutans	8.00	0.5		Grass	N	N	CP33-1		Wsun-Ycone-Besus
33	CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHbushclover	33-CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHb	Purple Prairie Clover	Dalea purpurea	2.00	0.125		Legume	N	N	CP33-1		Wsun-Ycone-Besus
33	CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHbushclover	33-CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHb	Round-Headed Bushclover	Lespedeza capitata	2.00	0.125		Legume	N	N	CP33-1		Wsun-Ycone-Besus
33	CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHbushclover	33-CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHb	Purple Coneflower	Echinacea purpurea	1.00	0.0625		Forb	N	N	CP33-1		Wsun-Ycone-Besus
33	CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHbushclover	33-CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHb	Stiff Goldenrod	Oligoneuron rigidum	1.00	0.0625		Forb	N	N	CP33-1		Wsun-Ycone-Besus
33	CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHbushclover	33-CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHb	Fewleaf Sunflower	Helianthus occidentalis	1.00	0.0625		Forb	N	N	CP33-1		Wsun-Ycone-Besus
33	CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHbushclover	33-CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHb	Yellow Coneflower	Ratibida pinnata	1.00	0.0625		Forb	N	N	CP33-1		Wsun-Ycone-Besus
33	CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHbushclover	33-CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHb	Black-eyed Susan	Rudbeckia hirta	0.75	0.046875		Forb	N	N	CP33-1		Wsun-Ycone-Besus
33	CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rblzst	33-CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclo	Little Bluestem	Schizachyrium scoparium	24.00	1.5		Grass	N	N	CP33-2		SkyAster-Sgrod-Wsun
33	CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rblzst	33-CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclo	Sideoats Grama	Bouteloua curtipendula	20.00	1.25		Grass	N	N	CP33-2		SkyAster-Sgrod-Wsun
33	CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rblzst	33-CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclo	Indiangrass	Sorghastrum nutans	16.00	1		Grass	N	N	CP33-2		SkyAster-Sgrod-Wsun
33	CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rblzst	33-CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclo	Canada Wildrye	Elymus canadensis	8.00	0.5		Grass	N	N	CP33-2		SkyAster-Sgrod-Wsun
33	CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rblzst	33-CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclo	Purple Coneflower	Echinacea purpurea	2.00	0.125		Forb	N	N	CP33-2		SkyAster-Sgrod-Wsun
33	CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rblzst	33-CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclo	Purple Prairie Clover	Dalea purpurea	2.00	0.125		Legume	N	N	CP33-2		SkyAster-Sgrod-Wsun
33	CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rblzst	33-CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclo	Rough Blazing Star	Liatris aspera	2.00	0.125		Forb	N	N	CP33-2		SkyAster-Sgrod-Wsun
33	CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rblzst	33-CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclo	Black-eyed Susan	Rudbeckia hirta	1.00	0.0625		Forb	N	N	CP33-2		SkyAster-Sgrod-Wsun
33	CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rblzst	33-CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclo	Sky-Blue Aster	Symphyotrichum oolenta	1.00	0.0625		Forb	N	N	CP33-2		SkyAster-Sgrod-Wsun

33	CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rblzs	33-CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclov	Stiff Goldenrod	Oligoneuron rigidum	1.00	0.0625		Forb	N	N	CP33-2		SkyAster-Sgrod-Wsun
33	CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rblzs	33-CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclov	Fewleaf Sunflower	Helianthus occidentalis	1.00	0.0625		Forb	N	N	CP33-2		SkyAster-Sgrod-Wsun
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord-I	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedg	Canada Wildrye	Elymus canadensis	16.00	1		Grass	N	N	CP38B-WPHRA		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord-I	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedg	Indiangrass	Sorghastrum nutans	12.00	0.75		Grass	N	N	CP38B-WPHRA		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord-I	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedg	Switchgrass	Panicum virgatum	12.00	0.75		Grass	N	N	CP38B-WPHRA		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord-I	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedg	Big Bluestem	Andropogon gerardii	8.00	0.5		Grass	N	N	CP38B-WPHRA		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord-I	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedg	Fox Sedge	Carex vulpinoidea	8.00	0.5		Sedge	N	N	CP38B-WPHRA		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord-I	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedg	Prairie Cordgrass	Spartina pectinata	8.00	0.5		Grass	N	N	CP38B-WPHRA		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord-I	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedg	Fowl Mannagrass	Glyceria striata	4.00	0.25		Grass	N	N	CP38B-WPHRA		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord-I	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedg	Cupplant	Silphium perfoliatum	2.00	0.125		Forb	N	N	CP38B-WPHRA		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord-I	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedg	Showy Tick Trefoil	Desmodium canadense	2.00	0.125		Legume	N	N	CP38B-WPHRA		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord-I	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedg	Blue Vervain	Verbena hastata	1.00	0.0625		Forb	N	N	CP38B-WPHRA		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord-I	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedg	Golden Alexanders	Zizia aurea	1.00	0.0625		Forb	N	N	CP38B-WPHRA		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord-I	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedg	Marsh Milkweed	Asclepias incarnata	1.00	0.0625		Forb	N	N	CP38B-WPHRA		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord-I	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedg	Boneset	Eupatorium perfoliatum	0.50	0.03125		Forb	N	N	CP38B-WPHRA		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord-I	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedg	Common Ironweed	Vernonia fasciculata	0.50	0.03125		Forb	N	N	CP38B-WPHRA		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord-I	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedg	Joe-pye Weed	Eutrochium maculatum	0.50	0.03125		Forb	N	N	CP38B-WPHRA		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord-I	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedg	Culver's Root	Veronicastrum virginicum	0.25	0.015625		Forb	N	N	CP38B-WPHRA		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-CWGCA(CP1)1-RC-Orc-Tim	38-CP38E-CWGCA(CP1)1-RC-Orc-Tim	Red Clover	Trifolium pratense	80.00	5		Legume	I	N	CP38E-CWGCA(CP1)1		RC-Orc-Tim
38	CP38E-CWGCA(CP1)1-RC-Orc-Tim	38-CP38E-CWGCA(CP1)1-RC-Orc-Tim	Orchardgrass	Dactylis glomerata L.	48.00	3		Grass	I	N	CP38E-CWGCA(CP1)1		RC-Orc-Tim
38	CP38E-CWGCA(CP1)1-RC-Orc-Tim	38-CP38E-CWGCA(CP1)1-RC-Orc-Tim	Timothy	Phleum pratense	32.00	2		Grass	I	N	CP38E-CWGCA(CP1)1		RC-Orc-Tim
38	CP38E-CWGCA(CP1)2-Alf-Orc-Tim	38-CP38E-CWGCA(CP1)2-Alf-Orc-Tim	Alfalfa	Medicago sativa	96.00	6		Legume	I	N	CP38E-CWGCA(CP1)2		Alf-Orc-Tim
38	CP38E-CWGCA(CP1)2-Alf-Orc-Tim	38-CP38E-CWGCA(CP1)2-Alf-Orc-Tim	Orchardgrass	Dactylis glomerata L.	48.00	3		Grass	I	N	CP38E-CWGCA(CP1)2		Alf-Orc-Tim
38	CP38E-CWGCA(CP1)2-Alf-Orc-Tim	38-CP38E-CWGCA(CP1)2-Alf-Orc-Tim	Timothy	Phleum pratense	32.00	2		Grass	I	N	CP38E-CWGCA(CP1)2		Alf-Orc-Tim
38	CP38E-CWGCA(CP1)3-RC-Tim-Orc-Rtop-LadC	38-CP38E-CWGCA(CP1)3-RC-Tim-Orc-Rtop-LadC	Red Clover	Trifolium pratense	80.00	5		Legume	I	N	CP38E-CWGCA(CP1)3		RC-Tim-Orc-Rtop-LadC
38	CP38E-CWGCA(CP1)3-RC-Tim-Orc-Rtop-LadC	38-CP38E-CWGCA(CP1)3-RC-Tim-Orc-Rtop-LadC	Timothy	Phleum pratense	32.00	2		Grass	I	N	CP38E-CWGCA(CP1)3		RC-Tim-Orc-Rtop-LadC
38	CP38E-CWGCA(CP1)3-RC-Tim-Orc-Rtop-LadC	38-CP38E-CWGCA(CP1)3-RC-Tim-Orc-Rtop-LadC	Orchardgrass	Dactylis glomerata L.	16.00	1		Grass	I	N	CP38E-CWGCA(CP1)3		RC-Tim-Orc-Rtop-LadC
38	CP38E-CWGCA(CP1)3-RC-Tim-Orc-Rtop-LadC	38-CP38E-CWGCA(CP1)3-RC-Tim-Orc-Rtop-LadC	Redtop	Agrostis gigantea	16.00	1		Grass	I	N	CP38E-CWGCA(CP1)3		RC-Tim-Orc-Rtop-LadC
38	CP38E-CWGCA(CP1)3-RC-Tim-Orc-Rtop-LadC	38-CP38E-CWGCA(CP1)3-RC-Tim-Orc-Rtop-LadC	White Ladino Clover	Trifolium repens	8.00	0.5		Legume	I	N	CP38E-CWGCA(CP1)3		RC-Tim-Orc-Rtop-LadC
38	CP38E-CWGCA(CP1)4-Alf-Rtop-Tim-Orc	38-CP38E-CWGCA(CP1)4-Alf-Rtop-Tim-Orc	Alfalfa	Medicago sativa	96.00	6		Legume	I	N	CP38E-CWGCA(CP1)4		Alf-Rtop-Tim-Orc
38	CP38E-CWGCA(CP1)4-Alf-Rtop-Tim-Orc	38-CP38E-CWGCA(CP1)4-Alf-Rtop-Tim-Orc	Redtop	Agrostis gigantea	32.00	2		Grass	I	N	CP38E-CWGCA(CP1)4		Alf-Rtop-Tim-Orc
38	CP38E-CWGCA(CP1)4-Alf-Rtop-Tim-Orc	38-CP38E-CWGCA(CP1)4-Alf-Rtop-Tim-Orc	Timothy	Phleum pratense	32.00	2		Grass	I	N	CP38E-CWGCA(CP1)4		Alf-Rtop-Tim-Orc
38	CP38E-CWGCA(CP1)4-Alf-Rtop-Tim-Orc	38-CP38E-CWGCA(CP1)4-Alf-Rtop-Tim-Orc	Orchardgrass	Dactylis glomerata L.	16.00	1		Grass	I	N	CP38E-CWGCA(CP1)4		Alf-Rtop-Tim-Orc
38	CP38E-CWGCA(CP1)5-RC-KB-Orc-Rtop	38-CP38E-CWGCA(CP1)5-RC-KB-Orc-Rtop	Red Clover	Trifolium pratense	80.00	5		Legume	I	N	CP38E-CWGCA(CP1)5		RC-KB-Orc-Rtop
38	CP38E-CWGCA(CP1)5-RC-KB-Orc-Rtop	38-CP38E-CWGCA(CP1)5-RC-KB-Orc-Rtop	Kentucky Bluegrass	Poa pratensis	32.00	2		Grass	I	N	CP38E-CWGCA(CP1)5		RC-KB-Orc-Rtop
38	CP38E-CWGCA(CP1)5-RC-KB-Orc-Rtop	38-CP38E-CWGCA(CP1)5-RC-KB-Orc-Rtop	Orchardgrass	Dactylis glomerata L.	16.00	1		Grass	I	N	CP38E-CWGCA(CP1)5		RC-KB-Orc-Rtop
38	CP38E-CWGCA(CP1)5-RC-KB-Orc-Rtop	38-CP38E-CWGCA(CP1)5-RC-KB-Orc-Rtop	Redtop	Agrostis gigantea	16.00	1		Grass	I	N	CP38E-CWGCA(CP1)5		RC-KB-Orc-Rtop
38	CP38E-CWGCA(CP1)6-Alf-SB-Tim	38-CP38E-CWGCA(CP1)6-Alf-SB-Tim	Alfalfa	Medicago sativa	96.00	6		Legume	I	N	CP38E-CWGCA(CP1)6		Alf-SB-Tim
38	CP38E-CWGCA(CP1)6-Alf-SB-Tim	38-CP38E-CWGCA(CP1)6-Alf-SB-Tim	Smooth Bromegrass	Bromus inermis	48.00	3		Grass	I	N	CP38E-CWGCA(CP1)6		Alf-SB-Tim
38	CP38E-CWGCA(CP1)6-Alf-SB-Tim	38-CP38E-CWGCA(CP1)6-Alf-SB-Tim	Timothy	Phleum pratense	32.00	2		Grass	I	N	CP38E-CWGCA(CP1)6		Alf-SB-Tim
38	CP38E-CWGCA(CP1)7-RC-SB-Tim-Orc-LadC	38-CP38E-CWGCA(CP1)7-RC-SB-Tim-Orc-LadC	Red Clover	Trifolium pratense	80.00	5		Legume	I	N	CP38E-CWGCA(CP1)7		RC-SB-Tim-Orc-LadC
38	CP38E-CWGCA(CP1)7-RC-SB-Tim-Orc-LadC	38-CP38E-CWGCA(CP1)7-RC-SB-Tim-Orc-LadC	Smooth Bromegrass	Bromus inermis	32.00	2		Grass	I	N	CP38E-CWGCA(CP1)7		RC-SB-Tim-Orc-LadC
38	CP38E-CWGCA(CP1)7-RC-SB-Tim-Orc-LadC	38-CP38E-CWGCA(CP1)7-RC-SB-Tim-Orc-LadC	Timothy	Phleum pratense	32.00	2		Grass	I	N	CP38E-CWGCA(CP1)7		RC-SB-Tim-Orc-LadC
38	CP38E-CWGCA(CP1)7-RC-SB-Tim-Orc-LadC	38-CP38E-CWGCA(CP1)7-RC-SB-Tim-Orc-LadC	Orchardgrass	Dactylis glomerata L.	16.00	1		Grass	I	N	CP38E-CWGCA(CP1)7		RC-SB-Tim-Orc-LadC
38	CP38E-CWGCA(CP1)7-RC-SB-Tim-Orc-LadC	38-CP38E-CWGCA(CP1)7-RC-SB-Tim-Orc-LadC	White Ladino Clover	Trifolium repens	8.00	0.5		Legume	I	N	CP38E-CWGCA(CP1)7		RC-SB-Tim-Orc-LadC
38	CP38E-CWGCA(CP1)8-RC-SB-Tim	38-CP38E-CWGCA(CP1)8-RC-SB-Tim	Red Clover	Trifolium pratense	80.00	5		Legume	I	N	CP38E-CWGCA(CP1)8		RC-SB-Tim
38	CP38E-CWGCA(CP1)8-RC-SB-Tim	38-CP38E-CWGCA(CP1)8-RC-SB-Tim	Smooth Bromegrass	Bromus inermis	48.00	3		Grass	I	N	CP38E-CWGCA(CP1)8		RC-SB-Tim
38	CP38E-CWGCA(CP1)8-RC-SB-Tim	38-CP38E-CWGCA(CP1)8-RC-SB-Tim	Timothy	Phleum pratense	32.00	2		Grass	I	N	CP38E-CWGCA(CP1)8		RC-SB-Tim
38	CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-	38-CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-I	Little Bluestem	Schizachyrium scoparium	24.00	1.5		Grass	N	N	CP38E-CWGCA(CP2)D		LB-Sgrama-BB-Indian-PPclover-Besus-Rblzstar-Sgrod-Ycone

38	CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-	38-CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-I	Sideoats Grama	Bouteloua curtipendula	24.00	1.5		Grass	N	N	CP38E-CWGCA(CP2)D		LB-Sgrama-BB-Indian-PPclover-Besus-Rblzstar-Sgrod-Ycone
38	CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-	38-CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-I	Big Bluestem	Andropogon gerardii	8.00	0.5		Grass	N	N	CP38E-CWGCA(CP2)D		LB-Sgrama-BB-Indian-PPclover-Besus-Rblzstar-Sgrod-Ycone
38	CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-	38-CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-I	Indiangrass	Sorghastrum nutans	8.00	0.5		Grass	N	N	CP38E-CWGCA(CP2)D		LB-Sgrama-BB-Indian-PPclover-Besus-Rblzstar-Sgrod-Ycone
38	CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-	38-CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-I	Purple Prairie Clover	Dalea purpurea	2.00	0.125		Legume	N	N	CP38E-CWGCA(CP2)D		LB-Sgrama-BB-Indian-PPclover-Besus-Rblzstar-Sgrod-Ycone
38	CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-	38-CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-I	Black-eyed Susan	Rudbeckia hirta	1.00	0.0625		Forb	N	N	CP38E-CWGCA(CP2)D		LB-Sgrama-BB-Indian-PPclover-Besus-Rblzstar-Sgrod-Ycone
38	CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-	38-CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-I	Rough Blazing Star	Liatris aspera	1.00	0.0625		Forb	N	N	CP38E-CWGCA(CP2)D		LB-Sgrama-BB-Indian-PPclover-Besus-Rblzstar-Sgrod-Ycone
38	CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-	38-CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-I	Stiff Goldenrod	Oligoneuron rigidum	1.00	0.0625		Forb	N	N	CP38E-CWGCA(CP2)D		LB-Sgrama-BB-Indian-PPclover-Besus-Rblzstar-Sgrod-Ycone
38	CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-	38-CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-I	Yellow Coneflower	Ratibida pinnata	1.00	0.0625		Forb	N	N	CP38E-CWGCA(CP2)D		LB-Sgrama-BB-Indian-PPclover-Besus-Rblzstar-Sgrod-Ycone
38	CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-	38-CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian	Little Bluestem	Schizachyrium scoparium	24.00	1.5		Grass	N	N	CP38E-CWGCA(CP2)DM		Shwgrod-Sgrod-Ycone
38	CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-	38-CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian	Sideoats Grama	Bouteloua curtipendula	16.00	1		Grass	N	N	CP38E-CWGCA(CP2)DM		Shwgrod-Sgrod-Ycone
38	CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-	38-CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian	Big Bluestem	Andropogon gerardii	8.00	0.5		Grass	N	N	CP38E-CWGCA(CP2)DM		Shwgrod-Sgrod-Ycone
38	CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-	38-CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian	Indiangrass	Sorghastrum nutans	8.00	0.5		Grass	N	N	CP38E-CWGCA(CP2)DM		Shwgrod-Sgrod-Ycone
38	CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-	38-CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian	Switchgrass	Panicum virgatum	8.00	0.5		Grass	N	N	CP38E-CWGCA(CP2)DM		Shwgrod-Sgrod-Ycone
38	CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-	38-CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian	Purple Prairie Clover	Dalea purpurea	2.00	0.125		Legume	N	N	CP38E-CWGCA(CP2)DM		Shwgrod-Sgrod-Ycone
38	CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-	38-CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian	Bergamot	Monarda fistulosa	1.00	0.0625		Forb	N	N	CP38E-CWGCA(CP2)DM		Shwgrod-Sgrod-Ycone
38	CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-	38-CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian	Black-eyed Susan	Rudbeckia hirta	1.00	0.0625		Forb	N	N	CP38E-CWGCA(CP2)DM		Shwgrod-Sgrod-Ycone
38	CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-	38-CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian	Rough Blazing Star	Liatris aspera	1.00	0.0625		Forb	N	N	CP38E-CWGCA(CP2)DM		Shwgrod-Sgrod-Ycone
38	CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-	38-CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian	Showy Goldenrod	Solidago speciosa	1.00	0.0625		Forb	N	N	CP38E-CWGCA(CP2)DM		Shwgrod-Sgrod-Ycone
38	CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-	38-CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian	Stiff Goldenrod	Oligoneuron rigidum	1.00	0.0625		Forb	N	N	CP38E-CWGCA(CP2)DM		Shwgrod-Sgrod-Ycone
38	CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-	38-CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian	Yellow Coneflower	Ratibida pinnata	1.00	0.0625		Forb	N	N	CP38E-CWGCA(CP2)DM		Shwgrod-Sgrod-Ycone
38	CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Pb	38-CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Little Bluestem	Schizachyrium scoparium	20.00	1.25		Grass	N	N	CP38E-CWGCA(CP2)M		Shwgrod-Sgrod-Ycone
38	CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Pb	38-CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Canada Wildrye	Elymus canadensis	16.00	1		Grass	N	N	CP38E-CWGCA(CP2)M		Shwgrod-Sgrod-Ycone
38	CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Pb	38-CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Indiangrass	Sorghastrum nutans	16.00	1		Grass	N	N	CP38E-CWGCA(CP2)M		Shwgrod-Sgrod-Ycone
38	CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Pb	38-CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Big Bluestem	Andropogon gerardii	8.00	0.5		Grass	N	N	CP38E-CWGCA(CP2)M		Shwgrod-Sgrod-Ycone
38	CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Pb	38-CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Switchgrass	Panicum virgatum	8.00	0.5		Grass	N	N	CP38E-CWGCA(CP2)M		Shwgrod-Sgrod-Ycone
38	CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Pb	38-CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Big Bluestem	Andropogon gerardii	8.00	0.5		Grass	N	N	CP38E-CWGCA(CP2)M		Shwgrod-Sgrod-Ycone
38	CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Pb	38-CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Switchgrass	Panicum virgatum	8.00	0.5		Grass	N	N	CP38E-CWGCA(CP2)M		Shwgrod-Sgrod-Ycone
38	CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Pb	38-CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Prairie Blazing Star	Liatris pycnostachya	2.00	0.125		Forb	N	N	CP38E-CWGCA(CP2)M		Shwgrod-Sgrod-Ycone
38	CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Pb	38-CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Rough Blazing Star	Liatris aspera	2.00	0.125		Forb	N	N	CP38E-CWGCA(CP2)M		Shwgrod-Sgrod-Ycone
38	CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Pb	38-CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Bergamot	Monarda fistulosa	1.00	0.0625		Forb	N	N	CP38E-CWGCA(CP2)M		Shwgrod-Sgrod-Ycone
38	CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Pb	38-CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Black-eyed Susan	Rudbeckia hirta	1.00	0.0625		Forb	N	N	CP38E-CWGCA(CP2)M		Shwgrod-Sgrod-Ycone
38	CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Pb	38-CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Showy Goldenrod	Solidago speciosa	1.00	0.0625		Forb	N	N	CP38E-CWGCA(CP2)M		Shwgrod-Sgrod-Ycone
38	CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Pb	38-CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Stiff Goldenrod	Oligoneuron rigidum	1.00	0.0625		Forb	N	N	CP38E-CWGCA(CP2)M		Shwgrod-Sgrod-Ycone
38	CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Pb	38-CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Yellow Coneflower	Ratibida pinnata	1.00	0.0625		Forb	N	N	CP38E-CWGCA(CP2)M		Shwgrod-Sgrod-Ycone
38	CP38E-CWGCA(CP2)W-BB-Cwrye-Switch-Pcord-Cup-Bv	38-CP38E-CWGCA(CP2)W-BB-Cwrye-Switch-Pcor	Big Bluestem	Andropogon gerardii	16.00	1		Grass	N	N	CP38E-CWGCA(CP2)W		BB-Cwrye-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-CWGCA(CP2)W-BB-Cwrye-Switch-Pcord-Cup-Bv	38-CP38E-CWGCA(CP2)W-BB-Cwrye-Switch-Pcor	Canada Wildrye	Elymus canadensis	16.00	1		Grass	N	N	CP38E-CWGCA(CP2)W		BB-Cwrye-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-CWGCA(CP2)W-BB-Cwrye-Switch-Pcord-Cup-Bv	38-CP38E-CWGCA(CP2)W-BB-Cwrye-Switch-Pcor	Switchgrass	Panicum virgatum	16.00	1		Grass	N	N	CP38E-CWGCA(CP2)W		BB-Cwrye-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-CWGCA(CP2)W-BB-Cwrye-Switch-Pcord-Cup-Bv	38-CP38E-CWGCA(CP2)W-BB-Cwrye-Switch-Pcor	Prairie Cordgrass	Spartina pectinata	8.00	0.5		Grass	N	N	CP38E-CWGCA(CP2)W		BB-Cwrye-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-CWGCA(CP2)W-BB-Cwrye-Switch-Pcord-Cup-Bv	38-CP38E-CWGCA(CP2)W-BB-Cwrye-Switch-Pcor	Cupplant	Silphium perfoliatum	2.00	0.125		Forb	N	N	CP38E-CWGCA(CP2)W		BB-Cwrye-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-CWGCA(CP2)W-BB-Cwrye-Switch-Pcord-Cup-Bv	38-CP38E-CWGCA(CP2)W-BB-Cwrye-Switch-Pcor	Blue Vervain	Verbena hastata	1.00	0.0625		Forb	N	N	CP38E-CWGCA(CP2)W		BB-Cwrye-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-CWGCA(CP2)W-BB-Cwrye-Switch-Pcord-Cup-Bv	38-CP38E-CWGCA(CP2)W-BB-Cwrye-Switch-Pcor	Common Ironweed	Vernonia fasciculata	1.00	0.0625		Forb	N	N	CP38E-CWGCA(CP2)W		BB-Cwrye-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Pblzs	38-CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pc	Switchgrass	Panicum virgatum	32.00	2		Grass	N	N	CP38E-CWGCA(CP2)WM		Switch-BB-Cwrye-Pcord-Pblzstar-Berg-Besus-NEaster-Ycone
38	CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Pblzs	38-CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pc	Big Bluestem	Andropogon gerardii	16.00	1		Grass	N	N	CP38E-CWGCA(CP2)WM		Switch-BB-Cwrye-Pcord-Pblzstar-Berg-Besus-NEaster-Ycone
38	CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Pblzs	38-CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pc	Canada Wildrye	Elymus canadensis	16.00	1		Grass	N	N	CP38E-CWGCA(CP2)WM		Switch-BB-Cwrye-Pcord-Pblzstar-Berg-Besus-NEaster-Ycone
38	CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Pblzs	38-CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pc	Prairie Cordgrass	Spartina pectinata	4.00	0.25		Grass	N	N	CP38E-CWGCA(CP2)WM		Switch-BB-Cwrye-Pcord-Pblzstar-Berg-Besus-NEaster-Ycone
38	CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Pblzs	38-CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pc	Prairie Blazing Star	Liatris pycnostachya	2.00	0.125		Forb	N	N	CP38E-CWGCA(CP2)WM		Switch-BB-Cwrye-Pcord-Pblzstar-Berg-Besus-NEaster-Ycone
38	CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Pblzs	38-CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pc	Bergamot	Monarda fistulosa	1.00	0.0625		Forb	N	N	CP38E-CWGCA(CP2)WM		Switch-BB-Cwrye-Pcord-Pblzstar-Berg-Besus-NEaster-Ycone
38	CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Pblzs	38-CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pc	Black-eyed Susan	Rudbeckia hirta	1.00	0.0625		Forb	N	N	CP38E-CWGCA(CP2)WM		Switch-BB-Cwrye-Pcord-Pblzstar-Berg-Besus-NEaster-Ycone
38	CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Pblzs	38-CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pc	New England Aster	Symphyotrichum novae-a	1.00	0.0625		Forb	N	N	CP38E-CWGCA(CP2)WM		Switch-BB-Cwrye-Pcord-Pblzstar-Berg-Besus-NEaster-Ycone
38	CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Pblzs	38-CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pc	Yellow Coneflower	Ratibida pinnata	1.00	0.0625		Forb	N	N	CP38E-CWGCA(CP2)WM		Switch-BB-Cwrye-Pcord-Pblzstar-Berg-Besus-NEaster-Ycone
38	CP38E-GHRA(CP2)D-LB-Sgrama-BB-Indian-PPclover-Sg	38-CP38E-GHRA(CP2)D-LB-Sgrama-BB-Indian-PP	Little Bluestem	Schizachyrium scoparium	24.00	1.5		Grass	N	N	CP38E-GHRA(CP2)D		LB-Sgrama-BB-Indian-PPclover-Sgrod-Ycone

38	CP38E-GHRA(CP2)D-LB-Sgrama-BB-Indian-PPclover-Sg	38-CP38E-GHRA(CP2)D-LB-Sgrama-BB-Indian-PP	Sideoats Grama	Bouteloua curtipendula	24.00	1.5		Grass	N	N	CP38E-GHRA(CP2)D		LB-Sgrama-BB-Indian-PPclover-Sgrod-Ycone
38	CP38E-GHRA(CP2)D-LB-Sgrama-BB-Indian-PPclover-Sg	38-CP38E-GHRA(CP2)D-LB-Sgrama-BB-Indian-PP	Big Bluestem	Andropogon gerardii	8.00	0.5		Grass	N	N	CP38E-GHRA(CP2)D		LB-Sgrama-BB-Indian-PPclover-Sgrod-Ycone
38	CP38E-GHRA(CP2)D-LB-Sgrama-BB-Indian-PPclover-Sg	38-CP38E-GHRA(CP2)D-LB-Sgrama-BB-Indian-PP	Indiangrass	Sorghastrum nutans	8.00	0.5		Grass	N	N	CP38E-GHRA(CP2)D		LB-Sgrama-BB-Indian-PPclover-Sgrod-Ycone
38	CP38E-GHRA(CP2)D-LB-Sgrama-BB-Indian-PPclover-Sg	38-CP38E-GHRA(CP2)D-LB-Sgrama-BB-Indian-PP	Purple Prairie Clover	Dalea purpurea	2.00	0.125		Legume	N	N	CP38E-GHRA(CP2)D		LB-Sgrama-BB-Indian-PPclover-Sgrod-Ycone
38	CP38E-GHRA(CP2)D-LB-Sgrama-BB-Indian-PPclover-Sg	38-CP38E-GHRA(CP2)D-LB-Sgrama-BB-Indian-PP	Stiff Goldenrod	Oligoneuron rigidum	1.00	0.0625		Forb	N	N	CP38E-GHRA(CP2)D		LB-Sgrama-BB-Indian-PPclover-Sgrod-Ycone
38	CP38E-GHRA(CP2)D-LB-Sgrama-BB-Indian-PPclover-Sg	38-CP38E-GHRA(CP2)D-LB-Sgrama-BB-Indian-PP	Yellow Coneflower	Ratibida pinnata	1.00	0.0625		Forb	N	N	CP38E-GHRA(CP2)D		LB-Sgrama-BB-Indian-PPclover-Sgrod-Ycone
38	CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-Switch-PP	38-CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-S	Little Bluestem	Schizachyrium scoparium	24.00	1.5		Grass	N	N	CP38E-GHRA(CP2)DM		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-Switch-PP	38-CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-S	Sideoats Grama	Bouteloua curtipendula	16.00	1		Grass	N	N	CP38E-GHRA(CP2)DM		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-Switch-PP	38-CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-S	Big Bluestem	Andropogon gerardii	8.00	0.5		Grass	N	N	CP38E-GHRA(CP2)DM		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-Switch-PP	38-CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-S	Indiangrass	Sorghastrum nutans	8.00	0.5		Grass	N	N	CP38E-GHRA(CP2)DM		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-Switch-PP	38-CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-S	Switchgrass	Panicum virgatum	8.00	0.5		Grass	N	N	CP38E-GHRA(CP2)DM		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-Switch-PP	38-CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-S	Purple Prairie Clover	Dalea purpurea	2.00	0.125		Legume	N	N	CP38E-GHRA(CP2)DM		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-Switch-PP	38-CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-S	Bergamot	Monarda fistulosa	1.00	0.0625		Forb	N	N	CP38E-GHRA(CP2)DM		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-Switch-PP	38-CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-S	Yellow Coneflower	Ratibida pinnata	1.00	0.0625		Forb	N	N	CP38E-GHRA(CP2)DM		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Switch-Berg	38-CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Sw	Little Bluestem	Schizachyrium scoparium	20.00	1.25		Grass	N	N	CP38E-GHRA(CP2)M		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Switch-Berg	38-CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Sw	Canada Wildrye	Elymus canadensis	16.00	1		Grass	N	N	CP38E-GHRA(CP2)M		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Switch-Berg	38-CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Sw	Indiangrass	Sorghastrum nutans	16.00	1		Grass	N	N	CP38E-GHRA(CP2)M		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Switch-Berg	38-CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Sw	Big Bluestem	Andropogon gerardii	8.00	0.5		Grass	N	N	CP38E-GHRA(CP2)M		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Switch-Berg	38-CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Sw	Switchgrass	Panicum virgatum	8.00	0.5		Grass	N	N	CP38E-GHRA(CP2)M		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Switch-Berg	38-CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Sw	Bergamot	Monarda fistulosa	1.00	0.0625		Forb	N	N	CP38E-GHRA(CP2)M		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Switch-Berg	38-CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Sw	Black-eyed Susan	Rudbeckia hirta	1.00	0.0625		Forb	N	N	CP38E-GHRA(CP2)M		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Switch-Berg	38-CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Sw	Yellow Coneflower	Ratibida pinnata	1.00	0.0625		Forb	N	N	CP38E-GHRA(CP2)M		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-Cu	38-CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch	Big Bluestem	Andropogon gerardii	16.00	1		Grass	N	N	CP38E-GHRA(CP2)W		BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-Cu	38-CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch	Canada Wildrye	Elymus canadensis	16.00	1		Grass	N	N	CP38E-GHRA(CP2)W		BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-Cu	38-CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch	Indiangrass	Sorghastrum nutans	16.00	1		Grass	N	N	CP38E-GHRA(CP2)W		BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-Cu	38-CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch	Switchgrass	Panicum virgatum	16.00	1		Grass	N	N	CP38E-GHRA(CP2)W		BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-Cu	38-CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch	Prairie Cordgrass	Spartina pectinata	8.00	0.5		Grass	N	N	CP38E-GHRA(CP2)W		BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-Cu	38-CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch	Cupplant	Silphium perfoliatum	2.00	0.125		Forb	N	N	CP38E-GHRA(CP2)W		BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-Cu	38-CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch	Blue Vervain	Verbena hastata	1.00	0.0625		Forb	N	N	CP38E-GHRA(CP2)W		BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-Cu	38-CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch	Common Ironweed	Vernonia fasciculata	1.00	0.0625		Forb	N	N	CP38E-GHRA(CP2)W		BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-GHRA(CP2)WM-Switch-BB-Cwrye-Pcord-Berg-N	38-CP38E-GHRA(CP2)WM-Switch-BB-Cwrye-Pcor	Switchgrass	Panicum virgatum	32.00	2		Grass	N	N	CP38E-GHRA(CP2)WM		Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
38	CP38E-GHRA(CP2)WM-Switch-BB-Cwrye-Pcord-Berg-N	38-CP38E-GHRA(CP2)WM-Switch-BB-Cwrye-Pcor	Big Bluestem	Andropogon gerardii	16.00	1		Grass	N	N	CP38E-GHRA(CP2)WM		Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
38	CP38E-GHRA(CP2)WM-Switch-BB-Cwrye-Pcord-Berg-N	38-CP38E-GHRA(CP2)WM-Switch-BB-Cwrye-Pcor	Canada Wildrye	Elymus canadensis	16.00	1		Grass	N	N	CP38E-GHRA(CP2)WM		Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
38	CP38E-GHRA(CP2)WM-Switch-BB-Cwrye-Pcord-Berg-N	38-CP38E-GHRA(CP2)WM-Switch-BB-Cwrye-Pcor	Prairie Cordgrass	Spartina pectinata	4.00	0.25		Grass	N	N	CP38E-GHRA(CP2)WM		Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
38	CP38E-GHRA(CP2)WM-Switch-BB-Cwrye-Pcord-Berg-N	38-CP38E-GHRA(CP2)WM-Switch-BB-Cwrye-Pcor	Bergamot	Monarda fistulosa	1.00	0.0625		Forb	N	N	CP38E-GHRA(CP2)WM		Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
38	CP38E-GHRA(CP2)WM-Switch-BB-Cwrye-Pcord-Berg-N	38-CP38E-GHRA(CP2)WM-Switch-BB-Cwrye-Pcor	New England Aster	Symphyotrichum novae-a	1.00	0.0625		Forb	N	N	CP38E-GHRA(CP2)WM		Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
38	CP38E-GHRA(CP2)WM-Switch-BB-Cwrye-Pcord-Berg-N	38-CP38E-GHRA(CP2)WM-Switch-BB-Cwrye-Pcor	Yellow Coneflower	Ratibida pinnata	1.00	0.0625		Forb	N	N	CP38E-GHRA(CP2)WM		Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Little Bluestem	Schizachyrium scoparium	24.00	1.5		Grass	N	N	CP38E-GHRA(CP25)D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Sideoats Grama	Bouteloua curtipendula	24.00	1.5		Grass	N	N	CP38E-GHRA(CP25)D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Indiangrass	Sorghastrum nutans	8.00	0.5		Grass	N	N	CP38E-GHRA(CP25)D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Big Bluestem	Andropogon gerardii	4.00	0.25		Grass	N	N	CP38E-GHRA(CP25)D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Purple Prairie Clover	Dalea purpurea	2.00	0.125		Legume	N	N	CP38E-GHRA(CP25)D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Sand Dropseed	Sporobolus cryptandrus	2.00	0.125		Grass	N	N	CP38E-GHRA(CP25)D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Prairie Junegrass	Koeleria macrantha	1.00	0.0625		Grass	N	N	CP38E-GHRA(CP25)D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Spiderwort	Tradescantia ohiensis	1.00	0.0625		Forb	N	N	CP38E-GHRA(CP25)D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Hoary Vervain	Verbena stricta	0.50	0.03125		Forb	N	N	CP38E-GHRA(CP25)D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Leadplant	Amorpha canescens	0.50	0.03125		Legume	N	N	CP38E-GHRA(CP25)D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Prairie Tickseed	Coreopsis palmata	0.50	0.03125		Forb	N	N	CP38E-GHRA(CP25)D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Silky Aster	Symphyotrichum pratens	0.50	0.03125		Forb	N	N	CP38E-GHRA(CP25)D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint

38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Stiff Goldenrod	Oligoneuron rigidum	0.50	0.03125		Forb	N	N	CP38E-GHRA(CP25)D	Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Yellow Coneflower	Ratibida pinnata	0.50	0.03125		Forb	N	N	CP38E-GHRA(CP25)D	Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Prairie Cinquefoil	Potentilla arguta	0.25	0.015625		Forb	N	N	CP38E-GHRA(CP25)D	Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Spotted Mint	Monarda punctata	0.25	0.015625		Forb	N	N	CP38E-GHRA(CP25)D	Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjune	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Little Bluestem	Schizachyrium scoparium	24.00	1.5		Grass	N	N	CP38E-GHRA(CP25)DM	Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjune	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Sideoats Grama	Bouteloua curtipendula	24.00	1.5		Grass	N	N	CP38E-GHRA(CP25)DM	Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjune	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Indiangrass	Sorghastrum nutans	8.00	0.5		Grass	N	N	CP38E-GHRA(CP25)DM	Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjune	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Switchgrass	Panicum virgatum	4.00	0.25		Grass	N	N	CP38E-GHRA(CP25)DM	Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjune	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Prairie Junegrass	Koeleria macrantha	2.00	0.125		Grass	N	N	CP38E-GHRA(CP25)DM	Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjune	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Prairie Dropseed	Sporobolus heterolepis	2.00	0.125		Grass	N	N	CP38E-GHRA(CP25)DM	Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjune	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Purple Prairie Clover	Dalea purpurea	2.00	0.125		Legume	N	N	CP38E-GHRA(CP25)DM	Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjune	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Round-Headed Bushclover	Lespedeza capitata	2.00	0.125		Legume	N	N	CP38E-GHRA(CP25)DM	Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjune	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Bergamot	Monarda fistulosa	1.00	0.0625		Forb	N	N	CP38E-GHRA(CP25)DM	Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjune	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Spiderwort	Tradescantia ohiensis	1.00	0.0625		Forb	N	N	CP38E-GHRA(CP25)DM	Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjune	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Yellow Coneflower	Ratibida pinnata	1.00	0.0625		Forb	N	N	CP38E-GHRA(CP25)DM	Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjune	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Leadplant	Amorpha canescens	0.50	0.03125		Legume	N	N	CP38E-GHRA(CP25)DM	Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjune	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Rough Blazing Star	Liatris aspera	0.50	0.03125		Forb	N	N	CP38E-GHRA(CP25)DM	Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjune	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Sky-Blue Aster	Symphyotrichum oolenta	0.50	0.03125		Forb	N	N	CP38E-GHRA(CP25)DM	Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjune	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Stiff Goldenrod	Oligoneuron rigidum	0.50	0.03125		Forb	N	N	CP38E-GHRA(CP25)DM	Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjune	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Prairie Cinquefoil	Potentilla arguta	0.25	0.015625		Forb	N	N	CP38E-GHRA(CP25)DM	Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Switch-Oxe	38-CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Sv	Little Bluestem	Schizachyrium scoparium	24.00	1.5		Grass	N	N	CP38E-GHRA(CP25)M	Berg-Besus-NEaster-SBAster-Ycone-Croot
38	CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Switch-Oxe	38-CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Sv	Indiangrass	Sorghastrum nutans	16.00	1		Grass	N	N	CP38E-GHRA(CP25)M	Berg-Besus-NEaster-SBAster-Ycone-Croot
38	CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Switch-Oxe	38-CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Sv	Big Bluestem	Andropogon gerardii	8.00	0.5		Grass	N	N	CP38E-GHRA(CP25)M	Berg-Besus-NEaster-SBAster-Ycone-Croot
38	CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Switch-Oxe	38-CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Sv	Canada Wildrye	Elymus canadensis	8.00	0.5		Grass	N	N	CP38E-GHRA(CP25)M	Berg-Besus-NEaster-SBAster-Ycone-Croot
38	CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Switch-Oxe	38-CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Sv	Switchgrass	Panicum virgatum	8.00	0.5		Grass	N	N	CP38E-GHRA(CP25)M	Berg-Besus-NEaster-SBAster-Ycone-Croot
38	CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Switch-Oxe	38-CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Sv	Ox-eye Sunflower	Heliopsis helianthoides	1.00	0.0625		Forb	N	N	CP38E-GHRA(CP25)M	Berg-Besus-NEaster-SBAster-Ycone-Croot
38	CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Switch-Oxe	38-CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Sv	Prairie Blazing Star	Liatris pycnostachya	1.00	0.0625		Forb	N	N	CP38E-GHRA(CP25)M	Berg-Besus-NEaster-SBAster-Ycone-Croot
38	CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Switch-Oxe	38-CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Sv	Purple Prairie Clover	Dalea purpurea	1.00	0.0625		Legume	N	N	CP38E-GHRA(CP25)M	Berg-Besus-NEaster-SBAster-Ycone-Croot
38	CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Switch-Oxe	38-CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Sv	Rosinweed	Silphium integrifolium	1.00	0.0625		Forb	N	N	CP38E-GHRA(CP25)M	Berg-Besus-NEaster-SBAster-Ycone-Croot
38	CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Switch-Oxe	38-CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Sv	Bergamot	Monarda fistulosa	0.50	0.03125		Forb	N	N	CP38E-GHRA(CP25)M	Berg-Besus-NEaster-SBAster-Ycone-Croot
38	CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Switch-Oxe	38-CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Sv	Black-eyed Susan	Rudbeckia hirta	0.50	0.03125		Forb	N	N	CP38E-GHRA(CP25)M	Berg-Besus-NEaster-SBAster-Ycone-Croot
38	CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Switch-Oxe	38-CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Sv	New England Aster	Symphyotrichum novae-a	0.50	0.03125		Forb	N	N	CP38E-GHRA(CP25)M	Berg-Besus-NEaster-SBAster-Ycone-Croot
38	CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Switch-Oxe	38-CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Sv	Smooth Blue Aster	Symphyotrichum laeve	0.50	0.03125		Forb	N	N	CP38E-GHRA(CP25)M	Berg-Besus-NEaster-SBAster-Ycone-Croot
38	CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Switch-Oxe	38-CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Sv	Yellow Coneflower	Ratibida pinnata	0.50	0.03125		Forb	N	N	CP38E-GHRA(CP25)M	Berg-Besus-NEaster-SBAster-Ycone-Croot
38	CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Switch-Oxe	38-CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Sv	Culver's Root	Veronicastrum virginicum	0.25	0.015625		Forb	N	N	CP38E-GHRA(CP25)M	Berg-Besus-NEaster-SBAster-Ycone-Croot
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-F	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BI	Canada Wildrye	Elymus canadensis	16.00	1		Grass	N	N	CP38E-GHRA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-F	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BI	Switchgrass	Panicum virgatum	16.00	1		Grass	N	N	CP38E-GHRA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-F	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BI	Indiangrass	Sorghastrum nutans	12.00	0.75		Grass	N	N	CP38E-GHRA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-F	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BI	Big Bluestem	Andropogon gerardii	8.00	0.5		Grass	N	N	CP38E-GHRA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-F	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BI	Prairie Cordgrass	Spartina pectinata	8.00	0.5		Grass	N	N	CP38E-GHRA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-F	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BI	Fowl Mannagrass	Glyceria striata	4.00	0.25		Grass	N	N	CP38E-GHRA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-F	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BI	Fox Sedge	Carex vulpinoidea	4.00	0.25		Sedge	N	N	CP38E-GHRA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-F	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BI	Cupplant	Silphium perfoliatum	2.00	0.125		Forb	N	N	CP38E-GHRA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-F	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BI	Showy Tick Trefoil	Desmodium canadense	2.00	0.125		Legume	N	N	CP38E-GHRA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-F	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BI	Blue Vervain	Verbena hastata	1.00	0.0625		Forb	N	N	CP38E-GHRA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-F	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BI	Golden Alexanders	Zizia aurea	1.00	0.0625		Forb	N	N	CP38E-GHRA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-F	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BI	Marsh Milkweed	Asclepias incarnata	1.00	0.0625		Forb	N	N	CP38E-GHRA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-F	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BI	Boneset	Eupatorium perfoliatum	0.50	0.03125		Forb	N	N	CP38E-GHRA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-F	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BI	Common Ironweed	Vernonia fasciculata	0.50	0.03125		Forb	N	N	CP38E-GHRA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot

38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-F	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BI	Joe-pye Weed	Eutrochium maculatum	0.50	0.03125		Forb	N	N	CP38E-GHRA(CP25)W		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-F	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BI	Culver's Root	Veronicastrum virginicum	0.25	0.015625		Forb	N	N	CP38E-GHRA(CP25)W		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Indian-Pcord	38-CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Ind	Switchgrass	Panicum virgatum	24.00	1.5		Grass	N	N	CP38E-GHRA(CP25)WM		Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
38	CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Indian-Pcord	38-CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Ind	Big Bluestem	Andropogon gerardii	20.00	1.25		Grass	N	N	CP38E-GHRA(CP25)WM		Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
38	CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Indian-Pcord	38-CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Ind	Canada Wildrye	Elymus canadensis	16.00	1		Grass	N	N	CP38E-GHRA(CP25)WM		Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
38	CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Indian-Pcord	38-CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Ind	Indiangrass	Sorghastrum nutans	12.00	0.75		Grass	N	N	CP38E-GHRA(CP25)WM		Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
38	CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Indian-Pcord	38-CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Ind	Prairie Cordgrass	Spartina pectinata	4.00	0.25		Grass	N	N	CP38E-GHRA(CP25)WM		Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
38	CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Indian-Pcord	38-CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Ind	Cupplant	Silphium perfoliatum	2.00	0.125		Forb	N	N	CP38E-GHRA(CP25)WM		Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
38	CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Indian-Pcord	38-CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Ind	White wild indigo	Baptisia alba	1.50	0.09375		Legume	N	N	CP38E-GHRA(CP25)WM		Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
38	CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Indian-Pcord	38-CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Ind	Black-eyed Susan	Rudbeckia hirta	0.50	0.03125		Forb	N	N	CP38E-GHRA(CP25)WM		Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
38	CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Indian-Pcord	38-CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Ind	Common Ironweed	Vernonia fasciculata	0.50	0.03125		Forb	N	N	CP38E-GHRA(CP25)WM		Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
38	CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Indian-Pcord	38-CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Ind	Golden Alexanders	Zizia aurea	0.50	0.03125		Forb	N	N	CP38E-GHRA(CP25)WM		Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
38	CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Indian-Pcord	38-CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Ind	New England Aster	Symphyotrichum novae-a	0.50	0.03125		Forb	N	N	CP38E-GHRA(CP25)WM		Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
38	CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Indian-Pcord	38-CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Ind	Prairie Blazing Star	Liatris pycnostachya	0.50	0.03125		Forb	N	N	CP38E-GHRA(CP25)WM		Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
38	CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Indian-Pcord	38-CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Ind	Yellow Coneflower	Ratibida pinnata	0.50	0.03125		Forb	N	N	CP38E-GHRA(CP25)WM		Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
38	CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Indian-Pcord	38-CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Ind	Bergamot	Monarda fistulosa	0.25	0.015625		Forb	N	N	CP38E-GHRA(CP25)WM		Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
38	CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Indian-Pcord	38-CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Ind	Great St. John's Wort	Hypericum ascyron	0.25	0.015625		Forb	N	N	CP38E-GHRA(CP25)WM		Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Little Bluestem	Schizachyrium scoparium	24.00	1.5		Grass	N	N	CP38E-KBB		Fspurge-Galex-Rblzstar-RHbushclover-Wsun-Berg-Ptick-Besus
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Canada Wildrye	Elymus canadensis	16.00	1		Grass	N	N	CP38E-KBB		Fspurge-Galex-Rblzstar-RHbushclover-Wsun-Berg-Ptick-Besus
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Indiangrass	Sorghastrum nutans	16.00	1		Grass	N	N	CP38E-KBB		Fspurge-Galex-Rblzstar-RHbushclover-Wsun-Berg-Ptick-Besus
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Big Bluestem	Andropogon gerardii	8.00	0.5		Grass	N	N	CP38E-KBB		Fspurge-Galex-Rblzstar-RHbushclover-Wsun-Berg-Ptick-Besus
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Sideoats Grama	Bouteloua curtipendula	8.00	0.5		Grass	N	N	CP38E-KBB		Fspurge-Galex-Rblzstar-RHbushclover-Wsun-Berg-Ptick-Besus
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Switchgrass	Panicum virgatum	8.00	0.5		Grass	N	N	CP38E-KBB		Fspurge-Galex-Rblzstar-RHbushclover-Wsun-Berg-Ptick-Besus
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Wild Lupine	Lupinus perennis	3.00	0.1875		Legume	N	N	CP38E-KBB		Fspurge-Galex-Rblzstar-RHbushclover-Wsun-Berg-Ptick-Besus
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Purple Prairie Clover	Dalea purpurea	2.00	0.125		Legume	N	N	CP38E-KBB		Fspurge-Galex-Rblzstar-RHbushclover-Wsun-Berg-Ptick-Besus
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Butterfly Milkweed	Asclepias tuberosa	1.00	0.0625		Forb	N	N	CP38E-KBB		Fspurge-Galex-Rblzstar-RHbushclover-Wsun-Berg-Ptick-Besus
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Flowering Spurge	Euphorbia corollata	1.00	0.0625		Forb	N	N	CP38E-KBB		Fspurge-Galex-Rblzstar-RHbushclover-Wsun-Berg-Ptick-Besus
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Golden Alexanders	Zizia aurea	1.00	0.0625		Forb	N	N	CP38E-KBB		Fspurge-Galex-Rblzstar-RHbushclover-Wsun-Berg-Ptick-Besus
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Rough Blazing Star	Liatris aspera	1.00	0.0625		Forb	N	N	CP38E-KBB		Fspurge-Galex-Rblzstar-RHbushclover-Wsun-Berg-Ptick-Besus
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Round-Headed Bushclover	Lespedeza capitata	1.00	0.0625		Legume	N	N	CP38E-KBB		Fspurge-Galex-Rblzstar-RHbushclover-Wsun-Berg-Ptick-Besus
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Fewleaf Sunflower	Helianthus occidentalis	1.00	0.0625		Forb	N	N	CP38E-KBB		Fspurge-Galex-Rblzstar-RHbushclover-Wsun-Berg-Ptick-Besus
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Bergamot	Monarda fistulosa	0.50	0.03125		Forb	N	N	CP38E-KBB		Fspurge-Galex-Rblzstar-RHbushclover-Wsun-Berg-Ptick-Besus
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Prairie Tickseed	Coreopsis palmata	0.50	0.03125		Forb	N	N	CP38E-KBB		Fspurge-Galex-Rblzstar-RHbushclover-Wsun-Berg-Ptick-Besus
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Black-eyed Susan	Rudbeckia hirta	0.40	0.025		Forb	N	N	CP38E-KBB		Fspurge-Galex-Rblzstar-RHbushclover-Wsun-Berg-Ptick-Besus
38	CP38E-KBB(CP1)1-Alf-Rtop-Tim-Orc	38-CP38E-KBB(CP1)1-Alf-Rtop-Tim-Orc	Alfalfa	Medicago sativa	96.00	6		Legume	I	N	CP38E-KBB(CP1)1		Alf-Rtop-Tim-Orc
38	CP38E-KBB(CP1)1-Alf-Rtop-Tim-Orc	38-CP38E-KBB(CP1)1-Alf-Rtop-Tim-Orc	Redtop	Agrostis gigantea	32.00	2		Grass	I	N	CP38E-KBB(CP1)1		Alf-Rtop-Tim-Orc
38	CP38E-KBB(CP1)1-Alf-Rtop-Tim-Orc	38-CP38E-KBB(CP1)1-Alf-Rtop-Tim-Orc	Timothy	Phleum pratense	32.00	2		Grass	I	N	CP38E-KBB(CP1)1		Alf-Rtop-Tim-Orc
38	CP38E-KBB(CP1)1-Alf-Rtop-Tim-Orc	38-CP38E-KBB(CP1)1-Alf-Rtop-Tim-Orc	Orchardgrass	Dactylis glomerata L.	16.00	1		Grass	I	N	CP38E-KBB(CP1)1		Alf-Rtop-Tim-Orc
38	CP38E-KBB(CP1)2-RC-KB-Orc-Rtop	38-CP38E-KBB(CP1)2-RC-KB-Orc-Rtop	Red Clover	Trifolium pratense	80.00	5		Legume	I	N	CP38E-KBB(CP1)2		RC-KB-Orc-Rtop
38	CP38E-KBB(CP1)2-RC-KB-Orc-Rtop	38-CP38E-KBB(CP1)2-RC-KB-Orc-Rtop	Kentucky Bluegrass	Poa pratensis	32.00	2		Grass	I	N	CP38E-KBB(CP1)2		RC-KB-Orc-Rtop
38	CP38E-KBB(CP1)2-RC-KB-Orc-Rtop	38-CP38E-KBB(CP1)2-RC-KB-Orc-Rtop	Orchardgrass	Dactylis glomerata L.	16.00	1		Grass	I	N	CP38E-KBB(CP1)2		RC-KB-Orc-Rtop
38	CP38E-KBB(CP1)2-RC-KB-Orc-Rtop	38-CP38E-KBB(CP1)2-RC-KB-Orc-Rtop	Redtop	Agrostis gigantea	16.00	1		Grass	I	N	CP38E-KBB(CP1)2		RC-KB-Orc-Rtop
38	CP38E-KBB(CP1)3-RC-SB-Tim	38-CP38E-KBB(CP1)3-RC-SB-Tim	Red Clover	Trifolium pratense	80.00	5		Legume	I	N	CP38E-KBB(CP1)3		RC-SB-Tim
38	CP38E-KBB(CP1)3-RC-SB-Tim	38-CP38E-KBB(CP1)3-RC-SB-Tim	Smooth Bromegrass	Bromus inermis	48.00	3		Grass	I	N	CP38E-KBB(CP1)3		RC-SB-Tim
38	CP38E-KBB(CP1)3-RC-SB-Tim	38-CP38E-KBB(CP1)3-RC-SB-Tim	Timothy	Phleum pratense	32.00	2		Grass	I	N	CP38E-KBB(CP1)3		RC-SB-Tim
38	CP38E-KBB(CP1)4-RC-Tim-Orc-Rtop	38-CP38E-KBB(CP1)4-RC-Tim-Orc-Rtop	Red Clover	Trifolium pratense	80.00	5		Legume	I	N	CP38E-KBB(CP1)4		RC-Tim-Orc-Rtop
38	CP38E-KBB(CP1)4-RC-Tim-Orc-Rtop	38-CP38E-KBB(CP1)4-RC-Tim-Orc-Rtop	Timothy	Phleum pratense	32.00	2		Grass	I	N	CP38E-KBB(CP1)4		RC-Tim-Orc-Rtop
38	CP38E-KBB(CP1)4-RC-Tim-Orc-Rtop	38-CP38E-KBB(CP1)4-RC-Tim-Orc-Rtop	Orchardgrass	Dactylis glomerata L.	16.00	1		Grass	I	N	CP38E-KBB(CP1)4		RC-Tim-Orc-Rtop
38	CP38E-KBB(CP1)4-RC-Tim-Orc-Rtop	38-CP38E-KBB(CP1)4-RC-Tim-Orc-Rtop	Redtop	Agrostis gigantea	16.00	1		Grass	I	N	CP38E-KBB(CP1)4		RC-Tim-Orc-Rtop

38	CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlup-PPclove	38-CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlu	Little Bluestem	Schizachyrium scoparium	36.00	2.25		Grass	N	N	CP38E-KBB(WHIP)		LB-Sgrama-BB-Pjune-Wlup-PPclover-Rblzstar-Ptick-Besus
38	CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlup-PPclove	38-CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlu	Sideoats Grama	Bouteloua curtipendula	16.00	1		Grass	N	N	CP38E-KBB(WHIP)		LB-Sgrama-BB-Pjune-Wlup-PPclover-Rblzstar-Ptick-Besus
38	CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlup-PPclove	38-CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlu	Big Bluestem	Andropogon gerardii	8.00	0.5		Grass	N	N	CP38E-KBB(WHIP)		LB-Sgrama-BB-Pjune-Wlup-PPclover-Rblzstar-Ptick-Besus
38	CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlup-PPclove	38-CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlu	Prairie Junegrass	Koeleria macrantha	4.00	0.25		Grass	N	N	CP38E-KBB(WHIP)		LB-Sgrama-BB-Pjune-Wlup-PPclover-Rblzstar-Ptick-Besus
38	CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlup-PPclove	38-CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlu	Wild Lupine	Lupinus perennis	3.00	0.1875		Legume	N	N	CP38E-KBB(WHIP)		LB-Sgrama-BB-Pjune-Wlup-PPclover-Rblzstar-Ptick-Besus
38	CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlup-PPclove	38-CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlu	Purple Prairie Clover	Dalea purpurea	2.00	0.125		Legume	N	N	CP38E-KBB(WHIP)		LB-Sgrama-BB-Pjune-Wlup-PPclover-Rblzstar-Ptick-Besus
38	CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlup-PPclove	38-CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlu	Rough Blazing Star	Liatris aspera	2.00	0.125		Forb	N	N	CP38E-KBB(WHIP)		LB-Sgrama-BB-Pjune-Wlup-PPclover-Rblzstar-Ptick-Besus
38	CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlup-PPclove	38-CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlu	Prairie Tickseed	Coreopsis palmata	1.00	0.0625		Forb	N	N	CP38E-KBB(WHIP)		LB-Sgrama-BB-Pjune-Wlup-PPclover-Rblzstar-Ptick-Besus
38	CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlup-PPclove	38-CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlu	Black-eyed Susan	Rudbeckia hirta	0.25	0.015625		Forb	N	N	CP38E-KBB(WHIP)		LB-Sgrama-BB-Pjune-Wlup-PPclover-Rblzstar-Ptick-Besus
38	CP38E-SWGCA(CP1)1-Alf-Rtop-Tim-Orc	38-CP38E-SWGCA(CP1)1-Alf-Rtop-Tim-Orc	Alfalfa	Medicago sativa	96.00	6		Legume	I	N	CP38E-SWGCA(CP1)1		Alf-Rtop-Tim-Orc
38	CP38E-SWGCA(CP1)1-Alf-Rtop-Tim-Orc	38-CP38E-SWGCA(CP1)1-Alf-Rtop-Tim-Orc	Redtop	Agrostis gigantea	32.00	2		Grass	I	N	CP38E-SWGCA(CP1)1		Alf-Rtop-Tim-Orc
38	CP38E-SWGCA(CP1)1-Alf-Rtop-Tim-Orc	38-CP38E-SWGCA(CP1)1-Alf-Rtop-Tim-Orc	Timothy	Phleum pratense	32.00	2		Grass	I	N	CP38E-SWGCA(CP1)1		Alf-Rtop-Tim-Orc
38	CP38E-SWGCA(CP1)1-Alf-Rtop-Tim-Orc	38-CP38E-SWGCA(CP1)1-Alf-Rtop-Tim-Orc	Orchardgrass	Dactylis glomerata L.	16.00	1		Grass	I	N	CP38E-SWGCA(CP1)1		Alf-Rtop-Tim-Orc
38	CP38E-SWGCA(CP1)2-RC-KB-Orc-Rtop	38-CP38E-SWGCA(CP1)2-RC-KB-Orc-Rtop	Red Clover	Trifolium pratense	80.00	5		Legume	I	N	CP38E-SWGCA(CP1)2		RC-KB-Orc-Rtop
38	CP38E-SWGCA(CP1)2-RC-KB-Orc-Rtop	38-CP38E-SWGCA(CP1)2-RC-KB-Orc-Rtop	Kentucky Bluegrass	Poa pratensis	32.00	2		Grass	I	N	CP38E-SWGCA(CP1)2		RC-KB-Orc-Rtop
38	CP38E-SWGCA(CP1)2-RC-KB-Orc-Rtop	38-CP38E-SWGCA(CP1)2-RC-KB-Orc-Rtop	Orchardgrass	Dactylis glomerata L.	16.00	1		Grass	I	N	CP38E-SWGCA(CP1)2		RC-KB-Orc-Rtop
38	CP38E-SWGCA(CP1)2-RC-KB-Orc-Rtop	38-CP38E-SWGCA(CP1)2-RC-KB-Orc-Rtop	Redtop	Agrostis gigantea	16.00	1		Grass	I	N	CP38E-SWGCA(CP1)2		RC-KB-Orc-Rtop
38	CP38E-SWGCA(CP1)3-RC-SB-Tim	38-CP38E-SWGCA(CP1)3-RC-SB-Tim	Red Clover	Trifolium pratense	80.00	5		Legume	I	N	CP38E-SWGCA(CP1)3		RC-SB-Tim
38	CP38E-SWGCA(CP1)3-RC-SB-Tim	38-CP38E-SWGCA(CP1)3-RC-SB-Tim	Smooth Bromegrass	Bromus inermis	48.00	3		Grass	I	N	CP38E-SWGCA(CP1)3		RC-SB-Tim
38	CP38E-SWGCA(CP1)3-RC-SB-Tim	38-CP38E-SWGCA(CP1)3-RC-SB-Tim	Timothy	Phleum pratense	32.00	2		Grass	I	N	CP38E-SWGCA(CP1)3		RC-SB-Tim
38	CP38E-SWGCA(CP1)4-RC-Tim-Orc-Rtop	38-CP38E-SWGCA(CP1)4-RC-Tim-Orc-Rtop	Red Clover	Trifolium pratense	80.00	5		Legume	I	N	CP38E-SWGCA(CP1)4		RC-Tim-Orc-Rtop
38	CP38E-SWGCA(CP1)4-RC-Tim-Orc-Rtop	38-CP38E-SWGCA(CP1)4-RC-Tim-Orc-Rtop	Timothy	Phleum pratense	32.00	2		Grass	I	N	CP38E-SWGCA(CP1)4		RC-Tim-Orc-Rtop
38	CP38E-SWGCA(CP1)4-RC-Tim-Orc-Rtop	38-CP38E-SWGCA(CP1)4-RC-Tim-Orc-Rtop	Orchardgrass	Dactylis glomerata L.	16.00	1		Grass	I	N	CP38E-SWGCA(CP1)4		RC-Tim-Orc-Rtop
38	CP38E-SWGCA(CP1)4-RC-Tim-Orc-Rtop	38-CP38E-SWGCA(CP1)4-RC-Tim-Orc-Rtop	Redtop	Agrostis gigantea	16.00	1		Grass	I	N	CP38E-SWGCA(CP1)4		RC-Tim-Orc-Rtop
38	CP38E-SWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-S	38-CP38E-SWGCA(CP2)D-LB-Sgrama-BB-Indian-I	Little Bluestem	Schizachyrium scoparium	24.00	1.5		Grass	N	N	CP38E-SWGCA(CP2)D		LB-Sgrama-BB-Indian-PPclover-Sgrod-Ycone
38	CP38E-SWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-S	38-CP38E-SWGCA(CP2)D-LB-Sgrama-BB-Indian-I	Sideoats Grama	Bouteloua curtipendula	24.00	1.5		Grass	N	N	CP38E-SWGCA(CP2)D		LB-Sgrama-BB-Indian-PPclover-Sgrod-Ycone
38	CP38E-SWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-S	38-CP38E-SWGCA(CP2)D-LB-Sgrama-BB-Indian-I	Big Bluestem	Andropogon gerardii	8.00	0.5		Grass	N	N	CP38E-SWGCA(CP2)D		LB-Sgrama-BB-Indian-PPclover-Sgrod-Ycone
38	CP38E-SWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-S	38-CP38E-SWGCA(CP2)D-LB-Sgrama-BB-Indian-I	Indiangrass	Sorghastrum nutans	8.00	0.5		Grass	N	N	CP38E-SWGCA(CP2)D		LB-Sgrama-BB-Indian-PPclover-Sgrod-Ycone
38	CP38E-SWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-S	38-CP38E-SWGCA(CP2)D-LB-Sgrama-BB-Indian-I	Purple Prairie Clover	Dalea purpurea	2.00	0.125		Legume	N	N	CP38E-SWGCA(CP2)D		LB-Sgrama-BB-Indian-PPclover-Sgrod-Ycone
38	CP38E-SWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-S	38-CP38E-SWGCA(CP2)D-LB-Sgrama-BB-Indian-I	Stiff Goldenrod	Oligoneuron rigidum	1.00	0.0625		Forb	N	N	CP38E-SWGCA(CP2)D		LB-Sgrama-BB-Indian-PPclover-Sgrod-Ycone
38	CP38E-SWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-S	38-CP38E-SWGCA(CP2)D-LB-Sgrama-BB-Indian-I	Yellow Coneflower	Ratibida pinnata	1.00	0.0625		Forb	N	N	CP38E-SWGCA(CP2)D		LB-Sgrama-BB-Indian-PPclover-Sgrod-Ycone
38	CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-I	38-CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian	Little Bluestem	Schizachyrium scoparium	24.00	1.5		Grass	N	N	CP38E-SWGCA(CP2)DM		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-I	38-CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian	Sideoats Grama	Bouteloua curtipendula	16.00	1		Grass	N	N	CP38E-SWGCA(CP2)DM		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-I	38-CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian	Big Bluestem	Andropogon gerardii	8.00	0.5		Grass	N	N	CP38E-SWGCA(CP2)DM		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-I	38-CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian	Indiangrass	Sorghastrum nutans	8.00	0.5		Grass	N	N	CP38E-SWGCA(CP2)DM		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-I	38-CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian	Switchgrass	Panicum virgatum	8.00	0.5		Grass	N	N	CP38E-SWGCA(CP2)DM		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-I	38-CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian	Purple Prairie Clover	Dalea purpurea	2.00	0.125		Legume	N	N	CP38E-SWGCA(CP2)DM		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-I	38-CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian	Bergamot	Monarda fistulosa	1.00	0.0625		Forb	N	N	CP38E-SWGCA(CP2)DM		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-I	38-CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian	Yellow Coneflower	Ratibida pinnata	1.00	0.0625		Forb	N	N	CP38E-SWGCA(CP2)DM		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Ber	38-CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Little Bluestem	Schizachyrium scoparium	20.00	1.25		Grass	N	N	CP38E-SWGCA(CP2)M		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Ber	38-CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Canada Wildrye	Elymus canadensis	16.00	1		Grass	N	N	CP38E-SWGCA(CP2)M		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Ber	38-CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Indiangrass	Sorghastrum nutans	16.00	1		Grass	N	N	CP38E-SWGCA(CP2)M		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Ber	38-CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Big Bluestem	Andropogon gerardii	8.00	0.5		Grass	N	N	CP38E-SWGCA(CP2)M		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Ber	38-CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Switchgrass	Panicum virgatum	8.00	0.5		Grass	N	N	CP38E-SWGCA(CP2)M		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Ber	38-CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Bergamot	Monarda fistulosa	1.00	0.0625		Forb	N	N	CP38E-SWGCA(CP2)M		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Ber	38-CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Black-eyed Susan	Rudbeckia hirta	1.00	0.0625		Forb	N	N	CP38E-SWGCA(CP2)M		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Ber	38-CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Yellow Coneflower	Ratibida pinnata	1.00	0.0625		Forb	N	N	CP38E-SWGCA(CP2)M		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-	38-CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Switc	Big Bluestem	Andropogon gerardii	16.00	1		Grass	N	N	CP38E-SWGCA(CP2)W		BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-	38-CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Switc	Canada Wildrye	Elymus canadensis	16.00	1		Grass	N	N	CP38E-SWGCA(CP2)W		BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron

38	CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-C	38-CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Switc	Indiangrass	Sorghastrum nutans	16.00	1		Grass	N	N	CP38E-SWGCA(CP2)W		BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-C	38-CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Switc	Switchgrass	Panicum virgatum	16.00	1		Grass	N	N	CP38E-SWGCA(CP2)W		BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-C	38-CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Switc	Prairie Cordgrass	Spartina pectinata	8.00	0.5		Grass	N	N	CP38E-SWGCA(CP2)W		BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-C	38-CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Switc	Cupplant	Silphium perfoliatum	2.00	0.125		Forb	N	N	CP38E-SWGCA(CP2)W		BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-C	38-CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Switc	Blue Vervain	Verbena hastata	1.00	0.0625		Forb	N	N	CP38E-SWGCA(CP2)W		BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-C	38-CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Switc	Common Ironweed	Vernonia fasciculata	1.00	0.0625		Forb	N	N	CP38E-SWGCA(CP2)W		BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-SWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Berg-	38-CP38E-SWGCA(CP2)WM-Switch-BB-Cwrye-Pc	Switchgrass	Panicum virgatum	32.00	2		Grass	N	N	CP38E-SWGCA(CP2)WM		Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
38	CP38E-SWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Berg-	38-CP38E-SWGCA(CP2)WM-Switch-BB-Cwrye-Pc	Big Bluestem	Andropogon gerardii	16.00	1		Grass	N	N	CP38E-SWGCA(CP2)WM		Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
38	CP38E-SWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Berg-	38-CP38E-SWGCA(CP2)WM-Switch-BB-Cwrye-Pc	Canada Wildrye	Elymus canadensis	16.00	1		Grass	N	N	CP38E-SWGCA(CP2)WM		Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
38	CP38E-SWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Berg-	38-CP38E-SWGCA(CP2)WM-Switch-BB-Cwrye-Pc	Prairie Cordgrass	Spartina pectinata	4.00	0.25		Grass	N	N	CP38E-SWGCA(CP2)WM		Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
38	CP38E-SWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Berg-	38-CP38E-SWGCA(CP2)WM-Switch-BB-Cwrye-Pc	Bergamot	Monarda fistulosa	1.00	0.0625		Forb	N	N	CP38E-SWGCA(CP2)WM		Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
38	CP38E-SWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Berg-	38-CP38E-SWGCA(CP2)WM-Switch-BB-Cwrye-Pc	New England Aster	Symphyotrichum novae-a	1.00	0.0625		Forb	N	N	CP38E-SWGCA(CP2)WM		Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
38	CP38E-SWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Berg-	38-CP38E-SWGCA(CP2)WM-Switch-BB-Cwrye-Pc	Yellow Coneflower	Ratibida pinnata	1.00	0.0625		Forb	N	N	CP38E-SWGCA(CP2)WM		Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Little Bluestem	Schizachyrium scoparium	24.00	1.5		Grass	N	N	CP38E-SWGCA(CP25)D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Sideoats Grama	Bouteloua curtipendula	24.00	1.5		Grass	N	N	CP38E-SWGCA(CP25)D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Indiangrass	Sorghastrum nutans	8.00	0.5		Grass	N	N	CP38E-SWGCA(CP25)D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Big Bluestem	Andropogon gerardii	4.00	0.25		Grass	N	N	CP38E-SWGCA(CP25)D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Purple Prairie Clover	Dalea purpurea	2.00	0.125		Legume	N	N	CP38E-SWGCA(CP25)D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Sand Dropseed	Sporobolus cryptandrus	2.00	0.125		Grass	N	N	CP38E-SWGCA(CP25)D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Prairie Junegrass	Koeleria macrantha	1.00	0.0625		Grass	N	N	CP38E-SWGCA(CP25)D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Spiderwort	Tradescantia ohiensis	1.00	0.0625		Forb	N	N	CP38E-SWGCA(CP25)D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Hoary Vervain	Verbena stricta	0.50	0.03125		Forb	N	N	CP38E-SWGCA(CP25)D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Leadplant	Amorpha canescens	0.50	0.03125		Legume	N	N	CP38E-SWGCA(CP25)D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Prairie Tickseed	Coreopsis palmata	0.50	0.03125		Forb	N	N	CP38E-SWGCA(CP25)D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Silky Aster	Symphyotrichum pratens	0.50	0.03125		Forb	N	N	CP38E-SWGCA(CP25)D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Stiff Goldenrod	Oligoneuron rigidum	0.50	0.03125		Forb	N	N	CP38E-SWGCA(CP25)D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Yellow Coneflower	Ratibida pinnata	0.50	0.03125		Forb	N	N	CP38E-SWGCA(CP25)D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Prairie Cinquefoil	Potentilla arguta	0.25	0.015625		Forb	N	N	CP38E-SWGCA(CP25)D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Spotted Mint	Monarda punctata	0.25	0.015625		Forb	N	N	CP38E-SWGCA(CP25)D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Little Bluestem	Schizachyrium scoparium	24.00	1.5		Grass	N	N	CP38E-SWGCA(CP25)DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Sideoats Grama	Bouteloua curtipendula	24.00	1.5		Grass	N	N	CP38E-SWGCA(CP25)DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Indiangrass	Sorghastrum nutans	8.00	0.5		Grass	N	N	CP38E-SWGCA(CP25)DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Switchgrass	Panicum virgatum	4.00	0.25		Grass	N	N	CP38E-SWGCA(CP25)DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Prairie Junegrass	Koeleria macrantha	2.00	0.125		Grass	N	N	CP38E-SWGCA(CP25)DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Prairie Dropseed	Sporobolus heterolepis	2.00	0.125		Grass	N	N	CP38E-SWGCA(CP25)DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Purple Prairie Clover	Dalea purpurea	2.00	0.125		Legume	N	N	CP38E-SWGCA(CP25)DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Round-Headed Bushclover	Lespedeza capitata	2.00	0.125		Legume	N	N	CP38E-SWGCA(CP25)DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Bergamot	Monarda fistulosa	1.00	0.0625		Forb	N	N	CP38E-SWGCA(CP25)DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Spiderwort	Tradescantia ohiensis	1.00	0.0625		Forb	N	N	CP38E-SWGCA(CP25)DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Yellow Coneflower	Ratibida pinnata	1.00	0.0625		Forb	N	N	CP38E-SWGCA(CP25)DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Leadplant	Amorpha canescens	0.50	0.03125		Legume	N	N	CP38E-SWGCA(CP25)DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Rough Blazing Star	Liatris aspera	0.50	0.03125		Forb	N	N	CP38E-SWGCA(CP25)DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Sky-Blue Aster	Symphyotrichum oolenta	0.50	0.03125		Forb	N	N	CP38E-SWGCA(CP25)DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Stiff Goldenrod	Oligoneuron rigidum	0.50	0.03125		Forb	N	N	CP38E-SWGCA(CP25)DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Prairie Cinquefoil	Potentilla arguta	0.25	0.015625		Forb	N	N	CP38E-SWGCA(CP25)DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-Switch-O	38-CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-	Little Bluestem	Schizachyrium scoparium	24.00	1.5		Grass	N	N	CP38E-SWGCA(CP25)M		Berg-Besus-NEaster-SBAster-Ycone-Croot
38	CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-Switch-O	38-CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-	Indiangrass	Sorghastrum nutans	16.00	1		Grass	N	N	CP38E-SWGCA(CP25)M		Berg-Besus-NEaster-SBAster-Ycone-Croot
38	CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-Switch-O	38-CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-	Big Bluestem	Andropogon gerardii	8.00	0.5		Grass	N	N	CP38E-SWGCA(CP25)M		Berg-Besus-NEaster-SBAster-Ycone-Croot
38	CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-Switch-O	38-CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-	Canada Wildrye	Elymus canadensis	8.00	0.5		Grass	N	N	CP38E-SWGCA(CP25)M		Berg-Besus-NEaster-SBAster-Ycone-Croot

38	CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-Switch-O	38-CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-	Switchgrass	Panicum virgatum	8.00	0.5		Grass	N	N	CP38E-SWGCA(CP25)M	Berg-Besus-NEaster-SBAster-Ycone-Croot
38	CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-Switch-O	38-CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-	Ox-eye Sunflower	Heliopsis helianthoides	1.00	0.0625		Forb	N	N	CP38E-SWGCA(CP25)M	Berg-Besus-NEaster-SBAster-Ycone-Croot
38	CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-Switch-O	38-CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-	Prairie Blazing Star	Liatris pycnostachya	1.00	0.0625		Forb	N	N	CP38E-SWGCA(CP25)M	Berg-Besus-NEaster-SBAster-Ycone-Croot
38	CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-Switch-O	38-CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-	Purple Prairie Clover	Dalea purpurea	1.00	0.0625		Legume	N	N	CP38E-SWGCA(CP25)M	Berg-Besus-NEaster-SBAster-Ycone-Croot
38	CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-Switch-O	38-CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-	Rosinweed	Silphium integrifolium	1.00	0.0625		Forb	N	N	CP38E-SWGCA(CP25)M	Berg-Besus-NEaster-SBAster-Ycone-Croot
38	CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-Switch-O	38-CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-	Bergamot	Monarda fistulosa	0.50	0.03125		Forb	N	N	CP38E-SWGCA(CP25)M	Berg-Besus-NEaster-SBAster-Ycone-Croot
38	CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-Switch-O	38-CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-	Black-eyed Susan	Rudbeckia hirta	0.50	0.03125		Forb	N	N	CP38E-SWGCA(CP25)M	Berg-Besus-NEaster-SBAster-Ycone-Croot
38	CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-Switch-O	38-CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-	New England Aster	Symphyotrichum novae-a	0.50	0.03125		Forb	N	N	CP38E-SWGCA(CP25)M	Berg-Besus-NEaster-SBAster-Ycone-Croot
38	CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-Switch-O	38-CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-	Smooth Blue Aster	Symphyotrichum laeve	0.50	0.03125		Forb	N	N	CP38E-SWGCA(CP25)M	Berg-Besus-NEaster-SBAster-Ycone-Croot
38	CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-Switch-O	38-CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-	Yellow Coneflower	Ratibida pinnata	0.50	0.03125		Forb	N	N	CP38E-SWGCA(CP25)M	Berg-Besus-NEaster-SBAster-Ycone-Croot
38	CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-Switch-O	38-CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-	Culver's Root	Veronicastrum virginicum	0.25	0.015625		Forb	N	N	CP38E-SWGCA(CP25)M	Berg-Besus-NEaster-SBAster-Ycone-Croot
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-	Canada Wildrye	Elymus canadensis	16.00	1		Grass	N	N	CP38E-SWGCA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-	Switchgrass	Panicum virgatum	16.00	1		Grass	N	N	CP38E-SWGCA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-	Indiangrass	Sorghastrum nutans	12.00	0.75		Grass	N	N	CP38E-SWGCA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-	Big Bluestem	Andropogon gerardii	8.00	0.5		Grass	N	N	CP38E-SWGCA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-	Prairie Cordgrass	Spartina pectinata	8.00	0.5		Grass	N	N	CP38E-SWGCA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-	Fowl Mannagrass	Glyceria striata	4.00	0.25		Grass	N	N	CP38E-SWGCA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-	Fox Sedge	Carex vulpinoidea	4.00	0.25		Sedge	N	N	CP38E-SWGCA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-	Cupplant	Silphium perfoliatum	2.00	0.125		Forb	N	N	CP38E-SWGCA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-	Showy Tick Trefoil	Desmodium canadense	2.00	0.125		Legume	N	N	CP38E-SWGCA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-	Blue Vervain	Verbena hastata	1.00	0.0625		Forb	N	N	CP38E-SWGCA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-	Golden Alexanders	Zizia aurea	1.00	0.0625		Forb	N	N	CP38E-SWGCA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-	Marsh Milkweed	Asclepias incarnata	1.00	0.0625		Forb	N	N	CP38E-SWGCA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-	Boneset	Eupatorium perfoliatum	0.50	0.03125		Forb	N	N	CP38E-SWGCA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-	Common Ironweed	Vernonia fasciculata	0.50	0.03125		Forb	N	N	CP38E-SWGCA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-	Joe-pye Weed	Eutrochium maculatum	0.50	0.03125		Forb	N	N	CP38E-SWGCA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-	Culver's Root	Veronicastrum virginicum	0.25	0.015625		Forb	N	N	CP38E-SWGCA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-Indian-Pco	38-CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-I	Switchgrass	Panicum virgatum	24.00	1.5		Grass	N	N	CP38E-SWGCA(CP25)WM	Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
38	CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-Indian-Pco	38-CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-I	Big Bluestem	Andropogon gerardii	20.00	1.25		Grass	N	N	CP38E-SWGCA(CP25)WM	Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
38	CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-Indian-Pco	38-CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-I	Canada Wildrye	Elymus canadensis	16.00	1		Grass	N	N	CP38E-SWGCA(CP25)WM	Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
38	CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-Indian-Pco	38-CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-I	Indiangrass	Sorghastrum nutans	12.00	0.75		Grass	N	N	CP38E-SWGCA(CP25)WM	Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
38	CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-Indian-Pco	38-CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-I	Prairie Cordgrass	Spartina pectinata	4.00	0.25		Grass	N	N	CP38E-SWGCA(CP25)WM	Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
38	CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-Indian-Pco	38-CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-I	Cupplant	Silphium perfoliatum	2.00	0.125		Forb	N	N	CP38E-SWGCA(CP25)WM	Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
38	CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-Indian-Pco	38-CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-I	White wild indigo	Baptisia alba	1.50	0.09375		Legume	N	N	CP38E-SWGCA(CP25)WM	Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
38	CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-Indian-Pco	38-CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-I	Black-eyed Susan	Rudbeckia hirta	0.50	0.03125		Forb	N	N	CP38E-SWGCA(CP25)WM	Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
38	CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-Indian-Pco	38-CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-I	Common Ironweed	Vernonia fasciculata	0.50	0.03125		Forb	N	N	CP38E-SWGCA(CP25)WM	Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
38	CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-Indian-Pco	38-CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-I	Golden Alexanders	Zizia aurea	0.50	0.03125		Forb	N	N	CP38E-SWGCA(CP25)WM	Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
38	CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-Indian-Pco	38-CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-I	New England Aster	Symphyotrichum novae-a	0.50	0.03125		Forb	N	N	CP38E-SWGCA(CP25)WM	Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
38	CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-Indian-Pco	38-CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-I	Prairie Blazing Star	Liatris pycnostachya	0.50	0.03125		Forb	N	N	CP38E-SWGCA(CP25)WM	Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
38	CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-Indian-Pco	38-CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-I	Yellow Coneflower	Ratibida pinnata	0.50	0.03125		Forb	N	N	CP38E-SWGCA(CP25)WM	Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
38	CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-Indian-Pco	38-CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-I	Bergamot	Monarda fistulosa	0.25	0.015625		Forb	N	N	CP38E-SWGCA(CP25)WM	Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
38	CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-Indian-Pco	38-CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-I	Great St. John's Wort	Hypericum ascyron	0.25	0.015625		Forb	N	N	CP38E-SWGCA(CP25)WM	Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop-	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pju	Little Bluestem	Schizachyrium scoparium	32.00	2		Grass	N	N	CP38E-WPHRA(CP25)D	Swort-Berg-Lplant-Rblzstar-SkyAster-Besus-Pcinque-Sgrod-
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop-	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pju	Sideoats Grama	Bouteloua curtipendula	24.00	1.5		Grass	N	N	CP38E-WPHRA(CP25)D	Swort-Berg-Lplant-Rblzstar-SkyAster-Besus-Pcinque-Sgrod-
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop-	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pju	Indiangrass	Sorghastrum nutans	4.00	0.25		Grass	N	N	CP38E-WPHRA(CP25)D	Swort-Berg-Lplant-Rblzstar-SkyAster-Besus-Pcinque-Sgrod-
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop-	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pju	Prairie Junegrass	Koeleria macrantha	4.00	0.25		Grass	N	N	CP38E-WPHRA(CP25)D	Swort-Berg-Lplant-Rblzstar-SkyAster-Besus-Pcinque-Sgrod-
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop-	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pju	Prairie Dropseed	Sporobolus heterolepis	4.00	0.25		Grass	N	N	CP38E-WPHRA(CP25)D	Swort-Berg-Lplant-Rblzstar-SkyAster-Besus-Pcinque-Sgrod-
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop-	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pju	Switchgrass	Panicum virgatum	4.00	0.25		Grass	N	N	CP38E-WPHRA(CP25)D	Swort-Berg-Lplant-Rblzstar-SkyAster-Besus-Pcinque-Sgrod-
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop-	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pju	Purple Prairie Clover	Dalea purpurea	2.00	0.125		Legume	N	N	CP38E-WPHRA(CP25)D	Swort-Berg-Lplant-Rblzstar-SkyAster-Besus-Pcinque-Sgrod-

38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop-	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjur	Round-Headed Bushclover	Lespedeza capitata	2.00	0.125		Legume	N	N	CP38E-WPHRA(CP25)D	Swort-Berg-Lplant-Rblzstar-SkyAster-Besus-Pcinque-Sgrod-
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop-	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjur	Spiderwort	Tradescantia ohiensis	1.00	0.0625		Forb	N	N	CP38E-WPHRA(CP25)D	Swort-Berg-Lplant-Rblzstar-SkyAster-Besus-Pcinque-Sgrod-
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop-	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjur	Bergamot	Monarda fistulosa	0.50	0.03125		Forb	N	N	CP38E-WPHRA(CP25)D	Swort-Berg-Lplant-Rblzstar-SkyAster-Besus-Pcinque-Sgrod-
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop-	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjur	Leadplant	Amorpha canescens	0.50	0.03125		Legume	N	N	CP38E-WPHRA(CP25)D	Swort-Berg-Lplant-Rblzstar-SkyAster-Besus-Pcinque-Sgrod-
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop-	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjur	Rough Blazing Star	Liatris aspera	0.50	0.03125		Forb	N	N	CP38E-WPHRA(CP25)D	Swort-Berg-Lplant-Rblzstar-SkyAster-Besus-Pcinque-Sgrod-
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop-	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjur	Sky-Blue Aster	Symphyotrichum oolenta	0.50	0.03125		Forb	N	N	CP38E-WPHRA(CP25)D	Swort-Berg-Lplant-Rblzstar-SkyAster-Besus-Pcinque-Sgrod-
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop-	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjur	Black-eyed Susan	Rudbeckia hirta	0.25	0.015625		Forb	N	N	CP38E-WPHRA(CP25)D	Swort-Berg-Lplant-Rblzstar-SkyAster-Besus-Pcinque-Sgrod-
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop-	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjur	Prairie Cinquefoil	Potentilla arguta	0.25	0.015625		Forb	N	N	CP38E-WPHRA(CP25)D	Swort-Berg-Lplant-Rblzstar-SkyAster-Besus-Pcinque-Sgrod-
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop-	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjur	Stiff Goldenrod	Oligoneuron rigidum	0.25	0.015625		Forb	N	N	CP38E-WPHRA(CP25)D	Swort-Berg-Lplant-Rblzstar-SkyAster-Besus-Pcinque-Sgrod-
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop-	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjur	Yellow Coneflower	Ratibida pinnata	0.25	0.015625		Forb	N	N	CP38E-WPHRA(CP25)D	Swort-Berg-Lplant-Rblzstar-SkyAster-Besus-Pcinque-Sgrod-
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BI	Little Bluestem	Schizachyrium scoparium	32.00	2		Grass	N	N	CP38E-WPHRA(CP25)DM	Hvervain-Lplant-Ptick-SilkAster-Pcinque-Smint-Sgrod-Ycone
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BI	Sideoats Grama	Bouteloua curtipendula	24.00	1.5		Grass	N	N	CP38E-WPHRA(CP25)DM	Hvervain-Lplant-Ptick-SilkAster-Pcinque-Smint-Sgrod-Ycone
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BI	Prairie Junegrass	Koeleria macrantha	6.00	0.375		Grass	N	N	CP38E-WPHRA(CP25)DM	Hvervain-Lplant-Ptick-SilkAster-Pcinque-Smint-Sgrod-Ycone
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BI	Big Bluestem	Andropogon gerardii	4.00	0.25		Grass	N	N	CP38E-WPHRA(CP25)DM	Hvervain-Lplant-Ptick-SilkAster-Pcinque-Smint-Sgrod-Ycone
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BI	Indiangrass	Sorghastrum nutans	4.00	0.25		Grass	N	N	CP38E-WPHRA(CP25)DM	Hvervain-Lplant-Ptick-SilkAster-Pcinque-Smint-Sgrod-Ycone
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BI	Sand Dropseed	Sporobolus cryptandrus	4.00	0.25		Grass	N	N	CP38E-WPHRA(CP25)DM	Hvervain-Lplant-Ptick-SilkAster-Pcinque-Smint-Sgrod-Ycone
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BI	Butterfly Milkweed	Asclepias tuberosa	1.00	0.0625		Forb	N	N	CP38E-WPHRA(CP25)DM	Hvervain-Lplant-Ptick-SilkAster-Pcinque-Smint-Sgrod-Ycone
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BI	Purple Prairie Clover	Dalea purpurea	1.00	0.0625		Legume	N	N	CP38E-WPHRA(CP25)DM	Hvervain-Lplant-Ptick-SilkAster-Pcinque-Smint-Sgrod-Ycone
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BI	Spiderwort	Tradescantia ohiensis	1.00	0.0625		Forb	N	N	CP38E-WPHRA(CP25)DM	Hvervain-Lplant-Ptick-SilkAster-Pcinque-Smint-Sgrod-Ycone
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BI	Hoary Vervain	Verbena stricta	0.50	0.03125		Forb	N	N	CP38E-WPHRA(CP25)DM	Hvervain-Lplant-Ptick-SilkAster-Pcinque-Smint-Sgrod-Ycone
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BI	Leadplant	Amorpha canescens	0.50	0.03125		Legume	N	N	CP38E-WPHRA(CP25)DM	Hvervain-Lplant-Ptick-SilkAster-Pcinque-Smint-Sgrod-Ycone
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BI	Prairie Tickseed	Coreopsis palmata	0.50	0.03125		Forb	N	N	CP38E-WPHRA(CP25)DM	Hvervain-Lplant-Ptick-SilkAster-Pcinque-Smint-Sgrod-Ycone
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BI	Silky Aster	Symphyotrichum pratens	0.50	0.03125		Forb	N	N	CP38E-WPHRA(CP25)DM	Hvervain-Lplant-Ptick-SilkAster-Pcinque-Smint-Sgrod-Ycone
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BI	Prairie Cinquefoil	Potentilla arguta	0.25	0.015625		Forb	N	N	CP38E-WPHRA(CP25)DM	Hvervain-Lplant-Ptick-SilkAster-Pcinque-Smint-Sgrod-Ycone
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BI	Spotted Mint	Monarda punctata	0.25	0.015625		Forb	N	N	CP38E-WPHRA(CP25)DM	Hvervain-Lplant-Ptick-SilkAster-Pcinque-Smint-Sgrod-Ycone
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BI	Stiff Goldenrod	Oligoneuron rigidum	0.25	0.015625		Forb	N	N	CP38E-WPHRA(CP25)DM	Hvervain-Lplant-Ptick-SilkAster-Pcinque-Smint-Sgrod-Ycone
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BI	Yellow Coneflower	Ratibida pinnata	0.25	0.015625		Forb	N	N	CP38E-WPHRA(CP25)DM	Hvervain-Lplant-Ptick-SilkAster-Pcinque-Smint-Sgrod-Ycone
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BE	Little Bluestem	Schizachyrium scoparium	28.00	1.75		Grass	N	N	CP38E-WPHRA(CP25)M	Pblzstar-PPclover-Berg-Besus-NEaster-SkyAster-SBAster-Ycone-
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BE	Canada Wildrye	Elymus canadensis	12.00	0.75		Grass	N	N	CP38E-WPHRA(CP25)M	Pblzstar-PPclover-Berg-Besus-NEaster-SkyAster-SBAster-Ycone-
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BE	Sideoats Grama	Bouteloua curtipendula	12.00	0.75		Grass	N	N	CP38E-WPHRA(CP25)M	Pblzstar-PPclover-Berg-Besus-NEaster-SkyAster-SBAster-Ycone-
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BE	Big Bluestem	Andropogon gerardii	4.00	0.25		Grass	N	N	CP38E-WPHRA(CP25)M	Pblzstar-PPclover-Berg-Besus-NEaster-SkyAster-SBAster-Ycone-
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BE	Indiangrass	Sorghastrum nutans	4.00	0.25		Grass	N	N	CP38E-WPHRA(CP25)M	Pblzstar-PPclover-Berg-Besus-NEaster-SkyAster-SBAster-Ycone-
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BE	Switchgrass	Panicum virgatum	4.00	0.25		Grass	N	N	CP38E-WPHRA(CP25)M	Pblzstar-PPclover-Berg-Besus-NEaster-SkyAster-SBAster-Ycone-
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BE	Canada Milkvetch	Astragalus canadensis	2.00	0.125		Legume	N	N	CP38E-WPHRA(CP25)M	Pblzstar-PPclover-Berg-Besus-NEaster-SkyAster-SBAster-Ycone-
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BE	Ox-eye Sunflower	Heliopsis helianthoides	1.00	0.0625		Forb	N	N	CP38E-WPHRA(CP25)M	Pblzstar-PPclover-Berg-Besus-NEaster-SkyAster-SBAster-Ycone-
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BE	Prairie Blazing Star	Liatris pycnostachya	1.00	0.0625		Forb	N	N	CP38E-WPHRA(CP25)M	Pblzstar-PPclover-Berg-Besus-NEaster-SkyAster-SBAster-Ycone-
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BE	Purple Prairie Clover	Dalea purpurea	1.00	0.0625		Legume	N	N	CP38E-WPHRA(CP25)M	Pblzstar-PPclover-Berg-Besus-NEaster-SkyAster-SBAster-Ycone-
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BE	Bergamot	Monarda fistulosa	0.50	0.03125		Forb	N	N	CP38E-WPHRA(CP25)M	Pblzstar-PPclover-Berg-Besus-NEaster-SkyAster-SBAster-Ycone-
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BE	Black-eyed Susan	Rudbeckia hirta	0.50	0.03125		Forb	N	N	CP38E-WPHRA(CP25)M	Pblzstar-PPclover-Berg-Besus-NEaster-SkyAster-SBAster-Ycone-
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BE	New England Aster	Symphyotrichum novae-a	0.50	0.03125		Forb	N	N	CP38E-WPHRA(CP25)M	Pblzstar-PPclover-Berg-Besus-NEaster-SkyAster-SBAster-Ycone-
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BE	Sky-Blue Aster	Symphyotrichum oolenta	0.50	0.03125		Forb	N	N	CP38E-WPHRA(CP25)M	Pblzstar-PPclover-Berg-Besus-NEaster-SkyAster-SBAster-Ycone-
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BE	Smooth Blue Aster	Symphyotrichum laeve	0.50	0.03125		Forb	N	N	CP38E-WPHRA(CP25)M	Pblzstar-PPclover-Berg-Besus-NEaster-SkyAster-SBAster-Ycone-
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BE	Yellow Coneflower	Ratibida pinnata	0.50	0.03125		Forb	N	N	CP38E-WPHRA(CP25)M	Pblzstar-PPclover-Berg-Besus-NEaster-SkyAster-SBAster-Ycone-
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BE	Culver's Root	Veronicastrum virginicum	0.25	0.015625		Forb	N	N	CP38E-WPHRA(CP25)M	Pblzstar-PPclover-Berg-Besus-NEaster-SkyAster-SBAster-Ycone-
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsedg	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-	Canada Wildrye	Elymus canadensis	16.00	1		Grass	N	N	CP38E-WPHRA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsedg	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-	Indiangrass	Sorghastrum nutans	12.00	0.75		Grass	N	N	CP38E-WPHRA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsedg	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-	Switchgrass	Panicum virgatum	12.00	0.75		Grass	N	N	CP38E-WPHRA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsedg	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-	Big Bluestem	Andropogon gerardii	8.00	0.5		Grass	N	N	CP38E-WPHRA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsedg	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-	Fox Sedge	Carex vulpinoidea	8.00	0.5		Sedge	N	N	CP38E-WPHRA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot

38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsedg	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-	Prairie Cordgrass	Spartina pectinata	8.00	0.5		Grass	N	N	CP38E-WPHRA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsedg	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-	Fowl Mannagrass	Glyceria striata	4.00	0.25		Grass	N	N	CP38E-WPHRA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsedg	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-	Cupplant	Silphium perfoliatum	2.00	0.125		Forb	N	N	CP38E-WPHRA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsedg	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-	Showy Tick Trefoil	Desmodium canadense	2.00	0.125		Legume	N	N	CP38E-WPHRA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsedg	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-	Blue Vervain	Verbena hastata	1.00	0.0625		Forb	N	N	CP38E-WPHRA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsedg	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-	Golden Alexanders	Zizia aurea	1.00	0.0625		Forb	N	N	CP38E-WPHRA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsedg	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-	Marsh Milkweed	Asclepias incarnata	1.00	0.0625		Forb	N	N	CP38E-WPHRA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsedg	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-	Boneset	Eupatorium perfoliatum	0.50	0.03125		Forb	N	N	CP38E-WPHRA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsedg	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-	Common Ironweed	Vernonia fasciculata	0.50	0.03125		Forb	N	N	CP38E-WPHRA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsedg	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-	Joe-pye Weed	Eutrochium maculatum	0.50	0.03125		Forb	N	N	CP38E-WPHRA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsedg	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-	Culver's Root	Veronicastrum virginicum	0.25	0.015625		Forb	N	N	CP38E-WPHRA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-Monarch(CP1)-Tim-Orc-RC-Cmilkweed-Besus-Ox	38-CP38E-Monarch(CP1)-Tim-Orc-RC-Cmilkweed-	Timothy	Phleum pratense	8.00	0.5	14.2	Grass	I	X	CP38E-Monarch(CP1)	Tim-Orc-RC-Cmilkweed-Besus-Oxeyesun-Sgrod
38	CP38E-Monarch(CP1)-Tim-Orc-RC-Cmilkweed-Besus-Ox	38-CP38E-Monarch(CP1)-Tim-Orc-RC-Cmilkweed-	Orchardgrass	Dactylis glomerata L.	8.00	0.5	7.5	Grass	I	X	CP38E-Monarch(CP1)	Tim-Orc-RC-Cmilkweed-Besus-Oxeyesun-Sgrod
38	CP38E-Monarch(CP1)-Tim-Orc-RC-Cmilkweed-Besus-Ox	38-CP38E-Monarch(CP1)-Tim-Orc-RC-Cmilkweed-	Red Clover	Trifolium pratense	4.80	0.3	1.9	Legume	I	X	CP38E-Monarch(CP1)	Tim-Orc-RC-Cmilkweed-Besus-Oxeyesun-Sgrod
38	CP38E-Monarch(CP1)-Tim-Orc-RC-Cmilkweed-Besus-Ox	38-CP38E-Monarch(CP1)-Tim-Orc-RC-Cmilkweed-	Common Milkweed	Asclepias syriaca	6.05	0.38	0.6	Forb	N	X	CP38E-Monarch(CP1)	Tim-Orc-RC-Cmilkweed-Besus-Oxeyesun-Sgrod
38	CP38E-Monarch(CP1)-Tim-Orc-RC-Cmilkweed-Besus-Ox	38-CP38E-Monarch(CP1)-Tim-Orc-RC-Cmilkweed-	Black-Eyed Susan	Rudbeckia hirta	0.96	0.06	2.2	Forb	N	X	CP38E-Monarch(CP1)	Tim-Orc-RC-Cmilkweed-Besus-Oxeyesun-Sgrod
38	CP38E-Monarch(CP1)-Tim-Orc-RC-Cmilkweed-Besus-Ox	38-CP38E-Monarch(CP1)-Tim-Orc-RC-Cmilkweed-	Ox-eye Sunflower	Heliopsis helianthoides	0.96	0.06	0.20	Forb	N	X	CP38E-Monarch(CP1)	Tim-Orc-RC-Cmilkweed-Besus-Oxeyesun-Sgrod
38	CP38E-Monarch(CP1)-Tim-Orc-RC-Cmilkweed-Besus-Ox	38-CP38E-Monarch(CP1)-Tim-Orc-RC-Cmilkweed-	Stiff Goldenrod	Oligoneuron rigidum	0.96	0.06	1.1	Forb	N	X	CP38E-Monarch(CP1)	Tim-Orc-RC-Cmilkweed-Besus-Oxeyesun-Sgrod
38	CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cwrye-Wpc	38-CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cv	Big Bluestem	Andropogon gerardii	4.00	0.25	1	Grass	N	X	CP38E-Monarch(CP2)	Sgrod-Shwgrod-NEaster
38	CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cwrye-Wpc	38-CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cv	Little Bluestem	Schizachyrium scopariu	24.00	1.5	8.3	Grass	N	X	CP38E-Monarch(CP2)	Sgrod-Shwgrod-NEaster
38	CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cwrye-Wpc	38-CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cv	Indiangrass	Sorghastrum nutans	4.00	0.25	1.2	Grass	N	X	CP38E-Monarch(CP2)	Sgrod-Shwgrod-NEaster
38	CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cwrye-Wpc	38-CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cv	Sideoats Grama	Bouteloua curtipendula	12.00	0.75	2.2	Grass	N	X	CP38E-Monarch(CP2)	Sgrod-Shwgrod-NEaster
38	CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cwrye-Wpc	38-CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cv	Canada Wildrye	Elymus canadensis	16.00	1	2	Grass	N	X	CP38E-Monarch(CP2)	Sgrod-Shwgrod-NEaster
38	CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cwrye-Wpc	38-CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cv	white prairie clover	Dalea candida	3.04	0.19	1.2	Legume	N	X	CP38E-Monarch(CP2)	Sgrod-Shwgrod-NEaster
38	CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cwrye-Wpc	38-CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cv	Common Milkweed	Asclepias syriaca	4.96	0.31	0.5	Forb	N	X	CP38E-Monarch(CP2)	Sgrod-Shwgrod-NEaster
38	CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cwrye-Wpc	38-CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cv	Black-eyed Susan	Rudbeckia hirta	0.96	0.06	2.2	Forb	N	X	CP38E-Monarch(CP2)	Sgrod-Shwgrod-NEaster
38	CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cwrye-Wpc	38-CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cv	Bergamot	Monarda fistulosa	0.96	0.06	1.8	Forb	N	X	CP38E-Monarch(CP2)	Sgrod-Shwgrod-NEaster
38	CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cwrye-Wpc	38-CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cv	Stiff Goldenrod	Oligoneuron rigidum	0.96	0.06	1.1	Forb	N	X	CP38E-Monarch(CP2)	Sgrod-Shwgrod-NEaster
38	CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cwrye-Wpc	38-CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cv	Showy Goldenrod	Solidago speciosa	0.48	0.03	1.1	Forb	N	X	CP38E-Monarch(CP2)	Sgrod-Shwgrod-NEaster
38	CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cwrye-Wpc	38-CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cv	New England Aster	Symphyotrichum novae	0.48	0.03	0.8	Forb	N	X	CP38E-Monarch(CP2)	Sgrod-Shwgrod-NEaster
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-Cwrye-Wp	38-CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	Big Bluestem	Andropogon gerardii	4.00	0.25	1	Grass	N	X	CP38E-Monarch(CP25)	Sgrod-Shwgrod-NEaster-Rblzstar-Rtlsnkmaster-Cup-SkyAster
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-Cwrye-Wp	38-CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	Little Bluestem	Schizachyrium scopariu	16.00	1	5.6	Grass	N	X	CP38E-Monarch(CP25)	Sgrod-Shwgrod-NEaster-Rblzstar-Rtlsnkmaster-Cup-SkyAster
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-Cwrye-Wp	38-CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	Indiangrass	Sorghastrum nutans	4.00	0.25	1.2	Grass	N	X	CP38E-Monarch(CP25)	Sgrod-Shwgrod-NEaster-Rblzstar-Rtlsnkmaster-Cup-SkyAster
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-Cwrye-Wp	38-CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	Sideoats Grama	Bouteloua curtipendula	8.00	0.5	1.5	Grass	N	X	CP38E-Monarch(CP25)	Sgrod-Shwgrod-NEaster-Rblzstar-Rtlsnkmaster-Cup-SkyAster
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-Cwrye-Wp	38-CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	Canada Wildrye	Elymus canadensis	8.00	0.5	1	Grass	N	X	CP38E-Monarch(CP25)	Sgrod-Shwgrod-NEaster-Rblzstar-Rtlsnkmaster-Cup-SkyAster
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-Cwrye-Wp	38-CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	white prairie clover	Dalea candida	3.04	0.19	1.2	Legume	N	X	CP38E-Monarch(CP25)	Sgrod-Shwgrod-NEaster-Rblzstar-Rtlsnkmaster-Cup-SkyAster
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-Cwrye-Wp	38-CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	Common Milkweed	Asclepias syriaca	4.96	0.31	0.5	Forb	N	X	CP38E-Monarch(CP25)	Sgrod-Shwgrod-NEaster-Rblzstar-Rtlsnkmaster-Cup-SkyAster
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-Cwrye-Wp	38-CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	Black-eyed Susan	Rudbeckia hirta	0.96	0.06	2.2	Forb	N	X	CP38E-Monarch(CP25)	Sgrod-Shwgrod-NEaster-Rblzstar-Rtlsnkmaster-Cup-SkyAster
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-Cwrye-Wp	38-CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	Bergamot	Monarda fistulosa	0.96	0.06	1.8	Forb	N	X	CP38E-Monarch(CP25)	Sgrod-Shwgrod-NEaster-Rblzstar-Rtlsnkmaster-Cup-SkyAster
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-Cwrye-Wp	38-CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	Stiff Goldenrod	Oligoneuron rigidum	0.96	0.06	1.1	Forb	N	X	CP38E-Monarch(CP25)	Sgrod-Shwgrod-NEaster-Rblzstar-Rtlsnkmaster-Cup-SkyAster
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-Cwrye-Wp	38-CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	Showy Goldenrod	Solidago speciosa	0.48	0.03	1.1	Forb	N	X	CP38E-Monarch(CP25)	Sgrod-Shwgrod-NEaster-Rblzstar-Rtlsnkmaster-Cup-SkyAster
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-Cwrye-Wp	38-CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	New England Aster	Symphyotrichum novae	0.48	0.03	0.8	Forb	N	X	CP38E-Monarch(CP25)	Sgrod-Shwgrod-NEaster-Rblzstar-Rtlsnkmaster-Cup-SkyAster
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-Cwrye-Wp	38-CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	Rough Blazing Star	Liatris aspera	0.48	0.03	0.2	Forb	N	X	CP38E-Monarch(CP25)	Sgrod-Shwgrod-NEaster-Rblzstar-Rtlsnkmaster-Cup-SkyAster
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-Cwrye-Wp	38-CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	Rattlesnake Master	Eryngium yuccifolium	0.96	0.06	0.2	Forb	N	X	CP38E-Monarch(CP25)	Sgrod-Shwgrod-NEaster-Rblzstar-Rtlsnkmaster-Cup-SkyAster
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-Cwrye-Wp	38-CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	Cupplant	Silphium perfoliatum	2.08	0.13	0.1	Forb	N	X	CP38E-Monarch(CP25)	Sgrod-Shwgrod-NEaster-Rblzstar-Rtlsnkmaster-Cup-SkyAster
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-Cwrye-Wp	38-CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	Sky-Blue Aster	Symphyotrichum oolen	0.96	0.06	1.9	Forb	N	X	CP38E-Monarch(CP25)	BB-LB-Indian-Sgrama-Cwrye-Wpclover-Cmilkweed-Besus-Berg-Sgrod-Shwgrod-NEaster-Rblzstar-Rtlsnkmaster-Cup-SkyAster
38	CP38E-GHRA(CP1)1-Alf-Rtop-Tim-Orc	38-CP38E-GHRA(CP1)1-Alf-Rtop-Tim-Orc	Alfalfa	Medicago sativa	96.00	6	30.2	Legume	I	X	CP38E-GHRA(CP1)1	Alf-Rtop-Tim-Orc
38	CP38E-GHRA(CP1)1-Alf-Rtop-Tim-Orc	38-CP38E-GHRA(CP1)1-Alf-Rtop-Tim-Orc	Redtop	Agrostis gigantea	32.00	2	229.2	Grass	I		CP38E-GHRA(CP1)1	Alf-Rtop-Tim-Orc

38	CP38E-GHRA(CP1)1-Alf-Rtop-Tim-Orc	38-CP38E-GHRA(CP1)1-Alf-Rtop-Tim-Orc	timothy	Phleum pratense	32.00	2	56.5	Grass	I	X	CP38E-GHRA(CP1)1		Alf-Rtop-Tim-Orc
38	CP38E-GHRA(CP1)1-Alf-Rtop-Tim-Orc	38-CP38E-GHRA(CP1)1-Alf-Rtop-Tim-Orc	Orchardgrass	Dactylis glomerata L.	16.00	1	15	Grass	I	X	CP38E-GHRA(CP1)1		Alf-Rtop-Tim-Orc
38	CP38E-GHRA(CP1)2-RC-KB-Orc-Rtop	38-CP38E-GHRA(CP1)2-RC-KB-Orc-Rtop	Red Clover	Trifolium pratense	80.00	5	31.6	Legume	I	X	CP38E-GHRA(CP1)2		RC-KB-Orc-Rtop
38	CP38E-GHRA(CP1)2-RC-KB-Orc-Rtop	38-CP38E-GHRA(CP1)2-RC-KB-Orc-Rtop	Kentucky Bluegrass	Poa pratensis	32.00	2	100	Grass	I		CP38E-GHRA(CP1)2		RC-KB-Orc-Rtop
38	CP38E-GHRA(CP1)2-RC-KB-Orc-Rtop	38-CP38E-GHRA(CP1)2-RC-KB-Orc-Rtop	Orchardgrass	Dactylis glomerata L.	16.00	1	15	Grass	I	X	CP38E-GHRA(CP1)2		RC-KB-Orc-Rtop
38	CP38E-GHRA(CP1)2-RC-KB-Orc-Rtop	38-CP38E-GHRA(CP1)2-RC-KB-Orc-Rtop	Redtop	Agrostis gigantea	16.00	1	114.6	Grass	I		CP38E-GHRA(CP1)2		RC-KB-Orc-Rtop
38	CP38E-GHRA(CP1)3-RC-SB-Tim	38-CP38E-GHRA(CP1)3-RC-SB-Tim	Red Clover	Trifolium pratense	80.00	5	31.6	Legume	I	X	CP38E-GHRA(CP1)3		RC-SB-Tim
38	CP38E-GHRA(CP1)3-RC-SB-Tim	38-CP38E-GHRA(CP1)3-RC-SB-Tim	Smooth Bromegrass	Bromus inermis	48.00	3	9.4	Grass	I		CP38E-GHRA(CP1)3		RC-SB-Tim
38	CP38E-GHRA(CP1)3-RC-SB-Tim	38-CP38E-GHRA(CP1)3-RC-SB-Tim	Timothy	Phleum pratense	32.00	2	56.5	Grass	I	X	CP38E-GHRA(CP1)3		RC-SB-Tim
38	CP38E-GHRA(CP1)4-RC-Tim-Orc-Rtop	38-CP38E-GHRA(CP1)4-RC-Tim-Orc-Rtop	Red Clover	Trifolium pratense	80.00	5	31.6	Legume	I	X	CP38E-GHRA(CP1)4		RC-Tim-Orc-Rtop
38	CP38E-GHRA(CP1)4-RC-Tim-Orc-Rtop	38-CP38E-GHRA(CP1)4-RC-Tim-Orc-Rtop	Timothy	Phleum pratense	32.00	2	56.5	Grass	I	X	CP38E-GHRA(CP1)4		RC-Tim-Orc-Rtop
38	CP38E-GHRA(CP1)4-RC-Tim-Orc-Rtop	38-CP38E-GHRA(CP1)4-RC-Tim-Orc-Rtop	Orchardgrass	Dactylis glomerata L.	16.00	1	15	Grass	I	X	CP38E-GHRA(CP1)4		RC-Tim-Orc-Rtop
38	CP38E-GHRA(CP1)4-RC-Tim-Orc-Rtop	38-CP38E-GHRA(CP1)4-RC-Tim-Orc-Rtop	Redtop	Agrostis gigantea	16.00	1	114.6	Grass	I		CP38E-GHRA(CP1)4		RC-Tim-Orc-Rtop
38	CP3-1-BB-LB-Indian-Sgrama-Sgrod-Ycone-PPclover	38-CP3-1-BB-LB-Indian-Sgrama-Sgrod-Ycone-PPcl	Big Bluestem	Andropogon gerardii	8.00	0.5	1.9	Grass	N	X	CP3-1		BB-LB-Indian-Sgrama-Sgrod-Ycone-PPclover
38	CP3-1-BB-LB-Indian-Sgrama-Sgrod-Ycone-PPclover	38-CP3-1-BB-LB-Indian-Sgrama-Sgrod-Ycone-PPcl	Little Bluestem	Schizachyrium scopariu	24.00	1.5	8.3	Grass	N	X	CP3-1		BB-LB-Indian-Sgrama-Sgrod-Ycone-PPclover
38	CP3-1-BB-LB-Indian-Sgrama-Sgrod-Ycone-PPclover	38-CP3-1-BB-LB-Indian-Sgrama-Sgrod-Ycone-PPcl	Indiangrass	Sorghastrum nutans	8.00	0.5	2.3	Grass	N	X	CP3-1		BB-LB-Indian-Sgrama-Sgrod-Ycone-PPclover
38	CP3-1-BB-LB-Indian-Sgrama-Sgrod-Ycone-PPclover	38-CP3-1-BB-LB-Indian-Sgrama-Sgrod-Ycone-PPcl	Sideoats Grama	Bouteloua curtipendula	24.00	1.5	4.4	Grass	N	X	CP3-1		BB-LB-Indian-Sgrama-Sgrod-Ycone-PPclover
38	CP3-1-BB-LB-Indian-Sgrama-Sgrod-Ycone-PPclover	38-CP3-1-BB-LB-Indian-Sgrama-Sgrod-Ycone-PPcl	Stiff Goldenrod	Oligoneuron rigidum	1.00	0.0625	1.1	Forb	N	X	CP3-1		BB-LB-Indian-Sgrama-Sgrod-Ycone-PPclover
38	CP3-1-BB-LB-Indian-Sgrama-Sgrod-Ycone-PPclover	38-CP3-1-BB-LB-Indian-Sgrama-Sgrod-Ycone-PPcl	Yellow Coneflower	Ratibida pinnata	1.00	0.0625	0.7	Forb	N	X	CP3-1		BB-LB-Indian-Sgrama-Sgrod-Ycone-PPclover
38	CP3-1-BB-LB-Indian-Sgrama-Sgrod-Ycone-PPclover	38-CP3-1-BB-LB-Indian-Sgrama-Sgrod-Ycone-PPcl	Purple Prairie Clover	Dalea purpurea	2.00	0.125	1	Legume	N	X	CP3-1		BB-LB-Indian-Sgrama-Sgrod-Ycone-PPclover
38	CP3-2-BB-Switch-LB-Indian-Cwrye-Ycone-Besus-Berg	38-CP3-2-BB-Switch-LB-Indian-Cwrye-Ycone-Besu	Big Bluestem	Andropogon gerardii	8.00	0.5	1.9	Grass	N	X	CP3-2		BB-Switch-LB-Indian-Cwrye-Ycone-Besus-Berg
38	CP3-2-BB-Switch-LB-Indian-Cwrye-Ycone-Besus-Berg	38-CP3-2-BB-Switch-LB-Indian-Cwrye-Ycone-Besu	Switchgrass	Panicum virgatum	8.00	0.5	4.5	Grass	N	X	CP3-2		BB-Switch-LB-Indian-Cwrye-Ycone-Besus-Berg
38	CP3-2-BB-Switch-LB-Indian-Cwrye-Ycone-Besus-Berg	38-CP3-2-BB-Switch-LB-Indian-Cwrye-Ycone-Besu	Little Bluestem	Schizachyrium scopariu	20.00	1.25	6.9	Grass	N	X	CP3-2		BB-Switch-LB-Indian-Cwrye-Ycone-Besus-Berg
38	CP3-2-BB-Switch-LB-Indian-Cwrye-Ycone-Besus-Berg	38-CP3-2-BB-Switch-LB-Indian-Cwrye-Ycone-Besu	Indiangrass	Sorghastrum nutans	16.00	1	4.5	Grass	N	X	CP3-2		BB-Switch-LB-Indian-Cwrye-Ycone-Besus-Berg
38	CP3-2-BB-Switch-LB-Indian-Cwrye-Ycone-Besus-Berg	38-CP3-2-BB-Switch-LB-Indian-Cwrye-Ycone-Besu	Canada Wildrye	Elymus canadensis	16.00	1	2	Grass	N	X	CP3-2		BB-Switch-LB-Indian-Cwrye-Ycone-Besus-Berg
38	CP3-2-BB-Switch-LB-Indian-Cwrye-Ycone-Besus-Berg	38-CP3-2-BB-Switch-LB-Indian-Cwrye-Ycone-Besu	Yellow Coneflower	Ratibida pinnata	1.00	0.0625	0.7	Forb	N	X	CP3-2		BB-Switch-LB-Indian-Cwrye-Ycone-Besus-Berg
38	CP3-2-BB-Switch-LB-Indian-Cwrye-Ycone-Besus-Berg	38-CP3-2-BB-Switch-LB-Indian-Cwrye-Ycone-Besu	Black-Eyed Susan	Rudbeckia hirta	1.00	0.0625	2.3	Forb	N	X	CP3-2		BB-Switch-LB-Indian-Cwrye-Ycone-Besus-Berg
38	CP3-2-BB-Switch-LB-Indian-Cwrye-Ycone-Besus-Berg	38-CP3-2-BB-Switch-LB-Indian-Cwrye-Ycone-Besu	Bergamot	Monarda fistulosa	1.00	0.0625	1.8	Forb	N	X	CP3-2		BB-Switch-LB-Indian-Cwrye-Ycone-Besus-Berg
38	CP3-3-BB-LB-Indian-Switch-Sgrama-PPclover-Berg-Ycon	38-CP3-3-BB-LB-Indian-Switch-Sgrama-PPclover-B	Big Bluestem	Andropogon gerardii	8.00	0.5	1.9	Grass	N	X	CP3-3		BB-LB-Indian-Switch-Sgrama-PPclover-Berg-Ycone
38	CP3-3-BB-LB-Indian-Switch-Sgrama-PPclover-Berg-Ycon	38-CP3-3-BB-LB-Indian-Switch-Sgrama-PPclover-B	Little Bluestem	Schizachyrium scopariu	24.00	1.5	8.3	Grass	N	X	CP3-3		BB-LB-Indian-Switch-Sgrama-PPclover-Berg-Ycone
38	CP3-3-BB-LB-Indian-Switch-Sgrama-PPclover-Berg-Ycon	38-CP3-3-BB-LB-Indian-Switch-Sgrama-PPclover-B	Indiangrass	Sorghastrum nutans	8.00	0.5	2.3	Grass	N	X	CP3-3		BB-LB-Indian-Switch-Sgrama-PPclover-Berg-Ycone
38	CP3-3-BB-LB-Indian-Switch-Sgrama-PPclover-Berg-Ycon	38-CP3-3-BB-LB-Indian-Switch-Sgrama-PPclover-B	Switchgrass	Panicum virgatum	8.00	0.5	4.5	Grass	N	X	CP3-3		BB-LB-Indian-Switch-Sgrama-PPclover-Berg-Ycone
38	CP3-3-BB-LB-Indian-Switch-Sgrama-PPclover-Berg-Ycon	38-CP3-3-BB-LB-Indian-Switch-Sgrama-PPclover-B	Sideoats Grama	Bouteloua curtipendula	16.00	1	3	Grass	N	X	CP3-3		BB-LB-Indian-Switch-Sgrama-PPclover-Berg-Ycone
38	CP3-3-BB-LB-Indian-Switch-Sgrama-PPclover-Berg-Ycon	38-CP3-3-BB-LB-Indian-Switch-Sgrama-PPclover-B	Purple Prairie Clover	Dalea purpurea	2.00	0.125	1	Legume	N	X	CP3-3		BB-LB-Indian-Switch-Sgrama-PPclover-Berg-Ycone
38	CP3-3-BB-LB-Indian-Switch-Sgrama-PPclover-Berg-Ycon	38-CP3-3-BB-LB-Indian-Switch-Sgrama-PPclover-B	Bergamot	Monarda fistulosa	1.00	0.0625	1.8	Forb	N	X	CP3-3		BB-LB-Indian-Switch-Sgrama-PPclover-Berg-Ycone
38	CP3-3-BB-LB-Indian-Switch-Sgrama-PPclover-Berg-Ycon	38-CP3-3-BB-LB-Indian-Switch-Sgrama-PPclover-B	Yellow Coneflower	Ratibida pinnata	1.00	0.0625	0.7	Forb	N	X	CP3-3		BB-LB-Indian-Switch-Sgrama-PPclover-Berg-Ycone
38	CP3-4-Switch-Pcord-BB-Indian-Cwrye-Ciron-Cup-Bvervai	38-CP3-4-Switch-Pcord-BB-Indian-Cwrye-Ciron-Cu	Switchgrass	Panicum virgatum	16.00	1	9	Grass	N	X	CP3-4		Switch-Pcord-BB-Indian-Cwrye-Ciron-Cup-Bvervain
38	CP3-4-Switch-Pcord-BB-Indian-Cwrye-Ciron-Cup-Bvervai	38-CP3-4-Switch-Pcord-BB-Indian-Cwrye-Ciron-Cu	Prairie Cordgrass	Spartina pectinata	8.00	0.5	1.3	Grass	N		CP3-4		Switch-Pcord-BB-Indian-Cwrye-Ciron-Cup-Bvervain
38	CP3-4-Switch-Pcord-BB-Indian-Cwrye-Ciron-Cup-Bvervai	38-CP3-4-Switch-Pcord-BB-Indian-Cwrye-Ciron-Cu	Big Bluestem	Andropogon gerardii	16.00	1	3.8	Grass	N	X	CP3-4		Switch-Pcord-BB-Indian-Cwrye-Ciron-Cup-Bvervain
38	CP3-4-Switch-Pcord-BB-Indian-Cwrye-Ciron-Cup-Bvervai	38-CP3-4-Switch-Pcord-BB-Indian-Cwrye-Ciron-Cu	Indiangrass	Sorghastrum nutans	16.00	1	4.5	Grass	N	X	CP3-4		Switch-Pcord-BB-Indian-Cwrye-Ciron-Cup-Bvervain
38	CP3-4-Switch-Pcord-BB-Indian-Cwrye-Ciron-Cup-Bvervai	38-CP3-4-Switch-Pcord-BB-Indian-Cwrye-Ciron-Cu	Canada Wildrye	Elymus canadensis	16.00	1	2	Grass	N	X	CP3-4		Switch-Pcord-BB-Indian-Cwrye-Ciron-Cup-Bvervain
38	CP3-4-Switch-Pcord-BB-Indian-Cwrye-Ciron-Cup-Bvervai	38-CP3-4-Switch-Pcord-BB-Indian-Cwrye-Ciron-Cu	Common Ironweed	Vernonia fasciculata	1.00	0.0625	0.5	Forb	N	X	CP3-4		Switch-Pcord-BB-Indian-Cwrye-Ciron-Cup-Bvervain
38	CP3-4-Switch-Pcord-BB-Indian-Cwrye-Ciron-Cup-Bvervai	38-CP3-4-Switch-Pcord-BB-Indian-Cwrye-Ciron-Cu	Cupplant	Silphium perfoliatum	2.00	0.125	0.1	Forb	N	X	CP3-4		Switch-Pcord-BB-Indian-Cwrye-Ciron-Cup-Bvervain
38	CP3-4-Switch-Pcord-BB-Indian-Cwrye-Ciron-Cup-Bvervai	38-CP3-4-Switch-Pcord-BB-Indian-Cwrye-Ciron-Cu	Blue Vervain	Verbena hastata	1.00	0.0625	2.2	Forb	N	X	CP3-4		Switch-Pcord-BB-Indian-Cwrye-Ciron-Cup-Bvervain
38	CP3-5-Switch-Pcord-BB-Cwrye-Berg-Ycone-NEaster	38-CP3-5-Switch-Pcord-BB-Cwrye-Berg-Ycone-NEa	Switchgrass	Panicum virgatum	32.00	2	17.9	Grass	N	X	CP3-5		Switch-Pcord-BB-Cwrye-Berg-Ycone-NEaster
38	CP3-5-Switch-Pcord-BB-Cwrye-Berg-Ycone-NEaster	38-CP3-5-Switch-Pcord-BB-Cwrye-Berg-Ycone-NEa	Prairie Cordgrass	Spartina pectinata	4.00	0.25	0.7	Grass	N		CP3-5		Switch-Pcord-BB-Cwrye-Berg-Ycone-NEaster
38	CP3-5-Switch-Pcord-BB-Cwrye-Berg-Ycone-NEaster	38-CP3-5-Switch-Pcord-BB-Cwrye-Berg-Ycone-NEa	Big Bluestem	Andropogon gerardii	16.00	1	3.8	Grass	N	X	CP3-5		Switch-Pcord-BB-Cwrye-Berg-Ycone-NEaster
38	CP3-5-Switch-Pcord-BB-Cwrye-Berg-Ycone-NEaster	38-CP3-5-Switch-Pcord-BB-Cwrye-Berg-Ycone-NEa	Canada Wildrye	Elymus canadensis	16.00	1	2	Grass	N	X	CP3-5		Switch-Pcord-BB-Cwrye-Berg-Ycone-NEaster
38	CP3-5-Switch-Pcord-BB-Cwrye-Berg-Ycone-NEaster	38-CP3-5-Switch-Pcord-BB-Cwrye-Berg-Ycone-NEa	Bergamot	Monarda fistulosa	1.00	0.0625	1.8	Forb	N	X	CP3-5		Switch-Pcord-BB-Cwrye-Berg-Ycone-NEaster

38	CP3-5-Switch-Pcord-BB-Cwrye-Berg-Ycone-NEaster	38-CP3-5-Switch-Pcord-BB-Cwrye-Berg-Ycone-NEa	Yellow Coneflower	Ratibida pinnata	1.00	0.0625	0.7	Forb	N	X	CP3-5		Switch-Pcord-BB-Cwrye-Berg-Ycone-NEaster
38	CP3-5-Switch-Pcord-BB-Cwrye-Berg-Ycone-NEaster	38-CP3-5-Switch-Pcord-BB-Cwrye-Berg-Ycone-NEa	New England Aster	Symphyotrichum novae	1.00	0.0625	1.7	Forb	N	X	CP3-5		Switch-Pcord-BB-Cwrye-Berg-Ycone-NEaster
STD	**Mix #**	**std-mix**	**Common Name**	**Scientific Name**	**(oz./A)**	**(lbs./A)**	**Seeds/Square Foot**	**Type**	**Native**	**(Y/N)**	**I**	**Mix No.**	**MR**
									N				

STD	Mix #	std-mix	Common Name	Scientific Name	PLS (oz./A)	PLS (lbs./A)	Seeds/Square Foot	Type	Intro / Native	Poll. (Y/N)	Mix No.	MR	Mix Components
		LEAVE THIS ROW AS IS							N	Y			
2	CP2_1-BB-Switch-Cmilkvetch-Besus-Ycone	2-CP2_1-BB-Switch-Cmilkvetch-Besus-Ycone	Big Bluestem	Andropogon gerardii	48	3		Grass	N	N	CP2_1		BB-Switch-Cmilkvetch-Besus-Ycone
2	CP2_1-BB-Switch-Cmilkvetch-Besus-Ycone	2-CP2_1-BB-Switch-Cmilkvetch-Besus-Ycone	Switchgrass	Panicum virgatum	16	1		Grass	N	N	CP2_1		BB-Switch-Cmilkvetch-Besus-Ycone
2	CP2_1-BB-Switch-Cmilkvetch-Besus-Ycone	2-CP2_1-BB-Switch-Cmilkvetch-Besus-Ycone	Canada Milkvetch	Astragalus canadensis	2	0.125		Legume	N	N	CP2_1		BB-Switch-Cmilkvetch-Besus-Ycone
2	CP2_1-BB-Switch-Cmilkvetch-Besus-Ycone	2-CP2_1-BB-Switch-Cmilkvetch-Besus-Ycone	Black-eyed Susan	Rudbeckia hirta	1	0.0625		Forb	N	N	CP2_1		BB-Switch-Cmilkvetch-Besus-Ycone
2	CP2_1-BB-Switch-Cmilkvetch-Besus-Ycone	2-CP2_1-BB-Switch-Cmilkvetch-Besus-Ycone	Yellow Coneflower	Ratibida pinnata	1	0.0625		Forb	N	N	CP2_1		BB-Switch-Cmilkvetch-Besus-Ycone
2	CP2_2-BB-Switch-Ttrefoil-Besus-Ycone	2-CP2_2-BB-Switch-Ttrefoil-Besus-Ycone	Big Bluestem	Andropogon gerardii	48	3		Grass	N	N	CP2_2		BB-Switch-Ttrefoil-Besus-Ycone
2	CP2_2-BB-Switch-Ttrefoil-Besus-Ycone	2-CP2_2-BB-Switch-Ttrefoil-Besus-Ycone	Switchgrass	Panicum virgatum	16	1		Grass	N	N	CP2_2		BB-Switch-Ttrefoil-Besus-Ycone
2	CP2_2-BB-Switch-Ttrefoil-Besus-Ycone	2-CP2_2-BB-Switch-Ttrefoil-Besus-Ycone	Showy Tick Trefoil	Desmodium canadense	6	0.375		Legume	N	N	CP2_2		BB-Switch-Ttrefoil-Besus-Ycone
2	CP2_2-BB-Switch-Ttrefoil-Besus-Ycone	2-CP2_2-BB-Switch-Ttrefoil-Besus-Ycone	Black-eyed Susan	Rudbeckia hirta	1	0.0625		Forb	N	N	CP2_2		BB-Switch-Ttrefoil-Besus-Ycone
2	CP2_2-BB-Switch-Ttrefoil-Besus-Ycone	2-CP2_2-BB-Switch-Ttrefoil-Besus-Ycone	Yellow Coneflower	Ratibida pinnata	1	0.0625		Forb	N	N	CP2_2		BB-Switch-Ttrefoil-Besus-Ycone
2	CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Yco	2-CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-B	Little Bluestem	Schizachyrium scoparium	24	1.5		Grass	N	N	CP2_3		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
2	CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Yco	2-CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-B	Sideoats Grama	Bouteloua curtipendula	16	1		Grass	N	N	CP2_3		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
2	CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Yco	2-CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-B	Big Bluestem	Andropogon gerardii	8	0.5		Grass	N	N	CP2_3		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
2	CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Yco	2-CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-B	Indiangrass	Sorghastrum nutans	8	0.5		Grass	N	N	CP2_3		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
2	CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Yco	2-CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-B	Switchgrass	Panicum virgatum	8	0.5		Grass	N	N	CP2_3		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
2	CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Yco	2-CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-B	Purple Prairie Clover	Dalea purpurea	2	0.125		Legume	N	N	CP2_3		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
2	CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Yco	2-CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-B	Bergamot	Monarda fistulosa	1	0.0625		Forb	N	N	CP2_3		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
2	CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Yco	2-CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-B	Yellow Coneflower	Ratibida pinnata	1	0.0625		Forb	N	N	CP2_3		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
2	CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone	2-CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus	Little Bluestem	Schizachyrium scoparium	20	1.25		Grass	N	N	CP2_4		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
2	CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone	2-CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus	Canada Wildrye	Elymus canadensis	16	1		Grass	N	N	CP2_4		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
2	CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone	2-CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus	Indiangrass	Sorghastrum nutans	16	1		Grass	N	N	CP2_4		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
2	CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone	2-CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus	Big Bluestem	Andropogon gerardii	8	0.5		Grass	N	N	CP2_4		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
2	CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone	2-CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus	Switchgrass	Panicum virgatum	8	0.5		Grass	N	N	CP2_4		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
2	CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone	2-CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus	Bergamot	Monarda fistulosa	1	0.0625		Forb	N	N	CP2_4		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
2	CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone	2-CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus	Black-eyed Susan	Rudbeckia hirta	1	0.0625		Forb	N	N	CP2_4		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
2	CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone	2-CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus	Yellow Coneflower	Ratibida pinnata	1	0.0625		Forb	N	N	CP2_4		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
2	CP2_5-BB-Sgrama-Indian-PPclover-Sgrod-Ycone	2-CP2_5-BB-Sgrama-Indian-PPclover-Sgrod-Ycon	Big Bluestem	Andropogon gerardii	24	1.5		Grass	N	N	CP2_5		BB-Sgrama-Indian-PPclover-Sgrod-Ycone
2	CP2_5-BB-Sgrama-Indian-PPclover-Sgrod-Ycone	2-CP2_5-BB-Sgrama-Indian-PPclover-Sgrod-Ycon	Sideoats Grama	Bouteloua curtipendula	24	1.5		Grass	N	N	CP2_5		BB-Sgrama-Indian-PPclover-Sgrod-Ycone
2	CP2_5-BB-Sgrama-Indian-PPclover-Sgrod-Ycone	2-CP2_5-BB-Sgrama-Indian-PPclover-Sgrod-Ycon	Indiangrass	Sorghastrum nutans	8	0.5		Grass	N	N	CP2_5		BB-Sgrama-Indian-PPclover-Sgrod-Ycone
2	CP2_5-BB-Sgrama-Indian-PPclover-Sgrod-Ycone	2-CP2_5-BB-Sgrama-Indian-PPclover-Sgrod-Ycon	Purple Prairie Clover	Dalea purpurea	2	0.125		Legume	N	N	CP2_5		BB-Sgrama-Indian-PPclover-Sgrod-Ycone
2	CP2_5-BB-Sgrama-Indian-PPclover-Sgrod-Ycone	2-CP2_5-BB-Sgrama-Indian-PPclover-Sgrod-Ycon	Stiff Goldenrod	Oligoneuron rigidum	1	0.0625		Forb	N	N	CP2_5		BB-Sgrama-Indian-PPclover-Sgrod-Ycone
2	CP2_5-BB-Sgrama-Indian-PPclover-Sgrod-Ycone	2-CP2_5-BB-Sgrama-Indian-PPclover-Sgrod-Ycon	Yellow Coneflower	Ratibida pinnata	1	0.0625		Forb	N	N	CP2_5		BB-Sgrama-Indian-PPclover-Sgrod-Ycone
2	CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ci	2-CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bve	Big Bluestem	Andropogon gerardii	16	1		Grass	N	N	CP2_6		BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
2	CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ci	2-CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bve	Canada Wildrye	Elymus canadensis	16	1		Grass	N	N	CP2_6		BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
2	CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ci	2-CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bve	Indiangrass	Sorghastrum nutans	16	1		Grass	N	N	CP2_6		BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
2	CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ci	2-CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bve	Switchgrass	Panicum virgatum	16	1		Grass	N	N	CP2_6		BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
2	CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ci	2-CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bve	Prairie Cordgrass	Spartina pectinata	8	0.5		Grass	N	N	CP2_6		BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
2	CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ci	2-CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bve	Cupplant	Silphium perfoliatum	2	0.125		Forb	N	N	CP2_6		BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron

2	CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ci	2-CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bve	Blue Vervain	Verbena hastata	1	0.0625		Forb	N	N	CP2_6	BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
2	CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ci	2-CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bve	Common Ironweed	Vernonia fasciculata	1	0.0625		Forb	N	N	CP2_6	BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
2	CP2_7-Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone	2-CP2_7-Switch-BB-Cwrye-Pcord-Berg-NEaster-Y	Switchgrass	Panicum virgatum	32	2		Grass	N	N	CP2_7	Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
2	CP2_7-Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone	2-CP2_7-Switch-BB-Cwrye-Pcord-Berg-NEaster-Y	Big Bluestem	Andropogon gerardii	16	1		Grass	N	N	CP2_7	Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
2	CP2_7-Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone	2-CP2_7-Switch-BB-Cwrye-Pcord-Berg-NEaster-Y	Canada Wildrye	Elymus canadensis	16	1		Grass	N	N	CP2_7	Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
2	CP2_7-Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone	2-CP2_7-Switch-BB-Cwrye-Pcord-Berg-NEaster-Y	Prairie Cordgrass	Spartina pectinata	4	0.25		Grass	N	N	CP2_7	Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
2	CP2_7-Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone	2-CP2_7-Switch-BB-Cwrye-Pcord-Berg-NEaster-Y	Bergamot	Monarda fistulosa	1	0.0625		Forb	N	N	CP2_7	Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
2	CP2_7-Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone	2-CP2_7-Switch-BB-Cwrye-Pcord-Berg-NEaster-Y	New England Aster	Symphyotrichum novae-a	1	0.0625		Forb	N	N	CP2_7	Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
2	CP2_7-Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone	2-CP2_7-Switch-BB-Cwrye-Pcord-Berg-NEaster-Y	Yellow Coneflower	Ratibida pinnata	1	0.0625		Forb	N	N	CP2_7	Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
4	CP4D-5-Indian-BB-Switch-Cmilkvetch-Besus-Ycone	4-CP4D-5-Indian-BB-Switch-Cmilkvetch-Besus-Yc	Indiangrass	Sorghastrum nutans	48	3		Grass	N	N	CP4D-5	Indian-BB-Switch-Cmilkvetch-Besus-Ycone
4	CP4D-5-Indian-BB-Switch-Cmilkvetch-Besus-Ycone	4-CP4D-5-Indian-BB-Switch-Cmilkvetch-Besus-Yc	Big Bluestem	Andropogon gerardii	16	1		Grass	N	N	CP4D-5	Indian-BB-Switch-Cmilkvetch-Besus-Ycone
4	CP4D-5-Indian-BB-Switch-Cmilkvetch-Besus-Ycone	4-CP4D-5-Indian-BB-Switch-Cmilkvetch-Besus-Yc	Switchgrass	Panicum virgatum	16	1		Grass	N	N	CP4D-5	Indian-BB-Switch-Cmilkvetch-Besus-Ycone
4	CP4D-5-Indian-BB-Switch-Cmilkvetch-Besus-Ycone	4-CP4D-5-Indian-BB-Switch-Cmilkvetch-Besus-Yc	Canada Milkvetch	Astragalus canadensis	2	0.125		Legume	N	N	CP4D-5	Indian-BB-Switch-Cmilkvetch-Besus-Ycone
4	CP4D-5-Indian-BB-Switch-Cmilkvetch-Besus-Ycone	4-CP4D-5-Indian-BB-Switch-Cmilkvetch-Besus-Yc	Black-eyed Susan	Rudbeckia hirta	1	0.0625		Forb	N	N	CP4D-5	Indian-BB-Switch-Cmilkvetch-Besus-Ycone
4	CP4D-5-Indian-BB-Switch-Cmilkvetch-Besus-Ycone	4-CP4D-5-Indian-BB-Switch-Cmilkvetch-Besus-Yc	Yellow Coneflower	Ratibida pinnata	1	0.0625		Forb	N	N	CP4D-5	Indian-BB-Switch-Cmilkvetch-Besus-Ycone
4	CP4D-6-Indian-BB-Switch-LB-Cmilkvetch-Besus-Ycone	4-CP4D-6-Indian-BB-Switch-LB-Cmilkvetch-Besus	Indiangrass	Sorghastrum nutans	48	3		Grass	N	N	CP4D-6	Indian-BB-Switch-LB-Cmilkvetch-Besus-Ycone
4	CP4D-6-Indian-BB-Switch-LB-Cmilkvetch-Besus-Ycone	4-CP4D-6-Indian-BB-Switch-LB-Cmilkvetch-Besus	Big Bluestem	Andropogon gerardii	16	1		Grass	N	N	CP4D-6	Indian-BB-Switch-LB-Cmilkvetch-Besus-Ycone
4	CP4D-6-Indian-BB-Switch-LB-Cmilkvetch-Besus-Ycone	4-CP4D-6-Indian-BB-Switch-LB-Cmilkvetch-Besus	Switchgrass	Panicum virgatum	16	1		Grass	N	N	CP4D-6	Indian-BB-Switch-LB-Cmilkvetch-Besus-Ycone
4	CP4D-6-Indian-BB-Switch-LB-Cmilkvetch-Besus-Ycone	4-CP4D-6-Indian-BB-Switch-LB-Cmilkvetch-Besus	Little Bluestem	Schizachyrium scoparium	16	1		Grass	N	N	CP4D-6	Indian-BB-Switch-LB-Cmilkvetch-Besus-Ycone
4	CP4D-6-Indian-BB-Switch-LB-Cmilkvetch-Besus-Ycone	4-CP4D-6-Indian-BB-Switch-LB-Cmilkvetch-Besus	Canada Milkvetch	Astragalus canadensis	2	0.125		Legume	N	N	CP4D-6	Indian-BB-Switch-LB-Cmilkvetch-Besus-Ycone
4	CP4D-6-Indian-BB-Switch-LB-Cmilkvetch-Besus-Ycone	4-CP4D-6-Indian-BB-Switch-LB-Cmilkvetch-Besus	Black-eyed Susan	Rudbeckia hirta	1	0.0625		Forb	N	N	CP4D-6	Indian-BB-Switch-LB-Cmilkvetch-Besus-Ycone
4	CP4D-6-Indian-BB-Switch-LB-Cmilkvetch-Besus-Ycone	4-CP4D-6-Indian-BB-Switch-LB-Cmilkvetch-Besus	Yellow Coneflower	Ratibida pinnata	1	0.0625		Forb	N	N	CP4D-6	Indian-BB-Switch-LB-Cmilkvetch-Besus-Ycone
4	CP4D-7-Indian-BB-Switch-PPclover-Besus-Ycone	4-CP4D-7-Indian-BB-Switch-PPclover-Besus-Ycon	Indiangrass	Sorghastrum nutans	48	3		Grass	N	N	CP4D-7	Indian-BB-Switch-PPclover-Besus-Ycone
4	CP4D-7-Indian-BB-Switch-PPclover-Besus-Ycone	4-CP4D-7-Indian-BB-Switch-PPclover-Besus-Ycon	Big Bluestem	Andropogon gerardii	16	1		Grass	N	N	CP4D-7	Indian-BB-Switch-PPclover-Besus-Ycone
4	CP4D-7-Indian-BB-Switch-PPclover-Besus-Ycone	4-CP4D-7-Indian-BB-Switch-PPclover-Besus-Ycon	Switchgrass	Panicum virgatum	16	1		Grass	N	N	CP4D-7	Indian-BB-Switch-PPclover-Besus-Ycone
4	CP4D-7-Indian-BB-Switch-PPclover-Besus-Ycone	4-CP4D-7-Indian-BB-Switch-PPclover-Besus-Ycon	Purple Prairie Clover	Dalea purpurea	2	0.125		Legume	N	N	CP4D-7	Indian-BB-Switch-PPclover-Besus-Ycone
4	CP4D-7-Indian-BB-Switch-PPclover-Besus-Ycone	4-CP4D-7-Indian-BB-Switch-PPclover-Besus-Ycon	Black-eyed Susan	Rudbeckia hirta	1	0.0625		Forb	N	N	CP4D-7	Indian-BB-Switch-PPclover-Besus-Ycone
4	CP4D-7-Indian-BB-Switch-PPclover-Besus-Ycone	4-CP4D-7-Indian-BB-Switch-PPclover-Besus-Ycon	Yellow Coneflower	Ratibida pinnata	1	0.0625		Forb	N	N	CP4D-7	Indian-BB-Switch-PPclover-Besus-Ycone
4	CP4D-8-Indian-BB-LB-Switch-PPclover-Besus-Ycone	4-CP4D-8-Indian-BB-LB-Switch-PPclover-Besus-Y	Indiangrass	Sorghastrum nutans	48	3		Grass	N	N	CP4D-8	Indian-BB-LB-Switch-PPclover-Besus-Ycone
4	CP4D-8-Indian-BB-LB-Switch-PPclover-Besus-Ycone	4-CP4D-8-Indian-BB-LB-Switch-PPclover-Besus-Y	Big Bluestem	Andropogon gerardii	16	1		Grass	N	N	CP4D-8	Indian-BB-LB-Switch-PPclover-Besus-Ycone
4	CP4D-8-Indian-BB-LB-Switch-PPclover-Besus-Ycone	4-CP4D-8-Indian-BB-LB-Switch-PPclover-Besus-Y	Little Bluestem	Schizachyrium scoparium	16	1		Grass	N	N	CP4D-8	Indian-BB-LB-Switch-PPclover-Besus-Ycone
4	CP4D-8-Indian-BB-LB-Switch-PPclover-Besus-Ycone	4-CP4D-8-Indian-BB-LB-Switch-PPclover-Besus-Y	Switchgrass	Panicum virgatum	16	1		Grass	N	N	CP4D-8	Indian-BB-LB-Switch-PPclover-Besus-Ycone
4	CP4D-8-Indian-BB-LB-Switch-PPclover-Besus-Ycone	4-CP4D-8-Indian-BB-LB-Switch-PPclover-Besus-Y	Purple Prairie Clover	Dalea purpurea	2	0.125		Legume	N	N	CP4D-8	Indian-BB-LB-Switch-PPclover-Besus-Ycone
4	CP4D-8-Indian-BB-LB-Switch-PPclover-Besus-Ycone	4-CP4D-8-Indian-BB-LB-Switch-PPclover-Besus-Y	Black-eyed Susan	Rudbeckia hirta	1	0.0625		Forb	N	N	CP4D-8	Indian-BB-LB-Switch-PPclover-Besus-Ycone
4	CP4D-8-Indian-BB-LB-Switch-PPclover-Besus-Ycone	4-CP4D-8-Indian-BB-LB-Switch-PPclover-Besus-Y	Yellow Coneflower	Ratibida pinnata	1	0.0625		Forb	N	N	CP4D-8	Indian-BB-LB-Switch-PPclover-Besus-Ycone
4	CP4D-9-Indian-BB-Switch-PPclover-Berg-Ycone	4-CP4D-9-Indian-BB-Switch-PPclover-Berg-Ycone	Indiangrass	Sorghastrum nutans	48	3		Grass	N	N	CP4D-9	Indian-BB-Switch-PPclover-Berg-Ycone
4	CP4D-9-Indian-BB-Switch-PPclover-Berg-Ycone	4-CP4D-9-Indian-BB-Switch-PPclover-Berg-Ycone	Big Bluestem	Andropogon gerardii	16	1		Grass	N	N	CP4D-9	Indian-BB-Switch-PPclover-Berg-Ycone
4	CP4D-9-Indian-BB-Switch-PPclover-Berg-Ycone	4-CP4D-9-Indian-BB-Switch-PPclover-Berg-Ycone	Switchgrass	Panicum virgatum	16	1		Grass	N	N	CP4D-9	Indian-BB-Switch-PPclover-Berg-Ycone
4	CP4D-9-Indian-BB-Switch-PPclover-Berg-Ycone	4-CP4D-9-Indian-BB-Switch-PPclover-Berg-Ycone	Purple Prairie Clover	Dalea purpurea	2	0.125		Legume	N	N	CP4D-9	Indian-BB-Switch-PPclover-Berg-Ycone
4	CP4D-9-Indian-BB-Switch-PPclover-Berg-Ycone	4-CP4D-9-Indian-BB-Switch-PPclover-Berg-Ycone	Bergamot	Monarda fistulosa	1	0.0625		Forb	N	N	CP4D-9	Indian-BB-Switch-PPclover-Berg-Ycone
4	CP4D-9-Indian-BB-Switch-PPclover-Berg-Ycone	4-CP4D-9-Indian-BB-Switch-PPclover-Berg-Ycone	Yellow Coneflower	Ratibida pinnata	1	0.0625		Forb	N	N	CP4D-9	Indian-BB-Switch-PPclover-Berg-Ycone
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Sv	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover	Little Bluestem	Schizachyrium scoparium	24	1.5		Grass	N	N	CP25-D	LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swort-Hvervain-Lpla
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Sv	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover	Sideoats Grama	Bouteloua curtipendula	24	1.5		Grass	N	N	CP25-D	LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swort-Hvervain-Lpla
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Sv	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover	Indiangrass	Sorghastrum nutans	8	0.5		Grass	N	N	CP25-D	LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swort-Hvervain-Lpla
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Sv	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover	Big Bluestem	Andropogon gerardii	4	0.25		Grass	N	N	CP25-D	LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swort-Hvervain-Lpla
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Sv	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover	Prairie Junegrass	Koeleria macrantha	2	0.125		Grass	N	N	CP25-D	LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swort-Hvervain-Lpla
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Sv	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover	Purple Prairie Clover	Dalea purpurea	2	0.125		Legume	N	N	CP25-D	LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swort-Hvervain-Lpla
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Sv	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover	Sand Dropseed	Sporobolus cryptandrus	2	0.125		Grass	N	N	CP25-D	LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swort-Hvervain-Lpla
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Sv	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover	Spiderwort	Tradescantia ohiensis	1	0.0625		Forb	N	N	CP25-D	LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swort-Hvervain-Lpla
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Sv	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover	Hoary Vervain	Verbena stricta	0.5	0.03125		Forb	N	N	CP25-D	LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swort-Hvervain-Lpla
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Sv	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover	Leadplant	Amorpha canescens	0.5	0.03125		Legume	N	N	CP25-D	LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swort-Hvervain-Lpla
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Sv	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover	Prairie Tickseed	Coreopsis palmata	0.5	0.03125		Forb	N	N	CP25-D	LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swort-Hvervain-Lpla
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Sv	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover	Silky Aster	Symphyotrichum pratens	0.5	0.03125		Forb	N	N	CP25-D	LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swort-Hvervain-Lpla
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Sv	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover	Stiff Goldenrod	Oligoneuron rigidum	0.5	0.03125		Forb	N	N	CP25-D	LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swort-Hvervain-Lpla
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Sv	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover	Yellow Coneflower	Ratibida pinnata	1	0.03125		Forb	N	N	CP25-D	LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swort-Hvervain-Lpla
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Sv	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover	Prairie Cinquefoil	Potentilla arguta	0.25	0.015625		Forb	N	N	CP25-D	LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swort-Hvervain-Lpla
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Sv	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover	Spotted Mint	Monarda punctata	0	0.015625		Forb	N	N	CP25-D	LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swort-Hvervain-Lpla
25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclo	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pd	Little Bluestem	Schizachyrium scoparium	24	1.5		Grass	N	N	CP25-DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-Bi
25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclo	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pd	Sideoats Grama	Bouteloua curtipendula	24	1.5		Grass	N	N	CP25-DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-Bi
25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclo	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pd	Indiangrass	Sorghastrum nutans	8	0.5		Grass	N	N	CP25-DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-Bi
25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclo	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pd	Switchgrass	Panicum virgatum	4	0.25		Grass	N	N	CP25-DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-Bi
25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclo	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pd	Prairie Junegrass	Koeleria macrantha	2	0.125		Grass	N	N	CP25-DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-Bi
25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclo	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pd	Prairie Dropseed	Sporobolus heterolepis	2	0.125		Grass	N	N	CP25-DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-Bi
25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclo	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pd	Purple Prairie Clover	Dalea purpurea	2	0.125		Legume	N	N	CP25-DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-Bi
25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclo	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pd	Round-Headed Bushclover	Lespedeza capitata	2	0.125		Legume	N	N	CP25-DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-Bi
25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclo	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pd	Bergamot	Monarda fistulosa	1	0.0625		Forb	N	N	CP25-DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-Bi
25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclo	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pd	Spiderwort	Tradescantia ohiensis	1	0.0625		Forb	N	N	CP25-DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-Bi
25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclo	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pd	Yellow Coneflower	Ratibida pinnata	1	0.0625		Forb	N	N	CP25-DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-Bi
25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclo	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pd	Leadplant	Amorpha canescens	0.5	0.03125		Legume	N	N	CP25-DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-Bi
25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclo	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pd	Rough Blazing Star	Liatris aspera	1	0.03125		Forb	N	N	CP25-DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-Bi
25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclo	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pd	Sky-Blue Aster	Symphyotrichum oolenta	1	0.03125		Forb	N	N	CP25-DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-Bi

25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclo	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pd	Stiff Goldenrod	Oligoneuron rigidum	0.5	0.03125		Forb	N	N	CP25-DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclo	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pd	Prairie Cinquefoil	Potentilla arguta	0.25	0.015625		Forb	N	N	CP25-DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pju	Little Bluestem	Schizachyrium scoparium	24	1.5		Grass	N	N	CP25-KBB	LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-PPclover-PPCone-Lp
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pju	Sideoats Grama	Bouteloua curtipendula	24	1.5		Grass	N	N	CP25-KBB	LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-PPclover-PPCone-Lp
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pju	Indiangrass	Sorghastrum nutans	8	0.5		Grass	N	N	CP25-KBB	LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-PPclover-PPCone-Lp
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pju	Switchgrass	Panicum virgatum	8	0.5		Grass	N	N	CP25-KBB	LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-PPclover-PPCone-Lp
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pju	Wild Lupine	Lupinus perennis	3	0.1875		Legume	N	N	CP25-KBB	LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-PPclover-PPCone-Lp
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pju	Prairie Junegrass	Koeleria macrantha	2	0.125		Grass	N	N	CP25-KBB	LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-PPclover-PPCone-Lp
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pju	Prairie Dropseed	Sporobolus heterolepis	2	0.125		Grass	N	N	CP25-KBB	LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-PPclover-PPCone-Lp
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pju	Purple Prairie Clover	Dalea purpurea	2	0.125		Legume	N	N	CP25-KBB	LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-PPclover-PPCone-Lp
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pju	Pale Purple Coneflower	Echinacea pallida	1	0.0625		Forb	N	N	CP25-KBB	LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-PPclover-PPCone-Lp
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pju	Leadplant	Amorpha canescens	0.5	0.03125		Legume	N	N	CP25-KBB	LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-PPclover-PPCone-Lp
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pju	Rough Blazing Star	Liatris aspera	0.5	0.03125		Forb	N	N	CP25-KBB	LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-PPclover-PPCone-Lp
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pju	Stiff Goldenrod	Oligoneuron rigidum	0.5	0.03125		Forb	N	N	CP25-KBB	LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-PPclover-PPCone-Lp
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pju	Yellow Coneflower	Ratibida pinnata	1	0.03125		Forb	N	N	CP25-KBB	LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-PPclover-PPCone-Lp
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pju	Bergamot	Monarda fistulosa	0	0.015625		Forb	N	N	CP25-KBB	LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-PPclover-PPCone-Lp
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pju	Prairie Cinquefoil	Potentilla arguta	0.25	0.015625		Forb	N	N	CP25-KBB	LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-PPclover-PPCone-Lp
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pju	Sky-Blue Aster	Symphyotrichum oolenta	0.25	0.015625		Forb	N	N	CP25-KBB	LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-PPclover-PPCone-Lp
25	CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzsta	25-CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesu	Little Bluestem	Schizachyrium scoparium	24	1.5		Grass	N	N	CP25-M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
25	CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzsta	25-CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesu	Indiangrass	Sorghastrum nutans	16	1		Grass	N	N	CP25-M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
25	CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzsta	25-CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesu	Big Bluestem	Andropogon gerardii	8	0.5		Grass	N	N	CP25-M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
25	CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzsta	25-CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesu	Canada Wildrye	Elymus canadensis	8	0.5		Grass	N	N	CP25-M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
25	CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzsta	25-CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesu	Switchgrass	Panicum virgatum	8	0.5		Grass	N	N	CP25-M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
25	CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzsta	25-CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesu	Ox-eye Sunflower	Heliopsis helianthoides	1	0.0625		Forb	N	N	CP25-M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
25	CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzsta	25-CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesu	Prairie Blazing Star	Liatris pycnostachya	1	0.0625		Forb	N	N	CP25-M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
25	CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzsta	25-CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesu	Purple Prairie Clover	Dalea purpurea	1	0.0625		Legume	N	N	CP25-M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
25	CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzsta	25-CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesu	Rosinweed	Silphium integrifolium	1	0.0625		Forb	N	N	CP25-M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
25	CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzsta	25-CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesu	Bergamot	Monarda fistulosa	0.5	0.03125		Forb	N	N	CP25-M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
25	CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzsta	25-CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesu	Black-eyed Susan	Rudbeckia hirta	0.5	0.03125		Forb	N	N	CP25-M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
25	CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzsta	25-CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesu	New England Aster	Symphyotrichum novae-a	0.5	0.03125		Forb	N	N	CP25-M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
25	CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzsta	25-CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesu	Sky-Blue Aster	Symphyotrichum oolenta	0.5	0.03125		Forb	N	N	CP25-M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
25	CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzsta	25-CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesu	Yellow Coneflower	Ratibida pinnata	0.5	0.03125		Forb	N	N	CP25-M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
25	CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzsta	25-CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesu	Culver's Root	Veronicastrum virginicum	0	0.015625		Forb	N	N	CP25-M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsed	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgr	Canada Wildrye	Elymus canadensis	16	1		Grass	N	N	CP25-W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsed	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgr	Switchgrass	Panicum virgatum	16	1		Grass	N	N	CP25-W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsed	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgr	Indiangrass	Sorghastrum nutans	12	0.75		Grass	N	N	CP25-W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsed	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgr	Big Bluestem	Andropogon gerardii	8	0.5		Grass	N	N	CP25-W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsed	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgr	Prairie Cordgrass	Spartina pectinata	8	0.5		Grass	N	N	CP25-W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsed	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgr	Fowl Mannagrass	Glyceria striata	4	0.25		Grass	N	N	CP25-W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsed	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgr	Fox Sedge	Carex vulpinoidea	4	0.25		Sedge	N	N	CP25-W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsed	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgr	Cupplant	Silphium perfoliatum	2	0.125		Forb	N	N	CP25-W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsed	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgr	Showy Tick Trefoil	Desmodium canadense	2	0.125		Legume	N	N	CP25-W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsed	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgr	Blue Vervain	Verbena hastata	1	0.0625		Forb	N	N	CP25-W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsed	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgr	Golden Alexanders	Zizia aurea	1	0.0625		Forb	N	N	CP25-W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsed	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgr	Marsh Milkweed	Asclepias incarnata	1	0.0625		Forb	N	N	CP25-W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsed	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgr	Boneset	Eupatorium perfoliatum	0.5	0.03125		Forb	N	N	CP25-W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsed	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgr	Common Ironweed	Vernonia fasciculata	1	0.03125		Forb	N	N	CP25-W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsed	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgr	Joe-pye Weed	Eutrochium maculatum	1	0.03125		Forb	N	N	CP25-W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsed	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgr	Culver's Root	Veronicastrum virginicum	0	0.015625		Forb	N	N	CP25-W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
25	CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-WWInd	25-CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cu	Switchgrass	Panicum virgatum	24	1.5		Grass	N	N	CP25-WM	Switch-Cwrye-Indian-BB-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
25	CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-WWInd	25-CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cu	Canada Wildrye	Elymus canadensis	16	1		Grass	N	N	CP25-WM	Switch-Cwrye-Indian-BB-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
25	CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-WWInd	25-CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cu	Indiangrass	Sorghastrum nutans	12	0.75		Grass	N	N	CP25-WM	Switch-Cwrye-Indian-BB-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
25	CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-WWInd	25-CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cu	Big Bluestem	Andropogon gerardii	8	0.5		Grass	N	N	CP25-WM	Switch-Cwrye-Indian-BB-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
25	CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-WWInd	25-CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cu	Prairie Cordgrass	Spartina pectinata	4	0.25		Grass	N	N	CP25-WM	Switch-Cwrye-Indian-BB-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
25	CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-WWInd	25-CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cu	Cupplant	Silphium perfoliatum	2	0.125		Forb	N	N	CP25-WM	Switch-Cwrye-Indian-BB-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
25	CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-WWInd	25-CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cu	White wild indigo	Baptisia alba	1.5	0.09375		Legume	N	N	CP25-WM	Switch-Cwrye-Indian-BB-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
25	CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-WWInd	25-CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cu	Black-eyed Susan	Rudbeckia hirta	0.5	0.03125		Forb	N	N	CP25-WM	Switch-Cwrye-Indian-BB-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
25	CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-WWInd	25-CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cu	Common Ironweed	Vernonia fasciculata	0.5	0.03125		Forb	N	N	CP25-WM	Switch-Cwrye-Indian-BB-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
25	CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-WWInd	25-CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cu	Golden Alexanders	Zizia aurea	0.5	0.03125		Forb	N	N	CP25-WM	Switch-Cwrye-Indian-BB-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
25	CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-WWInd	25-CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cu	New England Aster	Symphyotrichum novae-a	0.5	0.03125		Forb	N	N	CP25-WM	Switch-Cwrye-Indian-BB-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
25	CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-WWInd	25-CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cu	Prairie Blazing Star	Liatris pycnostachya	0.5	0.03125		Forb	N	N	CP25-WM	Switch-Cwrye-Indian-BB-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
25	CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-WWInd	25-CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cu	Yellow Coneflower	Ratibida pinnata	0.5	0.03125		Forb	N	N	CP25-WM	Switch-Cwrye-Indian-BB-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
25	CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-WWInd	25-CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cu	Bergamot	Monarda fistulosa	0.25	0.015625		Forb	N	N	CP25-WM	Switch-Cwrye-Indian-BB-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
25	CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-WWInd	25-CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cu	Great St. John's Wort	Hypericum ascyron	0	0.015625		Forb	N	N	CP25-WM	Switch-Cwrye-Indian-BB-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
33	CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHbushclov	33-CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RH	Little Bluestem	Schizachyrium scoparium	32	2		Grass	N	N	CP33-1	LB-Sgrama-Cwrye-Indian-PPclover-RHbushclover-PPcone-Sgrod-\
33	CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHbushclov	33-CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RH	Sideoats Grama	Bouteloua curtipendula	32	2		Grass	N	N	CP33-1	LB-Sgrama-Cwrye-Indian-PPclover-RHbushclover-PPcone-Sgrod-\
33	CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHbushclov	33-CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RH	Canada Wildrye	Elymus canadensis	8	0.5		Grass	N	N	CP33-1	LB-Sgrama-Cwrye-Indian-PPclover-RHbushclover-PPcone-Sgrod-\
33	CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHbushclov	33-CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RH	Indiangrass	Sorghastrum nutans	8	0.5		Grass	N	N	CP33-1	LB-Sgrama-Cwrye-Indian-PPclover-RHbushclover-PPcone-Sgrod-\
33	CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHbushclov	33-CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RH	Purple Prairie Clover	Dalea purpurea	2	0.125		Legume	N	N	CP33-1	LB-Sgrama-Cwrye-Indian-PPclover-RHbushclover-PPcone-Sgrod-\
33	CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHbushclov	33-CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RH	Round-Headed Bushclover	Lespedeza capitata	2	0.125		Legume	N	N	CP33-1	LB-Sgrama-Cwrye-Indian-PPclover-RHbushclover-PPcone-Sgrod-\
33	CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHbushclov	33-CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RH	Purple Coneflower	Echinacea purpurea	1	0.0625		Forb	N	N	CP33-1	LB-Sgrama-Cwrye-Indian-PPclover-RHbushclover-PPcone-Sgrod-\

33	CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHbushclov	33-CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RH	Stiff Goldenrod	Oligoneuron rigidum	1	0.0625		Forb	N	N	CP33-1	LB-Sgrama-Cwrye-Indian-PPclover-RHbushclover-PPcone-Sgrod-\
33	CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHbushclov	33-CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RH	Fewleaf Sunflower	Helianthus occidentalis	1	0.0625		Forb	N	N	CP33-1	LB-Sgrama-Cwrye-Indian-PPclover-RHbushclover-PPcone-Sgrod-\
33	CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHbushclov	33-CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RH	Yellow Coneflower	Ratibida pinnata	1	0.0625		Forb	N	N	CP33-1	LB-Sgrama-Cwrye-Indian-PPclover-RHbushclover-PPcone-Sgrod-\
33	CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHbushclov	33-CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RH	Black-eyed Susan	Rudbeckia hirta	0.75	0.046875		Forb	N	N	CP33-1	LB-Sgrama-Cwrye-Indian-PPclover-RHbushclover-PPcone-Sgrod-\
33	CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rbl	33-CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPc	Little Bluestem	Schizachyrium scoparium	24	1.5		Grass	N	N	CP33-2	LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rblzstar-Besus-SkyAst
33	CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rbl	33-CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPc	Sideoats Grama	Bouteloua curtipendula	20	1.25		Grass	N	N	CP33-2	LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rblzstar-Besus-SkyAst
33	CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rbl	33-CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPc	Indiangrass	Sorghastrum nutans	16	1		Grass	N	N	CP33-2	LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rblzstar-Besus-SkyAst
33	CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rbl	33-CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPc	Canada Wildrye	Elymus canadensis	8	0.5		Grass	N	N	CP33-2	LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rblzstar-Besus-SkyAst
33	CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rbl	33-CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPc	Purple Coneflower	Echinacea purpurea	2	0.125		Forb	N	N	CP33-2	LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rblzstar-Besus-SkyAst
33	CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rbl	33-CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPc	Purple Prairie Clover	Dalea purpurea	2	0.125		Legume	N	N	CP33-2	LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rblzstar-Besus-SkyAst
33	CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rbl	33-CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPc	Rough Blazing Star	Liatris aspera	2	0.125		Forb	N	N	CP33-2	LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rblzstar-Besus-SkyAst
33	CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rbl	33-CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPc	Black-eyed Susan	Rudbeckia hirta	1	0.0625		Forb	N	N	CP33-2	LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rblzstar-Besus-SkyAst
33	CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rbl	33-CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPc	Sky-Blue Aster	Symphyotrichum oolenta	1	0.0625		Forb	N	N	CP33-2	LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rblzstar-Besus-SkyAst
33	CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rbl	33-CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPc	Stiff Goldenrod	Oligoneuron rigidum	1	0.0625		Forb	N	N	CP33-2	LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rblzstar-Besus-SkyAst
33	CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rbl	33-CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPc	Fewleaf Sunflower	Helianthus occidentalis	1	0.0625		Forb	N	N	CP33-2	LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rblzstar-Besus-SkyAst
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsed	Canada Wildrye	Elymus canadensis	16	1		Grass	N	N	CP38B-WPHRA	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsed	Indiangrass	Sorghastrum nutans	12	0.75		Grass	N	N	CP38B-WPHRA	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsed	Switchgrass	Panicum virgatum	12	0.75		Grass	N	N	CP38B-WPHRA	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsed	Big Bluestem	Andropogon gerardii	8	0.5		Grass	N	N	CP38B-WPHRA	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsed	Fox Sedge	Carex vulpinoidea	8	0.5		Sedge	N	N	CP38B-WPHRA	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsed	Prairie Cordgrass	Spartina pectinata	8	0.5		Grass	N	N	CP38B-WPHRA	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsed	Fowl Mannagrass	Glyceria striata	4	0.25		Grass	N	N	CP38B-WPHRA	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsed	Cupplant	Silphium perfoliatum	2	0.125		Forb	N	N	CP38B-WPHRA	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsed	Showy Tick Trefoil	Desmodium canadense	2	0.125		Legume	N	N	CP38B-WPHRA	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsed	Blue Vervain	Verbena hastata	1	0.0625		Forb	N	N	CP38B-WPHRA	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsed	Golden Alexanders	Zizia aurea	1	0.0625		Forb	N	N	CP38B-WPHRA	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsed	Marsh Milkweed	Asclepias incarnata	1	0.0625		Forb	N	N	CP38B-WPHRA	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsed	Boneset	Eupatorium perfoliatum	0.5	0.03125		Forb	N	N	CP38B-WPHRA	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsed	Common Ironweed	Vernonia fasciculata	1	0.03125		Forb	N	N	CP38B-WPHRA	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsed	Joe-pye Weed	Eutrochium maculatum	1	0.03125		Forb	N	N	CP38B-WPHRA	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsed	Culver's Root	Veronicastrum virginicum	0	0.015625		Forb	N	N	CP38B-WPHRA	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-B	38-CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-P	Little Bluestem	Schizachyrium scoparium	24	1.5		Grass	N	N	CP38E-CWGCA(CP2)D	LB-Sgrama-BB-Indian-PPclover-Besus-Rblzstar-Sgrod-Ycone
38	CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-B	38-CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-P	Sideoats Grama	Bouteloua curtipendula	24	1.5		Grass	N	N	CP38E-CWGCA(CP2)D	LB-Sgrama-BB-Indian-PPclover-Besus-Rblzstar-Sgrod-Ycone
38	CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-B	38-CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-P	Big Bluestem	Andropogon gerardii	8	0.5		Grass	N	N	CP38E-CWGCA(CP2)D	LB-Sgrama-BB-Indian-PPclover-Besus-Rblzstar-Sgrod-Ycone
38	CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-B	38-CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-P	Indiangrass	Sorghastrum nutans	8	0.5		Grass	N	N	CP38E-CWGCA(CP2)D	LB-Sgrama-BB-Indian-PPclover-Besus-Rblzstar-Sgrod-Ycone
38	CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-B	38-CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-P	Purple Prairie Clover	Dalea purpurea	2	0.125		Legume	N	N	CP38E-CWGCA(CP2)D	LB-Sgrama-BB-Indian-PPclover-Besus-Rblzstar-Sgrod-Ycone
38	CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-B	38-CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-P	Black-eyed Susan	Rudbeckia hirta	1	0.0625		Forb	N	N	CP38E-CWGCA(CP2)D	LB-Sgrama-BB-Indian-PPclover-Besus-Rblzstar-Sgrod-Ycone
38	CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-B	38-CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-P	Rough Blazing Star	Liatris aspera	1	0.0625		Forb	N	N	CP38E-CWGCA(CP2)D	LB-Sgrama-BB-Indian-PPclover-Besus-Rblzstar-Sgrod-Ycone
38	CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-B	38-CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-P	Stiff Goldenrod	Oligoneuron rigidum	1	0.0625		Forb	N	N	CP38E-CWGCA(CP2)D	LB-Sgrama-BB-Indian-PPclover-Besus-Rblzstar-Sgrod-Ycone
38	CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-B	38-CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-P	Yellow Coneflower	Ratibida pinnata	1	0.0625		Forb	N	N	CP38E-CWGCA(CP2)D	LB-Sgrama-BB-Indian-PPclover-Besus-Rblzstar-Sgrod-Ycone
38	CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-I	38-CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian	Little Bluestem	Schizachyrium scoparium	24	1.5		Grass	N	N	CP38E-CWGCA(CP2)DM	LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Besus-Rblzstar-Shwg
38	CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-I	38-CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian	Sideoats Grama	Bouteloua curtipendula	16	1		Grass	N	N	CP38E-CWGCA(CP2)DM	LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Besus-Rblzstar-Shwg
38	CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-I	38-CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian	Big Bluestem	Andropogon gerardii	8	0.5		Grass	N	N	CP38E-CWGCA(CP2)DM	LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Besus-Rblzstar-Shwg
38	CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-I	38-CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian	Indiangrass	Sorghastrum nutans	8	0.5		Grass	N	N	CP38E-CWGCA(CP2)DM	LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Besus-Rblzstar-Shwg
38	CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-I	38-CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian	Switchgrass	Panicum virgatum	8	0.5		Grass	N	N	CP38E-CWGCA(CP2)DM	LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Besus-Rblzstar-Shwg
38	CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-I	38-CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian	Purple Prairie Clover	Dalea purpurea	2	0.125		Legume	N	N	CP38E-CWGCA(CP2)DM	LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Besus-Rblzstar-Shwg
38	CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-I	38-CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian	Bergamot	Monarda fistulosa	1	0.0625		Forb	N	N	CP38E-CWGCA(CP2)DM	LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Besus-Rblzstar-Shwg
38	CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-I	38-CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian	Black-eyed Susan	Rudbeckia hirta	1	0.0625		Forb	N	N	CP38E-CWGCA(CP2)DM	LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Besus-Rblzstar-Shwg
38	CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-I	38-CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian	Rough Blazing Star	Liatris aspera	1	0.0625		Forb	N	N	CP38E-CWGCA(CP2)DM	LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Besus-Rblzstar-Shwg
38	CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-I	38-CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian	Showy Goldenrod	Solidago speciosa	1	0.0625		Forb	N	N	CP38E-CWGCA(CP2)DM	LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Besus-Rblzstar-Shwg
38	CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-I	38-CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian	Stiff Goldenrod	Oligoneuron rigidum	1	0.0625		Forb	N	N	CP38E-CWGCA(CP2)DM	LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Besus-Rblzstar-Shwg
38	CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-I	38-CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian	Yellow Coneflower	Ratibida pinnata	1	0.0625		Forb	N	N	CP38E-CWGCA(CP2)DM	LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Besus-Rblzstar-Shwg
38	CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Pbl	38-CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Little Bluestem	Schizachyrium scoparium	20	1.25		Grass	N	N	CP38E-CWGCA(CP2)M	LB-Cwrye-Indian-BB-Switch-Pblzstar-Rblzstar-Berg-Besus-Shwgro
38	CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Pbl	38-CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Canada Wildrye	Elymus canadensis	16	1		Grass	N	N	CP38E-CWGCA(CP2)M	LB-Cwrye-Indian-BB-Switch-Pblzstar-Rblzstar-Berg-Besus-Shwgro
38	CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Pbl	38-CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Indiangrass	Sorghastrum nutans	16	1		Grass	N	N	CP38E-CWGCA(CP2)M	LB-Cwrye-Indian-BB-Switch-Pblzstar-Rblzstar-Berg-Besus-Shwgro
38	CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Pbl	38-CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Big Bluestem	Andropogon gerardii	8	0.5		Grass	N	N	CP38E-CWGCA(CP2)M	LB-Cwrye-Indian-BB-Switch-Pblzstar-Rblzstar-Berg-Besus-Shwgro
38	CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Pbl	38-CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Switchgrass	Panicum virgatum	8	0.5		Grass	N	N	CP38E-CWGCA(CP2)M	LB-Cwrye-Indian-BB-Switch-Pblzstar-Rblzstar-Berg-Besus-Shwgro
38	CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Pbl	38-CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Prairie Blazing Star	Liatris pycnostachya	2	0.125		Forb	N	N	CP38E-CWGCA(CP2)M	LB-Cwrye-Indian-BB-Switch-Pblzstar-Rblzstar-Berg-Besus-Shwgro
38	CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Pbl	38-CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Rough Blazing Star	Liatris aspera	2	0.125		Forb	N	N	CP38E-CWGCA(CP2)M	LB-Cwrye-Indian-BB-Switch-Pblzstar-Rblzstar-Berg-Besus-Shwgro
38	CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Pbl	38-CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Bergamot	Monarda fistulosa	1	0.0625		Forb	N	N	CP38E-CWGCA(CP2)M	LB-Cwrye-Indian-BB-Switch-Pblzstar-Rblzstar-Berg-Besus-Shwgro
38	CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Pbl	38-CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Black-eyed Susan	Rudbeckia hirta	1	0.0625		Forb	N	N	CP38E-CWGCA(CP2)M	LB-Cwrye-Indian-BB-Switch-Pblzstar-Rblzstar-Berg-Besus-Shwgro
38	CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Pbl	38-CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Showy Goldenrod	Solidago speciosa	1	0.0625		Forb	N	N	CP38E-CWGCA(CP2)M	LB-Cwrye-Indian-BB-Switch-Pblzstar-Rblzstar-Berg-Besus-Shwgro
38	CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Pbl	38-CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Stiff Goldenrod	Oligoneuron rigidum	1	0.0625		Forb	N	N	CP38E-CWGCA(CP2)M	LB-Cwrye-Indian-BB-Switch-Pblzstar-Rblzstar-Berg-Besus-Shwgro
38	CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Pbl	38-CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Yellow Coneflower	Ratibida pinnata	1	0.0625		Forb	N	N	CP38E-CWGCA(CP2)M	LB-Cwrye-Indian-BB-Switch-Pblzstar-Rblzstar-Berg-Besus-Shwgro
38	CP38E-CWGCA(CP2)W-BB-Cwrye-Switch-Pcord-Cup-Bv	38-CP38E-CWGCA(CP2)W-BB-Cwrye-Switch-Pcor	Big Bluestem	Andropogon gerardii	16	1		Grass	N	N	CP38E-CWGCA(CP2)W	BB-Cwrye-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-CWGCA(CP2)W-BB-Cwrye-Switch-Pcord-Cup-Bv	38-CP38E-CWGCA(CP2)W-BB-Cwrye-Switch-Pcor	Canada Wildrye	Elymus canadensis	16	1		Grass	N	N	CP38E-CWGCA(CP2)W	BB-Cwrye-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-CWGCA(CP2)W-BB-Cwrye-Switch-Pcord-Cup-Bv	38-CP38E-CWGCA(CP2)W-BB-Cwrye-Switch-Pcor	Switchgrass	Panicum virgatum	16	1		Grass	N	N	CP38E-CWGCA(CP2)W	BB-Cwrye-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-CWGCA(CP2)W-BB-Cwrye-Switch-Pcord-Cup-Bv	38-CP38E-CWGCA(CP2)W-BB-Cwrye-Switch-Pcor	Prairie Cordgrass	Spartina pectinata	8	0.5		Grass	N	N	CP38E-CWGCA(CP2)W	BB-Cwrye-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-CWGCA(CP2)W-BB-Cwrye-Switch-Pcord-Cup-Bv	38-CP38E-CWGCA(CP2)W-BB-Cwrye-Switch-Pcor	Cupplant	Silphium perfoliatum	2	0.125		Forb	N	N	CP38E-CWGCA(CP2)W	BB-Cwrye-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-CWGCA(CP2)W-BB-Cwrye-Switch-Pcord-Cup-Bv	38-CP38E-CWGCA(CP2)W-BB-Cwrye-Switch-Pcor	Blue Vervain	Verbena hastata	1	0.0625		Forb	N	N	CP38E-CWGCA(CP2)W	BB-Cwrye-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-CWGCA(CP2)W-BB-Cwrye-Switch-Pcord-Cup-Bv	38-CP38E-CWGCA(CP2)W-BB-Cwrye-Switch-Pcor	Common Ironweed	Vernonia fasciculata	1	0.0625		Forb	N	N	CP38E-CWGCA(CP2)W	BB-Cwrye-Switch-Pcord-Cup-Bvervain-Ciron

38	CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Pblzs	38-CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pc	Switchgrass	Panicum virgatum	32	2		Grass	N	N	CP38E-CWGCA(CP2)WM	Switch-BB-Cwrye-Pcord-Pblzstar-Berg-Besus-NEaster-Ycone
38	CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Pblzs	38-CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pc	Big Bluestem	Andropogon gerardii	16	1		Grass	N	N	CP38E-CWGCA(CP2)WM	Switch-BB-Cwrye-Pcord-Pblzstar-Berg-Besus-NEaster-Ycone
38	CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Pblzs	38-CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pc	Canada Wildrye	Elymus canadensis	16	1		Grass	N	N	CP38E-CWGCA(CP2)WM	Switch-BB-Cwrye-Pcord-Pblzstar-Berg-Besus-NEaster-Ycone
38	CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Pblzs	38-CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pc	Prairie Cordgrass	Spartina pectinata	4	0.25		Grass	N	N	CP38E-CWGCA(CP2)WM	Switch-BB-Cwrye-Pcord-Pblzstar-Berg-Besus-NEaster-Ycone
38	CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Pblzs	38-CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pc	Prairie Blazing Star	Liatris pycnostachya	2	0.125		Forb	N	N	CP38E-CWGCA(CP2)WM	Switch-BB-Cwrye-Pcord-Pblzstar-Berg-Besus-NEaster-Ycone
38	CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Pblzs	38-CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pc	Bergamot	Monarda fistulosa	1	0.0625		Forb	N	N	CP38E-CWGCA(CP2)WM	Switch-BB-Cwrye-Pcord-Pblzstar-Berg-Besus-NEaster-Ycone
38	CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Pblzs	38-CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pc	Black-eyed Susan	Rudbeckia hirta	1	0.0625		Forb	N	N	CP38E-CWGCA(CP2)WM	Switch-BB-Cwrye-Pcord-Pblzstar-Berg-Besus-NEaster-Ycone
38	CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Pblzs	38-CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pc	New England Aster	Symphyotrichum novae-a	1	0.0625		Forb	N	N	CP38E-CWGCA(CP2)WM	Switch-BB-Cwrye-Pcord-Pblzstar-Berg-Besus-NEaster-Ycone
38	CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Pblzs	38-CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pc	Yellow Coneflower	Ratibida pinnata	1	0.0625		Forb	N	N	CP38E-CWGCA(CP2)WM	Switch-BB-Cwrye-Pcord-Pblzstar-Berg-Besus-NEaster-Ycone
38	CP38E-GHRA(CP2)D-LB-Sgrama-BB-Indian-PPclover-Sg	38-CP38E-GHRA(CP2)D-LB-Sgrama-BB-Indian-PP	Little Bluestem	Schizachyrium scoparium	24	1.5		Grass	N	N	CP38E-GHRA(CP2)D	LB-Sgrama-BB-Indian-PPclover-Sgrod-Ycone
38	CP38E-GHRA(CP2)D-LB-Sgrama-BB-Indian-PPclover-Sg	38-CP38E-GHRA(CP2)D-LB-Sgrama-BB-Indian-PP	Sideoats Grama	Bouteloua curtipendula	24	1.5		Grass	N	N	CP38E-GHRA(CP2)D	LB-Sgrama-BB-Indian-PPclover-Sgrod-Ycone
38	CP38E-GHRA(CP2)D-LB-Sgrama-BB-Indian-PPclover-Sg	38-CP38E-GHRA(CP2)D-LB-Sgrama-BB-Indian-PP	Big Bluestem	Andropogon gerardii	8	0.5		Grass	N	N	CP38E-GHRA(CP2)D	LB-Sgrama-BB-Indian-PPclover-Sgrod-Ycone
38	CP38E-GHRA(CP2)D-LB-Sgrama-BB-Indian-PPclover-Sg	38-CP38E-GHRA(CP2)D-LB-Sgrama-BB-Indian-PP	Indiangrass	Sorghastrum nutans	8	0.5		Grass	N	N	CP38E-GHRA(CP2)D	LB-Sgrama-BB-Indian-PPclover-Sgrod-Ycone
38	CP38E-GHRA(CP2)D-LB-Sgrama-BB-Indian-PPclover-Sg	38-CP38E-GHRA(CP2)D-LB-Sgrama-BB-Indian-PP	Purple Prairie Clover	Dalea purpurea	2	0.125		Legume	N	N	CP38E-GHRA(CP2)D	LB-Sgrama-BB-Indian-PPclover-Sgrod-Ycone
38	CP38E-GHRA(CP2)D-LB-Sgrama-BB-Indian-PPclover-Sg	38-CP38E-GHRA(CP2)D-LB-Sgrama-BB-Indian-PP	Stiff Goldenrod	Oligoneuron rigidum	1	0.0625		Forb	N	N	CP38E-GHRA(CP2)D	LB-Sgrama-BB-Indian-PPclover-Sgrod-Ycone
38	CP38E-GHRA(CP2)D-LB-Sgrama-BB-Indian-PPclover-Sg	38-CP38E-GHRA(CP2)D-LB-Sgrama-BB-Indian-PP	Yellow Coneflower	Ratibida pinnata	1	0.0625		Forb	N	N	CP38E-GHRA(CP2)D	LB-Sgrama-BB-Indian-PPclover-Sgrod-Ycone
38	CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-Switch-PP	38-CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-S	Little Bluestem	Schizachyrium scoparium	24	1.5		Grass	N	N	CP38E-GHRA(CP2)DM	LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-Switch-PP	38-CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-S	Sideoats Grama	Bouteloua curtipendula	16	1		Grass	N	N	CP38E-GHRA(CP2)DM	LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-Switch-PP	38-CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-S	Big Bluestem	Andropogon gerardii	8	0.5		Grass	N	N	CP38E-GHRA(CP2)DM	LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-Switch-PP	38-CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-S	Indiangrass	Sorghastrum nutans	8	0.5		Grass	N	N	CP38E-GHRA(CP2)DM	LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-Switch-PP	38-CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-S	Switchgrass	Panicum virgatum	8	0.5		Grass	N	N	CP38E-GHRA(CP2)DM	LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-Switch-PP	38-CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-S	Purple Prairie Clover	Dalea purpurea	2	0.125		Legume	N	N	CP38E-GHRA(CP2)DM	LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-Switch-PP	38-CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-S	Bergamot	Monarda fistulosa	1	0.0625		Forb	N	N	CP38E-GHRA(CP2)DM	LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-Switch-PP	38-CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-S	Yellow Coneflower	Ratibida pinnata	1	0.0625		Forb	N	N	CP38E-GHRA(CP2)DM	LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Switch-Berg-	38-CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Swi	Little Bluestem	Schizachyrium scoparium	20	1.25		Grass	N	N	CP38E-GHRA(CP2)M	LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Switch-Berg-	38-CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Swi	Canada Wildrye	Elymus canadensis	16	1		Grass	N	N	CP38E-GHRA(CP2)M	LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Switch-Berg-	38-CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Swi	Indiangrass	Sorghastrum nutans	16	1		Grass	N	N	CP38E-GHRA(CP2)M	LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Switch-Berg-	38-CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Swi	Big Bluestem	Andropogon gerardii	8	0.5		Grass	N	N	CP38E-GHRA(CP2)M	LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Switch-Berg-	38-CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Swi	Switchgrass	Panicum virgatum	8	0.5		Grass	N	N	CP38E-GHRA(CP2)M	LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Switch-Berg-	38-CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Swi	Bergamot	Monarda fistulosa	1	0.0625		Forb	N	N	CP38E-GHRA(CP2)M	LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Switch-Berg-	38-CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Swi	Black-eyed Susan	Rudbeckia hirta	1	0.0625		Forb	N	N	CP38E-GHRA(CP2)M	LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Switch-Berg-	38-CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Swi	Yellow Coneflower	Ratibida pinnata	1	0.0625		Forb	N	N	CP38E-GHRA(CP2)M	LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-C	38-CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch	Big Bluestem	Andropogon gerardii	16	1		Grass	N	N	CP38E-GHRA(CP2)W	BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-C	38-CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch	Canada Wildrye	Elymus canadensis	16	1		Grass	N	N	CP38E-GHRA(CP2)W	BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-C	38-CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch	Indiangrass	Sorghastrum nutans	16	1		Grass	N	N	CP38E-GHRA(CP2)W	BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-C	38-CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch	Switchgrass	Panicum virgatum	16	1		Grass	N	N	CP38E-GHRA(CP2)W	BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-C	38-CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch	Prairie Cordgrass	Spartina pectinata	8	0.5		Grass	N	N	CP38E-GHRA(CP2)W	BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-C	38-CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch	Cupplant	Silphium perfoliatum	2	0.125		Forb	N	N	CP38E-GHRA(CP2)W	BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-C	38-CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch	Blue Vervain	Verbena hastata	1	0.0625		Forb	N	N	CP38E-GHRA(CP2)W	BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-C	38-CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch	Common Ironweed	Vernonia fasciculata	1	0.0625		Forb	N	N	CP38E-GHRA(CP2)W	BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-GHRA(CP2)WM-Switch-BB-Cwrye-Pcord-Berg-N	38-CP38E-GHRA(CP2)WM-Switch-BB-Cwrye-Pco	Switchgrass	Panicum virgatum	32	2		Grass	N	N	CP38E-GHRA(CP2)WM	Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
38	CP38E-GHRA(CP2)WM-Switch-BB-Cwrye-Pcord-Berg-N	38-CP38E-GHRA(CP2)WM-Switch-BB-Cwrye-Pco	Big Bluestem	Andropogon gerardii	16	1		Grass	N	N	CP38E-GHRA(CP2)WM	Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
38	CP38E-GHRA(CP2)WM-Switch-BB-Cwrye-Pcord-Berg-N	38-CP38E-GHRA(CP2)WM-Switch-BB-Cwrye-Pco	Canada Wildrye	Elymus canadensis	16	1		Grass	N	N	CP38E-GHRA(CP2)WM	Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
38	CP38E-GHRA(CP2)WM-Switch-BB-Cwrye-Pcord-Berg-N	38-CP38E-GHRA(CP2)WM-Switch-BB-Cwrye-Pco	Prairie Cordgrass	Spartina pectinata	4	0.25		Grass	N	N	CP38E-GHRA(CP2)WM	Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
38	CP38E-GHRA(CP2)WM-Switch-BB-Cwrye-Pcord-Berg-N	38-CP38E-GHRA(CP2)WM-Switch-BB-Cwrye-Pco	Bergamot	Monarda fistulosa	1	0.0625		Forb	N	N	CP38E-GHRA(CP2)WM	Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
38	CP38E-GHRA(CP2)WM-Switch-BB-Cwrye-Pcord-Berg-N	38-CP38E-GHRA(CP2)WM-Switch-BB-Cwrye-Pco	New England Aster	Symphyotrichum novae-a	1	0.0625		Forb	N	N	CP38E-GHRA(CP2)WM	Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
38	CP38E-GHRA(CP2)WM-Switch-BB-Cwrye-Pcord-Berg-N	38-CP38E-GHRA(CP2)WM-Switch-BB-Cwrye-Pco	Yellow Coneflower	Ratibida pinnata	1	0.0625		Forb	N	N	CP38E-GHRA(CP2)WM	Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Little Bluestem	Schizachyrium scoparium	24	1.5		Grass	N	N	CP38E-GHRA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Sideoats Grama	Bouteloua curtipendula	24	1.5		Grass	N	N	CP38E-GHRA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Indiangrass	Sorghastrum nutans	8	0.5		Grass	N	N	CP38E-GHRA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Big Bluestem	Andropogon gerardii	4	0.25		Grass	N	N	CP38E-GHRA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Purple Prairie Clover	Dalea purpurea	2	0.125		Legume	N	N	CP38E-GHRA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Sand Dropseed	Sporobolus cryptandrus	2	0.125		Grass	N	N	CP38E-GHRA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Prairie Junegrass	Koeleria macrantha	1	0.0625		Grass	N	N	CP38E-GHRA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Spiderwort	Tradescantia ohiensis	1	0.0625		Forb	N	N	CP38E-GHRA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Hoary Vervain	Verbena stricta	0.5	0.03125		Forb	N	N	CP38E-GHRA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Leadplant	Amorpha canescens	0.5	0.03125		Legume	N	N	CP38E-GHRA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Prairie Tickseed	Coreopsis palmata	0.5	0.03125		Forb	N	N	CP38E-GHRA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Silky Aster	Symphyotrichum pratens	0.5	0.03125		Forb	N	N	CP38E-GHRA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Stiff Goldenrod	Oligoneuron rigidum	0.5	0.03125		Forb	N	N	CP38E-GHRA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Yellow Coneflower	Ratibida pinnata	0.5	0.03125		Forb	N	N	CP38E-GHRA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Prairie Cinquefoil	Potentilla arguta	0.25	0.015625		Forb	N	N	CP38E-GHRA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Spotted Mint	Monarda punctata	0	0.015625		Forb	N	N	CP38E-GHRA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjun	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Little Bluestem	Schizachyrium scoparium	24	1.5		Grass	N	N	CP38E-GHRA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjun	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Sideoats Grama	Bouteloua curtipendula	24	1.5		Grass	N	N	CP38E-GHRA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjun	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Indiangrass	Sorghastrum nutans	8	0.5		Grass	N	N	CP38E-GHRA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjun	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Switchgrass	Panicum virgatum	4	0.25		Grass	N	N	CP38E-GHRA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjun	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Prairie Junegrass	Koeleria macrantha	2	0.125		Grass	N	N	CP38E-GHRA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjun	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Prairie Dropseed	Sporobolus heterolepis	2	0.125		Grass	N	N	CP38E-GHRA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjun	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Purple Prairie Clover	Dalea purpurea	2	0.125		Legume	N	N	CP38E-GHRA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjun	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Round-Headed Bushclover	Lespedeza capitata	2	0.125		Legume	N	N	CP38E-GHRA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B

38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjun	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Bergamot	Monarda fistulosa	1	0.0625		Forb	N	N	CP38E-GHRA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjun	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Spiderwort	Tradescantia ohiensis	1	0.0625		Forb	N	N	CP38E-GHRA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjun	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Yellow Coneflower	Ratibida pinnata	1	0.0625		Forb	N	N	CP38E-GHRA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjun	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Leadplant	Amorpha canescens	0.5	0.03125		Legume	N	N	CP38E-GHRA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjun	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Rough Blazing Star	Liatris aspera	1	0.03125		Forb	N	N	CP38E-GHRA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjun	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Sky-Blue Aster	Symphyotrichum oolenta	1	0.03125		Forb	N	N	CP38E-GHRA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjun	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Stiff Goldenrod	Oligoneuron rigidum	0.5	0.03125		Forb	N	N	CP38E-GHRA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjun	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Prairie Cinquefoil	Potentilla arguta	0.25	0.015625		Forb	N	N	CP38E-GHRA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
38	CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Switch-Oxe	38-CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Sw	Little Bluestem	Schizachyrium scoparium	24	1.5		Grass	N	N	CP38E-GHRA(CP25)M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
38	CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Switch-Oxe	38-CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Sw	Indiangrass	Sorghastrum nutans	16	1		Grass	N	N	CP38E-GHRA(CP25)M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
38	CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Switch-Oxe	38-CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Sw	Big Bluestem	Andropogon gerardii	8	0.5		Grass	N	N	CP38E-GHRA(CP25)M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
38	CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Switch-Oxe	38-CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Sw	Canada Wildrye	Elymus canadensis	8	0.5		Grass	N	N	CP38E-GHRA(CP25)M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
38	CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Switch-Oxe	38-CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Sw	Switchgrass	Panicum virgatum	8	0.5		Grass	N	N	CP38E-GHRA(CP25)M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
38	CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Switch-Oxe	38-CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Sw	Ox-eye Sunflower	Heliopsis helianthoides	1	0.0625		Forb	N	N	CP38E-GHRA(CP25)M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
38	CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Switch-Oxe	38-CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Sw	Prairie Blazing Star	Liatris pycnostachya	1	0.0625		Forb	N	N	CP38E-GHRA(CP25)M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
38	CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Switch-Oxe	38-CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Sw	Purple Prairie Clover	Dalea purpurea	1	0.0625		Legume	N	N	CP38E-GHRA(CP25)M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
38	CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Switch-Oxe	38-CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Sw	Rosinweed	Silphium integrifolium	1	0.0625		Forb	N	N	CP38E-GHRA(CP25)M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
38	CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Switch-Oxe	38-CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Sw	Bergamot	Monarda fistulosa	0.5	0.03125		Forb	N	N	CP38E-GHRA(CP25)M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
38	CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Switch-Oxe	38-CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Sw	Black-eyed Susan	Rudbeckia hirta	0.5	0.03125		Forb	N	N	CP38E-GHRA(CP25)M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
38	CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Switch-Oxe	38-CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Sw	New England Aster	Symphyotrichum novae-a	0.5	0.03125		Forb	N	N	CP38E-GHRA(CP25)M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
38	CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Switch-Oxe	38-CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Sw	Smooth Blue Aster	Symphyotrichum laeve	0.5	0.03125		Forb	N	N	CP38E-GHRA(CP25)M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
38	CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Switch-Oxe	38-CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Sw	Yellow Coneflower	Ratibida pinnata	0.5	0.03125		Forb	N	N	CP38E-GHRA(CP25)M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
38	CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Switch-Oxe	38-CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Sw	Culver's Root	Veronicastrum virginicum	0	0.015625		Forb	N	N	CP38E-GHRA(CP25)M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-B	Canada Wildrye	Elymus canadensis	16	1		Grass	N	N	CP38E-GHRA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-B	Switchgrass	Panicum virgatum	16	1		Grass	N	N	CP38E-GHRA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-B	Indiangrass	Sorghastrum nutans	12	0.75		Grass	N	N	CP38E-GHRA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-B	Big Bluestem	Andropogon gerardii	8	0.5		Grass	N	N	CP38E-GHRA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-B	Prairie Cordgrass	Spartina pectinata	8	0.5		Grass	N	N	CP38E-GHRA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-B	Fowl Mannagrass	Glyceria striata	4	0.25		Grass	N	N	CP38E-GHRA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-B	Fox Sedge	Carex vulpinoidea	4	0.25		Sedge	N	N	CP38E-GHRA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-B	Cupplant	Silphium perfoliatum	2	0.125		Forb	N	N	CP38E-GHRA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-B	Showy Tick Trefoil	Desmodium canadense	2	0.125		Legume	N	N	CP38E-GHRA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-B	Blue Vervain	Verbena hastata	1	0.0625		Forb	N	N	CP38E-GHRA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-B	Golden Alexanders	Zizia aurea	1	0.0625		Forb	N	N	CP38E-GHRA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-B	Marsh Milkweed	Asclepias incarnata	1	0.0625		Forb	N	N	CP38E-GHRA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-B	Boneset	Eupatorium perfoliatum	0.5	0.03125		Forb	N	N	CP38E-GHRA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-B	Common Ironweed	Vernonia fasciculata	1	0.03125		Forb	N	N	CP38E-GHRA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-B	Joe-pye Weed	Eutrochium maculatum	1	0.03125		Forb	N	N	CP38E-GHRA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-B	Culver's Root	Veronicastrum virginicum	0	0.015625		Forb	N	N	CP38E-GHRA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Indian-Pcor	38-CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Ind	Switchgrass	Panicum virgatum	24	1.5		Grass	N	N	CP38E-GHRA(CP25)WM	Switch-BB-Cwrye-Indian-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
38	CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Indian-Pcor	38-CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Ind	Big Bluestem	Andropogon gerardii	20	1.25		Grass	N	N	CP38E-GHRA(CP25)WM	Switch-BB-Cwrye-Indian-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
38	CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Indian-Pcor	38-CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Ind	Canada Wildrye	Elymus canadensis	16	1		Grass	N	N	CP38E-GHRA(CP25)WM	Switch-BB-Cwrye-Indian-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
38	CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Indian-Pcor	38-CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Ind	Indiangrass	Sorghastrum nutans	12	0.75		Grass	N	N	CP38E-GHRA(CP25)WM	Switch-BB-Cwrye-Indian-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
38	CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Indian-Pcor	38-CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Ind	Prairie Cordgrass	Spartina pectinata	4	0.25		Grass	N	N	CP38E-GHRA(CP25)WM	Switch-BB-Cwrye-Indian-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
38	CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Indian-Pcor	38-CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Ind	Cupplant	Silphium perfoliatum	2	0.125		Forb	N	N	CP38E-GHRA(CP25)WM	Switch-BB-Cwrye-Indian-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
38	CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Indian-Pcor	38-CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Ind	White wild indigo	Baptisia alba	1.5	0.09375		Legume	N	N	CP38E-GHRA(CP25)WM	Switch-BB-Cwrye-Indian-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
38	CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Indian-Pcor	38-CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Ind	Black-eyed Susan	Rudbeckia hirta	0.5	0.03125		Forb	N	N	CP38E-GHRA(CP25)WM	Switch-BB-Cwrye-Indian-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
38	CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Indian-Pcor	38-CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Ind	Common Ironweed	Vernonia fasciculata	0.5	0.03125		Forb	N	N	CP38E-GHRA(CP25)WM	Switch-BB-Cwrye-Indian-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
38	CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Indian-Pcor	38-CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Ind	Golden Alexanders	Zizia aurea	0.5	0.03125		Forb	N	N	CP38E-GHRA(CP25)WM	Switch-BB-Cwrye-Indian-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
38	CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Indian-Pcor	38-CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Ind	New England Aster	Symphyotrichum novae-a	0.5	0.03125		Forb	N	N	CP38E-GHRA(CP25)WM	Switch-BB-Cwrye-Indian-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
38	CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Indian-Pcor	38-CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Ind	Prairie Blazing Star	Liatris pycnostachya	0.5	0.03125		Forb	N	N	CP38E-GHRA(CP25)WM	Switch-BB-Cwrye-Indian-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
38	CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Indian-Pcor	38-CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Ind	Yellow Coneflower	Ratibida pinnata	0.5	0.03125		Forb	N	N	CP38E-GHRA(CP25)WM	Switch-BB-Cwrye-Indian-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
38	CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Indian-Pcor	38-CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Ind	Bergamot	Monarda fistulosa	0.25	0.015625		Forb	N	N	CP38E-GHRA(CP25)WM	Switch-BB-Cwrye-Indian-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
38	CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Indian-Pcor	38-CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Ind	Great St. John's Wort	Hypericum ascyron	0	0.015625		Forb	N	N	CP38E-GHRA(CP25)WM	Switch-BB-Cwrye-Indian-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Little Bluestem	Schizachyrium scoparium	24	1.5		Grass	N	N	CP38E-KBB	LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-PPclover-Bmilkweed-F
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Canada Wildrye	Elymus canadensis	16	1		Grass	N	N	CP38E-KBB	LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-PPclover-Bmilkweed-F
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Indiangrass	Sorghastrum nutans	16	1		Grass	N	N	CP38E-KBB	LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-PPclover-Bmilkweed-F
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Big Bluestem	Andropogon gerardii	8	0.5		Grass	N	N	CP38E-KBB	LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-PPclover-Bmilkweed-F
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Sideoats Grama	Bouteloua curtipendula	8	0.5		Grass	N	N	CP38E-KBB	LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-PPclover-Bmilkweed-F
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Switchgrass	Panicum virgatum	8	0.5		Grass	N	N	CP38E-KBB	LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-PPclover-Bmilkweed-F
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Wild Lupine	Lupinus perennis	3	0.1875		Legume	N	N	CP38E-KBB	LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-PPclover-Bmilkweed-F
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Purple Prairie Clover	Dalea purpurea	2	0.125		Legume	N	N	CP38E-KBB	LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-PPclover-Bmilkweed-F
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Butterfly Milkweed	Asclepias tuberosa	1	0.0625		Forb	N	N	CP38E-KBB	LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-PPclover-Bmilkweed-F
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Flowering Spurge	Euphorbia corollata	1	0.0625		Forb	N	N	CP38E-KBB	LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-PPclover-Bmilkweed-F
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Golden Alexanders	Zizia aurea	1	0.0625		Forb	N	N	CP38E-KBB	LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-PPclover-Bmilkweed-F
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Rough Blazing Star	Liatris aspera	1	0.0625		Forb	N	N	CP38E-KBB	LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-PPclover-Bmilkweed-F
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Round-Headed Bushclover	Lespedeza capitata	1	0.0625		Legume	N	N	CP38E-KBB	LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-PPclover-Bmilkweed-F
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Fewleaf Sunflower	Helianthus occidentalis	1	0.0625		Forb	N	N	CP38E-KBB	LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-PPclover-Bmilkweed-F
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Bergamot	Monarda fistulosa	0.5	0.03125		Forb	N	N	CP38E-KBB	LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-PPclover-Bmilkweed-F
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Prairie Tickseed	Coreopsis palmata	1	0.03125		Forb	N	N	CP38E-KBB	LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-PPclover-Bmilkweed-F
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Black-eyed Susan	Rudbeckia hirta	0	0.025		Forb	N	N	CP38E-KBB	LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-PPclover-Bmilkweed-F

38	CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlup-PPclove	38-CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlup	Little Bluestem	Schizachyrium scoparium	36	2.25		Grass	N	N	CP38E-KBB(WHIP)	LB-Sgrama-BB-Pjune-Wlup-PPclover-Rblzstar-Ptick-Besus
38	CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlup-PPclove	38-CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlup	Sideoats Grama	Bouteloua curtipendula	16	1		Grass	N	N	CP38E-KBB(WHIP)	LB-Sgrama-BB-Pjune-Wlup-PPclover-Rblzstar-Ptick-Besus
38	CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlup-PPclove	38-CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlup	Big Bluestem	Andropogon gerardii	8	0.5		Grass	N	N	CP38E-KBB(WHIP)	LB-Sgrama-BB-Pjune-Wlup-PPclover-Rblzstar-Ptick-Besus
38	CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlup-PPclove	38-CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlup	Prairie Junegrass	Koeleria macrantha	4	0.25		Grass	N	N	CP38E-KBB(WHIP)	LB-Sgrama-BB-Pjune-Wlup-PPclover-Rblzstar-Ptick-Besus
38	CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlup-PPclove	38-CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlup	Wild Lupine	Lupinus perennis	3	0.1875		Legume	N	N	CP38E-KBB(WHIP)	LB-Sgrama-BB-Pjune-Wlup-PPclover-Rblzstar-Ptick-Besus
38	CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlup-PPclove	38-CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlup	Purple Prairie Clover	Dalea purpurea	2	0.125		Legume	N	N	CP38E-KBB(WHIP)	LB-Sgrama-BB-Pjune-Wlup-PPclover-Rblzstar-Ptick-Besus
38	CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlup-PPclove	38-CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlup	Rough Blazing Star	Liatris aspera	2	0.125		Forb	N	N	CP38E-KBB(WHIP)	LB-Sgrama-BB-Pjune-Wlup-PPclover-Rblzstar-Ptick-Besus
38	CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlup-PPclove	38-CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlup	Prairie Tickseed	Coreopsis palmata	1	0.0625		Forb	N	N	CP38E-KBB(WHIP)	LB-Sgrama-BB-Pjune-Wlup-PPclover-Rblzstar-Ptick-Besus
38	CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlup-PPclove	38-CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlup	Black-eyed Susan	Rudbeckia hirta	0.25	0.015625		Forb	N	N	CP38E-KBB(WHIP)	LB-Sgrama-BB-Pjune-Wlup-PPclover-Rblzstar-Ptick-Besus
38	CP38E-SWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-S	38-CP38E-SWGCA(CP2)D-LB-Sgrama-BB-Indian-P	Little Bluestem	Schizachyrium scoparium	24	1.5		Grass	N	N	CP38E-SWGCA(CP2)D	LB-Sgrama-BB-Indian-PPclover-Sgrod-Ycone
38	CP38E-SWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-S	38-CP38E-SWGCA(CP2)D-LB-Sgrama-BB-Indian-P	Sideoats Grama	Bouteloua curtipendula	24	1.5		Grass	N	N	CP38E-SWGCA(CP2)D	LB-Sgrama-BB-Indian-PPclover-Sgrod-Ycone
38	CP38E-SWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-S	38-CP38E-SWGCA(CP2)D-LB-Sgrama-BB-Indian-P	Big Bluestem	Andropogon gerardii	8	0.5		Grass	N	N	CP38E-SWGCA(CP2)D	LB-Sgrama-BB-Indian-PPclover-Sgrod-Ycone
38	CP38E-SWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-S	38-CP38E-SWGCA(CP2)D-LB-Sgrama-BB-Indian-P	Indiangrass	Sorghastrum nutans	8	0.5		Grass	N	N	CP38E-SWGCA(CP2)D	LB-Sgrama-BB-Indian-PPclover-Sgrod-Ycone
38	CP38E-SWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-S	38-CP38E-SWGCA(CP2)D-LB-Sgrama-BB-Indian-P	Purple Prairie Clover	Dalea purpurea	2	0.125		Legume	N	N	CP38E-SWGCA(CP2)D	LB-Sgrama-BB-Indian-PPclover-Sgrod-Ycone
38	CP38E-SWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-S	38-CP38E-SWGCA(CP2)D-LB-Sgrama-BB-Indian-P	Stiff Goldenrod	Oligoneuron rigidum	1	0.0625		Forb	N	N	CP38E-SWGCA(CP2)D	LB-Sgrama-BB-Indian-PPclover-Sgrod-Ycone
38	CP38E-SWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-S	38-CP38E-SWGCA(CP2)D-LB-Sgrama-BB-Indian-P	Yellow Coneflower	Ratibida pinnata	1	0.0625		Forb	N	N	CP38E-SWGCA(CP2)D	LB-Sgrama-BB-Indian-PPclover-Sgrod-Ycone
38	CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-P	38-CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian	Little Bluestem	Schizachyrium scoparium	24	1.5		Grass	N	N	CP38E-SWGCA(CP2)DM	LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-P	38-CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian	Sideoats Grama	Bouteloua curtipendula	16	1		Grass	N	N	CP38E-SWGCA(CP2)DM	LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-P	38-CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian	Big Bluestem	Andropogon gerardii	8	0.5		Grass	N	N	CP38E-SWGCA(CP2)DM	LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-P	38-CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian	Indiangrass	Sorghastrum nutans	8	0.5		Grass	N	N	CP38E-SWGCA(CP2)DM	LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-P	38-CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian	Switchgrass	Panicum virgatum	8	0.5		Grass	N	N	CP38E-SWGCA(CP2)DM	LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-P	38-CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian	Purple Prairie Clover	Dalea purpurea	2	0.125		Legume	N	N	CP38E-SWGCA(CP2)DM	LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-P	38-CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian	Bergamot	Monarda fistulosa	1	0.0625		Forb	N	N	CP38E-SWGCA(CP2)DM	LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-P	38-CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian	Yellow Coneflower	Ratibida pinnata	1	0.0625		Forb	N	N	CP38E-SWGCA(CP2)DM	LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Ber	38-CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-Sv	Little Bluestem	Schizachyrium scoparium	20	1.25		Grass	N	N	CP38E-SWGCA(CP2)M	LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Ber	38-CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-Sv	Canada Wildrye	Elymus canadensis	16	1		Grass	N	N	CP38E-SWGCA(CP2)M	LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Ber	38-CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-Sv	Indiangrass	Sorghastrum nutans	16	1		Grass	N	N	CP38E-SWGCA(CP2)M	LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Ber	38-CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-Sv	Big Bluestem	Andropogon gerardii	8	0.5		Grass	N	N	CP38E-SWGCA(CP2)M	LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Ber	38-CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-Sv	Switchgrass	Panicum virgatum	8	0.5		Grass	N	N	CP38E-SWGCA(CP2)M	LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Ber	38-CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-Sv	Bergamot	Monarda fistulosa	1	0.0625		Forb	N	N	CP38E-SWGCA(CP2)M	LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Ber	38-CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-Sv	Black-eyed Susan	Rudbeckia hirta	1	0.0625		Forb	N	N	CP38E-SWGCA(CP2)M	LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Ber	38-CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-Sv	Yellow Coneflower	Ratibida pinnata	1	0.0625		Forb	N	N	CP38E-SWGCA(CP2)M	LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-	38-CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Swit	Big Bluestem	Andropogon gerardii	16	1		Grass	N	N	CP38E-SWGCA(CP2)W	BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-	38-CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Swit	Canada Wildrye	Elymus canadensis	16	1		Grass	N	N	CP38E-SWGCA(CP2)W	BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-	38-CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Swit	Indiangrass	Sorghastrum nutans	16	1		Grass	N	N	CP38E-SWGCA(CP2)W	BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-	38-CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Swit	Switchgrass	Panicum virgatum	16	1		Grass	N	N	CP38E-SWGCA(CP2)W	BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-	38-CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Swit	Prairie Cordgrass	Spartina pectinata	8	0.5		Grass	N	N	CP38E-SWGCA(CP2)W	BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-	38-CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Swit	Silphium perfoliatum	Cupplant	2	0.125		Forb	N	N	CP38E-SWGCA(CP2)W	BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-	38-CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Swit	Blue Vervain	Verbena hastata	1	0.0625		Forb	N	N	CP38E-SWGCA(CP2)W	BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-	38-CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Swit	Common Ironweed	Vernonia fasciculata	1	0.0625		Forb	N	N	CP38E-SWGCA(CP2)W	BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-SWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Berg	38-CP38E-SWGCA(CP2)WM-Switch-BB-Cwrye-Pc	Switchgrass	Panicum virgatum	32	2		Grass	N	N	CP38E-SWGCA(CP2)WM	Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
38	CP38E-SWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Berg	38-CP38E-SWGCA(CP2)WM-Switch-BB-Cwrye-Pc	Big Bluestem	Andropogon gerardii	16	1		Grass	N	N	CP38E-SWGCA(CP2)WM	Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
38	CP38E-SWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Berg	38-CP38E-SWGCA(CP2)WM-Switch-BB-Cwrye-Pc	Canada Wildrye	Elymus canadensis	16	1		Grass	N	N	CP38E-SWGCA(CP2)WM	Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
38	CP38E-SWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Berg	38-CP38E-SWGCA(CP2)WM-Switch-BB-Cwrye-Pc	Prairie Cordgrass	Spartina pectinata	4	0.25		Grass	N	N	CP38E-SWGCA(CP2)WM	Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
38	CP38E-SWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Berg	38-CP38E-SWGCA(CP2)WM-Switch-BB-Cwrye-Pc	Bergamot	Monarda fistulosa	1	0.0625		Forb	N	N	CP38E-SWGCA(CP2)WM	Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
38	CP38E-SWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Berg	38-CP38E-SWGCA(CP2)WM-Switch-BB-Cwrye-Pc	New England Aster	Symphyotrichum novae-a	1	0.0625		Forb	N	N	CP38E-SWGCA(CP2)WM	Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
38	CP38E-SWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Berg	38-CP38E-SWGCA(CP2)WM-Switch-BB-Cwrye-Pc	Yellow Coneflower	Ratibida pinnata	1	0.0625		Forb	N	N	CP38E-SWGCA(CP2)WM	Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Little Bluestem	Schizachyrium scoparium	24	1.5		Grass	N	N	CP38E-SWGCA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Sideoats Grama	Bouteloua curtipendula	24	1.5		Grass	N	N	CP38E-SWGCA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Indiangrass	Sorghastrum nutans	8	0.5		Grass	N	N	CP38E-SWGCA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Big Bluestem	Andropogon gerardii	4	0.25		Grass	N	N	CP38E-SWGCA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Purple Prairie Clover	Dalea purpurea	2	0.125		Legume	N	N	CP38E-SWGCA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Sand Dropseed	Sporobolus cryptandrus	2	0.125		Grass	N	N	CP38E-SWGCA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Prairie Junegrass	Koeleria macrantha	1	0.0625		Grass	N	N	CP38E-SWGCA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Spiderwort	Tradescantia ohiensis	1	0.0625		Forb	N	N	CP38E-SWGCA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Hoary Vervain	Verbena stricta	0.5	0.03125		Forb	N	N	CP38E-SWGCA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Leadplant	Amorpha canescens	0.5	0.03125		Legume	N	N	CP38E-SWGCA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Prairie Tickseed	Coreopsis palmata	0.5	0.03125		Forb	N	N	CP38E-SWGCA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Silky Aster	Symphyotrichum pratens	0.5	0.03125		Forb	N	N	CP38E-SWGCA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Stiff Goldenrod	Oligoneuron rigidum	1	0.03125		Forb	N	N	CP38E-SWGCA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Yellow Coneflower	Ratibida pinnata	0.5	0.03125		Forb	N	N	CP38E-SWGCA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Prairie Cinquefoil	Potentilla arguta	0.25	0.015625		Forb	N	N	CP38E-SWGCA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Spotted Mint	Monarda punctata	0	0.015625		Forb	N	N	CP38E-SWGCA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Little Bluestem	Schizachyrium scoparium	24	1.5		Grass	N	N	CP38E-SWGCA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Sideoats Grama	Bouteloua curtipendula	24	1.5		Grass	N	N	CP38E-SWGCA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Indiangrass	Sorghastrum nutans	8	0.5		Grass	N	N	CP38E-SWGCA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Switchgrass	Panicum virgatum	4	0.25		Grass	N	N	CP38E-SWGCA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Prairie Junegrass	Koeleria macrantha	2	0.125		Grass	N	N	CP38E-SWGCA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Prairie Dropseed	Sporobolus heterolepis	2	0.125		Grass	N	N	CP38E-SWGCA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Purple Prairie Clover	Dalea purpurea	2	0.125		Legume	N	N	CP38E-SWGCA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Round-Headed Bushclover	Lespedeza capitata	2	0.125		Legume	N	N	CP38E-SWGCA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B

38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Bergamot	Monarda fistulosa	1	0.0625		Forb	N	N	CP38E-SWGCA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Spiderwort	Tradescantia ohiensis	1	0.0625		Forb	N	N	CP38E-SWGCA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Yellow Coneflower	Ratibida pinnata	1	0.0625		Forb	N	N	CP38E-SWGCA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Leadplant	Amorpha canescens	0.5	0.03125		Legume	N	N	CP38E-SWGCA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Rough Blazing Star	Liatris aspera	1	0.03125		Forb	N	N	CP38E-SWGCA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Sky-Blue Aster	Symphyotrichum oolenta	1	0.03125		Forb	N	N	CP38E-SWGCA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Stiff Goldenrod	Oligoneuron rigidum	0.5	0.03125		Forb	N	N	CP38E-SWGCA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Prairie Cinquefoil	Potentilla arguta	0.25	0.015625		Forb	N	N	CP38E-SWGCA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
38	CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-Switch-Ox	38-CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-S	Little Bluestem	Schizachyrium scoparium	24	1.5		Grass	N	N	CP38E-SWGCA(CP25)M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
38	CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-Switch-Ox	38-CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-S	Indiangrass	Sorghastrum nutans	16	1		Grass	N	N	CP38E-SWGCA(CP25)M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
38	CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-Switch-Ox	38-CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-S	Big Bluestem	Andropogon gerardii	8	0.5		Grass	N	N	CP38E-SWGCA(CP25)M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
38	CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-Switch-Ox	38-CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-S	Canada Wildrye	Elymus canadensis	8	0.5		Grass	N	N	CP38E-SWGCA(CP25)M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
38	CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-Switch-Ox	38-CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-S	Switchgrass	Panicum virgatum	8	0.5		Grass	N	N	CP38E-SWGCA(CP25)M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
38	CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-Switch-Ox	38-CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-S	Ox-eye Sunflower	Heliopsis helianthoides	1	0.0625		Forb	N	N	CP38E-SWGCA(CP25)M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
38	CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-Switch-Ox	38-CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-S	Prairie Blazing Star	Liatris pycnostachya	1	0.0625		Forb	N	N	CP38E-SWGCA(CP25)M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
38	CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-Switch-Ox	38-CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-S	Purple Prairie Clover	Dalea purpurea	1	0.0625		Legume	N	N	CP38E-SWGCA(CP25)M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
38	CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-Switch-Ox	38-CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-S	Rosinweed	Silphium integrifolium	1	0.0625		Forb	N	N	CP38E-SWGCA(CP25)M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
38	CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-Switch-Ox	38-CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-S	Bergamot	Monarda fistulosa	0.5	0.03125		Forb	N	N	CP38E-SWGCA(CP25)M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
38	CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-Switch-Ox	38-CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-S	Black-eyed Susan	Rudbeckia hirta	0.5	0.03125		Forb	N	N	CP38E-SWGCA(CP25)M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
38	CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-Switch-Ox	38-CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-S	New England Aster	Symphyotrichum novae-a	0.5	0.03125		Forb	N	N	CP38E-SWGCA(CP25)M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
38	CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-Switch-Ox	38-CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-S	Smooth Blue Aster	Symphyotrichum laeve	0.5	0.03125		Forb	N	N	CP38E-SWGCA(CP25)M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
38	CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-Switch-Ox	38-CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-S	Yellow Coneflower	Ratibida pinnata	0.5	0.03125		Forb	N	N	CP38E-SWGCA(CP25)M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
38	CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-Switch-Ox	38-CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-S	Culver's Root	Veronicastrum virginicum	0	0.015625		Forb	N	N	CP38E-SWGCA(CP25)M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian	Canada Wildrye	Elymus canadensis	16	1		Grass	N	N	CP38E-SWGCA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian	Switchgrass	Panicum virgatum	16	1		Grass	N	N	CP38E-SWGCA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian	Indiangrass	Sorghastrum nutans	12	0.75		Grass	N	N	CP38E-SWGCA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian	Big Bluestem	Andropogon gerardii	8	0.5		Grass	N	N	CP38E-SWGCA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian	Prairie Cordgrass	Spartina pectinata	8	0.5		Grass	N	N	CP38E-SWGCA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian	Fowl Mannagrass	Glyceria striata	4	0.25		Grass	N	N	CP38E-SWGCA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian	Fox Sedge	Carex vulpinoidea	4	0.25		Sedge	N	N	CP38E-SWGCA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian	Cupplant	Silphium perfoliatum	2	0.125		Forb	N	N	CP38E-SWGCA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian	Showy Tick Trefoil	Desmodium canadense	2	0.125		Legume	N	N	CP38E-SWGCA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian	Blue Vervain	Verbena hastata	1	0.0625		Forb	N	N	CP38E-SWGCA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian	Golden Alexanders	Zizia aurea	1	0.0625		Forb	N	N	CP38E-SWGCA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian	Marsh Milkweed	Asclepias incarnata	1	0.0625		Forb	N	N	CP38E-SWGCA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian	Boneset	Eupatorium perfoliatum	0.5	0.03125		Forb	N	N	CP38E-SWGCA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian	Common Ironweed	Vernonia fasciculata	1	0.03125		Forb	N	N	CP38E-SWGCA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian	Joe-pye Weed	Eutrochium maculatum	1	0.03125		Forb	N	N	CP38E-SWGCA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian	Culver's Root	Veronicastrum virginicum	0	0.015625		Forb	N	N	CP38E-SWGCA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-Indian-Pco	38-CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-I	Switchgrass	Panicum virgatum	24	1.5		Grass	N	N	CP38E-SWGCA(CP25)WM	Switch-BB-Cwrye-Indian-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
38	CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-Indian-Pco	38-CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-I	Big Bluestem	Andropogon gerardii	20	1.25		Grass	N	N	CP38E-SWGCA(CP25)WM	Switch-BB-Cwrye-Indian-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
38	CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-Indian-Pco	38-CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-I	Canada Wildrye	Elymus canadensis	16	1		Grass	N	N	CP38E-SWGCA(CP25)WM	Switch-BB-Cwrye-Indian-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
38	CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-Indian-Pco	38-CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-I	Indiangrass	Sorghastrum nutans	12	0.75		Grass	N	N	CP38E-SWGCA(CP25)WM	Switch-BB-Cwrye-Indian-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
38	CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-Indian-Pco	38-CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-I	Prairie Cordgrass	Spartina pectinata	4	0.25		Grass	N	N	CP38E-SWGCA(CP25)WM	Switch-BB-Cwrye-Indian-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
38	CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-Indian-Pco	38-CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-I	Cupplant	Silphium perfoliatum	2	0.125		Forb	N	N	CP38E-SWGCA(CP25)WM	Switch-BB-Cwrye-Indian-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
38	CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-Indian-Pco	38-CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-I	White wild indigo	Baptisia alba	1.5	0.09375		Legume	N	N	CP38E-SWGCA(CP25)WM	Switch-BB-Cwrye-Indian-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
38	CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-Indian-Pco	38-CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-I	Black-eyed Susan	Rudbeckia hirta	0.5	0.03125		Forb	N	N	CP38E-SWGCA(CP25)WM	Switch-BB-Cwrye-Indian-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
38	CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-Indian-Pco	38-CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-I	Common Ironweed	Vernonia fasciculata	0.5	0.03125		Forb	N	N	CP38E-SWGCA(CP25)WM	Switch-BB-Cwrye-Indian-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
38	CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-Indian-Pco	38-CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-I	Golden Alexanders	Zizia aurea	0.5	0.03125		Forb	N	N	CP38E-SWGCA(CP25)WM	Switch-BB-Cwrye-Indian-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
38	CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-Indian-Pco	38-CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-I	New England Aster	Symphyotrichum novae-a	0.5	0.03125		Forb	N	N	CP38E-SWGCA(CP25)WM	Switch-BB-Cwrye-Indian-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
38	CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-Indian-Pco	38-CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-I	Prairie Blazing Star	Liatris pycnostachya	0.5	0.03125		Forb	N	N	CP38E-SWGCA(CP25)WM	Switch-BB-Cwrye-Indian-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
38	CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-Indian-Pco	38-CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-I	Yellow Coneflower	Ratibida pinnata	0.5	0.03125		Forb	N	N	CP38E-SWGCA(CP25)WM	Switch-BB-Cwrye-Indian-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
38	CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-Indian-Pco	38-CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-I	Bergamot	Monarda fistulosa	0.25	0.015625		Forb	N	N	CP38E-SWGCA(CP25)WM	Switch-BB-Cwrye-Indian-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
38	CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-Indian-Pco	38-CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-I	Great St. John's Wort	Hypericum ascyron	0	0.015625		Forb	N	N	CP38E-SWGCA(CP25)WM	Switch-BB-Cwrye-Indian-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pju	Little Bluestem	Schizachyrium scoparium	32	2		Grass	N	N	CP38E-WPHRA(CP25)D	LB-Sgrama-Indian-Pjune-Pdrop-Switch-PPclover-RHbushclover-S
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pju	Sideoats Grama	Bouteloua curtipendula	24	1.5		Grass	N	N	CP38E-WPHRA(CP25)D	LB-Sgrama-Indian-Pjune-Pdrop-Switch-PPclover-RHbushclover-S
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pju	Indiangrass	Sorghastrum nutans	4	0.25		Grass	N	N	CP38E-WPHRA(CP25)D	LB-Sgrama-Indian-Pjune-Pdrop-Switch-PPclover-RHbushclover-S
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pju	Prairie Junegrass	Koeleria macrantha	4	0.25		Grass	N	N	CP38E-WPHRA(CP25)D	LB-Sgrama-Indian-Pjune-Pdrop-Switch-PPclover-RHbushclover-S
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pju	Prairie Dropseed	Sporobolus heterolepis	4	0.25		Grass	N	N	CP38E-WPHRA(CP25)D	LB-Sgrama-Indian-Pjune-Pdrop-Switch-PPclover-RHbushclover-S
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pju	Switchgrass	Panicum virgatum	4	0.25		Grass	N	N	CP38E-WPHRA(CP25)D	LB-Sgrama-Indian-Pjune-Pdrop-Switch-PPclover-RHbushclover-S
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pju	Purple Prairie Clover	Dalea purpurea	2	0.125		Legume	N	N	CP38E-WPHRA(CP25)D	LB-Sgrama-Indian-Pjune-Pdrop-Switch-PPclover-RHbushclover-S
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pju	Round-Headed Bushclover	Lespedeza capitata	2	0.125		Legume	N	N	CP38E-WPHRA(CP25)D	LB-Sgrama-Indian-Pjune-Pdrop-Switch-PPclover-RHbushclover-S
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pju	Spiderwort	Tradescantia ohiensis	1	0.0625		Forb	N	N	CP38E-WPHRA(CP25)D	LB-Sgrama-Indian-Pjune-Pdrop-Switch-PPclover-RHbushclover-S
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pju	Bergamot	Monarda fistulosa	0.5	0.03125		Forb	N	N	CP38E-WPHRA(CP25)D	LB-Sgrama-Indian-Pjune-Pdrop-Switch-PPclover-RHbushclover-S
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pju	Leadplant	Amorpha canescens	0.5	0.03125		Legume	N	N	CP38E-WPHRA(CP25)D	LB-Sgrama-Indian-Pjune-Pdrop-Switch-PPclover-RHbushclover-S
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pju	Rough Blazing Star	Liatris aspera	0.5	0.03125		Forb	N	N	CP38E-WPHRA(CP25)D	LB-Sgrama-Indian-Pjune-Pdrop-Switch-PPclover-RHbushclover-S
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pju	Sky-Blue Aster	Symphyotrichum oolenta	0.5	0.03125		Forb	N	N	CP38E-WPHRA(CP25)D	LB-Sgrama-Indian-Pjune-Pdrop-Switch-PPclover-RHbushclover-S
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pju	Black-eyed Susan	Rudbeckia hirta	0.25	0.015625		Forb	N	N	CP38E-WPHRA(CP25)D	LB-Sgrama-Indian-Pjune-Pdrop-Switch-PPclover-RHbushclover-S
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pju	Prairie Cinquefoil	Potentilla arguta	0.25	0.015625		Forb	N	N	CP38E-WPHRA(CP25)D	LB-Sgrama-Indian-Pjune-Pdrop-Switch-PPclover-RHbushclover-S
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pju	Stiff Goldenrod	Oligoneuron rigidum	0	0.015625		Forb	N	N	CP38E-WPHRA(CP25)D	LB-Sgrama-Indian-Pjune-Pdrop-Switch-PPclover-RHbushclover-S
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pju	Yellow Coneflower	Ratibida pinnata	0	0.015625		Forb	N	N	CP38E-WPHRA(CP25)D	LB-Sgrama-Indian-Pjune-Pdrop-Switch-PPclover-RHbushclover-S

38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-B	Little Bluestem	Schizachyrium scoparium	32	2		Grass	N	N	CP38E-WPHRA(CP25)DM	LB-Sgrama-Pjune-BB-Indian-Sdrop-Bmilkweed-PPclover-Swort-H
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-B	Sideoats Grama	Bouteloua curtipendula	24	1.5		Grass	N	N	CP38E-WPHRA(CP25)DM	LB-Sgrama-Pjune-BB-Indian-Sdrop-Bmilkweed-PPclover-Swort-H
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-B	Prairie Junegrass	Koeleria macrantha	6	0.375		Grass	N	N	CP38E-WPHRA(CP25)DM	LB-Sgrama-Pjune-BB-Indian-Sdrop-Bmilkweed-PPclover-Swort-H
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-B	Big Bluestem	Andropogon gerardii	4	0.25		Grass	N	N	CP38E-WPHRA(CP25)DM	LB-Sgrama-Pjune-BB-Indian-Sdrop-Bmilkweed-PPclover-Swort-H
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-B	Indiangrass	Sorghastrum nutans	4	0.25		Grass	N	N	CP38E-WPHRA(CP25)DM	LB-Sgrama-Pjune-BB-Indian-Sdrop-Bmilkweed-PPclover-Swort-H
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-B	Sand Dropseed	Sporobolus cryptandrus	4	0.25		Grass	N	N	CP38E-WPHRA(CP25)DM	LB-Sgrama-Pjune-BB-Indian-Sdrop-Bmilkweed-PPclover-Swort-H
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-B	Butterfly Milkweed	Asclepias tuberosa	1	0.0625		Forb	N	N	CP38E-WPHRA(CP25)DM	LB-Sgrama-Pjune-BB-Indian-Sdrop-Bmilkweed-PPclover-Swort-H
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-B	Purple Prairie Clover	Dalea purpurea	1	0.0625		Legume	N	N	CP38E-WPHRA(CP25)DM	LB-Sgrama-Pjune-BB-Indian-Sdrop-Bmilkweed-PPclover-Swort-H
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-B	Spiderwort	Tradescantia ohiensis	1	0.0625		Forb	N	N	CP38E-WPHRA(CP25)DM	LB-Sgrama-Pjune-BB-Indian-Sdrop-Bmilkweed-PPclover-Swort-H
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-B	Hoary Vervain	Verbena stricta	0.5	0.03125		Forb	N	N	CP38E-WPHRA(CP25)DM	LB-Sgrama-Pjune-BB-Indian-Sdrop-Bmilkweed-PPclover-Swort-H
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-B	Leadplant	Amorpha canescens	0.5	0.03125		Legume	N	N	CP38E-WPHRA(CP25)DM	LB-Sgrama-Pjune-BB-Indian-Sdrop-Bmilkweed-PPclover-Swort-H
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-B	Prairie Tickseed	Coreopsis palmata	0.5	0.03125		Forb	N	N	CP38E-WPHRA(CP25)DM	LB-Sgrama-Pjune-BB-Indian-Sdrop-Bmilkweed-PPclover-Swort-H
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-B	Silky Aster	Symphyotrichum pratens	0.5	0.03125		Forb	N	N	CP38E-WPHRA(CP25)DM	LB-Sgrama-Pjune-BB-Indian-Sdrop-Bmilkweed-PPclover-Swort-H
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-B	Prairie Cinquefoil	Potentilla arguta	0.25	0.015625		Forb	N	N	CP38E-WPHRA(CP25)DM	LB-Sgrama-Pjune-BB-Indian-Sdrop-Bmilkweed-PPclover-Swort-H
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-B	Spotted Mint	Monarda punctata	0.25	0.015625		Forb	N	N	CP38E-WPHRA(CP25)DM	LB-Sgrama-Pjune-BB-Indian-Sdrop-Bmilkweed-PPclover-Swort-H
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-B	Stiff Goldenrod	Oligoneuron rigidum	0	0.015625		Forb	N	N	CP38E-WPHRA(CP25)DM	LB-Sgrama-Pjune-BB-Indian-Sdrop-Bmilkweed-PPclover-Swort-H
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-B	Yellow Coneflower	Ratibida pinnata	0	0.015625		Forb	N	N	CP38E-WPHRA(CP25)DM	LB-Sgrama-Pjune-BB-Indian-Sdrop-Bmilkweed-PPclover-Swort-H
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB	Little Bluestem	Schizachyrium scoparium	28	1.75		Grass	N	N	CP38E-WPHRA(CP25)M	LB-Cwrye-Sgrama-BB-Indian-Switch-Cmilkvetch-Oxeyesun-Pblzst
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB	Canada Wildrye	Elymus canadensis	12	0.75		Grass	N	N	CP38E-WPHRA(CP25)M	LB-Cwrye-Sgrama-BB-Indian-Switch-Cmilkvetch-Oxeyesun-Pblzst
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB	Sideoats Grama	Bouteloua curtipendula	12	0.75		Grass	N	N	CP38E-WPHRA(CP25)M	LB-Cwrye-Sgrama-BB-Indian-Switch-Cmilkvetch-Oxeyesun-Pblzst
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB	Big Bluestem	Andropogon gerardii	4	0.25		Grass	N	N	CP38E-WPHRA(CP25)M	LB-Cwrye-Sgrama-BB-Indian-Switch-Cmilkvetch-Oxeyesun-Pblzst
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB	Indiangrass	Sorghastrum nutans	4	0.25		Grass	N	N	CP38E-WPHRA(CP25)M	LB-Cwrye-Sgrama-BB-Indian-Switch-Cmilkvetch-Oxeyesun-Pblzst
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB	Switchgrass	Panicum virgatum	4	0.25		Grass	N	N	CP38E-WPHRA(CP25)M	LB-Cwrye-Sgrama-BB-Indian-Switch-Cmilkvetch-Oxeyesun-Pblzst
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB	Canada Milkvetch	Astragalus canadensis	2	0.125		Legume	N	N	CP38E-WPHRA(CP25)M	LB-Cwrye-Sgrama-BB-Indian-Switch-Cmilkvetch-Oxeyesun-Pblzst
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB	Ox-eye Sunflower	Heliopsis helianthoides	1	0.0625		Forb	N	N	CP38E-WPHRA(CP25)M	LB-Cwrye-Sgrama-BB-Indian-Switch-Cmilkvetch-Oxeyesun-Pblzst
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB	Prairie Blazing Star	Liatris pycnostachya	1	0.0625		Forb	N	N	CP38E-WPHRA(CP25)M	LB-Cwrye-Sgrama-BB-Indian-Switch-Cmilkvetch-Oxeyesun-Pblzst
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB	Purple Prairie Clover	Dalea purpurea	1	0.0625		Legume	N	N	CP38E-WPHRA(CP25)M	LB-Cwrye-Sgrama-BB-Indian-Switch-Cmilkvetch-Oxeyesun-Pblzst
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB	Bergamot	Monarda fistulosa	0.5	0.03125		Forb	N	N	CP38E-WPHRA(CP25)M	LB-Cwrye-Sgrama-BB-Indian-Switch-Cmilkvetch-Oxeyesun-Pblzst
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB	Black-eyed Susan	Rudbeckia hirta	0.5	0.03125		Forb	N	N	CP38E-WPHRA(CP25)M	LB-Cwrye-Sgrama-BB-Indian-Switch-Cmilkvetch-Oxeyesun-Pblzst
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB	New England Aster	Symphyotrichum novae-a	0.5	0.03125		Forb	N	N	CP38E-WPHRA(CP25)M	LB-Cwrye-Sgrama-BB-Indian-Switch-Cmilkvetch-Oxeyesun-Pblzst
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB	Sky-Blue Aster	Symphyotrichum oolenta	0.5	0.03125		Forb	N	N	CP38E-WPHRA(CP25)M	LB-Cwrye-Sgrama-BB-Indian-Switch-Cmilkvetch-Oxeyesun-Pblzst
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB	Smooth Blue Aster	Symphyotrichum laeve	0.5	0.03125		Forb	N	N	CP38E-WPHRA(CP25)M	LB-Cwrye-Sgrama-BB-Indian-Switch-Cmilkvetch-Oxeyesun-Pblzst
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB	Yellow Coneflower	Ratibida pinnata	1	0.03125		Forb	N	N	CP38E-WPHRA(CP25)M	LB-Cwrye-Sgrama-BB-Indian-Switch-Cmilkvetch-Oxeyesun-Pblzst
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB	Culver's Root	Veronicastrum virginicum	0	0.015625		Forb	N	N	CP38E-WPHRA(CP25)M	LB-Cwrye-Sgrama-BB-Indian-Switch-Cmilkvetch-Oxeyesun-Pblzst
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsed	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch	Canada Wildrye	Elymus canadensis	16	1		Grass	N	N	CP38E-WPHRA(CP25)W	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsed	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch	Indiangrass	Sorghastrum nutans	12	0.75		Grass	N	N	CP38E-WPHRA(CP25)W	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsed	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch	Switchgrass	Panicum virgatum	12	0.75		Grass	N	N	CP38E-WPHRA(CP25)W	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsed	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch	Big Bluestem	Andropogon gerardii	8	0.5		Grass	N	N	CP38E-WPHRA(CP25)W	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsed	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch	Fox Sedge	Carex vulpinoidea	8	0.5		Sedge	N	N	CP38E-WPHRA(CP25)W	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsed	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch	Prairie Cordgrass	Spartina pectinata	8	0.5		Grass	N	N	CP38E-WPHRA(CP25)W	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsed	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch	Fowl Mannagrass	Glyceria striata	4	0.25		Grass	N	N	CP38E-WPHRA(CP25)W	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsed	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch	Cupplant	Silphium perfoliatum	2	0.125		Forb	N	N	CP38E-WPHRA(CP25)W	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsed	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch	Showy Tick Trefoil	Desmodium canadense	2	0.125		Legume	N	N	CP38E-WPHRA(CP25)W	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsed	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch	Blue Vervain	Verbena hastata	1	0.0625		Forb	N	N	CP38E-WPHRA(CP25)W	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsed	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch	Golden Alexanders	Zizia aurea	1	0.0625		Forb	N	N	CP38E-WPHRA(CP25)W	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsed	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch	Marsh Milkweed	Asclepias incarnata	1	0.0625		Forb	N	N	CP38E-WPHRA(CP25)W	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsed	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch	Boneset	Eupatorium perfoliatum	0.5	0.03125		Forb	N	N	CP38E-WPHRA(CP25)W	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsed	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch	Common Ironweed	Vernonia fasciculata	1	0.03125		Forb	N	N	CP38E-WPHRA(CP25)W	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsed	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch	Joe-pye Weed	Eutrochium maculatum	1	0.03125		Forb	N	N	CP38E-WPHRA(CP25)W	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsed	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch	Culver's Root	Veronicastrum virginicum	0	0.015625		Forb	N	N	CP38E-WPHRA(CP25)W	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38E-Monarch(CP1)-Tim-Orc-RC-Cmilkweed-Besus-O	38-CP38E-Monarch(CP1)-Tim-Orc-RC-Cmilkweed	Common Milkweed	Asclepias syriaca	6	0.378	0.6	Forb	N	X	CP38E-Monarch(CP1)	Tim-Orc-RC-Cmilkweed-Besus-Oxeyesun-Sgrod
38	CP38E-Monarch(CP1)-Tim-Orc-RC-Cmilkweed-	38-CP38E-Monarch(CP1)-Tim-Orc-RC-Cm	Black-Eyed Susan	Rudbeckia hirta	0.96	0.06	2.2	Forb	N	X	CP38E-Monarch(CP1)	Tim-Orc-RC-Cmilkweed-Besus-Oxeyesun-Sgrod
38	CP38E-Monarch(CP1)-Tim-Orc-RC-Cmilkweed-	38-CP38E-Monarch(CP1)-Tim-Orc-RC-Cm	Ox-eye Sunflower	Heliopsis helianthoides	0.96	0.06	0.2	Forb	N	X	CP38E-Monarch(CP1)	Tim-Orc-RC-Cmilkweed-Besus-Oxeyesun-Sgrod
38	CP38E-Monarch(CP1)-Tim-Orc-RC-Cmilkweed-	38-CP38E-Monarch(CP1)-Tim-Orc-RC-Cm	Stiff Goldenrod	Oligoneuron rigidum	0.96	0.06	1.1	Forb	N	X	CP38E-Monarch(CP1)	Tim-Orc-RC-Cmilkweed-Besus-Oxeyesun-Sgrod
38	CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cv	38-CP38E-Monarch(CP2)-BB-LB-Indian-Sg	Big Bluestem	Andropogon gerardii	4	0.25	1	Grass	N	X	CP38E-Monarch(CP2)	BB-LB-Indian-Sgrama-Cwrye-Wpclover-Cmilkweed-Besus-Berg-Sg
38	CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cv	38-CP38E-Monarch(CP2)-BB-LB-Indian-Sg	Little Bluestem	Schizachyrium scoparium	24	1.5	8.3	Grass	N	X	CP38E-Monarch(CP2)	BB-LB-Indian-Sgrama-Cwrye-Wpclover-Cmilkweed-Besus-Berg-Sg
38	CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cv	38-CP38E-Monarch(CP2)-BB-LB-Indian-Sg	Indiangrass	Sorghastrum nutans	4	0.25	1.2	Grass	N	X	CP38E-Monarch(CP2)	BB-LB-Indian-Sgrama-Cwrye-Wpclover-Cmilkweed-Besus-Berg-Sg
38	CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cv	38-CP38E-Monarch(CP2)-BB-LB-Indian-Sg	Sideoats Grama	Bouteloua curtipendula	12	0.75	2.2	Grass	N	X	CP38E-Monarch(CP2)	BB-LB-Indian-Sgrama-Cwrye-Wpclover-Cmilkweed-Besus-Berg-Sg
38	CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cv	38-CP38E-Monarch(CP2)-BB-LB-Indian-Sg	Canada Wildrye	Elymus canadensis	16	1	2	Grass	N	X	CP38E-Monarch(CP2)	BB-LB-Indian-Sgrama-Cwrye-Wpclover-Cmilkweed-Besus-Berg-Sg
38	CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cv	38-CP38E-Monarch(CP2)-BB-LB-Indian-Sg	white prairie clover	Dalea candida	3.04	0.19	1.2	Legume	N	X	CP38E-Monarch(CP2)	BB-LB-Indian-Sgrama-Cwrye-Wpclover-Cmilkweed-Besus-Berg-Sg
38	CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cv	38-CP38E-Monarch(CP2)-BB-LB-Indian-Sg	Common Milkweed	Asclepias syriaca	4.96	0.31	0.5	Forb	N	X	CP38E-Monarch(CP2)	BB-LB-Indian-Sgrama-Cwrye-Wpclover-Cmilkweed-Besus-Berg-Sg
38	CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cv	38-CP38E-Monarch(CP2)-BB-LB-Indian-Sg	Black-eyed Susan	Rudbeckia hirta	0.96	0.06	2.2	Forb	N	X	CP38E-Monarch(CP2)	BB-LB-Indian-Sgrama-Cwrye-Wpclover-Cmilkweed-Besus-Berg-Sg
38	CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cv	38-CP38E-Monarch(CP2)-BB-LB-Indian-Sg	Bergamot	Monarda fistulosa	0.96	0.06	1.8	Forb	N	X	CP38E-Monarch(CP2)	BB-LB-Indian-Sgrama-Cwrye-Wpclover-Cmilkweed-Besus-Berg-Sg
38	CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cv	38-CP38E-Monarch(CP2)-BB-LB-Indian-Sg	Stiff Goldenrod	Oligoneuron rigidum	0.96	0.06	1.1	Forb	N	X	CP38E-Monarch(CP2)	BB-LB-Indian-Sgrama-Cwrye-Wpclover-Cmilkweed-Besus-Berg-Sg
38	CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cv	38-CP38E-Monarch(CP2)-BB-LB-Indian-Sg	Showy Goldenrod	Solidago speciosa	0.48	0.03	1.1	Forb	N	X	CP38E-Monarch(CP2)	BB-LB-Indian-Sgrama-Cwrye-Wpclover-Cmilkweed-Besus-Berg-Sg
38	CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cv	38-CP38E-Monarch(CP2)-BB-LB-Indian-Sg	New England Aster	Symphyotrichum novae-angliae	0.48	0.03	0.8	Forb	N	X	CP38E-Monarch(CP2)	BB-LB-Indian-Sgrama-Cwrye-Wpclover-Cmilkweed-Besus-Berg-Sg

38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	38-CP38E-Monarch(CP25)-BB-LB-Indian-S	Big Bluestem	Andropogon gerardii	4	0.25	1	Grass	N	X	CP38E-Monarch(CP25)	BB-LB-Indian-Sgrama-Cwrye-Wpclover-Cmilkweed-Besus-Berg-Sg
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	38-CP38E-Monarch(CP25)-BB-LB-Indian-S	Little Bluestem	Schizachyrium scoparium	16	1	5.6	Grass	N	X	CP38E-Monarch(CP25)	BB-LB-Indian-Sgrama-Cwrye-Wpclover-Cmilkweed-Besus-Berg-Sg
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	38-CP38E-Monarch(CP25)-BB-LB-Indian-S	Indiangrass	Sorghastrum nutans	4	0.25	1.2	Grass	N	X	CP38E-Monarch(CP25)	BB-LB-Indian-Sgrama-Cwrye-Wpclover-Cmilkweed-Besus-Berg-Sg
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	38-CP38E-Monarch(CP25)-BB-LB-Indian-S	Sideoats Grama	Bouteloua curtipendula	8	0.5	1.5	Grass	N	X	CP38E-Monarch(CP25)	BB-LB-Indian-Sgrama-Cwrye-Wpclover-Cmilkweed-Besus-Berg-Sg
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	38-CP38E-Monarch(CP25)-BB-LB-Indian-S	Canada Wildrye	Elymus canadensis	8	0.5	1	Grass	N	X	CP38E-Monarch(CP25)	BB-LB-Indian-Sgrama-Cwrye-Wpclover-Cmilkweed-Besus-Berg-Sg
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	38-CP38E-Monarch(CP25)-BB-LB-Indian-S	white prairie clover	Dalea candida	3.04	0.19	1.2	Legume	N	X	CP38E-Monarch(CP25)	BB-LB-Indian-Sgrama-Cwrye-Wpclover-Cmilkweed-Besus-Berg-Sg
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	38-CP38E-Monarch(CP25)-BB-LB-Indian-S	Common Milkweed	Asclepias syriaca	4.96	0.31	0.5	Forb	N	X	CP38E-Monarch(CP25)	BB-LB-Indian-Sgrama-Cwrye-Wpclover-Cmilkweed-Besus-Berg-Sg
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	38-CP38E-Monarch(CP25)-BB-LB-Indian-S	Black-eyed Susan	Rudbeckia hirta	0.96	0.06	2.2	Forb	N	X	CP38E-Monarch(CP25)	BB-LB-Indian-Sgrama-Cwrye-Wpclover-Cmilkweed-Besus-Berg-Sg
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	38-CP38E-Monarch(CP25)-BB-LB-Indian-S	Bergamot	Monarda fistulosa	0.96	0.06	1.8	Forb	N	X	CP38E-Monarch(CP25)	BB-LB-Indian-Sgrama-Cwrye-Wpclover-Cmilkweed-Besus-Berg-Sg
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	38-CP38E-Monarch(CP25)-BB-LB-Indian-S	Stiff Goldenrod	Oligoneuron rigidum	0.96	0.06	1.1	Forb	N	X	CP38E-Monarch(CP25)	BB-LB-Indian-Sgrama-Cwrye-Wpclover-Cmilkweed-Besus-Berg-Sg
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	38-CP38E-Monarch(CP25)-BB-LB-Indian-S	Showy Goldenrod	Solidago speciosa	0.48	0.03	1.1	Forb	N	X	CP38E-Monarch(CP25)	BB-LB-Indian-Sgrama-Cwrye-Wpclover-Cmilkweed-Besus-Berg-Sg
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	38-CP38E-Monarch(CP25)-BB-LB-Indian-S	New England Aster	Symphyotrichum novae-angliae	0.48	0.03	0.8	Forb	N	X	CP38E-Monarch(CP25)	BB-LB-Indian-Sgrama-Cwrye-Wpclover-Cmilkweed-Besus-Berg-Sg
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	38-CP38E-Monarch(CP25)-BB-LB-Indian-S	Rough Blazing Star	Liatris aspera	0.48	0.03	0.2	Forb	N	X	CP38E-Monarch(CP25)	BB-LB-Indian-Sgrama-Cwrye-Wpclover-Cmilkweed-Besus-Berg-Sg
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	38-CP38E-Monarch(CP25)-BB-LB-Indian-S	Rattlesnake Master	Eryngium yuccifolium	0.96	0.06	0.2	Forb	N	X	CP38E-Monarch(CP25)	BB-LB-Indian-Sgrama-Cwrye-Wpclover-Cmilkweed-Besus-Berg-Sg
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	38-CP38E-Monarch(CP25)-BB-LB-Indian-S	Cupplant	Silphium perfoliatum	2.08	0.13	0.1	Forb	N	X	CP38E-Monarch(CP25)	BB-LB-Indian-Sgrama-Cwrye-Wpclover-Cmilkweed-Besus-Berg-Sg
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	38-CP38E-Monarch(CP25)-BB-LB-Indian-S	Sky-Blue Aster	Symphyotrichum oolentangiense	0.96	0.06	1.9	Forb	N	X	CP38E-Monarch(CP25)	BB-LB-Indian-Sgrama-Cwrye-Wpclover-Cmilkweed-Besus-Berg-Sg
38	CP3-1-BB-LB-Indian-Sgrama-Sgrod-Ycone-PPcl	38-CP3-1-BB-LB-Indian-Sgrama-Sgrod-Yc	Big Bluestem	Andropogon gerardii	8	0.5	1.9	Grass	N	X	CP3-1	BB-LB-Indian-Sgrama-Sgrod-Ycone-PPclover
38	CP3-1-BB-LB-Indian-Sgrama-Sgrod-Ycone-PPcl	38-CP3-1-BB-LB-Indian-Sgrama-Sgrod-Yc	Little Bluestem	Schizachyrium scoparium	24	1.5	8.3	Grass	N	X	CP3-1	BB-LB-Indian-Sgrama-Sgrod-Ycone-PPclover
38	CP3-1-BB-LB-Indian-Sgrama-Sgrod-Ycone-PPcl	38-CP3-1-BB-LB-Indian-Sgrama-Sgrod-Yc	Indiangrass	Sorghastrum nutans	8	0.5	2.3	Grass	N	X	CP3-1	BB-LB-Indian-Sgrama-Sgrod-Ycone-PPclover
38	CP3-1-BB-LB-Indian-Sgrama-Sgrod-Ycone-PPcl	38-CP3-1-BB-LB-Indian-Sgrama-Sgrod-Yc	Sideoats Grama	Bouteloua curtipendula	24	1.5	4.4	Grass	N	X	CP3-1	BB-LB-Indian-Sgrama-Sgrod-Ycone-PPclover
38	CP3-1-BB-LB-Indian-Sgrama-Sgrod-Ycone-PPcl	38-CP3-1-BB-LB-Indian-Sgrama-Sgrod-Yc	Stiff Goldenrod	Oligoneuron rigidum	1	0.0625	1.1	Forb	N	X	CP3-1	BB-LB-Indian-Sgrama-Sgrod-Ycone-PPclover
38	CP3-1-BB-LB-Indian-Sgrama-Sgrod-Ycone-PPcl	38-CP3-1-BB-LB-Indian-Sgrama-Sgrod-Yc	Yellow Coneflower	Ratibida pinnata	1	0.0625	0.7	Forb	N	X	CP3-1	BB-LB-Indian-Sgrama-Sgrod-Ycone-PPclover
38	CP3-1-BB-LB-Indian-Sgrama-Sgrod-Ycone-PPcl	38-CP3-1-BB-LB-Indian-Sgrama-Sgrod-Yc	Purple Prairie Clover	Dalea purpurea	2	0.125	1	Legume	N	X	CP3-1	BB-LB-Indian-Sgrama-Sgrod-Ycone-PPclover
38	CP3-2-BB-Switch-LB-Indian-Cwrye-Ycone-Besu	38-CP3-2-BB-Switch-LB-Indian-Cwrye-Yc	Big Bluestem	Andropogon gerardii	8	0.5	1.9	Grass	N	X	CP3-2	BB-Switch-LB-Indian-Cwrye-Ycone-Besus-Berg
38	CP3-2-BB-Switch-LB-Indian-Cwrye-Ycone-Besu	38-CP3-2-BB-Switch-LB-Indian-Cwrye-Yc	Switchgrass	Panicum virgatum	8	0.5	4.5	Grass	N	X	CP3-2	BB-Switch-LB-Indian-Cwrye-Ycone-Besus-Berg
38	CP3-2-BB-Switch-LB-Indian-Cwrye-Ycone-Besu	38-CP3-2-BB-Switch-LB-Indian-Cwrye-Yc	Little Bluestem	Schizachyrium scoparium	20	1.25	6.9	Grass	N	X	CP3-2	BB-Switch-LB-Indian-Cwrye-Ycone-Besus-Berg
38	CP3-2-BB-Switch-LB-Indian-Cwrye-Ycone-Besu	38-CP3-2-BB-Switch-LB-Indian-Cwrye-Yc	Indiangrass	Sorghastrum nutans	16	1	4.5	Grass	N	X	CP3-2	BB-Switch-LB-Indian-Cwrye-Ycone-Besus-Berg
38	CP3-2-BB-Switch-LB-Indian-Cwrye-Ycone-Besu	38-CP3-2-BB-Switch-LB-Indian-Cwrye-Yc	Canada Wildrye	Elymus canadensis	16	1	2	Grass	N	X	CP3-2	BB-Switch-LB-Indian-Cwrye-Ycone-Besus-Berg
38	CP3-2-BB-Switch-LB-Indian-Cwrye-Ycone-Besu	38-CP3-2-BB-Switch-LB-Indian-Cwrye-Yc	Yellow Coneflower	Ratibida pinnata	1	0.0625	0.7	Forb	N	X	CP3-2	BB-Switch-LB-Indian-Cwrye-Ycone-Besus-Berg
38	CP3-2-BB-Switch-LB-Indian-Cwrye-Ycone-Besu	38-CP3-2-BB-Switch-LB-Indian-Cwrye-Yc	Black-Eyed Susan	Rudbeckia hirta	1	0.0625	2.3	Forb	N	X	CP3-2	BB-Switch-LB-Indian-Cwrye-Ycone-Besus-Berg
38	CP3-2-BB-Switch-LB-Indian-Cwrye-Ycone-Besu	38-CP3-2-BB-Switch-LB-Indian-Cwrye-Yc	Bergamot	Monarda fistulosa	1	0.0625	1.8	Forb	N	X	CP3-2	BB-Switch-LB-Indian-Cwrye-Ycone-Besus-Berg
38	CP3-3-BB-LB-Indian-Switch-Sgrama-PPclover-B	38-CP3-3-BB-LB-Indian-Switch-Sgrama-PP	Big Bluestem	Andropogon gerardii	8	0.5	1.9	Grass	N	X	CP3-3	BB-LB-Indian-Switch-Sgrama-PPclover-Berg-Ycone
38	CP3-3-BB-LB-Indian-Switch-Sgrama-PPclover-B	38-CP3-3-BB-LB-Indian-Switch-Sgrama-PP	Little Bluestem	Schizachyrium scoparium	24	1.5	8.3	Grass	N	X	CP3-3	BB-LB-Indian-Switch-Sgrama-PPclover-Berg-Ycone
38	CP3-3-BB-LB-Indian-Switch-Sgrama-PPclover-B	38-CP3-3-BB-LB-Indian-Switch-Sgrama-PP	Indiangrass	Sorghastrum nutans	8	0.5	2.3	Grass	N	X	CP3-3	BB-LB-Indian-Switch-Sgrama-PPclover-Berg-Ycone
38	CP3-3-BB-LB-Indian-Switch-Sgrama-PPclover-B	38-CP3-3-BB-LB-Indian-Switch-Sgrama-PP	Switchgrass	Panicum virgatum	8	0.5	4.5	Grass	N	X	CP3-3	BB-LB-Indian-Switch-Sgrama-PPclover-Berg-Ycone
38	CP3-3-BB-LB-Indian-Switch-Sgrama-PPclover-B	38-CP3-3-BB-LB-Indian-Switch-Sgrama-PP	Sideoats Grama	Bouteloua curtipendula	16	1	3	Grass	N	X	CP3-3	BB-LB-Indian-Switch-Sgrama-PPclover-Berg-Ycone
38	CP3-3-BB-LB-Indian-Switch-Sgrama-PPclover-B	38-CP3-3-BB-LB-Indian-Switch-Sgrama-PP	Purple Prairie Clover	Dalea purpurea	2	0.125	1	Legume	N	X	CP3-3	BB-LB-Indian-Switch-Sgrama-PPclover-Berg-Ycone
38	CP3-3-BB-LB-Indian-Switch-Sgrama-PPclover-B	38-CP3-3-BB-LB-Indian-Switch-Sgrama-PP	Bergamot	Monarda fistulosa	1	0.0625	1.8	Forb	N	X	CP3-3	BB-LB-Indian-Switch-Sgrama-PPclover-Berg-Ycone
38	CP3-3-BB-LB-Indian-Switch-Sgrama-PPclover-B	38-CP3-3-BB-LB-Indian-Switch-Sgrama-PP	Yellow Coneflower	Ratibida pinnata	1	0.0625	0.7	Forb	N	X	CP3-3	BB-LB-Indian-Switch-Sgrama-PPclover-Berg-Ycone
38	CP3-4-Switch-Pcord-BB-Indian-Cwrye-Ciron-Cu	38-CP3-4-Switch-Pcord-BB-Indian-Cwrye-C	Switchgrass	Panicum virgatum	16	1	9	Grass	N	X	CP3-4	Switch-Pcord-BB-Indian-Cwrye-Ciron-Cup-Bvervain
38	CP3-4-Switch-Pcord-BB-Indian-Cwrye-Ciron-Cu	38-CP3-4-Switch-Pcord-BB-Indian-Cwrye-C	Prairie Cordgrass	Spartina pectinata	8	0.5	1.3	Grass	N		CP3-4	Switch-Pcord-BB-Indian-Cwrye-Ciron-Cup-Bvervain
38	CP3-4-Switch-Pcord-BB-Indian-Cwrye-Ciron-Cu	38-CP3-4-Switch-Pcord-BB-Indian-Cwrye-C	Big Bluestem	Andropogon gerardii	16	1	3.8	Grass	N	X	CP3-4	Switch-Pcord-BB-Indian-Cwrye-Ciron-Cup-Bvervain
38	CP3-4-Switch-Pcord-BB-Indian-Cwrye-Ciron-Cu	38-CP3-4-Switch-Pcord-BB-Indian-Cwrye-C	Indiangrass	Sorghastrum nutans	16	1	4.5	Grass	N	X	CP3-4	Switch-Pcord-BB-Indian-Cwrye-Ciron-Cup-Bvervain
38	CP3-4-Switch-Pcord-BB-Indian-Cwrye-Ciron-Cu	38-CP3-4-Switch-Pcord-BB-Indian-Cwrye-C	Canada Wildrye	Elymus canadensis	16	1	2	Grass	N	X	CP3-4	Switch-Pcord-BB-Indian-Cwrye-Ciron-Cup-Bvervain
38	CP3-4-Switch-Pcord-BB-Indian-Cwrye-Ciron-Cu	38-CP3-4-Switch-Pcord-BB-Indian-Cwrye-C	Common Ironweed	Vernonia fasciculata	1	0.0625	0.5	Forb	N	X	CP3-4	Switch-Pcord-BB-Indian-Cwrye-Ciron-Cup-Bvervain
38	CP3-4-Switch-Pcord-BB-Indian-Cwrye-Ciron-Cu	38-CP3-4-Switch-Pcord-BB-Indian-Cwrye-C	Cupplant	Silphium perfoliatum	2	0.125	0.1	Forb	N	X	CP3-4	Switch-Pcord-BB-Indian-Cwrye-Ciron-Cup-Bvervain
38	CP3-4-Switch-Pcord-BB-Indian-Cwrye-Ciron-Cu	38-CP3-4-Switch-Pcord-BB-Indian-Cwrye-C	Blue Vervain	Verbena hastata	1	0.0625	2.2	Forb	N	X	CP3-4	Switch-Pcord-BB-Indian-Cwrye-Ciron-Cup-Bvervain
38	CP3-5-Switch-Pcord-BB-Cwrye-Berg-Ycone-NEA	38-CP3-5-Switch-Pcord-BB-Cwrye-Berg-Yc	Switchgrass	Panicum virgatum	32	2	17.9	Grass	N	X	CP3-5	Switch-Pcord-BB-Cwrye-Berg-Ycone-NEaster
38	CP3-5-Switch-Pcord-BB-Cwrye-Berg-Ycone-NEA	38-CP3-5-Switch-Pcord-BB-Cwrye-Berg-Yc	Prairie Cordgrass	Spartina pectinata	4	0.25	0.7	Grass	N		CP3-5	Switch-Pcord-BB-Cwrye-Berg-Ycone-NEaster
38	CP3-5-Switch-Pcord-BB-Cwrye-Berg-Ycone-NEA	38-CP3-5-Switch-Pcord-BB-Cwrye-Berg-Yc	Big Bluestem	Andropogon gerardii	16	1	3.8	Grass	N	X	CP3-5	Switch-Pcord-BB-Cwrye-Berg-Ycone-NEaster
38	CP3-5-Switch-Pcord-BB-Cwrye-Berg-Ycone-NEA	38-CP3-5-Switch-Pcord-BB-Cwrye-Berg-Yc	Canada Wildrye	Elymus canadensis	16	1	2	Grass	N	X	CP3-5	Switch-Pcord-BB-Cwrye-Berg-Ycone-NEaster
38	CP3-5-Switch-Pcord-BB-Cwrye-Berg-Ycone-NEA	38-CP3-5-Switch-Pcord-BB-Cwrye-Berg-Yc	Monarda fistulosa	Monarda fistulosa	1	0.0625	1.8	Forb	N	X	CP3-5	Switch-Pcord-BB-Cwrye-Berg-Ycone-NEaster
38	CP3-5-Switch-Pcord-BB-Cwrye-Berg-Ycone-NEA	38-CP3-5-Switch-Pcord-BB-Cwrye-Berg-Yc	Yellow Coneflower	Ratibida pinnata	1	0.0625	0.7	Forb	N	X	CP3-5	Switch-Pcord-BB-Cwrye-Berg-Ycone-NEaster
38	CP3-5-Switch-Pcord-BB-Cwrye-Berg-Ycone-NEA	38-CP3-5-Switch-Pcord-BB-Cwrye-Berg-Yc	New England Aster	Symphyotrichum novae-angliae	1	0.0625	1.7	Forb	N	X	CP3-5	Switch-Pcord-BB-Cwrye-Berg-Ycone-NEaster

STD	Mix #	std-mix	Common Name	Scientific Name	PLS (oz./A)	PLS (lbs./A)	Seeds/Square Foot	Type	Intro / Native	Poll. (Y/N)	MIXDescrip	Mix No.	MR
	0												

STD	Mix #	std-mix	Common Name	Scientific Name	PLS (oz./A)	PLS (lbs./A)	Seeds/Square Foot	Type	Intro / Native	Poll. (Y/N)	Mix No.	MR	Mix Components
38	CP3-1-BB-LB-Indian-Sgrama-Sgrod-Ycone-PPcl	38-CP3-1-BB-LB-Indian-Sgrama-Sgrod-Yc	Big Bluestem	Andropogon gerardii	8	0.5	1.9	Grass	N	X	CP3-1		BB-LB-Indian-Sgrama-Sgrod-Ycone-PPclover
38	CP3-1-BB-LB-Indian-Sgrama-Sgrod-Ycone-PPcl	38-CP3-1-BB-LB-Indian-Sgrama-Sgrod-Yc	Indiangrass	Sorghastrum nutans	8	0.5	2.3	Grass	N	X	CP3-1		BB-LB-Indian-Sgrama-Sgrod-Ycone-PPclover
38	CP3-1-BB-LB-Indian-Sgrama-Sgrod-Ycone-PPcl	38-CP3-1-BB-LB-Indian-Sgrama-Sgrod-Yc	Little Bluestem	Schizachyrium scoparium	24	1.5	8.3	Grass	N	X	CP3-1		BB-LB-Indian-Sgrama-Sgrod-Ycone-PPclover
38	CP3-1-BB-LB-Indian-Sgrama-Sgrod-Ycone-PPcl	38-CP3-1-BB-LB-Indian-Sgrama-Sgrod-Yc	Purple Prairie Clover	Dalea purpurea	2	0.125	1	Legume	N	X	CP3-1		BB-LB-Indian-Sgrama-Sgrod-Ycone-PPclover
38	CP3-1-BB-LB-Indian-Sgrama-Sgrod-Ycone-PPcl	38-CP3-1-BB-LB-Indian-Sgrama-Sgrod-Yc	Sideoats Grama	Bouteloua curtipendula	24	1.5	4.4	Grass	N	X	CP3-1		BB-LB-Indian-Sgrama-Sgrod-Ycone-PPclover
38	CP3-1-BB-LB-Indian-Sgrama-Sgrod-Ycone-PPcl	38-CP3-1-BB-LB-Indian-Sgrama-Sgrod-Yc	Stiff Goldenrod	Oligoneuron rigidum	1	0.0625	1.1	Forb	N	X	CP3-1		BB-LB-Indian-Sgrama-Sgrod-Ycone-PPclover
38	CP3-1-BB-LB-Indian-Sgrama-Sgrod-Ycone-PPcl	38-CP3-1-BB-LB-Indian-Sgrama-Sgrod-Yc	Yellow Coneflower	Ratibida pinnata	1	0.0625	0.7	Forb	N	X	CP3-1		BB-LB-Indian-Sgrama-Sgrod-Ycone-PPclover

Faribault M500 D-line

Stormwater Pollution Prevention Plan

Ventura to Farmington A-line Abandonment and Capacity Replacement Project –Faribault M500 D-line

Northern Natural Gas

Dakota County, Minnesota

February 2026

Project Number: 172608813

FERC Docket CP26- -000

CERTIFICATION STATEMENT

In accordance with Northern Natural Gas and Minnesota National Pollutant Discharge Elimination System (NPDES)/State Disposal System (SDS) General Permit No. MNR100001, all contractors and subcontractors identified in this Stormwater Pollution Prevention Plan shall sign a copy of the following certification statement before conducting any professional service at the Project area:

> I certify under penalty of law that I understand the terms and conditions of the Minnesota NPDES/SDS general permit that authorizes the storm water discharges associated with construction activity from the project site as part of this certification. Further, by my signature, I understand that I am becoming a co-permittee, along with the owner(s) and other contractors and subcontractors signing such certifications, to the Minnesota Pollution Control Agency NPDES/SDS General Permit No. MNR100001 for "Stormwater Associated with Construction Activity" at the identified site. As a co-permittee, I understand that I, and my company, are legally required under the Clean Water Act and the Code of Minnesota, to ensure compliance with the terms and conditions of the storm water pollution prevention plan developed under this NPDES/SDS permit and the terms of this NPDES/SDS permit.
>
> I certify under penalty of law that I have reviewed, understand and will comply with this document, the NPDES/SDS permit, and all attachments. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Authorized Signature	Authorized Signature
Date	Date
TBD	TBD
Name – Contractor’s Contact	Name – Contractor’s Contact
Title	Title
Company Name	Company Name
Address	Address
Telephone Number	Telephone Number

Stormwater Pollution Prevention Plan (SWPPP)
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ATTACHMENT A: Project Location Map
ATTACHMENT B: Soils Map
ATTACHMENT C: Erosion Control Map
ATTACHMENT D: Northern's Engineering Standard 7507
ATTACHMENT E: NRCS Mapped Soils Table
ATTACHMENT F: Spill Prevention, Containment, and Countermeasure Plan
ATTACHMENT G: SWPPP Inspection & Maintenance Report and Rainfall Inspection Chart
ATTACHMENT H: Upland Erosion Control, Revegetation, and Maintenance Plan
ATTACHMENT I: Wetland and Waterbody Construction and Mitigation Procedures
ATTACHMENT J: Minnesota NPDES/SDS Permit No. MNR100001
ATTACHMENT K: MPCA Authorization Request for NPDES Coverage Under MNR100001 - Pending
ATTACHMENT L: MPCA Authorization Letter - Pending
ATTACHMENT M: SWPPP Amendments
ATTACHMENT N: Notification Roster

ATTACHMENT O: Erosion Control Certification Documentation for Northern Natural Gas Environmental Inspection Staff – Pending Selection of Environmental Inspector
ATTACHMENT P: Northern's Horizontal Directional Drill Monitoring, Inadvertent Return Response, and Contingency Plan (included by reference only)
ATTACHMENT Q: Noxious Weed Plan (included by reference only)
ATTACHMENT R: Steep Slopes Table
ATTACHMENT S: NRCS/Minnesota Board of Water and Soil Resources (BWSR) seed mix

INTRODUCTION

The following documents and related information are incorporated by reference to comprise the Northern Natural Gas (Northern) Stormwater Pollution Prevention Plan (SWPPP). This Plan and the referenced materials must be retained at the construction site from the date of project initiation to the date of permit termination conditions and provided to the Minnesota Pollution Control Agency (MPCA), U.S. Environmental Protection Agency (EPA) or other regulatory agency upon request to satisfy the requirements of MPCA's Stormwater Permit for Construction Activity (MNR100001). The MPCA has approval to administer the EPA's National Pollutant Discharge Elimination System (NPDES) program and the Minnesota State Disposal System (SDS). As needed, this SWPPP will be amended to reflect any changes in design, construction, operation, or maintenance.

1. PROJECT LOCATION AND DESCRIPTION

1. PROJECT LOCATION

Northern proposes to construct and operate an approximately 7.50-mile extension of its 30-inch-diameter D-line pipeline in Dakota County, Minnesota. The proposed extension will be tied in below ground at the current terminus of the D-line on the south side of 307th Street, in Section 16, T112N, R20W, Dakota County, Minnesota. The downstream tie-in at the terminus will be completed below grade to the D-line, located on the west side of Essex Avenue, in Section 14, T113N, R20W, Dakota County, Minnesota.

Northern will also plan to remove existing aboveground facilities associated with the Project. This includes a valve setting and a hot tap fitting from its existing 30-inch diameter M500 C-line and tie over from the M500 C-line at the take off to remove the existing connection on the south side of 307th Street West, in Section 16, T112N, Range 20W, Dakota County, and two aboveground tie-over valve settings located on the west of Essex Avenue, in Section 14 and 12, T113N, R20W, Dakota County, Minnesota. Northern also will install a new block valve and associated valves and piping within its expanded E-Line to D-Line regulator station, located on the north side of 245th Street, in Section 14, T113N, R20W, Dakota County, Minnesota. This work is known as the Faribault M500 D-Line Extension Project (Project).

To minimize methane venting to the atmosphere during tie-in activities, Northern will utilize temporary compression to evacuate gas from the D- and C-lines to adjacent mainlines prior to the tie-ins. The location for the temporary compression is the Northfield #1 town border station (TBS), located north of 330th Street West, in Section 28, T112N, R20W, Dakota County, Minnesota. Northern will also utilize a line stop in addition to the temporary compression; the line stop is located in Section 14, T113N, R20W, Dakota County, Minnesota.

A Project location map is included in Attachment A.

2. PROJECT DESCRIPTION

As described above, the Project will involve the installation of a pipeline extension of Northern's 30-inch-diameter D-line with the exception of between milepost (MP) 104.53 to the terminus of the Faribault M500 D-line (MP 104.87), where the existing 24-inch-diameter D-line will be removed and replaced with new 30-inch-diameter D-line in the same trench..

This Project will also involve the removal of three valve settings. The work at these locations will also involve the removal of piping, valves, guard rail, and gravel. The land will be returned to original grade and Northern will release the facility and access easement but will maintain its pipeline easement. The existing gravel lots each measure less than <0.01 acre of gravel. Northern also will install a new block valve and associated valves and piping within its E-Line to D-Line regulator station. Northern will utilize the existing station permanent access road without modification. No modifications to the existing facility footprint or easements will be required to install the new block valve.

Northern will utilize its existing Northfield #1 TBS for temporary compression. Approximately three portable natural-gas fired 300-horsepower units will be utilized for about 65 hours to reduce the pressure to approximately 10 to 15 psig. No land disturbing activities are planned at the Northfield #1 TBS as part of this project.

The Project will be installed parallel, utilizing a 25-foot offset, to existing Northern mainlines with the exception of MP 104.53 to the end (MP 104.87) where the existing 24-inch-diameter D-line will be removed and replaced with new 30-inch-diameter D-line in the same trench. The pipeline will be installed within a 100-foot-wide nominal construction corridor and a 75-foot-wide construction corridor in a wetland except in FAR-W071 where Northern will neck down to 70 feet. In addition to the construction corridor, Northern will utilize temporary workspace (TWS), extra temporary workspace (ETWS), existing driveways and farm roads, temporary access roads (TAR), and staging areas during construction. Northern is in the process of obtaining new permanent pipeline easements, where required.

The purpose of this Project is to enhance the safety, reliability, security, and operational efficiency of Northern's pipeline system and to serve the firm transportation requirements of Northern's customers in Minnesota.

Northern plans to construct the Project components in accordance with the Federal Energy Regulatory Commission's (FERC) requirements for Section 7 authorizations. The Project duration will be approximately seven months and is scheduled to begin in spring 2028, or as soon as all required permits are obtained.

The proposed Project workspaces and additional features are shown on the attached maps (Attachments A-C).

Construction activities will include: clearing, grading, excavation, installation of the pipeline (via horizontal directional drill (HDD) and open trench), remove and construct valve settings, pressure testing, backfilling, clean up and site restoration. The Project workspace will be returned, as near as practicable, to pre-existing conditions.

The Project will include approximately 171.91 acres of temporary disturbance. No permanent impacts are included with this project. There are approximately 1.48 acres of existing impervious surface within the Project area. The Project will result in 0.0 acre of new impervious surface within the Project area.

Project Acreage Summary	
Existing Impervious Area	Approximately 1.48 acres
Post Construction New Impervious Area	0.0 acre
Post Construction Total Impervious Area	1.48 acres
Total Potentially Disturbed Area	171.91 acres

2. SWPPP AND TRAINING DOCUMENTATION

1. Posting Notification

A copy of the NPDES/SDS Certification by the MPCA will be posted on-site or available in the SWPPP within 72 hours upon MPCA request.

2. Location of the SWPPP

A copy of the SWPPP will be provided to the contractor prior to construction. The SWPPP (original or copies), all changes and amendments to it, and inspections and maintenance records will be kept at the site or electronically available during construction by the contractor who has operational control of that portion of the site and by Northern's environmental inspector (EI). The SWPPP will be available either electronically, in the field, or an on-site vehicle during normal working hours.

3. Training and/or Certification Documentation

The MPCA requires stormwater training for certain individuals for construction projects. The content and extent of training must be commensurate with the individual's job duties and responsibilities with regard to activities covered under the NPDES/SDS permit for the Project. At least one individual present on the permitted project site (or available to the project site in 72 hours) must be trained in the job duties described below.

This SWPPP has been prepared under the direction of and reviewed by Chad Johnson at Stantec Consulting Services Inc. (Stantec). Mr. Johnson holds the following state and national certifications relevant to SWPPP design:

- University of Minnesota – SWPPP Design and Site Management Certification http://www.erosion.umn.edu
- Certified Professional in Erosion and Sediment Control (#3797)
- Certified Professional in Storm Water Quality (#476)
- Certified Erosion, Sediment and Storm Water Inspector (#195)

Northern company and third-party inspection personnel associated with this Project have been trained in accordance with the permit's training requirements through the University of Minnesota's Erosion and Sediment Control Program. Northern's on-site EIs have been trained and are certified in the areas of construction stormwater inspector/installer. The EIs are supervised by Northern's Project environmental specialist who has been trained and is certified in the areas of SWPPP design, construction stormwater site management and inspector/installer.

Mr. Terry Plucker, Environmental Compliance Manager, holds the following state certifications relevant to SWPPP design:

- University of Minnesota – SWPPP Design and Site Management Certification http://www.erosion.umn.edu
- Professional Geoscientist – Soil Science Texas (#11893)

Northern's contractor personnel responsible for performing or supervising the installation of erosion and sediment control devices best management practices (BMPs) are required to provide proof of training in accordance with the permit requirements prior to construction activities. Prior to construction, Northern will review the requirements of the Minnesota NPDES/SDS permit number MNR100001 and this SWPPP with the contractor. Copies of the EI's training certifications will be included in Attachment O.

4. SWPPP IMPLEMENTATION OR AMENDMENTS

The contractor is responsible for providing trained and knowledgeable personnel to implement the SWPPP. Northern's EIs will be responsible for conducting the required inspections every seven days or within 24 hours after each rain event 0.5 inch or greater. Northern will provide the contractor with the results of the inspections and corrective actions that may be required. It will be Northern's responsibility to provide adequate documentation in the SWPPP.

5. BMP INSTALLATION, MAINTENANCE OR REPAIR

The contractor is also responsible for providing trained and knowledgeable personnel responsible for the installation, maintenance, or repair of the erosion and sediment control BMPs described in the SWPPP, Project plans or Project specifications. It will be the contractor's responsibility to provide appropriate documentation in the SWPPP prior to construction. A notification roster for this SWPPP is included in Attachment N.

3. RESPONSIBLE PARTIES

The Project is owned by:
Northern Natural Gas
1111 South 103rd Street
Omaha, Nebraska 68124
Contact: Mr. Terry Plucker, Environmental Compliance Manager
402-398-7226

Northern has developed a chain of responsibility with all operators on the site to ensure that the SWPPP will be implemented and stay in effect until construction of the Project is complete, the entire site has achieved permit termination conditions, and a Notice of Termination (NOT) has been submitted to the MPCA. The following responsibilities have been assigned for this Project:

- SWPPP development: Stantec on behalf of Northern
- Oversee SWPPP implementation/amendments: Northern
- Conduct required inspections: Northern
- Conduct BMP installation, maintenance and repair: contractor – to be determined

4. RECEIVING WATERS

The following list of receiving waters are located within 1-mile of the Project and have the potential to receive stormwater runoff from the Project site. Receiving waters were

identified using U.S. Geological Survey topographic maps, National Hydrography Dataset (NHD), National Wetland Inventory (NWI) data, aerial photography, Minnesota Public Waters Inventory (PWI), National Resources Conservation Service (NRCS) soils data and field survey (within the Project area).

Based on the wetland and waterbody determination and delineation surveys, seven waterways are located with the ESB for the Project. Of the seven waterways identified, only two waterways will be crossed by the Project. The following is a list of waterways crossed by the Project:

Unique Waterway Identifier	MP	Waterbody Type	Crossing Width (feet)	Crossing Method
FAR-S02	99.02	Perennial (Chub Creek)	26.0	HDD
FAR-S05	103.09	Intermittent	3.2	HDD

These crossings will be conducted via HDD, which will minimize potential direct impacts on the extent practicable and eliminate the need for restoration. An additional 67 NHD mapped waterways are located within a 1-mile radius of the project. Two of these waterways, the Chub Creek and Dutch Creek are listed on the MPCA Impaired Waters List for fish bioassessments. As required by the Minnesota NPDES/SDS permit number MNR100001, Northern will implement additional BMPs to further reduce the potential for Project runoff to these waterways. No other special or protected waterways are located within 1-mile of the Project that require additional BMPs per Minnesota NPDES/SDS Permit No. MNR100001. No impacts on the waterways are anticipated from construction stormwater runoff.

Based on the wetland and waterbody determination and delineation surveys, one waterbody is located with the ESB for the Project. No waterbodies will be crossed by the project. An additional 22 NHD mapped waterbodies are located within 1-mile of the Project. One of these waterbodies, Chub Lake, is listed on the MPCA Impaired Waters List for nutrient impairments. As required by the Minnesota NPDES/SDS permit number MNR100001, Northern will implement additional BMPs to further reduce the potential for Project runoff to this waterbody. No other special or protected waterbodies are located within 1-mile of the Project that require additional BMPs per Minnesota NPDES/SDS Permit No. MNR100001. No impacts on the waterbodies are anticipated from construction stormwater runoff.

Based on the wetland and waterbody determination and delineation surveys, 83 wetlands are located with the ESB for the Project. Of the 83 wetlands identified, only 17 wetlands will be crossed by the Project. The following is a list of wetlands crossed by the Project:

Unique Wetland Identifier	**MP**		**Field Determined Wetland Classification[1]**	**Length of Crossing (feet)[2]**	**Area Affected by Construction (acres)**
	From	**To**			
FAR-W02	97.35		Seasonally flooded basin/farmed wetland / PEM1Af	N/A	0.39[6]

Unique Wetland Identifier	MP		Field Determined Wetland Classification[1]	Length of Crossing (feet)[2]	Area Affected by Construction (acres)
	From	To			
	97.37	97.38	Seasonally flooded basin/farmed wetland / PEM1Af	55	0.08
FAR-W03	97.39	97.39	Degraded wet meadow / PEM1B	12	0.04
FAR-W10	97.69		Seasonally flooded basin/farmed wetland / PEM1Af	N/A	0.04
FAR-W12	97.74	97.76	Seasonally flooded basin/farmed wetland / PEM1Af	130	0.21
FAR-W23	97.95	97.98	Degraded Wet Meadow / PEM1Bf	205	0.39
FAR-W31	98.03		Seasonally flooded basin/farmed wetland / PEM1Af	N/A	<0.00[8]
FAR-W33	98.13		Seasonally flooded basin/farmed wetland / PEM1Af	N/A	<0.00[8]
FAR-W39	98.31	98.31	Degraded wet meadow / PEM1B	20	0.04
FAR-W40	98.42		Degraded wet meadow / PEM1B, Shallow marsh / PEM1C, Shallow open water / PUBH	26	0.04
FAR-W63	99.01	99.10	Floodplain forest / PFO1A, Degraded wet meadow / PEM1B, Wet to wet-mesic prairie / PEM1B, Shrub-carr / PSS1C	387	0.05[9]
FAR-W67	99.96	100.07	Hardwood swamp / PFO1A, Seasonally flooded basin/farmed wetland / PEM1B, Shallow marsh / PEM1C, Shrub-carr / PSS1C	518	0.07[9]
FAR-W69	100.53	100.60	Degraded wet meadow / PEM1B	318	0.04[9]
FAR-W70	100.62	100.62	Shallow Marsh / PEM1Cf	19	<0.00[8,9]
FAR-W71	101.39	101.43	Seasonally flooded basin/farmed wetland / PEM1Af	293	0.47
FAR-W78	103.08	103.12	Degraded wet meadow / PEM1B	200	0.03[9]

Unique Wetland Identifier	MP		Field Determined Wetland Classification[1]	Length of Crossing (feet)[2]	Area Affected by Construction (acres)
	From	To			
FAR-W80	103.63	103.99	Hardwood swamp / PFO1A, Seasonally flooded basin/farmed wetland / PEM1B, Degraded wet meadow / PEM1B, Shrub-carr / PSS1C	1,480	0.20[9]
FAR-W83	104.84	104.87	Seasonally flooded basin/farmed wetland / PEM1Af	152	0.19
	104.87		Seasonally flooded basin/farmed wetland / PEM1Af	N/A	0.04[6]
Total					**2.32**

[1] Wetland Classification based on Cowardin, Classification of Wetlands and Deepwater Habitats: PFO1A – Palustrine Forested – broad leaved deciduous – temporarily flooded (Hardwood Forest, Floodplain Forest), PSS1C – Palustrine Scrub-Shrub - broad-leaved deciduous - seasonally flooded (Shrub-Carr), PSS1B – Palustrine Scrub-Shrub - broad-leaved deciduous - saturated (Shrub-Carr), PEM1Af - Palustrine Emergent – temporarily flooded - farmed (Seasonally Flooded/Farmed), PEM1B - Palustrine Emergent – seasonally saturated (Wet Meadow / Disturbed wet meadow), PEM1Bf - Palustrine Emergent – seasonally saturated - farmed (Wet Meadow / Disturbed wet meadow / Farmed), PEM1C - Palustrine Emergent – persistent - seasonally flooded (Shallow Marsh), PEM1Cf - Palustrine Emergent – persistent - seasonally flooded - farmed (Shallow Marsh / Farmed), PUBH – Palustrine Unconsolidated Bottom –permanently flooded (Shallow Open Water) – The listed classification represents the wetland community at the crossing locations.

[2] Wetland crossing lengths of pipeline.

[3] Area required to be cleared at a frequency necessary to maintain the ROW in an herbaceous state.

[4] Wetlands crossed by the Project via HDD. Northern will not conduct maintenance between the entry and exit pits; therefore, no impacts on the wetland will occur during operation.

[5] Wetland impacts will occur from routine mowing operations; however, the wetland currently consist of a PEM community, therefore no community type conversion will occur.

[6] Construction related wetland impacts will not include below ground impacts

[8] Impacts are less than 0.01 acre in size

[9] Impacts will be limited to foot traffic within a six-foot-wide travel lane between the HDD entry and exit points.

Several additional NWI mapped wetlands occur within a mile radius of the project, however no impacts to these wetlands are anticipated from construction stormwater runoff. The Project will result in 2.32 acres of temporary wetland impacts during construction. No permanent fill or conversion will occur.

The Project is located within the Hastings DWSMA/WHP area. To avoid impacts to this DWSMA, Northern will follow FERC Plan and its Procedures and implement BMPs to comply with state and local regulations, as applicable.

Northern will implement BMPs throughout the Project area and redundant BMPs within 50 feet of the wetland boundaries to reduce potential for additional Project impacts on wetland and waterways. See information on the location of erosion and sediment control locations in the erosion control map (attachment C).

Discharge of test water and construction trench water will be conducted in accordance with issued NPDES permits, including the use of meters to control flow rates, and will employ an energy-dissipating device such as a straw bale dewatering structure. Discharge rates will be controlled to prevent erosion, scouring and sedimentation, flooding, or the introduction of foreign or toxic substances into adjacent waterbodies. Hydrostatic test waters will be transported offsite for disposal at an approved facility. Dewatering

discharges will be inspected and photographed at the beginning of dewatering operations and at least once every 24 hours during operation.

During trench dewatering, water will be pumped from the trench via a submersible pump equipped with a float and screen and then discharged through a geotextile filter bag and/or straw bale dewatering structure to a well-vegetated upland area. Dewatering rates will be controlled through the use of meters and will be conducted to avoid the flow of silt-laden water directly into waterbodies.

5. SOILS AND SLOPES INFORMATION

Soil units mapped within the Project area by the NRCS are identified in detail within a table, located in Attachment E. A map indicating the typical soil types within the Project area has been provided as Attachment B.

Steep slopes within the Project area were characterized into three categories, slopes between 5% and 15%, greater than 15% and less than 30%, and greater than 30%. Steep slope categories are identified by milepost in a table located in Attachment R.

At a minimum, the contractor will install temporary and permanent slope breakers every 300 feet on slopes ranging between 5% and 15%, every 200 feet on slopes ranging between greater than 15% and less than 30%, and every 100 feet on slopes greater than 30%. Temporary and permanent slope breakers are discussed further in Section 8.

The contractor also will install hydro mulch, or comparable alternative for temporary and permanent stabilization on all slopes greater than 15% within non-agricultural areas. Hydro mulch is discussed further in Section 8.

6. PERMANENT STORMWATER MANAGEMENT

The Project will not result in any new impervious surface; therefore, infiltration or other volume reduction practices are not required.

7. SEQUENCE OF CONSTRUCTION ACTIVITIES

All sediment control measures will be in place prior to any removal or grading work and will be maintained until the potential for erosion has been eliminated. Additional information on sequencing can be found in the attached Engineering Standard 7507 in Attachment D. The Project will generally follow the sequencing identified below.

1. Preconstruction meeting. Prior to construction, a pre-construction meeting will be held at which the EI will provide environmental compliance training for all personnel working on the Project.
2. Staking. A Northern contractor will stake the construction boundaries, sensitive areas boundaries, and proposed facility locations.
3. The contractor will obtain soil samples in areas to be seeded for agronomic testing. Soils will be analyzed for nitrogen, phosphorus, potassium, and lime amendment recommendations.
4. Install necessary perimeter controls and temporary erosion and sediment controls. Prior to the start of any ground disturbing activities at any given location, the contractor will install soil erosion and sedimentation control measures within the temporary construction footprint in accordance with this SWPPP. The SWPPP incorporates the FERC Upland Erosion Control, Revegetation, and Maintenance Plan

(Plan) and the Wetland and Waterbody Construction and Mitigation procedures (Procedures) requirements, recommendations from the Minnesota Department of Transportation (DOT) and site-specific erosion control information.

a. The contractor will install and maintain temporary sediment barriers, such as silt fences and/or straw bales at areas as indicated in Northern's Procedures or direction of the Project EI. As directed, these sediment barriers will be left in place after final clean up to provide protection until a vegetative cover is established. The contractor will be responsible for maintaining erosion control devices until adequate re-vegetation has been established for a period of up to 24 months and removing erosion control devices after adequate re-vegetation has been established as determined by a Northern representative. Once original erosion control devices have been placed, the cost to replace and maintain original devices will be the responsibility of contractor.

b. The contractor will provide an environmental crew as required to install and maintain erosion control devices through the duration and following completion of the Project. Erosion control devices will be installed under the direction of the environmental inspector.

5. Clear and grade the workspaces. Large obstacles such as trees and rocks will be removed, and grading will be performed as required to provide a safe, level working surface for construction activities. A maximum of 12 inches or the actual depth of the existing topsoil horizon, whichever is less, will be segregated. The topsoil and subsoil will be stored in separate windrows on the construction ROW and will not be allowed to mix.

6. Install pipeline. Construction materials and equipment will be transported throughout the Project workspaces. Additional sediment and erosion control BMPs will be installed as field conditions warrant during construction and the request of the EI or as the contractor deems necessary.

a. The contractor and contractor's subcontractor(s) will each be responsible for complying with the appropriate State One Call System regulations before any excavation activities begin. The contractor and contractor's subcontractor(s) will each display a copy of the One Call documentation on-site. The contractor and contractor's subcontractor will each be responsible for locating, supporting, protecting, and repairing any foreign lines, cables, or other facilities located or exposed during excavation.

b. The contractor must comply with all state and local regulations when transporting equipment including the breaking down of equipment for relocation. The Project is located within a floodplain between the following MPs:

i. MP 98.66 and MP 98.68- Portions of FAR SA-002, FAR ETWS-011 and FAR ETWS-013 are located in the floodplain.

ii. MP 98.99 to 99.16.- The HDD point and a portion of FAR ETWS-014 and FAR ETWS-015 on the north side of Chub Creek are located within the floodplain.

For mitigation within the floodplains, Northern will stake down any construction mats, anchor or move any loose equipment outside of the floodplains, and limit fuel storage and refueling operations inside the floodplains.

c. The construction site practices will follow FERC regulatory procedures, including the Plan and Procedures, except for the project-specific modifications identified in the table below. These plans are included in Attachments H and I.

MP	Wetland Type	Temporary Impact on Wetland (Acres)	Description	Alternatives to Procedures	Justification
97.36	Degraded wet meadow	0.47	100-foot wide ROW through wetland FAR-W02	VI.A.3	100-foot ROW required for facility removal and tie-in
97.39	Degraded wet meadow	0.03	100-foot wide ROW through wetland FAR-W03	VI.A.3	100-foot ROW required for open-cut road crossing
97.68	Seasonally flooded basin/farmed wetland	0.03	100-foot wide ROW through wetland FAR-W10	VI.A.3	Wetland does not extend across the TWS. Necking down in this wetland would not reduce wetland impacts as it only extends into the spoil side
97.74	Seasonally flooded basin/farmed wetland	0.21	100-foot wide ROW through wetland FAR-W12	VI.A.3	
97.95	Degraded Wet Meadow	0.40	100-foot wide ROW through wetland FAR-W23	VI.A.3	100-foot ROW required for point of inflection
98.12	Seasonally flooded basin/farmed wetland	<0.01	100-foot wide ROW through wetland FAR-W33	VI.A.3	Just clips edge of farmed wetland so neck down not needed
98.31	Degraded wet meadow	0.04	100-foot wide ROW through wetland FAR-W39	VI.A.3	100-foot ROW required for point of inflection

MP	Wetland Type	Temporary Impact on Wetland (Acres)	Description	Alternatives to Procedures	Justification
101.34	Seasonally flooded basin/farmed wetland	0.00	FAR TAR-008 is 70 feet from FAR-71	VI.B.1.a	Utilizing an existing private driveway and expanding on the non-wetland side of the driveway
104.87	Seasonally flooded basin/farmed wetland	0.20	100-foot wide ROW through wetland FAR-W83	VI.A.3	Project end point-tie-in needed and in common ditch replacement section
		0.04	FAR ETWS-061 is within wetland FAR-W83	VI.B.1.a	Project end point-tie-in needed and in common ditch replacement section

d. ALL CONSTRUCTION OPERATIONS ARE TO BE CONFINED TO DEFINED CORRIDORS, ACCESS ROADS, STAGING AREAS, TEMPORARY WORKSPACES, AND EXTRA TEMPRAORY WORKAPCES. THE CONTRACTOR WILL NOT USE ANY ADDITIONAL WORKSPACE, ACCESS ROADS OR STAGING AREAS FOR THIS PROJECT UNLESS APPROVED BY THE COMPANY'S REPRESENTATIVE. THE CONTRACTOR WILL NOT GO BEYOND DEFINED WORK AREAS AND ACCESS ROADS AS STATED BY THE COMPANY. NO EQUIPMENT MAY BE MOVED TO THESE AREAS UNTIL THE COMPANY'S REPRESENTATIVE HAS RECEIVED ENVIRONMENTAL CLEARANCES. NONCOMPLIANCE WILL BE CONSIDERED A BREACH OF THIS AGREEMENT.

e. Open Cut / Trenching. The open cut trench method will be the primary technique used to install pipeline throughout the Project. During construction, the contractor will not open more trench area than they can reasonably install BMPs on, stabilize or restore within a 24-hour period.

   The Minnesota CWA Section 401 Water Quality Certification program will limit the amount of open trench to less than 5,280 feet at any one time to limit the potential for unforeseen weather events to cause erosion and discharges to Waters of the United States. Northern will restrict the amount of open trench per individual project component to less than 5,280 feet. The 5,280 feet of open trench will be a 'moving mile'; as the contractor removes topsoil and excavates trench on the front end of the mile, they will backfill and restore the area on the back end of the trench so no more than one mile of trench will be open at any one

time. Final restoration will be required as they move; therefore, final restoration activities will be conducted concurrently with the installation of the next section of pipeline.

f. HDD: Seven HDDs will be utilized to install pipeline across wetlands, waterways, and roadways.

g. Sediment buildup on paved surfaces will be monitored. Sediment must be swept off the road at the end of each working day. Dewatering will be conducted in accordance with the FERC Procedure, Minnesota Department of Natural Resources (MDNR), and MPCA requirement. All BMPs will be maintained throughout Project construction and follow-up restoration until the site is considered stabilized and permits are closed out.

7. Conduct Hydrostatic Testing. Northern will conduct hydrostatic testing of the new pipeline and transport it off-site to disposal facility or discharged in an upland area onsite in accordance with the state discharge permits.

8. Erect aboveground facilities. Northern will install a new block valve and associated valves and piping within its E-Line to D-Line regulator station. No modifications to the existing facility footprint or easements will be required to install the new block valve.

9. Restore contours. Site restoration will be based on the degree of disturbance caused by construction activities, the ecological setting of the site, and the preferences of the affected landowner/land manager. Final grading of the Project area will begin immediately upon completion of construction within a given area. Within agricultural lands, topsoil and subsoil will be tested for compaction following construction and abandonment in agricultural areas. Northern's contractor will de-compact subsoil in accordance with the soil compaction mitigation procedures described in the FERC Plan. Final grading will occur to match preconstruction conditions, with the exception of steep slopes requiring permanent slope breaks.

10. Perform final restoration activities. Clean and restore Project area in accordance with the Engineering Standard 7507 (Attachment D), NPDES/SDS permit number MNR100001, and FERC requirements. Complete final grading and seed and mulch with grass or applicable vegetation per landowner specifications or NRCS/Minnesota Board of Water and Soil Resources (BWSR) seed mix (Attachment S). Per Northern's Engineering Standard 7507 (Attachment D), drill seeding or hydroseeding should be applied for all disturbed upland areas larger than 500 square feet. Any area seeded after October 1 will be seeded with a temporary seed mix, and the contractor will be required to remobilize the following spring to complete permanent seeding and fertilization. Remove temporary erosion control devices, where appropriate.

8. SWPPP BEST MANAGEMENT PRACTICES

Prior to the start of any ground disturbing activities within the Project, Northern's contractor will implement appropriate erosion and sediment control BMPs. Potential BMPs are identified below.

1. Erosion control

a. Preservation of Existing Vegetation: The contractor will preserve existing vegetation and vegetative buffer strips to the extent possible.

b. Mulch: Mulch such as wood chips, straw, or compost can be used independently as a temporary soil stabilization practice or in conjunction with seeding activities. Mulch should not be installed in active agricultural lands. Mulch, if used, will not contain synthetic (plastic) fiber additives in areas that drain to a Minnesota public water.

c. Erosion Control Blankets: Erosion control blankets are available in a variety of natural and synthetic materials (i.e., coconut fiber, jute, straw, hay or wood excelsior). Erosion control blankets will be installed to the manufacturer's instruction, FERC Plan and Procedures and Northern's instruction. Erosion control blankets will be used for temporary permanent stabilization in areas of concentrated flow in non-agricultural areas. Erosion control mesh, if used, will be limited to bio-netting or natural netting, specifically Category 3N or 4N in the 2016 and 2018 Minnesota DOT standards. Additional guidance on types of erosion control materials is included in Attachment D.

d. Hydro Mulch: Hydro mulch typically consists of applying a mixture of wood fiber, seed, fertilizer, and stabilizing emulsion with hydro mulch equipment. Equipment should be equipped with either an auger-type agitator or jet spray. The agitator must be used at all times to ensure a uniform seed coverage. Hydro mulch should be applied at a rate of 3,000 pounds per acre or per manufacturer guidelines. Do not apply mulch to standing water or in wetlands. Hydro mulch will be used in place of erosion control blanket on steep slopes per Northern's Engineering Standard 7507: Erosion and Sediment Control Technical Standards.

e. Dust Control: To abate dust resulting from construction activities, the contractor will employ dust control measures such as watering access roads, storage piles, and disturbed surfaces during construction to minimize fugitive emissions, where necessary. Additional measures include vehicle speed restrictions on unpaved roadways to 15 miles per hour, use of gravel or asphalt at site exit points to remove dirt from tires and tracks, and replanting disturbed areas as quickly as possible after construction.

f. Temporary Stabilization: Soil stabilization measures will be initiated by the following workday whenever earth-disturbing activities have temporarily ceased on any portion of the site. Temporary stabilization must be completed as soon as practicable, but no later than seven calendar days after stabilization measures have been initiated. Temporary seeding will occur as a part of the temporary stabilization. Seed disturbed areas in accordance with seed mixes, rates, and dates obtained from previous coordination with the NRCS, BWSR, or as requested by the landowner. Seeding is not required in cultivated croplands unless requested by the landowner.

g. Permanent Stabilization: Soil stabilization measures will be initiated by the following workday whenever earth-disturbing activities have permanently ceased on any portion of the site. Typical establishment practices are provided within Northern's Engineering Standard 7507 (Attachment D). Per Northern's Engineering Standard 7507, drill seeding or hydroseeding should be applied for all disturbed upland areas larger than 500 square feet. Any area seeded after October 1 will be seeded with a temporary seed mix, and the contractor will be

required to remobilize the following spring to complete permanent seeding and fertilization.

2. Sediment Control

a. Construction Entrance/Exit: Stabilized temporary construction entrances will be installed, as appropriate, for portions of this Project where existing roadways do not exist. Additionally, sediment tracked off-site onto paved surfaces will be removed at the end of each workday. The contractor will employ standard pipeline construction practices to protect the roadside ditches and water flow, if present.

b. Storm Drain Inlet Protection: There are no known stormwater inlets or culverts on this Project which require inlet protection. If storm drain inlets are present along the existing access roads, protection will be determined by the Project EI. Inlet protection may be removed to alleviate documented flooding but will be replaced upon completion of the rain event.

c. Stockpile Protection: Any portion of a stockpile (topsoil or subsoil) for this Project that will not be touched for seven days will be temporarily stabilized with a temporary cover seed. In addition, silt fence or other effective sediment controls will be placed at the base of all stockpiles on the downgradient perimeter prior to the initiation of stockpiling. Downstream silt fence will be in place above all wetland and waterbody areas to protect runoff from stockpiles. Stockpiles will be located outside of natural buffers or surface waters.

d. Silt fence, Straw bales, and Fiber Logs: Silt fence, straw bales, or fiber logs can be used as a perimeter control down-gradient of exposed soils during construction. Straw bales and fiber logs alone are not considered an adequate or effective sediment control device and should only be used in conjunction with silt fence. Silt fence will be installed prior to initial grading activities and will remain in place until final site stabilization has occurred. Silt fence will be held in place with 2-inch by 2-inch posts not to exceed 10-foot spacing and the base of the fence will be buried 6 inches in the ground. Once construction has begun, the site will be analyzed to determine whether additional silt fencing is required. Fiber logs or straw bales are used as a sediment and storm water velocity control device. Straw bales should be excavated the width of a bale and the length of the proposed barrier to a minimum depth of four inches. The trench must be deep enough to remove all grass and other material which might allow underflow. After the bales are staked (two stakes per bale) and chinked (filled by wedging), the excavated soil should be backfilled against the barrier. Fiber Logs are tubes of plastic netting or biodegradable burlap material filled with straw, rice straw, or coconut fiber. If straw bales or fiber logs are used, they should be Certified Weed Free.

e. Berms: Berms are a dike of material (topsoil, sub soil, compost, rock, etc.) that is placed perpendicular to sheet flow runoff to control erosion in disturbed areas and retain sediment. Berms can be used in place of a traditional sediment and erosion control tool such as a silt fence. If topsoil is used in a berm, subsoil cannot be mixed in, and the berm cannot be driven over with equipment.

f. Trench Breakers: Trench breakers are intended to slow the flow of subsurface water along the trench. Trench breakers may be constructed of materials such as sandbags or polyurethane foam. Do not use topsoil in trench breakers. Trench breakers should be installed per the following spacing:

Slope (%)	Spacing (feet)
5-15	300
>15-30	200
> 30	100

At a minimum, trench breakers should be installed at the base of slopes greater than 5%, where the base of the slope is less than 50 feet from a waterbody or wetland, and at each wetland and waterbody that is crossed via open cut methods, as specified in the FERC Procedures. Do not install trench breakers within a wetland.

g. Slope Breakers: Slope breakers are intended to reduce runoff velocity and divert water off the construction ROW. Temporary slope breakers may be constructed of materials such as soil, silt fence, staked hay or straw bales, or sandbags; whereas, permanent slope breakers consist of soil. The outfall of each slope breaker should be directed to a stable, well vegetated upland area or construct an energy-dissipating device at the end of the slope breaker and off the construction ROW. The outfall of each slope breaker should be positioned to prevent sediment discharge into wetlands, waterbodies, or other sensitive environmental resource areas. Slope breakers should be installed per the following spacing:

Slope (%)	Spacing (feet)
5-15	300
>15-30	200
> 30	100

h. Redundant Sediment Controls: Where the preservation of a natural 50-foot-wide buffer is infeasible, redundant sediment controls will be installed when a wetland or waterbody is within 50 feet of the Project's earth disturbances and stormwater flows to the surface water. Northern will install perimeter sediment controls at least five feet apart unless limited by lack of available space. Natural buffers are not required adjacent to road ditches, judicial ditches, county ditches, stormwater conveyance channels, storm drain inlets, and sediment basins. If preserving the buffer is infeasible, Northern will document the reason why in the SWPPP.

i. Dewatering Activities: Discharge from pit trench dewatering will be completed in accordance with FERC Plan and Procedures, MDNR water appropriation permit, and NPDES General Permit NPDES/SDS Permit MNR100001. Dewatering must occur in a manner that does not cause erosion. Dewatering structures must be removed as soon as possible after the completion of dewatering activities. All pumps will be equipped with a float and screen or a functional equivalent to maintain the intake above the trench bottom. Water will be discharged through geotextiles, and hay or straw bales. Dewatering will be conducted to avoid the flow of silt-laden water directly into waterbodies, wetlands or other surface water features. Dewatering discharges will be inspected and photographed at the

beginning of dewatering operations and at least once every 24 hours during operation.

For areas where consistent dewatering is anticipated, the contractor may implement a dewatering structure, consisting of a double row of weed-free strawbales, with offset cracks, as a de-watering structure. The water will be discharged via a non-woven geotextile filter bag within a straw bale dewatering/filtering structure. If needed, a polymer sock may be added in the filter bag to regulate Total Suspended Solids limits to below permit threshold, the contractor to coordinate with Northern before the use a polymer.

j. Hydrostatic Test Activities: Hydrostatic test activities are planned for the Project. Water may be re-used for hydrostatic testing between the new pipeline segments. The test water is expected to only contact new pipe, and no additives or chemicals will be added to the test water. The hydrostatic test water will be hauled off for disposal at an approved facility or discharged in an upland area onsite in accordance with the state discharge permits. No chemicals will be used after testing (e.g., to dry the pipe).

3. Temporary Clear-Span Bridge (TCSB)

No TCSBs are planned for the Project.

4. Pollution Prevention

a. Engine Degreasing: No engine degreasing will occur at the Project site. A copy of Northern's standard Spill Prevention, Containment, and Countermeasure (SPCC) plan is included in Attachment F.

b. Concrete Washout: All liquid and solid wastes generated by concrete washout operations will be confined in a containment basin lined with impermeable plastic. The liquid and solid wastes must not contact the ground and there must not be runoff from the concrete washout area. Concrete may only be washed out at designated areas approved by Northern's EI greater than 100 feet from a wetland, waterbody or designated municipal watershed area. The wash out stations will be removable and will be hauled off site at Project completion. The washout stations will be marked by a large sign stating, "concrete washout."

c. Material Storage: Northern place building products (including pesticides, fertilizers and treatment chemicals) and landscape materials under cover (e.g., plastic sheeting or temporary roofs) or protect them by similarly effective means designed to minimize contact with stormwater. Northern may choose to not to cover or protect products which are either not a source of contamination to stormwater or are designed to be exposed to stormwater.

d. Toilet Facility Project: Northern will position portable toilets so they are secure and will not tip or be knocked over and will properly dispose sanitary waste in accordance with Minn. R. ch. 7041.

e. Solid Waste: All solid waste generated from the Project site will be properly disposed of according to state and local requirements.

f. Inadvertent Release Plan: In the event of an inadvertent release during hydrostatic testing or other construction activity, Northern's Inadvertent Release Plan will be followed. The Plan is included in Attachment P.

g. Hazardous Material Management: In general, no hazardous material will be stored on the jobsite which requires secondary containment. However, should hazardous materials such as fuels and hydraulic fluid be stored on site, they must be stored in secondary containment. Spill kits or other suitable emergency action procedures to handle small chemical, petroleum, hazardous, or other non-stormwater material which has the potential to contaminate groundwater or surface waters must be properly contained and mitigated by the contractor.

    1. In Minnesota, any hazardous spills above 5 gallons will be reported to the Minnesota State Duty Officer (1-800-422-0798). If a spill occurs within the Hastings DWSMA/WHP area the City of Hastings Public Works (651-480-6185) should be notified after the Duty Officer. Spill kits or other suitable emergency action procedures to handle small chemical, petroleum, hazardous, or other non-stormwater material which has the potential to contaminate groundwater or surface waters must be properly contained and mitigated by the contractor. Reporting of spills will also be in accordance with Minn. Stat 115.061. If there is a noncompliance with this plan that could endanger public drinking water supplies notification to the City of Hasting Public Works/MDH (651-201-5841) should occur.
    2. Fueling Exclusion Zones: Refueling for equipment and vehicles or storage of hazardous liquids will not take place within the Hastings DWSMA/WHP, 100 feet of a waterbody or wetland, within 200 feet of private wells and 400 feet of public water supplies. Wells and exclusion zones are shown on Figure 3 in Attachment C. These zones will be clearly marked in the field as 'No Refueling Beyond This Point'. Due to the nature of the construction operation, certain equipment cannot be moved for refueling and may therefore be located within a fueling exclusion zone. Any fueling taking place with the Hastings DWSMA/WHP area should be on an impervious surface with secondary containment to prevent any accidental spills from reaching the ground surface. In cases where refueling needs to occur within the other fueling exclusion zone, Northern will have an EI present for the operation and will have spill response equipment onsite and readily available. Specific procedures are provided in the SPCC plan.

9. SITE-SPECIFIC EROSION CONTROL PLAN

Northern has completed an estimate of the total erosion control devices that may be utilized during construction of the Project - see Attachment C. The following estimate will be amended, and erosion control devices installed per the discretion of the trained EIs. The actual total number, type, and location will be determined in the field by the EIs.

Potential Erosion Control Devices – Preferred Route	**Estimated Number/Volume Anticipated during Construction**
Temporary	
Silt Fence, Straw Bales, or Fiber Logs	Approximately 79,200 linear feet
Timber Mats	900 linear feet
Hydro mulch/Mulch (certified weed free)	18.90 acres
Erosion Blanket	0.3 acre
Seeding – Upland	19.20 acres [1]
Temporary Slope Breakers	19
Construction Entrances	21
Permanent	
Hydro mulch/Mulch (certified weed free)	18.90 acres
Upland Seeding	19.20 acres [1]
Restoration of Agricultural land[2]	148.91 acres
Erosion Blanket	0.3 acre
Trench Breakers	19
Permanent Slope Breakers	19

[1] Acreage represents non-agricultural areas within the Project area where gravel will not be permanently installed.
[2] Seeding will be completed per landowner requirements due to predominance of agricultural cropland within the Project area.
[3] Trench breakers should be installed at the same locations at Permanent Slope Breakers, as determined by Northern based on field conditions.

10. TEMPORARY SEDIMENT BASINS

This Project does not require a temporary sediment basin, according to the MPCA, as the project will be sequenced to not disturb five or more acres of soils that drain to one common location at one time; therefore, this Project does not require a temporary sediment basin. Should Northern's EI determine that a temporary sediment basin or additional BMPs are needed, the SWPPP should be modified to reflect the additional measures taken.

11. INSPECTION AND MAINTENANCE

Northern's EI's will inspect disturbed areas that have not reached permit termination conditions, structural control measures, and locations where vehicles enter or exit the ROW at least once per week and within 24 hours of a storm event of 0.5 inch of rain or greater during active construction. Where parts of the Project site have permanent cover, but work remains on other parts of the site, inspections of the areas with permanent cover will be reduced to once per month. Inspections will be temporarily suspended during winter at the onset of frozen ground conditions where construction activities have ceased and will resume at the onset of spring runoff, in accordance with Part 11.11 of the general permit (MNR100001).

EIs will conduct inspections to ensure erosion and sediment control measures have been installed and are maintained properly, and to identify ineffective measures needing contractor repairs. EI's will prepare reports documenting construction activities such as dates when major grading occurs, dates when construction activities temporarily or permanently cease on a portion of the site, and dates when stabilization measures are initiated.

1. Inspections will be performed every seven days and within 24 hours of a 0.5-inch or greater rainfall event. An example SWPPP Inspection & Maintenance Report is included as Attachment G.
2. Maintenance will be performed within the timeframes of the NPDES permit when the following site conditions indicate:
    a. Silt fence and other BMP repairs should be made when it becomes non-functional or sediment reaches half the height of the device.
    b. Tracked sediment must be removed within 24 hours of discovery of off-site tracking onto paved surfaces.
    c. BMPs in disrepair must be repaired, replaced or supplemented by the end of the next business day after discovery or before the next storm event, which ever comes first, as field conditions allow.
    d. The contractor is responsible for maintaining all BMPs until work has been completed, site has achieved final termination conditions, and the NOT has been submitted to the MPCA.

12. POST CONSTRUCTION SITE CONDITIONS

No above-grade facility (new valve setting) will be required; therefore no permanent stormwater management is required as the net increase of impervious surface is less than one acre.

13. RESTORATION

The contractor will remove all rock or concrete from paths, walkways, driveways, parking areas or other paved areas.

The contractor will level and grade the site after all facilities have been installed and equipment has been removed from the Project site. The contractor to level and grade disturbed areas to match the surrounding elevations. The contractor will restore topsoil with seven days of backfill of the trench. As per the MPCA requirements, soil stabilization is to commence as soon as practicable ("immediately"), but no later than seven days from when land-disturbing activities have temporarily or permanently ceased. As such, the contractor must seed and mulch restored areas (as required) once topsoil restoration has occurred. In ditch bottoms with little to no slope (e.g., less than 2%), mulch may be disc-anchored in lieu of installing erosion control blanket. If disc-anchoring is found to be inadequate at minimizing erosion from ditches or swales, another more effective BMP must be utilized. The contractor will provide soil or suitable material for areas that require fill material. The top one foot of imported fill must consist of topsoil. All imported fill material must be approved by Northern prior to arriving on-site. Imported fill will be adequately compacted to prevent settling.

After grading has been completed, the contractor will seed Project site with a grass seed mixture specified by Northern or restored per landowner's requirement. The contractor will apply fertilizer and soil amendments based upon agronomic testing recommendations

obtained at the start of the Project. Seed disturbed areas in accordance with seed mixes, rates, and dates obtained from previous coordination with NRCS, BWSR, or as requested by the landowner.

14. UPDATING AND MODIFYING THE SWPPP

Northern can revise the SWPPP at any time; however, prior to revisions, all BMPs will be selected, installed and maintained in accordance with the manufacturer's specifications and accepted engineering practices. All SWPPP changes will be done by a.) Individuals preparing the SWPPP for the Project; b.) Individuals overseeing implementation of, revising and/or amending the SWPPP and individuals performing inspections for the Project; c.) Individuals performing or supervising the installation, maintenance and repair of BMPs; or d.) Another qualified individual. If less stringent BMPs are proposed in the revision, justification in effectiveness of the replacement BMP will be provided.

Northern will amend the SWPPP as necessary and within seven days to correct problems identified or address situations whenever:

1. There is a change in design, construction, operation, maintenance, weather or seasonal conditions that has a significant effect on the discharge of pollutants to surface waters or underground waters.
2. Inspections or investigations by site operators, local, state or federal officials indicate the SWPPP is not effective in eliminating or significantly minimizing the discharge of pollutants to surface waters or underground waters or that the discharges are causing water quality standard exceedances.
3. The SWPPP is not achieving the general objectives of controlling pollutants in stormwater discharges associated with construction activity, or the SWPPP is not consistent with the terms and conditions of this permit.
4. At any time after permit coverage is effective, the MPCA determines that the Project's stormwater discharges may cause, have reasonable potential to cause, or contribute to non-attainment of any applicable water quality standard, or that the SWPPP does not incorporate the requirements in an approved Total Maximum Daily Load (TMDL) Implementation Plan approved after the Project starts that contains construction stormwater related requirements. The permit requirements provide the protection required for no net increase in pollutant loading.

SWPPP amendments will be documented in Attachment M.

15. NOTICE OF TERMINATION

Compliance NPDES/SDS Permit No. MNR100001 is required until a NOT is submitted. The owner and contractor authorization to discharge under this permit terminates at midnight on the day the NOT is signed.

The owner and contractor must submit a NOT within 30 days after one or more of the following conditions have been met:

1. Permit termination conditions will be considered achieved on all portions of the site for which the contractor is responsible when land is restored to pre-construction agricultural use or achieved permanent uniform perennial vegetative cover at 70% of

its expected final growth. At that time, all temporary BMPs such as silt fence, straw bales, and fiber logs must be removed. When submitting the NOT either ground or aerial photographs showing the NOT requirements have been met must be included.

2. Another owner or contractor has assumed control over all areas of the site that have not been finally stabilized.

16. CERTIFICATION OF COMPLIANCE WITH FEDERAL, STATE, AND LOCAL REGULATIONS

This SWPPP was prepared in accordance with the NPDES general permit for stormwater discharge associated with a construction activity. Northern operates under strict compliance with the rules and regulations of the FERC. Construction site practices follow FERC regulatory procedures, including the Upland Erosion Control, Revegetation, and Maintenance Plan and the Wetland and Waterbody Construction and Mitigation Procedures, except for the modifications identified in the table located in section 7.6(c). The plan and procedures are included in Attachments H and I. Other sections of this SWPPP include specific practices utilized by Northern to ensure compliance with the general FERC procedures and federal NPDES/SDS standards.

All other applicable federal, state, or local requirements for erosion and sediment control site plans (or permits), or stormwater management site plans (or permits) have been taken into account and will be met. A copy of the Minnesota Permit authorizing Stormwater discharge associated with Construction Activities on Northern's pipeline routes (MNR100001) is included as Attachment J. A copy of Northern's Notice of Intent submittal for coverage under the MPCA NPDES Permit Number MNR100001 will be included in Attachment K in the final SWPPP. MPCA's authorization letter for coverage under Permit Number MNR100001 will be included in Attachment L in the final SWPPP.

17. RECORD RETENTION

A copy of the SWPPP will be kept on-site for the entire duration of the Project. The materials included in the SWPPP will include documentation of any changes, inspection and maintenance records, permanent operation and maintenance agreements, and calculations for design of both temporary and permanent stormwater management systems. Copies of the SWPPP and all inspection reports will be forwarded to Northern and kept on file for a period of three years.

ATTACHMENT A

PROJECT LOCATION MAP

Figure No.

1

Title

Project Location & Topography
V2F - Faribault M500 D-Line

Client/Project 172608813

Northern Natural Gas
Ventura to Farmington A-Line Abandonment & Capacity Replacement Project

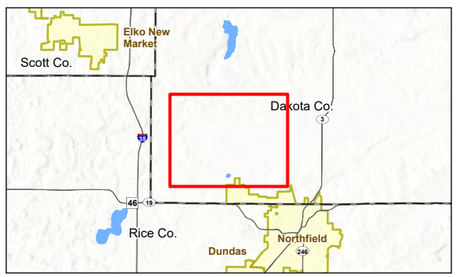
Project Location
Dakota County, Minnesota

Prepared by JM on 2025-10-24
TR by JL on 2025-10-27
IR by SK on 2026-01-29

N

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(At original document size of 11x17)
1:24,000

Legend
- Environmental Survey Boundary
- 1-Mile Buffer



Notes
1. Coordinate System: NAD 1983 UTM Zone 15N
2. Data Sources: Stantec, NNG, Esri, USCB, USGS
3. Background: USGS 7.5' Topographic Quadrangles

Stantec

Northern Natural Gas

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Figure No.

1

Title

Project Location & Topography
V2F - Faribault M500 D-Line

Client/Project 172608813

Northern Natural Gas
Ventura to Farmington A-Line Abandonment & Capacity Replacement Project

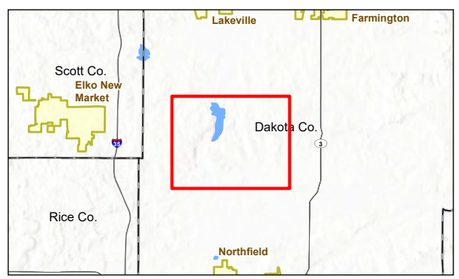
Project Location
Dakota County, Minnesota

Prepared by JM on 2025-10-24
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Legend
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Figure No.

1

Title

Project Location & Topography
V2F - Faribault M500 D-Line

Client/Project 172608813

Northern Natural Gas
Ventura to Farmington A-Line Abandonment & Capacity Replacement Project

Project Location
Dakota County, Minnesota

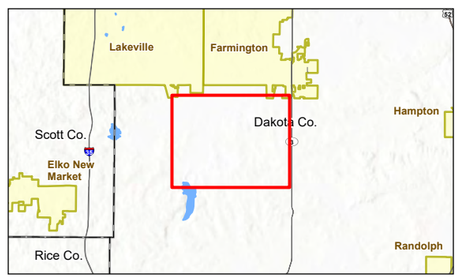
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Legend

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ATTACHMENT B

SOILS MAP

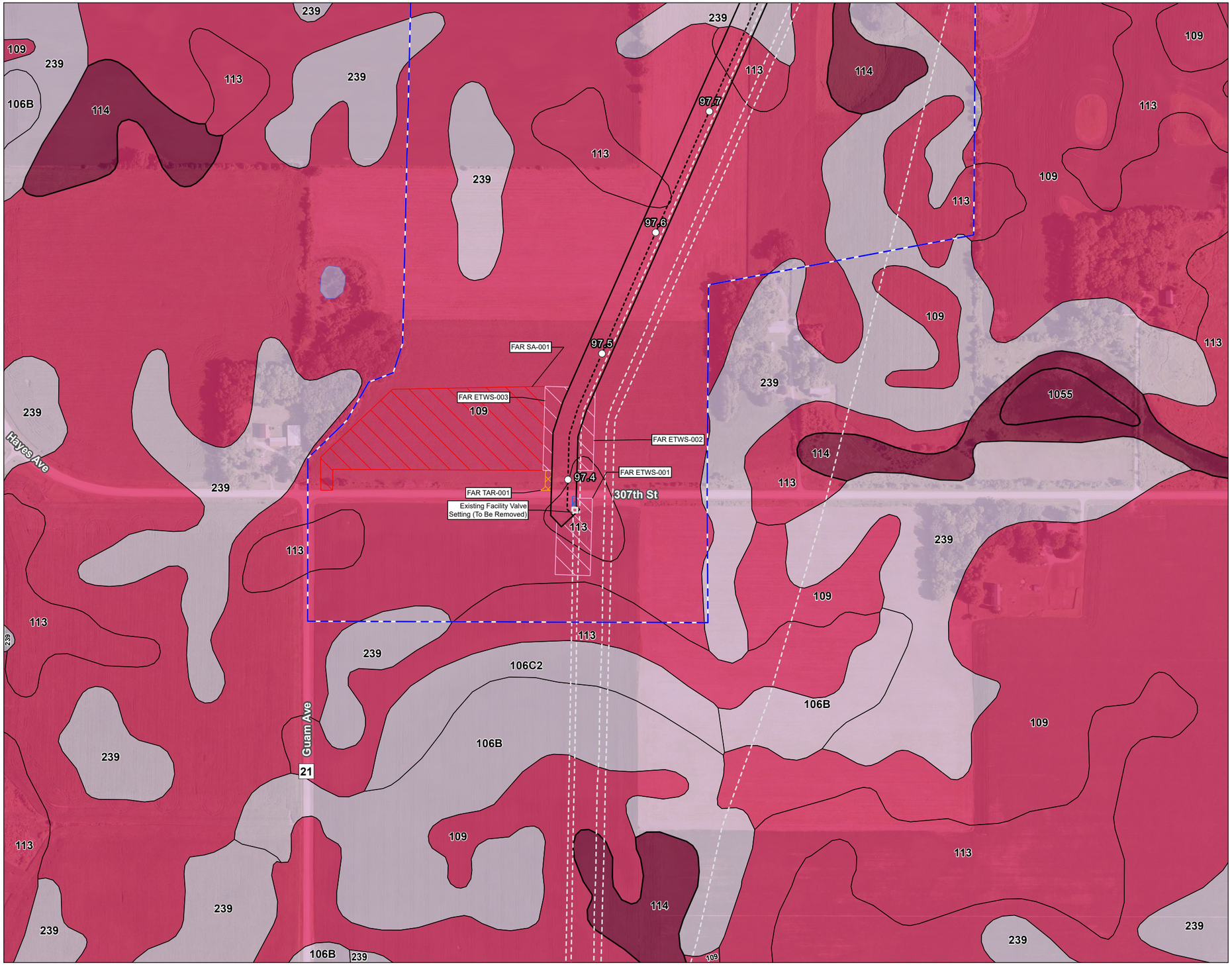


Figure No.

2

Title

NRCS Soil Series Map
V2F - Faribault M500 D-Line

Client/Project 172608813

Northern Natural Gas
Ventura to Farmington A-Line Abandonment & Capacity Replacement Project

Project Location
Dakota County, Minnesota

Prepared by JM on 2025-10-24
TR by JL on 2025-10-27
IR by SK on 2026-01-29

N

0 200 400 Feet
(At original document size of 11x17)
1:4,800

Legend

- Environmental Survey Boundary
- Existing Lot
- Existing Access Road
- Temporary Workspace
- Extra Temporary Workspace
- Staging Area
- Temporary Access Road
- Proposed Pipeline
- Existing Pipeline
- Mile Post

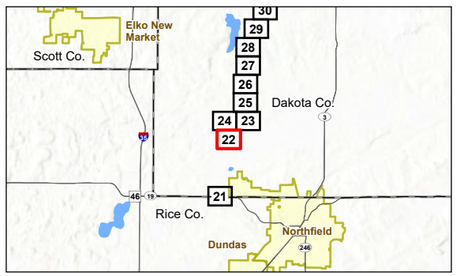
NRCS Soil Survey Data

Hydric Soil Rating

- Hydric
- Predominantly Hydric
- Partially Hydric
- Predominantly Non-Hydric
- Non-Hydric

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Ephemeral Stream
- Canal/Ditch
- Waterbody



Notes
1. Coordinate System: NAD 1983 UTM Zone 15N
2. Data Sources: Stantec, NNG, Esri, USCB, USGS, NRCS
3. Background: 2023 NAIP

Stantec

Northern Natural Gas

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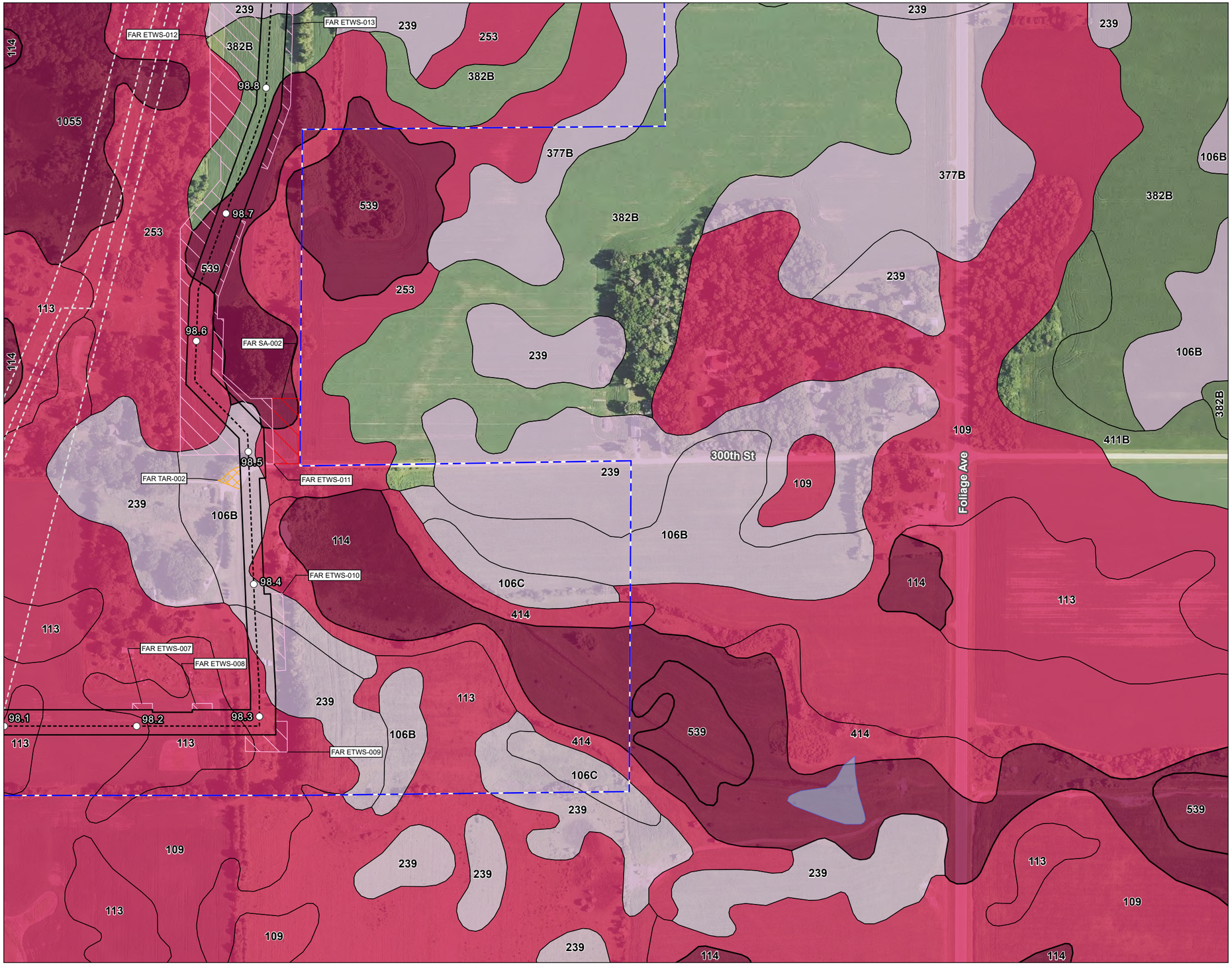


Figure No.

2

Title

NRCS Soil Series Map
V2F - Faribault M500 D-Line

Client/Project 172608813

Northern Natural Gas
Ventura to Farmington A-Line Abandonment & Capacity Replacement Project

Project Location
Dakota County, Minnesota

Prepared by JM on 2025-10-24
TR by JL on 2025-10-27
IR by SK on 2026-01-29

N

0 200 400 Feet
(At original document size of 11x17)
1:4,800

Legend

- Environmental Survey Boundary
- Temporary Workspace
- Extra Temporary Workspace
- Staging Area
- Temporary Access Road
- Proposed Pipeline
- Existing Pipeline
- Mile Post

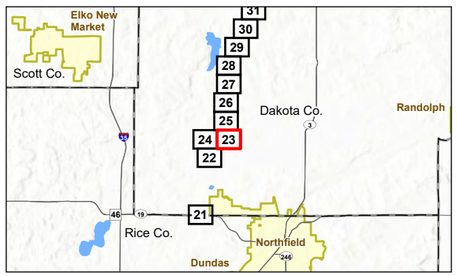
NRCS Soil Survey Data

Hydric Soil Rating

- Hydric
- Predominantly Hydric
- Partially Hydric
- Predominantly Non-Hydric
- Non-Hydric

National Hydrography Dataset

- Perennial Stream
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- Ephemeral Stream
- Canal/Ditch
- Waterbody



Notes
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2. Data Sources: Stantec, NNG, Esri, USCB, USGS, NRCS
3. Background: 2023 NAIP

Stantec

Northern Natural Gas

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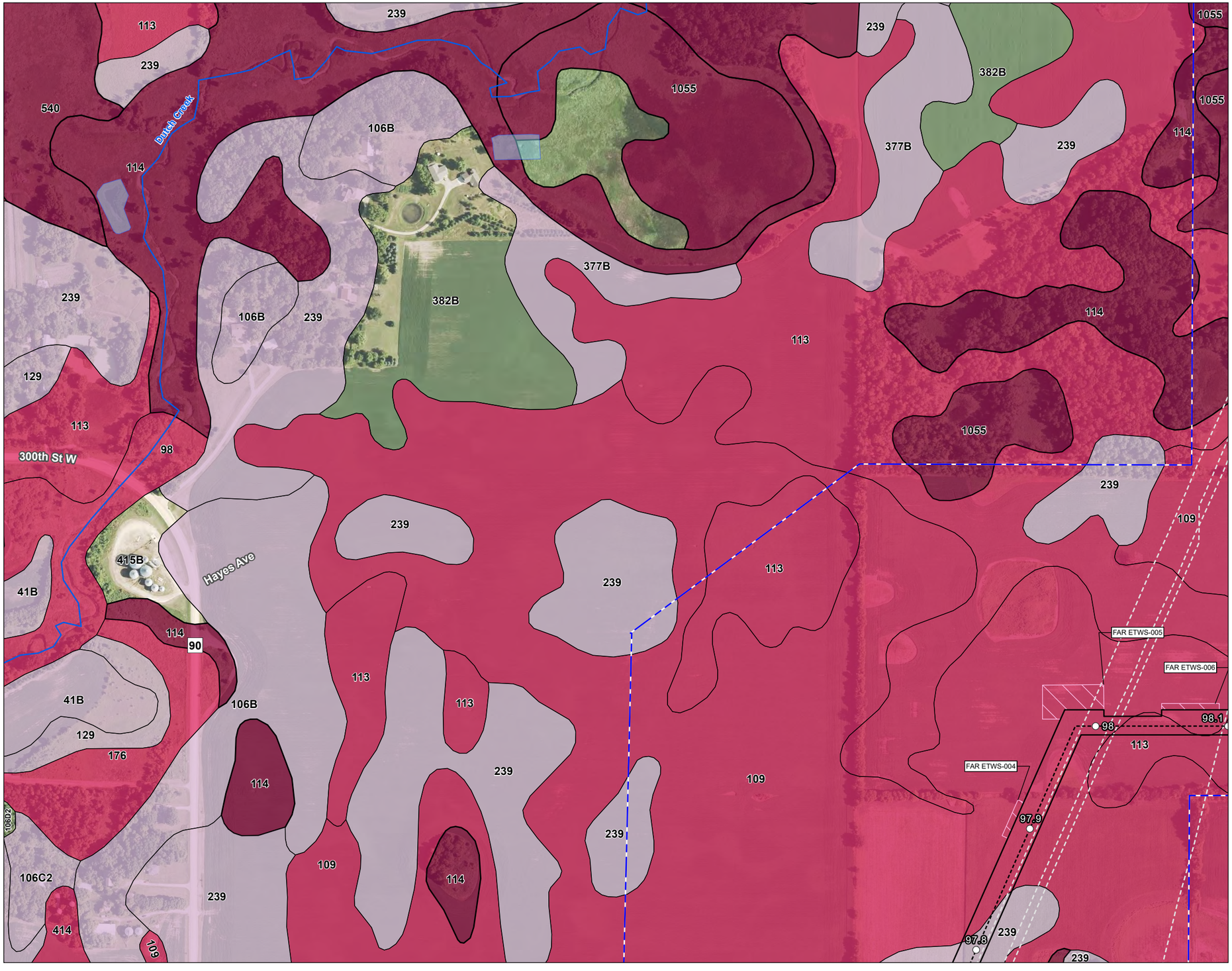


Figure No.

2

Title

NRCS Soil Series Map
V2F - Faribault M500 D-Line

Client/Project 172608813

Northern Natural Gas
Ventura to Farmington A-Line Abandonment & Capacity Replacement Project

Project Location
Dakota County, Minnesota

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N

0 200 400 Feet
(At original document size of 11x17)
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Legend

- Environmental Survey Boundary
- Temporary Workspace
- Extra Temporary Workspace
- Proposed Pipeline
- Existing Pipeline
- Mile Post

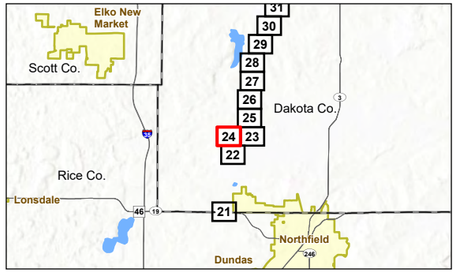
NRCS Soil Survey Data

Hydric Soil Rating

- Hydric
- Predominantly Hydric
- Partially Hydric
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- Non-Hydric

National Hydrography Dataset

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- Intermittent Stream
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Notes
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3. Background: 2023 NAIP

Stantec

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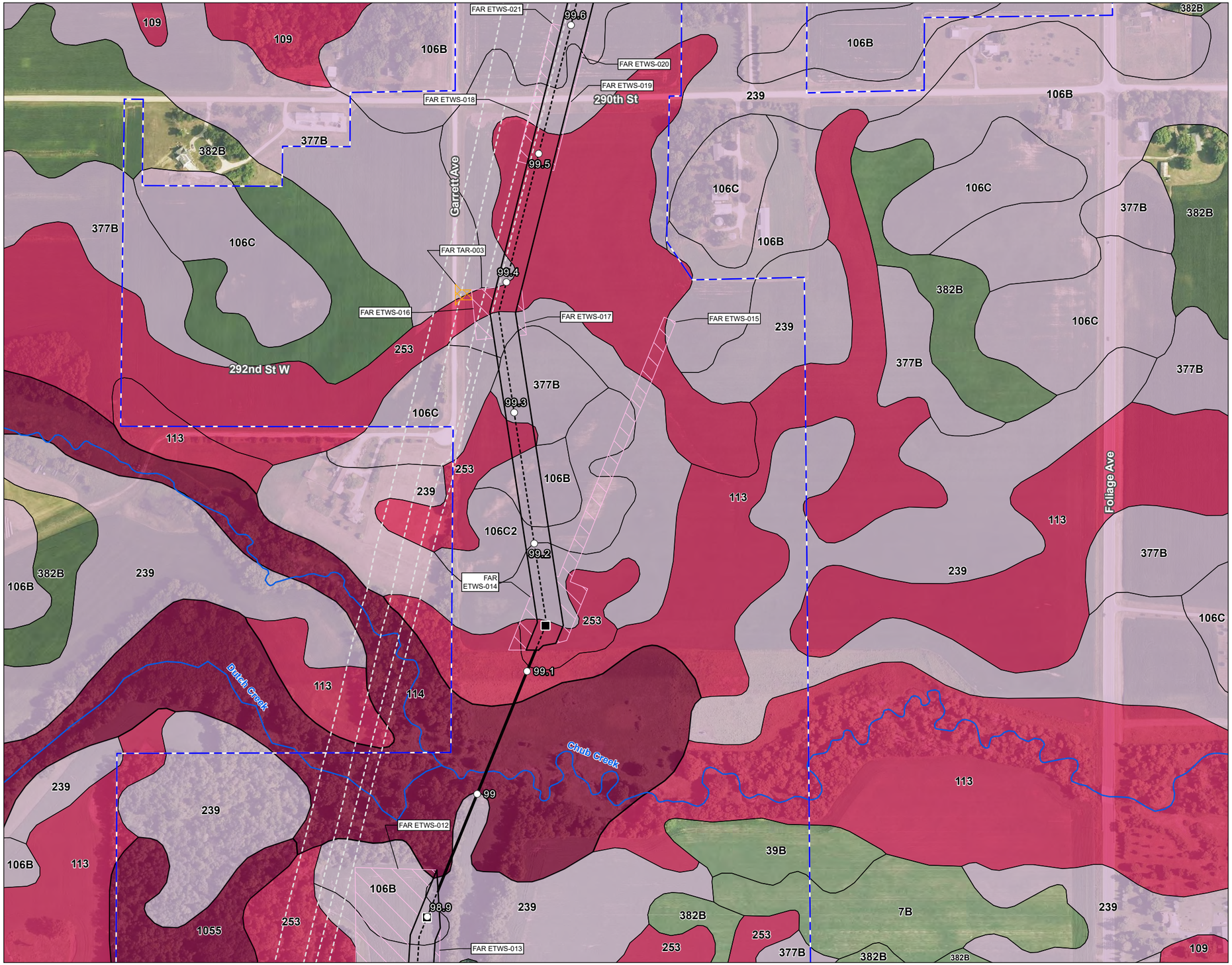


Figure No.

2

Title

NRCS Soil Series Map
V2F - Faribault M500 D-Line

Client/Project 172608813

Northern Natural Gas
Ventura to Farmington A-Line Abandonment & Capacity Replacement Project

Project Location
Dakota County, Minnesota

Prepared by JM on 2025-10-24
TR by JL on 2025-10-27
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N

0 200 400 Feet
(At original document size of 11x17)
1:4,800

Legend

- Environmental Survey Boundary
- Temporary Workspace
- Extra Temporary Workspace
- Temporary Access Road
- Proposed Pipeline
- Existing Pipeline
- Mile Post
- HDD

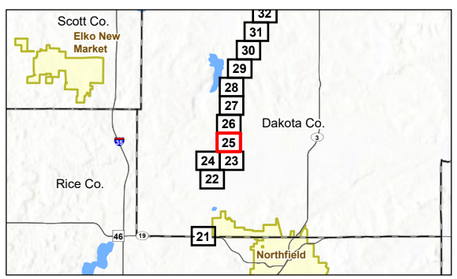
NRCS Soil Survey Data

Hydric Soil Rating

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- Non-Hydric

National Hydrography Dataset

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Notes
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2. Data Sources: Stantec, NNG, Esri, USCB, USGS, NRCS
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Northern Natural Gas

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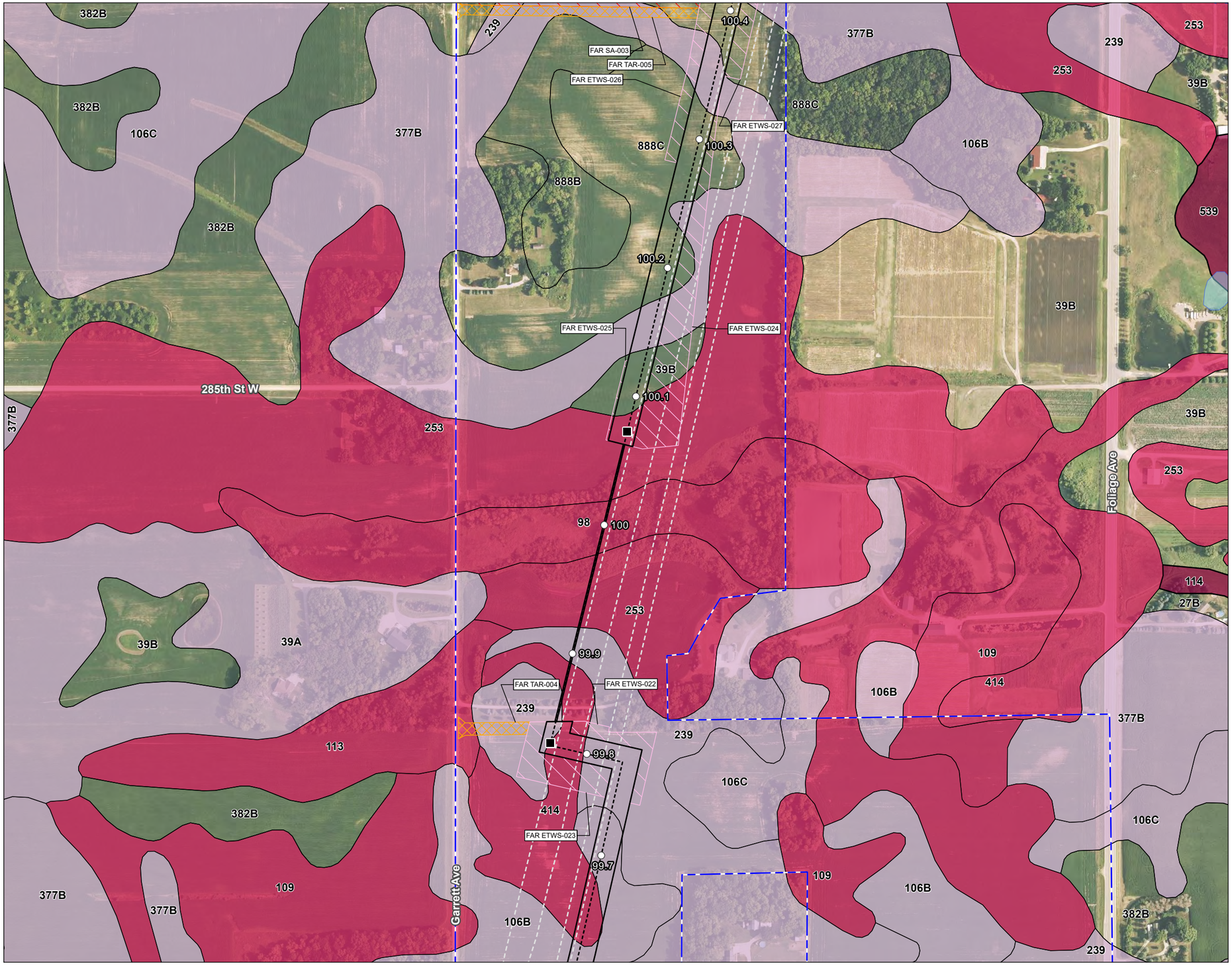


Figure No.
2

Title
NRCS Soil Series Map
V2F - Faribault M500 D-Line

Client/Project
Northern Natural Gas
Ventura to Farmington A-Line Abandonment & Capacity Replacement Project

172608813

Project Location
Dakota County, Minnesota

Prepared by JM on 2025-10-24
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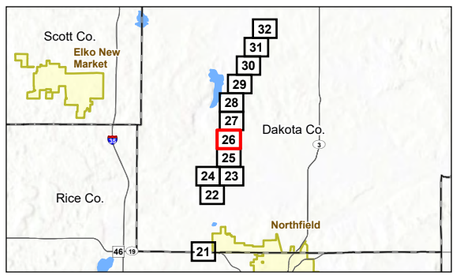
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Legend
- Environmental Survey Boundary
- Temporary Workspace
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- Staging Area
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NRCS Soil Survey Data
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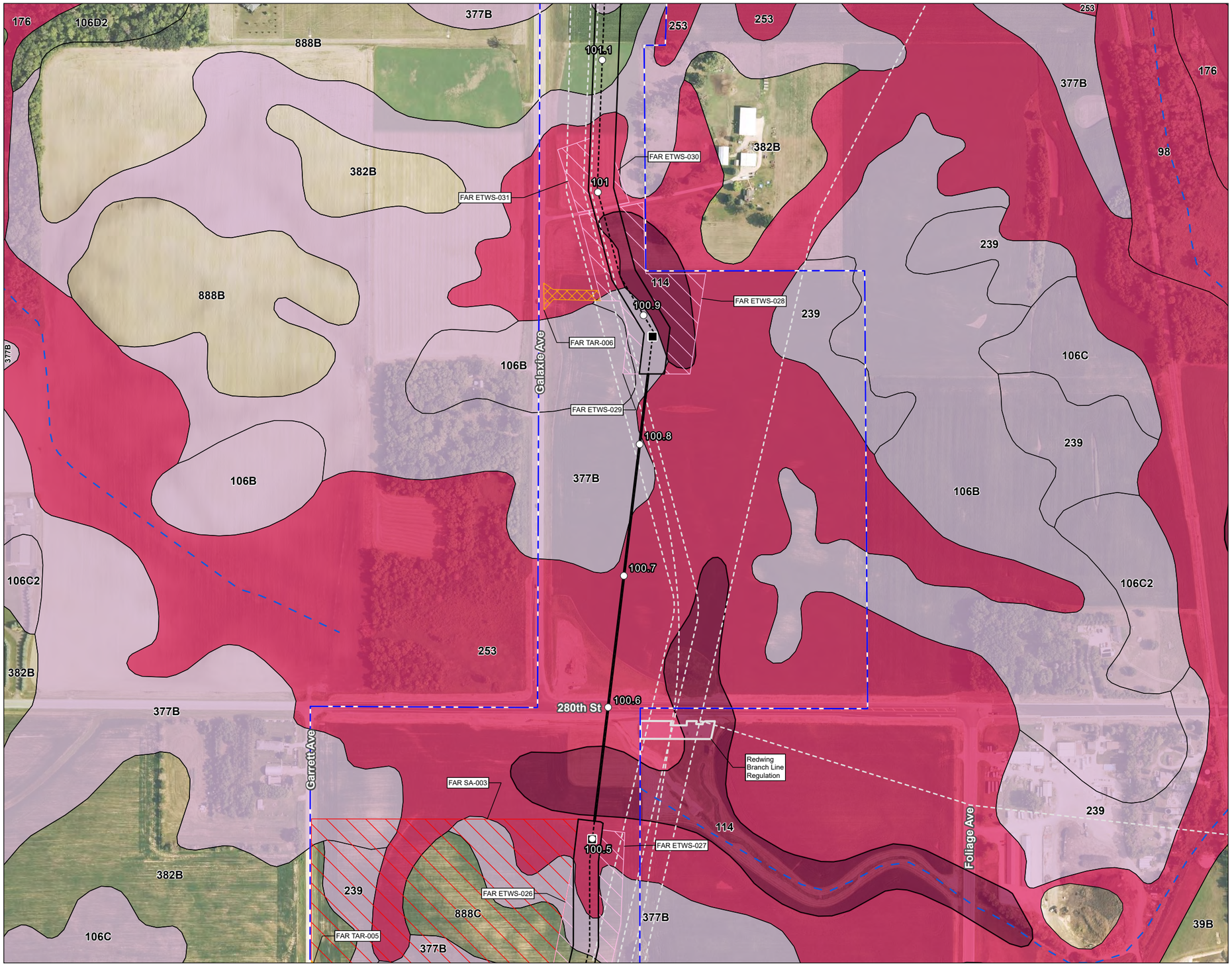


Figure No.

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Northern Natural Gas
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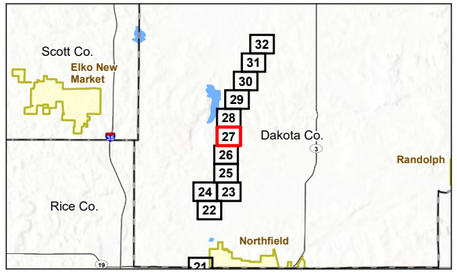
NRCS Soil Survey Data

Hydric Soil Rating

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- Predominantly Non-Hydric
- Non-Hydric

National Hydrography Dataset

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- Ephemeral Stream
- Canal/Ditch
- Waterbody



Notes
1. Coordinate System: NAD 1983 UTM Zone 15N
2. Data Sources: Stantec, NNG, Esri, USCB, USGS, NRCS
3. Background: 2023 NAIP

Stantec

Northern Natural Gas

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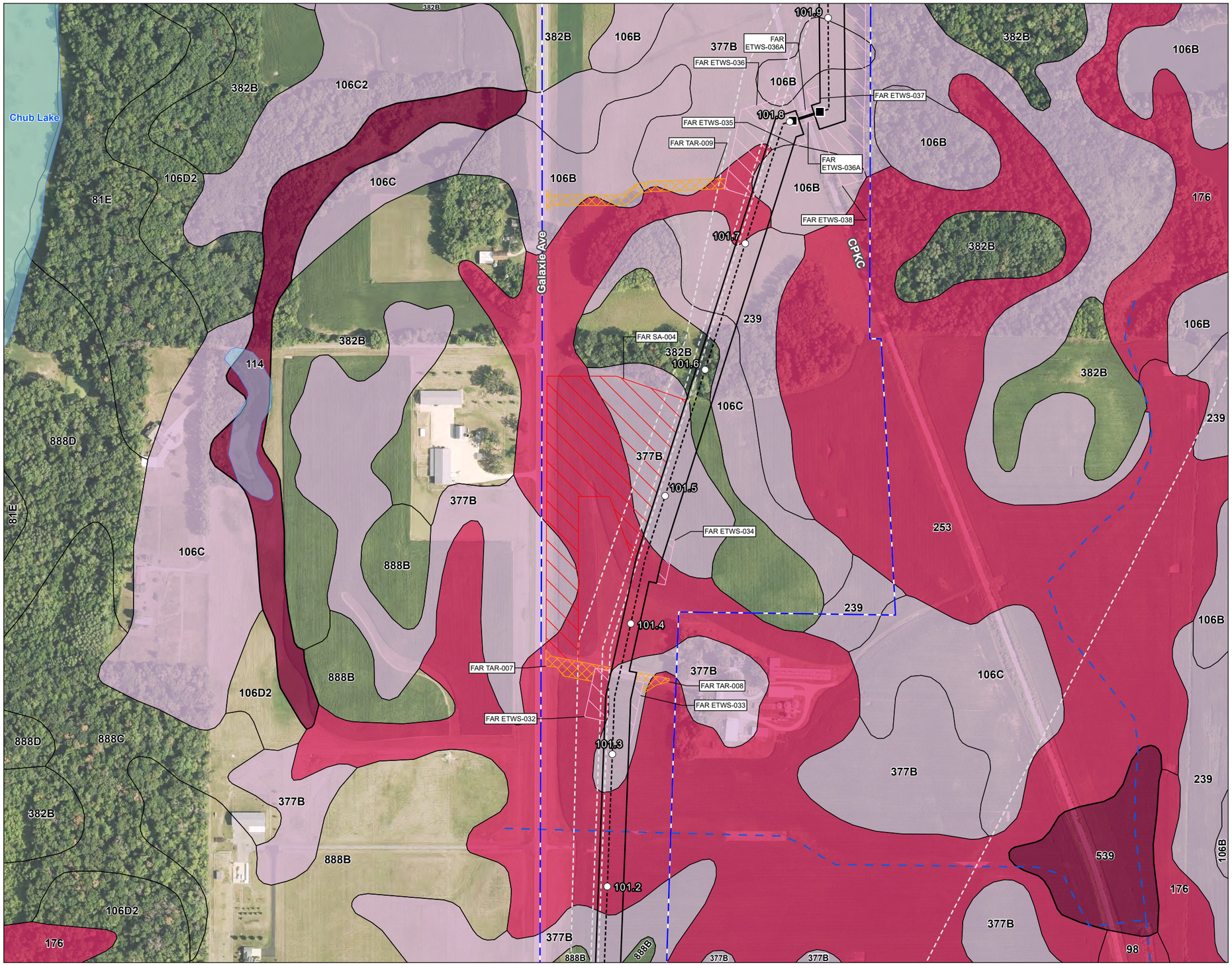


Figure No.

2

Title

NRCS Soil Series Map
V2F - Faribault M500 D-Line

Client/Project 172608813

Northern Natural Gas
Ventura to Farmington A-Line Abandonment & Capacity Replacement Project

Project Location
Dakota County, Minnesota

Prepared by JM on 2025-10-24
TR by JL on 2025-10-27
IR by SK on 2026-01-29

N

0 200 400 Feet
(At original document size of 11x17)
1:4,800

Legend

- Environmental Survey Boundary
- Temporary Workspace
- Extra Temporary Workspace
- Staging Area
- Temporary Access Road
- Proposed Pipeline
- Existing Pipeline
- Mile Post
- HDD

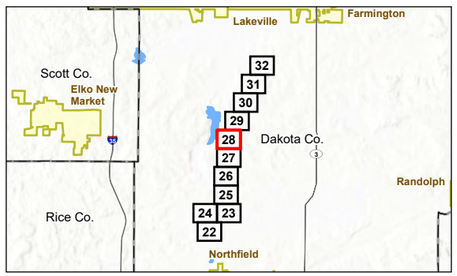
NRCS Soil Survey Data

Hydric Soil Rating

- Hydric
- Predominantly Hydric
- Partially Hydric
- Predominantly Non-Hydric
- Non-Hydric

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Ephemeral Stream
- Canal/Ditch
- Waterbody



Notes

1. Coordinate System: NAD 1983 UTM Zone 15N
2. Data Sources: Stantec, NNG, Esri, USCB, USGS, NRCS
3. Background: 2023 NAIP

Stantec

Northern Natural Gas

U:\172611\7260891003_data\gis_cad\gis\ArcPro\172608813_NNG_VenturaFarmington\172608813_NNG_VenturaFarmington.aprx Revised: 2026-02-03 By: jmarly

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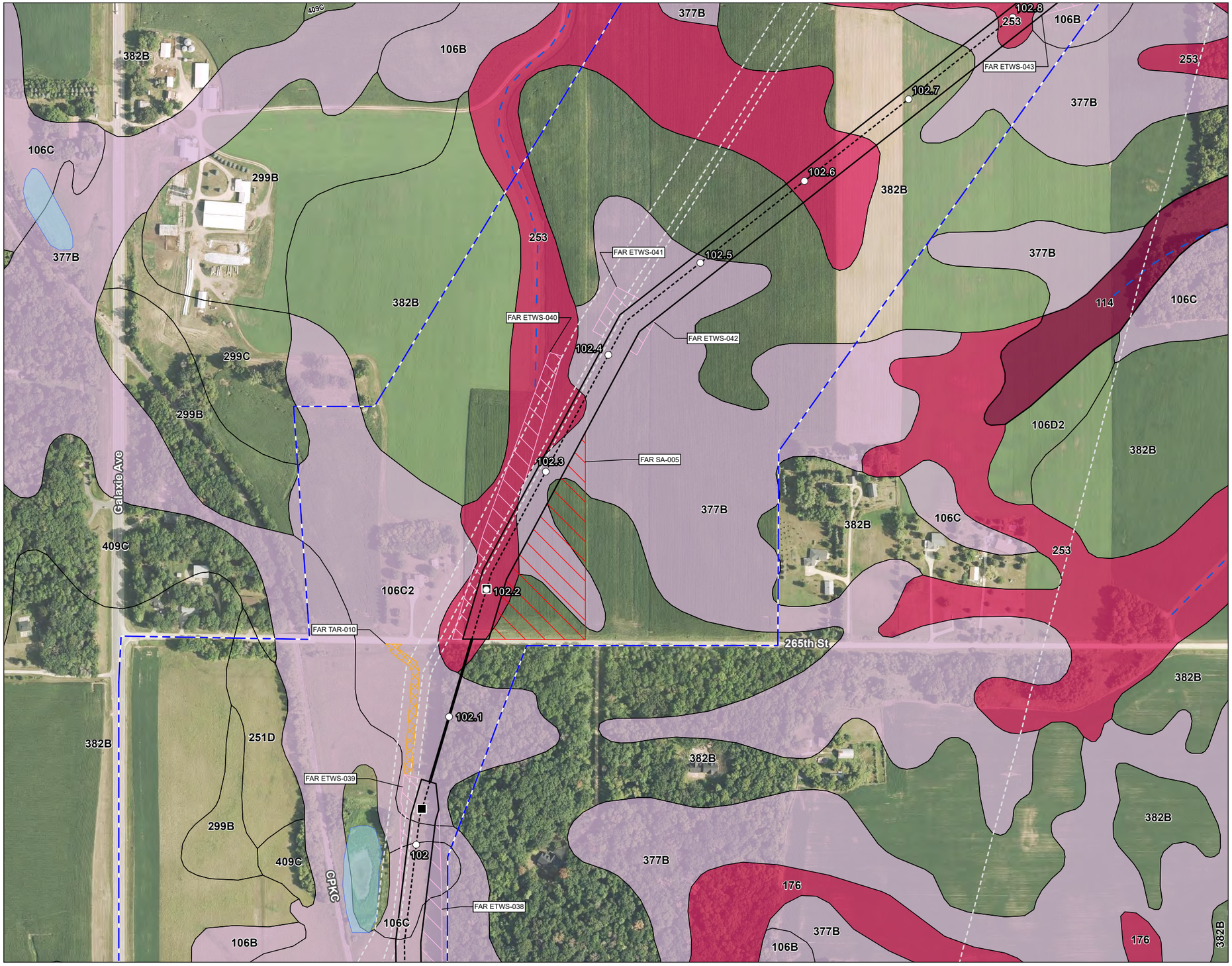


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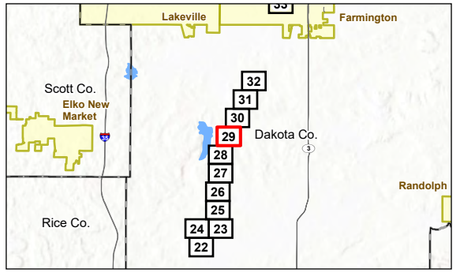
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- Non-Hydric

National Hydrography Dataset

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Stantec

Northern Natural Gas

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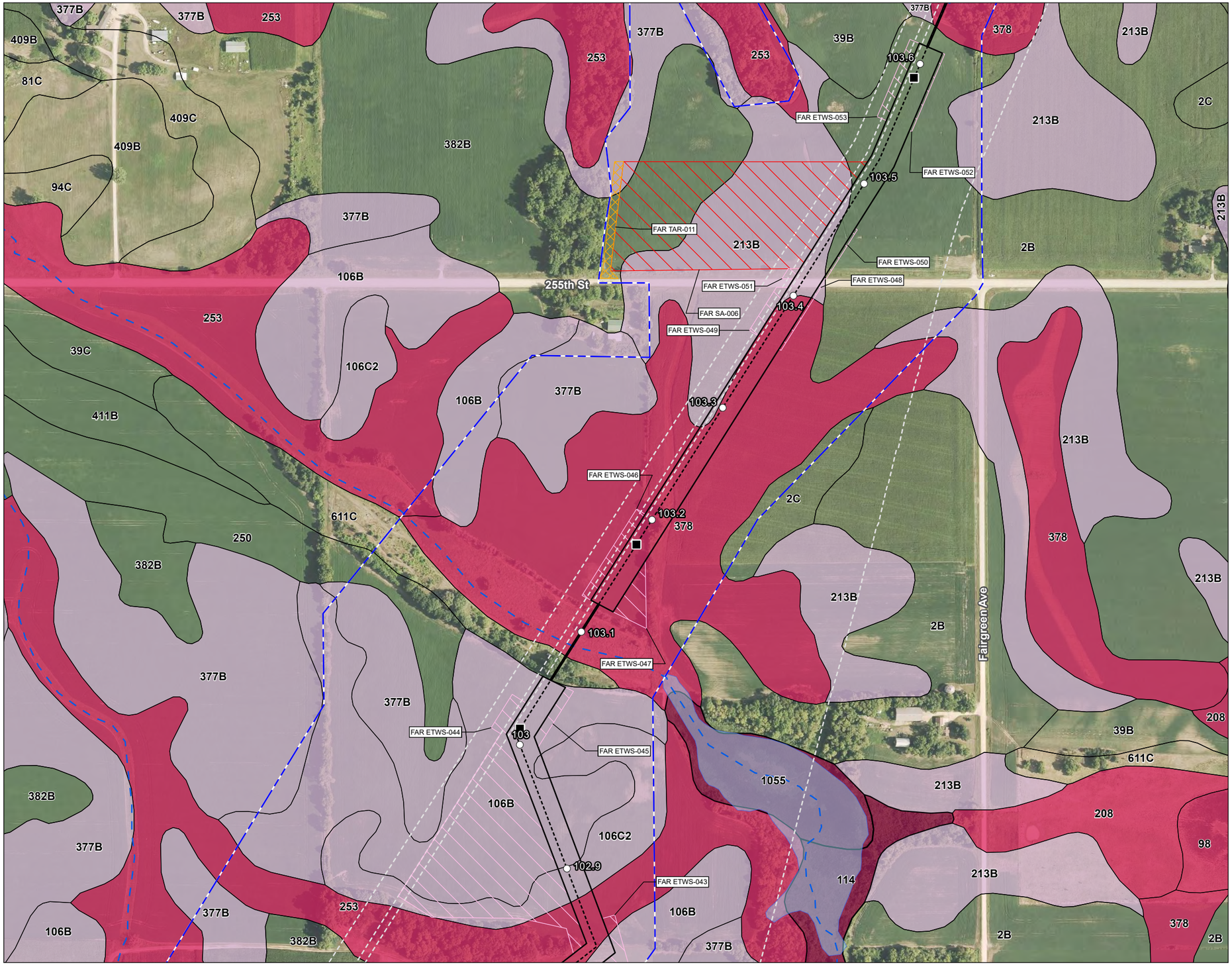


Figure No.

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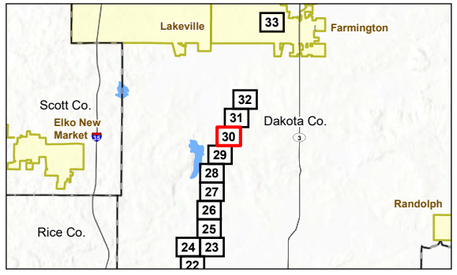
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Northern Natural Gas

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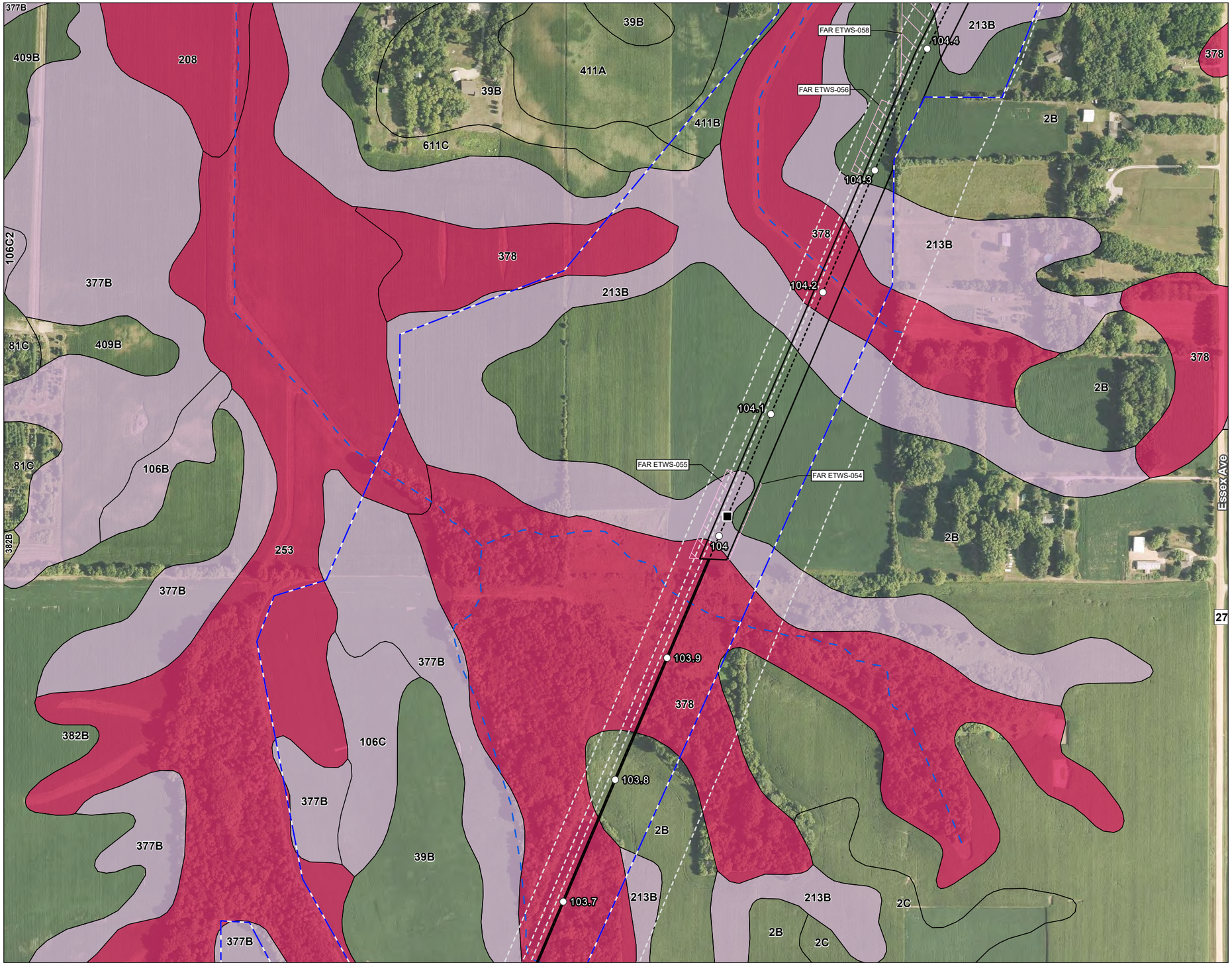


Figure No.

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NRCS Soil Series Map
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Client/Project 172608813

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Legend

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- Extra Temporary Workspace
- Proposed Pipeline
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- HDD

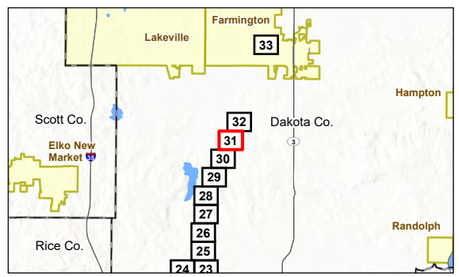
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3. Background: 2023 NAIP

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Northern Natural Gas

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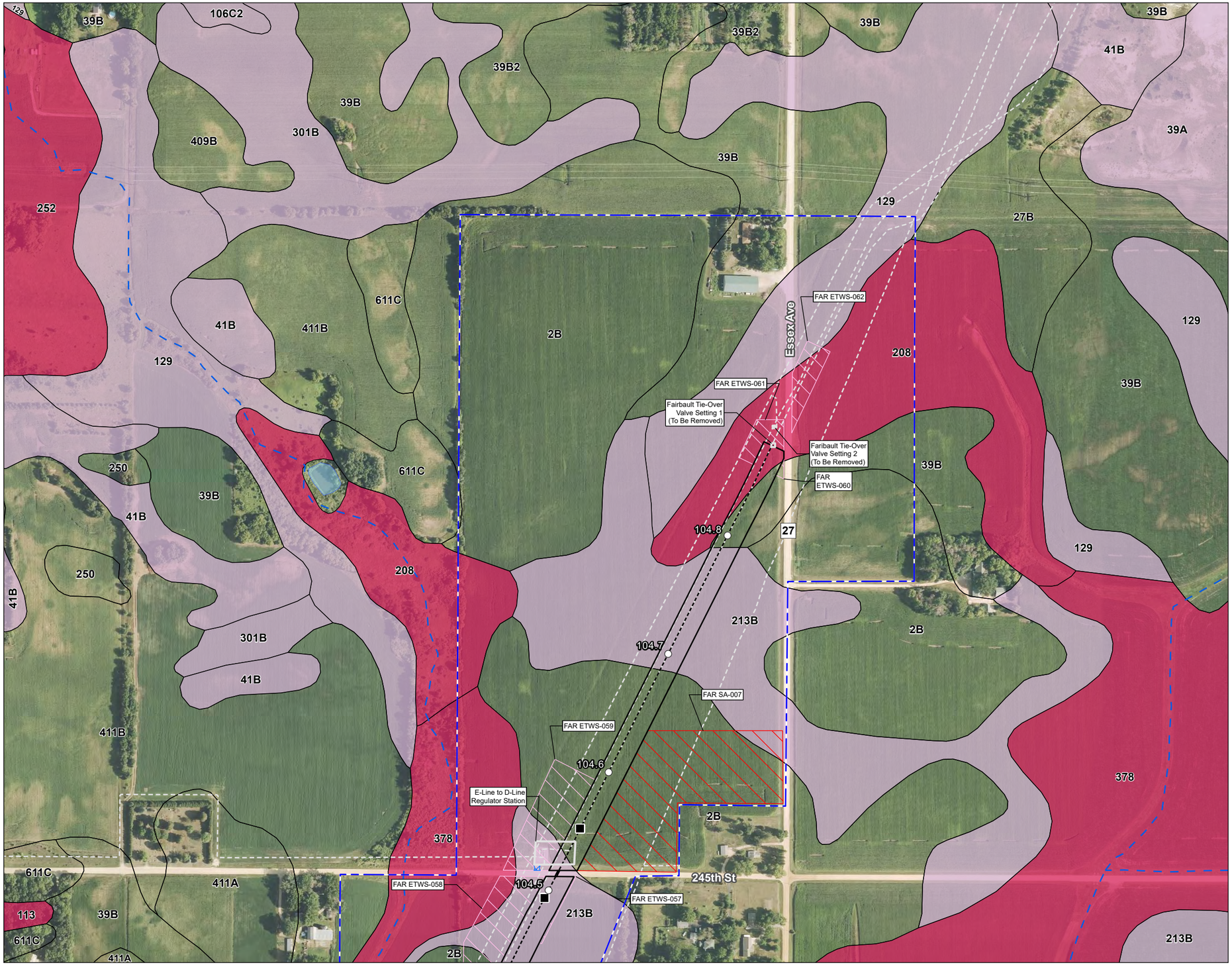


Figure No.

2

Title

NRCS Soil Series Map
V2F - Faribault M500 D-Line

Client/Project 172608813

Northern Natural Gas
Ventura to Farmington A-Line Abandonment & Capacity Replacement Project

Project Location
Dakota County, Minnesota

Prepared by JM on 2025-10-24
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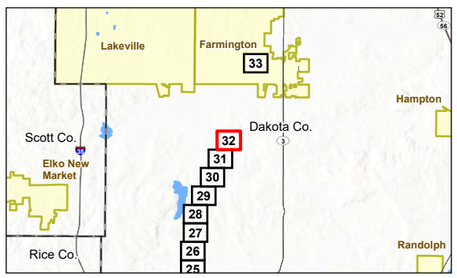
N

0 200 400 Feet
(At original document size of 11x17)
1:4,800

Legend
- Environmental Survey Boundary
- Existing Lot
- Existing Access Road
- Temporary Workspace
- Extra Temporary Workspace
- Staging Area
- Proposed Pipeline
- Existing Pipeline
- Mile Post
- HDD

NRCS Soil Survey Data
Hydric Soil Rating
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- Predominantly Hydric
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- Non-Hydric

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Stantec

Northern Natural Gas

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ATTACHMENT C

EROSION CONTROL MAP



Figure No.

1

Title

Erosion Control Plan
V2F - Faribault M500 D-Line

Client/Project 172608813

Northern Natural Gas
Ventura to Farmington A-Line Abandonment & Capacity Replacement Project

Project Location
Dakota County, Minnesota

Prepared by JM on 2025-10-24
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N

0 200 400 Feet
(At original document size of 11x17)
1:4,800

Legend

- Environmental Survey Boundary
- Existing Lot
- Existing Access Road
- Temporary Workspace
- Extra Temporary Workspace
- Staging Area
- Temporary Access Road
- Proposed Pipeline
- Existing Pipeline
- Mile Post
- 1' Elevation Contour
- Culvert
- Upland Drainage Feature
- Field Delineated Wetland
- Silt Fence
- Redundant Silt Fence
- Hazardous Liquid Storage Exclusion Zone
- Wellhead Protection Area
- Drinking Water Supply Management Area

FEMA Flood Hazard Areas

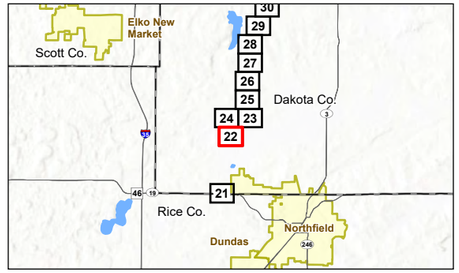
- Floodway
- 100-Year Floodplain
- 500-Year Floodplain

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody

*Percent slope only displayed within 10 feet of centerline and slope 5% or greater.

Erosion Control Notes:
1. Erosion control devices and tracking pad locations will be determined in the field by the EI and contractor, based on site conditions and safety.
2. Slope breakers and other BMPs will be installed in areas with slopes greater than 5%.
3. Erosion mats may be used during final restoration in areas with slopes greater than 5%.
4. Dewatering locations may be determined in the field by the EI as needed.
5. Silt fence that crosses the centerline will be placed prior to and post-excavation activities.



Notes
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3. Background: 2023 NAIP

Stantec

Northern Natural Gas

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Figure No.

1

Title

Erosion Control Plan
V2F - Faribault M500 D-Line

Client/Project 172608813

Northern Natural Gas
Ventura to Farmington A-Line Abandonment & Capacity Replacement Project

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0 200 400 Feet
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Legend

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- Existing Pipeline
- Mile Post
- 1' Elevation Contour
- Culvert
- Upland Drainage Feature
- Field Delineated Wetland
- Well Location
- Redundant Silt Fence
- 5+ Percent Slope*
- Tracking Pad
- Hazardous Liquid Storage Exclusion Zone
- Wellhead Protection Area
- Drinking Water Supply Management Area

FEMA Flood Hazard Areas

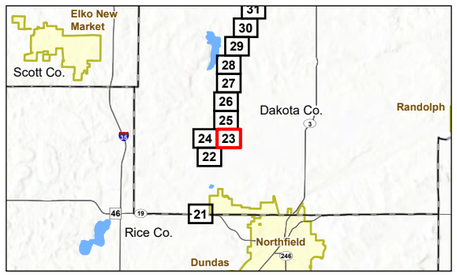
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Northern Natural Gas

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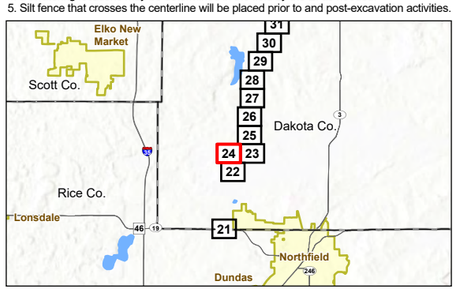
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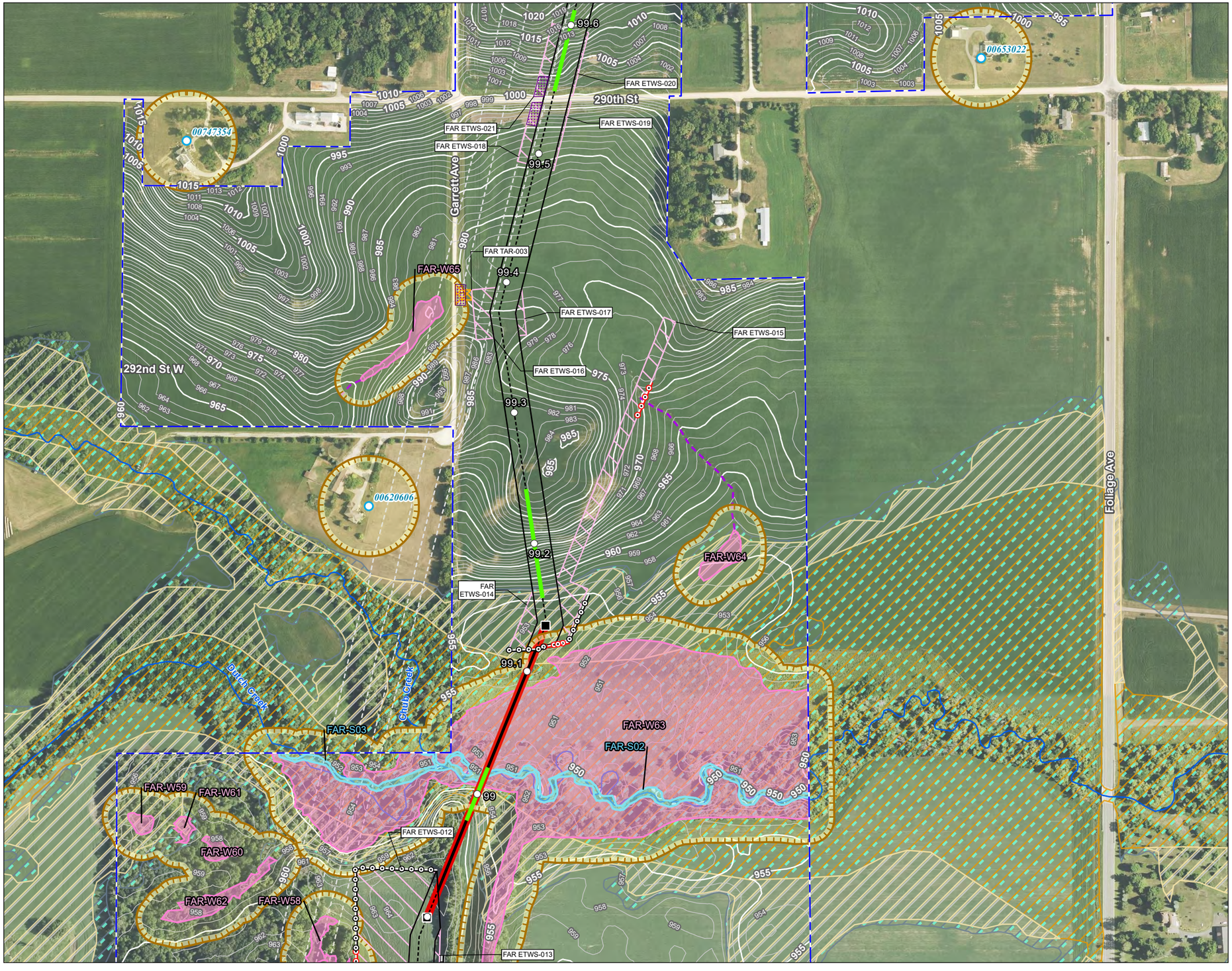


Figure No.

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Title

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Client/Project 172608813

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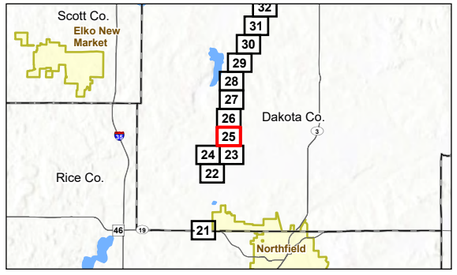
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- HDD
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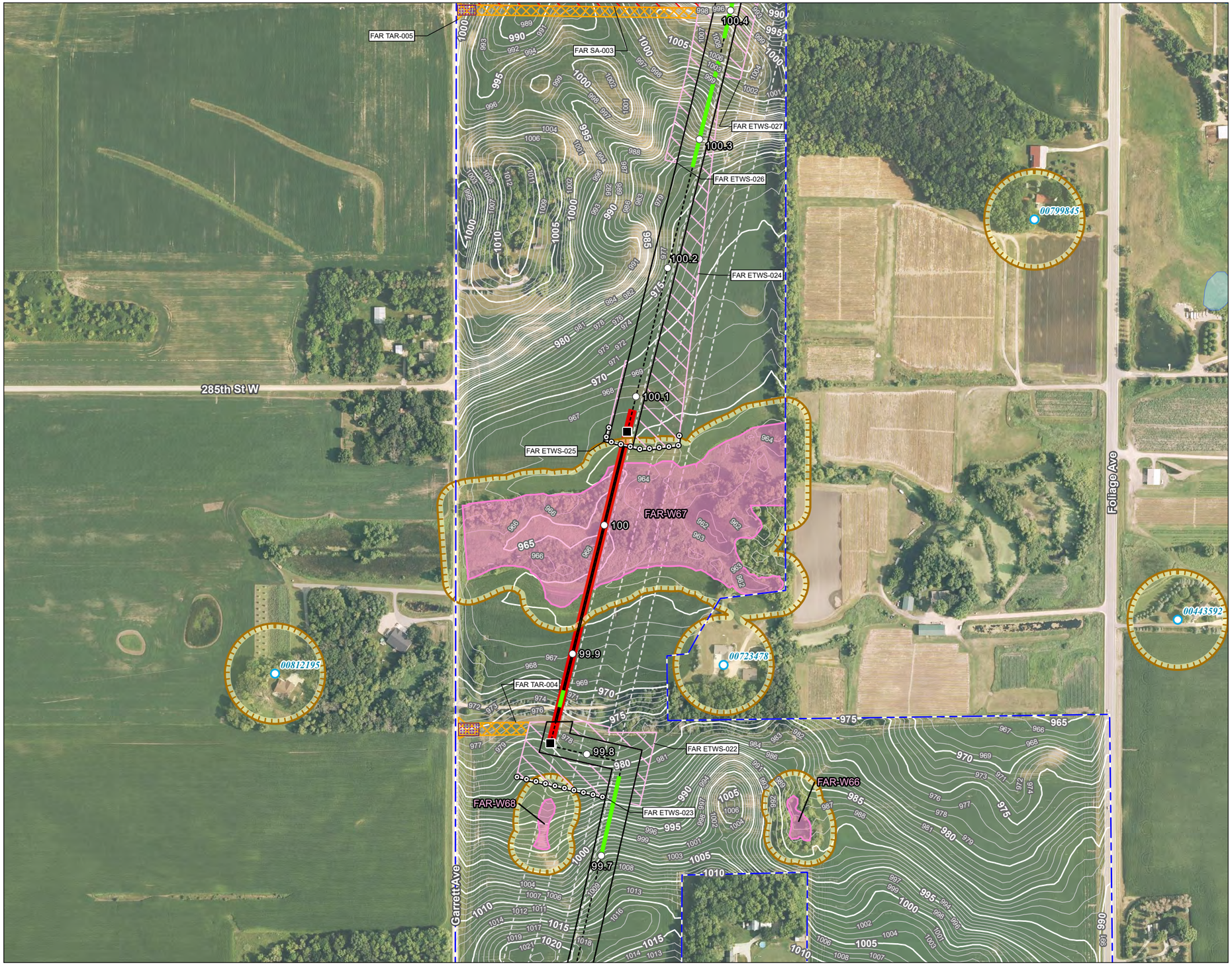


Figure No.

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V2F - Faribault M500 D-Line

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- Staging Area
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- Proposed Pipeline
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- Mile Post
- HDD
- HDD Segment
- 1' Elevation Contour
- Field Delineated Wetland
- Well Location
- Silt Fence
- 5+ Percent Slope*
- Tracking Pad
- Hazardous Liquid Storage Exclusion Zone
- Wellhead Protection Area
- Drinking Water Supply Management Area

FEMA Flood Hazard Areas

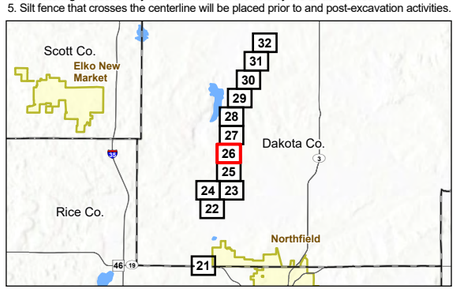
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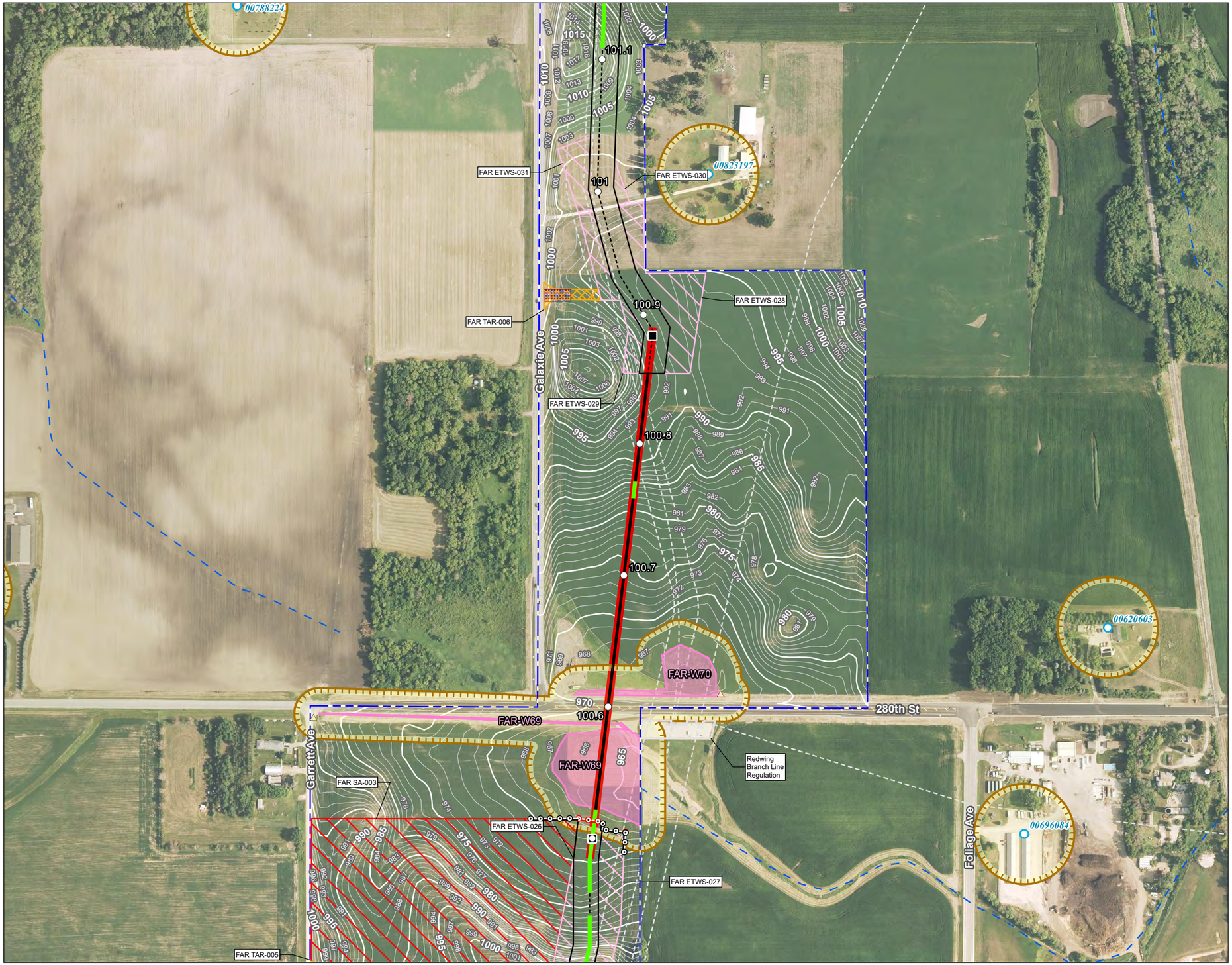


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- HDD Segment
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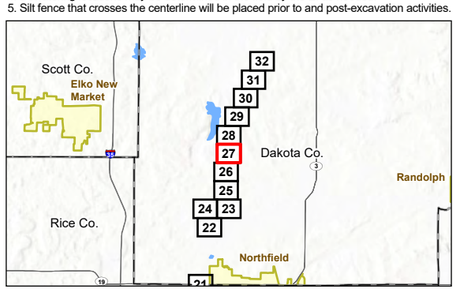
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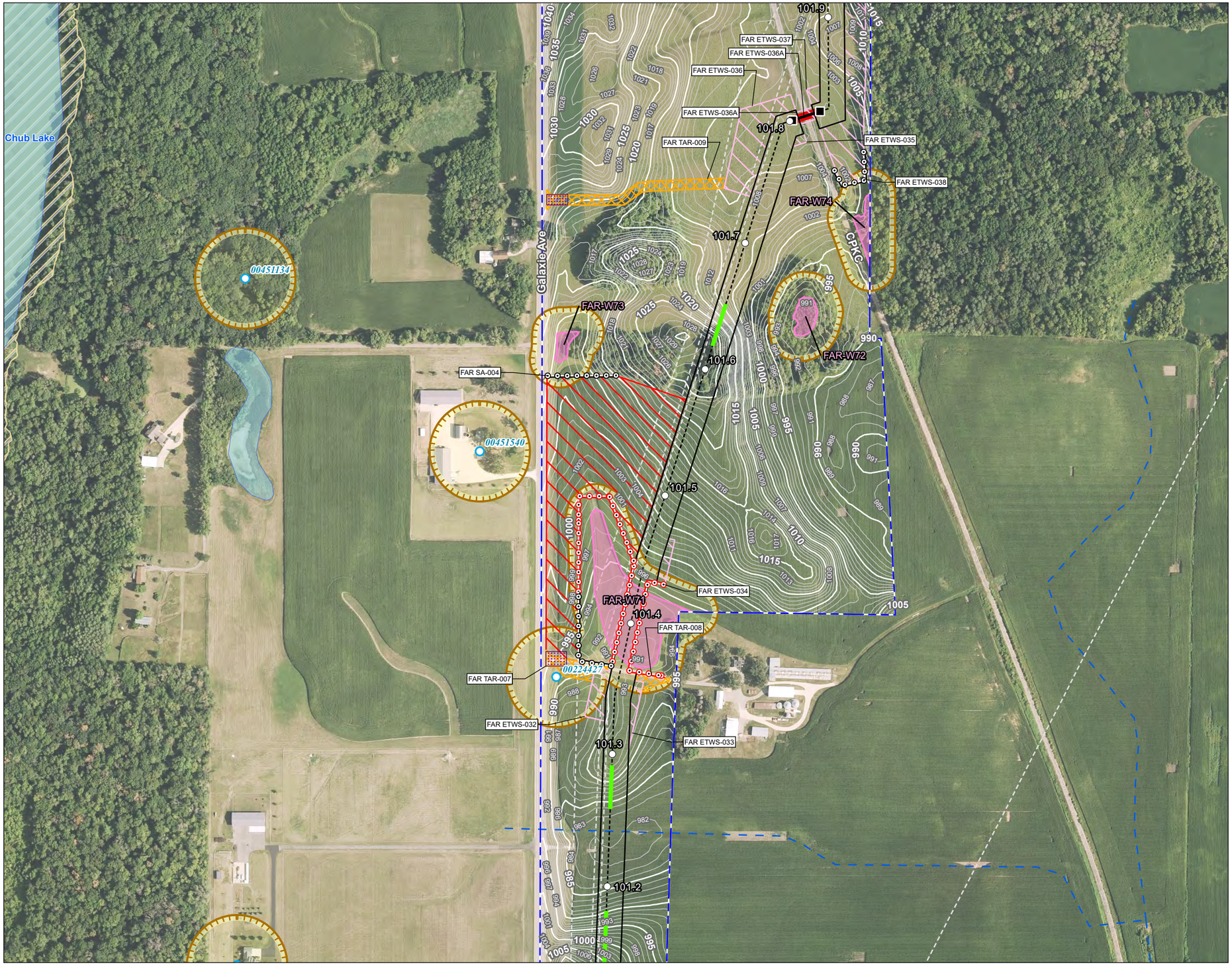


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FEMA Flood Hazard Areas

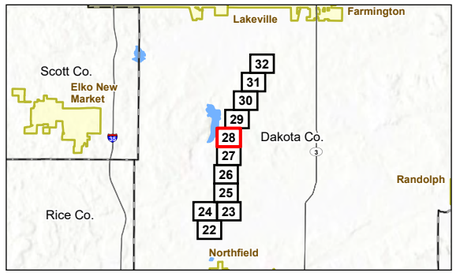
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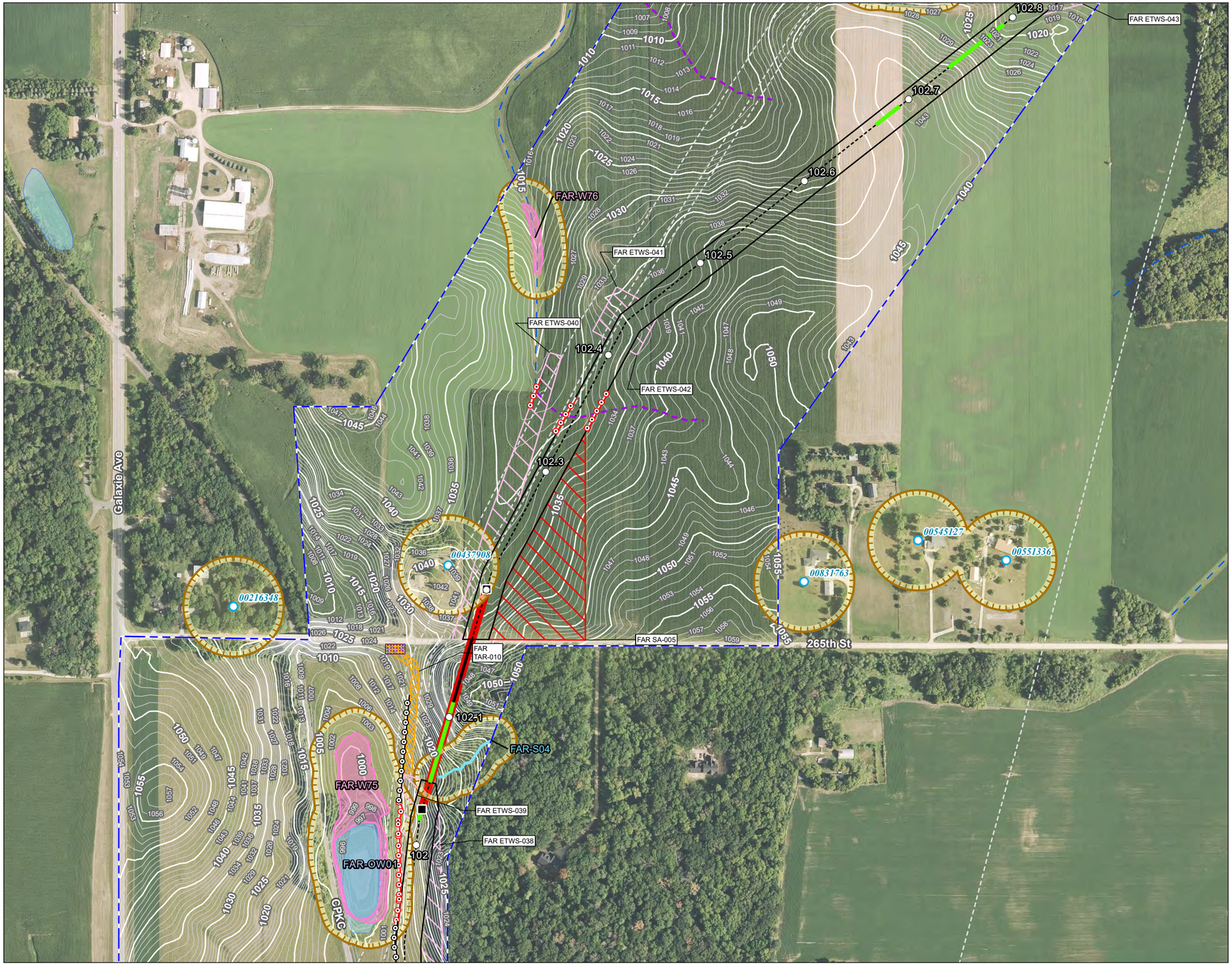


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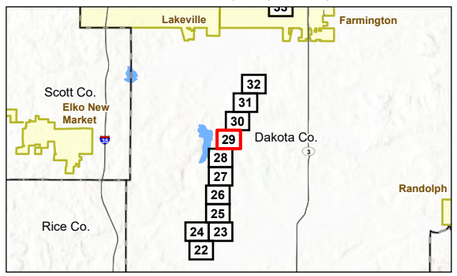
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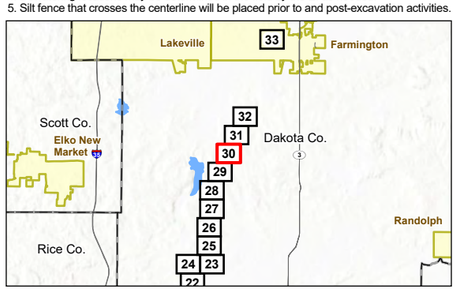
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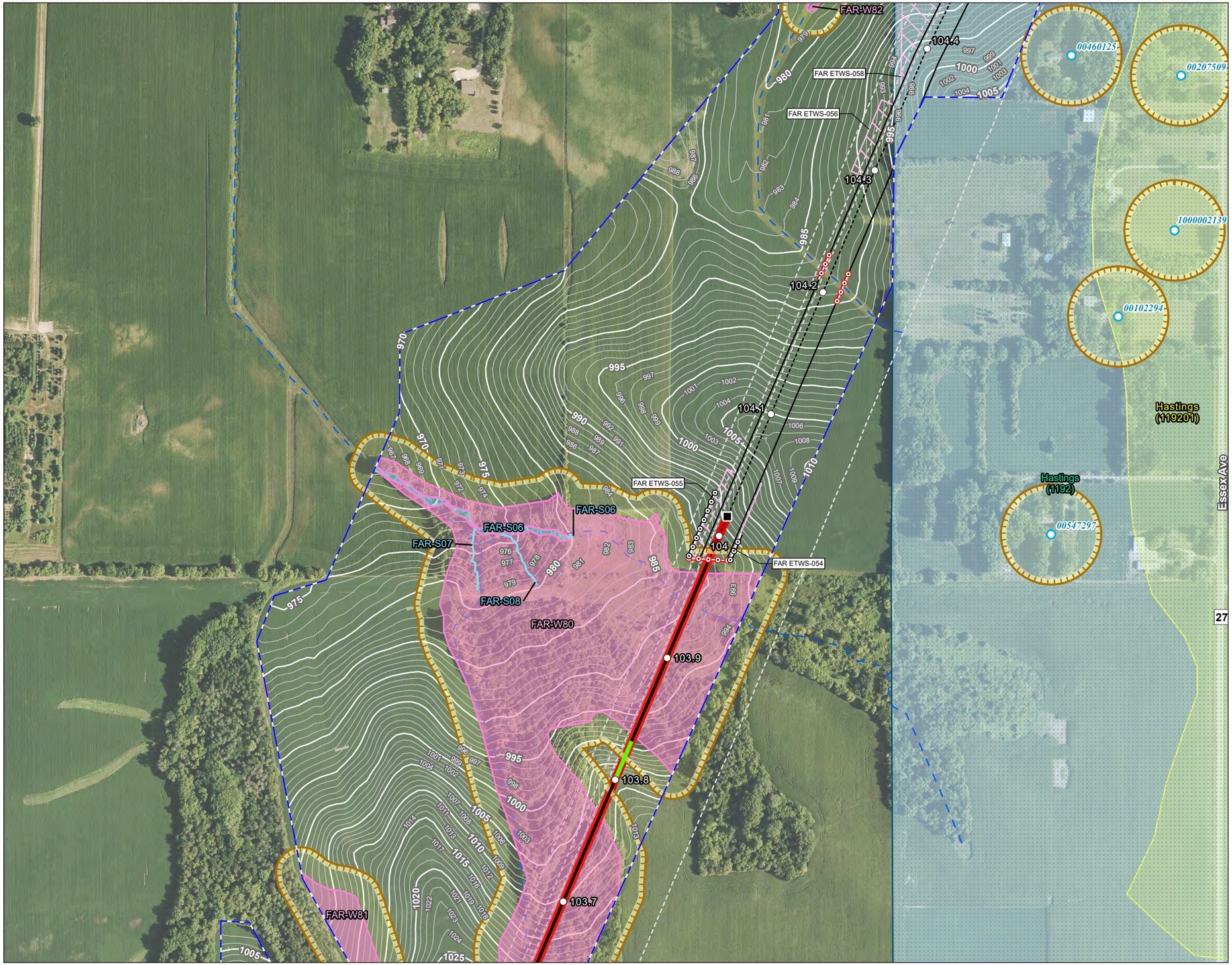


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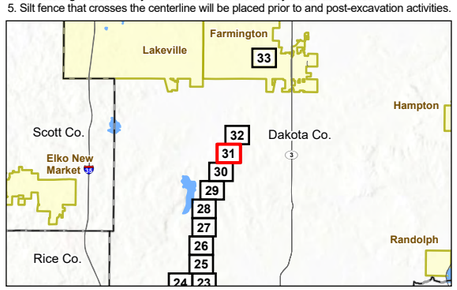
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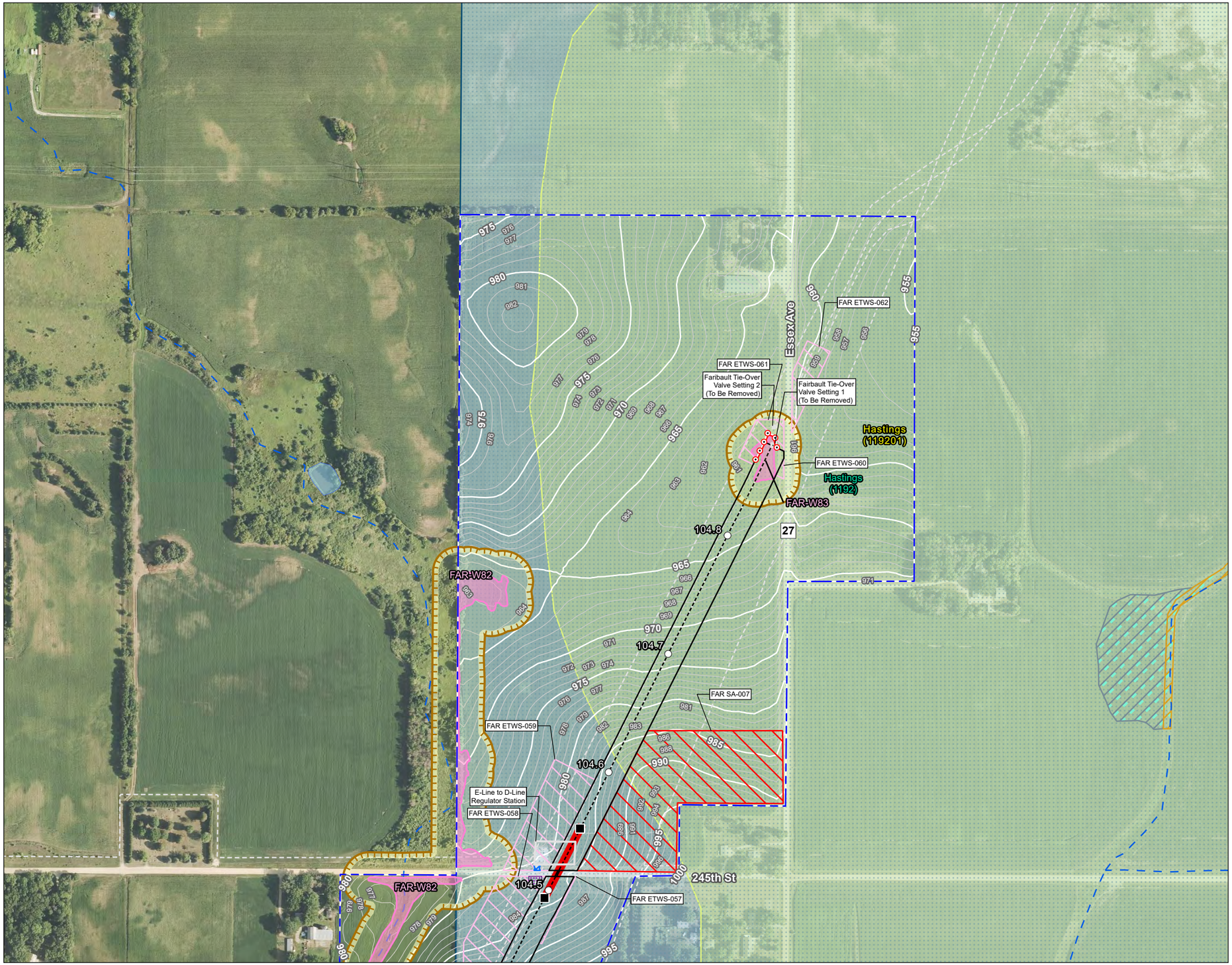


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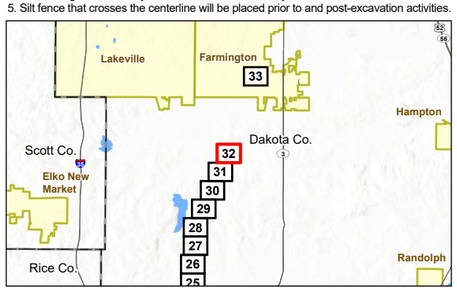
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ATTACHMENT D

NORTHERN'S ENGINEERING STANDARD 7507

Stantec



Northern Natural Gas Company

Erosion and Sediment Control

Technical Standards

Engineering Standard 7507

December 2025

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Abbreviations and Acronyms

BMPs	Best Management Practices
Company	Northern Natural Gas Company
Contractor	Prime Contractor
ECB	Erosion Control Blanket
EI	Environmental Inspector
FERC	Federal Energy Regulatory Commission
HI	Hand Installed
MS	Machine Sliced
NPDES/SDS	National Pollutant Discharge Elimination System
PA	Pre-Assembled
Plan	FERC's Upland Erosion Control, Revegetation, and Maintenance Plan
Procedures	FERC's Wetland and Waterbody Construction and Mitigation Procedures
SD	Super Duty
SDS	Safety Data Sheet
SPCC	Spill Prevention, Containment, and Countermeasure Plan
Spec.	Specifications
SWPPP	Stormwater Pollution Prevention Plan

ENVIRONMENTAL REQUIREMENTS

1 GENERAL

These technical standards identify the minimum controls and practices to be implemented by Contractors working on projects owned and operated by Company. Additionally, the technical standards provide the Company's contractor with material options for erosion prevention and sediment controls to meet requirements of the federal NPDES program, state and local-level pollution control programs, and the FERC Plan and Procedures. The contractor retains liability and responsibility for compliance with the NPDES requirements until all conditions, including final stabilization, have been met and any applicable permit(s) have been closed. Project specific plans may be more restrictive than and supersede this standard.

The Contractor will schedule and conduct construction operations to prevent, control, minimize, or abate pollution of air, land, and water in accordance with all applicable permits, agency consultation, mitigation plans and the FERC Plan and Procedures. In the event of non-compliance with any of the standards, Contractor will immediately provide verbal notification to Company and provide written notification within 24 hours.

1.1 Environmental Items

Company has identified environmental materials to be used as erosion prevention and sediment control and implementation will be governed based upon the terms of the Capital Construction Agreement and/or Work Offer for the project. Contractor is required to provide the material, equipment, installation, maintenance, and removal of each item.

1.1.1 Environmental Items

a. Sediment Control Log: Maintenance of the sediment log includes removal and disposal of trapped sediment.
b. Silt Fence: Maintenance of silt fence includes removal and disposal of trapped sediment.
c. Silt Curtain: Maintenance of the silt curtain includes removal and disposal of trapped sediment.
d. Straw Bales-Certified Weed-Free (per bale): Maintenance of the straw bales includes removal and disposal of trapped sediment. Used straw bales may be broken up and used as mulch onsite, where allowable.
e. Slope Breakers Permanent: Permanent slope breakers are not to be removed upon final stabilization.
f. Filter Berms: Installation of the topsoil filter berm includes immediate seed and mulch. Installation for rock or rock weeper filter berm when converted from temporary to permanent conditions, as applicable, includes modification of the berm dimensions. Temporary filter berms will be removed upon final stabilization.
g. Storm Drain Inlet Protection: Maintenance of the inlet protection devices includes the removal and disposal of trapped sediment or sediment deposited in or plugging drainage systems protected by the devices.
h. Mats: Mats to be installed are to be clean and free of debris.
i. Construction Exit Controls: Rock access pads will be maintained to mitigate track out onto public roads. Place synthetic fabric beneath the rock to aid in recovery during restoration.

j. Filter Bags: Filter bags must be replaced/removed when they have reached their limit of use, are no longer functional, damaged, and/or otherwise require replacement.
k. Erosion Control Blanket (square yards): Installation includes the erosion control blanket, trenching and staking.
l. Mulch-Certified Weed-Free, Slash Mulch (per acre): Includes crimping or anchoring to prevent loss due to wind and water.
m. Seeding: Temporary and permanent seeding includes soil bed preparation, soil amendments and reseeding, as necessary.

1.2 Environmental Training Requirements

Environmental training is provided to increase awareness of the environmental requirements applicable to the project, to prevent incidents of environmental non-compliance and damage, and to meet state-specific requirements. Issues addressed in environmental training include but are not limited to approved project work areas; erosion and sediment control; material storage and disposal; spill prevention, control, countermeasures, and reporting; and environmental requirements contained in project permits and approvals. The Contractor staff will complete the required training in VeriForce. Environmental training is required of project personnel before they can enter the project site or related work areas, per Environmental Procedure 380.201.

Contractor staff must provide proof of completion of all VeriForce training at the start of the project. Upon verification of training, each staff is issued an environmental training sticker and card. All Contractor personnel must display the sticker or card.

The Contractor will provide workers with sufficient skill and experience to perform the Work assigned to them. Upon request by Company, the Contractor will submit evidence of qualification for any person engaged in special work requiring professional training or certification; including, but not limited to, the state-specific requirements for Erosion Prevention and Sediment Control Practices installation and/or Erosion Control Supervisor.

1.2.1 Erosion Prevention and Sediment Control Practices Installer

The Contractor will provide a certified installer (crew supervisor or laborer), as required by the respective state, to install or to direct installations, maintenance, repairs, or removals of erosion prevention or sediment control practices. Documentation of applicable certification from at least one installer will be provided to Company prior to initiation of construction activities.

1.2.2 Erosion Control Supervisor

The Contractor will provide an Erosion Control Supervisor with a valid state-specific Erosion and Stormwater Construction Site Management certification, where applicable, The Erosion Control Supervisor will be authorized to represent the Contractor and meeting contractual requirements for Erosion and Stormwater Management. The certification must be obtained from state agency approved provider, where required.

The Erosion Control Supervisor will be required to be available to respond to the work site within 72 hours of initial disturbance, or as required by the state, and at the site daily when work is taking

place until final stabilization. The following list describes the duties of the Erosion Control Supervisor:

1) Ensures quality control when implementing application plans and permit conditions.

2) Ensures proper installation, functionality, and maintenance, clean-up, and removal of all erosion prevention and non-biodegradable sediment control BMPs and in accordance with manufacturer's recommendations.

3) Implements the erosion and sediment control schedule.

4) Coordinates the work of subcontractors and ensures the full execution of erosion and sediment control measures for each operation and stage of work.

5) Oversees the work of subcontractors and ensures the subcontractors undertake erosion and sediment preventive measures at each stage of the work.

6) Attends construction meetings to discuss the erosion and sediment control schedule.

7) Provides for erosion and sediment control methods for temporary work not shown on the plans.

8) Ensures activities are completed in compliance with all applicable permits.

9) Ensures the full installation of erosion and sediment control devices before suspension of any work.

10) Ensures that proper cleanup occurs from vehicle tracking on paved surfaces and in other locations where sediment migrates and accumulates outside of the approved workspace.

11) Ensures that all non-biodegradable erosion and sediment controls are removed upon final stabilization of the Project.

12) Ensures that installers of erosion and sediment control have proper certifications.

13) The Erosion Control Supervisor is authorized to install, fix, or repair erosion or sediment control practices when a certified installer is unavailable, as applicable.

2 APPROVED WORK AREAS AND SITE ACCESS

Project-related ground disturbance will be limited to the construction right of way, extra workspace areas, pipe storage yards, borrow and disposal areas, access roads, and other areas approved by the Company. Any project-related ground disturbing activities outside these areas will require prior approval. This requirement does not apply to activities needed to comply with the FERC Plan and Procedures, Environmental Procedures 380.201a and 380.201b respectively, (i.e., slope breakers, energy-dissipating devices, dewatering structures, drain tile system repairs). All construction or restoration activities outside of authorized areas are subject to all applicable survey and permit requirements, and landowner easement agreements.

2.1 Approved Work Area

Per the FERC Plan and Procedures, the Company will establish the right of way boundaries and construction limits confining construction operations. Signs and highly visible flagging per colors specified in engineering procedure 7000.100A2 will be installed marking the boundaries of sensitive resource areas, waterbodies, wetlands, or areas with special requirements along the construction work area. Wetland boundaries and buffers must be clearly marked in the field with signs and/or highly visible flagging until construction-related ground disturbing activities are complete. Once established, the Contractor is responsible for maintaining all markings installed by civil survey and/or the environmental inspector throughout construction.

All extra work areas (such as staging areas and additional spoil storage areas) will be sited at least 50 feet away from wetland boundaries, except where the adjacent upland consists of cultivated or rotated cropland or other disturbed land and/or where site-specific approval from the FERC has been obtained.

2.2 Access Roads and Right of Way Access

The Contractor will implement efforts to control unauthorized off-road vehicle use throughout the life of the project. The Contractor will maintain signs, gates, and roads as necessary, per the FERC Plan and Procedures.

A combination of 50-foot-long crushed stone access pads (or as indicated in project documents), matting, and culverts will be installed at ingresses and egresses to access roads and at road crossings, as necessary, as determined by the EI, to minimize the tracking of mud onto roads. If crushed stone access pads are used, place the stone on synthetic fabric to facilitate removal, or follow requirements from state or local authorities. Crushed stone is not to be placed in waterbodies or wetlands. If mud is tracked onto a road, it must be shoveled or swept off the road immediately.

The Contractor will provide clean equipment prior to entering new workspaces to reduce the potential for invasion or spread of undesirable or noxious vegetation. The EI will inspect tracked equipment to confirm the adequacy of cleaning and will not allow equipment to be brought on-site unless the inspection is satisfactory.

If purple loosestrife or other noxious weed is encountered in the approved work area at any time, equipment will be thoroughly cleaned as described above prior to exiting the area of purple loosestrife, even if cleaning must occur in a wetland or within 500 feet of a wetland or waterbody. In such cases, equipment may be cleaned within containment on the right-of-way, as approved by the EI. Soil and vegetative debris resulting from cleaning will be immediately collected and disposed of at a licensed facility, per state regulations and the project noxious weed management plan.

In wetlands that cannot be appropriately stabilized, all construction equipment other than that needed to install the wetland crossing will use access roads located in upland areas. See FERC Plan and Procedures for additional details.

3 MATERIALS HANDLING AND DISPOSAL

3.1 General

Company's materials handling and disposal requirements must be implemented during construction of a project. Company's SPCC Plan, Environmental Procedure 380.201d, includes procedures for disposal of any soil or materials contaminated by a fuel or chemical spill.

Construction debris must be collected as needed and placed in solid waste storage containers to keep the project area tidy.

The Contractor will provide on-site sanitary facilities as needed for personnel, including inspectors and subcontractors. The facilities must be sited in an upland area away from wetlands, waterbodies, stormwater conveyances, curb and gutter, and storm sewers. It must be securely anchored, and it must be within secondary containment.

3.2 Hazardous Materials and Petroleum Products Management

The Contractor will provide the Company a list of petroleum products, hazardous materials and chemicals brought on-site and a copy of the SDS for each. No such material will be brought on-site without prior consent by the Company. The Contractor will retain each SDS on site in accordance with Company's Safety Procedure 110.180. The Contractor will make its SDSs available to the Company.

Petroleum products and potentially hazardous chemicals/materials on-site must be stored in accordance with Environmental Procedures 380.201d and 390.104.

3.3 Hazardous and Liquid Waste Disposal

If hazardous wastes are generated by the Contractor, the Contractor will follow Company's Environmental Procedures 390 series.

3.4 Non-Hazardous Solid Wastes

Construction debris must be collected as needed and placed in solid waste storage containers to keep the project area tidy. Contractor will provide adequate on-site containers with proper labels for secure storage of rubbish and wastes. Contractor will label waste containers, regardless of size. Non-biodegradable sediment controls left onsite after final stabilization are considered construction waste and are the responsibility of the Contractor to remove within 14 days of final stabilization.

3.4.1 Non-Combustible Wastes

Non-woody construction waste (e.g., trash, used filter bags, used silt fence, pallets, metal bindings, welding rods, epoxy coating, abrasive blasting waste, excess rock, excess drilling mud, and drill cuttings) will be removed from the right-of-way by Contractor and be disposed of in existing solid waste landfill/recycling facilities operating under a valid permit. Construction waste must be disposed of by Contractor according to applicable state and local requirements.

If desired, excess rock may be disposed of at an existing commercial facility, such as a gravel pit, provided Contractor obtains written permission from the facility and provides a copy of the permission to Company prior to disposal. If a landowner requests that excess rock be left on their property, the Contractor will notify the Company of the request. The Company, in its sole discretion, will determine whether such a request will be authorized. The Company's decision on the matter will be final. If authorization is granted, the Contractor will be responsible for ensuring rock is stored within the approved work area, but outside of the post-construction permanent right-of-way.

3.4.2 Chipping Procedures for Woody Vegetation

Non-merchantable timber, slash, and stumps may be chipped and used as mulch in upland areas, if approved by the landowner or land-managing agency. Contractor may request permission from Company to use wood chips as mulch, provided Contractor has obtained written permission from the landowner or land-managing agency. Company, in its sole discretion, will determine whether such a request will be authorized. Company's decision on the matter will be final.

If slash, brush, and timber generated during wetland clearing are to be chipped, the material must be removed from the wetland and chipped in an upland area, unless specifically authorized by project authorizations.

4 CLEARING, GRADING, AND TOPSOIL SEGREGATION

4.1.1 Noxious and Invasive Weeds

Contractor will follow all requirements of the state's noxious and invasive weed laws with regards to treatment and movement of noxious and invasive weeds located within the construction limits. Each state within Company's pipeline system issues a state noxious weed list.

The Contractor will provide clean equipment prior to entering new workspaces to reduce the potential for invasion or spread of undesirable or noxious vegetation. The EI will inspect tracked equipment to confirm the adequacy of cleaning and will not allow equipment to be brought on-site unless the inspection is satisfactory.

If purple loosestrife or other noxious weed is encountered in the approved work area at any time, equipment will be thoroughly cleaned as described above prior to exiting the area of purple loosestrife, even if cleaning must occur in a wetland or within 500 feet of a wetland or waterbody. In such cases, equipment may be cleaned within containment on the right-of-way, as approved by the EI. Soil and vegetative debris resulting from cleaning will be immediately collected and disposed of at a licensed facility, per state regulations and the project noxious weed management plan.

Contractor will adhere to all plant pest quarantine orders imposed by each respective state. Common requirements include, but are not limited to:

a. Untreated wood from areas known to have plant pest is prohibited from entering non-infested areas;

b. Movement of materials or equipment out of quarantine areas is prohibited without inspection and/or compliance agreements; and

c. Wood may not be offered as firewood or otherwise to an industry or individual without compliance agreements.

The Contractor will:

a. Dispose of quarantined wood in accordance with existing quarantine requirements;

b. Salvage topsoil in accordance with the FERC Plan and Procedures;

c. Where project phasing and/or exclusion areas and/or buffers have been identified, the Contractor will isolate those areas using temporary fence, and perform clearing and grubbing operations in a manner that will not damage or jeopardize the surrounding plant life and property; and

Contractor will prune branches for the following reasons, and only with DES approval:

a. For pedestrian, vehicle, and infrastructure clearance;

b. To reduce risk of branch failure; and

c. To improve a site line and sign visibility.

4.1.2 Quarantined Wood

Contractor will follow all species-specific quarantine regulation posted by the respective state agency. Contractor will not market quarantined trees to the wood-using industries or individuals without having a compliance agreement from the respective state agency. No wood with bark attached will be made available to the public for use as firewood from the quarantined area. Do not remove any part of the quarantined tree, including roots, outside of a quarantined county without fulfilling the requirements of a compliance agreement from the respective state agency. Contractor may chip quarantined wood through a chipping machine or tub grinder to create wood mulch for use within the construction limits, as allowed by state regulations.

Contractor will dispose of quarantined trees, brush, stumps, roots, and debris by chipping or tub grinding and using the mulch within the construction limits for erosion control, construction of exit pads or landscaping purposes. No mulch may be placed in wetland areas.

Contractor will dispose of stumps, roots, and debris from oak wilt infected oak trees by chipping or tub grinding and using the mulch within the construction limits for erosion control, construction of exit pads or landscaping purposes.

4.2 Grading and Topsoil Segregation

Contractor shall comply with all provisions of the FERC Plan and Procedures.

4.3 ***Excess Vegetation Removal**

Excess vegetation may require mowing or cutting prior to topsoil segregation. Crops and dense grass over 18 inches in height should be segregated and removed from the right of way as construction waste to avoid impeding revegetation efforts and anerobic breakdown within topsoil piles.*

5 SEDIMENT CONTROLS

Sediment control practices are designed to prevent or minimize loss of eroded soil at a site and/or discharges of sediment laden water into surface waters or stormwater conveyances. Sediment control practices may be constructed of materials such as silt fence, fiber logs, staked hay or straw bales, compacted earth (e.g., drivable berms across travel ways), sandbags, or other appropriate materials. The section has been developed based on the FERC Plan and Procedures and the NPDES regulations and additional, more stringent requirements associated with permit conditions or mitigations plans may be applicable based on the state. In this case, the most stringent requirement will apply.

Contractor will install temporary sediment barriers during clearing and grading activities. Temporary sediment barriers will be installed and maintained as directed by the EI at the following locations:

1) Across the entire width of the approved work area at approaches to waterbodies and at the base of slopes adjacent to wetlands and roads;

2) Along the edge of the approved work area where waterbodies and wetlands are bordering the approved work area;

3) Where necessary to contain spoil and sediment within the approved work area (e.g., on steep side slopes or in saturated wetlands);

4) At other locations as directed by the EI.

Sediment barriers located across the active portion of the work area may be removed during the day when work is being conducted but must be replaced each night or at the onset of inclement weather (e.g., rainstorm). Sediment barriers will be inspected daily in areas of active construction and repaired as needed throughout construction.

5.1.1.1 Winter Construction

*When construction will either extend into or be suspended through the winter months, contractor shall submit to Northern a winter construction plan in writing for approval prior to conducting work or demobilizing from the project in winter conditions. The winter construction plan should cover methods of erosion and sediment control to be employed, plan to address maintenance of the controls, snow removal, worker safety, and restoration of subsoil and topsoil to alleviate compaction and settlement. These methods must address the remaining scope of the project and must achieve environmental compliance in frozen conditions.

During frozen conditions, sediment controls and stabilization must be installed during active construction and prior to cessation of construction activities.* Contractor may establish a packed snow berm in areas with sufficient winter snow that will act as a temporary sediment barrier during construction. This temporary sediment barrier will be established and maintained as needed along the edge of the disturbed work areas, access roads, and extra work areas to prevent sediment runoff.

During frozen conditions, if the snow berms are ineffective or if sediment discharge off the right-of-way is observed, Contractor will attempt to install silt fence, staked straw bales and/or other types of sediment barrier in those areas to prevent further offsite sedimentation. Installation of silt fence can be accomplished using a ditch-witch trencher and backfilled with saturated organic soil that will freeze and anchor the silt fence to the wetland surface. Straw bales can be used alone or in conjunction with silt fence, following state-specific standards. These will be anchored to the ground with rebar. Contractor will attempt to retrieve the sediment, as practicable, without disturbing the surface of the approved work areas.

Temporary sediment barriers will remain in place until permanent vegetation has become successfully reestablished as determined by Company. Once permanent vegetation has become successfully reestablished, the barriers will be removed and disposed of as construction waste. During frozen conditions, remove temporary sediment barriers at the completion of construction only if the area will be inaccessible after spring thaw precluding proper retrieval of the barriers, and if so, approved by the EI.

5.2 Installation, Maintenance and Removal of Sediment Control Practices

5.2.1.1 Installation

1) Install sediment controls on all downgradient perimeters of the site and downgradient areas of the site that drain to any surface water, including curb and gutter systems. Contractors must locate sediment control practices **upgradient** of any buffer zones.
2) Contractors must install sediment control practices **before any upgradient land-disturbing activities begin** and must keep the sediment control practices in place and in functional condition until they establish permanent cover.
3) Contractors must provide silt fence or other effective sediment controls at the base of stockpiles on the downgradient perimeter.
4) The Contractor must preserve a **50-foot natural buffer** or, if a buffer is infeasible on the site, provide **redundant (double) perimeter sediment controls** when a surface water is located within 50 feet of the project's earth disturbances and stormwater flows to the surface water. {Natural buffers are not required adjacent to road ditches, judicial ditches, county ditches, stormwater conveyance channels, storm drain inlets, and sediment basins.} Larger buffer zones may be required but will be noted in the SWPPP.
5) When redundant sediment controls are required, the Contractor will install them at least **5 feet apart** unless otherwise noted on the SWPPP or directed by the on-site EI.
6) If downgradient sediment controls are overloaded, based on frequent failure or excessive maintenance requirements, contractors must install additional up-gradient sediment control practices or redundant BMPs to eliminate the overloading and amend the SWPPP to identify these additional practices as required.
7) Measures will be installed, maintained, and repaired per applicable permit conditions.

8) The contractor will recover any sediment lost from the project site, restore property to the pre-existing conditions for loss of sediment off the project, or both at no additional cost to the Company. If sediment is lost in a water of the state, applicable regulatory authorization must be obtained by the Company before removing the sediment.

5.2.1.2 Maintenance

1) All nonfunctional BMPs must be repaired, replaced, or supplemented immediately, but no later than 24 hours, after discovery unless a more stringent time frame is specified in site specific plans. All perimeter control devices, which have become **nonfunctional,** or **sediment has reached 1/2 of the height of the device** must be repaired, replaced or supplemented immediately, but no later than 24 hours, after discovery unless a more stringent time frame is specified in site specific plans.
2) Sediment tracked onto public roadways must be removed immediately.

5.2.1.3 Removal

1) Remove temporary sediment controls (unless biodegradable) after permanent restoration has been achieved. All removed materials become the property of the Contractor.
2) Remove the silt curtain upon completion of instream work. All instream work requirements still apply while removing silt curtains.
3) Remove sediment control logs upon permanent restoration. For compost logs, the outer shell material, if not biodegradable (i.e., jute), must be removed completely and contents of logs may be left in place and spread out over the ground to decay.

5.3 Sediment Control Practices

5.3.1 Vegetated Buffers

Incorporating an existing vegetated buffer along the perimeter of the site and upslope of structural perimeter controls provides an effective and inexpensive sediment control. Maintaining a buffer zone during clearing and grubbing operations may provide sediment controls prior to the installation of structural controls.

5.3.2 Sediment Control Log

Sediment control logs may be used as perimeter control, ditch checks, and as part of dewatering structures. Installation of the sediment control log is provided below by type and Table 5.2.2-1 provides the material specifications for the sediment control logs.

Table 5.2.2-1
Sediment Control Logs Material Specifications

Material	Material Specification	Netting	Diameter (inches)	Material make-up	Dry Weight	Biodegradable
Straw Logs	Refer to State Specification	Encased in photodegradable synthetic or natural netting with a service life from 6 months to 9 months and with openings ½ inch × ½ inch	8 to 9	Consisting of at least 80% of the fiber material at least 3 in long	2 to 4 lbs. per cu. ft.	No

Wood Fiber Logs	Refer to State Specification	Encased in a photodegradable synthetic or natural netting with a service life from 6 to 9 months and with openings ½ inch × ½ inch	6 to 8	Consisting of at least 80% of the fiber material at least 6 in long	1.4 lbs per cu. ft. to 5.7 lbs per cu. ft.	No
Wood Chip Logs	Refer to State Specification	Encased in a photodegradable synthetic or natural fiber casing with 1/8 to 3/8 openings with a service life from 12 months to 24 months.	8 to 10	NA	NA	Yes
Compost Logs	Refer to State Specification	Encased in photodegradable synthetic woven or natural fiber casing with 1/8 to 3/8 in. openings, with a target service life from 12 to 24 months.	7 to 9	30-40% compost/p60-70% - wood chip	NA	Yes
Rock Logs	Refer to State Specification	Encased in a geotextile material with a minimum grab tensile strength of 130 lb. ASTM D6818 and a minimum Mullen Burst Strength of 175 psi	4 to 6	NA	NA	No

5.3.2.1 Installation of Straw and Wood Fiber Logs

Place logs on smooth prepped soils and prepare a shallow, less than 1/4 of the total height of the log, trench for the sediment control log to be placed. Backfill and compact the upgrade side of the sediment control log with soil. Stake logs through the back half of the log at a 45-degree angle with the top of the stake pointed upstream. Stakes will be spaced every 2 feet. If using more than one sediment control log for length, overlap the ends 6 inches and stake both ends. See typical drawing Figure S-5B in Appendix B.

5.3.2.2 Wood Fiber, Wood Chip, Compost, and Rock Logs

Place logs on smooth, prepped soils or paved surfaces and ensure no gaps are between logs and soil or paved surface. Install logs along contours with ends turned up slope in a J-hook manner. Compost and wood chip logs are considered biodegradable if the netting is biodegradable. Contractor will need approval from the Company prior to onsite spreading of wood chips to ensure compliance with all applicable permits. See typical drawing Figure S-5B in Appendix B.

5.3.3 Ditch Checks

Ditch checks are practices placed in ditches and other stormwater conveyances designed to slow the flow of water.

If used as a ditch check without erosion control blanket: Follow installation above for sediment control log type Wood Fiber, Wood Chip, Compost, or Rock and place perpendicular to flow and in a crescent shape with ends facing upstream. Use logs with a center section of the ditch check one log diameter lower than the ends. Space stakes every 1 foot. Provide 2 stakes in a crisscross pattern at each location with the sediment control log.

If used as a ditch check with erosion control blankets: Install a wood fiber ECB as show in plan, at least one role width, and perpendicular to the ditch flow. Burry the leading edge in a trench 4 inches deep and 4 inches wide. Backfill and compact the trench with soil. Staple the ECB at spacing no greater than 1 foot on center. Place the Wood Fiber log without the trench, on top of the ECB. If using more than one sediment control log for length, overlap the ends 6 inches and stake both ends. See typical drawing Figure S-5B in Appendix B.

5.3.3.1 Anchoring

Provide wood stakes for straw and wood fiber logs with the following dimensions: 1 inch × 2 inches and 22 inches to 24 inches long with a pointed end.

5.3.3.2 Removal

Upon final stabilization of the right of way, the contractor will remove all sediment control logs. The exception are compost logs with biodegradable netting. If the netting is not biodegradable, it may be removed, and the compost left onsite to decompose.

5.3.4 Silt Fence

Silt fence is the most commonly used perimeter control. It can also be used as slope breakers and/or ditch checks in low flow areas. Four types of silt fence are presented below.

1) **Machine Sliced (MS)/ Hand Installed (HI)** high flow **silt fence**: consists of a woven geotextile fabric installed by machine or hand supported by wood posts and geotextile is attached using three staples. A typical installation Figure S-1 is provided in Appendix B.

2) **Machine Sliced (MS)/ Hand Installed (HI) wire backed silt fence**: consists of a woven geotextile fabric mesh fence fabric will be standard woven wire fence fabric installed by machine/hand and supported by steel backed by Wire posts and geotextile is attached using three zip ties. A typical installation Figure S-2 is provided in Appendix B.

3) **Super Duty (SD) silt fence:** consists of concrete jersey barriers with fabric wrapped around the front face of the barrier. The Contractor may provide woven or non-woven geotextile fabric or poly/poly-reinforced sheeting.

Silt Fence Material Specifications

Table 5.2.4-1 provides the material specifications for the silt fence.

Table 5.2.4-1
Silt Fence Material Specifications

Silt Fence Type [a]	Width (inches)	Grab Tensile (machine direction), lb.	Apparent Opening Size	Puncture Strength (ASTM D 4833)	Maximum Permittivity (ASTM D 4491)	Flow Rates (gpm/sq. ft)
Machine Sliced /Hand Installed (MS/HI), high flow geotextile [b]	36	130	No. 30 sieve	NA	1.0 s−1	100
Wire backed silt fence	36	NA	No. 30 sieve	NA	NA	100
Super Duty (SD), woven or non-woven geotextile [c]	36	100	No. 30 sieve	NA	NA	NA

[a] UV Stability 500h must be 70% and meet ASTM D 4355.
[b] Provide MS, HI woven geotextile with monofilament in both directions. Do not make substitutions.
[c] The Contractor may use poly/poly-reinforced sheeting with a thickness of at least 6 mil or an equivalent.

A. Fasteners

Provide fasteners with a tensile strength of at least 50 lbs. Use a minimum of three staples to fasten geotextile to wooden posts on MS/HI applications. Use wire ties or plastic ties to fasten geotextile to anchor points on SD applications.

B. Fabric Requirements:

1) Provide geotextiles from Table 5.2.4-1

2) Provide fabric meeting the following requirements and characteristics:

   a. Uniform in texture

   b. Uniform in appearance

   c. Contains no defects, flaws, or tears affecting the physical properties

   d. Contains UV inhibitors and stabilizers providing a minimum service life of at least 2 years during outdoor exposure, and meets the requirements specified in the table 5.2.4-1

5.3.4.1 Supports

Company only allows hardwood posts which is a variance from Department of Transportation specifications, see Table 5.2.4-2 below. However, steel t-posts may be required in manufacturer's specifications for wire backed silt fence. In this case manufacturer's specifications will be followed.

Table 5.2.4-2 Silt Fence Post Requirements	
Characteristic	**Requirement**
Type	Hardwood
Weight	≥ 2 in × 2 in
Length	≥ 4.0 ft
Embedment	≥ 18 in
Post Spacing	<5.0 ft

5.3.4.2 Installation of Silt Fence

A trench is excavated, or machine sliced to a depth between 6 inches (HI) or 8 to 12 inches (MS/PA). The stakes are installed on the downslope side from the site and are embedded to a minimum depth of 2 feet. The excavated material is backfilled over the geotextile fabric and compacted. Spacing of stakes is typically 5-foot minimum and 6-foot maximum.

5.3.4.3 Installation of Portable Precast Concrete Jersey Barriers (Super Duty)

Place the bottom edge of the geotextile fabric 4 to 6 inches under the face of the median barrier. Place barriers end to end to minimize any gap in the barrier. The geotextile fabric should be attached to the face of the barrier with wire or plastic zip ties and secured to each cable ring on the barrier.

5.3.5 Flotation Silt Curtain

Flotation silt curtain may be used as a primary sediment control, only while in-water work is occurring. Once work within the water feature is completed, perimeter control should be installed on the adjacent upland to keep material out of the water. Flotation silt curtain is not considered a sediment control once in-water work is completed. It can be used in moving or still water and is used to contain suspended sediment and floating debris in open water and must meet the following requirements and characteristics:

a. Made of fabric fastened to a flotation carrier

b. Weighted along the bottom edge

c. Depth as shown on the plans and typical Figure S-3 (Appendix B) and referring to the dimension of the curtain fabric extending below the flotation portion of the curtain

d. Material must be disinfected prior to coming onsite and must be disinfected and dried prior to removing the material offsite

e. If the surface water has invasive species and the material is moved offsite for disinfection a state transport permit may be required

Material specifications for flotation silt curtain is provided in Table 5.2.5-1 below.

Table 5.2.5-1
Flotation Silt Curtain Requirements

Characteristic	Type	
	Light Duty	Heavy Duty
Curtain fabric materials type	Impermeable, vinyl-nylon laminate	Impermeable, vinyl-coated nylon
Weight (oz per sq. yd)	18	0.22
Grab tensile strength, lbs	300	500
Depth of curtain [a]	2 ft – 10 ft	2ft – 10 ft
Flotation (in)	6 diameter marine quality expanded polystyrene	8 diameter marine quality expanded polystyrene
Net buoyancy, lb. per ft	13	20
Top load carrying components	Fabric only	Fabric plus 5/16 in [8 mm] galvanized steel cable at least 9,800 lb. break strength
Ballast	≥0.7 lb per ft [1.0 kg per m] enclosed ¼ in [6 mm] galvanized chain	≥1.1 lb per ft [1.6 kg per m] enclosed 5/16 in [8 mm] galvanized chain
Connections between Sections	Laced grommets	Aluminum collar reinforced quick disconnects

[a] Minimum average roll value meeting the requirements of ASTM D 4632.

5.3.6 Filter Berms

Filter berms are an economical option for sediment control; typically constructed from materials readily available on site. Filter berms are used as perimeter control, slope breakers and ditch checks.

5.3.6.1 Filter Berms Material Specification

Table 5.2.6-1 below provides the material and construction specifications for each of the four types presented which include compost, slash mulch, topsoil, and rock. For high flow or high velocity areas, rock is the strongest of the options.

Table 5.2.6-1
Filter Berm Specifications

Type	Material	Shape and Base	Height	Side Slopes
Compost	Refer to State Specification	Trapezoidal shape with 5 ft. base width	Min. height 2 ft. in loose volume, and	2:1 (V:H) side slopes
Slash Mulch	Refer to State Specification	Trapezoidal shape with 5 ft. base width	2:1 (V:H) side slopes	2:1 (V:H) side slopes
Topsoil	Refer to State Specification	Trapezoid shape with 7 ft. base width	Min. height 2 ft.	2:1 (V:H) side slopes
Type 4	Refer to State Specification	Trapezoid shape with 5 ft. base width	Max. Height 2.0 ft., and	2:1 (V:H) side slopes

5.3.6.2 Installation of Filter Berms

For use as perimeter control, or a slope breaker, filter berms should be installed along the contour of the slope and perpendicular to sheet flow. “J-hooks” should be included at the beginning and end of the berm. Refer to typical Figure ERO-13, Appendix B.

As a ditch check, in very low flow areas, slash mulch may be used, if allowed by the applicable regulatory agency. Neither compost nor topsoil should be used as a ditch check.

5.3.7 Temporary Down Drains

Temporary down drains may be used to convey concentrated runoff down the face of a slope to reduce the potential for erosion on the slope.

5.3.7.1 Installation of a Temporary Down Drain

Temporary down drains are effective at isolating overland flow on disturbed slopes. Provide a minimum slope on pipe of 3%.

5.3.7.2 Temporary Down Drain Material Specification

Table 5.2.7-1 below provides the suggested pipe diameter based on the drainage area. The maximum allowable drainage area is 5 acres per slope drain.

Table 5.2.7-1
Temporary Down Drains
Slope Drain Sizing

Drainage Area, acres	Pipe Diameter, inches
0-0.5	12
>0.5-1.5	18
>1.5-2.5	21
>2.5-3.5	24

At the top of the slope, prepare a channel to direct flow into the mouth of the pipe (e.g., earthen dike, sandbags, curb). Provide a dike made of compacted Class V, dirt, or sandbags to channel the flow to the temporary slope drain. The top of the dike should be 1 foot higher than the top of the inlet pipe. The pipe should be anchored along the slope with the spacing no greater than 8 feet apart. A watertight connection should be used to attach the flared end section to the inlet end of drainpipe. Extend the pipe beyond the toe of slope and terminate in a 4-foot level section where practicable. Install a dewatering structure at the base to collect the water leaving the pipe. Refer to typical Figure S-7, Appendix B.

5.3.8 Storm Drain Inlet Protection

Inlet protection devices are used as a preventative measure from allowing sediment-laden water from entering a storm drain. The inlet protection device must meet the following criteria:

1) All inlet devices must have an emergency overflow or bypass feature equivalent in size to the grate opening size,
2) Devices may include using rock logs (with local governmental approval); or
3) Filtering devices housed inside the catch basin (drop-in prefabricated units).

5.3.8.1 Installation of a Storm Drain Inlet Protection

Inlet protection must be installed prior to disturbing soils that will drain directly to the inlet. The protection device should fit the inlet properly with no gaps. Refer to typical Figure ERO-16, Appendix B.

5.3.8.2 Maintenance of Storm Drain Inlet Protection

1) Inspect and clean out devices regularly.
2) Inlet protection may be removed for a particular inlet if a specific safety concern (e.g., freeze or flood event) has been identified. They may not be pulled during winter construction unless approved by the appropriate stormwater regulatory agency.

5.3.9 Triangular Silt Dikes

Triangular Silt Dikes (TSD) are an alternative sediment control measure for use in site-specific conditions. They consist of urethane foam and geotextile fabric and are typically designed with protective aprons on one or both sides of the barrier. They are typically used in areas where the staking of materials into surfaces (e.g., pavement) is not possible. They are reusable, and easily relocated and installed. **Per manufacturers specifications, these are not a drivable barrier.** These must be used and installed per manufacturer's specifications. The TSD typically comes in three sizes and one option with steel mesh as indicated in Table 5.2.9-1 below.

Table 5.2.9-1
Triangular Silt Dike Use and Specifications

Size	Use	Design
10-inch foam	Ditch check dams Diversion Dikes Drop Inlet Protection Temporary Ditch Liner Stream & Pond Protection	Designed to be used in multiple configurations. Protective aprons on both sides of the barrier with one sewn seam (on the front upstream side).
8-inch foam	Curb Protection Continuous Barrier Diversion Dikes Drop Inlet Protection Stream & Pond Protection Installations on Concrete and Asphalt	Typically designed for smaller development areas where vehicle traffic is greater. Protective aprons on both sides and has the front and back apron sewn into the barrier. With both aprons sewn, it allows this product to be easily installed on concrete and asphalt.
5-inch foam	Along Curbs in Developments Diversion Dikes Inlet Protection Continuous Barrier Small Surface Drainage Areas Roadway Shoulder Protection Installations on Concrete and Asphalt	Typically used in areas with lower runoff. designed It has a protective apron on the front or upstream side of the barrier and no protective apron on the backside or down- stream side. Backside should be installed along curbs or on hard surfaces where overtopping the barrier will not cause erosion on the backside.
Reinforced Steel	Ditch check dams Diversion Dikes Drop Inlet Protection Temporary Ditch Liner Stream & Pond Protection	Can be used where drainage are is limited to 0.25 acre per 100 linear feet of dike. Filter dike is a self-contained silt fence consisting of filter fabric wrapped around welded wire fabric and shaped into a triangular cross section.

5.3.9.1 Installation of Triangular Silt Dikes

Installation method will vary based on the size of the silt dike, the proposed use, and the manufacturer of the materials. The Contractor shall use and install this product in compliance with the manufacturer's specifications. Refer to typical Figure S-5A, Appendix B.

5.3.10 Construction Exit Controls

All construction exits onto paved surfaces must be stabilized with appropriate controls to minimize vehicle tracking of sediment from the project onto paved surfaces. The Contractor will:

1) Maintain safe and accessible conditions at all road crossings and access points during construction.
2) Minimize the use of tracked equipment on public roadways. Remove any soil or gravel spilled or tracked onto roadways immediately to maintain safe road conditions. Repair any damages to roadway surfaces, shoulders, and bar ditches.

5.3.10.1 Materials for Construction Exit Controls

There are a variety of acceptable materials for use in construction exit controls. The appropriate material will be based on the project site conditions, soil type, vehicle size, amount of vehicle traffic, time of year, and duration of use. The vehicle tracking pad should be at least 50-foot-long but longer pads may be required to adequately clean tires. All materials must be removed upon achieving final stabilization of the project.

Examples of acceptable materials for construction exit controls include the following:

- Crushed rock
- Slash mulch
- Temporary paving
- Timber mats
- Floating reusable mats
- Rumble pad
- Wheel wash-off

5.3.10.2 Installation of Construction Exit Controls

1) If crushed stone access pads are used place the stone on synthetic fabric to facilitate removal.
2) The size and depth of the aggregate will be dependent on the project site conditions. In general, aggregate used is 1.5 to 3 inches in size and placed in a layer approximately 6 inches thick. However, coarser aggregate materials (2 to 6 inches in size) may be more effective.
3) A sediment control measure may be required at the entrance to the construction exit, in addition to the stabilization measure. Optional sediment controls may include a small rock berm, compost log, or other sediment control designed as a drivable control and approved by the Company on a project specific basis. Triangular silt dikes are not a drivable sediment control.
4) Refer to Typical Figure ERO-12 in Appendix B.

6 EROSION CONTROLS

Erosion control practices are designed to reduce the erosion potential of the soil as a result of construction activities. Erosion controls are key to minimizing the amount of sediment produced from a site. Erosion controls may consist of both temporary and permanent measures. Temporary measures are required throughout construction and are subject to specific time frames required by permits or construction plans. A good erosion control installation begins with appropriate site preparation to provide good contact with the soil and the erosion control measures.

Temporary cover is the most efficient means of erosion control and is typically accomplished with the application of a temporary seed mix and disk-anchored mulch. This section has been developed based on the FERC Plan and Procedures and the state NPDES regulations. Additional, more stringent requirements associated with permit conditions or mitigations plans may be applicable. In this case, the most stringent requirement will apply.

Prior to the installation of temporary or permanent erosion control measures, the Contractor will complete site preparation by grading the area to remove clods of soil greater than 3 inches diameter and any ruts, erosion rills, or washouts that are deeper than 3 inches.

6.1 Installation and Maintenance of Erosion Control Practices

6.1.1.1 Installation

1) Temporary erosion controls must be properly maintained throughout construction (on a daily basis) and reinstalled as necessary (such as after backfilling of the trench) until replaced by permanent erosion controls or restoration is complete.
2) Project plans and permits may require that disturbance on steep slopes must be minimized, when steep slopes must be disturbed, contractors must use techniques such as phasing and stabilization practices designed for steep slopes (e.g., slope draining and terracing). **Refer to SWPPP.**
3) Project plans and permits may require that all exposed soil areas, including stockpiles must be stabilized. Stabilization must be **initiated immediately** to limit soil erosion when construction activity has **permanently or temporarily ceased on any portion of the site** and **will not resume for a period exceeding 14 calendar days. Timelines may vary from state to state, refer to SWPPP.**
4) Stabilization must be completed **no later than 14 calendar days** after the construction activity has ceased. Stabilization is not required on constructed base components of roads, parking lots and similar surfaces. Stabilization is not required on temporary stockpiles without significant silt, clay, or organic components (e.g., clean aggregate stockpiles, demolition concrete stockpiles, sand stockpiles) but contractors must provide sediment controls at the base of the stockpile. **Timelines may vary from state to state, refer to SWPPP.**
5) Contractors must stabilize the **normal wetted perimeter of the last 200 linear feet** of temporary or permanent drainage ditches or swales that drain water from the site **within 24 hours** after connecting to a surface water or property edge. Contractors must complete stabilization of remaining portions of temporary or permanent ditches or swales within **14**

calendar days after connecting to a surface water or property edge and construction in that portion of the ditch temporarily or permanently ceases. **Timelines may vary from state to state, refer to SWPPP.**

6) Contractors must **not** use mulch, hydromulch, tackifier, polyacrylamide or similar erosion prevention practices within any portion of the normal wetted perimeter of a temporary or **permanent drainage ditch or swale section with a continuous slope of greater than 2 percent**. **Requirements may vary from state to state, refer to SWPPP.**
7) The Contractor must not disturb more land (i.e., phasing) than can be effectively inspected and maintained in accordance with the NPDES permit or other applicable state or federal permits.
8) Install erosion control fabric or a functional equivalent on waterbody banks at the time of final bank recontouring. Do not use synthetic monofilament mesh/netted erosion control materials in areas designated as sensitive wildlife habitat unless the product is specifically designed to minimize harm to wildlife. Anchor erosion control fabric with staples or other appropriate devices. **Requirements may vary from state to state, refer to SWPPP.**
9) Contractors must provide silt fence or other effective sediment controls at the base of stockpiles on the downgradient perimeter.

6.1.1.2 Maintenance

1) All nonfunctional BMPs must be repaired, replaced, or supplemented immediately, but no later than **24 hours of discovery unless another time frame is specified** in the SWPPP. **Requirements may vary from state to state, refer to SWPPP.**
2) Sediment tracked onto public roadways must be removed immediately. **Requirements may vary from state to state, refer to SWPPP.**

6.2 Erosion Control Practices

6.2.1 Horizontal Slope Grading

Horizontal slope grading or cat tracking reduces erosion potential by creating horizontal groves on exposed slopes. This is achieved by driving tracked equipment vertically up and down the slope, resulting in the tracks being oriented horizontally. This provides support for mulch and seed to stay in place during rain events.

6.2.1.1 Implementation of Horizontal Slope Grading

On all slopes 1:3 and greater with a length of 50 feet or more, tracking may be done at the end of each day the slope is worked. This is not as efficient on clay soils. Refer to typical Figure E-1, Appendix B.

6.2.2 Temporary Slope Breakers

Temporary slope breakers may be used to reduce runoff velocity and divert water off the construction right of way.

6.2.2.1 Temporary Slope Breakers Material Specifications

Temporary slope breakers may be constructed using soil, silt fence, staked hay or straw bales or sandbags.

6.2.2.2 Installation of Temporary Slope Breakers

Temporary slope breakers may be installed, as necessary, on all disturbed areas to avoid excessive erosion by slowing overland flow and diverting it to well-vegetated areas.

1) Temporary slope breakers must be installed on slopes greater than 5 percent where the base of the slope is less than 50 feet from waterbodies, wetlands, and road crossings. The following space is a guidance, however, closer spacing will be used if necessary.

Slope %	Spacing (feet)
5 – 15	300
>15 – 30	200
>30	100

2) Outfalls will be directed to a stable, well vegetated area or a constructed energy dissipation device at the end of the slope breaker and off the construction right of way.

3) Temporary slope breaker outfalls will be positioned to prevent sediment discharge into wetlands, waterbodies, or other sensitive environmental resource areas.

6.2.3 Mulch

Mulch is used as both a temporary and permanent erosion control measure. Temporary mulch follows the same requirements as permanent mulch, although the application timing is different. Temporary mulch is typically used to stabilize spoil piles, construction areas where construction activities have ceased for 14 days or more, or within 7 days if within a mile of an impaired or special water. Mulch shall be applied as soon as construction ceases with no plan to resume construction, but no later than the seventh or fourteenth day as required under the FERC Plan, or the project permits.

Mulch may consist of weed-free straw or hay, slash mulch, or prairie hay.

6.2.3.1 Mulch Material Specifications

Table 6.2.3-1 below identifies four types of mulch, acceptable for use on Company projects.

Table 6.2.3-1
Mulch Material Specifications

Type	Material	Conditions	Application Rate
Certified Noxious weed-free Straw	Clean agricultural grain straw (wheat, oats, rye, barley) or clean straw harvested from native grass production fields.	1.Certified as noxious-weed free with inspection tag. 2.Free of cattail, reed canary grass, birds-foot trefoil, and crown vetch. 3. Bales are in an air-dried condition at the time of delivery.	2 Tons per acre, unless otherwise noted in construction plans.

Table 6.2.3-1
Mulch Material Specifications

Type	Material	Conditions	Application Rate
Certified Noxious weed-free Straw- with Overspray	Clean agricultural grain straw (wheat, oats, rye, barley) or clean straw harvested from native grass production fields. Overspray with hydraulic fiber matrix	1.Certified as noxious-weed free with inspection tag. 2.Free of cattail, reed canary grass, birds-foot trefoil, and crown vetch. 3. Bales are in an air-dried condition at the time of delivery. 4. Hydraulic fiber matrix will be used to overspray straw in lieu of disc anchoring.	1.5 Tons per acre with overspray of hydraulic fiber matrix at 750 lbs per acre.
Slash Mulch	Raw wood slash from hard or soft timber harvested during clearing and grubbing operations on the project.	1.Raw wood slash from hard or soft timber harvested during clearing and grubbing operations on the project or hauled in; 2.Maximum length of individual pieces will not exceed 20 in. 3.Maximum width of individual pieces will not exceed 2 in. 4. Must come from an area outside any quarantine area.	Project specific
Prairie hay	Prairie hay	1.Has not been thrashed to remove seeds so it consists of directly bailed material. 2.Has not been thrashed to remove seeds so it consists of directly bailed material. 3.Free of noxious weeds as defined by MNDA. 4.Free of cattail, reed canary grass, birds-foot trefoil, and crown vetch.	2 Tons per Acre

6.2.3.2 Application Requirements

1) Apply mulch on all slopes (except in cultivated cropland) concurrent with or immediately after seeding, where necessary to stabilize the soil surface and to reduce wind and water erosion. Spread mulch uniformly over the area to cover at least 90 percent of the ground surface at a rate of 2 tons/acre of straw or its equivalent, unless the local soil conservation authority, landowner, or land managing agency approves otherwise in writing.
2) Mulch all disturbed upland areas (except cultivated cropland) before seeding if:

    a. final grading and installation of permanent erosion control measures will not be completed in an area within 20 days after the trench in that area is backfilled (10 days in residential areas), as required in section V.A.1 of the FERC Plan; or
    b. construction or restoration activity is interrupted for extended periods, such as when seeding cannot be completed due to seeding period restrictions.

3) If mulching before seeding, increase mulch application on all slopes within 100 feet of waterbodies and wetlands to a rate of 3 tons/acre of straw or equivalent.

4) If wood chips are used as mulch, do not use more than 1 ton/acre, and add the equivalent of 11 lbs/acre available nitrogen (at least 50 percent of which is slow release).

6.2.3.3 Installation of Mulch Materials

1) Apply mulch material at a rate which provides approximately 90 percent uniform distribution over all exposed soils. Mulch shall be reapplied any time the combined coverage of non-nuisance vegetation and mulch falls below 70 percent.
2) Even application will be completed, where too little or too much has been applied, re-mulch area or remove the excess coverage.
3) Do not operate mulch-blowing equipment on slopes steeper than 1:2.5 (V:H) on slopes where rutting will occur or where wind velocities are greater than 15 miles per hour.

6.2.3.3.1 Straw Mulch/Prairie Hay

1) Disk anchor immediately after placement unless otherwise approved.
2) Reduce application rate and overspray with tackifier in lieu of disk anchoring.

6.2.3.4 Winter Application

1) Place mulch on bare frozen ground.
2) At temperatures above 20 degrees F., apply mulch at a reduced rated of 1.5 tons per acre and overspray with a natural tackifier or hydraulic fiber matrix in lieu of disc anchoring.
3) At temperatures below 20 degrees F., delay mulching if possible until ground is snow covered, perform mulching over the snow and crimp in with tracked equipment.

6.2.4 Erosion Control Blankets

Erosion control blankets are used to control erosion, aid the establishment of vegetation, reinforce vegetation, and temporarily reinforce slopes, ditch bottoms, and shorelines. Blanket materials must provide netting opening dimensions large enough to germinate plants, reduce animal entanglement, and keep fill material intact.

Erosion control blankets are typically used wherever mulch would be ineffective, including but not limited to; slopes steeper than 1:3, areas where the mulch would blow away and areas of concentrated water flows (e.g., ditch bottoms or banks). All slopes requiring revegetation with a slope of greater than 15% must be stabilized with either an erosion control blanket or hydraulically applied bonded fiber matrix product per manufacturers specifications. The preferred method is to utilize appropriate hydraulically applied erosion control products, as detailed in Section 6.2.5.

Erosion control blankets are comprised of a fill material and netting or stitching and have a wide range of target service life.

6.2.4.1 Application of Erosion Control Blankets

a. **Type 1** – Flat areas, very low flow ditch bottoms.
b. **Type 2** – Moderate slopes, ditch bottoms less than 3% grade.
c. **Type 3** – Steep slopes; higher flowing ditches up to 4% grade.
d. **Type 4** – Steeper slopes and higher flowing ditch bottoms.

6.2.4.2 Erosion Control Blanket Material Specification

Table 6.2.4-1 identifies four categories of erosion control blankets authorized for Company projects.

Table 6.2.4-1
Erosion Control Blanket Material Specifications

		Type 1		Type 2		Type 3		Type 4	
		Wood Cellulose	Wood Fiber	Straw	Wood Fiber	Straw-Coconut	Wood Fiber	Straw-Coconut	Wood Fiber
Target Service Life		**< 3 months**	**< 3 months**	**1 growing season**	**1 growing season**	**2 years**	**2 years**	**3 years**	**3 years**
Fill	Fiber Length	80% > 0.5 in.	80% > 6 in.	80% > 3 in.	80% > 6 in.	80% > 3 in.	80% > 6 in.	80% > 3 in.	80% > 6 in.
	Material	100% wood cellulose	100% Excelsior	100% Straw	100% Excelsior	70% Straw 30% Coconut	100% Excelsior	70% Straw 30% Coconut	100% Excelsior
Netting/ Stitching	Location	1S	Stitching only	2S	2S	2S	2S	3S	3S
	Material	Degradable	Degradable/Glue	Degradable/ Synthetic or Natural	Degradable/ Synthetic or Natural	Degradable/ Synthetic or Natural	Degradable /Synthetic or Natural	Black UV Stabilized polypropylene	Black UV Stabilized polypropylene

1S: Netting on one side, **2S**: Netting on 2 sides, **3S**: Netting forms 3-idmensional matrix

Table 6.2.4-2 identifies the staples/anchors for use with the erosion control blankets.

Table 6.2.4-2
Erosion Control Blanket Anchors

Blanket Category	Materials	Type	Min. Length
Type 1	Biodegradable	Stake	5 in.
Type 2 and 3	Steel wire	11 Gauge	6 in.
Type 4	Steel wire	11 Gauge	8 in.

6.2.4.3 Installation of Erosion Control Blankets

1) Complete site grading to ensure that the soil surface is free of soil clods 3-inches or greater and/or ruts 3-inches or greater.
2) Blankets should be installed flat and parallel to the direction of water flow. If the blanket has netting on 2 sides, place the side with the majority of the stitching on the bottom.
3) The uphill edge of the blanket must be buried and stapled into a 6-inch-deep by 6-inch-wide check slot or glued in place. The soil should be tamped back over the check slot.
4) Shingle and/or overlap the edges parallel to the water flow by at least 4 inches. Edges perpendicular to water flow should overlap by 7 inches.
5) Staple pattern should be based on the steepness of the slope or the ditch bottom. Follow the manufacturer's recommendations for staple installation.
6) The blanket should be installed within 24 hours of seeding.
7) Refer to typical installation Figures E-2A and E-2B in Appendix B.

6.2.4.4 Winter Stabilization

1) Blankets may be used for winter stabilization. Remove the snow from the area prior to placing the blanket and use appropriate anchors.

6.2.5 Hydraulic Erosion Control Products

Hydraulic erosion control products are hydraulically applied tackifiers (glue) or mulch materials with a tackifier added. These are comprised of a tackifier, a hydraulic matrix, and are applied using a water stream. Temporary or permanent seed mixes may be included in the matrix or applied prior to the matrix. These are used for areas where equipment cannot easily access (spoil piles), areas of steep slopes but should never be used in areas with concentrated water flows. All slopes requiring revegetation with a slope of greater than 15% must be stabilized with either an erosion control blanket or hydraulically applied bonded fiber matrix product per manufacturers specifications. Hydromulch may also be utilized for spoil pile stabilization and is preferred because it is less likely to require reapplication. The preferred method is to utilize appropriate hydraulically applied bonded fiber matrix or reinforced fiber matrix products, as detailed below.

6.2.5.1 Hydraulic Erosion Control Products Material Specification

Table 6.2.5-1 below provides the material specifications for approved hydraulic erosion control products.

Table 6.2.5-1
Hydraulic Erosion Control Products

Type	Matrix	Application	Performance Time Frame	Application Rate
Natural Tackifier	Water soluble natural proteins, vegetable gums, guar gums, starch, psyllium, or a water-soluble blend of hydrophilic polymers, sticking aids or other gums	1. Used as overspray with straw mulch. 2. Combined with matrices below. 3. Do not apply within 24 hours of a rain event or freeze.	Provides erosion control performance for no greater than 3 months	Per Manufacturers specifications.
Synthetic tackifier	Organic, biodegradable, nonpolluting, non-toxic materials, water soluble, remains flexible, does not inhibit water infiltration	1. May be used as overspray or part of matrices below. 2. Cures within 48 hours.	Provides erosion control performance for no greater than 18 months.	Per Manufacturers specifications.
Hydromulch	Blend of shredded wood paper fibers, natural fibers, or both along with 2.5-5% tackifier by weight.	1. Used as temporary cover on steep slopes. 2. Applied with or without seed. 3. Can be used as permanent mulch in flat areas without concentrated flow.	Functional for up to 3 months.	Per Manufacturers specifications (typically 2,500 lbs/acre)
Bonded Fiber Matrix (BFM)	Composed of wood or wood byproducts. Contains 10% blended hydrocolloid crosslinked polymers by volume and up to 2% fertilizer by volume.	1. Primarily used on inaccessible steep slopes. 2. Seed should be applied before the application of BFM.	Functional at least 6 months	Per Manufacturers specifications. (Typically, 3,500 lbs/acre)

Table 6.2.5-1 Hydraulic Erosion Control Products				
Type	**Matrix**	**Application**	**Performance Time Frame**	**Application Rate**
	Binder and crosslinked polymers do not dissolve or disperse upon rewetting	3. Applied in two stages, allow first stage to dewater before applying second.		
Reinforced Fiber Matrix (RFM)	Defibrated organic fibers, cross-linked insoluble or linear hydro-colloidal tackifiers, reinforcing natural or synthetic fibers.	1. Cure time is within 2 hours.	Functional for at least 12 months.	Per Manufacturers specifications (typically 3,900 lbs/acre)

6.2.5.2 Application of Hydraulic Erosion Control Products

1) Application of this material should be 100% ground coverage, with no shadowing visible.
2) Application should not be made within 24 hours of a rain event or freeze.
3) Apply seed per manufacturer's recommendation. If seed is applied with the hydraulic product, an agitator will be used to maintain the seed in the material stream for even application.
4) Do not apply in water bearing soils or by itself in ditch bottoms carrying concentrated flows.
5) Contractor will apply per the manufacturer's specification.

6.2.6 Poly Sheeting and Geotextile

Poly sheeting and geotextile may be used as an erosion prevention method to cover exposed soils. It is typically used to cover stockpiles when the establishment of vegetation on the stockpile is not preferred. Poly sheeting may also be used as a cover on potentially contaminated soil piles.

6.2.6.1 Poly Sheeting and Geotextile Material Specification

Table 6.2.6-1 below provides the material specifications for approved hydraulic erosion control products. Refer to typical Figures ERO-17a and ERO-17b, Appendix B.

Table 6.2.6-1 Poly Sheeting and Geotextile Material for Stockpile Coverage			
Type	**Material**	**Targeted Lifespan**	**Acceptable Anchors**
Poly Sheeting	Must be at least 6 mil. thick and may be composed of either reinforced polyethylene sheeting or reinforced polyester tarps.	6 months	No-puncture type anchor weights, sandbags with cords, chain link fence, metal posts, wood. Stockpiles must have perimeter control in addition to cover.
Geotextile Fabric	Should meet requirements under AASHTO M-288-06 for Class 3 Stabilization and Separation.	NA	No-puncture type anchor weights, sandbags with cords, chain link fence, metal posts, wood. Stockpiles must have perimeter control in addition to cover.

6.2.6.2 Installation of Poly Sheeting and Geotextile

1) Cover exposed soil with poly sheeting or geotextile fabric.
2) Secure material tightly in place using an anchoring system.
3) If applicable, trench material at the top of slope.
4) Provide a water diversion to direct water away from the stockpile.
5) Install perimeter controls around stockpile.

6.2.7 Rapid Stabilization

Rapid stabilization measures, as identified by the Department of Transportation, are optional materials to be used to temporarily stabilize an area quickly. Do not use these measures in wetlands. Optional measures are provided in Table 6.2.7-1 below. Please note the appropriate measure should be selected based on site conditions and agency requirements. Variations to the seed mixes may be required based on site-specific conditions and timing.

Table 6.2.7-1
Rapid Stabilization

Method	Materials
1	Straw mulch placed at a rate of 2 ton per acre with disc anchoring.
2	Straw mulch placed at a rate of 1.5 ton per acre. Hydromulch, placed at a rate of 750 lbs per acre.
3	Hydromulch, placed at 330 lb. per 1000 gal. of slurry mix. Seed mixture 22-111 placed at a rate of 10 lb. per 1,000 gal. of slurry mix. Type 3 slow-release fertilizer 10-10-10 placed at a rate of 50 lb. per 1000 gal. of slurry mix. Water placed at a rate of 875 gal per 1,000 gal of slurry mix. Apply mixture at a rate of 6000 gal per acre.
4	Natural net erosion control blanket. Seed mixture 22-111 placed at a rate of 2 lb. per 100 sq. yd. Type 3 Slow-Release Fertilizer 10-10-10 placed at a rate of 8 lb. per 100 sq. yd.
5	Rip Rap Class II Geotextile Type III

7 WATER MANAGEMENT, TRENCHING AND EXCAVATION

7.1 Construction Dewatering

Dewatering may be required at construction excavations to remove accumulated stormwater or groundwater. Regulation of dewatering activities may vary from state to state and project specific documents will be reviewed to determine if more restrictive conditions apply.

1) Dewatering may occur through pumping water out of a trench or pumping water using well points to lower the ground water table. Dewatering is also a state regulated activity requiring a permit. Specific dewatering requirements, such as measuring and recording water volumes, will be provided in project authorizations.
2) Intake hoses will be raised above the bottom of the excavation to avoid the uptake of sediments from the excavation.
3) Surface water pump intakes must be screened to prevent fish from being drawn into the system.

4) All equipment used within surface waters must be free of prohibited invasive species and aquatic plants prior to be transporting into or within the site.
5) All materials used in surface waters must be decontaminated prior to leaving the site and/or if transported for offsite decontamination, a transport permit may be required.
6) Each installation will be equipped with a flow meter and the actual amount of water withdrawn will be recorded and reported per the state-specific requirements.
7) Suspension of appropriations may be required during periods of low flow; refer to project specific documentation.
8) Surface water appropriations will be sampled at the time of appropriation.

7.1.1.1 Dewatering Procedures

During trench dewatering, Contractor will suspend the intake hose above the bottom of the trench to minimize sediment uptake. Water will be discharged through a dewatering structure into a stable, well vegetated upland area at least 100 feet from wetlands and waterbodies. Trench discharge containing high sediment content must not be allowed to flow into any wetland, waterbody, ditch, or stormwater conveyance. Contractor will monitor dewatering operations to ensure that discharge rates and sediment loads do not exceed the capacity of the dewatering devices. If filter bags are used, one filter bag is required per dewatering pump. Sediment trapped by dewatering devices may be worked into the subsoil of an upland area or disposed of with the spent dewatering device at an appropriate facility. Operation and refueling of dewatering pumps will also be accomplished in accordance with Company's SPCC Plan.

Typically, water discharges will be made onto the non-working side of the Company's right-of-way and confined to the approved work area. If filtering devices prove to be ineffective due to freezing water, conduct dewatering activities in a manner that will best minimize sediment runoff. The discharge rate and volume will be monitored to prevent scouring of the right-of-way and to prevent sediment discharge off approved working areas. Dewatering activities will be conducted in a manner that does not result in erosion on or off right of way. Dewatering activities will be monitored to ensure that deposition of sediment into sensitive environmental resource areas, including but not limited to wetlands, waterbodies, cultural resource sites, and sensitive species habitats. If deposition occurs, dewatering will cease, and the design of the dewatering measures revised to prevent reoccurrence.

Dewatering structures will be removed as soon as practicable after completion of discharge activities. Sampling protocols may be required and will be provided in the project authorizations. In winter conditions, dewatering activities may be adjusted to account for the lack of infiltration.

Discharged water will be confined to the approved work area unless both Company and the impacted landowner or land-managing agency provide prior written approval to Contractor stating that water may leave the approved work area on their property. At no time will the discharge event result in a state-defined "Nuisance Conditions."

7.1.1.2 Dewatering Structure Material Specifications

Dewatering activities will include at least two of the following best management practices per discharge event as provided in Table 7.2-1.

Table 7.2-1 Dewatering Structure			
Type	**Materials**	**Application**	**Supplement BMP**
Vegetative Filter	Existing grassy buffer	1. Water will be discharged to dewatering structure/bag located within a well-vegetated upland area. 2. Cropland is not considered a well-vegetated area. 3. Discharge rates will be managed to ensure no scouring at the discharge location or flow path.	1. Sediment logs may be incorporated to slow the path of the water. 2. If scouring occurs along the flow path, erosion control blanket may be installed to minimize the potential for erosion.
Straw Bale Structure	Certified noxious weed free straw bales, geotextile fabric, wooden stakes.	1. Dewatering structure will be sized appropriately for the maximum discharge rate and water volume.	1. A geotextile filter bag may be incorporated into the structure to provide additional sediment control.
Dewatering Filter Bag	Nonwoven geotextile bag	1. One hose may be used per bag. 2. The hose will be secured in the bag. 3. The bag will be monitored for maintenance needs and/or flow rate.	1. Dewatering bags may be used in well-vegetated upland areas or with a straw bale dewatering structure.

7.1.1.3 Winter Construction

Construction dewatering relies on infiltration of water along the discharge path as part of the best management practices. In winter conditions, frozen soils will minimize infiltration and may create flooding conditions. Discharge locations will be sited to account for reduced infiltration.

7.1.1.4 Coagulation and Flocculation Aids

Construction dewatering through filter bags and dewatering structures may not achieve the required water quality results. With division environmental specialist approval, it may be beneficial to utilize a coagulant, polymer, or flocculant aid in the dewatering structure and/or hose to facilitate settling of fine clay particles within the structure/bag. Polyacrylamides cannot be used for any discharges reaching wetlands, waterbodies, or storm drains. Other non-toxic polymers and chitosan are permissible for use, with approval from or at the direction of the division environmental specialist.

7.2 Upland Trenching

Trenching in uplands will be completed in accordance with the FERC Plan. Excavated materials will be stockpiled within the approved construction right of way and separation will be maintained between the subsoil and topsoil stockpiles.

In Minnesota, the Contractor may not have more than one mile of open trench at any one time, as required in project authorizations.

7.2.1 Trench Breakers

Trench breakers will be installed to protect against subsurface water flow along the pipe. Trench breakers may be constructed of bags filled with rock-free subsoil or sand, or foam trench breakers may be used with Company's approval. Topsoil may not be used for trench breakers.

7.2.1.1 Trench Breaker Installation

1) Trench breakers will be installed at the base of slopes greater than 5 percent where the base of the slope is less than 50 feet from a waterbody or wetland and where needed to avoid draining a waterbody or wetland.
2) Trench breakers will be installed as required in the FERC Plan and Procedures.
3) Trench breakers will not be installed within a wetland.
4) Spacing will be determined by an engineer or will follow the spacing of slope breakers as indicated in section 6.2.2.(1).
5) *Trench breakers will fully encircle the pipe by a minimum of 6 inches.
6) Trench breakers must be keyed into the walls and bottom of the trench a minimum of 6 inches deep and 12 inches along the pipe.*

7.3 Drain Tiles

Contractor will furnish materials, labor, equipment and supervision for the repair and replacement of drain tile. Contractor's cost for such repair and replacement of drain tile will be included in the applicable unit prices set forth in the Agreement with Company.

For new pipelines in areas where drain tiles exist or are planned, ensure that the depth of cover over the pipeline is sufficient to avoid interference with drain tile systems. For adjacent pipeline loops in agricultural areas, install the new pipeline with at least the same depth of cover as the existing pipeline(s) and so that a minimum of *one foot* of clearance is present between the repaired section of tile and the top of the pipeline.

Contractor will probe tile systems cut by trenching to determine if damage has occurred during construction and repair/replace damaged tiles to this specification. A qualified specialist must be used for drain tile repairs and to adequately probe and test repaired drainage systems. Filter-covered drain tiles will not be used unless approved by the local soil conservation authority or at the landowner's or land-managing agency's request.

Drain tile replacement or repairs will be performed such that:

a. Repair damaged drain tiles to their original or better condition.
b. Broken or crushed tile will be removed for a sufficient distance from the trench to provide satisfactory drainage, joints, and adequate support.
c. Drain tile furnished by Contractor for replacement purposes will be of the rigid type, either vitrified clay or schedule 40 P.V.C. perforated pipe, unless the landowner or land-managing agency requests otherwise.
d. Replacement tile will be of a quality and size at least equal to that of the tile being replaced;
e. Drain tile will be replaced so that its former gradient and alignment are restored; and
f. The soil beneath and around replaced tile lines will be firmly compacted.

When tile lines are cut during trenching operations, Contractor will:

1) Make immediate temporary repairs so that the tile system can continue to function until permanent repairs can be made after the pipe is lowered into the trench; unless prior written

consent is obtained from the landowner or land-managing agency and Contractor requests from Company permission to interrupt flow or usability; and

2) Make permanent replacements in accordance with directions from a qualified drain tile specialist and the following requirements, if clay drain tiles or flexible drain duct are used in the repair:

    a. a single continuous supporting member will be placed across the trench as a trough in which to lay replaced tile;
    b. the supporting member will be placed across the trench with at least two feet solid bearing under the ends; and
    c. Contractor will fabricate and weld the supporting member material into shapes and lengths to properly support the tile line.

3) In cases where the original tile line is intersected at an angle, the tile line will be replaced for some distance on both sides of the trench to insure adequate tile performance.

    a. Before completing permanent tile replacements, Contractor will examine by suitable means the adjacent tile located beneath the working side of the approved work area to assure that drainage tile has not been crushed, plugged, misaligned, or otherwise disturbed as a result of Contractor's activities.

4) When the tile lines are otherwise damaged by Contractor's operation, regardless of location, Contractor will make repairs necessary to satisfy the tenant, landowner, or land-managing agency at no additional expense to Company.
5) Contractor will be responsible for damages resulting from improper functioning of tile when caused by Contractor's failure to keep such tile in good repair and to keep tile lines free from clogging.
6) Tile replacements will be documented and approved by Company prior to placing backfill over tile lines.

7.4 Pipe Coating Wastes, Pipe Cutting and Removal of Pipe

Pipeline coating (including asphalt or asbestos wrap coating, epoxy, or paint) may need to be removed and re-applied for projects such as digs, tie-ins, or pipe replacements. Pipe coating along portions of Company's pipeline is presumed, by the Company, to contain non-friable asbestos. Methods for removal and disposal of pipe coating must be in accordance with applicable regulations and Company's Environmental Procedures.

Asbestos-containing pipe coating materials must be removed using the wet method technique, prior to abrasive blasting. After the pipe coating has been removed, the pipe may be cleaned using an abrasive blasting technique. Procedures for blast waste collection and disposal are described in Company's Environmental Procedure 340.102.

In some situations, blast wastes may be defined as hazardous wastes under state and federal law. If the structure to be blasted includes paint made with metals such as lead, chromium, zinc, or cadmium or other hazardous waste characteristics, specific procedures may be required of the

Contractor. Procedures for managing blast paint waste are described in Company's Environmental Procedure 340.102.

Overspray and overspill from pipe coating / painting activities are considered construction waste and must be collected, stored, and disposed of accordingly. Where in-service pipe must be cut or removed, liquids and other materials encountered in the in-service pipe will be contained and stored as hazardous waste. Company will test the liquids and other materials to determine if they are non-hazardous. Any materials contaminated by the liquids will be managed as appropriate for such contamination. Procedures for managing liquids encountered when cutting pipe and procedures for removal of pipe are described in Company's Environmental Procedure 320.300.

8 STREAM AND RIVER CROSSINGS

8.1 General Planning and Site Preparation

Contractor will provide the EI six-work-day prior notification of construction across any waterbody. Temporary sediment barriers will be installed and maintained near waterbodies (i.e., rivers, streams, or drain) as specified in Section 5.

Contractor will not store hazardous materials, chemicals, fuels, lubricating oils, or equipment; or perform concrete coating or concrete weight manufacturing within 100 feet of waterbodies or wetlands as specified in Section 3. Refueling within 100 feet of waterbodies and wetlands will be conducted as specified in the FERC Procedures.

8.2 Bridges

Construction equipment, including clearing crews, must cross waterbodies on bridges. Clearing equipment will not be allowed to ford waterbodies, unless specifically authorized by Company. Where bridges are used, single-span, solid deck equipment bridges will be installed across the waterbodies above the top of bank. Temporary culverts or concrete supports may be used for spans over 20 feet in length, **if provided for in project authorizations**. Bridges, culverts, and supports must be sized and placed to allow highest water flow during construction. Bridges will be installed with geotextile below the bridge deck wrapped over the sides and sediment controls installed at the toe boards to prevent sediment from entering the waterbody. Timber mat bridges will be anchored on one side to allow for the bridge to swing, but remain anchored, during flood events. Soil exposed during bridge installation will be covered with erosion control fabric. Where bridges are not installed, Contractor will move equipment around the waterbodies on approved access roads. Contractor will not install bridges across horizontally directionally drilled waterbodies, unless specifically permitted.

Contractor will remove bridges at the earliest time possible after construction, or as indicated in project authorizations, provided the bridge is not needed to access other parts of the right-of-way for final grading, clean-up, seeding, hydrostatic testing, or other project activities. Once bridges are removed, they may not be reinstalled.

8.3 Clearing and Grading

Grassy vegetation and root stock will be left intact within 100 feet of waterbodies until just before construction across the waterbody begins, except as necessary to install an equipment bridge across the waterbody. Where waterbodies are crossed using the horizontal directional drill technique, no clearing or access is allowed on the stream side of the workspace for the drill entry and exit holes, except for civil survey manual line-of-sight clearing, sensor grid installation and removal, and water appropriation. Fencing, orange construction or silt fence will be installed and maintained across the entry and exit hole to prevent unauthorized access to the waterbody.

8.4 In-Stream Work

Construction across waterbodies will be conducted using the techniques specified in project authorizations, project alignment sheets, drawings, and/or the project line lists. In the absences of specific crossing techniques, Contractor will use the flume technique to construct across cold water fisheries and cool water and warm water fisheries considered significant by the state that are less than or equal to 10 feet wide. Contractor may request permission from Company to use alternate techniques (e.g., the dam-and-pump technique). Company, in its sole discretion, will determine whether such a request will be authorized and the Company's decision on the matter will be final. Other waterbodies may be open cut in the absence of specific crossing techniques, if permitted.

8.4.1 Flume Crossing Method

Where the flume technique is implemented, properly sized, and aligned flume pipe(s) will be placed in the waterbody to allow water to flow through the pipe(s) and across the construction site. The flume pipe(s) will be installed prior to trenching, but after blasting if blasting is required. Flume pipe(s) will not be removed until after the in-stream trench is backfilled and the waterbody banks are seeded and stabilized.

Sand or pea gravel bags will be installed in the waterbody at the upstream end of the flume pipe to dam the waterbody and funnel the water into the flume. After installing sand or pea gravel bags on the upstream end, bags also will be installed on the downstream end. Contractor will ensure that dams spaced far enough apart, and the flume pipe(s) are long enough to allow adequate room for excavating the trench in the waterbody bed.

Adequate water flow through the flume pipe(s) must be maintained to protect aquatic life, provide for alternative uses of the stream, and provide for downstream withdrawals of water by users. Stand-by pumps, within secondary containment structures, and hoses will be readily available during flume crossing construction.

Prior to in-stream excavation, Contractor will create a dry work area by pumping standing water from between the dams into a stable, well vegetated upland area or a dewatering device (e.g., filter bag or straw bale structure) located at least 100 feet away from the waterbody banks in accordance with project authorizations.

In-stream work where the flume technique is implemented will be conducted from equipment positioned on the waterbody banks or bridge. Equipment will not be allowed to ford, drive into, or work from within the waterbody.

8.4.2 Dam and Pump Crossing Method

For waterbodies where the dam-and-pump technique is implemented, sand or pea gravel bags will be installed in the waterbody at the upstream and downstream ends of the proposed trench. Contractor will ensure that dams are spaced far enough apart to allow adequate room for excavating the trench in the waterbody bed.

Using an adequate size and number of water pumps within secondary containment structures, water will be pumped from the upstream dam around the work area to the downstream side. The intake hose will be suspended above the waterbody bed and screened to minimize the intake of sediment and prevent entrainment of fish. Water pumped across the work area will be discharged onto an energy dissipation device (e.g., plywood boards or a splash pup) to prevent scouring of the waterbody bed on the downstream end.

Adequate water flow through the pumps must be maintained to protect aquatic life, provide for alternative uses of the stream, and provide for downstream withdrawals of water by users. Stand-by pumps, within secondary containment structures, and hoses will be readily available at times during dam-and-pump crossing construction. A pump watch must be maintained if pumps will run outside of working hours.

Prior to in-stream excavation, Contractor will create a dry work area by pumping standing water from between the dams into a stable, well-vegetated upland area or dewatering device (e.g., filter bag or straw bale structure) located at least 100 feet away from the waterbody banks in accordance with project authorizations.

In-stream work where the dam-and-pump technique is implemented will be conducted from equipment positioned on the waterbody banks or bridge. Equipment will not be allowed to ford, drive into, or work from within the waterbody.

8.4.3 Open Cut Crossing Method

For waterbodies less than or equal to 10 feet wide that are not crossed using a dry construction technique (e.g., flume or dam-and-pump), complete work in the waterbody (not including blasting) within 24 hours, except as otherwise specified in the project authorizations and the FERC Procedures, the project alignment sheets, and/or the project line lists. Where blasting is required, the time frame for completing work in the waterbody commences immediately after blasting. In-stream work will be conducted from equipment positioned on the waterbody banks or bridge. Equipment will not be allowed to ford, drive into, or work from within the waterbody.

For waterbodies greater than 10 feet wide and less than or equal to 100 feet wide that are not crossed using a dry construction technique (e.g., flume or dam-and-pump), complete work in the waterbody (not including blasting) within 48 hours, except as otherwise specified in the project authorizations, the project alignment sheets, drawings, and/or the project line lists. Where blasting

is required, the time frame for completing work in the waterbody commences immediately after blasting. Equipment operating in the waterbody will be limited to that needed to construct the crossing. Other equipment must cross on an equipment bridge or move around the waterbody on approved access roads.

Waterbodies greater than 100 feet wide must be crossed as specified in the project authorizations, the project alignment sheets, drawings, and/or the project line lists.

8.5 Spoil Storage, and Restoration

During construction across waterbodies, spoil from in-stream excavation will be stored a minimum of 10 feet from the waterbody banks, or greater based on project authorizations. A silt fence and/or straw bale containment structure or redundant BMPs will be used as necessary to contain spoil in the approved work area and prevent sediment runoff into the waterbody. Until installation of pipe, an earthen plug will be left in place in the trench on both banks of the waterbodies to separate the waterbody trench from upland trench and prevent water from the upland trench from flowing into the waterbody trench. During backfilling, Contractor will backfill waterbody trenches with native spoil so that the waterbody bottom is restored to its original contour. In cold water fisheries, clean, washed, non-limestone gravel or native cobbles will be used for the upper one foot of backfill.

Final grading will begin immediately after backfilling by restoring waterbody banks to their preconstruction contours. For removal of larger diameter pipes, the Contractor will need to haul in acceptable fill material to restore the contours. Bank stabilization must be considered in design and permitting. Banks will be seeded immediately following final grading. Erosion control fabric will be placed on top of the seed and will be anchored with staples, metal stakes, or other appropriate devices. Final grading, seeding, and bank stabilization will be completed no later than 24 hours after backfilling waterbody trench, weather and soil conditions permitting.

Trench breakers and permanent slope breakers will be installed at the base of slopes adjacent to waterbodies, and mulch will be applied in accordance with Sections 5 and 6. For waterbodies crossed using a dry construction technique (e.g., flume or dam-and-pump), bank stabilization will be completed before returning flow to the waterbody channel per the FERC Procedures.

9 WETLANDS

9.1 General Planning and Site Preparation

Temporary sediment barriers will be installed and maintained in and near wetlands as specified in Section 5.

Contractor will not store hazardous materials, chemicals, fuels, lubricating oils, or equipment; or perform concrete coating or concrete weight manufacturing within 100 feet of wetlands as specified in Section 3. Refueling within 100 feet of waterbodies and wetlands will be conducted as specified in the FERC Procedures and Environmental Procedure 380.201d.

Construction equipment operating in wetlands will be limited to the amount necessary to construct the crossing. Construction equipment not used to construct the crossing will use approved access

roads to move around wetlands to the maximum extent practicable. Where the use of approved access roads does not provide adequate access around a wetland, each piece of equipment used to construct the crossing may pass through the wetland only once, unless otherwise specified in project authorizations, the project alignment sheets, drawings, and/or the project line lists. Equipment operating from mats may cross on the mats more than once, if permitted.

9.2 Ground Stabilization

If a wetland cannot support construction equipment, and low-ground-pressure equipment is not used, Contractor will use a temporary platform of equipment mats to stabilize the right-of-way. Equipment mats will be removed from wetlands following construction and will be disposed of or reused. Duration of matting may be restricted by wetland permits. Tree stumps, brush riprap, imported dirt and rock fill may not be used to stabilize the approved work area in wetlands.

9.3 Grading, Trench Excavation, Backfilling

Contractor will not grade or remove stumps or root systems from the approved work area in wetlands, except over the ditch line. If Contractor believes that there is an adverse safety impact from this restriction, Contractor may request permission from Company to remove stumps and root systems from other areas in the approved work area. Company, in its sole discretion, will determine whether such a request will be authorized. Company's decision on the matter will be final.

Contractor will segregate topsoil from subsoil over the trench line as specified the FERC Plan and Procedures, except where saturated soils or ponded water make this impractical. Upland spoil or spoil from another wetland may not be imported into or stored in a wetland.

Contractor will minimize the duration of construction-related disturbance in wetlands to the maximum extent practicable. Where wetland conditions allow, the pipeline will be assembled in an upland area and pushed or pulled into place. Prior to backfilling, trench breakers will be installed at the base of slopes adjacent to wetlands and where an unmitigated trench poses a risk of draining a wetland in accordance with the FERC Procedures. During backfilling, segregated topsoil will be replaced to the top of the trench. Where wetlands overlie weathered bedrock, clean sand padding may be imported to the wetland trench to protect the pipe. Only the amount of padding necessary to protect the pipe may be imported to the wetland trench. In no case may sand padding be backfilled above the bedrock profile.

9.4 Restoration

Final grading will begin within six days of backfilling by restoring wetlands to their preconstruction contours, leaving no crown over the trench, or as required in the applicable permits, whichever is more restrictive. Wetlands will be seeded in accordance with Section 10.3. Fertilizer, lime, and mulch will not be applied in wetlands. Permanent slope breakers will be installed at the base of slopes adjacent to wetlands in accordance with Section 7. Timber riprap, equipment mats, pipe skids, and other construction debris will be removed from wetlands upon completion of construction. Existing culverts will be restored to their pre-construction condition after construction, including elevation, diameter, and length.

10 BACKFILLING, CLEAN-UP, AND FINAL RESTORATION

10.1 Backfilling

Prior to backfilling, Contractor will install trench breakers in the pipeline trench as directed by the EI, or absent directions from the EI, immediately up-slope of every temporary slope breaker, at the base of slopes adjacent to wetlands and waterbodies, and where the pipeline trench poses a risk of draining a wetland. Trench breakers will be constructed of materials such as sandbags (no topsoil) and will be notched into the sidewalls of the trench. Topsoil must be restored within 20 days of backfill. A travel lane may remain for access but must be restored as soon as access is no longer needed. In Minnesota, no more than one mile of trench may be open at any time, accelerating the backfill schedule.

In residential areas, the trench will be backfilled as soon as possible after the pipe is lowered in the trench. Topsoil must be restored within 10 days of backfill in residential areas.

Topsoil will not be used to pad the pipe during backfilling. In areas where topsoil has been segregated, the subsoil will be replaced first, and the topsoil will be spread over the area from which it was removed. Contractor may request from Company permission to import and use topsoil in lieu of topsoil separation and replacement. Company, in its sole discretion, will determine whether such a request will be authorized. Company's decision on the matter will be final and require compliance with Environmental Procedure 400.105. Blast rock may be used to backfill the trench to the top of the natural bedrock profile provided adequate padding is placed around the pipe in accordance with technical specifications. A twelve-inch earth crown will be constructed over the trench line (except in wetlands) to allow for future settling of the backfill material, per engineering standards ES-7503 or ES-7510 as appropriate. Cross drains will be left in the crown at 100-foot intervals, in swales and drains, and immediately up-slope of slope breakers.

10.2 Clean-up

Contractor will make every effort to complete final clean-up (including final grading) within twenty days after the trench is backfilled and complete installation of permanent erosion control measures within six days of topsoil restoration, or as required in the applicable permits, whichever is more restrictive and weather and soil conditions permitting. Debris will be disposed of in accordance with Section 3, and original ground contours will be restored, except for a crown over the trench in upland areas.

A travel lane, including bridges over waterbodies, will be left open during final grading and clean-up to allow for construction equipment access. This travel lane must be restored when access is no longer necessary.

10.3 Final Restoration and Revegetation

All compacted or rutted upland areas must be decompacted during restoration with a para-plow or other deep tillage implement. If plowing is employed, the stripped construction right-of-way will be decompacted first followed by replacement of the segregated topsoil. Where necessary, additional plowing of the topsoil will be performed to alleviate subsurface compaction. If

subsequent grading and clean-up activities result in further compaction, additional plowing will be required. If frozen conditions preclude plowing activities, remediation of compacted or rutted areas may need to be conducted after spring thaw occurs.

To aid in revegetation, remove excess rock from the top 12 inches of soil within the approved work area such that the size, density, and distribution of rock within the work area is similar to adjacent areas not disturbed by construction. If a landowner requests excess rock be left on their property, Contractor will notify Company of the request from the landowner for storage of rock within the approved work area outside of the post-construction permanent right-of-way. Company, in its sole discretion, will determine whether such a request will be authorized. Company's decision on the matter will be final. If authorization is granted, Contractor will be responsible for ensuring rock is stored within an upland area of the approved work area, but outside of the post-construction permanent right-of-way.

Permanent slope breakers will be installed and maintained in locations similar to temporary slope breakers as described in Sections 5 and 6 and as directed by the EI. Permanent slope breakers must be constructed of soil compacted to a minimum height of 1.5 feet, 4 feet in bottom width, and have an eight-foot-wide parabolic channel on the up-slope side. The down-slope angle and outfall will be the same as temporary slope breakers.

Fences and all-terrain-vehicle barriers removed during construction must be repaired or replaced during restoration. New all-terrain-vehicle barriers requested by landowners or land-managing agencies must be installed during restoration. Barriers will be constructed using stumps, boulders, or blast rock collected on land within the approved work area or other material as requested by landowners or land-managing agencies. Barriers will extend across the entire width of the approved work area and will be positioned in such a manner to prevent vehicle passage through or around the barrier. Barrier material will be sufficient type, size, and placement to prevent removal by all-terrain-vehicle users.

Contractor will be responsible for successful revegetation of the right-of-way. Disturbed areas will be seeded as required in permit authorizations, weather and soil conditions permitting. Slopes steeper than 33 percent and stream banks will be seeded immediately following final grading.

10.4 Seeding

Temporary and permanent seeding of the right-of-way will be completed within the recommended seeding dates as specified in agency consultations, the project alignment sheets, drawings, and/or the project line lists. If seeding cannot be completed during the recommended seeding period, temporary seed and mulch will be applied to disturbed areas except wetlands. Permanent seeding will be initiated at the beginning of the next seeding season. Typical temporary seed mixes include annual rye, oats, barley, and/or wheat. If dormant seeding, do not seed when ground is frozen or snow-covered.

10.4.1 Seeding Preparation

Prior to seeding, remove construction debris and grade the right-of-way to leave the soil in the proper condition for seedbed preparation. Excessive depth of mulch or vegetative debris must be

avoided to support proper germination. Prepare the seedbed to a depth of three to four inches using appropriate equipment to provide a firm uniform seedbed free of excess rock and large soil clods. If the right-of-way will be hydroseeded, the seedbed will be scarified to facilitate seed lodging and germination. If seeding is temporary and at locations (e.g., spoil stockpiles) where site prep access is not available, seed bed preparation is not expected.

10.4.2 Soil Amendments

Contractor will complete a soil test prior to seeding to determine the appropriate soil additives (i.e., fertilizer and/or lime) for the Project, as directed by Company or as requested by the landowner or land-managing agency. All Company SWPPPs will require testing for nitrogen, phosphorus, potassium, and lime amendments. In the absence of a SWPPP, the contractor shall apply 50 lbs of nitrogen/Acre of a 10-10-10 fertilizer where half of the nitrogen is a slow-release variety. Where soil additives are required, incorporate the fertilizer and/or lime into the top two inches of soil as soon as possible after application. Use of lime and fertilizer are prohibited in wetland areas.

10.4.3 Seeding

Uplands and wetlands will be seeded with mixes and at rates as specified in the project authorizations, the project alignment sheets, drawings, and/or the project line lists. Final seeding and restoration must occur with six days of backfill. Active cropland will not be seeded, unless requested by the landowner. In the absence of specific seed mixes for the Project the state-specific seeding guide published by the USDA Natural Resources Conservation service or state Department of Transportation may be utilized. *Northern's preference is to utilize pollinator/monarch butterfly seed mixtures to implement provisions of voluntary species habitat agreements.* Any area seeded after October 1 will be seeded with a temporary seed mix, and the contractor will be required to remobilize the following spring to complete permanent seeding and fertilization. Wetlands will be seeded with annual ryegrass at a rate of 40 lbs/acre in the absence of specific seed mixes for wetlands. Seed must be purchased in accordance with pure live seed specifications and be certified weed free. Seed will be used within nine months of testing. Any legumes in the seed mix will be treated with inoculants specific to the species. For conventional seeding, use four times the manufacturer's recommended rate of inoculants, and ten times the recommended rate if hydro-seeding methods are used.

Seed will be uniformly applied and incorporated into the top one inch of soil. For areas greater than 500 ft^2 either drill seeding or hydroseeding is required in uplands. A seed drill equipped with a culti-packer is the preferred method of seeding, however, if the seed is broadcast or applied using a hydro-seeder, the seed will be applied at double the recommended seeding rate. Where seed is broadcast, the seed will be incorporated into the soil by raking or dragging. Where a hydro-seeder is used, the seed bed will be scarified prior to application to allow the seeds to lodge and germinate.

Immediately after or concurrent with seeding, mulch will be uniformly applied to cover 90 percent of the ground surface at a rate of two tons per acre of straw except those areas located in actively cultivated croplands, and other areas at the EI's discretion. Mulch specifications are discussed in Section 6. Mulch will not be applied in wetlands.

After seeding, Contractor will restore turf, ornamental trees and shrubs and other landscaping in residential areas in accordance with the landowner's request or compensation will be made to the landowner. Restoration work will be performed by Contractor personnel familiar with local horticultural and turf establishment practices. In addition, Contractor may be required to install vegetative visual screening at critical viewpoints in the project area in accordance with the project authorizations, the project alignment sheets, drawings, and/or the project line lists. Vegetative visual screening will involve planting native shrub and tree species within the approved work area at naturally occurring densities and distributions (not on a grid) to blend with the surrounding landscape.

Revegetation will be considered successful when the surface of the approved work area is similar to adjacent undisturbed lands in terms of species richness and density, or at least 70 percent perennial vegetation.

10.4.4 Post-Construction Monitoring and Maintenance

Contractor will be responsible for maintaining erosion and sediment controls, making repairs on the right of way, and success of any vegetation, including trees, until final stabilization has been achieved. Company expects and requires the Contractor to respond to repairs such as BMP repair and/or replacement, reseeding, regrading, removal of non-biodegradable BMPs in a timely manner and within the time frame outlined in any application project authorizations (e.g., construction stormwater permit). Upon achieving final stabilization, Contractor will walk the Project and remove any construction waste (e.g., mats) and non-biodegradable sediment controls.

11 REVISION HISTORY:

Responsibility for Procedure:

Address all questions on this procedure to the director of environmental.

Revisions:

Rev. 0	04/01/21	
Rev. 1	07/21/21	Revised to require the use of erosion control blankets or hydraulically applied bonded fiber matrix on all slopes 15% or greater, that require revegetation.
Rev. 2	05/04/23	Revised to include paragraph on coagulation/flocculation aids.
Rev. 3	12/08/23	Revised to include soil testing requirements and editorial/style changes.
Rev. 4	07/23/25	Changes to required seeding methods.
Rev. 5	12/05/25	Clarified trench breaker, excess vegetation disposal, and expectations for winter construction plans. Corrected minimum drain tile offset from pipe. Stated preference for pollinator seed mix.

Appendix A

380.203b SWPPP Inspection and Maintenance Report

NORTHERN NATURAL GAS
STORMWATER INSPECTION AND MAINTENANCE FORM

Project Name:		**Work Order #:**	**Inspection Date:** **Inspection Time:**
Project Description:			**Stormwater Permit Agency:**
Nearest Town, County and State:			**Stormwater Permit Authorization #:**
GPS Lat:	**GPS Long:**		**Initial Grading Date:** **Final Grading Date:**
Full Contractor Company Name:			**Final Seeding Date:**
Contractor Contact Info (Name/Phone):			**Final Stabilization Date:**
Inspection Event:	☐ Routine ☐ Rain Event ☐ Maintenance		
Inspection Schedule (IL, IA, MI, MN, OK, SD, WI)	☐ Every 7 days and within 24 hours of a rain event 0.5 inches or greater (inches of rain)		
Inspection Schedule (KS, NE, OK, SD)	☐ Every 14 days and within 24 hours of a rain event 0.5 inches or greater (inches of rain)		
Inspection Schedule (NM and all EPA permits)	☐ Every 7 days or every 14 days and within 24 hours of a rain event 0.25 inches or greater (inches)		
Reduced Inspection Schedule and Reason Behind Reduced Schedule (Must follow stormwater permit authorization requirements, which may vary per state/project.)	☐ Every 30 days	☐ Site temporarily stabilized and winter conditions ☐ Arid, semi-arid or drought stricken area ☐ Frozen conditions ☐ Other, explain:	
Current Weather and Site Conditions (i.e., 66°F and dry):			
Construction Phase:	☐ **Active** ☐ **Suspended** ☐ **Post-Construction**		

SUBMITTED TO: (Enter names and email addresses below.)

Project Manager: Click here to enter text.
Construction Coordinator: Click here to enter text.
Field Operations Contact: Click here to enter text.
Division Environmental Specialist (DES): Click here to enter text.
Construction Environmental Compliance Contact: Christa Webber

NORTHERN NATURAL GAS
STORMWATER INSPECTION AND MAINTENANCE FORM

Table 1.0 – Inspection Observations and Corrective Actions

Stormwater Inspection Item	**Maintenance Required:** If yes, complete columns to the right.	**Observations:** Describe locations where controls require maintenance or additional controls are needed.	**Recommended Corrective Actions:** Describe actions taken while on-site, and/or recommendations to resolve observed issues. Update items with notes to detail status, including ongoing communications to ensure progress toward resolution.	**Assigned to:**	**Repair Status**	**Completion Date[1]**
Contract Yards and Storage Areas	☐ Yes ☐ No ☐ N/A				☐ Pending ☐ In progress ☐ Complete	
Vehicle Exit Points	☐ Yes ☐ No ☐ N/A				☐ Pending ☐ In progress ☐ Complete	
Sediment Controls	☐ Yes ☐ No ☐ N/A				☐ Pending ☐ In progress ☐ Complete	
Erosion Controls	☐ Yes ☐ No ☐ N/A				☐ Pending ☐ In progress ☐ Complete	
Disturbed Areas Stabilization	☐ Yes ☐ No ☐ N/A				☐ Pending ☐ In progress ☐ Complete	
Dewatering Activities and Structures	☐ Yes ☐ No ☐ N/A				☐ Pending ☐ In progress ☐ Complete	
Material Storage (e.g., containment, spill kits, etc.)	☐ Yes ☐ No ☐ N/A				☐ Pending ☐ In progress ☐ Complete	
Final Restoration Activities	☐ Yes ☐ No ☐ N/A				☐ Pending ☐ In progress ☐ Complete	

[1]Action items that were dated complete on the previous report should not appear on subsequent reports.

SUBMITTED TO: (Enter names and email addresses below.)

Project Manager: Click here to enter text.
Construction Coordinator: Click here to enter text.
Field Operations Contact: Click here to enter text.
Division Environmental Specialist (DES): Click here to enter text.
Construction Environmental Compliance Contact: Christa Webber

Table 2.0 – Erosion Control Devices (Separately list each area where ECDs have been either temporarily or permanently installed.)

Exact location of erosion/sediment control inspected *(Ex. east road-side ditch of HWY 20)*	**Temporary (T) or Permanent (P)**	**Type of erosion/sediment control** *(Ex. hay bales, silt fence, wattles, slope breakers, erosion blankets, construction entrances, electric/barbed-wire fence, dewatering devices/structures, etc.)*	**Date Installed**	**Date Removed**	**Dates and Comments Regarding Completed Repair/Maintenance Activities**

Table 3.0 – Revegetation (Separately list each area where revegetation is required to report status toward "final stabilization", as defined by the respective permit.)

Location	**Status**	**Land Use**	**Seed/Over-seed Date(s)**	**Comments**

SUBMITTED TO: (Enter names and email addresses below.)
Project Manager: Click here to enter text.
Construction Coordinator: Click here to enter text.
Field Operations Contact: Click here to enter text.
Division Environmental Specialist (DES): Click here to enter text.
Construction Environmental Compliance Contact: Christa Webber

NORTHERN NATURAL GAS
STORMWATER INSPECTION AND MAINTENANCE FORM

General Observations:	
Is there a violation affecting water quality?	
☐ Yes, and I immediately called the environmental specialist for instruction.	☐ No: No further action required.
Has the entire site achieved Final Stabilization per the permit requirements and have all temporary ECDs have been removed.	
☐ Yes, and I immediately called the environmental specialist for instruction.	☐ No: The next SWPPP inspection is due on or before this date:

Certification: I certify that: (1) the information contained in this report is true, accurate and complete; (2) I am qualified to complete this inspection based on my training and knowledge of the principles and practice of erosion and sediment controls; and (3) the project is in compliance with the SWPPP. I understand the terms and conditions of the general National Pollutant Discharge Elimination System (NPDES) permit authorization for this project, which authorizes the storm water discharges associated with industrial activity from the construction site identified as part of this certification.	
Inspector Printed Name:	
Inspector Signature:	**Date:**
Certification: I certify that: (1) the information contained in this report is true, accurate and complete; (2) I understand that I am required to take the listed corrective actions within 24 hours of this notification, or as soon as possible if field conditions prevent access, under the conditions of the National Pollutant Discharge Elimination System (NPDES) permit authorization for this project and the FERC Plan and Procedures; and (3) the project is in compliance with the SWPPP. I understand the terms and conditions of the general National Pollutant Discharge Elimination System (NPDES) permit authorization for this project, which authorizes the storm water discharges associated with industrial activity from the construction site identified as part of this certification.	
Contractor Environmental Lead Printed Name:	
Contractor Environmental Lead Signature:	**Date:**

SUBMITTED TO: (Enter names and email addresses below.)

Project Manager: Click here to enter text.
Construction Coordinator: Click here to enter text.
Field Operations Contact: Click here to enter text.
Division Environmental Specialist (DES): Click here to enter text.
Construction Environmental Compliance Contact: Christa Webber

INSPECTION PHOTOS

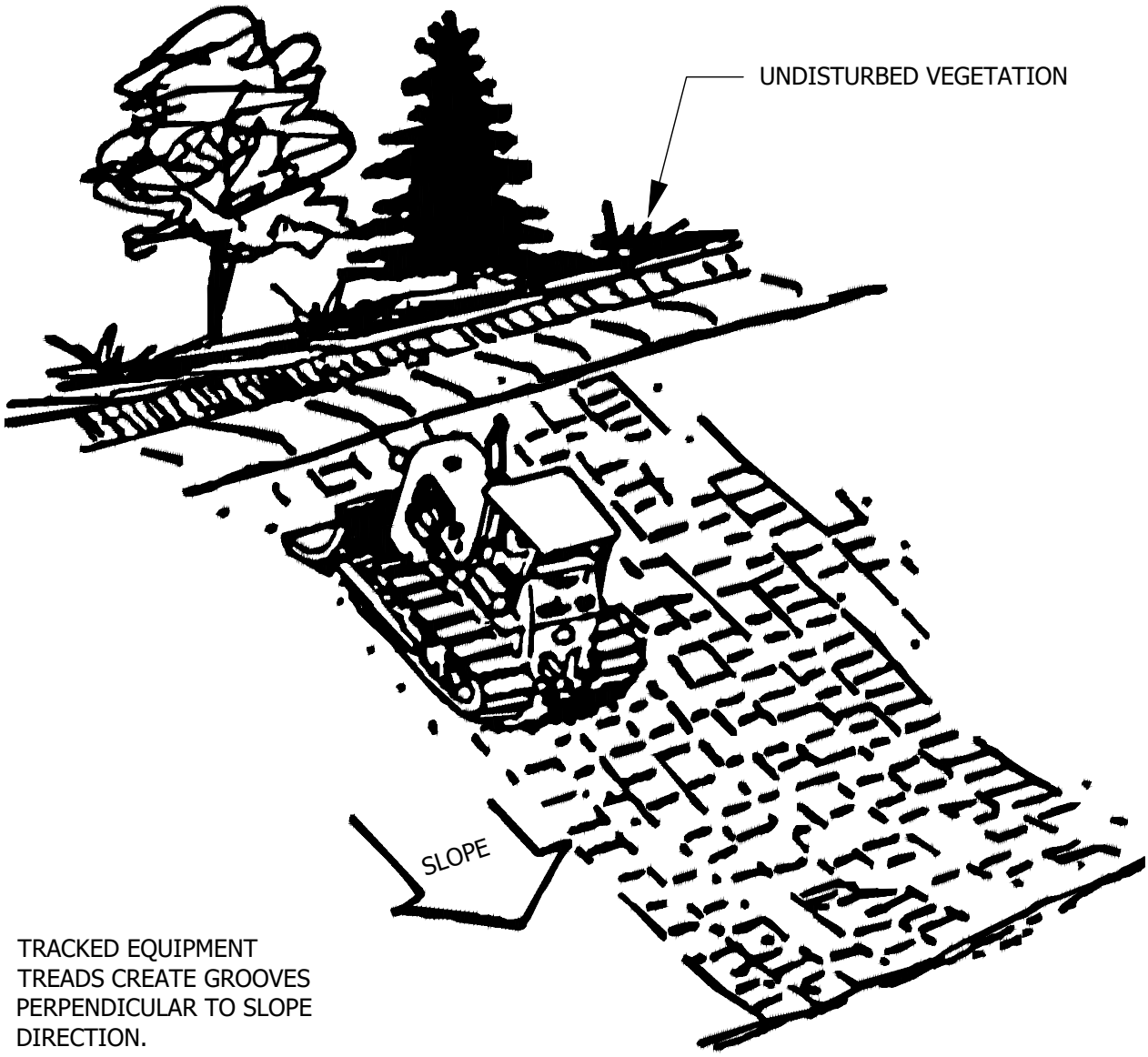
(Insert a minimum of two to three photos on the next pages, followed directly by captions detailing: 1) direction of view, 2) location within the temporary workspace, and 3) other significant information to reference the information noted above. Photos must be provided for any areas noted above as requiring maintenance. If those areas were corrected during the inspection, simply include photos showing the corrected concern.)

SUBMITTED TO: (Enter names and email addresses below.)

Project Manager: Click here to enter text.
Construction Coordinator: Click here to enter text.
Field Operations Contact: Click here to enter text.
Division Environmental Specialist (DES): Click here to enter text.
Construction Environmental Compliance Contact: Christa Webber

Appendix B

Typical Erosion and Sediment Control Details



TRACKED EQUIPMENT
TREADS CREATE GROOVES
PERPENDICULAR TO SLOPE
DIRECTION.

NOTE:
ALL SLOPES WITH A GRADE EQUAL TO OR STEEPER THAN 3:1 REQUIRE SLOPE TRACKING. SLOPES WITH A GRADE MORE GRADUAL THAN 3:1 REQUIRE SLOPE TRACKING IF THE STABILIZATION METHOD IS EROSION CONTROL BLANKET OR HYDROMULCH.

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PL#. N/A		CONST. YR 2019
STA# N/A		
	BY	DATE
DESIGN		12/26/2019
DRAWN		1/7/2020
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SCALE: N/A		

Northern Natural Gas

HORIZONTAL SLOPE GRADING

Figure E-1

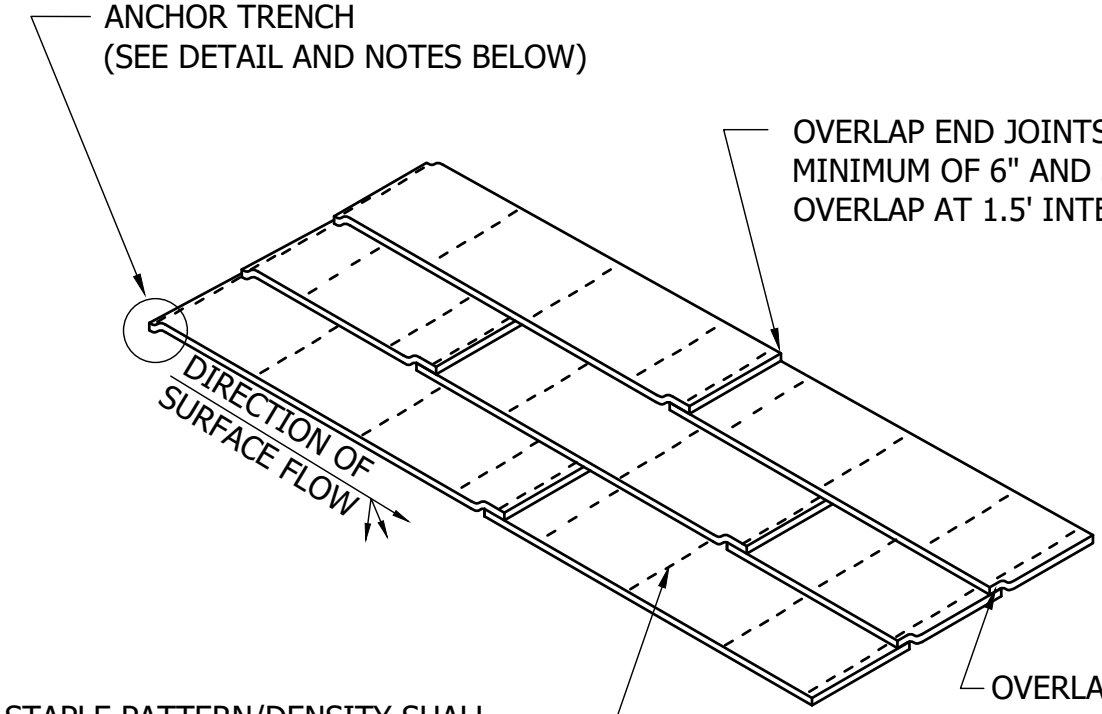
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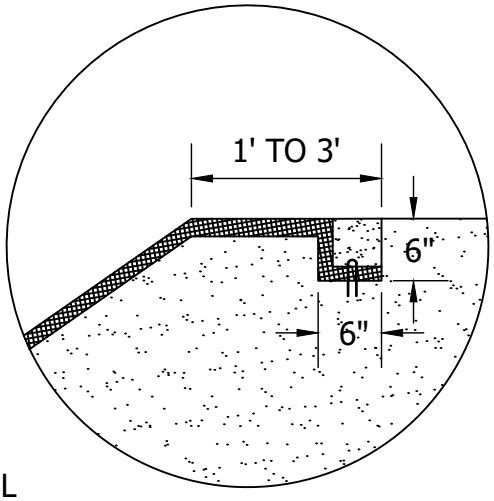
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ANCHOR TRENCH

1. DIG 6" X 6" TRENCH
2. LAY BLANKET IN TRENCH
3. STAPLE AT 1.5' INTERVALS
4. BACKFILL WITH NATURAL SOIL AND COMPACT
5. BLANKET LENGTH SHALL NOT EXCEED 100' WITHOUT AN ANCHOR TRENCH

NOTE:

1. SLOPE SURFACE SHALL BE FREE OF ROCKS, SOIL CLUMPS, STICKS, VEHICLE IMPRINTS, AND GRASS. BLANKETS SHALL HAVE GOOD SOIL CONTACT.
2. EROSION CONTROL BLANKET TYPE TO BE SPECIFIED BY ENGINEER.

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FILE NO.: N/A		
SCALE: N/A		

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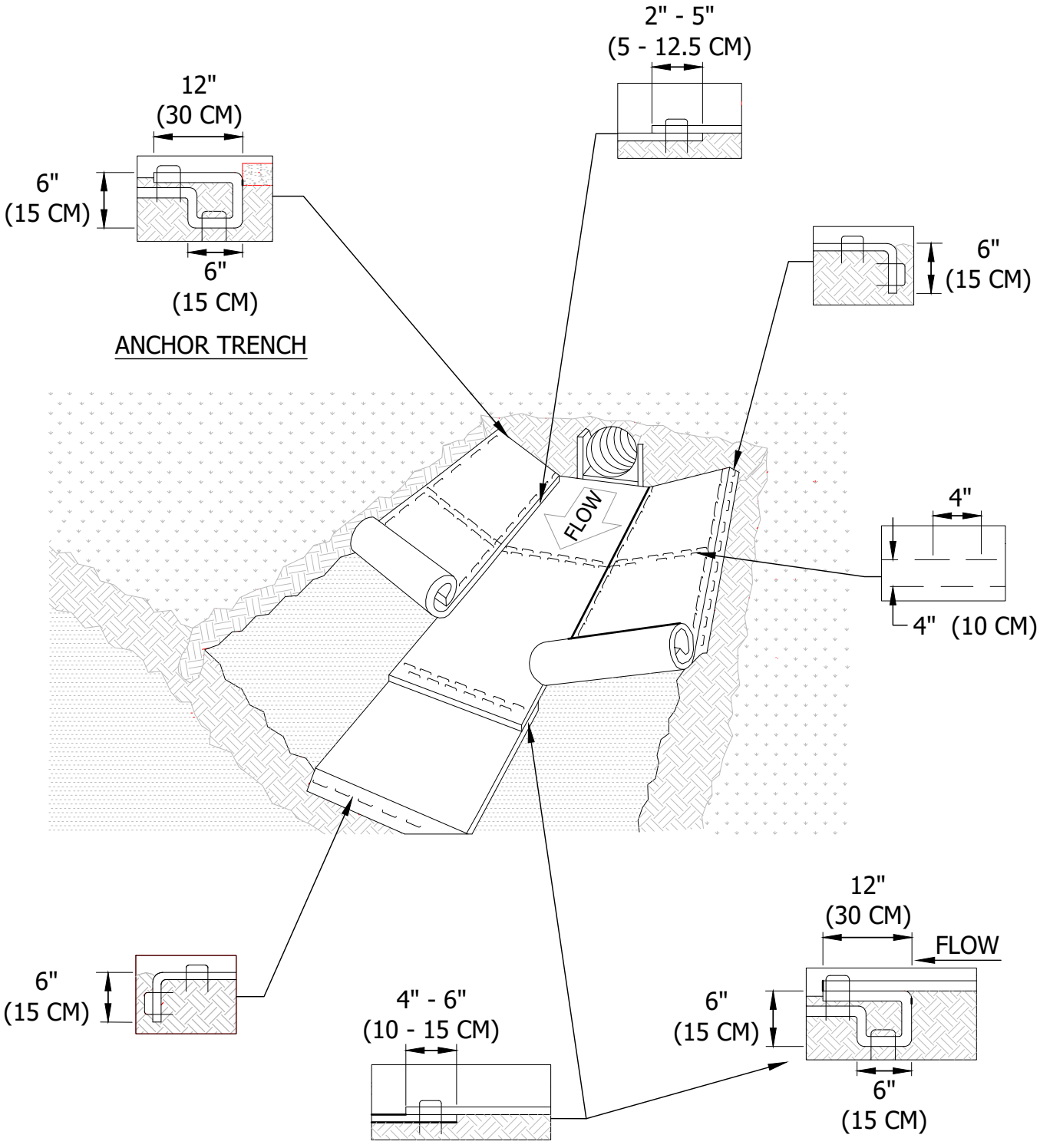
EROSION CONTROL BLANKET INSTALLATION

Figure E-2A

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NOTE:
EROSION CONTROL CHANNEL BLANKET TYPE TO BE SPECIFIED BY ENGINEER.

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SCALE: N/A		

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EROSION CONTROL BLANKET CHANNEL INSTALLATION

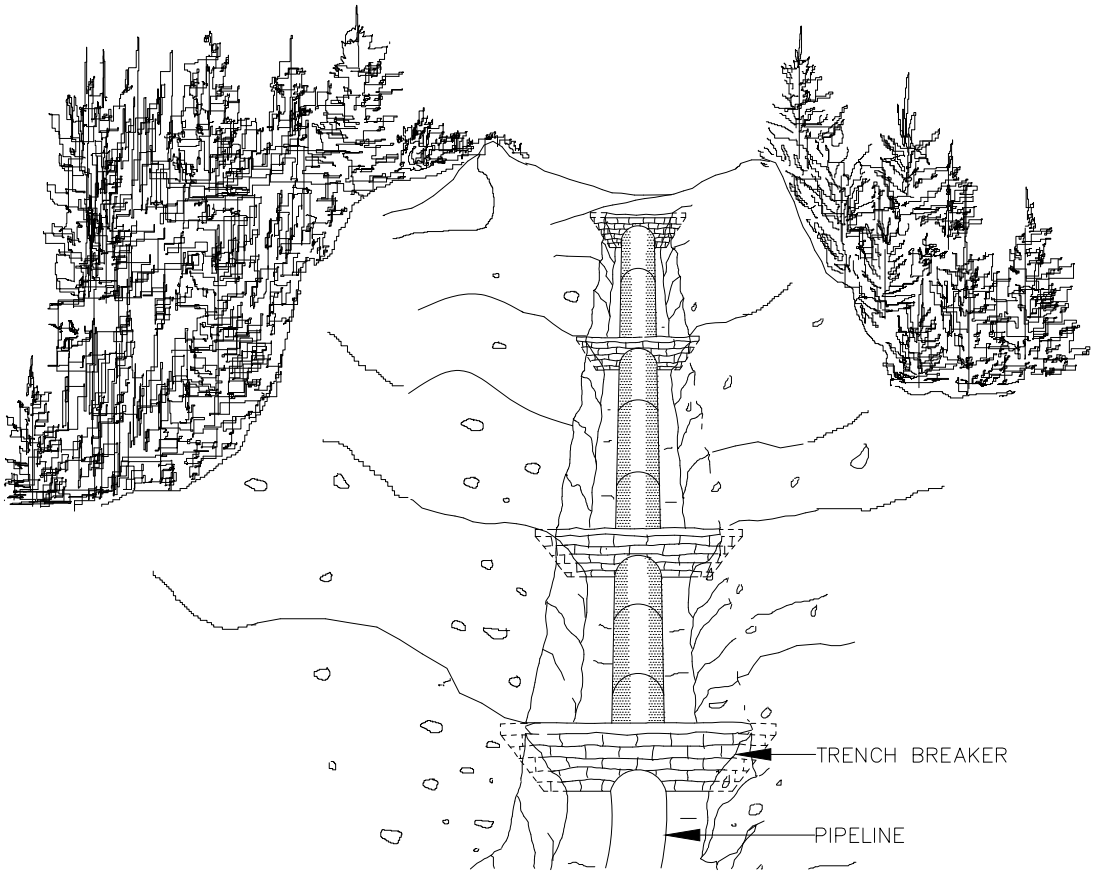
Figure E-2B

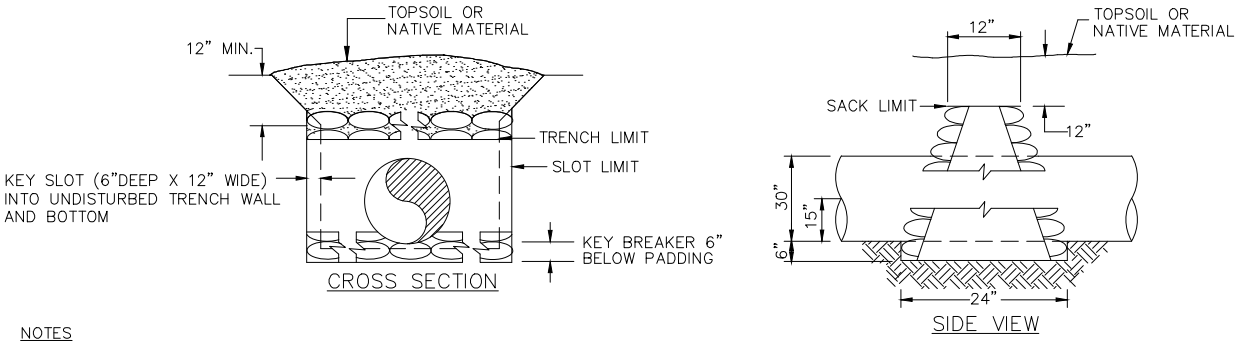
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NOTES

1. TRENCH BREAKERS SHALL BE INSTALLED:
   - ON SLOPES ALONG THE TRENCH LINE WHERE THE NATURAL DRAINAGE PATTERN, PROFILE, AND TYPE OF BACKFILL MATERIAL MAY RESULT IN LOSS OF BACKFILL MATERIAL OR ALTERATION OF THE NATURAL PATTERN;
   - AT THE BASE OF SLOPES ADJACENT TO WATERBODIES AND WETLANDS;
   - WHERE NEEDED TO AVOID DRAINING A WETLAND;
   - ON UPLAND SLOPES, AT THE SAME SPACING AS SLOPE BREAKERS AND UP SLOPE OF SLOPE BREAKERS;
   - IN CULTIVATED LAND AND RESIDENTIAL AREAS WHERE PERMANENT SLOPE BREAKERS ARE NOT TYPICALLY INSTALLED, AT THE SAME SPACING AS IF PERMANENT SLOPE BREAKERS WHERE REQUIRED.
2. OPEN WEAVE HEMP OR JUTE SACKS SHALL BE FILLED WITH A MINIMUM OF 55lbs. MIXTURE OF 1 PART CEMENT TO 6 PARTS SAND OR SUBSOIL SO THAT NATURAL GROUND WATER WILL PERMIT MIXTURE TO EXUDE AND BOND SACKS TOGETHER. FOAM MAY REPLACE MIXTURE.
3. BREAKER SPACING AND CONFIGURATION MAY BE CHANGED AS DIRECTED BY COMPANY. DEPTH OF DITCH MAY VARY WITH SITE CONDITIONS. SEE FERC'S PLANS AND PROCEDURES, FOR TYPICAL SPACING.
4. ALL MATERIALS SHALL BE SUPPLIED BY CONTRACTOR.
5. TRENCH BREAKERS MUST FULLY ENCIRCLE THE PIPE.

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Northern Natural Gas.

TYPICAL TRENCH BREAKER REQUIREMENTS

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PROJECT NO.

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FIGURE 6

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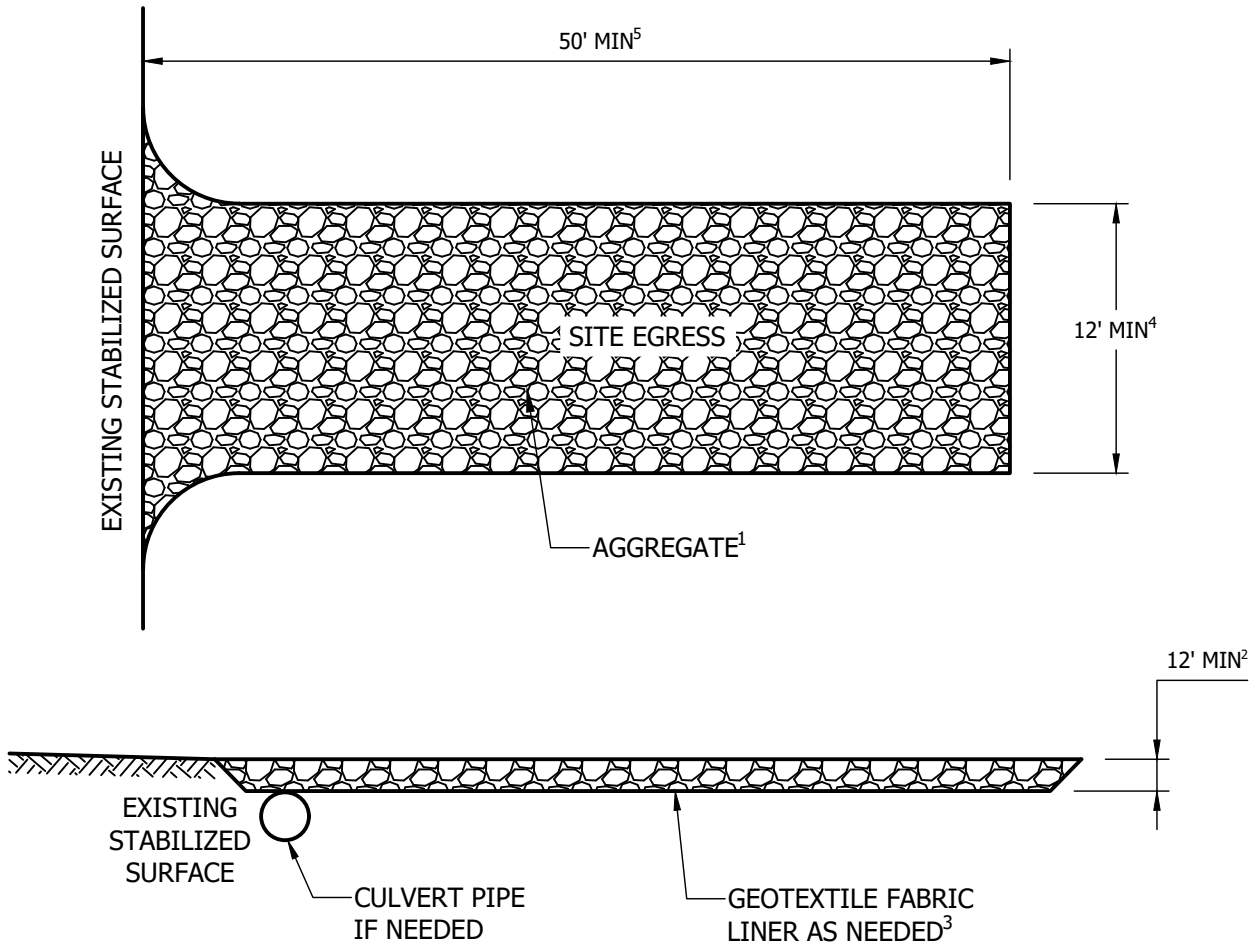


Table 1. Gradation for stone tracking pads	
Sieve Size	Percent by weight passing
3"	100
2-1/2"	90-100
1-1/2"	25-60
3/4"	0-20
3/8"	0-5

NOTE

1. USE HARD, DURABLE, ANGULAR STONE OR RECYCLED CONCRETE MEETING THE GRADATION IN TABLE 1. WHERE THIS GRADATION IS NOT AVAILABLE, MEET THE GRADATION IN WISCONSIN DEPARTMENT OF TRANSPORTATION (DOT) 2018 STANDARD SPECIFICATIONS, SECTION 312, SELECT CRUSHED MATERIAL.
2. SLOPE THE STONE TRACKING PAD IN A MANNER TO DIRECT RUNOFF TO AN APPROVED TREATMENT PLACE.
3. SELECT FABRIC TYPE BASED ON SOIL CONDITIONS AND VEHICLES LOADING.
4. INSTALL TRACKING PAD ACROSS FULL WIDTH OF THE ACCESS POINT, OR RESTRICT EXISTING TRAFFIC TO A DEDICATED EGRESS LAND A LEAST 12 FEET WIDE ACROSS THE TOP OF THE PAD.
5. IF A 50' PAD LENGTH IS NOT POSSIBLE DUE TO SITE GEOMETRY, INSTALL THE MAXIMUM LENGTH PRACTICABLE AND SUPPLEMENT WITH ADDITIONAL PRACTICES AS NEEDED.

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ASBUILT		
FILE NO.: N/A		
SCALE: N/A		

Northern Natural Gas

CONSTRUCTION ENTRANCE

Figure ERO-12

PROJECT NO. N/A

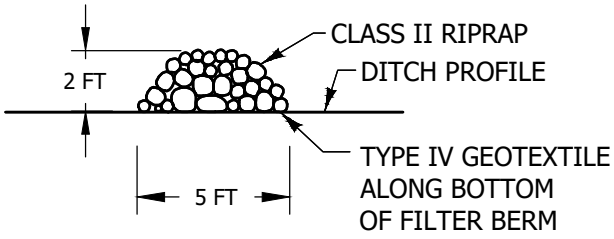
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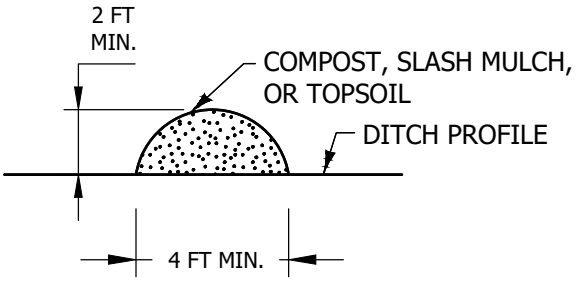
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TYPE 5 (ROCK)



TYPE 1 (COMPOST), TYPE 2 (SLASH MULCH), OR TYPE 4 (TOPSOIL)

NOTE

1. FOR PERMANENT DITCH CHECK REDUCE THE HEIGHT TO 16 IN. AND MODIFY THE 1:2 (V:H) SIDE SLOPE TO 1:6 (V:H).

FAC. CODE: N/A		REL. W.O. N/A	
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SCALE: N/A			

Northern Natural Gas

SEDIMENT CONTROL FILTER BERM

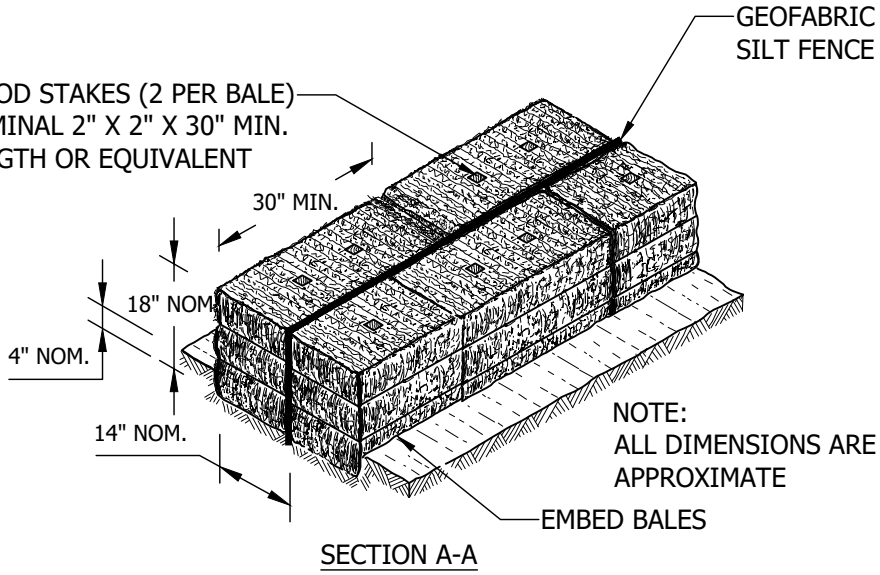
Figure ERO-13

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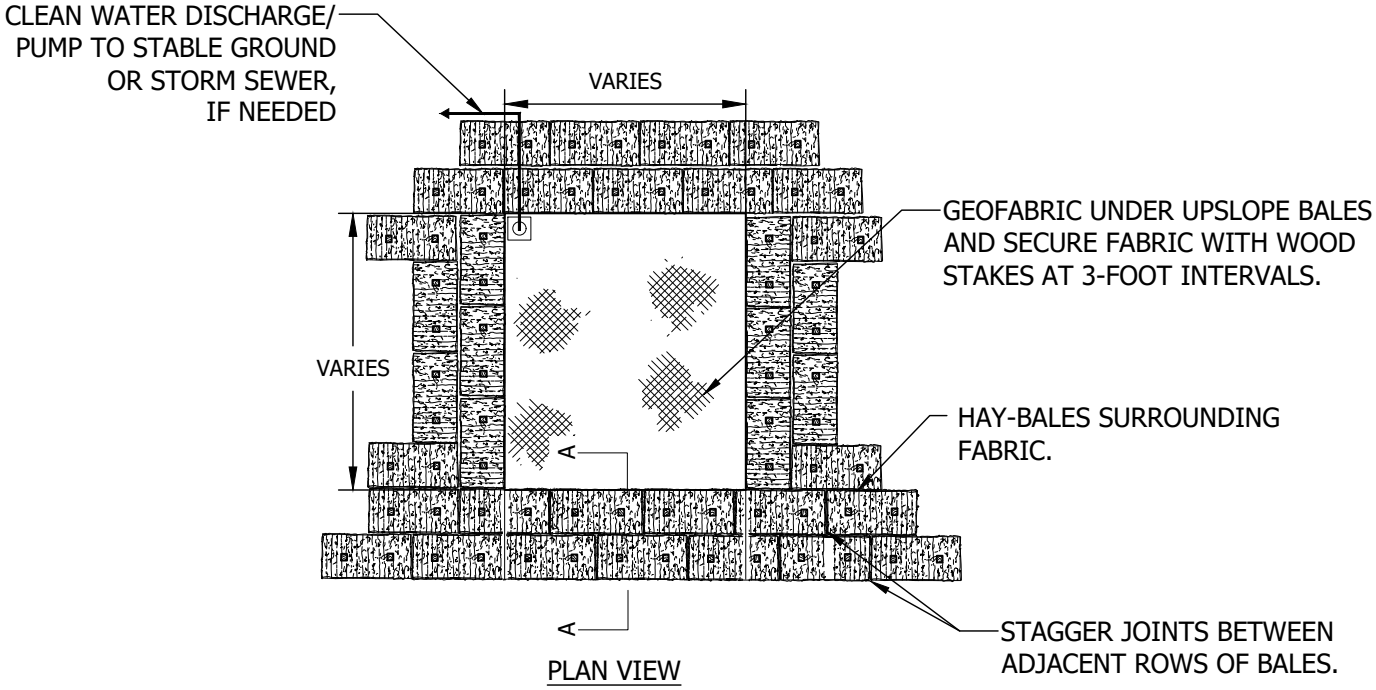
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SECTION A-A



PLAN VIEW

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	BY	DATE
DESIGN		1/8/2020
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FILE NO.: N/A		
SCALE: N/A		

Northern Natural Gas

STRAW BALE DEWATERING STRUCTURE

Figure ERO-14

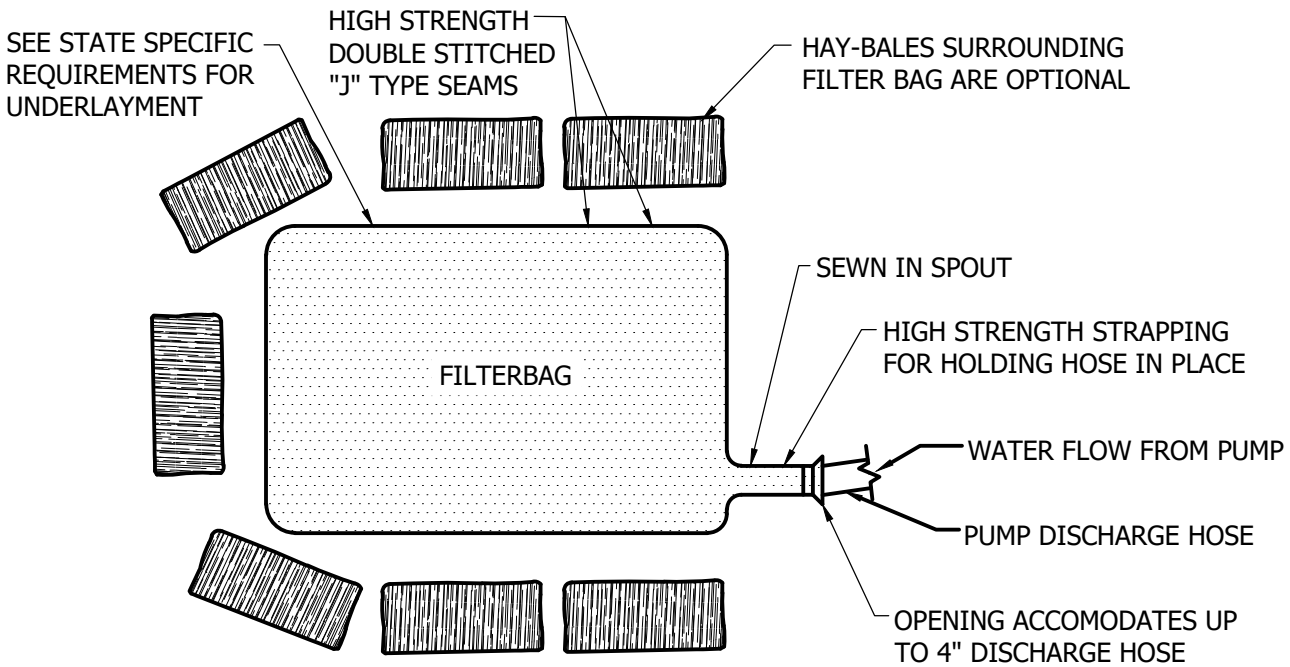
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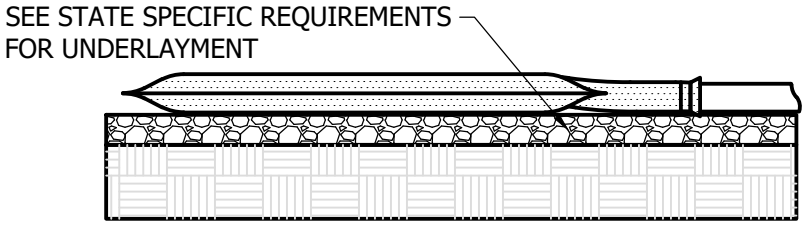
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TOP VIEW



SIDE VIEW

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SCALE: N/A		

Northern Natural Gas

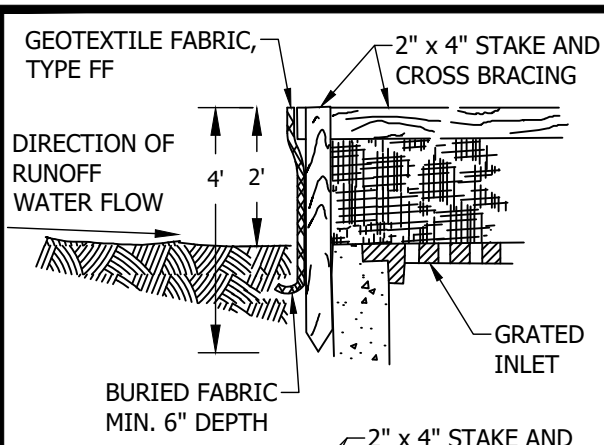
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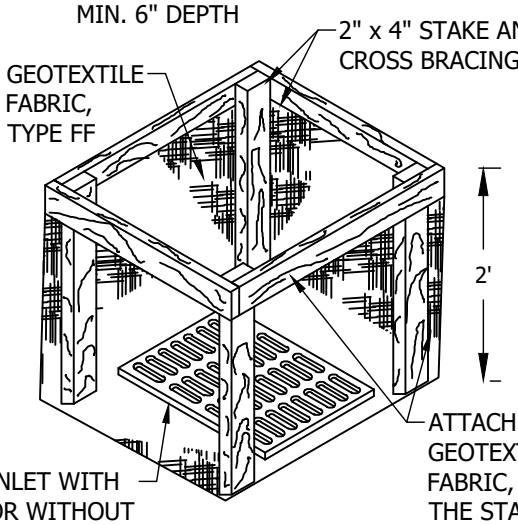
Figure ERO-15

PROJECT NO.
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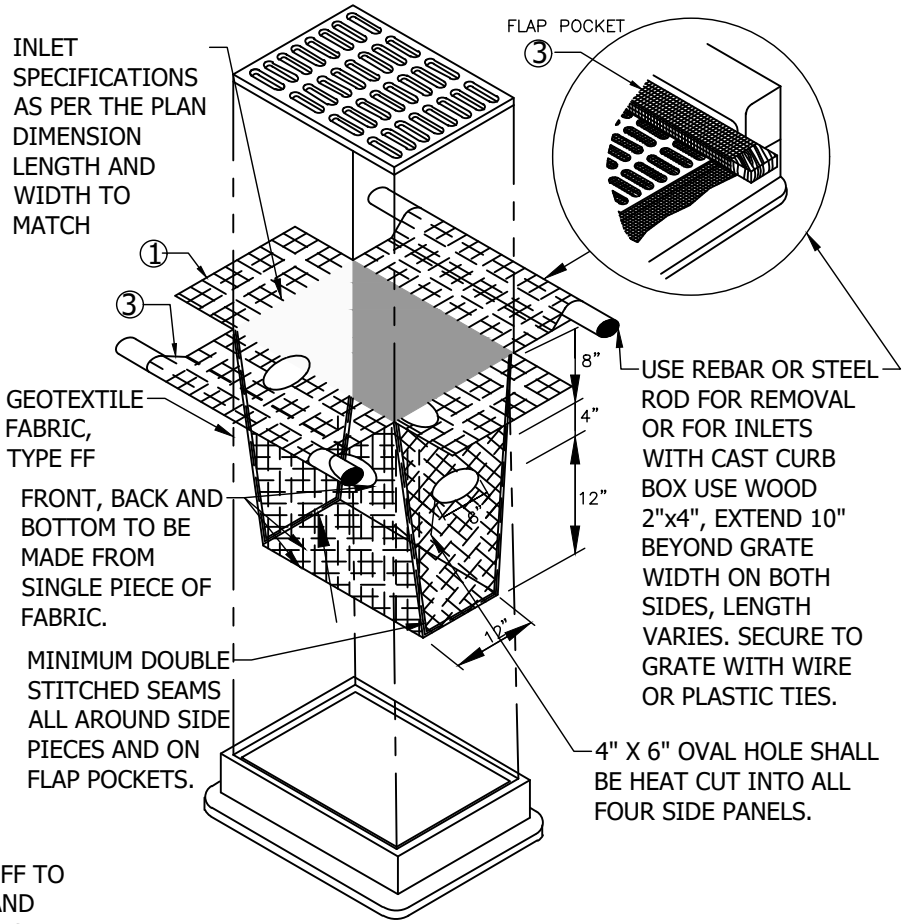
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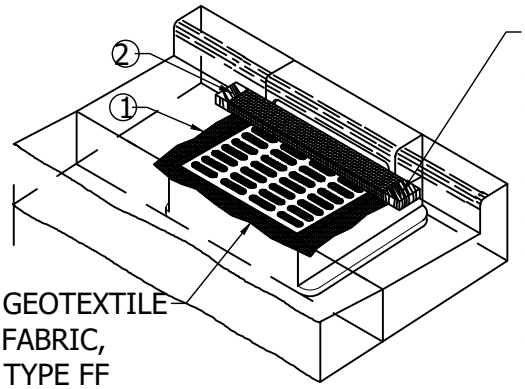




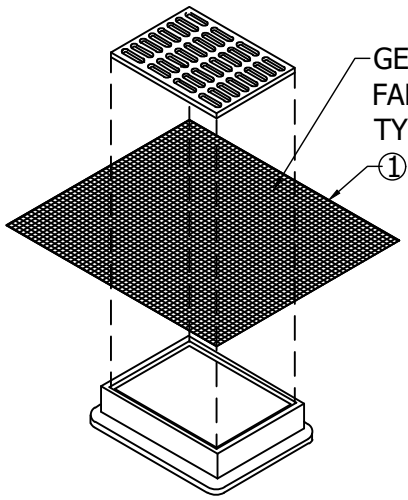
INLET PROTECTION, TYPE A



INLET PROTECTION, TYPE D
(CAN BE INSTALLED IN ANY INLET TYPE WITH OR WITHOUT A CURB BOX AS PER NOTE ②)



INLET PROTECTION, TYPE C (WITH CURB BOX)



INLET PROTECTION, TYPE B (WITHOUT CURB BOX)
(CAN BE INSTALLED IN ANY INLET WITHOUT A CURB BOX)

1. FINISHED SIZE, INCLUDING FLAP POCKETS WHERE REQUIRED, SHALL EXTEND A MINIMUM OF 10" AROUND THE PERIMETER TO FACILITATE MAINTENANCE OR REMOVAL.
2. FOR INLET PROTECTION, TYPE C (WITH CURB BOX), AN ADDITIONAL 18" OF FABRIC IS WRAPPED AROUND THE WOOD AND SECURED WITH STAPLES. THE WOOD SHALL NOT BLOCK THE ENTIRE HEIGHT OF THE CURB BOX OPENING.
3. FLAP POCKETS SHALL BE LARGE ENOUGH TO ACCEPT WOOD 2X4.

FAC. CODE: N/A		REL. W.O. N/A	
PL#. N/A		CONST. YR 2019	
STA# N/A			
	BY	DATE	
DESIGN		1/8/2020	
DRAWN		1/8/2020	
ASBUILT			
FILE NO.: N/A			
SCALE: N/A			

Northern Natural Gas

INLET PROTECTION DROP-IN BAG

Figure ER0-16

PROJECT NO. N/A

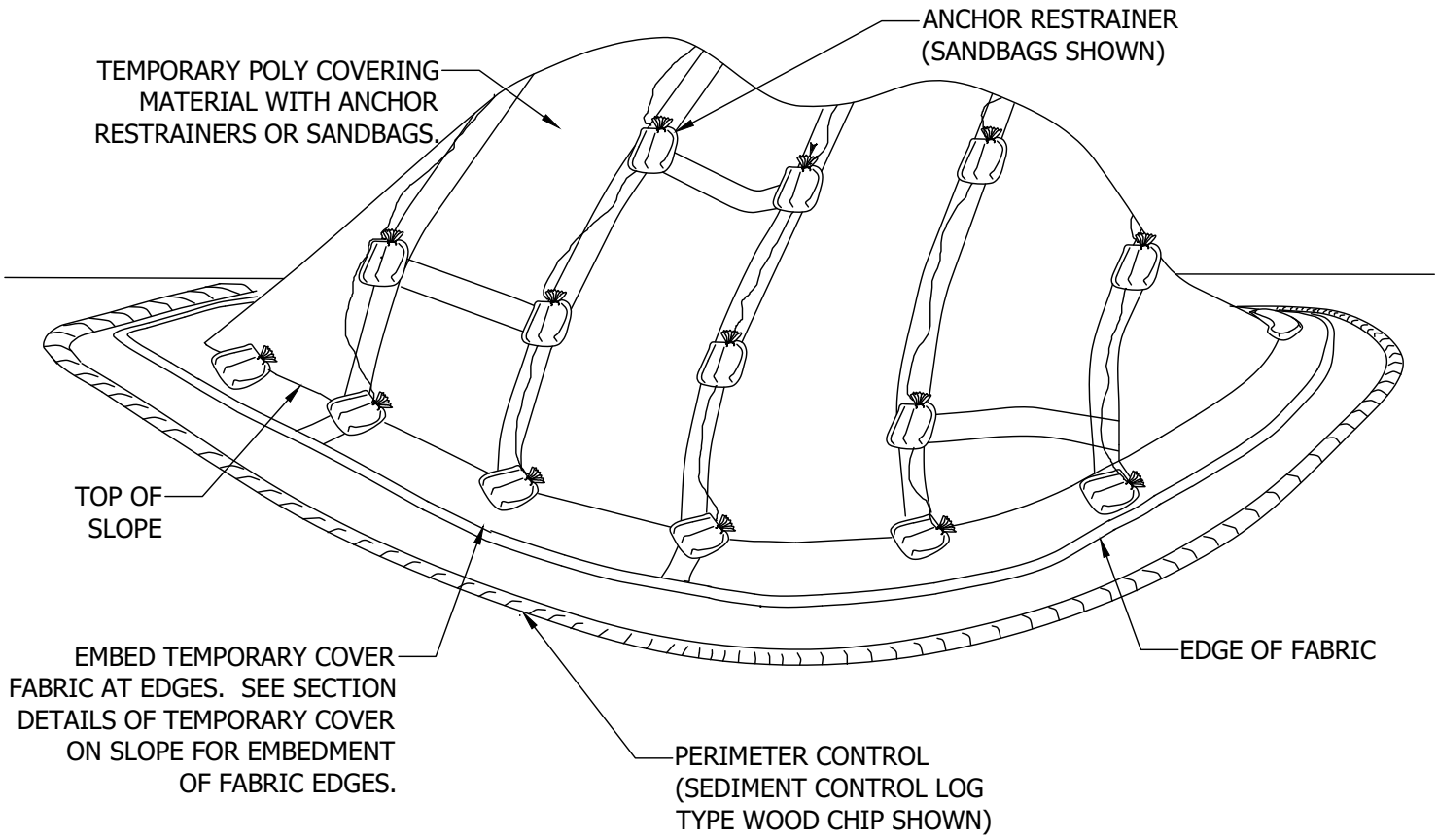
DWG. NO. TYP1

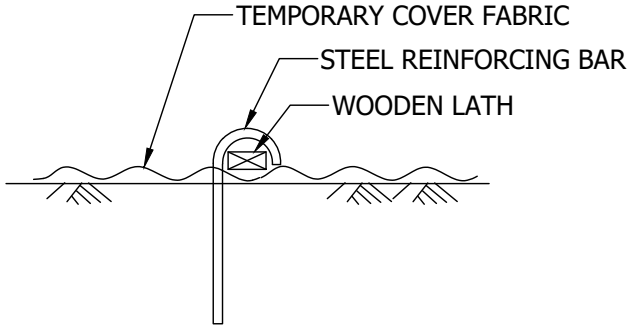
SHT. 1 OF 1

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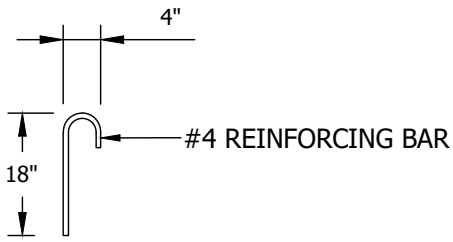
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ANCHOR RESTRAINER
(STEEL BAR AND WOODEN LATH OPTION)



STEEL REINFORCING BAR DETAIL

NOTES

1. ANCHOR RESTRAINERS: TYPE, QUANTITY, AND SPACING ARE INCIDENTAL TO POLY COVER. PROVIDE ON CORNERS AND SEAMS OF POLY COVER MATERIAL TO KEEP FROM BLOWING OFF. NO MINIMUM SPACING REQUIRED.
2. PERIMETER CONTROL: USE SEDIMENT CONTROL LOGS TYPE WOOD CHIP OR COMPOST, INCIDENTAL.

FAC. CODE: N/A		REL. W.O. N/A
PL#. N/A		CONST. YR 2019
STA# N/A		
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Northern Natural Gas

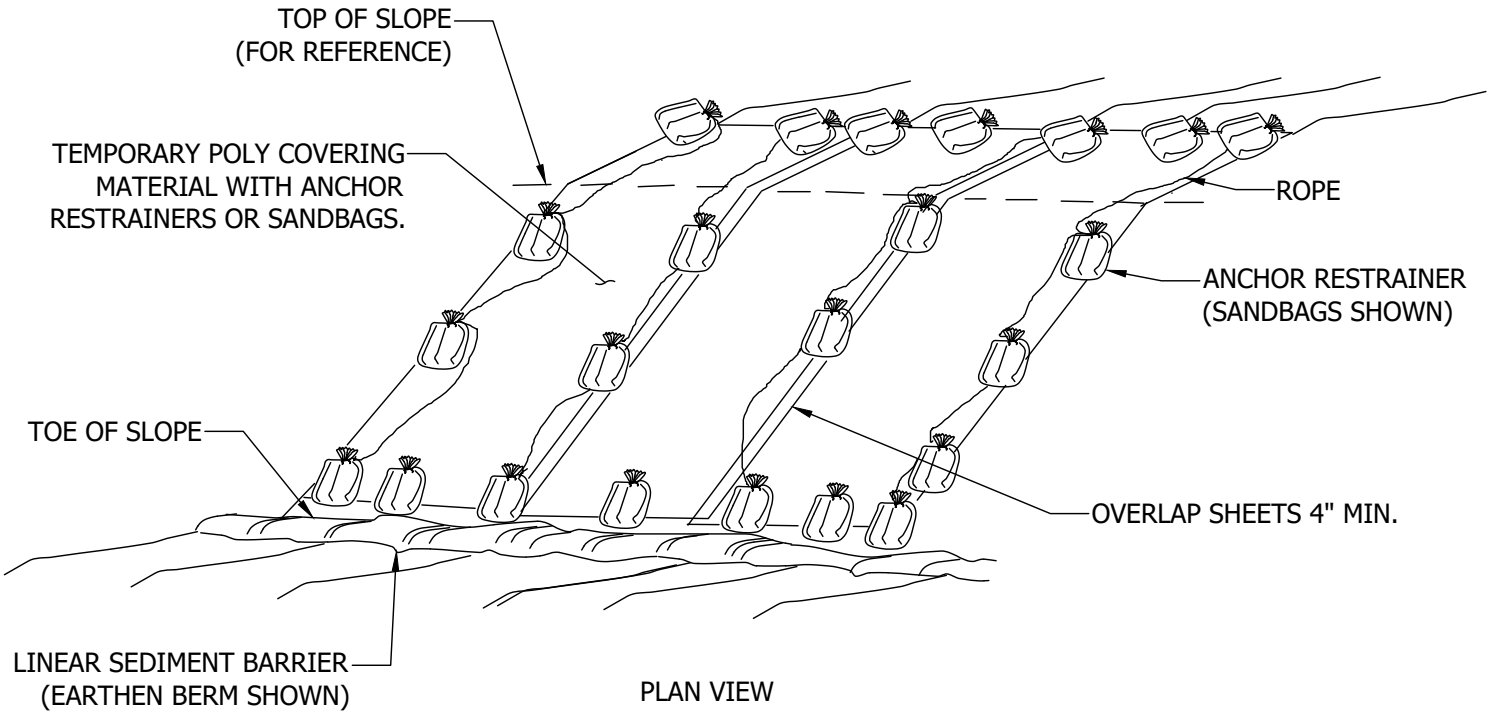
POLY COVER ON SLOPE

Figure ERO-17a

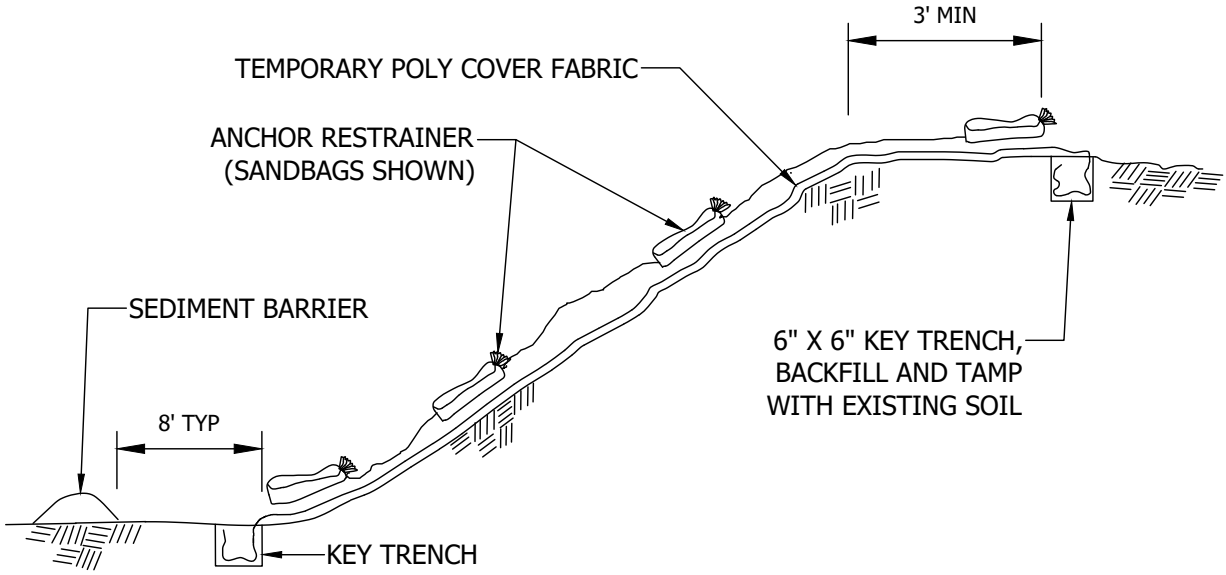
PROJECT NO.
N/A

DWG. NO.
TYP1
SHT. 1 OF 1

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PLAN VIEW



ELEVATION VIEW

NOTES

1. ANCHOR RESTRAINERS: TYPE, QUANTITY, AND SPACING ARE INCIDENTAL TO POLY COVER. PROVIDE ON CORNERS AND SEAMS OF POLY COVER MATERIAL TO KEEP FROM BLOWING OFF. NO MINIMUM SPACING REQUIRED.
2. PERIMETER CONTROL: USE SEDIMENT CONTROL LOGS TYPE WOOD CHIP OR COMPOST, INCIDENTAL.

FAC. CODE: N/A		REL. W.O. N/A	
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STA# N/A			
	BY	DATE	
DESIGN		1/8/2020	
DRAWN		1/8/2020	
ASBUILT			
FILE NO.: N/A			
SCALE: N/A			

Northern Natural Gas

POLY COVER ON STOCKPILE

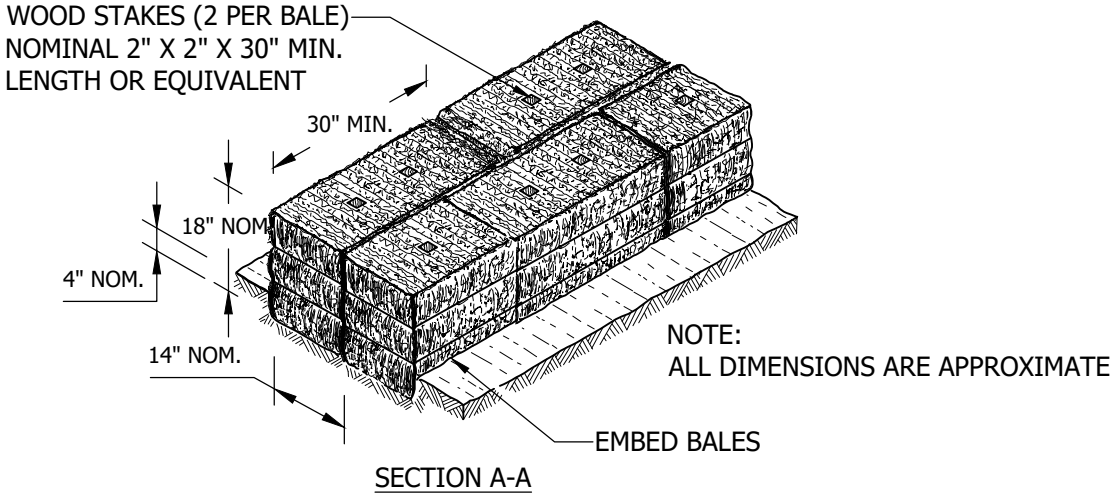
Figure ERO-17b

PROJECT NO.
N/A

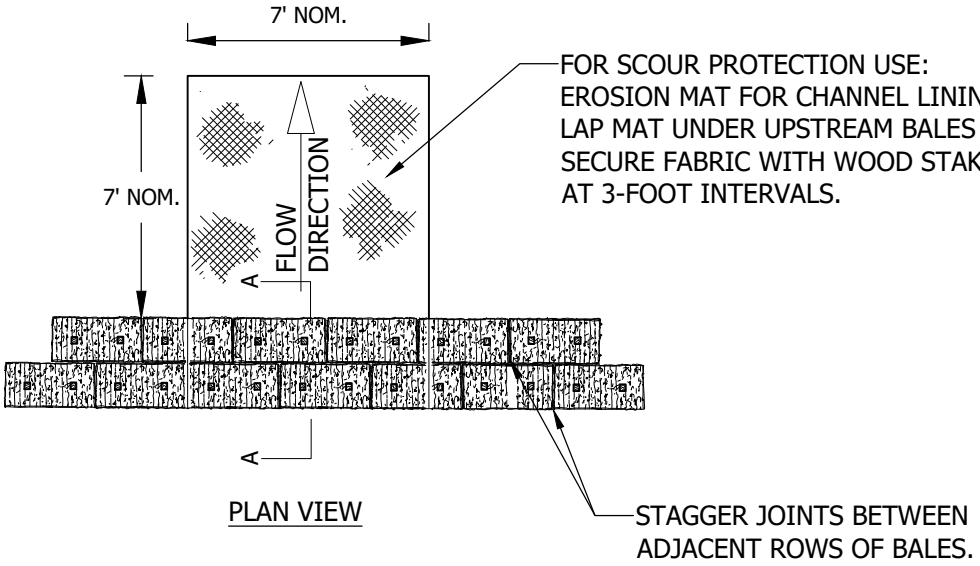
DWG. NO.
TYP1
SHT. 1 OF 1

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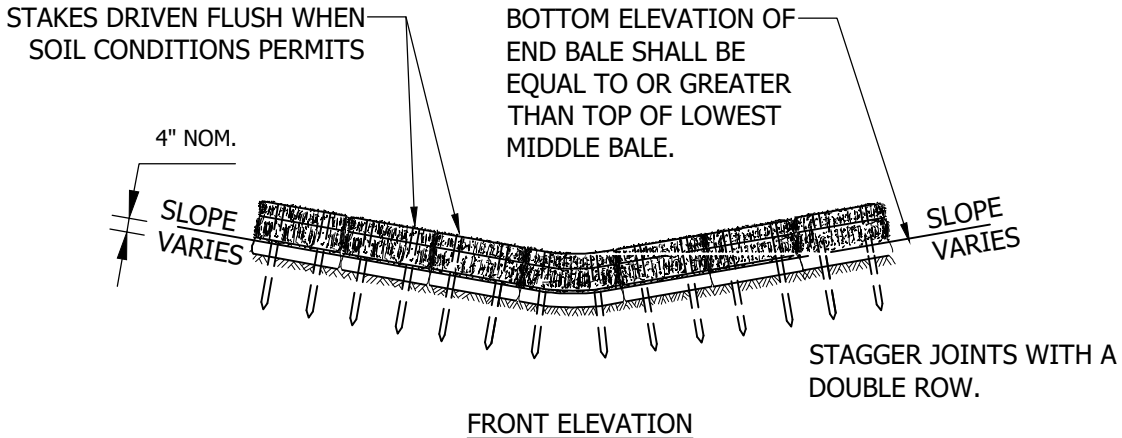
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SECTION A-A



PLAN VIEW



FRONT ELEVATION

FAC. CODE: N/A		REL. W.O. N/A
PL#. N/A		CONST. YR 2019
STA# N/A		
	BY	DATE
DESIGN		1/15/2020
DRAWN		1/15/2020
ASBUILT		
FILE NO.: N/A		
SCALE: N/A		

Northern Natural Gas

BALE BARRIER DITCH CHECK

Figure ERO-19

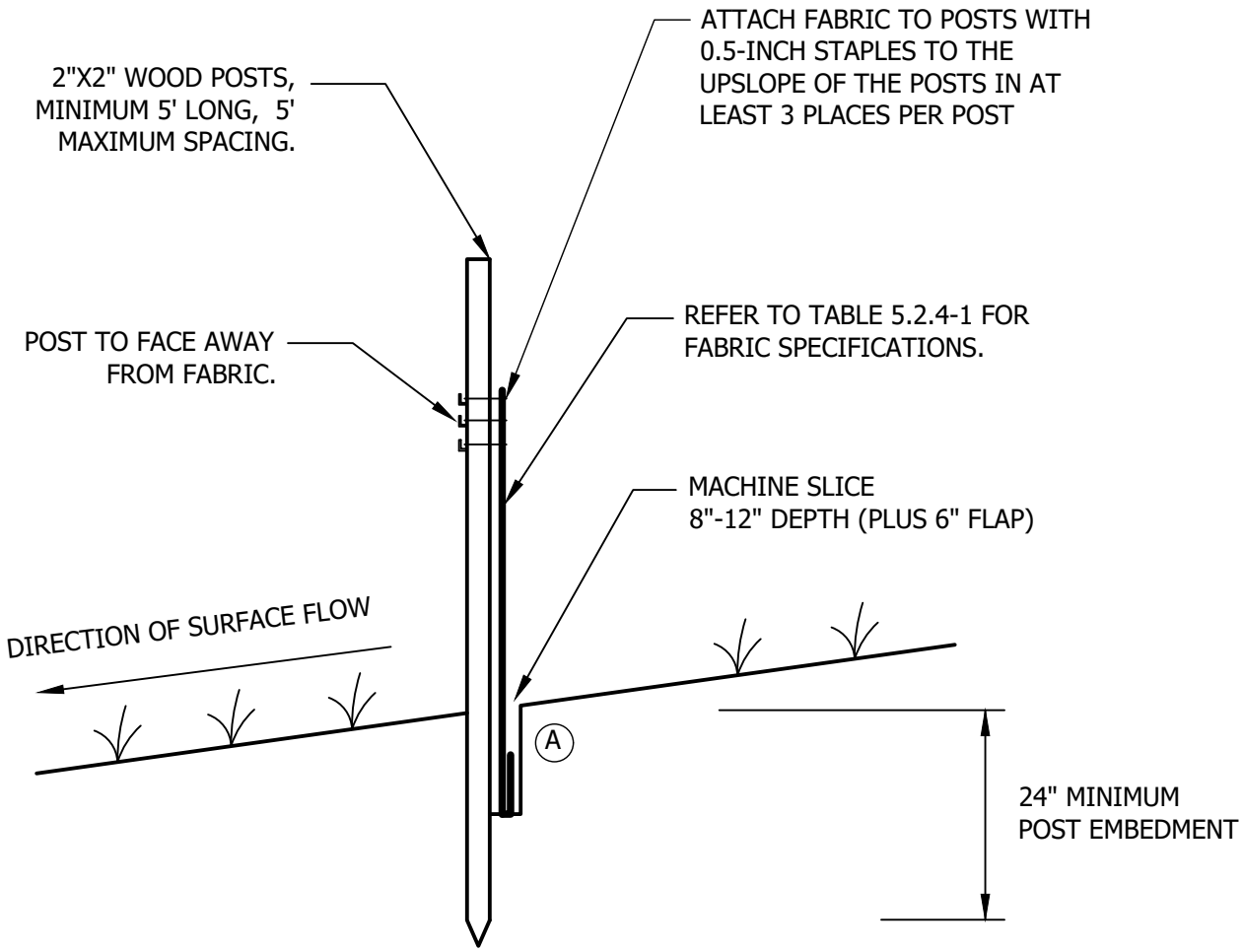
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DWG. NO. TYP1

SHT. 1 OF 1

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NOTE:
THE MACHINE SLICED METHOD (THIS DETAIL) IS THE STANDARD SILT FENCE INSTALLATION METHOD. HEAVY-DUTY (S-2) SILT FENCE INSTALLATION METHODS SHOULD ONLY BE USED WHEN APPROVED OR DIRECTED BY THE NORTHERN NATURAL GAS.

(A) COMPACTION:
AFTER "SLICING" IN THE FABRIC AND *BEFORE* INSTALLATION OF WOOD POSTS, DRIVE INSTALLATION EQUIPMENT OVER THE "SLICE" WHILE FABRIC IS LAYING ON THE GROUND. *THEN* INSTALL WOOD POSTS AND PULL UP FABRIC TO ATTACH AT A UNIFORM HEIGHT.

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PL#. N/A		CONST. YR 2019
STA# N/A		
	BY	DATE
DESIGN		12/20/2019
DRAWN		1/7/2020
ASBUILT		
FILE NO.: N/A		
SCALE: N/A		

Northern Natural Gas

SILT FENCE MACHINE SLICED

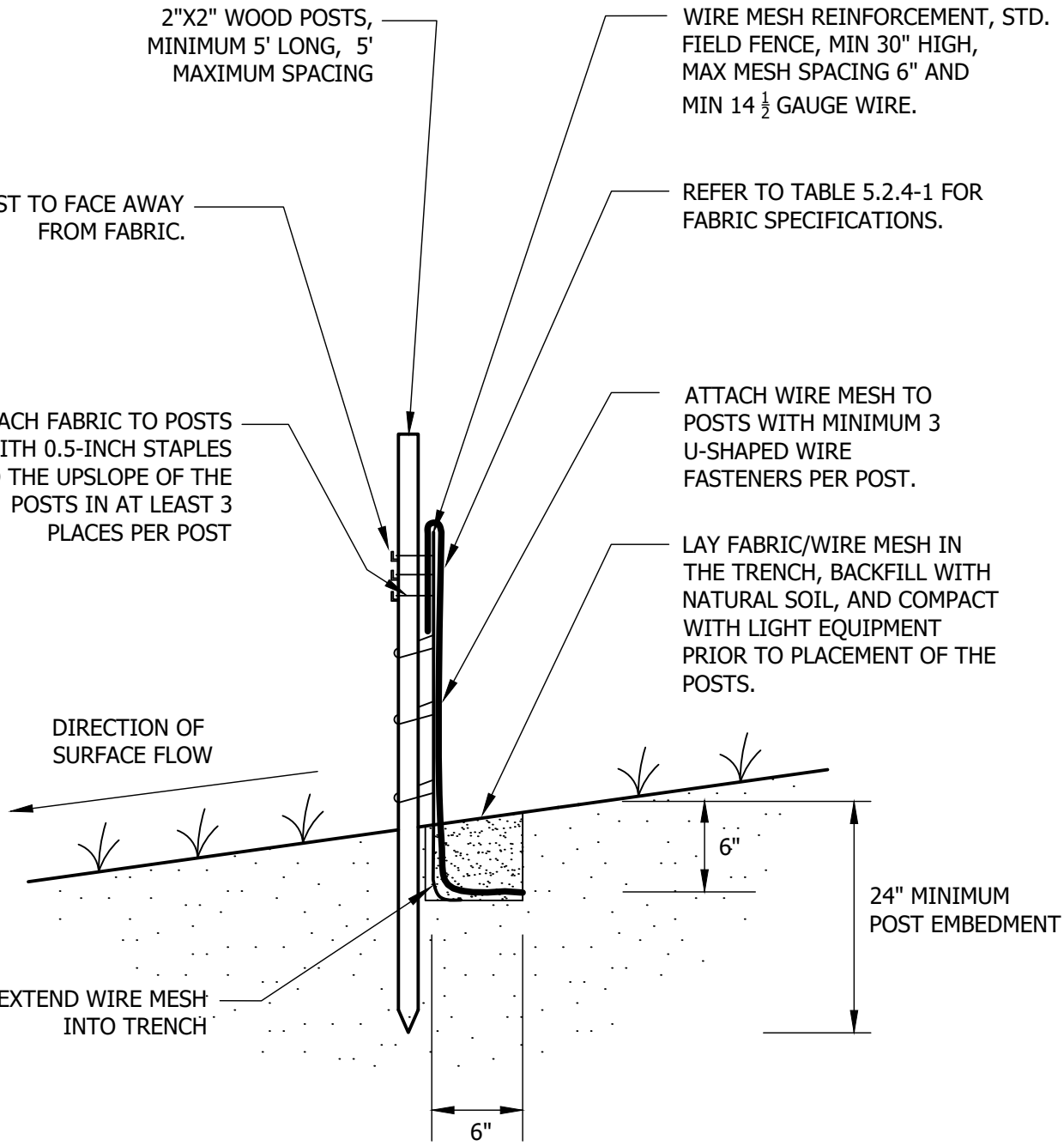
Figure S-1

PROJECT NO.
N/A

DWG. NO.
TYP1
SHT. 1 OF 1

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FAC. CODE: N/A		REL. W.O. N/A
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DRAWN		1/7/2020
ASBUILT		
FILE NO.: N/A		
SCALE: N/A		

Northern Natural Gas

SILT FENCE WIRE BACKED (HEAVY-DUTY)

Figure S-2

PROJECT NO. N/A

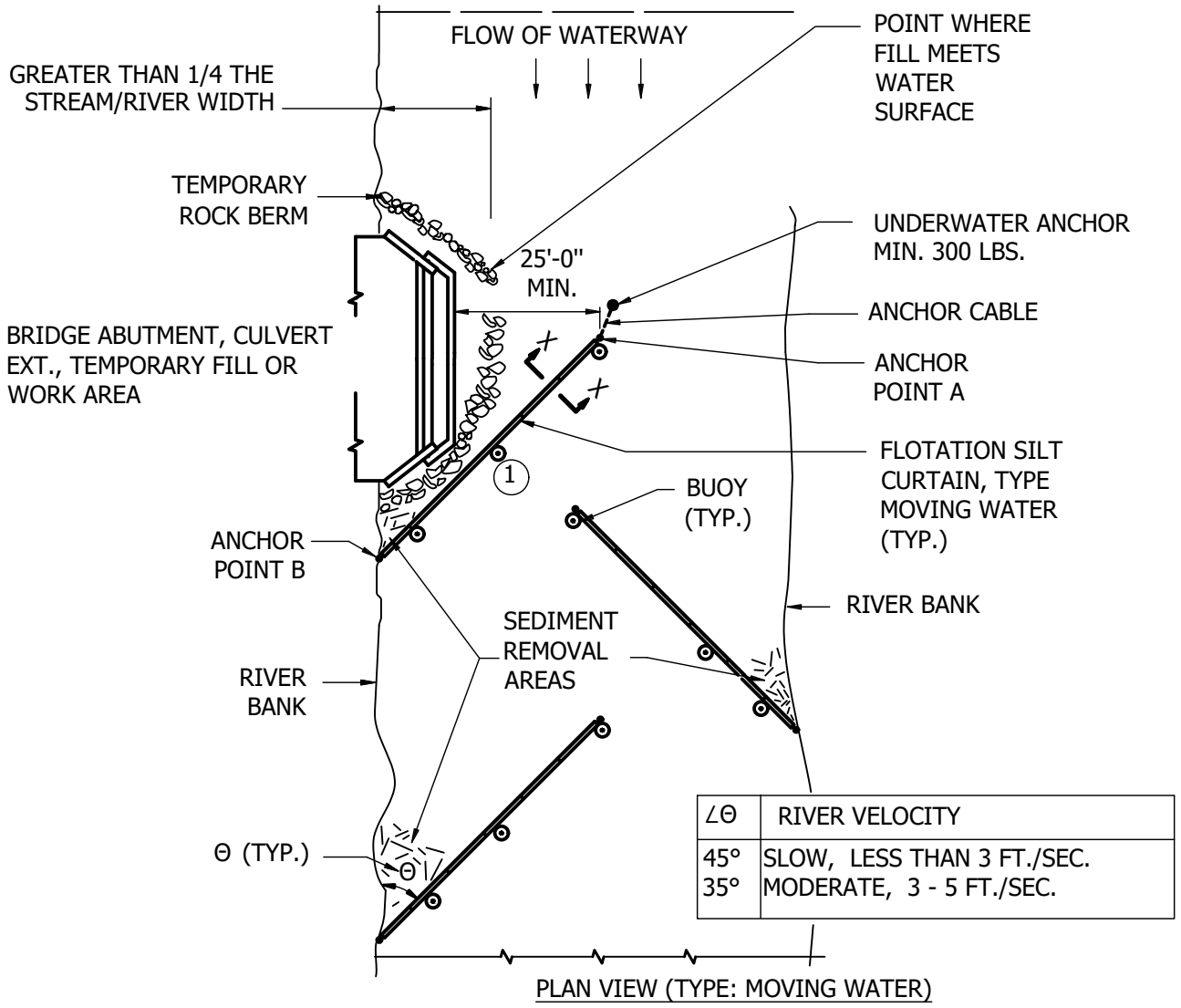
DWG. NO. TYP1

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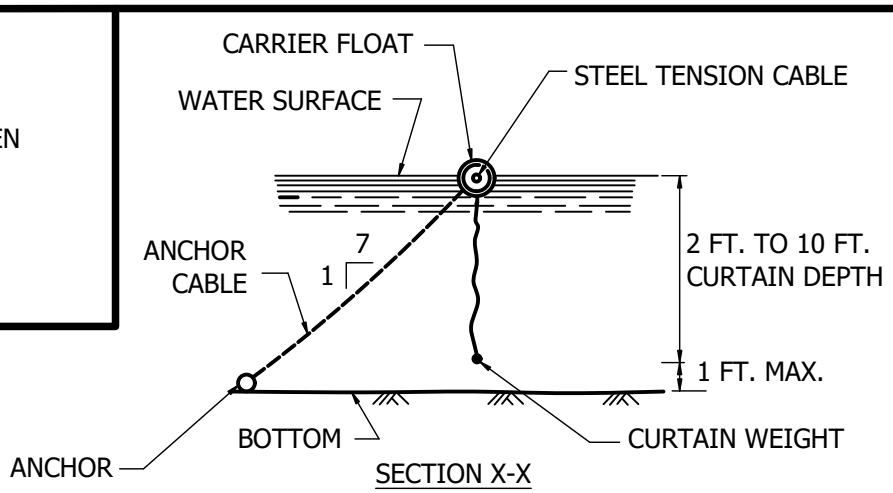
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∠Θ	RIVER VELOCITY
45°	SLOW, LESS THAN 3 FT./SEC.
35°	MODERATE, 3 - 5 FT./SEC.

PLAN VIEW (TYPE: MOVING WATER)

NOTE:
1 100 FT. MAX. SPACING BETWEEN ANCHORS. ANCHORS WEIGH MIN. 40 LBS.



SECTION X-X

FAC. CODE: N/A		REL. W.O. N/A	
PL#. N/A		CONST. YR 2019	
STA# N/A			
	BY	DATE	
DESIGN		12/22/2019	
DRAWN		1/7/2020	
ASBUILT			
FILE NO.: N/A			
SCALE: N/A			

Northern Natural Gas

FLOATATION SILT CURTAIN IN MOVING WATER

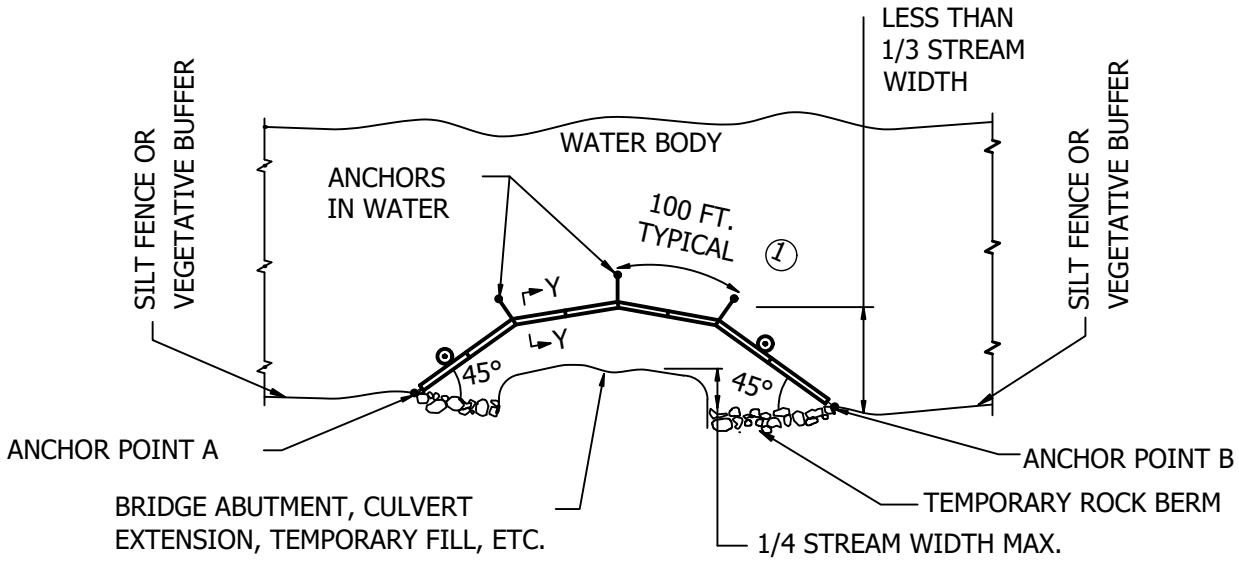
Figure S-3A

PROJECT NO. N/A

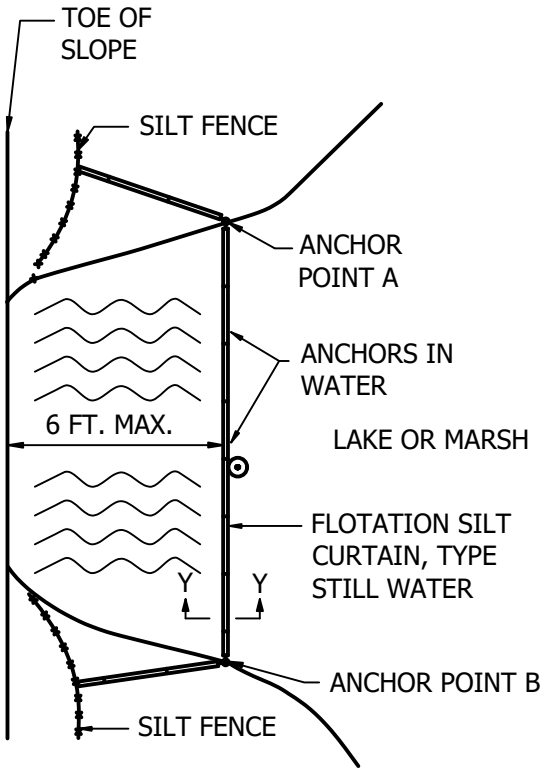
DWG. NO. TYP1

SHT. 1 OF 1

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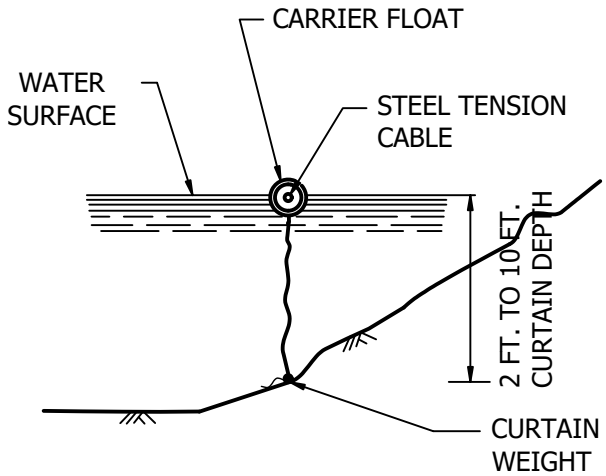
PLAN VIEW (TYPE: WORK AREA)



PLAN VIEW (TYPE: STILL WATER)

NOTES:

1. 100 FT. MAX. SPACING BETWEEN ANCHORS. ANCHORS WEIGH MIN. 40 LBS.



SECTION Y-Y

FAC. CODE: N/A		REL. W.O. N/A	
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ASBUILT			
FILE NO.: N/A			
SCALE: N/A			

Northern Natural Gas

FLOATATION SILT CURTAIN IN STILL WATER

Figure S-3B

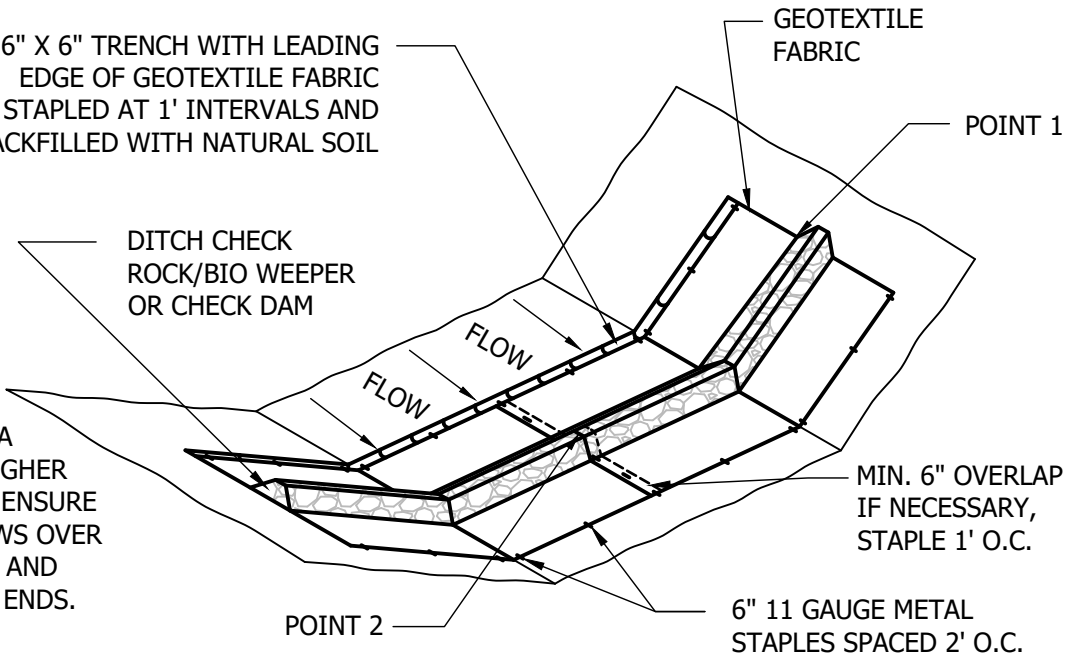
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DWG. NO. TYP1

SHT. 1 OF 1

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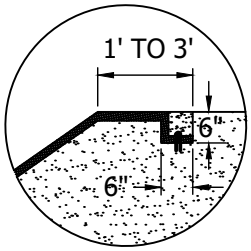
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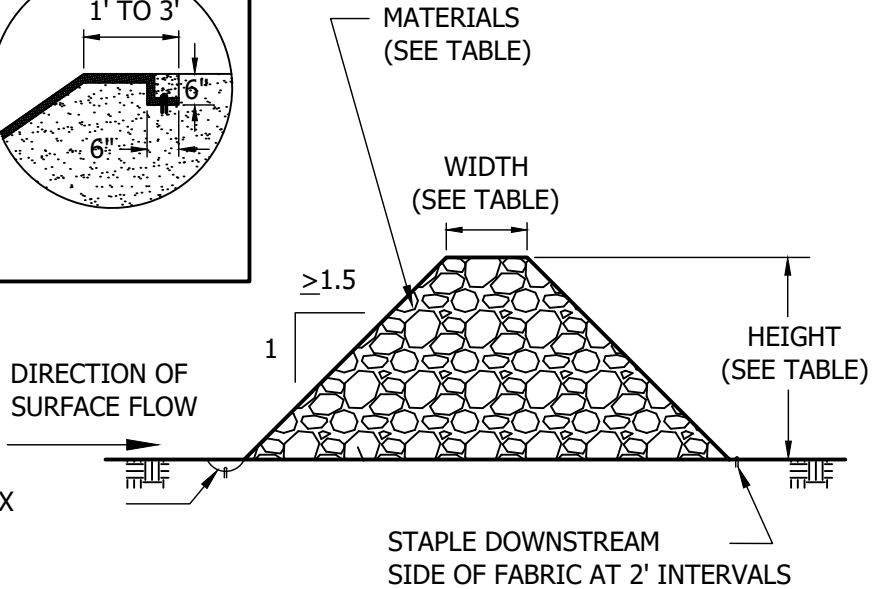


NOTE:
POINT 1 MUST BE A MINIMUM OF 6" HIGHER THAN POINT 2 TO ENSURE THAT WATER FLOWS OVER THE DITCH CHECK AND NOT AROUND THE ENDS.

	HEIGHT (INCHES)	WIDTH (INCHES)	MATERIAL
SMALL CHECK	24	12 - 18	2"-12" ANGULAR WASHED ROCK
LARGE CHECK	36	24 - 30	3"-18" ANGULAR WASHED ROCK
ROCK WEEPER	18	6 - 12	1 1/2" WASHED ROCK

ANCHOR TRENCH
1. DIG 6" X 6" TRENCH
2. LAY BLANKET IN TRENCH
3. STAPLE AT 1.5' INTERVALS
4. BACKFILL WITH NATURAL SOIL AND COMPACT





GEOTEXTILE FABRIC ANCHORED IN 6" X 6" TRENCH WITH 6", 11 GAUGE METAL STAPLES AT 1' INTERVALS

FAC. CODE: N/A		REL. W.O. N/A	
PL#. N/A		CONST. YR 2019	
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DESIGN		12/23/2019	
DRAWN		1/7/2020	
ASBUILT			
FILE NO.: N/A			
SCALE: N/A			

Northern Natural Gas

ROCK DITCH CHECK/WEEPER SIZING & MATERIALS

Figure S-4

PROJECT NO.
N/A

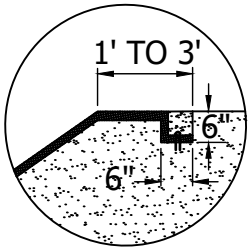
DWG. NO.
TYP1
SHT. 1 OF 1

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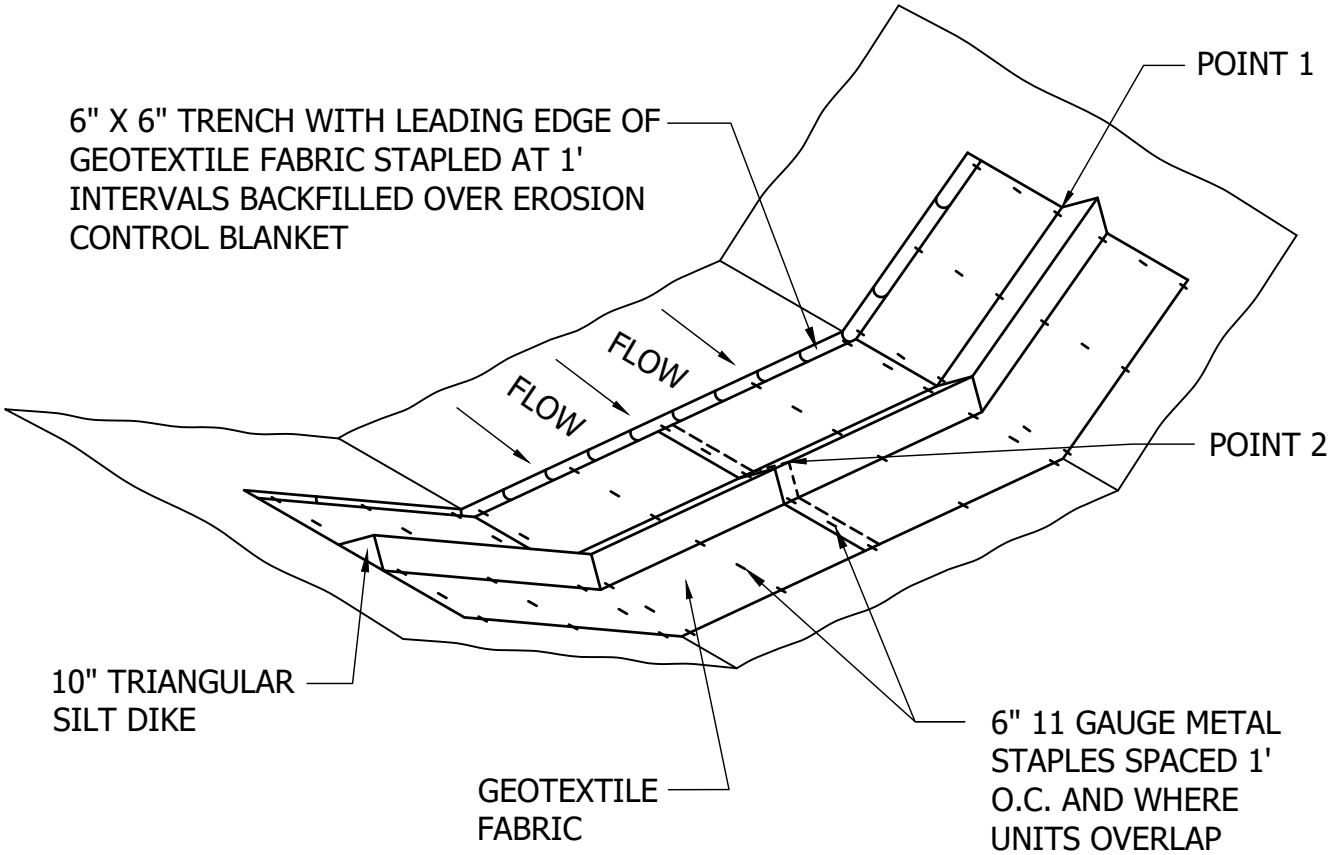
ANCHOR TRENCH

1. DIG 6" X 6" TRENCH
2. LAY BLANKET IN TRENCH
3. STAPLE AT 1.5' INTERVALS
4. BACKFILL WITH NATURAL SOIL AND COMPACT



NOTE:
STAPLE DENSITY SHALL CONFORM TO MANUFACTURERS SPECIFICATIONS.

NOTE:
POINT 1 MUST BE A MINIMUM OF 6" HIGHER THAN POINT 2 TO ENSURE THAT WATER FLOWS OVER THE DIKE AND NOT AROUND THE ENDS.



FAC. CODE: N/A		REL. W.O. N/A	
PL#. N/A		CONST. YR 2019	
STA# N/A			
	BY	DATE	
DESIGN		12/23/2019	
DRAWN		1/7/2020	
ASBUILT			
FILE NO.: N/A			
SCALE: N/A			

Northern Natural Gas

DITCH CHECK
TRIANGULAR SILT DIKE

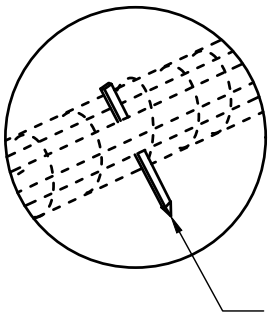
Figure S-5A

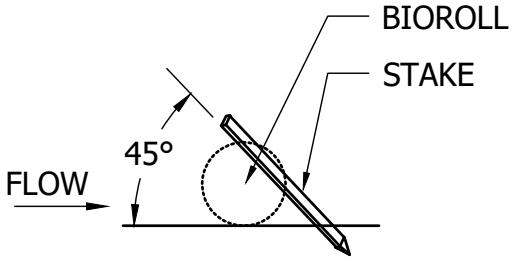
PROJECT NO.
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DWG. NO.
TYP1
SHT. 1 OF 1

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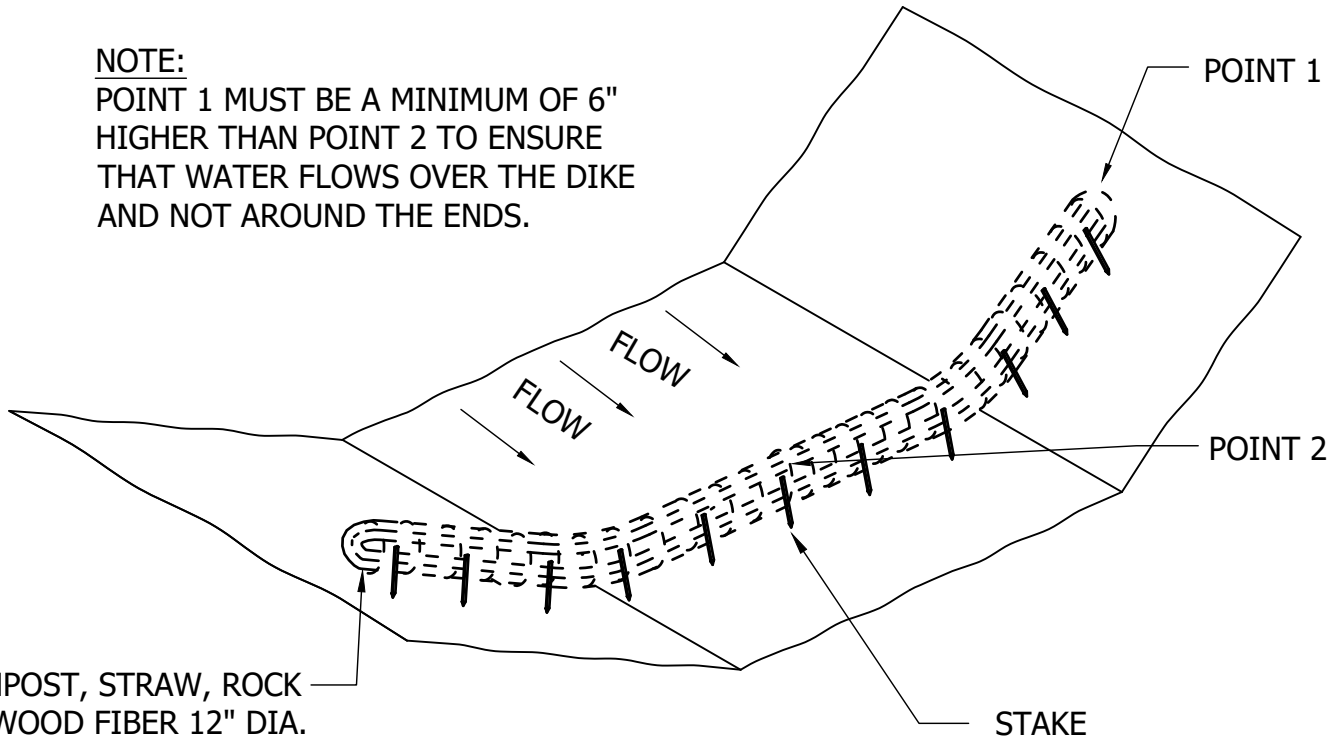
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2" x 2" x 16" LONG WOODEN STAKES AT 1'-0" SPACING . STAKES SHALL BE DRIVEN THROUGH THE BACK HALF OF THE FILTER LOG AT AN ANGLE OF 45° WITH THE TOP OF THE STAKE POINTING UPSTREAM.

NOTE:
POINT 1 MUST BE A MINIMUM OF 6" HIGHER THAN POINT 2 TO ENSURE THAT WATER FLOWS OVER THE DIKE AND NOT AROUND THE ENDS.



COMPOST, STRAW, ROCK OR WOOD FIBER 12" DIA. ROLL ENCLOSED IN POLYPROPYLENE NETTING OR A GEOTEXTILE BAG.

FAC. CODE: N/A		REL. W.O. N/A
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STA# N/A		
	BY	DATE
DESIGN		12/24/2019
DRAWN		1/7/2020
ASBUILT		
FILE NO.: N/A		
SCALE: N/A		

Northern Natural Gas

FILTER LOG DITCH CHECK

Figure S-5B

PROJECT NO. N/A

DWG. NO. TYP1

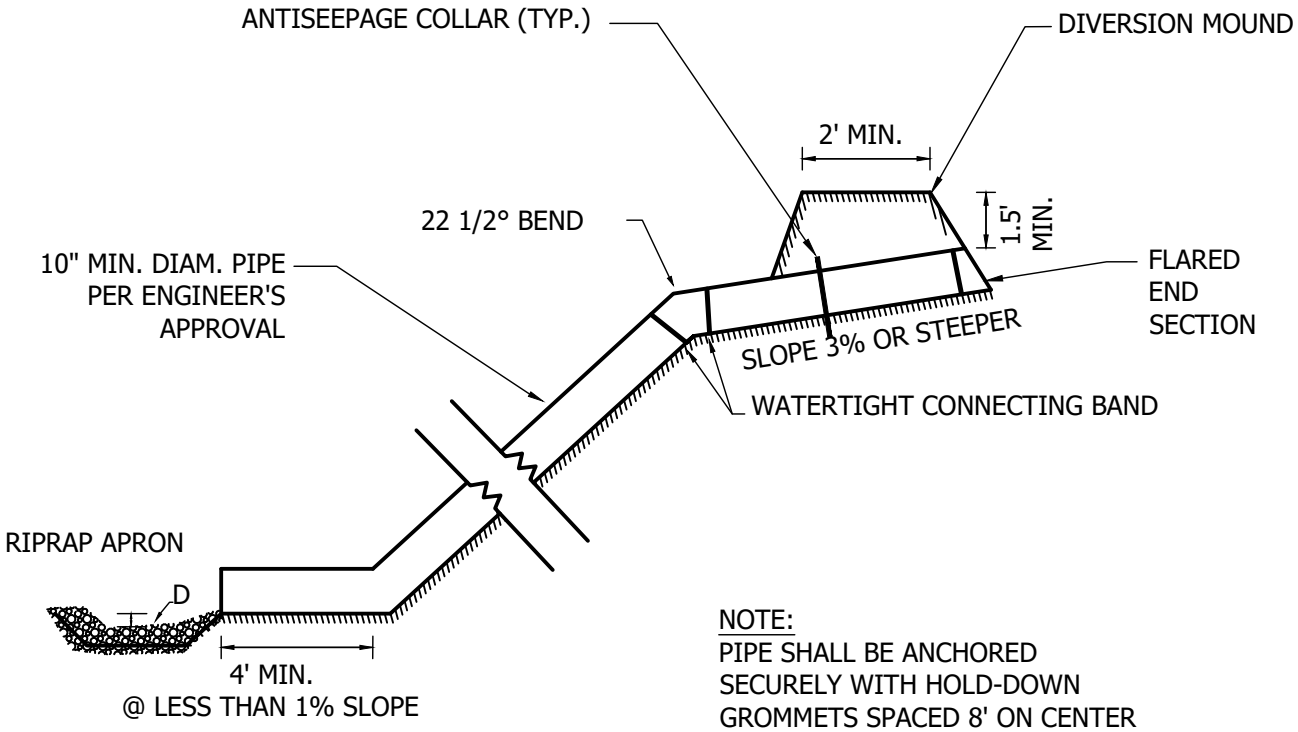
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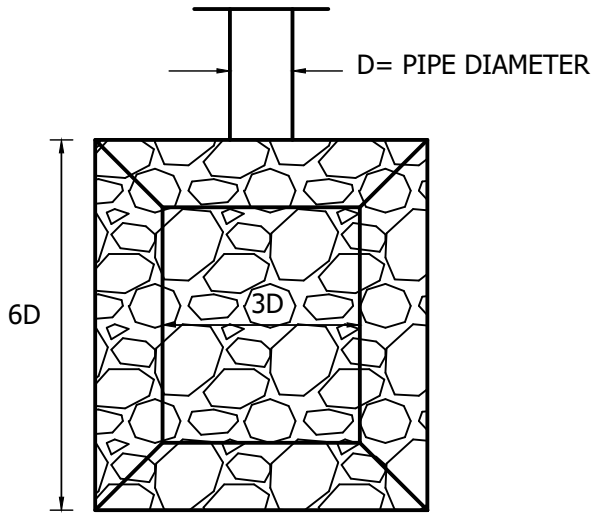
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PROFILE VIEW

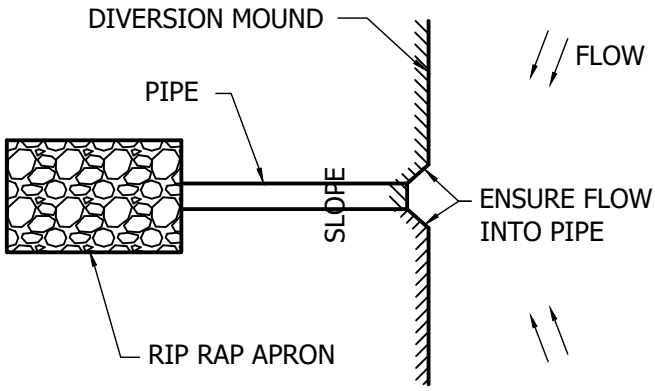


NOTE:
PIPE SHALL BE ANCHORED SECURELY WITH HOLD-DOWN GROMMETS SPACED 8' ON CENTER

RIPRAP APRON PLAN



PLAN VIEW



FAC. CODE: N/A		REL. W.O. N/A	
PL#. N/A		CONST. YR 2019	
STA# N/A			
	BY	DATE	
DESIGN		12/25/2019	
DRAWN		1/7/2020	
ASBUILT			
FILE NO.: N/A			
SCALE: N/A			

Northern Natural Gas

DIVERSION MOUND AND TEMPORARY PIPE DOWNDRAIN

Figure S-7

PROJECT NO. N/A

DWG. NO. TYP1

SHT. 1 OF 1

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Appendix C

State DOT Cross Reference Table

Control Type	BMP	Typical Detail	Illinois	Iowa	Michigan	Minnesota	Nebraska	New Mexico	Oklahoma	South Dakota	Texas	Wisconsin
Sediment	**Straw Logs Log**	Figure S-5B	N/A	IA DOT Spec 4169.12A	MI DTMB Spec ES32	MN DOT Spec 3882- Type 3 Mulch	NDOT Spec 806.02 (1); NDOT Spec 806.02 (1.); 812.02	N/A	N/A	SD DOT Spec 734.2.B.2	TX DOT Item 506 (2.10)	WI DOT Temporary ditch check- Bid Item 628.7504
Sediment	**Wood Fiber Log**	Figure S-5B	IL DOT CSSWPC Spec 41-3.01(d)	IA DOT Spec 4169.12A	MI DTMB Spec ES32	Excelsior wood fibers	NDOT Spec 806.02 (1); NE DOT Spec 806.02 (1.); 812/02	N/A	N/A	SD DOT Spec 734.2.B.2	TX DOT Item 506 (2.10)	WI DOT Temporary ditch check- Bid Item 628.7504
Sediment	**Wood Chip Log**	Figure S-5B	N/A	N/A	MI DTMB Spec ES32	MN DOT Spec 3882- Type 6 Mulch	NDOT Spec 806.02 (1); NDOT Spec 806.02 (1.); 812.02	N/A	N/A	N/A	TX DOT Item 506 (2.10)	WI DOT Temporary ditch check- Bid Item 628.7504
Sediment	**Compost/Wood Chip blend Log**	Figure S-5B	N/A	IA DOT Spec 4169.12B	MI DTMB Spec ES32	MN DOT Spec 3890-Grade 2 Compost MN DOT Spec 3882- Type 6 Mulch Consisting of the following blend of compost and wood chips: (a) From 30% to 40%, Grade 2 compost in accordance with MN DOT Spec 3890, "Compost" with at least 70% compost retained on the ⅜ in. sieve, (b) From 60% to 70%, Type 6 mulch in accordance to MN DOT Spec 3882, "Mulch Material"	NDOT Spec 807.02 (d.); 812.02	NM DOT Spec 603.2.6 and 632.2.6	N/A	N/A	TX DOT Item 506 (2.10)	N/A
Sediment	**Rock Log**	Figure S-5B	N/A	N/A	N/A	MN DOT Spec 3137 - Washed 3/4 in to 1 ½ in, Class A, B, C, or D rock	NDOT Spec 812.02	N/A	N/A	N/A	N/A	N/A
Sediment	**Machine Sliced /Hand Installed (MS/HI), high flow geotextile[2]**	Figure S-1	IL DOT CSSWPC Spec 41-3.01(b)	N/A	MI DTMB Spec S51 with post spacing modified to a maximum of 6 foot	MN DOT Spec 3886-modified to use only wooden posts	NDOT Spec 810.02; 811.02	N/A	OK DOT Spec 221.04C and 712.06	N/A	N/A	N/A
Sediment	**Machine Sliced /Hand Installed (MS/HI), wire backed.**	Figure S-2	N/A	N/A	N/A	N/A	NDOT Spec 810.02; 811.02	N/A	N/A	SD DOT Spec 734.2.B.1	TX DOT Item 506 (2.9)	N/A
Sediment	**Pre-Assembled (PA), woven geotextile**	N/A	N/A	N/A	N/A	MN DOT Spec 3886-modified to use only wooden posts	NDOT Spec 810.02; 811.02	N/A	N/A	N/A	N/A	N/A
Sediment	**Super Duty (SD), woven or non-woven geotextile3**	N/A	N/A	N/A	N/A	MN DOT Spec 3886	NDOT Spec 810.02; 811.02	N/A	N/A	N/A	N/A	N/A
Sediment	**Flotation Silt Curtain**	Figures S-3A and S3B	N/A	N/A	MI DTMB Spec S61	MN DOT Spec 3887	NDOT Spec 812.02; 820.02	N/A	N/A	N/A	N/A	WI DOT 1070; 1069
Sediment	**Compost Filter Berms**	Figure ERO-13	N/A	N/A	N/A	MN DOT Spec 3874 (A) MN DOT Spec 3890 (Grade 2)	NDOT Spec 813.02	N/A	N/A	N/A	N/A	WI DOT 1066
Sediment	**Slash Mulch Filter Berms**	Figure ERO-13	N/A	N/A	N/A	MN DOT Spec 3874 (B) MN DOT Spec 3882 (Type 5)	NDOT Spec 813.02	N/A	OK DOT Spec 221.04F	N/A	N/A	WI DOT 1066; 1058
Sediment	**Topsoil Berm**	Figure ERO-13	N/A	N/A	N/A	MN DOT Spec 3874 (D) MN DOT Spec 2105	NDOT Spec 813.02	N/A	OK DOT Spec 221.04F	N/A	N/A	WI DOT 1066
Sediment	**Rock Berm**	Figure ERO-13	IL DOT Spec 1005.01 IL DOT Spec 1005.02	N/A	MI DTMB Spec ES32	MN DOT Spec 3874 (E) MN DOT Spec 3733 (liner) MN DOT Spec 3601 (Class II riprap)	NDOT Spec Table 905.02; 814.02	N/A	OK DOT Spec 221.04G	N/A	TX DOT Item 506 (2.1)	N/A
Sediment	**Down Drains**	Figure S-7	IL DOT CSSWPC Spec 41-2.04(b)	N/A	MI DTMB Spec E15	MN DOT Spec 3892	NDOT Spec 814.02	NM DOT Spec 603.2.2	OK DOT Spec 221.02A	N/A	TX DOT Item 506 (2.2)	N/A
Erosion	**Horizontal Slope Grading**	Figure E-1	N/A	N/A	MI DTMB Spec E3	N/A	NDOT Spec 818.02	N/A	N/A	N/A	N/A	N/A
Erosion/Sediment	**Ditch Checks**	Figure S-4 or Figure ERO-19	IL DOT CSSWPC Spec 41-3.03(a)	N/A	MI DTMB Spec ES31	N/A	NDOT 814.02	N/A	N/A	N/A	TX DOT Item 506 (2.2)	N/A

Control Type	BMP	Typical Detail	Illinois	Iowa	Michigan	Minnesota	Nebraska	New Mexico	Oklahoma	South Dakota	Texas	Wisconsin
Erosion	**Certified Noxious weed free: agricultural grain straw (wheat, oats, rye, barley) or clean straw harvested from native grass production fields.**	N/A	IL DOT CSSWPC Spec 41-2.02(a)	IA DOT Spec 4169.07A	MI DTMB Spec E6	MN DOT Spec 3882.3(D) Type 3	NDOT Spec 810.02	N/A	N/A	SD DOT Spec 732.2.A	TX DOT Item 164 (3.2)	WI DOT 1058
Erosion	**Certified Noxious weed free: agricultural grain straw with hydraulic fiber matrix overspray**	N/A	IL DOT CSSWPC Spec 41-2.02(a)	N/A	MI DTMB Spec E6	MN DOT Spec 3882.3(D) Type 3 MN DOT Spec 3884	NDOT Spec 810.02	N/A	N/A	N/A	N/A	WI DOT 1058
Erosion	**Wood Mulch**	N/A	N/A	N/A	MI DTMB Spec E6	MN DOT Spec 3882.3(E/F) Type 5/6	NDOT Spec 806.02	N/A	N/A	N/A	N/A	WI DOT 1058
Erosion	**Prairie Hay**	N/A	N/A	N/A	N/A	MN DOT Spec 3882.3(H) Type 8	NDOT Spec 806.02	N/A	N/A	SD DOT Spec 732.2.A	TX DOT Item 164 (3.2)	WI DOT 1055
Erosion	**Type 1-erosion control blanket**	Figures E-2A and E-2B	IL DOT CSSWPC Spec 41-2.02(d)	IA DOT Spec 4169.10B1	MI DTMB Spec E9	MN DOT Spec 2575 MN DOT Spec 3885 (Category 0)	NDOT Spec 810.02	NM DOT Spec 603.2.3.2	N/A	SD DOT Spec 734.2.C.1	TX DOT Item 169 (2.1.1)	WI DOT Erosion mat Class I Types A and B - Bid Items 628.2002,628.2004 , 628.2006, and 628.2008
Erosion	**Type 2-erosion control blanket**	Figures E-2A and E-2B	N/A	IA DOT Spec 4169.10C1	N/A	MN DOT Spec 2575 MN DOT Spec 3885 (Category 3)	NDOT Spec 810.02	N/A	N/A	N/A	TX DOT Item 169 (2.1.2)	WI DOT Erosion mat Class II Types B and C - Bid Items 628.2023, and 628.2027
Erosion	**Type 3- erosion control blanket**	Figures E-2A and E-2B	N/A	IA DOT Spec 4169.10B2 and 4169.10C2	N/A	MN DOT Spec 2575 MN DOT Spec 3885 (Category 4)	NDOT Spec 810.02	N/A	N/A	N/A	TX DOT Item 169 (2.1.3 and 2.1.4)	WI DOT Erosion mat Class III Types A - D - Bid Items 628.2031,628.2033 , 628.2037, and 628.2039
Erosion	**Type 4-erosion control blanket**	Figures E-2A and E-2B	N/A	IA DOT Spec 4169.10E	N/A	MN DOT Spec 2575 MN DOT Spec 3885 (Category 6)	NDOT Spec 810.02	N/A	OK DOT Spec 228.04	SD DOT Spec 734.2.C.2	TX DOT Item 169 (2.2)	N/A
Erosion	**Natural Tackifier**	N/A	N/A	N/A	N/A	MN DOT Spec 2575.3.E	NDOT Spec 807.02 (b) Type HM2	N/A	N/A	N/A	N/A	N/A
Erosion	**Synthetic Tackifier**	N/A	IL DOT CSSWPC Spec 41-2.03	N/A	N/A	MN DOT Spec 2575.3.E	NDOT Spec 807.02 (c) Type HM3	N/A	N/A	N/A	N/A	N/A
Erosion	**Hydromulch**	N/A	IL DOT CSSWPC Spec 41-2.02(b)	IA DOT Spec 4169.07B1	N/A	MN DOT Spec 3884.3-B.2	NDOT Spec 807.02 (b.,c.,and d.)	N/A	N/A	SD DOT Spec 732.2.B	TX DOT Item 164 (3.3)	WI DOT Soil Stabilizer Type B Bid Item 628.6510
Erosion	**Bonded Fiber Matrix**	N/A	N/A	IA DOT Spec 4169.07B2	N/A	MN DOT Spec 3884.3-B.4	NDOT spec 811.02	N/A	N/A	SD DOT Spec 732.2.C	N/A - considered as direct substitute for blankets by TX DOT	WI DOT Soil Stabilizer Type A Bid Item 628.6505
Erosion	**Reinforced Fiber Matrix**	N/A	N/A	IA DOT Spec 4169.07B3	N/A	MN DOT Spec 3884.3-B.5	NDOT spec 811.02	N/A	N/A	SD DOT Spec 732.2.D	N/A - considered as direct substitute for blankets by TX DOT	N/A
Erosion	**Poly Sheeting**	Figures ERO-17a and ERO-17b	N/A	N/A	MI DTMB Spec E18	MN DOT Spec 2575.518 MN DOT Spec 3888	NDOT spec 811.02	N/A	N/A	N/A	N/A	N/A

Control Type	BMP	Typical Detail	Illinois	Iowa	Michigan	Minnesota	Nebraska	New Mexico	Oklahoma	South Dakota	Texas	Wisconsin
Erosion	**Geotextile Fabric**	N/A	N/A	IA DOT Spec 4169.11	N/A	MN DOT Spec: Type V	NDOT spec 811.02	N/A	N/A	N/A	N/A	N/A
Erosion/Sediment	**Straw Bale Dewatering Structure**	Figure ERO-14	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	WI DOT 1061
Erosion/Sediment	**Geotextile Filter Bag**	Figure ERO-15	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	WI DOT 1061
Sediment	**Inlet Protection-Drop-in Bag**	Figure ERO-16	IL DOT CSSWPC Spec 41-3.02(a)	N/A	MI DTMB Spec S58	N/A	N/A	N/A	N/A	N/A	N/A	WI DOT Inlet Protection Type A - Bid Item 628.7005
Sediment	**Triangular Silt Dike**	Figure S-5A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	WI DOT Temporary ditch check- Bid Item 628.7504

This table is provided for cross reference only to aid the contractor in obtaining materials. For installation specifications refer to the body of Northern Natural Gas Company's Erosion and Sediment Control Technical Standards. The standards are not intended to address every situation, project specific permits and site conditions may require alteration of the Stormwater Pollution Prevention Plan or practices not outlined in the Technical Standards.

ATTACHMENT E

NRCS MAPPED SOIL TABLE

Attachment E – NRCS Mapped Soils

Map Label	Mile Post		Soil Map Unit Name	Local Component Phase	Component Percent	Percent Slope	Depth of A Horizon (in)	Surface Texture	Drainage Class	Permeability	Landforms
	From	To									
Faribault M500 D-line Extension											
98	99.98	100.02	Colo silt loam, occasionally flooded	Colo-occasionally flooded	85	1	54	Silt loam	Poorly drained	Moderately high	Floodplains
109	97.40 97.63 97.83 98.06 98.13 98.28	97.62 97.73 98.02 98.10 98.21 98.35	Cordova clay loam, 0 to 2 percent slopes	Cordova	75-90	1	54	Clay loam	Poorly drained	Moderately high	Ground moraines
113	97.37 97.62 97.73 98.02 98.10 98.21 99.07	97.40 97.63 97.77 98.06 98.13 98.28 99.10	Webster clay loam, 0 to 2 percent slopes	Webster	75-95	1	20	Clay loam	Poorly drained	Moderately high	Ground moraines
114	98.93 99.00 100.52 100.92 100.94 100.96	98.95 99.07 100.57 100.93 100.94 100.98	Glencoe silty clay loam, 0 to 1 percent slopes	Glencoe	65-95	0	40	Silty clay loam	Very poorly drained	Moderately high	Depressions
208	104.84	104.88	Kato silty clay loam	Kato	95	0.5	23	Silty clay loam	Poorly drained	Moderately high	Flats
239	97.77 98.35 98.85 98.91 98.95 99.14 99.35 99.40 99.52 99.73 99.83 99.89 101.64	97.83 98.38 98.88 98.93 99.00 99.20 99.38 99.42 99.55 99.80 99.87 99.92 101.70	Le Sueur loam, 1 to 3 percent slopes	Le Sueur	65-90	2	14	Loam	Somewhat poorly drained	Moderately high	Not rated

Map Label	Mile Post		Soil Map Unit Name	Local Component Phase	Component Percent	Percent Slope	Depth of A Horizon (in)	Surface Texture	Drainage Class	Permeability	Landforms
	From	To									
253	98.53 99.10 99.27 99.38 99.42 99.92 100.02 100.44 100.57 100.81 100.93 100.94 100.98 101.18 101.37 101.70 102.14 102.33 102.59 102.79	98.64 99.14 99.29 99.40 99.52 99.98 100.09 100.52 100.74 100.84 100.94 100.96 101.06 101.27 101.46 101.73 102.25 102.36 102.65 102.88	Maxcreek silty clay loam	Maxcreek	90	1	17	Silty clay loam	Poorly drained	Moderately high	Swales
378	103.08 103.63 103.84 104.19	103.40 103.77 103.99 104.25	Maxfield silty clay loam	Maxfield	90	1	21	Silty clay loam	Poorly drained	Moderately high	Swales
414	98.40 99.63 99.80 99.87	98.42 99.68 99.83 99.89	Hamel loam, 0 to 2 percent slopes	Hamel	75-95	1	24	Loam	Poorly drained	Moderately high	Ground moraines
539	98.64	98.72	Klossner muck, 0 to 1 percent slopes	Klossner-drained	89-95	0	46	Muck	Very poorly drained	High	Depressions
106B	98.38 98.42 98.88 99.21 99.55 99.68 101.73 101.86 102.90	98.40 98.53 98.91 99.27 99.63 99.73 101.78 101.90 103.06	Lester loam, 2 to 6 percent slopes	Lester	65-90	4	9	Loam	Well drained	Moderately high	Not rated
106C	101.62 101.93	101.64 102.00	Lester loam, 6 to 10 percent slopes	Lester	65-90	7	9	Loam	Well drained	Moderately high	Ground moraines

Map Label	Mile Post		Soil Map Unit Name	Local Component Phase	Component Percent	Percent Slope	Depth of A Horizon (in)	Surface Texture	Drainage Class	Permeability	Landforms
	From	To									
106C2	99.20 102.02 102.88	99.21 102.13 102.90	Lester loam, 6 to 10 percent slopes, moderately eroded	Lester-moderately eroded	75-90	8	6	Loam	Well drained	Moderately high	Ground moraines
213B	103.40 103.99 104.15 104.25 104.42 104.69	103.47 104.05 104.19 104.29 104.53 104.79	Klinger silt loam, 1 to 5 percent slopes	Klinger	90	3	13	Silt loam	Somewhat poorly drained	Moderately high	Moraines
2B	103.47 103.77 104.05 104.29 104.53	103.63 103.84 104.15 104.42 104.69	Ostrander loam, 1 to 6 percent slopes	Ostrander	85	4	17	Loam	Well drained	Moderately high	Moraines
377B	99.29 100.14 100.23 100.32 100.41 100.74 100.84 101.06 101.13 101.27 101.46 101.78 101.90 102.00 102.25 102.36 102.76	99.35 100.18 100.25 100.37 100.44 100.81 100.92 101.08 101.18 101.37 101.56 101.86 101.93 102.02 102.33 102.51 102.79	Merton silt loam, 1 to 6 percent slopes	Merton	90	3	15	Silt loam	Somewhat poorly drained	Moderately high	Moraines
382B	98.72 101.56 102.13 102.51 102.65	98.85 101.62 102.14 102.59 102.76	Blooming silt loam, 1 to 6 percent slopes	Blooming	90	3	9	Silt loam	Well drained	Moderately high	Moraines
39B	100.09 104.79	100.14 104.84	Wadena loam, 2 to 6 percent slopes	Wadena	75-95	3	17	Loam	Well drained	Moderately high	Outwash plains
611C	103.06	103.08	Hawick gravelly sandy loam, 6 to 12 percent slopes	Hawick	85-95	8	7	Gravelly sandy loam	Excessively drained	High	Outwash plains

Map Label	Mile Post		Soil Map Unit Name	Local Component Phase	Component Percent	Percent Slope	Depth of A Horizon (in)	Surface Texture	Drainage Class	Permeability	Landforms
	From	To									
888B	101.08	101.13	Kingsley-Lester complex, 2 to 6 percent slopes	Kingsley	55	4	8	Gravelly sandy loam	Excessively drained	High	Outwash plains
888C	100.18 100.25 100.37	100.23 100.32 100.41	Kingsley-Lester complex, 6 to 12 percent slopes	Kingsley	55	9	8	Sandy loam	Well drained	Moderately high	Moraines

ATTACHMENT F

SPILL PREVENTION, CONTAINMENT, AND COUNTERMEASURE PLAN

Stantec

Northern Natural Gas
Spill Prevention, Control and Countermeasure (SPCC) Plan
For Construction Projects

Introduction

This SPCC Plan describes planning, prevention and control measures to minimize impacts resulting from spills of fuels, petroleum products, or other regulated substances as a result of pipeline facility construction. These measures will be implemented by the contractor, unless otherwise indicated, during Northern Natural Gas (Northern) pipeline facility construction projects. This SPCC Plan was developed in accordance with the Federal Energy Regulatory Commission's Wetland and Waterbody Construction and Mitigation Procedures (FERC Procedures) and satisfies the requirements for SPCC Plans described therein. This plan must remain on-site.

1 Planning and Prevention

Northern requires its contractors to implement proper planning and preventative measures to minimize the likelihood of spills, and to quickly and successfully clean up a spill should one occur. Northern developed this SPCC Plan to set forth the minimum standards for handling and storing regulated substances, and for cleaning up spills. Potential sources of construction-related spills include storage tank leaks, machinery and equipment failure, and fuel handling and transfer accidents. The contractor will be responsible for implementing, at a minimum, the following planning and prevention measures.

1.1 Roles and Responsibilities:

Contractor Spill Coordinator

1.1.1 A contractor spill coordinator shall be designated and employed by the contractor, subject to approval by Northern on projects where outside contractors are used for construction. The spill coordinator may also be a designated Northern employee.

1.1.2 The contractor spill coordinator shall notify the environmental inspector (EI) immediately of any spill, regardless of volume. If the EI is not available, the contractor spill coordinator shall notify Northern's Operations Communication Center (OCC) at 888-367-6671 within 30 minutes of the occurrence.

1.1.3 The contractor spill coordinator shall mobilize on-site personnel, equipment, and materials for containment and/or clean-up commensurate with the extent of the spill.

1.1.4 The contractor spill coordinator will assist the EI in completion of the Spill Release/Report form (environmental procedure 320.101a, Appendix A: Spill/Release Report Form).

1.1.5 The contractor spill coordinator will identify available emergency response contractors. The emergency response contractors will be subject to Northern's approval.

1.1.6 The contractor spill coordinator shall assist the emergency response contractor and monitor containment activities to ensure the actions are consistent with the requirements of this SPCC Plan.

1.1.7 The contractor spill coordinator, in consultation with the Division Environmental Specialist (DES), on-site Northern representative or appropriate agencies, will assist in determining when it is necessary to evacuate spill sites to safeguard human health.

1.1.8 The contractor spill coordinator should **not** contact any agency regarding a spill without authorization from Northern's environmental department.

Environmental Inspector (EI)

1.1.9 The EI may be a designated Northern employee or a third-party inspector assigned to monitor environmental compliance on the project.

1.1.10 The EI will monitor the contractor's compliance with the provisions of this SPCC Plan.

1.1.11 The EI will immediately report all spills to the OCC at 888-367-6671, the construction coordinator and other Northern personnel, as required.

1.1.12 The EI, with assistance from the contractor spill coordinator, is responsible for completing a Spill Release/Report Form and submitting it to the DES within 24 hours of the occurrence for all spills, regardless of volume.

1.1.13 Both the contractor spill coordinator and the EI, in conjunction with the DES or appropriate agencies, will assist in determining when it is necessary to evacuate spill sites to safeguard human health.

1.1.14 The EI should not contact any agency regarding a spill without authorization from the DES.

Construction Coordinator

1.1.15 The construction coordinator is a designated Northern representative who is responsible for the management of construction activities on the project.

1.1.16 The construction coordinator is responsible for documenting the general information regarding any spills such as, work stoppages, injuries, fires and the extent of exposure to on-site personnel.

1.1.17 The construction coordinator, in consultation with the DES or appropriate agencies, will assist in determining when it is necessary to evacuate spill sites to safeguard human health.

1.1.18 The construction coordinator is responsible for coordinating any emergency response services that may be required such as the Fire Department, the Sherriff's Department, or for contacting emergency response contractors.

Authorized Personnel

1.1.19 Authorized personnel are representatives of the contractor who are designated to handle fuel, lubricants or other regulated substances.

1.1.20 Authorized personnel shall be familiar with the requirements of this SPCC Plan and the consequences of non-compliance.

Contractor's Construction Superintendent

1.1.21 The contractor's construction superintendent, or representative, must immediately notify the EI of any spill of any liquid, (i.e. a petroleum product, hazardous liquid, water, casing wax, etc.), regardless of volume.

1.1.22 The contractor's construction superintendent is ultimately responsible for ensuring that construction personnel understand and comply with this SPCC Plan.

Construction Personnel

1.1.23 Construction personnel are representatives of the contractor involved with installation of the pipeline facility.

1.1.24 Construction personnel shall notify the crew foreman and/or contractor's spill coordinator immediately of any spill of any liquid (i.e. a petroleum product or hazardous liquid, water, casing wax, etc.), regardless of volume.

1.1.25 Construction personnel are responsible for beginning the initial spill containment and clean-up.

Environmental Specialist

1.1.26 The environmental specialist is a designated Northern employee who is responsible for the management of environmental compliance on the project.

1.1.27 The environmental specialist is the EI's initial point of contact when a spill occurs and will assist in determining the containment measures that may be required.

1.1.28 The environmental specialist will promptly report spills to appropriate Federal, State, and local agencies as required.

1.1.29 The environmental specialist will coordinate with these agencies regarding contacting additional parties or agencies.

1.1.30 The environmental specialist will promptly notify the U.S. Coast Guard National Response Center of spills, regardless of size, that enter lakes, streams or other standing or flowing waters. (The National Response Center phone number is listed in section 4.2 of this SPCC Plan).

1.1.31 The environmental specialist, in consultation with appropriate agencies, will assist in determining when spill sites will be evacuated, as necessary, to safeguard human health.

1.2 Training:

1.2.1 The contractor spill coordinator shall train all employees handling fuels and other regulated substances to follow and comply with this SPCC Plan.

1.2.2 The contractor's construction superintendent will be responsible for ensuring that such training is received prior to construction activities.

1.2.3 The EI will specifically address compliance with this SPCC Plan while delivering Environmental Training-Construction, environmental training Type B to contractor personnel and/or while reviewing safety procedure 110.180b, Contractor Orientation Checklist and Roster with contractor personnel. (See

environmental procedure 380.201, Environmental Compliance for Construction Projects, for training program requirements.)

1.3 Equipment:

1.3.1 All equipment must be thoroughly cleaned prior to arrival on-site. Equipment with existing fluid leaks will not be allowed on-site.

1.3.2 All equipment repairs and maintenance must be completed offsite. In the event that a repair is required to remove the equipment, or removing the equipment is more likely to cause a spill than an onsite repair, adequate liquid storage must be utilized in addition to secondary containment to contain any liquids during the repair. Ensure the capacity of existing secondary containment is adequate for the repair.

1.3.3 Each piece of self-propelled equipment (i.e. dozers, excavators, side booms, etc.) must be equipped with a spill kit. At a minimum, the spill kit must include sufficient absorbent pads and plastic lining material to contain spills resulting from mechanical failure.

1.3.4 Directional drilling rigs must be equipped with a spill kit of appropriate size to contain any potential spills. At a minimum, spill kits must include absorbent pads, booms, a temporary disposal bag, disposable nitrile gloves and plastic lining material to contain spills resulting from mechanical failure.

1.3.5 Each piece of stationary equipment, excluding directional drilling rigs, (i.e. generators, air compressors, water pumps, etc.) must have access to a spill kit. The spill kit must be located in the immediate vicinity of the stationary equipment and in an easily accessible area no farther than 100 yards. At a minimum, spill kits must include absorbent pads, booms, a temporary disposal bag, disposable nitrile gloves and plastic lining material to contain spills resulting from mechanical failure. The appropriate quantities will depend on the number of pieces of stationary equipment and are subject to approval by the on-site Northern representatives.

1.3.6 Each piece of stationary equipment, including drilling rigs, must be parked inside appropriately sized and constructed secondary containment. Any self-propelled equipment parked for more than 24 hours is considered stationary.

1.3.7 Each contractor vehicle must be equipped with a catch pan and a spill kit containing a sufficient quantity of absorbent and barrier materials to adequately contain and recover foreseeable spills. These kits may include, but are not limited to absorbent pads, straw bales, absorbent clay, sawdust, floor-drying agents, spill containment barriers, plastic sheeting, skimmer pumps and holding tanks.

1.3.8 For personal vehicles driven by contractor personnel and parked daily at construction project contractor yards, the contractor spill coordinator must provide on-site spill kits of adequate size to be stationed in easily accessible areas in the event of a spill resulting from a personal vehicle.

1.3.9 All fuel and service vehicles shall carry materials that are adequate to control foreseeable spills. Such material may include, but is not limited to, absorbent pads, commercial absorbent material, plastic bags with ties and a shovel.

1.3.10 Suitable plastic lining materials must also be available for placement below and on top of temporarily stored contaminated soils and materials.

1.3.11 The contractor spill coordinator will make known to authorized personnel, construction personnel, and the EI, the locations of spill control equipment and materials and have them readily accessible during construction activity. Spill kits must be replenished following each spill clean-up.

1.3.12 Construction equipment shall not be parked overnight or fueled within 200 feet of residential water wells, within 400 feet of municipal or community water wells, or within 100 feet of a wetland or waterbody. These activities may occur closer only if the EI finds, in advance, no reasonable alternative and the contractor has taken appropriate steps to prevent spills. These steps include secondary containment structures.

1.3.13 All fuel nozzles shall be equipped with functional automatic shut-offs.

1.3.14 In large wetlands where no upland site is available for refueling, auxiliary fuel tanks on construction equipment are recommended.

1.3.15 Fuel trucks transporting fuel to on-site construction equipment shall travel only on approved access roads.

1.4 Supervision and Inspection:

1.4.1 Prior to construction, the contractor spill coordinator, or designee, shall perform an inspection and test of all equipment to ensure that it is in good condition and free of leaks.

1.4.2 During construction, the contractor spill coordinator, or designee, shall perform daily inspections on hoses, hydraulic cylinders, fluid reservoirs, hydraulic connections, valves, pipes and tanks to ensure equipment is free of leaks.

1.4.3 On a daily basis, prior to commencing construction activities, the contractor spill coordinator, or designee, must complete Northern's Daily Equipment Spill Prevention Checklist (environmental procedure 380.201c, Daily Equipment Spill Prevention Checklist) and provide the original copy to the on-site EI or a Northern representative. The EI maintains these documents in a file for the course of a week. If a spill occurs within the week, this document is attached to the Spill/Release Report Form.

2 Liquid Transfer Plans:

2.1 The contractor spill coordinator will prepare a site-specific liquid transfer plan prior to the transfer of any liquids for construction activities which require manipulation of valves or removal of plugs (e.g., pipeline liquids, hydrostatic test water, fuel, glycol or oil) where spills can occur.

2.2 The liquid transfer plan must also address any other activities that have potential to result in a liquid release without proper planning (e.g., pipeline cutting pig launching/removing or draining of drips).

2.2.1 For pipeline cutting activities, the liquid transfer plan must include step-by-step instructions with diagramed drawings for how to check for liquids prior to performing any cutting activities.

2.3 At a minimum, the liquid transfer plan must include detail for the correct location of secondary containment and positioning of all valves, plugs and hoses prior to, during and at the completion of the liquid transfer process.

2.4 The liquid transfer plan must be reviewed by the EI prior to execution of any liquid transfer. In the EI's absence, the chief inspector will review the liquid transfer plan.

2.5 The liquid transfer plan must be maintained by contractor personnel responsible for the respective liquid transfer process and updated as needed when procedures or processes change.

2.6 Contractor personnel will review the status of liquid transfer configurations during shift changes to ensure proper communication between crews.

3 Storage and Handling of Fuels/Hazardous Liquids

3.1 Typical Fuels, Lubricant and Hazardous Liquids:

3.1.1 The following table identifies fuels, lubricants and coolants generally present on pipeline construction spreads and identifies typical total volumes, storage and transportation methods. Contractors will have appropriate Safety Data Sheets (SDS) on-site, as required by the Occupation Safety and Health Administration (OSHA).

Typical Petroleum Storage and Handling Volumes on a Construction Spread

	Fluids	Typical Amounts	Storage	Typical Transport Mode
Fuels	Diesel	6,000-12,000 Gallons	1-3 Tanks or Tankers stored at contractor yard 5 gallon cans, 100 gallon storage in pickups, etc.	1-3 Fuel Trucks 1-3 "Fuel Skids"
	Military Aviation Kerosene [1]	6,000-12,000 Gallons		
	Kerosene [1]	6,000-12,000 Gallons		
	Gasoline	5,000 Gallons		
Lubricant	Engine Oil	< 500 Gallons	Bulk Storage or Retail Packaging at contractor yard warehouse	1-3 "Grease" Trucks
	Transmission/ Drive Train Oil	< 500 Gallons		
	Hydraulic Oil	< 500 Gallons		
	Gear Oil	< 500 Gallons		
	Lubricating Grease	20-30 cases of 24 cans per case		
Coolants	Ethylene Glycol	100 Gallons		
	Propylene Glycol	100 Gallons		

[1] Used straight or as additives only in extremely cold weather.

3.2 Storage of Fuel and Hazardous Liquids – General:

3.2.1 The contractor shall follow proper storage practices for fuels and hazardous liquids including, but not limited to, the following:

3.2.1.1 Fuel storage shall be at contractor yards only, or as approved by Northern.

3.2.1.2 Tools and materials to stop the flow of leaking tanks and pipes shall be kept on-site. Such equipment must include, but not be limited to, plugs of various sizes, a hammer, assorted sizes of metal screws with rubber washers, a screwdriver and plastic tape.

3.2.1.3 Fuels, lubricants, waste oil and any other regulated substances shall be stored in aboveground tanks only.

3.2.1.4 Storage tanks and containers must conform to all applicable industry codes.

3.2.1.5 A suitable secondary containment structure must be utilized at each fuel storage site. Portable secondary containment structures are preferred over site-constructed structures. If portable structures are not available, the site-constructed structures must be lined with seamless plastic sheeting. All structures must provide a minimum containment volume equal to the volume of the largest storage vessel; and provide at least 1 foot of freeboard.

3.2.1.6 If earthen containment dikes are used, they shall be constructed with slopes no steeper than 3:1 (horizontal to vertical) to limit erosion and provide structural stability.

3.2.1.7 It is the contractor's responsibility to remove all secondary containment structures at the conclusion of the project. The contractor is also responsible for returning the storage impoundment area to its original contour and appearance upon completion of the project.

3.2.1.8 Secondary containment areas must not have drains. If visual inspection indicates that no spillage has occurred in the secondary containment structure, accumulated water may be drawn off and sprayed on the surrounding upland areas in accordance with applicable permits. If spillage has occurred in the structure, accumulated waste shall be drawn off and pumped into drum storage for disposal. Water with a visible sheen must not be discharged on-site and must be hauled out for proper disposal.

3.2.1.9 Vehicle wastes resulting from equipment failure, including used oils and other fluids, shall be handled and managed by personnel trained in the procedures outlined in this Plan. Vehicle wastes will be stored and disposed of in accordance with section 6.0 of this SPCC Plan.

3.3 Refueling:

3.3.1 Fuels shall be dispensed by authorized personnel only. The contractor must provide adequate lighting for refueling after dark.

3.3.2 Personnel shall be actively holding the nozzle during all refueling. Absorbent pads shall be within reaching distance in the event of a nozzle malfunction.

3.3.3 Refueling shall not occur within 100 feet of a wetland or waterbody. These activities may occur closer only if the EI finds, in advance, no reasonable alternative and the contractor has taken appropriate steps to prevent spills. These steps include secondary containment structures.

3.3.4 Refueling shall not occur within 200 feet of residential water wells or within 400 feet of municipal or community water wells.

3.4 Refueling and Fuel Storage near Wetlands, Waterbodies or Rural Residences:

3.4.1 Northern requires that the storage of petroleum products, refueling and lubricating operations take place in upland areas that are more than 100 feet from wetlands, streams, and waterbodies (including drainage ditches), and 200 feet of residential water wells or within 400 feet of municipal or community water wells. In addition, the contractor must store hazardous materials, chemicals, fuel and lubricating oils, and perform concrete coating activities outside of these areas. Auxiliary fuel tanks solidly attached to construction equipment or pumps are not considered storage and are acceptable.

3.4.2 In certain instances, refueling or fuel storage may be unavoidable due to site-specific conditions or unique construction requirements. Examples include continuously operating pumps and temporary stationary equipment associated with horizontal directional drilling (HDD) activities. These locations must be approved in advance by the EI. In addition to those practices described above, the following precautions will be taken when refueling within 100 feet of streams, wetlands, and waterbodies; within 200 feet of private water wells; or within 400 feet of municipal or community water wells:

3.4.2.1 Adequate amounts of absorbent materials and containment booms must be kept on-site by each construction crew to enable the rapid containment and clean-up of a spill incident.

3.4.2.2 If fuel must be stored within wetlands or near streams for refueling of continuously operating pumps, secondary containment must be provided.

3.4.2.3 A suitable secondary containment structure must be utilized at each fuel storage site. Portable secondary containment structures are preferred over site-constructed structures. If portable structures are not available, the site-constructed structures must be lined with seamless plastic sheeting. All structures must provide a minimum

containment volume equal to the volume of the largest storage vessel; and provide at least 1 foot of freeboard.

3.4.2.4 Procedures regarding excavation and disposal of contaminated soil material from wetlands or near waterbodies are described in section 6.3 of this SPCC Plan.

3.4.2.5 Equipment operating within wetlands must be manned continuously or placed within proper secondary containment.

4 Initial Spill Management

4.1 Immediate Response:

4.1.1 Immediately upon learning of any fuel, oil, hazardous material or other regulated substance spill, or upon learning of conditions that will lead to an imminent spill, the person discovering the situation must:

4.1.1.1 Initiate actions to contain the fluid that has spilled or is about to spill, and initiate action to eliminate the source of the spill to the maximum extent that is safely possible.

4.1.1.2 Notify the contractor spill coordinator and the EI, and provide them with the following information:

4.1.1.2.1 Location and cause of the spill

4.1.1.2.2 The type and amount of material that has spilled

4.1.1.2.3 Whether the spill has reached, or is likely to reach, any surface water

4.1.1.3 Upon learning of a spill or a potential spill the contractor spill coordinator shall:

4.1.1.3.1 Assess the situation and determine the need for further action.

4.1.1.3.2 Direct subsequent activities and/or further assign responsibilities to other personnel.

4.1.1.3.3 Notify the EI

4.1.2 The EI will notify the OCC at 888-367-6671 and the construction coordinator.

4.2 Mobilization:

4.2.1 The contractor spill coordinator shall mobilize on-site personnel, equipment, and materials for containment and/or clean-up commensurate with the extent of the spill and notify the EI.

4.2.2 The DES will work with the EI and contractor spill coordinator to determine if a spill is reportable to an agency.

4.2.3 If the contractor spill coordinator and/or the EI determine that a spill is beyond the scope of on-site equipment and personnel, the contractor spill coordinator and/or the EI will immediately notify the contractor construction superintendent that an emergency response contractor is needed to contain

and/or clean up the spill. The contractor is responsible for obtaining the services of an emergency response contractor.

4.2.4 The contractor spill coordinator shall assist the emergency response contractor and monitor containment procedures to ensure that the actions are consistent with the requirements of this SPCC Plan.

5 Spill Notification Responsibilities

5.1 The EI will immediately report all spills, regardless of volume, to Northern's OCC at 888-367-6671. The EI, or an applicable company representative, will participate on the OCC call to assess the spill. An environmental department representative will determine any requirements for further agency notification(s).

5.2 Spill Release/Report Form:

5.2.1 The EI, with assistance from the contractor spill coordinator, shall complete a Spill Release/Report Form for each release of a regulated substance, regardless of volume. The Spill Release/Report Form must be submitted to the DES within 24 hours of the occurrence of the spill.

5.2.2 All associated laboratory analysis and other documentation that may be required separately, on a case-specific basis, will be the responsibility of the contractor and should be provided to the EI. The EI will forward the information to the DES.

5.3 Agency Notification:

5.3.1 In the event of a reportable spill the DES will determine who is responsible for any required agency notification(s).

5.3.2 For projects in Minnesota, if there is any discharge of any substance or material, including hazardous materials, which, if not recovered, may cause pollution to waters of the state, the Minnesota Duty Officer shall be notified immediately. The Minnesota Duty Officer's phone numbers are 651-649-5451 and 800-422-0798.

5.3.3 For any spills that are determined to be the responsibility of Northern, the DES will promptly notify the appropriate Federal, State, and/or local agencies.

5.3.4 For any spills that are determined to be the responsibility of the contractor, the DES will request that the contractor spill coordinator promptly notify the appropriate Federal, State and/or local agencies.

5.3.5 The DES will promptly notify the National Response Center (NRC) at 800-424-8802 for all spills that impact streams, lakes or other waterbodies containing standing or flowing water.

5.3.6 The contractor spill coordinator will provide the EI and/or the Northern on-site representative all Spill Release/Report forms and associated information resulting from agency contact no later than 24 hours from the receipt of such documentation.

5.3.7 Northern's DESs and construction compliance personnel are listed below.

Name	Office Phone	Cell Phone
Kelly Henry	651-456-1712	612-759-8287
Naomi Cavalieri	402-398-7847	531-301-1176
*Steve San Miguel	402-398-7305	402-595-8554*
Michelle Brown	402-530-3502	806-231-4960
Christa Webber	402-398-7980	402-810-3769
Terry Plucker	402-398-7226	402-332-7081

6 Spill Containment and Clean-Up

6.1 In the event of a spill, the contractor will abide by applicable Federal, State and local regulations, in respect to cleaning up the spill. All clean-up and other construction related spill activities must be completed by, and costs assumed by, the contractor. Specific control and clean-up measures for both upland and wetland/waterbody spills are described below.

6.2 Spill Control and Clean-Up for Upland Areas:

6.2.1 If a spill should occur during refueling operations, **STOP** the operation until the spill can be controlled and the situation corrected.

6.2.1.1 Spill sources must be immediately identified and contained.

6.2.1.2 For large spills on land, the spills must be contained and pumped immediately into tank trucks. The contractor or, if necessary, an emergency response contractor, shall excavate the contaminated soil. It is the responsibility of the contractor to obtain Northern's approval prior to activities if waste vendors other than those approved by Northern (Clean Harbors and Safety-Kleen) may be used.

6.2.1.3 Spilled material and contaminated soil must be treated and/or disposed of in accordance with applicable Federal, State, and local requirements (section 6.0) and Northern's procedures.

6.2.1.4 Smaller spills on land shall be cleaned up with absorbent materials. Contaminated soil or other materials associated with these releases shall also be collected and disposed of in accordance with applicable regulations (section 6.0) and Northern's procedures.

6.2.1.5 Flowing spills must be contained and/or absorbed before reaching surface waters or wetlands.

6.2.1.6 Absorbent material(s) shall be placed over spills to minimize spreading and to reduce penetration into the soil.

6.2.1.7 The contractor spill coordinator and/or the DES, in consultation with appropriate agencies, shall determine when spill sites will be evacuated, as necessary, to safeguard human health. Evacuation parameters shall include consideration for the potential of fire, explosion, and hazardous gases.

6.3 Spill Control and Clean-Up for Wetlands and Waterbodies:

6.3.1 In addition to the measures described previously in this SPCC Plan, the following conditions shall apply if a spill, regardless of size, occurs near or into a stream, wetland or other waterbody:

6.3.1.1 If a spill should occur during refueling operations, **STOP** the operation until the spill can be controlled and the situation corrected.

6.3.1.2 For spills into streams, lakes or other waterbodies containing standing or flowing water, the contractor spill coordinator will immediately notify the nearest Northern representative and the OCC at 888-367-6671. The DES will promptly notify the NRC. (The NRC phone number is listed in section 4.2 of this SPCC Plan).

6.3.1.3 For spills in standing water floating booms, skimmer pumps and holding tanks shall be on-hand and used by the contractor to recover and contain released materials on the surface of the water.

6.3.1.4 If deemed necessary for large spills in waterbodies, the contractor must secure an emergency response contractor to further contain and clean up the spill. All contractors must be approved by Northern prior to construction.

6.3.1.5 Contaminated soils in wetlands must be excavated, and placed on, and covered by, plastic sheeting in bermed areas a minimum of 100 feet away from the wetland. Dispose of contaminated soil as soon as possible in accordance with section 6.0 of this SPCC Pan and Northern's procedures.

6.4 Inadvertent Mud Releases:

6.4.1 In the event of a drilling mud release (i.e., frac-out) to a sensitive resource area, including a waterbody, the contractor shall follow environmental procedure 380.203i, Appendix I: Plan for Inadvertent Release of Drilling Mud.

7 Storage and Disposal of Contaminated Materials

7.1 Environmental procedure 390.107, Approved Disposal Facilities, describes that all selected wastes generated at Northern facilities must be disposed of at Northern-approved waste facilities. The procedure also lists the locations of each Northern-approved disposal facility.

7.2 All contaminated soils, absorbent materials, and other wastes shall be stored and properly disposed by the contractor in accordance with applicable Federal and State regulations and Northern's procedures.

7.3 Only approved and licensed waste vendors and carriers may be used to transport contaminated material from the site to a Northern-approved disposal facility.

7.4 Used oil, glycol or hazardous wastes must be disposed by a Northern-approved contractor.

7.5 Environmental procedures regarding hazardous waste are located in the 390.000, Hazardous Waste Management, series of Northern's environmental operating procedures manual. The series includes procedures on manifesting and other transport requirements for off-site disposal.

7.6 Disposal of domestic wastes must be determined by the contractor and the information provided to the EI.

7.7 If it is necessary to temporarily store excavated soils on-site, these materials shall be 1) contained in plastic bags or, 2) placed on and covered by plastic sheeting. In addition, the perimeter of the storage area must include a berm to prevent and contain runoff.

8 REVISION HISTORY:

Responsibility for Procedure:

Address all questions on this procedure to the director of environmental.

Revisions:

Rev. 0	05/17/11	Initial procedure released.
Rev. 1	08/15/12	Changed Northern employee to Northern representative in section 1.1, Roles and Responsibilities, under Construction Coordinator. Updated information regarding spill kits in section 1.3, Equipment. Referenced Environmental Training-Construction. Included Minnesota Duty Officer contact information. Stated that the contractor shall follow Northern's Inadvertent Mud Release Plan for frac-outs. Added requirement for all contractor vehicles to be equipped with a catch pan. Updated formatting.
Rev. 2	12/14/12	Publish Only: Updated DES contact information.
Rev. 3	02/26/14	Added a section for liquid transfer planning and updated environmental department staff contact information.
Rev. 4	08/19/15	Publish Only: Updated DES and construction compliance personnel contact information.
Rev. 5	01/30/19	Publish Only: Division environmental specialists and construction compliance personnel contact information were updated in this procedure revision.
Rev. 6	01/06/21	Publish Only: Added section 1.3.5 stating existing practice for secondary containment for stationary equipment.
Rev. 7	02/17/21	Publish Only: Stated requirements for equipment repairs and maintenance.
Rev. 8	02/01/22	Publish Only: Division environmental specialist contact information was updated.

ATTACHMENT G

SWPPP INSPECTION AND MAINTENANCE REPORT AND RAINFALL INSPECTION CHART

NORTHERN NATURAL GAS
STORMWATER INSPECTION AND MAINTENANCE FORM

Project Name:	**Work Order #:**	**Inspection Date:**	**Inspection Time:**
Project Description:		**Stormwater Permit Agency:**	
Nearest Town, County and State:		**Stormwater Permit Authorization #:**	
GPS Lat:	**GPS Long:**	**Initial Grading Date:**	**Final Grading Date:**
Full Contractor Company Name:		**Final Seeding Date:**	
Contractor Contact Info (Name/Phone):		**Final Stabilization Date:**	

Inspection Event:	☐ Routine ☐ Rain Event ☐ Maintenance	
Inspection Schedule (IL, IA, MI, MN, OK, SD, WI)	☐ Every 7 days and within 24 hours of a rain event 0.5 inches or greater (inches of rain)	
Inspection Schedule (KS, NE, OK, SD)	☐ Every 14 days and within 24 hours of a rain event 0.5 inches or greater (inches of rain)	
Inspection Schedule (NM and all EPA permits)	☐ Every 7 days or every 14 days and within 24 hours of a rain event 0.25 inches or greater (inches)	
Reduced Inspection Schedule and Reason Behind Reduced Schedule (Must follow stormwater permit authorization requirements, which may vary per state/project.)	☐ Every 30 days	☐ Site temporarily stabilized and winter conditions ☐ Arid, semi-arid or drought stricken area ☐ Frozen conditions ☐ Other, explain:
Current Weather and Site Conditions (i.e., 66°F and dry):		
Construction Phase:	☐ **Active** ☐ **Suspended** ☐ **Post-Construction**	

SUBMITTED TO: (Enter names and email addresses below.)

Project Manager: Click here to enter text.
Construction Coordinator: Click here to enter text.
Field Operations Contact: Click here to enter text.
Division Environmental Specialist (DES): Click here to enter text.
Construction Environmental Compliance Contact: Christa Webber

NORTHERN NATURAL GAS
STORMWATER INSPECTION AND MAINTENANCE FORM

Table 1.0 – Inspection Observations and Corrective Actions

Stormwater Inspection Item	**Maintenance Required:** If yes, complete columns to the right.	**Observations:** Describe locations where controls require maintenance or additional controls are needed.	**Recommended Corrective Actions:** Describe actions taken while on-site, and/or recommendations to resolve observed issues. Update items with notes to detail status, including ongoing communications to ensure progress toward resolution.	**Assigned to:**	**Repair Status**	**Completion Date[1]**
Contract Yards and Storage Areas	☐ Yes ☐ No ☐ N/A				☐ Pending ☐ In progress ☐ Complete	
Vehicle Exit Points	☐ Yes ☐ No ☐ N/A				☐ Pending ☐ In progress ☐ Complete	
Sediment Controls	☐ Yes ☐ No ☐ N/A				☐ Pending ☐ In progress ☐ Complete	
Erosion Controls	☐ Yes ☐ No ☐ N/A				☐ Pending ☐ In progress ☐ Complete	
Disturbed Areas Stabilization	☐ Yes ☐ No ☐ N/A				☐ Pending ☐ In progress ☐ Complete	
Dewatering Activities and Structures	☐ Yes ☐ No ☐ N/A				☐ Pending ☐ In progress ☐ Complete	
Material Storage (e.g., containment, spill kits, etc.)	☐ Yes ☐ No ☐ N/A				☐ Pending ☐ In progress ☐ Complete	
Final Restoration Activities	☐ Yes ☐ No ☐ N/A				☐ Pending ☐ In progress ☐ Complete	

[1]Action items that were dated complete on the previous report should not appear on subsequent reports.

SUBMITTED TO: (Enter names and email addresses below.)

Project Manager: Click here to enter text.
Construction Coordinator: Click here to enter text.
Field Operations Contact: Click here to enter text.
Division Environmental Specialist (DES): Click here to enter text.
Construction Environmental Compliance Contact: Christa Webber

NORTHERN NATURAL GAS
STORMWATER INSPECTION AND MAINTENANCE FORM

Table 2.0 – Erosion Control Devices (Separately list each area where ECDs have been either temporarily or permanently installed.)

Exact location of erosion/sediment control inspected *(Ex. east road-side ditch of HWY 20)*	**Temporary (T) or Permanent (P)**	**Type of erosion/sediment control** *(Ex. hay bales, silt fence, wattles, slope breakers, erosion blankets, construction entrances, electric/barbed-wire fence, dewatering devices/structures, etc.)*	**Date Installed**	**Date Removed**	**Dates and Comments Regarding Completed Repair/Maintenance Activities**

Table 3.0 – Revegetation (Separately list each area where revegetation is required to report status toward "final stabilization", as defined by the respective permit.)

Location	**Status**	**Land Use**	**Seed/Over-seed Date(s)**	**Comments**

SUBMITTED TO: (Enter names and email addresses below.)

Project Manager: Click here to enter text.
Construction Coordinator: Click here to enter text.
Field Operations Contact: Click here to enter text.
Division Environmental Specialist (DES): Click here to enter text.
Construction Environmental Compliance Contact: Christa Webber

NORTHERN NATURAL GAS
STORMWATER INSPECTION AND MAINTENANCE FORM

General Observations:

Is there a violation affecting water quality?	
☐ Yes, and I immediately called the environmental specialist for instruction.	☐ No: No further action required.
Has the entire site achieved Final Stabilization per the permit requirements and have all temporary ECDs have been removed.	
☐ Yes, and I immediately called the environmental specialist for instruction.	☐ No: The next SWPPP inspection is due on or before this date:

Certification: I certify that: (1) the information contained in this report is true, accurate and complete; (2) I am qualified to complete this inspection based on my training and knowledge of the principles and practice of erosion and sediment controls; and (3) the project is in compliance with the SWPPP. I understand the terms and conditions of the general National Pollutant Discharge Elimination System (NPDES) permit authorization for this project, which authorizes the storm water discharges associated with industrial activity from the construction site identified as part of this certification.	
Inspector Printed Name:	
Inspector Signature:	**Date:**
Certification: I certify that: (1) the information contained in this report is true, accurate and complete; (2) I understand that I am required to take the listed corrective actions within 24 hours of this notification, or as soon as possible if field conditions prevent access, under the conditions of the National Pollutant Discharge Elimination System (NPDES) permit authorization for this project and the FERC Plan and Procedures; and (3) the project is in compliance with the SWPPP. I understand the terms and conditions of the general National Pollutant Discharge Elimination System (NPDES) permit authorization for this project, which authorizes the storm water discharges associated with industrial activity from the construction site identified as part of this certification.	
Contractor Environmental Lead Printed Name:	
Contractor Environmental Lead Signature:	**Date:**

SUBMITTED TO: (Enter names and email addresses below.)

Project Manager: Click here to enter text.
Construction Coordinator: Click here to enter text.
Field Operations Contact: Click here to enter text.
Division Environmental Specialist (DES): Click here to enter text.
Construction Environmental Compliance Contact: Christa Webber

INSPECTION PHOTOS

(Insert a minimum of two to three photos on the next pages, followed directly by captions detailing: 1) direction of view, 2) location within the temporary workspace, and 3) other significant information to reference the information noted above. Photos must be provided for any areas noted above as requiring maintenance. If those areas were corrected during the inspection, simply include photos showing the corrected concern.)

SUBMITTED TO: (Enter names and email addresses below.)

Project Manager: Click here to enter text.
Construction Coordinator: Click here to enter text.
Field Operations Contact: Click here to enter text.
Division Environmental Specialist (DES): Click here to enter text.
Construction Environmental Compliance Contact: Christa Webber

ATTACHMENT H

UPLAND EROSION CONTROL, REVEGETATION, AND MAINTENANCE PLAN

Stantec

UPLAND EROSION CONTROL, REVEGETATION, AND MAINTENANCE PLAN

MAY 2013 VERSION

UPLAND EROSION CONTROL, REVEGETATION, AND MAINTENANCE PLAN

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UPLAND EROSION CONTROL, REVEGETATION, AND MAINTENANCE PLAN (PLAN)

I. APPLICABILITY

A. The intent of this Plan is to assist project sponsors by identifying baseline mitigation measures for minimizing erosion and enhancing revegetation. Project sponsors shall specify in their applications for a new FERC authorization and in prior notice and advance notice filings, any individual measures in this Plan they consider unnecessary, technically infeasible, or unsuitable due to local conditions and fully describe any alternative measures they would use. Project sponsors shall also explain how those alternative measures would achieve a comparable level of mitigation.

Once a project is authorized, project sponsors can request further changes as variances to the measures in this Plan (or the applicant's approved plan). The Director of the Office of Energy Projects (Director) will consider approval of variances upon the project sponsor's written request, if the Director agrees that a variance:

1. provides equal or better environmental protection;

2. is necessary because a portion of this Plan is infeasible or unworkable based on project-specific conditions; or

3. is specifically required in writing by another federal, state, or Native American land management agency for the portion of the project on its land or under its jurisdiction.

Sponsors of projects planned for construction under the automatic authorization provisions in the FERC's regulations must receive written approval for any variances in advance of construction.

Project-related impacts on wetland and waterbody systems are addressed in the staff's Wetland and Waterbody Construction and Mitigation Procedures (Procedures).

II. SUPERVISION AND INSPECTION

A. ENVIRONMENTAL INSPECTION

1. At least one Environmental Inspector is required for each construction spread during construction and restoration (as defined by section V). The number and experience of Environmental Inspectors assigned to each construction spread shall be appropriate for the length of the construction spread and the number/significance of resources affected.

2. Environmental Inspectors shall have peer status with all other activity inspectors.

3. Environmental Inspectors shall have the authority to stop activities that violate the environmental conditions of the FERC's Orders, stipulations of other environmental permits or approvals, or landowner easement agreements; and to order appropriate corrective action.

B. RESPONSIBILITIES OF ENVIRONMENTAL INSPECTORS

At a minimum, the Environmental Inspector(s) shall be responsible for:

1. Inspecting construction activities for compliance with the requirements of this Plan, the Procedures, the environmental conditions of the FERC's Orders, the mitigation measures proposed by the project sponsor (as approved and/or modified by the Order), other environmental permits and approvals, and environmental requirements in landowner easement agreements.

2. Identifying, documenting, and overseeing corrective actions, as necessary to bring an activity back into compliance;

3. Verifying that the limits of authorized construction work areas and locations of access roads are visibly marked before clearing, and maintained throughout construction;

4. Verifying the location of signs and highly visible flagging marking the boundaries of sensitive resource areas, waterbodies, wetlands, or areas with special requirements along the construction work area;

5. Identifying erosion/sediment control and soil stabilization needs in all areas;

6. Ensuring that the design of slope breakers will not cause erosion or direct water into sensitive environmental resource areas, including cultural resource sites, wetlands, waterbodies, and sensitive species habitats;

7. Verifying that dewatering activities are properly monitored and do not result in the deposition of sand, silt, and/or sediment into sensitive environmental resource areas, including wetlands, waterbodies, cultural resource sites, and sensitive species habitats; stopping dewatering activities if such deposition is occurring and ensuring the design of the discharge is changed to prevent reoccurrence; and verifying that dewatering structures are removed after completion of dewatering activities;

8. Ensuring that subsoil and topsoil are tested in agricultural and residential areas to measure compaction and determine the need for corrective action;

9. Advising the Chief Construction Inspector when environmental conditions (such as wet weather or frozen soils) make it advisable to restrict or delay construction activities to avoid topsoil mixing or excessive compaction;

10. Ensuring restoration of contours and topsoil;

11. Verifying that the soils imported for agricultural or residential use are certified as free of noxious weeds and soil pests, unless otherwise approved by the landowner;

12. Ensuring that erosion control devices are properly installed to prevent sediment flow into sensitive environmental resource areas (e.g., wetlands, waterbodies, cultural resource sites, and sensitive species habitats) and onto roads, and determining the need for additional erosion control devices;

13. Inspecting and ensuring the maintenance of temporary erosion control measures at least:

    a. on a daily basis in areas of active construction or equipment operation;

    b. on a weekly basis in areas with no construction or equipment operation; and

    c. within 24 hours of each 0.5 inch of rainfall;

14. Ensuring the repair of all ineffective temporary erosion control measures within 24 hours of identification, or as soon as conditions allow if compliance with this time frame would result in greater environmental impacts;

15. Keeping records of compliance with the environmental conditions of the FERC's Orders, and the mitigation measures proposed by the project sponsor in the application submitted to the FERC, and other federal or state environmental permits during active construction and restoration;

16. Identifying areas that should be given special attention to ensure stabilization and restoration after the construction phase; and

17. Verifying that locations for any disposal of excess construction materials for beneficial reuse comply with section III.E.

III. PRECONSTRUCTION PLANNING

The project sponsor shall do the following before construction:

A. CONSTRUCTION WORK AREAS

1. Identify all construction work areas (e.g., construction right-of-way, extra work space areas, pipe storage and contractor yards, borrow and disposal areas, access roads) that would be needed for safe construction. The project sponsor must ensure that appropriate cultural resources and biological surveys are conducted, as determined necessary by the appropriate federal and state agencies.

2. Project sponsors are encouraged to consider expanding any required cultural resources and endangered species surveys in anticipation of the need for activities outside of authorized work areas.

3. Plan construction sequencing to limit the amount and duration of open trench sections, as necessary, to prevent excessive erosion or sediment flow into sensitive environmental resource areas.

B. DRAIN TILE AND IRRIGATION SYSTEMS

1. Attempt to locate existing drain tiles and irrigation systems.

2. Contact landowners and local soil conservation authorities to determine the locations of future drain tiles that are likely to be installed within 3 years of the authorized construction.

3. Develop procedures for constructing through drain-tiled areas, maintaining irrigation systems during construction, and repairing drain tiles and irrigation systems after construction.

4. Engage qualified drain tile specialists, as needed to conduct or monitor repairs to drain tile systems affected by construction. Use drain tile specialists from the project area, if available.

C. GRAZING DEFERMENT

Develop grazing deferment plans with willing landowners, grazing permittees, and land management agencies to minimize grazing disturbance of revegetation efforts.

D. ROAD CROSSINGS AND ACCESS POINTS

Plan for safe and accessible conditions at all roadway crossings and access points during construction and restoration.

E. DISPOSAL PLANNING

Determine methods and locations for the regular collection, containment, and disposal of excess construction materials and debris (e.g., timber, slash, mats, garbage, drill cuttings and fluids, excess rock) throughout the construction process. Disposal of materials for beneficial reuse must not result in adverse environmental impact and is subject to compliance with all applicable survey, landowner or land management agency approval, and permit requirements.

F. AGENCY COORDINATION

The project sponsor must coordinate with the appropriate local, state, and federal agencies as outlined in this Plan and/or required by the FERC's Orders.

1. Obtain written recommendations from the local soil conservation authorities or land management agencies regarding permanent erosion control and revegetation specifications.

2. Develop specific procedures in coordination with the appropriate agencies to prevent the introduction or spread of invasive species, noxious weeds, and soil pests resulting from construction and restoration activities.

3. Develop specific procedures in coordination with the appropriate agencies and landowners, as necessary, to allow for livestock and wildlife movement and protection during construction.

4. Develop specific blasting procedures in coordination with the appropriate agencies that address pre- and post-blast inspections; advanced public notification; and mitigation measures for building foundations, groundwater wells, and springs. Use appropriate methods (e.g., blasting mats) to prevent damage to nearby structures and to prevent debris from entering sensitive environmental resource areas.

G. SPILL PREVENTION AND RESPONSE PROCEDURES

The project sponsor shall develop project-specific Spill Prevention and Response Procedures, as specified in section IV of the staff's Procedures. A copy must be filed with the Secretary of the FERC (Secretary) prior to construction and made available in the field on each construction spread. The filing requirement does not apply to projects constructed under the automatic authorization provisions in the FERC's regulations.

H. RESIDENTIAL CONSTRUCTION

For all properties with residences located within 50 feet of construction work areas, project sponsors shall: avoid removal of mature trees and landscaping within the construction work area unless necessary for safe operation of construction equipment, or as specified in landowner agreements; fence the edge of the construction work area for a distance of 100 feet on either side of the residence; and restore all lawn areas and landscaping immediately following clean up operations, or as specified in landowner agreements. If seasonal or other weather conditions prevent compliance with these time frames, maintain and monitor temporary erosion controls (sediment barriers and mulch) until conditions allow completion of restoration.

I. WINTER CONSTRUCTION PLANS

If construction is planned to occur during winter weather conditions, project sponsors shall develop and file a project-specific winter construction plan with the FERC application. This filing requirement does not apply to projects constructed under the automatic authorization provisions of the FERC's regulations.

The plan shall address:

1. winter construction procedures (e.g., snow handling and removal, access road construction and maintenance, soil handling under saturated or frozen conditions, topsoil stripping);

2. stabilization and monitoring procedures if ground conditions will delay restoration until the following spring (e.g., mulching and erosion controls, inspection and reporting, stormwater control during spring thaw conditions); and

3. final restoration procedures (e.g., subsidence and compaction repair, topsoil replacement, seeding).

IV. INSTALLATION

A. APPROVED AREAS OF DISTURBANCE

1. Project-related ground disturbance shall be limited to the construction right-of-way, extra work space areas, pipe storage yards, borrow and disposal areas, access roads, and other areas approved in the FERC's Orders. Any project-related ground disturbing activities outside these areas will require prior Director approval. This requirement does not apply to activities needed to comply with the Plan and Procedures (i.e., slope breakers, energy-dissipating devices, dewatering structures, drain tile system repairs) or minor field realignments and workspace shifts per landowner needs and requirements that do not affect other landowners or sensitive environmental resource areas. All construction or restoration activities outside of authorized areas are subject to all applicable survey and permit requirements, and landowner easement agreements.

2. The construction right-of-way width for a project shall not exceed 75 feet or that described in the FERC application unless otherwise modified by a FERC Order. However, in limited, non-wetland areas, this construction right-of-way width may be expanded by up to 25 feet without Director approval to accommodate full construction right-of-way topsoil segregation and to ensure safe construction where topographic conditions (e.g., side-slopes) or soil limitations require it. Twenty-five feet of extra construction right-of-way width may also be used in limited, non-wetland or non-forested areas for truck turn-arounds where no reasonable alternative access exists.

   Project use of these additional limited areas is subject to landowner or land management agency approval and compliance with all applicable survey and permit requirements. When additional areas are used, each one shall be identified and the need explained in the weekly or biweekly construction reports to the FERC, if required. The following material shall be included in the reports:

   a. the location of each additional area by station number and reference to previously filed alignment sheets, or updated alignment sheets showing the additional areas;

   b. identification of the filing at FERC containing evidence that the additional areas were previously surveyed; and

c. a statement that landowner approval has been obtained and is available in project files.

Prior written approval of the Director is required when the authorized construction right-of-way width would be expanded by more than 25 feet.

B. TOPSOIL SEGREGATION

1. Unless the landowner or land management agency specifically approves otherwise, prevent the mixing of topsoil with subsoil by stripping topsoil from either the full work area or from the trench and subsoil storage area (ditch plus spoil side method) in:

   a. cultivated or rotated croplands, and managed pastures;

   b. residential areas;

   c. hayfields; and

   d. other areas at the landowner's or land managing agency's request.

2. In residential areas, importation of topsoil is an acceptable alternative to topsoil segregation.

3. Where topsoil segregation is required, the project sponsor must:

   a. segregate at least 12 inches of topsoil in deep soils (more than 12 inches of topsoil); and

   b. make every effort to segregate the entire topsoil layer in soils with less than 12 inches of topsoil.

4. Maintain separation of salvaged topsoil and subsoil throughout all construction activities.

5. Segregated topsoil may not be used for padding the pipe, constructing temporary slope breakers or trench plugs, improving or maintaining roads, or as a fill material.

6. Stabilize topsoil piles and minimize loss due to wind and water erosion with use of sediment barriers, mulch, temporary seeding, tackifiers, or functional equivalents, where necessary.

C. DRAIN TILES

1. Mark locations of drain tiles damaged during construction.

2. Probe all drainage tile systems within the area of disturbance to check for damage.

3. Repair damaged drain tiles to their original or better condition. Do not use filter-covered drain tiles unless the local soil conservation authorities and the landowner agree. Use qualified specialists for testing and repairs.

4. For new pipelines in areas where drain tiles exist or are planned, ensure that the depth of cover over the pipeline is sufficient to avoid interference with drain tile systems. For adjacent pipeline loops in agricultural areas, install the new pipeline with at least the same depth of cover as the existing pipeline(s).

D. IRRIGATION

Maintain water flow in crop irrigation systems, unless shutoff is coordinated with affected parties.

E. ROAD CROSSINGS AND ACCESS POINTS

1. Maintain safe and accessible conditions at all road crossings and access points during construction.

2. If crushed stone access pads are used in residential or agricultural areas, place the stone on synthetic fabric to facilitate removal.

3. Minimize the use of tracked equipment on public roadways. Remove any soil or gravel spilled or tracked onto roadways daily or more frequent as necessary to maintain safe road conditions. Repair any damages to roadway surfaces, shoulders, and bar ditches.

F. TEMPORARY EROSION CONTROL

Install temporary erosion controls immediately after initial disturbance of the soil. Temporary erosion controls must be properly maintained throughout construction (on a daily basis) and reinstalled as necessary (such as after backfilling of the trench) until replaced by permanent erosion controls or restoration is complete.

1. Temporary Slope Breakers

   a. Temporary slope breakers are intended to reduce runoff velocity and divert water off the construction right-of-way. Temporary slope

breakers may be constructed of materials such as soil, silt fence, staked hay or straw bales, or sand bags.

b. Install temporary slope breakers on all disturbed areas, as necessary to avoid excessive erosion. Temporary slope breakers must be installed on slopes greater than 5 percent where the base of the slope is less than 50 feet from waterbody, wetland, and road crossings at the following spacing (closer spacing shall be used if necessary):

Slope (%)	Spacing (feet)
5 - 15	300
>15 - 30	200
>30	100

c. Direct the outfall of each temporary slope breaker to a stable, well vegetated area or construct an energy-dissipating device at the end of the slope breaker and off the construction right-of-way.

d. Position the outfall of each temporary slope breaker to prevent sediment discharge into wetlands, waterbodies, or other sensitive environmental resource areas.

2. Temporary Trench Plugs

Temporary trench plugs are intended to segment a continuous open trench prior to backfill.

a. Temporary trench plugs may consist of unexcavated portions of the trench, compacted subsoil, sandbags, or some functional equivalent.

b. Position temporary trench plugs, as necessary, to reduce trenchline erosion and minimize the volume and velocity of trench water flow at the base of slopes.

3. Sediment Barriers

Sediment barriers are intended to stop the flow of sediments and to prevent the deposition of sediments beyond approved workspaces or into sensitive resources.

a. Sediment barriers may be constructed of materials such as silt fence, staked hay or straw bales, compacted earth (e.g., driveable berms across travelways), sand bags, or other appropriate materials.

b. At a minimum, install and maintain temporary sediment barriers across the entire construction right-of-way at the base of slopes greater than 5 percent where the base of the slope is less than 50 feet from a waterbody, wetland, or road crossing until revegetation is successful as defined in this Plan. Leave adequate room between the base of the slope and the sediment barrier to accommodate ponding of water and sediment deposition.

c. Where wetlands or waterbodies are adjacent to and downslope of construction work areas, install sediment barriers along the edge of these areas, as necessary to prevent sediment flow into the wetland or waterbody.

4. Mulch

a. Apply mulch on all slopes (except in cultivated cropland) concurrent with or immediately after seeding, where necessary to stabilize the soil surface and to reduce wind and water erosion. Spread mulch uniformly over the area to cover at least 75 percent of the ground surface at a rate of 2 tons/acre of straw or its equivalent, unless the local soil conservation authority, landowner, or land managing agency approves otherwise in writing.

b. Mulch can consist of weed-free straw or hay, wood fiber hydromulch, erosion control fabric, or some functional equivalent.

c. Mulch all disturbed upland areas (except cultivated cropland) before seeding if:

(1) final grading and installation of permanent erosion control measures will not be completed in an area within 20 days after the trench in that area is backfilled (10 days in residential areas), as required in section V.A.1; or

(2) construction or restoration activity is interrupted for extended periods, such as when seeding cannot be completed due to seeding period restrictions.

d. If mulching before seeding, increase mulch application on all slopes within 100 feet of waterbodies and wetlands to a rate of 3 tons/acre of straw or equivalent.

e. If wood chips are used as mulch, do not use more than 1 ton/acre and add the equivalent of 11 lbs/acre available nitrogen (at least 50 percent of which is slow release).

f. Ensure that mulch is adequately anchored to minimize loss due to wind and water.

g. When anchoring with liquid mulch binders, use rates recommended by the manufacturer. Do not use liquid mulch binders within 100 feet of wetlands or waterbodies, except where the product is certified environmentally non-toxic by the appropriate state or federal agency or independent standards-setting organization.

h. Do not use synthetic monofilament mesh/netted erosion control materials in areas designated as sensitive wildlife habitat, unless the product is specifically designed to minimize harm to wildlife. Anchor erosion control fabric with staples or other appropriate devices.

V. RESTORATION

A. CLEANUP

1. Commence cleanup operations immediately following backfill operations. Complete final grading, topsoil replacement, and installation of permanent erosion control structures within 20 days after backfilling the trench (10 days in residential areas). If seasonal or other weather conditions prevent compliance with these time frames, maintain temporary erosion controls (i.e., temporary slope breakers, sediment barriers, and mulch) until conditions allow completion of cleanup.

   If construction or restoration unexpectedly continues into the winter season when conditions could delay successful decompaction, topsoil replacement, or seeding until the following spring, file with the Secretary for the review and written approval of the Director, a winter construction plan (as specified in section III.I). This filing requirement does not apply to projects constructed under the automatic authorization provisions of the FERC's regulations.

2. A travel lane may be left open temporarily to allow access by construction traffic if the temporary erosion control structures are installed as specified in section IV.F. and inspected and maintained as specified in sections II.B.12 through 14. When access is no longer required the travel lane must be removed and the right-of-way restored.

3. Rock excavated from the trench may be used to backfill the trench only to the top of the existing bedrock profile. Rock that is not returned to the trench shall be considered construction debris, unless approved for use as mulch or for some other use on the construction work areas by the landowner or land managing agency.

4. Remove excess rock from at least the top 12 inches of soil in all cultivated or rotated cropland, managed pastures, hayfields, and residential areas, as well as other areas at the landowner's request. The size, density, and distribution of rock on the construction work area shall be similar to adjacent areas not disturbed by construction. The landowner or land management agency may approve other provisions in writing.

5. Grade the construction right-of-way to restore pre-construction contours and leave the soil in the proper condition for planting.

6. Remove construction debris from all construction work areas unless the landowner or land managing agency approves leaving materials onsite for beneficial reuse, stabilization, or habitat restoration.

7. Remove temporary sediment barriers when replaced by permanent erosion control measures or when revegetation is successful.

B. PERMANENT EROSION CONTROL DEVICES

1. Trench Breakers

a. Trench breakers are intended to slow the flow of subsurface water along the trench. Trench breakers may be constructed of materials such as sand bags or polyurethane foam. Do not use topsoil in trench breakers.

b. An engineer or similarly qualified professional shall determine the need for and spacing of trench breakers. Otherwise, trench breakers shall be installed at the same spacing as and upslope of permanent slope breakers.

c. In agricultural fields and residential areas where slope breakers are not typically required, install trench breakers at the same spacing as if permanent slope breakers were required.

d. At a minimum, install a trench breaker at the base of slopes greater than 5 percent where the base of the slope is less than 50 feet from a waterbody or wetland and where needed to avoid draining a waterbody or wetland. Install trench breakers at wetland boundaries, as specified in the Procedures. Do not install trench breakers within a wetland.

2. Permanent Slope Breakers

a. Permanent slope breakers are intended to reduce runoff velocity, divert water off the construction right-of-way, and prevent sediment deposition into sensitive resources. Permanent slope breakers may be constructed of materials such as soil, stone, or some functional equivalent.

b. Construct and maintain permanent slope breakers in all areas, except cultivated areas and lawns, unless requested by the landowner, using spacing recommendations obtained from the local soil conservation authority or land managing agency.

In the absence of written recommendations, use the following spacing unless closer spacing is necessary to avoid excessive erosion on the construction right-of-way:

Slope (%)	Spacing (feet)
5 - 15	300
>15 - 30	200
>30	100

c. Construct slope breakers to divert surface flow to a stable area without causing water to pool or erode behind the breaker. In the absence of a stable area, construct appropriate energy-dissipating devices at the end of the breaker.

d. Slope breakers may extend slightly (about 4 feet) beyond the edge of the construction right-of-way to effectively drain water off the disturbed area. Where slope breakers extend beyond the edge of the construction right-of-way, they are subject to compliance with all applicable survey requirements.

C. SOIL COMPACTION MITIGATION

1. Test topsoil and subsoil for compaction at regular intervals in agricultural and residential areas disturbed by construction activities. Conduct tests on the same soil type under similar moisture conditions in undisturbed areas to approximate preconstruction conditions. Use penetrometers or other appropriate devices to conduct tests.

2. Plow severely compacted agricultural areas with a paraplow or other deep tillage implement. In areas where topsoil has been segregated, plow the subsoil before replacing the segregated topsoil.

If subsequent construction and cleanup activities result in further compaction, conduct additional tilling.

3. Perform appropriate soil compaction mitigation in severely compacted residential areas.

D. REVEGETATION

1. General

a. The project sponsor is responsible for ensuring successful revegetation of soils disturbed by project-related activities, except as noted in section V.D.1.b.

b. Restore all turf, ornamental shrubs, and specialized landscaping in accordance with the landowner's request, or compensate the landowner. Restoration work must be performed by personnel familiar with local horticultural and turf establishment practices.

2. Soil Additives

Fertilize and add soil pH modifiers in accordance with written recommendations obtained from the local soil conservation authority, land management agencies, or landowner. Incorporate recommended soil pH modifier and fertilizer into the top 2 inches of soil as soon as practicable after application.

3. Seeding Requirements

a. Prepare a seedbed in disturbed areas to a depth of 3 to 4 inches using appropriate equipment to provide a firm seedbed. When hydroseeding, scarify the seedbed to facilitate lodging and germination of seed.

b. Seed disturbed areas in accordance with written recommendations for seed mixes, rates, and dates obtained from the local soil conservation authority or the request of the landowner or land management agency. Seeding is not required in cultivated croplands unless requested by the landowner.

c. Perform seeding of permanent vegetation within the recommended seeding dates. If seeding cannot be done within those dates, use appropriate temporary erosion control measures discussed in section IV.F and perform seeding of permanent vegetation at the beginning of the next recommended seeding season. Dormant seeding or temporary

seeding of annual species may also be used, if necessary, to establish cover, as approved by the Environmental Inspector. Lawns may be seeded on a schedule established with the landowner.

d. In the absence of written recommendations from the local soil conservation authorities, seed all disturbed soils within 6 working days of final grading, weather and soil conditions permitting, subject to the specifications in section V.D.3.a through V.D.3.c.

e. Base seeding rates on Pure Live Seed. Use seed within 12 months of seed testing.

f. Treat legume seed with an inoculant specific to the species using the manufacturer's recommended rate of inoculant appropriate for the seeding method (broadcast, drill, or hydro).

g. In the absence of written recommendations from the local soil conservation authorities, landowner, or land managing agency to the contrary, a seed drill equipped with a cultipacker is preferred for seed application.

Broadcast or hydroseeding can be used in lieu of drilling at double the recommended seeding rates. Where seed is broadcast, firm the seedbed with a cultipacker or roller after seeding. In rocky soils or where site conditions may limit the effectiveness of this equipment, other alternatives may be appropriate (e.g., use of a chain drag) to lightly cover seed after application, as approved by the Environmental Inspector.

VI. OFF-ROAD VEHICLE CONTROL

To each owner or manager of forested lands, offer to install and maintain measures to control unauthorized vehicle access to the right-of-way. These measures may include:

A. signs;

B. fences with locking gates;

C. slash and timber barriers, pipe barriers, or a line of boulders across the right-of-way; and

D. conifers or other appropriate trees or shrubs across the right-of-way.

VII. POST-CONSTRUCTION ACTIVITIES AND REPORTING

A. MONITORING AND MAINTENANCE

1. Conduct follow-up inspections of all disturbed areas, as necessary, to determine the success of revegetation and address landowner concerns. At a minimum, conduct inspections after the first and second growing seasons.

2. Revegetation in non-agricultural areas shall be considered successful if upon visual survey the density and cover of non-nuisance vegetation are similar in density and cover to adjacent undisturbed lands. In agricultural areas, revegetation shall be considered successful when upon visual survey, crop growth and vigor are similar to adjacent undisturbed portions of the same field, unless the easement agreement specifies otherwise.

   Continue revegetation efforts until revegetation is successful.

3. Monitor and correct problems with drainage and irrigation systems resulting from pipeline construction in agricultural areas until restoration is successful.

4. Restoration shall be considered successful if the right-of-way surface condition is similar to adjacent undisturbed lands, construction debris is removed (unless otherwise approved by the landowner or land managing agency per section V.A.6), revegetation is successful, and proper drainage has been restored.

5. Routine vegetation mowing or clearing over the full width of the permanent right-of-way in uplands shall not be done more frequently than every 3 years. However, to facilitate periodic corrosion/leak surveys, a corridor not exceeding 10 feet in width centered on the pipeline may be cleared at a frequency necessary to maintain the 10-foot corridor in an herbaceous state. In no case shall routine vegetation mowing or clearing occur during the migratory bird nesting season between April 15 and August 1 of any year unless specifically approved in writing by the responsible land management agency or the U.S. Fish and Wildlife Service.

6. Efforts to control unauthorized off-road vehicle use, in cooperation with the landowner, shall continue throughout the life of the project. Maintain signs, gates, and permanent access roads as necessary.

B. REPORTING

1. The project sponsor shall maintain records that identify by milepost:

   a. method of application, application rate, and type of fertilizer, pH modifying agent, seed, and mulch used;

   b. acreage treated;

   c. dates of backfilling and seeding;

   d. names of landowners requesting special seeding treatment and a description of the follow-up actions;

   e. the location of any subsurface drainage repairs or improvements made during restoration; and

   f. any problem areas and how they were addressed.

2. The project sponsor shall file with the Secretary quarterly activity reports documenting the results of follow-up inspections required by section VII.A.1; any problem areas, including those identified by the landowner; and corrective actions taken for at least 2 years following construction.

   The requirement to file quarterly activity reports with the Secretary does not apply to projects constructed under the automatic authorization, prior notice, or advanced notice provisions in the FERC's regulations.

ATTACHMENT I

WETLAND AND WATERBODY CONSTRUCTION AND MITIGATION PROCEDURES

Stantec

WETLAND AND WATERBODY CONSTRUCTION AND MITIGATION PROCEDURES

MAY 2013 VERSION

WETLAND AND WATERBODY CONSTRUCTION AND MITIGATION PROCEDURES

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WETLAND AND WATERBODY
CONSTRUCTION AND MITIGATION PROCEDURES (PROCEDURES)

I. APPLICABILITY

A. The intent of these Procedures is to assist project sponsors by identifying baseline mitigation measures for minimizing the extent and duration of project-related disturbance on wetlands and waterbodies. Project sponsors shall specify in their applications for a new FERC authorization, and in prior notice and advance notice filings, any individual measures in these Procedures they consider unnecessary, technically infeasible, or unsuitable due to local conditions and fully describe any alternative measures they would use. Project sponsors shall also explain how those alternative measures would achieve a comparable level of mitigation.

Once a project is authorized, project sponsors can request further changes as variances to the measures in these Procedures (or the applicant's approved procedures). The Director of the Office of Energy Projects (Director) will consider approval of variances upon the project sponsor's written request, if the Director agrees that a variance:

1. provides equal or better environmental protection;

2. is necessary because a portion of these Procedures is infeasible or unworkable based on project-specific conditions; or

3. is specifically required in writing by another federal, state, or Native American land management agency for the portion of the project on its land or under its jurisdiction.

Sponsors of projects planned for construction under the automatic authorization provisions in the FERC's regulations must receive written approval for any variances in advance of construction.

Project-related impacts on non-wetland areas are addressed in the staff's Upland Erosion Control, Revegetation, and Maintenance Plan (Plan).

B. DEFINITIONS

1. "Waterbody" includes any natural or artificial stream, river, or drainage with perceptible flow at the time of crossing, and other permanent waterbodies such as ponds and lakes:

   a. "minor waterbody" includes all waterbodies less than or equal to 10 feet wide at the water's edge at the time of crossing;

   b. "intermediate waterbody" includes all waterbodies greater than 10 feet wide but less than or equal to 100 feet wide at the water's edge at the time of crossing; and

   c. "major waterbody" includes all waterbodies greater than 100 feet wide at the water's edge at the time of crossing.

2. "Wetland" includes any area that is not in actively cultivated or rotated cropland and that satisfies the requirements of the current federal methodology for identifying and delineating wetlands.

II. PRECONSTRUCTION FILING

A. The following information must be filed with the Secretary of the FERC (Secretary) prior to the beginning of construction, for the review and written approval by the Director:

1. site-specific justifications for extra work areas that would be closer than 50 feet from a waterbody or wetland; and

2. site-specific justifications for the use of a construction right-of-way greater than 75-feet-wide in wetlands.

B. The following information must be filed with the Secretary prior to the beginning of construction. These filing requirements do not apply to projects constructed under the automatic authorization provisions in the FERC's regulations:

1. Spill Prevention and Response Procedures specified in section IV.A;

2. a schedule identifying when trenching or blasting will occur within each waterbody greater than 10 feet wide, within any designated coldwater fishery, and within any waterbody identified as habitat for federally-listed threatened or endangered species. The project sponsor will revise the schedule as necessary to provide FERC staff at least 14 days advance notice. Changes within this last 14-day period must provide for at least 48 hours advance notice;

3. plans for horizontal directional drills (HDD) under wetlands or waterbodies, specified in section V.B.6.d;

4. site-specific plans for major waterbody crossings, described in section V.B.9;

5. a wetland delineation report as described in section VI.A.1, if applicable; and

6. the hydrostatic testing information specified in section VII.B.3.

III. ENVIRONMENTAL INSPECTORS

A. At least one Environmental Inspector having knowledge of the wetland and waterbody conditions in the project area is required for each construction spread. The number and experience of Environmental Inspectors assigned to each construction spread shall be appropriate for the length of the construction spread and the number/significance of resources affected.

B. The Environmental Inspector's responsibilities are outlined in the Upland Erosion Control, Revegetation, and Maintenance Plan (Plan).

IV. PRECONSTRUCTION PLANNING

A. The project sponsor shall develop project-specific Spill Prevention and Response Procedures that meet applicable requirements of state and federal agencies. A copy must be filed with the Secretary prior to construction and made available in the field on each construction spread. This filing requirement does not apply to projects constructed under the automatic authorization provisions in the FERC's regulations.

1. It shall be the responsibility of the project sponsor and its contractors to structure their operations in a manner that reduces the risk of spills or the accidental exposure of fuels or hazardous materials to waterbodies or wetlands. The project sponsor and its contractors must, at a minimum, ensure that:

a. all employees handling fuels and other hazardous materials are properly trained;

b. all equipment is in good operating order and inspected on a regular basis;

c. fuel trucks transporting fuel to on-site equipment travel only on approved access roads;

d. all equipment is parked overnight and/or fueled at least 100 feet from a waterbody or in an upland area at least 100 feet from a wetland boundary. These activities can occur closer only if the Environmental Inspector determines that there is no reasonable alternative, and the

project sponsor and its contractors have taken appropriate steps (including secondary containment structures) to prevent spills and provide for prompt cleanup in the event of a spill;

e. hazardous materials, including chemicals, fuels, and lubricating oils, are not stored within 100 feet of a wetland, waterbody, or designated municipal watershed area, unless the location is designated for such use by an appropriate governmental authority. This applies to storage of these materials and does not apply to normal operation or use of equipment in these areas;

f. concrete coating activities are not performed within 100 feet of a wetland or waterbody boundary, unless the location is an existing industrial site designated for such use. These activities can occur closer only if the Environmental Inspector determines that there is no reasonable alternative, and the project sponsor and its contractors have taken appropriate steps (including secondary containment structures) to prevent spills and provide for prompt cleanup in the event of a spill;

g. pumps operating within 100 feet of a waterbody or wetland boundary utilize appropriate secondary containment systems to prevent spills; and

h. bulk storage of hazardous materials, including chemicals, fuels, and lubricating oils have appropriate secondary containment systems to prevent spills.

2. The project sponsor and its contractors must structure their operations in a manner that provides for the prompt and effective cleanup of spills of fuel and other hazardous materials. At a minimum, the project sponsor and its contractors must:

a. ensure that each construction crew (including cleanup crews) has on hand sufficient supplies of absorbent and barrier materials to allow the rapid containment and recovery of spilled materials and knows the procedure for reporting spills and unanticipated discoveries of contamination;

b. ensure that each construction crew has on hand sufficient tools and material to stop leaks;

c. know the contact names and telephone numbers for all local, state, and federal agencies (including, if necessary, the U. S. Coast Guard and the National Response Center) that must be notified of a spill; and

d. follow the requirements of those agencies in cleaning up the spill, in excavating and disposing of soils or other materials contaminated by a spill, and in collecting and disposing of waste generated during spill cleanup.

B. AGENCY COORDINATION

The project sponsor must coordinate with the appropriate local, state, and federal agencies as outlined in these Procedures and in the FERC's Orders.

V. WATERBODY CROSSINGS

A. NOTIFICATION PROCEDURES AND PERMITS

1. Apply to the U.S. Army Corps of Engineers (COE), or its delegated agency, for the appropriate wetland and waterbody crossing permits.

2. Provide written notification to authorities responsible for potable surface water supply intakes located within 3 miles downstream of the crossing at least 1 week before beginning work in the waterbody, or as otherwise specified by that authority.

3. Apply for state-issued waterbody crossing permits and obtain individual or generic section 401 water quality certification or waiver.

4. Notify appropriate federal and state authorities at least 48 hours before beginning trenching or blasting within the waterbody, or as specified in applicable permits.

B. INSTALLATION

1. Time Window for Construction

Unless expressly permitted or further restricted by the appropriate federal or state agency in writing on a site-specific basis, instream work, except that required to install or remove equipment bridges, must occur during the following time windows:

a. coldwater fisheries - June 1 through September 30; and

b. coolwater and warmwater fisheries - June 1 through November 30.

2. Extra Work Areas

a. Locate all extra work areas (such as staging areas and additional spoil storage areas) at least 50 feet away from water's edge, except where

the adjacent upland consists of cultivated or rotated cropland or other disturbed land.

b. The project sponsor shall file with the Secretary for review and written approval by the Director, site-specific justification for each extra work area with a less than 50-foot setback from the water's edge, except where the adjacent upland consists of cultivated or rotated cropland or other disturbed land. The justification must specify the conditions that will not permit a 50-foot setback and measures to ensure the waterbody is adequately protected.

c. Limit the size of extra work areas to the minimum needed to construct the waterbody crossing.

3. General Crossing Procedures

a. Comply with the COE, or its delegated agency, permit terms and conditions.

b. Construct crossings as close to perpendicular to the axis of the waterbody channel as engineering and routing conditions permit.

c. Where pipelines parallel a waterbody, maintain at least 15 feet of undisturbed vegetation between the waterbody (and any adjacent wetland) and the construction right-of-way, except where maintaining this offset will result in greater environmental impact.

d. Where waterbodies meander or have multiple channels, route the pipeline to minimize the number of waterbody crossings.

e. Maintain adequate waterbody flow rates to protect aquatic life, and prevent the interruption of existing downstream uses.

f. Waterbody buffers (e.g., extra work area setbacks, refueling restrictions) must be clearly marked in the field with signs and/or highly visible flagging until construction-related ground disturbing activities are complete.

g. Crossing of waterbodies when they are dry or frozen and not flowing may proceed using standard upland construction techniques in accordance with the Plan, provided that the Environmental Inspector verifies that water is unlikely to flow between initial disturbance and final stabilization of the feature. In the event of perceptible flow, the project sponsor must comply with all applicable Procedure requirements for "waterbodies" as defined in section I.B.1.

4. Spoil Pile Placement and Control

   a. All spoil from minor and intermediate waterbody crossings, and upland spoil from major waterbody crossings, must be placed in the construction right-of-way at least 10 feet from the water's edge or in additional extra work areas as described in section V.B.2.

   b. Use sediment barriers to prevent the flow of spoil or silt-laden water into any waterbody.

5. Equipment Bridges

   a. Only clearing equipment and equipment necessary for installation of equipment bridges may cross waterbodies prior to bridge installation. Limit the number of such crossings of each waterbody to one per piece of clearing equipment.

   b. Construct and maintain equipment bridges to allow unrestricted flow and to prevent soil from entering the waterbody. Examples of such bridges include:

      (1) equipment pads and culvert(s);
      (2) equipment pads or railroad car bridges without culverts;
      (3) clean rock fill and culvert(s); and
      (4) flexi-float or portable bridges.

      Additional options for equipment bridges may be utilized that achieve the performance objectives noted above. Do not use soil to construct or stabilize equipment bridges.

   c. Design and maintain each equipment bridge to withstand and pass the highest flow expected to occur while the bridge is in place. Align culverts to prevent bank erosion or streambed scour. If necessary, install energy dissipating devices downstream of the culverts.

   d. Design and maintain equipment bridges to prevent soil from entering the waterbody.

   e. Remove temporary equipment bridges as soon as practicable after permanent seeding.

   f. If there will be more than 1 month between final cleanup and the beginning of permanent seeding and reasonable alternative access to the right-of-way is available, remove temporary equipment bridges as soon as practicable after final cleanup.

g. Obtain any necessary approval from the COE, or the appropriate state agency for permanent bridges.

6. Dry-Ditch Crossing Methods

a. Unless approved otherwise by the appropriate federal or state agency, install the pipeline using one of the dry-ditch methods outlined below for crossings of waterbodies up to 30 feet wide (at the water's edge at the time of construction) that are state-designated as either coldwater or significant coolwater or warmwater fisheries, or federally-designated as critical habitat.

b. Dam and Pump

(1) The dam-and-pump method may be used without prior approval for crossings of waterbodies where pumps can adequately transfer streamflow volumes around the work area, and there are no concerns about sensitive species passage.

(2) Implementation of the dam-and-pump crossing method must meet the following performance criteria:

(i) use sufficient pumps, including on-site backup pumps, to maintain downstream flows;
(ii) construct dams with materials that prevent sediment and other pollutants from entering the waterbody (e.g., sandbags or clean gravel with plastic liner);
(iii) screen pump intakes to minimize entrainment of fish;
(iv) prevent streambed scour at pump discharge; and
(v) continuously monitor the dam and pumps to ensure proper operation throughout the waterbody crossing.

c. Flume Crossing

The flume crossing method requires implementation of the following steps:

(1) install flume pipe after blasting (if necessary), but before any trenching;

(2) use sand bag or sand bag and plastic sheeting diversion structure or equivalent to develop an effective seal and to divert stream flow through the flume pipe (some modifications to the stream bottom may be required to achieve an effective seal);

(3) properly align flume pipe(s) to prevent bank erosion and streambed scour;

(4) do not remove flume pipe during trenching, pipelaying, or backfilling activities, or initial streambed restoration efforts; and

(5) remove all flume pipes and dams that are not also part of the equipment bridge as soon as final cleanup of the stream bed and bank is complete.

d. Horizontal Directional Drill

For each waterbody or wetland that would be crossed using the HDD method, file with the Secretary for the review and written approval by the Director, a plan that includes:

(1) site-specific construction diagrams that show the location of mud pits, pipe assembly areas, and all areas to be disturbed or cleared for construction;

(2) justification that disturbed areas are limited to the minimum needed to construct the crossing;

(3) identification of any aboveground disturbance or clearing between the HDD entry and exit workspaces during construction;

(4) a description of how an inadvertent release of drilling mud would be contained and cleaned up; and

(5) a contingency plan for crossing the waterbody or wetland in the event the HDD is unsuccessful and how the abandoned drill hole would be sealed, if necessary.

The requirement to file HDD plans does not apply to projects constructed under the automatic authorization provisions in the FERC's regulations.

7. Crossings of Minor Waterbodies

Where a dry-ditch crossing is not required, minor waterbodies may be crossed using the open-cut crossing method, with the following restrictions:

a. except for blasting and other rock breaking measures, complete instream construction activities (including trenching, pipe installation, backfill, and restoration of the streambed contours) within 24 hours.

Streambanks and unconsolidated streambeds may require additional restoration after this period;

b. limit use of equipment operating in the waterbody to that needed to construct the crossing; and

c. equipment bridges are not required at minor waterbodies that do not have a state-designated fishery classification or protected status (e.g., agricultural or intermittent drainage ditches). However, if an equipment bridge is used it must be constructed as described in section V.B.5.

8. Crossings of Intermediate Waterbodies

Where a dry-ditch crossing is not required, intermediate waterbodies may be crossed using the open-cut crossing method, with the following restrictions:

a. complete instream construction activities (not including blasting and other rock breaking measures) within 48 hours, unless site-specific conditions make completion within 48 hours infeasible;

b. limit use of equipment operating in the waterbody to that needed to construct the crossing; and

c. all other construction equipment must cross on an equipment bridge as specified in section V.B.5.

9. Crossings of Major Waterbodies

Before construction, the project sponsor shall file with the Secretary for the review and written approval by the Director a detailed, site-specific construction plan and scaled drawings identifying all areas to be disturbed by construction for each major waterbody crossing (the scaled drawings are not required for any offshore portions of pipeline projects). This plan must be developed in consultation with the appropriate state and federal agencies and shall include extra work areas, spoil storage areas, sediment control structures, etc., as well as mitigation for navigational issues. The requirement to file major waterbody crossing plans does not apply to projects constructed under the automatic authorization provisions of the FERC's regulations.

The Environmental Inspector may adjust the final placement of the erosion and sediment control structures in the field to maximize effectiveness.

10. Temporary Erosion and Sediment Control

Install sediment barriers (as defined in section IV.F.3.a of the Plan) immediately after initial disturbance of the waterbody or adjacent upland.

Sediment barriers must be properly maintained throughout construction and reinstalled as necessary (such as after backfilling of the trench) until replaced by permanent erosion controls or restoration of adjacent upland areas is complete. Temporary erosion and sediment control measures are addressed in more detail in the Plan; however, the following specific measures must be implemented at stream crossings:

a. install sediment barriers across the entire construction right-of-way at all waterbody crossings, where necessary to prevent the flow of sediments into the waterbody. Removable sediment barriers (or driveable berms) must be installed across the travel lane. These removable sediment barriers can be removed during the construction day, but must be re-installed after construction has stopped for the day and/or when heavy precipitation is imminent;

b. where waterbodies are adjacent to the construction right-of-way and the right-of-way slopes toward the waterbody, install sediment barriers along the edge of the construction right-of-way as necessary to contain spoil within the construction right-of-way and prevent sediment flow into the waterbody; and

c. use temporary trench plugs at all waterbody crossings, as necessary, to prevent diversion of water into upland portions of the pipeline trench and to keep any accumulated trench water out of the waterbody.

11. Trench Dewatering

Dewater the trench (either on or off the construction right-of-way) in a manner that does not cause erosion and does not result in silt-laden water flowing into any waterbody. Remove the dewatering structures as soon as practicable after the completion of dewatering activities.

C. RESTORATION

1. Use clean gravel or native cobbles for the upper 1 foot of trench backfill in all waterbodies that contain coldwater fisheries.

2. For open-cut crossings, stabilize waterbody banks and install temporary sediment barriers within 24 hours of completing instream construction activities. For dry-ditch crossings, complete streambed and bank stabilization before returning flow to the waterbody channel.

3. Return all waterbody banks to preconstruction contours or to a stable angle of repose as approved by the Environmental Inspector.

4. Install erosion control fabric or a functional equivalent on waterbody banks at the time of final bank recontouring. Do not use synthetic monofilament

mesh/netted erosion control materials in areas designated as sensitive wildlife habitat unless the product is specifically designed to minimize harm to wildlife. Anchor erosion control fabric with staples or other appropriate devices.

5. Application of riprap for bank stabilization must comply with COE, or its delegated agency, permit terms and conditions.

6. Unless otherwise specified by state permit, limit the use of riprap to areas where flow conditions preclude effective vegetative stabilization techniques such as seeding and erosion control fabric.

7. Revegetate disturbed riparian areas with native species of conservation grasses, legumes, and woody species, similar in density to adjacent undisturbed lands.

8. Install a permanent slope breaker across the construction right-of-way at the base of slopes greater than 5 percent that are less than 50 feet from the waterbody, or as needed to prevent sediment transport into the waterbody. In addition, install sediment barriers as outlined in the Plan.

   In some areas, with the approval of the Environmental Inspector, an earthen berm may be suitable as a sediment barrier adjacent to the waterbody.

9. Sections V.C.3 through V.C.7 above also apply to those perennial or intermittent streams not flowing at the time of construction.

D. POST-CONSTRUCTION MAINTENANCE

1. Limit routine vegetation mowing or clearing adjacent to waterbodies to allow a riparian strip at least 25 feet wide, as measured from the waterbody's mean high water mark, to permanently revegetate with native plant species across the entire construction right-of-way. However, to facilitate periodic corrosion/leak surveys, a corridor centered on the pipeline and up to 10 feet wide may be cleared at a frequency necessary to maintain the 10-foot corridor in an herbaceous state. In addition, trees that are located within 15 feet of the pipeline that have roots that could compromise the integrity of the pipeline coating may be cut and removed from the permanent right-of-way. Do not conduct any routine vegetation mowing or clearing in riparian areas that are between HDD entry and exit points.

2. Do not use herbicides or pesticides in or within 100 feet of a waterbody except as allowed by the appropriate land management or state agency.

3. Time of year restrictions specified in section VII.A.5 of the Plan (April 15 – August 1 of any year) apply to routine mowing and clearing of riparian areas.

VI. WETLAND CROSSINGS

A. GENERAL

1. The project sponsor shall conduct a wetland delineation using the current federal methodology and file a wetland delineation report with the Secretary before construction. The requirement to file a wetland delineation report does not apply to projects constructed under the automatic authorization provisions in the FERC's regulations.

   This report shall identify:

   a. by milepost all wetlands that would be affected;

   b. the National Wetlands Inventory (NWI) classification for each wetland;

   c. the crossing length of each wetland in feet; and

   d. the area of permanent and temporary disturbance that would occur in each wetland by NWI classification type.

   The requirements outlined in this section do not apply to wetlands in actively cultivated or rotated cropland. Standard upland protective measures, including workspace and topsoiling requirements, apply to these agricultural wetlands.

2. Route the pipeline to avoid wetland areas to the maximum extent possible. If a wetland cannot be avoided or crossed by following an existing right-of-way, route the new pipeline in a manner that minimizes disturbance to wetlands. Where looping an existing pipeline, overlap the existing pipeline right-of-way with the new construction right-of-way. In addition, locate the loop line no more than 25 feet away from the existing pipeline unless site-specific constraints would adversely affect the stability of the existing pipeline.

3. Limit the width of the construction right-of-way to 75 feet or less. Prior written approval of the Director is required where topographic conditions or soil limitations require that the construction right-of-way width within the boundaries of a federally delineated wetland be expanded beyond 75 feet. Early in the planning process the project sponsor is encouraged to identify site-specific areas where excessively wide trenches could occur and/or where spoil piles could be difficult to maintain because existing soils lack adequate unconfined compressive strength.

4. Wetland boundaries and buffers must be clearly marked in the field with signs and/or highly visible flagging until construction-related ground disturbing activities are complete.

5. Implement the measures of sections V and VI in the event a waterbody crossing is located within or adjacent to a wetland crossing. If all measures of sections V and VI cannot be met, the project sponsor must file with the Secretary a site-specific crossing plan for review and written approval by the Director before construction. This crossing plan shall address at a minimum:

   a. spoil control;

   b. equipment bridges;

   c. restoration of waterbody banks and wetland hydrology;

   d. timing of the waterbody crossing;

   e. method of crossing; and

   f. size and location of all extra work areas.

6. Do not locate aboveground facilities in any wetland, except where the location of such facilities outside of wetlands would prohibit compliance with U.S. Department of Transportation regulations.

B. INSTALLATION

1. Extra Work Areas and Access Roads

   a. Locate all extra work areas (such as staging areas and additional spoil storage areas) at least 50 feet away from wetland boundaries, except where the adjacent upland consists of cultivated or rotated cropland or other disturbed land.

   b. The project sponsor shall file with the Secretary for review and written approval by the Director, site-specific justification for each extra work area with a less than 50-foot setback from wetland boundaries, except where adjacent upland consists of cultivated or rotated cropland or other disturbed land. The justification must specify the site-specific conditions that will not permit a 50-foot setback and measures to ensure the wetland is adequately protected.

   c. The construction right-of-way may be used for access when the wetland soil is firm enough to avoid rutting or the construction right-of-way has been appropriately stabilized to avoid rutting (e.g., with timber riprap, prefabricated equipment mats, or terra mats).

      In wetlands that cannot be appropriately stabilized, all construction equipment other than that needed to install the wetland crossing shall

use access roads located in upland areas. Where access roads in upland areas do not provide reasonable access, limit all other construction equipment to one pass through the wetland using the construction right-of-way.

d. The only access roads, other than the construction right-of-way, that can be used in wetlands are those existing roads that can be used with no modifications or improvements, other than routine repair, and no impact on the wetland.

2. Crossing Procedures

a. Comply with COE, or its delegated agency, permit terms and conditions.

b. Assemble the pipeline in an upland area unless the wetland is dry enough to adequately support skids and pipe.

c. Use “push-pull” or “float” techniques to place the pipe in the trench where water and other site conditions allow.

d. Minimize the length of time that topsoil is segregated and the trench is open. Do not trench the wetland until the pipeline is assembled and ready for lowering in.

e. Limit construction equipment operating in wetland areas to that needed to clear the construction right-of-way, dig the trench, fabricate and install the pipeline, backfill the trench, and restore the construction right-of-way.

f. Cut vegetation just above ground level, leaving existing root systems in place, and remove it from the wetland for disposal.

The project sponsor can burn woody debris in wetlands, if approved by the COE and in accordance with state and local regulations, ensuring that all remaining woody debris is removed for disposal.

g. Limit pulling of tree stumps and grading activities to directly over the trenchline. Do not grade or remove stumps or root systems from the rest of the construction right-of-way in wetlands unless the Chief Inspector and Environmental Inspector determine that safety-related construction constraints require grading or the removal of tree stumps from under the working side of the construction right-of-way.

h. Segregate the top 1 foot of topsoil from the area disturbed by trenching, except in areas where standing water is present or soils are

saturated. Immediately after backfilling is complete, restore the segregated topsoil to its original location.

i. Do not use rock, soil imported from outside the wetland, tree stumps, or brush riprap to support equipment on the construction right-of-way.

j. If standing water or saturated soils are present, or if construction equipment causes ruts or mixing of the topsoil and subsoil in wetlands, use low-ground-weight construction equipment, or operate normal equipment on timber riprap, prefabricated equipment mats, or terra mats.

k. Remove all project-related material used to support equipment on the construction right-of-way upon completion of construction.

3. Temporary Sediment Control

Install sediment barriers (as defined in section IV.F.3.a of the Plan) immediately after initial disturbance of the wetland or adjacent upland. Sediment barriers must be properly maintained throughout construction and reinstalled as necessary (such as after backfilling of the trench). Except as noted below in section VI.B.3.c, maintain sediment barriers until replaced by permanent erosion controls or restoration of adjacent upland areas is complete. Temporary erosion and sediment control measures are addressed in more detail in the Plan.

a. Install sediment barriers across the entire construction right-of-way immediately upslope of the wetland boundary at all wetland crossings where necessary to prevent sediment flow into the wetland.

b. Where wetlands are adjacent to the construction right-of-way and the right-of-way slopes toward the wetland, install sediment barriers along the edge of the construction right-of-way as necessary to contain spoil within the construction right-of-way and prevent sediment flow into the wetland.

c. Install sediment barriers along the edge of the construction right-of-way as necessary to contain spoil and sediment within the construction right-of-way through wetlands. Remove these sediment barriers during right-of-way cleanup.

4. Trench Dewatering

Dewater the trench (either on or off the construction right-of-way) in a manner that does not cause erosion and does not result in silt-laden water flowing into any wetland. Remove the dewatering structures as soon as practicable after the completion of dewatering activities.

C. RESTORATION

1. Where the pipeline trench may drain a wetland, construct trench breakers at the wetland boundaries and/or seal the trench bottom as necessary to maintain the original wetland hydrology.

2. Restore pre-construction wetland contours to maintain the original wetland hydrology.

3. For each wetland crossed, install a trench breaker at the base of slopes near the boundary between the wetland and adjacent upland areas. Install a permanent slope breaker across the construction right-of-way at the base of slopes greater than 5 percent where the base of the slope is less than 50 feet from the wetland, or as needed to prevent sediment transport into the wetland. In addition, install sediment barriers as outlined in the Plan. In some areas, with the approval of the Environmental Inspector, an earthen berm may be suitable as a sediment barrier adjacent to the wetland.

4. Do not use fertilizer, lime, or mulch unless required in writing by the appropriate federal or state agency.

5. Consult with the appropriate federal or state agencies to develop a project-specific wetland restoration plan. The restoration plan shall include measures for re-establishing herbaceous and/or woody species, controlling the invasion and spread of invasive species and noxious weeds (e.g., purple loosestrife and phragmites), and monitoring the success of the revegetation and weed control efforts. Provide this plan to the FERC staff upon request.

6. Until a project-specific wetland restoration plan is developed and/or implemented, temporarily revegetate the construction right-of-way with annual ryegrass at a rate of 40 pounds/acre (unless standing water is present).

7. Ensure that all disturbed areas successfully revegetate with wetland herbaceous and/or woody plant species.

8. Remove temporary sediment barriers located at the boundary between wetland and adjacent upland areas after revegetation and stabilization of adjacent upland areas are judged to be successful as specified in section VII.A.4 of the Plan.

D. POST-CONSTRUCTION MAINTENANCE AND REPORTING

1. Do not conduct routine vegetation mowing or clearing over the full width of the permanent right-of-way in wetlands. However, to facilitate periodic corrosion/leak surveys, a corridor centered on the pipeline and up to 10 feet wide may be cleared at a frequency necessary to maintain the 10-foot corridor in an herbaceous state. In addition, trees within 15 feet of the pipeline with roots that could compromise the integrity of pipeline coating may be selectively cut and removed from the permanent right-of-way. Do not conduct any routine vegetation mowing or clearing in wetlands that are between HDD entry and exit points.

2. Do not use herbicides or pesticides in or within 100 feet of a wetland, except as allowed by the appropriate federal or state agency.

3. Time of year restrictions specified in section VII.A.5 of the Plan (April 15 – August 1 of any year) apply to routine mowing and clearing of wetland areas.

4. Monitor and record the success of wetland revegetation annually until wetland revegetation is successful.

5. Wetland revegetation shall be considered successful if all of the following criteria are satisfied:

    a. the affected wetland satisfies the current federal definition for a wetland (i.e., soils, hydrology, and vegetation);

    b. vegetation is at least 80 percent of either the cover documented for the wetland prior to construction, or at least 80 percent of the cover in adjacent wetland areas that were not disturbed by construction;

    c. if natural rather than active revegetation was used, the plant species composition is consistent with early successional wetland plant communities in the affected ecoregion; and

    d. invasive species and noxious weeds are absent, unless they are abundant in adjacent areas that were not disturbed by construction.

6. Within 3 years after construction, file a report with the Secretary identifying the status of the wetland revegetation efforts and documenting success as defined in section VI.D.5, above. The requirement to file wetland restoration reports with the Secretary does not apply to projects constructed under the automatic authorization, prior notice, or advance notice provisions in the FERC's regulations.

    For any wetland where revegetation is not successful at the end of 3 years after construction, develop and implement (in consultation with a

professional wetland ecologist) a remedial revegetation plan to actively revegetate wetlands. Continue revegetation efforts and file a report annually documenting progress in these wetlands until wetland revegetation is successful.

VII. HYDROSTATIC TESTING

A. NOTIFICATION PROCEDURES AND PERMITS

1. Apply for state-issued water withdrawal permits, as required.

2. Apply for National Pollutant Discharge Elimination System (NPDES) or state-issued discharge permits, as required.

3. Notify appropriate state agencies of intent to use specific sources at least 48 hours before testing activities unless they waive this requirement in writing.

B. GENERAL

1. Perform 100 percent radiographic inspection of all pipeline section welds or hydrotest the pipeline sections, before installation under waterbodies or wetlands.

2. If pumps used for hydrostatic testing are within 100 feet of any waterbody or wetland, address secondary containment and refueling of these pumps in the project's Spill Prevention and Response Procedures.

3. The project sponsor shall file with the Secretary before construction a list identifying the location of all waterbodies proposed for use as a hydrostatic test water source or discharge location. This filing requirement does not apply to projects constructed under the automatic authorization provisions of the FERC's regulations.

C. INTAKE SOURCE AND RATE

1. Screen the intake hose to minimize the potential for entrainment of fish.

2. Do not use state-designated exceptional value waters, waterbodies which provide habitat for federally listed threatened or endangered species, or waterbodies designated as public water supplies, unless appropriate federal, state, and/or local permitting agencies grant written permission.

3. Maintain adequate flow rates to protect aquatic life, provide for all waterbody uses, and provide for downstream withdrawals of water by existing users.

4. Locate hydrostatic test manifolds outside wetlands and riparian areas to the maximum extent practicable.

D. DISCHARGE LOCATION, METHOD, AND RATE

1. Regulate discharge rate, use energy dissipation device(s), and install sediment barriers, as necessary, to prevent erosion, streambed scour, suspension of sediments, or excessive streamflow.

2. Do not discharge into state-designated exceptional value waters, waterbodies which provide habitat for federally listed threatened or endangered species, or waterbodies designated as public water supplies, unless appropriate federal, state, and local permitting agencies grant written permission.

ATTACHMENT J

MINNESOTA NPDES/SDS PERMIT
NO. MNR100001

Stantec

MINNESOTA POLLUTION CONTROL AGENCY

AUTHORIZATION TO DISCHARGE

STORMWATER ASSOCIATED WITH CONSTRUCTION ACTIVITY

UNDER THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)/

STATE DISPOSAL SYSTEM (SDS) PROGRAM

MNR100001

Permittee:	Multiple
Project Name:	Construction Stormwater General Permit
Issuance date:	August 1, 2023
Expiration date:	July 31, 2028

The state of Minnesota, on behalf of its citizens through the Minnesota Pollution Control Agency (MPCA), authorizes the Permittee(s) named above seeking coverage under this general permit to discharge stormwater associated with construction activity to waters of the state of Minnesota in accordance with the requirements of this permit.

The goal of this permit is to reduce pollutant levels in point source discharges and protect water quality in accordance with the U.S. Clean Water Act, Minnesota statutes and rules, and federal laws and regulations.

This permit is effective on the issuance date identified above. This permit expires at midnight on the expiration date identified above.

Signature: Ryan Anderson

This document has been electronically signed.

for the Minnesota Pollution Control Agency

Ryan Anderson
Manager
Stormwater Section
Municipal Division

Permit application:
Submit via MPCA e-Services at
https://rsp.pca.state.mn.us/

Questions on this permit?
Contact e-Services at
651-757-2728 or 844-828-0942

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1.1	**Permit Coverage**. [Minn. R. 7090]
1.2	This permit is required for construction activity that results in land disturbance of equal to or greater than one (1) acre or if a project is part of a common plan of development or sale that ultimately will disturb greater than one (1) acre, and authorizes, subject to the terms and conditions of this permit, the discharge of stormwater associated with construction activity. [Minn. R. 7090]
1.3	Construction activity covered by this permit cannot commence until coverage under this permit is effective as described in item 3.3 through 3.4 or, if applicable, until the Minnesota Pollution Control Agency (MPCA) has issued an individual National Pollutant Discharge Elimination System (NPDES)/State Disposal System (SDS) construction stormwater permit for the project. [Minn. R. 7090]
1.4	This permit covers all areas of the State of Minnesota except land wholly within the boundaries of a federally recognized Indian Reservation owned by a tribe or a tribal member or land held in trust by the federal government for a tribe or tribal member. [Minn. R. 7090]
1.5	Coverage under this permit is not required when all stormwater from construction activity is routed directly to and treated by a "treatment works," as defined in Minn. Stat. Section 115.01, subd. 21, operated under an individual NPDES/SDS permit with a Total Suspended Solids (TSS) effluent limit. [Minn. R. 7090]
1.6	This permit covers ongoing projects covered under any previous construction stormwater permit that are not complete on the issuance date of this permit. Permittees must either remain in compliance with the previous permit and terminate coverage within 18 months of the issuance date of this permit or comply with this permit, including updating the Stormwater Pollution Prevention Plan (SWPPP), within the 18-month period. Permittees of previously permitted projects are not required to incorporate any additional requirements regarding the permanent stormwater treatment system included in this reissued permit. [Minn. R. 7090]
1.7	Coverage for projects that extend beyond the expiration date of this permit remains effective for a grace period of 18 months. If Permittees cannot complete projects during the grace period, the MPCA will extend coverage under the next permit and permittees must comply with the requirements of the new permit including updating the SWPPP. Permittees are not required to follow changes to the permanent stormwater treatment section of the next permit. [Minn. R. 7090]
2.1	**Prohibitions and Limitations of Coverage**. [Minn. R. 7090]
2.2	The owner must develop a complete and accurate SWPPP that complies with item 5.2 prior to submitting the application for coverage and starting construction activity. Failure to prepare a SWPPP prior to submitting the application may result in permit revocation. [Minn. R. 7090]
2.3	This permit prohibits discharges of any material other than stormwater treated in compliance with this permit and discharges from dewatering or basin draining activities in accordance with Section 10. Prohibited discharges include, but are not limited to, wastewater from washout of concrete, stucco, paint, form release oils, curing compounds and other construction materials, fuels, oils, or other pollutants used in vehicle and equipment operation and maintenance, soaps or solvents used in vehicle and equipment washing and maintenance, and other hazardous substances or wastes. [Minn. R. 7090]
2.4	This permit does not authorize stormwater discharges related to the placement of fill into waters of the state requiring local, state or federal authorizations (such as U.S. Army Corps of Engineers Section 404 permits, Minnesota Department of Natural Resources (DNR) Public Waters Work permits or local governmental unit (LGU) Wetland Conservation Act replacement plans or determinations). [Minn. R. 7090]
2.5	This permit does not authorize stormwater discharges associated with industrial activity except for construction activity. Permittees must obtain coverage for discharges associated with industrial activity under a separate NPDES/SDS permit once day-to-day operational activities commence even if construction is ongoing. [Minn. R. 7090]
2.6	This permit does not authorize discharges from non-point source agricultural and silvicultural activities excluded from NPDES permit requirements under 40 CFR pt. 122.3(e). [Minn. R. 7090]
2.7	This permit does not authorize stormwater discharges to Prohibited, Restricted, Special or Impaired waters unless permittees follow the additional stormwater requirements in Section 23. [Minn. R. 7090]
2.8	This permit does not replace or satisfy any environmental review requirements including those under the Minnesota Environmental Policy Act or the National Environmental Policy Act. The owner must verify completion of any environmental review required by law, including any required Environmental Assessment Work Sheets or Environmental Impact Statements, Federal environmental review, or other required review prior to applying for coverage under this permit. If any part of your common plan of development or sale requires environmental review, coverage under this permit cannot be

	obtained until such environmental review is complete. [Minn. R. 7090]
2.9	This permit does not replace or satisfy any review requirements for discharges adversely impacting State or Federally designated endangered or threatened species or a designated critical habitat. The owner must comply with the National Historic Preservation Act and conduct all required review and coordination related to historic preservation, including significant anthropological sites and any burial sites, with the Minnesota Historic Preservation Officer. [Minn. R. 7090]
2.10	This permit does not authorize discharges to wetlands unless the permittee complies with the requirements in Section 22. Coverage under this permit cannot be issued until the requirements for wetland permits, decisions, other determinations, or the mitigative sequence required in section 22 have been finalized and documented. [Minn. R. 7050.0186]
3.1	**Application and Coverage Effective Date**. [Minn. R. 7090]
3.2	The owner and operator must submit a complete and accurate on-line application with the appropriate fee to the MPCA for each project that disturbs one (1) or more acres of land or for a common plan of development or sale that will ultimately disturb one (1) or more acres. [Minn. R. 7090]
3.3	For projects or common plans of development or sale that disturb less than 50 acres or do not discharge stormwater within 1 mile (aerial radius measurement) of a special or impaired water, permittees do not need to submit the SWPPP with the application. Permit coverage for these projects is effective upon application and completing the payment process. [Minn. R. 7090]
3.4	For certain projects or common plans of development or sale disturbing 50 acres or more, the complete SWPPP must be included with the application and submitted at least 30 days before the start of construction activity. This applies if there is a discharge point on the project within one mile (aerial radius measurement) of, and flows to, a special water listed in item 23.3 through 23.6 or an impaired water as described in item 23.7. Permit coverage for these projects is effective upon submitting the application and complete SWPPP, completing the payment process and receiving a determination from the MPCA that the review of the SWPPP is complete. The determination may take longer than 30 days if the SWPPP is incomplete. If the MPCA fails to contact the permittees within 30 days of application receipt, coverage is effective 30 days after completing the payment process. [Minn. R. 7090]
3.5	The application requires listing all persons meeting the definition of owner and operator as permittees. The owner is responsible for compliance with all terms and conditions of this permit. The operator is responsible for compliance with Sections 3, 4, 6-22, 24 and applicable requirements for construction activity in Section 23. [Minn. R. 7090]
3.6	Permittees will receive coverage notification in a manner determined by the MPCA. [Minn. R. 7090]
3.7	For construction projects where the owner or operator changes (e.g., an original developer sells portions of the property to various homebuilders or sells the entire site to a new owner), the current owner and the new owner or operator must submit a complete permit modification form provided by the MPCA. The current owner and the new owner or operator must submit the form prior to the new owner or operator commencing construction activity or no later than 30 days after taking ownership of the property. [Minn. R. 7090]
3.8	For construction projects where the owner or operator changes, the current owner must provide a SWPPP to the new owner and operator that specifically addresses the remaining construction activity. The new owner or operator can implement the original SWPPP, modify the SWPPP, or develop a new SWPPP. Permittees must ensure their activities do not render another party's erosion prevention and sediment control BMPs ineffective. [Minn. R. 7090]
4.1	**Termination of Coverage**. [Minn. R. 7090]
4.2	Permittees must submit a NOT within 30 days after all termination conditions listed in Section 13 are complete. [Minn. R. 7090]
4.3	Permittees must submit a NOT within 30 days after selling or otherwise legally transferring the entire site, including permit responsibility for roads (e.g., street sweeping) and stormwater infrastructure final clean out, or transferring portions of a site to another party. The permittees' coverage under this permit terminates at midnight on the submission date of the NOT. [Minn. R. 7090]
4.4	Permittees may terminate permit coverage prior to completion of all construction activity if they meet all of the following conditions: a. construction activity has ceased for at least 90 days; and b. at least 90 percent (by area) of all originally proposed construction activity has been completed and permanent cover has been established on those areas; and c. on areas where construction activity is not complete, permanent cover has been established; and d. the site complies with item 13.3 through 13.7.

	After permit coverage is terminated under this item, any subsequent development on the remaining portions of the site will require permit coverage if the subsequent development itself or as part of the remaining common plan of development or sale will result in land disturbing activities of one (1) or more acres in size. [Minn. R. 7090]
4.5	Permittees may terminate coverage upon MPCA approval after submitting information documenting the owner cancelled the project. [Minn. R. 7090]
5.1	**Stormwater Pollution Prevention Plan (SWPPP) Content**. [Minn. R. 7090]
5.2	The owner must develop and implement a SWPPP. The SWPPP must include items 5.3 through 5.26. [Minn. R. 7090]
5.3	The SWPPP must incorporate specific Best Management Practices (BMP) used to comply with the requirements of this permit. [Minn. R. 7090]
5.4	The SWPPP must include a narrative describing the timing for installation of all erosion prevention and sediment control BMPs and a description of the permanent stormwater treatment systems. [Minn. R. 7090]
5.5	The SWPPP must include the location and type of all temporary and permanent erosion prevention and sediment control BMPs along with procedures used to establish additional temporary BMPs as necessary for the site conditions during construction. Standard details and/or specifications for BMPs must be included in the final plans and specifications for the project. [Minn. R. 7090]
5.6	The SWPPP must include the calculations and other information used for the design of temporary sediment basins and any of the permanent stormwater treatment systems required in Section 15. [Minn. R. 7090]
5.7	The SWPPP must include estimated quantities anticipated at the start of the project for the life of the project for all erosion prevention and sediment control BMPs (e.g., linear feet of silt fence or square feet of erosion control blanket). [Minn. R. 7090]
5.8	The SWPPP must include the number of acres of impervious surface for both pre- and post-construction. [Minn. R. 7090]
5.9	The SWPPP must include a site map with existing and final grades, including drainage area boundaries, directions of flow and all discharge points where stormwater is leaving the site or entering a surface water. The site map must indicate the areas of steep slopes. The site map must also include impervious surfaces, soil types and locations of potential pollutant-generating activities as identified in Section 12. [Minn. R. 7090]
5.10	The SWPPP must include a map of all surface waters, existing wetlands, and stormwater ponds or basins that can be identified on maps such as United States Geological Survey 7.5-minute quadrangle maps, the National Wetland Inventory map or equivalent maps and are within one mile (aerial radius measurement) from the project boundaries that will receive stormwater from the construction site, during or after construction. The SWPPP must identify if the surface waters are special or impaired waters. [Minn. R. 7090]
5.11	The SWPPP must include a site map showing construction activity areas that are adjacent to and drain to Public Waters for which the DNR has promulgated "work in water restrictions" during specified fish spawning time frames. [Minn. R. 7090]
5.12	Permittees must identify locations of 50' buffer zones as required in item 9.17 and 100' permanent buffer zones as required in item 23.11, on plan sheets in the SWPPP. [Minn. R. 7090]
5.13	If permittees determine compliance with the following requirements is infeasible, they must document the determination in the SWPPP: a. temporary sediment basins as described in Section 14; and b. for linear projects, if the permanent stormwater treatment system cannot be constructed within the right-of-way, a reasonable attempt must be made to obtain additional right-of-way (item 15.9); and c. buffer zones as described in item 9.17 and item 23.11. [Minn. R. 7090]
5.14	If permittees determine that a temporary sediment basin is infeasible as described in item 14.10, the SWPPP must describe the alternative BMPs used. [Minn. R. 7090]
5.15	Where systems cannot meet the full volume reduction requirement on-site, (e.g., the site has infiltration prohibitions, see item 16.14 through item 16.21) the permittee must document the reasons in the SWPPP. [Minn. R. 7090]
5.16	The SWPPP must include any stormwater mitigation measures proposed to be part of the final project in any environmental review document, endangered species review, archeological or other required local, state or federal review conducted for the project. For purposes of this permit, mitigation measures mean actions necessary to avoid, minimize, or mitigate for impacts related to erosion prevention, sediment control, the permanent stormwater treatment system, pollution prevention management measures and discharges associated with the project's construction activity. [Minn. R. 7090]

5.17	The SWPPP must describe the methods used for permanent cover of all exposed soil areas. [Minn. R. 7090]
5.18	Permittees must identify the locations of areas where construction will be phased to minimize the duration of exposed soil areas in the SWPPP. [Minn. R. 7090]
5.19	For projects with a discharge point on the project within one (1) mile (aerial radius measurement) of and which flows to an impaired water, permittees must identify the impaired water(s), and any United States Environmental Protection Agency (USEPA)-approved Total Maximum Daily Load (TMDL) for the pollutant(s) or stressor(s) described in item 23.7. Permittees' identification must include those TMDLs approved at any time prior to permit application submittal and are still in effect. [Minn. R. 7090]
5.20	Permittees must document in the SWPPP, all trained individuals identified in item 21.2. Documentation must include: a. names of personnel required to be trained; and b. dates of training and name of instructor(s) and entity providing training; and c. content of training course. If permittees do not know the names of the individuals at the time of application, the permittees must ensure they document training before construction activity commences. [Minn. R. 7090]
5.21	The SWPPP must identify a person knowledgeable and experienced in the application of erosion prevention and sediment control BMPs who will coordinate with all contractors, subcontractors, and operators on-site to oversee the implementation of the SWPPP. [Minn. R. 7090]
5.22	The SWPPP must describe any specific chemicals and chemical treatment systems used for enhancing the sedimentation process and how it achieves compliance with item 9.19. [Minn. R. 7090]
5.23	The SWPPP must identify the person(s), organizations, or entities responsible for long-term operation and maintenance of permanent stormwater treatment systems. [Minn. R. 7090]
5.24	The SWPPP must describe methods to minimize soil compaction and preserve topsoil. Minimizing soil compaction is not required where the function of a specific area dictates compaction. [Minn. R. 7090]
5.25	The SWPPP must include any site assessments for groundwater or soil contamination required in item 16.15. [Minn. R. 7090]
5.26	The SWPPP must account for the following factors in designing temporary erosion prevention and sediment control BMPs: a. the expected amount, frequency, intensity, and duration of precipitation; and b. the nature of stormwater runoff and run-on at the site, including factors such as expected flow from impervious surfaces, slopes, and site drainage features; and c. the stormwater volume, velocity, and peak flowrates to minimize discharge of pollutants in stormwater and to minimize channel and streambank erosion and scour in the immediate vicinity of discharge points; and d. the range of soil particle sizes expected to be present. [Minn. R. 7090]
6.1	**SWPPP Amendments**. [Minn. R. 7090]
6.2	One of the individuals described in item 21.2.a or item 21.2.b or another qualified individual must complete all SWPPP changes. Changes involving the use of a less stringent BMP must include a justification describing how the replacement BMP is effective for the site characteristics. [Minn. R. 7090]
6.3	Permittees must amend the SWPPP within 7 days to include additional or modified BMPs whenever there is a change in design, construction, operation, maintenance, weather or seasonal conditions having a significant effect on the discharge of pollutants to surface waters or groundwater. [Minn. R. 7090]
6.4	Permittees must amend the SWPPP within 7 days to include additional or modified BMPs whenever inspections or investigations by the site owner or operator, USEPA or MPCA officials indicate the SWPPP is not effective in eliminating or significantly minimizing the discharge of pollutants to surface waters or groundwater or the discharges are causing water quality standard exceedances (e.g., nuisance conditions as defined in Minn. R. 7050.0210, subp. 2) or the SWPPP is not consistent with the objectives of a USEPA approved TMDL. [Minn. R. 7050.0210]
7.1	**BMP Selection and Stormwater Management**. [Minn. R. 7090]
7.2	Permittees must select, install, and maintain the BMPs identified in the SWPPP and in this permit in an appropriate and functional manner and in accordance with relevant manufacturer specifications and accepted engineering practices to minimize the discharge of pollutants in stormwater from construction activities. Examples of stormwater management practices for this section include but are not limited to wet sedimentation basins, temporary depressions to hold

	stormwater, stormwater routing, dikes, berms, pumping, and stormwater treatment BMPs. Permittees must phase and incorporate stormwater management principles as the construction progresses. Unless infeasible, temporary or permanent wet sedimentation basins (when required, see section 14 and 15) should be constructed as a first step in the process and stormwater routed to these. [Minn. R. 7090]
7.3	Permittees must not disturb more land (i.e., phasing) than can be effectively inspected and maintained in accordance with Section 11. [Minn. R. 7090]
7.4	If permittees will be using some type of erosion control netting on the site as part of the soil stabilization techniques, permittees are encouraged to use products that have been shown to minimize impacts on wildlife. The U.S. Fish & Wildlife Service recommends using types of netting practices that are considered "wildlife friendly," including those that use natural fiber or 100 percent biodegradable materials and that use a loose weave with a non-welded, movable jointed netting. Products that are not wildlife friendly include square plastic netting that are degradable (e.g., photodegradable, UV-degradable, oxo-degradable), netting made from polypropylene, nylon, polyethylene, or polyester. Other recommendations include removing the netting product when it is no longer needed. More information may be found at: https://www.fws.gov/initiative/protecting-wildlife/make-change-wildlife-friendly-erosion-control-products. There also may be State, Tribal, or local requirements about using wildlife friendly erosion control products. See Minnesota Department of Transportation requirements at: https://www.mndot.org/environment/erosion/rolled-erosion-prevention-products.html. [Minn. R. 7050]
8.1	**Erosion Prevention Practices**. [Minn. R. 7090]
8.2	Before work begins, permittees must delineate the location of areas not to be disturbed. [Minn. R. 7090]
8.3	Permittees must minimize the need for disturbance of portions of the project with steep slopes. When steep slopes must be disturbed, permittees must use techniques such as phasing and stabilization practices designed for steep slopes (e.g., slope draining and terracing). [Minn. R. 7090]
8.4	Permittees must stabilize all exposed soil areas, including stockpiles. Stabilization must be initiated immediately to limit soil erosion when construction activity has permanently or temporarily ceased on any portion of the site and will not resume for a period exceeding 14 calendar days (7 days for sites discharging to special or impaired waters, see section 24). Stabilization must be completed no later than 14 calendar days after the construction activity has ceased. Stabilization is not required on constructed base components of roads, parking lots and similar surfaces. Stabilization is not required on temporary stockpiles without significant silt, clay or organic components (e.g., clean aggregate stockpiles, demolition concrete stockpiles, sand stockpiles) but permittees must provide sediment controls at the base of the stockpile. [Minn. R. 7090]
8.5	For Public Waters that the Minnesota DNR has promulgated "work in water restrictions" during specified fish spawning time frames, permittees must complete stabilization of all exposed soil areas within 200 feet of the water's edge, and that drain to these waters, within 24 hours during the restriction period. [Minn. R. 7090]
8.6	Permittees must stabilize the normal wetted perimeter of the last 200 linear feet of temporary or permanent drainage ditches or swales that drain water from the site within 24 hours after connecting to a surface water or property edge. Permittees must complete stabilization of remaining portions of temporary or permanent ditches or swales within 14 calendar days (7 days for sites discharging to special or impaired waters, see section 24) after connecting to a surface water or property edge and construction in that portion of the ditch temporarily or permanently ceases. [Minn. R. 7090]
8.7	Temporary or permanent ditches or swales being used as a sediment containment system during construction (with properly designed rock-ditch checks, bio rolls, silt dikes, etc.) do not need to be stabilized. Permittees must stabilize these areas within 24 hours after their use as a sediment containment system ceases. [Minn. R. 7090]
8.8	Permittees must not use mulch, hydromulch, tackifier, polyacrylamide or similar erosion prevention practices within any portion of the normal wetted perimeter of a temporary or permanent drainage ditch or swale section with a continuous slope of greater than 2 percent. Examples of acceptable erosion prevention practices include blankets, poly, riprap, etc. [Minn. R. 7090]
8.9	Permittees must provide temporary or permanent energy dissipation at all pipe outlets within 24 hours after connection to a surface water or permanent stormwater treatment system. [Minn. R. 7090]
9.1	**Sediment Control Practices**. [Minn. R. 7090]
9.2	Permittees must establish sediment control BMPs on all downgradient perimeters of the site and downgradient areas of the site that drain to any surface water, including curb and gutter systems. Permittees must locate sediment control practices upgradient of any buffer zones. Permittees must install sediment control practices before any upgradient land-disturbing activities begin and must keep the sediment control practices in place until they establish permanent cover. [Minn. R. 7090]
9.3	If downgradient sediment controls are overloaded, based on frequent failure or excessive maintenance requirements,

	permittees must install additional upgradient sediment control practices or redundant BMPs to eliminate the overloading and amend the SWPPP to identify these additional practices as required in item 6.3. [Minn. R. 7090]
9.4	Temporary or permanent drainage ditches and sediment basins designed as part of a sediment containment system (e.g., ditches with rock-check dams) require sediment control practices only as appropriate for site conditions. [Minn. R. 7090]
9.5	A floating silt curtain placed in the water is not a sediment control BMP to satisfy item 9.2 except when working on a shoreline or below the waterline. Immediately after the construction activity (e.g., installation of rip rap along the shoreline) in that area is complete, permittees must install an upland perimeter control practice if exposed soils still drain to a surface water. [Minn. R. 7090]
9.6	Permittees must re-install all sediment control practices adjusted or removed to accommodate short-term activities such as clearing or grubbing, or passage of vehicles, immediately after the short-term activity is completed. Permittees must re-install sediment control practices before the next precipitation event even if the short-term activity is not complete. [Minn. R. 7090]
9.7	Permittees must protect all storm drain inlets using appropriate BMPs during construction until they establish permanent cover on all areas with potential for discharging to the inlet. [Minn. R. 7090]
9.8	Permittees may remove inlet protection for a particular inlet if a specific safety concern (e.g. street flooding/freezing) is identified by the permittees or the jurisdictional authority (e.g., city/county/township/Minnesota Department of Transportation engineer). Permittees must document the need for removal in the SWPPP. [Minn. R. 7090]
9.9	Permittees must provide silt fence or other effective sediment controls at the base of stockpiles on the downgradient perimeter prior to the initiation of stockpiling. Sediment controls must be managed in accordance with section 9.6. [Minn. R. 7090]
9.10	Permittees must locate stockpiles outside of natural buffers or surface waters, including stormwater conveyances such as curb and gutter systems unless there is a bypass in place for the stormwater. [Minn. R. 7090]
9.11	Permittees must install a vehicle tracking BMP to minimize the track out of sediment from the construction site or onto paved roads within the site. [Minn. R. 7090]
9.12	Permittees must use street sweeping in addition to vehicle tracking BMPs if vehicle tracking BMPs alone are not adequate to prevent sediment tracking onto the street. [Minn. R. 7090]
9.13	Permittees must install temporary sediment basins as required in Section 14. [Minn. R. 7090]
9.14	In any areas of the site where final vegetative stabilization will occur, permittees must restrict vehicle and equipment use to minimize soil compaction. [Minn. R. 7090]
9.15	Permittees must preserve topsoil on the site, unless infeasible. [Minn. R. 7090]
9.16	Permittees must direct discharges from BMPs to vegetated areas unless infeasible. [Minn. R. 7090]
9.17	Permittees must preserve a 50-foot natural buffer or, if a buffer is infeasible on the site, provide redundant (double) perimeter sediment controls when a surface water is located within 50 feet of the project's earth disturbances and stormwater flows to the surface water. Permittees must install perimeter sediment controls at least 5 feet apart unless limited by lack of available space. Natural buffers are not required adjacent to road ditches, judicial ditches, county ditches, stormwater conveyance channels, storm drain inlets, and sediment basins. If preserving the buffer is infeasible, permittees must document the reasons in the SWPPP. Sheet piling and other impermeable barriers installed in a manner that retains all stormwater are considered redundant perimeter control. [Minn. R. 7090]
9.18	Any sediment control made of soil must be temporarily or permanently stabilized within 24 hours. [Minn. R. 7090]
9.19	Permittees must use polymers, flocculants, or other sedimentation treatment chemicals in accordance with accepted engineering practices, dosing specifications and sediment removal design specifications provided by the manufacturer or supplier. The permittees must use conventional erosion and sediment controls prior to chemical addition and must direct treated stormwater to a sediment control system for filtration or settlement of the floc prior to discharge. [Minn. R. 7090]
10.1	**Dewatering and Basin Draining**. [Minn. R. 7090]
10.2	Permittees must not cause nuisance conditions (see Minn. R. 7050.0210, subp. 2) in surface waters from dewatering and basin draining (e.g., pumped discharges, trench/ditch cuts for drainage) discharges. Permittees must discharge turbid or sediment-laden waters related to dewatering or basin draining to a sediment control (e.g. sediment trap or basin, filter bag) designed to prevent discharges with visual turbidity. To the extent feasible, use well-vegetated (e.g., grassy or wooded), upland areas of the site to infiltrate dewatering water before discharge. Permittees are prohibited from using receiving waters as part of the treatment area. Permittees must visually check and photograph the discharge at the beginning and at least once every 24 hours of operation to ensure adequate treatment has been obtained and nuisance conditions will not

	result from the discharge. [Minn. R. 7050.0210]
10.3	If nuisance conditions result from the discharge, Permittees must cease dewatering immediately and corrective actions must occur before dewatering is resumed. Nuisance conditions includes, but is not limited to, a sediment plume in the discharge or the discharge appears cloudy, or opaque, or has a visible contrast, or has a visible oil film, or has aquatic habitat degradation that can be identified by an observer. [Minn. R. 7050.0210]
10.4	If permittees must discharge water containing oil or grease, they must use an oil-water separator or suitable filtration device (e.g., cartridge filters, absorbents pads) prior to discharge. [Minn. R. 7090]
10.5	Permittees must discharge all water from dewatering or basin-draining activities in a manner that does not cause erosion or scour in the immediate vicinity of discharge points or inundation of wetlands in the immediate vicinity of discharge points that causes significant adverse impact to the wetland. [Minn. R. 7090]
10.6	If permittees use filters with backwash water, they must haul the backwash water away for disposal, return the backwash water to the beginning of the treatment process, or incorporate the backwash water into the site in a manner that does not cause erosion. [Minn. R. 7090]
11.1	**Inspections and Maintenance**. [Minn. R. 7090]
11.2	Permittees must ensure a trained person, as identified in item 21.2.b, will inspect the entire construction site at least once every seven (7) days during active construction and within 24 hours after a rainfall event greater than 1/2 inch in 24 hours. [Minn. R. 7090]
11.3	Permittees must inspect and maintain all permanent stormwater treatment BMPs. [Minn. R. 7090]
11.4	Permittees must inspect all erosion prevention and sediment control BMPs and Pollution Prevention Management Measures to ensure integrity and effectiveness. Permittees must repair, replace or supplement all nonfunctional BMPs with functional BMPs by the end of the next business day after discovery unless another time frame is specified in item 11.5 or 11.6. Permittees may take additional time if field conditions prevent access to the area. [Minn. R. 7090]
11.5	During each inspection, permittees must inspect areas adjacent to the project, surface waters, including drainage ditches and conveyance systems but not curb and gutter systems, for evidence of erosion and sediment deposition. Permittees must remove all deltas and sediment deposited in areas adjacent to the project, surface waters, including drainage ways, catch basins, and other drainage systems and restabilize the areas where sediment removal results in exposed soil. Permittees must complete removal and stabilization within seven (7) calendar days of discovery unless precluded by legal, regulatory, or physical access constraints. Permittees must use all reasonable efforts to obtain access. If precluded, removal and stabilization must take place within seven (7) days of obtaining access. Permittees are responsible for contacting all local, regional, state and federal authorities and receiving any applicable permits, prior to conducting any work in surface waters. [Minn. R. 7090]
11.6	Permittees must inspect construction site vehicle exit locations, streets and curb and gutter systems within and adjacent to the project for sedimentation from erosion or tracked sediment from vehicles. Permittees must remove sediment from all paved surfaces within one (1) calendar day of discovery or, if applicable, within a shorter time to avoid a safety hazard to users of public streets. [Minn. R. 7090]
11.7	Permittees must repair, replace or supplement all perimeter control devices when they become nonfunctional or the sediment reaches 1/2 of the height of the device. [Minn. R. 7090]
11.8	Permittees must drain temporary and permanent sedimentation basins and remove the sediment when the depth of sediment collected in the basin reaches 1/2 the storage volume within 72 hours of discovery. [Minn. R. 7090]
11.9	Permittee's must inspect and photograph dewatering discharges at the beginning and at least once every 24 hours during operation. Dewatering discharges that only last for minutes, as opposed to hours, and do not reach a surface water, do not require photographs or documentation. [Minn. R. 7090]
11.10	Permittees must ensure that at least one individual present on the site (or available to the project site in three (3) calendar days) is trained in the job duties described in item 21.2.b. [Minn. R. 7090]
11.11	Permittees may adjust the inspection schedule described in item 11.2 as follows: a. inspections of areas with permanent cover can be reduced to once per month, even if construction activity continues on other portions of the site; or b. where sites have permanent cover on all exposed soil and no construction activity is occurring anywhere on the site, inspections can be reduced to once per month and, after 12 months, may be suspended completely until construction activity resumes. The MPCA may require inspections to resume if conditions warrant; or c. where construction activity has been suspended due to frozen ground conditions, inspections may be suspended.

	Inspections must resume within 24 hours of runoff occurring, or upon resuming construction, whichever comes first. d. for projects where a pollinator habitat or native prairie type vegetated cover is being established, inspections may be reduced to once per month if the site has temporary vegetation with a density of 70% temporary uniform cover. If after 24 months no significant erosion problems are observed, inspections may be suspended completely until the termination requirements in section 13 have been met. [Minn. R. 7090]
11.12	Permittees must record all inspections and maintenance activities within 24 hours of being conducted and these records must be retained with the SWPPP. These records must include: a. date and time of inspections; and b. name of persons conducting inspections; and c. accurate findings of inspections, including the specific location where corrective actions are needed; and d. corrective actions taken (including dates, times, and party completing maintenance activities); and e. date of all rainfall events greater than 1/2 inches in 24 hours, and the amount of rainfall for each event. Permittees must obtain rainfall amounts by either a properly maintained rain gauge installed on-site, a weather station that is within one (1) mile of your location, or a weather reporting system that provides site specific rainfall data from radar summaries; and f. if permittees observe a discharge during the inspection, they must record and should photograph and describe the location of the discharge (i.e., color, odor, settled or suspended solids, oil sheen, and other obvious indicators of pollutants); and g. any amendments to the SWPPP proposed as a result of the inspection must be documented as required in Section 6 within seven (7) calendar days; and h. all photographs of dewatering activities and documentation of nuisance conditions resulting from dewatering activities as described in section 10. [Minn. R. 7090]
12.1	**Pollution Prevention Management Measures**. [Minn. R. 7090]
12.2	Permittees must place construction materials and landscape materials under cover (e.g., plastic sheeting or temporary roofs) or protect them by similarly effective means designed to minimize contact with stormwater. Permittees are not required to cover or protect products which are either not a source of contamination to stormwater or are designed to be exposed to stormwater. [Minn. R. 7090]
12.3	Permittees must place pesticides, fertilizers and treatment chemicals under cover (e.g., plastic sheeting or temporary roofs) or protect them by similarly effective means designed to minimize contact with stormwater. [Minn. R. 7090]
12.4	Permittees must store hazardous materials and toxic waste, (including oil, diesel fuel, gasoline, hydraulic fluids, paint solvents, petroleum-based products, wood preservatives, additives, curing compounds, and acids) in sealed containers to prevent spills, leaks or other discharge. Storage and disposal of hazardous waste materials must be in compliance with Minn. R. ch. 7045 including secondary containment as applicable. [Minn. R. 7090]
12.5	Permittees must properly store, collect and dispose solid waste in compliance with Minn. R. ch. 7035. [Minn. R. 7035]
12.6	Permittees must position portable toilets so they are secure and will not tip or be knocked over. Permittees must properly dispose sanitary waste in accordance with Minn. R. ch. 7041. [Minn. R. 7041]
12.7	Permittees must take reasonable steps to prevent the discharge of spilled or leaked chemicals, including fuel, from any area where chemicals or fuel will be loaded or unloaded including the use of drip pans or absorbents unless infeasible. Permittees must ensure adequate supplies are available at all times to clean up discharged materials and that an appropriate disposal method is available for recovered spilled materials. Permittees must report and clean up spills immediately as required by Minn. Stat. 115.061, using dry clean up measures where possible. [Minn. Stat. 115.061]
12.8	Permittees must limit vehicle exterior washing and equipment to a defined area of the site. Permittees must contain runoff from the washing area in a sediment basin or other similarly effective controls and must dispose waste from the washing activity properly. Permittees must properly use and store soaps, detergents, or solvents. [Minn. R. 7090]
12.9	Permittees must provide effective containment for all liquid and solid wastes generated by washout operations (e.g., concrete, stucco, paint, form release oils, curing compounds and other construction materials) related to the construction activity. Permittees must prevent liquid and solid washout wastes from contacting the ground and must design the containment so it does not result in runoff from the washout operations or areas. Permittees must properly dispose liquid and solid wastes in compliance with MPCA rules. Permittees must install a sign indicating the location of the washout facility. [Minn. R. 7035, Minn. R. 7090]
13.1	**Permit Termination Conditions**. [Minn. R. 7090]
13.2	Permittees must complete all construction activity and must install permanent cover over all areas prior to submitting the NOT. Vegetative cover must consist of a uniform perennial vegetation with a density of 70 percent of its expected final

	growth. Vegetation is not required where the function of a specific area dictates no vegetation, such as impervious surfaces or the base of a sand filter. [Minn. R. 7090]
13.3	Permittees must clean the permanent stormwater treatment system of any accumulated sediment and must ensure the system meets all applicable requirements in Section 15 through 19 and is operating as designed. [Minn. R. 7090]
13.4	Permittees must remove all sediment from conveyance systems prior to submitting the NOT. [Minn. R. 7090]
13.5	Permittees must remove all temporary synthetic erosion prevention and sediment control BMPs prior to submitting the NOT. Permittees may leave BMPs designed to decompose on-site in place. [Minn. R. 7090]
13.6	For residential construction only, permit coverage terminates on individual lots if the lot is sold to the homeowner, structures are finished, and permanent cover has been established. For lots that are sold to the homeowner where permanent cover has not been established, coverage terminates if temporary erosion prevention and downgradient perimeter control is properly installed and the permittee distributes the MPCA's "Homeowner Fact Sheet" to the homeowner. [Minn. R. 7090]
13.7	For construction projects on agricultural land (e.g., pipelines across cropland), permittees must return the disturbed land to its preconstruction agricultural use prior to submitting the NOT. [Minn. R. 7090]
13.8	When submitting the NOT, Permittees must include either ground or aerial photographs showing the requirements of 13.2 have been met. Permittees are not required to take photographs of every distinct part of the site, however the conditions portrayed must be substantially similar to those areas that are not photographed. Photographs must be clear and in focus and must include the date the photo was taken. [Minn. R. 7090]
14.1	**Temporary Sediment Basins**. [Minn. R. 7090]
14.2	Where ten (10) or more acres of disturbed soil (5 acres for sites discharging to special or impaired waters, see section 24) drain to a common location, permittees must provide a temporary sediment basin to provide treatment of the runoff before it leaves the construction site or enters surface waters. Permittees may convert a temporary sediment basin to a permanent basin after construction is complete. The temporary basin is no longer required when permanent cover has reduced the acreage of disturbed soil to less than ten (10) acres draining to a common location. [Minn. R. 7090]
14.3	The temporary basin must provide live storage for a calculated volume of runoff from a two (2)-year, 24-hour storm from each acre drained to the basin or 1,800 cubic feet of live storage per acre drained, whichever is greater. [Minn. R. 7090]
14.4	Where permittees have not calculated the two (2)-year, 24-hour storm runoff amount, the temporary basin must provide 3,600 cubic feet of live storage per acre of the basins' drainage area. [Minn. R. 7090]
14.5	Permittees must design basin outlets to prevent short-circuiting and the discharge of floating debris. [Minn. R. 7090]
14.6	Permittees must design the outlet structure to withdraw water from the surface to minimize the discharge of pollutants. Permittees may temporarily suspend the use of a surface withdrawal mechanism during frozen conditions. The basin must include a stabilized emergency overflow to prevent failure of pond integrity. [Minn. R. 7090]
14.7	Permittees must provide energy dissipation for the basin outlet within 24 hours after connection to a surface water. [Minn. R. 7090]
14.8	Permittees must locate temporary basins outside of surface waters and any buffer zone required in item 23.11. [Minn. R. 7090]
14.9	Permittees must construct the temporary basins prior to disturbing 10 or more acres of soil draining to a common location. [Minn. R. 7090]
14.10	Where a temporary sediment basin meeting the requirements of item 14.3 through 14.9 is infeasible, permittees must install effective sediment controls such as smaller sediment basins and/or sediment traps, silt fences, vegetative buffer strips or any appropriate combination of measures as dictated by individual site conditions. In determining whether installing a sediment basin is infeasible, permittees must consider public safety and may consider factors such as site soils, slope, and available area on-site. Permittees must document this determination of infeasibility in the SWPPP. [Minn. R. 7090]
15.1	**Permanent Stormwater Treatment System**. [Minn. R. 7090]
15.2	Permittees must design and implement the project so all stormwater discharged from the project during and after construction activities does not cause a violation of state water quality standards, including nuisance conditions, erosion in receiving channels or on downslope properties, or a significant adverse impact to wetlands caused by inundation or decrease of flow. [Minn. R. 7090]
15.3	Permittees must design and construct a permanent stormwater treatment system to treat the water quality volume if the project's ultimate development replaces vegetation and/or other pervious surfaces creating a net increase of one (1) or

	more acres of cumulative impervious surface. [Minn. R. 7090]
15.4	Permittees must calculate the water quality volume as one (1) inch times the net increase of impervious surfaces created by the project. [Minn. R. 7090]
15.5	Permittees must first consider volume reduction practices on-site (e.g., infiltration or other) when designing the permanent stormwater treatment system. If this permit prohibits infiltration as described in item 16.14 through item 16.21, permittees may consider a wet sedimentation basin, filtration basin or regional pond. This permit does not consider wet sedimentation basins and filtration systems to be volume reduction practices. [Minn. R. 7090]
15.6	For projects where the full volume reduction requirement cannot be met on-site, (e.g., the site has infiltration prohibitions), permittees must document the reasons in the SWPPP. [Minn. R. 7090]
15.7	Permittees must discharge the water quality volume to a permanent stormwater treatment system prior to discharge to a surface water. For purposes of this item, surface waters do not include man-made drainage systems that convey stormwater to a permanent stormwater treatment system. [Minn. R. 7090]
15.8	Where the proximity to bedrock precludes the installation of any of the permanent stormwater treatment practices required by Sections 15 through 19, permittees must install other treatment such as grassed swales, smaller ponds, or grit chambers, prior to the discharge of stormwater to surface waters. [Minn. R. 7090]
15.9	For linear projects where permittees cannot treat the entire water quality volume within the existing right-of-way, permittees must make a reasonable attempt to obtain additional right-of-way, easement or other permission for stormwater treatment during the project planning process. Documentation of these attempts must be in the SWPPP. Permittees must still consider volume reduction practices first as described in item 15.5. If permittees cannot obtain additional right-of-way, easement or other permission, they must maximize the treatment of the water quality volume prior to discharge to surface waters. [Minn. R. 7090]
16.1	**Infiltration Systems**. [Minn. R. 7090]
16.2	Infiltration options include, but are not limited to: infiltration basins, infiltration trenches, rainwater gardens, bioretention areas without underdrains, swales with impermeable check dams, and natural depressions. If permittees utilize an infiltration system to meet the requirements of this permit, they must incorporate the design parameters in item 16.3 through item 16.21. Permittees must follow the infiltration prohibition in item 16.14 anytime an infiltration system is designed, including those not required by this permit. [Minn. R. 7090]
16.3	Permittees must design infiltration systems such that pre-existing hydrologic conditions of wetlands in the vicinity are not impacted (e.g., inundation or breaching a perched water table supporting a wetland). [Minn. R. 7090]
16.4	Permittees must not excavate infiltration systems to final grade, or within three (3) feet of final grade, until the contributing drainage area has been constructed and fully stabilized unless they provide rigorous erosion prevention and sediment controls (e.g., diversion berms) to keep sediment and runoff completely away from the infiltration area. [Minn. R. 7090]
16.5	When excavating an infiltration system to within three (3) feet of final grade, permittees must stake off and mark the area so heavy construction vehicles or equipment do not compact the soil in the infiltration area. [Minn. R. 7090]
16.6	Permittees must use a pretreatment device such as a vegetated filter strip, forebay, or water quality inlet (e.g., grit chamber) to remove solids, floating materials, and oil and grease from the runoff, to the maximum extent practicable, before the system routes stormwater to the infiltration system. [Minn. R. 7090]
16.7	Permittees must design infiltration systems to provide a water quality volume (calculated as an instantaneous volume) of one (1) inch of runoff, or one (1) inch minus the volume of stormwater treated by another system on the site, from the net increase of impervious surfaces created by the project. [Minn. R. 7090]
16.8	Permittees must design the infiltration system to discharge all stormwater (including stormwater in excess of the water quality volume) routed to the system through the uppermost soil surface or engineered media surface within 48 hours. Permittees must route additional flows that cannot infiltrate within 48 hours to bypass the system through a stabilized discharge point. [Minn. R. 7090]
16.9	Permittees must provide a means to visually verify the infiltration system is discharging through the soil surface or filter media surface within 48 hours or less. [Minn. R. 7090]
16.10	Permittees must provide at least one soil boring, test pit or infiltrometer test in the location of the infiltration practice for determining infiltration rates. [Minn. R. 7090]
16.11	For design purposes, permittees must divide field measured infiltration rates by 2 as a safety factor or permittees can use soil-boring results with the infiltration rate chart in the Minnesota Stormwater Manual to determine design infiltration rates. When soil borings indicate type A soils, permittees should perform field measurements to verify the rate is not above

	8.3 inches per hour. This permit prohibits infiltration if the field measured infiltration rate is above 8.3 inches per hour. [Minn. R. 7090]
16.12	Permittees must employ appropriate on-site testing to ensure a minimum of three (3) feet of separation from the seasonally saturated soils (or from bedrock) and the bottom of the proposed infiltration system. [Minn. R. 7090]
16.13	Permittees must design a maintenance access, typically eight (8) feet wide, for the infiltration system. [Minn. R. 7090]
16.14	This permit prohibits permittees from constructing infiltration systems that receive runoff from vehicle fueling and maintenance areas including construction of infiltration systems not required by this permit. [Minn. R. 7090]
16.15	This permit prohibits permittees from constructing infiltration systems where infiltrating stormwater may mobilize high levels of contaminants in soil or groundwater. Permittees must either complete the MPCA's contamination screening checklist or conduct their own assessment to determine the suitability for infiltration. Permittees must retain the checklist or assessment with the SWPPP. For more information and to access the MPCA's "contamination screening checklist" see the Minnesota Stormwater Manual. [Minn. R. 7090]
16.16	This permit prohibits permittees from constructing infiltration systems in areas where soil infiltration rates are field measured at more than 8.3 inches per hour unless they amend soils to slow the infiltration rate below 8.3 inches per hour. [Minn. R. 7090]
16.17	This permit prohibits permittees from constructing infiltration systems in areas with less than three (3) feet of separation distance from the bottom of the infiltration system to the elevation of the seasonally saturated soils or the top of bedrock. [Minn. R. 7090]
16.18	This permit prohibits permittees from constructing infiltration systems in areas of predominately Hydrologic Soil Group type D soils (clay). [Minn. R. 7090]
16.19	This permit prohibits permittees from constructing infiltration systems within a Drinking Water Supply Management Area (DWSMA) as defined in Minn. R. 4720.5100, subp. 13, if the system will be located: a. in an Emergency Response Area (ERA) within a DWSMA classified as having high or very high vulnerability as defined by the Minnesota Department of Health; or b. in an ERA within a DWSMA classified as moderate vulnerability unless a regulated MS4 Permittee performed or approved a higher level of engineering review sufficient to provide a functioning treatment system and to prevent adverse impacts to groundwater; or c. outside of an ERA within a DWSMA classified as having high or very high vulnerability, unless a regulated MS4 Permittee performed or approved a higher level of engineering review sufficient to provide a functioning treatment system and to prevent adverse impacts to groundwater. See "higher level of engineering review" in the Minnesota Stormwater Manual for more information. [Minn. R. 7090]
16.20	This permit prohibits permittees from constructing infiltration systems in areas within 1,000 feet upgradient or 100 feet downgradient of active karst features. [Minn. R. 7090]
16.21	This permit prohibits permittees from constructing infiltration systems in areas that receive runoff from the following industrial facilities not authorized to infiltrate stormwater under the NPDES stormwater permit for industrial activities: wood preserving facilities; automobile salvage yards; scrap recycling and waste recycling facilities; hazardous waste treatment, storage, or disposal facilities; or air transportation facilities that conduct deicing activities. [Minn. R. 7090]
17.1	**Filtration Systems**. [Minn. R. 7090]
17.2	Filtration options include but are not limited to: sand filters with underdrains, biofiltration areas, swales using underdrains with impermeable check dams and underground sand filters. If permittees utilize a filtration system to meet the permanent stormwater treatment requirements of this permit, they must comply with items 17.3 through 17.11. [Minn. R. 7090]
17.3	Permittees must not install filter media until they construct and fully stabilize the contributing drainage area unless they provide rigorous erosion prevention and sediment controls (e.g., diversion berms) to keep sediment and runoff completely away from the filtration area. [Minn. R. 7090]
17.4	Permittees must design filtration systems to remove at least 80 percent of TSS. [Minn. R. 7090]
17.5	Permittees must use a pretreatment device such as a vegetated filter strip, small sedimentation basin, water quality inlet, forebay or hydrodynamic separator to remove settleable solids, floating materials, and oils and grease from the runoff, to the maximum extent practicable, before runoff enters the filtration system. [Minn. R. 7090]

17.6	Permittees must design filtration systems to treat a water quality volume (calculated as an instantaneous volume) of one (1) inch of runoff, or one (1) inch minus the volume of stormwater treated by another system on the site, from the net increase of impervious surfaces created by the project. [Minn. R. 7090]
17.7	Permittees must design the filtration system to discharge all stormwater (including stormwater in excess of the water quality volume) routed to the system through the uppermost soil surface or engineered media surface within 48 hours. Additional flows that the system cannot filter within 48 hours must bypass the system or discharge through an emergency overflow. [Minn. R. 7090]
17.8	Permittees must design the filtration system to provide a means to visually verify the system is discharging through the soil surface or filter media within 48 hours. [Minn. R. 7090]
17.9	Permittees must employ appropriate on-site testing to ensure a minimum of three (3) feet of separation between the seasonally saturated soils (or from bedrock) and the bottom of the proposed filtration system. [Minn. R. 7090]
17.10	Permittees must ensure that filtration systems with less than three (3) feet of separation between seasonally saturated soils or from bedrock are constructed with an impermeable liner. [Minn. R. 7090]
17.11	The permittees must design a maintenance access, typically eight (8) feet wide, for the filtration system. [Minn. R. 7090]
18.1	**Wet Sedimentation Basin**. [Minn. R. 7090]
18.2	Permittees using a wet sedimentation basin to meet the permanent stormwater treatment requirements of this permit must incorporate the design parameters in item 18.3 through 18.10. [Minn. R. 7090]
18.3	Permittees must design the basin to have a permanent volume of 1,800 cubic feet of storage below the outlet pipe for each acre that drains to the basin. The basin's permanent volume must reach a minimum depth of at least three (3) feet and must have no depth greater than 10 feet. Permittees must configure the basin to minimize scour or resuspension of solids. [Minn. R. 7090]
18.4	Permittees must design the basin to provide live storage for a water quality volume (calculated as an instantaneous volume) of one (1) inch of runoff, or one (1) inch minus the volume of stormwater treated by another system on the site, from the net increase in impervious surfaces created by the project. [Minn. R. 7090]
18.5	Permittees must design basin outlets so the water quality volume discharges at no more than 5.66 cubic feet per second (cfs) per acre of surface area of the basin. [Minn. R. 7090]
18.6	Permittees must design basin outlets to prevent short-circuiting and the discharge of floating debris. Basin outlets must have energy dissipation. [Minn. R. 7090]
18.7	Permittees must design the basin to include a stabilized emergency overflow to accommodate storm events in excess of the basin's hydraulic design. [Minn. R. 7090]
18.8	Permittees must design a maintenance access, typically eight (8) feet wide, for the basin. [Minn. R. 7090]
18.9	Permittees must locate basins outside of surface waters and any buffer zone required in item 23.11. Permittees must design basins to avoid draining water from wetlands unless the impact to the wetland complies with the requirements of Section 22. [Minn. R. 7090]
18.10	Permittees must design basins using an impermeable liner if located within active karst terrain. [Minn. R. 7090]
19.1	**Regional Wet Sedimentation Basins**. [Minn. R. 7090]
19.2	When the entire water quality volume cannot be treated by volume reduction practices on-site, permittees can use or create regional wet sedimentation basins provided they are constructed basins, not a natural wetland or water body, (wetlands used as regional basins must be mitigated for, see Section 22). The owner must ensure the regional basin conforms to all requirements for a wet sedimentation basin as described in items 18.3 through 18.10 and must be large enough to account for the entire area that drains to the regional basin. Permittees must verify that the regional basin will discharge at no more than 5.66 cfs per acre of surface area of the basin and must provide a live storage volume of one-inch times all the impervious area draining to the basin. Permittees cannot significantly degrade waterways between the project and the regional basin. The owner must obtain written authorization from the applicable LGU or private entity that owns and maintains the regional basin. [Minn. R. 7090]
20.1	**SWPPP Availability**. [Minn. R. 7090]
20.2	Permittees must keep the SWPPP on-site, or electronically available on-site, during normal working hours with personnel who have operational control over the applicable portion of the site, including all changes to the SWPPP, inspections, and maintenance records. [Minn. R. 7090]
21.1	**Training Requirements**. [Minn. R. 7090]

21.2	Permittees must ensure all of the following individuals receive training and the content and extent of the training is commensurate with the individual's job duties and responsibilities with regard to activities covered under this permit: a. Individuals preparing the SWPPP for the project. b. Individuals overseeing implementation of, revising and/or amending the SWPPP and individuals performing inspections for the project. One of these individuals must be available for an on-site inspection within 72 hours upon request by the MPCA. c. Individuals performing or supervising the installation, maintenance and repair of BMPs. [Minn. R. 7090]
21.3	Permittees must ensure individuals identified in Section 21 receive training from local, state, federal agencies, professional organizations, or other entities with expertise in erosion prevention, sediment control, permanent stormwater treatment and the Minnesota NPDES/SDS Construction Stormwater permit. Permittees must ensure these individuals attend a refresher-training course every three (3) years. [Minn. R. 7090]
22.1	**Requirements for Discharges to Wetlands**. [Minn. R. 7050.0186]
22.2	If the project has any discharges with the potential for significant adverse impacts to a wetland, (e.g., conversion of a natural wetland to a stormwater pond) permittees must demonstrate that the wetland mitigative sequence has been followed in accordance with items 22.3 or 22.4. [Minn. R. 7050.0186]
22.3	If the potential adverse impacts to a wetland on a specific project site are addressed by permits or other approvals from an official statewide program (U.S. Army Corps of Engineers 404 program, Minnesota Department of Natural Resources, or the State of Minnesota Wetland Conservation Act) that are issued specifically for the project and project site, permittees may use the permit, decision or other determination issued by these agencies to show the potential adverse impacts are addressed. For purposes of this permit, deminimus actions are determinations by the permitting agency that address the project impacts, whereas a non-jurisdictional determination does not address project impacts. [Minn. R. 7090]
22.4	If there are impacts from the project not addressed in one of the permits, decisions or other determinations discussed in item 22.3 (e.g., permanent inundation or flooding of the wetland, significant degradation of water quality, excavation, filling, draining), permittees must minimize all adverse impacts to wetlands by utilizing appropriate measures. Permittees must use measures based on the nature of the wetland, its vegetative community types and the established hydrology. These measures include in order of preference: a. avoid all significant adverse impacts to wetlands from the project and post-project discharge; b. minimize any unavoidable impacts from the project and post-project discharge; c. provide compensatory mitigation when the permittees determine(s) that there is no reasonable and practicable alternative to having a significant adverse impact on a wetland. For compensatory mitigation, wetland restoration or creation must be of the same type, size and whenever reasonable and practicable in the same watershed as the impacted wetland. [Minn. R. 7050.0186]
23.1	**Additional Requirements for Discharges to Special (Prohibited, Restricted, Other) and Impaired Waters**. [Minn. R. 7090]
23.2	The BMPs identified for each special or impaired water are required for those areas of the project draining to a discharge point on the project that is within one mile (aerial radius measurement) of special or impaired water and flows to that special or impaired water. [Minn. R. 7090]
23.3	Discharges to the following special waters identified as Prohibited in Minn. R. 7050.0335 subp. 3 must incorporate the BMPs outlined in items 23.9, 23.10, 23.11, 23.13 and 23.14: a. Boundary Waters Canoe Area Wilderness; Voyageurs National Park; Kettle River from the site of the former dam at Sandstone to its confluence with the Saint Croix River; Rum River from Ogechie Lake spillway to the northernmost confluence with Lake Onamia. b. Those portions of Lake Superior North of latitude 47 degrees, 57 minutes, 13 seconds, East of Hat Point, South of the Minnesota-Ontario boundary, and West of the Minnesota-Michigan boundary; c. Scientific and Natural Areas identified as in Minn. R. 7050.0335 Subp. 3: Boot Lake, Anoka County; Kettle River in sections 15, 22, 23, T 41 N, R 20, Pine County; Pennington Bog, Beltrami County; Purvis Lake-Ober Foundation, Saint Louis County; waters within the borders of Itasca Wilderness Sanctuary, Clearwater County; Iron Springs Bog, Clearwater County; Wolsfeld Woods, Hennepin County; Green Water Lake, Becker County; Blackdog Preserve, Dakota County; Prairie Bush Clover, Jackson County; Black Lake Bog, Pine County; Pembina Trail Preserve, Polk County; and Falls Creek, Washington County. [Minn. R. 7050.0335, subp. 3]
23.4	Discharges to the following special waters identified as Restricted in Minn. R. 7050.0335 subp.1 must incorporate the BMPs

	outlined in items 23.9, 23.10 and 23.11: a. Lake Superior, except those portions identified as prohibited in item 23.3.b; b. Mississippi River in those portions from Lake Itasca to the southerly boundary of Morrison County that are included in the Mississippi Headwaters Board comprehensive plan dated February 12, 1981; c. Scenic or Recreational River Segments: Saint Croix River, entire length; Cannon River from northern city limits of Faribault to its confluence with the Mississippi River; North Fork of the Crow River from Lake Koronis outlet to the Meeker-Wright county line; Kettle River from north Pine County line to the site of the former dam at Sandstone; Minnesota River from Lac que Parle dam to Redwood County State Aid Highway 11; Mississippi River from County State Aid Highway 7 bridge in Saint Cloud to northwestern city limits of Anoka; and Rum River from State Highway 27 bridge in Onamia to Madison and Rice streets in Anoka; d. Lake Trout Lakes identified in Minn. R. 7050.0335 including lake trout lakes inside the boundaries of the Boundary Waters Canoe Area Wilderness and Voyageurs National Park; e. Calcareous Fens listed in Minn. R. 7050.0335, subp. 1. [Minn. R. 7050.0335, subp. 1]
23.5	Discharges to the Trout Lakes (other special water) identified in Minn. R. 6264.0050, subp. 2 and Minn. R. 7050.0420 must incorporate the BMPs outlined in items 23.9, 23.10 and 23.11. [Minn. R. 6264.0050, subp. 2, Minn. R. 7050]
23.6	Discharges to the Trout Streams (other special water) listed in Minn. R. 6264.0050, subp. 4 and Minn. R. 7050.0420 must incorporate the BMPs outlined in items 23.9, 23.10, 23.11 and 23.12. [Minn. R. 6264.0050, subp. 4, Minn. R. 7050]
23.7	Discharges to impaired waters or a water with an USEPA approved TMDL for any of the impairments listed in this item must incorporate the BMPs outlined in items 23.9 and 23.10. Impaired waters are waters identified as impaired under section 303 (d) of the federal Clean Water Act for phosphorus (nutrient eutrophication biological indicators, nutrients), turbidity, TSS, dissolved oxygen or aquatic biota (fish bioassessment, aquatic plant bioassessment and aquatic macroinvertebrate bioassessment, benthic macroinvertebrate bioassessment). Terms used for the pollutants or stressors in this item are subject to change. [Minn. R. 7090]
23.8	Where the additional BMPs in this Section conflict with requirements elsewhere in this permit, items 23.9 through 23.14 take precedence. [Minn. R. 7090]
23.9	Permittees must immediately initiate stabilization of exposed soil areas, as described in item 8.5 & 8.8, and complete the stabilization within seven (7) calendar days after the construction activity in that portion of the site temporarily or permanently ceases. [Minn. R. 7090]
23.10	Permittees must provide a temporary sediment basin as described in Section 14 for common drainage locations that serve an area with five (5) or more acres disturbed at one time. [Minn. R. 7090]
23.11	Permittees must include an undisturbed buffer zone of not less than 100 linear feet from a special water (not including tributaries) and must maintain this buffer zone at all times, both during construction and as a permanent feature post construction, except where a water crossing or other encroachment is necessary to complete the project. Permittees must fully document the circumstance and reasons the buffer encroachment is necessary in the SWPPP and include restoration activities. This permit allows replacement of existing impervious surface within the buffer. Permittees must minimize all potential water quality, scenic and other environmental impacts of these exceptions by the use of additional or redundant (double) BMPs and must document this in the SWPPP for the project. [Minn. R. 7090]
23.12	Permittees must design the permanent stormwater treatment system so the discharge from the project minimizes any increase in the temperature of trout streams resulting from the one (1) and two (2) year 24-hour precipitation events. This includes all tributaries of designated trout streams located within the same Public Land Survey System (PLSS) Section. Permittees must incorporate one or more of the following measures, in order of preference: a. Provide stormwater infiltration or other volume reduction practices as described in item 15.4 and 15.5, to reduce runoff. Infiltration systems must discharge all stormwater routed to the system within 24 hours. b. Provide stormwater filtration as described in Section 17. Filtration systems must discharge all stormwater routed to the system within 24 hours. c. Minimize the discharge from connected impervious surfaces by discharging to vegetated areas, or grass swales, and through the use of other non-structural controls. d. If ponding is used, the design must include an appropriate combination of measures such as shading, vegetated swale discharges or constructed wetland treatment cells that limit temperature increases. The pond must be designed as a dry pond and should draw down in 24 hours or less. e. Other methods that minimize any increase in the temperature of the trout stream. [Minn. R. 7090]

23.13	Permittees must conduct routine site inspections once every three (3) days as described in item 11.2 for projects that discharge to prohibited waters. [Minn. R. 7090]
23.14	If discharges to prohibited waters cannot provide volume reduction equal to one (1) inch times the net increase of impervious surfaces as required in item 15.4 and 15.5, permittees must develop a permanent stormwater treatment system design that will result in no net increase of TSS or phosphorus to the prohibited water. Permittees must keep the plan in the SWPPP for the project. [Minn. R. 7090]
24.1	**General Provisions**. [Minn. R. 7090]
24.2	If the MPCA determines that an individual permit would more appropriately regulate the construction activity, the MPCA may require an individual permit to continue the construction activity. Coverage under this general permit will remain in effect until the MPCA issues an individual permit. [Minn. R. 7001.0210, subp. 6]
24.3	If the permittee cannot meet the terms and conditions of this general permit, an owner may request an individual permit, in accordance with Minn. R. 7001.0210 subp. 6. [Minn. R. 7001.0210, subp. 6]
24.4	Any interested person may petition the MPCA to require an individual NPDES/SDS permit in accordance with 40 CFR 122.28(b)(3). [40 CFR 122.28(b)(3)]
24.5	In addition to the requirement found in section 20, permittees must make the SWPPP, including all inspection reports, maintenance records, training records and other information required by this permit, available to federal, state, and local officials within three (3) days upon request for the duration of the permit and for three (3) years following the NOT. [Minn. R. 7090]
24.6	Permittees may not assign or transfer this permit except when the transfer occurs in accordance with the applicable requirements of item 3.7 and 3.8. [Minn. R. 7090]
24.7	Nothing in this permit must be construed to relieve the permittees from civil or criminal penalties for noncompliance with the terms and conditions provided herein. Nothing in this permit must be construed to preclude the initiation of any legal action or relieve the permittees from any responsibilities, liabilities, or penalties to which the permittees is/are or may be subject to under Section 311 of the Clean Water Act and Minn. Stat. Section 115 and 116, as amended. Permittees are not liable for permit requirements for activities occurring on those portions of a site where the permit has been transferred to another party as required in item 3.7 or the permittees have submitted the NOT as required in Section 4. [Minn. R. 7090]
24.8	The provisions of this permit are severable. If any provision of this permit or the application of any provision of this permit to any circumstances is held invalid, the application of such provision to other circumstances, and the remainder of this permit must not be affected thereby. [Minn. R. 7090]
24.9	The permittees must comply with the provisions of Minn. R. 7001.0150, subp. 3 and Minn. R. 7001.1090, subp. 1(A), 1(B), 1(C), 1(H), 1(I), 1(J), 1(K), and 1(L). [Minn. R. 7001]
24.10	The permittees must allow access as provided in 40 CFR 122.41(i) and Minn. Stat. Section 115.04. The permittees must allow representatives of the MPCA or any member, employee or agent thereof, when authorized by it, upon presentation of credentials, to enter upon any property, public or private, for the purpose of obtaining information or examination of records or conducting surveys or investigations. [40 CFR 122.41(i)]
24.11	For the purposes of Minn. R. 7090 and other documents that reference specific sections of this permit, "Stormwater Discharge Design Requirements" corresponds to Sections 5, 6 and 14 through 21; "Construction Activity Requirements" corresponds to Sections 7 through 13; and "Appendix A" corresponds to Sections 22 and 23. [Minn. R. 7090]
25.1	**Definitions**. [Minn. R. 7090]
25.2	"Active karst" means a terrain having distinctive landforms and hydrology created primarily from the dissolution of soluble rocks within 50 feet of the land surface. [Minn. R. 7090]
25.3	"Aerial radius measurement" means the shortest straight line distance measurement between the point of stormwater discharge from a project construction site to the nearest edge of the water body receiving the stormwater. This measurement does not follow the meander flow path. [Minn. R. 7090]
25.4	"Best Management Practices (BMPs)" means the most effective and practicable means of erosion prevention and sediment control, and water quality management practices that are the most effective and practicable means of to control, prevent, and minimize degradation of surface water, including avoidance of impacts, construction-phasing, minimizing the length of time soil areas are exposed, prohibitions, pollution prevention through good housekeeping, and other management practices published by state or designated area-wide planning agencies. [Minn. R. 7090]
25.5	"Common Plan of Development or Sale" means one proposed plan for a contiguous area where multiple separate and distinct land-disturbing activities may be taking place at different times, on different schedules, but under one proposed

	plan. One plan is broadly defined to include design, permit application, advertisement or physical demarcation indicating that land-disturbing activities may occur. [Minn. R. 7090]
25.6	"Construction Activity" means activities including clearing, grading, and excavating, that result in land disturbance of equal to or greater than one acre, including the disturbance of less than one acre of total land area that is part of a larger common plan of development or sale if the larger common plan will ultimately disturb equal to or greater than one acre. This includes a disturbance to the land that results in a change in the topography, existing soil cover, both vegetative and nonvegetative, or the existing soil topography that may result in accelerated stormwater runoff that may lead to soil erosion and movement of sediment. Construction activity does not include a disturbance to the land of less than five acres for the purpose of routine maintenance performed to maintain the original line and grade, hydraulic capacity, and original purpose of the facility. Routine maintenance does not include activities such as repairs, replacement and other types of non-routine maintenance. Pavement rehabilitation that does not disturb the underlying soils (e.g., mill and overlay projects) is not construction activity. [Minn. R. 7090]
25.7	"Dewatering" means the removal of surface or ground water to dry and/or solidify a construction site to enable construction activity. Dewatering may require a Minnesota Department of Natural Resources water appropriation permit and, if dewatering water is contaminated, discharge of such water may require an individual MPCA NPDES/SDS permit. [Minn. R. 7090]
25.8	"Energy Dissipation" means methods employed at pipe outlets to prevent erosion caused by the rapid discharge of water scouring soils. [Minn. R. 7090]
25.9	"Erosion Prevention" means measures employed to prevent erosion such as soil stabilization practices, permanent cover or construction phasing. [Minn. R. 7090]
25.10	"General Contractor" means the party who signs the construction contract with the owner to construct the entire project described in the final plans and specifications. Where the construction project involves more than one contractor, the general contractor is the party responsible for managing the entire project on behalf of the owner. In some cases, the owner is the general contractor. In these cases, the owner signs the permit application as the operator and becomes the sole permittee. [Minn. R. 7090]
25.11	"Groundwater" means the water contained below the surface of the earth in the saturated zone including, without limitation, all waters whether under confined, unconfined, or perched conditions, in near surface unconsolidated sediment or regolith, or in rock formations deeper underground. [Minn. R. 7060]
25.12	"Homeowner Fact Sheet" means an MPCA fact sheet available on the MPCA Construction Stormwater website for permittees to give to homeowners at the time of sale. [Minn. R. 7090]
25.13	"Infeasible" means not technologically possible or not economically practicable and achievable in light of the best industry practices. [Minn. R. 7090]
25.14	"Initiated immediately" means taking an action to commence soil stabilization as soon as practicable, but no later than the end of the workday, following the day when the land-disturbing activities temporarily or permanently cease, if the permittees know that construction work on that portion of the site will be temporarily ceased for 14 or more additional calendar days or 7 calendar days where item 23.9 applies. Permittees can initiate stabilization by: a. prepping the soil for vegetative or non-vegetative stabilization; or b. applying mulch or other non-vegetative product to the exposed soil area; or c. seeding or planting the exposed area; or d. starting any of the activities in a - c on a portion of the area to be stabilized, but not on the entire area; or e. finalizing arrangements to have stabilization product fully installed in compliance with the applicable deadline for completing stabilization. [Minn. R. 7090]
25.15	"Impervious Surface" means a constructed hard surface that either prevents or retards the entry of water into the soil and causes water to run off the surface in greater quantities and at an increased rate of flow than prior to development. Examples include rooftops, driveways, parking lots, and concrete, asphalt, or gravel roads. Bridges over surface waters are considered impervious surfaces. Recreational trails that are distinctly set apart from a roadway (i.e. not parallel) and intended for non-motorized recreational uses are not considered impervious surfaces. Sidewalks that are parallel to a roadway (or generally following alongside a roadway) must still be included as impervious surfaces. [Minn. R. 7090]
25.16	"National Pollutant Discharge Elimination System (NPDES)" means the program for issuing, modifying, revoking, reissuing, terminating, monitoring, and enforcing permits under the Clean Water Act, as amended (33 U.S.C. 1251 et seq. Section 1342 and 40 CFR parts 122, 123, 124 and 450). [Minn. R. 7001.1020]
25.17	"Natural Buffer" means an area of undisturbed cover surrounding surface waters within which construction activities are

	restricted. Natural buffer includes the vegetation, exposed rock, or barren ground that exists prior to commencement of earth-disturbing activities. [Minn. R. 7090]
25.18	"Normal Wetted Perimeter" means the area of a conveyance, such as a ditch or channel, that is in contact with water during flow events that are expected to occur from a two-year, 24-hour storm event. [Minn. R. 7090]
25.19	"Notice of Termination (NOT)" means the form (electronic or paper) required for terminating coverage under the Construction General permit. [Minn. R. 7090]
25.20	"Operator" means the person (usually the general contractor), firm, governmental agency, or other entity designated by the owner who has day to day operational control and/or the ability to modify project plans and specifications related to the SWPPP. The permit application must list the operator as a permittee. Subcontractors hired by and under supervision of the general contractor are not operators. [Minn. R. 7090]
25.21	"Owner" means the person, firm, governmental agency, or other entity possessing the title of the land on which the construction activities will occur or, if the construction activity is for a lease, easement, or mineral rights license holder, the party or individual identified as the lease, easement or mineral rights license holder; or the contracting government agency responsible for the construction activity. [Minn. R. 7090]
25.22	"Permanent Cover" means surface types that will prevent soil failure under erosive conditions. Examples include: gravel, concrete, perennial cover, or other landscaped material that will permanently arrest soil erosion. Permittees must establish a uniform perennial vegetative cover (i.e., evenly distributed, without large bare areas) with a density of 70 percent of the vegetative cover native to local undisturbed areas on all areas not covered by permanent structures, or equivalent permanent stabilization measures. Permanent cover does not include temporary BMPs such as wood fiber blanket, mulch, and rolled erosion control products. [Minn. R. 7090]
25.23	"Permittee(s)" means the person(s), firm, governmental agency, or other entity identified as the owner and operator on the application submitted to the MPCA and are responsible for compliance with the terms and conditions of this permit. [Minn. R. 7090]
25.24	"Project(s)" means all construction activity planned and/or conducted under a particular permit. The project occurs on the site or sites described in the permit application, the SWPPP and in the associated plans, specifications and contract documents. [Minn. R. 7090]
25.25	"Public Waters" means all water basins and watercourses described in Minn. Stat. Section 103G.005 subd. 15. [Minn. Stat. 103G.005, subd.15]
25.26	"Redoximorphic Features" means a color pattern in soil, formed by oxidation and reduction process of iron and/or manganese in seasonally saturated soil. [Minn. R. 7090]
25.27	"Section" includes all item numbers of the same whole number. For example, "Section 3" of the permit refers to items 3.1 through 3.8. [Minn. R. 7090]
25.28	"Seasonally Saturated Soil" means the highest seasonal elevation in the soil in a reduced chemical state because of soil voids filled with water causing anaerobic conditions. Seasonally saturated soil is evidenced by the presence of redoximorphic features or other information determined by scientifically established methods or empirical field measurements. [Minn. R. 7090]
25.29	"Sediment Control" means methods employed to prevent suspended sediment in stormwater from leaving the site (e.g. silt fences, compost logs and storm drain inlet protection). [Minn. R. 7090]
25.30	"Stabilize", "Stabilized", "Stabilization" means the exposed ground surface has been covered by appropriate materials such as mulch, staked sod, riprap, erosion control blanket, mats or other material that prevents erosion from occurring. Grass seeding, agricultural crop seeding or other seeding alone is not stabilization. Mulch materials must achieve approximately 90 percent ground coverage (typically 2 ton/acre). [Minn. R. 7090]
25.31	"Stormwater" means precipitation runoff, stormwater runoff, snowmelt runoff, and any other surface runoff and drainage. [Minn. R. 7090]
25.32	"Steep Slopes" means slopes that are 1:3 (V:H) (33.3 percent) or steeper in grade. [Minn. R. 7090]
25.33	"Storm Water Pollution Prevention Plan (SWPPP)" means a plan for stormwater discharge that includes all required content under in Section 5 that describes the erosion prevention, sediment control and waste control BMPs and permanent stormwater treatment systems. [Minn. R. 7090]
25.34	"Surface Water or Waters" means all streams, lakes, ponds, marshes, wetlands, reservoirs, springs, rivers, drainage systems, waterways, watercourses, and irrigation systems whether natural or artificial, public or private, except that surface waters do not include stormwater treatment systems constructed from upland. This permit does not consider stormwater

	treatment systems constructed in wetlands and mitigated in accordance with Section 22 as surface waters. [Minn. R. 7090]
25.35	"Waters of the State" means all streams, lakes, ponds, marshes, watercourses, waterways, wells, springs, reservoirs, aquifers, irrigation systems, drainage systems and all other bodies or accumulations of water, surface or underground, natural or artificial, public or private, which are contained within, flow through, or border upon the state or any portion thereof. [Minn. Stat. 115.01, subd. 22]
25.36	"Water Quality Volume" means one (1) inch of runoff from the net increase in impervious surfaces created by the project (calculated as an instantaneous volume). [Minn. R. 7090]
25.37	"Wetlands" means those areas that are inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support, and under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas. Constructed wetlands designed for wastewater treatment are not waters of the state. Wetlands must have the following attributes: a. a predominance of hydric soils; and b. inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support a prevalence of hydrophytic vegetation typically adapted for life in a saturated soil condition; and c. under normal circumstances support a prevalence of such vegetation. [Minn. R. 7050.0186, subp. 1(a)B]

ATTACHMENT K

MPCA AUTHORIZATION REQUEST FOR NPDES COVERAGE UNDER MNR100001 -PENDING

ATTACHMENT L

MPCA AUTHORIZATION LETTER - PENDING

ATTACHMENT M

SWPPP AMENDMENTS

Stantec

ATTACHMENT N

NOTIFICATION ROSTER

Notification Roster - Spill Response

Company	Name	Role	Phone Number	Email
Northern Natural Gas	Terry Plucker	Environmental Compliance Manager	402-332-7081	Terry.Plucker@nngco.com
Northern Natural Gas	Christa Webber	Environmental Specialist	402-398-7980	Christa.Webber@nngco.com

Contractor

State

Minnesota State Duty Officer	800-422-0798

Notification Roster - SWPPP

Company	Name	Role	Phone Number	Email
Northern Natural Gas	Terry Plucker	Environmental Compliance Manager	402-332-7081	Terry.Plucker@nngco.com
Northern Natural Gas	Christa Webber	Environmental Specialist	402-398-7980	Christa.Webber@nngco.com

Contractor

State

Minnesota State Duty Officer			800-422-0798	
Minnesota State Duty Officer			800-422-0798	

ATTACHMENT O

EROSION CONTROL CERTIFICATION DOCUMENTATION FOR NORTHERN NATURAL GAS ENVIRONMENTAL INSPECTION STAFF -PENDING SELECTION OF ENVIRONMENTAL INSPECTOR

Stantec

ATTACHMENT P

NORTHERN'S HORIZONTAL DIRECTIONAL DRILL MONITORING, INADVERTENT RETURN RESPONSE, AND CONTINGENCY PLAN

FOUND UNDER THE "NORTHERN SUBMISSIONS TO FERC"
TAP ON NORTHERN'S WEBSITE:

HTTPS://WWW.NORTHERNNATURALGAS.COM/EXPANSIONPROJECTS

Stantec

ATTACHMENT Q

NOXIOUS WEED PLAN

FOUND UNDER THE “NORTHERN SUBMISSIONS TO FERC”
TAP ON NORTHERN’S WEBSITE:

HTTPS://WWW.NORTHERNNATURALGAS.COM/EXPANSIONPROJECTS

ATTACHMENT R

STEEP SLOPES TABLE

Attachment R Steep Slopes Within the Project Area

MP Begin	MP End	Slope Category[1]	Length (feet)
Faribault M500 D-Line			
98.40	98.41	5-15	57
98.98	99.02	5-15	175[2]
99.16	99.24	5-15	402
99.55	99.61	5-15	309
99.70	99.76	5-15	345
99.86	99.87	5-15	94[2]
100.28	100.36	5-15	443
100.38	100.44	5-15	294
100.46	100.52	5-15	331
100.76	100.77	5-15	74[2]
101.11	101.18	5-15	393
101.26	101.29	5-15	149
101.62	101.65	5-15	150
102.02	102.03	5-15	78[2]
102.05	102.11	5-15	288[2]
102.67	102.69	5-15	101
102.74	102.79	5-15	281
103.80	103.83	5-15	111[2]

[1]Slopes were obtained from civil survey data.

[2]Area is within a drill or bore.

ATTACHMENT S

NRCS/MINNESOTA BOARD OF WATER AND SOIL RESOURCES (BWSR) SEED MIX

From: Bartsch, Zachary
Sent: Thursday, December 21, 2023 12:57 PM
To: Blount, Veronica - NRCS, Sparta, WI
Subject: 2023 Seed mixes
Attachments: 484_WI_CPS_Mulching_2016.pdf; Standard_Mix_Calc2020-30-11.xlsm

Hello Veronica,

I hope 2023 has treated you well. I am reaching out again for a similar project to the one you helped me with in 2022.

This project is located in Monroe County, and will disturbing cropland, forest, and grass ditches/right of ways. Are the two resources you provided in 2022 (attached) still acceptable for use to plan seed mixes and erosion control practices?

Thank you,

Zach Bartsch
Soil Scientist

Mobile: 701-318-9364
zachary.bartsch@stantec.com

Stantec
3303 Fiechtner Drive Suite 100
Fargo ND 58103

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From: Blount, Veronica - NRCS, Sparta, WI <veronica.blount@usda.gov>
Sent: Wednesday, January 12, 2022 8:19 AM
To: Bartsch, Zachary <zachary.bartsch@stantec.com>
Subject: RE: [External Email]Seed mixes

Zach,

I apologize for the delay; this one got away from me!

I've attached:

1. The standard mix NRCS seed calculator. You'll need to Enable Macros in the yellow ribbon at the top, then:
    a. For sites where erosion control is the main concern, select "342" in STEP 1. For a habitat/wildlife concern, select "327."
    b. Then, for STEP 2, select "Introduced"
    c. For STEP 3, select a mix from the alternatives listed. On the "342Mixes" tab, you can see the Moisture Regimes they are designed for (Column N)

2. NRCS Standard 484, Mulching. This will describe soil coverage/erosion control considerations.

I hope this is helpful,
Veronica

Veronica Blount | District Conservationist (Acting)| Onalaska & Sparta Field Offices
U.S. Department of Agriculture | Natural Resources Conservation Service
Onalaska Office 608-433-7365 | Sparta Office 608-269-8136 x. 113 | Cell 608-633-8780

From: Bartsch, Zachary <zachary.bartsch@stantec.com>
Sent: Friday, January 7, 2022 9:49 AM
To: Blount, Veronica - NRCS, Sparta, WI <veronica.blount@usda.gov>
Subject: [External Email]Seed mixes

[External Email]
If this message comes from an **unexpected sender** or references a **vague/unexpected topic;**
Use caution before clicking links or opening attachments.
Please send any concerns or suspicious messages to: Spam.Abuse@usda.gov

Veronica,

Apologies for the wait, I had a meeting come up.

One thing I forgot to follow up with was if your office (or Monroe Co) has any erosion control practice guidelines that it would want the project to follow or use?

Thanks,

Zach Bartsch
Soil Scientist

Mobile: 701-318-9364
zachary.bartsch@stantec.com

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3303 Fiechtner Drive Suite 100
Fargo ND 58103



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TABLE 1 - GUIDE[1] TO MULCH MATERIALS, RATES, AND USES

Mulch Material	Quality Standards	Applicable Rate	Depth of Application	Remarks
Organic Mulches				
Grass Hay or Cereal Grain Straw[2]	Air dried; free of undesirable seeds, coarse material and moldy chunks	1.5 – 2 tons / acre	Lightly cover 75 – 90% of surface	Use where mulch effect is to be maintained for more than three months. Subject to blowing unless kept moist or anchored.
Wood Fiber Hydromulch	Natural wood fiber with green dye and dispersing agent added	0.75 – 1 ton / acre	Lightly cover 100% of the surface	Apply with hydromulcher, on 0-2% slopes. Use material with tacking agent for anchoring.
Wood Fiber / Paper Blend hydromulch	Blend of natural wood fiber and paper	0.75 – 1 ton / acre	Lightly cover 100% of the surface	Apply with hydromulcher, on 0-2% slopes. Use material with tacking agent for anchoring.
Wood Long-Fiber Excelsior	Air dried burred wood fibers, 4” or longer	1 – 2 tons / acre		Effective for erosion control. Anchoring usually not required except on critical areas or sites subject to high winds.
Compost	Commonly made from yard waste (leaves, branches, etc.) or manure	Cover 100% of the ground	2 inches	Applied with a blower truck. Anchoring is not required. Excellent for water infiltration and moisture conservation.
Manure	Well shredded, free of coarse materials	8 – 10 tons / acre		May create a problem with weeds. Excellent moisture conserver. Resistant to wind blowing. Do not use manure for water erosion control because surface water may be contaminated. Anchoring is required.

Mulch Material	Quality Standards	Applicable Rate	Depth of Application	Remarks
Organic Mulches				
Sawdust and ground corn cobs	Green or composted, free from weed seeds, trash and coarse materials.	5 tons / acre	2 – 7 inches	Sawdust from hardwood species is preferred to avoid possible toxicity from pitch or resins contained in conifers. Most effective as mulch around ornamentals, small fruits and other nursery stock. Special application rates: fruit trees 5-7"; blueberries 6", vegetables and flowers, 2-3", blackberries and raspberries 4-7"; strawberries 3". Resistance to blowing. Requires 30-35 lbs. N/ton to prevent nitrogen deficiency during decay. Rate based on weight of 24 lbs./cubic foot. Anchoring is required.
Wood Chips or Bark, Shavings	Green or air dried; free of weed seeds, trash and coarse material	10 – 20 tons / acre	2 – 7 inches	Chips or shavings from hardwood species are preferred to avoid possible toxicity from pitch or resins contained in conifers. Has same use and application as sawdust. Requires 20-25 lbs. N/ton to prevent nitrogen deficiency during decay. Resistant to blowing. Decomposes slowly. Anchoring not required.
Cornstalks, shredded or chopped	Air dried; shredded into 8” to 12” lengths	4 – 6 tons/ acre		Effective for erosion control. Slow to decompose. Excellent mulch for field crops. Resistant to wind blowing. Anchoring not required.
Non-Organic Mulches				
Gravel, crushed stone or slag	Washed	90% ground cover	2-3 inches	Use for permanent erosion control; on short slopes; around woody plants and ornamentals.

Mulch Material	Quality Standards	Applicable Rate	Depth of Application	Remarks
Non-Organic Mulches				
Plastic	2-4 mils	Apply according to manufacturer's specifications	Thickness of one layer	Use black for weed control and white for seedling establishment without organic mulch. Release plastic after seeding is established. Effective moisture conservation and weed control for small fruits. Large areas should have holes or slits cut to let rainfall percolate. Anchoring is required.
1. This table is not all-inclusive. There may be additional mulch materials or variations of the materials listed here that would be equivalent to achieve the intended effect.				
2. Mulch used on native seedings should not consist of pasture hay containing introduced species. Use grain straw mulches only.				

TABLE 2- GUIDE TO MULCH ANCHORING MATERIALS		
Anchoring Method or Material	**Kind of Mulch to be Anchored**	**How to Apply**
Mechanical		
Mulch Anchoring Tool or Disk	Grass hay, straw or manure	Apply mulch and pull the mulch anchoring tool or disk over mulch. Use equipment with serrated straight disks spaced 6-10" apart or other suitable equipment. Operate as close to the contour as possible. Mulch material should be tucked into the soil surface 2-3 inches. Use on areas of concentrated flow when velocity is less than approximately 4 feet per second.
Tackifier or Binder	Grass hay, straw, Hydromulch materials	Method and rate of application shall be according to manufacturers' recommendation. Use on areas without concentrated flow. Usually applied with a hydromulcher after seeding has been completed.
Wood Hydromulch Fibers	Grass, hay, straw	Use on areas without concentrated flow. Apply with hydromulcher immediately after seeding. Use 3000 lbs. Of mulch material and apply 750 lbs. of wood fiber with tacking agent per acre.
Asphalt Spray (Emulsion)	Grass hay, straw, compost, wood chips, wood shavings	Apply with suitable equipment to spray asphalt into the mulch as it is applied. Materials shall conform to the requirements of ASTM Specifications D 977. Application rate is 0.05 gallons per square yard (242 gallons per acres). Material shall be non-toxic to plant life. Use on areas without concentrated flow.
Manual		
Polypropylene plastic netting	Grass hay, straw, compost, wood shavings, wood long-fiber excelsior.	Apply plastic netting over mulch immediately after mulching and staple with 11 gauge or heavier wire staples. Installation is the same as for fiber blankets, mats and netting. Use when concentrated flow velocity is less than 4 feet per second.[1]
Wood Excelsior Fiber Blanket: interlocking web of excelsior fibers with netting on one or both sides. 80% of fibers are 8 inches or longer.	Use without additional mulch.	Anchor per manufacturer's specifications. Effective for erosion control on steep slopes and areas of concentrated flow.[1]

Anchoring Method or Material	Kind of Mulch to be Anchored	How to Apply
Chopped straw or straw and coconut fiber blanket: Uniform agricultural wheat straw or straw and coconut fiber between photodegradable or biodegradable netting.	Use without additional mulch.	Anchor per manufacturer's specifications. Effective for erosion control on moderate or steep slopes and low flow channels.[1]
Peg and twine	Grass hay, straw, wood shavings, wood long-fiber excelsior	After mulching, divide the area into blocks approximately 1 square yard in size. Drive 4-6 pegs per block to within 2-3" of soil surface. Anchor mulch by stretching twine between pegs in a criss-cross pattern on each block. Secure twin around each peg with two or more turns. Where mowing is planned, drive pegs flush with the soil surface.
Spade	Grass hay, straw, wood shavings, wood long-fiber excelsior	Cut mulch into soil surface with square edge spade. Make cuts in contour rows spaced 18 inches apart.
Soil and Stones	Plastic	Bury edge of plastic in a trench 6 inches deep. Firm soil over plastic. Use stones to hold plastic down in other places as needed.

1. Placing and anchoring Blankets, Mats and Netting: In areas of concentrated flow, lay the mat parallel to the direction of water flow, with netting on top. Spread blankets evenly without stretching so fibers are in direct contact with the soil. Adjacent strip edges shall be overlapped 2-4 inches. Strip ends shall overlap a minimum of 10 inches with the upgrade strip on top. The upgrade end of each blanket shall be buried at least 6 inches in a vertical slot with the soil pressed firmly against the embedded mat. Additional check slots at 50-foot intervals may be desirable on steep grades or long flow patterns. Strip ends and end overlaps shall be stapled with not more than 12 inches between staples. All other joints and edges shall be stapled at 4 foot intervals. Additional staples shall be placed down the center of each blanket in a diamond pattern at a maximum of 4-foot intervals. Where velocities exceed 5 cfs, place edge and center staples at 2-foot intervals. All staples shall be inserted flush with the ground surface. Staples shall be 11 gauge or heavier U shaped with a 1-2 inch crown. Staple length shall be determined by soil conditions as follows: Highly compacted soils – 6 inch: Friable soils – 8 inches; Loose or sandy soils – 10 inch.

2. In areas of broad sheet flow, mats may be placed either parallel or perpendicular to slope direction. Spread blankets evenly without stretching so fibers are in direct contact with the soil. Adjacent strip edges shall be overlapped 2-4 inches with upgrade strip on top. Ends of each mat shall be stapled with not more than 12 inches between staples. All other edges and mat centers shall be stapled to hold the mat in place with not more than 4-6 feet between staples. All staples shall be inserted flush with the ground surface. Staples shall be 11 gauge or heavier, U shaped with a 1-2 inch crown. Staple length shall be determined by soil condition as listed above.

USDA NRCS
Natural Resources Conservation Service

SEEDING PLAN
Standard and CRP Mixes

Ver. 1/2015

Landowner:	
TRACT #:	
Field(s):	
Plan by:	
County:	
Date:	
Total Acres:	

○ 327 ○ 342 ○ 512 ○ CRP NRCS STD.

Mix Type: ○ Introduced ○ Native

Mix #

GRASSES					
Common Name	Scientific Name	Intro/ Native	PLS (lbs / Acre)	Total Lbs.	
TOTAL GRASSES:			0.0	0.0	

FORBS/LEGUMES						
Common Name	Scientific Name	Intro/ Native	PLS (lbs / Acre)	Total Lbs.	PLS (oz./Acre)	Total Oz.

USDA NRCS
Natural Resources Conservation Service

SEEDING PLAN
Standard and CRP Mixes

Ver. 1/2015

Landowner:
TRACT #:
Field(s):
Plan by:
County:
Date:
Total Acres:

○ 327 ○ 342 ○ 512 ○ CRP — NRCS STD.
Mix Type: ○ Introduced ○ Native
Mix #

TOTAL FORBS/LEGUMES:						

SEEDING DATES	Spring Seeding	Late Summer	Fall Dormant Seeding		Frost Seeding Allowed?

		lbs/acre	Total lbs.	*OR*	Bu./Acre	Total Bu.
Temporary Cover Crop:						
Companion Crop: ○ YES ○ NO **You must pick Yes or No**						

Fertilizer & Lime		Lbs./Acre	Total Needed (lbs)
80-89 Lime		N/R	
Nitrogen		N/R	
Phosphate (P205)		N/R	
Potash (K20)		N/R	

☐ **General**
☐ **Soil Test**
☐ Fert./Lime Not Needed

N/R=Not Recommended for Pure Native Mixes

Seeding was completed on: _____ **according to the above requirements.**
(Date)

STANDARD 327 MIXES

REVISION DATE: 12/14/2012

criteria: 0

STD	Mix #	std-mix	Common Name	Scientific Name	PLS (oz./A)	PLS (lbs./A)	Seeds/Square Foot	Type	Intro / Native	Poll. (Y/N)		Mix No.	MR	Mix Components
327	(D)-1-Sgrod-Ycone-PPclover-BB-LE	327-(D)-1-Sgrod-Ycone-PPclover	Stiff Goldenrod	Oligoneuron rigidum	1	0.06	1	Forb	N	N		1	D	Sgrod-Ycone-PPclover-BB-LB-Indian-Sgrama
327	(D)-1-Sgrod-Ycone-PPclover-BB-LE	327-(D)-1-Sgrod-Ycone-PPclover	Yellow Coneflower	Ratibida pinnata	1	0.06	0.6	Forb	N	N		1	D	Sgrod-Ycone-PPclover-BB-LB-Indian-Sgrama
327	(D)-1-Sgrod-Ycone-PPclover-BB-LE	327-(D)-1-Sgrod-Ycone-PPclover	Purple Prairie Clover	Dalea purpurea	2	0.13	0.9	Legume	N	N		1	D	Sgrod-Ycone-PPclover-BB-LB-Indian-Sgrama
327	(D)-1-Sgrod-Ycone-PPclover-BB-LE	327-(D)-1-Sgrod-Ycone-PPclover	Big Bluestem	Andropogon gerardii	16	1	3.8	Grass	N	N		1	D	Sgrod-Ycone-PPclover-BB-LB-Indian-Sgrama
327	(D)-1-Sgrod-Ycone-PPclover-BB-LE	327-(D)-1-Sgrod-Ycone-PPclover	Little Bluestem	Schizachyrium scoparium	28	1.75	9.6	Grass	N	N		1	D	Sgrod-Ycone-PPclover-BB-LB-Indian-Sgrama
327	(D)-1-Sgrod-Ycone-PPclover-BB-LE	327-(D)-1-Sgrod-Ycone-PPclover	Indiangrass	Sorghastrum nutans	16	1	4.4	Grass	N	N		1	D	Sgrod-Ycone-PPclover-BB-LB-Indian-Sgrama
327	(D)-1-Sgrod-Ycone-PPclover-BB-LE	327-(D)-1-Sgrod-Ycone-PPclover	Sideoats Grama	Bouteloua curtipendula	28	1.75	5.1	Grass	N	N		1	D	Sgrod-Ycone-PPclover-BB-LB-Indian-Sgrama
327	(DM)-2-LB-Indian-Sgrama-BB-Swit	327-(DM)-2-LB-Indian-Sgrama-B	Little Bluestem	Schizachyrium scoparium	24	1.5	8.2	Grass	N	N		2	DM	LB-Indian-Sgrama-BB-Switch-PPclover-Berg-Y
327	(DM)-2-LB-Indian-Sgrama-BB-Swit	327-(DM)-2-LB-Indian-Sgrama-B	Indiangrass	Sorghastrum nutans	16	1	4	Grass	N	N		2	DM	LB-Indian-Sgrama-BB-Switch-PPclover-Berg-Y
327	(DM)-2-LB-Indian-Sgrama-BB-Swit	327-(DM)-2-LB-Indian-Sgrama-B	Sideoats Grama	Bouteloua curtipendula	16	1	2.9	Grass	N	N		2	DM	LB-Indian-Sgrama-BB-Switch-PPclover-Berg-Y
327	(DM)-2-LB-Indian-Sgrama-BB-Swit	327-(DM)-2-LB-Indian-Sgrama-B	Big Bluestem	Andropogon gerardii	8	0.5	1.5	Grass	N	N		2	DM	LB-Indian-Sgrama-BB-Switch-PPclover-Berg-Y
327	(DM)-2-LB-Indian-Sgrama-BB-Swit	327-(DM)-2-LB-Indian-Sgrama-B	Switchgrass	Panicum virgatum	8	0.5	4.5	Grass	N	N		2	DM	LB-Indian-Sgrama-BB-Switch-PPclover-Berg-Y
327	(DM)-2-LB-Indian-Sgrama-BB-Swit	327-(DM)-2-LB-Indian-Sgrama-B	Purple Prairie Clover	Dalea purpurea	2	0.13	0.9	Legume	N	N		2	DM	LB-Indian-Sgrama-BB-Switch-PPclover-Berg-Y
327	(DM)-2-LB-Indian-Sgrama-BB-Swit	327-(DM)-2-LB-Indian-Sgrama-B	Bergamot	Monarda fistulosa	1	0.06	1.8	Forb	N	N		2	DM	LB-Indian-Sgrama-BB-Switch-PPclover-Berg-Y
327	(DM)-2-LB-Indian-Sgrama-BB-Swit	327-(DM)-2-LB-Indian-Sgrama-B	Yellow Coneflower	Ratibida pinnata	1	0.06	0.6	Forb	N	N		2	DM	LB-Indian-Sgrama-BB-Switch-PPclover-Berg-Y
327	(M)-3-LB-BB-Cwrye-Indian-Switch-	327-(M)-3-LB-BB-Cwrye-Indian-	Little Bluestem	Schizachyrium scoparium	20	1.25	6.8	Grass	N	N		3	M	LB-BB-Cwrye-Indian-Switch-Berg-Besus-Ycon
327	(M)-3-LB-BB-Cwrye-Indian-Switch-	327-(M)-3-LB-BB-Cwrye-Indian-	Big Bluestem	Andropogon gerardii	16	1	3.8	Grass	N	N		3	M	LB-BB-Cwrye-Indian-Switch-Berg-Besus-Ycon
327	(M)-3-LB-BB-Cwrye-Indian-Switch-	327-(M)-3-LB-BB-Cwrye-Indian-	Canada Wildrye	Elymus canadensis	16	1	2.5	Grass	N	N		3	M	LB-BB-Cwrye-Indian-Switch-Berg-Besus-Ycon
327	(M)-3-LB-BB-Cwrye-Indian-Switch-	327-(M)-3-LB-BB-Cwrye-Indian-	Indiangrass	Sorghastrum nutans	16	1	4	Grass	N	N		3	M	LB-BB-Cwrye-Indian-Switch-Berg-Besus-Ycon
327	(M)-3-LB-BB-Cwrye-Indian-Switch-	327-(M)-3-LB-BB-Cwrye-Indian-	Switchgrass	Panicum virgatum	8	0.5	4.5	Grass	N	N		3	M	LB-BB-Cwrye-Indian-Switch-Berg-Besus-Ycon
327	(M)-3-LB-BB-Cwrye-Indian-Switch-	327-(M)-3-LB-BB-Cwrye-Indian-	Bergamot	Monarda fistulosa	1	0.06	1.8	Forb	N	N		3	M	LB-BB-Cwrye-Indian-Switch-Berg-Besus-Ycon
327	(M)-3-LB-BB-Cwrye-Indian-Switch-	327-(M)-3-LB-BB-Cwrye-Indian-	Black-Eyed Susan	Rudbeckia hirta	1	0.06	2.2	Forb	N	N		3	M	LB-BB-Cwrye-Indian-Switch-Berg-Besus-Ycon
327	(M)-3-LB-BB-Cwrye-Indian-Switch-	327-(M)-3-LB-BB-Cwrye-Indian-	Yellow Coneflower	Ratibida pinnata	1	0.06	0.6	Forb	N	N		3	M	LB-BB-Cwrye-Indian-Switch-Berg-Besus-Ycon
327	(WM)-4-BB-Indian-Switch-Vwrye-P	327-(WM)-4-BB-Indian-Switch-V	Big Bluestem	Andropogon gerardii	24	1.5	5.7	Grass	N	N		4	WM	BB-Indian-Switch-Vwrye-Pcord-Berg-NEaster
327	(WM)-4-BB-Indian-Switch-Vwrye-P	327-(WM)-4-BB-Indian-Switch-V	Indiangrass	Sorghastrum nutans	16	1	4	Grass	N	N		4	WM	BB-Indian-Switch-Vwrye-Pcord-Berg-NEaster
327	(WM)-4-BB-Indian-Switch-Vwrye-P	327-(WM)-4-BB-Indian-Switch-V	Switchgrass	Panicum virgatum	16	1	9	Grass	N	N		4	WM	BB-Indian-Switch-Vwrye-Pcord-Berg-NEaster
327	(WM)-4-BB-Indian-Switch-Vwrye-P	327-(WM)-4-BB-Indian-Switch-V	Virginia Wildrye	Elymus virginicus	16	1	1.5	Grass	N	N		4	WM	BB-Indian-Switch-Vwrye-Pcord-Berg-NEaster
327	(WM)-4-BB-Indian-Switch-Vwrye-P	327-(WM)-4-BB-Indian-Switch-V	Prairie Cordgrass	Spartina pectinata	8	0.5	0.6	Grass	N	N		4	WM	BB-Indian-Switch-Vwrye-Pcord-Berg-NEaster
327	(WM)-4-BB-Indian-Switch-Vwrye-P	327-(WM)-4-BB-Indian-Switch-V	Bergamot	Monarda fistulosa	1	0.06	1.8	Forb	N	N		4	WM	BB-Indian-Switch-Vwrye-Pcord-Berg-NEaster
327	(WM)-4-BB-Indian-Switch-Vwrye-P	327-(WM)-4-BB-Indian-Switch-V	New England Aster	Symphyotrichum novae-angliae	1	0.06	1.6	Forb	N	N		4	WM	BB-Indian-Switch-Vwrye-Pcord-Berg-NEaster
327	(WM)-4-BB-Indian-Switch-Vwrye-P	327-(WM)-4-BB-Indian-Switch-V	Yellow Coneflower	Ratibida pinnata	1	0.06	0.6	Forb	N	N		4	WM	BB-Indian-Switch-Vwrye-Pcord-Berg-NEaster
327	(W)-5-Ciron-Cup-Bvervain-Switch-P	327-(W)-5-Ciron-Cup-Bvervain-S	Common Ironweed	Vernonia fasciculata	1	0.06	0.5	Forb	N	N		5	W	Ciron-Cup-Bvervain-Switch-Pcord-BB-Indian-V
327	(W)-5-Ciron-Cup-Bvervain-Switch-P	327-(W)-5-Ciron-Cup-Bvervain-S	Cupplant	Silphium perfoliatum	2	0.13	0.1	Forb	N	N		5	W	Ciron-Cup-Bvervain-Switch-Pcord-BB-Indian-V
327	(W)-5-Ciron-Cup-Bvervain-Switch-P	327-(W)-5-Ciron-Cup-Bvervain-S	Blue Vervain	Verbena hastata	1	0.06	2.1	Forb	N	N		5	W	Ciron-Cup-Bvervain-Switch-Pcord-BB-Indian-V
327	(W)-5-Ciron-Cup-Bvervain-Switch-P	327-(W)-5-Ciron-Cup-Bvervain-S	Switchgrass	Panicum virgatum	16	1	8.9	Grass	N	N		5	W	Ciron-Cup-Bvervain-Switch-Pcord-BB-Indian-V
327	(W)-5-Ciron-Cup-Bvervain-Switch-P	327-(W)-5-Ciron-Cup-Bvervain-S	Prairie Cordgrass	Spartina pectinata	8	0.5	1.2	Grass	N	N		5	W	Ciron-Cup-Bvervain-Switch-Pcord-BB-Indian-V
327	(W)-5-Ciron-Cup-Bvervain-Switch-P	327-(W)-5-Ciron-Cup-Bvervain-S	Big Bluestem	Andropogon gerardii	16	1	3.8	Grass	N	N		5	W	Ciron-Cup-Bvervain-Switch-Pcord-BB-Indian-V
327	(W)-5-Ciron-Cup-Bvervain-Switch-P	327-(W)-5-Ciron-Cup-Bvervain-S	Indiangrass	Sorghastrum nutans	16	1	4.4	Grass	N	N		5	W	Ciron-Cup-Bvervain-Switch-Pcord-BB-Indian-V
327	(W)-5-Ciron-Cup-Bvervain-Switch-P	327-(W)-5-Ciron-Cup-Bvervain-S	Virginia Wildrye	Elymus virginicus	20	1.25	1.9	Grass	N	N		5	W	Ciron-Cup-Bvervain-Switch-Pcord-BB-Indian-V
327	(D)-6-Pcinque-SilkAster-Lplant-Smi	327-(D)-6-Pcinque-SilkAster-Lpl	Prairie Cinquefoil	Potentilla arguta	0.5	0.03	2.3	Forb	N	N		6	D	Pcinque-SilkAster-Lplant-Smint-Ptick-Sgrod-H
327	(D)-6-Pcinque-SilkAster-Lplant-Smi	327-(D)-6-Pcinque-SilkAster-Lpl	Silky Aster	Symphyotrichum sericeum	1	0.06	1.3	Forb	N	N		6	D	Pcinque-SilkAster-Lplant-Smint-Ptick-Sgrod-H
327	(D)-6-Pcinque-SilkAster-Lplant-Smi	327-(D)-6-Pcinque-SilkAster-Lpl	Leadplant	Amorpha canescens	1	0.06	0.4	Legume	N	N		6	D	Pcinque-SilkAster-Lplant-Smint-Ptick-Sgrod-H
327	(D)-6-Pcinque-SilkAster-Lplant-Smi	327-(D)-6-Pcinque-SilkAster-Lpl	Spotted Mint	Monarda punctata	0.5	0.03	1.1	Forb	N	N		6	D	Pcinque-SilkAster-Lplant-Smint-Ptick-Sgrod-H
327	(D)-6-Pcinque-SilkAster-Lplant-Smi	327-(D)-6-Pcinque-SilkAster-Lpl	Prairie Tickseed	Coreopsis palmata	1	0.06	0.3	Forb	N	N		6	D	Pcinque-SilkAster-Lplant-Smint-Ptick-Sgrod-H
327	(D)-6-Pcinque-SilkAster-Lplant-Smi	327-(D)-6-Pcinque-SilkAster-Lpl	Stiff Goldenrod	Oligoneuron rigidum	1	0.06	1	Forb	N	N		6	D	Pcinque-SilkAster-Lplant-Smint-Ptick-Sgrod-H
327	(D)-6-Pcinque-SilkAster-Lplant-Smi	327-(D)-6-Pcinque-SilkAster-Lpl	Hoary Vervain	Verbena stricta	1	0.06	0.7	Forb	N	N		6	D	Pcinque-SilkAster-Lplant-Smint-Ptick-Sgrod-H
327	(D)-6-Pcinque-SilkAster-Lplant-Smi	327-(D)-6-Pcinque-SilkAster-Lpl	Yellow Coneflower	Ratibida pinnata	1	0.06	0.6	Forb	N	N		6	D	Pcinque-SilkAster-Lplant-Smint-Ptick-Sgrod-H
327	(D)-6-Pcinque-SilkAster-Lplant-Smi	327-(D)-6-Pcinque-SilkAster-Lpl	Spiderwort	Tradescantia ohiensis	2	0.13	0.4	Forb	N	N		6	D	Pcinque-SilkAster-Lplant-Smint-Ptick-Sgrod-H
327	(D)-6-Pcinque-SilkAster-Lplant-Smi	327-(D)-6-Pcinque-SilkAster-Lpl	Purple Prairie Clover	Dalea purpurea	4	0.25	1.8	Legume	N	N		6	D	Pcinque-SilkAster-Lplant-Smint-Ptick-Sgrod-H
327	(D)-6-Pcinque-SilkAster-Lplant-Smi	327-(D)-6-Pcinque-SilkAster-Lpl	Big Bluestem	Andropogon gerardii	4	0.25	1	Grass	N	N		6	D	Pcinque-SilkAster-Lplant-Smint-Ptick-Sgrod-H
327	(D)-6-Pcinque-SilkAster-Lplant-Smi	327-(D)-6-Pcinque-SilkAster-Lpl	Sideoats Grama	Bouteloua curtipendula	24	1.5	4.4	Grass	N	N		6	D	Pcinque-SilkAster-Lplant-Smint-Ptick-Sgrod-H
327	(D)-6-Pcinque-SilkAster-Lplant-Smi	327-(D)-6-Pcinque-SilkAster-Lpl	Little Bluestem	Schizachyrium scoparium	24	1.5	8.3	Grass	N	N		6	D	Pcinque-SilkAster-Lplant-Smint-Ptick-Sgrod-H

327	(D)-6-Pcinque-SilkAster-Lplant-Smi	327-(D)-6-Pcinque-SilkAster-Lpl	Indiangrass	Sorghastrum nutans	8	0.5	2.2	Grass	N	N		6	D	Pcinque-SilkAster-Lplant-Smint-Ptick-Sgrod-H
327	(D)-6-Pcinque-SilkAster-Lplant-Smi	327-(D)-6-Pcinque-SilkAster-Lpl	Prairie Junegrass	Koeleria macrantha	2	0.13	6.6	Grass	N	N		6	D	Pcinque-SilkAster-Lplant-Smint-Ptick-Sgrod-H
327	(D)-6-Pcinque-SilkAster-Lplant-Smi	327-(D)-6-Pcinque-SilkAster-Lpl	Sand Dropseed	Sporobolus cryptandrus	2	0.13	15.3	Grass	N	N		6	D	Pcinque-SilkAster-Lplant-Smint-Ptick-Sgrod-H
327	(DM)-7-LB-Sgrama-Indian-Switch-P	327-(DM)-7-LB-Sgrama-Indian-S	Little Bluestem	Schizachyrium scoparium	24	1.5	8.2	Grass	N	N		7	DM	LB-Sgrama-Indian-Switch-PPclover-RHbushclo
327	(DM)-7-LB-Sgrama-Indian-Switch-P	327-(DM)-7-LB-Sgrama-Indian-S	Sideoats Grama	Bouteloua curtipendula	24	1.5	4.4	Grass	N	N		7	DM	LB-Sgrama-Indian-Switch-PPclover-RHbushclo
327	(DM)-7-LB-Sgrama-Indian-Switch-P	327-(DM)-7-LB-Sgrama-Indian-S	Indiangrass	Sorghastrum nutans	8	0.5	2	Grass	N	N		7	DM	LB-Sgrama-Indian-Switch-PPclover-RHbushclo
327	(DM)-7-LB-Sgrama-Indian-Switch-P	327-(DM)-7-LB-Sgrama-Indian-S	Switchgrass	Panicum virgatum	4	0.25	2.2	Grass	N	N		7	DM	LB-Sgrama-Indian-Switch-PPclover-RHbushclo
327	(DM)-7-LB-Sgrama-Indian-Switch-P	327-(DM)-7-LB-Sgrama-Indian-S	Purple Prairie Clover	Dalea purpurea	3	0.19	1.4	Legume	N	N		7	DM	LB-Sgrama-Indian-Switch-PPclover-RHbushclo
327	(DM)-7-LB-Sgrama-Indian-Switch-P	327-(DM)-7-LB-Sgrama-Indian-S	Round-Headed Bushclover	Lespedeza capitata	3	0.19	0.8	Legume	N	N		7	DM	LB-Sgrama-Indian-Switch-PPclover-RHbushclo
327	(DM)-7-LB-Sgrama-Indian-Switch-P	327-(DM)-7-LB-Sgrama-Indian-S	Prairie Junegrass	Koeleria macrantha	2	0.13	6.6	Grass	N	N		7	DM	LB-Sgrama-Indian-Switch-PPclover-RHbushclo
327	(DM)-7-LB-Sgrama-Indian-Switch-P	327-(DM)-7-LB-Sgrama-Indian-S	Prairie Dropseed	Sporobolus heterolepis	2	0.13	0.6	Grass	N	N		7	DM	LB-Sgrama-Indian-Switch-PPclover-RHbushclo
327	(DM)-7-LB-Sgrama-Indian-Switch-P	327-(DM)-7-LB-Sgrama-Indian-S	Bergamot	Monarda fistulosa	1	0.06	1.8	Forb	N	N		7	DM	LB-Sgrama-Indian-Switch-PPclover-RHbushclo
327	(DM)-7-LB-Sgrama-Indian-Switch-P	327-(DM)-7-LB-Sgrama-Indian-S	Leadplant	Amorpha canescens	1	0.06	0.4	Legume	N	N		7	DM	LB-Sgrama-Indian-Switch-PPclover-RHbushclo
327	(DM)-7-LB-Sgrama-Indian-Switch-P	327-(DM)-7-LB-Sgrama-Indian-S	Silky Aster	Symphyotrichum sericeum	1	0.06	0.6	Forb	N	N		7	DM	LB-Sgrama-Indian-Switch-PPclover-RHbushclo
327	(DM)-7-LB-Sgrama-Indian-Switch-P	327-(DM)-7-LB-Sgrama-Indian-S	Spiderwort	Tradescantia ohiensis	1	0.06	0.2	Forb	N	N		7	DM	LB-Sgrama-Indian-Switch-PPclover-RHbushclo
327	(DM)-7-LB-Sgrama-Indian-Switch-P	327-(DM)-7-LB-Sgrama-Indian-S	Stiff Goldenrod	Oligoneuron rigidum	1	0.06	1	Forb	N	N		7	DM	LB-Sgrama-Indian-Switch-PPclover-RHbushclo
327	(DM)-7-LB-Sgrama-Indian-Switch-P	327-(DM)-7-LB-Sgrama-Indian-S	Yellow Coneflower	Ratibida pinnata	1	0.06	0.6	Forb	N	N		7	DM	LB-Sgrama-Indian-Switch-PPclover-RHbushclo
327	(DM)-7-LB-Sgrama-Indian-Switch-P	327-(DM)-7-LB-Sgrama-Indian-S	Rough Blazing Star	Liatris aspera	0.5	0.03	0.2	Forb	N	N		7	DM	LB-Sgrama-Indian-Switch-PPclover-RHbushclo
327	(DM)-7-LB-Sgrama-Indian-Switch-P	327-(DM)-7-LB-Sgrama-Indian-S	Prairie Cinquefoil	Potentilla arguta	0.25	0.02	1.1	Forb	N	N		7	DM	LB-Sgrama-Indian-Switch-PPclover-RHbushclo
327	(M)-8-LB-BB-Indian-Cwrye-Switch-	327-(M)-8-LB-BB-Indian-Cwrye-	Little Bluestem	Schizachyrium scoparium	24	1.5	8.2	Grass	N	N		8	M	LB-BB-Indian-Cwrye-Switch-Oxeyesun-Pblzsta
327	(M)-8-LB-BB-Indian-Cwrye-Switch-	327-(M)-8-LB-BB-Indian-Cwrye-	Big Bluestem	Andropogon gerardii	16	1	3.8	Grass	N	N		8	M	LB-BB-Indian-Cwrye-Switch-Oxeyesun-Pblzsta
327	(M)-8-LB-BB-Indian-Cwrye-Switch-	327-(M)-8-LB-BB-Indian-Cwrye-	Indiangrass	Sorghastrum nutans	16	1	4	Grass	N	N		8	M	LB-BB-Indian-Cwrye-Switch-Oxeyesun-Pblzsta
327	(M)-8-LB-BB-Indian-Cwrye-Switch-	327-(M)-8-LB-BB-Indian-Cwrye-	Canada Wildrye	Elymus canadensis	8	0.5	1.3	Grass	N	N		8	M	LB-BB-Indian-Cwrye-Switch-Oxeyesun-Pblzsta
327	(M)-8-LB-BB-Indian-Cwrye-Switch-	327-(M)-8-LB-BB-Indian-Cwrye-	Switchgrass	Panicum virgatum	8	0.5	4.5	Grass	N	N		8	M	LB-BB-Indian-Cwrye-Switch-Oxeyesun-Pblzsta
327	(M)-8-LB-BB-Indian-Cwrye-Switch-	327-(M)-8-LB-BB-Indian-Cwrye-	Ox-eye Sunflower	Heliopsis helianthoides	1	0.06	0.1	Forb	N	N		8	M	LB-BB-Indian-Cwrye-Switch-Oxeyesun-Pblzsta
327	(M)-8-LB-BB-Indian-Cwrye-Switch-	327-(M)-8-LB-BB-Indian-Cwrye-	Prairie Blazing Star	Liatris pycnostachya	1	0.06	0.3	Forb	N	N		8	M	LB-BB-Indian-Cwrye-Switch-Oxeyesun-Pblzsta
327	(M)-8-LB-BB-Indian-Cwrye-Switch-	327-(M)-8-LB-BB-Indian-Cwrye-	Purple Prairie Clover	Dalea purpurea	1	0.06	0.5	Legume	N	N		8	M	LB-BB-Indian-Cwrye-Switch-Oxeyesun-Pblzsta
327	(M)-8-LB-BB-Indian-Cwrye-Switch-	327-(M)-8-LB-BB-Indian-Cwrye-	Rosinweed	Silphium integrifolium	1	0.06	0.1	Forb	N	N		8	M	LB-BB-Indian-Cwrye-Switch-Oxeyesun-Pblzsta
327	(M)-8-LB-BB-Indian-Cwrye-Switch-	327-(M)-8-LB-BB-Indian-Cwrye-	Bergamot	Monarda fistulosa	0.5	0.03	0.9	Forb	N	N		8	M	LB-BB-Indian-Cwrye-Switch-Oxeyesun-Pblzsta
327	(M)-8-LB-BB-Indian-Cwrye-Switch-	327-(M)-8-LB-BB-Indian-Cwrye-	Black-Eyed Susan	Rudbeckia hirta	0.5	0.03	1.1	Forb	N	N		8	M	LB-BB-Indian-Cwrye-Switch-Oxeyesun-Pblzsta
327	(M)-8-LB-BB-Indian-Cwrye-Switch-	327-(M)-8-LB-BB-Indian-Cwrye-	New England Aster	Symphyotrichum novae-angliae	0.5	0.03	0.8	Forb	N	N		8	M	LB-BB-Indian-Cwrye-Switch-Oxeyesun-Pblzsta
327	(M)-8-LB-BB-Indian-Cwrye-Switch-	327-(M)-8-LB-BB-Indian-Cwrye-	Sky-Blue Aster	Symphyotrichum oolentangiense	0.5	0.03	0.9	Forb	N	N		8	M	LB-BB-Indian-Cwrye-Switch-Oxeyesun-Pblzsta
327	(M)-8-LB-BB-Indian-Cwrye-Switch-	327-(M)-8-LB-BB-Indian-Cwrye-	Yellow Coneflower	Ratibida pinnata	0.5	0.03	0.3	Forb	N	N		8	M	LB-BB-Indian-Cwrye-Switch-Oxeyesun-Pblzsta
327	(M)-8-LB-BB-Indian-Cwrye-Switch-	327-(M)-8-LB-BB-Indian-Cwrye-	Culver's Root	Veronicastrum virginicum	0.25	0.02	4.3	Forb	N	N		8	M	LB-BB-Indian-Cwrye-Switch-Oxeyesun-Pblzsta
327	(WM)-9-BB-Cwrye-Switch-Indian-C	327-(WM)-9-BB-Cwrye-Switch-I	Big Bluestem	Andropogon gerardii	20	1.25	4.8	Grass	N	N		9	WM	BB-Cwrye-Switch-Indian-Cup-Pcord-WWIndig
327	(WM)-9-BB-Cwrye-Switch-Indian-C	327-(WM)-9-BB-Cwrye-Switch-I	Canada Wildrye	Elymus canadensis	16	1	2.5	Grass	N	N		9	WM	BB-Cwrye-Switch-Indian-Cup-Pcord-WWIndig
327	(WM)-9-BB-Cwrye-Switch-Indian-C	327-(WM)-9-BB-Cwrye-Switch-I	Switchgrass	Panicum virgatum	16	1	9	Grass	N	N		9	WM	BB-Cwrye-Switch-Indian-Cup-Pcord-WWIndig
327	(WM)-9-BB-Cwrye-Switch-Indian-C	327-(WM)-9-BB-Cwrye-Switch-I	Indiangrass	Sorghastrum nutans	12	0.75	3	Grass	N	N		9	WM	BB-Cwrye-Switch-Indian-Cup-Pcord-WWIndig
327	(WM)-9-BB-Cwrye-Switch-Indian-C	327-(WM)-9-BB-Cwrye-Switch-I	Cupplant	Silphium perfoliatum	4	0.25	0.1	Forb	N	N		9	WM	BB-Cwrye-Switch-Indian-Cup-Pcord-WWIndig
327	(WM)-9-BB-Cwrye-Switch-Indian-C	327-(WM)-9-BB-Cwrye-Switch-I	Prairie Cordgrass	Spartina pectinata	4	0.25	0.6	Grass	N	N		9	WM	BB-Cwrye-Switch-Indian-Cup-Pcord-WWIndig
327	(WM)-9-BB-Cwrye-Switch-Indian-C	327-(WM)-9-BB-Cwrye-Switch-I	White Wild Indigo	Baptisia alba	1.5	0.09	0.1	Legume	N	N		9	WM	BB-Cwrye-Switch-Indian-Cup-Pcord-WWIndig
327	(WM)-9-BB-Cwrye-Switch-Indian-C	327-(WM)-9-BB-Cwrye-Switch-I	Bergamot	Monarda fistulosa	1	0.06	1.8	Forb	N	N		9	WM	BB-Cwrye-Switch-Indian-Cup-Pcord-WWIndig
327	(WM)-9-BB-Cwrye-Switch-Indian-C	327-(WM)-9-BB-Cwrye-Switch-I	Black-Eyed Susan	Rudbeckia hirta	1	0.06	2.2	Forb	N	N		9	WM	BB-Cwrye-Switch-Indian-Cup-Pcord-WWIndig
327	(WM)-9-BB-Cwrye-Switch-Indian-C	327-(WM)-9-BB-Cwrye-Switch-I	Common Ironweed	Vernonia fasciculata	1	0.06	0.4	Forb	N	N		9	WM	BB-Cwrye-Switch-Indian-Cup-Pcord-WWIndig
327	(WM)-9-BB-Cwrye-Switch-Indian-C	327-(WM)-9-BB-Cwrye-Switch-I	Golden Alexanders	Zizia aurea	1	0.06	0.2	Forb	N	N		9	WM	BB-Cwrye-Switch-Indian-Cup-Pcord-WWIndig
327	(WM)-9-BB-Cwrye-Switch-Indian-C	327-(WM)-9-BB-Cwrye-Switch-I	New England Aster	Symphyotrichum novae-angliae	1	0.06	1.6	Forb	N	N		9	WM	BB-Cwrye-Switch-Indian-Cup-Pcord-WWIndig
327	(WM)-9-BB-Cwrye-Switch-Indian-C	327-(WM)-9-BB-Cwrye-Switch-I	Prairie Blazing Star	Liatris pycnostachya	1	0.06	0.4	Forb	N	N		9	WM	BB-Cwrye-Switch-Indian-Cup-Pcord-WWIndig
327	(WM)-9-BB-Cwrye-Switch-Indian-C	327-(WM)-9-BB-Cwrye-Switch-I	Yellow Coneflower	Ratibida pinnata	1	0.06	0.6	Forb	N	N		9	WM	BB-Cwrye-Switch-Indian-Cup-Pcord-WWIndig
327	(WM)-9-BB-Cwrye-Switch-Indian-C	327-(WM)-9-BB-Cwrye-Switch-I	Great St. John's Wort	Hypericum ascyron	0.25	0.02	1.1	Forb	N	N		9	WM	BB-Cwrye-Switch-Indian-Cup-Pcord-WWIndig
327	(W)-10-Croot-Ciron-Cup-MM-Jpye-	327-(W)-10-Croot-Ciron-Cup-M	Culver's Root	Veronicastrum virginicum	0.25	0.02	4.3	Forb	N	N		10	W	Croot-Ciron-Cup-MM-Jpye-Bvervain-Shwgroo
327	(W)-10-Croot-Ciron-Cup-MM-Jpye-	327-(W)-10-Croot-Ciron-Cup-M	Common Ironweed	Vernonia fasciculata	0.5	0.03	0.2	Forb	N	N		10	W	Croot-Ciron-Cup-MM-Jpye-Bvervain-Shwgroo
327	(W)-10-Croot-Ciron-Cup-MM-Jpye-	327-(W)-10-Croot-Ciron-Cup-M	Cupplant	Silphium perfoliatum	2	0.13	0.1	Forb	N	N		10	W	Croot-Ciron-Cup-MM-Jpye-Bvervain-Shwgroo
327	(W)-10-Croot-Ciron-Cup-MM-Jpye-	327-(W)-10-Croot-Ciron-Cup-M	Marsh Milkweed	Asclepias incarnata	2	0.13	0.2	Forb	N	N		10	W	Croot-Ciron-Cup-MM-Jpye-Bvervain-Shwgroo
327	(W)-10-Croot-Ciron-Cup-MM-Jpye-	327-(W)-10-Croot-Ciron-Cup-M	Joe-Pye Weed	Eutrochium maculatum	1	0.06	2.2	Forb	N	N		10	W	Croot-Ciron-Cup-MM-Jpye-Bvervain-Shwgroo
327	(W)-10-Croot-Ciron-Cup-MM-Jpye-	327-(W)-10-Croot-Ciron-Cup-M	Blue Vervain	Verbena hastata	2	0.13	4.3	Forb	N	N		10	W	Croot-Ciron-Cup-MM-Jpye-Bvervain-Shwgroo
327	(W)-10-Croot-Ciron-Cup-MM-Jpye-	327-(W)-10-Croot-Ciron-Cup-M	Showy Tick Trefoil	Desmodium canadense	3	0.19	0.3	Forb	N	N		10	W	Croot-Ciron-Cup-MM-Jpye-Bvervain-Shwgroo
327	(W)-10-Croot-Ciron-Cup-MM-Jpye-	327-(W)-10-Croot-Ciron-Cup-M	Boneset	Eupatorium perfoliatum	0.5	0.03	1.8	Forb	N	N		10	W	Croot-Ciron-Cup-MM-Jpye-Bvervain-Shwgroo

327	(W)-10-Croot-Ciron-Cup-MM-Jpye-	327-(W)-10-Croot-Ciron-Cup-M	Golden Alexanders	Zizia aurea	2	0.13	0.5	Forb	N	N		10	W	Croot-Ciron-Cup-MM-Jpye-Bvervain-Shwgroc
327	(W)-10-Croot-Ciron-Cup-MM-Jpye-	327-(W)-10-Croot-Ciron-Cup-M	Switchgrass	Panicum virgatum	8	0.5	4.5	Grass	N	N		10	W	Croot-Ciron-Cup-MM-Jpye-Bvervain-Shwgroc
327	(W)-10-Croot-Ciron-Cup-MM-Jpye-	327-(W)-10-Croot-Ciron-Cup-M	Prairie Cordgrass	Spartina pectinata	4	0.25	0.6	Grass	N	N		10	W	Croot-Ciron-Cup-MM-Jpye-Bvervain-Shwgroc
327	(W)-10-Croot-Ciron-Cup-MM-Jpye-	327-(W)-10-Croot-Ciron-Cup-M	Big Bluestem	Andropogon gerardii	4	0.25	1	Grass	N	N		10	W	Croot-Ciron-Cup-MM-Jpye-Bvervain-Shwgroc
327	(W)-10-Croot-Ciron-Cup-MM-Jpye-	327-(W)-10-Croot-Ciron-Cup-M	Canada Wildrye	Elymus canadensis	8	0.5	1	Grass	N	N		10	W	Croot-Ciron-Cup-MM-Jpye-Bvervain-Shwgroc
327	(W)-10-Croot-Ciron-Cup-MM-Jpye-	327-(W)-10-Croot-Ciron-Cup-M	Indiangrass	Sorghastrum nutans	4	0.25	1.1	Grass	N	N		10	W	Croot-Ciron-Cup-MM-Jpye-Bvervain-Shwgroc
327	(W)-10-Croot-Ciron-Cup-MM-Jpye-	327-(W)-10-Croot-Ciron-Cup-M	Fowl Mannagrass	Glyceria striata	4	0.25	14.7	Grass	N	N		10	W	Croot-Ciron-Cup-MM-Jpye-Bvervain-Shwgroc
327	(W)-10-Croot-Ciron-Cup-MM-Jpye-	327-(W)-10-Croot-Ciron-Cup-M	Fox Sedge	Carex vulpinoidea	4	0.25	9.2	Sedge	N	N		10	W	Croot-Ciron-Cup-MM-Jpye-Bvervain-Shwgroc
327	(DM)-11-Pcinque-Lplant-SilkAster-I	327-(DM)-11-Pcinque-Lplant-Sil	Prairie Cinquefoil	Potentilla arguta	0.5	0.03	2.2	Forb	N	N		11	DM	Pcinque-Lplant-SilkAster-PPclover-Rblzstar-W
327	(DM)-11-Pcinque-Lplant-SilkAster-I	327-(DM)-11-Pcinque-Lplant-Sil	Leadplant	Amorpha canescens	1	0.06	0.4	Legume	N	N		11	DM	Pcinque-Lplant-SilkAster-PPclover-Rblzstar-W
327	(DM)-11-Pcinque-Lplant-SilkAster-I	327-(DM)-11-Pcinque-Lplant-Sil	Silky Aster	Symphyotrichum sericeum	1	0.06	1.3	Forb	N	N		11	DM	Pcinque-Lplant-SilkAster-PPclover-Rblzstar-W
327	(DM)-11-Pcinque-Lplant-SilkAster-I	327-(DM)-11-Pcinque-Lplant-Sil	Purple Prairie Clover	Dalea purpurea	4	0.25	1.8	Legume	N	N		11	DM	Pcinque-Lplant-SilkAster-PPclover-Rblzstar-W
327	(DM)-11-Pcinque-Lplant-SilkAster-I	327-(DM)-11-Pcinque-Lplant-Sil	Rough Blazing Star	Liatris aspera	1	0.06	0.3	Forb	N	N		11	DM	Pcinque-Lplant-SilkAster-PPclover-Rblzstar-W
327	(DM)-11-Pcinque-Lplant-SilkAster-I	327-(DM)-11-Pcinque-Lplant-Sil	Wild Lupine	Lupinus perennis	6	0.38	0.1	Legume	N	N		11	DM	Pcinque-Lplant-SilkAster-PPclover-Rblzstar-W
327	(DM)-11-Pcinque-Lplant-SilkAster-I	327-(DM)-11-Pcinque-Lplant-Sil	Bergamot	Monarda fistulosa	0.5	0.03	0.9	Forb	N	N		11	DM	Pcinque-Lplant-SilkAster-PPclover-Rblzstar-W
327	(DM)-11-Pcinque-Lplant-SilkAster-I	327-(DM)-11-Pcinque-Lplant-Sil	Yellow Coneflower	Ratibida pinnata	1	0.06	0.6	Forb	N	N		11	DM	Pcinque-Lplant-SilkAster-PPclover-Rblzstar-W
327	(DM)-11-Pcinque-Lplant-SilkAster-I	327-(DM)-11-Pcinque-Lplant-Sil	Stiff Goldenrod	Oligoneuron rigidum	1	0.06	1.1	Forb	N	N		11	DM	Pcinque-Lplant-SilkAster-PPclover-Rblzstar-W
327	(DM)-11-Pcinque-Lplant-SilkAster-I	327-(DM)-11-Pcinque-Lplant-Sil	Pale Purple Coneflower	Echinacea pallida	2	0.13	0.2	Forb	N	N		11	DM	Pcinque-Lplant-SilkAster-PPclover-Rblzstar-W
327	(DM)-11-Pcinque-Lplant-SilkAster-I	327-(DM)-11-Pcinque-Lplant-Sil	Sideoats Grama	Bouteloua curtipendula	20	1.25	3.7	Grass	N	N		11	DM	Pcinque-Lplant-SilkAster-PPclover-Rblzstar-W
327	(DM)-11-Pcinque-Lplant-SilkAster-I	327-(DM)-11-Pcinque-Lplant-Sil	Little Bluestem	Schizachyrium scoparium	24	1.5	8.3	Grass	N	N		11	DM	Pcinque-Lplant-SilkAster-PPclover-Rblzstar-W
327	(DM)-11-Pcinque-Lplant-SilkAster-I	327-(DM)-11-Pcinque-Lplant-Sil	Indiangrass	Sorghastrum nutans	8	0.5	2.2	Grass	N	N		11	DM	Pcinque-Lplant-SilkAster-PPclover-Rblzstar-W
327	(DM)-11-Pcinque-Lplant-SilkAster-I	327-(DM)-11-Pcinque-Lplant-Sil	Prairie Junegrass	Koeleria macrantha	1	0.06	3.3	Grass	N	N		11	DM	Pcinque-Lplant-SilkAster-PPclover-Rblzstar-W
327	(DM)-11-Pcinque-Lplant-SilkAster-I	327-(DM)-11-Pcinque-Lplant-Sil	Prairie Dropseed	Sporobolus heterolepis	2	0.13	0.7	Grass	N	N		11	DM	Pcinque-Lplant-SilkAster-PPclover-Rblzstar-W
327	(DM)-11-Pcinque-Lplant-SilkAster-I	327-(DM)-11-Pcinque-Lplant-Sil	Switchgrass	Panicum virgatum	4	0.25	2.2	Grass	N	N		11	DM	Pcinque-Lplant-SilkAster-PPclover-Rblzstar-W
327	(DM)-12-LB-Sgrama-0-Swort-PPclo	327-(DM)-12-LB-Sgrama-0-Swo	Little Bluestem	Schizachyrium scoparium	16	1	5.5	Grass	N	Y		12	DM	LB-Sgrama-0-Swort-PPclover-Ycone-Pblzstar-
327	(DM)-12-LB-Sgrama-0-Swort-PPclo	327-(DM)-12-LB-Sgrama-0-Swo	Sideoats Grama	Bouteloua curtipendula	16	1	2.2	Grass	N	Y		12	DM	LB-Sgrama-0-Swort-PPclover-Ycone-Pblzstar-
327	(DM)-12-LB-Sgrama-0-Swort-PPclo	327-(DM)-12-LB-Sgrama-0-Swo	Illinois Tick Trefoil	Desmodium illinoense	5	0.31	0.5	Legume	N	Y		12	DM	LB-Sgrama-0-Swort-PPclover-Ycone-Pblzstar-
327	(DM)-12-LB-Sgrama-0-Swort-PPclo	327-(DM)-12-LB-Sgrama-0-Swo	Spiderwort	Tradescantia ohiensis	5	0.31	0.9	Forb	N	Y		12	DM	LB-Sgrama-0-Swort-PPclover-Ycone-Pblzstar-
327	(DM)-12-LB-Sgrama-0-Swort-PPclo	327-(DM)-12-LB-Sgrama-0-Swo	Purple Prairie Clover	Dalea purpurea	6	0.38	2.7	Legume	N	Y		12	DM	LB-Sgrama-0-Swort-PPclover-Ycone-Pblzstar-
327	(DM)-12-LB-Sgrama-0-Swort-PPclo	327-(DM)-12-LB-Sgrama-0-Swo	Yellow Coneflower	Ratibida pinnata	1	0.06	0.6	Forb	N	Y		12	DM	LB-Sgrama-0-Swort-PPclover-Ycone-Pblzstar-
327	(DM)-12-LB-Sgrama-0-Swort-PPclo	327-(DM)-12-LB-Sgrama-0-Swo	Prairie Blazing Star	Liatris pycnostachya	3	0.19	0.8	Forb	N	Y		12	DM	LB-Sgrama-0-Swort-PPclover-Ycone-Pblzstar-
327	(DM)-12-LB-Sgrama-0-Swort-PPclo	327-(DM)-12-LB-Sgrama-0-Swo	Rattlesnake Master	Eryngium yuccifolium	6	0.38	1.1	Forb	N	Y		12	DM	LB-Sgrama-0-Swort-PPclover-Ycone-Pblzstar-
327	(DM)-12-LB-Sgrama-0-Swort-PPclo	327-(DM)-12-LB-Sgrama-0-Swo	Showy Goldenrod	Solidago speciosa	4	0.25	8.7	Forb	N	Y		12	DM	LB-Sgrama-0-Swort-PPclover-Ycone-Pblzstar-
327	(DM)-12-LB-Sgrama-0-Swort-PPclo	327-(DM)-12-LB-Sgrama-0-Swo	Stiff Goldenrod	Oligoneuron rigidum	3	0.19	3.2	Forb	N	Y		12	DM	LB-Sgrama-0-Swort-PPclover-Ycone-Pblzstar-
327	(DM)-12-LB-Sgrama-0-Swort-PPclo	327-(DM)-12-LB-Sgrama-0-Swo	Smooth Blue Aster	Symphyotricum laeve	2	0.13	2.2	Forb	N	Y		12	DM	LB-Sgrama-0-Swort-PPclover-Ycone-Pblzstar-
327	(DM)-12-LB-Sgrama-0-Swort-PPclo	327-(DM)-12-LB-Sgrama-0-Swo	Prairie Cinquefoil	Potentilla arguta	2	0.13	9.2	Forb	N	Y		12	DM	LB-Sgrama-0-Swort-PPclover-Ycone-Pblzstar-
327	(M)-13-LB-Sgrama-Fbtongue-Swort-	327-(M)-13-LB-Sgrama-Fbtongu	Little Bluestem	Schizachyrium scoparium	16	1	5.5	Grass	N	Y		13	M	LB-Sgrama-Fbtongue-Swort-Galex-Ycone-PPc
327	(M)-13-LB-Sgrama-Fbtongue-Swort-	327-(M)-13-LB-Sgrama-Fbtongu	Sideoats Grama	Bouteloua curtipendula	16	1	2.2	Grass	N	Y		13	M	LB-Sgrama-Fbtongue-Swort-Galex-Ycone-PPc
327	(M)-13-LB-Sgrama-Fbtongue-Swort-	327-(M)-13-LB-Sgrama-Fbtongu	Foxglove Beardtongue	Penstemon digitalis	4	0.25	10.6	Forb	N	Y		13	M	LB-Sgrama-Fbtongue-Swort-Galex-Ycone-PPc
327	(M)-13-LB-Sgrama-Fbtongue-Swort-	327-(M)-13-LB-Sgrama-Fbtongu	Spiderwort	Tradescantia ohiensis	6	0.38	1.1	Forb	N	Y		13	M	LB-Sgrama-Fbtongue-Swort-Galex-Ycone-PPc
327	(M)-13-LB-Sgrama-Fbtongue-Swort-	327-(M)-13-LB-Sgrama-Fbtongu	Golden Alexanders	Zizia aurea	6	0.38	1.5	Forb	N	Y		13	M	LB-Sgrama-Fbtongue-Swort-Galex-Ycone-PPc
327	(M)-13-LB-Sgrama-Fbtongue-Swort-	327-(M)-13-LB-Sgrama-Fbtongu	Yellow Coneflower	Ratibida pinnata	1	0.06	0.6	Forb	N	Y		13	M	LB-Sgrama-Fbtongue-Swort-Galex-Ycone-PPc
327	(M)-13-LB-Sgrama-Fbtongue-Swort-	327-(M)-13-LB-Sgrama-Fbtongu	Purple Prairie Clover	Dalea purpurea	6	0.38	2.7	Legume	N	Y		13	M	LB-Sgrama-Fbtongue-Swort-Galex-Ycone-PPc
327	(M)-13-LB-Sgrama-Fbtongue-Swort-	327-(M)-13-LB-Sgrama-Fbtongu	Prairie Blazing Star	Liatris pycnostachya	4	0.25	1.1	Forb	N	Y		13	M	LB-Sgrama-Fbtongue-Swort-Galex-Ycone-PPc
327	(M)-13-LB-Sgrama-Fbtongue-Swort-	327-(M)-13-LB-Sgrama-Fbtongu	Rattlesnake Master	Eryngium yuccifolium	6	0.38	1.1	Forb	N	Y		13	M	LB-Sgrama-Fbtongue-Swort-Galex-Ycone-PPc
327	(M)-13-LB-Sgrama-Fbtongue-Swort-	327-(M)-13-LB-Sgrama-Fbtongu	New England Aster	Symphyotrichum novae-angliae	3	0.19	4.8	Forb	N	Y		13	M	LB-Sgrama-Fbtongue-Swort-Galex-Ycone-PPc
327	(M)-13-LB-Sgrama-Fbtongue-Swort-	327-(M)-13-LB-Sgrama-Fbtongu	Stiff Goldenrod	Oligoneuron rigidum	3	0.19	3.2	Forb	N	Y		13	M	LB-Sgrama-Fbtongue-Swort-Galex-Ycone-PPc
327	(M)-13-LB-Sgrama-Fbtongue-Swort-	327-(M)-13-LB-Sgrama-Fbtongu	Smooth Blue Aster	Symphyotrichum laeve	3	0.19	3.3	Forb	N	Y		13	M	LB-Sgrama-Fbtongue-Swort-Galex-Ycone-PPc
327	(WM)-14-BB-Indian-Fbtongue-Swor	327-(WM)-14-BB-Indian-Fbtong	Big Bluestem	Andropogon gerardii	16	1	3.8	Grass	N	Y		14	WM	BB-Indian-Fbtongue-Swort-Galex-Ycone-Pblz
327	(WM)-14-BB-Indian-Fbtongue-Swor	327-(WM)-14-BB-Indian-Fbtong	Indiangrass	Sorghastrum nutans	16	1	4.4	Grass	N	Y		14	WM	BB-Indian-Fbtongue-Swort-Galex-Ycone-Pblz
327	(WM)-14-BB-Indian-Fbtongue-Swor	327-(WM)-14-BB-Indian-Fbtong	Foxglove Beardtongue	Penstemon digitalis	4	0.25	10.6	Forb	N	Y		14	WM	BB-Indian-Fbtongue-Swort-Galex-Ycone-Pblz
327	(WM)-14-BB-Indian-Fbtongue-Swor	327-(WM)-14-BB-Indian-Fbtong	Spiderwort	Tradescantia ohiensis	6	0.38	1.1	Forb	N	Y		14	WM	BB-Indian-Fbtongue-Swort-Galex-Ycone-Pblz
327	(WM)-14-BB-Indian-Fbtongue-Swor	327-(WM)-14-BB-Indian-Fbtong	Golden Alexanders	Zizia aurea	5	0.31	1.3	Forb	N	Y		14	WM	BB-Indian-Fbtongue-Swort-Galex-Ycone-Pblz
327	(WM)-14-BB-Indian-Fbtongue-Swor	327-(WM)-14-BB-Indian-Fbtong	Yellow Coneflower	Ratibida pinnata	1	0.06	0.6	Forb	N	Y		14	WM	BB-Indian-Fbtongue-Swort-Galex-Ycone-Pblz
327	(WM)-14-BB-Indian-Fbtongue-Swor	327-(WM)-14-BB-Indian-Fbtong	Prairie Blazing Star	Liatris pycnostachya	3	0.19	0.8	Forb	N	Y		14	WM	BB-Indian-Fbtongue-Swort-Galex-Ycone-Pblz
327	(WM)-14-BB-Indian-Fbtongue-Swor	327-(WM)-14-BB-Indian-Fbtong	Rattlesnake Master	Eryngium yuccifolium	6	0.38	1.1	Forb	N	Y		14	WM	BB-Indian-Fbtongue-Swort-Galex-Ycone-Pblz
327	(WM)-14-BB-Indian-Fbtongue-Swor	327-(WM)-14-BB-Indian-Fbtong	New England Aster	Symphyotrichum novae-angliae	3	0.19	4.8	Forb	N	Y		14	WM	BB-Indian-Fbtongue-Swort-Galex-Ycone-Pblz
327	(WM)-14-BB-Indian-Fbtongue-Swor	327-(WM)-14-BB-Indian-Fbtong	Blue Vervain	Verbena hastata	4	0.25	8.5	Forb	N	Y		14	WM	BB-Indian-Fbtongue-Swort-Galex-Ycone-Pblz

327	(WM)-14-BB-Indian-Fbtongue-Swor	327-(WM)-14-BB-Indian-Fbtongu	Common Ironweed	Vernonia fasciculata	3	0.19	1.4	Forb	N	Y		14	WM	BB-Indian-Fbtongue-Swort-Galex-Ycone-Pblz
327	(WM)-14-BB-Indian-Fbtongue-Swor	327-(WM)-14-BB-Indian-Fbtongu	Cupplant	Silphium perfoliatum	3	0.19	0.1	Forb	N	Y		14	WM	BB-Indian-Fbtongue-Swort-Galex-Ycone-Pblz
327	(D-W)-15A-Switch	327-(D-W)-15A-Switch	Switchgrass	Panicum virgatum	112	7	63	Grass	N	N		15A	D-W	Switch
327	(D-W)-15B-BB	327-(D-W)-15B-BB	Big Bluestem	Andropogon gerardii	176	11	42	Grass	N	N		15B	D-W	BB
327	(D-W)-15C-Indian	327-(D-W)-15C-Indian	Indiangrass	Sorghastrum nutans	160	10	44	Grass	N	N		15C	D-W	Indian
327	(DM-M)-16A-SB-Tim-Alf	327-(DM-M)-16A-SB-Tim-Alf	Smooth Bromegrass	Bromus inermis	48	3	9	Grass	I	N		16A	DM-M	SB-Tim-Alf
327	(DM-M)-16A-SB-Tim-Alf	327-(DM-M)-16A-SB-Tim-Alf	Timothy	Phleum pratense	40	2.5	71	Grass	I	N		16A	DM-M	SB-Tim-Alf
327	(DM-M)-16A-SB-Tim-Alf	327-(DM-M)-16A-SB-Tim-Alf	Alfalfa	Medicago sativa	96	6	30	Legume	I	N		16A	DM-M	SB-Tim-Alf
327	(M-W)-16B-Orc-Tim-RC	327-(M-W)-16B-Orc-Tim-RC	Orchardgrass	Dactylis glomerata L.	32	2	30	Grass	I	N		16B	M-W	Orc-Tim-RC
327	(M-W)-16B-Orc-Tim-RC	327-(M-W)-16B-Orc-Tim-RC	Timothy	Phleum pratense	32	2	57	Grass	I	N		16B	M-W	Orc-Tim-RC
327	(M-W)-16B-Orc-Tim-RC	327-(M-W)-16B-Orc-Tim-RC	Red Clover	Trifolium pratense	80	5	30	Legume	I	N		16B	M-W	Orc-Tim-RC
327	(DM-M)-16C-Orc-Tim-Alf	327-(DM-M)-16C-Orc-Tim-Alf	Orchardgrass	Dactylis glomerata L.	32	2	30	Grass	I	N		16C	DM-M	Orc-Tim-Alf
327	(DM-M)-16C-Orc-Tim-Alf	327-(DM-M)-16C-Orc-Tim-Alf	Timothy	Phleum pratense	32	2	57	Grass	I	N		16C	DM-M	Orc-Tim-Alf
327	(DM-M)-16C-Orc-Tim-Alf	327-(DM-M)-16C-Orc-Tim-Alf	Alfalfa	Medicago sativa	96	6	30	Legume	I	N		16C	DM-M	Orc-Tim-Alf
327	(M-WM)-16D-SB-Tim-RC	327-(M-WM)-16D-SB-Tim-RC	Smooth Bromegrass	Bromus inermis	48	3	9	Grass	I	N		16D	M-WM	SB-Tim-RC
327	(M-WM)-16D-SB-Tim-RC	327-(M-WM)-16D-SB-Tim-RC	Timothy	Phleum pratense	40	2.5	71	Grass	I	N		16D	M-WM	SB-Tim-RC
327	(M-WM)-16D-SB-Tim-RC	327-(M-WM)-16D-SB-Tim-RC	Red Clover	Trifolium pratense	80	5	30	Legume	I	N		16D	M-WM	SB-Tim-RC
327	(M-WM)-16E-SB-Tim-Orc-RC-Lad(	327-(M-WM)-16E-SB-Tim-Orc-I	Smooth Bromegrass	Bromus inermis	32	2	6	Grass	I	N		16E	M-WM	SB-Tim-Orc-RC-LadC
327	(M-WM)-16E-SB-Tim-Orc-RC-Lad(	327-(M-WM)-16E-SB-Tim-Orc-I	Timothy	Phleum pratense	32	2	57	Grass	I	N		16E	M-WM	SB-Tim-Orc-RC-LadC
327	(M-WM)-16E-SB-Tim-Orc-RC-Lad(	327-(M-WM)-16E-SB-Tim-Orc-I	Orchardgrass	Dactylis glomerata L.	16	1	15	Grass	I	N		16E	M-WM	SB-Tim-Orc-RC-LadC
327	(M-WM)-16E-SB-Tim-Orc-RC-Lad(	327-(M-WM)-16E-SB-Tim-Orc-I	Red Clover	Trifolium pratense	80	5	30	Legume	I	N		16E	M-WM	SB-Tim-Orc-RC-LadC
327	(M-WM)-16E-SB-Tim-Orc-RC-Lad(	327-(M-WM)-16E-SB-Tim-Orc-I	White Ladino Clover	Trifolium repens	8	0.5	10	Legume	I	N		16E	M-WM	SB-Tim-Orc-RC-LadC
327	(M-WM)-16F-Orc-Tim-RC-LadC	327-(M-WM)-16F-Orc-Tim-RC-I	Orchardgrass	Dactylis glomerata L.	32	2	30	Grass	I	N		16F	M-WM	Orc-Tim-RC-LadC
327	(M-WM)-16F-Orc-Tim-RC-LadC	327-(M-WM)-16F-Orc-Tim-RC-I	Timothy	Phleum pratense	32	2	57	Grass	I	N		16F	M-WM	Orc-Tim-RC-LadC
327	(M-WM)-16F-Orc-Tim-RC-LadC	327-(M-WM)-16F-Orc-Tim-RC-I	Red Clover	Trifolium pratense	80	5	30	Legume	I	N		16F	M-WM	Orc-Tim-RC-LadC
327	(M-WM)-16F-Orc-Tim-RC-LadC	327-(M-WM)-16F-Orc-Tim-RC-I	White Ladino Clover	Trifolium repens	8	0.5	10	Legume	I	N		16F	M-WM	Orc-Tim-RC-LadC
327	(DM-WM)-16G-Orc-Tim-Btrefoil	327-(DM-WM)-16G-Orc-Tim-Bt	Orchardgrass	Dactylis glomerata L.	32	2	30	Grass	I	N		16G	DM-WM	Orc-Tim-Btrefoil
327	(DM-WM)-16G-Orc-Tim-Btrefoil	327-(DM-WM)-16G-Orc-Tim-Bt	Timothy	Phleum pratense	32	2	57	Grass	I	N		16G	DM-WM	Orc-Tim-Btrefoil
327	(DM-WM)-16G-Orc-Tim-Btrefoil	327-(DM-WM)-16G-Orc-Tim-Bt	Birdsfoot Trefoil	Lotus corniculatus	64	4	36	Legume	I	N		16G	DM-WM	Orc-Tim-Btrefoil
327	(M-WM)-16H-Tfesc-Tim-RC-LadC	327-(M-WM)-16H-Tfesc-Tim-RC	Tall Fescue	Schedonorus arundinaceus	48	3	15	Grass	I	N		16H	M-WM	Tfesc-Tim-RC-LadC
327	(M-WM)-16H-Tfesc-Tim-RC-LadC	327-(M-WM)-16H-Tfesc-Tim-RC	Timothy	Phleum pratense	32	2	57	Grass	I	N		16H	M-WM	Tfesc-Tim-RC-LadC
327	(M-WM)-16H-Tfesc-Tim-RC-LadC	327-(M-WM)-16H-Tfesc-Tim-RC	Red Clover	Trifolium pratense	64	4	24	Legume	I	N		16H	M-WM	Tfesc-Tim-RC-LadC
327	(M-WM)-16H-Tfesc-Tim-RC-LadC	327-(M-WM)-16H-Tfesc-Tim-RC	White Ladino Clover	Trifolium repens	16	1	20	Legume	I	N		16H	M-WM	Tfesc-Tim-RC-LadC
327	(DM-M)-17A-Orc-Tim-Alf-LadC	327-(DM-M)-17A-Orc-Tim-Alf-I	Orchardgrass	Dactylis glomerata L.	16	1	15	Grass	I	Y		17A	DM-M	Orc-Tim-Alf-LadC
327	(DM-M)-17A-Orc-Tim-Alf-LadC	327-(DM-M)-17A-Orc-Tim-Alf-I	Timothy	Phleum pratense	8	0.5	14	Grass	I	Y		17A	DM-M	Orc-Tim-Alf-LadC
327	(DM-M)-17A-Orc-Tim-Alf-LadC	327-(DM-M)-17A-Orc-Tim-Alf-I	Alfalfa	Medicago sativa	64	4	20	Legume	I	Y		17A	DM-M	Orc-Tim-Alf-LadC
327	(DM-M)-17A-Orc-Tim-Alf-LadC	327-(DM-M)-17A-Orc-Tim-Alf-I	White Ladino Clover	Trifolium repens	24	1.5	30	Legume	I	Y		17A	DM-M	Orc-Tim-Alf-LadC
327	(WM-W)-17B-Prye-Tfesc-RC-Aclov	327-(WM-W)-17B-Prye-Tfesc-R	Perennial Ryegrass	Lolium perenne	48	3	15	Grass	I	Y		17B	WM-W	Prye-Tfesc-RC-Aclover
327	(WM-W)-17B-Prye-Tfesc-RC-Aclov	327-(WM-W)-17B-Prye-Tfesc-R	Tall Fescue	Schedonorus arundinaceus	48	3	15	Grass	I	Y		17B	WM-W	Prye-Tfesc-RC-Aclover
327	(WM-W)-17B-Prye-Tfesc-RC-Aclov	327-(WM-W)-17B-Prye-Tfesc-R	Red Clover	Trifolium pratense	64	4	20	Legume	I	Y		17B	WM-W	Prye-Tfesc-RC-Aclover
327	(WM-W)-17B-Prye-Tfesc-RC-Aclov	327-(WM-W)-17B-Prye-Tfesc-R	Alsike Clover	Trifolium hybridum	24	1.5	23.4	Legume	I	X		17B	WM-W	Prye-Tfesc-RC-Aclover

STANDARD 342 MIXES REVISION DATE: 1/23/2013

criteria 0

STD	Mix #	std-mix	Common Name	Scientific Name	PLS (oz./A)	PLS (lbs./A)	Seeds/Square Foot	Type	Intro / Native	Poll. (Y/N)		Mix No.	MR	Mix Components
	No 342 mixes meet this criterion	LEAVE THIS ROW AS IS							N	Y				
	No 342 mixes meet this criterion	LEAVE THIS ROW AS IS							N	N				
		LEAVE THIS ROW AS IS							I	Y				
342	(DM-M)-1-SB-Crfesc-KB-Alf-R	342-(DM-M)-1-SB-Crfesc-KB	Smooth Bromegrass	Bromus inermis	160.0	10	30	Grass	I	N		1	DM-M	SB-Crfesc-KB-Alf-RC
342	(DM-M)-1-SB-Crfesc-KB-Alf-R	342-(DM-M)-1-SB-Crfesc-KB	Creeping Red Fescue	Festuca rubra	48.0	3	24	Grass	I	N		1	DM-M	SB-Crfesc-KB-Alf-RC
342	(DM-M)-1-SB-Crfesc-KB-Alf-R	342-(DM-M)-1-SB-Crfesc-KB	Kentucky Bluegrass	Poa pratensis	24.0	1.5	75	Grass	I	N		1	DM-M	SB-Crfesc-KB-Alf-RC
342	(DM-M)-1-SB-Crfesc-KB-Alf-R	342-(DM-M)-1-SB-Crfesc-KB	Alfalfa	Medicago sativa	48.0	3	15	Legume	I	N		1	DM-M	SB-Crfesc-KB-Alf-RC
342	(DM-M)-1-SB-Crfesc-KB-Alf-R	342-(DM-M)-1-SB-Crfesc-KB	Red Clover	Trifolium pratense	48.0	3	18	Legume	I	N		1	DM-M	SB-Crfesc-KB-Alf-RC
342	(DM-M)-2-SB-Tim-Alf	342-(DM-M)-2-SB-Tim-Alf	Smooth Bromegrass	Bromus inermis	240.0	15	46	Grass	I	N		2	DM-M	SB-Tim-Alf
342	(DM-M)-2-SB-Tim-Alf	342-(DM-M)-2-SB-Tim-Alf	Timothy	Phleum pratense	48.0	3	84	Grass	I	N		2	DM-M	SB-Tim-Alf
342	(DM-M)-2-SB-Tim-Alf	342-(DM-M)-2-SB-Tim-Alf	Alfalfa	Medicago sativa	112.0	7	35	Legume	I	N		2	DM-M	SB-Tim-Alf
342	(DM-M)-3-SB-Prye-Tfesc-Tim-I	342-(DM-M)-3-SB-Prye-Tfesc	Smooth Bromegrass	Bromus inermis	160.0	10	30	Grass	I	N		3	DM-M	SB-Prye-Tfesc-Tim-KB
342	(DM-M)-3-SB-Prye-Tfesc-Tim-I	342-(DM-M)-3-SB-Prye-Tfesc	Perennial Ryegrass	Lolium perenne	80.0	5	25	Grass	I	N		3	DM-M	SB-Prye-Tfesc-Tim-KB
342	(DM-M)-3-SB-Prye-Tfesc-Tim-I	342-(DM-M)-3-SB-Prye-Tfesc	Tall Fescue	Schedonorus arundinaceus	32.0	2	10	Grass	I	N		3	DM-M	SB-Prye-Tfesc-Tim-KB
342	(DM-M)-3-SB-Prye-Tfesc-Tim-I	342-(DM-M)-3-SB-Prye-Tfesc	Timothy	Phleum pratense	32.0	2	57	Grass	I	N		3	DM-M	SB-Prye-Tfesc-Tim-KB
342	(DM-M)-3-SB-Prye-Tfesc-Tim-I	342-(DM-M)-3-SB-Prye-Tfesc	Kentucky Bluegrass	Poa pratensis	16.0	1	50	Grass	I	N		3	DM-M	SB-Prye-Tfesc-Tim-KB
342	(DM-M)-4-SB-Crfesc-Alf-RC	342-(DM-M)-4-SB-Crfesc-Alf	Smooth Bromegrass	Bromus inermis	320.0	20	62	Grass	I	N		4	DM-M	SB-Crfesc-Alf-RC
342	(DM-M)-4-SB-Crfesc-Alf-RC	342-(DM-M)-4-SB-Crfesc-Alf	Creeping Red Fescue	Festuca rubra	80.0	5	40	Grass	I	N		4	DM-M	SB-Crfesc-Alf-RC
342	(DM-M)-4-SB-Crfesc-Alf-RC	342-(DM-M)-4-SB-Crfesc-Alf	Alfalfa	Medicago sativa	128.0	8	40	Legume	I	N		4	DM-M	SB-Crfesc-Alf-RC
342	(DM-M)-4-SB-Crfesc-Alf-RC	342-(DM-M)-4-SB-Crfesc-Alf	Red Clover	Trifolium pratense	64.0	4	24	Legume	I	N		4	DM-M	SB-Crfesc-Alf-RC
342	(DM-M)-5-SB-Alf	342-(DM-M)-5-SB-Alf	Smooth Bromegrass	Bromus inermis	480.0	30	93	Grass	I	N		5	DM-M	SB-Alf
342	(DM-M)-5-SB-Alf	342-(DM-M)-5-SB-Alf	Alfalfa	Medicago sativa	224.0	14	70	Legume	I	N		5	DM-M	SB-Alf
342	(DM-WM)-6-SB-Prye-Tim-Crfe	342-(DM-WM)-6-SB-Prye-Tim	Smooth Bromegrass	Bromus inermis	112.0	7	21	Grass	I	N		6	DM-WM	SB-Prye-Tim-Crfesc-KB-RC
342	(DM-WM)-6-SB-Prye-Tim-Crfe	342-(DM-WM)-6-SB-Prye-Tim	Perennial Ryegrass	Lolium perenne	48.0	3	15	Grass	I	N		6	DM-WM	SB-Prye-Tim-Crfesc-KB-RC
342	(DM-WM)-6-SB-Prye-Tim-Crfe	342-(DM-WM)-6-SB-Prye-Tim	Timothy	Phleum pratense	32.0	2	57	Grass	I	N		6	DM-WM	SB-Prye-Tim-Crfesc-KB-RC
342	(DM-WM)-6-SB-Prye-Tim-Crfe	342-(DM-WM)-6-SB-Prye-Tim	Creeping Red Fescue	Festuca rubra	16.0	1	8	Grass	I	N		6	DM-WM	SB-Prye-Tim-Crfesc-KB-RC
342	(DM-WM)-6-SB-Prye-Tim-Crfe	342-(DM-WM)-6-SB-Prye-Tim	Kentucky Bluegrass	Poa pratensis	16.0	1	50	Grass	I	N		6	DM-WM	SB-Prye-Tim-Crfesc-KB-RC
342	(DM-WM)-6-SB-Prye-Tim-Crfe	342-(DM-WM)-6-SB-Prye-Tim	Red Clover	Trifolium pratense	48.0	3	18	Legume	I	N		6	DM-WM	SB-Prye-Tim-Crfesc-KB-RC
342	(M)-7-SB-KB-Crfesc-Btrefoil	342-(M)-7-SB-KB-Crfesc-Btre	Smooth Bromegrass	Bromus inermis	112.0	7	21	Grass	I	N		7	M	SB-KB-Crfesc-Btrefoil
342	(M)-7-SB-KB-Crfesc-Btrefoil	342-(M)-7-SB-KB-Crfesc-Btre	Kentucky Bluegrass	Poa pratensis	48.0	3	150	Grass	I	N		7	M	SB-KB-Crfesc-Btrefoil
342	(M)-7-SB-KB-Crfesc-Btrefoil	342-(M)-7-SB-KB-Crfesc-Btre	Creeping Red Fescue	Festuca rubra	32.0	2	16	Grass	I	N		7	M	SB-KB-Crfesc-Btrefoil
342	(M)-7-SB-KB-Crfesc-Btrefoil	342-(M)-7-SB-KB-Crfesc-Btre	Birdsfoot Trefoil	Lotus corniculatus	32.0	2	18	Legume	I	N		7	M	SB-KB-Crfesc-Btrefoil
342	(M)-8-SB-Crfesc-KB	342-(M)-8-SB-Crfesc-KB	Smooth Bromegrass	Bromus inermis	240.0	15	45	Grass	I	N		8	M	SB-Crfesc-KB
342	(M)-8-SB-Crfesc-KB	342-(M)-8-SB-Crfesc-KB	Creeping Red Fescue	Festuca rubra	32.0	2	16	Grass	I	N		8	M	SB-Crfesc-KB
342	(M)-8-SB-Crfesc-KB	342-(M)-8-SB-Crfesc-KB	Kentucky Bluegrass	Poa pratensis	32.0	2	100	Grass	I	N		8	M	SB-Crfesc-KB
342	(M)-9-Prye-Crfesc-KB	342-(M)-9-Prye-Crfesc-KB	Perennial Ryegrass	Lolium perenne	160.0	10	50	Grass	I	N		9	M	Prye-Crfesc-KB
342	(M)-9-Prye-Crfesc-KB	342-(M)-9-Prye-Crfesc-KB	Creeping Red Fescue	Festuca rubra	64.0	4	32	Grass	I	N		9	M	Prye-Crfesc-KB
342	(M)-9-Prye-Crfesc-KB	342-(M)-9-Prye-Crfesc-KB	Kentucky Bluegrass	Poa pratensis	48.0	3	150	Grass	I	N		9	M	Prye-Crfesc-KB
342	(M)-10-SB-Prye-Tim-RC	342-(M)-10-SB-Prye-Tim-RC	Smooth Bromegrass	Bromus inermis	224.0	14	42	Grass	I	N		10	M	SB-Prye-Tim-RC
342	(M)-10-SB-Prye-Tim-RC	342-(M)-10-SB-Prye-Tim-RC	Perennial Ryegrass	Lolium perenne	64.0	4	20	Grass	I	N		10	M	SB-Prye-Tim-RC
342	(M)-10-SB-Prye-Tim-RC	342-(M)-10-SB-Prye-Tim-RC	Timothy	Phleum pratense	48.0	3	84	Grass	I	N		10	M	SB-Prye-Tim-RC
342	(M)-10-SB-Prye-Tim-RC	342-(M)-10-SB-Prye-Tim-RC	Red Clover	Trifolium pratense	48.0	3	18	Legume	I	N		10	M	SB-Prye-Tim-RC
342	(M)-11-SB-Crfesc	342-(M)-11-SB-Crfesc	Smooth Bromegrass	Bromus inermis	512.0	32	96	Grass	I	N		11	M	SB-Crfesc
342	(M)-11-SB-Crfesc	342-(M)-11-SB-Crfesc	Creeping Red Fescue	Festuca rubra	128.0	8	64	Grass	I	N		11	M	SB-Crfesc
342	(M)-12-KB-Crfesc	342-(M)-12-KB-Crfesc	Kentucky Bluegrass	Poa pratensis	64.0	4	200	Grass	I	N		12	M	KB-Crfesc
342	(M)-12-KB-Crfesc	342-(M)-12-KB-Crfesc	Creeping Red Fescue	Festuca rubra	48.0	3	24	Grass	I	N		12	M	KB-Crfesc
342	(M)-13-SB-Tim-RC	342-(M)-13-SB-Tim-RC	Smooth Bromegrass	Bromus inermis	224.0	14	43	Grass	I	N		13	M	SB-Tim-RC
342	(M)-13-SB-Tim-RC	342-(M)-13-SB-Tim-RC	Timothy	Phleum pratense	64.0	4	112	Grass	I	N		13	M	SB-Tim-RC
342	(M)-13-SB-Tim-RC	342-(M)-13-SB-Tim-RC	Red Clover	Trifolium pratense	48.0	3	18	Legume	I	N		13	M	SB-Tim-RC
342	(M)-14-SB-Tim-Aclover	342-(M)-14-SB-Tim-Aclover	Smooth Bromegrass	Bromus inermis	240.0	15	43	Grass	I	N		14	M	SB-Tim-Aclover
342	(M)-14-SB-Tim-Aclover	342-(M)-14-SB-Tim-Aclover	Timothy	Phleum pratense	56.0	3.5	112	Grass	I	N		14	M	SB-Tim-Aclover
342	(M)-14-SB-Tim-Aclover	342-(M)-14-SB-Tim-Aclover	Alsike Clover	Trifolium hybridum	32.0	2	32	Legume	I	N		14	M	SB-Tim-Aclover
342	(M)-15-SB-Tim-Btrefoil	342-(M)-15-SB-Tim-Btrefoil	Smooth Bromegrass	Bromus inermis	240.0	15	43	Grass	I	N		15	M	SB-Tim-Btrefoil
342	(M)-15-SB-Tim-Btrefoil	342-(M)-15-SB-Tim-Btrefoil	Timothy	Phleum pratense	56.0	3.5	112	Grass	I	N		15	M	SB-Tim-Btrefoil
342	(M)-15-SB-Tim-Btrefoil	342-(M)-15-SB-Tim-Btrefoil	Birdsfoot Trefoil	Lotus corniculatus	48.0	3	26	Legume	I	N		15	M	SB-Tim-Btrefoil
342	(WM)-16-SB-Tfesc-Prye-Tim-K	342-(WM)-16-SB-Tfesc-Prye-	Smooth Bromegrass	Bromus inermis	96.0	6	18	Grass	I	N		16	WM	SB-Tfesc-Prye-Tim-KB-RC
342	(WM)-16-SB-Tfesc-Prye-Tim-K	342-(WM)-16-SB-Tfesc-Prye-	Tall Fescue	Schedonorus arundinaceus	80.0	5	25	Grass	I	N		16	WM	SB-Tfesc-Prye-Tim-KB-RC
342	(WM)-16-SB-Tfesc-Prye-Tim-K	342-(WM)-16-SB-Tfesc-Prye-	Perennial Ryegrass	Lolium perenne	48.0	3	15	Grass	I	N		16	WM	SB-Tfesc-Prye-Tim-KB-RC
342	(WM)-16-SB-Tfesc-Prye-Tim-K	342-(WM)-16-SB-Tfesc-Prye-	Timothy	Phleum pratense	48.0	3	84	Grass	I	N		16	WM	SB-Tfesc-Prye-Tim-KB-RC
342	(WM)-16-SB-Tfesc-Prye-Tim-K	342-(WM)-16-SB-Tfesc-Prye-	Kentucky Bluegrass	Poa pratensis	32.0	2	100	Grass	I	N		16	WM	SB-Tfesc-Prye-Tim-KB-RC
342	(WM)-16-SB-Tfesc-Prye-Tim-K	342-(WM)-16-SB-Tfesc-Prye-	Red Clover	Trifolium pratense	48.0	3	18	Legume	I	N		16	WM	SB-Tfesc-Prye-Tim-KB-RC
342	(WM)-17-Rtop-Tim-RC	342-(WM)-17-Rtop-Tim-RC	Redtop	Agrostis gigantea	16.0	1	114	Grass	I	N		17	WM	Rtop-Tim-RC
342	(WM)-17-Rtop-Tim-RC	342-(WM)-17-Rtop-Tim-RC	Timothy	Phleum pratense	48.0	3	84	Grass	I	N		17	WM	Rtop-Tim-RC
342	(WM)-17-Rtop-Tim-RC	342-(WM)-17-Rtop-Tim-RC	Red Clover	Trifolium pratense	80.0	5	30	Legume	I	N		17	WM	Rtop-Tim-RC
342	(WM)-18-SB-Tim-Prye-KB-RC	342-(WM)-18-SB-Tim-Prye-K	Smooth Bromegrass	Bromus inermis	96.0	6	18	Grass	I	N		18	WM	SB-Tim-Prye-KB-RC
342	(WM)-18-SB-Tim-Prye-KB-RC	342-(WM)-18-SB-Tim-Prye-K	Timothy	Phleum pratense	48.0	3	84	Grass	I	N		18	WM	SB-Tim-Prye-KB-RC
342	(WM)-18-SB-Tim-Prye-KB-RC	342-(WM)-18-SB-Tim-Prye-K	Perennial Ryegrass	Lolium perenne	48.0	3	15	Grass	I	N		18	WM	SB-Tim-Prye-KB-RC
342	(WM)-18-SB-Tim-Prye-KB-RC	342-(WM)-18-SB-Tim-Prye-K	Kentucky Bluegrass	Poa pratensis	32.0	2	100	Grass	I	N		18	WM	SB-Tim-Prye-KB-RC
342	(WM)-18-SB-Tim-Prye-KB-RC	342-(WM)-18-SB-Tim-Prye-K	Red Clover	Trifolium pratense	48.0	3	18	Legume	I	N		18	WM	SB-Tim-Prye-KB-RC
342	(WM)-19-KB-Rtop-Tim-RC	342-(WM)-19-KB-Rtop-Tim-R	Kentucky Bluegrass	Poa pratensis	32.0	2	100	Grass	I	N		19	WM	KB-Rtop-Tim-RC
342	(WM)-19-KB-Rtop-Tim-RC	342-(WM)-19-KB-Rtop-Tim-R	Redtop	Agrostis gigantea	16.0	1	114	Grass	I	N		19	WM	KB-Rtop-Tim-RC
342	(WM)-19-KB-Rtop-Tim-RC	342-(WM)-19-KB-Rtop-Tim-R	Timothy	Phleum pratense	16.0	1	28	Grass	I	N		19	WM	KB-Rtop-Tim-RC
342	(WM)-19-KB-Rtop-Tim-RC	342-(WM)-19-KB-Rtop-Tim-R	Red Clover	Trifolium pratense	64.0	4	24	Legume	I	N		19	WM	KB-Rtop-Tim-RC
342	(W)-20-KB-Rtop-Aclover	342-(W)-20-KB-Rtop-Aclover	Kentucky Bluegrass	Poa pratensis	32.0	2	100	Grass	I	N		20	W	KB-Rtop-Aclover
342	(W)-20-KB-Rtop-Aclover	342-(W)-20-KB-Rtop-Aclover	Redtop	Agrostis gigantea	32.0	2	228	Grass	I	N		20	W	KB-Rtop-Aclover
342	(W)-20-KB-Rtop-Aclover	342-(W)-20-KB-Rtop-Aclover	Alsike Clover	Trifolium hybridum	32.0	2	32	Legume	I	N		20	W	KB-Rtop-Aclover
342	(W)-21-Rtop-Aclover	342-(W)-21-Rtop-Aclover	Redtop	Agrostis gigantea	48.0	3	342	Grass	I	N		21	W	Rtop-Aclover
342	(W)-21-Rtop-Aclover	342-(W)-21-Rtop-Aclover	Alsike Clover	Trifolium hybridum	48.0	3	48	Legume	I	N		21	W	Rtop-Aclover

STANDARD 512 MIXES

criteria: H-1

STD	Mix #	std-mix	Common Name	Scientific Name
		LEAVE THIS ROW AS IS		
		LEAVE THIS ROW AS IS		
512	(FSG 1)-H1-RC-Tfesc-Tim	512-(FSG 1)-H1-RC-Tfesc-Tim	Red Clover	Trifolium pratense
512	(FSG 1)-H1-RC-Tfesc-Tim	512-(FSG 1)-H1-RC-Tfesc-Tim	Tall Fescue	Schedonorus arundinaceus
512	(FSG 1)-H1-RC-Tfesc-Tim	512-(FSG 1)-H1-RC-Tfesc-Tim	Timothy	Phleum pratense
512	(FSG 2)-H2-Alf	512-(FSG 2)-H2-Alf	Alfalfa	Medicago sativa
512	(FSG 2,3,5,6)-H3-Alf-SB	512-(FSG 2,3,5,6)-H3-Alf-SB	Alfalfa	Medicago sativa
512	(FSG 2,3,5,6)-H3-Alf-SB	512-(FSG 2,3,5,6)-H3-Alf-SB	Smooth Bromegrass	Bromus inermis
512	(FSG 4,7)-H4-Aclover-Tfesc-Tim	512-(FSG 4,7)-H4-Aclover-Tfesc-Tim	Alsike Clover	Trifolium hybridum
512	(FSG 4,7)-H4-Aclover-Tfesc-Tim	512-(FSG 4,7)-H4-Aclover-Tfesc-Tim	Tall Fescue	Schedonorus arundinaceus
512	(FSG 4,7)-H4-Aclover-Tfesc-Tim	512-(FSG 4,7)-H4-Aclover-Tfesc-Tim	Timothy	Phleum pratense
512	(FSG 8)-H5-Alf-Tim	512-(FSG 8)-H5-Alf-Tim	Alfalfa	Medicago sativa
512	(FSG 8)-H5-Alf-Tim	512-(FSG 8)-H5-Alf-Tim	Timothy	Phleum pratense
512	(FSG 9)-H6-Alf-SB-Tim	512-(FSG 9)-H6-Alf-SB-Tim	Alfalfa	Medicago sativa
512	(FSG 9)-H6-Alf-SB-Tim	512-(FSG 9)-H6-Alf-SB-Tim	Smooth Bromegrass	Bromus inermis
512	(FSG 9)-H6-Alf-SB-Tim	512-(FSG 9)-H6-Alf-SB-Tim	Timothy	Phleum pratense
512	(FSG 1-9)-H7-Switch	512-(FSG 1-9)-H7-Switch	Switchgrass	Panicum virgatum
512	(FSG 1-9)-H8-BB	512-(FSG 1-9)-H8-BB	Big Bluestem	Andropogon gerardii
512	(FSG 1-9)-H9-Indian	512-(FSG 1-9)-H9-Indian	Indiangrass	Sorghastrum nutans
512	(FSG 1)-PP1-Aclover-Mfesc	512-(FSG 1)-PP1-Aclover-Mfesc	Alsike Clover	Trifolium hybridum
512	(FSG 1)-PP1-Aclover-Mfesc	512-(FSG 1)-PP1-Aclover-Mfesc	Meadow Fescue	Schedonorus pratensis
512	(FSG 1)-PP1A-Aclover-Orc	512-(FSG 1)-PP1A-Aclover-Orc	Alsike Clover	Trifolium hybridum
512	(FSG 1)-PP1A-Aclover-Orc	512-(FSG 1)-PP1A-Aclover-Orc	Orchardgrass	Dactylis glomerata L.
512	(FSG 1)-PP1B-Aclover-Tim	512-(FSG 1)-PP1B-Aclover-Tim	Alsike Clover	Trifolium hybridum
512	(FSG 1)-PP1B-Aclover-Tim	512-(FSG 1)-PP1B-Aclover-Tim	Timothy	Phleum pratense
512	(FSG 2-3)-PP2-Alf-SB-Orc	512-(FSG 2-3)-PP2-Alf-SB-Orc	Alfalfa	Medicago sativa
512	(FSG 2-3)-PP2-Alf-SB-Orc	512-(FSG 2-3)-PP2-Alf-SB-Orc	Smooth Bromegrass	Bromus inermis
512	(FSG 2-3)-PP2-Alf-SB-Orc	512-(FSG 2-3)-PP2-Alf-SB-Orc	Orchardgrass	Dactylis glomerata L.
512	(FSG 4)-PP4-Aclover-Mfesc-Tim	512-(FSG 4)-PP4-Aclover-Mfesc-Tim	Alsike Clover	Trifolium hybridum
512	(FSG 4)-PP4-Aclover-Mfesc-Tim	512-(FSG 4)-PP4-Aclover-Mfesc-Tim	Meadow Fescue	Schedonorus pratensis
512	(FSG 4)-PP4-Aclover-Mfesc-Tim	512-(FSG 4)-PP4-Aclover-Mfesc-Tim	Timothy	Phleum pratense
512	(FSG 4)-PP4B-Btrefoil-Mfesc-Tim	512-(FSG 4)-PP4B-Btrefoil-Mfesc-Tim	Birdsfoot Trefoil	Lotus corniculatus
512	(FSG 4)-PP4B-Btrefoil-Mfesc-Tim	512-(FSG 4)-PP4B-Btrefoil-Mfesc-Tim	Meadow Fescue	Schedonorus pratensis
512	(FSG 4)-PP4B-Btrefoil-Mfesc-Tim	512-(FSG 4)-PP4B-Btrefoil-Mfesc-Tim	Timothy	Phleum pratense
512	(FSG 5)-PP5-RC-LadC-Orc-Mfesc	512-(FSG 5)-PP5-RC-LadC-Orc-Mfesc	Red Clover	Trifolium pratense
512	(FSG 5)-PP5-RC-LadC-Orc-Mfesc	512-(FSG 5)-PP5-RC-LadC-Orc-Mfesc	White Ladino Clover	Trifolium repens
512	(FSG 5)-PP5-RC-LadC-Orc-Mfesc	512-(FSG 5)-PP5-RC-LadC-Orc-Mfesc	Orchardgrass	Dactylis glomerata L.
512	(FSG 5)-PP5-RC-LadC-Orc-Mfesc	512-(FSG 5)-PP5-RC-LadC-Orc-Mfesc	Meadow Fescue	Schedonorus pratensis
512	(FSG 5)-PP5B-RC-LadC-Festu-Mfesc	512-(FSG 5)-PP5B-RC-LadC-Festu-Mfesc	Red Clover	Trifolium pratense
512	(FSG 5)-PP5B-RC-LadC-Festu-Mfesc	512-(FSG 5)-PP5B-RC-LadC-Festu-Mfesc	White Ladino Clover	Trifolium repens
512	(FSG 5)-PP5B-RC-LadC-Festu-Mfesc	512-(FSG 5)-PP5B-RC-LadC-Festu-Mfesc	Festulolium	Festuca x Lolium
512	(FSG 5)-PP5B-RC-LadC-Festu-Mfesc	512-(FSG 5)-PP5B-RC-LadC-Festu-Mfesc	Meadow Fescue	Schedonorus pratensis
512	(FSG 6)-PP6-RC-Orc-SB	512-(FSG 6)-PP6-RC-Orc-SB	Red Clover	Trifolium pratense
512	(FSG 6)-PP6-RC-Orc-SB	512-(FSG 6)-PP6-RC-Orc-SB	Orchardgrass	Dactylis glomerata L.
512	(FSG 6)-PP6-RC-Orc-SB	512-(FSG 6)-PP6-RC-Orc-SB	Smooth Bromegrass	Bromus inermis
512	(FSG 7)-PP7-Aclover-Mfesc-Tim-Rtop	512-(FSG 7)-PP7-Aclover-Mfesc-Tim-Rtop	Alsike Clover	Trifolium hybridum
512	(FSG 7)-PP7-Aclover-Mfesc-Tim-Rtop	512-(FSG 7)-PP7-Aclover-Mfesc-Tim-Rtop	Meadow Fescue	Schedonorus pratensis
512	(FSG 7)-PP7-Aclover-Mfesc-Tim-Rtop	512-(FSG 7)-PP7-Aclover-Mfesc-Tim-Rtop	Timothy	Phleum pratense
512	(FSG 7)-PP7-Aclover-Mfesc-Tim-Rtop	512-(FSG 7)-PP7-Aclover-Mfesc-Tim-Rtop	Redtop	Agrostis gigantea
512	(FSG 7)-PP7B-Btrefoil-Mfesc-Tim-Rtop	512-(FSG 7)-PP7B-Btrefoil-Mfesc-Tim-Rtop	Birdsfoot Trefoil	Lotus corniculatus
512	(FSG 7)-PP7B-Btrefoil-Mfesc-Tim-Rtop	512-(FSG 7)-PP7B-Btrefoil-Mfesc-Tim-Rtop	Meadow Fescue	Schedonorus pratensis
512	(FSG 7)-PP7B-Btrefoil-Mfesc-Tim-Rtop	512-(FSG 7)-PP7B-Btrefoil-Mfesc-Tim-Rtop	Timothy	Phleum pratense
512	(FSG 7)-PP7B-Btrefoil-Mfesc-Tim-Rtop	512-(FSG 7)-PP7B-Btrefoil-Mfesc-Tim-Rtop	Redtop	Agrostis gigantea
512	(FSG 8)-PP8-LadC-Orc-Mfesc	512-(FSG 8)-PP8-LadC-Orc-Mfesc	White Ladino Clover	Trifolium repens
512	(FSG 8)-PP8-LadC-Orc-Mfesc	512-(FSG 8)-PP8-LadC-Orc-Mfesc	Orchardgrass	Dactylis glomerata L.
512	(FSG 8)-PP8-LadC-Orc-Mfesc	512-(FSG 8)-PP8-LadC-Orc-Mfesc	Meadow Fescue	Schedonorus pratensis
512	(FSG 8)-PP8B-LadC-Festu-Mfesc	512-(FSG 8)-PP8B-LadC-Festu-Mfesc	White Ladino Clover	Trifolium repens
512	(FSG 8)-PP8B-LadC-Festu-Mfesc	512-(FSG 8)-PP8B-LadC-Festu-Mfesc	Festulolium	Festuca x Lolium
512	(FSG 8)-PP8B-LadC-Festu-Mfesc	512-(FSG 8)-PP8B-LadC-Festu-Mfesc	Meadow Fescue	Schedonorus pratensis
512	(FSG 9)-PP9-RC-Orc-Mfesc	512-(FSG 9)-PP9-RC-Orc-Mfesc	Red Clover	Trifolium pratense
512	(FSG 9)-PP9-RC-Orc-Mfesc	512-(FSG 9)-PP9-RC-Orc-Mfesc	Orchardgrass	Dactylis glomerata L.
512	(FSG 9)-PP9-RC-Orc-Mfesc	512-(FSG 9)-PP9-RC-Orc-Mfesc	Meadow Fescue	Schedonorus pratensis
512	(FSG 1,4,7)-PHS1-KB-Mfesc-LadC	512-(FSG 1,4,7)-PHS1-KB-Mfesc-LadC	Kentucky Bluegrass	Poa pratensis
512	(FSG 1,4,7)-PHS1-KB-Mfesc-LadC	512-(FSG 1,4,7)-PHS1-KB-Mfesc-LadC	Meadow Fescue	Schedonorus pratensis
512	(FSG 1,4,7)-PHS1-KB-Mfesc-LadC	512-(FSG 1,4,7)-PHS1-KB-Mfesc-LadC	White Ladino Clover	Trifolium repens
512	(FSG 1,4,7)-PHS1A-KB-Mfesc-Btrefoil	512-(FSG 1,4,7)-PHS1A-KB-Mfesc-Btrefoil	Kentucky Bluegrass	Poa pratensis
512	(FSG 1,4,7)-PHS1A-KB-Mfesc-Btrefoil	512-(FSG 1,4,7)-PHS1A-KB-Mfesc-Btrefoil	Meadow Fescue	Schedonorus pratensis
512	(FSG 1,4,7)-PHS1A-KB-Mfesc-Btrefoil	512-(FSG 1,4,7)-PHS1A-KB-Mfesc-Btrefoil	Birdsfoot Trefoil	Lotus corniculatus
512	(FSG 5-8)-PHS2-KB-Festu-LadC	512-(FSG 5-8)-PHS2-KB-Festu-LadC	Kentucky Bluegrass	Poa pratensis

512	(FSG 5-8)-PHS2-KB-Festu-LadC	512-(FSG 5-8)-PHS2-KB-Festu-LadC	Festulolium	Festuca x Lolium
512	(FSG 5-8)-PHS2-KB-Festu-LadC	512-(FSG 5-8)-PHS2-KB-Festu-LadC	White Ladino Clover	Trifolium repens
512	(FSG 5-8)-PHS2A-KB-Prye-LadC	512-(FSG 5-8)-PHS2A-KB-Prye-LadC	Kentucky Bluegrass	Poa pratensis
512	(FSG 5-8)-PHS2A-KB-Prye-LadC	512-(FSG 5-8)-PHS2A-KB-Prye-LadC	Perennial Ryegrass	Lolium perenne
512	(FSG 5-8)-PHS2A-KB-Prye-LadC	512-(FSG 5-8)-PHS2A-KB-Prye-LadC	White Ladino Clover	Trifolium repens
512	(FSG 2-3)-PHS3-Alf-Orc	512-(FSG 2-3)-PHS3-Alf-Orc	Alfalfa	Medicago sativa
512	(FSG 2-3)-PHS3-Alf-Orc	512-(FSG 2-3)-PHS3-Alf-Orc	Orchardgrass	Dactylis glomerata L.

REVISION DATE: 12/14/2012

PLS (oz./A)	PLS (lbs./A)	Seeds/Square Foot	Type	Intro / Native	Poll. (Y/N)		Mix No.	FSG-MIX #	Mix Components	FSG
				I	Y					
				N	Y					
96.0	6	36	Legume	I	N		H1	FSG 1	RC-Tfesc-Tim	1
96.0	6	32	Grass	I	N		H1	FSG 1	RC-Tfesc-Tim	1
16.0	1	28	Grass	I	N		H1	FSG 1	RC-Tfesc-Tim	1
192.0	12	60	Legume	I	N		H2	FSG 2	Alf	2
160.0	10	50	Legume	I	N		H3	FSG 2,3,5,6	Alf-SB	2,3,5,6
64.0	4	12	Grass	I	N		H3	FSG 2,3,5,6	Alf-SB	2,3,5,6
48.0	3	48	Legume	I	N		H4	FSG 4,7	Aclover-Tfesc-Tim	4,7
96.0	6	32	Grass	I	N		H4	FSG 4,7	Aclover-Tfesc-Tim	4,7
16.0	1	28	Grass	I	N		H4	FSG 4,7	Aclover-Tfesc-Tim	4,7
128.0	8	40	Legume	I	N		H5	FSG 8	Alf-Tim	8
32.0	2	56	Grass	I	N		H5	FSG 8	Alf-Tim	8
128.0	8	40	Legume	I	N		H6	FSG 9	Alf-SB-Tim	9
64.0	4	12	Grass	I	N		H6	FSG 9	Alf-SB-Tim	9
16.0	1	28	Grass	I	N		H6	FSG 9	Alf-SB-Tim	9
112.0	7	63	Grass	N	N		H7	FSG 1-9	Switch	1-9
176.0	11	42	Grass	N	N		H8	FSG 1-9	BB	1-9
160.0	10	44	Grass	N	N		H9	FSG 1-9	Indian	1-9
32.0	2	32	Legume	I	N		PP1	FSG 1	Aclover-Mfesc	1
96.0	6	30	Grass	I	N		PP1	FSG 1	Aclover-Mfesc	1
32.0	2	32	Legume	I	N		PP1A	FSG 1	Aclover-Orc	1
48.0	3	48	Grass	I	N		PP1A	FSG 1	Aclover-Orc	1
32.0	2	32	Legume	I	N		PP1B	FSG 1	Aclover-Tim	1
24.0	1.5	42	Grass	I	N		PP1B	FSG 1	Aclover-Tim	1
96.0	6	30	Legume	I	N		PP2	FSG 2-3	Alf-SB-Orc	2-3
64.0	4	12	Grass	I	N		PP2	FSG 2-3	Alf-SB-Orc	2-3
64.0	4	64	Grass	I	N		PP2	FSG 2-3	Alf-SB-Orc	2-3
32.0	2	32	Legume	I	N		PP4	FSG 4	Aclover-Mfesc-Tim	4
96.0	6	30	Grass	I	N		PP4	FSG 4	Aclover-Mfesc-Tim	4
16.0	1	28	Grass	I	N		PP4	FSG 4	Aclover-Mfesc-Tim	4
48.0	3	26	Legume	I	N		PP4B	FSG 4	Btrefoil-Mfesc-Tim	4
96.0	6	30	Grass	I	N		PP4B	FSG 4	Btrefoil-Mfesc-Tim	4
16.0	1	28	Grass	I	N		PP4B	FSG 4	Btrefoil-Mfesc-Tim	4
80.0	5	30	Legume	I	N		PP5	FSG 5	RC-LadC-Orc-Mfesc	5
16.0	1	20	Legume	I	N		PP5	FSG 5	RC-LadC-Orc-Mfesc	5
48.0	3	48	Grass	I	N		PP5	FSG 5	RC-LadC-Orc-Mfesc	5
96.0	6	30	Grass	I	N		PP5	FSG 5	RC-LadC-Orc-Mfesc	5
80.0	5	30	Legume	I	N		PP5B	FSG 5	RC-LadC-Festu-Mfesc	5
16.0	1	20	Legume	I	N		PP5B	FSG 5	RC-LadC-Festu-Mfesc	5
112.0	7	36	Grass	I	N		PP5B	FSG 5	RC-LadC-Festu-Mfesc	5
96.0	6	30	Grass	I	N		PP5B	FSG 5	RC-LadC-Festu-Mfesc	5
80.0	5	30	Legume	I	N		PP6	FSG 6	RC-Orc-SB	6
64.0	4	64	Grass	I	N		PP6	FSG 6	RC-Orc-SB	6
64.0	4	12	Grass	I	N		PP6	FSG 6	RC-Orc-SB	6
32.0	2	32	Legume	I	N		PP7	FSG 7	Aclover-Mfesc-Tim-Rtop	7
96.0	6	30	Grass	I	N		PP7	FSG 7	Aclover-Mfesc-Tim-Rtop	7
16.0	1	28	Grass	I	N		PP7	FSG 7	Aclover-Mfesc-Tim-Rtop	7
16.0	1	114	Grass	I	N		PP7	FSG 7	Aclover-Mfesc-Tim-Rtop	7
48.0	3	26	Legume	I	N		PP7B	FSG 7	Btrefoil-Mfesc-Tim-Rtop	7
96.0	6	30	Grass	I	N		PP7B	FSG 7	Btrefoil-Mfesc-Tim-Rtop	7
16.0	1	28	Grass	I	N		PP7B	FSG 7	Btrefoil-Mfesc-Tim-Rtop	7
16.0	1	114	Grass	I	N		PP7B	FSG 7	Btrefoil-Mfesc-Tim-Rtop	7
16.0	1	20	Legume	I	N		PP8	FSG 8	LadC-Orc-Mfesc	8
48.0	3	48	Grass	I	N		PP8	FSG 8	LadC-Orc-Mfesc	8
96.0	6	30	Grass	I	N		PP8	FSG 8	LadC-Orc-Mfesc	8
16.0	1	20	Legume	I	N		PP8B	FSG 8	LadC-Festu-Mfesc	8
112.0	7	36	Grass	I	N		PP8B	FSG 8	LadC-Festu-Mfesc	8
96.0	6	30	Grass	I	N		PP8B	FSG 8	LadC-Festu-Mfesc	8
80.0	5	30	Legume	I	N		PP9	FSG 9	RC-Orc-Mfesc	9
48.0	3	48	Grass	I	N		PP9	FSG 9	RC-Orc-Mfesc	9
96.0	6	30	Grass	I	N		PP9	FSG 9	RC-Orc-Mfesc	9
64.0	4	200	Grass	I	N		PHS1	FSG 1,4,7	KB-Mfesc-LadC	1,4,7
64.0	4	20	Grass	I	N		PHS1	FSG 1,4,7	KB-Mfesc-LadC	1,4,7
16.0	1	20	Legume	I	N		PHS1	FSG 1,4,7	KB-Mfesc-LadC	1,4,7
64.0	4	200	Grass	I	N		PHS1A	FSG 1,4,7	KB-Mfesc-Btrefoil	1,4,7
64.0	4	20	Grass	I	N		PHS1A	FSG 1,4,7	KB-Mfesc-Btrefoil	1,4,7
48.0	3	26	Legume	I	N		PHS1A	FSG 1,4,7	KB-Mfesc-Btrefoil	1,4,7
32.0	2	100	Grass	I	N		PHS2	FSG 5-8	KB-Festu-LadC	5-8

112.0	7	35	Grass	I	N		PHS2	FSG 5-8	KB-Festu-LadC	5-8
16.0	1	20	Legume	I	N		PHS2	FSG 5-8	KB-Festu-LadC	5-8
32.0	2	100	Grass	I	N		PHS2A	FSG 5-8	KB-Prye-LadC	5-8
112.0	7	35	Grass	I	N		PHS2A	FSG 5-8	KB-Prye-LadC	5-8
16.0	1	20	Legume	I	N		PHS2A	FSG 5-8	KB-Prye-LadC	5-8
96.0	6	30	Legume	I	N		PHS3	FSG 2-3	Alf-Orc	2-3
48.0	3	48	Grass	I	N		PHS3	FSG 2-3	Alf-Orc	2-3

CRP MIXES

REVISION DATE: 11/30/2020

criteria: 0

STD	Mix #	std-mix	Common Name	Scientific Name	PLS (oz./A)	PLS (lbs./A)	Seeds/Square Foot	Type	Intro / Native	Poll. (Y/N)	Mix No.	MR	Mix Components
		LEAVE THIS ROW AS IS							I	Y			
		LEAVE THIS ROW AS IS							N	Y			
1	CP1-1-Alf-SB-Tim	1-CP1-1-Alf-SB-Tim	Alfalfa	Medicago sativa	96.00	6		Legume	I	N	CP1-1		Alf-SB-Tim
1	CP1-1-Alf-SB-Tim	1-CP1-1-Alf-SB-Tim	Smooth Bromegrass	Bromus inermis	48.00	3		Grass	I	N	CP1-1		Alf-SB-Tim
1	CP1-1-Alf-SB-Tim	1-CP1-1-Alf-SB-Tim	Timothy	Phleum pratense	32.00	2		Grass	I	N	CP1-1		Alf-SB-Tim
1	CP1-2-RC-Orc-Tim	1-CP1-2-RC-Orc-Tim	Red Clover	Trifolium pratense	80.00	5		Legume	I	N	CP1-2		RC-Orc-Tim
1	CP1-2-RC-Orc-Tim	1-CP1-2-RC-Orc-Tim	Orchardgrass	Dactylis glomerata L.	48.00	3		Grass	I	N	CP1-2		RC-Orc-Tim
1	CP1-2-RC-Orc-Tim	1-CP1-2-RC-Orc-Tim	Timothy	Phleum pratense	32.00	2		Grass	I	N	CP1-2		RC-Orc-Tim
1	CP1-3-Alf-Orc-Tim	1-CP1-3-Alf-Orc-Tim	Alfalfa	Medicago sativa	96.00	6		Legume	I	N	CP1-3		Alf-Orc-Tim
1	CP1-3-Alf-Orc-Tim	1-CP1-3-Alf-Orc-Tim	Orchardgrass	Dactylis glomerata L.	48.00	3		Grass	I	N	CP1-3		Alf-Orc-Tim
1	CP1-3-Alf-Orc-Tim	1-CP1-3-Alf-Orc-Tim	Timothy	Phleum pratense	32.00	2		Grass	I	N	CP1-3		Alf-Orc-Tim
1	CP1-4-RC-SB-Tim	1-CP1-4-RC-SB-Tim	Red Clover	Trifolium pratense	80.00	5		Legume	I	N	CP1-4		RC-SB-Tim
1	CP1-4-RC-SB-Tim	1-CP1-4-RC-SB-Tim	Smooth Bromegrass	Bromus inermis	48.00	3		Grass	I	N	CP1-4		RC-SB-Tim
1	CP1-4-RC-SB-Tim	1-CP1-4-RC-SB-Tim	Timothy	Phleum pratense	32.00	2		Grass	I	N	CP1-4		RC-SB-Tim
1	CP1-5-RC-SB-Tim-Orc	1-CP1-5-RC-SB-Tim-Orc	Red Clover	Trifolium pratense	80.00	5		Legume	I	N	CP1-5		RC-SB-Tim-Orc
1	CP1-5-RC-SB-Tim-Orc	1-CP1-5-RC-SB-Tim-Orc	Smooth Bromegrass	Bromus inermis	32.00	2		Grass	I	N	CP1-5		RC-SB-Tim-Orc
1	CP1-5-RC-SB-Tim-Orc	1-CP1-5-RC-SB-Tim-Orc	Timothy	Phleum pratense	32.00	2		Grass	I	N	CP1-5		RC-SB-Tim-Orc
1	CP1-5-RC-SB-Tim-Orc	1-CP1-5-RC-SB-Tim-Orc	Orchardgrass	Dactylis glomerata L.	16.00	1		Grass	I	N	CP1-5		RC-SB-Tim-Orc
1	CP1-6-RC-Tim-Orc-Rtop-LadC	1-CP1-6-RC-Tim-Orc-Rtop-LadC	Red Clover	Trifolium pratense	80.00	5		Legume	I	N	CP1-6		RC-Tim-Orc-Rtop-LadC
1	CP1-6-RC-Tim-Orc-Rtop-LadC	1-CP1-6-RC-Tim-Orc-Rtop-LadC	Timothy	Phleum pratense	32.00	2		Grass	I	N	CP1-6		RC-Tim-Orc-Rtop-LadC
1	CP1-6-RC-Tim-Orc-Rtop-LadC	1-CP1-6-RC-Tim-Orc-Rtop-LadC	Orchardgrass	Dactylis glomerata L.	16.00	1		Grass	I	N	CP1-6		RC-Tim-Orc-Rtop-LadC
1	CP1-6-RC-Tim-Orc-Rtop-LadC	1-CP1-6-RC-Tim-Orc-Rtop-LadC	Redtop	Agrostis gigantea	16.00	1		Grass	I	N	CP1-6		RC-Tim-Orc-Rtop-LadC
1	CP1-6-RC-Tim-Orc-Rtop-LadC	1-CP1-6-RC-Tim-Orc-Rtop-LadC	White Ladino Clover	Trifolium repens	8.00	0.5		Legume	I	N	CP1-6		RC-Tim-Orc-Rtop-LadC
1	CP1-7-Alf-Rtop-Tim-Orc	1-CP1-7-Alf-Rtop-Tim-Orc	Alfalfa	Medicago sativa	96.00	6		Legume	I	N	CP1-7		Alf-Rtop-Tim-Orc
1	CP1-7-Alf-Rtop-Tim-Orc	1-CP1-7-Alf-Rtop-Tim-Orc	Redtop	Agrostis gigantea	32.00	2		Grass	I	N	CP1-7		Alf-Rtop-Tim-Orc
1	CP1-7-Alf-Rtop-Tim-Orc	1-CP1-7-Alf-Rtop-Tim-Orc	Timothy	Phleum pratense	32.00	2		Grass	I	N	CP1-7		Alf-Rtop-Tim-Orc
1	CP1-7-Alf-Rtop-Tim-Orc	1-CP1-7-Alf-Rtop-Tim-Orc	Orchardgrass	Dactylis glomerata L.	16.00	1		Grass	I	N	CP1-7		Alf-Rtop-Tim-Orc
1	CP1-8-RC-KB-Orc-Rtop	1-CP1-8-RC-KB-Orc-Rtop	Red Clover	Trifolium pratense	80.00	5		Legume	I	N	CP1-8		RC-KB-Orc-Rtop
1	CP1-8-RC-KB-Orc-Rtop	1-CP1-8-RC-KB-Orc-Rtop	Kentucky Bluegrass	Poa pratensis	32.00	2		Grass	I	N	CP1-8		RC-KB-Orc-Rtop
1	CP1-8-RC-KB-Orc-Rtop	1-CP1-8-RC-KB-Orc-Rtop	Orchardgrass	Dactylis glomerata L.	16.00	1		Grass	I	N	CP1-8		RC-KB-Orc-Rtop
1	CP1-8-RC-KB-Orc-Rtop	1-CP1-8-RC-KB-Orc-Rtop	Redtop	Agrostis gigantea	16.00	1		Grass	I	N	CP1-8		RC-KB-Orc-Rtop
2	CP2_1-BB-Switch-Cmilkvetch-Besus-Ycone	2-CP2_1-BB-Switch-Cmilkvetch-Besus-Ycone	Big Bluestem	Andropogon gerardii	48.00	3		Grass	N	N	CP2_1		BB-Switch-Cmilkvetch-Besus-Ycone
2	CP2_1-BB-Switch-Cmilkvetch-Besus-Ycone	2-CP2_1-BB-Switch-Cmilkvetch-Besus-Ycone	Switchgrass	Panicum virgatum	16.00	1		Grass	N	N	CP2_1		BB-Switch-Cmilkvetch-Besus-Ycone
2	CP2_1-BB-Switch-Cmilkvetch-Besus-Ycone	2-CP2_1-BB-Switch-Cmilkvetch-Besus-Ycone	Canada Milkvetch	Astragalus canadensis	2.00	0.125		Legume	N	N	CP2_1		BB-Switch-Cmilkvetch-Besus-Ycone
2	CP2_1-BB-Switch-Cmilkvetch-Besus-Ycone	2-CP2_1-BB-Switch-Cmilkvetch-Besus-Ycone	Black-eyed Susan	Rudbeckia hirta	1.00	0.0625		Forb	N	N	CP2_1		BB-Switch-Cmilkvetch-Besus-Ycone
2	CP2_1-BB-Switch-Cmilkvetch-Besus-Ycone	2-CP2_1-BB-Switch-Cmilkvetch-Besus-Ycone	Yellow Coneflower	Ratibida pinnata	1.00	0.0625		Forb	N	N	CP2_1		BB-Switch-Cmilkvetch-Besus-Ycone
2	CP2_2-BB-Switch-Ttrefoil-Besus-Ycone	2-CP2_2-BB-Switch-Ttrefoil-Besus-Ycone	Big Bluestem	Andropogon gerardii	48.00	3		Grass	N	N	CP2_2		BB-Switch-Ttrefoil-Besus-Ycone
2	CP2_2-BB-Switch-Ttrefoil-Besus-Ycone	2-CP2_2-BB-Switch-Ttrefoil-Besus-Ycone	Switchgrass	Panicum virgatum	16.00	1		Grass	N	N	CP2_2		BB-Switch-Ttrefoil-Besus-Ycone
2	CP2_2-BB-Switch-Ttrefoil-Besus-Ycone	2-CP2_2-BB-Switch-Ttrefoil-Besus-Ycone	Showy Tick Trefoil	Desmodium canadense	6.00	0.375		Legume	N	N	CP2_2		BB-Switch-Ttrefoil-Besus-Ycone
2	CP2_2-BB-Switch-Ttrefoil-Besus-Ycone	2-CP2_2-BB-Switch-Ttrefoil-Besus-Ycone	Black-eyed Susan	Rudbeckia hirta	1.00	0.0625		Forb	N	N	CP2_2		BB-Switch-Ttrefoil-Besus-Ycone
2	CP2_2-BB-Switch-Ttrefoil-Besus-Ycone	2-CP2_2-BB-Switch-Ttrefoil-Besus-Ycone	Yellow Coneflower	Ratibida pinnata	1.00	0.0625		Forb	N	N	CP2_2		BB-Switch-Ttrefoil-Besus-Ycone
2	CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycon	2-CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-Be	Little Bluestem	Schizachyrium scoparium	24.00	1.5		Grass	N	N	CP2_3		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
2	CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycon	2-CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-Be	Sideoats Grama	Bouteloua curtipendula	16.00	1		Grass	N	N	CP2_3		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
2	CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycon	2-CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-Be	Big Bluestem	Andropogon gerardii	8.00	0.5		Grass	N	N	CP2_3		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
2	CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycon	2-CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-Be	Indiangrass	Sorghastrum nutans	8.00	0.5		Grass	N	N	CP2_3		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone

2	CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycon	2-CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-Be	Switchgrass	Panicum virgatum	8.00	0.5		Grass	N	N	CP2_3		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
2	CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycon	2-CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-Be	Purple Prairie Clover	Dalea purpurea	2.00	0.125		Legume	N	N	CP2_3		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
2	CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycon	2-CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-Be	Bergamot	Monarda fistulosa	1.00	0.0625		Forb	N	N	CP2_3		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
2	CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycon	2-CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-Be	Yellow Coneflower	Ratibida pinnata	1.00	0.0625		Forb	N	N	CP2_3		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
2	CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone	2-CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus-Y	Little Bluestem	Schizachyrium scoparium	20.00	1.25		Grass	N	N	CP2_4		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
2	CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone	2-CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus-Y	Canada Wildrye	Elymus canadensis	16.00	1		Grass	N	N	CP2_4		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
2	CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone	2-CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus-Y	Indiangrass	Sorghastrum nutans	16.00	1		Grass	N	N	CP2_4		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
2	CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone	2-CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus-Y	Big Bluestem	Andropogon gerardii	8.00	0.5		Grass	N	N	CP2_4		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
2	CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone	2-CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus-Y	Switchgrass	Panicum virgatum	8.00	0.5		Grass	N	N	CP2_4		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
2	CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone	2-CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus-Y	Bergamot	Monarda fistulosa	1.00	0.0625		Forb	N	N	CP2_4		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
2	CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone	2-CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus-Y	Black-eyed Susan	Rudbeckia hirta	1.00	0.0625		Forb	N	N	CP2_4		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
2	CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone	2-CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus-Y	Yellow Coneflower	Ratibida pinnata	1.00	0.0625		Forb	N	N	CP2_4		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
2	CP2_5-BB-Sgrama-Indian-PPclover-Sgrod-Ycone	2-CP2_5-BB-Sgrama-Indian-PPclover-Sgrod-Ycone	Big Bluestem	Andropogon gerardii	24.00	1.5		Grass	N	N	CP2_5		BB-Sgrama-Indian-PPclover-Sgrod-Ycone
2	CP2_5-BB-Sgrama-Indian-PPclover-Sgrod-Ycone	2-CP2_5-BB-Sgrama-Indian-PPclover-Sgrod-Ycone	Sideoats Grama	Bouteloua curtipendula	24.00	1.5		Grass	N	N	CP2_5		BB-Sgrama-Indian-PPclover-Sgrod-Ycone
2	CP2_5-BB-Sgrama-Indian-PPclover-Sgrod-Ycone	2-CP2_5-BB-Sgrama-Indian-PPclover-Sgrod-Ycone	Indiangrass	Sorghastrum nutans	8.00	0.5		Grass	N	N	CP2_5		BB-Sgrama-Indian-PPclover-Sgrod-Ycone
2	CP2_5-BB-Sgrama-Indian-PPclover-Sgrod-Ycone	2-CP2_5-BB-Sgrama-Indian-PPclover-Sgrod-Ycone	Purple Prairie Clover	Dalea purpurea	2.00	0.125		Legume	N	N	CP2_5		BB-Sgrama-Indian-PPclover-Sgrod-Ycone
2	CP2_5-BB-Sgrama-Indian-PPclover-Sgrod-Ycone	2-CP2_5-BB-Sgrama-Indian-PPclover-Sgrod-Ycone	Stiff Goldenrod	Oligoneuron rigidum	1.00	0.0625		Forb	N	N	CP2_5		BB-Sgrama-Indian-PPclover-Sgrod-Ycone
2	CP2_5-BB-Sgrama-Indian-PPclover-Sgrod-Ycone	2-CP2_5-BB-Sgrama-Indian-PPclover-Sgrod-Ycone	Yellow Coneflower	Ratibida pinnata	1.00	0.0625		Forb	N	N	CP2_5		BB-Sgrama-Indian-PPclover-Sgrod-Ycone
2	CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciro	2-CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bverv	Big Bluestem	Andropogon gerardii	16.00	1		Grass	N	N	CP2_6		BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
2	CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciro	2-CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bverv	Canada Wildrye	Elymus canadensis	16.00	1		Grass	N	N	CP2_6		BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
2	CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciro	2-CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bverv	Indiangrass	Sorghastrum nutans	16.00	1		Grass	N	N	CP2_6		BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
2	CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciro	2-CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bverv	Switchgrass	Panicum virgatum	16.00	1		Grass	N	N	CP2_6		BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
2	CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciro	2-CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bverv	Prairie Cordgrass	Spartina pectinata	8.00	0.5		Grass	N	N	CP2_6		BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
2	CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciro	2-CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bverv	Cupplant	Silphium perfoliatum	2.00	0.125		Forb	N	N	CP2_6		BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
2	CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciro	2-CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bverv	Blue Vervain	Verbena hastata	1.00	0.0625		Forb	N	N	CP2_6		BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
2	CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciro	2-CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bverv	Common Ironweed	Vernonia fasciculata	1.00	0.0625		Forb	N	N	CP2_6		BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
2	CP2_7-Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone	2-CP2_7-Switch-BB-Cwrye-Pcord-Berg-NEaster-Yc	Switchgrass	Panicum virgatum	32.00	2		Grass	N	N	CP2_7		Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
2	CP2_7-Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone	2-CP2_7-Switch-BB-Cwrye-Pcord-Berg-NEaster-Yc	Big Bluestem	Andropogon gerardii	16.00	1		Grass	N	N	CP2_7		Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
2	CP2_7-Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone	2-CP2_7-Switch-BB-Cwrye-Pcord-Berg-NEaster-Yc	Canada Wildrye	Elymus canadensis	16.00	1		Grass	N	N	CP2_7		Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
2	CP2_7-Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone	2-CP2_7-Switch-BB-Cwrye-Pcord-Berg-NEaster-Yc	Prairie Cordgrass	Spartina pectinata	4.00	0.25		Grass	N	N	CP2_7		Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
2	CP2_7-Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone	2-CP2_7-Switch-BB-Cwrye-Pcord-Berg-NEaster-Yc	Bergamot	Monarda fistulosa	1.00	0.0625		Forb	N	N	CP2_7		Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
2	CP2_7-Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone	2-CP2_7-Switch-BB-Cwrye-Pcord-Berg-NEaster-Yc	New England Aster	Symphyotrichum novae-a	1.00	0.0625		Forb	N	N	CP2_7		Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
2	CP2_7-Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone	2-CP2_7-Switch-BB-Cwrye-Pcord-Berg-NEaster-Yc	Yellow Coneflower	Ratibida pinnata	1.00	0.0625		Forb	N	N	CP2_7		Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
4	CP4D-1-RC-SB-Tim-Orc-RC	4-CP4D-1-RC-SB-Tim-Orc-RC	Red Clover	Trifolium pratense	96.00	6		Legume	I	N	CP4D-1		RC-SB-Tim-Orc-RC
4	CP4D-1-RC-SB-Tim-Orc-RC	4-CP4D-1-RC-SB-Tim-Orc-RC	Smooth Bromegrass	Bromus inermis	32.00	2		Grass	I	N	CP4D-1		RC-SB-Tim-Orc-RC
4	CP4D-1-RC-SB-Tim-Orc-RC	4-CP4D-1-RC-SB-Tim-Orc-RC	Timothy	Phleum pratense	32.00	2		Grass	I	N	CP4D-1		RC-SB-Tim-Orc-RC
4	CP4D-1-RC-SB-Tim-Orc-RC	4-CP4D-1-RC-SB-Tim-Orc-RC	Orchardgrass	Dactylis glomerata L.	8.00	0.5		Grass	I	N	CP4D-1		RC-SB-Tim-Orc-RC
4	CP4D-1-RC-SB-Tim-Orc-RC	4-CP4D-1-RC-SB-Tim-Orc-RC	Red Clover	Trifolium pratense	8.00	0.5		Legume	I	N	CP4D-1		RC-SB-Tim-Orc-RC
4	CP4D-2-Alf-SB-Tim-Orc	4-CP4D-2-Alf-SB-Tim-Orc	Alfalfa	Medicago sativa	112.00	7		Legume	I	N	CP4D-2		Alf-SB-Tim-Orc
4	CP4D-2-Alf-SB-Tim-Orc	4-CP4D-2-Alf-SB-Tim-Orc	Smooth Bromegrass	Bromus inermis	32.00	2		Grass	I	N	CP4D-2		Alf-SB-Tim-Orc
4	CP4D-2-Alf-SB-Tim-Orc	4-CP4D-2-Alf-SB-Tim-Orc	Timothy	Phleum pratense	16.00	1		Grass	I	N	CP4D-2		Alf-SB-Tim-Orc
4	CP4D-2-Alf-SB-Tim-Orc	4-CP4D-2-Alf-SB-Tim-Orc	Orchardgrass	Dactylis glomerata L.	8.00	0.5		Grass	I	N	CP4D-2		Alf-SB-Tim-Orc
4	CP4D-3-RC-Tim-SB-Orc	4-CP4D-3-RC-Tim-SB-Orc	Red Clover	Trifolium pratense	96.00	6		Legume	I	N	CP4D-3		RC-Tim-SB-Orc
4	CP4D-3-RC-Tim-SB-Orc	4-CP4D-3-RC-Tim-SB-Orc	Timothy	Phleum pratense	32.00	2		Grass	I	N	CP4D-3		RC-Tim-SB-Orc
4	CP4D-3-RC-Tim-SB-Orc	4-CP4D-3-RC-Tim-SB-Orc	Smooth Bromegrass	Bromus inermis	32.00	2		Grass	I	N	CP4D-3		RC-Tim-SB-Orc
4	CP4D-3-RC-Tim-SB-Orc	4-CP4D-3-RC-Tim-SB-Orc	Orchardgrass	Dactylis glomerata L.	8.00	0.5		Grass	I	N	CP4D-3		RC-Tim-SB-Orc
4	CP4D-4-RC-Tim-Orc-LadC	4-CP4D-4-RC-Tim-Orc-LadC	Red Clover	Trifolium pratense	96.00	6		Legume	I	N	CP4D-4		RC-Tim-Orc-LadC
4	CP4D-4-RC-Tim-Orc-LadC	4-CP4D-4-RC-Tim-Orc-LadC	Timothy	Phleum pratense	32.00	2		Grass	I	N	CP4D-4		RC-Tim-Orc-LadC
4	CP4D-4-RC-Tim-Orc-LadC	4-CP4D-4-RC-Tim-Orc-LadC	Orchardgrass	Dactylis glomerata L.	16.00	1		Grass	I	N	CP4D-4		RC-Tim-Orc-LadC

4	CP4D-4-RC-Tim-Orc-LadC	4-CP4D-4-RC-Tim-Orc-LadC	White Ladino Clover	Trifolium repens	8.00	0.5		Legume	I	N	CP4D-4		RC-Tim-Orc-LadC
4	CP4D-5-Indian-BB-Switch-Cmilkvetch-Besus-Ycone	4-CP4D-5-Indian-BB-Switch-Cmilkvetch-Besus-Yco	Indiangrass	Sorghastrum nutans	48.00	3		Grass	N	N	CP4D-5		Indian-BB-Switch-Cmilkvetch-Besus-Ycone
4	CP4D-5-Indian-BB-Switch-Cmilkvetch-Besus-Ycone	4-CP4D-5-Indian-BB-Switch-Cmilkvetch-Besus-Yco	Big Bluestem	Andropogon gerardii	16.00	1		Grass	N	N	CP4D-5		Indian-BB-Switch-Cmilkvetch-Besus-Ycone
4	CP4D-5-Indian-BB-Switch-Cmilkvetch-Besus-Ycone	4-CP4D-5-Indian-BB-Switch-Cmilkvetch-Besus-Yco	Switchgrass	Panicum virgatum	16.00	1		Grass	N	N	CP4D-5		Indian-BB-Switch-Cmilkvetch-Besus-Ycone
4	CP4D-5-Indian-BB-Switch-Cmilkvetch-Besus-Ycone	4-CP4D-5-Indian-BB-Switch-Cmilkvetch-Besus-Yco	Canada Milkvetch	Astragalus canadensis	2.00	0.125		Legume	N	N	CP4D-5		Indian-BB-Switch-Cmilkvetch-Besus-Ycone
4	CP4D-5-Indian-BB-Switch-Cmilkvetch-Besus-Ycone	4-CP4D-5-Indian-BB-Switch-Cmilkvetch-Besus-Yco	Black-eyed Susan	Rudbeckia hirta	1.00	0.0625		Forb	N	N	CP4D-5		Indian-BB-Switch-Cmilkvetch-Besus-Ycone
4	CP4D-5-Indian-BB-Switch-Cmilkvetch-Besus-Ycone	4-CP4D-5-Indian-BB-Switch-Cmilkvetch-Besus-Yco	Yellow Coneflower	Ratibida pinnata	1.00	0.0625		Forb	N	N	CP4D-5		Indian-BB-Switch-Cmilkvetch-Besus-Ycone
4	CP4D-6-Indian-BB-Switch-LB-Cmilkvetch-Besus-Ycone	4-CP4D-6-Indian-BB-Switch-LB-Cmilkvetch-Besus-	Indiangrass	Sorghastrum nutans	48.00	3		Grass	N	N	CP4D-6		Indian-BB-Switch-LB-Cmilkvetch-Besus-Ycone
4	CP4D-6-Indian-BB-Switch-LB-Cmilkvetch-Besus-Ycone	4-CP4D-6-Indian-BB-Switch-LB-Cmilkvetch-Besus-	Big Bluestem	Andropogon gerardii	16.00	1		Grass	N	N	CP4D-6		Indian-BB-Switch-LB-Cmilkvetch-Besus-Ycone
4	CP4D-6-Indian-BB-Switch-LB-Cmilkvetch-Besus-Ycone	4-CP4D-6-Indian-BB-Switch-LB-Cmilkvetch-Besus-	Switchgrass	Panicum virgatum	16.00	1		Grass	N	N	CP4D-6		Indian-BB-Switch-LB-Cmilkvetch-Besus-Ycone
4	CP4D-6-Indian-BB-Switch-LB-Cmilkvetch-Besus-Ycone	4-CP4D-6-Indian-BB-Switch-LB-Cmilkvetch-Besus-	Little Bluestem	Schizachyrium scoparium	16.00	1		Grass	N	N	CP4D-6		Indian-BB-Switch-LB-Cmilkvetch-Besus-Ycone
4	CP4D-6-Indian-BB-Switch-LB-Cmilkvetch-Besus-Ycone	4-CP4D-6-Indian-BB-Switch-LB-Cmilkvetch-Besus-	Canada Milkvetch	Astragalus canadensis	2.00	0.125		Legume	N	N	CP4D-6		Indian-BB-Switch-LB-Cmilkvetch-Besus-Ycone
4	CP4D-6-Indian-BB-Switch-LB-Cmilkvetch-Besus-Ycone	4-CP4D-6-Indian-BB-Switch-LB-Cmilkvetch-Besus-	Black-eyed Susan	Rudbeckia hirta	1.00	0.0625		Forb	N	N	CP4D-6		Indian-BB-Switch-LB-Cmilkvetch-Besus-Ycone
4	CP4D-6-Indian-BB-Switch-LB-Cmilkvetch-Besus-Ycone	4-CP4D-6-Indian-BB-Switch-LB-Cmilkvetch-Besus-	Yellow Coneflower	Ratibida pinnata	1.00	0.0625		Forb	N	N	CP4D-6		Indian-BB-Switch-LB-Cmilkvetch-Besus-Ycone
4	CP4D-7-Indian-BB-Switch-PPclover-Besus-Ycone	4-CP4D-7-Indian-BB-Switch-PPclover-Besus-Ycone	Indiangrass	Sorghastrum nutans	48.00	3		Grass	N	N	CP4D-7		Indian-BB-Switch-PPclover-Besus-Ycone
4	CP4D-7-Indian-BB-Switch-PPclover-Besus-Ycone	4-CP4D-7-Indian-BB-Switch-PPclover-Besus-Ycone	Big Bluestem	Andropogon gerardii	16.00	1		Grass	N	N	CP4D-7		Indian-BB-Switch-PPclover-Besus-Ycone
4	CP4D-7-Indian-BB-Switch-PPclover-Besus-Ycone	4-CP4D-7-Indian-BB-Switch-PPclover-Besus-Ycone	Switchgrass	Panicum virgatum	16.00	1		Grass	N	N	CP4D-7		Indian-BB-Switch-PPclover-Besus-Ycone
4	CP4D-7-Indian-BB-Switch-PPclover-Besus-Ycone	4-CP4D-7-Indian-BB-Switch-PPclover-Besus-Ycone	Purple Prairie Clover	Dalea purpurea	2.00	0.125		Legume	N	N	CP4D-7		Indian-BB-Switch-PPclover-Besus-Ycone
4	CP4D-7-Indian-BB-Switch-PPclover-Besus-Ycone	4-CP4D-7-Indian-BB-Switch-PPclover-Besus-Ycone	Black-eyed Susan	Rudbeckia hirta	1.00	0.0625		Forb	N	N	CP4D-7		Indian-BB-Switch-PPclover-Besus-Ycone
4	CP4D-7-Indian-BB-Switch-PPclover-Besus-Ycone	4-CP4D-7-Indian-BB-Switch-PPclover-Besus-Ycone	Yellow Coneflower	Ratibida pinnata	1.00	0.0625		Forb	N	N	CP4D-7		Indian-BB-Switch-PPclover-Besus-Ycone
4	CP4D-8-Indian-BB-LB-Switch-PPclover-Besus-Ycone	4-CP4D-8-Indian-BB-LB-Switch-PPclover-Besus-Yc	Indiangrass	Sorghastrum nutans	48.00	3		Grass	N	N	CP4D-8		Indian-BB-LB-Switch-PPclover-Besus-Ycone
4	CP4D-8-Indian-BB-LB-Switch-PPclover-Besus-Ycone	4-CP4D-8-Indian-BB-LB-Switch-PPclover-Besus-Yc	Big Bluestem	Andropogon gerardii	16.00	1		Grass	N	N	CP4D-8		Indian-BB-LB-Switch-PPclover-Besus-Ycone
4	CP4D-8-Indian-BB-LB-Switch-PPclover-Besus-Ycone	4-CP4D-8-Indian-BB-LB-Switch-PPclover-Besus-Yc	Little Bluestem	Schizachyrium scoparium	16.00	1		Grass	N	N	CP4D-8		Indian-BB-LB-Switch-PPclover-Besus-Ycone
4	CP4D-8-Indian-BB-LB-Switch-PPclover-Besus-Ycone	4-CP4D-8-Indian-BB-LB-Switch-PPclover-Besus-Yc	Switchgrass	Panicum virgatum	16.00	1		Grass	N	N	CP4D-8		Indian-BB-LB-Switch-PPclover-Besus-Ycone
4	CP4D-8-Indian-BB-LB-Switch-PPclover-Besus-Ycone	4-CP4D-8-Indian-BB-LB-Switch-PPclover-Besus-Yc	Purple Prairie Clover	Dalea purpurea	2.00	0.125		Legume	N	N	CP4D-8		Indian-BB-LB-Switch-PPclover-Besus-Ycone
4	CP4D-8-Indian-BB-LB-Switch-PPclover-Besus-Ycone	4-CP4D-8-Indian-BB-LB-Switch-PPclover-Besus-Yc	Black-eyed Susan	Rudbeckia hirta	1.00	0.0625		Forb	N	N	CP4D-8		Indian-BB-LB-Switch-PPclover-Besus-Ycone
4	CP4D-8-Indian-BB-LB-Switch-PPclover-Besus-Ycone	4-CP4D-8-Indian-BB-LB-Switch-PPclover-Besus-Yc	Yellow Coneflower	Ratibida pinnata	1.00	0.0625		Forb	N	N	CP4D-8		Indian-BB-LB-Switch-PPclover-Besus-Ycone
4	CP4D-9-Indian-BB-Switch-PPclover-Berg-Ycone	4-CP4D-9-Indian-BB-Switch-PPclover-Berg-Ycone	Indiangrass	Sorghastrum nutans	48.00	3		Grass	N	N	CP4D-9		Indian-BB-Switch-PPclover-Berg-Ycone
4	CP4D-9-Indian-BB-Switch-PPclover-Berg-Ycone	4-CP4D-9-Indian-BB-Switch-PPclover-Berg-Ycone	Big Bluestem	Andropogon gerardii	16.00	1		Grass	N	N	CP4D-9		Indian-BB-Switch-PPclover-Berg-Ycone
4	CP4D-9-Indian-BB-Switch-PPclover-Berg-Ycone	4-CP4D-9-Indian-BB-Switch-PPclover-Berg-Ycone	Switchgrass	Panicum virgatum	16.00	1		Grass	N	N	CP4D-9		Indian-BB-Switch-PPclover-Berg-Ycone
4	CP4D-9-Indian-BB-Switch-PPclover-Berg-Ycone	4-CP4D-9-Indian-BB-Switch-PPclover-Berg-Ycone	Purple Prairie Clover	Dalea purpurea	2.00	0.125		Legume	N	N	CP4D-9		Indian-BB-Switch-PPclover-Berg-Ycone
4	CP4D-9-Indian-BB-Switch-PPclover-Berg-Ycone	4-CP4D-9-Indian-BB-Switch-PPclover-Berg-Ycone	Bergamot	Monarda fistulosa	1.00	0.0625		Forb	N	N	CP4D-9		Indian-BB-Switch-PPclover-Berg-Ycone
4	CP4D-9-Indian-BB-Switch-PPclover-Berg-Ycone	4-CP4D-9-Indian-BB-Switch-PPclover-Berg-Ycone	Yellow Coneflower	Ratibida pinnata	1.00	0.0625		Forb	N	N	CP4D-9		Indian-BB-Switch-PPclover-Berg-Ycone
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swd	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-S	Little Bluestem	Schizachyrium scoparium	24.00	1.5		Grass	N	N	CP25-D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swd	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-S	Sideoats Grama	Bouteloua curtipendula	24.00	1.5		Grass	N	N	CP25-D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swd	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-S	Indiangrass	Sorghastrum nutans	8.00	0.5		Grass	N	N	CP25-D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swd	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-S	Big Bluestem	Andropogon gerardii	4.00	0.25		Grass	N	N	CP25-D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swd	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-S	Prairie Junegrass	Koeleria macrantha	2.00	0.125		Grass	N	N	CP25-D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swd	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-S	Purple Prairie Clover	Dalea purpurea	2.00	0.125		Legume	N	N	CP25-D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swd	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-S	Sand Dropseed	Sporobolus cryptandrus	2.00	0.125		Grass	N	N	CP25-D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swd	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-S	Spiderwort	Tradescantia ohiensis	1.00	0.0625		Forb	N	N	CP25-D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swd	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-S	Hoary Vervain	Verbena stricta	0.50	0.03125		Forb	N	N	CP25-D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swd	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-S	Leadplant	Amorpha canescens	0.50	0.03125		Legume	N	N	CP25-D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swd	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-S	Prairie Tickseed	Coreopsis palmata	0.50	0.03125		Forb	N	N	CP25-D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swd	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-S	Silky Aster	Symphyotrichum pratens	0.50	0.03125		Forb	N	N	CP25-D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swd	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-S	Stiff Goldenrod	Oligoneuron rigidum	0.50	0.03125		Forb	N	N	CP25-D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swd	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-S	Yellow Coneflower	Ratibida pinnata	0.50	0.03125		Forb	N	N	CP25-D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swd	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-S	Prairie Cinquefoil	Potentilla arguta	0.25	0.015625		Forb	N	N	CP25-D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swd	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-S	Spotted Mint	Monarda punctata	0.25	0.015625		Forb	N	N	CP25-D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint

25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclove	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdro	Little Bluestem	Schizachyrium scoparium	24.00	1.5		Grass	N	N	CP25-DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclove	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdro	Sideoats Grama	Bouteloua curtipendula	24.00	1.5		Grass	N	N	CP25-DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclove	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdro	Indiangrass	Sorghastrum nutans	8.00	0.5		Grass	N	N	CP25-DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclove	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdro	Switchgrass	Panicum virgatum	4.00	0.25		Grass	N	N	CP25-DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclove	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdro	Prairie Junegrass	Koeleria macrantha	2.00	0.125		Grass	N	N	CP25-DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclove	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdro	Prairie Dropseed	Sporobolus heterolepis	2.00	0.125		Grass	N	N	CP25-DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclove	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdro	Purple Prairie Clover	Dalea purpurea	2.00	0.125		Legume	N	N	CP25-DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclove	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdro	Round-Headed Bushclover	Lespedeza capitata	2.00	0.125		Legume	N	N	CP25-DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclove	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdro	Bergamot	Monarda fistulosa	1.00	0.0625		Forb	N	N	CP25-DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclove	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdro	Spiderwort	Tradescantia ohiensis	1.00	0.0625		Forb	N	N	CP25-DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclove	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdro	Yellow Coneflower	Ratibida pinnata	1.00	0.0625		Forb	N	N	CP25-DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclove	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdro	Leadplant	Amorpha canescens	0.50	0.03125		Legume	N	N	CP25-DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclove	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdro	Rough Blazing Star	Liatris aspera	0.50	0.03125		Forb	N	N	CP25-DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclove	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdro	Sky-Blue Aster	Symphyotrichum oolenta	0.50	0.03125		Forb	N	N	CP25-DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclove	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdro	Stiff Goldenrod	Oligoneuron rigidum	0.50	0.03125		Forb	N	N	CP25-DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclove	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdro	Prairie Cinquefoil	Potentilla arguta	0.25	0.015625		Forb	N	N	CP25-DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjur	Little Bluestem	Schizachyrium scoparium	24.00	1.5		Grass	N	N	CP25-KBB		Lplant-Rblzstar-Sgrod-Ycone-Berg-Pcinque-SkyAster
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjur	Sideoats Grama	Bouteloua curtipendula	24.00	1.5		Grass	N	N	CP25-KBB		Lplant-Rblzstar-Sgrod-Ycone-Berg-Pcinque-SkyAster
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjur	Indiangrass	Sorghastrum nutans	8.00	0.5		Grass	N	N	CP25-KBB		Lplant-Rblzstar-Sgrod-Ycone-Berg-Pcinque-SkyAster
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjur	Switchgrass	Panicum virgatum	8.00	0.5		Grass	N	N	CP25-KBB		Lplant-Rblzstar-Sgrod-Ycone-Berg-Pcinque-SkyAster
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjur	Wild Lupine	Lupinus perennis	3.00	0.1875		Legume	N	N	CP25-KBB		Lplant-Rblzstar-Sgrod-Ycone-Berg-Pcinque-SkyAster
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjur	Prairie Junegrass	Koeleria macrantha	2.00	0.125		Grass	N	N	CP25-KBB		Lplant-Rblzstar-Sgrod-Ycone-Berg-Pcinque-SkyAster
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjur	Prairie Dropseed	Sporobolus heterolepis	2.00	0.125		Grass	N	N	CP25-KBB		Lplant-Rblzstar-Sgrod-Ycone-Berg-Pcinque-SkyAster
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjur	Purple Prairie Clover	Dalea purpurea	2.00	0.125		Legume	N	N	CP25-KBB		Lplant-Rblzstar-Sgrod-Ycone-Berg-Pcinque-SkyAster
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjur	Pale Purple Coneflower	Echinacea pallida	1.00	0.0625		Forb	N	N	CP25-KBB		Lplant-Rblzstar-Sgrod-Ycone-Berg-Pcinque-SkyAster
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjur	Leadplant	Amorpha canescens	0.50	0.03125		Legume	N	N	CP25-KBB		Lplant-Rblzstar-Sgrod-Ycone-Berg-Pcinque-SkyAster
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjur	Rough Blazing Star	Liatris aspera	0.50	0.03125		Forb	N	N	CP25-KBB		Lplant-Rblzstar-Sgrod-Ycone-Berg-Pcinque-SkyAster
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjur	Stiff Goldenrod	Oligoneuron rigidum	0.50	0.03125		Forb	N	N	CP25-KBB		Lplant-Rblzstar-Sgrod-Ycone-Berg-Pcinque-SkyAster
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjur	Yellow Coneflower	Ratibida pinnata	0.50	0.03125		Forb	N	N	CP25-KBB		Lplant-Rblzstar-Sgrod-Ycone-Berg-Pcinque-SkyAster
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjur	Bergamot	Monarda fistulosa	0.25	0.015625		Forb	N	N	CP25-KBB		Lplant-Rblzstar-Sgrod-Ycone-Berg-Pcinque-SkyAster
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjur	Prairie Cinquefoil	Potentilla arguta	0.25	0.015625		Forb	N	N	CP25-KBB		Lplant-Rblzstar-Sgrod-Ycone-Berg-Pcinque-SkyAster
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjur	Sky-Blue Aster	Symphyotrichum oolenta	0.25	0.015625		Forb	N	N	CP25-KBB		Lplant-Rblzstar-Sgrod-Ycone-Berg-Pcinque-SkyAster
25	CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-	25-CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun	Little Bluestem	Schizachyrium scoparium	24.00	1.5		Grass	N	N	CP25-M		Berg-Besus-NEaster-SkyAster-Ycone-Croot
25	CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-	25-CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun	Indiangrass	Sorghastrum nutans	16.00	1		Grass	N	N	CP25-M		Berg-Besus-NEaster-SkyAster-Ycone-Croot
25	CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-	25-CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun	Big Bluestem	Andropogon gerardii	8.00	0.5		Grass	N	N	CP25-M		Berg-Besus-NEaster-SkyAster-Ycone-Croot
25	CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-	25-CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun	Canada Wildrye	Elymus canadensis	8.00	0.5		Grass	N	N	CP25-M		Berg-Besus-NEaster-SkyAster-Ycone-Croot
25	CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-	25-CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun	Switchgrass	Panicum virgatum	8.00	0.5		Grass	N	N	CP25-M		Berg-Besus-NEaster-SkyAster-Ycone-Croot
25	CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-	25-CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun	Ox-eye Sunflower	Heliopsis helianthoides	1.00	0.0625		Forb	N	N	CP25-M		Berg-Besus-NEaster-SkyAster-Ycone-Croot
25	CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-	25-CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun	Prairie Blazing Star	Liatris pycnostachya	1.00	0.0625		Forb	N	N	CP25-M		Berg-Besus-NEaster-SkyAster-Ycone-Croot
25	CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-	25-CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun	Purple Prairie Clover	Dalea purpurea	1.00	0.0625		Legume	N	N	CP25-M		Berg-Besus-NEaster-SkyAster-Ycone-Croot
25	CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-	25-CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun	Rosinweed	Silphium integrifolium	1.00	0.0625		Forb	N	N	CP25-M		Berg-Besus-NEaster-SkyAster-Ycone-Croot
25	CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-	25-CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun	Bergamot	Monarda fistulosa	0.50	0.03125		Forb	N	N	CP25-M		Berg-Besus-NEaster-SkyAster-Ycone-Croot
25	CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-	25-CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun	Black-eyed Susan	Rudbeckia hirta	0.50	0.03125		Forb	N	N	CP25-M		Berg-Besus-NEaster-SkyAster-Ycone-Croot
25	CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-	25-CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun	New England Aster	Symphyotrichum novae-a	0.50	0.03125		Forb	N	N	CP25-M		Berg-Besus-NEaster-SkyAster-Ycone-Croot
25	CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-	25-CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun	Sky-Blue Aster	Symphyotrichum oolenta	0.50	0.03125		Forb	N	N	CP25-M		Berg-Besus-NEaster-SkyAster-Ycone-Croot
25	CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-	25-CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun	Yellow Coneflower	Ratibida pinnata	0.50	0.03125		Forb	N	N	CP25-M		Berg-Besus-NEaster-SkyAster-Ycone-Croot
25	CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-	25-CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun	Culver's Root	Veronicastrum virginicum	0.25	0.015625		Forb	N	N	CP25-M		Berg-Besus-NEaster-SkyAster-Ycone-Croot
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgras	Canada Wildrye	Elymus canadensis	16.00	1		Grass	N	N	CP25-W		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgras	Switchgrass	Panicum virgatum	16.00	1		Grass	N	N	CP25-W		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot

25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgras	Indiangrass	Sorghastrum nutans	12.00	0.75		Grass	N	N	CP25-W		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgras	Big Bluestem	Andropogon gerardii	8.00	0.5		Grass	N	N	CP25-W		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgras	Prairie Cordgrass	Spartina pectinata	8.00	0.5		Grass	N	N	CP25-W		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgras	Fowl Mannagrass	Glyceria striata	4.00	0.25		Grass	N	N	CP25-W		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgras	Fox Sedge	Carex vulpinoidea	4.00	0.25		Sedge	N	N	CP25-W		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgras	Cupplant	Silphium perfoliatum	2.00	0.125		Forb	N	N	CP25-W		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgras	Showy Tick Trefoil	Desmodium canadense	2.00	0.125		Legume	N	N	CP25-W		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgras	Blue Vervain	Verbena hastata	1.00	0.0625		Forb	N	N	CP25-W		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgras	Golden Alexanders	Zizia aurea	1.00	0.0625		Forb	N	N	CP25-W		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgras	Marsh Milkweed	Asclepias incarnata	1.00	0.0625		Forb	N	N	CP25-W		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgras	Boneset	Eupatorium perfoliatum	0.50	0.03125		Forb	N	N	CP25-W		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgras	Common Ironweed	Vernonia fasciculata	0.50	0.03125		Forb	N	N	CP25-W		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgras	Joe-pye Weed	Eutrochium maculatum	0.50	0.03125		Forb	N	N	CP25-W		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgras	Culver's Root	Veronicastrum virginicum	0.25	0.015625		Forb	N	N	CP25-W		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
25	CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-WWIndig	25-CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-	Switchgrass	Panicum virgatum	24.00	1.5		Grass	N	N	CP25-WM		Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
25	CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-WWIndig	25-CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-	Canada Wildrye	Elymus canadensis	16.00	1		Grass	N	N	CP25-WM		Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
25	CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-WWIndig	25-CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-	Indiangrass	Sorghastrum nutans	12.00	0.75		Grass	N	N	CP25-WM		Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
25	CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-WWIndig	25-CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-	Big Bluestem	Andropogon gerardii	8.00	0.5		Grass	N	N	CP25-WM		Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
25	CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-WWIndig	25-CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-	Prairie Cordgrass	Spartina pectinata	4.00	0.25		Grass	N	N	CP25-WM		Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
25	CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-WWIndig	25-CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-	Cupplant	Silphium perfoliatum	2.00	0.125		Forb	N	N	CP25-WM		Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
25	CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-WWIndig	25-CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-	White wild indigo	Baptisia alba	1.50	0.09375		Legume	N	N	CP25-WM		Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
25	CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-WWIndig	25-CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-	Black-eyed Susan	Rudbeckia hirta	0.50	0.03125		Forb	N	N	CP25-WM		Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
25	CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-WWIndig	25-CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-	Common Ironweed	Vernonia fasciculata	0.50	0.03125		Forb	N	N	CP25-WM		Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
25	CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-WWIndig	25-CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-	Golden Alexanders	Zizia aurea	0.50	0.03125		Forb	N	N	CP25-WM		Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
25	CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-WWIndig	25-CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-	New England Aster	Symphyotrichum novae-a	0.50	0.03125		Forb	N	N	CP25-WM		Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
25	CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-WWIndig	25-CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-	Prairie Blazing Star	Liatris pycnostachya	0.50	0.03125		Forb	N	N	CP25-WM		Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
25	CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-WWIndig	25-CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-	Yellow Coneflower	Ratibida pinnata	0.50	0.03125		Forb	N	N	CP25-WM		Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
25	CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-WWIndig	25-CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-	Bergamot	Monarda fistulosa	0.25	0.015625		Forb	N	N	CP25-WM		Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
25	CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-WWIndig	25-CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-	Great St. John's Wort	Hypericum ascyron	0.25	0.015625		Forb	N	N	CP25-WM		Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
33	CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHbushclover	33-CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHb	Little Bluestem	Schizachyrium scoparium	32.00	2		Grass	N	N	CP33-1		Wsun-Ycone-Besus
33	CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHbushclover	33-CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHb	Sideoats Grama	Bouteloua curtipendula	32.00	2		Grass	N	N	CP33-1		Wsun-Ycone-Besus
33	CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHbushclover	33-CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHb	Canada Wildrye	Elymus canadensis	8.00	0.5		Grass	N	N	CP33-1		Wsun-Ycone-Besus
33	CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHbushclover	33-CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHb	Indiangrass	Sorghastrum nutans	8.00	0.5		Grass	N	N	CP33-1		Wsun-Ycone-Besus
33	CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHbushclover	33-CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHb	Purple Prairie Clover	Dalea purpurea	2.00	0.125		Legume	N	N	CP33-1		Wsun-Ycone-Besus
33	CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHbushclover	33-CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHb	Round-Headed Bushclover	Lespedeza capitata	2.00	0.125		Legume	N	N	CP33-1		Wsun-Ycone-Besus
33	CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHbushclover	33-CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHb	Purple Coneflower	Echinacea purpurea	1.00	0.0625		Forb	N	N	CP33-1		Wsun-Ycone-Besus
33	CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHbushclover	33-CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHb	Stiff Goldenrod	Oligoneuron rigidum	1.00	0.0625		Forb	N	N	CP33-1		Wsun-Ycone-Besus
33	CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHbushclover	33-CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHb	Fewleaf Sunflower	Helianthus occidentalis	1.00	0.0625		Forb	N	N	CP33-1		Wsun-Ycone-Besus
33	CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHbushclover	33-CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHb	Yellow Coneflower	Ratibida pinnata	1.00	0.0625		Forb	N	N	CP33-1		Wsun-Ycone-Besus
33	CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHbushclover	33-CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHb	Black-eyed Susan	Rudbeckia hirta	0.75	0.046875		Forb	N	N	CP33-1		Wsun-Ycone-Besus
33	CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rblzst	33-CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclo	Little Bluestem	Schizachyrium scoparium	24.00	1.5		Grass	N	N	CP33-2		SkyAster-Sgrod-Wsun
33	CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rblzst	33-CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclo	Sideoats Grama	Bouteloua curtipendula	20.00	1.25		Grass	N	N	CP33-2		SkyAster-Sgrod-Wsun
33	CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rblzst	33-CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclo	Indiangrass	Sorghastrum nutans	16.00	1		Grass	N	N	CP33-2		SkyAster-Sgrod-Wsun
33	CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rblzst	33-CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclo	Canada Wildrye	Elymus canadensis	8.00	0.5		Grass	N	N	CP33-2		SkyAster-Sgrod-Wsun
33	CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rblzst	33-CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclo	Purple Coneflower	Echinacea purpurea	2.00	0.125		Forb	N	N	CP33-2		SkyAster-Sgrod-Wsun
33	CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rblzst	33-CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclo	Purple Prairie Clover	Dalea purpurea	2.00	0.125		Legume	N	N	CP33-2		SkyAster-Sgrod-Wsun
33	CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rblzst	33-CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclo	Rough Blazing Star	Liatris aspera	2.00	0.125		Forb	N	N	CP33-2		SkyAster-Sgrod-Wsun
33	CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rblzst	33-CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclo	Black-eyed Susan	Rudbeckia hirta	1.00	0.0625		Forb	N	N	CP33-2		SkyAster-Sgrod-Wsun
33	CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rblzst	33-CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclo	Sky-Blue Aster	Symphyotrichum oolenta	1.00	0.0625		Forb	N	N	CP33-2		SkyAster-Sgrod-Wsun

33	CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rblzs	33-CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclov	Stiff Goldenrod	Oligoneuron rigidum	1.00	0.0625		Forb	N	N	CP33-2		SkyAster-Sgrod-Wsun
33	CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rblzs	33-CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclov	Fewleaf Sunflower	Helianthus occidentalis	1.00	0.0625		Forb	N	N	CP33-2		SkyAster-Sgrod-Wsun
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord-I	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedg	Canada Wildrye	Elymus canadensis	16.00	1		Grass	N	N	CP38B-WPHRA		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord-I	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedg	Indiangrass	Sorghastrum nutans	12.00	0.75		Grass	N	N	CP38B-WPHRA		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord-I	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedg	Switchgrass	Panicum virgatum	12.00	0.75		Grass	N	N	CP38B-WPHRA		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord-I	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedg	Big Bluestem	Andropogon gerardii	8.00	0.5		Grass	N	N	CP38B-WPHRA		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord-I	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedg	Fox Sedge	Carex vulpinoidea	8.00	0.5		Sedge	N	N	CP38B-WPHRA		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord-I	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedg	Prairie Cordgrass	Spartina pectinata	8.00	0.5		Grass	N	N	CP38B-WPHRA		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord-I	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedg	Fowl Mannagrass	Glyceria striata	4.00	0.25		Grass	N	N	CP38B-WPHRA		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord-I	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedg	Cupplant	Silphium perfoliatum	2.00	0.125		Forb	N	N	CP38B-WPHRA		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord-I	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedg	Showy Tick Trefoil	Desmodium canadense	2.00	0.125		Legume	N	N	CP38B-WPHRA		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord-I	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedg	Blue Vervain	Verbena hastata	1.00	0.0625		Forb	N	N	CP38B-WPHRA		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord-I	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedg	Golden Alexanders	Zizia aurea	1.00	0.0625		Forb	N	N	CP38B-WPHRA		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord-I	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedg	Marsh Milkweed	Asclepias incarnata	1.00	0.0625		Forb	N	N	CP38B-WPHRA		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord-I	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedg	Boneset	Eupatorium perfoliatum	0.50	0.03125		Forb	N	N	CP38B-WPHRA		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord-I	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedg	Common Ironweed	Vernonia fasciculata	0.50	0.03125		Forb	N	N	CP38B-WPHRA		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord-I	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedg	Joe-pye Weed	Eutrochium maculatum	0.50	0.03125		Forb	N	N	CP38B-WPHRA		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord-I	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedg	Culver's Root	Veronicastrum virginicum	0.25	0.015625		Forb	N	N	CP38B-WPHRA		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-CWGCA(CP1)1-RC-Orc-Tim	38-CP38E-CWGCA(CP1)1-RC-Orc-Tim	Red Clover	Trifolium pratense	80.00	5		Legume	I	N	CP38E-CWGCA(CP1)1		RC-Orc-Tim
38	CP38E-CWGCA(CP1)1-RC-Orc-Tim	38-CP38E-CWGCA(CP1)1-RC-Orc-Tim	Orchardgrass	Dactylis glomerata L.	48.00	3		Grass	I	N	CP38E-CWGCA(CP1)1		RC-Orc-Tim
38	CP38E-CWGCA(CP1)1-RC-Orc-Tim	38-CP38E-CWGCA(CP1)1-RC-Orc-Tim	Timothy	Phleum pratense	32.00	2		Grass	I	N	CP38E-CWGCA(CP1)1		RC-Orc-Tim
38	CP38E-CWGCA(CP1)2-Alf-Orc-Tim	38-CP38E-CWGCA(CP1)2-Alf-Orc-Tim	Alfalfa	Medicago sativa	96.00	6		Legume	I	N	CP38E-CWGCA(CP1)2		Alf-Orc-Tim
38	CP38E-CWGCA(CP1)2-Alf-Orc-Tim	38-CP38E-CWGCA(CP1)2-Alf-Orc-Tim	Orchardgrass	Dactylis glomerata L.	48.00	3		Grass	I	N	CP38E-CWGCA(CP1)2		Alf-Orc-Tim
38	CP38E-CWGCA(CP1)2-Alf-Orc-Tim	38-CP38E-CWGCA(CP1)2-Alf-Orc-Tim	Timothy	Phleum pratense	32.00	2		Grass	I	N	CP38E-CWGCA(CP1)2		Alf-Orc-Tim
38	CP38E-CWGCA(CP1)3-RC-Tim-Orc-Rtop-LadC	38-CP38E-CWGCA(CP1)3-RC-Tim-Orc-Rtop-LadC	Red Clover	Trifolium pratense	80.00	5		Legume	I	N	CP38E-CWGCA(CP1)3		RC-Tim-Orc-Rtop-LadC
38	CP38E-CWGCA(CP1)3-RC-Tim-Orc-Rtop-LadC	38-CP38E-CWGCA(CP1)3-RC-Tim-Orc-Rtop-LadC	Timothy	Phleum pratense	32.00	2		Grass	I	N	CP38E-CWGCA(CP1)3		RC-Tim-Orc-Rtop-LadC
38	CP38E-CWGCA(CP1)3-RC-Tim-Orc-Rtop-LadC	38-CP38E-CWGCA(CP1)3-RC-Tim-Orc-Rtop-LadC	Orchardgrass	Dactylis glomerata L.	16.00	1		Grass	I	N	CP38E-CWGCA(CP1)3		RC-Tim-Orc-Rtop-LadC
38	CP38E-CWGCA(CP1)3-RC-Tim-Orc-Rtop-LadC	38-CP38E-CWGCA(CP1)3-RC-Tim-Orc-Rtop-LadC	Redtop	Agrostis gigantea	16.00	1		Grass	I	N	CP38E-CWGCA(CP1)3		RC-Tim-Orc-Rtop-LadC
38	CP38E-CWGCA(CP1)3-RC-Tim-Orc-Rtop-LadC	38-CP38E-CWGCA(CP1)3-RC-Tim-Orc-Rtop-LadC	White Ladino Clover	Trifolium repens	8.00	0.5		Legume	I	N	CP38E-CWGCA(CP1)3		RC-Tim-Orc-Rtop-LadC
38	CP38E-CWGCA(CP1)4-Alf-Rtop-Tim-Orc	38-CP38E-CWGCA(CP1)4-Alf-Rtop-Tim-Orc	Alfalfa	Medicago sativa	96.00	6		Legume	I	N	CP38E-CWGCA(CP1)4		Alf-Rtop-Tim-Orc
38	CP38E-CWGCA(CP1)4-Alf-Rtop-Tim-Orc	38-CP38E-CWGCA(CP1)4-Alf-Rtop-Tim-Orc	Redtop	Agrostis gigantea	32.00	2		Grass	I	N	CP38E-CWGCA(CP1)4		Alf-Rtop-Tim-Orc
38	CP38E-CWGCA(CP1)4-Alf-Rtop-Tim-Orc	38-CP38E-CWGCA(CP1)4-Alf-Rtop-Tim-Orc	Timothy	Phleum pratense	32.00	2		Grass	I	N	CP38E-CWGCA(CP1)4		Alf-Rtop-Tim-Orc
38	CP38E-CWGCA(CP1)4-Alf-Rtop-Tim-Orc	38-CP38E-CWGCA(CP1)4-Alf-Rtop-Tim-Orc	Orchardgrass	Dactylis glomerata L.	16.00	1		Grass	I	N	CP38E-CWGCA(CP1)4		Alf-Rtop-Tim-Orc
38	CP38E-CWGCA(CP1)5-RC-KB-Orc-Rtop	38-CP38E-CWGCA(CP1)5-RC-KB-Orc-Rtop	Red Clover	Trifolium pratense	80.00	5		Legume	I	N	CP38E-CWGCA(CP1)5		RC-KB-Orc-Rtop
38	CP38E-CWGCA(CP1)5-RC-KB-Orc-Rtop	38-CP38E-CWGCA(CP1)5-RC-KB-Orc-Rtop	Kentucky Bluegrass	Poa pratensis	32.00	2		Grass	I	N	CP38E-CWGCA(CP1)5		RC-KB-Orc-Rtop
38	CP38E-CWGCA(CP1)5-RC-KB-Orc-Rtop	38-CP38E-CWGCA(CP1)5-RC-KB-Orc-Rtop	Orchardgrass	Dactylis glomerata L.	16.00	1		Grass	I	N	CP38E-CWGCA(CP1)5		RC-KB-Orc-Rtop
38	CP38E-CWGCA(CP1)5-RC-KB-Orc-Rtop	38-CP38E-CWGCA(CP1)5-RC-KB-Orc-Rtop	Redtop	Agrostis gigantea	16.00	1		Grass	I	N	CP38E-CWGCA(CP1)5		RC-KB-Orc-Rtop
38	CP38E-CWGCA(CP1)6-Alf-SB-Tim	38-CP38E-CWGCA(CP1)6-Alf-SB-Tim	Alfalfa	Medicago sativa	96.00	6		Legume	I	N	CP38E-CWGCA(CP1)6		Alf-SB-Tim
38	CP38E-CWGCA(CP1)6-Alf-SB-Tim	38-CP38E-CWGCA(CP1)6-Alf-SB-Tim	Smooth Bromegrass	Bromus inermis	48.00	3		Grass	I	N	CP38E-CWGCA(CP1)6		Alf-SB-Tim
38	CP38E-CWGCA(CP1)6-Alf-SB-Tim	38-CP38E-CWGCA(CP1)6-Alf-SB-Tim	Timothy	Phleum pratense	32.00	2		Grass	I	N	CP38E-CWGCA(CP1)6		Alf-SB-Tim
38	CP38E-CWGCA(CP1)7-RC-SB-Tim-Orc-LadC	38-CP38E-CWGCA(CP1)7-RC-SB-Tim-Orc-LadC	Red Clover	Trifolium pratense	80.00	5		Legume	I	N	CP38E-CWGCA(CP1)7		RC-SB-Tim-Orc-LadC
38	CP38E-CWGCA(CP1)7-RC-SB-Tim-Orc-LadC	38-CP38E-CWGCA(CP1)7-RC-SB-Tim-Orc-LadC	Smooth Bromegrass	Bromus inermis	32.00	2		Grass	I	N	CP38E-CWGCA(CP1)7		RC-SB-Tim-Orc-LadC
38	CP38E-CWGCA(CP1)7-RC-SB-Tim-Orc-LadC	38-CP38E-CWGCA(CP1)7-RC-SB-Tim-Orc-LadC	Timothy	Phleum pratense	32.00	2		Grass	I	N	CP38E-CWGCA(CP1)7		RC-SB-Tim-Orc-LadC
38	CP38E-CWGCA(CP1)7-RC-SB-Tim-Orc-LadC	38-CP38E-CWGCA(CP1)7-RC-SB-Tim-Orc-LadC	Orchardgrass	Dactylis glomerata L.	16.00	1		Grass	I	N	CP38E-CWGCA(CP1)7		RC-SB-Tim-Orc-LadC
38	CP38E-CWGCA(CP1)7-RC-SB-Tim-Orc-LadC	38-CP38E-CWGCA(CP1)7-RC-SB-Tim-Orc-LadC	White Ladino Clover	Trifolium repens	8.00	0.5		Legume	I	N	CP38E-CWGCA(CP1)7		RC-SB-Tim-Orc-LadC
38	CP38E-CWGCA(CP1)8-RC-SB-Tim	38-CP38E-CWGCA(CP1)8-RC-SB-Tim	Red Clover	Trifolium pratense	80.00	5		Legume	I	N	CP38E-CWGCA(CP1)8		RC-SB-Tim
38	CP38E-CWGCA(CP1)8-RC-SB-Tim	38-CP38E-CWGCA(CP1)8-RC-SB-Tim	Smooth Bromegrass	Bromus inermis	48.00	3		Grass	I	N	CP38E-CWGCA(CP1)8		RC-SB-Tim
38	CP38E-CWGCA(CP1)8-RC-SB-Tim	38-CP38E-CWGCA(CP1)8-RC-SB-Tim	Timothy	Phleum pratense	32.00	2		Grass	I	N	CP38E-CWGCA(CP1)8		RC-SB-Tim
38	CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-	38-CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-I	Little Bluestem	Schizachyrium scoparium	24.00	1.5		Grass	N	N	CP38E-CWGCA(CP2)D		LB-Sgrama-BB-Indian-PPclover-Besus-Rblzstar-Sgrod-Ycone

38	CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-	38-CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-I	Sideoats Grama	Bouteloua curtipendula	24.00	1.5		Grass	N	N	CP38E-CWGCA(CP2)D		LB-Sgrama-BB-Indian-PPclover-Besus-Rblzstar-Sgrod-Ycone
38	CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-	38-CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-I	Big Bluestem	Andropogon gerardii	8.00	0.5		Grass	N	N	CP38E-CWGCA(CP2)D		LB-Sgrama-BB-Indian-PPclover-Besus-Rblzstar-Sgrod-Ycone
38	CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-	38-CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-I	Indiangrass	Sorghastrum nutans	8.00	0.5		Grass	N	N	CP38E-CWGCA(CP2)D		LB-Sgrama-BB-Indian-PPclover-Besus-Rblzstar-Sgrod-Ycone
38	CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-	38-CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-I	Purple Prairie Clover	Dalea purpurea	2.00	0.125		Legume	N	N	CP38E-CWGCA(CP2)D		LB-Sgrama-BB-Indian-PPclover-Besus-Rblzstar-Sgrod-Ycone
38	CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-	38-CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-I	Black-eyed Susan	Rudbeckia hirta	1.00	0.0625		Forb	N	N	CP38E-CWGCA(CP2)D		LB-Sgrama-BB-Indian-PPclover-Besus-Rblzstar-Sgrod-Ycone
38	CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-	38-CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-I	Rough Blazing Star	Liatris aspera	1.00	0.0625		Forb	N	N	CP38E-CWGCA(CP2)D		LB-Sgrama-BB-Indian-PPclover-Besus-Rblzstar-Sgrod-Ycone
38	CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-	38-CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-I	Stiff Goldenrod	Oligoneuron rigidum	1.00	0.0625		Forb	N	N	CP38E-CWGCA(CP2)D		LB-Sgrama-BB-Indian-PPclover-Besus-Rblzstar-Sgrod-Ycone
38	CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-	38-CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-I	Yellow Coneflower	Ratibida pinnata	1.00	0.0625		Forb	N	N	CP38E-CWGCA(CP2)D		LB-Sgrama-BB-Indian-PPclover-Besus-Rblzstar-Sgrod-Ycone
38	CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-	38-CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian	Little Bluestem	Schizachyrium scoparium	24.00	1.5		Grass	N	N	CP38E-CWGCA(CP2)DM		Shwgrod-Sgrod-Ycone
38	CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-	38-CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian	Sideoats Grama	Bouteloua curtipendula	16.00	1		Grass	N	N	CP38E-CWGCA(CP2)DM		Shwgrod-Sgrod-Ycone
38	CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-	38-CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian	Big Bluestem	Andropogon gerardii	8.00	0.5		Grass	N	N	CP38E-CWGCA(CP2)DM		Shwgrod-Sgrod-Ycone
38	CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-	38-CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian	Indiangrass	Sorghastrum nutans	8.00	0.5		Grass	N	N	CP38E-CWGCA(CP2)DM		Shwgrod-Sgrod-Ycone
38	CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-	38-CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian	Switchgrass	Panicum virgatum	8.00	0.5		Grass	N	N	CP38E-CWGCA(CP2)DM		Shwgrod-Sgrod-Ycone
38	CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-	38-CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian	Purple Prairie Clover	Dalea purpurea	2.00	0.125		Legume	N	N	CP38E-CWGCA(CP2)DM		Shwgrod-Sgrod-Ycone
38	CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-	38-CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian	Bergamot	Monarda fistulosa	1.00	0.0625		Forb	N	N	CP38E-CWGCA(CP2)DM		Shwgrod-Sgrod-Ycone
38	CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-	38-CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian	Black-eyed Susan	Rudbeckia hirta	1.00	0.0625		Forb	N	N	CP38E-CWGCA(CP2)DM		Shwgrod-Sgrod-Ycone
38	CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-	38-CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian	Rough Blazing Star	Liatris aspera	1.00	0.0625		Forb	N	N	CP38E-CWGCA(CP2)DM		Shwgrod-Sgrod-Ycone
38	CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-	38-CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian	Showy Goldenrod	Solidago speciosa	1.00	0.0625		Forb	N	N	CP38E-CWGCA(CP2)DM		Shwgrod-Sgrod-Ycone
38	CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-	38-CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian	Stiff Goldenrod	Oligoneuron rigidum	1.00	0.0625		Forb	N	N	CP38E-CWGCA(CP2)DM		Shwgrod-Sgrod-Ycone
38	CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-	38-CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian	Yellow Coneflower	Ratibida pinnata	1.00	0.0625		Forb	N	N	CP38E-CWGCA(CP2)DM		Shwgrod-Sgrod-Ycone
38	CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Pb	38-CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Little Bluestem	Schizachyrium scoparium	20.00	1.25		Grass	N	N	CP38E-CWGCA(CP2)M		Shwgrod-Sgrod-Ycone
38	CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Pb	38-CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Canada Wildrye	Elymus canadensis	16.00	1		Grass	N	N	CP38E-CWGCA(CP2)M		Shwgrod-Sgrod-Ycone
38	CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Pb	38-CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Indiangrass	Sorghastrum nutans	16.00	1		Grass	N	N	CP38E-CWGCA(CP2)M		Shwgrod-Sgrod-Ycone
38	CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Pb	38-CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Big Bluestem	Andropogon gerardii	8.00	0.5		Grass	N	N	CP38E-CWGCA(CP2)M		Shwgrod-Sgrod-Ycone
38	CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Pb	38-CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Switchgrass	Panicum virgatum	8.00	0.5		Grass	N	N	CP38E-CWGCA(CP2)M		Shwgrod-Sgrod-Ycone
38	CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Pb	38-CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Big Bluestem	Andropogon gerardii	8.00	0.5		Grass	N	N	CP38E-CWGCA(CP2)M		Shwgrod-Sgrod-Ycone
38	CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Pb	38-CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Switchgrass	Panicum virgatum	8.00	0.5		Grass	N	N	CP38E-CWGCA(CP2)M		Shwgrod-Sgrod-Ycone
38	CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Pb	38-CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Prairie Blazing Star	Liatris pycnostachya	2.00	0.125		Forb	N	N	CP38E-CWGCA(CP2)M		Shwgrod-Sgrod-Ycone
38	CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Pb	38-CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Rough Blazing Star	Liatris aspera	2.00	0.125		Forb	N	N	CP38E-CWGCA(CP2)M		Shwgrod-Sgrod-Ycone
38	CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Pb	38-CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Bergamot	Monarda fistulosa	1.00	0.0625		Forb	N	N	CP38E-CWGCA(CP2)M		Shwgrod-Sgrod-Ycone
38	CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Pb	38-CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Black-eyed Susan	Rudbeckia hirta	1.00	0.0625		Forb	N	N	CP38E-CWGCA(CP2)M		Shwgrod-Sgrod-Ycone
38	CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Pb	38-CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Showy Goldenrod	Solidago speciosa	1.00	0.0625		Forb	N	N	CP38E-CWGCA(CP2)M		Shwgrod-Sgrod-Ycone
38	CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Pb	38-CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Stiff Goldenrod	Oligoneuron rigidum	1.00	0.0625		Forb	N	N	CP38E-CWGCA(CP2)M		Shwgrod-Sgrod-Ycone
38	CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Pb	38-CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Yellow Coneflower	Ratibida pinnata	1.00	0.0625		Forb	N	N	CP38E-CWGCA(CP2)M		Shwgrod-Sgrod-Ycone
38	CP38E-CWGCA(CP2)W-BB-Cwrye-Switch-Pcord-Cup-Bv	38-CP38E-CWGCA(CP2)W-BB-Cwrye-Switch-Pcor	Big Bluestem	Andropogon gerardii	16.00	1		Grass	N	N	CP38E-CWGCA(CP2)W		BB-Cwrye-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-CWGCA(CP2)W-BB-Cwrye-Switch-Pcord-Cup-Bv	38-CP38E-CWGCA(CP2)W-BB-Cwrye-Switch-Pcor	Canada Wildrye	Elymus canadensis	16.00	1		Grass	N	N	CP38E-CWGCA(CP2)W		BB-Cwrye-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-CWGCA(CP2)W-BB-Cwrye-Switch-Pcord-Cup-Bv	38-CP38E-CWGCA(CP2)W-BB-Cwrye-Switch-Pcor	Switchgrass	Panicum virgatum	16.00	1		Grass	N	N	CP38E-CWGCA(CP2)W		BB-Cwrye-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-CWGCA(CP2)W-BB-Cwrye-Switch-Pcord-Cup-Bv	38-CP38E-CWGCA(CP2)W-BB-Cwrye-Switch-Pcor	Prairie Cordgrass	Spartina pectinata	8.00	0.5		Grass	N	N	CP38E-CWGCA(CP2)W		BB-Cwrye-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-CWGCA(CP2)W-BB-Cwrye-Switch-Pcord-Cup-Bv	38-CP38E-CWGCA(CP2)W-BB-Cwrye-Switch-Pcor	Cupplant	Silphium perfoliatum	2.00	0.125		Forb	N	N	CP38E-CWGCA(CP2)W		BB-Cwrye-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-CWGCA(CP2)W-BB-Cwrye-Switch-Pcord-Cup-Bv	38-CP38E-CWGCA(CP2)W-BB-Cwrye-Switch-Pcor	Blue Vervain	Verbena hastata	1.00	0.0625		Forb	N	N	CP38E-CWGCA(CP2)W		BB-Cwrye-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-CWGCA(CP2)W-BB-Cwrye-Switch-Pcord-Cup-Bv	38-CP38E-CWGCA(CP2)W-BB-Cwrye-Switch-Pcor	Common Ironweed	Vernonia fasciculata	1.00	0.0625		Forb	N	N	CP38E-CWGCA(CP2)W		BB-Cwrye-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Pblzs	38-CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pc	Switchgrass	Panicum virgatum	32.00	2		Grass	N	N	CP38E-CWGCA(CP2)WM		Switch-BB-Cwrye-Pcord-Pblzstar-Berg-Besus-NEaster-Ycone
38	CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Pblzs	38-CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pc	Big Bluestem	Andropogon gerardii	16.00	1		Grass	N	N	CP38E-CWGCA(CP2)WM		Switch-BB-Cwrye-Pcord-Pblzstar-Berg-Besus-NEaster-Ycone
38	CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Pblzs	38-CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pc	Canada Wildrye	Elymus canadensis	16.00	1		Grass	N	N	CP38E-CWGCA(CP2)WM		Switch-BB-Cwrye-Pcord-Pblzstar-Berg-Besus-NEaster-Ycone
38	CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Pblzs	38-CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pc	Prairie Cordgrass	Spartina pectinata	4.00	0.25		Grass	N	N	CP38E-CWGCA(CP2)WM		Switch-BB-Cwrye-Pcord-Pblzstar-Berg-Besus-NEaster-Ycone
38	CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Pblzs	38-CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pc	Prairie Blazing Star	Liatris pycnostachya	2.00	0.125		Forb	N	N	CP38E-CWGCA(CP2)WM		Switch-BB-Cwrye-Pcord-Pblzstar-Berg-Besus-NEaster-Ycone
38	CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Pblzs	38-CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pc	Bergamot	Monarda fistulosa	1.00	0.0625		Forb	N	N	CP38E-CWGCA(CP2)WM		Switch-BB-Cwrye-Pcord-Pblzstar-Berg-Besus-NEaster-Ycone
38	CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Pblzs	38-CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pc	Black-eyed Susan	Rudbeckia hirta	1.00	0.0625		Forb	N	N	CP38E-CWGCA(CP2)WM		Switch-BB-Cwrye-Pcord-Pblzstar-Berg-Besus-NEaster-Ycone
38	CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Pblzs	38-CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pc	New England Aster	Symphyotrichum novae-a	1.00	0.0625		Forb	N	N	CP38E-CWGCA(CP2)WM		Switch-BB-Cwrye-Pcord-Pblzstar-Berg-Besus-NEaster-Ycone
38	CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Pblzs	38-CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pc	Yellow Coneflower	Ratibida pinnata	1.00	0.0625		Forb	N	N	CP38E-CWGCA(CP2)WM		Switch-BB-Cwrye-Pcord-Pblzstar-Berg-Besus-NEaster-Ycone
38	CP38E-GHRA(CP2)D-LB-Sgrama-BB-Indian-PPclover-Sg	38-CP38E-GHRA(CP2)D-LB-Sgrama-BB-Indian-PP	Little Bluestem	Schizachyrium scoparium	24.00	1.5		Grass	N	N	CP38E-GHRA(CP2)D		LB-Sgrama-BB-Indian-PPclover-Sgrod-Ycone

38	CP38E-GHRA(CP2)D-LB-Sgrama-BB-Indian-PPclover-Sg	38-CP38E-GHRA(CP2)D-LB-Sgrama-BB-Indian-PP	Sideoats Grama	Bouteloua curtipendula	24.00	1.5		Grass	N	N	CP38E-GHRA(CP2)D		LB-Sgrama-BB-Indian-PPclover-Sgrod-Ycone
38	CP38E-GHRA(CP2)D-LB-Sgrama-BB-Indian-PPclover-Sg	38-CP38E-GHRA(CP2)D-LB-Sgrama-BB-Indian-PP	Big Bluestem	Andropogon gerardii	8.00	0.5		Grass	N	N	CP38E-GHRA(CP2)D		LB-Sgrama-BB-Indian-PPclover-Sgrod-Ycone
38	CP38E-GHRA(CP2)D-LB-Sgrama-BB-Indian-PPclover-Sg	38-CP38E-GHRA(CP2)D-LB-Sgrama-BB-Indian-PP	Indiangrass	Sorghastrum nutans	8.00	0.5		Grass	N	N	CP38E-GHRA(CP2)D		LB-Sgrama-BB-Indian-PPclover-Sgrod-Ycone
38	CP38E-GHRA(CP2)D-LB-Sgrama-BB-Indian-PPclover-Sg	38-CP38E-GHRA(CP2)D-LB-Sgrama-BB-Indian-PP	Purple Prairie Clover	Dalea purpurea	2.00	0.125		Legume	N	N	CP38E-GHRA(CP2)D		LB-Sgrama-BB-Indian-PPclover-Sgrod-Ycone
38	CP38E-GHRA(CP2)D-LB-Sgrama-BB-Indian-PPclover-Sg	38-CP38E-GHRA(CP2)D-LB-Sgrama-BB-Indian-PP	Stiff Goldenrod	Oligoneuron rigidum	1.00	0.0625		Forb	N	N	CP38E-GHRA(CP2)D		LB-Sgrama-BB-Indian-PPclover-Sgrod-Ycone
38	CP38E-GHRA(CP2)D-LB-Sgrama-BB-Indian-PPclover-Sg	38-CP38E-GHRA(CP2)D-LB-Sgrama-BB-Indian-PP	Yellow Coneflower	Ratibida pinnata	1.00	0.0625		Forb	N	N	CP38E-GHRA(CP2)D		LB-Sgrama-BB-Indian-PPclover-Sgrod-Ycone
38	CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-Switch-PP	38-CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-S	Little Bluestem	Schizachyrium scoparium	24.00	1.5		Grass	N	N	CP38E-GHRA(CP2)DM		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-Switch-PP	38-CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-S	Sideoats Grama	Bouteloua curtipendula	16.00	1		Grass	N	N	CP38E-GHRA(CP2)DM		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-Switch-PP	38-CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-S	Big Bluestem	Andropogon gerardii	8.00	0.5		Grass	N	N	CP38E-GHRA(CP2)DM		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-Switch-PP	38-CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-S	Indiangrass	Sorghastrum nutans	8.00	0.5		Grass	N	N	CP38E-GHRA(CP2)DM		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-Switch-PP	38-CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-S	Switchgrass	Panicum virgatum	8.00	0.5		Grass	N	N	CP38E-GHRA(CP2)DM		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-Switch-PP	38-CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-S	Purple Prairie Clover	Dalea purpurea	2.00	0.125		Legume	N	N	CP38E-GHRA(CP2)DM		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-Switch-PP	38-CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-S	Bergamot	Monarda fistulosa	1.00	0.0625		Forb	N	N	CP38E-GHRA(CP2)DM		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-Switch-PP	38-CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-S	Yellow Coneflower	Ratibida pinnata	1.00	0.0625		Forb	N	N	CP38E-GHRA(CP2)DM		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Switch-Berg	38-CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Sw	Little Bluestem	Schizachyrium scoparium	20.00	1.25		Grass	N	N	CP38E-GHRA(CP2)M		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Switch-Berg	38-CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Sw	Canada Wildrye	Elymus canadensis	16.00	1		Grass	N	N	CP38E-GHRA(CP2)M		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Switch-Berg	38-CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Sw	Indiangrass	Sorghastrum nutans	16.00	1		Grass	N	N	CP38E-GHRA(CP2)M		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Switch-Berg	38-CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Sw	Big Bluestem	Andropogon gerardii	8.00	0.5		Grass	N	N	CP38E-GHRA(CP2)M		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Switch-Berg	38-CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Sw	Switchgrass	Panicum virgatum	8.00	0.5		Grass	N	N	CP38E-GHRA(CP2)M		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Switch-Berg	38-CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Sw	Bergamot	Monarda fistulosa	1.00	0.0625		Forb	N	N	CP38E-GHRA(CP2)M		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Switch-Berg	38-CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Sw	Black-eyed Susan	Rudbeckia hirta	1.00	0.0625		Forb	N	N	CP38E-GHRA(CP2)M		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Switch-Berg	38-CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Sw	Yellow Coneflower	Ratibida pinnata	1.00	0.0625		Forb	N	N	CP38E-GHRA(CP2)M		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-Cu	38-CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch	Big Bluestem	Andropogon gerardii	16.00	1		Grass	N	N	CP38E-GHRA(CP2)W		BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-Cu	38-CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch	Canada Wildrye	Elymus canadensis	16.00	1		Grass	N	N	CP38E-GHRA(CP2)W		BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-Cu	38-CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch	Indiangrass	Sorghastrum nutans	16.00	1		Grass	N	N	CP38E-GHRA(CP2)W		BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-Cu	38-CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch	Switchgrass	Panicum virgatum	16.00	1		Grass	N	N	CP38E-GHRA(CP2)W		BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-Cu	38-CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch	Prairie Cordgrass	Spartina pectinata	8.00	0.5		Grass	N	N	CP38E-GHRA(CP2)W		BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-Cu	38-CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch	Cupplant	Silphium perfoliatum	2.00	0.125		Forb	N	N	CP38E-GHRA(CP2)W		BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-Cu	38-CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch	Blue Vervain	Verbena hastata	1.00	0.0625		Forb	N	N	CP38E-GHRA(CP2)W		BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-Cu	38-CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch	Common Ironweed	Vernonia fasciculata	1.00	0.0625		Forb	N	N	CP38E-GHRA(CP2)W		BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-GHRA(CP2)WM-Switch-BB-Cwrye-Pcord-Berg-N	38-CP38E-GHRA(CP2)WM-Switch-BB-Cwrye-Pcor	Switchgrass	Panicum virgatum	32.00	2		Grass	N	N	CP38E-GHRA(CP2)WM		Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
38	CP38E-GHRA(CP2)WM-Switch-BB-Cwrye-Pcord-Berg-N	38-CP38E-GHRA(CP2)WM-Switch-BB-Cwrye-Pcor	Big Bluestem	Andropogon gerardii	16.00	1		Grass	N	N	CP38E-GHRA(CP2)WM		Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
38	CP38E-GHRA(CP2)WM-Switch-BB-Cwrye-Pcord-Berg-N	38-CP38E-GHRA(CP2)WM-Switch-BB-Cwrye-Pcor	Canada Wildrye	Elymus canadensis	16.00	1		Grass	N	N	CP38E-GHRA(CP2)WM		Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
38	CP38E-GHRA(CP2)WM-Switch-BB-Cwrye-Pcord-Berg-N	38-CP38E-GHRA(CP2)WM-Switch-BB-Cwrye-Pcor	Prairie Cordgrass	Spartina pectinata	4.00	0.25		Grass	N	N	CP38E-GHRA(CP2)WM		Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
38	CP38E-GHRA(CP2)WM-Switch-BB-Cwrye-Pcord-Berg-N	38-CP38E-GHRA(CP2)WM-Switch-BB-Cwrye-Pcor	Bergamot	Monarda fistulosa	1.00	0.0625		Forb	N	N	CP38E-GHRA(CP2)WM		Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
38	CP38E-GHRA(CP2)WM-Switch-BB-Cwrye-Pcord-Berg-N	38-CP38E-GHRA(CP2)WM-Switch-BB-Cwrye-Pcor	New England Aster	Symphyotrichum novae-a	1.00	0.0625		Forb	N	N	CP38E-GHRA(CP2)WM		Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
38	CP38E-GHRA(CP2)WM-Switch-BB-Cwrye-Pcord-Berg-N	38-CP38E-GHRA(CP2)WM-Switch-BB-Cwrye-Pcor	Yellow Coneflower	Ratibida pinnata	1.00	0.0625		Forb	N	N	CP38E-GHRA(CP2)WM		Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Little Bluestem	Schizachyrium scoparium	24.00	1.5		Grass	N	N	CP38E-GHRA(CP25)D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Sideoats Grama	Bouteloua curtipendula	24.00	1.5		Grass	N	N	CP38E-GHRA(CP25)D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Indiangrass	Sorghastrum nutans	8.00	0.5		Grass	N	N	CP38E-GHRA(CP25)D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Big Bluestem	Andropogon gerardii	4.00	0.25		Grass	N	N	CP38E-GHRA(CP25)D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Purple Prairie Clover	Dalea purpurea	2.00	0.125		Legume	N	N	CP38E-GHRA(CP25)D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Sand Dropseed	Sporobolus cryptandrus	2.00	0.125		Grass	N	N	CP38E-GHRA(CP25)D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Prairie Junegrass	Koeleria macrantha	1.00	0.0625		Grass	N	N	CP38E-GHRA(CP25)D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Spiderwort	Tradescantia ohiensis	1.00	0.0625		Forb	N	N	CP38E-GHRA(CP25)D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Hoary Vervain	Verbena stricta	0.50	0.03125		Forb	N	N	CP38E-GHRA(CP25)D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Leadplant	Amorpha canescens	0.50	0.03125		Legume	N	N	CP38E-GHRA(CP25)D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Prairie Tickseed	Coreopsis palmata	0.50	0.03125		Forb	N	N	CP38E-GHRA(CP25)D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Silky Aster	Symphyotrichum pratens	0.50	0.03125		Forb	N	N	CP38E-GHRA(CP25)D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint

38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Stiff Goldenrod	Oligoneuron rigidum	0.50	0.03125		Forb	N	N	CP38E-GHRA(CP25)D	Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Yellow Coneflower	Ratibida pinnata	0.50	0.03125		Forb	N	N	CP38E-GHRA(CP25)D	Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Prairie Cinquefoil	Potentilla arguta	0.25	0.015625		Forb	N	N	CP38E-GHRA(CP25)D	Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Spotted Mint	Monarda punctata	0.25	0.015625		Forb	N	N	CP38E-GHRA(CP25)D	Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjune	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Little Bluestem	Schizachyrium scoparium	24.00	1.5		Grass	N	N	CP38E-GHRA(CP25)DM	Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjune	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Sideoats Grama	Bouteloua curtipendula	24.00	1.5		Grass	N	N	CP38E-GHRA(CP25)DM	Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjune	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Indiangrass	Sorghastrum nutans	8.00	0.5		Grass	N	N	CP38E-GHRA(CP25)DM	Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjune	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Switchgrass	Panicum virgatum	4.00	0.25		Grass	N	N	CP38E-GHRA(CP25)DM	Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjune	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Prairie Junegrass	Koeleria macrantha	2.00	0.125		Grass	N	N	CP38E-GHRA(CP25)DM	Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjune	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Prairie Dropseed	Sporobolus heterolepis	2.00	0.125		Grass	N	N	CP38E-GHRA(CP25)DM	Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjune	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Purple Prairie Clover	Dalea purpurea	2.00	0.125		Legume	N	N	CP38E-GHRA(CP25)DM	Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjune	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Round-Headed Bushclover	Lespedeza capitata	2.00	0.125		Legume	N	N	CP38E-GHRA(CP25)DM	Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjune	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Bergamot	Monarda fistulosa	1.00	0.0625		Forb	N	N	CP38E-GHRA(CP25)DM	Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjune	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Spiderwort	Tradescantia ohiensis	1.00	0.0625		Forb	N	N	CP38E-GHRA(CP25)DM	Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjune	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Yellow Coneflower	Ratibida pinnata	1.00	0.0625		Forb	N	N	CP38E-GHRA(CP25)DM	Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjune	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Leadplant	Amorpha canescens	0.50	0.03125		Legume	N	N	CP38E-GHRA(CP25)DM	Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjune	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Rough Blazing Star	Liatris aspera	0.50	0.03125		Forb	N	N	CP38E-GHRA(CP25)DM	Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjune	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Sky-Blue Aster	Symphyotrichum oolenta	0.50	0.03125		Forb	N	N	CP38E-GHRA(CP25)DM	Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjune	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Stiff Goldenrod	Oligoneuron rigidum	0.50	0.03125		Forb	N	N	CP38E-GHRA(CP25)DM	Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjune	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Prairie Cinquefoil	Potentilla arguta	0.25	0.015625		Forb	N	N	CP38E-GHRA(CP25)DM	Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Switch-Oxe	38-CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Sv	Little Bluestem	Schizachyrium scoparium	24.00	1.5		Grass	N	N	CP38E-GHRA(CP25)M	Berg-Besus-NEaster-SBAster-Ycone-Croot
38	CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Switch-Oxe	38-CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Sv	Indiangrass	Sorghastrum nutans	16.00	1		Grass	N	N	CP38E-GHRA(CP25)M	Berg-Besus-NEaster-SBAster-Ycone-Croot
38	CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Switch-Oxe	38-CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Sv	Big Bluestem	Andropogon gerardii	8.00	0.5		Grass	N	N	CP38E-GHRA(CP25)M	Berg-Besus-NEaster-SBAster-Ycone-Croot
38	CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Switch-Oxe	38-CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Sv	Canada Wildrye	Elymus canadensis	8.00	0.5		Grass	N	N	CP38E-GHRA(CP25)M	Berg-Besus-NEaster-SBAster-Ycone-Croot
38	CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Switch-Oxe	38-CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Sv	Switchgrass	Panicum virgatum	8.00	0.5		Grass	N	N	CP38E-GHRA(CP25)M	Berg-Besus-NEaster-SBAster-Ycone-Croot
38	CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Switch-Oxe	38-CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Sv	Ox-eye Sunflower	Heliopsis helianthoides	1.00	0.0625		Forb	N	N	CP38E-GHRA(CP25)M	Berg-Besus-NEaster-SBAster-Ycone-Croot
38	CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Switch-Oxe	38-CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Sv	Prairie Blazing Star	Liatris pycnostachya	1.00	0.0625		Forb	N	N	CP38E-GHRA(CP25)M	Berg-Besus-NEaster-SBAster-Ycone-Croot
38	CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Switch-Oxe	38-CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Sv	Purple Prairie Clover	Dalea purpurea	1.00	0.0625		Legume	N	N	CP38E-GHRA(CP25)M	Berg-Besus-NEaster-SBAster-Ycone-Croot
38	CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Switch-Oxe	38-CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Sv	Rosinweed	Silphium integrifolium	1.00	0.0625		Forb	N	N	CP38E-GHRA(CP25)M	Berg-Besus-NEaster-SBAster-Ycone-Croot
38	CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Switch-Oxe	38-CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Sv	Bergamot	Monarda fistulosa	0.50	0.03125		Forb	N	N	CP38E-GHRA(CP25)M	Berg-Besus-NEaster-SBAster-Ycone-Croot
38	CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Switch-Oxe	38-CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Sv	Black-eyed Susan	Rudbeckia hirta	0.50	0.03125		Forb	N	N	CP38E-GHRA(CP25)M	Berg-Besus-NEaster-SBAster-Ycone-Croot
38	CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Switch-Oxe	38-CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Sv	New England Aster	Symphyotrichum novae-a	0.50	0.03125		Forb	N	N	CP38E-GHRA(CP25)M	Berg-Besus-NEaster-SBAster-Ycone-Croot
38	CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Switch-Oxe	38-CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Sv	Smooth Blue Aster	Symphyotrichum laeve	0.50	0.03125		Forb	N	N	CP38E-GHRA(CP25)M	Berg-Besus-NEaster-SBAster-Ycone-Croot
38	CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Switch-Oxe	38-CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Sv	Yellow Coneflower	Ratibida pinnata	0.50	0.03125		Forb	N	N	CP38E-GHRA(CP25)M	Berg-Besus-NEaster-SBAster-Ycone-Croot
38	CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Switch-Oxe	38-CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Sv	Culver's Root	Veronicastrum virginicum	0.25	0.015625		Forb	N	N	CP38E-GHRA(CP25)M	Berg-Besus-NEaster-SBAster-Ycone-Croot
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-F	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BI	Canada Wildrye	Elymus canadensis	16.00	1		Grass	N	N	CP38E-GHRA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-F	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BI	Switchgrass	Panicum virgatum	16.00	1		Grass	N	N	CP38E-GHRA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-F	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BI	Indiangrass	Sorghastrum nutans	12.00	0.75		Grass	N	N	CP38E-GHRA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-F	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BI	Big Bluestem	Andropogon gerardii	8.00	0.5		Grass	N	N	CP38E-GHRA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-F	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BI	Prairie Cordgrass	Spartina pectinata	8.00	0.5		Grass	N	N	CP38E-GHRA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-F	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BI	Fowl Mannagrass	Glyceria striata	4.00	0.25		Grass	N	N	CP38E-GHRA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-F	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BI	Fox Sedge	Carex vulpinoidea	4.00	0.25		Sedge	N	N	CP38E-GHRA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-F	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BI	Cupplant	Silphium perfoliatum	2.00	0.125		Forb	N	N	CP38E-GHRA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-F	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BI	Showy Tick Trefoil	Desmodium canadense	2.00	0.125		Legume	N	N	CP38E-GHRA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-F	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BI	Blue Vervain	Verbena hastata	1.00	0.0625		Forb	N	N	CP38E-GHRA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-F	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BI	Golden Alexanders	Zizia aurea	1.00	0.0625		Forb	N	N	CP38E-GHRA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-F	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BI	Marsh Milkweed	Asclepias incarnata	1.00	0.0625		Forb	N	N	CP38E-GHRA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-F	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BI	Boneset	Eupatorium perfoliatum	0.50	0.03125		Forb	N	N	CP38E-GHRA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-F	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BI	Common Ironweed	Vernonia fasciculata	0.50	0.03125		Forb	N	N	CP38E-GHRA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot

38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-F	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BI	Joe-pye Weed	Eutrochium maculatum	0.50	0.03125		Forb	N	N	CP38E-GHRA(CP25)W		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-F	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BI	Culver's Root	Veronicastrum virginicum	0.25	0.015625		Forb	N	N	CP38E-GHRA(CP25)W		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Indian-Pcord	38-CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Ind	Switchgrass	Panicum virgatum	24.00	1.5		Grass	N	N	CP38E-GHRA(CP25)WM		Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
38	CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Indian-Pcord	38-CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Ind	Big Bluestem	Andropogon gerardii	20.00	1.25		Grass	N	N	CP38E-GHRA(CP25)WM		Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
38	CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Indian-Pcord	38-CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Ind	Canada Wildrye	Elymus canadensis	16.00	1		Grass	N	N	CP38E-GHRA(CP25)WM		Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
38	CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Indian-Pcord	38-CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Ind	Indiangrass	Sorghastrum nutans	12.00	0.75		Grass	N	N	CP38E-GHRA(CP25)WM		Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
38	CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Indian-Pcord	38-CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Ind	Prairie Cordgrass	Spartina pectinata	4.00	0.25		Grass	N	N	CP38E-GHRA(CP25)WM		Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
38	CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Indian-Pcord	38-CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Ind	Cupplant	Silphium perfoliatum	2.00	0.125		Forb	N	N	CP38E-GHRA(CP25)WM		Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
38	CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Indian-Pcord	38-CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Ind	White wild indigo	Baptisia alba	1.50	0.09375		Legume	N	N	CP38E-GHRA(CP25)WM		Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
38	CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Indian-Pcord	38-CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Ind	Black-eyed Susan	Rudbeckia hirta	0.50	0.03125		Forb	N	N	CP38E-GHRA(CP25)WM		Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
38	CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Indian-Pcord	38-CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Ind	Common Ironweed	Vernonia fasciculata	0.50	0.03125		Forb	N	N	CP38E-GHRA(CP25)WM		Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
38	CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Indian-Pcord	38-CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Ind	Golden Alexanders	Zizia aurea	0.50	0.03125		Forb	N	N	CP38E-GHRA(CP25)WM		Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
38	CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Indian-Pcord	38-CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Ind	New England Aster	Symphyotrichum novae-a	0.50	0.03125		Forb	N	N	CP38E-GHRA(CP25)WM		Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
38	CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Indian-Pcord	38-CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Ind	Prairie Blazing Star	Liatris pycnostachya	0.50	0.03125		Forb	N	N	CP38E-GHRA(CP25)WM		Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
38	CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Indian-Pcord	38-CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Ind	Yellow Coneflower	Ratibida pinnata	0.50	0.03125		Forb	N	N	CP38E-GHRA(CP25)WM		Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
38	CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Indian-Pcord	38-CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Ind	Bergamot	Monarda fistulosa	0.25	0.015625		Forb	N	N	CP38E-GHRA(CP25)WM		Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
38	CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Indian-Pcord	38-CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Ind	Great St. John's Wort	Hypericum ascyron	0.25	0.015625		Forb	N	N	CP38E-GHRA(CP25)WM		Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Little Bluestem	Schizachyrium scoparium	24.00	1.5		Grass	N	N	CP38E-KBB		Fspurge-Galex-Rblzstar-RHbushclover-Wsun-Berg-Ptick-Besus
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Canada Wildrye	Elymus canadensis	16.00	1		Grass	N	N	CP38E-KBB		Fspurge-Galex-Rblzstar-RHbushclover-Wsun-Berg-Ptick-Besus
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Indiangrass	Sorghastrum nutans	16.00	1		Grass	N	N	CP38E-KBB		Fspurge-Galex-Rblzstar-RHbushclover-Wsun-Berg-Ptick-Besus
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Big Bluestem	Andropogon gerardii	8.00	0.5		Grass	N	N	CP38E-KBB		Fspurge-Galex-Rblzstar-RHbushclover-Wsun-Berg-Ptick-Besus
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Sideoats Grama	Bouteloua curtipendula	8.00	0.5		Grass	N	N	CP38E-KBB		Fspurge-Galex-Rblzstar-RHbushclover-Wsun-Berg-Ptick-Besus
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Switchgrass	Panicum virgatum	8.00	0.5		Grass	N	N	CP38E-KBB		Fspurge-Galex-Rblzstar-RHbushclover-Wsun-Berg-Ptick-Besus
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Wild Lupine	Lupinus perennis	3.00	0.1875		Legume	N	N	CP38E-KBB		Fspurge-Galex-Rblzstar-RHbushclover-Wsun-Berg-Ptick-Besus
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Purple Prairie Clover	Dalea purpurea	2.00	0.125		Legume	N	N	CP38E-KBB		Fspurge-Galex-Rblzstar-RHbushclover-Wsun-Berg-Ptick-Besus
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Butterfly Milkweed	Asclepias tuberosa	1.00	0.0625		Forb	N	N	CP38E-KBB		Fspurge-Galex-Rblzstar-RHbushclover-Wsun-Berg-Ptick-Besus
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Flowering Spurge	Euphorbia corollata	1.00	0.0625		Forb	N	N	CP38E-KBB		Fspurge-Galex-Rblzstar-RHbushclover-Wsun-Berg-Ptick-Besus
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Golden Alexanders	Zizia aurea	1.00	0.0625		Forb	N	N	CP38E-KBB		Fspurge-Galex-Rblzstar-RHbushclover-Wsun-Berg-Ptick-Besus
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Rough Blazing Star	Liatris aspera	1.00	0.0625		Forb	N	N	CP38E-KBB		Fspurge-Galex-Rblzstar-RHbushclover-Wsun-Berg-Ptick-Besus
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Round-Headed Bushclover	Lespedeza capitata	1.00	0.0625		Legume	N	N	CP38E-KBB		Fspurge-Galex-Rblzstar-RHbushclover-Wsun-Berg-Ptick-Besus
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Fewleaf Sunflower	Helianthus occidentalis	1.00	0.0625		Forb	N	N	CP38E-KBB		Fspurge-Galex-Rblzstar-RHbushclover-Wsun-Berg-Ptick-Besus
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Bergamot	Monarda fistulosa	0.50	0.03125		Forb	N	N	CP38E-KBB		Fspurge-Galex-Rblzstar-RHbushclover-Wsun-Berg-Ptick-Besus
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Prairie Tickseed	Coreopsis palmata	0.50	0.03125		Forb	N	N	CP38E-KBB		Fspurge-Galex-Rblzstar-RHbushclover-Wsun-Berg-Ptick-Besus
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Black-eyed Susan	Rudbeckia hirta	0.40	0.025		Forb	N	N	CP38E-KBB		Fspurge-Galex-Rblzstar-RHbushclover-Wsun-Berg-Ptick-Besus
38	CP38E-KBB(CP1)1-Alf-Rtop-Tim-Orc	38-CP38E-KBB(CP1)1-Alf-Rtop-Tim-Orc	Alfalfa	Medicago sativa	96.00	6		Legume	I	N	CP38E-KBB(CP1)1		Alf-Rtop-Tim-Orc
38	CP38E-KBB(CP1)1-Alf-Rtop-Tim-Orc	38-CP38E-KBB(CP1)1-Alf-Rtop-Tim-Orc	Redtop	Agrostis gigantea	32.00	2		Grass	I	N	CP38E-KBB(CP1)1		Alf-Rtop-Tim-Orc
38	CP38E-KBB(CP1)1-Alf-Rtop-Tim-Orc	38-CP38E-KBB(CP1)1-Alf-Rtop-Tim-Orc	Timothy	Phleum pratense	32.00	2		Grass	I	N	CP38E-KBB(CP1)1		Alf-Rtop-Tim-Orc
38	CP38E-KBB(CP1)1-Alf-Rtop-Tim-Orc	38-CP38E-KBB(CP1)1-Alf-Rtop-Tim-Orc	Orchardgrass	Dactylis glomerata L.	16.00	1		Grass	I	N	CP38E-KBB(CP1)1		Alf-Rtop-Tim-Orc
38	CP38E-KBB(CP1)2-RC-KB-Orc-Rtop	38-CP38E-KBB(CP1)2-RC-KB-Orc-Rtop	Red Clover	Trifolium pratense	80.00	5		Legume	I	N	CP38E-KBB(CP1)2		RC-KB-Orc-Rtop
38	CP38E-KBB(CP1)2-RC-KB-Orc-Rtop	38-CP38E-KBB(CP1)2-RC-KB-Orc-Rtop	Kentucky Bluegrass	Poa pratensis	32.00	2		Grass	I	N	CP38E-KBB(CP1)2		RC-KB-Orc-Rtop
38	CP38E-KBB(CP1)2-RC-KB-Orc-Rtop	38-CP38E-KBB(CP1)2-RC-KB-Orc-Rtop	Orchardgrass	Dactylis glomerata L.	16.00	1		Grass	I	N	CP38E-KBB(CP1)2		RC-KB-Orc-Rtop
38	CP38E-KBB(CP1)2-RC-KB-Orc-Rtop	38-CP38E-KBB(CP1)2-RC-KB-Orc-Rtop	Redtop	Agrostis gigantea	16.00	1		Grass	I	N	CP38E-KBB(CP1)2		RC-KB-Orc-Rtop
38	CP38E-KBB(CP1)3-RC-SB-Tim	38-CP38E-KBB(CP1)3-RC-SB-Tim	Red Clover	Trifolium pratense	80.00	5		Legume	I	N	CP38E-KBB(CP1)3		RC-SB-Tim
38	CP38E-KBB(CP1)3-RC-SB-Tim	38-CP38E-KBB(CP1)3-RC-SB-Tim	Smooth Bromegrass	Bromus inermis	48.00	3		Grass	I	N	CP38E-KBB(CP1)3		RC-SB-Tim
38	CP38E-KBB(CP1)3-RC-SB-Tim	38-CP38E-KBB(CP1)3-RC-SB-Tim	Timothy	Phleum pratense	32.00	2		Grass	I	N	CP38E-KBB(CP1)3		RC-SB-Tim
38	CP38E-KBB(CP1)4-RC-Tim-Orc-Rtop	38-CP38E-KBB(CP1)4-RC-Tim-Orc-Rtop	Red Clover	Trifolium pratense	80.00	5		Legume	I	N	CP38E-KBB(CP1)4		RC-Tim-Orc-Rtop
38	CP38E-KBB(CP1)4-RC-Tim-Orc-Rtop	38-CP38E-KBB(CP1)4-RC-Tim-Orc-Rtop	Timothy	Phleum pratense	32.00	2		Grass	I	N	CP38E-KBB(CP1)4		RC-Tim-Orc-Rtop
38	CP38E-KBB(CP1)4-RC-Tim-Orc-Rtop	38-CP38E-KBB(CP1)4-RC-Tim-Orc-Rtop	Orchardgrass	Dactylis glomerata L.	16.00	1		Grass	I	N	CP38E-KBB(CP1)4		RC-Tim-Orc-Rtop
38	CP38E-KBB(CP1)4-RC-Tim-Orc-Rtop	38-CP38E-KBB(CP1)4-RC-Tim-Orc-Rtop	Redtop	Agrostis gigantea	16.00	1		Grass	I	N	CP38E-KBB(CP1)4		RC-Tim-Orc-Rtop

38	CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlup-PPclove	38-CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlu	Little Bluestem	Schizachyrium scoparium	36.00	2.25		Grass	N	N	CP38E-KBB(WHIP)		LB-Sgrama-BB-Pjune-Wlup-PPclover-Rblzstar-Ptick-Besus
38	CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlup-PPclove	38-CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlu	Sideoats Grama	Bouteloua curtipendula	16.00	1		Grass	N	N	CP38E-KBB(WHIP)		LB-Sgrama-BB-Pjune-Wlup-PPclover-Rblzstar-Ptick-Besus
38	CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlup-PPclove	38-CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlu	Big Bluestem	Andropogon gerardii	8.00	0.5		Grass	N	N	CP38E-KBB(WHIP)		LB-Sgrama-BB-Pjune-Wlup-PPclover-Rblzstar-Ptick-Besus
38	CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlup-PPclove	38-CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlu	Prairie Junegrass	Koeleria macrantha	4.00	0.25		Grass	N	N	CP38E-KBB(WHIP)		LB-Sgrama-BB-Pjune-Wlup-PPclover-Rblzstar-Ptick-Besus
38	CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlup-PPclove	38-CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlu	Wild Lupine	Lupinus perennis	3.00	0.1875		Legume	N	N	CP38E-KBB(WHIP)		LB-Sgrama-BB-Pjune-Wlup-PPclover-Rblzstar-Ptick-Besus
38	CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlup-PPclove	38-CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlu	Purple Prairie Clover	Dalea purpurea	2.00	0.125		Legume	N	N	CP38E-KBB(WHIP)		LB-Sgrama-BB-Pjune-Wlup-PPclover-Rblzstar-Ptick-Besus
38	CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlup-PPclove	38-CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlu	Rough Blazing Star	Liatris aspera	2.00	0.125		Forb	N	N	CP38E-KBB(WHIP)		LB-Sgrama-BB-Pjune-Wlup-PPclover-Rblzstar-Ptick-Besus
38	CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlup-PPclove	38-CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlu	Prairie Tickseed	Coreopsis palmata	1.00	0.0625		Forb	N	N	CP38E-KBB(WHIP)		LB-Sgrama-BB-Pjune-Wlup-PPclover-Rblzstar-Ptick-Besus
38	CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlup-PPclove	38-CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlu	Black-eyed Susan	Rudbeckia hirta	0.25	0.015625		Forb	N	N	CP38E-KBB(WHIP)		LB-Sgrama-BB-Pjune-Wlup-PPclover-Rblzstar-Ptick-Besus
38	CP38E-SWGCA(CP1)1-Alf-Rtop-Tim-Orc	38-CP38E-SWGCA(CP1)1-Alf-Rtop-Tim-Orc	Alfalfa	Medicago sativa	96.00	6		Legume	I	N	CP38E-SWGCA(CP1)1		Alf-Rtop-Tim-Orc
38	CP38E-SWGCA(CP1)1-Alf-Rtop-Tim-Orc	38-CP38E-SWGCA(CP1)1-Alf-Rtop-Tim-Orc	Redtop	Agrostis gigantea	32.00	2		Grass	I	N	CP38E-SWGCA(CP1)1		Alf-Rtop-Tim-Orc
38	CP38E-SWGCA(CP1)1-Alf-Rtop-Tim-Orc	38-CP38E-SWGCA(CP1)1-Alf-Rtop-Tim-Orc	Timothy	Phleum pratense	32.00	2		Grass	I	N	CP38E-SWGCA(CP1)1		Alf-Rtop-Tim-Orc
38	CP38E-SWGCA(CP1)1-Alf-Rtop-Tim-Orc	38-CP38E-SWGCA(CP1)1-Alf-Rtop-Tim-Orc	Orchardgrass	Dactylis glomerata L.	16.00	1		Grass	I	N	CP38E-SWGCA(CP1)1		Alf-Rtop-Tim-Orc
38	CP38E-SWGCA(CP1)2-RC-KB-Orc-Rtop	38-CP38E-SWGCA(CP1)2-RC-KB-Orc-Rtop	Red Clover	Trifolium pratense	80.00	5		Legume	I	N	CP38E-SWGCA(CP1)2		RC-KB-Orc-Rtop
38	CP38E-SWGCA(CP1)2-RC-KB-Orc-Rtop	38-CP38E-SWGCA(CP1)2-RC-KB-Orc-Rtop	Kentucky Bluegrass	Poa pratensis	32.00	2		Grass	I	N	CP38E-SWGCA(CP1)2		RC-KB-Orc-Rtop
38	CP38E-SWGCA(CP1)2-RC-KB-Orc-Rtop	38-CP38E-SWGCA(CP1)2-RC-KB-Orc-Rtop	Orchardgrass	Dactylis glomerata L.	16.00	1		Grass	I	N	CP38E-SWGCA(CP1)2		RC-KB-Orc-Rtop
38	CP38E-SWGCA(CP1)2-RC-KB-Orc-Rtop	38-CP38E-SWGCA(CP1)2-RC-KB-Orc-Rtop	Redtop	Agrostis gigantea	16.00	1		Grass	I	N	CP38E-SWGCA(CP1)2		RC-KB-Orc-Rtop
38	CP38E-SWGCA(CP1)3-RC-SB-Tim	38-CP38E-SWGCA(CP1)3-RC-SB-Tim	Red Clover	Trifolium pratense	80.00	5		Legume	I	N	CP38E-SWGCA(CP1)3		RC-SB-Tim
38	CP38E-SWGCA(CP1)3-RC-SB-Tim	38-CP38E-SWGCA(CP1)3-RC-SB-Tim	Smooth Bromegrass	Bromus inermis	48.00	3		Grass	I	N	CP38E-SWGCA(CP1)3		RC-SB-Tim
38	CP38E-SWGCA(CP1)3-RC-SB-Tim	38-CP38E-SWGCA(CP1)3-RC-SB-Tim	Timothy	Phleum pratense	32.00	2		Grass	I	N	CP38E-SWGCA(CP1)3		RC-SB-Tim
38	CP38E-SWGCA(CP1)4-RC-Tim-Orc-Rtop	38-CP38E-SWGCA(CP1)4-RC-Tim-Orc-Rtop	Red Clover	Trifolium pratense	80.00	5		Legume	I	N	CP38E-SWGCA(CP1)4		RC-Tim-Orc-Rtop
38	CP38E-SWGCA(CP1)4-RC-Tim-Orc-Rtop	38-CP38E-SWGCA(CP1)4-RC-Tim-Orc-Rtop	Timothy	Phleum pratense	32.00	2		Grass	I	N	CP38E-SWGCA(CP1)4		RC-Tim-Orc-Rtop
38	CP38E-SWGCA(CP1)4-RC-Tim-Orc-Rtop	38-CP38E-SWGCA(CP1)4-RC-Tim-Orc-Rtop	Orchardgrass	Dactylis glomerata L.	16.00	1		Grass	I	N	CP38E-SWGCA(CP1)4		RC-Tim-Orc-Rtop
38	CP38E-SWGCA(CP1)4-RC-Tim-Orc-Rtop	38-CP38E-SWGCA(CP1)4-RC-Tim-Orc-Rtop	Redtop	Agrostis gigantea	16.00	1		Grass	I	N	CP38E-SWGCA(CP1)4		RC-Tim-Orc-Rtop
38	CP38E-SWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-S	38-CP38E-SWGCA(CP2)D-LB-Sgrama-BB-Indian-I	Little Bluestem	Schizachyrium scoparium	24.00	1.5		Grass	N	N	CP38E-SWGCA(CP2)D		LB-Sgrama-BB-Indian-PPclover-Sgrod-Ycone
38	CP38E-SWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-S	38-CP38E-SWGCA(CP2)D-LB-Sgrama-BB-Indian-I	Sideoats Grama	Bouteloua curtipendula	24.00	1.5		Grass	N	N	CP38E-SWGCA(CP2)D		LB-Sgrama-BB-Indian-PPclover-Sgrod-Ycone
38	CP38E-SWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-S	38-CP38E-SWGCA(CP2)D-LB-Sgrama-BB-Indian-I	Big Bluestem	Andropogon gerardii	8.00	0.5		Grass	N	N	CP38E-SWGCA(CP2)D		LB-Sgrama-BB-Indian-PPclover-Sgrod-Ycone
38	CP38E-SWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-S	38-CP38E-SWGCA(CP2)D-LB-Sgrama-BB-Indian-I	Indiangrass	Sorghastrum nutans	8.00	0.5		Grass	N	N	CP38E-SWGCA(CP2)D		LB-Sgrama-BB-Indian-PPclover-Sgrod-Ycone
38	CP38E-SWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-S	38-CP38E-SWGCA(CP2)D-LB-Sgrama-BB-Indian-I	Purple Prairie Clover	Dalea purpurea	2.00	0.125		Legume	N	N	CP38E-SWGCA(CP2)D		LB-Sgrama-BB-Indian-PPclover-Sgrod-Ycone
38	CP38E-SWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-S	38-CP38E-SWGCA(CP2)D-LB-Sgrama-BB-Indian-I	Stiff Goldenrod	Oligoneuron rigidum	1.00	0.0625		Forb	N	N	CP38E-SWGCA(CP2)D		LB-Sgrama-BB-Indian-PPclover-Sgrod-Ycone
38	CP38E-SWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-S	38-CP38E-SWGCA(CP2)D-LB-Sgrama-BB-Indian-I	Yellow Coneflower	Ratibida pinnata	1.00	0.0625		Forb	N	N	CP38E-SWGCA(CP2)D		LB-Sgrama-BB-Indian-PPclover-Sgrod-Ycone
38	CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-I	38-CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian	Little Bluestem	Schizachyrium scoparium	24.00	1.5		Grass	N	N	CP38E-SWGCA(CP2)DM		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-I	38-CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian	Sideoats Grama	Bouteloua curtipendula	16.00	1		Grass	N	N	CP38E-SWGCA(CP2)DM		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-I	38-CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian	Big Bluestem	Andropogon gerardii	8.00	0.5		Grass	N	N	CP38E-SWGCA(CP2)DM		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-I	38-CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian	Indiangrass	Sorghastrum nutans	8.00	0.5		Grass	N	N	CP38E-SWGCA(CP2)DM		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-I	38-CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian	Switchgrass	Panicum virgatum	8.00	0.5		Grass	N	N	CP38E-SWGCA(CP2)DM		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-I	38-CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian	Purple Prairie Clover	Dalea purpurea	2.00	0.125		Legume	N	N	CP38E-SWGCA(CP2)DM		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-I	38-CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian	Bergamot	Monarda fistulosa	1.00	0.0625		Forb	N	N	CP38E-SWGCA(CP2)DM		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-I	38-CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian	Yellow Coneflower	Ratibida pinnata	1.00	0.0625		Forb	N	N	CP38E-SWGCA(CP2)DM		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Ber	38-CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Little Bluestem	Schizachyrium scoparium	20.00	1.25		Grass	N	N	CP38E-SWGCA(CP2)M		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Ber	38-CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Canada Wildrye	Elymus canadensis	16.00	1		Grass	N	N	CP38E-SWGCA(CP2)M		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Ber	38-CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Indiangrass	Sorghastrum nutans	16.00	1		Grass	N	N	CP38E-SWGCA(CP2)M		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Ber	38-CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Big Bluestem	Andropogon gerardii	8.00	0.5		Grass	N	N	CP38E-SWGCA(CP2)M		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Ber	38-CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Switchgrass	Panicum virgatum	8.00	0.5		Grass	N	N	CP38E-SWGCA(CP2)M		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Ber	38-CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Bergamot	Monarda fistulosa	1.00	0.0625		Forb	N	N	CP38E-SWGCA(CP2)M		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Ber	38-CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Black-eyed Susan	Rudbeckia hirta	1.00	0.0625		Forb	N	N	CP38E-SWGCA(CP2)M		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Ber	38-CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Yellow Coneflower	Ratibida pinnata	1.00	0.0625		Forb	N	N	CP38E-SWGCA(CP2)M		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-	38-CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Switc	Big Bluestem	Andropogon gerardii	16.00	1		Grass	N	N	CP38E-SWGCA(CP2)W		BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-	38-CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Switc	Canada Wildrye	Elymus canadensis	16.00	1		Grass	N	N	CP38E-SWGCA(CP2)W		BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron

38	CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-C	38-CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Switc	Indiangrass	Sorghastrum nutans	16.00	1		Grass	N	N	CP38E-SWGCA(CP2)W		BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-C	38-CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Switc	Switchgrass	Panicum virgatum	16.00	1		Grass	N	N	CP38E-SWGCA(CP2)W		BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-C	38-CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Switc	Prairie Cordgrass	Spartina pectinata	8.00	0.5		Grass	N	N	CP38E-SWGCA(CP2)W		BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-C	38-CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Switc	Cupplant	Silphium perfoliatum	2.00	0.125		Forb	N	N	CP38E-SWGCA(CP2)W		BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-C	38-CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Switc	Blue Vervain	Verbena hastata	1.00	0.0625		Forb	N	N	CP38E-SWGCA(CP2)W		BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-C	38-CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Switc	Common Ironweed	Vernonia fasciculata	1.00	0.0625		Forb	N	N	CP38E-SWGCA(CP2)W		BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-SWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Berg-	38-CP38E-SWGCA(CP2)WM-Switch-BB-Cwrye-Pc	Switchgrass	Panicum virgatum	32.00	2		Grass	N	N	CP38E-SWGCA(CP2)WM		Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
38	CP38E-SWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Berg-	38-CP38E-SWGCA(CP2)WM-Switch-BB-Cwrye-Pc	Big Bluestem	Andropogon gerardii	16.00	1		Grass	N	N	CP38E-SWGCA(CP2)WM		Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
38	CP38E-SWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Berg-	38-CP38E-SWGCA(CP2)WM-Switch-BB-Cwrye-Pc	Canada Wildrye	Elymus canadensis	16.00	1		Grass	N	N	CP38E-SWGCA(CP2)WM		Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
38	CP38E-SWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Berg-	38-CP38E-SWGCA(CP2)WM-Switch-BB-Cwrye-Pc	Prairie Cordgrass	Spartina pectinata	4.00	0.25		Grass	N	N	CP38E-SWGCA(CP2)WM		Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
38	CP38E-SWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Berg-	38-CP38E-SWGCA(CP2)WM-Switch-BB-Cwrye-Pc	Bergamot	Monarda fistulosa	1.00	0.0625		Forb	N	N	CP38E-SWGCA(CP2)WM		Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
38	CP38E-SWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Berg-	38-CP38E-SWGCA(CP2)WM-Switch-BB-Cwrye-Pc	New England Aster	Symphyotrichum novae-a	1.00	0.0625		Forb	N	N	CP38E-SWGCA(CP2)WM		Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
38	CP38E-SWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Berg-	38-CP38E-SWGCA(CP2)WM-Switch-BB-Cwrye-Pc	Yellow Coneflower	Ratibida pinnata	1.00	0.0625		Forb	N	N	CP38E-SWGCA(CP2)WM		Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Little Bluestem	Schizachyrium scoparium	24.00	1.5		Grass	N	N	CP38E-SWGCA(CP25)D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Sideoats Grama	Bouteloua curtipendula	24.00	1.5		Grass	N	N	CP38E-SWGCA(CP25)D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Indiangrass	Sorghastrum nutans	8.00	0.5		Grass	N	N	CP38E-SWGCA(CP25)D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Big Bluestem	Andropogon gerardii	4.00	0.25		Grass	N	N	CP38E-SWGCA(CP25)D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Purple Prairie Clover	Dalea purpurea	2.00	0.125		Legume	N	N	CP38E-SWGCA(CP25)D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Sand Dropseed	Sporobolus cryptandrus	2.00	0.125		Grass	N	N	CP38E-SWGCA(CP25)D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Prairie Junegrass	Koeleria macrantha	1.00	0.0625		Grass	N	N	CP38E-SWGCA(CP25)D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Spiderwort	Tradescantia ohiensis	1.00	0.0625		Forb	N	N	CP38E-SWGCA(CP25)D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Hoary Vervain	Verbena stricta	0.50	0.03125		Forb	N	N	CP38E-SWGCA(CP25)D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Leadplant	Amorpha canescens	0.50	0.03125		Legume	N	N	CP38E-SWGCA(CP25)D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Prairie Tickseed	Coreopsis palmata	0.50	0.03125		Forb	N	N	CP38E-SWGCA(CP25)D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Silky Aster	Symphyotrichum pratens	0.50	0.03125		Forb	N	N	CP38E-SWGCA(CP25)D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Stiff Goldenrod	Oligoneuron rigidum	0.50	0.03125		Forb	N	N	CP38E-SWGCA(CP25)D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Yellow Coneflower	Ratibida pinnata	0.50	0.03125		Forb	N	N	CP38E-SWGCA(CP25)D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Prairie Cinquefoil	Potentilla arguta	0.25	0.015625		Forb	N	N	CP38E-SWGCA(CP25)D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Spotted Mint	Monarda punctata	0.25	0.015625		Forb	N	N	CP38E-SWGCA(CP25)D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Little Bluestem	Schizachyrium scoparium	24.00	1.5		Grass	N	N	CP38E-SWGCA(CP25)DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Sideoats Grama	Bouteloua curtipendula	24.00	1.5		Grass	N	N	CP38E-SWGCA(CP25)DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Indiangrass	Sorghastrum nutans	8.00	0.5		Grass	N	N	CP38E-SWGCA(CP25)DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Switchgrass	Panicum virgatum	4.00	0.25		Grass	N	N	CP38E-SWGCA(CP25)DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Prairie Junegrass	Koeleria macrantha	2.00	0.125		Grass	N	N	CP38E-SWGCA(CP25)DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Prairie Dropseed	Sporobolus heterolepis	2.00	0.125		Grass	N	N	CP38E-SWGCA(CP25)DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Purple Prairie Clover	Dalea purpurea	2.00	0.125		Legume	N	N	CP38E-SWGCA(CP25)DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Round-Headed Bushclover	Lespedeza capitata	2.00	0.125		Legume	N	N	CP38E-SWGCA(CP25)DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Bergamot	Monarda fistulosa	1.00	0.0625		Forb	N	N	CP38E-SWGCA(CP25)DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Spiderwort	Tradescantia ohiensis	1.00	0.0625		Forb	N	N	CP38E-SWGCA(CP25)DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Yellow Coneflower	Ratibida pinnata	1.00	0.0625		Forb	N	N	CP38E-SWGCA(CP25)DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Leadplant	Amorpha canescens	0.50	0.03125		Legume	N	N	CP38E-SWGCA(CP25)DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Rough Blazing Star	Liatris aspera	0.50	0.03125		Forb	N	N	CP38E-SWGCA(CP25)DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Sky-Blue Aster	Symphyotrichum oolenta	0.50	0.03125		Forb	N	N	CP38E-SWGCA(CP25)DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Stiff Goldenrod	Oligoneuron rigidum	0.50	0.03125		Forb	N	N	CP38E-SWGCA(CP25)DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Prairie Cinquefoil	Potentilla arguta	0.25	0.015625		Forb	N	N	CP38E-SWGCA(CP25)DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-Switch-O	38-CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-	Little Bluestem	Schizachyrium scoparium	24.00	1.5		Grass	N	N	CP38E-SWGCA(CP25)M		Berg-Besus-NEaster-SBAster-Ycone-Croot
38	CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-Switch-O	38-CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-	Indiangrass	Sorghastrum nutans	16.00	1		Grass	N	N	CP38E-SWGCA(CP25)M		Berg-Besus-NEaster-SBAster-Ycone-Croot
38	CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-Switch-O	38-CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-	Big Bluestem	Andropogon gerardii	8.00	0.5		Grass	N	N	CP38E-SWGCA(CP25)M		Berg-Besus-NEaster-SBAster-Ycone-Croot
38	CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-Switch-O	38-CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-	Canada Wildrye	Elymus canadensis	8.00	0.5		Grass	N	N	CP38E-SWGCA(CP25)M		Berg-Besus-NEaster-SBAster-Ycone-Croot

38	CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-Switch-O	38-CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-	Switchgrass	Panicum virgatum	8.00	0.5		Grass	N	N	CP38E-SWGCA(CP25)M	Berg-Besus-NEaster-SBAster-Ycone-Croot
38	CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-Switch-O	38-CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-	Ox-eye Sunflower	Heliopsis helianthoides	1.00	0.0625		Forb	N	N	CP38E-SWGCA(CP25)M	Berg-Besus-NEaster-SBAster-Ycone-Croot
38	CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-Switch-O	38-CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-	Prairie Blazing Star	Liatris pycnostachya	1.00	0.0625		Forb	N	N	CP38E-SWGCA(CP25)M	Berg-Besus-NEaster-SBAster-Ycone-Croot
38	CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-Switch-O	38-CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-	Purple Prairie Clover	Dalea purpurea	1.00	0.0625		Legume	N	N	CP38E-SWGCA(CP25)M	Berg-Besus-NEaster-SBAster-Ycone-Croot
38	CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-Switch-O	38-CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-	Rosinweed	Silphium integrifolium	1.00	0.0625		Forb	N	N	CP38E-SWGCA(CP25)M	Berg-Besus-NEaster-SBAster-Ycone-Croot
38	CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-Switch-O	38-CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-	Bergamot	Monarda fistulosa	0.50	0.03125		Forb	N	N	CP38E-SWGCA(CP25)M	Berg-Besus-NEaster-SBAster-Ycone-Croot
38	CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-Switch-O	38-CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-	Black-eyed Susan	Rudbeckia hirta	0.50	0.03125		Forb	N	N	CP38E-SWGCA(CP25)M	Berg-Besus-NEaster-SBAster-Ycone-Croot
38	CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-Switch-O	38-CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-	New England Aster	Symphyotrichum novae-a	0.50	0.03125		Forb	N	N	CP38E-SWGCA(CP25)M	Berg-Besus-NEaster-SBAster-Ycone-Croot
38	CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-Switch-O	38-CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-	Smooth Blue Aster	Symphyotrichum laeve	0.50	0.03125		Forb	N	N	CP38E-SWGCA(CP25)M	Berg-Besus-NEaster-SBAster-Ycone-Croot
38	CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-Switch-O	38-CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-	Yellow Coneflower	Ratibida pinnata	0.50	0.03125		Forb	N	N	CP38E-SWGCA(CP25)M	Berg-Besus-NEaster-SBAster-Ycone-Croot
38	CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-Switch-O	38-CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-	Culver's Root	Veronicastrum virginicum	0.25	0.015625		Forb	N	N	CP38E-SWGCA(CP25)M	Berg-Besus-NEaster-SBAster-Ycone-Croot
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-	Canada Wildrye	Elymus canadensis	16.00	1		Grass	N	N	CP38E-SWGCA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-	Switchgrass	Panicum virgatum	16.00	1		Grass	N	N	CP38E-SWGCA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-	Indiangrass	Sorghastrum nutans	12.00	0.75		Grass	N	N	CP38E-SWGCA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-	Big Bluestem	Andropogon gerardii	8.00	0.5		Grass	N	N	CP38E-SWGCA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-	Prairie Cordgrass	Spartina pectinata	8.00	0.5		Grass	N	N	CP38E-SWGCA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-	Fowl Mannagrass	Glyceria striata	4.00	0.25		Grass	N	N	CP38E-SWGCA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-	Fox Sedge	Carex vulpinoidea	4.00	0.25		Sedge	N	N	CP38E-SWGCA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-	Cupplant	Silphium perfoliatum	2.00	0.125		Forb	N	N	CP38E-SWGCA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-	Showy Tick Trefoil	Desmodium canadense	2.00	0.125		Legume	N	N	CP38E-SWGCA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-	Blue Vervain	Verbena hastata	1.00	0.0625		Forb	N	N	CP38E-SWGCA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-	Golden Alexanders	Zizia aurea	1.00	0.0625		Forb	N	N	CP38E-SWGCA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-	Marsh Milkweed	Asclepias incarnata	1.00	0.0625		Forb	N	N	CP38E-SWGCA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-	Boneset	Eupatorium perfoliatum	0.50	0.03125		Forb	N	N	CP38E-SWGCA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-	Common Ironweed	Vernonia fasciculata	0.50	0.03125		Forb	N	N	CP38E-SWGCA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-	Joe-pye Weed	Eutrochium maculatum	0.50	0.03125		Forb	N	N	CP38E-SWGCA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-	Culver's Root	Veronicastrum virginicum	0.25	0.015625		Forb	N	N	CP38E-SWGCA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-Indian-Pco	38-CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-I	Switchgrass	Panicum virgatum	24.00	1.5		Grass	N	N	CP38E-SWGCA(CP25)WM	Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
38	CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-Indian-Pco	38-CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-I	Big Bluestem	Andropogon gerardii	20.00	1.25		Grass	N	N	CP38E-SWGCA(CP25)WM	Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
38	CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-Indian-Pco	38-CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-I	Canada Wildrye	Elymus canadensis	16.00	1		Grass	N	N	CP38E-SWGCA(CP25)WM	Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
38	CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-Indian-Pco	38-CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-I	Indiangrass	Sorghastrum nutans	12.00	0.75		Grass	N	N	CP38E-SWGCA(CP25)WM	Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
38	CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-Indian-Pco	38-CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-I	Prairie Cordgrass	Spartina pectinata	4.00	0.25		Grass	N	N	CP38E-SWGCA(CP25)WM	Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
38	CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-Indian-Pco	38-CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-I	Cupplant	Silphium perfoliatum	2.00	0.125		Forb	N	N	CP38E-SWGCA(CP25)WM	Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
38	CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-Indian-Pco	38-CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-I	White wild indigo	Baptisia alba	1.50	0.09375		Legume	N	N	CP38E-SWGCA(CP25)WM	Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
38	CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-Indian-Pco	38-CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-I	Black-eyed Susan	Rudbeckia hirta	0.50	0.03125		Forb	N	N	CP38E-SWGCA(CP25)WM	Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
38	CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-Indian-Pco	38-CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-I	Common Ironweed	Vernonia fasciculata	0.50	0.03125		Forb	N	N	CP38E-SWGCA(CP25)WM	Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
38	CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-Indian-Pco	38-CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-I	Golden Alexanders	Zizia aurea	0.50	0.03125		Forb	N	N	CP38E-SWGCA(CP25)WM	Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
38	CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-Indian-Pco	38-CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-I	New England Aster	Symphyotrichum novae-a	0.50	0.03125		Forb	N	N	CP38E-SWGCA(CP25)WM	Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
38	CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-Indian-Pco	38-CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-I	Prairie Blazing Star	Liatris pycnostachya	0.50	0.03125		Forb	N	N	CP38E-SWGCA(CP25)WM	Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
38	CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-Indian-Pco	38-CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-I	Yellow Coneflower	Ratibida pinnata	0.50	0.03125		Forb	N	N	CP38E-SWGCA(CP25)WM	Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
38	CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-Indian-Pco	38-CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-I	Bergamot	Monarda fistulosa	0.25	0.015625		Forb	N	N	CP38E-SWGCA(CP25)WM	Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
38	CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-Indian-Pco	38-CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-I	Great St. John's Wort	Hypericum ascyron	0.25	0.015625		Forb	N	N	CP38E-SWGCA(CP25)WM	Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop-	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pju	Little Bluestem	Schizachyrium scoparium	32.00	2		Grass	N	N	CP38E-WPHRA(CP25)D	Swort-Berg-Lplant-Rblzstar-SkyAster-Besus-Pcinque-Sgrod-
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop-	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pju	Sideoats Grama	Bouteloua curtipendula	24.00	1.5		Grass	N	N	CP38E-WPHRA(CP25)D	Swort-Berg-Lplant-Rblzstar-SkyAster-Besus-Pcinque-Sgrod-
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop-	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pju	Indiangrass	Sorghastrum nutans	4.00	0.25		Grass	N	N	CP38E-WPHRA(CP25)D	Swort-Berg-Lplant-Rblzstar-SkyAster-Besus-Pcinque-Sgrod-
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop-	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pju	Prairie Junegrass	Koeleria macrantha	4.00	0.25		Grass	N	N	CP38E-WPHRA(CP25)D	Swort-Berg-Lplant-Rblzstar-SkyAster-Besus-Pcinque-Sgrod-
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop-	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pju	Prairie Dropseed	Sporobolus heterolepis	4.00	0.25		Grass	N	N	CP38E-WPHRA(CP25)D	Swort-Berg-Lplant-Rblzstar-SkyAster-Besus-Pcinque-Sgrod-
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop-	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pju	Switchgrass	Panicum virgatum	4.00	0.25		Grass	N	N	CP38E-WPHRA(CP25)D	Swort-Berg-Lplant-Rblzstar-SkyAster-Besus-Pcinque-Sgrod-
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop-	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pju	Purple Prairie Clover	Dalea purpurea	2.00	0.125		Legume	N	N	CP38E-WPHRA(CP25)D	Swort-Berg-Lplant-Rblzstar-SkyAster-Besus-Pcinque-Sgrod-

38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop-	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjur	Round-Headed Bushclover	Lespedeza capitata	2.00	0.125		Legume	N	N	CP38E-WPHRA(CP25)D	Swort-Berg-Lplant-Rblzstar-SkyAster-Besus-Pcinque-Sgrod-
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop-	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjur	Spiderwort	Tradescantia ohiensis	1.00	0.0625		Forb	N	N	CP38E-WPHRA(CP25)D	Swort-Berg-Lplant-Rblzstar-SkyAster-Besus-Pcinque-Sgrod-
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop-	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjur	Bergamot	Monarda fistulosa	0.50	0.03125		Forb	N	N	CP38E-WPHRA(CP25)D	Swort-Berg-Lplant-Rblzstar-SkyAster-Besus-Pcinque-Sgrod-
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop-	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjur	Leadplant	Amorpha canescens	0.50	0.03125		Legume	N	N	CP38E-WPHRA(CP25)D	Swort-Berg-Lplant-Rblzstar-SkyAster-Besus-Pcinque-Sgrod-
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop-	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjur	Rough Blazing Star	Liatris aspera	0.50	0.03125		Forb	N	N	CP38E-WPHRA(CP25)D	Swort-Berg-Lplant-Rblzstar-SkyAster-Besus-Pcinque-Sgrod-
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop-	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjur	Sky-Blue Aster	Symphyotrichum oolenta	0.50	0.03125		Forb	N	N	CP38E-WPHRA(CP25)D	Swort-Berg-Lplant-Rblzstar-SkyAster-Besus-Pcinque-Sgrod-
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop-	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjur	Black-eyed Susan	Rudbeckia hirta	0.25	0.015625		Forb	N	N	CP38E-WPHRA(CP25)D	Swort-Berg-Lplant-Rblzstar-SkyAster-Besus-Pcinque-Sgrod-
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop-	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjur	Prairie Cinquefoil	Potentilla arguta	0.25	0.015625		Forb	N	N	CP38E-WPHRA(CP25)D	Swort-Berg-Lplant-Rblzstar-SkyAster-Besus-Pcinque-Sgrod-
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop-	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjur	Stiff Goldenrod	Oligoneuron rigidum	0.25	0.015625		Forb	N	N	CP38E-WPHRA(CP25)D	Swort-Berg-Lplant-Rblzstar-SkyAster-Besus-Pcinque-Sgrod-
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop-	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjur	Yellow Coneflower	Ratibida pinnata	0.25	0.015625		Forb	N	N	CP38E-WPHRA(CP25)D	Swort-Berg-Lplant-Rblzstar-SkyAster-Besus-Pcinque-Sgrod-
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BI	Little Bluestem	Schizachyrium scoparium	32.00	2		Grass	N	N	CP38E-WPHRA(CP25)DM	Hvervain-Lplant-Ptick-SilkAster-Pcinque-Smint-Sgrod-Ycone
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BI	Sideoats Grama	Bouteloua curtipendula	24.00	1.5		Grass	N	N	CP38E-WPHRA(CP25)DM	Hvervain-Lplant-Ptick-SilkAster-Pcinque-Smint-Sgrod-Ycone
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BI	Prairie Junegrass	Koeleria macrantha	6.00	0.375		Grass	N	N	CP38E-WPHRA(CP25)DM	Hvervain-Lplant-Ptick-SilkAster-Pcinque-Smint-Sgrod-Ycone
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BI	Big Bluestem	Andropogon gerardii	4.00	0.25		Grass	N	N	CP38E-WPHRA(CP25)DM	Hvervain-Lplant-Ptick-SilkAster-Pcinque-Smint-Sgrod-Ycone
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BI	Indiangrass	Sorghastrum nutans	4.00	0.25		Grass	N	N	CP38E-WPHRA(CP25)DM	Hvervain-Lplant-Ptick-SilkAster-Pcinque-Smint-Sgrod-Ycone
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BI	Sand Dropseed	Sporobolus cryptandrus	4.00	0.25		Grass	N	N	CP38E-WPHRA(CP25)DM	Hvervain-Lplant-Ptick-SilkAster-Pcinque-Smint-Sgrod-Ycone
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BI	Butterfly Milkweed	Asclepias tuberosa	1.00	0.0625		Forb	N	N	CP38E-WPHRA(CP25)DM	Hvervain-Lplant-Ptick-SilkAster-Pcinque-Smint-Sgrod-Ycone
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BI	Purple Prairie Clover	Dalea purpurea	1.00	0.0625		Legume	N	N	CP38E-WPHRA(CP25)DM	Hvervain-Lplant-Ptick-SilkAster-Pcinque-Smint-Sgrod-Ycone
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BI	Spiderwort	Tradescantia ohiensis	1.00	0.0625		Forb	N	N	CP38E-WPHRA(CP25)DM	Hvervain-Lplant-Ptick-SilkAster-Pcinque-Smint-Sgrod-Ycone
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BI	Hoary Vervain	Verbena stricta	0.50	0.03125		Forb	N	N	CP38E-WPHRA(CP25)DM	Hvervain-Lplant-Ptick-SilkAster-Pcinque-Smint-Sgrod-Ycone
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BI	Leadplant	Amorpha canescens	0.50	0.03125		Legume	N	N	CP38E-WPHRA(CP25)DM	Hvervain-Lplant-Ptick-SilkAster-Pcinque-Smint-Sgrod-Ycone
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BI	Prairie Tickseed	Coreopsis palmata	0.50	0.03125		Forb	N	N	CP38E-WPHRA(CP25)DM	Hvervain-Lplant-Ptick-SilkAster-Pcinque-Smint-Sgrod-Ycone
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BI	Silky Aster	Symphyotrichum pratens	0.50	0.03125		Forb	N	N	CP38E-WPHRA(CP25)DM	Hvervain-Lplant-Ptick-SilkAster-Pcinque-Smint-Sgrod-Ycone
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BI	Prairie Cinquefoil	Potentilla arguta	0.25	0.015625		Forb	N	N	CP38E-WPHRA(CP25)DM	Hvervain-Lplant-Ptick-SilkAster-Pcinque-Smint-Sgrod-Ycone
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BI	Spotted Mint	Monarda punctata	0.25	0.015625		Forb	N	N	CP38E-WPHRA(CP25)DM	Hvervain-Lplant-Ptick-SilkAster-Pcinque-Smint-Sgrod-Ycone
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BI	Stiff Goldenrod	Oligoneuron rigidum	0.25	0.015625		Forb	N	N	CP38E-WPHRA(CP25)DM	Hvervain-Lplant-Ptick-SilkAster-Pcinque-Smint-Sgrod-Ycone
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BI	Yellow Coneflower	Ratibida pinnata	0.25	0.015625		Forb	N	N	CP38E-WPHRA(CP25)DM	Hvervain-Lplant-Ptick-SilkAster-Pcinque-Smint-Sgrod-Ycone
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BE	Little Bluestem	Schizachyrium scoparium	28.00	1.75		Grass	N	N	CP38E-WPHRA(CP25)M	Pblzstar-PPclover-Berg-Besus-NEaster-SkyAster-SBAster-Ycone-
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BE	Canada Wildrye	Elymus canadensis	12.00	0.75		Grass	N	N	CP38E-WPHRA(CP25)M	Pblzstar-PPclover-Berg-Besus-NEaster-SkyAster-SBAster-Ycone-
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BE	Sideoats Grama	Bouteloua curtipendula	12.00	0.75		Grass	N	N	CP38E-WPHRA(CP25)M	Pblzstar-PPclover-Berg-Besus-NEaster-SkyAster-SBAster-Ycone-
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BE	Big Bluestem	Andropogon gerardii	4.00	0.25		Grass	N	N	CP38E-WPHRA(CP25)M	Pblzstar-PPclover-Berg-Besus-NEaster-SkyAster-SBAster-Ycone-
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BE	Indiangrass	Sorghastrum nutans	4.00	0.25		Grass	N	N	CP38E-WPHRA(CP25)M	Pblzstar-PPclover-Berg-Besus-NEaster-SkyAster-SBAster-Ycone-
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BE	Switchgrass	Panicum virgatum	4.00	0.25		Grass	N	N	CP38E-WPHRA(CP25)M	Pblzstar-PPclover-Berg-Besus-NEaster-SkyAster-SBAster-Ycone-
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BE	Canada Milkvetch	Astragalus canadensis	2.00	0.125		Legume	N	N	CP38E-WPHRA(CP25)M	Pblzstar-PPclover-Berg-Besus-NEaster-SkyAster-SBAster-Ycone-
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BE	Ox-eye Sunflower	Heliopsis helianthoides	1.00	0.0625		Forb	N	N	CP38E-WPHRA(CP25)M	Pblzstar-PPclover-Berg-Besus-NEaster-SkyAster-SBAster-Ycone-
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BE	Prairie Blazing Star	Liatris pycnostachya	1.00	0.0625		Forb	N	N	CP38E-WPHRA(CP25)M	Pblzstar-PPclover-Berg-Besus-NEaster-SkyAster-SBAster-Ycone-
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BE	Purple Prairie Clover	Dalea purpurea	1.00	0.0625		Legume	N	N	CP38E-WPHRA(CP25)M	Pblzstar-PPclover-Berg-Besus-NEaster-SkyAster-SBAster-Ycone-
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BE	Bergamot	Monarda fistulosa	0.50	0.03125		Forb	N	N	CP38E-WPHRA(CP25)M	Pblzstar-PPclover-Berg-Besus-NEaster-SkyAster-SBAster-Ycone-
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BE	Black-eyed Susan	Rudbeckia hirta	0.50	0.03125		Forb	N	N	CP38E-WPHRA(CP25)M	Pblzstar-PPclover-Berg-Besus-NEaster-SkyAster-SBAster-Ycone-
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BE	New England Aster	Symphyotrichum novae-a	0.50	0.03125		Forb	N	N	CP38E-WPHRA(CP25)M	Pblzstar-PPclover-Berg-Besus-NEaster-SkyAster-SBAster-Ycone-
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BE	Sky-Blue Aster	Symphyotrichum oolenta	0.50	0.03125		Forb	N	N	CP38E-WPHRA(CP25)M	Pblzstar-PPclover-Berg-Besus-NEaster-SkyAster-SBAster-Ycone-
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BE	Smooth Blue Aster	Symphyotrichum laeve	0.50	0.03125		Forb	N	N	CP38E-WPHRA(CP25)M	Pblzstar-PPclover-Berg-Besus-NEaster-SkyAster-SBAster-Ycone-
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BE	Yellow Coneflower	Ratibida pinnata	0.50	0.03125		Forb	N	N	CP38E-WPHRA(CP25)M	Pblzstar-PPclover-Berg-Besus-NEaster-SkyAster-SBAster-Ycone-
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BE	Culver's Root	Veronicastrum virginicum	0.25	0.015625		Forb	N	N	CP38E-WPHRA(CP25)M	Pblzstar-PPclover-Berg-Besus-NEaster-SkyAster-SBAster-Ycone-
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsedg	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-	Canada Wildrye	Elymus canadensis	16.00	1		Grass	N	N	CP38E-WPHRA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsedg	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-	Indiangrass	Sorghastrum nutans	12.00	0.75		Grass	N	N	CP38E-WPHRA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsedg	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-	Switchgrass	Panicum virgatum	12.00	0.75		Grass	N	N	CP38E-WPHRA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsedg	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-	Big Bluestem	Andropogon gerardii	8.00	0.5		Grass	N	N	CP38E-WPHRA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsedg	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-	Fox Sedge	Carex vulpinoidea	8.00	0.5		Sedge	N	N	CP38E-WPHRA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot

38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsedg	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-	Prairie Cordgrass	Spartina pectinata	8.00	0.5		Grass	N	N	CP38E-WPHRA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsedg	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-	Fowl Mannagrass	Glyceria striata	4.00	0.25		Grass	N	N	CP38E-WPHRA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsedg	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-	Cupplant	Silphium perfoliatum	2.00	0.125		Forb	N	N	CP38E-WPHRA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsedg	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-	Showy Tick Trefoil	Desmodium canadense	2.00	0.125		Legume	N	N	CP38E-WPHRA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsedg	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-	Blue Vervain	Verbena hastata	1.00	0.0625		Forb	N	N	CP38E-WPHRA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsedg	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-	Golden Alexanders	Zizia aurea	1.00	0.0625		Forb	N	N	CP38E-WPHRA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsedg	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-	Marsh Milkweed	Asclepias incarnata	1.00	0.0625		Forb	N	N	CP38E-WPHRA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsedg	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-	Boneset	Eupatorium perfoliatum	0.50	0.03125		Forb	N	N	CP38E-WPHRA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsedg	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-	Common Ironweed	Vernonia fasciculata	0.50	0.03125		Forb	N	N	CP38E-WPHRA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsedg	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-	Joe-pye Weed	Eutrochium maculatum	0.50	0.03125		Forb	N	N	CP38E-WPHRA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsedg	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-	Culver's Root	Veronicastrum virginicum	0.25	0.015625		Forb	N	N	CP38E-WPHRA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-Monarch(CP1)-Tim-Orc-RC-Cmilkweed-Besus-Ox	38-CP38E-Monarch(CP1)-Tim-Orc-RC-Cmilkweed-	Timothy	Phleum pratense	8.00	0.5	14.2	Grass	I	X	CP38E-Monarch(CP1)	Tim-Orc-RC-Cmilkweed-Besus-Oxeyesun-Sgrod
38	CP38E-Monarch(CP1)-Tim-Orc-RC-Cmilkweed-Besus-Ox	38-CP38E-Monarch(CP1)-Tim-Orc-RC-Cmilkweed-	Orchardgrass	Dactylis glomerata L.	8.00	0.5	7.5	Grass	I	X	CP38E-Monarch(CP1)	Tim-Orc-RC-Cmilkweed-Besus-Oxeyesun-Sgrod
38	CP38E-Monarch(CP1)-Tim-Orc-RC-Cmilkweed-Besus-Ox	38-CP38E-Monarch(CP1)-Tim-Orc-RC-Cmilkweed-	Red Clover	Trifolium pratense	4.80	0.3	1.9	Legume	I	X	CP38E-Monarch(CP1)	Tim-Orc-RC-Cmilkweed-Besus-Oxeyesun-Sgrod
38	CP38E-Monarch(CP1)-Tim-Orc-RC-Cmilkweed-Besus-Ox	38-CP38E-Monarch(CP1)-Tim-Orc-RC-Cmilkweed-	Common Milkweed	Asclepias syriaca	6.05	0.38	0.6	Forb	N	X	CP38E-Monarch(CP1)	Tim-Orc-RC-Cmilkweed-Besus-Oxeyesun-Sgrod
38	CP38E-Monarch(CP1)-Tim-Orc-RC-Cmilkweed-Besus-Ox	38-CP38E-Monarch(CP1)-Tim-Orc-RC-Cmilkweed-	Black-Eyed Susan	Rudbeckia hirta	0.96	0.06	2.2	Forb	N	X	CP38E-Monarch(CP1)	Tim-Orc-RC-Cmilkweed-Besus-Oxeyesun-Sgrod
38	CP38E-Monarch(CP1)-Tim-Orc-RC-Cmilkweed-Besus-Ox	38-CP38E-Monarch(CP1)-Tim-Orc-RC-Cmilkweed-	Ox-eye Sunflower	Heliopsis helianthoides	0.96	0.06	0.20	Forb	N	X	CP38E-Monarch(CP1)	Tim-Orc-RC-Cmilkweed-Besus-Oxeyesun-Sgrod
38	CP38E-Monarch(CP1)-Tim-Orc-RC-Cmilkweed-Besus-Ox	38-CP38E-Monarch(CP1)-Tim-Orc-RC-Cmilkweed-	Stiff Goldenrod	Oligoneuron rigidum	0.96	0.06	1.1	Forb	N	X	CP38E-Monarch(CP1)	Tim-Orc-RC-Cmilkweed-Besus-Oxeyesun-Sgrod
38	CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cwrye-Wpc	38-CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cv	Big Bluestem	Andropogon gerardii	4.00	0.25	1	Grass	N	X	CP38E-Monarch(CP2)	Sgrod-Shwgrod-NEaster
38	CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cwrye-Wpc	38-CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cv	Little Bluestem	Schizachyrium scopariu	24.00	1.5	8.3	Grass	N	X	CP38E-Monarch(CP2)	Sgrod-Shwgrod-NEaster
38	CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cwrye-Wpc	38-CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cv	Indiangrass	Sorghastrum nutans	4.00	0.25	1.2	Grass	N	X	CP38E-Monarch(CP2)	Sgrod-Shwgrod-NEaster
38	CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cwrye-Wpc	38-CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cv	Sideoats Grama	Bouteloua curtipendula	12.00	0.75	2.2	Grass	N	X	CP38E-Monarch(CP2)	Sgrod-Shwgrod-NEaster
38	CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cwrye-Wpc	38-CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cv	Canada Wildrye	Elymus canadensis	16.00	1	2	Grass	N	X	CP38E-Monarch(CP2)	Sgrod-Shwgrod-NEaster
38	CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cwrye-Wpc	38-CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cv	white prairie clover	Dalea candida	3.04	0.19	1.2	Legume	N	X	CP38E-Monarch(CP2)	Sgrod-Shwgrod-NEaster
38	CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cwrye-Wpc	38-CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cv	Common Milkweed	Asclepias syriaca	4.96	0.31	0.5	Forb	N	X	CP38E-Monarch(CP2)	Sgrod-Shwgrod-NEaster
38	CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cwrye-Wpc	38-CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cv	Black-eyed Susan	Rudbeckia hirta	0.96	0.06	2.2	Forb	N	X	CP38E-Monarch(CP2)	Sgrod-Shwgrod-NEaster
38	CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cwrye-Wpc	38-CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cv	Bergamot	Monarda fistulosa	0.96	0.06	1.8	Forb	N	X	CP38E-Monarch(CP2)	Sgrod-Shwgrod-NEaster
38	CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cwrye-Wpc	38-CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cv	Stiff Goldenrod	Oligoneuron rigidum	0.96	0.06	1.1	Forb	N	X	CP38E-Monarch(CP2)	Sgrod-Shwgrod-NEaster
38	CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cwrye-Wpc	38-CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cv	Showy Goldenrod	Solidago speciosa	0.48	0.03	1.1	Forb	N	X	CP38E-Monarch(CP2)	Sgrod-Shwgrod-NEaster
38	CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cwrye-Wpc	38-CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cv	New England Aster	Symphyotrichum novae	0.48	0.03	0.8	Forb	N	X	CP38E-Monarch(CP2)	Sgrod-Shwgrod-NEaster
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-Cwrye-Wp	38-CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	Big Bluestem	Andropogon gerardii	4.00	0.25	1	Grass	N	X	CP38E-Monarch(CP25)	Sgrod-Shwgrod-NEaster-Rblzstar-Rtlsnkmaster-Cup-SkyAster
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-Cwrye-Wp	38-CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	Little Bluestem	Schizachyrium scopariu	16.00	1	5.6	Grass	N	X	CP38E-Monarch(CP25)	Sgrod-Shwgrod-NEaster-Rblzstar-Rtlsnkmaster-Cup-SkyAster
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-Cwrye-Wp	38-CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	Indiangrass	Sorghastrum nutans	4.00	0.25	1.2	Grass	N	X	CP38E-Monarch(CP25)	Sgrod-Shwgrod-NEaster-Rblzstar-Rtlsnkmaster-Cup-SkyAster
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-Cwrye-Wp	38-CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	Sideoats Grama	Bouteloua curtipendula	8.00	0.5	1.5	Grass	N	X	CP38E-Monarch(CP25)	Sgrod-Shwgrod-NEaster-Rblzstar-Rtlsnkmaster-Cup-SkyAster
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-Cwrye-Wp	38-CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	Canada Wildrye	Elymus canadensis	8.00	0.5	1	Grass	N	X	CP38E-Monarch(CP25)	Sgrod-Shwgrod-NEaster-Rblzstar-Rtlsnkmaster-Cup-SkyAster
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-Cwrye-Wp	38-CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	white prairie clover	Dalea candida	3.04	0.19	1.2	Legume	N	X	CP38E-Monarch(CP25)	Sgrod-Shwgrod-NEaster-Rblzstar-Rtlsnkmaster-Cup-SkyAster
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-Cwrye-Wp	38-CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	Common Milkweed	Asclepias syriaca	4.96	0.31	0.5	Forb	N	X	CP38E-Monarch(CP25)	Sgrod-Shwgrod-NEaster-Rblzstar-Rtlsnkmaster-Cup-SkyAster
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-Cwrye-Wp	38-CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	Black-eyed Susan	Rudbeckia hirta	0.96	0.06	2.2	Forb	N	X	CP38E-Monarch(CP25)	Sgrod-Shwgrod-NEaster-Rblzstar-Rtlsnkmaster-Cup-SkyAster
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-Cwrye-Wp	38-CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	Bergamot	Monarda fistulosa	0.96	0.06	1.8	Forb	N	X	CP38E-Monarch(CP25)	Sgrod-Shwgrod-NEaster-Rblzstar-Rtlsnkmaster-Cup-SkyAster
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-Cwrye-Wp	38-CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	Stiff Goldenrod	Oligoneuron rigidum	0.96	0.06	1.1	Forb	N	X	CP38E-Monarch(CP25)	Sgrod-Shwgrod-NEaster-Rblzstar-Rtlsnkmaster-Cup-SkyAster
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-Cwrye-Wp	38-CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	Showy Goldenrod	Solidago speciosa	0.48	0.03	1.1	Forb	N	X	CP38E-Monarch(CP25)	Sgrod-Shwgrod-NEaster-Rblzstar-Rtlsnkmaster-Cup-SkyAster
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-Cwrye-Wp	38-CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	New England Aster	Symphyotrichum novae	0.48	0.03	0.8	Forb	N	X	CP38E-Monarch(CP25)	Sgrod-Shwgrod-NEaster-Rblzstar-Rtlsnkmaster-Cup-SkyAster
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-Cwrye-Wp	38-CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	Rough Blazing Star	Liatris aspera	0.48	0.03	0.2	Forb	N	X	CP38E-Monarch(CP25)	Sgrod-Shwgrod-NEaster-Rblzstar-Rtlsnkmaster-Cup-SkyAster
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-Cwrye-Wp	38-CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	Rattlesnake Master	Eryngium yuccifolium	0.96	0.06	0.2	Forb	N	X	CP38E-Monarch(CP25)	Sgrod-Shwgrod-NEaster-Rblzstar-Rtlsnkmaster-Cup-SkyAster
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-Cwrye-Wp	38-CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	Cupplant	Silphium perfoliatum	2.08	0.13	0.1	Forb	N	X	CP38E-Monarch(CP25)	Sgrod-Shwgrod-NEaster-Rblzstar-Rtlsnkmaster-Cup-SkyAster
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-Cwrye-Wp	38-CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	Sky-Blue Aster	Symphyotrichum oolen	0.96	0.06	1.9	Forb	N	X	CP38E-Monarch(CP25)	BB-LB-Indian-Sgrama-Cwrye-Wpclover-Cmilkweed-Besus-Berg-Sgrod-Shwgrod-NEaster-Rblzstar-Rtlsnkmaster-Cup-SkyAster
38	CP38E-GHRA(CP1)1-Alf-Rtop-Tim-Orc	38-CP38E-GHRA(CP1)1-Alf-Rtop-Tim-Orc	Alfalfa	Medicago sativa	96.00	6	30.2	Legume	I	X	CP38E-GHRA(CP1)1	Alf-Rtop-Tim-Orc
38	CP38E-GHRA(CP1)1-Alf-Rtop-Tim-Orc	38-CP38E-GHRA(CP1)1-Alf-Rtop-Tim-Orc	Redtop	Agrostis gigantea	32.00	2	229.2	Grass	I		CP38E-GHRA(CP1)1	Alf-Rtop-Tim-Orc

38	CP38E-GHRA(CP1)1-Alf-Rtop-Tim-Orc	38-CP38E-GHRA(CP1)1-Alf-Rtop-Tim-Orc	timothy	Phleum pratense	32.00	2	56.5	Grass	I	X	CP38E-GHRA(CP1)1		Alf-Rtop-Tim-Orc
38	CP38E-GHRA(CP1)1-Alf-Rtop-Tim-Orc	38-CP38E-GHRA(CP1)1-Alf-Rtop-Tim-Orc	Orchardgrass	Dactylis glomerata L.	16.00	1	15	Grass	I	X	CP38E-GHRA(CP1)1		Alf-Rtop-Tim-Orc
38	CP38E-GHRA(CP1)2-RC-KB-Orc-Rtop	38-CP38E-GHRA(CP1)2-RC-KB-Orc-Rtop	Red Clover	Trifolium pratense	80.00	5	31.6	Legume	I	X	CP38E-GHRA(CP1)2		RC-KB-Orc-Rtop
38	CP38E-GHRA(CP1)2-RC-KB-Orc-Rtop	38-CP38E-GHRA(CP1)2-RC-KB-Orc-Rtop	Kentucky Bluegrass	Poa pratensis	32.00	2	100	Grass	I		CP38E-GHRA(CP1)2		RC-KB-Orc-Rtop
38	CP38E-GHRA(CP1)2-RC-KB-Orc-Rtop	38-CP38E-GHRA(CP1)2-RC-KB-Orc-Rtop	Orchardgrass	Dactylis glomerata L.	16.00	1	15	Grass	I	X	CP38E-GHRA(CP1)2		RC-KB-Orc-Rtop
38	CP38E-GHRA(CP1)2-RC-KB-Orc-Rtop	38-CP38E-GHRA(CP1)2-RC-KB-Orc-Rtop	Redtop	Agrostis gigantea	16.00	1	114.6	Grass	I		CP38E-GHRA(CP1)2		RC-KB-Orc-Rtop
38	CP38E-GHRA(CP1)3-RC-SB-Tim	38-CP38E-GHRA(CP1)3-RC-SB-Tim	Red Clover	Trifolium pratense	80.00	5	31.6	Legume	I	X	CP38E-GHRA(CP1)3		RC-SB-Tim
38	CP38E-GHRA(CP1)3-RC-SB-Tim	38-CP38E-GHRA(CP1)3-RC-SB-Tim	Smooth Bromegrass	Bromus inermis	48.00	3	9.4	Grass	I		CP38E-GHRA(CP1)3		RC-SB-Tim
38	CP38E-GHRA(CP1)3-RC-SB-Tim	38-CP38E-GHRA(CP1)3-RC-SB-Tim	Timothy	Phleum pratense	32.00	2	56.5	Grass	I	X	CP38E-GHRA(CP1)3		RC-SB-Tim
38	CP38E-GHRA(CP1)4-RC-Tim-Orc-Rtop	38-CP38E-GHRA(CP1)4-RC-Tim-Orc-Rtop	Red Clover	Trifolium pratense	80.00	5	31.6	Legume	I	X	CP38E-GHRA(CP1)4		RC-Tim-Orc-Rtop
38	CP38E-GHRA(CP1)4-RC-Tim-Orc-Rtop	38-CP38E-GHRA(CP1)4-RC-Tim-Orc-Rtop	Timothy	Phleum pratense	32.00	2	56.5	Grass	I	X	CP38E-GHRA(CP1)4		RC-Tim-Orc-Rtop
38	CP38E-GHRA(CP1)4-RC-Tim-Orc-Rtop	38-CP38E-GHRA(CP1)4-RC-Tim-Orc-Rtop	Orchardgrass	Dactylis glomerata L.	16.00	1	15	Grass	I	X	CP38E-GHRA(CP1)4		RC-Tim-Orc-Rtop
38	CP38E-GHRA(CP1)4-RC-Tim-Orc-Rtop	38-CP38E-GHRA(CP1)4-RC-Tim-Orc-Rtop	Redtop	Agrostis gigantea	16.00	1	114.6	Grass	I		CP38E-GHRA(CP1)4		RC-Tim-Orc-Rtop
38	CP3-1-BB-LB-Indian-Sgrama-Sgrod-Ycone-PPclover	38-CP3-1-BB-LB-Indian-Sgrama-Sgrod-Ycone-PPcl	Big Bluestem	Andropogon gerardii	8.00	0.5	1.9	Grass	N	X	CP3-1		BB-LB-Indian-Sgrama-Sgrod-Ycone-PPclover
38	CP3-1-BB-LB-Indian-Sgrama-Sgrod-Ycone-PPclover	38-CP3-1-BB-LB-Indian-Sgrama-Sgrod-Ycone-PPcl	Little Bluestem	Schizachyrium scopariu	24.00	1.5	8.3	Grass	N	X	CP3-1		BB-LB-Indian-Sgrama-Sgrod-Ycone-PPclover
38	CP3-1-BB-LB-Indian-Sgrama-Sgrod-Ycone-PPclover	38-CP3-1-BB-LB-Indian-Sgrama-Sgrod-Ycone-PPcl	Indiangrass	Sorghastrum nutans	8.00	0.5	2.3	Grass	N	X	CP3-1		BB-LB-Indian-Sgrama-Sgrod-Ycone-PPclover
38	CP3-1-BB-LB-Indian-Sgrama-Sgrod-Ycone-PPclover	38-CP3-1-BB-LB-Indian-Sgrama-Sgrod-Ycone-PPcl	Sideoats Grama	Bouteloua curtipendula	24.00	1.5	4.4	Grass	N	X	CP3-1		BB-LB-Indian-Sgrama-Sgrod-Ycone-PPclover
38	CP3-1-BB-LB-Indian-Sgrama-Sgrod-Ycone-PPclover	38-CP3-1-BB-LB-Indian-Sgrama-Sgrod-Ycone-PPcl	Stiff Goldenrod	Oligoneuron rigidum	1.00	0.0625	1.1	Forb	N	X	CP3-1		BB-LB-Indian-Sgrama-Sgrod-Ycone-PPclover
38	CP3-1-BB-LB-Indian-Sgrama-Sgrod-Ycone-PPclover	38-CP3-1-BB-LB-Indian-Sgrama-Sgrod-Ycone-PPcl	Yellow Coneflower	Ratibida pinnata	1.00	0.0625	0.7	Forb	N	X	CP3-1		BB-LB-Indian-Sgrama-Sgrod-Ycone-PPclover
38	CP3-1-BB-LB-Indian-Sgrama-Sgrod-Ycone-PPclover	38-CP3-1-BB-LB-Indian-Sgrama-Sgrod-Ycone-PPcl	Purple Prairie Clover	Dalea purpurea	2.00	0.125	1	Legume	N	X	CP3-1		BB-LB-Indian-Sgrama-Sgrod-Ycone-PPclover
38	CP3-2-BB-Switch-LB-Indian-Cwrye-Ycone-Besus-Berg	38-CP3-2-BB-Switch-LB-Indian-Cwrye-Ycone-Besu	Big Bluestem	Andropogon gerardii	8.00	0.5	1.9	Grass	N	X	CP3-2		BB-Switch-LB-Indian-Cwrye-Ycone-Besus-Berg
38	CP3-2-BB-Switch-LB-Indian-Cwrye-Ycone-Besus-Berg	38-CP3-2-BB-Switch-LB-Indian-Cwrye-Ycone-Besu	Switchgrass	Panicum virgatum	8.00	0.5	4.5	Grass	N	X	CP3-2		BB-Switch-LB-Indian-Cwrye-Ycone-Besus-Berg
38	CP3-2-BB-Switch-LB-Indian-Cwrye-Ycone-Besus-Berg	38-CP3-2-BB-Switch-LB-Indian-Cwrye-Ycone-Besu	Little Bluestem	Schizachyrium scopariu	20.00	1.25	6.9	Grass	N	X	CP3-2		BB-Switch-LB-Indian-Cwrye-Ycone-Besus-Berg
38	CP3-2-BB-Switch-LB-Indian-Cwrye-Ycone-Besus-Berg	38-CP3-2-BB-Switch-LB-Indian-Cwrye-Ycone-Besu	Indiangrass	Sorghastrum nutans	16.00	1	4.5	Grass	N	X	CP3-2		BB-Switch-LB-Indian-Cwrye-Ycone-Besus-Berg
38	CP3-2-BB-Switch-LB-Indian-Cwrye-Ycone-Besus-Berg	38-CP3-2-BB-Switch-LB-Indian-Cwrye-Ycone-Besu	Canada Wildrye	Elymus canadensis	16.00	1	2	Grass	N	X	CP3-2		BB-Switch-LB-Indian-Cwrye-Ycone-Besus-Berg
38	CP3-2-BB-Switch-LB-Indian-Cwrye-Ycone-Besus-Berg	38-CP3-2-BB-Switch-LB-Indian-Cwrye-Ycone-Besu	Yellow Coneflower	Ratibida pinnata	1.00	0.0625	0.7	Forb	N	X	CP3-2		BB-Switch-LB-Indian-Cwrye-Ycone-Besus-Berg
38	CP3-2-BB-Switch-LB-Indian-Cwrye-Ycone-Besus-Berg	38-CP3-2-BB-Switch-LB-Indian-Cwrye-Ycone-Besu	Black-Eyed Susan	Rudbeckia hirta	1.00	0.0625	2.3	Forb	N	X	CP3-2		BB-Switch-LB-Indian-Cwrye-Ycone-Besus-Berg
38	CP3-2-BB-Switch-LB-Indian-Cwrye-Ycone-Besus-Berg	38-CP3-2-BB-Switch-LB-Indian-Cwrye-Ycone-Besu	Bergamot	Monarda fistulosa	1.00	0.0625	1.8	Forb	N	X	CP3-2		BB-Switch-LB-Indian-Cwrye-Ycone-Besus-Berg
38	CP3-3-BB-LB-Indian-Switch-Sgrama-PPclover-Berg-Ycon	38-CP3-3-BB-LB-Indian-Switch-Sgrama-PPclover-B	Big Bluestem	Andropogon gerardii	8.00	0.5	1.9	Grass	N	X	CP3-3		BB-LB-Indian-Switch-Sgrama-PPclover-Berg-Ycone
38	CP3-3-BB-LB-Indian-Switch-Sgrama-PPclover-Berg-Ycon	38-CP3-3-BB-LB-Indian-Switch-Sgrama-PPclover-B	Little Bluestem	Schizachyrium scopariu	24.00	1.5	8.3	Grass	N	X	CP3-3		BB-LB-Indian-Switch-Sgrama-PPclover-Berg-Ycone
38	CP3-3-BB-LB-Indian-Switch-Sgrama-PPclover-Berg-Ycon	38-CP3-3-BB-LB-Indian-Switch-Sgrama-PPclover-B	Indiangrass	Sorghastrum nutans	8.00	0.5	2.3	Grass	N	X	CP3-3		BB-LB-Indian-Switch-Sgrama-PPclover-Berg-Ycone
38	CP3-3-BB-LB-Indian-Switch-Sgrama-PPclover-Berg-Ycon	38-CP3-3-BB-LB-Indian-Switch-Sgrama-PPclover-B	Switchgrass	Panicum virgatum	8.00	0.5	4.5	Grass	N	X	CP3-3		BB-LB-Indian-Switch-Sgrama-PPclover-Berg-Ycone
38	CP3-3-BB-LB-Indian-Switch-Sgrama-PPclover-Berg-Ycon	38-CP3-3-BB-LB-Indian-Switch-Sgrama-PPclover-B	Sideoats Grama	Bouteloua curtipendula	16.00	1	3	Grass	N	X	CP3-3		BB-LB-Indian-Switch-Sgrama-PPclover-Berg-Ycone
38	CP3-3-BB-LB-Indian-Switch-Sgrama-PPclover-Berg-Ycon	38-CP3-3-BB-LB-Indian-Switch-Sgrama-PPclover-B	Purple Prairie Clover	Dalea purpurea	2.00	0.125	1	Legume	N	X	CP3-3		BB-LB-Indian-Switch-Sgrama-PPclover-Berg-Ycone
38	CP3-3-BB-LB-Indian-Switch-Sgrama-PPclover-Berg-Ycon	38-CP3-3-BB-LB-Indian-Switch-Sgrama-PPclover-B	Bergamot	Monarda fistulosa	1.00	0.0625	1.8	Forb	N	X	CP3-3		BB-LB-Indian-Switch-Sgrama-PPclover-Berg-Ycone
38	CP3-3-BB-LB-Indian-Switch-Sgrama-PPclover-Berg-Ycon	38-CP3-3-BB-LB-Indian-Switch-Sgrama-PPclover-B	Yellow Coneflower	Ratibida pinnata	1.00	0.0625	0.7	Forb	N	X	CP3-3		BB-LB-Indian-Switch-Sgrama-PPclover-Berg-Ycone
38	CP3-4-Switch-Pcord-BB-Indian-Cwrye-Ciron-Cup-Bvervai	38-CP3-4-Switch-Pcord-BB-Indian-Cwrye-Ciron-Cu	Switchgrass	Panicum virgatum	16.00	1	9	Grass	N	X	CP3-4		Switch-Pcord-BB-Indian-Cwrye-Ciron-Cup-Bvervain
38	CP3-4-Switch-Pcord-BB-Indian-Cwrye-Ciron-Cup-Bvervai	38-CP3-4-Switch-Pcord-BB-Indian-Cwrye-Ciron-Cu	Prairie Cordgrass	Spartina pectinata	8.00	0.5	1.3	Grass	N		CP3-4		Switch-Pcord-BB-Indian-Cwrye-Ciron-Cup-Bvervain
38	CP3-4-Switch-Pcord-BB-Indian-Cwrye-Ciron-Cup-Bvervai	38-CP3-4-Switch-Pcord-BB-Indian-Cwrye-Ciron-Cu	Big Bluestem	Andropogon gerardii	16.00	1	3.8	Grass	N	X	CP3-4		Switch-Pcord-BB-Indian-Cwrye-Ciron-Cup-Bvervain
38	CP3-4-Switch-Pcord-BB-Indian-Cwrye-Ciron-Cup-Bvervai	38-CP3-4-Switch-Pcord-BB-Indian-Cwrye-Ciron-Cu	Indiangrass	Sorghastrum nutans	16.00	1	4.5	Grass	N	X	CP3-4		Switch-Pcord-BB-Indian-Cwrye-Ciron-Cup-Bvervain
38	CP3-4-Switch-Pcord-BB-Indian-Cwrye-Ciron-Cup-Bvervai	38-CP3-4-Switch-Pcord-BB-Indian-Cwrye-Ciron-Cu	Canada Wildrye	Elymus canadensis	16.00	1	2	Grass	N	X	CP3-4		Switch-Pcord-BB-Indian-Cwrye-Ciron-Cup-Bvervain
38	CP3-4-Switch-Pcord-BB-Indian-Cwrye-Ciron-Cup-Bvervai	38-CP3-4-Switch-Pcord-BB-Indian-Cwrye-Ciron-Cu	Common Ironweed	Vernonia fasciculata	1.00	0.0625	0.5	Forb	N	X	CP3-4		Switch-Pcord-BB-Indian-Cwrye-Ciron-Cup-Bvervain
38	CP3-4-Switch-Pcord-BB-Indian-Cwrye-Ciron-Cup-Bvervai	38-CP3-4-Switch-Pcord-BB-Indian-Cwrye-Ciron-Cu	Cupplant	Silphium perfoliatum	2.00	0.125	0.1	Forb	N	X	CP3-4		Switch-Pcord-BB-Indian-Cwrye-Ciron-Cup-Bvervain
38	CP3-4-Switch-Pcord-BB-Indian-Cwrye-Ciron-Cup-Bvervai	38-CP3-4-Switch-Pcord-BB-Indian-Cwrye-Ciron-Cu	Blue Vervain	Verbena hastata	1.00	0.0625	2.2	Forb	N	X	CP3-4		Switch-Pcord-BB-Indian-Cwrye-Ciron-Cup-Bvervain
38	CP3-5-Switch-Pcord-BB-Cwrye-Berg-Ycone-NEaster	38-CP3-5-Switch-Pcord-BB-Cwrye-Berg-Ycone-NEa	Switchgrass	Panicum virgatum	32.00	2	17.9	Grass	N	X	CP3-5		Switch-Pcord-BB-Cwrye-Berg-Ycone-NEaster
38	CP3-5-Switch-Pcord-BB-Cwrye-Berg-Ycone-NEaster	38-CP3-5-Switch-Pcord-BB-Cwrye-Berg-Ycone-NEa	Prairie Cordgrass	Spartina pectinata	4.00	0.25	0.7	Grass	N		CP3-5		Switch-Pcord-BB-Cwrye-Berg-Ycone-NEaster
38	CP3-5-Switch-Pcord-BB-Cwrye-Berg-Ycone-NEaster	38-CP3-5-Switch-Pcord-BB-Cwrye-Berg-Ycone-NEa	Big Bluestem	Andropogon gerardii	16.00	1	3.8	Grass	N	X	CP3-5		Switch-Pcord-BB-Cwrye-Berg-Ycone-NEaster
38	CP3-5-Switch-Pcord-BB-Cwrye-Berg-Ycone-NEaster	38-CP3-5-Switch-Pcord-BB-Cwrye-Berg-Ycone-NEa	Canada Wildrye	Elymus canadensis	16.00	1	2	Grass	N	X	CP3-5		Switch-Pcord-BB-Cwrye-Berg-Ycone-NEaster
38	CP3-5-Switch-Pcord-BB-Cwrye-Berg-Ycone-NEaster	38-CP3-5-Switch-Pcord-BB-Cwrye-Berg-Ycone-NEa	Bergamot	Monarda fistulosa	1.00	0.0625	1.8	Forb	N	X	CP3-5		Switch-Pcord-BB-Cwrye-Berg-Ycone-NEaster

38	CP3-5-Switch-Pcord-BB-Cwrye-Berg-Ycone-NEaster	38-CP3-5-Switch-Pcord-BB-Cwrye-Berg-Ycone-NEa	Yellow Coneflower	Ratibida pinnata	1.00	0.0625	0.7	Forb	N	X	CP3-5		Switch-Pcord-BB-Cwrye-Berg-Ycone-NEaster
38	CP3-5-Switch-Pcord-BB-Cwrye-Berg-Ycone-NEaster	38-CP3-5-Switch-Pcord-BB-Cwrye-Berg-Ycone-NEa	New England Aster	Symphyotrichum novae	1.00	0.0625	1.7	Forb	N	X	CP3-5		Switch-Pcord-BB-Cwrye-Berg-Ycone-NEaster
STD	**Mix #**	**std-mix**	**Common Name**	**Scientific Name**	**(oz./A)**	**(lbs./A)**	**Seeds/Square Foot**	**Type**	**Native**	**(Y/N)**	**I**	**Mix No.**	**MR**
									N				

STD	Mix #	std-mix	Common Name	Scientific Name	PLS (oz./A)	PLS (lbs./A)	Seeds/Square Foot	Type	Intro / Native	Poll. (Y/N)	Mix No.	MR	Mix Components
		LEAVE THIS ROW AS IS							N	Y			
2	CP2_1-BB-Switch-Cmilkvetch-Besus-Ycone	2-CP2_1-BB-Switch-Cmilkvetch-Besus-Ycone	Big Bluestem	Andropogon gerardii	48	3		Grass	N	N	CP2_1		BB-Switch-Cmilkvetch-Besus-Ycone
2	CP2_1-BB-Switch-Cmilkvetch-Besus-Ycone	2-CP2_1-BB-Switch-Cmilkvetch-Besus-Ycone	Switchgrass	Panicum virgatum	16	1		Grass	N	N	CP2_1		BB-Switch-Cmilkvetch-Besus-Ycone
2	CP2_1-BB-Switch-Cmilkvetch-Besus-Ycone	2-CP2_1-BB-Switch-Cmilkvetch-Besus-Ycone	Canada Milkvetch	Astragalus canadensis	2	0.125		Legume	N	N	CP2_1		BB-Switch-Cmilkvetch-Besus-Ycone
2	CP2_1-BB-Switch-Cmilkvetch-Besus-Ycone	2-CP2_1-BB-Switch-Cmilkvetch-Besus-Ycone	Black-eyed Susan	Rudbeckia hirta	1	0.0625		Forb	N	N	CP2_1		BB-Switch-Cmilkvetch-Besus-Ycone
2	CP2_1-BB-Switch-Cmilkvetch-Besus-Ycone	2-CP2_1-BB-Switch-Cmilkvetch-Besus-Ycone	Yellow Coneflower	Ratibida pinnata	1	0.0625		Forb	N	N	CP2_1		BB-Switch-Cmilkvetch-Besus-Ycone
2	CP2_2-BB-Switch-Ttrefoil-Besus-Ycone	2-CP2_2-BB-Switch-Ttrefoil-Besus-Ycone	Big Bluestem	Andropogon gerardii	48	3		Grass	N	N	CP2_2		BB-Switch-Ttrefoil-Besus-Ycone
2	CP2_2-BB-Switch-Ttrefoil-Besus-Ycone	2-CP2_2-BB-Switch-Ttrefoil-Besus-Ycone	Switchgrass	Panicum virgatum	16	1		Grass	N	N	CP2_2		BB-Switch-Ttrefoil-Besus-Ycone
2	CP2_2-BB-Switch-Ttrefoil-Besus-Ycone	2-CP2_2-BB-Switch-Ttrefoil-Besus-Ycone	Showy Tick Trefoil	Desmodium canadense	6	0.375		Legume	N	N	CP2_2		BB-Switch-Ttrefoil-Besus-Ycone
2	CP2_2-BB-Switch-Ttrefoil-Besus-Ycone	2-CP2_2-BB-Switch-Ttrefoil-Besus-Ycone	Black-eyed Susan	Rudbeckia hirta	1	0.0625		Forb	N	N	CP2_2		BB-Switch-Ttrefoil-Besus-Ycone
2	CP2_2-BB-Switch-Ttrefoil-Besus-Ycone	2-CP2_2-BB-Switch-Ttrefoil-Besus-Ycone	Yellow Coneflower	Ratibida pinnata	1	0.0625		Forb	N	N	CP2_2		BB-Switch-Ttrefoil-Besus-Ycone
2	CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Yco	2-CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-B	Little Bluestem	Schizachyrium scoparium	24	1.5		Grass	N	N	CP2_3		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
2	CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Yco	2-CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-B	Sideoats Grama	Bouteloua curtipendula	16	1		Grass	N	N	CP2_3		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
2	CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Yco	2-CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-B	Big Bluestem	Andropogon gerardii	8	0.5		Grass	N	N	CP2_3		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
2	CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Yco	2-CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-B	Indiangrass	Sorghastrum nutans	8	0.5		Grass	N	N	CP2_3		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
2	CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Yco	2-CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-B	Switchgrass	Panicum virgatum	8	0.5		Grass	N	N	CP2_3		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
2	CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Yco	2-CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-B	Purple Prairie Clover	Dalea purpurea	2	0.125		Legume	N	N	CP2_3		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
2	CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Yco	2-CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-B	Bergamot	Monarda fistulosa	1	0.0625		Forb	N	N	CP2_3		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
2	CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Yco	2-CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-B	Yellow Coneflower	Ratibida pinnata	1	0.0625		Forb	N	N	CP2_3		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
2	CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone	2-CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus	Little Bluestem	Schizachyrium scoparium	20	1.25		Grass	N	N	CP2_4		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
2	CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone	2-CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus	Canada Wildrye	Elymus canadensis	16	1		Grass	N	N	CP2_4		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
2	CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone	2-CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus	Indiangrass	Sorghastrum nutans	16	1		Grass	N	N	CP2_4		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
2	CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone	2-CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus	Big Bluestem	Andropogon gerardii	8	0.5		Grass	N	N	CP2_4		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
2	CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone	2-CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus	Switchgrass	Panicum virgatum	8	0.5		Grass	N	N	CP2_4		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
2	CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone	2-CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus	Bergamot	Monarda fistulosa	1	0.0625		Forb	N	N	CP2_4		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
2	CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone	2-CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus	Black-eyed Susan	Rudbeckia hirta	1	0.0625		Forb	N	N	CP2_4		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
2	CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone	2-CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus	Yellow Coneflower	Ratibida pinnata	1	0.0625		Forb	N	N	CP2_4		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
2	CP2_5-BB-Sgrama-Indian-PPclover-Sgrod-Ycone	2-CP2_5-BB-Sgrama-Indian-PPclover-Sgrod-Ycon	Big Bluestem	Andropogon gerardii	24	1.5		Grass	N	N	CP2_5		BB-Sgrama-Indian-PPclover-Sgrod-Ycone
2	CP2_5-BB-Sgrama-Indian-PPclover-Sgrod-Ycone	2-CP2_5-BB-Sgrama-Indian-PPclover-Sgrod-Ycon	Sideoats Grama	Bouteloua curtipendula	24	1.5		Grass	N	N	CP2_5		BB-Sgrama-Indian-PPclover-Sgrod-Ycone
2	CP2_5-BB-Sgrama-Indian-PPclover-Sgrod-Ycone	2-CP2_5-BB-Sgrama-Indian-PPclover-Sgrod-Ycon	Indiangrass	Sorghastrum nutans	8	0.5		Grass	N	N	CP2_5		BB-Sgrama-Indian-PPclover-Sgrod-Ycone
2	CP2_5-BB-Sgrama-Indian-PPclover-Sgrod-Ycone	2-CP2_5-BB-Sgrama-Indian-PPclover-Sgrod-Ycon	Purple Prairie Clover	Dalea purpurea	2	0.125		Legume	N	N	CP2_5		BB-Sgrama-Indian-PPclover-Sgrod-Ycone
2	CP2_5-BB-Sgrama-Indian-PPclover-Sgrod-Ycone	2-CP2_5-BB-Sgrama-Indian-PPclover-Sgrod-Ycon	Stiff Goldenrod	Oligoneuron rigidum	1	0.0625		Forb	N	N	CP2_5		BB-Sgrama-Indian-PPclover-Sgrod-Ycone
2	CP2_5-BB-Sgrama-Indian-PPclover-Sgrod-Ycone	2-CP2_5-BB-Sgrama-Indian-PPclover-Sgrod-Ycon	Yellow Coneflower	Ratibida pinnata	1	0.0625		Forb	N	N	CP2_5		BB-Sgrama-Indian-PPclover-Sgrod-Ycone
2	CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ci	2-CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bve	Big Bluestem	Andropogon gerardii	16	1		Grass	N	N	CP2_6		BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
2	CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ci	2-CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bve	Canada Wildrye	Elymus canadensis	16	1		Grass	N	N	CP2_6		BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
2	CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ci	2-CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bve	Indiangrass	Sorghastrum nutans	16	1		Grass	N	N	CP2_6		BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
2	CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ci	2-CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bve	Switchgrass	Panicum virgatum	16	1		Grass	N	N	CP2_6		BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
2	CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ci	2-CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bve	Prairie Cordgrass	Spartina pectinata	8	0.5		Grass	N	N	CP2_6		BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
2	CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ci	2-CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bve	Cupplant	Silphium perfoliatum	2	0.125		Forb	N	N	CP2_6		BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron

2	CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ci	2-CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bve	Blue Vervain	Verbena hastata	1	0.0625		Forb	N	N	CP2_6	BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
2	CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ci	2-CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bve	Common Ironweed	Vernonia fasciculata	1	0.0625		Forb	N	N	CP2_6	BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
2	CP2_7-Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone	2-CP2_7-Switch-BB-Cwrye-Pcord-Berg-NEaster-Y	Switchgrass	Panicum virgatum	32	2		Grass	N	N	CP2_7	Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
2	CP2_7-Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone	2-CP2_7-Switch-BB-Cwrye-Pcord-Berg-NEaster-Y	Big Bluestem	Andropogon gerardii	16	1		Grass	N	N	CP2_7	Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
2	CP2_7-Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone	2-CP2_7-Switch-BB-Cwrye-Pcord-Berg-NEaster-Y	Canada Wildrye	Elymus canadensis	16	1		Grass	N	N	CP2_7	Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
2	CP2_7-Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone	2-CP2_7-Switch-BB-Cwrye-Pcord-Berg-NEaster-Y	Prairie Cordgrass	Spartina pectinata	4	0.25		Grass	N	N	CP2_7	Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
2	CP2_7-Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone	2-CP2_7-Switch-BB-Cwrye-Pcord-Berg-NEaster-Y	Bergamot	Monarda fistulosa	1	0.0625		Forb	N	N	CP2_7	Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
2	CP2_7-Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone	2-CP2_7-Switch-BB-Cwrye-Pcord-Berg-NEaster-Y	New England Aster	Symphyotrichum novae-a	1	0.0625		Forb	N	N	CP2_7	Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
2	CP2_7-Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone	2-CP2_7-Switch-BB-Cwrye-Pcord-Berg-NEaster-Y	Yellow Coneflower	Ratibida pinnata	1	0.0625		Forb	N	N	CP2_7	Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
4	CP4D-5-Indian-BB-Switch-Cmilkvetch-Besus-Ycone	4-CP4D-5-Indian-BB-Switch-Cmilkvetch-Besus-Yc	Indiangrass	Sorghastrum nutans	48	3		Grass	N	N	CP4D-5	Indian-BB-Switch-Cmilkvetch-Besus-Ycone
4	CP4D-5-Indian-BB-Switch-Cmilkvetch-Besus-Ycone	4-CP4D-5-Indian-BB-Switch-Cmilkvetch-Besus-Yc	Big Bluestem	Andropogon gerardii	16	1		Grass	N	N	CP4D-5	Indian-BB-Switch-Cmilkvetch-Besus-Ycone
4	CP4D-5-Indian-BB-Switch-Cmilkvetch-Besus-Ycone	4-CP4D-5-Indian-BB-Switch-Cmilkvetch-Besus-Yc	Switchgrass	Panicum virgatum	16	1		Grass	N	N	CP4D-5	Indian-BB-Switch-Cmilkvetch-Besus-Ycone
4	CP4D-5-Indian-BB-Switch-Cmilkvetch-Besus-Ycone	4-CP4D-5-Indian-BB-Switch-Cmilkvetch-Besus-Yc	Canada Milkvetch	Astragalus canadensis	2	0.125		Legume	N	N	CP4D-5	Indian-BB-Switch-Cmilkvetch-Besus-Ycone
4	CP4D-5-Indian-BB-Switch-Cmilkvetch-Besus-Ycone	4-CP4D-5-Indian-BB-Switch-Cmilkvetch-Besus-Yc	Black-eyed Susan	Rudbeckia hirta	1	0.0625		Forb	N	N	CP4D-5	Indian-BB-Switch-Cmilkvetch-Besus-Ycone
4	CP4D-5-Indian-BB-Switch-Cmilkvetch-Besus-Ycone	4-CP4D-5-Indian-BB-Switch-Cmilkvetch-Besus-Yc	Yellow Coneflower	Ratibida pinnata	1	0.0625		Forb	N	N	CP4D-5	Indian-BB-Switch-Cmilkvetch-Besus-Ycone
4	CP4D-6-Indian-BB-Switch-LB-Cmilkvetch-Besus-Ycone	4-CP4D-6-Indian-BB-Switch-LB-Cmilkvetch-Besus	Indiangrass	Sorghastrum nutans	48	3		Grass	N	N	CP4D-6	Indian-BB-Switch-LB-Cmilkvetch-Besus-Ycone
4	CP4D-6-Indian-BB-Switch-LB-Cmilkvetch-Besus-Ycone	4-CP4D-6-Indian-BB-Switch-LB-Cmilkvetch-Besus	Big Bluestem	Andropogon gerardii	16	1		Grass	N	N	CP4D-6	Indian-BB-Switch-LB-Cmilkvetch-Besus-Ycone
4	CP4D-6-Indian-BB-Switch-LB-Cmilkvetch-Besus-Ycone	4-CP4D-6-Indian-BB-Switch-LB-Cmilkvetch-Besus	Switchgrass	Panicum virgatum	16	1		Grass	N	N	CP4D-6	Indian-BB-Switch-LB-Cmilkvetch-Besus-Ycone
4	CP4D-6-Indian-BB-Switch-LB-Cmilkvetch-Besus-Ycone	4-CP4D-6-Indian-BB-Switch-LB-Cmilkvetch-Besus	Little Bluestem	Schizachyrium scoparium	16	1		Grass	N	N	CP4D-6	Indian-BB-Switch-LB-Cmilkvetch-Besus-Ycone
4	CP4D-6-Indian-BB-Switch-LB-Cmilkvetch-Besus-Ycone	4-CP4D-6-Indian-BB-Switch-LB-Cmilkvetch-Besus	Canada Milkvetch	Astragalus canadensis	2	0.125		Legume	N	N	CP4D-6	Indian-BB-Switch-LB-Cmilkvetch-Besus-Ycone
4	CP4D-6-Indian-BB-Switch-LB-Cmilkvetch-Besus-Ycone	4-CP4D-6-Indian-BB-Switch-LB-Cmilkvetch-Besus	Black-eyed Susan	Rudbeckia hirta	1	0.0625		Forb	N	N	CP4D-6	Indian-BB-Switch-LB-Cmilkvetch-Besus-Ycone
4	CP4D-6-Indian-BB-Switch-LB-Cmilkvetch-Besus-Ycone	4-CP4D-6-Indian-BB-Switch-LB-Cmilkvetch-Besus	Yellow Coneflower	Ratibida pinnata	1	0.0625		Forb	N	N	CP4D-6	Indian-BB-Switch-LB-Cmilkvetch-Besus-Ycone
4	CP4D-7-Indian-BB-Switch-PPclover-Besus-Ycone	4-CP4D-7-Indian-BB-Switch-PPclover-Besus-Ycon	Indiangrass	Sorghastrum nutans	48	3		Grass	N	N	CP4D-7	Indian-BB-Switch-PPclover-Besus-Ycone
4	CP4D-7-Indian-BB-Switch-PPclover-Besus-Ycone	4-CP4D-7-Indian-BB-Switch-PPclover-Besus-Ycon	Big Bluestem	Andropogon gerardii	16	1		Grass	N	N	CP4D-7	Indian-BB-Switch-PPclover-Besus-Ycone
4	CP4D-7-Indian-BB-Switch-PPclover-Besus-Ycone	4-CP4D-7-Indian-BB-Switch-PPclover-Besus-Ycon	Switchgrass	Panicum virgatum	16	1		Grass	N	N	CP4D-7	Indian-BB-Switch-PPclover-Besus-Ycone
4	CP4D-7-Indian-BB-Switch-PPclover-Besus-Ycone	4-CP4D-7-Indian-BB-Switch-PPclover-Besus-Ycon	Purple Prairie Clover	Dalea purpurea	2	0.125		Legume	N	N	CP4D-7	Indian-BB-Switch-PPclover-Besus-Ycone
4	CP4D-7-Indian-BB-Switch-PPclover-Besus-Ycone	4-CP4D-7-Indian-BB-Switch-PPclover-Besus-Ycon	Black-eyed Susan	Rudbeckia hirta	1	0.0625		Forb	N	N	CP4D-7	Indian-BB-Switch-PPclover-Besus-Ycone
4	CP4D-7-Indian-BB-Switch-PPclover-Besus-Ycone	4-CP4D-7-Indian-BB-Switch-PPclover-Besus-Ycon	Yellow Coneflower	Ratibida pinnata	1	0.0625		Forb	N	N	CP4D-7	Indian-BB-Switch-PPclover-Besus-Ycone
4	CP4D-8-Indian-BB-LB-Switch-PPclover-Besus-Ycone	4-CP4D-8-Indian-BB-LB-Switch-PPclover-Besus-Y	Indiangrass	Sorghastrum nutans	48	3		Grass	N	N	CP4D-8	Indian-BB-LB-Switch-PPclover-Besus-Ycone
4	CP4D-8-Indian-BB-LB-Switch-PPclover-Besus-Ycone	4-CP4D-8-Indian-BB-LB-Switch-PPclover-Besus-Y	Big Bluestem	Andropogon gerardii	16	1		Grass	N	N	CP4D-8	Indian-BB-LB-Switch-PPclover-Besus-Ycone
4	CP4D-8-Indian-BB-LB-Switch-PPclover-Besus-Ycone	4-CP4D-8-Indian-BB-LB-Switch-PPclover-Besus-Y	Little Bluestem	Schizachyrium scoparium	16	1		Grass	N	N	CP4D-8	Indian-BB-LB-Switch-PPclover-Besus-Ycone
4	CP4D-8-Indian-BB-LB-Switch-PPclover-Besus-Ycone	4-CP4D-8-Indian-BB-LB-Switch-PPclover-Besus-Y	Switchgrass	Panicum virgatum	16	1		Grass	N	N	CP4D-8	Indian-BB-LB-Switch-PPclover-Besus-Ycone
4	CP4D-8-Indian-BB-LB-Switch-PPclover-Besus-Ycone	4-CP4D-8-Indian-BB-LB-Switch-PPclover-Besus-Y	Purple Prairie Clover	Dalea purpurea	2	0.125		Legume	N	N	CP4D-8	Indian-BB-LB-Switch-PPclover-Besus-Ycone
4	CP4D-8-Indian-BB-LB-Switch-PPclover-Besus-Ycone	4-CP4D-8-Indian-BB-LB-Switch-PPclover-Besus-Y	Black-eyed Susan	Rudbeckia hirta	1	0.0625		Forb	N	N	CP4D-8	Indian-BB-LB-Switch-PPclover-Besus-Ycone
4	CP4D-8-Indian-BB-LB-Switch-PPclover-Besus-Ycone	4-CP4D-8-Indian-BB-LB-Switch-PPclover-Besus-Y	Yellow Coneflower	Ratibida pinnata	1	0.0625		Forb	N	N	CP4D-8	Indian-BB-LB-Switch-PPclover-Besus-Ycone
4	CP4D-9-Indian-BB-Switch-PPclover-Berg-Ycone	4-CP4D-9-Indian-BB-Switch-PPclover-Berg-Ycone	Indiangrass	Sorghastrum nutans	48	3		Grass	N	N	CP4D-9	Indian-BB-Switch-PPclover-Berg-Ycone
4	CP4D-9-Indian-BB-Switch-PPclover-Berg-Ycone	4-CP4D-9-Indian-BB-Switch-PPclover-Berg-Ycone	Big Bluestem	Andropogon gerardii	16	1		Grass	N	N	CP4D-9	Indian-BB-Switch-PPclover-Berg-Ycone
4	CP4D-9-Indian-BB-Switch-PPclover-Berg-Ycone	4-CP4D-9-Indian-BB-Switch-PPclover-Berg-Ycone	Switchgrass	Panicum virgatum	16	1		Grass	N	N	CP4D-9	Indian-BB-Switch-PPclover-Berg-Ycone
4	CP4D-9-Indian-BB-Switch-PPclover-Berg-Ycone	4-CP4D-9-Indian-BB-Switch-PPclover-Berg-Ycone	Purple Prairie Clover	Dalea purpurea	2	0.125		Legume	N	N	CP4D-9	Indian-BB-Switch-PPclover-Berg-Ycone
4	CP4D-9-Indian-BB-Switch-PPclover-Berg-Ycone	4-CP4D-9-Indian-BB-Switch-PPclover-Berg-Ycone	Bergamot	Monarda fistulosa	1	0.0625		Forb	N	N	CP4D-9	Indian-BB-Switch-PPclover-Berg-Ycone
4	CP4D-9-Indian-BB-Switch-PPclover-Berg-Ycone	4-CP4D-9-Indian-BB-Switch-PPclover-Berg-Ycone	Yellow Coneflower	Ratibida pinnata	1	0.0625		Forb	N	N	CP4D-9	Indian-BB-Switch-PPclover-Berg-Ycone
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Sv	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover	Little Bluestem	Schizachyrium scoparium	24	1.5		Grass	N	N	CP25-D	LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swort-Hvervain-Lpla
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Sv	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover	Sideoats Grama	Bouteloua curtipendula	24	1.5		Grass	N	N	CP25-D	LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swort-Hvervain-Lpla
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Sv	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover	Indiangrass	Sorghastrum nutans	8	0.5		Grass	N	N	CP25-D	LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swort-Hvervain-Lpla
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Sv	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover	Big Bluestem	Andropogon gerardii	4	0.25		Grass	N	N	CP25-D	LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swort-Hvervain-Lpla
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Sv	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover	Prairie Junegrass	Koeleria macrantha	2	0.125		Grass	N	N	CP25-D	LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swort-Hvervain-Lpla
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Sv	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover	Purple Prairie Clover	Dalea purpurea	2	0.125		Legume	N	N	CP25-D	LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swort-Hvervain-Lpla
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Sv	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover	Sand Dropseed	Sporobolus cryptandrus	2	0.125		Grass	N	N	CP25-D	LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swort-Hvervain-Lpla
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Sv	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover	Spiderwort	Tradescantia ohiensis	1	0.0625		Forb	N	N	CP25-D	LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swort-Hvervain-Lpla
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Sv	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover	Hoary Vervain	Verbena stricta	0.5	0.03125		Forb	N	N	CP25-D	LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swort-Hvervain-Lpla
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Sv	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover	Leadplant	Amorpha canescens	0.5	0.03125		Legume	N	N	CP25-D	LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swort-Hvervain-Lpla
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Sv	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover	Prairie Tickseed	Coreopsis palmata	0.5	0.03125		Forb	N	N	CP25-D	LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swort-Hvervain-Lpla
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Sv	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover	Silky Aster	Symphyotrichum pratens	0.5	0.03125		Forb	N	N	CP25-D	LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swort-Hvervain-Lpla
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Sv	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover	Stiff Goldenrod	Oligoneuron rigidum	0.5	0.03125		Forb	N	N	CP25-D	LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swort-Hvervain-Lpla
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Sv	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover	Yellow Coneflower	Ratibida pinnata	1	0.03125		Forb	N	N	CP25-D	LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swort-Hvervain-Lpla
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Sv	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover	Prairie Cinquefoil	Potentilla arguta	0.25	0.015625		Forb	N	N	CP25-D	LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swort-Hvervain-Lpla
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Sv	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover	Spotted Mint	Monarda punctata	0	0.015625		Forb	N	N	CP25-D	LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swort-Hvervain-Lpla
25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclo	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pd	Little Bluestem	Schizachyrium scoparium	24	1.5		Grass	N	N	CP25-DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-Bi
25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclo	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pd	Sideoats Grama	Bouteloua curtipendula	24	1.5		Grass	N	N	CP25-DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-Bi
25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclo	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pd	Indiangrass	Sorghastrum nutans	8	0.5		Grass	N	N	CP25-DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-Bi
25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclo	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pd	Switchgrass	Panicum virgatum	4	0.25		Grass	N	N	CP25-DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-Bi
25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclo	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pd	Prairie Junegrass	Koeleria macrantha	2	0.125		Grass	N	N	CP25-DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-Bi
25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclo	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pd	Prairie Dropseed	Sporobolus heterolepis	2	0.125		Grass	N	N	CP25-DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-Bi
25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclo	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pd	Purple Prairie Clover	Dalea purpurea	2	0.125		Legume	N	N	CP25-DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-Bi
25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclo	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pd	Round-Headed Bushclover	Lespedeza capitata	2	0.125		Legume	N	N	CP25-DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-Bi
25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclo	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pd	Bergamot	Monarda fistulosa	1	0.0625		Forb	N	N	CP25-DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-Bi
25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclo	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pd	Spiderwort	Tradescantia ohiensis	1	0.0625		Forb	N	N	CP25-DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-Bi
25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclo	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pd	Yellow Coneflower	Ratibida pinnata	1	0.0625		Forb	N	N	CP25-DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-Bi
25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclo	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pd	Leadplant	Amorpha canescens	0.5	0.03125		Legume	N	N	CP25-DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-Bi
25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclo	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pd	Rough Blazing Star	Liatris aspera	1	0.03125		Forb	N	N	CP25-DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-Bi
25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclo	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pd	Sky-Blue Aster	Symphyotrichum oolenta	1	0.03125		Forb	N	N	CP25-DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-Bi

25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclo	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pd	Stiff Goldenrod	Oligoneuron rigidum	0.5	0.03125		Forb	N	N	CP25-DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclo	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pd	Prairie Cinquefoil	Potentilla arguta	0.25	0.015625		Forb	N	N	CP25-DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pju	Little Bluestem	Schizachyrium scoparium	24	1.5		Grass	N	N	CP25-KBB	LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-PPclover-PPCone-Lp
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pju	Sideoats Grama	Bouteloua curtipendula	24	1.5		Grass	N	N	CP25-KBB	LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-PPclover-PPCone-Lp
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pju	Indiangrass	Sorghastrum nutans	8	0.5		Grass	N	N	CP25-KBB	LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-PPclover-PPCone-Lp
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pju	Switchgrass	Panicum virgatum	8	0.5		Grass	N	N	CP25-KBB	LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-PPclover-PPCone-Lp
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pju	Wild Lupine	Lupinus perennis	3	0.1875		Legume	N	N	CP25-KBB	LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-PPclover-PPCone-Lp
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pju	Prairie Junegrass	Koeleria macrantha	2	0.125		Grass	N	N	CP25-KBB	LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-PPclover-PPCone-Lp
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pju	Prairie Dropseed	Sporobolus heterolepis	2	0.125		Grass	N	N	CP25-KBB	LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-PPclover-PPCone-Lp
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pju	Purple Prairie Clover	Dalea purpurea	2	0.125		Legume	N	N	CP25-KBB	LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-PPclover-PPCone-Lp
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pju	Pale Purple Coneflower	Echinacea pallida	1	0.0625		Forb	N	N	CP25-KBB	LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-PPclover-PPCone-Lp
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pju	Leadplant	Amorpha canescens	0.5	0.03125		Legume	N	N	CP25-KBB	LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-PPclover-PPCone-Lp
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pju	Rough Blazing Star	Liatris aspera	0.5	0.03125		Forb	N	N	CP25-KBB	LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-PPclover-PPCone-Lp
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pju	Stiff Goldenrod	Oligoneuron rigidum	0.5	0.03125		Forb	N	N	CP25-KBB	LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-PPclover-PPCone-Lp
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pju	Yellow Coneflower	Ratibida pinnata	1	0.03125		Forb	N	N	CP25-KBB	LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-PPclover-PPCone-Lp
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pju	Bergamot	Monarda fistulosa	0	0.015625		Forb	N	N	CP25-KBB	LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-PPclover-PPCone-Lp
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pju	Prairie Cinquefoil	Potentilla arguta	0.25	0.015625		Forb	N	N	CP25-KBB	LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-PPclover-PPCone-Lp
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pju	Sky-Blue Aster	Symphyotrichum oolenta	0.25	0.015625		Forb	N	N	CP25-KBB	LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-PPclover-PPCone-Lp
25	CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzsta	25-CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesu	Little Bluestem	Schizachyrium scoparium	24	1.5		Grass	N	N	CP25-M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
25	CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzsta	25-CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesu	Indiangrass	Sorghastrum nutans	16	1		Grass	N	N	CP25-M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
25	CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzsta	25-CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesu	Big Bluestem	Andropogon gerardii	8	0.5		Grass	N	N	CP25-M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
25	CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzsta	25-CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesu	Canada Wildrye	Elymus canadensis	8	0.5		Grass	N	N	CP25-M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
25	CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzsta	25-CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesu	Switchgrass	Panicum virgatum	8	0.5		Grass	N	N	CP25-M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
25	CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzsta	25-CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesu	Ox-eye Sunflower	Heliopsis helianthoides	1	0.0625		Forb	N	N	CP25-M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
25	CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzsta	25-CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesu	Prairie Blazing Star	Liatris pycnostachya	1	0.0625		Forb	N	N	CP25-M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
25	CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzsta	25-CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesu	Purple Prairie Clover	Dalea purpurea	1	0.0625		Legume	N	N	CP25-M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
25	CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzsta	25-CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesu	Rosinweed	Silphium integrifolium	1	0.0625		Forb	N	N	CP25-M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
25	CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzsta	25-CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesu	Bergamot	Monarda fistulosa	0.5	0.03125		Forb	N	N	CP25-M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
25	CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzsta	25-CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesu	Black-eyed Susan	Rudbeckia hirta	0.5	0.03125		Forb	N	N	CP25-M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
25	CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzsta	25-CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesu	New England Aster	Symphyotrichum novae-a	0.5	0.03125		Forb	N	N	CP25-M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
25	CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzsta	25-CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesu	Sky-Blue Aster	Symphyotrichum oolenta	0.5	0.03125		Forb	N	N	CP25-M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
25	CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzsta	25-CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesu	Yellow Coneflower	Ratibida pinnata	0.5	0.03125		Forb	N	N	CP25-M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
25	CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzsta	25-CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesu	Culver's Root	Veronicastrum virginicum	0	0.015625		Forb	N	N	CP25-M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsed	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgr	Canada Wildrye	Elymus canadensis	16	1		Grass	N	N	CP25-W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsed	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgr	Switchgrass	Panicum virgatum	16	1		Grass	N	N	CP25-W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsed	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgr	Indiangrass	Sorghastrum nutans	12	0.75		Grass	N	N	CP25-W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsed	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgr	Big Bluestem	Andropogon gerardii	8	0.5		Grass	N	N	CP25-W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsed	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgr	Prairie Cordgrass	Spartina pectinata	8	0.5		Grass	N	N	CP25-W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsed	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgr	Fowl Mannagrass	Glyceria striata	4	0.25		Grass	N	N	CP25-W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsed	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgr	Fox Sedge	Carex vulpinoidea	4	0.25		Sedge	N	N	CP25-W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsed	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgr	Cupplant	Silphium perfoliatum	2	0.125		Forb	N	N	CP25-W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsed	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgr	Showy Tick Trefoil	Desmodium canadense	2	0.125		Legume	N	N	CP25-W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsed	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgr	Blue Vervain	Verbena hastata	1	0.0625		Forb	N	N	CP25-W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsed	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgr	Golden Alexanders	Zizia aurea	1	0.0625		Forb	N	N	CP25-W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsed	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgr	Marsh Milkweed	Asclepias incarnata	1	0.0625		Forb	N	N	CP25-W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsed	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgr	Boneset	Eupatorium perfoliatum	0.5	0.03125		Forb	N	N	CP25-W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsed	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgr	Common Ironweed	Vernonia fasciculata	1	0.03125		Forb	N	N	CP25-W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsed	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgr	Joe-pye Weed	Eutrochium maculatum	1	0.03125		Forb	N	N	CP25-W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsed	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgr	Culver's Root	Veronicastrum virginicum	0	0.015625		Forb	N	N	CP25-W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
25	CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-WWInd	25-CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cu	Switchgrass	Panicum virgatum	24	1.5		Grass	N	N	CP25-WM	Switch-Cwrye-Indian-BB-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
25	CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-WWInd	25-CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cu	Canada Wildrye	Elymus canadensis	16	1		Grass	N	N	CP25-WM	Switch-Cwrye-Indian-BB-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
25	CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-WWInd	25-CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cu	Indiangrass	Sorghastrum nutans	12	0.75		Grass	N	N	CP25-WM	Switch-Cwrye-Indian-BB-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
25	CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-WWInd	25-CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cu	Big Bluestem	Andropogon gerardii	8	0.5		Grass	N	N	CP25-WM	Switch-Cwrye-Indian-BB-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
25	CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-WWInd	25-CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cu	Prairie Cordgrass	Spartina pectinata	4	0.25		Grass	N	N	CP25-WM	Switch-Cwrye-Indian-BB-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
25	CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-WWInd	25-CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cu	Cupplant	Silphium perfoliatum	2	0.125		Forb	N	N	CP25-WM	Switch-Cwrye-Indian-BB-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
25	CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-WWInd	25-CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cu	White wild indigo	Baptisia alba	1.5	0.09375		Legume	N	N	CP25-WM	Switch-Cwrye-Indian-BB-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
25	CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-WWInd	25-CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cu	Black-eyed Susan	Rudbeckia hirta	0.5	0.03125		Forb	N	N	CP25-WM	Switch-Cwrye-Indian-BB-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
25	CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-WWInd	25-CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cu	Common Ironweed	Vernonia fasciculata	0.5	0.03125		Forb	N	N	CP25-WM	Switch-Cwrye-Indian-BB-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
25	CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-WWInd	25-CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cu	Golden Alexanders	Zizia aurea	0.5	0.03125		Forb	N	N	CP25-WM	Switch-Cwrye-Indian-BB-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
25	CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-WWInd	25-CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cu	New England Aster	Symphyotrichum novae-a	0.5	0.03125		Forb	N	N	CP25-WM	Switch-Cwrye-Indian-BB-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
25	CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-WWInd	25-CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cu	Prairie Blazing Star	Liatris pycnostachya	0.5	0.03125		Forb	N	N	CP25-WM	Switch-Cwrye-Indian-BB-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
25	CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-WWInd	25-CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cu	Yellow Coneflower	Ratibida pinnata	0.5	0.03125		Forb	N	N	CP25-WM	Switch-Cwrye-Indian-BB-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
25	CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-WWInd	25-CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cu	Bergamot	Monarda fistulosa	0.25	0.015625		Forb	N	N	CP25-WM	Switch-Cwrye-Indian-BB-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
25	CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-WWInd	25-CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cu	Great St. John's Wort	Hypericum ascyron	0	0.015625		Forb	N	N	CP25-WM	Switch-Cwrye-Indian-BB-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
33	CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHbushclov	33-CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RH	Little Bluestem	Schizachyrium scoparium	32	2		Grass	N	N	CP33-1	LB-Sgrama-Cwrye-Indian-PPclover-RHbushclover-PPcone-Sgrod-\
33	CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHbushclov	33-CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RH	Sideoats Grama	Bouteloua curtipendula	32	2		Grass	N	N	CP33-1	LB-Sgrama-Cwrye-Indian-PPclover-RHbushclover-PPcone-Sgrod-\
33	CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHbushclov	33-CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RH	Canada Wildrye	Elymus canadensis	8	0.5		Grass	N	N	CP33-1	LB-Sgrama-Cwrye-Indian-PPclover-RHbushclover-PPcone-Sgrod-\
33	CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHbushclov	33-CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RH	Indiangrass	Sorghastrum nutans	8	0.5		Grass	N	N	CP33-1	LB-Sgrama-Cwrye-Indian-PPclover-RHbushclover-PPcone-Sgrod-\
33	CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHbushclov	33-CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RH	Purple Prairie Clover	Dalea purpurea	2	0.125		Legume	N	N	CP33-1	LB-Sgrama-Cwrye-Indian-PPclover-RHbushclover-PPcone-Sgrod-\
33	CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHbushclov	33-CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RH	Round-Headed Bushclover	Lespedeza capitata	2	0.125		Legume	N	N	CP33-1	LB-Sgrama-Cwrye-Indian-PPclover-RHbushclover-PPcone-Sgrod-\
33	CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHbushclov	33-CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RH	Purple Coneflower	Echinacea purpurea	1	0.0625		Forb	N	N	CP33-1	LB-Sgrama-Cwrye-Indian-PPclover-RHbushclover-PPcone-Sgrod-\

33	CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHbushclov	33-CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RH	Stiff Goldenrod	Oligoneuron rigidum	1	0.0625		Forb	N	N	CP33-1	LB-Sgrama-Cwrye-Indian-PPclover-RHbushclover-PPcone-Sgrod-\
33	CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHbushclov	33-CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RH	Fewleaf Sunflower	Helianthus occidentalis	1	0.0625		Forb	N	N	CP33-1	LB-Sgrama-Cwrye-Indian-PPclover-RHbushclover-PPcone-Sgrod-\
33	CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHbushclov	33-CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RH	Yellow Coneflower	Ratibida pinnata	1	0.0625		Forb	N	N	CP33-1	LB-Sgrama-Cwrye-Indian-PPclover-RHbushclover-PPcone-Sgrod-\
33	CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHbushclov	33-CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RH	Black-eyed Susan	Rudbeckia hirta	0.75	0.046875		Forb	N	N	CP33-1	LB-Sgrama-Cwrye-Indian-PPclover-RHbushclover-PPcone-Sgrod-\
33	CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rbl	33-CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPc	Little Bluestem	Schizachyrium scoparium	24	1.5		Grass	N	N	CP33-2	LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rblzstar-Besus-SkyAst
33	CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rbl	33-CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPc	Sideoats Grama	Bouteloua curtipendula	20	1.25		Grass	N	N	CP33-2	LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rblzstar-Besus-SkyAst
33	CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rbl	33-CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPc	Indiangrass	Sorghastrum nutans	16	1		Grass	N	N	CP33-2	LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rblzstar-Besus-SkyAst
33	CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rbl	33-CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPc	Canada Wildrye	Elymus canadensis	8	0.5		Grass	N	N	CP33-2	LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rblzstar-Besus-SkyAst
33	CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rbl	33-CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPc	Purple Coneflower	Echinacea purpurea	2	0.125		Forb	N	N	CP33-2	LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rblzstar-Besus-SkyAst
33	CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rbl	33-CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPc	Purple Prairie Clover	Dalea purpurea	2	0.125		Legume	N	N	CP33-2	LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rblzstar-Besus-SkyAst
33	CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rbl	33-CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPc	Rough Blazing Star	Liatris aspera	2	0.125		Forb	N	N	CP33-2	LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rblzstar-Besus-SkyAst
33	CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rbl	33-CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPc	Black-eyed Susan	Rudbeckia hirta	1	0.0625		Forb	N	N	CP33-2	LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rblzstar-Besus-SkyAst
33	CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rbl	33-CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPc	Sky-Blue Aster	Symphyotrichum oolenta	1	0.0625		Forb	N	N	CP33-2	LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rblzstar-Besus-SkyAst
33	CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rbl	33-CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPc	Stiff Goldenrod	Oligoneuron rigidum	1	0.0625		Forb	N	N	CP33-2	LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rblzstar-Besus-SkyAst
33	CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rbl	33-CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPc	Fewleaf Sunflower	Helianthus occidentalis	1	0.0625		Forb	N	N	CP33-2	LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rblzstar-Besus-SkyAst
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsed	Canada Wildrye	Elymus canadensis	16	1		Grass	N	N	CP38B-WPHRA	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsed	Indiangrass	Sorghastrum nutans	12	0.75		Grass	N	N	CP38B-WPHRA	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsed	Switchgrass	Panicum virgatum	12	0.75		Grass	N	N	CP38B-WPHRA	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsed	Big Bluestem	Andropogon gerardii	8	0.5		Grass	N	N	CP38B-WPHRA	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsed	Fox Sedge	Carex vulpinoidea	8	0.5		Sedge	N	N	CP38B-WPHRA	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsed	Prairie Cordgrass	Spartina pectinata	8	0.5		Grass	N	N	CP38B-WPHRA	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsed	Fowl Mannagrass	Glyceria striata	4	0.25		Grass	N	N	CP38B-WPHRA	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsed	Cupplant	Silphium perfoliatum	2	0.125		Forb	N	N	CP38B-WPHRA	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsed	Showy Tick Trefoil	Desmodium canadense	2	0.125		Legume	N	N	CP38B-WPHRA	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsed	Blue Vervain	Verbena hastata	1	0.0625		Forb	N	N	CP38B-WPHRA	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsed	Golden Alexanders	Zizia aurea	1	0.0625		Forb	N	N	CP38B-WPHRA	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsed	Marsh Milkweed	Asclepias incarnata	1	0.0625		Forb	N	N	CP38B-WPHRA	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsed	Boneset	Eupatorium perfoliatum	0.5	0.03125		Forb	N	N	CP38B-WPHRA	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsed	Common Ironweed	Vernonia fasciculata	1	0.03125		Forb	N	N	CP38B-WPHRA	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsed	Joe-pye Weed	Eutrochium maculatum	1	0.03125		Forb	N	N	CP38B-WPHRA	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsed	Culver's Root	Veronicastrum virginicum	0	0.015625		Forb	N	N	CP38B-WPHRA	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-B	38-CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-P	Little Bluestem	Schizachyrium scoparium	24	1.5		Grass	N	N	CP38E-CWGCA(CP2)D	LB-Sgrama-BB-Indian-PPclover-Besus-Rblzstar-Sgrod-Ycone
38	CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-B	38-CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-P	Sideoats Grama	Bouteloua curtipendula	24	1.5		Grass	N	N	CP38E-CWGCA(CP2)D	LB-Sgrama-BB-Indian-PPclover-Besus-Rblzstar-Sgrod-Ycone
38	CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-B	38-CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-P	Big Bluestem	Andropogon gerardii	8	0.5		Grass	N	N	CP38E-CWGCA(CP2)D	LB-Sgrama-BB-Indian-PPclover-Besus-Rblzstar-Sgrod-Ycone
38	CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-B	38-CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-P	Indiangrass	Sorghastrum nutans	8	0.5		Grass	N	N	CP38E-CWGCA(CP2)D	LB-Sgrama-BB-Indian-PPclover-Besus-Rblzstar-Sgrod-Ycone
38	CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-B	38-CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-P	Purple Prairie Clover	Dalea purpurea	2	0.125		Legume	N	N	CP38E-CWGCA(CP2)D	LB-Sgrama-BB-Indian-PPclover-Besus-Rblzstar-Sgrod-Ycone
38	CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-B	38-CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-P	Black-eyed Susan	Rudbeckia hirta	1	0.0625		Forb	N	N	CP38E-CWGCA(CP2)D	LB-Sgrama-BB-Indian-PPclover-Besus-Rblzstar-Sgrod-Ycone
38	CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-B	38-CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-P	Rough Blazing Star	Liatris aspera	1	0.0625		Forb	N	N	CP38E-CWGCA(CP2)D	LB-Sgrama-BB-Indian-PPclover-Besus-Rblzstar-Sgrod-Ycone
38	CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-B	38-CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-P	Stiff Goldenrod	Oligoneuron rigidum	1	0.0625		Forb	N	N	CP38E-CWGCA(CP2)D	LB-Sgrama-BB-Indian-PPclover-Besus-Rblzstar-Sgrod-Ycone
38	CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-B	38-CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-P	Yellow Coneflower	Ratibida pinnata	1	0.0625		Forb	N	N	CP38E-CWGCA(CP2)D	LB-Sgrama-BB-Indian-PPclover-Besus-Rblzstar-Sgrod-Ycone
38	CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-I	38-CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian	Little Bluestem	Schizachyrium scoparium	24	1.5		Grass	N	N	CP38E-CWGCA(CP2)DM	LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Besus-Rblzstar-Shwg
38	CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-I	38-CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian	Sideoats Grama	Bouteloua curtipendula	16	1		Grass	N	N	CP38E-CWGCA(CP2)DM	LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Besus-Rblzstar-Shwg
38	CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-I	38-CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian	Big Bluestem	Andropogon gerardii	8	0.5		Grass	N	N	CP38E-CWGCA(CP2)DM	LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Besus-Rblzstar-Shwg
38	CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-I	38-CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian	Indiangrass	Sorghastrum nutans	8	0.5		Grass	N	N	CP38E-CWGCA(CP2)DM	LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Besus-Rblzstar-Shwg
38	CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-I	38-CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian	Switchgrass	Panicum virgatum	8	0.5		Grass	N	N	CP38E-CWGCA(CP2)DM	LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Besus-Rblzstar-Shwg
38	CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-I	38-CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian	Purple Prairie Clover	Dalea purpurea	2	0.125		Legume	N	N	CP38E-CWGCA(CP2)DM	LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Besus-Rblzstar-Shwg
38	CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-I	38-CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian	Bergamot	Monarda fistulosa	1	0.0625		Forb	N	N	CP38E-CWGCA(CP2)DM	LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Besus-Rblzstar-Shwg
38	CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-I	38-CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian	Black-eyed Susan	Rudbeckia hirta	1	0.0625		Forb	N	N	CP38E-CWGCA(CP2)DM	LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Besus-Rblzstar-Shwg
38	CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-I	38-CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian	Rough Blazing Star	Liatris aspera	1	0.0625		Forb	N	N	CP38E-CWGCA(CP2)DM	LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Besus-Rblzstar-Shwg
38	CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-I	38-CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian	Showy Goldenrod	Solidago speciosa	1	0.0625		Forb	N	N	CP38E-CWGCA(CP2)DM	LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Besus-Rblzstar-Shwg
38	CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-I	38-CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian	Stiff Goldenrod	Oligoneuron rigidum	1	0.0625		Forb	N	N	CP38E-CWGCA(CP2)DM	LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Besus-Rblzstar-Shwg
38	CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-I	38-CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian	Yellow Coneflower	Ratibida pinnata	1	0.0625		Forb	N	N	CP38E-CWGCA(CP2)DM	LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Besus-Rblzstar-Shwg
38	CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Pbl	38-CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Little Bluestem	Schizachyrium scoparium	20	1.25		Grass	N	N	CP38E-CWGCA(CP2)M	LB-Cwrye-Indian-BB-Switch-Pblzstar-Rblzstar-Berg-Besus-Shwgro
38	CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Pbl	38-CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Canada Wildrye	Elymus canadensis	16	1		Grass	N	N	CP38E-CWGCA(CP2)M	LB-Cwrye-Indian-BB-Switch-Pblzstar-Rblzstar-Berg-Besus-Shwgro
38	CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Pbl	38-CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Indiangrass	Sorghastrum nutans	16	1		Grass	N	N	CP38E-CWGCA(CP2)M	LB-Cwrye-Indian-BB-Switch-Pblzstar-Rblzstar-Berg-Besus-Shwgro
38	CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Pbl	38-CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Big Bluestem	Andropogon gerardii	8	0.5		Grass	N	N	CP38E-CWGCA(CP2)M	LB-Cwrye-Indian-BB-Switch-Pblzstar-Rblzstar-Berg-Besus-Shwgro
38	CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Pbl	38-CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Switchgrass	Panicum virgatum	8	0.5		Grass	N	N	CP38E-CWGCA(CP2)M	LB-Cwrye-Indian-BB-Switch-Pblzstar-Rblzstar-Berg-Besus-Shwgro
38	CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Pbl	38-CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Prairie Blazing Star	Liatris pycnostachya	2	0.125		Forb	N	N	CP38E-CWGCA(CP2)M	LB-Cwrye-Indian-BB-Switch-Pblzstar-Rblzstar-Berg-Besus-Shwgro
38	CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Pbl	38-CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Rough Blazing Star	Liatris aspera	2	0.125		Forb	N	N	CP38E-CWGCA(CP2)M	LB-Cwrye-Indian-BB-Switch-Pblzstar-Rblzstar-Berg-Besus-Shwgro
38	CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Pbl	38-CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Bergamot	Monarda fistulosa	1	0.0625		Forb	N	N	CP38E-CWGCA(CP2)M	LB-Cwrye-Indian-BB-Switch-Pblzstar-Rblzstar-Berg-Besus-Shwgro
38	CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Pbl	38-CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Black-eyed Susan	Rudbeckia hirta	1	0.0625		Forb	N	N	CP38E-CWGCA(CP2)M	LB-Cwrye-Indian-BB-Switch-Pblzstar-Rblzstar-Berg-Besus-Shwgro
38	CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Pbl	38-CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Showy Goldenrod	Solidago speciosa	1	0.0625		Forb	N	N	CP38E-CWGCA(CP2)M	LB-Cwrye-Indian-BB-Switch-Pblzstar-Rblzstar-Berg-Besus-Shwgro
38	CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Pbl	38-CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Stiff Goldenrod	Oligoneuron rigidum	1	0.0625		Forb	N	N	CP38E-CWGCA(CP2)M	LB-Cwrye-Indian-BB-Switch-Pblzstar-Rblzstar-Berg-Besus-Shwgro
38	CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Pbl	38-CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Yellow Coneflower	Ratibida pinnata	1	0.0625		Forb	N	N	CP38E-CWGCA(CP2)M	LB-Cwrye-Indian-BB-Switch-Pblzstar-Rblzstar-Berg-Besus-Shwgro
38	CP38E-CWGCA(CP2)W-BB-Cwrye-Switch-Pcord-Cup-Bv	38-CP38E-CWGCA(CP2)W-BB-Cwrye-Switch-Pcor	Big Bluestem	Andropogon gerardii	16	1		Grass	N	N	CP38E-CWGCA(CP2)W	BB-Cwrye-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-CWGCA(CP2)W-BB-Cwrye-Switch-Pcord-Cup-Bv	38-CP38E-CWGCA(CP2)W-BB-Cwrye-Switch-Pcor	Canada Wildrye	Elymus canadensis	16	1		Grass	N	N	CP38E-CWGCA(CP2)W	BB-Cwrye-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-CWGCA(CP2)W-BB-Cwrye-Switch-Pcord-Cup-Bv	38-CP38E-CWGCA(CP2)W-BB-Cwrye-Switch-Pcor	Switchgrass	Panicum virgatum	16	1		Grass	N	N	CP38E-CWGCA(CP2)W	BB-Cwrye-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-CWGCA(CP2)W-BB-Cwrye-Switch-Pcord-Cup-Bv	38-CP38E-CWGCA(CP2)W-BB-Cwrye-Switch-Pcor	Prairie Cordgrass	Spartina pectinata	8	0.5		Grass	N	N	CP38E-CWGCA(CP2)W	BB-Cwrye-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-CWGCA(CP2)W-BB-Cwrye-Switch-Pcord-Cup-Bv	38-CP38E-CWGCA(CP2)W-BB-Cwrye-Switch-Pcor	Cupplant	Silphium perfoliatum	2	0.125		Forb	N	N	CP38E-CWGCA(CP2)W	BB-Cwrye-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-CWGCA(CP2)W-BB-Cwrye-Switch-Pcord-Cup-Bv	38-CP38E-CWGCA(CP2)W-BB-Cwrye-Switch-Pcor	Blue Vervain	Verbena hastata	1	0.0625		Forb	N	N	CP38E-CWGCA(CP2)W	BB-Cwrye-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-CWGCA(CP2)W-BB-Cwrye-Switch-Pcord-Cup-Bv	38-CP38E-CWGCA(CP2)W-BB-Cwrye-Switch-Pcor	Common Ironweed	Vernonia fasciculata	1	0.0625		Forb	N	N	CP38E-CWGCA(CP2)W	BB-Cwrye-Switch-Pcord-Cup-Bvervain-Ciron

38	CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Pblzs	38-CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pc	Switchgrass	Panicum virgatum	32	2		Grass	N	N	CP38E-CWGCA(CP2)WM	Switch-BB-Cwrye-Pcord-Pblzstar-Berg-Besus-NEaster-Ycone
38	CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Pblzs	38-CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pc	Big Bluestem	Andropogon gerardii	16	1		Grass	N	N	CP38E-CWGCA(CP2)WM	Switch-BB-Cwrye-Pcord-Pblzstar-Berg-Besus-NEaster-Ycone
38	CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Pblzs	38-CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pc	Canada Wildrye	Elymus canadensis	16	1		Grass	N	N	CP38E-CWGCA(CP2)WM	Switch-BB-Cwrye-Pcord-Pblzstar-Berg-Besus-NEaster-Ycone
38	CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Pblzs	38-CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pc	Prairie Cordgrass	Spartina pectinata	4	0.25		Grass	N	N	CP38E-CWGCA(CP2)WM	Switch-BB-Cwrye-Pcord-Pblzstar-Berg-Besus-NEaster-Ycone
38	CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Pblzs	38-CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pc	Prairie Blazing Star	Liatris pycnostachya	2	0.125		Forb	N	N	CP38E-CWGCA(CP2)WM	Switch-BB-Cwrye-Pcord-Pblzstar-Berg-Besus-NEaster-Ycone
38	CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Pblzs	38-CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pc	Bergamot	Monarda fistulosa	1	0.0625		Forb	N	N	CP38E-CWGCA(CP2)WM	Switch-BB-Cwrye-Pcord-Pblzstar-Berg-Besus-NEaster-Ycone
38	CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Pblzs	38-CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pc	Black-eyed Susan	Rudbeckia hirta	1	0.0625		Forb	N	N	CP38E-CWGCA(CP2)WM	Switch-BB-Cwrye-Pcord-Pblzstar-Berg-Besus-NEaster-Ycone
38	CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Pblzs	38-CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pc	New England Aster	Symphyotrichum novae-a	1	0.0625		Forb	N	N	CP38E-CWGCA(CP2)WM	Switch-BB-Cwrye-Pcord-Pblzstar-Berg-Besus-NEaster-Ycone
38	CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Pblzs	38-CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pc	Yellow Coneflower	Ratibida pinnata	1	0.0625		Forb	N	N	CP38E-CWGCA(CP2)WM	Switch-BB-Cwrye-Pcord-Pblzstar-Berg-Besus-NEaster-Ycone
38	CP38E-GHRA(CP2)D-LB-Sgrama-BB-Indian-PPclover-Sg	38-CP38E-GHRA(CP2)D-LB-Sgrama-BB-Indian-PP	Little Bluestem	Schizachyrium scoparium	24	1.5		Grass	N	N	CP38E-GHRA(CP2)D	LB-Sgrama-BB-Indian-PPclover-Sgrod-Ycone
38	CP38E-GHRA(CP2)D-LB-Sgrama-BB-Indian-PPclover-Sg	38-CP38E-GHRA(CP2)D-LB-Sgrama-BB-Indian-PP	Sideoats Grama	Bouteloua curtipendula	24	1.5		Grass	N	N	CP38E-GHRA(CP2)D	LB-Sgrama-BB-Indian-PPclover-Sgrod-Ycone
38	CP38E-GHRA(CP2)D-LB-Sgrama-BB-Indian-PPclover-Sg	38-CP38E-GHRA(CP2)D-LB-Sgrama-BB-Indian-PP	Big Bluestem	Andropogon gerardii	8	0.5		Grass	N	N	CP38E-GHRA(CP2)D	LB-Sgrama-BB-Indian-PPclover-Sgrod-Ycone
38	CP38E-GHRA(CP2)D-LB-Sgrama-BB-Indian-PPclover-Sg	38-CP38E-GHRA(CP2)D-LB-Sgrama-BB-Indian-PP	Indiangrass	Sorghastrum nutans	8	0.5		Grass	N	N	CP38E-GHRA(CP2)D	LB-Sgrama-BB-Indian-PPclover-Sgrod-Ycone
38	CP38E-GHRA(CP2)D-LB-Sgrama-BB-Indian-PPclover-Sg	38-CP38E-GHRA(CP2)D-LB-Sgrama-BB-Indian-PP	Purple Prairie Clover	Dalea purpurea	2	0.125		Legume	N	N	CP38E-GHRA(CP2)D	LB-Sgrama-BB-Indian-PPclover-Sgrod-Ycone
38	CP38E-GHRA(CP2)D-LB-Sgrama-BB-Indian-PPclover-Sg	38-CP38E-GHRA(CP2)D-LB-Sgrama-BB-Indian-PP	Stiff Goldenrod	Oligoneuron rigidum	1	0.0625		Forb	N	N	CP38E-GHRA(CP2)D	LB-Sgrama-BB-Indian-PPclover-Sgrod-Ycone
38	CP38E-GHRA(CP2)D-LB-Sgrama-BB-Indian-PPclover-Sg	38-CP38E-GHRA(CP2)D-LB-Sgrama-BB-Indian-PP	Yellow Coneflower	Ratibida pinnata	1	0.0625		Forb	N	N	CP38E-GHRA(CP2)D	LB-Sgrama-BB-Indian-PPclover-Sgrod-Ycone
38	CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-Switch-PP	38-CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-S	Little Bluestem	Schizachyrium scoparium	24	1.5		Grass	N	N	CP38E-GHRA(CP2)DM	LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-Switch-PP	38-CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-S	Sideoats Grama	Bouteloua curtipendula	16	1		Grass	N	N	CP38E-GHRA(CP2)DM	LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-Switch-PP	38-CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-S	Big Bluestem	Andropogon gerardii	8	0.5		Grass	N	N	CP38E-GHRA(CP2)DM	LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-Switch-PP	38-CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-S	Indiangrass	Sorghastrum nutans	8	0.5		Grass	N	N	CP38E-GHRA(CP2)DM	LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-Switch-PP	38-CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-S	Switchgrass	Panicum virgatum	8	0.5		Grass	N	N	CP38E-GHRA(CP2)DM	LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-Switch-PP	38-CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-S	Purple Prairie Clover	Dalea purpurea	2	0.125		Legume	N	N	CP38E-GHRA(CP2)DM	LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-Switch-PP	38-CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-S	Bergamot	Monarda fistulosa	1	0.0625		Forb	N	N	CP38E-GHRA(CP2)DM	LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-Switch-PP	38-CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-S	Yellow Coneflower	Ratibida pinnata	1	0.0625		Forb	N	N	CP38E-GHRA(CP2)DM	LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Switch-Berg-	38-CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Swi	Little Bluestem	Schizachyrium scoparium	20	1.25		Grass	N	N	CP38E-GHRA(CP2)M	LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Switch-Berg-	38-CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Swi	Canada Wildrye	Elymus canadensis	16	1		Grass	N	N	CP38E-GHRA(CP2)M	LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Switch-Berg-	38-CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Swi	Indiangrass	Sorghastrum nutans	16	1		Grass	N	N	CP38E-GHRA(CP2)M	LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Switch-Berg-	38-CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Swi	Big Bluestem	Andropogon gerardii	8	0.5		Grass	N	N	CP38E-GHRA(CP2)M	LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Switch-Berg-	38-CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Swi	Switchgrass	Panicum virgatum	8	0.5		Grass	N	N	CP38E-GHRA(CP2)M	LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Switch-Berg-	38-CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Swi	Bergamot	Monarda fistulosa	1	0.0625		Forb	N	N	CP38E-GHRA(CP2)M	LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Switch-Berg-	38-CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Swi	Black-eyed Susan	Rudbeckia hirta	1	0.0625		Forb	N	N	CP38E-GHRA(CP2)M	LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Switch-Berg-	38-CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Swi	Yellow Coneflower	Ratibida pinnata	1	0.0625		Forb	N	N	CP38E-GHRA(CP2)M	LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-C	38-CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch	Big Bluestem	Andropogon gerardii	16	1		Grass	N	N	CP38E-GHRA(CP2)W	BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-C	38-CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch	Canada Wildrye	Elymus canadensis	16	1		Grass	N	N	CP38E-GHRA(CP2)W	BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-C	38-CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch	Indiangrass	Sorghastrum nutans	16	1		Grass	N	N	CP38E-GHRA(CP2)W	BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-C	38-CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch	Switchgrass	Panicum virgatum	16	1		Grass	N	N	CP38E-GHRA(CP2)W	BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-C	38-CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch	Prairie Cordgrass	Spartina pectinata	8	0.5		Grass	N	N	CP38E-GHRA(CP2)W	BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-C	38-CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch	Cupplant	Silphium perfoliatum	2	0.125		Forb	N	N	CP38E-GHRA(CP2)W	BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-C	38-CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch	Blue Vervain	Verbena hastata	1	0.0625		Forb	N	N	CP38E-GHRA(CP2)W	BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-C	38-CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch	Common Ironweed	Vernonia fasciculata	1	0.0625		Forb	N	N	CP38E-GHRA(CP2)W	BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-GHRA(CP2)WM-Switch-BB-Cwrye-Pcord-Berg-N	38-CP38E-GHRA(CP2)WM-Switch-BB-Cwrye-Pco	Switchgrass	Panicum virgatum	32	2		Grass	N	N	CP38E-GHRA(CP2)WM	Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
38	CP38E-GHRA(CP2)WM-Switch-BB-Cwrye-Pcord-Berg-N	38-CP38E-GHRA(CP2)WM-Switch-BB-Cwrye-Pco	Big Bluestem	Andropogon gerardii	16	1		Grass	N	N	CP38E-GHRA(CP2)WM	Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
38	CP38E-GHRA(CP2)WM-Switch-BB-Cwrye-Pcord-Berg-N	38-CP38E-GHRA(CP2)WM-Switch-BB-Cwrye-Pco	Canada Wildrye	Elymus canadensis	16	1		Grass	N	N	CP38E-GHRA(CP2)WM	Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
38	CP38E-GHRA(CP2)WM-Switch-BB-Cwrye-Pcord-Berg-N	38-CP38E-GHRA(CP2)WM-Switch-BB-Cwrye-Pco	Prairie Cordgrass	Spartina pectinata	4	0.25		Grass	N	N	CP38E-GHRA(CP2)WM	Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
38	CP38E-GHRA(CP2)WM-Switch-BB-Cwrye-Pcord-Berg-N	38-CP38E-GHRA(CP2)WM-Switch-BB-Cwrye-Pco	Bergamot	Monarda fistulosa	1	0.0625		Forb	N	N	CP38E-GHRA(CP2)WM	Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
38	CP38E-GHRA(CP2)WM-Switch-BB-Cwrye-Pcord-Berg-N	38-CP38E-GHRA(CP2)WM-Switch-BB-Cwrye-Pco	New England Aster	Symphyotrichum novae-a	1	0.0625		Forb	N	N	CP38E-GHRA(CP2)WM	Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
38	CP38E-GHRA(CP2)WM-Switch-BB-Cwrye-Pcord-Berg-N	38-CP38E-GHRA(CP2)WM-Switch-BB-Cwrye-Pco	Yellow Coneflower	Ratibida pinnata	1	0.0625		Forb	N	N	CP38E-GHRA(CP2)WM	Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Little Bluestem	Schizachyrium scoparium	24	1.5		Grass	N	N	CP38E-GHRA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Sideoats Grama	Bouteloua curtipendula	24	1.5		Grass	N	N	CP38E-GHRA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Indiangrass	Sorghastrum nutans	8	0.5		Grass	N	N	CP38E-GHRA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Big Bluestem	Andropogon gerardii	4	0.25		Grass	N	N	CP38E-GHRA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Purple Prairie Clover	Dalea purpurea	2	0.125		Legume	N	N	CP38E-GHRA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Sand Dropseed	Sporobolus cryptandrus	2	0.125		Grass	N	N	CP38E-GHRA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Prairie Junegrass	Koeleria macrantha	1	0.0625		Grass	N	N	CP38E-GHRA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Spiderwort	Tradescantia ohiensis	1	0.0625		Forb	N	N	CP38E-GHRA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Hoary Vervain	Verbena stricta	0.5	0.03125		Forb	N	N	CP38E-GHRA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Leadplant	Amorpha canescens	0.5	0.03125		Legume	N	N	CP38E-GHRA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Prairie Tickseed	Coreopsis palmata	0.5	0.03125		Forb	N	N	CP38E-GHRA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Silky Aster	Symphyotrichum pratens	0.5	0.03125		Forb	N	N	CP38E-GHRA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Stiff Goldenrod	Oligoneuron rigidum	0.5	0.03125		Forb	N	N	CP38E-GHRA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Yellow Coneflower	Ratibida pinnata	0.5	0.03125		Forb	N	N	CP38E-GHRA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Prairie Cinquefoil	Potentilla arguta	0.25	0.015625		Forb	N	N	CP38E-GHRA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Spotted Mint	Monarda punctata	0	0.015625		Forb	N	N	CP38E-GHRA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjun	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Little Bluestem	Schizachyrium scoparium	24	1.5		Grass	N	N	CP38E-GHRA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjun	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Sideoats Grama	Bouteloua curtipendula	24	1.5		Grass	N	N	CP38E-GHRA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjun	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Indiangrass	Sorghastrum nutans	8	0.5		Grass	N	N	CP38E-GHRA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjun	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Switchgrass	Panicum virgatum	4	0.25		Grass	N	N	CP38E-GHRA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjun	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Prairie Junegrass	Koeleria macrantha	2	0.125		Grass	N	N	CP38E-GHRA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjun	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Prairie Dropseed	Sporobolus heterolepis	2	0.125		Grass	N	N	CP38E-GHRA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjun	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Purple Prairie Clover	Dalea purpurea	2	0.125		Legume	N	N	CP38E-GHRA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjun	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Round-Headed Bushclover	Lespedeza capitata	2	0.125		Legume	N	N	CP38E-GHRA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B

38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjun	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Bergamot	Monarda fistulosa	1	0.0625		Forb	N	N	CP38E-GHRA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjun	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Spiderwort	Tradescantia ohiensis	1	0.0625		Forb	N	N	CP38E-GHRA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjun	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Yellow Coneflower	Ratibida pinnata	1	0.0625		Forb	N	N	CP38E-GHRA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjun	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Leadplant	Amorpha canescens	0.5	0.03125		Legume	N	N	CP38E-GHRA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjun	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Rough Blazing Star	Liatris aspera	1	0.03125		Forb	N	N	CP38E-GHRA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjun	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Sky-Blue Aster	Symphyotrichum oolenta	1	0.03125		Forb	N	N	CP38E-GHRA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjun	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Stiff Goldenrod	Oligoneuron rigidum	0.5	0.03125		Forb	N	N	CP38E-GHRA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjun	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Prairie Cinquefoil	Potentilla arguta	0.25	0.015625		Forb	N	N	CP38E-GHRA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
38	CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Switch-Oxe	38-CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Sw	Little Bluestem	Schizachyrium scoparium	24	1.5		Grass	N	N	CP38E-GHRA(CP25)M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
38	CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Switch-Oxe	38-CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Sw	Indiangrass	Sorghastrum nutans	16	1		Grass	N	N	CP38E-GHRA(CP25)M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
38	CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Switch-Oxe	38-CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Sw	Big Bluestem	Andropogon gerardii	8	0.5		Grass	N	N	CP38E-GHRA(CP25)M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
38	CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Switch-Oxe	38-CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Sw	Canada Wildrye	Elymus canadensis	8	0.5		Grass	N	N	CP38E-GHRA(CP25)M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
38	CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Switch-Oxe	38-CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Sw	Switchgrass	Panicum virgatum	8	0.5		Grass	N	N	CP38E-GHRA(CP25)M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
38	CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Switch-Oxe	38-CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Sw	Ox-eye Sunflower	Heliopsis helianthoides	1	0.0625		Forb	N	N	CP38E-GHRA(CP25)M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
38	CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Switch-Oxe	38-CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Sw	Prairie Blazing Star	Liatris pycnostachya	1	0.0625		Forb	N	N	CP38E-GHRA(CP25)M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
38	CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Switch-Oxe	38-CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Sw	Purple Prairie Clover	Dalea purpurea	1	0.0625		Legume	N	N	CP38E-GHRA(CP25)M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
38	CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Switch-Oxe	38-CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Sw	Rosinweed	Silphium integrifolium	1	0.0625		Forb	N	N	CP38E-GHRA(CP25)M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
38	CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Switch-Oxe	38-CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Sw	Bergamot	Monarda fistulosa	0.5	0.03125		Forb	N	N	CP38E-GHRA(CP25)M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
38	CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Switch-Oxe	38-CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Sw	Black-eyed Susan	Rudbeckia hirta	0.5	0.03125		Forb	N	N	CP38E-GHRA(CP25)M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
38	CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Switch-Oxe	38-CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Sw	New England Aster	Symphyotrichum novae-a	0.5	0.03125		Forb	N	N	CP38E-GHRA(CP25)M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
38	CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Switch-Oxe	38-CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Sw	Smooth Blue Aster	Symphyotrichum laeve	0.5	0.03125		Forb	N	N	CP38E-GHRA(CP25)M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
38	CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Switch-Oxe	38-CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Sw	Yellow Coneflower	Ratibida pinnata	0.5	0.03125		Forb	N	N	CP38E-GHRA(CP25)M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
38	CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Switch-Oxe	38-CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Sw	Culver's Root	Veronicastrum virginicum	0	0.015625		Forb	N	N	CP38E-GHRA(CP25)M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-B	Canada Wildrye	Elymus canadensis	16	1		Grass	N	N	CP38E-GHRA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-B	Switchgrass	Panicum virgatum	16	1		Grass	N	N	CP38E-GHRA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-B	Indiangrass	Sorghastrum nutans	12	0.75		Grass	N	N	CP38E-GHRA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-B	Big Bluestem	Andropogon gerardii	8	0.5		Grass	N	N	CP38E-GHRA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-B	Prairie Cordgrass	Spartina pectinata	8	0.5		Grass	N	N	CP38E-GHRA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-B	Fowl Mannagrass	Glyceria striata	4	0.25		Grass	N	N	CP38E-GHRA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-B	Fox Sedge	Carex vulpinoidea	4	0.25		Sedge	N	N	CP38E-GHRA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-B	Cupplant	Silphium perfoliatum	2	0.125		Forb	N	N	CP38E-GHRA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-B	Showy Tick Trefoil	Desmodium canadense	2	0.125		Legume	N	N	CP38E-GHRA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-B	Blue Vervain	Verbena hastata	1	0.0625		Forb	N	N	CP38E-GHRA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-B	Golden Alexanders	Zizia aurea	1	0.0625		Forb	N	N	CP38E-GHRA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-B	Marsh Milkweed	Asclepias incarnata	1	0.0625		Forb	N	N	CP38E-GHRA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-B	Boneset	Eupatorium perfoliatum	0.5	0.03125		Forb	N	N	CP38E-GHRA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-B	Common Ironweed	Vernonia fasciculata	1	0.03125		Forb	N	N	CP38E-GHRA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-B	Joe-pye Weed	Eutrochium maculatum	1	0.03125		Forb	N	N	CP38E-GHRA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-B	Culver's Root	Veronicastrum virginicum	0	0.015625		Forb	N	N	CP38E-GHRA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Indian-Pcor	38-CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Ind	Switchgrass	Panicum virgatum	24	1.5		Grass	N	N	CP38E-GHRA(CP25)WM	Switch-BB-Cwrye-Indian-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
38	CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Indian-Pcor	38-CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Ind	Big Bluestem	Andropogon gerardii	20	1.25		Grass	N	N	CP38E-GHRA(CP25)WM	Switch-BB-Cwrye-Indian-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
38	CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Indian-Pcor	38-CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Ind	Canada Wildrye	Elymus canadensis	16	1		Grass	N	N	CP38E-GHRA(CP25)WM	Switch-BB-Cwrye-Indian-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
38	CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Indian-Pcor	38-CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Ind	Indiangrass	Sorghastrum nutans	12	0.75		Grass	N	N	CP38E-GHRA(CP25)WM	Switch-BB-Cwrye-Indian-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
38	CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Indian-Pcor	38-CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Ind	Prairie Cordgrass	Spartina pectinata	4	0.25		Grass	N	N	CP38E-GHRA(CP25)WM	Switch-BB-Cwrye-Indian-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
38	CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Indian-Pcor	38-CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Ind	Cupplant	Silphium perfoliatum	2	0.125		Forb	N	N	CP38E-GHRA(CP25)WM	Switch-BB-Cwrye-Indian-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
38	CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Indian-Pcor	38-CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Ind	White wild indigo	Baptisia alba	1.5	0.09375		Legume	N	N	CP38E-GHRA(CP25)WM	Switch-BB-Cwrye-Indian-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
38	CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Indian-Pcor	38-CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Ind	Black-eyed Susan	Rudbeckia hirta	0.5	0.03125		Forb	N	N	CP38E-GHRA(CP25)WM	Switch-BB-Cwrye-Indian-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
38	CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Indian-Pcor	38-CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Ind	Common Ironweed	Vernonia fasciculata	0.5	0.03125		Forb	N	N	CP38E-GHRA(CP25)WM	Switch-BB-Cwrye-Indian-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
38	CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Indian-Pcor	38-CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Ind	Golden Alexanders	Zizia aurea	0.5	0.03125		Forb	N	N	CP38E-GHRA(CP25)WM	Switch-BB-Cwrye-Indian-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
38	CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Indian-Pcor	38-CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Ind	New England Aster	Symphyotrichum novae-a	0.5	0.03125		Forb	N	N	CP38E-GHRA(CP25)WM	Switch-BB-Cwrye-Indian-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
38	CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Indian-Pcor	38-CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Ind	Prairie Blazing Star	Liatris pycnostachya	0.5	0.03125		Forb	N	N	CP38E-GHRA(CP25)WM	Switch-BB-Cwrye-Indian-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
38	CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Indian-Pcor	38-CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Ind	Yellow Coneflower	Ratibida pinnata	0.5	0.03125		Forb	N	N	CP38E-GHRA(CP25)WM	Switch-BB-Cwrye-Indian-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
38	CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Indian-Pcor	38-CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Ind	Bergamot	Monarda fistulosa	0.25	0.015625		Forb	N	N	CP38E-GHRA(CP25)WM	Switch-BB-Cwrye-Indian-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
38	CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Indian-Pcor	38-CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Ind	Great St. John's Wort	Hypericum ascyron	0	0.015625		Forb	N	N	CP38E-GHRA(CP25)WM	Switch-BB-Cwrye-Indian-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Little Bluestem	Schizachyrium scoparium	24	1.5		Grass	N	N	CP38E-KBB	LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-PPclover-Bmilkweed-F
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Canada Wildrye	Elymus canadensis	16	1		Grass	N	N	CP38E-KBB	LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-PPclover-Bmilkweed-F
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Indiangrass	Sorghastrum nutans	16	1		Grass	N	N	CP38E-KBB	LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-PPclover-Bmilkweed-F
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Big Bluestem	Andropogon gerardii	8	0.5		Grass	N	N	CP38E-KBB	LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-PPclover-Bmilkweed-F
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Sideoats Grama	Bouteloua curtipendula	8	0.5		Grass	N	N	CP38E-KBB	LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-PPclover-Bmilkweed-F
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Switchgrass	Panicum virgatum	8	0.5		Grass	N	N	CP38E-KBB	LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-PPclover-Bmilkweed-F
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Wild Lupine	Lupinus perennis	3	0.1875		Legume	N	N	CP38E-KBB	LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-PPclover-Bmilkweed-F
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Purple Prairie Clover	Dalea purpurea	2	0.125		Legume	N	N	CP38E-KBB	LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-PPclover-Bmilkweed-F
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Butterfly Milkweed	Asclepias tuberosa	1	0.0625		Forb	N	N	CP38E-KBB	LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-PPclover-Bmilkweed-F
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Flowering Spurge	Euphorbia corollata	1	0.0625		Forb	N	N	CP38E-KBB	LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-PPclover-Bmilkweed-F
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Golden Alexanders	Zizia aurea	1	0.0625		Forb	N	N	CP38E-KBB	LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-PPclover-Bmilkweed-F
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Rough Blazing Star	Liatris aspera	1	0.0625		Forb	N	N	CP38E-KBB	LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-PPclover-Bmilkweed-F
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Round-Headed Bushclover	Lespedeza capitata	1	0.0625		Legume	N	N	CP38E-KBB	LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-PPclover-Bmilkweed-F
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Fewleaf Sunflower	Helianthus occidentalis	1	0.0625		Forb	N	N	CP38E-KBB	LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-PPclover-Bmilkweed-F
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Bergamot	Monarda fistulosa	0.5	0.03125		Forb	N	N	CP38E-KBB	LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-PPclover-Bmilkweed-F
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Prairie Tickseed	Coreopsis palmata	1	0.03125		Forb	N	N	CP38E-KBB	LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-PPclover-Bmilkweed-F
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Black-eyed Susan	Rudbeckia hirta	0	0.025		Forb	N	N	CP38E-KBB	LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-PPclover-Bmilkweed-F

38	CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlup-PPclove	38-CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlup	Little Bluestem	Schizachyrium scoparium	36	2.25		Grass	N	N	CP38E-KBB(WHIP)	LB-Sgrama-BB-Pjune-Wlup-PPclover-Rblzstar-Ptick-Besus
38	CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlup-PPclove	38-CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlup	Sideoats Grama	Bouteloua curtipendula	16	1		Grass	N	N	CP38E-KBB(WHIP)	LB-Sgrama-BB-Pjune-Wlup-PPclover-Rblzstar-Ptick-Besus
38	CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlup-PPclove	38-CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlup	Big Bluestem	Andropogon gerardii	8	0.5		Grass	N	N	CP38E-KBB(WHIP)	LB-Sgrama-BB-Pjune-Wlup-PPclover-Rblzstar-Ptick-Besus
38	CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlup-PPclove	38-CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlup	Prairie Junegrass	Koeleria macrantha	4	0.25		Grass	N	N	CP38E-KBB(WHIP)	LB-Sgrama-BB-Pjune-Wlup-PPclover-Rblzstar-Ptick-Besus
38	CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlup-PPclove	38-CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlup	Wild Lupine	Lupinus perennis	3	0.1875		Legume	N	N	CP38E-KBB(WHIP)	LB-Sgrama-BB-Pjune-Wlup-PPclover-Rblzstar-Ptick-Besus
38	CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlup-PPclove	38-CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlup	Purple Prairie Clover	Dalea purpurea	2	0.125		Legume	N	N	CP38E-KBB(WHIP)	LB-Sgrama-BB-Pjune-Wlup-PPclover-Rblzstar-Ptick-Besus
38	CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlup-PPclove	38-CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlup	Rough Blazing Star	Liatris aspera	2	0.125		Forb	N	N	CP38E-KBB(WHIP)	LB-Sgrama-BB-Pjune-Wlup-PPclover-Rblzstar-Ptick-Besus
38	CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlup-PPclove	38-CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlup	Prairie Tickseed	Coreopsis palmata	1	0.0625		Forb	N	N	CP38E-KBB(WHIP)	LB-Sgrama-BB-Pjune-Wlup-PPclover-Rblzstar-Ptick-Besus
38	CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlup-PPclove	38-CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlup	Black-eyed Susan	Rudbeckia hirta	0.25	0.015625		Forb	N	N	CP38E-KBB(WHIP)	LB-Sgrama-BB-Pjune-Wlup-PPclover-Rblzstar-Ptick-Besus
38	CP38E-SWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-S	38-CP38E-SWGCA(CP2)D-LB-Sgrama-BB-Indian-P	Little Bluestem	Schizachyrium scoparium	24	1.5		Grass	N	N	CP38E-SWGCA(CP2)D	LB-Sgrama-BB-Indian-PPclover-Sgrod-Ycone
38	CP38E-SWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-S	38-CP38E-SWGCA(CP2)D-LB-Sgrama-BB-Indian-P	Sideoats Grama	Bouteloua curtipendula	24	1.5		Grass	N	N	CP38E-SWGCA(CP2)D	LB-Sgrama-BB-Indian-PPclover-Sgrod-Ycone
38	CP38E-SWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-S	38-CP38E-SWGCA(CP2)D-LB-Sgrama-BB-Indian-P	Big Bluestem	Andropogon gerardii	8	0.5		Grass	N	N	CP38E-SWGCA(CP2)D	LB-Sgrama-BB-Indian-PPclover-Sgrod-Ycone
38	CP38E-SWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-S	38-CP38E-SWGCA(CP2)D-LB-Sgrama-BB-Indian-P	Indiangrass	Sorghastrum nutans	8	0.5		Grass	N	N	CP38E-SWGCA(CP2)D	LB-Sgrama-BB-Indian-PPclover-Sgrod-Ycone
38	CP38E-SWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-S	38-CP38E-SWGCA(CP2)D-LB-Sgrama-BB-Indian-P	Purple Prairie Clover	Dalea purpurea	2	0.125		Legume	N	N	CP38E-SWGCA(CP2)D	LB-Sgrama-BB-Indian-PPclover-Sgrod-Ycone
38	CP38E-SWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-S	38-CP38E-SWGCA(CP2)D-LB-Sgrama-BB-Indian-P	Stiff Goldenrod	Oligoneuron rigidum	1	0.0625		Forb	N	N	CP38E-SWGCA(CP2)D	LB-Sgrama-BB-Indian-PPclover-Sgrod-Ycone
38	CP38E-SWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-S	38-CP38E-SWGCA(CP2)D-LB-Sgrama-BB-Indian-P	Yellow Coneflower	Ratibida pinnata	1	0.0625		Forb	N	N	CP38E-SWGCA(CP2)D	LB-Sgrama-BB-Indian-PPclover-Sgrod-Ycone
38	CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-P	38-CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian	Little Bluestem	Schizachyrium scoparium	24	1.5		Grass	N	N	CP38E-SWGCA(CP2)DM	LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-P	38-CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian	Sideoats Grama	Bouteloua curtipendula	16	1		Grass	N	N	CP38E-SWGCA(CP2)DM	LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-P	38-CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian	Big Bluestem	Andropogon gerardii	8	0.5		Grass	N	N	CP38E-SWGCA(CP2)DM	LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-P	38-CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian	Indiangrass	Sorghastrum nutans	8	0.5		Grass	N	N	CP38E-SWGCA(CP2)DM	LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-P	38-CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian	Switchgrass	Panicum virgatum	8	0.5		Grass	N	N	CP38E-SWGCA(CP2)DM	LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-P	38-CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian	Purple Prairie Clover	Dalea purpurea	2	0.125		Legume	N	N	CP38E-SWGCA(CP2)DM	LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-P	38-CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian	Bergamot	Monarda fistulosa	1	0.0625		Forb	N	N	CP38E-SWGCA(CP2)DM	LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-P	38-CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian	Yellow Coneflower	Ratibida pinnata	1	0.0625		Forb	N	N	CP38E-SWGCA(CP2)DM	LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Ber	38-CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-Sv	Little Bluestem	Schizachyrium scoparium	20	1.25		Grass	N	N	CP38E-SWGCA(CP2)M	LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Ber	38-CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-Sv	Canada Wildrye	Elymus canadensis	16	1		Grass	N	N	CP38E-SWGCA(CP2)M	LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Ber	38-CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-Sv	Indiangrass	Sorghastrum nutans	16	1		Grass	N	N	CP38E-SWGCA(CP2)M	LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Ber	38-CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-Sv	Big Bluestem	Andropogon gerardii	8	0.5		Grass	N	N	CP38E-SWGCA(CP2)M	LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Ber	38-CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-Sv	Switchgrass	Panicum virgatum	8	0.5		Grass	N	N	CP38E-SWGCA(CP2)M	LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Ber	38-CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-Sv	Bergamot	Monarda fistulosa	1	0.0625		Forb	N	N	CP38E-SWGCA(CP2)M	LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Ber	38-CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-Sv	Black-eyed Susan	Rudbeckia hirta	1	0.0625		Forb	N	N	CP38E-SWGCA(CP2)M	LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Ber	38-CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-Sv	Yellow Coneflower	Ratibida pinnata	1	0.0625		Forb	N	N	CP38E-SWGCA(CP2)M	LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-	38-CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Swit	Big Bluestem	Andropogon gerardii	16	1		Grass	N	N	CP38E-SWGCA(CP2)W	BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-	38-CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Swit	Canada Wildrye	Elymus canadensis	16	1		Grass	N	N	CP38E-SWGCA(CP2)W	BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-	38-CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Swit	Indiangrass	Sorghastrum nutans	16	1		Grass	N	N	CP38E-SWGCA(CP2)W	BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-	38-CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Swit	Switchgrass	Panicum virgatum	16	1		Grass	N	N	CP38E-SWGCA(CP2)W	BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-	38-CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Swit	Prairie Cordgrass	Spartina pectinata	8	0.5		Grass	N	N	CP38E-SWGCA(CP2)W	BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-	38-CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Swit	Silphium perfoliatum	Cupplant	2	0.125		Forb	N	N	CP38E-SWGCA(CP2)W	BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-	38-CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Swit	Blue Vervain	Verbena hastata	1	0.0625		Forb	N	N	CP38E-SWGCA(CP2)W	BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-	38-CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Swit	Common Ironweed	Vernonia fasciculata	1	0.0625		Forb	N	N	CP38E-SWGCA(CP2)W	BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-SWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Berg	38-CP38E-SWGCA(CP2)WM-Switch-BB-Cwrye-Pc	Switchgrass	Panicum virgatum	32	2		Grass	N	N	CP38E-SWGCA(CP2)WM	Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
38	CP38E-SWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Berg	38-CP38E-SWGCA(CP2)WM-Switch-BB-Cwrye-Pc	Big Bluestem	Andropogon gerardii	16	1		Grass	N	N	CP38E-SWGCA(CP2)WM	Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
38	CP38E-SWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Berg	38-CP38E-SWGCA(CP2)WM-Switch-BB-Cwrye-Pc	Canada Wildrye	Elymus canadensis	16	1		Grass	N	N	CP38E-SWGCA(CP2)WM	Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
38	CP38E-SWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Berg	38-CP38E-SWGCA(CP2)WM-Switch-BB-Cwrye-Pc	Prairie Cordgrass	Spartina pectinata	4	0.25		Grass	N	N	CP38E-SWGCA(CP2)WM	Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
38	CP38E-SWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Berg	38-CP38E-SWGCA(CP2)WM-Switch-BB-Cwrye-Pc	Bergamot	Monarda fistulosa	1	0.0625		Forb	N	N	CP38E-SWGCA(CP2)WM	Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
38	CP38E-SWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Berg	38-CP38E-SWGCA(CP2)WM-Switch-BB-Cwrye-Pc	New England Aster	Symphyotrichum novae-a	1	0.0625		Forb	N	N	CP38E-SWGCA(CP2)WM	Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
38	CP38E-SWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Berg	38-CP38E-SWGCA(CP2)WM-Switch-BB-Cwrye-Pc	Yellow Coneflower	Ratibida pinnata	1	0.0625		Forb	N	N	CP38E-SWGCA(CP2)WM	Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Little Bluestem	Schizachyrium scoparium	24	1.5		Grass	N	N	CP38E-SWGCA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Sideoats Grama	Bouteloua curtipendula	24	1.5		Grass	N	N	CP38E-SWGCA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Indiangrass	Sorghastrum nutans	8	0.5		Grass	N	N	CP38E-SWGCA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Big Bluestem	Andropogon gerardii	4	0.25		Grass	N	N	CP38E-SWGCA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Purple Prairie Clover	Dalea purpurea	2	0.125		Legume	N	N	CP38E-SWGCA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Sand Dropseed	Sporobolus cryptandrus	2	0.125		Grass	N	N	CP38E-SWGCA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Prairie Junegrass	Koeleria macrantha	1	0.0625		Grass	N	N	CP38E-SWGCA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Spiderwort	Tradescantia ohiensis	1	0.0625		Forb	N	N	CP38E-SWGCA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Hoary Vervain	Verbena stricta	0.5	0.03125		Forb	N	N	CP38E-SWGCA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Leadplant	Amorpha canescens	0.5	0.03125		Legume	N	N	CP38E-SWGCA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Prairie Tickseed	Coreopsis palmata	0.5	0.03125		Forb	N	N	CP38E-SWGCA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Silky Aster	Symphyotrichum pratens	0.5	0.03125		Forb	N	N	CP38E-SWGCA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Stiff Goldenrod	Oligoneuron rigidum	1	0.03125		Forb	N	N	CP38E-SWGCA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Yellow Coneflower	Ratibida pinnata	0.5	0.03125		Forb	N	N	CP38E-SWGCA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Prairie Cinquefoil	Potentilla arguta	0.25	0.015625		Forb	N	N	CP38E-SWGCA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Spotted Mint	Monarda punctata	0	0.015625		Forb	N	N	CP38E-SWGCA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Little Bluestem	Schizachyrium scoparium	24	1.5		Grass	N	N	CP38E-SWGCA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Sideoats Grama	Bouteloua curtipendula	24	1.5		Grass	N	N	CP38E-SWGCA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Indiangrass	Sorghastrum nutans	8	0.5		Grass	N	N	CP38E-SWGCA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Switchgrass	Panicum virgatum	4	0.25		Grass	N	N	CP38E-SWGCA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Prairie Junegrass	Koeleria macrantha	2	0.125		Grass	N	N	CP38E-SWGCA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Prairie Dropseed	Sporobolus heterolepis	2	0.125		Grass	N	N	CP38E-SWGCA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Purple Prairie Clover	Dalea purpurea	2	0.125		Legume	N	N	CP38E-SWGCA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Round-Headed Bushclover	Lespedeza capitata	2	0.125		Legume	N	N	CP38E-SWGCA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B

38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Bergamot	Monarda fistulosa	1	0.0625		Forb	N	N	CP38E-SWGCA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Spiderwort	Tradescantia ohiensis	1	0.0625		Forb	N	N	CP38E-SWGCA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Yellow Coneflower	Ratibida pinnata	1	0.0625		Forb	N	N	CP38E-SWGCA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Leadplant	Amorpha canescens	0.5	0.03125		Legume	N	N	CP38E-SWGCA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Rough Blazing Star	Liatris aspera	1	0.03125		Forb	N	N	CP38E-SWGCA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Sky-Blue Aster	Symphyotrichum oolenta	1	0.03125		Forb	N	N	CP38E-SWGCA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Stiff Goldenrod	Oligoneuron rigidum	0.5	0.03125		Forb	N	N	CP38E-SWGCA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Prairie Cinquefoil	Potentilla arguta	0.25	0.015625		Forb	N	N	CP38E-SWGCA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
38	CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-Switch-Ox	38-CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-S	Little Bluestem	Schizachyrium scoparium	24	1.5		Grass	N	N	CP38E-SWGCA(CP25)M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
38	CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-Switch-Ox	38-CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-S	Indiangrass	Sorghastrum nutans	16	1		Grass	N	N	CP38E-SWGCA(CP25)M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
38	CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-Switch-Ox	38-CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-S	Big Bluestem	Andropogon gerardii	8	0.5		Grass	N	N	CP38E-SWGCA(CP25)M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
38	CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-Switch-Ox	38-CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-S	Canada Wildrye	Elymus canadensis	8	0.5		Grass	N	N	CP38E-SWGCA(CP25)M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
38	CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-Switch-Ox	38-CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-S	Switchgrass	Panicum virgatum	8	0.5		Grass	N	N	CP38E-SWGCA(CP25)M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
38	CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-Switch-Ox	38-CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-S	Ox-eye Sunflower	Heliopsis helianthoides	1	0.0625		Forb	N	N	CP38E-SWGCA(CP25)M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
38	CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-Switch-Ox	38-CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-S	Prairie Blazing Star	Liatris pycnostachya	1	0.0625		Forb	N	N	CP38E-SWGCA(CP25)M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
38	CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-Switch-Ox	38-CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-S	Purple Prairie Clover	Dalea purpurea	1	0.0625		Legume	N	N	CP38E-SWGCA(CP25)M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
38	CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-Switch-Ox	38-CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-S	Rosinweed	Silphium integrifolium	1	0.0625		Forb	N	N	CP38E-SWGCA(CP25)M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
38	CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-Switch-Ox	38-CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-S	Bergamot	Monarda fistulosa	0.5	0.03125		Forb	N	N	CP38E-SWGCA(CP25)M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
38	CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-Switch-Ox	38-CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-S	Black-eyed Susan	Rudbeckia hirta	0.5	0.03125		Forb	N	N	CP38E-SWGCA(CP25)M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
38	CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-Switch-Ox	38-CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-S	New England Aster	Symphyotrichum novae-a	0.5	0.03125		Forb	N	N	CP38E-SWGCA(CP25)M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
38	CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-Switch-Ox	38-CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-S	Smooth Blue Aster	Symphyotrichum laeve	0.5	0.03125		Forb	N	N	CP38E-SWGCA(CP25)M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
38	CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-Switch-Ox	38-CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-S	Yellow Coneflower	Ratibida pinnata	0.5	0.03125		Forb	N	N	CP38E-SWGCA(CP25)M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
38	CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-Switch-Ox	38-CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-S	Culver's Root	Veronicastrum virginicum	0	0.015625		Forb	N	N	CP38E-SWGCA(CP25)M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian	Canada Wildrye	Elymus canadensis	16	1		Grass	N	N	CP38E-SWGCA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian	Switchgrass	Panicum virgatum	16	1		Grass	N	N	CP38E-SWGCA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian	Indiangrass	Sorghastrum nutans	12	0.75		Grass	N	N	CP38E-SWGCA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian	Big Bluestem	Andropogon gerardii	8	0.5		Grass	N	N	CP38E-SWGCA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian	Prairie Cordgrass	Spartina pectinata	8	0.5		Grass	N	N	CP38E-SWGCA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian	Fowl Mannagrass	Glyceria striata	4	0.25		Grass	N	N	CP38E-SWGCA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian	Fox Sedge	Carex vulpinoidea	4	0.25		Sedge	N	N	CP38E-SWGCA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian	Cupplant	Silphium perfoliatum	2	0.125		Forb	N	N	CP38E-SWGCA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian	Showy Tick Trefoil	Desmodium canadense	2	0.125		Legume	N	N	CP38E-SWGCA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian	Blue Vervain	Verbena hastata	1	0.0625		Forb	N	N	CP38E-SWGCA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian	Golden Alexanders	Zizia aurea	1	0.0625		Forb	N	N	CP38E-SWGCA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian	Marsh Milkweed	Asclepias incarnata	1	0.0625		Forb	N	N	CP38E-SWGCA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian	Boneset	Eupatorium perfoliatum	0.5	0.03125		Forb	N	N	CP38E-SWGCA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian	Common Ironweed	Vernonia fasciculata	1	0.03125		Forb	N	N	CP38E-SWGCA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian	Joe-pye Weed	Eutrochium maculatum	1	0.03125		Forb	N	N	CP38E-SWGCA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian	Culver's Root	Veronicastrum virginicum	0	0.015625		Forb	N	N	CP38E-SWGCA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-Indian-Pco	38-CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-I	Switchgrass	Panicum virgatum	24	1.5		Grass	N	N	CP38E-SWGCA(CP25)WM	Switch-BB-Cwrye-Indian-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
38	CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-Indian-Pco	38-CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-I	Big Bluestem	Andropogon gerardii	20	1.25		Grass	N	N	CP38E-SWGCA(CP25)WM	Switch-BB-Cwrye-Indian-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
38	CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-Indian-Pco	38-CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-I	Canada Wildrye	Elymus canadensis	16	1		Grass	N	N	CP38E-SWGCA(CP25)WM	Switch-BB-Cwrye-Indian-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
38	CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-Indian-Pco	38-CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-I	Indiangrass	Sorghastrum nutans	12	0.75		Grass	N	N	CP38E-SWGCA(CP25)WM	Switch-BB-Cwrye-Indian-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
38	CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-Indian-Pco	38-CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-I	Prairie Cordgrass	Spartina pectinata	4	0.25		Grass	N	N	CP38E-SWGCA(CP25)WM	Switch-BB-Cwrye-Indian-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
38	CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-Indian-Pco	38-CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-I	Cupplant	Silphium perfoliatum	2	0.125		Forb	N	N	CP38E-SWGCA(CP25)WM	Switch-BB-Cwrye-Indian-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
38	CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-Indian-Pco	38-CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-I	White wild indigo	Baptisia alba	1.5	0.09375		Legume	N	N	CP38E-SWGCA(CP25)WM	Switch-BB-Cwrye-Indian-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
38	CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-Indian-Pco	38-CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-I	Black-eyed Susan	Rudbeckia hirta	0.5	0.03125		Forb	N	N	CP38E-SWGCA(CP25)WM	Switch-BB-Cwrye-Indian-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
38	CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-Indian-Pco	38-CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-I	Common Ironweed	Vernonia fasciculata	0.5	0.03125		Forb	N	N	CP38E-SWGCA(CP25)WM	Switch-BB-Cwrye-Indian-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
38	CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-Indian-Pco	38-CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-I	Golden Alexanders	Zizia aurea	0.5	0.03125		Forb	N	N	CP38E-SWGCA(CP25)WM	Switch-BB-Cwrye-Indian-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
38	CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-Indian-Pco	38-CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-I	New England Aster	Symphyotrichum novae-a	0.5	0.03125		Forb	N	N	CP38E-SWGCA(CP25)WM	Switch-BB-Cwrye-Indian-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
38	CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-Indian-Pco	38-CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-I	Prairie Blazing Star	Liatris pycnostachya	0.5	0.03125		Forb	N	N	CP38E-SWGCA(CP25)WM	Switch-BB-Cwrye-Indian-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
38	CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-Indian-Pco	38-CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-I	Yellow Coneflower	Ratibida pinnata	0.5	0.03125		Forb	N	N	CP38E-SWGCA(CP25)WM	Switch-BB-Cwrye-Indian-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
38	CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-Indian-Pco	38-CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-I	Bergamot	Monarda fistulosa	0.25	0.015625		Forb	N	N	CP38E-SWGCA(CP25)WM	Switch-BB-Cwrye-Indian-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
38	CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-Indian-Pco	38-CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-I	Great St. John's Wort	Hypericum ascyron	0	0.015625		Forb	N	N	CP38E-SWGCA(CP25)WM	Switch-BB-Cwrye-Indian-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pju	Little Bluestem	Schizachyrium scoparium	32	2		Grass	N	N	CP38E-WPHRA(CP25)D	LB-Sgrama-Indian-Pjune-Pdrop-Switch-PPclover-RHbushclover-S
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pju	Sideoats Grama	Bouteloua curtipendula	24	1.5		Grass	N	N	CP38E-WPHRA(CP25)D	LB-Sgrama-Indian-Pjune-Pdrop-Switch-PPclover-RHbushclover-S
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pju	Indiangrass	Sorghastrum nutans	4	0.25		Grass	N	N	CP38E-WPHRA(CP25)D	LB-Sgrama-Indian-Pjune-Pdrop-Switch-PPclover-RHbushclover-S
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pju	Prairie Junegrass	Koeleria macrantha	4	0.25		Grass	N	N	CP38E-WPHRA(CP25)D	LB-Sgrama-Indian-Pjune-Pdrop-Switch-PPclover-RHbushclover-S
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pju	Prairie Dropseed	Sporobolus heterolepis	4	0.25		Grass	N	N	CP38E-WPHRA(CP25)D	LB-Sgrama-Indian-Pjune-Pdrop-Switch-PPclover-RHbushclover-S
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pju	Switchgrass	Panicum virgatum	4	0.25		Grass	N	N	CP38E-WPHRA(CP25)D	LB-Sgrama-Indian-Pjune-Pdrop-Switch-PPclover-RHbushclover-S
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pju	Purple Prairie Clover	Dalea purpurea	2	0.125		Legume	N	N	CP38E-WPHRA(CP25)D	LB-Sgrama-Indian-Pjune-Pdrop-Switch-PPclover-RHbushclover-S
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pju	Round-Headed Bushclover	Lespedeza capitata	2	0.125		Legume	N	N	CP38E-WPHRA(CP25)D	LB-Sgrama-Indian-Pjune-Pdrop-Switch-PPclover-RHbushclover-S
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pju	Spiderwort	Tradescantia ohiensis	1	0.0625		Forb	N	N	CP38E-WPHRA(CP25)D	LB-Sgrama-Indian-Pjune-Pdrop-Switch-PPclover-RHbushclover-S
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pju	Bergamot	Monarda fistulosa	0.5	0.03125		Forb	N	N	CP38E-WPHRA(CP25)D	LB-Sgrama-Indian-Pjune-Pdrop-Switch-PPclover-RHbushclover-S
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pju	Leadplant	Amorpha canescens	0.5	0.03125		Legume	N	N	CP38E-WPHRA(CP25)D	LB-Sgrama-Indian-Pjune-Pdrop-Switch-PPclover-RHbushclover-S
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pju	Rough Blazing Star	Liatris aspera	0.5	0.03125		Forb	N	N	CP38E-WPHRA(CP25)D	LB-Sgrama-Indian-Pjune-Pdrop-Switch-PPclover-RHbushclover-S
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pju	Sky-Blue Aster	Symphyotrichum oolenta	0.5	0.03125		Forb	N	N	CP38E-WPHRA(CP25)D	LB-Sgrama-Indian-Pjune-Pdrop-Switch-PPclover-RHbushclover-S
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pju	Black-eyed Susan	Rudbeckia hirta	0.25	0.015625		Forb	N	N	CP38E-WPHRA(CP25)D	LB-Sgrama-Indian-Pjune-Pdrop-Switch-PPclover-RHbushclover-S
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pju	Prairie Cinquefoil	Potentilla arguta	0.25	0.015625		Forb	N	N	CP38E-WPHRA(CP25)D	LB-Sgrama-Indian-Pjune-Pdrop-Switch-PPclover-RHbushclover-S
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pju	Stiff Goldenrod	Oligoneuron rigidum	0	0.015625		Forb	N	N	CP38E-WPHRA(CP25)D	LB-Sgrama-Indian-Pjune-Pdrop-Switch-PPclover-RHbushclover-S
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pju	Yellow Coneflower	Ratibida pinnata	0	0.015625		Forb	N	N	CP38E-WPHRA(CP25)D	LB-Sgrama-Indian-Pjune-Pdrop-Switch-PPclover-RHbushclover-S

38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-B	Little Bluestem	Schizachyrium scoparium	32	2		Grass	N	N	CP38E-WPHRA(CP25)DM	LB-Sgrama-Pjune-BB-Indian-Sdrop-Bmilkweed-PPclover-Swort-H
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-B	Sideoats Grama	Bouteloua curtipendula	24	1.5		Grass	N	N	CP38E-WPHRA(CP25)DM	LB-Sgrama-Pjune-BB-Indian-Sdrop-Bmilkweed-PPclover-Swort-H
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-B	Prairie Junegrass	Koeleria macrantha	6	0.375		Grass	N	N	CP38E-WPHRA(CP25)DM	LB-Sgrama-Pjune-BB-Indian-Sdrop-Bmilkweed-PPclover-Swort-H
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-B	Big Bluestem	Andropogon gerardii	4	0.25		Grass	N	N	CP38E-WPHRA(CP25)DM	LB-Sgrama-Pjune-BB-Indian-Sdrop-Bmilkweed-PPclover-Swort-H
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-B	Indiangrass	Sorghastrum nutans	4	0.25		Grass	N	N	CP38E-WPHRA(CP25)DM	LB-Sgrama-Pjune-BB-Indian-Sdrop-Bmilkweed-PPclover-Swort-H
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-B	Sand Dropseed	Sporobolus cryptandrus	4	0.25		Grass	N	N	CP38E-WPHRA(CP25)DM	LB-Sgrama-Pjune-BB-Indian-Sdrop-Bmilkweed-PPclover-Swort-H
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-B	Butterfly Milkweed	Asclepias tuberosa	1	0.0625		Forb	N	N	CP38E-WPHRA(CP25)DM	LB-Sgrama-Pjune-BB-Indian-Sdrop-Bmilkweed-PPclover-Swort-H
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-B	Purple Prairie Clover	Dalea purpurea	1	0.0625		Legume	N	N	CP38E-WPHRA(CP25)DM	LB-Sgrama-Pjune-BB-Indian-Sdrop-Bmilkweed-PPclover-Swort-H
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-B	Spiderwort	Tradescantia ohiensis	1	0.0625		Forb	N	N	CP38E-WPHRA(CP25)DM	LB-Sgrama-Pjune-BB-Indian-Sdrop-Bmilkweed-PPclover-Swort-H
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-B	Hoary Vervain	Verbena stricta	0.5	0.03125		Forb	N	N	CP38E-WPHRA(CP25)DM	LB-Sgrama-Pjune-BB-Indian-Sdrop-Bmilkweed-PPclover-Swort-H
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-B	Leadplant	Amorpha canescens	0.5	0.03125		Legume	N	N	CP38E-WPHRA(CP25)DM	LB-Sgrama-Pjune-BB-Indian-Sdrop-Bmilkweed-PPclover-Swort-H
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-B	Prairie Tickseed	Coreopsis palmata	0.5	0.03125		Forb	N	N	CP38E-WPHRA(CP25)DM	LB-Sgrama-Pjune-BB-Indian-Sdrop-Bmilkweed-PPclover-Swort-H
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-B	Silky Aster	Symphyotrichum pratens	0.5	0.03125		Forb	N	N	CP38E-WPHRA(CP25)DM	LB-Sgrama-Pjune-BB-Indian-Sdrop-Bmilkweed-PPclover-Swort-H
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-B	Prairie Cinquefoil	Potentilla arguta	0.25	0.015625		Forb	N	N	CP38E-WPHRA(CP25)DM	LB-Sgrama-Pjune-BB-Indian-Sdrop-Bmilkweed-PPclover-Swort-H
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-B	Spotted Mint	Monarda punctata	0.25	0.015625		Forb	N	N	CP38E-WPHRA(CP25)DM	LB-Sgrama-Pjune-BB-Indian-Sdrop-Bmilkweed-PPclover-Swort-H
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-B	Stiff Goldenrod	Oligoneuron rigidum	0	0.015625		Forb	N	N	CP38E-WPHRA(CP25)DM	LB-Sgrama-Pjune-BB-Indian-Sdrop-Bmilkweed-PPclover-Swort-H
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-B	Yellow Coneflower	Ratibida pinnata	0	0.015625		Forb	N	N	CP38E-WPHRA(CP25)DM	LB-Sgrama-Pjune-BB-Indian-Sdrop-Bmilkweed-PPclover-Swort-H
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB	Little Bluestem	Schizachyrium scoparium	28	1.75		Grass	N	N	CP38E-WPHRA(CP25)M	LB-Cwrye-Sgrama-BB-Indian-Switch-Cmilkvetch-Oxeyesun-Pblzst
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB	Canada Wildrye	Elymus canadensis	12	0.75		Grass	N	N	CP38E-WPHRA(CP25)M	LB-Cwrye-Sgrama-BB-Indian-Switch-Cmilkvetch-Oxeyesun-Pblzst
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB	Sideoats Grama	Bouteloua curtipendula	12	0.75		Grass	N	N	CP38E-WPHRA(CP25)M	LB-Cwrye-Sgrama-BB-Indian-Switch-Cmilkvetch-Oxeyesun-Pblzst
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB	Big Bluestem	Andropogon gerardii	4	0.25		Grass	N	N	CP38E-WPHRA(CP25)M	LB-Cwrye-Sgrama-BB-Indian-Switch-Cmilkvetch-Oxeyesun-Pblzst
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB	Indiangrass	Sorghastrum nutans	4	0.25		Grass	N	N	CP38E-WPHRA(CP25)M	LB-Cwrye-Sgrama-BB-Indian-Switch-Cmilkvetch-Oxeyesun-Pblzst
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB	Switchgrass	Panicum virgatum	4	0.25		Grass	N	N	CP38E-WPHRA(CP25)M	LB-Cwrye-Sgrama-BB-Indian-Switch-Cmilkvetch-Oxeyesun-Pblzst
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB	Canada Milkvetch	Astragalus canadensis	2	0.125		Legume	N	N	CP38E-WPHRA(CP25)M	LB-Cwrye-Sgrama-BB-Indian-Switch-Cmilkvetch-Oxeyesun-Pblzst
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB	Ox-eye Sunflower	Heliopsis helianthoides	1	0.0625		Forb	N	N	CP38E-WPHRA(CP25)M	LB-Cwrye-Sgrama-BB-Indian-Switch-Cmilkvetch-Oxeyesun-Pblzst
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB	Prairie Blazing Star	Liatris pycnostachya	1	0.0625		Forb	N	N	CP38E-WPHRA(CP25)M	LB-Cwrye-Sgrama-BB-Indian-Switch-Cmilkvetch-Oxeyesun-Pblzst
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB	Purple Prairie Clover	Dalea purpurea	1	0.0625		Legume	N	N	CP38E-WPHRA(CP25)M	LB-Cwrye-Sgrama-BB-Indian-Switch-Cmilkvetch-Oxeyesun-Pblzst
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB	Bergamot	Monarda fistulosa	0.5	0.03125		Forb	N	N	CP38E-WPHRA(CP25)M	LB-Cwrye-Sgrama-BB-Indian-Switch-Cmilkvetch-Oxeyesun-Pblzst
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB	Black-eyed Susan	Rudbeckia hirta	0.5	0.03125		Forb	N	N	CP38E-WPHRA(CP25)M	LB-Cwrye-Sgrama-BB-Indian-Switch-Cmilkvetch-Oxeyesun-Pblzst
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB	New England Aster	Symphyotrichum novae-a	0.5	0.03125		Forb	N	N	CP38E-WPHRA(CP25)M	LB-Cwrye-Sgrama-BB-Indian-Switch-Cmilkvetch-Oxeyesun-Pblzst
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB	Sky-Blue Aster	Symphyotrichum oolenta	0.5	0.03125		Forb	N	N	CP38E-WPHRA(CP25)M	LB-Cwrye-Sgrama-BB-Indian-Switch-Cmilkvetch-Oxeyesun-Pblzst
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB	Smooth Blue Aster	Symphyotrichum laeve	0.5	0.03125		Forb	N	N	CP38E-WPHRA(CP25)M	LB-Cwrye-Sgrama-BB-Indian-Switch-Cmilkvetch-Oxeyesun-Pblzst
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB	Yellow Coneflower	Ratibida pinnata	1	0.03125		Forb	N	N	CP38E-WPHRA(CP25)M	LB-Cwrye-Sgrama-BB-Indian-Switch-Cmilkvetch-Oxeyesun-Pblzst
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB	Culver's Root	Veronicastrum virginicum	0	0.015625		Forb	N	N	CP38E-WPHRA(CP25)M	LB-Cwrye-Sgrama-BB-Indian-Switch-Cmilkvetch-Oxeyesun-Pblzst
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsed	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch	Canada Wildrye	Elymus canadensis	16	1		Grass	N	N	CP38E-WPHRA(CP25)W	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsed	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch	Indiangrass	Sorghastrum nutans	12	0.75		Grass	N	N	CP38E-WPHRA(CP25)W	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsed	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch	Switchgrass	Panicum virgatum	12	0.75		Grass	N	N	CP38E-WPHRA(CP25)W	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsed	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch	Big Bluestem	Andropogon gerardii	8	0.5		Grass	N	N	CP38E-WPHRA(CP25)W	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsed	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch	Fox Sedge	Carex vulpinoidea	8	0.5		Sedge	N	N	CP38E-WPHRA(CP25)W	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsed	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch	Prairie Cordgrass	Spartina pectinata	8	0.5		Grass	N	N	CP38E-WPHRA(CP25)W	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsed	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch	Fowl Mannagrass	Glyceria striata	4	0.25		Grass	N	N	CP38E-WPHRA(CP25)W	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsed	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch	Cupplant	Silphium perfoliatum	2	0.125		Forb	N	N	CP38E-WPHRA(CP25)W	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsed	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch	Showy Tick Trefoil	Desmodium canadense	2	0.125		Legume	N	N	CP38E-WPHRA(CP25)W	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsed	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch	Blue Vervain	Verbena hastata	1	0.0625		Forb	N	N	CP38E-WPHRA(CP25)W	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsed	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch	Golden Alexanders	Zizia aurea	1	0.0625		Forb	N	N	CP38E-WPHRA(CP25)W	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsed	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch	Marsh Milkweed	Asclepias incarnata	1	0.0625		Forb	N	N	CP38E-WPHRA(CP25)W	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsed	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch	Boneset	Eupatorium perfoliatum	0.5	0.03125		Forb	N	N	CP38E-WPHRA(CP25)W	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsed	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch	Common Ironweed	Vernonia fasciculata	1	0.03125		Forb	N	N	CP38E-WPHRA(CP25)W	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsed	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch	Joe-pye Weed	Eutrochium maculatum	1	0.03125		Forb	N	N	CP38E-WPHRA(CP25)W	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsed	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch	Culver's Root	Veronicastrum virginicum	0	0.015625		Forb	N	N	CP38E-WPHRA(CP25)W	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38E-Monarch(CP1)-Tim-Orc-RC-Cmilkweed-Besus-O	38-CP38E-Monarch(CP1)-Tim-Orc-RC-Cmilkweed	Common Milkweed	Asclepias syriaca	6	0.378	0.6	Forb	N	X	CP38E-Monarch(CP1)	Tim-Orc-RC-Cmilkweed-Besus-Oxeyesun-Sgrod
38	CP38E-Monarch(CP1)-Tim-Orc-RC-Cmilkweed-	38-CP38E-Monarch(CP1)-Tim-Orc-RC-Cm	Black-Eyed Susan	Rudbeckia hirta	0.96	0.06	2.2	Forb	N	X	CP38E-Monarch(CP1)	Tim-Orc-RC-Cmilkweed-Besus-Oxeyesun-Sgrod
38	CP38E-Monarch(CP1)-Tim-Orc-RC-Cmilkweed-	38-CP38E-Monarch(CP1)-Tim-Orc-RC-Cm	Ox-eye Sunflower	Heliopsis helianthoides	0.96	0.06	0.2	Forb	N	X	CP38E-Monarch(CP1)	Tim-Orc-RC-Cmilkweed-Besus-Oxeyesun-Sgrod
38	CP38E-Monarch(CP1)-Tim-Orc-RC-Cmilkweed-	38-CP38E-Monarch(CP1)-Tim-Orc-RC-Cm	Stiff Goldenrod	Oligoneuron rigidum	0.96	0.06	1.1	Forb	N	X	CP38E-Monarch(CP1)	Tim-Orc-RC-Cmilkweed-Besus-Oxeyesun-Sgrod
38	CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cv	38-CP38E-Monarch(CP2)-BB-LB-Indian-Sg	Big Bluestem	Andropogon gerardii	4	0.25	1	Grass	N	X	CP38E-Monarch(CP2)	BB-LB-Indian-Sgrama-Cwrye-Wpclover-Cmilkweed-Besus-Berg-Sg
38	CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cv	38-CP38E-Monarch(CP2)-BB-LB-Indian-Sg	Little Bluestem	Schizachyrium scoparium	24	1.5	8.3	Grass	N	X	CP38E-Monarch(CP2)	BB-LB-Indian-Sgrama-Cwrye-Wpclover-Cmilkweed-Besus-Berg-Sg
38	CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cv	38-CP38E-Monarch(CP2)-BB-LB-Indian-Sg	Indiangrass	Sorghastrum nutans	4	0.25	1.2	Grass	N	X	CP38E-Monarch(CP2)	BB-LB-Indian-Sgrama-Cwrye-Wpclover-Cmilkweed-Besus-Berg-Sg
38	CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cv	38-CP38E-Monarch(CP2)-BB-LB-Indian-Sg	Sideoats Grama	Bouteloua curtipendula	12	0.75	2.2	Grass	N	X	CP38E-Monarch(CP2)	BB-LB-Indian-Sgrama-Cwrye-Wpclover-Cmilkweed-Besus-Berg-Sg
38	CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cv	38-CP38E-Monarch(CP2)-BB-LB-Indian-Sg	Canada Wildrye	Elymus canadensis	16	1	2	Grass	N	X	CP38E-Monarch(CP2)	BB-LB-Indian-Sgrama-Cwrye-Wpclover-Cmilkweed-Besus-Berg-Sg
38	CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cv	38-CP38E-Monarch(CP2)-BB-LB-Indian-Sg	white prairie clover	Dalea candida	3.04	0.19	1.2	Legume	N	X	CP38E-Monarch(CP2)	BB-LB-Indian-Sgrama-Cwrye-Wpclover-Cmilkweed-Besus-Berg-Sg
38	CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cv	38-CP38E-Monarch(CP2)-BB-LB-Indian-Sg	Common Milkweed	Asclepias syriaca	4.96	0.31	0.5	Forb	N	X	CP38E-Monarch(CP2)	BB-LB-Indian-Sgrama-Cwrye-Wpclover-Cmilkweed-Besus-Berg-Sg
38	CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cv	38-CP38E-Monarch(CP2)-BB-LB-Indian-Sg	Black-eyed Susan	Rudbeckia hirta	0.96	0.06	2.2	Forb	N	X	CP38E-Monarch(CP2)	BB-LB-Indian-Sgrama-Cwrye-Wpclover-Cmilkweed-Besus-Berg-Sg
38	CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cv	38-CP38E-Monarch(CP2)-BB-LB-Indian-Sg	Bergamot	Monarda fistulosa	0.96	0.06	1.8	Forb	N	X	CP38E-Monarch(CP2)	BB-LB-Indian-Sgrama-Cwrye-Wpclover-Cmilkweed-Besus-Berg-Sg
38	CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cv	38-CP38E-Monarch(CP2)-BB-LB-Indian-Sg	Stiff Goldenrod	Oligoneuron rigidum	0.96	0.06	1.1	Forb	N	X	CP38E-Monarch(CP2)	BB-LB-Indian-Sgrama-Cwrye-Wpclover-Cmilkweed-Besus-Berg-Sg
38	CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cv	38-CP38E-Monarch(CP2)-BB-LB-Indian-Sg	Showy Goldenrod	Solidago speciosa	0.48	0.03	1.1	Forb	N	X	CP38E-Monarch(CP2)	BB-LB-Indian-Sgrama-Cwrye-Wpclover-Cmilkweed-Besus-Berg-Sg
38	CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cv	38-CP38E-Monarch(CP2)-BB-LB-Indian-Sg	New England Aster	Symphyotrichum novae-angliae	0.48	0.03	0.8	Forb	N	X	CP38E-Monarch(CP2)	BB-LB-Indian-Sgrama-Cwrye-Wpclover-Cmilkweed-Besus-Berg-Sg

38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	38-CP38E-Monarch(CP25)-BB-LB-Indian-S	Big Bluestem	Andropogon gerardii	4	0.25	1	Grass	N	X	CP38E-Monarch(CP25)	BB-LB-Indian-Sgrama-Cwrye-Wpclover-Cmilkweed-Besus-Berg-Sg
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	38-CP38E-Monarch(CP25)-BB-LB-Indian-S	Little Bluestem	Schizachyrium scoparium	16	1	5.6	Grass	N	X	CP38E-Monarch(CP25)	BB-LB-Indian-Sgrama-Cwrye-Wpclover-Cmilkweed-Besus-Berg-Sg
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	38-CP38E-Monarch(CP25)-BB-LB-Indian-S	Indiangrass	Sorghastrum nutans	4	0.25	1.2	Grass	N	X	CP38E-Monarch(CP25)	BB-LB-Indian-Sgrama-Cwrye-Wpclover-Cmilkweed-Besus-Berg-Sg
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	38-CP38E-Monarch(CP25)-BB-LB-Indian-S	Sideoats Grama	Bouteloua curtipendula	8	0.5	1.5	Grass	N	X	CP38E-Monarch(CP25)	BB-LB-Indian-Sgrama-Cwrye-Wpclover-Cmilkweed-Besus-Berg-Sg
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	38-CP38E-Monarch(CP25)-BB-LB-Indian-S	Canada Wildrye	Elymus canadensis	8	0.5	1	Grass	N	X	CP38E-Monarch(CP25)	BB-LB-Indian-Sgrama-Cwrye-Wpclover-Cmilkweed-Besus-Berg-Sg
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	38-CP38E-Monarch(CP25)-BB-LB-Indian-S	white prairie clover	Dalea candida	3.04	0.19	1.2	Legume	N	X	CP38E-Monarch(CP25)	BB-LB-Indian-Sgrama-Cwrye-Wpclover-Cmilkweed-Besus-Berg-Sg
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	38-CP38E-Monarch(CP25)-BB-LB-Indian-S	Common Milkweed	Asclepias syriaca	4.96	0.31	0.5	Forb	N	X	CP38E-Monarch(CP25)	BB-LB-Indian-Sgrama-Cwrye-Wpclover-Cmilkweed-Besus-Berg-Sg
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	38-CP38E-Monarch(CP25)-BB-LB-Indian-S	Black-eyed Susan	Rudbeckia hirta	0.96	0.06	2.2	Forb	N	X	CP38E-Monarch(CP25)	BB-LB-Indian-Sgrama-Cwrye-Wpclover-Cmilkweed-Besus-Berg-Sg
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	38-CP38E-Monarch(CP25)-BB-LB-Indian-S	Bergamot	Monarda fistulosa	0.96	0.06	1.8	Forb	N	X	CP38E-Monarch(CP25)	BB-LB-Indian-Sgrama-Cwrye-Wpclover-Cmilkweed-Besus-Berg-Sg
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	38-CP38E-Monarch(CP25)-BB-LB-Indian-S	Stiff Goldenrod	Oligoneuron rigidum	0.96	0.06	1.1	Forb	N	X	CP38E-Monarch(CP25)	BB-LB-Indian-Sgrama-Cwrye-Wpclover-Cmilkweed-Besus-Berg-Sg
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	38-CP38E-Monarch(CP25)-BB-LB-Indian-S	Showy Goldenrod	Solidago speciosa	0.48	0.03	1.1	Forb	N	X	CP38E-Monarch(CP25)	BB-LB-Indian-Sgrama-Cwrye-Wpclover-Cmilkweed-Besus-Berg-Sg
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	38-CP38E-Monarch(CP25)-BB-LB-Indian-S	New England Aster	Symphyotrichum novae-angliae	0.48	0.03	0.8	Forb	N	X	CP38E-Monarch(CP25)	BB-LB-Indian-Sgrama-Cwrye-Wpclover-Cmilkweed-Besus-Berg-Sg
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	38-CP38E-Monarch(CP25)-BB-LB-Indian-S	Rough Blazing Star	Liatris aspera	0.48	0.03	0.2	Forb	N	X	CP38E-Monarch(CP25)	BB-LB-Indian-Sgrama-Cwrye-Wpclover-Cmilkweed-Besus-Berg-Sg
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	38-CP38E-Monarch(CP25)-BB-LB-Indian-S	Rattlesnake Master	Eryngium yuccifolium	0.96	0.06	0.2	Forb	N	X	CP38E-Monarch(CP25)	BB-LB-Indian-Sgrama-Cwrye-Wpclover-Cmilkweed-Besus-Berg-Sg
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	38-CP38E-Monarch(CP25)-BB-LB-Indian-S	Cupplant	Silphium perfoliatum	2.08	0.13	0.1	Forb	N	X	CP38E-Monarch(CP25)	BB-LB-Indian-Sgrama-Cwrye-Wpclover-Cmilkweed-Besus-Berg-Sg
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	38-CP38E-Monarch(CP25)-BB-LB-Indian-S	Sky-Blue Aster	Symphyotrichum oolentangiense	0.96	0.06	1.9	Forb	N	X	CP38E-Monarch(CP25)	BB-LB-Indian-Sgrama-Cwrye-Wpclover-Cmilkweed-Besus-Berg-Sg
38	CP3-1-BB-LB-Indian-Sgrama-Sgrod-Ycone-PPcl	38-CP3-1-BB-LB-Indian-Sgrama-Sgrod-Yc	Big Bluestem	Andropogon gerardii	8	0.5	1.9	Grass	N	X	CP3-1	BB-LB-Indian-Sgrama-Sgrod-Ycone-PPclover
38	CP3-1-BB-LB-Indian-Sgrama-Sgrod-Ycone-PPcl	38-CP3-1-BB-LB-Indian-Sgrama-Sgrod-Yc	Little Bluestem	Schizachyrium scoparium	24	1.5	8.3	Grass	N	X	CP3-1	BB-LB-Indian-Sgrama-Sgrod-Ycone-PPclover
38	CP3-1-BB-LB-Indian-Sgrama-Sgrod-Ycone-PPcl	38-CP3-1-BB-LB-Indian-Sgrama-Sgrod-Yc	Indiangrass	Sorghastrum nutans	8	0.5	2.3	Grass	N	X	CP3-1	BB-LB-Indian-Sgrama-Sgrod-Ycone-PPclover
38	CP3-1-BB-LB-Indian-Sgrama-Sgrod-Ycone-PPcl	38-CP3-1-BB-LB-Indian-Sgrama-Sgrod-Yc	Sideoats Grama	Bouteloua curtipendula	24	1.5	4.4	Grass	N	X	CP3-1	BB-LB-Indian-Sgrama-Sgrod-Ycone-PPclover
38	CP3-1-BB-LB-Indian-Sgrama-Sgrod-Ycone-PPcl	38-CP3-1-BB-LB-Indian-Sgrama-Sgrod-Yc	Stiff Goldenrod	Oligoneuron rigidum	1	0.0625	1.1	Forb	N	X	CP3-1	BB-LB-Indian-Sgrama-Sgrod-Ycone-PPclover
38	CP3-1-BB-LB-Indian-Sgrama-Sgrod-Ycone-PPcl	38-CP3-1-BB-LB-Indian-Sgrama-Sgrod-Yc	Yellow Coneflower	Ratibida pinnata	1	0.0625	0.7	Forb	N	X	CP3-1	BB-LB-Indian-Sgrama-Sgrod-Ycone-PPclover
38	CP3-1-BB-LB-Indian-Sgrama-Sgrod-Ycone-PPcl	38-CP3-1-BB-LB-Indian-Sgrama-Sgrod-Yc	Purple Prairie Clover	Dalea purpurea	2	0.125	1	Legume	N	X	CP3-1	BB-LB-Indian-Sgrama-Sgrod-Ycone-PPclover
38	CP3-2-BB-Switch-LB-Indian-Cwrye-Ycone-Besu	38-CP3-2-BB-Switch-LB-Indian-Cwrye-Yc	Big Bluestem	Andropogon gerardii	8	0.5	1.9	Grass	N	X	CP3-2	BB-Switch-LB-Indian-Cwrye-Ycone-Besus-Berg
38	CP3-2-BB-Switch-LB-Indian-Cwrye-Ycone-Besu	38-CP3-2-BB-Switch-LB-Indian-Cwrye-Yc	Switchgrass	Panicum virgatum	8	0.5	4.5	Grass	N	X	CP3-2	BB-Switch-LB-Indian-Cwrye-Ycone-Besus-Berg
38	CP3-2-BB-Switch-LB-Indian-Cwrye-Ycone-Besu	38-CP3-2-BB-Switch-LB-Indian-Cwrye-Yc	Little Bluestem	Schizachyrium scoparium	20	1.25	6.9	Grass	N	X	CP3-2	BB-Switch-LB-Indian-Cwrye-Ycone-Besus-Berg
38	CP3-2-BB-Switch-LB-Indian-Cwrye-Ycone-Besu	38-CP3-2-BB-Switch-LB-Indian-Cwrye-Yc	Indiangrass	Sorghastrum nutans	16	1	4.5	Grass	N	X	CP3-2	BB-Switch-LB-Indian-Cwrye-Ycone-Besus-Berg
38	CP3-2-BB-Switch-LB-Indian-Cwrye-Ycone-Besu	38-CP3-2-BB-Switch-LB-Indian-Cwrye-Yc	Canada Wildrye	Elymus canadensis	16	1	2	Grass	N	X	CP3-2	BB-Switch-LB-Indian-Cwrye-Ycone-Besus-Berg
38	CP3-2-BB-Switch-LB-Indian-Cwrye-Ycone-Besu	38-CP3-2-BB-Switch-LB-Indian-Cwrye-Yc	Yellow Coneflower	Ratibida pinnata	1	0.0625	0.7	Forb	N	X	CP3-2	BB-Switch-LB-Indian-Cwrye-Ycone-Besus-Berg
38	CP3-2-BB-Switch-LB-Indian-Cwrye-Ycone-Besu	38-CP3-2-BB-Switch-LB-Indian-Cwrye-Yc	Black-Eyed Susan	Rudbeckia hirta	1	0.0625	2.3	Forb	N	X	CP3-2	BB-Switch-LB-Indian-Cwrye-Ycone-Besus-Berg
38	CP3-2-BB-Switch-LB-Indian-Cwrye-Ycone-Besu	38-CP3-2-BB-Switch-LB-Indian-Cwrye-Yc	Bergamot	Monarda fistulosa	1	0.0625	1.8	Forb	N	X	CP3-2	BB-Switch-LB-Indian-Cwrye-Ycone-Besus-Berg
38	CP3-3-BB-LB-Indian-Switch-Sgrama-PPclover-B	38-CP3-3-BB-LB-Indian-Switch-Sgrama-PP	Big Bluestem	Andropogon gerardii	8	0.5	1.9	Grass	N	X	CP3-3	BB-LB-Indian-Switch-Sgrama-PPclover-Berg-Ycone
38	CP3-3-BB-LB-Indian-Switch-Sgrama-PPclover-B	38-CP3-3-BB-LB-Indian-Switch-Sgrama-PP	Little Bluestem	Schizachyrium scoparium	24	1.5	8.3	Grass	N	X	CP3-3	BB-LB-Indian-Switch-Sgrama-PPclover-Berg-Ycone
38	CP3-3-BB-LB-Indian-Switch-Sgrama-PPclover-B	38-CP3-3-BB-LB-Indian-Switch-Sgrama-PP	Indiangrass	Sorghastrum nutans	8	0.5	2.3	Grass	N	X	CP3-3	BB-LB-Indian-Switch-Sgrama-PPclover-Berg-Ycone
38	CP3-3-BB-LB-Indian-Switch-Sgrama-PPclover-B	38-CP3-3-BB-LB-Indian-Switch-Sgrama-PP	Switchgrass	Panicum virgatum	8	0.5	4.5	Grass	N	X	CP3-3	BB-LB-Indian-Switch-Sgrama-PPclover-Berg-Ycone
38	CP3-3-BB-LB-Indian-Switch-Sgrama-PPclover-B	38-CP3-3-BB-LB-Indian-Switch-Sgrama-PP	Sideoats Grama	Bouteloua curtipendula	16	1	3	Grass	N	X	CP3-3	BB-LB-Indian-Switch-Sgrama-PPclover-Berg-Ycone
38	CP3-3-BB-LB-Indian-Switch-Sgrama-PPclover-B	38-CP3-3-BB-LB-Indian-Switch-Sgrama-PP	Purple Prairie Clover	Dalea purpurea	2	0.125	1	Legume	N	X	CP3-3	BB-LB-Indian-Switch-Sgrama-PPclover-Berg-Ycone
38	CP3-3-BB-LB-Indian-Switch-Sgrama-PPclover-B	38-CP3-3-BB-LB-Indian-Switch-Sgrama-PP	Bergamot	Monarda fistulosa	1	0.0625	1.8	Forb	N	X	CP3-3	BB-LB-Indian-Switch-Sgrama-PPclover-Berg-Ycone
38	CP3-3-BB-LB-Indian-Switch-Sgrama-PPclover-B	38-CP3-3-BB-LB-Indian-Switch-Sgrama-PP	Yellow Coneflower	Ratibida pinnata	1	0.0625	0.7	Forb	N	X	CP3-3	BB-LB-Indian-Switch-Sgrama-PPclover-Berg-Ycone
38	CP3-4-Switch-Pcord-BB-Indian-Cwrye-Ciron-Cu	38-CP3-4-Switch-Pcord-BB-Indian-Cwrye-C	Switchgrass	Panicum virgatum	16	1	9	Grass	N	X	CP3-4	Switch-Pcord-BB-Indian-Cwrye-Ciron-Cup-Bvervain
38	CP3-4-Switch-Pcord-BB-Indian-Cwrye-Ciron-Cu	38-CP3-4-Switch-Pcord-BB-Indian-Cwrye-C	Prairie Cordgrass	Spartina pectinata	8	0.5	1.3	Grass	N		CP3-4	Switch-Pcord-BB-Indian-Cwrye-Ciron-Cup-Bvervain
38	CP3-4-Switch-Pcord-BB-Indian-Cwrye-Ciron-Cu	38-CP3-4-Switch-Pcord-BB-Indian-Cwrye-C	Big Bluestem	Andropogon gerardii	16	1	3.8	Grass	N	X	CP3-4	Switch-Pcord-BB-Indian-Cwrye-Ciron-Cup-Bvervain
38	CP3-4-Switch-Pcord-BB-Indian-Cwrye-Ciron-Cu	38-CP3-4-Switch-Pcord-BB-Indian-Cwrye-C	Indiangrass	Sorghastrum nutans	16	1	4.5	Grass	N	X	CP3-4	Switch-Pcord-BB-Indian-Cwrye-Ciron-Cup-Bvervain
38	CP3-4-Switch-Pcord-BB-Indian-Cwrye-Ciron-Cu	38-CP3-4-Switch-Pcord-BB-Indian-Cwrye-C	Canada Wildrye	Elymus canadensis	16	1	2	Grass	N	X	CP3-4	Switch-Pcord-BB-Indian-Cwrye-Ciron-Cup-Bvervain
38	CP3-4-Switch-Pcord-BB-Indian-Cwrye-Ciron-Cu	38-CP3-4-Switch-Pcord-BB-Indian-Cwrye-C	Common Ironweed	Vernonia fasciculata	1	0.0625	0.5	Forb	N	X	CP3-4	Switch-Pcord-BB-Indian-Cwrye-Ciron-Cup-Bvervain
38	CP3-4-Switch-Pcord-BB-Indian-Cwrye-Ciron-Cu	38-CP3-4-Switch-Pcord-BB-Indian-Cwrye-C	Cupplant	Silphium perfoliatum	2	0.125	0.1	Forb	N	X	CP3-4	Switch-Pcord-BB-Indian-Cwrye-Ciron-Cup-Bvervain
38	CP3-4-Switch-Pcord-BB-Indian-Cwrye-Ciron-Cu	38-CP3-4-Switch-Pcord-BB-Indian-Cwrye-C	Blue Vervain	Verbena hastata	1	0.0625	2.2	Forb	N	X	CP3-4	Switch-Pcord-BB-Indian-Cwrye-Ciron-Cup-Bvervain
38	CP3-5-Switch-Pcord-BB-Cwrye-Berg-Ycone-NEA	38-CP3-5-Switch-Pcord-BB-Cwrye-Berg-Yc	Switchgrass	Panicum virgatum	32	2	17.9	Grass	N	X	CP3-5	Switch-Pcord-BB-Cwrye-Berg-Ycone-NEaster
38	CP3-5-Switch-Pcord-BB-Cwrye-Berg-Ycone-NEA	38-CP3-5-Switch-Pcord-BB-Cwrye-Berg-Yc	Prairie Cordgrass	Spartina pectinata	4	0.25	0.7	Grass	N		CP3-5	Switch-Pcord-BB-Cwrye-Berg-Ycone-NEaster
38	CP3-5-Switch-Pcord-BB-Cwrye-Berg-Ycone-NEA	38-CP3-5-Switch-Pcord-BB-Cwrye-Berg-Yc	Big Bluestem	Andropogon gerardii	16	1	3.8	Grass	N	X	CP3-5	Switch-Pcord-BB-Cwrye-Berg-Ycone-NEaster
38	CP3-5-Switch-Pcord-BB-Cwrye-Berg-Ycone-NEA	38-CP3-5-Switch-Pcord-BB-Cwrye-Berg-Yc	Canada Wildrye	Elymus canadensis	16	1	2	Grass	N	X	CP3-5	Switch-Pcord-BB-Cwrye-Berg-Ycone-NEaster
38	CP3-5-Switch-Pcord-BB-Cwrye-Berg-Ycone-NEA	38-CP3-5-Switch-Pcord-BB-Cwrye-Berg-Yc	Monarda fistulosa	Monarda fistulosa	1	0.0625	1.8	Forb	N	X	CP3-5	Switch-Pcord-BB-Cwrye-Berg-Ycone-NEaster
38	CP3-5-Switch-Pcord-BB-Cwrye-Berg-Ycone-NEA	38-CP3-5-Switch-Pcord-BB-Cwrye-Berg-Yc	Yellow Coneflower	Ratibida pinnata	1	0.0625	0.7	Forb	N	X	CP3-5	Switch-Pcord-BB-Cwrye-Berg-Ycone-NEaster
38	CP3-5-Switch-Pcord-BB-Cwrye-Berg-Ycone-NEA	38-CP3-5-Switch-Pcord-BB-Cwrye-Berg-Yc	New England Aster	Symphyotrichum novae-angliae	1	0.0625	1.7	Forb	N	X	CP3-5	Switch-Pcord-BB-Cwrye-Berg-Ycone-NEaster

STD	Mix #	std-mix	Common Name	Scientific Name	PLS (oz./A)	PLS (lbs./A)	Seeds/Square Foot	Type	Intro / Native	Poll. (Y/N)	MIXDescrip	Mix No.	MR
	0												

STD	Mix #	std-mix	Common Name	Scientific Name	PLS (oz./A)	PLS (lbs./A)	Seeds/Square Foot	Type	Intro / Native	Poll. (Y/N)	Mix No.	MR	Mix Components
38	CP3-1-BB-LB-Indian-Sgrama-Sgrod-Ycone-PPcl	38-CP3-1-BB-LB-Indian-Sgrama-Sgrod-Yc	Big Bluestem	Andropogon gerardii	8	0.5	1.9	Grass	N	X	CP3-1		BB-LB-Indian-Sgrama-Sgrod-Ycone-PPclover
38	CP3-1-BB-LB-Indian-Sgrama-Sgrod-Ycone-PPcl	38-CP3-1-BB-LB-Indian-Sgrama-Sgrod-Yc	Indiangrass	Sorghastrum nutans	8	0.5	2.3	Grass	N	X	CP3-1		BB-LB-Indian-Sgrama-Sgrod-Ycone-PPclover
38	CP3-1-BB-LB-Indian-Sgrama-Sgrod-Ycone-PPcl	38-CP3-1-BB-LB-Indian-Sgrama-Sgrod-Yc	Little Bluestem	Schizachyrium scoparium	24	1.5	8.3	Grass	N	X	CP3-1		BB-LB-Indian-Sgrama-Sgrod-Ycone-PPclover
38	CP3-1-BB-LB-Indian-Sgrama-Sgrod-Ycone-PPcl	38-CP3-1-BB-LB-Indian-Sgrama-Sgrod-Yc	Purple Prairie Clover	Dalea purpurea	2	0.125	1	Legume	N	X	CP3-1		BB-LB-Indian-Sgrama-Sgrod-Ycone-PPclover
38	CP3-1-BB-LB-Indian-Sgrama-Sgrod-Ycone-PPcl	38-CP3-1-BB-LB-Indian-Sgrama-Sgrod-Yc	Sideoats Grama	Bouteloua curtipendula	24	1.5	4.4	Grass	N	X	CP3-1		BB-LB-Indian-Sgrama-Sgrod-Ycone-PPclover
38	CP3-1-BB-LB-Indian-Sgrama-Sgrod-Ycone-PPcl	38-CP3-1-BB-LB-Indian-Sgrama-Sgrod-Yc	Stiff Goldenrod	Oligoneuron rigidum	1	0.0625	1.1	Forb	N	X	CP3-1		BB-LB-Indian-Sgrama-Sgrod-Ycone-PPclover
38	CP3-1-BB-LB-Indian-Sgrama-Sgrod-Ycone-PPcl	38-CP3-1-BB-LB-Indian-Sgrama-Sgrod-Yc	Yellow Coneflower	Ratibida pinnata	1	0.0625	0.7	Forb	N	X	CP3-1		BB-LB-Indian-Sgrama-Sgrod-Ycone-PPclover

Chan, Ginger

From: Bartsch, Zachary
Sent: Thursday, December 21, 2023 1:32 PM
To: Schaar, Matthew - NRCS, Farmington, MN
Subject: RE: [External Email]Seed mixes and erosion controls
Attachments: MNAgronomyTechNote_No_31_version1_7.pdf; 484_MN_OTH_Mulching_Tables_2021.pdf

Hi Matthew,

It has been a while since the last time we spoke, I hope you are well. I am reaching out for a project that is taking place in Washington County, MN, and similar to the project I contacted you about in 2022 that will be disturbing cropland, ditches, and perennial grasses. I didn't see anyone listed for the NRCS in Chisago or Washington County, but saw you on the Farmington field office (Dakota Co). In 2022, you provided me with the MN Agronomy Technical Note No. 31 and the 484 Mulching table (attached) to use for reseeding and preventing erosion following soil disturbances. Are these documents still acceptable for us and my client to reference now?

Let me know if you have any questions.

Zach Bartsch
Soil Scientist

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From: Schaar, Matthew - NRCS, Farmington, MN <matthew.schaar@usda.gov>
Sent: Friday, January 7, 2022 1:57 PM
To: Bartsch, Zachary <zachary.bartsch@stantec.com>
Subject: RE: [External Email]Seed mixes and erosion controls

Zach,

The attachment named "mulching tables" lists the quantities recommended for different materials used for mulch. The first one on the table "Grass Hay or Cereal Grain Straw" is very commonly used where concentrated flow is not much of an issue. Crimping the mulch after it is spread out is highly recommended.

The other attachment has some recommended seeding mixes and rates. Take a look at page 22 (STANDARD 342 – CRITICAL AREA PLANTING SPECIFICATIONS). If there are no concentrated flow issues or areas of really steep slopes the mixes suitable to construction sites may be appropriate, otherwise take a look at the mixes recommended for critical areas or waterways. Also, if there are native plant communities nearby you may want to be a bit cautious about using smooth brome grass.

Hope this helps,

Matthew Schaar
Soil Conservation Technician
USDA / NRCS
Farmington, MN
651-463-8665 ext. 6419

From: Bartsch, Zachary <zachary.bartsch@stantec.com>
Sent: Friday, January 7, 2022 8:55 AM
To: Schaar, Matthew - NRCS, Farmington, MN <matthew.schaar@usda.gov>
Subject: [External Email]Seed mixes and erosion controls

[External Email]
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Please send any concerns or suspicious messages to: Spam.Abuse@usda.gov

Good morning Matt,

Here is my contact info. Thanks.

Zach Bartsch
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Minnesota Agronomy Technical Note # 31 (Ver. 1.8)
Herbaceous Vegetation Establishment Guide

INTRODUCTION

This technical note may be used to guide establishment of native and introduced plantings of herbaceous vegetation for the purposes of meeting criteria in the Minnesota Natural Resources Conservation Service Field Office Technical Guide (FOTG) Practice Standards; ***327-Conservation Cover, 332-Contour Buffer Strips, 342-Critical Area Planting, 390- Riparian Herbaceous Cover, 393-Filter Strip, 420-Wildlife Habitat Planting, 512-Forage and Biomass Planting, 589C- Cross Wind Trap Strips, 643-Restoration of Rare or Declining Natural Communities, 645-Upland Wildlife Habitat Management, and 657-Wetland Restoration***. Other ecological science and certain engineering standards may refer to this technical note Refer to those standards for specific practice criteria.

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Recommended Plant Species

Varieties of introduced grasses and legumes shall be selected from one of the following sources:

- University of Minnesota Varietal Trials
- Plant Material Center varietal selections
- Varieties listed as recommended by Extension publications, Minnesota Crop Improvement Association or Varietal Trials of states adjacent to Minnesota
- Named varieties known to be locally adapted. Seek Area Office approval for varieties not identified as recommended by University of Minnesota or adjacent State Varietal Trials.

Select varieties that are adapted to specific site conditions, planned harvest schedule and harvest method, if applicable. To ensure longer life, alfalfa varieties shall have a Winter Survival Index of less than three, listed in the Very Good Winter Survival category. Varieties with no Winter Survival Index shall have a third-year yield of at least 105% of check varieties.

Seed Quality

All seed shall be of high quality and be labeled in accordance with Minnesota Seed Law, section 21.82 including limits on noxious weeds. For information about this law, see Minnesota Agronomy Tech Note MN-21 Agronomy Technical Notes | NRCS Minnesota. If *Amaranth* species are found in the test results, it must be identified on the seed test report. The Minnesota Department of Agriculture (MDA) requires that a genetic test must be done to determine if the *Amaranth* species are Palmer amaranth.

*--Non-commercial (bin-run) seed can be used as temporary cover or companion crop if the seed has been tested for germination and scale tickets provided. NRCS payments associated with conservation programs will not be allowed until seeding is established and field verified.

Wild or native harvest mixtures meeting the species diversity and quantity (minimum 35-40 PLS seeds/ft^2 total) requirements will be considered adequate. Seed tests are required to determine pure live seed requirements and presence of noxious weeds. Seed must be cleaned to an extent sufficient to allow passage through appropriate seeding equipment

Landowners who have purchased seed for use in NRCS financial assistance programs, must follow Minnesota state seed laws.

- The germination test date located on the seed label may not be more than 15 months old excluding the month of test for native grass and forb seeds when used as agricultural seed. A sell by date may be listed in addition to or in lieu of the test date and denote the end of the 15-month test date period.
- The germination test date, or sell by date, located on the seed label may not be more than 12 months old for introduced species.
- Landowners will have 12 months after the germination test date expires to plant the native and/or introduced seed and seed mixtures. If seeding will exceed these time limits, the seed shall be re-tested for germination to ensure seed quality. Variances may be granted by the State Resource Conservationist on a case-by-case basis.

Seed should be stored in a cool, dry place to maintain the purity, quality, and viability of the seed.

Inoculate legume seed before seeding with the inoculants specific for the species. Pre-inoculated seed may be used but shall be re-inoculated if used beyond dates specified on the seed tag. This does not apply to native legumes.

Native Seed Origin

Native seed origin must be labeled in accordance with federal and state seed laws including Minnesota Seed Law sections 21.80 through 21.92. Use source-identified local ecotypes, when available. This applicability is dependent upon program and practice requirements. Be aware that deviation from local origin could result in failure of establishment or long-lasting vegetative stand. Producers will document why origin was outside the recommended region and are aware that stand failure will be their responsibility.

The following is recommended when obtaining seeds/plants:

1. It is desirable for seed sources of native grass, forbs, and legumes to originate from as close to the planting site as possible. The preferred sequence: within the ecological sub-section, ecological section and then within a 200-mile radius of the project site, unless otherwise identified as an acceptable cultivar. Exception: Tallgrass Prairie Restoration shall be within a 175-mile radius of the project. Variances may be granted by the State Resource Conservationist on a case-by-case basis.
2. Seed origins native to Minnesota are preferred. When local Minnesota sources are not available, native seed shall originate from Wisconsin, North Dakota, South Dakota, Iowa, Illinois, and the Canadian provinces of Manitoba, or Ontario.
3. For native seed, the origin is the area where the original foundation seed was collected.
4. If the origin of the seed (generation 0) can be certified as one of the accepted states or provinces, then there would be no restriction on where the seed is grown. Certification must be provided by the grower, and responsibility for obtaining certification rests with the producer.
5. Where there are known remnant native prairies or certified native grass, or forb seed production fields present, maintain an isolation distance of 165 feet for grasses and 1320 feet for forbs when planting the same species that have different genetic origins.
6. The use of cultivars should be avoided within ¼ mile of existing remnant native prairie or other sensitive areas. "Yellow Tag" or source identified materials would be preferred.

Potentially Invasive Species

Ask for prior approval from the Area Resource Conservationist or Grazing Specialist before recommending reed canary grass, birdsfoot trefoil, crown vetch, sweet clover, or crested wheatgrass. These may be considered invasive if adjacent to restored native warm season grass stands or prairie remnants.

Seedbed Preparation and Seeding Methods

Prepare a firm seedbed for all planting methods.

Conventional Tillage - Prepare a fine, firm seedbed to a minimum of 3 inches. The seedbed should contain enough fine soil particles for uniform shallow coverage of the seed as well as contact with moisture and nutrients. If possible, use specialized native grass drills with depth bands designed to handle a wide variety of seed. For conventional drills, a minimum, cultipack before seeding.

Do not use heavy drills on conventionally prepared seedbeds as heavy drills tend to sink in the soil and depth control is difficult. Plant seed between ¼" and ½" inch deep depending on species recommendations. **The seedbed is firm enough when an adult footprint penetrates ¼" to ½" deep.** Some seed may be seen on the surface of the ground after seeding. Tillage should only be used on flatter slopes or in conjunction with erosion control measures.

No-Till - No-till drilling reduces the exposure of the newly seeded site to erosion. A drill should be selected that can handle a wide variety of seed (fluffy, smooth, large, and small) and low seeding rates. Plant seed between ¼" and ½" inch deep depending on species recommendations. Seed when the soil is slightly moist but not wet, especially when seeding inoculated legumes. Adjust the coulters and packing wheels of the drill to cover the seed based on the soil texture, moisture, and surface residue conditions.

- No-till Into Existing Vegetation:

  Use of herbicides is essential to kill existing vegetation. (Organic producers will not have this option available to them.) Complete control often requires more than one application. Land that has been in grass for many years usually has a thick residue layer on the soil surface. To allow for the best no-till seedbed this residue must be removed. Three options are: (1) grazing; (2) mowing with residue removed; and (3) prescribed burn. In the fall a burndown herbicide can be applied to prepare for a spring no-till seeding. An additional spring herbicide application may be required, depending on weed growth.

  No-till seeding should be used on existing pastures that lack diversity, either in grasses or legumes, on existing pastures that contain species unsuited to the kind and/or class of livestock, to improve the nutritional value of an existing pasture, improve forage production, and on pastures or grasslands that contain little debris, rocks, or boulders. Do not recommend inter-seeding alfalfa into existing alfalfa stands due to autotoxicity.

- No-Till into Crop Residue:

  When native materials are planted into undisturbed ground, the crop residue should be uniformly distributed over the soil surface prior to planting to minimize the smothering of new seedlings and to provide conditions for the operation of planting equipment. Native material planted into undisturbed corn residue has proven successful at times, however soybean residue is preferred. Soybeans produce a moderate amount of crop residue that can be effectively managed and tend to leave the soil in a mellow condition that is well suited to no-till planting of prairie plants.

- Inter-seeding with Tillage into Existing Coo Season Grass Stands:

  If a no-till drill is not available, it is still possible to inter-seed an existing grass stand by using tillage and a conventional grain drill. Disturb the existing sod with a light disc harrow or a harrow/field cultivator combination.

  If there is an old dense stand of Kentucky bluegrass and quackgrass, fall tillage will help to reduce competition before spring planting. Use enough tillage passes to expose at least 50% bare soil. If the surface is rough after the initial tillage use a drag harrow to level prior to seeding with the drill. Seed into moist but not wet soil. Immediately after drilling, the soil should be run over with a cultipacker.

Broadcast: - Prepare a fine firm seedbed to a minimum of 3 inches. Use a roller, cultipacker or similar implement prior to seeding. The seedbed should contain enough fine soil particles for uniform shallow coverage of the seed as well as contact with moisture and nutrients. **The seedbed is firm enough when a footprint penetrates ¼ to ½ deep.** Broadcast seed at a rate of 1.5 times the normal seeding rate and roll or cultipack again after seeding. Do not harrow in the seed.

Frost seeding (late February or March):

Graze or clip to a 2" of less stubble height the season before seeding or use a suppression rate of herbicide according to label directions. Broadcast the legume seed on top of the ground in late winter or early spring when freezing and thawing help to incorporate the seed into the soil. Do not seed on snow cover, especially on steeper soils because snow melt may carry the seed away in runoff events. Frost seeding also works well on small, disturbed areas within a pasture. Use this method where it is impractical or impossible to use conventional seeding equipment such as steep slopes, rough terrain, and rock outcrops. Red clover and white clover are vigorous and competitive with existing sods and are the ideal species for adding legumes to grass pastures. Use flash grazing after seeding to suppress the grasses and allow legumes to establish.

Seeding Equipment

Seeding equipment that ensures proper seed placement and good seed-soil contact will be used. Modern grass seeding attachments that allow for proper seed flow, seed placement and soil packing are needed to ensure a successful seeding.

Slower seeding speeds should be used for fluffy or rough-coated seed species. Three to five miles per hour should be the seeding speed for most types of grass drills. Seeding speeds in excess of 6 miles per hour may result in uneven or inconsistent grass and legume stands.

If a carrier is needed to help feed seed through the drill; cracked corn, dead barley, granular clay, vermiculite or rolled oats are examples of material that may be added to the mixture.

A. Grass Drill

Grass drills are specifically designed and equipped to properly meter and place various grass, legume and/or forb seed and share the following design characteristics:

1. Different seed boxes are normally required to handle the three types of grass seed commonly used. This includes the relatively clean, smooth seed characteristic of many cool-season grasses, the chaffy or trashy seed characteristic of many warm season grasses, and fine, smooth seed, characteristic of legumes or grasses such as Switchgrass.

   Seed boxes having the capability of seeding chaffy or awned grasses (i.e., blue grama, bluestems, and Indiangrass) are needed, only if such species are planned in the seeding mixture; likewise, fine-seed or legume seed boxes are needed, only if such species are to be seeded.

2. Agitators or similar mechanisms that prevent bridging of chaffy or trashy seed and ensure a constant flow of seed at the desired rate with uniform mixing of the species in the mixture.

3. Feeder mechanism (picker wheels, fluted feed, etc.) that ensures uniform flow of all types of grass seed either separately or in a mixture.

4. Oversized feeder tubes that allow constant flow of chaffy or trashy type seed from boxes to placement point (if such seed is used).

5. Individually mounted, adjustable, spring loaded, double-disc openers.

6. Depth bands or other depth-control systems that provide positive seed placement for final planting depth of one-fourth to one inch over varying degrees of seedbed firmness.

7. Press/packer wheels that provide adequate covering and firming of soil over and around the seed for necessary seed/soil contact after proper seed placement.

They should be mounted individually on each furrow opener or independently to follow behind each opener. Press/packer wheels are not intended to provide the basic "firm seedbed." The firm seedbed must exist before the drilling operation begins.

8. Drill calibration should be completed for both grass and grain drills prior to seeding. Refer to guidance below for completing drill calibration.

B. Small Grain Drill

1. Free-flowing grass seed (i.e., wheatgrasses) and legume seed can be successfully planted with a small grain drill provided proper seeding depth can be maintained throughout the field. Seeding depth is the most limiting factor to seeding success and contributes to most of the seeding failures when using a grain drill. It is extremely important to have a firm seedbed when using a grain drill. Periodic inspections should be done to check seeding depth especially when seeding across different soil types. Seeding depth will vary under actual planting conditions.

2. Checking the drill frequently and hand mixing the seed is essential to achieving a properly blended seed mix and helps ensure that seeds of different sizes are seeded evenly across the field. Periodic feeder mechanism adjustments are usually necessary to ensure proper seeding rates. A separate legume box is desirable for seeding small seeded species. (i.e., switchgrass and alfalfa). Ensure the grain drill's drop tubes are placed in front of the packer wheels to allow for seed-soil contact.

3. Chaffy or awned seeds (i.e., bluestems, Indiangrass, and blue grama) are difficult to plant with a grain drill. It is recommended that a grass drill be used for these types of grasses. Proper agitation is needed to prevent “bridging” of seed in the seed box, and the feeder mechanism must be capable of metering a uniform flow of seed at the desired rate. Very few grain drills have this capability. Use of debearded seeds is strongly recommended when considering seeding chaffy or awned seeds in a grain drill.

C. Broadcast Seeder

Broadcast seeding method may only be used when the slope, soil conditions, and/or size of area to be seeded makes the use of a drill impractical. All broadcast seedings will have a properly prepared seedbed (minimal residual cover with a smooth, firmly packed surface) and an operation which incorporates the seed into the soil at the proper depth (i.e., covering operation using a drag harrow, cultipacker, roller packer, or other suitable implement to cover and press the seed into the soil surface). When using the broadcast method, the seeding rates will be increased by 1.5 times.

D. Air seeders

Some air seeders and similar types of equipment may be used to seed free flowing grass seed (i.e., wheatgrasses) and legume seed if proper seeding depth can be obtained. However, seeding mixtures containing varying seed sizes may require an inert carrier to work properly in air seeders. The shallow planting depths for grasses and legumes can be difficult to maintain with this type of equipment. The equipment must be able to provide a uniform flow of seed at the desired rate. Use the correct seeding plates recommended by the manufacturer for the species to be planted. Use packer wheels or other suitable packing implement to press soil firmly around the seeds. **Air seeders are not recommended for seeding native grass and forb mixtures.**

Drill Calibration

Grass or grain drills may be calibrated using the following methods.

A. Bulk Weight Method

Raise the drill's drive wheel and measure its circumference in **feet**. Next, measure the distance between seed spouts or disc openers. Use Table 1 to determine the number of revolutions (R) to turn the drive wheel for the row spacing and wheel circumference in feet for your drill.

Table 1: Drill Calibration

Row spacing in inches	No. of seed spouts to use	Turns of drive wheel	Row spacing in inches	No. of seed spouts to use	Turns of drive wheel
6	4	96/C = R	24	1	96/C = R
7	4	82/C = R	30	1	77/C = R
8	3	96/C = R	36	1	64/C = R
10	3	77/C = R	42	1	55/C = R
12	2	96/C = R	48	1	48/C = R

Place enough seed in the box to cover spouts from which you will collect seed. Turn the drive wheel until all spouts are feeding. Place a container under the correct number of seed spouts (as determined from the Table 1) and turn the drive wheel the number of revolutions previously determined. Weigh the sample in grams. Multiply this weight by 0.5. The result is the pounds per acre at that setting. Adjust the drill setting and continue trials until the desired seeding rate is obtained.

Remember: Seeding rates as determined by this method are in terms of **bulk seed**. You need to convert your seeding rate from pure live seed per acre to bulk seed per acre when using this calibration method. Seed vendor should be able to provide bulk seed weights and pure live seed weights.

Example:

- Row spacing = 7 inches
- Number of seed spouts = 4
- Circumference of drive wheel (C) = 6.8 ft
- Revolutions of drive wheel (R) = 82/C R = 82/6.8 = 12 revolutions
- Bulk seeding rate is 15.1 lbs/ac. The drill is properly set when the 4 seed spouts yield 30 grams of seed after 12 revolutions of the drive wheel.
    - 30 grams x 0.5 = 15 lbs/ac

B. Seeds Per Row Foot Method

This method of determining the amount of seed being distributed by the seeding equipment is to count the number of seeds per foot of drill row while the machine is in operation.

Fill the drill with seed, make setting, and drive equipment over a hard ground surface or canvas. Count the number of seeds per foot of row and adjust until proper seeding rate is attained.

Use the information below to determine the linear foot of row necessary to equal one square foot planted.

Row spacing in inches	Linear foot of row to equal one square foot
6	2.0 feet
7	1.8 feet
8	1.5 feet
10	1.2 feet
12	1.0 foot

To determine the proper number of seeds per foot of drill row for a specific seeding mixture; you will first need to calculate the bulk seeding rate for each species in the mix. From Table 1, calculate the number of seeds per square foot (ft^2) for each pound seeded (seeds per pound divided by 43,560ft^2/acre).

Multiply the number of seeds per square foot for each pound seeded by the bulk seeding rate for each species. Total the resulting numbers to determine the number of seeds per square foot for the mixture.

Example:

If you want to calibrate a drill for a mixture of 4.5 lbs. PLS/ac green needlegrass (80% purity and 70% germination) and 4.0 lbs PLS/ac western wheatgrass (92% purity and 85% germination), calculate the bulk seeding rate for each species.

Bulk seeding rate would be 8 lbs/ac for green needlegrass and 5.1 lbs/ac for western wheatgrass.

- Green needlegrass – (.80 x .70) = .56. 4.5/.56 = 8.0 lb./ac bulk
- Western wheatgrass – (.92 x .85) = .78. 4.0/.78 = 5.1 lb./ac bulk

Green needlegrass seed contains 180,000 or 4.1 seeds/$ft^2$for each pound seeded (180,000/43560 ft^2/acre).

Western wheatgrass has 112,000 seeds per pound or about 2.6 seeds /ft^2 for each pound seeded.

- 8.0 lbs/ac x 4.1 seeds/ft^2/lb. = 32.8 seeds/ft^2
- 5.1 lbs/ac x 2.6 seeds/ft^2/lb. = 13.3 seeds/ft^2

The total seeds per square foot for the mix would be 46. If the drill we are calibrating has 7-inch row spacing, the drill calibration would be 46 seeds per 1.8 feet of row length.

Broadcast Seeder Calibration

A. Seeds Per Square Foot Method

1. Spread a large tarp or piece of plastic on a smooth level surface and anchor the edges to hold in place.
2. Place seed in the seed compartment(s) and travel across the tarp at the anticipated speed you will travel in the field. Make one pass across the tarp to check seeding rate.
3. Using a one square foot frame count the seeds in one square foot. Count the seeds on three to five samples and average.
4. Compare the results from step #3 with the planned seeding rate number of seeds per square foot of bulk seed for the seed mixture. Use the planned seeds per square foot of bulk seed since you will be counting all seeds on the tarp. If necessary, adjust the control gate for the small seed compartment and/or travel speed and repeat the test until the desired seeding rate is achieved.
5. Make two or three passes across the tarp at a selected spacing to check seed distribution and seeding pattern overlap. Adjust the travel spacing to achieve the desired overlap.
6. It may be desirable to check the seed being delivered from each seed compartment individually. In this case carryout Steps 2 through 4 independently for each seed compartment.

B. Pounds Per Acre Method

1. Measure out some fraction of an acre. For example, 1000 square feet is 2.3% (0.023) of an acre; 2000 square feet is 4.6% (0.046) of an acre; or 10890 square feet is 25% (0.25) of an acre.
2. Calculate the amount of seed required for the measured area. Weigh out the appropriate amount of each seed type and place in the appropriate box(s).

3. Seed the measured area and check if you had sufficient seed to cover the area or ran out before covering the measured area.
4. Adjust the settings and/or travel speed and repeat the trial on a new area as necessary.

Herbicide and Insecticide Carryover

Prior to planting, check to ensure that any herbicides used on previous two crop years will not "carry over" and negatively impact newly seeded plants. Residues of some herbicides may prevent the establishment of some native plant materials for up to two years. If the residual effects of herbicides are possible, delay planting until after the recommended interval to allow residual herbicide levels to dissipate, establish temporary cover or change species to be planted.

To protect pollinators, any seed supplied for projects must be free of pollinator lethal insecticides. Systemic insecticides including but not limited to neonicotinoid insecticides, can persist in the soil, and absorbed by new plantings and transferred to pollinators that forage on them. Use temporary cover such as oats or winter wheat in areas where insecticides may be a problem to allow time for the chemicals to break down.

Planting Dates

Seeding dates are based on long term averages and may be extended based on moisture conditions. See MN Instruction 190-380. Extension of these deadlines shall be based on both favorable moisture and temperature for seed germination.

Seeding of warm season grasses may begin before May 15 when the soil temperature is consistently 50° F or higher. When mixtures containing both warm season native and cool season introduced grasses are to be planted, select the seeding date based on the predominant plants in the mixture.

Table 2: Planting Dates

Cool Season Grasses and Legumes			
	Spring	Late Summer	Dormant
North	4/1 - 6/15	7/15 - 9/1	11/1 or a consistent soil temperature of <40° F.
South	4/1 - 6/1	8/1 - 9/10	11/1 or a consistent soil temperature of <40° F.
Warm Season Grasses, Forbs, and Legumes (includes warm and cool season natives planted in mixtures)			
	Spring	Late Summer	Dormant
Statewide	5/15 - 6/30	Not recommended	11/1 or a consistent soil temperature of <50° F.

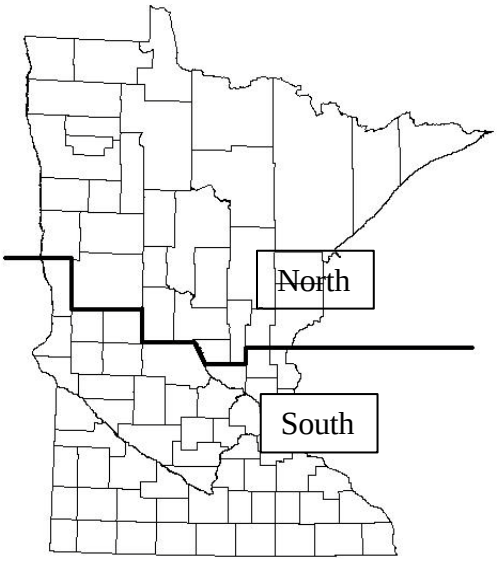


Figure 1: Planting Zones

Seeding Rates

Seed tests must show the percentage of germination and percentage of purity. Seeding rates shall be based on Pure Live Seed (PLS), where **PLS = % germination (+ dormant seed) x % purity**. To calculate the pounds of bulk seed required, divide the PLS requirement for the seeding by the percent PLS (expressed as a decimal). See Table 22: Conversion of Bulk Pounds to Pure Live Seed.

For example, if 1,000 pounds of PLS of Indiangrass is required for the seeding, germination is 90% and purity is 98%. The amount of bulk seed to purchase and apply to the field is: 1,000 lbs./0.882 = 1,134 lbs. of bulk seed.

Legumes will have hard seed, seeds that do not germinate during the first year, and the amount of hard seed will be specified on the seed tag. If there are more than 20% hard seed adjust the seeding rate up to achieve the desired pure, live seed coverage. Do not recommend seeding alfalfa following alfalfa due to problems with autotoxicity. Pasture mixes should not contain more than 50% legumes on a pure live seed basis to avoid bloat in livestock.

Companion Crops

For spring seeding of cool season species, a companion crop may be used for erosion control and weed suppression. No companion crop is required for inter-seeding or for late summer seeding but may be desirable for erosion control and to protect developing seedlings. Companion crop seeding rates may be increased when the companion crop will be harvested for forage.

Companion crops are competition for moisture and sunlight. Early maturing varieties of oats with good lodging resistance are desirable.

Companion crop seeding rates shall be:

Crop	Seeding Rate
Oats	0.75 – 1.25 bu/ac
Barley	0.5 – 1.0 bu/ac
Winter Wheat*	0.5 bu/ac
Ryegrass**	< 2.5 lbs/ac
Cereal Rye***	NOT RECOMMENDED

* Spring seeded only.
** Ryegrass is extremely difficult to dry down after cutting. Haylage is the preferred method of storage.
*** Cereal Rye can have allelopathic effects on competing species and is not recommended as a companion crop.

Companion crops are generally not recommended for warm season seeding. On highly erodible sites it may be desirable unless you are no-tilling into 70% residue cover or standing small grain stubble. Use a seeding of oats at ¾ to 1 ¼ bushels/acre.

Companion crops will be clipped or harvested for forage after jointing but before heading unless otherwise directed. Companion crops will not be harvested for grain. Clipping will be done when moisture conditions will not cause ruts or other field damage. Second and subsequent clippings are necessary when re-growth provides competition. Clipping height should be above developing seedlings – no less than 6". Where excessive growth has accumulated, the vegetation should be chopped and dispersed or harvested for forage rather than swathed. Companion crops seeded with late summer cool season grass seeding do not require clipping.

Temporary Cover Establishment

Where chemical residue carryover is the cause of delayed planting, refer to the product label for crops to rotate to. A bioassay test may be used to better determine chemical carryover.

Small grain temporary cover crops will be clipped in the boot stage to prevent seed formation. Spring seeded winter wheat and spring seeded winter rye will not require clipping. Millet and sorghums need to be clipped in the early heading stage to prevent viable seed formation. Forage sorghums, Sudangrass and sorghum-Sudangrass may need multiple clippings to control biomass accumulation and seed production. Residue from the temporary cover may be fall tilled, leaving a minimum of 40% residue cover.

Temporary Cover	Seeding Rate/Acre	Seeding Dates - Statewide
Oats	2.5 bu.	*-- April 1 to June 15 *-- August 1 to September 10
Barley	1.5 bu.	*--April 1 to June 15 *-- August 1 to September 10
Spring Wheat	1.25 bu.	*--April 1 to June 15
Winter Wheat	1.25 bu.	*-- August 1 to September 30
Spring Rye	1.0 bu.	*--April 1 to June 15
Winter Rye	1.0 bu.	*-- August 1 to September 30
Annual Ryegrass	8.0 lbs.	*--April 1 to June 15 *-- August 1 to September 10
Proso Millet	12.0 lbs.	May 15 to June 10
Sorghum/Sudangrass	12.0 lbs.	May 15 to June 10
Grain Sorghum	10.0 lbs.	May 15 to June 10
Corn	92.0 lbs.	May 15 to June 10

Weed Control

Approved herbicides may be used on both introduced and native plantings to control weed species. During the establishment year, mow weeds after they have reached a 12” height. Mow 2–3 times or as needed based on onsite evaluation, generally on 30-day intervals from the date of seeding. Mow to a height of 6” to 8”. Use a rotary mower or remove the clippings so as not to smother the seedlings. This will slow the weeds but won't harm the prairie plants. Livestock grazing is not an acceptable method of weed control during the establishment period.

The second year, evaluate the stand to determine if weed control is necessary. If it is, spot mow the planting at a height of six inches. If there is enough material for a prescribed burn, this may be an effective method to control weeds, but fire should not be introduced until the third year of establishment.

Fertilizer and Lime Requirements for Practices 327, 332, 342, 393, 512 and 589C

- **Introduced Cool Season Grasses and Legumes**
  - Apply fertilizer, manure, and lime according to University of Minnesota fertilizer recommendations. Soil tests will be completed by a Minnesota Department of Agriculture certified lab. Soil tests will be no older than four years. Manure nutrient samples will be done in the year of application. The sample tests will also be performed by a Minnesota Department of Agriculture certified lab. Apply manure with a calibrated spreader using guidelines from the Nutrient Management (590) practice standard. Refer to Table 17, Fertilizer Recommendations for Grass, Grass/Legume Mixes, and Alfalfa Hay for University of Minnesota fertilizer recommendations.

For Conservation Cover (327), Filter Strip (393), and Critical Area Planting (342), use a two ton per acre yield goal. If soil tests are not available, fertilizer will be applied in equal amounts of Nitrogen-Phosphorus-Potassium (N-P-K) for grass and legume establishment. An example fertilizer blend would be 60-60-60.

- The recommended rate per acre of liming materials shall be used to raise pH to 6.5 for alfalfa or 6.0 for other legume species. Liming materials will meet University of Minnesota recommendations for fineness of material and will be applied and incorporated a minimum of one year prior to seeding to achieve the desired pH.

- **Native Grasses, Forbs, and Legumes**

  Fertilizer is not required for seeding native grasses, forbs, and legumes.

Stand Evaluation

To determine adequacy of stands and to determine if reseeding or reinforcement seeding is required, please follow Agronomy Technical Note No. 17 "Guidelines for Herbaceous Stand Evaluation", FOTG > Section 1 > Reference List > Technical Notes and References by Discipline > Agronomy

Seeding Tools

Optional seeding plan tools and calculators are located on the MN FOTG at: Technical Resources/Seeding Tools.

STANDARD 327 – CONSERVATION COVER SEEDING SPECIFICATIONS
And
STANDARD 420 - WILDLIFE HABITAT PLANTING SPECIFICATIONS

Permanent, perennial vegetative cover should be established during the first recommended seeding or planting period for the selected species within the first year of the land use conversion. If this is not possible, a temporary cover may be used, and the permanent vegetative cover must be established during the next seeding period.

1. Specifications for Establishment of Upland Cover, and Upland Wildlife Habitat - Grasses, Legumes, Forbs

Commonly recommended native and introduced grass, legume and forb species are listed in Tables 3-5. Native plants and plant communities are encouraged since they are well-adapted to sites, less invasive, and likely to provide quality habitat without costly long-term maintenance. Native plants are required for Wildlife Habitat Plantings (420); however, due to cost, availability and landscape position, native plants may not be feasible in all Conservation Cover (327) situations.

A. Native Grasses, Forbs, and Legumes:

- Mixtures will comprise a minimum of 5 native species consisting of at least 3 native grasses and at least 2 native forbs/legumes. Mixtures will result in a minimum 35-40 total seeds/ft^2.
- Grasses shall not exceed 90% of the total mixture based on seeds/ft^2.
- No more than 20% of the grass component will be comprised of cool season grass species based on seeds/ft^2.

- Switchgrass in mixtures shall not exceed 10% of the grass component based on seeds/ft^2.
- Solid stands of Switchgrass seeded at 6.0 lbs/ac are allowed for site specific purposes such as providing winter cover in landscapes lacking adequate emergent wetlands or woody vegetation.
- When multiple forbs/legumes are included in a seed mixture, no individual species shall comprise more than 50% of the mixture based on seeds/ft^2.
- Refer to Biology Job Sheet #9 – "Establishment of Native Grass and Forbs" for additional establishment specifications. Refer to practice standard ***Upland Wildlife Habitat Management (645)*** for management recommendations.

B. Introduced Grasses and Legumes:

- Mixtures will comprise a minimum of 4 species consisting of at least 3 grasses and at least 1 forb or legume.
- Total recommended seeding rate is a minimum 35-40 total seeds/ft^2.
- At least 50% of the mixture shall be comprised of grasses based on seeds/ft^2.
- Introduced grass/legume mixtures may include up to 20% Switchgrass and/or Western Wheatgrass.
- The use of introduced species should be avoided adjacent to native prairie or other sensitive areas.
- Refer to Biology Job Sheet #8 - "Establishment of Introduced Grasses/Legumes" for additional establishment specifications. Refer to practice standard ***Upland Wildlife Habitat Management (645)*** for management recommendations.

2. Specifications for Native Pollinator, Honeybee and Monarch Habitat Establishment

Encourage blocks of cover as opposed to narrow linear plantings to improve habitat for grassland nesting birds and to decrease weed pressure along the edges of a native planting.

- Minimum size shall be 0.5 ac., with a minimum width of 20'.
- Apply techniques to prevent or mitigate offsite insecticide risks from drift from areas treated with insecticides (e.g., cropland). Achieve a target mitigation index value of ≥20 from Table 3 of Agronomy Technical Note #9 – "Preventing or Mitigating Potential Negative Impacts of Pesticides on Pollinators using Integrated Pest Management and Other Conservation Practices". Commonly recommended options which meet a target mitigation index value of 20 include, but are not limited to:

  1. Establish a ≥ 100' pesticide free setback from the edge of the planting into adjacent cropland. Pesticide free includes planting un-treated seed.
  2. Establish or incorporate an existing ≥30' flower free vegetated buffer between the habitat planting and cropland, and apply one of the following mitigation techniques to cropland beyond the vegetated buffer:
     - Utilize high volume/low pressure spray nozzles, and/or
     - Apply insecticides on adjacent cropland when wind speed is between 2 and 9 mph.
  3. Where cropland is adjacent to the planting, no application of insecticides within 30 feet of the habitat planting, and apply one of the following mitigation techniques to cropland beyond the insecticide free setback:
     - Utilize high volume/low pressure spray nozzles, and/or
     - Apply insecticides when wind speed is between 2 and 9 mph.

A. Native Grass and Forbs (Native Pollinator, Monarch, and Honeybee)

Plantings shall contain:

- A minimum of nine species of pollinator friendly native forbs – additional forbs are strongly encouraged.
- At least three species shall be from each bloom period – early, mid, and late flowering season so that pollinators have continuous food sources.
- A minimum of two native bunch grasses to provide nest sites.

Composition:

- The mixture will result in a minimum 35-40 seeds/ft² total. See Tables 6 and 10 for recommended species and individual composition.
- Forbs will comprise 50-75% of the mixture based on seeds/ft². No individual forb shall comprise more than 20% of the forb mixture based on seeds/ft². At least one forb shall be a legume.
- Grasses will comprise 25-50% of the mixture based on seeds/ft².
    - Canada or Virginia wildrye may be included in the mixture on erodible sites and shall comprise no more than 20% of the total grass mixture based on seeds/ft².
    - Certain species of native grass are restricted due to potential for aggressive growth and suppression of planted wildflowers or reducing the available bare soil in plantings. The seed mix cannot contain more than 10% total (by seeds/ft²) of any combination of the three grasses listed below.
        - Big bluestem (*Andropogon gerardii*)
        - Indiangrass (*Sorghastrum nutans*)
        - Switchgrass (*Panicum virgatum*)
- Mixtures designed to benefit monarch butterflies shall include nectar and larval plants beneficial to the monarch butterfly from Table 6. To provide food for monarch butterfly larvae, plantings shall include at least one species of milkweed (Asclepias spp.). Milkweed species shall comprise at least 1.5% of the total mixture (grass and forbs) based on seeds/ft². To provide food for adult Monarchs, at least 60% of the forbs in the mix shall be from the monarch butterfly planting list in Table 6.
- Blooming shrubs and trees can be an important source of pollen and nectar for pollinators, usually blooming well before many forb species. See Table 9 for native shrubs beneficial to pollinators.

Seeding Date: Fall dormant seeding favors forbs due to moist cold stratification. Fall dormant seeding is recommended unless the forb seed has been pre-stratified before purchase. See Table 2 for planting dates.

B. Introduced Perennial Grass and Legumes (Honeybee) - See Table 7 for recommended species and composition.

Refer to ***Biology Job Sheet #16 – "Native Habitat Development for Pollinators, Honeybees and Monarchs"*** and ***Biology Job Sheet #18 – "Introduced Grasses and Legumes – Honeybee Habitat"*** for additional establishment specifications. Refer to practice standard ***Upland Wildlife Habitat Management (645)*** for annual habitat recommendations.

STANDARD 645 – UPLAND WILDLIFE HABITAT MANAGEMENT SPECIFICATIONS

Specifications for Annual Forbs and Legumes for Honeybee Habitat

Encourage blocks of cover as opposed to narrow linear plantings.

- Minimum size shall be 0.5 ac., with a minimum width of 20'.

- Apply techniques to prevent or mitigate offsite insecticide risks from drift from areas treated with insecticides (e.g., cropland). Achieve a target mitigation index value of $\geq$ 20 from Table 3 of

Agronomy Technical Note #9 – "Preventing or Mitigating Potential Negative Impacts of Pesticides on Pollinators using Integrated Pest Management and Other Conservation Practices". Commonly recommended options which meet a target mitigation index value of 20 include but are not limited to:

1. Establish a ≥ 100' pesticide free setback from the edge of the planting into adjacent cropland. Pesticide free includes planting un-treated seed.
2. Establish or incorporate an existing ≥30' flower free vegetated buffer between the habitat planting and cropland, and apply one of the following mitigation techniques to cropland beyond the vegetated buffer:
   - Utilize high volume/low pressure spray nozzles, and/or
   - Apply insecticides on adjacent cropland when wind speed is between 2 and 9 mph.
3. Where cropland is adjacent to the planting, no application of insecticides within 30 feet of the habitat planting, and apply one of the following mitigation techniques to cropland beyond the insecticide free setback:
   - Utilize high volume/low pressure spray nozzles, and/or
   - Apply insecticides when wind speed is between 2 and 9 mph.

See Table 8 for species and seeding rates. Planting dates specific to annual forb/legume mixtures:

- South of Interstate 94 5/1 – 5/15
- North of Interstate 94 5/15 –6/1

Refer to ***Biology Job Sheet #20 – "Annual Forbs and Legumes – Pollinator and Honeybee Habitat"*** for additional establishment specifications.

This practice is intended to increase breeding habitat for monarchs by inter-seeding milkweed into an existing stand of vegetation that has sufficient nectar plant richness and abundance but lacks reproductive habitat, as determined by a monarch butterfly wildlife habitat evaluation guide (WHEG).

Inter-seeding milkweed should follow a disturbance such as prescribed burning, haying, grazing and/or herbicide spraying.

Option 1: Use a late summer or fall prescribed burn to remove above ground vegetation. Dormant inter-seed milkweed directly into seedbed. The following growing season, mow, or hay to a height of 6" whenever vegetation reaches 12-18" in height.

Option 2: Use a spring prescribed burn to remove previous year's residues. Inter-seed milkweed in strips with a no-till drill. Apply a grass selective herbicide to the planted strips during the growing season: warm season grasses (early summer), cool season grasses (spring, or late fall). Follow manufacturer's label directions. Mow or hay to a height of 6" when vegetation reaches 12-18" in height during the first year of establishment.

Seeding rates
Milkweed species (*Asclepias* sp.) should be seeded at a minimum rate of 0.15 seeds/sq. ft. and planted with a no-till drill at 1/4" depth.

STANDARD 643 – RESTORATION OF RARE OR DECLINING NATURAL COMMUNITIES – TALLGRASS PRAIRIE SEEDING SPECIFICATIONS

High species diversity is recommended to promote native community stability and function, to provide benefits to multiple wildlife species and to prevent establishment of invasive species.

Native prairie plant communities will be established utilizing seed harvested from existing Minnesota native prairies, or utilizing seed mixes comprised of Minnesota ecotype grasses, legumes, and forbs, developed to reflect "native prairie" communities as determined suitable for specific site conditions.

All seed, including native harvest, shall be supplied as pure-live seed (PLS) and conform to Minnesota Seed Law including limits on noxious weed content and State labeling requirements.

Restoration on Agricultural Fields and Other Disturbed Sites:

Seed Origin

It is desirable for seed sources of native grass, forbs, and legumes to originate from as close to the planting site as possible. When available, "Yellow Tag" or source identified materials are preferred. The following sequence defines the preferred wild/native harvest seed source for the project. Areas with similar site conditions and located as close to the project site as possible:

- Ecological Sub-sections
- Ecological Section
- Maximum distance of 175 miles of project
- Field tested native grass varieties and natural germplasm materials of known origin and adaptability. Refer to Table 21 for a listing of grass varieties/natural germplasm materials and their zone of adaptability.

Seeding Requirements

Diversity - Seed mixes will consist of a minimum 15 native species. The mixture will be comprised of a minimum 5 grasses, and a minimum 5 forbs. At least one forb shall be a legume.

Quantity - The mixture will result in a minimum 35-40 PLS seeds/ft^2 total, with a maximum 60% grass component based on seeds per square foot.

Composition

- No more than 20% of the grass component will be comprised of cool season grasses based on seeds/ft^2.
- Switchgrass shall not exceed 5% of the grass component based on seeds/ft^2
- No individual forb specie will comprise more than 20% of the forb mixture based on seeds/ft^2.
- Constructed mixtures may be developed using Tables 3 and 6**.**

Optional criteria to benefit monarchs, pollinators, and beneficial

insects:

- Consider designing the mixture to benefit both pollinators and monarch butterflies by adding nectar and larval plants beneficial to monarchs and pollinators.
- A minimum 3 forbs from each bloom period (early, mid, and late) should be included in the mixture.
- To provide food for monarch butterfly larvae, plantings should include at least one species of

milkweed (*Asclepias* spp.). Milkweed species should comprise at least 1.0% of the total mixture (grass and forbs) based on seeds/ft^2.

- Consider specific pollinator habitat requirements and select appropriate forb species using the columns listed in Table 6.

Refer to ***Biology Job Sheet #12 – "Restoration of Rare or Declining Plant Communities – Tallgrass Prairie"*** for additional establishment specifications. Refer to practice standard ***Upland Wildlife Habitat Management (645)*** for management recommendations.
Refer to ***Biology Technical Note #16 - Wild and Rare Riparian Habitat Guide*** for additional establishment specifications.

Table 3: Commonly Recommended Native Grasses

The following list identifies native grasses beneficial to upland wildlife and native habitat restoration. The list is not exhaustive and identifies species that are readily commercially available.

Species	% of Grass Component Seeds/Ft^2	Seeds/Ft^2 (1 lb/ac)	pH Min.	Wet Soils[1]	Drought[2] Tolerance	Flood Tolerance
Warm Season Grasses						
Big Bluestem *Andropogon gerardii*	0-30[3]	4.0	>6.0	Good	Fair	Fair
Indiangrass *Sorgastrum nutans*	0-30[3]	4.4	>4.8	Fair	Fair	Good
Blue Grama *Bouteloua gracilis*	0-20	17.2	>6.6	Poor	Good	Poor
Switchgrass *Panicum virgatum*	0-100[4]	9.0	>4.5	Good	Fair	Good
Little Bluestem *Schizachryrium scoparium*	0-30	6.6	>5.0	Poor	Good	Poor
Sideoats Grama *Bouteloua curtipendula*	0-30	4.1	>5.5	Poor	Good	Poor
Prairie Sandreed *Calamovilfa longifolia*	0-30	6.3	>5.6	Poor	Good	Poor
Prairie Cordgrass *Spartina pectinata*	0-5	4.2	>6.0	Excellent	Poor	Excellent
Prairie Dropseed *Sporopolus heterolepis*	0-10	5.1	>6.0	Fair	Fair	Good
Cool Season Grasses						
# Green Needlegrass *Stipa viridula*	0-10	4.1	>6.6	Poor	Good	Fair
# Canada Wildrye *Elymus canadensis*	0-10	2.6	>5.0	Good	Fair	Fair
# Slender Wheatgrass *Agropyron caninum*	0-10	3.6	>5.6	Fair	Good	Good
# Western Wheatgrass *Agropyron smithii*	0-10	2.6	>4.5	Fair	Good	Good
# Canada Bluejoint *Calamagrostis canadensis*	0-5	102.8	>4.5	Excellent	Poor	Excellent
# Virginia Wildrye *Elymus virginicus*	0-10	2.2	>5.0	Good	Fair	Good
# Kalms Brome *Bromus kalmii*	0-10	2.9	>5.5	Good	Fair	Fair
# Porcupine Grass *Hesperostipa spartea*	0-10	1.3	>6.6	Poor	Good	Fair
# Junegrass *Koeleria macrantha*	0-5	53.1	> 6.0	Poor	Good	Poor

Seeding rates are listed in pounds pure live seed per acre.

1/ Wet soils are those classified as somewhat poorly drained to very poorly drained.
2/ Droughty soils are those classified as excessively drained.
3/ Big bluestem or Indiangrass may not individually exceed 25% of the grass component in 643 – Restoration of Rare and Declining Habitat and 327 – Native Pollinator, Honeybee, and Monarch Habitat mixtures.
4/ Switchgrass may not exceed 10% of the grass component in 327 – Conservation Cover mixtures. Switchgrass may not exceed 5% of the grass component in 643 – Restoration of Rare and Declining Habitat mixtures.

Table 5: Commonly Recommended Introduced Grasses and Legumes

The following list identifies introduced grass and legumes beneficial to upland wildlife and native habitat restoration. The list is not inclusive, and identifies those species, which are readily available through private vendor seed supplies.

Species	% of Grass Component Seeds/Ft^2	Seeds/Ft^2 (1.0 lb./ac)	pH Range	Wet Soils 1/	Drought Tolerance 2/	Flood Tolerance	Invasiveness 3/
Orchard grass	0-25	15.0	5.6 – 8.4	Yes	Fair	Poor	Low
Timothy	0-25	29.8	5.1 – 8.4	Yes	Poor	Good	Low
Intermediate Wheatgrass	0-50	2.0	7.0 - 8.5	No	Fair	Fair	Low
Tall Wheatgrass	0-50	1.8	7.0 - 8.5	Yes	Poor	Good	Low
Western Wheatgrass 4/	0-10	2.5	4.5 – 9.0	Yes	Good	Good	Low
Switchgrass 4/	0-10	9.0	4.5 – 8.0	Yes	Fair	Good	Low
Alfalfa	0-50	5.2	6.0 - 8.5	No	Good	Poor	Low
Red Clover	0-25	6.3	5.5 - 7.6	Yes	Fair	Fair	Low
White Clover	0-25	18.4	5.2 – 8.0	Yes	Poor	Good	Low
Alsike Clover	0-25	15.6	5.6 - 7.5	Yes	Poor	Good	Low

[1]Wet soils are those classified as somewhat poorly drained to poorly drained.
[2]Droughty soils are those classified as excessively drained.
[3]Refers to the potential for a species to spread into adjoining areas.
[4]Switchgrass and/or Western Wheatgrass may be included in introduced grass-legume mixtures.

Table 6: Native Forb Species Beneficial to Pollinators, Monarchs and Other Beneficial Insects					
Species		**Bloom Color**	**Honey bee**	**Monarch**	**Flowering Season** Early = April - June Mid = June - August Late = August - October
DRY to MESIC					
Butterfly Weed	*Asclepias tuberosa*	Orange	H	LH	Mid
Canada Milkvetch	*Astragalus canadensis*	Cream	H		Mid
Compass Plant	*Silphium laciniatum*	Yellow		H	Mid
Dotted Blazing Star	*Liatris punctata*	Rose		VH	Mid
Evening Primrose	*Oenothera biennis*	Yellow			Mid
Foxglove Beardtongue	*Penstemon digitalis*	White	H		Early
Gray goldenrod	*Solidago nemoralis*	Yellow	H	H	Late
Hoary Vervain	*Verbena stricta*	Blue	H	H	Mid
Lance-leaved Coreopsis	*Coreopsis lanceolata*	Yellow	H	H	Early
Leadplant	*Amorpha canescens*	Purple	H	H	Mid
Long-headed Coneflower	*Ratibida columnifera*	Yellow			Mid
Ontario Blazing Star	*Liatris cylindracea*	Purple	H	VH	Late
Prairie onion	*Allium stellatum*	Pink	H		Mid
Purple Coneflower Narrow	*Echinacea angustifolia*	Pink	H	H	Mid
Purple Coneflower - Eastern	*Echinacea purpurea*	Pink	H	VH	Mid
Rough Blazing Star	*Liatris aspera*	Purple	H	VH	Late
Showy Goldenrod	*Solidago speciosa*	Yellow	H	VH	Late
Large-flowered Penstemon	*Penstemon grandiflorus*	Lavender	H		Early
Showy Milkweed	*Asclepias speciosa*	Pink	H	VH	Late
Silky Aster	*Symphyotrichum sericeum*	Purple		H	Late
Skyblue Aster	*Symphyotrichum oolentangiense*	Blue	H	H	Late
Smooth Aster	*Symphyotrichum laeva*	Blue	H	H	Late
Spotted Beebalm	*Monarda punctata*	Lavender	H	H	Mid
Stiff Sunflower	*Helianthus pauciflorus*	Yellow		H	Mid
Stiff Tickseed	*Coreopsis palmata*	Yellow		H	Mid
Wild Columbine	*Aquilegia canadensis*	Red	H		Early
Wild Lupine	*Lupinis perennis*	Lavender			Early
Wild White Indigo	*Baptista albaa*	White			Early
Whorled Milkweed	*Asclepias verticillata*	White	H	LH	Mid - Late
Yarrow	*Achillea millefolium*	White	H		Mid
MESIC to WET MESIC					
Blue Vervain	*Verbena hastata*	Blue		H	Mid - Late
Bottle Gentian	*Gentiana andrewsii*	Blue			Late
Canada Tick Trefoil	*Desmodium canadense*	Purple	H		Mid
Common Oxeye	*Heliopsis helianthoides*	Yellow		VH	Mid
Culvers Root	*Veronicastrum virginicum*	White	H	H	Mid
Giant Sunflower	*Helianthus giganteus*	Yellow	H	H	Late
Golden Alexanders	*Zizia aurea*	Yellow			Early
Great Blue Lobelia	*Lobelia siphilitica*	Blue		H	Late
Ironweed	*Veronia fasciculata*	Purple	H	H	Late
Meadow Blazing Star	*Liatris lingulistylis*	Purple		VH	Late
Mountain Mint	*Pycnanthemum virginianum*	White	VH	H	Mid
Obedient plant	*Physostegia virginiana*	Pink	H	H	Mid - Late
Partridge Pea	*Chamaechrista fasciculata*	Yellow	H		Mid
Rattlesnake Master	*Eryngium yuccifolium*	White		H	Mid
Sawtooth Sunflower	*Helianthus grosseserratus*	Yellow		VH	Late
Tall Blazing Star	*Liatris pycnostachya*	Purple		VH	Mid

Wild Bergamot	*Monarda fistulosa*	Lavender		H	Mid
Yellow Coneflower	*Ratibida pinnata*	Yellow			Mid
WET					
Blue Flag Iris	*Iris versicolor*	Blue	H		Early
Boneset	*Eupatorium perfoliatum*	White	H	H	Late
Cup Plant	*Silphium perfoliatum*	Yellow	H	H	Mid
Joe-pye Weed	*Eupatorium maculatum*	Rose	H	VH	Mid - Late
Giant Goldenrod	*Solidago gigantea*	Yellow	H	H	Mid - Late
New England Aster	*Symphyotrichum novae-angliae*	Purple	H	VH	Late
Panicled Aster	*Symphyotrichum lanceolatum*	White	H	H	Late
Sneezeweed	*Helenium autumnale*	Yellow	VH		Late
*Swamp Milkweed	*Asclepias incarnata*	Red	H	VH	Mid
DRY to WET MESIC					
Anise Hyssop	*Agastache foeniculum*	Purple	H	H	Mid
Black-eyed Susan	*Rudbeckia hirta*	Yellow		H	Mid - Late
*Common Milkweed	*Asclepias syriaca*	Purple	H	VH	Mid
Cream Gentian	*Gentiana flavida*	Cream			Late
Field thistle	*Cirsium doscolor*	Pink	H	VH	Late
Grass-leaved Goldenrod	*Euthamia graminifolia*	Yellow	H	VH	Mid
Heath aster	*Symphyotrichum ericoides*	White	H	H	Late
Prairie phlox	*Phlox pilosa*	Pink		H	Early
Purple Prairie Clover	*Dalea purpurea*	Purple	VH		Mid
Maximilian Sunflower	*Helianthus maximiliani*	Yellow	H	H	Late
Spiderworts	*Tradescantia spp.*	Blue			Early
Stiff Goldenrod	*Solidago rigida*	Yellow	H	VH	Late
White Prairie Clover	*Dalea candida*	White	H	H	Mid

Monarch larval host = * Honeybee and Monarch nectar value = Very High, High

Table 7: Introduced Perennial Grasses and Legumes - Honey Bee Habitat		
Recommended Basic Mixture	**Rate in lbs./acres PLS**	**Flowering Season**
Timothy	0.5	
Alfalfa	2.0	Mid-Late
White Clover	3.0	Early - Mid
Alsike Clover	4.0	Early - Mid
Red Clover	3.0	Early
Buckwheat **1/**	16.0	Early - Mid
Additional Optional Species		
Purple Prairie Clover	0.5	Mid
Canada Milkvetch	0.25	Late

1/ Plantings containing buckwheat may not be seeded within 30 feet of an existing commodity wheat field, or in a field with a planned rotation to commodity wheat within two years. Note should be taken that buckwheat is an annual.

Table 8: Annual Forbs and Legumes - Honeybee Habitat			
Recommended Basic Mixture	**Rate in lbs./acres PLS**		**Flowering Season**
	Drill	**Broadcast**	
Mustard *(Sinapis alba or Brassica juncea)*	2.0	2.5	Early
Buckwheat 1/	16.0	22.0	Early - Mid
Cowpea	18.0	25.0	Mid
Annual Sunflower Cultivar	0.5	0.5	Mid - Late
Additional Optional Species			
Dwarf Essex Rapeseed	1.0	1.5	Mid
Berseem Clover	3.5	5.0	Season Long
Red/Crimson Clover 2/	4.0	6.0	Early

1/ Plantings containing buckwheat may not be seeded within 30 feet of an existing commodity wheat field, or in a field with a planned rotation to commodity wheat within two years.

2/ This is only true for red clover that is already established (i.e., not an annual planting).

Table 9: Woody Species Beneficial to Native Pollinators and Honeybees			
Species		**Value to Pollinators 1/**	**Flowering Season**
American Basswood	*Tilia americana*	VH	Early - Mid
American Plum	*Prunus americana*	VH	Early
Black Cherry	*Prunus serotina*	VH	Early - Mid
Black Chokeberry	*Aronia melanocarpa*	VH	Early
Black Elderberry	*Sambucus nigra*	VH	Early
Black Willow	*Salix nigra*	VH	Early
Button Bush	*Cephalanthus occidentalis*	VH	Mid
Chokecherry	*Prunus virginiana*	VH	Early
Cockspur Hawthorn	*Crataegus crus-galli*	VH	Early
Common Chokecherry	*Prunus virginiana*	VH	Early
Common Ninebark	*Physocarpus opulifolius*	VH	Early
Currant/Gooseberry	*Ribes spp.*	VH	Early - Mid
Dogwoods	*Cornus spp.*	H	Early
Downy Arrowwood	*Viburnum rafinesqueanum*	VH	Early - Mid
False Indigo Bush	*Amorpha fruticosa*	VH	Mid
Fragrant False Indigo	*Amorpha nana*	VH	Mid
Lowbush Blueberry	*Vaccinium angustifolium*	VH	Mid
Nannyberry	*Viburnum lentago*	VH	Early - Mid
Native Rose Species	*Rosa spp.*	VH	Mid
New Jersey Tea	*Ceanothus americanus*	VH	Mid
Northern bush honeysuckle	*Diervilla lonicera*	VH	Early - Mid
Pagoda dogwood	*Cornus alternifolia*	H	Early
Pin cherry	*Prunus pensylvanica*	VH	Early
Prairie rose	*Rosa arkansana*	VH	Mid
Raspberries/Blackberries	*Rubus spp.*	VH	Early
Redosier dogwood	*Cornus sericea*	VH	Early
Sandcherry	*Prunus pumila*	VH	Early - Mid
Saskatoon Serviceberry	*Amelanchier alnifolia*	VH	Early
Serviceberries	*Amelanchier spp.*	H	Early - Mid
Smooth rose	*Rosa blanda*	VH	Mid

Smooth Sumac	*Rhus glabra*	VH	Early
Western snowberry	*Symphoricarpos occidentalis*	H	Mid
Willow, Pussy or Black	*Salix spp.*	VH	Early

1/ H = High VH = Very High

Table 10: Native Grasses for Native Pollinator, Monarch, and Honeybee Habitat

Species	Percentage of Grass Mixture – Seeds/Ft^2
Big Bluestem and/or Indiangrass	0-25%
Little Bluestem	0-50%
Prairie Dropseed	0-50%
Rough Dropseed	0-25%
Sideoats Grama	0-25%
Wildrye (Canada or Virginia)	0-20%

STANDARD 342 – CRITICAL AREA PLANTING SPECIFICATIONS

Recommended seed mixtures are found in Table 11. Seeding rates are based on pounds of Pure Live Seed (PLS) per acre. Design custom seed mixtures as follows:

Introduced Grass/Legume: Mixture will result in a minimum 150 seeds/ft^2, at least 50% of the mixture must be grass. Sod forming grasses will comprise a minimum 30% of the mixture. Legume seed shall be inoculated with the appropriate strain of nitrogen fixing bacteria prior to planting.

Native Grasses: Mixture will result in a minimum 75 seeds/ft^2. Sod forming grasses will comprise a minimum 30% of the mixture.

Table 11: Recommended Seed Mixtures for Critical Area Planting

Seeding Mixture	Lbs/ ac	Seeds/ft^2 Total Mix	% Sod Forming	Suitable Uses [1/]	Drainage	Capacity Retardance	Remarks
Smooth Brome [2] Perennial Ryegrass	28 10	150	58	CO, WW, CA	Moderate to well, excessively drained	B	Add Red Clover or Alsike Clover if desired
Smooth Brome [2] Timothy Perennial Ryegrass	15 3 3	155	30	CO, WW, CA	Moderate to well, excessively drained	B	Add Red Clover or Alsike Clover if desired
Smooth Brome [2] Red Top Perennial Ryegrass	15 1 5	190	83	CO	Moderate to excessively drained	B	Add Alfalfa or Alsike Clover if desired
Int. Wheatgrass Timothy Canada Wildrye	23 3 7	155	30	CO, WW	Well to somewhat poorly drained	B	Add Alsike clover or Alfalfa if desired
Kentucky Bluegrass [2] Creeping Red Fescue Perennial Ryegrass	3 5 10	210	70	CO, CA	Well to somewhat poorly drained	C	Add alsike or red clover if desired
Creeping Foxtail Timothy Red Top Perennial Ryegrass	10 2 1 3	362	78	CO, WW, CA	Somewhat poorly to poorly drained	C	Add Red Clover if desired
Timothy Perennial Ryegrass Kentucky Bluegrass [2] Tall Fescue Annual Ryegrass	2 4.5 2.5 3 3	198	40	CO, WW, CA	Moderate to somewhat poorly drained	C	
Big Bluestem Indiangrass Switchgrass Canada Wildrye	6 6 6 7	123	63	CO, CA	Moderate to well drained	B	
Big Bluestem Indiangrass Switchgrass Sideoats grama Little Bluestem	4 4 3 3 3	93	60	CO	Moderate to Excessively drained	B	
Switchgrass Sideoats Grama Canada Wildrye Western Wheatgrass	4 4 7 5	84	78	CO, CA	Moderately to well drained	B	
Prairie Cordgrass Switchgrass Western Wheatgrass Canada Wildrye	3 3 7 7	76	76	CO, CA, WW	Somewhat poorly to poorly drained	B	

[1] Suitable Uses: **CO** = construction sites **CA** = critical areas **WW** = waterways

[2] Do not recommend these species adjacent to native prairie.

STANDARD 332 – CONTOUR BUFFER STRIP SEEDING SPECIFICATIONS AND STANDARD 393 – FILTER STRIP SEEDING SPECIFICATIONS AND STANDARD 589C – CROSS WIND TRAP STRIP SEEDING SPECIFICATIONS

Refer to the applicable practice standard for design and vegetation criteria.

Acceptable plant species and seeding rates are found in Tables 12 and 13. See Table 23 for a summary of plant species characteristics.

Seeding mixture will result in a minimum 55 seeds/ft^2 total.

Introduced grass/legume mixtures shall contain no more than one legume component not to exceed the maximum mixture composition in Table 12.

Native forbs may be added to native grass mixtures to enhance the practices for wildlife, pollinators, monarchs, and beneficial insects. Forbs can be added to a native species mixture. However, the criteria for pollutant reduction must be met. Forbs may comprise up to 10% of the mixture. For seedings ≤ 30 feet wide, and adjacent to cropland where pesticides are applied, forbs or legumes are not recommended. Refer to National Agronomy Technical Note #9 for mitigation recommendations related to pesticide application. Refer to Table 13 for recommended native forbs which can withstand sheet flow.

Table 12: Recommended Species for Contour Buffer (332), Cross Wind Trap (589c) and Filter Strip (393) Seed Mixtures

SPECIES C = Cool season W = Warm season R = Rhizomatous	% Allowed in Mix	Seeds/ft^2 based on 1.0 PLS lb./Ac 1/	Drought	Flooding	Salts	Wet Soil	Effective Height	Longevity	Rooting Depth
Native Grasses									
Canada Wildrye C	0-25	2.6	Fair	Fair	Good	No	>12”	Short	M
Slender Wheatgrass # C	0-25	3.6	Good	Good	Good	No	< 12”	Short	M
Virginia Wildrye C	0-25	2.2	Fair	Good	Fair	S	>12”	Short	M
Green Needlegrass C	0-25	4.1	Good	Fair	Fair-Good	No	>12”	Long	D
Western Wheatgrass #C/R	0-50	2.6	Good	Good	Good-Ex	Yes	>12”	Long	D
Kalms Brome C	0-25	2.9	Fair	Fair	Poor	No	>12”	Short	M
Fringed Brome C	0-50	3.7	Fair	Fair	Poor	Yes	>12”	Moderate	M
Switchgrass # W/R	0-100	9.0	Fair	Good	Fair	Yes	>12”	Long	D
Prairie Cordgrass[4] W/R	0-100	4.2	Poor	Excellent	Poor	Yes	>12”	Long	D
Big Bluestem # W/R	0-50	4.0	Fair	Fair	Fair	No	>12”	Long	D
Indiangrass # W/R	0-25	4.4	Fair	Good	Fair	No	>12”	Long	M to D
Sideoats Grama # W/R	0-25	4.1	Good	Poor	Poor	No	< 12”	Long	S to M
Little Bluestem # W	0-25	6.6	Good	Poor	Poor	No	>12”	Long	D
Blue Grama W/R	0-25	17.2	Good	Poor	Fair	No	< 12”	Long	S

SPECIES C = Cool season W = Warm season R = Rhizomatous	% Allowed in Mix	Seeds/ft^2 based on 1.0 PLS lb./Ac 1/	Drought	Flooding	Salts	Wet Soil	Effective Height	Longevity	Rooting Depth
Introduced Grasses and Legumes[2]									
Creeping Foxtail # C/R	0-100	17.2	Poor	Good	Poor-Fair	Yes	>12”	Long	S to M
Smooth Bromegrass[3] C/R	0-100	3.1	Fair	Good	Poor-Fair	No	>12”	Long	S to M
Redtop C/R	0-100	111.4	Poor	Good	Poor-Fair	Yes	>12”	Short	S to M
Meadow Brome C	0-100	1.8	Fair	Fair	Poor	No	>12”	Moderate	M
Int. Wheatgrass # C/R	0-100	2.0	Fair	Fair	Fair-Good	No	>12”	Long	D
Tall Wheatgrass # C	0-50	1.8	Fair	Good	Good-Ex	Yes	>12”	Moderate	D
Timothy # C	0-25	29.8	Poor	Good	Poor	Yes	>12”	Short	S to M
Alfalfa # C	0-25	5.2	Good	Poor	Fair	No	>12”	Moderate	D
Red Clover # C	0-25	6.3	Fair	Fair	Poor-Fair	No	< 12”	Short	D
Alsike Clover C	0-25	15.6	Fair	Good	Poor-Fair	Yes	< 12”	Short	D

[#] **Varietal selection important**. See current edition of Minnesota Varietal Trials for Select Crops.

[1] PLS is Pure Live Seed.
[2] Do not mix introduced grass species with native grass species.
[3] Do not recommend these species adjacent to native prairie.
[4] Prairie Cordgrass should not exceed 20% of the mixture when combined with Big Bluestem, Indiangrass or Switchgrass.

Flooding ratings: **None** <1 week; **Poor** 1-2 weeks; **Fair** 2-4 weeks; **Good** 4-6 weeks; **Excellent** >6 weeks
Soluble salts ratings: **Poor** 0-2 mmhos; **Fair** 3-4 mmhos; **Good** 5-7 mmhos; **Excellent** 8-16 mmhos
Longevity: **Short** 1-4 Years; **Moderate** 5-10 Years; **Long** > 10 Years
Wet soils: **Yes**-tolerates poorly or very poorly drained. **S**-Tolerates somewhat poorly drained sites.
Rooting Depth: Rooting depths are based on typical growing conditions of the species
S (Shallow) = 0-12 inches, **M** (Medium) = 12-24 inches, **D** (Deep) = 24+ inches

Table 13: Native Forbs Suitable for Contour Buffer (332), Cross Wind Trap (589c) and Filter Strips (393)

The following list identifies native forbs and wildflowers beneficial to wildlife, pollinators, monarchs, and other beneficial insects and support higher volumes of water flow and sedimentation.

Common Name	Scientific Name	Bloom Period	Handle sheet flow	Dense stems to slow water flow	Rooting Depth
Canada Goldenrod	*Solidago canadensis*	Late	Yes	Yes	S
Cup Plant	*Silphium perfoliatum*	Mid	Yes		D
Giant Goldenrod	*Solidago gigantea*	Late	Yes		M to D
Giant Hyssop	*Agastache foeniculum*	Mid	Yes		M
Grass-leaved Goldenrod	*Euthamia graminifolia*	Late	Yes	Yes	D
Ironweed	*Vernonia fasciculata*	Mid	Yes		D
Joe-Pye Weed	*Eutrochium maculatum*	Mid	Yes		S
Marsh Milkweed	*Asclepias incarnata*	Mid	Yes		D
Mountain Mint	*Pycnanthemum virginianum*	Mid	Yes	Yes	D
New England Aster	*Symphyotrichum novae-angliae*	Late	Yes		S
Sneezeweed	*Helenium autumnale*	Late	Yes		S
Stiff Goldenrod	*Solidago rigida*	Late	Yes		D
Panicled Aster	*Symphyotrichum lanceolatum*	Late	Yes		S
White Sage	*Artemisia ludoviciana*	Late	Yes	Yes	D
Wild Bergamot	*Monarda fistulosa*	Mid	Yes	Yes	D
Yellow Coneflower	*Ratibida pinnata*	Mid	Yes		M

STANDARD 512 – PASTURE AND HAYLAND PLANTING SPECIFICATIONS

The following information contains specific requirements, recommendations, references, and guidelines to fully develop and implement a successful pasture or hayland planting.

When selecting or developing a seeding mixture, planners must consider what kind and class of livestock will consume the planned forage stand.

Experienced livestock producers may have preferences for forages, and the planner should consider those options. However, it is possible that the producer has overlooked additional species that might meet their goals.

Species Selection and Mix Development

Seed mixes shall be developed using the Pasture and Hay Planting Seed Tool available under the Pasture and Hayland Planting (512) conservation practice in Section IV of the FOTG. Refer to Tables 16, 17 and 24 for assistance with developing and/or approving seed mixes. If needed, consult an Area Resource Conservationist or Grazing/Rangeland Management Specialist for assistance with developing or certifying seed mixes.

When developing seed mixes, select species based on the following factors:

- Soil Drainage Classes present
- Soil Types present
- Management needs of the producer
- Soil fertility
- Soil pH
- Kind and class of animal (avoid planting species that may cause health concerns)
- Client suggestions.

Table 14 below contains seeding mixes that are adapted to a variety of soil drainage classes and livestock found in Minnesota. The mixes included in Table 14 should cover most situations and are a resource that conservation planners may use to assist with developing pasture and hayland seed mixes. **Do not use switchgrass in mixes consumed by sheep or horses. Do not use alsike clover in mixes consumed by horses.**

Seed mixes must be approved by an Area Resource Conservationist, Grazing/Rangeland Management Specialist, or field office staff with the appropriate Job Approval Authority if the planner does not possess the appropriate level of JAA for the plan.

Fundamentally, a seed mix must provide sufficient perennial ground cover. A rate of **64-120 pure live seeds (PLS) per square foot of perennial species** are required to achieve a dense stand for pasture or hay production. The lower end of this range of seed concentration may be used when seedbed conditions are expected to be optimal. Use higher seeding rates when:

- the seedbed is clumpy/rough or too loose
- when broadcast seeding
- into high residue situations (examples: dead perennial sod or un-tilled corn stalks)
- variable soil drainage classes are present (example: poorly drained and well drained soils need to be covered by the same mix).
- Overall site preparation may be undesirable

General recommendations for seeds/square foot based on site conditions:

- Good site prep with adequate weed control and a firm seed bed: 64-80+ seeds/sq ft
- Broadcast with a spinner-type spreader: 150% of the drilled rate.
    - Broadcast with an airflow machine where seed is evenly spaced (example: terragator) may not need additional seed over drilled rate.
- No-till into high residue (such as dead perennial sod or un-tilled corn stalks): 100+ seeds/sq ft
- Variable soil drainage conditions present: 100+ seeds/sq ft
- Frost seeding legumes: 64+ seeds/sq ft
- Note: These are general recommendations. Exact amounts may vary based on site conditions/characteristics.

Pasture plantings

- Usually contain 4-6 species or more, depending on site-specific conditions and management objectives of the producers. Based on those factors, more or less species may be desirable.
    - Generally, pasture mixes contain 2-4 grass species and 1-3 legume species.
- 30-50% legumes are usually recommended to improve forage quality of the stand and provide good nitrogen fixing capabilities. Legume content in the seed mix will depend upon:
    - Kind and class of livestock
    - Soil conditions/drainage class
    - Soil fertility
    - Producer input
    - Types of legumes used. Most legumes used commonly in plantings (except for birsdfoot trefoil) cause bloat. When using all bloat causing legumes, keep legume content down to less than 40% of the seed mix (on a seeds/square foot basis).

Hayland Plantings

For Hayland plantings, the harvest method must also be considered. Some species do not dry down very easily for dry hay and the producer must have access to harvest equipment and storage facilities that correspond to the forages planted. Forage species that meet nutrient needs and palatability requirements of the livestock shall be selected. Soil drainage class, Forage Suitability Groups, and nutrient status will determine which forage species are adapted to the site. Seed mixes for hay may contain pure stands of grasses or a mixture of grasses and legumes. For ease of management, no more than two grass species per mix for hay production are recommended.

- Match species to producer's operation and harvest/storage capabilities. For example, does the producer make haylage/baleage or harvest everything as dry hay.
- Seed mixes generally contain 60-80% legumes. Exact amount depends on the goals/objectives of the producer.
- Usually contain 2-4 species.
    - Recommend no more than two grasses to ensure the quality of the forage at harvest can be easily managed.
    - Select varieties with similar maturity/growth curves to allow for consistent quality at harvest.
    - Note more or less species may be desirable based on site conditions and the goals/objectives of the producer.

Perennial ryegrass, Italian ryegrass, festulolium, annual ryegrass, and other short-lived perennials and annuals do not meet the 512 standard because they do not live long enough to meet the 5-year lifespan

of the practice. When including short-term perennials or annuals into the seed mix, do not count them towards the required minimum number of seeds/square foot.
Seeding rates are developed on a pure live seed basis. Refer to the Pasture and Hay Planting Seed Tool for assistance with calculating PLS prior to seeding as needed. Also, refer to table 23 in this tech note for assistance calculating PLS based on the purity and total germination of the seed. Make certain the seed mix meets the nutrient requirements of the kind and class of animal, the level of performance desired by the producer, and the harvest and storage method available to the producer.

Native grasses/forbs usually require special seeding equipment. Refer to the section on seeding equipment for details on equipment characteristics and calibration methods.

Variety Selection

Refer to the Recommended Plant Species section at the beginning of this document for more information about variety selection. Table 15 lists some recommended varieties but is not all-encompassing due the large number of varieties present that may work for the various species. Producers should select varieties that:

- have resistance for insects or diseases that may be present,
- that match the harvest schedule and method of the producer,
- match the intended livestock species, class, and utilization method,
- are adapted to climatic and microclimatic conditions in the area to be seeded
- fit the overall management needs of the producer

Avoid species with "Variety Not Stated", if possible. Named varieties have specific documented traits that can be referred to with regards to persistence, production, etc.

Legumes

Use pre-inoculated legume seed with the rhizobia species specific to the legume(s) in the seed mix. If there are two kinds of legumes, each one will be inoculated with its specific rhizobia species.

Legumes may have relatively high amounts of hard seed, which are seeds that do not germinate during the first year, and the amount of hard seed will be specified on the seed tag. In many cases, these seeds may germinate in subsequent years. Increasing the seeding rate for species with higher than 20% hard seed may be desirable to ensure an adequate number of seedlings become established during the seeding year. Do not recommend seeding alfalfa following alfalfa due to problems with autotoxicity. Pasture mixes should not contain more than 50% legumes on a pure live seed basis to avoid bloat in livestock.

Management of New Seedings

Management during the seeding year is critical. Little or no grazing should be expected under normal conditions during the seeding year. Companion crops may be planted with new seedings and removed as hay. If growing conditions are favorable, grazing during the seeding year may be possible late in the season when the plants are dormant, and the ground is dry and/or frozen. Any grazing during the seeding year should result in low utilization/light grazing intensity. Avoid grazing or haying new seedings in the month of September and leave a minimum of six inches of residual height going into the winter. If growing conditions are not favorable, (such as excessive moisture or drought conditions that have affected establishment), then grazing must be deferred until the stand is fully established and conditions improve. If hay was harvested from new seedings, fertilizer may need to be applied based on soil test results to replace the amount of nutrients removed in the harvested hay.

Practice Certification

Use the Pasture and Hay Planting Seed Tool to determine the number of pure live seeds per square foot applied. **A minimum of 64 pure live seeds per square foot of acceptable perennial species are required to meet this practice standard.** When certifying this practice, do not include annual species or short-term perennials, such as annual ryegrass, perennial ryegrass, festulolium, warn season annual grasses, cool season annual grasses, annual legumes, brassicas, etc. when calculating the number of pure live seeds per square foot as these species do not meet the lifespan of this practice for growing conditions in Minnesota. Obtain copies of soil tests from an approved soil testing laboratory that are four years old or less. Also seed tags are required to allow for calculating the amount of pure live seed applied based on the purity and germination of the species in the seed mix.

Table 14: SEEDING MIXES FOR HAYLAND AND PASTURE

Cool Season Introduced Hay Mixes

Soil Drainage Class: Very Poorly to Poorly Drained			
Species	**Variety**	**Seeding Rate (PLS LBS/Acre)**	**% in Mixture**
Creeping Foxtail	Garrison	1	24
Alsike Clover	Named Variety	4	76
Soil Drainage Class: Poorly Drained			
Species	**Variety**	**Seeding Rate (PLS LBS/Acre)**	**% in Mixture**
Timothy	Climax	2	57
Birdsfoot Trefoil[1]	Norcen	5	43

Table 14: Cool Season Introduced Hay Mixes

Soil Drainage Class: Poorly Drained			
Species	**Variety**	**Seeding Rate (PLS LBS/Acre)**	**% in Mixture**
Creeping Foxtail	Named Variety	0.5	13
Timothy	Named Variety	0.5	18
Reed Canary Grass[1]	Named Variety	1	15
Meadow Fescue	Named Variety	3	20
White Clover	Named Variety	1	23
Birdsfoot Trefoil[1]	Named Variety	1	11
Note: This mix is best suited to baleage or silage.			

Soil Drainage Class: Somewhat Poorly to Moderately Well Drained			
Species	**Variety**	**Seeding Rate (PLS LBS/Acre)**	**% in Mixture**
Meadow Bromegrass	Fleet	10	16
Orchard grass	Orion	2	26
Tall Fescue	Bull	6	27
Birdsfoot Trefoil[1]	Roseau	1	7
White Clover	Alice	0.5	8
Red Clover	Medium	3	16

Soil Drainage Class: Moderately Well Drained to Well Drained			
Species	**Variety**	**Seeding Rate (PLS LBS/Acre)**	**% in Mixture**
Orchard grass	Named Variety	0.5	9
Meadow Fescue	Named Variety	6	40
Alfalfa*	Named Variety	8	51

Soil Drainage Class: Moderately Well Drained to Excessively Drained			
Species	**Variety**	**Seeding Rate (PLS LBS/Acre)**	**% in Mixture**
Intermediate Wheatgrass	Named Variety	8.5	23
Meadow Bromegrass	Named Variety	6.5	16
Alfalfa*	Named Variety	9	61

Table 14: Cool Season Introduced Hay Mixes			
Soil Drainage Class: Moderately Well Drained to Excessively Drained			
Species	**Variety**	**Seeding Rate (PLS LBS/Acre)**	**% in Mixture**
Timothy	Named Variety	0.5	19
Orchard grass	Named Variety	0.5	10
Intermediate Wheatgrass**	Named Variety	6	16
Meadow Bromegrass	Named Variety	3	7
Smooth Bromegrass	Named Variety	1.5	6
Alfalfa*	Hay Type	6	41

Cool Season Introduced Pasture Mixes			
Soil Drainage Class: Very Poorly to Poorly Drained			
Species	**Variety**	**Seeding Rate (PLS LBS/Acre)**	**% in Mix**
Creeping Foxtail	Garrison	2	34.6
Timothy	Climax	0.5	11.8
Tall Fescue	Bull	6	26.2
Alsike Clover	Recommended	1.5	20.2
Birdsfoot Trefoil[1]	Norcen	1	7.2
Soil Drainage Class: Very Poorly to Poorly Drained			
Species	**Variety**	**Seeding Rate (PLS LBS/Acre)**	**% in Mix**
Reed Canary Grass[1]	Named Variety	3	21.3
Creeping Foxtail	Named Variety	3	36.5
Timothy	Named Variety	0.5	8.3
Alsike Clover	Named Variety	3	28.4
Ladino Clover	Named Variety	0.5	5.4
Soil Drainage Class: Somewhat Poorly to Moderately Well Drained			
Species	**Variety**	**Seeding Rate (PLS LBS/Acre)**	**% in Mix**
Meadow Bromegrass	Fleet	10	15.8
Orchard grass	Orion	2	25.8
Tall Fescue	Bull	6	26.9
Birdsfoot Trefoil[1]	Roseau	1	7.3
White Clover	Alice	0.5	7.9
Red Clover	Medium	3	16.3

Table 14: Cool Season Introduced Pasture Mixes

Soil Drainage Class: Somewhat Poorly Drained to Well Drained			
Species	**Variety**	**Seeding Rate (PLS LBS/Acre)**	**% in Mix**
Perennial Ryegrass	Named Variety	2	12
Orchard grass	Named Variety	0.5	9
Meadow Fescue	Named Variety	5	31
Tall Fescue	Named Variety	2	12
Red Clover	Named Variety	2	15
White Clover	Named Variety	0.5	11
Birdsfoot Trefoil[1]	Named Variety	1	10

Soil Drainage Class: Moderately Well Drained to Well Drained (All Grass)			
Species	**Variety**	**Seeding Rate (PLS LBS/Acre)**	**% in Mix**
Timothy	Named Variety	0.5	20.6
Orchard grass	Named Variety	0.5	10.9
Intermediate Wheatgrass**	Named Variety	11.5	33.8
Smooth Bromegrass	Named Variety	3.5	15.9
Meadow Bromegrass	Named Variety	7	18.7

Soil Drainage Class: Moderately Well Drained to Well Drained			
Species	**Variety**	**Seeding Rate (PLS LBS/Acre)**	**% in Mix**
Timothy	Named Variety	0.5	18.9
Orchard grass	Named Variety	0.5	10
Intermediate Wheatgrass**	Named Variety	5	13.5
Meadow Bromegrass	Named Variety	5.5	10.4
Smooth Bromegrass	Named Variety	2.5	13.5
Alfalfa*	Grazing Type	5	33.7

Soil Drainage Class: Moderately Well Drained to Well Drained			
Species	**Variety**	**Seeding Rate (PLS LBS/Acre)**	**% in Mix**
Intermediate Wheatgrass**	Named Variety	8.5	25.4
Smooth Bromegrass	Named Variety	6.5	30
Orchard grass	Named Variety	0.5	11.1
Alfalfa*	Grazing Type	4.5	33.6

Table 14: Cool Season Introduced Pasture Mixes			
Soil Drainage Class: Moderately Well Drained to Excessively Drained			
Species	**Variety**	**Seeding Rate (PLS LBS/Acre)**	**% in Mix**
Meadow Bromegrass	Fleet	12	20.3
Intermediate Wheatgrass**	Oahe	10	18.6
Tall Fescue	Fawn	4	19.2
Alfalfa*	Grazing Type	4	18.6
Red Clover	Medium	4	23.3
Soil Drainage Class: Moderately Well Drained to Excessively Drained			
Species	**Variety**	**Seeding Rate (PLS LBS/Acre)**	**% in Mix**
Smooth Brome	Named Variety	5	23.4
Intermediate Wheatgrass**	Named Variety	5	15.2
Tall Fescue	Named Variety	3	23.5
Alfalfa*	Grazing Type	5	37.9

1/ Use birdsfoot trefoil or reed canary grass only in site specific circumstances and when it will not be invasive in native plant communities. Prior approval is required from the Area Grazing/Rangeland Management Specialist or Area Resource Conservationist Specialist.

*Alfalfa requires a minimum soil pH to be 6.5 or greater for optimum production.

**Intermediate wheatgrass requires a minimum soil pH of 6.0 or greater for optimum production.

Table 14: Legume Inter-seeding/Frost Seeding Mixes

Soil Drainage Class: Very Poorly Drained to Well Drained			
Species	**Variety**	**Seeding Rate (PLS LBS/Acre)**	**% in Mix**
Alsike Clover	Named Variety	4	100
Soil Drainage Class: Very Poorly Drained to Well Drained			
Species	**Variety**	**Seeding Rate (PLS LBS/Acre)**	**% in Mix**
Alsike Clover	Named Variety	3	60.4
Red Clover	Named Variety	5	39.6
Soil Drainage Class: Somewhat Poorly Drained to Well Drained			
Species	**Variety**	**Seeding Rate (PLS LBS/Acre)**	**% in Mix**
Red Clover	Named Variety	10	100
Soil Drainage Class: Well Drained to Excessively Drained			
Species	**Variety**	**Seeding Rate (PLS LBS/Acre)**	**% in Mix**
Alfalfa	Named Variety	5	31.3
Birsdfoot Trefoil	Named Variety	5	53
Red Clover	Named Variety	2	23.5

Table 15: RECOMMENDED NATIVE AND INTRODUCED GRASS, FORB AND LEGUME FORAGE VARIETIES.					
Recommended Introduced Grasses		**Recommended Legumes and Forbs**		**Recommended Native Grasses**	
Meadow Brome	Paddock Fleet	**Alfalfa**	Winter hardy grazing varieties	**Big Bluestem**	Bison Sunnyview Rountree Champ
Smooth Brome	Superior, Alpha Manchar, Bravo Carlton, Polar, Jubilee, Saratoga	**White Clover**	Ladino Alice	**Little Bluestem**	Itasca Badlands Blaze Camper
Orchard Grass	Potomac Orion Ambassador	**Alsike Clover**	Named Variety	**Switchgrass**	Dacotah Summer Sunburst Pathfinder Forestburg
Timothy	Climax Colt	**Kura Clover**	Named Variety	**Indiangrass**	Tomahawk Holt Oto
Tall Fescue	Courtenay Select	**Birdsfoot Trefoil[1]**	Roseau	**Side-oats Grama**	Killdeer Pierre
Reed Canary Grass[1]	Palaton Chieftan Venture	**Cicer Milkvetch**	Named Variety	**Western Wheatgrass**	Rodan
Intermediate Wheatgrass	Oahe Manska	**Forage Chickory**	Named Variety		
Tall Wheatgrass	Alkar	**Red Clover**	Named Variety		
Meadow Fescue	Pradel				
Creeping Foxtail	Garrison Retain				

1/ Use birdsfoot trefoil or reed canary grass only in site specific circumstances and when it will not be invasive in native plant communities. Prior approval is required from the Area Grazing Specialist.

Table 16: SELECTED FORAGE SPECIES ADAPTABILITY BY SOIL DRAINAGE CLASS

INTRODUCED GRASSES							
Soil Drainage Classes	**Very Poorly Drained**	**Poorly Drained**	**Somewhat Poorly Drained**	**Moderately Well Drained**	**Well Drained**	**Somewhat Excessively Drained**	**Excessively Drained**
Kentucky Bluegrass	N	N	Y	Y	Y	N	N
Meadow Bromegrass	N	N	Y	Y	Y	Y	Y
Smooth Bromegrass	N	N	Y	Y	Y	Y	Y
Reed Canary grass	Y	Y	Y	Y	Y	Y	Y
Meadow Fescue	N	Y	Y	Y	Y	Y	N
Tall Fescue	N	Y	Y	Y	Y	Y	Y
Creeping Foxtail	Y	Y	N	N	N	N	N
Orchard grass	N	N	Y	Y	Y	N	N
Timothy	N	Y	Y	Y	Y	N	N
Intermediate Wheatgrass	N	N	Y	Y	Y	Y	Y
Pubescent Wheatgrass	N	N	Y	Y	Y	Y	Y
Tall Wheatgrass	N	N	Y	Y	Y	Y	Y
NATIVE GRASSES							
Big Bluestem	N	Y	Y	Y	Y	Y	Y
Little Bluestem	N	N	N	Y	Y	Y	Y
Side Oats Grama	N	N	N	Y	Y	Y	Y
Indiangrass	N	Y	Y	Y	Y	N	N
Switchgrass	N	Y	Y	Y	Y	N	N
Slender Wheatgrass	N	Y	Y	Y	Y	Y	N
Western Wheatgrass	N	Y	Y	Y	Y	Y	N
Canada Wildrye	N	N	N	Y	Y	Y	Y
Virginia Wildrye	N	Y	Y	Y	N	N	N
LEGUMES/FORBS							
Alfalfa	N	N	N	Y	Y	Y	Y
Alsike Clover	Y	Y	Y	Y	Y	N	N
Kura Clover	N	Y	Y	Y	Y	N	N
Ladino Clover	N	Y	Y	Y	Y	N	N
Red Clover	N	N	Y	Y	Y	N	N
White Clover	N	N	Y	Y	Y	N	N
Cicer Milkvetch	N	Y	Y	Y	Y	Y	Y
Birdsfoot Trefoil	N	Y	Y	Y	Y	Y	Y
Forage Chickory	N	N	N	Y	Y	N	N

Table 17: FERTILIZER RECOMMENDATIONS FOR GRASS, GRASS/LEGUME AND ALFALFA FORAGE

Nitrogen Recommendations

	Conditions	N to Apply (units/Ac.)
>20% Legume		Nitrogen not recommended
< 20% Legume	Rotational grazing and adequate rainfall	150
	Continuous grazing and adequate rainfall	100
	Grazing and moderate rainfall	50
	Practice 327, 393, 342	60
	Sandy soils, steep slopes, low precipitation areas	30
	Organic Soils	50

Phosphorous Recommendations for Pasture > 20% Legume

	0-5	6-10	11-15	16-20	21+	Bray
	0-3	**4-7**	**8-11**	**12-15**	**16+**	**Olson**
Yield Goal Tons/Acre						
2	35	25	15	0	0	
3	55	40	25	10	0	
4	70	50	30	10	0	
5	90	65	40	15	0	
6	90	65	40	15	0	
7+	90	65	40	15	0	

Phosphorous Recommendations for Pasture < 20% Legume

	0-5	6-10	11-15	16-20	21+	Bray
	0-3	**4-7**	**8-11**	**12-15**	**16+**	**Olson**
Yield Goal Tons/Acre						
2	40	30	20	10	0	
3	50	40	30	20	0	
4	60	50	40	30	0	
5	70	60	50	40	0	
6	70	60	50	40	0	
7+	70	60	50	40	0	

Phosphorous Recommendations for Alfalfa Hay

	0-5	6-10	11-15	16-20	21+	Bray
	0-3	**4-7**	**8-11**	**12-15**	**16+**	**Olson**
Yield Goal Tons/Acre						
2	45	35	20	10	0	
3	65	45	25	10	0	
4	80	55	30	15	0	
5	95	65	40	15	0	
6	110	80	45	20	0	
7+	125	90	55	25	0	

Table 17: FERTILIZER RECOMMENDATIONS FOR GRASS, GRASS/LEGUME AND ALFALFA FORAGE cont.

Phosphorous Recommendations for Other Legume Hay						
	0-5	6-10	11-15	16-20	21+	Bray
	0-3	4-7	8-11	12-15	16+	Olson
Yield Goal Tons/Ac.						
2	40	30	20	10	0	
3	50	40	30	20	0	
4	60	50	40	30	0	
5	70	60	50	40	0	
6	70	60	50	40	0	
7+	70	60	50	40	0	
Potassium Recommendations for Pasture >20% Legume						
	0-40	41-80	81-120	121-160	161+	Soil Test Result
Yield Goal Tons/Ac.						
2	95	65	40	15	0	
3	140	100	60	20	0	
4	185	135	80	25	0	
5	230	165	100	35	0	
6	230	165	100	35	0	
7+	230	165	100	35	0	
Potassium Recommendations for Pasture <20% Legume						
	0-40	41-80	81-120	121-160	161+	Soil Test Result
Yield Goal Tons/Ac.						
2	90	60	30	0	0	
3	100	70	40	10	0	
4	110	80	50	20	0	
5	120	90	60	30	0	
6	120	90	60	30	0	
7+	120	90	60	30	0	
Potassium Recommendations for Alfalfa Hay						
	0-40	41-80	81-120	121-160	161+	Soil Test Result
Yield Goal Tons/Ac.						
2	145	100	55	10	0	
3	190	130	70	10	0	
4	240	165	90	15	0	
5	290	195	105	15	0	
6	335	230	125	20	0	
7+	380	265	145	20	0	

Table 17: FERTILIZER RECOMMENDATIONS FOR GRASS, GRASS/LEGUME AND ALFALFA FORAGE cont.

Potassium Recommendations for Other Legume Hay						
	0-40	41-80	81-120	121-160	161+	Soil Test Result
Yield Goal Tons/Ac.						
2	90	60	30	0	0	
3	100	70	40	10	0	
4	110	80	50	20	0	
5	120	90	60	30	0	
6	120	90	60	30	0	
7+	120	90	60	30	0	

TABLE 18: FORAGE SPECIES CHARACTERISTICS KEY - Livestock Grazing and Mechanical Harvesting

Increaser, Decreaser & Invader Describe Plant Species Reaction to Increased Livestock Grazing Pressure.	Increaser	Decreaser	Invader	Cattle	Horses	Sheep	Goats	Hay	Haylage	Silage	Baleage	Recovery After Harvest
NATIVE COOL SEASON GRASSES												
American mannagrass												
Fowl bluegrass				P								P
Needlegrass												
Green needlegrass		X		G				G				G
Needleandthread	X			F		P						F
Porcupine grass		X		F		P						G
Mountain brome				G								P
Prairie junegrass		X		G								P
Wheatgrass												
Bearded		X		G								
Bluebunch		X		G								F
Slender		X		G								F
Western		X		G				G				F
Whitetop		X		G								F
Wildrye												
Basin				G								F
Beardless				F								P
Canada		X		F								F
Virginia				F								P
NATIVE WARM SEASON GRASSES												
Alkali sacaton				F								F
Bluestem												
Big		X		G				G				G
Little		X		F								F
Sand		X		G								F
Buffalo grass	X			G								F
Grama												
Blue	X			G								P
Sideoats		X		G				G				F
Indian rice grass		X		G								F
Indiangrass				G				G				G
Inland Saltgrass	X			P								P
Prairie cordgrass				F								F
Prairie sandreed		X		F								F
Prairie dropseed				F								F
Reed canary grass		X		G	G							G
Sand dropseed				P								P
Switchgrass		X		F								F

Increaser, Decreaser & Invader Describe Plant Species Reaction to Increased Livestock Grazing Pressure.	Increaser	Decreaser	Invader	Cattle	Horses	Sheep	Goats	Hay	Haylage	Silage	Baleage	Recovery After Harvest
INTRODUCED COOL SEASON GRASSES												
Bromegrass												
Meadow				G								G
Smooth			X	G								G
Creeping foxtail				G								G
Kentucky bluegrass												
Orchard grass				G								G
Fescue												
Tall												
Meadow			X									
Timothy				F	G							G
Wheatgrass												
Crested				F								F
Intermediate				G								F
Pubescent				G								F
Siberian				F								F
Tall				P								F
Wildrye												
Altai				F								P
Mammoth				P								F
Russian				G								G
LEGUMES												
Alfalfa				G	P							G
Birdsfoot trefoil				G	P							G
Crown vetch					P							
Cicer milkvetch				G	P							G
Clover												
Alsike				G	P							G
Kura				G	P	G						
Ladino (white)				G	P							F
Red				G	P	G						F
Strawberry				G	P							F
Sweet				F	P							P
Sainfoin				G	P							F
Small burnet				F	P							

STANDARD 657 – WETLAND RESTORATION: HERBACEOUS SEEDING SPECIFICATIONS

Vegetative Restoration
Restoration of sites involves planting with appropriate native species. Species planted may vary depending on the type of wetland being restored. Planting specifications should be developed for the different zones where vegetation is to be established. Zones range from shallow open water, deep marsh, shallow/emergent marsh, and sedge/wet meadow. This technical note addresses shallow/emergent marsh fringe and sedge/wet meadow zones. Reference ***Section 5 of the Minnesota Wetland Restoration Guide*** for additional vegetative establishment recommendations: BWSR Wetland Restoration Guide.

Use of Native Seedbank
Maximizing the use of native seedbank is encouraged for wetland projects to promote the establishment of local seed/species. Seedbanks often contain annual species that provide important environmental benefits and often are not included in seed mixes. Survey information from nearby remnant communities can be used as a guide for developing a diversity standard and determining what additional species may be beneficial.

Seeding Wetlands
Wet meadow and sedge meadow seed mixes are designed to be used from the planned edge of open water (pool elevation) to around 1-1.5 feet in elevation depending on soil texture and capillary action of soil. Emergent seed mixes are commonly used in a 6 to 10-foot band that straddles the edge of open water. This strip of emergent seed is typically hand broadcast after water levels have stabilized within the wetland. It is not recommended to seed in areas that will have open water, as most wetland seed will float.

In most cases, wetland seed can be broadcast-seeded followed by rolling or packing, as most wetland seed needs light to germinate. Wetland grasses can be drill-seeded 1/8 to 1/4-inch-deep followed by broadcasting forbs and sedges. If a seed drill is used for installation of wetland seed the drill must be calibrated appropriately to ensure that small seed is planted correctly.

Establishment - Wetlands are typically dormant seeded in the fall or seeded in spring after hydrology conditions have stabilized. An advantage of fall dormant seeding is that forb and sedge seed is allowed to stratify over winter. Emergent wetland species may be seeded but are also commonly planted on the edge of open water and allowed to move to deeper areas on their own. Aggressive wetland species such as reed canary grass, non-native cattails and non-native phragmites need to be thoroughly controlled prior to wetland seeding or plantings will likely not be successful.

Seed Planting Density - Wetland seed mixes shall provide seed densities ranging from 110 to 200 seeds/ft^2. Wet/sedge meadow seed mixes shall contain 20-30 species. Shallow emergent marsh communities may be seeded with mixes of 10-20 species. For recommended species and optional seeding calculator refer to the MN NRCS Home Page at Field Office Technical Guide. Higher diversity mixes will help support pollinators and other invertebrates that play a key role in the health of wetland habitats. Recommended composition of mixes, based on seeds/ft^2:

Emergent Fringe		Sedge Meadow		Wet Meadow	
Grasses	20 – 65%	Grasses	20 – 50%	Grasses	20 – 60%
Sedges - Rushes	20 – 65%	Sedges - Rushes	40 – 70%	Sedges - Rushes	15 – 60%
Forbs	15 – 30%	Forbs	15 – 35%	Forbs	15 – 35%

*-- **NOTE** – Wet/Sedge meadow class wetland restorations that are intended to be short-term in duration, may utilize the following Conservation Practice Standards; Conservation Cover (327) or Restoration of Rare or Declining Natural Communities (643) specifications in lieu of 657 seeding specifications. Species shall be selected from Wet– Mesic drainage classes.

Early Successional Floodplain – The following mixtures are recommended on sites where natural regeneration of woody or herbaceous vegetation is expected to establish over time.

1.	Switchgrass	6.0 lbs/ac		
2.	Virginia Wildrye	3.0 lbs/ac		
	Slender Wheatgrass	5.0 lbs/ac		
	Switchgrass	3.0 lbs/ac		
*-- 3.	Riverbank Wild Rye	0.09 lb/ac		
	Slender Wheatgrass	0.99 lb/ac		
	Virginia Wild Rye	5.19 lbs/ac		
	Fowl Bluegrass	0.42 lb/ac		
	Marsh Milkweed	0.06 lb/ac		
	Autumn Sneezeweed	0.04 lb/ac		
	Tall Coneflower	0.02 lb/ac		
	Blue Vervain	0.09 lb/ac		

Table 21: Key Plant Species for Herbaceous Wetland Restoration

Grasses, forbs, sedges, and rushes are all commonly used as part of herbaceous wetland restoration projects. Species should be selected that are native to the area and well adapted to site conditions. The listed seeds per square foot are a general recommendation for seed mixes.

Shallow/Emergent Wetland Fringe (Saturated soils to water depths up to 6 inches)

Common Name	Botanical Name	Succession	Zone	Seeds/ft^2 at 1.0 lb/ac.	Seeds/ft^2 at 1.0 oz/ac.
Sweet flag	*Acorus americanus*	L	E	2.4	0.2
Water plantain	*Alisma subcordatum*	M	E	22.0	1.5
Marsh milkweed	*Asclepias incarnata*	L	S	1.76	0.1
American slough grass	*Beckmannia syzigachne*	E	S	18.4	1.2
Canada bluejoint grass	*Calamagrostis canadensis*	L	S	102.8	6.4
Slough sedge	*Carex atherodes*	L	E	10.7	0.7
Bottlebrush sedge	*Carex comosa*	L	E	11.0	0.7
Porcupine sedge	*Carex hystericina*	L	E	11.0	0.7
Lake sedge	*Carex lacustris*	L	E	11.8	0.7
Tussock sedge	*Carex stricta*	L	E	19.5	1.2
Fox sedge	*Carex vulpinoidea*	L	E	36.7	2.3
Least spike-rush	*Eleocharis acicularis*	M	E	25.7	1.6
Marsh spike-rush	*Eleocharis palustris*	M	E	18.7	1.2
Joe-pye weed	*Eutrochium maculatum*	L	S	34.9	2.2
Rattlesnake manna grass	*Glyceria canadensis*	M	E	58.8	3.7
Tall/Reed manna grass	*Glyceria grandis*	L	E	29.4	1.8
Soft rush	*Juncus effusus*	L	E	367.3	23.0
Knotted rush	*Juncus nodosus*	L	E	679.9	42.5
Torrey's rush	*Juncus torreyi*	M	E	587.7	36.7
Rice cutgrass	*Leersia oryzoides*	M	S	12.5	0.8
Water smartweed	*Polygonum amphibium*	E	E	2.9	0.2
Great water dock	*Rumex orbiculatus*	M	S	4.3	0.3
Broad-leaved arrowhead	*Sagittaria latifolia*	M	E	22.4	1.4
Hard-stem bulrush	*Schoenoplectus acutus*	L	E	4.7	0.3
River bulrush	*Schoenoplectus fluviatilis*	L	E	1.6	0.1
Three-square bulrush	*Schoenoplectus pungens*	L	E	4.4	0.3
Soft-stem bulrush	*Schoenoplectus tabernaemontani*	M	E	11.4	0.7
Wool grass	*Scirpus cyperinus*	L	S	624.4	39.0
Giant bur-reed	*Sparganium eurycarpum*	L	E	.01	NA

Wet Meadow – Sedge Meadow Wetland (saturated soils dominated by grasses, sedges, and forbs)					
Common Name	**Botanical Name**	**Succession**	**Zone**	**Seeds/ft^2 at 1.0 lb/ac.**	**Seeds/ft^2 at 1.0 oz/ac.**
Blue giant hyssop	*Agastache foeniculum*	L	S	33.4	2.1
Big bluestem	*Andropogon gerardi*	M	S	4.0	0.3
Canada anemone	*Anemone canadensis*	L	S	2.9	0.2
Marsh milkweed	*Asclepias incarnata*	L	S	1.8	0.1
American slough grass	*Beckmannia syzigachne*	E	S	18.4	1.2
Beggar's ticks	*Bidens cernua*	E	S	7.7	0.5
Fringed brome	*Bromus ciliata*	M	S	3.7	0.2
Canada bluejoint grass	*Calamagrostis canadensis*	L	S	102.8	6.4
Bebb's sedge	*Carex bebbii*	L	S	12.5	0.8
Bottlebrush sedge	*Carex comosa*	L	S	11.0	0.7
Wooly sedge	*Carex pellita*	L	E	10.3	0.6
Retrorsa sedge	*Carex retrorsa*	L	S	4.0	0.3
Pointed broom sedge	*Carex scoparia*	L	S	30.9	1.9
Awl-fruited sedge	*Carex stipata*	L	S	12.5	0.8
Tussock sedge	*Carex stricta*	L	E	19.5	1.2
Fox sedge	*Carex vulpinoidea*	E	S	36.7	2.3
Canada tick trefoil	*Desmodium canadense*	M	S	2.1	0.1
Flat-topped aster	*Doellingeria umbellata*	L	S	24.6	1.5
Spike-rush	*Eleocharis acicularis*	M	S	25.7	1.6
Creeping spike-rush	*Eleocharis palustris*	M	S	18.7	1.2
Virginia wild-rye	*Elymus vriginicus*	M	S	2.2	0.1
Boneset	*Eupatorium perfoliatum*	L	S	58.7	3.7
Grass-leaved goldenrod	*Euthamia graminifolia*	M	S	128.5	8.0
Joe-pye weed	*Eutrochium maculatum*	L	S	34.9	2.2
Tall/Reed manna grass	*Glyceria grandis*	L	S	29.4	1.8
Fowl manna grass	*Glyceria striata*	M	S	58.8	3.7
Sneezeweed	*Helenium autumnale*	M	S	47.7	3.0
Sawtooth sunflower	*Helianthus grossesserratus*	L	S	3.7	0.2
Blue-flag iris	*Iris versicolor*	L	S	.32	0.1
Knotted rush	*Juncus nodosus*	L	S	679.9	42.5
Slender rush	*Juncus tenuis*	M	S	367.3	23.0
Torrey's rush	*Juncus torreyii*	M	S	587.7	36.7
Rice-cut grass	*Leersia oryzoides*	M	S	12.5	0.8
Meadow blazingstar	*Liatris ligulistylis*	L	S	4.0	0.3
Tall blazingstar	*Liatris pycnostachya*	L	S	4.0	0.3
Great blue lobelia	*Lobelia siphilitica*	M	S	183.7	11.5
Water horehound	*Lycopus americanus*	E	S	47.7	2.98
Monkeyflower	*Mimulus ringens*	M	S	844.8	52.80
Switchgrass	*Panicum virgatum*	M	S	9.0	0.6
Fowl bluegrass	*Poa palustris*	M	S	47.8	3.0
Mountain mint	*Pycnanthemum virginianum*	L	S	80.8	5.1
Green bulrush	*Scirpus atrovirens*	M	S	168.9	10.6
Wool grass	*Scirpus cyperinus*	L	S	624.4	39.0
Giant goldenrod	*Solidago gigantea*	L	S	91.8	5.7
Indiangrass	*Sorgastrum nutans*	M	S	4.8	0.3

Common Name	Botanical Name	Succession	Zone	Seeds/ft^2 at 1.0 lb/ac.	Seeds/ft^2 at 1.0 oz/ac.
Prairie cordgrass	*Spartina pectinata*	M	S	4.2	0.3
Panicled aster	*Symphyotrichum lanceolatum*	L	S	57.3	3.6
New England aster	*Symphyotrichum novae-angliae*	L	S	24.3	1.5
Red-stem aster	*Symphyotrichum puniceum*	L	S	29.4	1.8
Tall meadow rue	*Thalictrum dasycarpum*	L	S	4.0	0.3
Blue vervain	*Verbena hastata*	M	S	34.1	2.1
Ironweed	*Veronia fasciculata*	L	S	8.8	0.6
Culver's root	*Veronicastrum virginicum*	L	S	293.9	18.3
Golden alexanders	*Zizia aurea*	M	S	4.0	0.3

Succession Definitions:

E = Early successional. Species is an annual or biennial.
M = Middle successional. Species is a short-term perennial or subdominant in the plant community. They generally establish in two years.
L = Late successional. Species is a dominant. Generally slow to establish from seed (3-5 years).

Zone Definitions:

E = Emergent – Plants are partially submerged with leaves, stems, and flowering parts partially or entirely out of the water. They can often grow under saturated conditions and may survive short periods of dry-down. The seed should be placed either on a mud flat or at the water's edge.
S = Saturated – Soils are saturated most of the year, plants will tolerate periodic flooding and dry-down periods. Species categorized as "Saturated" should generally be planted at the water's edge.

Table 22: Varieties and Natural Germplasm for Select Grass and Forbs for All Practice Standards						
Species	**Variety**	**Adaptability Zone Ratings**				
		A	**B**	**C**	**D**	**E**
Switchgrass	Forestburg*, Sunburst*	1	1	1	2	3
	Dacotah*	3	2	1	1	1
	Nebraska 28	1	1	2	3	4
	Pathfinder, Summer, Trailblazer	1	2	3	4	4
Big Bluestem	Bonilla*, Bounty*, Sunnyview	1	1	1	2	3
	Bison*	3	2	1	1	1
	Champ	1	1	2	3	4
	Roundtree	1	2	3	4	4
	Bonanza, Pawnee	1	2	3	3	4
Indiangrass	Tomahawk*	2	1	1	1	1
	Oto	2	3	4	4	4
	Holt	1	1	2	3	4
Sideoats Grama	Pierre*	1	1	1	2	3
	Killdeer*	3	2	1	1	1
	Butte	1	1	2	3	4
	Trailway	1	2	3	4	4
Little Bluestem	Itasca*	1	1	1	1	1
	Badlands*	2	1	1	1	1
	Camper	2	3	3	4	4
	Blaze	2	3	4	4	4
Prairie Sandreed	Goshen	1	1	2	4	4
Prairie Cordgrass	Red River*	Adapted in all zones				
Green Needlegrass	Lodorm*; MN, ND, SD Common*	Adapted in all zones				
Blue Grama	Bad River Ecotype*; ND or SD Common*	Adapted in all zones				
Slender Wheatgrass	Revenue*, Adanac, Primar, Pryor	Adapted in all zones				
Western Wheatgrass	Rodan*, Flintlock, Rosana	Adapted in all zones				
Canada Wildrye	Mandan*	Adapted in all zones				
Pubescent/Intermediate Wheatgrass	Beefmaker, Chief, Clarke, Haymaker, Manifest, Manska, Oahe, Reliant, Slate, Tegmar	Adapted in all zones				
Tall Wheatgrass	Alkar, Jose, Orbit, Platte	Adapted in all zones				
Maximilian Sunflower	Medicine Creek*	Adapted in all zones				
Stiff Sunflower	Bismarck Natural Germplasm*	Adapted in all zones				
Purple Prairie Clover	Bismarck Natural Germplasm*	Adapted in all zones				
Narrow-leaf Purple Coneflower	Bismarck Natural Germplasm*	Adapted in all zones				
Yellow Coneflower	Stillwater	Adapted in all zones				

***** Varieties/natural germplasm materials suitable for Tallgrass Prairie Restoration.

Figure 2: Grass Variety and Natural Germplasm Adaptability Zones and Ratings

1. Adapted with optimum performance.
2. Moderately adapted under haying or grazing, may not always produce mature seed.
3. Poorly adapted.
4. Not adapted

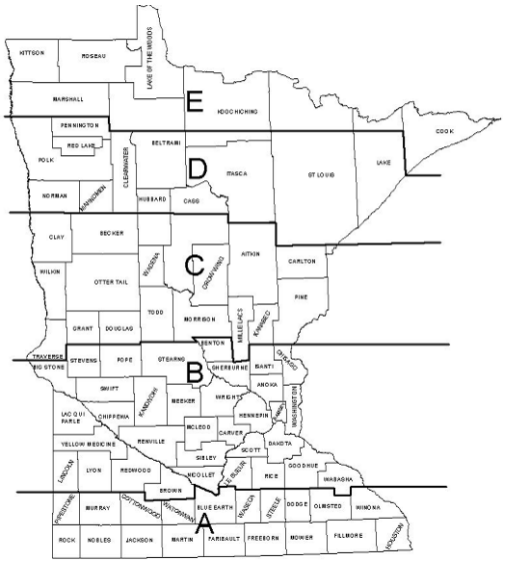


Table 23: Conversion of Bulk Pounds To Pure Live Seed

POUNDS OF GRASS SEED; BULK MATERIAL REQUIRED TO YIELD ONE POUND OF PURE LIVE SEED

Percent Germination

Percent Purity	100	99	98	97	96	95	94	93	92	91	90	89	88	87	86	85	84	83	82	81	80	75	70	65	60	55	50	45	40	35	30	25
100	1.00	1.01	1.02	1.03	1.04	1.05	1.06	1.08	1.09	1.10	1.11	1.12	1.14	1.15	1.16	1.18	1.19	1.20	1.22	1.23	1.25	1.33	1.43	1.54	1.67	1.82	2.00	2.22	2.50	2.86	3.33	4.00
99	1.01	1.02	1.03	1.04	1.05	1.06	1.07	1.09	1.10	1.11	1.12	1.13	1.15	1.16	1.17	1.19	1.20	1.22	1.23	1.25	1.26	1.35	1.44	1.55	1.68	1.84	2.02	2.24	2.53	2.89	3.37	4.04
98	1.02	1.03	1.04	1.05	1.06	1.07	1.09	1.10	1.11	1.12	1.13	1.15	1.16	1.17	1.19	1.20	1.21	1.23	1.24	1.26	1.28	1.36	1.46	1.57	1.70	1.86	2.04	2.27	2.55	2.92	3.40	4.08
97	1.03	1.04	1.05	1.06	1.07	1.09	1.10	1.11	1.12	1.13	1.15	1.16	1.17	1.18	1.20	1.21	1.23	1.24	1.26	1.27	1.29	1.37	1.47	1.59	1.72	1.87	2.06	2.29	2.58	2.95	3.44	4.12
96	1.04	1.05	1.06	1.07	1.09	1.10	1.11	1.12	1.13	1.14	1.16	1.17	1.18	1.20	1.21	1.23	1.24	1.26	1.27	1.29	1.30	1.39	1.49	1.60	1.74	1.89	2.08	2.31	2.60	2.98	3.47	4.17
95	1.05	1.06	1.07	1.09	1.10	1.11	1.12	1.13	1.14	1.16	1.17	1.18	1.20	1.21	1.22	1.24	1.25	1.27	1.28	1.30	1.32	1.40	1.50	1.62	1.75	1.91	2.11	2.34	2.63	3.01	3.51	4.21
94	1.06	1.07	1.09	1.10	1.11	1.12	1.13	1.14	1.16	1.17	1.18	1.20	1.21	1.22	1.24	1.25	1.27	1.28	1.30	1.31	1.33	1.42	1.52	1.64	1.77	1.93	2.13	2.36	2.66	3.04	3.55	4.26
93	1.08	1.09	1.10	1.11	1.12	1.13	1.14	1.16	1.17	1.18	1.19	1.21	1.22	1.24	1.25	1.27	1.28	1.30	1.31	1.33	1.34	1.43	1.54	1.65	1.79	1.96	2.15	2.39	2.69	3.07	3.58	4.30
92	1.09	1.10	1.11	1.12	1.13	1.14	1.16	1.17	1.18	1.19	1.21	1.22	1.24	1.25	1.26	1.28	1.29	1.31	1.33	1.34	1.36	1.45	1.55	1.67	1.81	1.98	2.17	2.42	2.72	3.11	3.62	4.35
91	1.10	1.11	1.12	1.13	1.14	1.16	1.17	1.18	1.19	1.21	1.22	1.23	1.25	1.26	1.28	1.29	1.31	1.32	1.34	1.36	1.37	1.47	1.57	1.69	1.83	2.00	2.20	2.44	2.75	3.14	3.66	4.40
90	1.11	1.12	1.13	1.15	1.16	1.17	1.18	1.19	1.21	1.22	1.23	1.25	1.26	1.28	1.29	1.31	1.32	1.34	1.36	1.37	1.39	1.48	1.59	1.71	1.85	2.02	2.22	2.47	2.78	3.17	3.70	4.44
89	1.12	1.13	1.15	1.16	1.17	1.18	1.20	1.21	1.22	1.23	1.25	1.26	1.28	1.29	1.31	1.32	1.34	1.35	1.37	1.39	1.40	1.50	1.61	1.73	1.87	2.04	2.25	2.50	2.81	3.21	3.75	4.49
88	1.14	1.15	1.16	1.17	1.18	1.20	1.21	1.22	1.24	1.25	1.26	1.28	1.29	1.31	1.32	1.34	1.35	1.37	1.39	1.40	1.42	1.52	1.62	1.75	1.89	2.07	2.27	2.53	2.84	3.25	3.79	4.55
87	1.15	1.16	1.17	1.18	1.20	1.21	1.22	1.24	1.25	1.26	1.28	1.29	1.31	1.32	1.34	1.35	1.37	1.38	1.40	1.42	1.44	1.53	1.64	1.77	1.92	2.09	2.30	2.55	2.87	3.28	3.83	4.60
86	1.16	1.17	1.19	1.20	1.21	1.22	1.24	1.25	1.26	1.28	1.29	1.31	1.32	1.34	1.35	1.37	1.38	1.40	1.42	1.44	1.45	1.55	1.66	1.79	1.94	2.11	2.33	2.58	2.91	3.32	3.88	4.65
85	1.18	1.19	1.20	1.21	1.23	1.24	1.25	1.27	1.28	1.29	1.31	1.32	1.34	1.35	1.37	1.38	1.40	1.42	1.43	1.45	1.47	1.57	1.68	1.81	1.96	2.14	2.35	2.61	2.94	3.36	3.92	4.71
84	1.19	1.20	1.21	1.23	1.24	1.25	1.27	1.28	1.29	1.31	1.32	1.34	1.35	1.37	1.38	1.40	1.42	1.43	1.45	1.47	1.49	1.59	1.70	1.83	1.98	2.16	2.38	2.65	2.98	3.40	3.97	4.76
83	1.20	1.22	1.23	1.24	1.26	1.27	1.28	1.30	1.31	1.32	1.34	1.35	1.37	1.38	1.40	1.42	1.43	1.45	1.47	1.49	1.51	1.61	1.72	1.85	2.01	2.19	2.41	2.68	3.01	3.44	4.02	4.82
82	1.22	1.23	1.24	1.26	1.27	1.28	1.30	1.31	1.33	1.34	1.36	1.37	1.39	1.40	1.42	1.43	1.45	1.47	1.49	1.51	1.52	1.63	1.74	1.88	2.03	2.22	2.44	2.71	3.05	3.48	4.07	4.88
81	1.23	1.25	1.26	1.27	1.29	1.30	1.31	1.33	1.34	1.36	1.37	1.39	1.40	1.42	1.44	1.45	1.47	1.49	1.51	1.52	1.54	1.65	1.76	1.90	2.06	2.24	2.47	2.74	3.09	3.53	4.12	4.94
80	1.25	1.26	1.28	1.29	1.30	1.32	1.33	1.34	1.36	1.37	1.39	1.40	1.42	1.44	1.45	1.47	1.49	1.51	1.52	1.54	1.56	1.67	1.79	1.92	2.08	2.27	2.50	2.78	3.13	3.57	4.17	5.00
75	1.33	1.35	1.36	1.37	1.39	1.40	1.42	1.43	1.45	1.47	1.48	1.50	1.52	1.53	1.55	1.57	1.59	1.61	1.63	1.65	1.67	1.78	1.90	2.05	2.22	2.42	2.67	2.96	3.33	3.81	4.44	5.33
70	1.43	1.44	1.46	1.47	1.49	1.50	1.52	1.54	1.55	1.57	1.59	1.61	1.62	1.64	1.66	1.68	1.70	1.72	1.74	1.76	1.79	1.90	2.04	2.20	2.38	2.60	2.86	3.17	3.57	4.08	4.76	5.71
65	1.54	1.55	1.57	1.59	1.60	1.62	1.64	1.65	1.67	1.69	1.71	1.73	1.75	1.77	1.79	1.81	1.83	1.85	1.88	1.90	1.92	2.05	2.20	2.37	2.56	2.80	3.08	3.42	3.85	4.40	5.13	6.15
60	1.67	1.68	1.70	1.72	1.74	1.75	1.77	1.79	1.81	1.83	1.85	1.87	1.89	1.92	1.94	1.96	1.98	2.01	2.03	2.06	2.08	2.22	2.38	2.56	2.78	3.03	3.33	3.70	4.17	4.76	5.56	6.67
55	1.82	1.84	1.86	1.87	1.89	1.91	1.93	1.96	1.98	2.00	2.02	2.04	2.07	2.09	2.11	2.14	2.16	2.19	2.22	2.24	2.27	2.42	2.60	2.80	3.03	3.31	3.64	4.04	4.55	5.19	6.06	7.27
50	2.00	2.02	2.04	2.06	2.08	2.11	2.13	2.15	2.17	2.20	2.22	2.25	2.27	2.30	2.33	2.35	2.38	2.41	2.44	2.47	2.50	2.67	2.86	3.08	3.33	3.64	4.00	4.44	5.00	5.71	6.67	8.00
45	2.22	2.24	2.27	2.29	2.31	2.34	2.36	2.39	2.42	2.44	2.47	2.50	2.53	2.55	2.58	2.61	2.65	2.68	2.71	2.74	2.78	2.96	3.17	3.42	3.70	4.04	4.44	4.94	5.56	6.35	7.41	8.89
40	2.50	2.53	2.55	2.58	2.60	2.63	2.66	2.69	2.72	2.75	2.78	2.81	2.84	2.87	2.91	2.94	2.98	3.01	3.05	3.09	3.13	3.33	3.57	3.85	4.17	4.55	5.00	5.56	6.25	7.14	8.33	10.00
35	2.86	2.89	2.92	2.95	2.98	3.01	3.04	3.07	3.11	3.14	3.17	3.21	3.25	3.28	3.32	3.36	3.40	3.44	3.48	3.53	3.57	3.81	4.08	4.40	4.76	5.19	5.71	6.35	7.14	8.16	9.52	11.43
30	3.33	3.37	3.40	3.44	3.47	3.51	3.55	3.58	3.62	3.66	3.70	3.75	3.79	3.83	3.88	3.92	3.97	4.02	4.07	4.12	4.17	4.44	4.76	5.13	5.56	6.06	6.67	7.41	8.33	9.52	11.11	13.33
25	4.00	4.04	4.08	4.12	4.17	4.21	4.26	4.30	4.35	4.40	4.44	4.49	4.55	4.60	4.65	4.71	4.76	4.82	4.88	4.94	5.00	5.33	5.71	6.15	6.67	7.27	8.00	8.89	10.00	11.43	13.33	16.00

Table 24: Characteristics of Common Grass, Legume and Forb Species for All Practice Standards

	Growth Habit 1	Drought Tolerance 2	Flood Tolerance 3	Longevity 4	Stand Establishment 5	Moisture Regime 6	Height 7	Growth Form 8	Salt Tolerance	Shade Tolerance	pH	Seeds/ Lb
Introduced Cool - Season Grasses												
Bromegrass												
Meadow	P	Fair	Fair	Medium	Medium	WM - D	M	B	Poor	Intolerant	5.6-8.4	80,000
Smooth	P	Fair	Good	Long	Rapid	M - D	M	S/R	Poor	Intolerant	5.6-8.4	135,000
Creeping foxtail	P	Poor	Good	Long	Medium	W - M	M	S/R	Poor	Intolerant	6.1-8.4	750,000
Fescue												
Tall	P	Good	Good	Medium	Medium	M - D	M	B	Fair	Tolerant	4.5-9.0	210,000
Meadow	P	Good	Good	Medium	Medium	M - D	M	B	Fair	Tolerant	4.5-9.0	235,955
Kentucky bluegrass	P	Poor	Fair	Long	Rapid	WM - DM	S	S/R	Poor	Intolerant	5.6-7.3	1,389,840
Orchard grass	P	Fair	Fair	Medium	Medium	WM – DW	M	B	Poor	Tolerant	5.6-8.4	654,000
Timothy	P	Poor	Good	Short	Rapid	DM - D	M	B	Poor	Moderate	5.1-8.4	1,163200
Red top	P	Poor	Good	Short	Medium	W - M	M	S/R	Poor	Intolerant	4.5-8.0	4,851,200
Wheatgrass												
Intermediate	P	Fair	Fair	Long	Medium	M - D	M	S/R	Fair	Intolerant	7.0-8.5	88,000
Pubescent	P	Fair	Fair	Long	Medium	M – D	M	S/R	Fair	Intolerant	7.0-8.5	88,000
Tall	P	Fair	Good	Medium	Medium	W - M	T	B	Good	Intolerant	7.0-8.5	79,000
Wildrye												
Altai	P	Fair	Good	Medium	Slow	M - D	M	B	Good	Intolerant	5.9-9.0	68,000
Mammoth	P	Good	Poor	Good	Slow	M - D	T	S/R	Fair	Intolerant	5.6-9.0	150,000
Russian	P	Good	Fair	Medium	Medium	M - D	M	B	Fair	Intolerant	6.0-9.0	55,000
Introduced Legumes												
Alfalfa	P	Good	Poor	Medium	Rapid	M - D	M	Crown	Fair	Intolerant	6.0-8.5	226,800
Birdsfoot trefoil	P	Fair	Fair	Medium	Rapid	W - DM	M	Pr	Good	Intolerant	5.8-8.0	369,840
Crown vetch	P	Good	Poor	Long	Medium	M - D	M	Pr	Poor	Intolerant	5.5-7.0	110,000
Cicer milkvetch	P	Good	Fair	Long	Medium	W - DM	T	Pr	Fair	Intolerant	6.0-8.1	134,000
Clover												
Alsike	P	Fair	Good		Medium	W - M	M	Crown	Poor	Intolerant	5.6-7.5	680,000
White	P	Poor	Good	Medium	Medium	WM - DM	S	Crown	Poor	Intolerant	5.2-8.0	800,000
Red	P	Fair	Fair	Short	Medium	WM - DM	M	Crown	Poor	Intolerant	5.5-7.6	275,000
Kura	P	Poor	Fair	Long	Medium	M - DM	S	P/Crown	Poor	Moderate	6.0-7.0	215,000
Sweet	P	Good	Fair	Medium	Rapid	WM - DM	T	Crown	Good	Intolerant	6.5-8.0	285,560

	Growth Habit 1	Drought Tolerance 2	Flood Tolerance 3	Longevity 4	Stand Establishment 5	Moisture Regime 6	Height 7	Growth Form 8	Salt Tolerance	Shade Tolerance	pH	Seeds/ Lb
Native Cool-Season Grasses												
Canada Bluejoint grass	P	Poor	Good	Long	Medium	W - M	T	S/R	Poor	Intolerant	4.5-8.0	4,480,000
Fowl bluegrass	P	Poor	Good	Medium	Med	W - WM	M	B	Poor	Intolerant	4.9-7.5	2,080,000
Fringed brome	P	Fair	Fair	Medium	Rapid	W - WM	M	B	Poor	Tolerant	5.5-7.5	160,000
Green needlegrass	P	Good	Fair	Long	Medium	DM - D	M	B	Fair	Intolerant	6.6-8.4	180,000
Kalms brome	P	Fair	Fair	Short	Medium	WM - M	M	B	Poor	Tolerant	5.5-7.5	128,000
Needle and thread grass	P	Good	Fair	Long	Slow	DM - D	M	B	Poor	Intolerant	6.6-8.4	25,600
Porcupine grass	P	Good	Fair	Long	Slow	DM - D	M	B	Poor	Intolerant	6.6-8.4	57,000
Prairie junegrass	P	Good	Poor	Long	Slow	DM - D	S	B	Poor	Tolerant	6.0-8.0	2,315,000
Reed canary grass	P	Fair	Good	Long	Medium	W - M	T	S/R	Fair	Intolerant	5.5-8.0	530,000
Wheatgrass												
Bearded	P	Good	Good	Short	Rapid	WM - D	M	B	Fair	Intolerant	5.6-9.0	155,000
Bluebunch	P	Good	Poor	Long	Medium	DM-D	T	B	Fair	Intolerant	6.6-8.4	125,680
Slender	P	Good	Good	Short	Rapid	WM - D	M	B	Good	Intolerant	5.6-9.0	155,000
Western	P	Good	Good	Long	Medium	DM - D	M	S/R	Good	Intolerant	4.5-9.0	112,000
Wildrye												
Canada	P	Fair	Fair	Short	Rapid	WM - D	M	B	Good	Tolerant	5.0-7.9	115,000
Virginia	P	Fair	Good	Short	Rapid	W - M	M	B	Fair	Tolerant	5.0-7.0	96,000
Native Warm-Season Grasses												
American slough grass	A	Poor	Good	NR	NR	W – WM	S	B	Fair	Moderate	5.5-7.5	800,000
Bluestem												
Big	P	Fair	Fair	Long	Slow	WM – D	T	R	Fair	Intolerant	6.0-7.5	176,000
Little	P	Good	Poor	Long	Medium	M - D	M	B	Poor	Intolerant	5.0-8.4	286,000
Sand	P	Good	Fair	Long	Slow	DM - D	T	R	Poor	Intolerant	5.6-8.4	100,000
Buffalo grass	P	Good	Fair	Long	Medium	M - D	S	S/St	Good	Intolerant	6.0-8.5	57,600
Grama												
Blue	P	Good	Poor	Long	Medium	DM - D	S	S/St	Fair	Intolerant	6.6-8.4	750,000
Sideoats	P	Good	Poor	Long	Medium	M - D	S	S/R	Poor	Intolerant	5.5-8.5	180,000
Indiangrass	P	Fair	Good	Long	Medium	M - D	T	B	Fair	Intolerant	4.8-8.0	193,000
Prairie cordgrass	P	Poor	Good	Long	Slow	W - M	T	S/R	Poor	Intolerant	6.0-8.5	183,000
Prairie slandered	P	Good	Poor	Long	Slow	D	T	S/R	Poor	Intolerant	5.6-8.4	275,000
Prairie dropseed	P	Fair	Good	Long	Slow	DM - D	M	B	Fair	Intolerant	6.0-7.2	224,000
Rough dropseed	P	Fair	Good	Long	Slow	DM - D	M	B	Fair	Intolerant	NR	480,000
Sand dropseed	P	Good	Poor	Short	Rapid	DM - D	M	B	Fair	Intolerant	6.6-8.0	3,200,000
Switchgrass	P	Fair	Good	Long	Medium	WM - D	T	S/R	Fair	Intolerant	4.5-8.0	390,000

	Growth Habit 1	Drought Tolerance 2	Flood Tolerance 3	Longevity 4	Stand Establishment 5	Moisture Regime 6	Height 7	Growth Form 8	Salt Tolerance	Shade Tolerance	pH	Seeds/ Oz
Native Forbs and Legumes												
American vetch	P	Good	Poor	Medium	Medium	WM – DM	S	Pr	Poor	Intolerant	5.9-7.2	2,052
Aster												
Heath	P	Good	Fair	Long	NR	M - D	M	E/R	NR	Intolerant	NR	200,000
New England	P	NR	Good	Long	Medium	W - DM	T	E/R	NR	Intolerant	5.5-7.0	66,000
Panicled	P	Fair	Fair	Long	Medium	WM - M	T	E	NR	Intolerant	NR	156,000
Silky	P	Good	Poor	Medium	Slow	DM - D	S	E	NR	Intolerant	NR	26,000
Smooth	P	Good	Poor	Long	Medium	WM – DM	T	E	NR	Intolerant	6.0-6.5	55,000
Swamp	P	NR	Good	Long	Medium	W - WM	T	E	NR	Intolerant	NR	80,000
Black-eyed Susan	Bi	Good	Good	Short	Rapid	WM - D	M	E	Poor	Intolerant	6.0-7.0	92,000
Blanket flower	P	Good	Fair	Medium	Medium	W - M	M	E	Poor	Intolerant	5.5-7.9	9,813
Blazingstar												
Dotted	P	Good	Poor	Long	Slow	DM - D	M	E	Poor	Intolerant	6.0-7.8	7,000
Ontario	P	Good	Poor	Long	Medium	DM - D	M	E	Poor	Intolerant	NR	14,000
Meadow	P	Good	Poor	Long	Medium	WM - M	T	E	Poor	Intolerant	6.0-8.5	11,000
Rough	P	Fair	Poor	Long	Medium	M - D	T	E	Poor	Intolerant	NR	16,000
Tall/Prairie	P	Good	Poor	Long	Medium	WM - M	T	E	Poor	Intolerant	6.0-8.5	11,000
Boneset	P	Good	Poor	Medium	Slow	W – WM	T	E	NR	Moderate	NR	160,000
Bush clover	P	Good	Poor	Long	Slow	DM - D	T	E/R	Poor	Intolerant	5.7-8.2	8,000
Canada milkvetch	P	Fair	Good	Short	Medium	WM - DM	T	E/R	Poor	Intolerant	6.0-8.0	17,000
Canada tick trefoil	P	Fair	Fair	Medium	NR	WM - DM	T	E	NR	Tolerant	NR	5,500
Common ox-eye	P	Good	Short	Short	Medium	WM - DM	T	E	NR	Moderate	NR	6,300
Compass plant	P	NR	NR	NR	NR	WM - D	T	E	NR	Moderate	4.5-7.5	660
Coneflower												
Yellow	Bi/P	Good	Fair	Medium	Medium	M - DM	T	E	Poor	Intolerant	5.6-6.8	30,000
Narrow-leaved purple	P	Good	Poor	Long	Slow	DM - D	M	E	Poor	Intolerant	6.5-7.2	7,000
Purple	P	Good	Poor	Long	Medium	WM - DM	T	E	Poor	Intolerant	6.5-7.2	7,000
Culver's root	P	NR	Fair	Long	NR	WM - DM	T	E	NR	Moderate	NR	800,000
Cup plant	P	Poor	Fair	Long	Medium	WM - M	T	E	Poor	Moderate	4.5-7.5	1,400
Evening primrose	Bi/P	Good	Poor	Long	Rapid	WM - D	T	E	Poor	Tolerant	5.0-7.0	90,000
Gentian												
Bottle	Bi	Poor	Poor	Short	Medium	WM - M	M	E	NR	Tolerant	NR	280,000
Cream	Bi	Poor	Poor	Short	Slow	WM - DM	T	E	NR	Tolerant	NR	140,000
Blue Giant hyssop	P	Poor	Fair	Medium	Rapid	M - DM	T	E/R	NR	Moderate	NR	91,000
Golden alexanders	P	NR	NR	NR	NR	WM - DM	T	E	NR	Moderate	NR	11,000

	Growth Habit 1	Drought Tolerance 2	Flood Tolerance 3	Longevity 4	Stand Establishment 5	Moisture Regime 6	Height 7	Growth Form 8	Salt Tolerance	Shade Tolerance	pH	Seeds/ Oz
Goldenrod												
Canada	P	Fair	NR	Long	NR	DM - D	T	E	Poor	Moderate	NR	287,500
Giant	P	NR	Fair	NR	NR	W - M	T	E	Poor	Moderate	NR	250,000
Grass-leaved	P	NR	Fair	NR	NR	W - M	T	E	Poor	Moderate	NR	350,000
Stiff	P	Good	Poor	Medium	Medium	WM - D	T	E	Poor	Moderate	5.0-7.5	41,000
Showy	P	NR	NR	NR	NR	M - D	T	E	NR	NR	NR	95,000
Great blue lobelia	P	Poor	Good	NR	Medium	W - M	T	E	NR	Moderate	NR	500,000
Ground plum	P	Fair	Poor	NR	NR	DM - D	S	Pr	Poor	NR	NR	5,200
Heart-leaved alexander	P	NR	NR	NR	NR	M - DM	M	E	NR	Moderate	NR	12,000
Illinois bundleflower	P	Fair	Poor	Long	Rapid	M - D	T	E	Poor	Intolerant	5.0-8.0	4,200
Ironweed	P	Fair	Good	Short	Rapid	WM - M	T	E	NR	Moderate	5.6-7.0	24,000
Joe pye weed	P	Fair	Good	Medium	NR	W - WM	T	E	NR	Moderate	NR	95,000
Lance-leaved coreopsis	P	Good	Good	Short	Rapid	M - D	M	E/R	Poor	NR	NR	20,000
Leadplant	P	Good	Poor	Long	Slow	M - D	M	E	Poor	Tolerant	5.5-8.0	16,000
Milkweed												
Butterfly	P	Good	Medium	Medium	Slow	M - D	M	E/R	Poor	Intolerant	4.8-6.8	4,300
Common	P	NR	NR	NR	Rapid	WM - D	T	E/R	NR	Intolerant	NR	4,000
Swamp - Marsh	P	Poor	Good	Medium	Slow	W - M	T	E/R	Poor	Intolerant	5.0-8.0	4,800
Whorled	P	Good	Poor	Long	Slow	M - D	M	E/R	NR	Intolerant	NR	11,000
Mountain Mint	P	Good	Poor	NR	NR	WM - M	T	E/R	Poor	Moderate	5.0-7.0	220,000
Partridge pea	A	NR	NR	NR	NR	M - D	M	E	NR	Tolerant	5.5-7.5	2,700
Penstemon												
Large-flowered	P	Good	Poor	Short	Medium	DM - D	M	E	Poor	Moderate	NR	14,000
Foxglove	P	Good	Poor	Short	Medium	M - DM	T	E	Poor	Tolerant	NR	130,000
Prairie cinquefoil	P	Poor	Fair	Short	Slow	DM - D	M	E	Poor	Moderate	NR	230,000
Prairie phlox	P	Good	Poor	Medium	Medium	WM - D	M	E	Poor	NR	NR	19,000
Prairie smoke	P	Good	Poor	Medium	Medium	WM - D	S	Pr	Poor	NR	NR	27,000
Purple prairie clover	P	Good	Fair	Medium	Medium	M - D	M	E	Fair	Moderate	5.5-6.6	18,000
Rattlesnake master	P	Good	Poor	Long	Medium	WM - DM	T	E	Poor	NR	NR	7,500
Sneezeweed	P	Poor	NR	Medium	NR	W - WM	T	E	Poor	Moderate	6.0-7.0	130,000
Spiderwort	P	Fair	Good	NR	NR	WM - D	S	E	NR	NR	NR	10,000
Spotted beebalm	Bi/P	Good	Poor	Short	Medium	M - D	M	E	Poor	Moderate	6.0-8.0	70,000
Sunflower												
Stiff	P	Good	Good	Long	Medium	DM - D	T	E/R	Poor	NR	NR	85,000
Maximilian	P	Poor	Good	Long	Medium	WM - DM	T	E/R	Poor	Intolerant	6.0-8.0	13,000
Giant	P	Poor	Good	Long	Medium	WM - M	T	E/R	Poor	NR	NR	10,000
Sawtooth	P	Fair	Poor	Medium	Medium	WM - DM	T	E/R	Poor	NR	5.8-7.3	10,000
Vervain												
Hoary	P	NR	NR	NR	NR	DM - D	M	E	NR	Moderate	NR	28,000
Blue	P	NR	NR	NR	NR	W - M	T	E	NR	Moderate	6.0-7.0	93,000
White prairie clover	P	Good	Fair	Medium	Medium	M - D	M	E	Fair	Moderate	5.5-6.6	19,000

	Growth Habit 1	Drought Tolerance 2	Flood Tolerance 3	Longevity 4	Stand Establishment 5	Moisture Regime 6	Height 7	Growth Form 8	Salt Tolerance	Shade Tolerance	pH	Seeds/ Oz
White sage	P	Good	NR	Short	Medium	DM - D	T	E/R	Good	Intolerant	6.0-9.0	4,048,000
White wild indigo	P	Fair	Fair	Medium	Medium	WM - D	T	E	NR	Moderate	< 6.8	1,700
Wild bergamot	P	Poor	Good	Medium	Medium	WM - D	T	E/R	Poor	Moderate	6.0-8.0	70,000
Wild lupine	P	Fair	Poor	Short	Medium	DM - D	M	E	Poor	Moderate	4.2-5.6	1,200
Wingstem	P	Poor	Fair	Medium	NR	WM - M	T	E/R	Poor	Tolerant	NR	9,000
Yarrow	P	Good	Good	Long	Medium	WM - D	M	E/R	Fair	Moderate	6.0-8.0	180,000

1. **Growth Habit**
   - A - Annual
   - P – Perennial
   - Bi – Biannual

2. **Drought Tolerance**
   Based on species recommended on an adapted site.

3. **Flood Tolerance**
   - Good - 28-42 days.
   - Fair - 14-28 days.
   - Poor - less than 14 days.
   - Creeping foxtail/ reed canary grass can tolerate up to 60 days.

4. **Longevity**
   - Short - 1-4 years.
   - Medium - 5-10 years.
   - Long – longer than 10 years with proper management.

5. **Stand Establishment**
   - Rapid – usually 1 growing season after planting.
   - Medium – usually 1-2 growing seasons after planting.
   - Slow - usually 2-3 growing seasons after planting.

6. **Moisture Regime**
   - W -Wet
   - WM – Wet Mesic
   - M - Mesic
   - DM – Dry Mesic
   - D – Dry

7. **Height**
   - S – Short <18”
   - M – Mid 18” – 36”
   - T – Tall >36”

8. **Growth Form**
   - B – Bunch
   - S – Sod Forming
   - Pr – Prostrate
   - E - Erect
   - R – Rhizomatous
   - St – Stoloniferous

NR – Not Rated

TABLE 1 - GUIDE[1] TO MULCH MATERIALS, RATES, AND USES

Mulch Material	Quality Standards	Applicable Rate	Depth of Application	Remarks
Organic Mulches				
Grass Hay or Cereal Grain Straw[2]	Air dried; free of undesirable seeds, coarse material and moldy chunks	1.5 – 2 tons / acre	Lightly cover 75 – 90% of surface	Use where mulch effect is to be maintained for more than three months. Subject to blowing unless kept moist or anchored.
Wood Fiber Hydromulch	Natural wood fiber with green dye and dispersing agent added	0.75 – 1 ton / acre	Lightly cover 100% of the surface	Apply with hydromulcher, on 0-2% slopes. Use material with tacking agent for anchoring.
Wood Fiber / Paper Blend hydromulch	Blend of natural wood fiber and paper	0.75 – 1 ton / acre	Lightly cover 100% of the surface	Apply with hydromulcher, on 0-2% slopes. Use material with tacking agent for anchoring.
Wood Long-Fiber Excelsior	Air dried burred wood fibers, 4” or longer	1 – 2 tons / acre		Effective for erosion control. Anchoring usually not required except on critical areas or sites subject to high winds.
Compost	Commonly made from yard waste (leaves, branches, etc.) or manure	Cover 100% of the ground	2 inches	Applied with a blower truck. Anchoring is not required. Excellent for water infiltration and moisture conservation.
Manure	Well shredded, free of coarse materials	8 – 10 tons / acre		May create a problem with weeds. Excellent moisture conserver. Resistant to wind blowing. Do not use manure for water erosion control because surface water may be contaminated. Anchoring is required.

Mulch Material	Quality Standards	Applicable Rate	Depth of Application	Remarks
Organic Mulches				
Sawdust and ground corn cobs	Green or composted, free from weed seeds, trash and coarse materials.	5 tons / acre	2 – 7 inches	Sawdust from hardwood species is preferred to avoid possible toxicity from pitch or resins contained in conifers. Most effective as mulch around ornamentals, small fruits and other nursery stock. Special application rates: fruit trees 5-7"; blueberries 6", vegetables and flowers, 2-3", blackberries and raspberries 4-7"; strawberries 3". Resistance to blowing. Requires 30-35 lbs. N/ton to prevent nitrogen deficiency during decay. Rate based on weight of 24 lbs./cubic foot. Anchoring is required.
Wood Chips or Bark, Shavings	Green or air dried; free of weed seeds, trash and coarse material	10 – 20 tons / acre	2 – 7 inches	Chips or shavings from hardwood species are preferred to avoid possible toxicity from pitch or resins contained in conifers. Has same use and application as sawdust. Requires 20-25 lbs. N/ton to prevent nitrogen deficiency during decay. Resistant to blowing. Decomposes slowly. Anchoring not required.
Cornstalks, shredded or chopped	Air dried; shredded into 8” to 12” lengths	4 – 6 tons/ acre		Effective for erosion control. Slow to decompose. Excellent mulch for field crops. Resistant to wind blowing. Anchoring not required.
Non-Organic Mulches				
Gravel, crushed stone or slag	Washed	90% ground cover	2-3 inches	Use for permanent erosion control; on short slopes; around woody plants and ornamentals.

Mulch Material	Quality Standards	Applicable Rate	Depth of Application	Remarks
Non-Organic Mulches				
Plastic	2-4 mils	Apply according to manufacturer's specifications	Thickness of one layer	Use black for weed control and white for seedling establishment without organic mulch. Release plastic after seeding is established. Effective moisture conservation and weed control for small fruits. Large areas should have holes or slits cut to let rainfall percolate. Anchoring is required.
1. This table is not all-inclusive. There may be additional mulch materials or variations of the materials listed here that would be equivalent to achieve the intended effect.				
2. Mulch used on native seedings should not consist of pasture hay containing introduced species. Use grain straw mulches only.				

TABLE 2- GUIDE TO MULCH ANCHORING MATERIALS		
Anchoring Method or Material	**Kind of Mulch to be Anchored**	**How to Apply**
Mechanical		
Mulch Anchoring Tool or Disk	Grass hay, straw or manure	Apply mulch and pull the mulch anchoring tool or disk over mulch. Use equipment with serrated straight disks spaced 6-10" apart or other suitable equipment. Operate as close to the contour as possible. Mulch material should be tucked into the soil surface 2-3 inches. Use on areas of concentrated flow when velocity is less than approximately 4 feet per second.
Tackifier or Binder	Grass hay, straw, Hydromulch materials	Method and rate of application shall be according to manufacturers' recommendation. Use on areas without concentrated flow. Usually applied with a hydromulcher after seeding has been completed.
Wood Hydromulch Fibers	Grass, hay, straw	Use on areas without concentrated flow. Apply with hydromulcher immediately after seeding. Use 3000 lbs. Of mulch material and apply 750 lbs. of wood fiber with tacking agent per acre.
Asphalt Spray (Emulsion)	Grass hay, straw, compost, wood chips, wood shavings	Apply with suitable equipment to spray asphalt into the mulch as it is applied. Materials shall conform to the requirements of ASTM Specifications D 977. Application rate is 0.05 gallons per square yard (242 gallons per acres). Material shall be non-toxic to plant life. Use on areas without concentrated flow.
Manual		
Polypropylene plastic netting	Grass hay, straw, compost, wood shavings, wood long-fiber excelsior.	Apply plastic netting over mulch immediately after mulching and staple with 11 gauge or heavier wire staples. Installation is the same as for fiber blankets, mats and netting. Use when concentrated flow velocity is less than 4 feet per second.[1]
Wood Excelsior Fiber Blanket: interlocking web of excelsior fibers with netting on one or both sides. 80% of fibers are 8 inches or longer.	Use without additional mulch.	Anchor per manufacturer's specifications. Effective for erosion control on steep slopes and areas of concentrated flow.[1]

Anchoring Method or Material	Kind of Mulch to be Anchored	How to Apply
Chopped straw or straw and coconut fiber blanket: Uniform agricultural wheat straw or straw and coconut fiber between photodegradable or biodegradable netting.	Use without additional mulch.	Anchor per manufacturer's specifications. Effective for erosion control on moderate or steep slopes and low flow channels.[1]
Peg and twine	Grass hay, straw, wood shavings, wood long-fiber excelsior	After mulching, divide the area into blocks approximately 1 square yard in size. Drive 4-6 pegs per block to within 2-3" of soil surface. Anchor mulch by stretching twine between pegs in a criss-cross pattern on each block. Secure twin around each peg with two or more turns. Where mowing is planned, drive pegs flush with the soil surface.
Spade	Grass hay, straw, wood shavings, wood long-fiber excelsior	Cut mulch into soil surface with square edge spade. Make cuts in contour rows spaced 18 inches apart.
Soil and Stones	Plastic	Bury edge of plastic in a trench 6 inches deep. Firm soil over plastic. Use stones to hold plastic down in other places as needed.

1. Placing and anchoring Blankets, Mats and Netting: In areas of concentrated flow, lay the mat parallel to the direction of water flow, with netting on top. Spread blankets evenly without stretching so fibers are in direct contact with the soil. Adjacent strip edges shall be overlapped 2-4 inches. Strip ends shall overlap a minimum of 10 inches with the upgrade strip on top. The upgrade end of each blanket shall be buried at least 6 inches in a vertical slot with the soil pressed firmly against the embedded mat. Additional check slots at 50-foot intervals may be desirable on steep grades or long flow patterns. Strip ends and end overlaps shall be stapled with not more than 12 inches between staples. All other joints and edges shall be stapled at 4 foot intervals. Additional staples shall be placed down the center of each blanket in a diamond pattern at a maximum of 4-foot intervals. Where velocities exceed 5 cfs, place edge and center staples at 2-foot intervals. All staples shall be inserted flush with the ground surface. Staples shall be 11 gauge or heavier U shaped with a 1-2 inch crown. Staple length shall be determined by soil conditions as follows: Highly compacted soils – 6 inch: Friable soils – 8 inches; Loose or sandy soils – 10 inch.

2. In areas of broad sheet flow, mats may be placed either parallel or perpendicular to slope direction. Spread blankets evenly without stretching so fibers are in direct contact with the soil. Adjacent strip edges shall be overlapped 2-4 inches with upgrade strip on top. Ends of each mat shall be stapled with not more than 12 inches between staples. All other edges and mat centers shall be stapled to hold the mat in place with not more than 4-6 feet between staples. All staples shall be inserted flush with the ground surface. Staples shall be 11 gauge or heavier, U shaped with a 1-2 inch crown. Staple length shall be determined by soil condition as listed above.

Chan, Ginger

From: Hytry, Ryan - FPAC-NRCS, MN <ryan.hytry@usda.gov>
Sent: Wednesday, December 27, 2023 6:55 AM
To: Bartsch, Zachary
Subject: RE: [External Email]Seed mixes and restoration technical notes
Attachments: 000_MN_EST_MNNRCS_Seedcalc_ver2_5_seedtag_checkout_May_2021.xlsm

> You don't often get email from ryan.hytry@usda.gov. Learn why this is important

Zach,

For a seeding after a conservation practice/disturbance we recommend a Critical Area Planting, CP342. The requirements for a 342 seeding are minimum 150 seeds per sq foot, minimum 30% sod forming grasses, and grasses shall comprise at least 50% of the mix. The mix we typically recommend is BLM#4 at a rate of 15 pls lbs per acre. If you have a different mix in mind you could run it through the attached seed mix calculator to see if it would meet a 342.

Ryan Hytry
Office: 507-724-5261 ext 109
Cell: 507-318-1978
District Conservationist
Houston County Field Office
USDA/NRCS



United States Department of Agriculture

From: Bartsch, Zachary <zachary.bartsch@stantec.com>
Sent: Thursday, December 21, 2023 3:21 PM
To: Hytry, Ryan - FPAC-NRCS, MN <ryan.hytry@usda.gov>; Bollman, Machele - FPAC-NRCS, IA <machele.bollman@usda.gov>
Subject: [External Email]Seed mixes and restoration technical notes

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Hello Ryan and Machele,

My name is Zach and I am a soil scientist at Stantec. I am reaching out to your NRCS office due to my involvement on a project taking place in Houston County that will disturb soil in cropland, and potentially hayfields. Does your county/district have any recommended or required seed mixes, seed mix calculators, or guides to follow for restoration of previously vegetated areas? For example, I have found the Agronomy Technical Note No. 31 and Mulching Tables (CPS 484) to use in other MN counties. Are there any other publications or resources you might have in addition to these items?

Thank you,

Zach Bartsch
Soil Scientist

Mobile: 701-318-9364
zachary.bartsch@stantec.com

Stantec
3303 Fiechtner Drive Suite 100
Fargo ND 58103



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Seeding Plan

Name **John Diersen** Date **2/12/2024**

Prepared by **RH** Tract No./ Field No. **16637**

Type of Seeding: 342 - Critical Area Planting

Field Area (acres): 2.00

10

Seeding Mix Summary

342 CRITICAL AREA PLANTING - INTRODUCED GRASS/LEGUME

Grasses/ Sedges	Common Name	Scientific Name	PLS Lbs/Acre	PLS Lbs
1	Kentucky Bluegrass	Poa pratensis	2.5	5.00
2	Annual Ryegrass	Lolium multiflorum	3	6.00
3	Perennial Ryegrass	Lolium perenne	4.5	9.00
4	Tall Fescue	Festuca arundinacea	3	6.00
5	Timothy	Phleum pratense	2	4.00
			15.00	**30.00**

Forbs/ Legumes	Common Name	Scientific Name	PLS Lbs/Acre	Total PLS/Lbs
		SUBTOTAL FORBS/Legumes	**0.00**	**0.00**
		DRILLED RATE [1]		

1/ Broadcast seeding rate is 1.5 times the drilled rate.

Seeding Dates

Cool Season Grasses and Legumes. South: Spring 4/1 - 6/1. Late Summer 8/1 - 9/10.

Seeding Method and Seedbed Preparation

Broadcasting via terrigator or vicon seeder: Seedbed should be tilled and clean of all vegetation and weeds, packed and firm enough to make a 1/2' or less boot imprint. Pack or light harrow following application to ensure proper seed to soil contact. Broadcast seed at 1.5 times the recommended drilled rate.

Companion Crop

Oats 3/4-1.25 BU/Ac

Fertilizer is Only Recommended For Introduced Grass or Grass/Legume Mixtures

Nitrogen Recommended (units/ac)	
Grass w/Legume >20%	0
Grass w/Legume <20%	60

Phosphorous Recommendations for Grass w/ >20% Legume (lb/ac)					
Bray	0-5	6-10	11-15	16-20	21+
Olsen	0-3	4-7	8-11	12-15	16+
	35	25	15	0	0
Phosphorous Recommendations for Grass w/ <20% Legume (lb/ac)					
Bray	0-5	6-10	11-15	16-20	21+
Olsen	0-3	4-7	8-11	12-15	16+
	40	30	20	10	0

Potassium Recommendations for Grass w/ >20% Legume (lb/ac)					
Soil Test Result	0-40	41-80	81-120	121-160	161+
	95	65	40	15	0
Potassium Recommendations for Grass w/ <20% Legume (lb/ac)					

Soil Test Result	0-40	41-80	81-120	121-160	161+
	90	60	30	0	0

If soil tests are not available, fertilizer will be applied in equal amounts of Nitrogen-Phosphorus-Potassium (N-P-K) for grass and legume establishment. An example fertilizer blend would be 60-60-60.

Checkout and Certification

Name | Date 2/12/2024

Prepared by | Tract No./ Field No.

Type of Seeding:

Field Area (acres): 10.00

Planting Date 6/28/20

Seeding Mix Summary

327 CONSERVATION COVER - INTRODUCED GRASS/LEGUME

Grasses/ Sedges	Common Name	Scientific Name	PLS Lbs/Acre		PLS Lbs
1	Orchardgrass	Dactylis glomerata	2.728		27.28
2	Int. Wheatgrass	Thinopyrum intermedium	5.58		55.80
		SUBTOTAL GRASS/SEDGE	**8.31**		**83.08**
		DRILLED RATE[1]			

Forbs/ Legumes	Common Name	Scientific Name	PLS Lbs/Acre	Total PLS/Lbs
1	Alfalfa	Medicago sativa	3.038	30.38
		SUBTOTAL FORBS	**3.04**	**30.38**
		DRILLED RATE [1]		

1/ Broadcast seeding rate is 1.5 times the drilled rate.

Seeding Evlauation and Checkout

TOTAL SEEDS/FT	**0.0**	**LOW**
Percent Grass	**#DIV/0!**	**#DIV/0!**
percent forb	**#DIV/0!**	**#DIV/0!**

Chan, Ginger

From: Bartsch, Zachary
Sent: Thursday, December 21, 2023 2:21 PM
To: ryan.hytry@usda.gov; machele.bollman@usda.gov
Subject: Seed mixes and restoration technical notes

Hello Ryan and Machele,

My name is Zach and I am a soil scientist at Stantec. I am reaching out to your NRCS office due to my involvement on a project taking place in Houston County that will disturb soil in cropland, and potentially hayfields. Does your county/district have any recommended or required seed mixes, seed mix calculators, or guides to follow for restoration of previously vegetated areas? For example, I have found the Agronomy Technical Note No. 31 and Mulching Tables (CPS 484) to use in other MN counties. Are there any other publications or resources you might have in addition to these items?

Thank you,

Zach Bartsch
Soil Scientist

Mobile: 701-318-9364
zachary.bartsch@stantec.com

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Chan, Ginger

From: Blount, Veronica - FPAC-NRCS, WI <veronica.blount@usda.gov>
Sent: Wednesday, January 3, 2024 8:32 AM
To: Bartsch, Zachary
Subject: RE: 2023 Seed mixes

You don't often get email from veronica.blount@usda.gov. Learn why this is important

Hi Zach!

Yes, these resources are still applicable.

Thank you, have a wonderful 2024.
Ronnie

Veronica "Ronnie" Blount | Soil Conservationist | Sparta Field Office
U.S. Department of Agriculture | Natural Resources Conservation Service
Office 608-269-8136 x. 116 | Cell 608-633-8780

From: Bartsch, Zachary <zachary.bartsch@stantec.com>
Sent: Thursday, December 21, 2023 1:57 PM
To: Blount, Veronica - FPAC-NRCS, WI <veronica.blount@usda.gov>
Subject: 2023 Seed mixes

Hello Veronica,

I hope 2023 has treated you well. I am reaching out again for a similar project to the one you helped me with in 2022.

This project is located in Monroe County, and will disturbing cropland, forest, and grass ditches/right of ways. Are the two resources you provided in 2022 (attached) still acceptable for use to plan seed mixes and erosion control practices?

Thank you,

Zach Bartsch
Soil Scientist

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From: Blount, Veronica - NRCS, Sparta, WI <veronica.blount@usda.gov>
Sent: Wednesday, January 12, 2022 8:19 AM
To: Bartsch, Zachary <zachary.bartsch@stantec.com>
Subject: RE: [External Email]Seed mixes

Zach,

I apologize for the delay; this one got away from me!

I've attached:

1. The standard mix NRCS seed calculator. You'll need to Enable Macros in the yellow ribbon at the top, then:
    a. For sites where erosion control is the main concern, select "342" in STEP 1. For a habitat/wildlife concern, select "327."
    b. Then, for STEP 2, select "Introduced"
    c. For STEP 3, select a mix from the alternatives listed. On the "342Mixes" tab, you can see the Moisture Regimes they are designed for (Column N)

2. NRCS Standard 484, Mulching. This will describe soil coverage/erosion control considerations.

I hope this is helpful,
Veronica

Veronica Blount | District Conservationist (Acting)| Onalaska & Sparta Field Offices
U.S. Department of Agriculture | Natural Resources Conservation Service
Onalaska Office 608-433-7365 | Sparta Office 608-269-8136 x. 113 | Cell 608-633-8780

From: Bartsch, Zachary <zachary.bartsch@stantec.com>
Sent: Friday, January 7, 2022 9:49 AM
To: Blount, Veronica - NRCS, Sparta, WI <veronica.blount@usda.gov>
Subject: [External Email]Seed mixes

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Veronica,

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One thing I forgot to follow up with was if your office (or Monroe Co) has any erosion control practice guidelines that it would want the project to follow or use?

Thanks,

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Soil Scientist

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From: Bartsch, Zachary
Sent: Thursday, December 21, 2023 12:57 PM
To: Blount, Veronica - NRCS, Sparta, WI
Subject: 2023 Seed mixes
Attachments: 484_WI_CPS_Mulching_2016.pdf; Standard_Mix_Calc2020-30-11.xlsm

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U.S. Department of Agriculture | Natural Resources Conservation Service
Onalaska Office 608-433-7365 | Sparta Office 608-269-8136 x. 113 | Cell 608-633-8780

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To: Blount, Veronica - NRCS, Sparta, WI <veronica.blount@usda.gov>
Subject: [External Email]Seed mixes

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Wood Long-Fiber Excelsior	Air dried burred wood fibers, 4” or longer	1 – 2 tons / acre		Effective for erosion control. Anchoring usually not required except on critical areas or sites subject to high winds.
Compost	Commonly made from yard waste (leaves, branches, etc.) or manure	Cover 100% of the ground	2 inches	Applied with a blower truck. Anchoring is not required. Excellent for water infiltration and moisture conservation.
Manure	Well shredded, free of coarse materials	8 – 10 tons / acre		May create a problem with weeds. Excellent moisture conserver. Resistant to wind blowing. Do not use manure for water erosion control because surface water may be contaminated. Anchoring is required.

Mulch Material	Quality Standards	Applicable Rate	Depth of Application	Remarks
Organic Mulches				
Sawdust and ground corn cobs	Green or composted, free from weed seeds, trash and coarse materials.	5 tons / acre	2 – 7 inches	Sawdust from hardwood species is preferred to avoid possible toxicity from pitch or resins contained in conifers. Most effective as mulch around ornamentals, small fruits and other nursery stock. Special application rates: fruit trees 5-7"; blueberries 6", vegetables and flowers, 2-3", blackberries and raspberries 4-7"; strawberries 3". Resistance to blowing. Requires 30-35 lbs. N/ton to prevent nitrogen deficiency during decay. Rate based on weight of 24 lbs./cubic foot. Anchoring is required.
Wood Chips or Bark, Shavings	Green or air dried; free of weed seeds, trash and coarse material	10 – 20 tons / acre	2 – 7 inches	Chips or shavings from hardwood species are preferred to avoid possible toxicity from pitch or resins contained in conifers. Has same use and application as sawdust. Requires 20-25 lbs. N/ton to prevent nitrogen deficiency during decay. Resistant to blowing. Decomposes slowly. Anchoring not required.
Cornstalks, shredded or chopped	Air dried; shredded into 8” to 12” lengths	4 – 6 tons/ acre		Effective for erosion control. Slow to decompose. Excellent mulch for field crops. Resistant to wind blowing. Anchoring not required.
Non-Organic Mulches				
Gravel, crushed stone or slag	Washed	90% ground cover	2-3 inches	Use for permanent erosion control; on short slopes; around woody plants and ornamentals.

Mulch Material	Quality Standards	Applicable Rate	Depth of Application	Remarks
Non-Organic Mulches				
Plastic	2-4 mils	Apply according to manufacturer's specifications	Thickness of one layer	Use black for weed control and white for seedling establishment without organic mulch. Release plastic after seeding is established. Effective moisture conservation and weed control for small fruits. Large areas should have holes or slits cut to let rainfall percolate. Anchoring is required.
1. This table is not all-inclusive. There may be additional mulch materials or variations of the materials listed here that would be equivalent to achieve the intended effect.				
2. Mulch used on native seedings should not consist of pasture hay containing introduced species. Use grain straw mulches only.				

TABLE 2- GUIDE TO MULCH ANCHORING MATERIALS		
Anchoring Method or Material	**Kind of Mulch to be Anchored**	**How to Apply**
Mechanical		
Mulch Anchoring Tool or Disk	Grass hay, straw or manure	Apply mulch and pull the mulch anchoring tool or disk over mulch. Use equipment with serrated straight disks spaced 6-10" apart or other suitable equipment. Operate as close to the contour as possible. Mulch material should be tucked into the soil surface 2-3 inches. Use on areas of concentrated flow when velocity is less than approximately 4 feet per second.
Tackifier or Binder	Grass hay, straw, Hydromulch materials	Method and rate of application shall be according to manufacturers' recommendation. Use on areas without concentrated flow. Usually applied with a hydromulcher after seeding has been completed.
Wood Hydromulch Fibers	Grass, hay, straw	Use on areas without concentrated flow. Apply with hydromulcher immediately after seeding. Use 3000 lbs. Of mulch material and apply 750 lbs. of wood fiber with tacking agent per acre.
Asphalt Spray (Emulsion)	Grass hay, straw, compost, wood chips, wood shavings	Apply with suitable equipment to spray asphalt into the mulch as it is applied. Materials shall conform to the requirements of ASTM Specifications D 977. Application rate is 0.05 gallons per square yard (242 gallons per acres). Material shall be non-toxic to plant life. Use on areas without concentrated flow.
Manual		
Polypropylene plastic netting	Grass hay, straw, compost, wood shavings, wood long-fiber excelsior.	Apply plastic netting over mulch immediately after mulching and staple with 11 gauge or heavier wire staples. Installation is the same as for fiber blankets, mats and netting. Use when concentrated flow velocity is less than 4 feet per second.[1]
Wood Excelsior Fiber Blanket: interlocking web of excelsior fibers with netting on one or both sides. 80% of fibers are 8 inches or longer.	Use without additional mulch.	Anchor per manufacturer's specifications. Effective for erosion control on steep slopes and areas of concentrated flow.[1]

Anchoring Method or Material	Kind of Mulch to be Anchored	How to Apply
Chopped straw or straw and coconut fiber blanket: Uniform agricultural wheat straw or straw and coconut fiber between photodegradable or biodegradable netting.	Use without additional mulch.	Anchor per manufacturer's specifications. Effective for erosion control on moderate or steep slopes and low flow channels.[1]
Peg and twine	Grass hay, straw, wood shavings, wood long-fiber excelsior	After mulching, divide the area into blocks approximately 1 square yard in size. Drive 4-6 pegs per block to within 2-3" of soil surface. Anchor mulch by stretching twine between pegs in a criss-cross pattern on each block. Secure twin around each peg with two or more turns. Where mowing is planned, drive pegs flush with the soil surface.
Spade	Grass hay, straw, wood shavings, wood long-fiber excelsior	Cut mulch into soil surface with square edge spade. Make cuts in contour rows spaced 18 inches apart.
Soil and Stones	Plastic	Bury edge of plastic in a trench 6 inches deep. Firm soil over plastic. Use stones to hold plastic down in other places as needed.

1. Placing and anchoring Blankets, Mats and Netting: In areas of concentrated flow, lay the mat parallel to the direction of water flow, with netting on top. Spread blankets evenly without stretching so fibers are in direct contact with the soil. Adjacent strip edges shall be overlapped 2-4 inches. Strip ends shall overlap a minimum of 10 inches with the upgrade strip on top. The upgrade end of each blanket shall be buried at least 6 inches in a vertical slot with the soil pressed firmly against the embedded mat. Additional check slots at 50-foot intervals may be desirable on steep grades or long flow patterns. Strip ends and end overlaps shall be stapled with not more than 12 inches between staples. All other joints and edges shall be stapled at 4 foot intervals. Additional staples shall be placed down the center of each blanket in a diamond pattern at a maximum of 4-foot intervals. Where velocities exceed 5 cfs, place edge and center staples at 2-foot intervals. All staples shall be inserted flush with the ground surface. Staples shall be 11 gauge or heavier U shaped with a 1-2 inch crown. Staple length shall be determined by soil conditions as follows: Highly compacted soils – 6 inch: Friable soils – 8 inches; Loose or sandy soils – 10 inch.

2. In areas of broad sheet flow, mats may be placed either parallel or perpendicular to slope direction. Spread blankets evenly without stretching so fibers are in direct contact with the soil. Adjacent strip edges shall be overlapped 2-4 inches with upgrade strip on top. Ends of each mat shall be stapled with not more than 12 inches between staples. All other edges and mat centers shall be stapled to hold the mat in place with not more than 4-6 feet between staples. All staples shall be inserted flush with the ground surface. Staples shall be 11 gauge or heavier, U shaped with a 1-2 inch crown. Staple length shall be determined by soil condition as listed above.

USDA NRCS
Natural Resources Conservation Service

SEEDING PLAN
Standard and CRP Mixes

Ver. 1/2015

Landowner:	
TRACT #:	
Field(s):	
Plan by:	
County:	
Date:	
Total Acres:	

○ 327 ○ 342 ○ 512 ○ CRP NRCS STD.

Mix Type: ○ Introduced ○ Native

Mix #

GRASSES					
Common Name	Scientific Name	Intro/ Native	PLS (lbs / Acre)	Total Lbs.	
TOTAL GRASSES:			0.0	0.0	

FORBS/LEGUMES						
Common Name	Scientific Name	Intro/ Native	PLS (lbs / Acre)	Total Lbs.	PLS (oz./Acre)	Total Oz.

USDA NRCS
Natural Resources Conservation Service

SEEDING PLAN
Standard and CRP Mixes

Ver. 1/2015

Landowner:
TRACT #:
Field(s):
Plan by:
County:
Date:
Total Acres:

○ 327 ○ 342 ○ 512 ○ CRP — NRCS STD.
Mix Type: ○ Introduced ○ Native
Mix #

TOTAL FORBS/LEGUMES:						

SEEDING DATES	Spring Seeding	Late Summer	Fall Dormant Seeding		Frost Seeding Allowed?

		lbs/acre	Total lbs.	*OR*	Bu./Acre	Total Bu.
Temporary Cover Crop:						
Companion Crop: ○ YES ○ NO **You must pick Yes or No**						

Fertilizer & Lime		Lbs./Acre	Total Needed (lbs)
80-89 Lime		N/R	
Nitrogen		N/R	
Phosphate (P205)		N/R	
Potash (K20)		N/R	

☐ **General**
☐ **Soil Test**
☐ Fert./Lime Not Needed

N/R=Not Recommended for Pure Native Mixes

Seeding was completed on: _____ **according to the above requirements.**
(Date)

STANDARD 327 MIXES

REVISION DATE: 12/14/2012

criteria: 0

STD	Mix #	std-mix	Common Name	Scientific Name	PLS (oz./A)	PLS (lbs./A)	Seeds/Square Foot	Type	Intro / Native	Poll. (Y/N)		Mix No.	MR	Mix Components
327	(D)-1-Sgrod-Ycone-PPclover-BB-LE	327-(D)-1-Sgrod-Ycone-PPclover	Stiff Goldenrod	Oligoneuron rigidum	1	0.06	1	Forb	N	N		1	D	Sgrod-Ycone-PPclover-BB-LB-Indian-Sgrama
327	(D)-1-Sgrod-Ycone-PPclover-BB-LE	327-(D)-1-Sgrod-Ycone-PPclover	Yellow Coneflower	Ratibida pinnata	1	0.06	0.6	Forb	N	N		1	D	Sgrod-Ycone-PPclover-BB-LB-Indian-Sgrama
327	(D)-1-Sgrod-Ycone-PPclover-BB-LE	327-(D)-1-Sgrod-Ycone-PPclover	Purple Prairie Clover	Dalea purpurea	2	0.13	0.9	Legume	N	N		1	D	Sgrod-Ycone-PPclover-BB-LB-Indian-Sgrama
327	(D)-1-Sgrod-Ycone-PPclover-BB-LE	327-(D)-1-Sgrod-Ycone-PPclover	Big Bluestem	Andropogon gerardii	16	1	3.8	Grass	N	N		1	D	Sgrod-Ycone-PPclover-BB-LB-Indian-Sgrama
327	(D)-1-Sgrod-Ycone-PPclover-BB-LE	327-(D)-1-Sgrod-Ycone-PPclover	Little Bluestem	Schizachyrium scoparium	28	1.75	9.6	Grass	N	N		1	D	Sgrod-Ycone-PPclover-BB-LB-Indian-Sgrama
327	(D)-1-Sgrod-Ycone-PPclover-BB-LE	327-(D)-1-Sgrod-Ycone-PPclover	Indiangrass	Sorghastrum nutans	16	1	4.4	Grass	N	N		1	D	Sgrod-Ycone-PPclover-BB-LB-Indian-Sgrama
327	(D)-1-Sgrod-Ycone-PPclover-BB-LE	327-(D)-1-Sgrod-Ycone-PPclover	Sideoats Grama	Bouteloua curtipendula	28	1.75	5.1	Grass	N	N		1	D	Sgrod-Ycone-PPclover-BB-LB-Indian-Sgrama
327	(DM)-2-LB-Indian-Sgrama-BB-Swit	327-(DM)-2-LB-Indian-Sgrama-B	Little Bluestem	Schizachyrium scoparium	24	1.5	8.2	Grass	N	N		2	DM	LB-Indian-Sgrama-BB-Switch-PPclover-Berg-Y
327	(DM)-2-LB-Indian-Sgrama-BB-Swit	327-(DM)-2-LB-Indian-Sgrama-B	Indiangrass	Sorghastrum nutans	16	1	4	Grass	N	N		2	DM	LB-Indian-Sgrama-BB-Switch-PPclover-Berg-Y
327	(DM)-2-LB-Indian-Sgrama-BB-Swit	327-(DM)-2-LB-Indian-Sgrama-B	Sideoats Grama	Bouteloua curtipendula	16	1	2.9	Grass	N	N		2	DM	LB-Indian-Sgrama-BB-Switch-PPclover-Berg-Y
327	(DM)-2-LB-Indian-Sgrama-BB-Swit	327-(DM)-2-LB-Indian-Sgrama-B	Big Bluestem	Andropogon gerardii	8	0.5	1.5	Grass	N	N		2	DM	LB-Indian-Sgrama-BB-Switch-PPclover-Berg-Y
327	(DM)-2-LB-Indian-Sgrama-BB-Swit	327-(DM)-2-LB-Indian-Sgrama-B	Switchgrass	Panicum virgatum	8	0.5	4.5	Grass	N	N		2	DM	LB-Indian-Sgrama-BB-Switch-PPclover-Berg-Y
327	(DM)-2-LB-Indian-Sgrama-BB-Swit	327-(DM)-2-LB-Indian-Sgrama-B	Purple Prairie Clover	Dalea purpurea	2	0.13	0.9	Legume	N	N		2	DM	LB-Indian-Sgrama-BB-Switch-PPclover-Berg-Y
327	(DM)-2-LB-Indian-Sgrama-BB-Swit	327-(DM)-2-LB-Indian-Sgrama-B	Bergamot	Monarda fistulosa	1	0.06	1.8	Forb	N	N		2	DM	LB-Indian-Sgrama-BB-Switch-PPclover-Berg-Y
327	(DM)-2-LB-Indian-Sgrama-BB-Swit	327-(DM)-2-LB-Indian-Sgrama-B	Yellow Coneflower	Ratibida pinnata	1	0.06	0.6	Forb	N	N		2	DM	LB-Indian-Sgrama-BB-Switch-PPclover-Berg-Y
327	(M)-3-LB-BB-Cwrye-Indian-Switch-	327-(M)-3-LB-BB-Cwrye-Indian-	Little Bluestem	Schizachyrium scoparium	20	1.25	6.8	Grass	N	N		3	M	LB-BB-Cwrye-Indian-Switch-Berg-Besus-Ycon
327	(M)-3-LB-BB-Cwrye-Indian-Switch-	327-(M)-3-LB-BB-Cwrye-Indian-	Big Bluestem	Andropogon gerardii	16	1	3.8	Grass	N	N		3	M	LB-BB-Cwrye-Indian-Switch-Berg-Besus-Ycon
327	(M)-3-LB-BB-Cwrye-Indian-Switch-	327-(M)-3-LB-BB-Cwrye-Indian-	Canada Wildrye	Elymus canadensis	16	1	2.5	Grass	N	N		3	M	LB-BB-Cwrye-Indian-Switch-Berg-Besus-Ycon
327	(M)-3-LB-BB-Cwrye-Indian-Switch-	327-(M)-3-LB-BB-Cwrye-Indian-	Indiangrass	Sorghastrum nutans	16	1	4	Grass	N	N		3	M	LB-BB-Cwrye-Indian-Switch-Berg-Besus-Ycon
327	(M)-3-LB-BB-Cwrye-Indian-Switch-	327-(M)-3-LB-BB-Cwrye-Indian-	Switchgrass	Panicum virgatum	8	0.5	4.5	Grass	N	N		3	M	LB-BB-Cwrye-Indian-Switch-Berg-Besus-Ycon
327	(M)-3-LB-BB-Cwrye-Indian-Switch-	327-(M)-3-LB-BB-Cwrye-Indian-	Bergamot	Monarda fistulosa	1	0.06	1.8	Forb	N	N		3	M	LB-BB-Cwrye-Indian-Switch-Berg-Besus-Ycon
327	(M)-3-LB-BB-Cwrye-Indian-Switch-	327-(M)-3-LB-BB-Cwrye-Indian-	Black-Eyed Susan	Rudbeckia hirta	1	0.06	2.2	Forb	N	N		3	M	LB-BB-Cwrye-Indian-Switch-Berg-Besus-Ycon
327	(M)-3-LB-BB-Cwrye-Indian-Switch-	327-(M)-3-LB-BB-Cwrye-Indian-	Yellow Coneflower	Ratibida pinnata	1	0.06	0.6	Forb	N	N		3	M	LB-BB-Cwrye-Indian-Switch-Berg-Besus-Ycon
327	(WM)-4-BB-Indian-Switch-Vwrye-P	327-(WM)-4-BB-Indian-Switch-V	Big Bluestem	Andropogon gerardii	24	1.5	5.7	Grass	N	N		4	WM	BB-Indian-Switch-Vwrye-Pcord-Berg-NEaster
327	(WM)-4-BB-Indian-Switch-Vwrye-P	327-(WM)-4-BB-Indian-Switch-V	Indiangrass	Sorghastrum nutans	16	1	4	Grass	N	N		4	WM	BB-Indian-Switch-Vwrye-Pcord-Berg-NEaster
327	(WM)-4-BB-Indian-Switch-Vwrye-P	327-(WM)-4-BB-Indian-Switch-V	Switchgrass	Panicum virgatum	16	1	9	Grass	N	N		4	WM	BB-Indian-Switch-Vwrye-Pcord-Berg-NEaster
327	(WM)-4-BB-Indian-Switch-Vwrye-P	327-(WM)-4-BB-Indian-Switch-V	Virginia Wildrye	Elymus virginicus	16	1	1.5	Grass	N	N		4	WM	BB-Indian-Switch-Vwrye-Pcord-Berg-NEaster
327	(WM)-4-BB-Indian-Switch-Vwrye-P	327-(WM)-4-BB-Indian-Switch-V	Prairie Cordgrass	Spartina pectinata	8	0.5	0.6	Grass	N	N		4	WM	BB-Indian-Switch-Vwrye-Pcord-Berg-NEaster
327	(WM)-4-BB-Indian-Switch-Vwrye-P	327-(WM)-4-BB-Indian-Switch-V	Bergamot	Monarda fistulosa	1	0.06	1.8	Forb	N	N		4	WM	BB-Indian-Switch-Vwrye-Pcord-Berg-NEaster
327	(WM)-4-BB-Indian-Switch-Vwrye-P	327-(WM)-4-BB-Indian-Switch-V	New England Aster	Symphyotrichum novae-angliae	1	0.06	1.6	Forb	N	N		4	WM	BB-Indian-Switch-Vwrye-Pcord-Berg-NEaster
327	(WM)-4-BB-Indian-Switch-Vwrye-P	327-(WM)-4-BB-Indian-Switch-V	Yellow Coneflower	Ratibida pinnata	1	0.06	0.6	Forb	N	N		4	WM	BB-Indian-Switch-Vwrye-Pcord-Berg-NEaster
327	(W)-5-Ciron-Cup-Bvervain-Switch-P	327-(W)-5-Ciron-Cup-Bvervain-S	Common Ironweed	Vernonia fasciculata	1	0.06	0.5	Forb	N	N		5	W	Ciron-Cup-Bvervain-Switch-Pcord-BB-Indian-V
327	(W)-5-Ciron-Cup-Bvervain-Switch-P	327-(W)-5-Ciron-Cup-Bvervain-S	Cupplant	Silphium perfoliatum	2	0.13	0.1	Forb	N	N		5	W	Ciron-Cup-Bvervain-Switch-Pcord-BB-Indian-V
327	(W)-5-Ciron-Cup-Bvervain-Switch-P	327-(W)-5-Ciron-Cup-Bvervain-S	Blue Vervain	Verbena hastata	1	0.06	2.1	Forb	N	N		5	W	Ciron-Cup-Bvervain-Switch-Pcord-BB-Indian-V
327	(W)-5-Ciron-Cup-Bvervain-Switch-P	327-(W)-5-Ciron-Cup-Bvervain-S	Switchgrass	Panicum virgatum	16	1	8.9	Grass	N	N		5	W	Ciron-Cup-Bvervain-Switch-Pcord-BB-Indian-V
327	(W)-5-Ciron-Cup-Bvervain-Switch-P	327-(W)-5-Ciron-Cup-Bvervain-S	Prairie Cordgrass	Spartina pectinata	8	0.5	1.2	Grass	N	N		5	W	Ciron-Cup-Bvervain-Switch-Pcord-BB-Indian-V
327	(W)-5-Ciron-Cup-Bvervain-Switch-P	327-(W)-5-Ciron-Cup-Bvervain-S	Big Bluestem	Andropogon gerardii	16	1	3.8	Grass	N	N		5	W	Ciron-Cup-Bvervain-Switch-Pcord-BB-Indian-V
327	(W)-5-Ciron-Cup-Bvervain-Switch-P	327-(W)-5-Ciron-Cup-Bvervain-S	Indiangrass	Sorghastrum nutans	16	1	4.4	Grass	N	N		5	W	Ciron-Cup-Bvervain-Switch-Pcord-BB-Indian-V
327	(W)-5-Ciron-Cup-Bvervain-Switch-P	327-(W)-5-Ciron-Cup-Bvervain-S	Virginia Wildrye	Elymus virginicus	20	1.25	1.9	Grass	N	N		5	W	Ciron-Cup-Bvervain-Switch-Pcord-BB-Indian-V
327	(D)-6-Pcinque-SilkAster-Lplant-Smi	327-(D)-6-Pcinque-SilkAster-Lpl	Prairie Cinquefoil	Potentilla arguta	0.5	0.03	2.3	Forb	N	N		6	D	Pcinque-SilkAster-Lplant-Smint-Ptick-Sgrod-H
327	(D)-6-Pcinque-SilkAster-Lplant-Smi	327-(D)-6-Pcinque-SilkAster-Lpl	Silky Aster	Symphyotrichum sericeum	1	0.06	1.3	Forb	N	N		6	D	Pcinque-SilkAster-Lplant-Smint-Ptick-Sgrod-H
327	(D)-6-Pcinque-SilkAster-Lplant-Smi	327-(D)-6-Pcinque-SilkAster-Lpl	Leadplant	Amorpha canescens	1	0.06	0.4	Legume	N	N		6	D	Pcinque-SilkAster-Lplant-Smint-Ptick-Sgrod-H
327	(D)-6-Pcinque-SilkAster-Lplant-Smi	327-(D)-6-Pcinque-SilkAster-Lpl	Spotted Mint	Monarda punctata	0.5	0.03	1.1	Forb	N	N		6	D	Pcinque-SilkAster-Lplant-Smint-Ptick-Sgrod-H
327	(D)-6-Pcinque-SilkAster-Lplant-Smi	327-(D)-6-Pcinque-SilkAster-Lpl	Prairie Tickseed	Coreopsis palmata	1	0.06	0.3	Forb	N	N		6	D	Pcinque-SilkAster-Lplant-Smint-Ptick-Sgrod-H
327	(D)-6-Pcinque-SilkAster-Lplant-Smi	327-(D)-6-Pcinque-SilkAster-Lpl	Stiff Goldenrod	Oligoneuron rigidum	1	0.06	1	Forb	N	N		6	D	Pcinque-SilkAster-Lplant-Smint-Ptick-Sgrod-H
327	(D)-6-Pcinque-SilkAster-Lplant-Smi	327-(D)-6-Pcinque-SilkAster-Lpl	Hoary Vervain	Verbena stricta	1	0.06	0.7	Forb	N	N		6	D	Pcinque-SilkAster-Lplant-Smint-Ptick-Sgrod-H
327	(D)-6-Pcinque-SilkAster-Lplant-Smi	327-(D)-6-Pcinque-SilkAster-Lpl	Yellow Coneflower	Ratibida pinnata	1	0.06	0.6	Forb	N	N		6	D	Pcinque-SilkAster-Lplant-Smint-Ptick-Sgrod-H
327	(D)-6-Pcinque-SilkAster-Lplant-Smi	327-(D)-6-Pcinque-SilkAster-Lpl	Spiderwort	Tradescantia ohiensis	2	0.13	0.4	Forb	N	N		6	D	Pcinque-SilkAster-Lplant-Smint-Ptick-Sgrod-H
327	(D)-6-Pcinque-SilkAster-Lplant-Smi	327-(D)-6-Pcinque-SilkAster-Lpl	Purple Prairie Clover	Dalea purpurea	4	0.25	1.8	Legume	N	N		6	D	Pcinque-SilkAster-Lplant-Smint-Ptick-Sgrod-H
327	(D)-6-Pcinque-SilkAster-Lplant-Smi	327-(D)-6-Pcinque-SilkAster-Lpl	Big Bluestem	Andropogon gerardii	4	0.25	1	Grass	N	N		6	D	Pcinque-SilkAster-Lplant-Smint-Ptick-Sgrod-H
327	(D)-6-Pcinque-SilkAster-Lplant-Smi	327-(D)-6-Pcinque-SilkAster-Lpl	Sideoats Grama	Bouteloua curtipendula	24	1.5	4.4	Grass	N	N		6	D	Pcinque-SilkAster-Lplant-Smint-Ptick-Sgrod-H
327	(D)-6-Pcinque-SilkAster-Lplant-Smi	327-(D)-6-Pcinque-SilkAster-Lpl	Little Bluestem	Schizachyrium scoparium	24	1.5	8.3	Grass	N	N		6	D	Pcinque-SilkAster-Lplant-Smint-Ptick-Sgrod-H

327	(D)-6-Pcinque-SilkAster-Lplant-Smi	327-(D)-6-Pcinque-SilkAster-Lpl	Indiangrass	Sorghastrum nutans	8	0.5	2.2	Grass	N	N		6	D	Pcinque-SilkAster-Lplant-Smint-Ptick-Sgrod-H
327	(D)-6-Pcinque-SilkAster-Lplant-Smi	327-(D)-6-Pcinque-SilkAster-Lpl	Prairie Junegrass	Koeleria macrantha	2	0.13	6.6	Grass	N	N		6	D	Pcinque-SilkAster-Lplant-Smint-Ptick-Sgrod-H
327	(D)-6-Pcinque-SilkAster-Lplant-Smi	327-(D)-6-Pcinque-SilkAster-Lpl	Sand Dropseed	Sporobolus cryptandrus	2	0.13	15.3	Grass	N	N		6	D	Pcinque-SilkAster-Lplant-Smint-Ptick-Sgrod-H
327	(DM)-7-LB-Sgrama-Indian-Switch-P	327-(DM)-7-LB-Sgrama-Indian-S	Little Bluestem	Schizachyrium scoparium	24	1.5	8.2	Grass	N	N		7	DM	LB-Sgrama-Indian-Switch-PPclover-RHbushclo
327	(DM)-7-LB-Sgrama-Indian-Switch-P	327-(DM)-7-LB-Sgrama-Indian-S	Sideoats Grama	Bouteloua curtipendula	24	1.5	4.4	Grass	N	N		7	DM	LB-Sgrama-Indian-Switch-PPclover-RHbushclo
327	(DM)-7-LB-Sgrama-Indian-Switch-P	327-(DM)-7-LB-Sgrama-Indian-S	Indiangrass	Sorghastrum nutans	8	0.5	2	Grass	N	N		7	DM	LB-Sgrama-Indian-Switch-PPclover-RHbushclo
327	(DM)-7-LB-Sgrama-Indian-Switch-P	327-(DM)-7-LB-Sgrama-Indian-S	Switchgrass	Panicum virgatum	4	0.25	2.2	Grass	N	N		7	DM	LB-Sgrama-Indian-Switch-PPclover-RHbushclo
327	(DM)-7-LB-Sgrama-Indian-Switch-P	327-(DM)-7-LB-Sgrama-Indian-S	Purple Prairie Clover	Dalea purpurea	3	0.19	1.4	Legume	N	N		7	DM	LB-Sgrama-Indian-Switch-PPclover-RHbushclo
327	(DM)-7-LB-Sgrama-Indian-Switch-P	327-(DM)-7-LB-Sgrama-Indian-S	Round-Headed Bushclover	Lespedeza capitata	3	0.19	0.8	Legume	N	N		7	DM	LB-Sgrama-Indian-Switch-PPclover-RHbushclo
327	(DM)-7-LB-Sgrama-Indian-Switch-P	327-(DM)-7-LB-Sgrama-Indian-S	Prairie Junegrass	Koeleria macrantha	2	0.13	6.6	Grass	N	N		7	DM	LB-Sgrama-Indian-Switch-PPclover-RHbushclo
327	(DM)-7-LB-Sgrama-Indian-Switch-P	327-(DM)-7-LB-Sgrama-Indian-S	Prairie Dropseed	Sporobolus heterolepis	2	0.13	0.6	Grass	N	N		7	DM	LB-Sgrama-Indian-Switch-PPclover-RHbushclo
327	(DM)-7-LB-Sgrama-Indian-Switch-P	327-(DM)-7-LB-Sgrama-Indian-S	Bergamot	Monarda fistulosa	1	0.06	1.8	Forb	N	N		7	DM	LB-Sgrama-Indian-Switch-PPclover-RHbushclo
327	(DM)-7-LB-Sgrama-Indian-Switch-P	327-(DM)-7-LB-Sgrama-Indian-S	Leadplant	Amorpha canescens	1	0.06	0.4	Legume	N	N		7	DM	LB-Sgrama-Indian-Switch-PPclover-RHbushclo
327	(DM)-7-LB-Sgrama-Indian-Switch-P	327-(DM)-7-LB-Sgrama-Indian-S	Silky Aster	Symphyotrichum sericeum	1	0.06	0.6	Forb	N	N		7	DM	LB-Sgrama-Indian-Switch-PPclover-RHbushclo
327	(DM)-7-LB-Sgrama-Indian-Switch-P	327-(DM)-7-LB-Sgrama-Indian-S	Spiderwort	Tradescantia ohiensis	1	0.06	0.2	Forb	N	N		7	DM	LB-Sgrama-Indian-Switch-PPclover-RHbushclo
327	(DM)-7-LB-Sgrama-Indian-Switch-P	327-(DM)-7-LB-Sgrama-Indian-S	Stiff Goldenrod	Oligoneuron rigidum	1	0.06	1	Forb	N	N		7	DM	LB-Sgrama-Indian-Switch-PPclover-RHbushclo
327	(DM)-7-LB-Sgrama-Indian-Switch-P	327-(DM)-7-LB-Sgrama-Indian-S	Yellow Coneflower	Ratibida pinnata	1	0.06	0.6	Forb	N	N		7	DM	LB-Sgrama-Indian-Switch-PPclover-RHbushclo
327	(DM)-7-LB-Sgrama-Indian-Switch-P	327-(DM)-7-LB-Sgrama-Indian-S	Rough Blazing Star	Liatris aspera	0.5	0.03	0.2	Forb	N	N		7	DM	LB-Sgrama-Indian-Switch-PPclover-RHbushclo
327	(DM)-7-LB-Sgrama-Indian-Switch-P	327-(DM)-7-LB-Sgrama-Indian-S	Prairie Cinquefoil	Potentilla arguta	0.25	0.02	1.1	Forb	N	N		7	DM	LB-Sgrama-Indian-Switch-PPclover-RHbushclo
327	(M)-8-LB-BB-Indian-Cwrye-Switch-	327-(M)-8-LB-BB-Indian-Cwrye-	Little Bluestem	Schizachyrium scoparium	24	1.5	8.2	Grass	N	N		8	M	LB-BB-Indian-Cwrye-Switch-Oxeyesun-Pblzsta
327	(M)-8-LB-BB-Indian-Cwrye-Switch-	327-(M)-8-LB-BB-Indian-Cwrye-	Big Bluestem	Andropogon gerardii	16	1	3.8	Grass	N	N		8	M	LB-BB-Indian-Cwrye-Switch-Oxeyesun-Pblzsta
327	(M)-8-LB-BB-Indian-Cwrye-Switch-	327-(M)-8-LB-BB-Indian-Cwrye-	Indiangrass	Sorghastrum nutans	16	1	4	Grass	N	N		8	M	LB-BB-Indian-Cwrye-Switch-Oxeyesun-Pblzsta
327	(M)-8-LB-BB-Indian-Cwrye-Switch-	327-(M)-8-LB-BB-Indian-Cwrye-	Canada Wildrye	Elymus canadensis	8	0.5	1.3	Grass	N	N		8	M	LB-BB-Indian-Cwrye-Switch-Oxeyesun-Pblzsta
327	(M)-8-LB-BB-Indian-Cwrye-Switch-	327-(M)-8-LB-BB-Indian-Cwrye-	Switchgrass	Panicum virgatum	8	0.5	4.5	Grass	N	N		8	M	LB-BB-Indian-Cwrye-Switch-Oxeyesun-Pblzsta
327	(M)-8-LB-BB-Indian-Cwrye-Switch-	327-(M)-8-LB-BB-Indian-Cwrye-	Ox-eye Sunflower	Heliopsis helianthoides	1	0.06	0.1	Forb	N	N		8	M	LB-BB-Indian-Cwrye-Switch-Oxeyesun-Pblzsta
327	(M)-8-LB-BB-Indian-Cwrye-Switch-	327-(M)-8-LB-BB-Indian-Cwrye-	Prairie Blazing Star	Liatris pycnostachya	1	0.06	0.3	Forb	N	N		8	M	LB-BB-Indian-Cwrye-Switch-Oxeyesun-Pblzsta
327	(M)-8-LB-BB-Indian-Cwrye-Switch-	327-(M)-8-LB-BB-Indian-Cwrye-	Purple Prairie Clover	Dalea purpurea	1	0.06	0.5	Legume	N	N		8	M	LB-BB-Indian-Cwrye-Switch-Oxeyesun-Pblzsta
327	(M)-8-LB-BB-Indian-Cwrye-Switch-	327-(M)-8-LB-BB-Indian-Cwrye-	Rosinweed	Silphium integrifolium	1	0.06	0.1	Forb	N	N		8	M	LB-BB-Indian-Cwrye-Switch-Oxeyesun-Pblzsta
327	(M)-8-LB-BB-Indian-Cwrye-Switch-	327-(M)-8-LB-BB-Indian-Cwrye-	Bergamot	Monarda fistulosa	0.5	0.03	0.9	Forb	N	N		8	M	LB-BB-Indian-Cwrye-Switch-Oxeyesun-Pblzsta
327	(M)-8-LB-BB-Indian-Cwrye-Switch-	327-(M)-8-LB-BB-Indian-Cwrye-	Black-Eyed Susan	Rudbeckia hirta	0.5	0.03	1.1	Forb	N	N		8	M	LB-BB-Indian-Cwrye-Switch-Oxeyesun-Pblzsta
327	(M)-8-LB-BB-Indian-Cwrye-Switch-	327-(M)-8-LB-BB-Indian-Cwrye-	New England Aster	Symphyotrichum novae-angliae	0.5	0.03	0.8	Forb	N	N		8	M	LB-BB-Indian-Cwrye-Switch-Oxeyesun-Pblzsta
327	(M)-8-LB-BB-Indian-Cwrye-Switch-	327-(M)-8-LB-BB-Indian-Cwrye-	Sky-Blue Aster	Symphyotrichum oolentangiense	0.5	0.03	0.9	Forb	N	N		8	M	LB-BB-Indian-Cwrye-Switch-Oxeyesun-Pblzsta
327	(M)-8-LB-BB-Indian-Cwrye-Switch-	327-(M)-8-LB-BB-Indian-Cwrye-	Yellow Coneflower	Ratibida pinnata	0.5	0.03	0.3	Forb	N	N		8	M	LB-BB-Indian-Cwrye-Switch-Oxeyesun-Pblzsta
327	(M)-8-LB-BB-Indian-Cwrye-Switch-	327-(M)-8-LB-BB-Indian-Cwrye-	Culver's Root	Veronicastrum virginicum	0.25	0.02	4.3	Forb	N	N		8	M	LB-BB-Indian-Cwrye-Switch-Oxeyesun-Pblzsta
327	(WM)-9-BB-Cwrye-Switch-Indian-C	327-(WM)-9-BB-Cwrye-Switch-I	Big Bluestem	Andropogon gerardii	20	1.25	4.8	Grass	N	N		9	WM	BB-Cwrye-Switch-Indian-Cup-Pcord-WWIndig
327	(WM)-9-BB-Cwrye-Switch-Indian-C	327-(WM)-9-BB-Cwrye-Switch-I	Canada Wildrye	Elymus canadensis	16	1	2.5	Grass	N	N		9	WM	BB-Cwrye-Switch-Indian-Cup-Pcord-WWIndig
327	(WM)-9-BB-Cwrye-Switch-Indian-C	327-(WM)-9-BB-Cwrye-Switch-I	Switchgrass	Panicum virgatum	16	1	9	Grass	N	N		9	WM	BB-Cwrye-Switch-Indian-Cup-Pcord-WWIndig
327	(WM)-9-BB-Cwrye-Switch-Indian-C	327-(WM)-9-BB-Cwrye-Switch-I	Indiangrass	Sorghastrum nutans	12	0.75	3	Grass	N	N		9	WM	BB-Cwrye-Switch-Indian-Cup-Pcord-WWIndig
327	(WM)-9-BB-Cwrye-Switch-Indian-C	327-(WM)-9-BB-Cwrye-Switch-I	Cupplant	Silphium perfoliatum	4	0.25	0.1	Forb	N	N		9	WM	BB-Cwrye-Switch-Indian-Cup-Pcord-WWIndig
327	(WM)-9-BB-Cwrye-Switch-Indian-C	327-(WM)-9-BB-Cwrye-Switch-I	Prairie Cordgrass	Spartina pectinata	4	0.25	0.6	Grass	N	N		9	WM	BB-Cwrye-Switch-Indian-Cup-Pcord-WWIndig
327	(WM)-9-BB-Cwrye-Switch-Indian-C	327-(WM)-9-BB-Cwrye-Switch-I	White Wild Indigo	Baptisia alba	1.5	0.09	0.1	Legume	N	N		9	WM	BB-Cwrye-Switch-Indian-Cup-Pcord-WWIndig
327	(WM)-9-BB-Cwrye-Switch-Indian-C	327-(WM)-9-BB-Cwrye-Switch-I	Bergamot	Monarda fistulosa	1	0.06	1.8	Forb	N	N		9	WM	BB-Cwrye-Switch-Indian-Cup-Pcord-WWIndig
327	(WM)-9-BB-Cwrye-Switch-Indian-C	327-(WM)-9-BB-Cwrye-Switch-I	Black-Eyed Susan	Rudbeckia hirta	1	0.06	2.2	Forb	N	N		9	WM	BB-Cwrye-Switch-Indian-Cup-Pcord-WWIndig
327	(WM)-9-BB-Cwrye-Switch-Indian-C	327-(WM)-9-BB-Cwrye-Switch-I	Common Ironweed	Vernonia fasciculata	1	0.06	0.4	Forb	N	N		9	WM	BB-Cwrye-Switch-Indian-Cup-Pcord-WWIndig
327	(WM)-9-BB-Cwrye-Switch-Indian-C	327-(WM)-9-BB-Cwrye-Switch-I	Golden Alexanders	Zizia aurea	1	0.06	0.2	Forb	N	N		9	WM	BB-Cwrye-Switch-Indian-Cup-Pcord-WWIndig
327	(WM)-9-BB-Cwrye-Switch-Indian-C	327-(WM)-9-BB-Cwrye-Switch-I	New England Aster	Symphyotrichum novae-angliae	1	0.06	1.6	Forb	N	N		9	WM	BB-Cwrye-Switch-Indian-Cup-Pcord-WWIndig
327	(WM)-9-BB-Cwrye-Switch-Indian-C	327-(WM)-9-BB-Cwrye-Switch-I	Prairie Blazing Star	Liatris pycnostachya	1	0.06	0.4	Forb	N	N		9	WM	BB-Cwrye-Switch-Indian-Cup-Pcord-WWIndig
327	(WM)-9-BB-Cwrye-Switch-Indian-C	327-(WM)-9-BB-Cwrye-Switch-I	Yellow Coneflower	Ratibida pinnata	1	0.06	0.6	Forb	N	N		9	WM	BB-Cwrye-Switch-Indian-Cup-Pcord-WWIndig
327	(WM)-9-BB-Cwrye-Switch-Indian-C	327-(WM)-9-BB-Cwrye-Switch-I	Great St. John's Wort	Hypericum ascyron	0.25	0.02	1.1	Forb	N	N		9	WM	BB-Cwrye-Switch-Indian-Cup-Pcord-WWIndig
327	(W)-10-Croot-Ciron-Cup-MM-Jpye-	327-(W)-10-Croot-Ciron-Cup-M	Culver's Root	Veronicastrum virginicum	0.25	0.02	4.3	Forb	N	N		10	W	Croot-Ciron-Cup-MM-Jpye-Bvervain-Shwgroo
327	(W)-10-Croot-Ciron-Cup-MM-Jpye-	327-(W)-10-Croot-Ciron-Cup-M	Common Ironweed	Vernonia fasciculata	0.5	0.03	0.2	Forb	N	N		10	W	Croot-Ciron-Cup-MM-Jpye-Bvervain-Shwgroo
327	(W)-10-Croot-Ciron-Cup-MM-Jpye-	327-(W)-10-Croot-Ciron-Cup-M	Cupplant	Silphium perfoliatum	2	0.13	0.1	Forb	N	N		10	W	Croot-Ciron-Cup-MM-Jpye-Bvervain-Shwgroo
327	(W)-10-Croot-Ciron-Cup-MM-Jpye-	327-(W)-10-Croot-Ciron-Cup-M	Marsh Milkweed	Asclepias incarnata	2	0.13	0.2	Forb	N	N		10	W	Croot-Ciron-Cup-MM-Jpye-Bvervain-Shwgroo
327	(W)-10-Croot-Ciron-Cup-MM-Jpye-	327-(W)-10-Croot-Ciron-Cup-M	Joe-Pye Weed	Eutrochium maculatum	1	0.06	2.2	Forb	N	N		10	W	Croot-Ciron-Cup-MM-Jpye-Bvervain-Shwgroo
327	(W)-10-Croot-Ciron-Cup-MM-Jpye-	327-(W)-10-Croot-Ciron-Cup-M	Blue Vervain	Verbena hastata	2	0.13	4.3	Forb	N	N		10	W	Croot-Ciron-Cup-MM-Jpye-Bvervain-Shwgroo
327	(W)-10-Croot-Ciron-Cup-MM-Jpye-	327-(W)-10-Croot-Ciron-Cup-M	Showy Tick Trefoil	Desmodium canadense	3	0.19	0.3	Forb	N	N		10	W	Croot-Ciron-Cup-MM-Jpye-Bvervain-Shwgroo
327	(W)-10-Croot-Ciron-Cup-MM-Jpye-	327-(W)-10-Croot-Ciron-Cup-M	Boneset	Eupatorium perfoliatum	0.5	0.03	1.8	Forb	N	N		10	W	Croot-Ciron-Cup-MM-Jpye-Bvervain-Shwgroo

327	(W)-10-Croot-Ciron-Cup-MM-Jpye-	327-(W)-10-Croot-Ciron-Cup-M	Golden Alexanders	Zizia aurea	2	0.13	0.5	Forb	N	N		10	W	Croot-Ciron-Cup-MM-Jpye-Bvervain-Shwgroc
327	(W)-10-Croot-Ciron-Cup-MM-Jpye-	327-(W)-10-Croot-Ciron-Cup-M	Switchgrass	Panicum virgatum	8	0.5	4.5	Grass	N	N		10	W	Croot-Ciron-Cup-MM-Jpye-Bvervain-Shwgroc
327	(W)-10-Croot-Ciron-Cup-MM-Jpye-	327-(W)-10-Croot-Ciron-Cup-M	Prairie Cordgrass	Spartina pectinata	4	0.25	0.6	Grass	N	N		10	W	Croot-Ciron-Cup-MM-Jpye-Bvervain-Shwgroc
327	(W)-10-Croot-Ciron-Cup-MM-Jpye-	327-(W)-10-Croot-Ciron-Cup-M	Big Bluestem	Andropogon gerardii	4	0.25	1	Grass	N	N		10	W	Croot-Ciron-Cup-MM-Jpye-Bvervain-Shwgroc
327	(W)-10-Croot-Ciron-Cup-MM-Jpye-	327-(W)-10-Croot-Ciron-Cup-M	Canada Wildrye	Elymus canadensis	8	0.5	1	Grass	N	N		10	W	Croot-Ciron-Cup-MM-Jpye-Bvervain-Shwgroc
327	(W)-10-Croot-Ciron-Cup-MM-Jpye-	327-(W)-10-Croot-Ciron-Cup-M	Indiangrass	Sorghastrum nutans	4	0.25	1.1	Grass	N	N		10	W	Croot-Ciron-Cup-MM-Jpye-Bvervain-Shwgroc
327	(W)-10-Croot-Ciron-Cup-MM-Jpye-	327-(W)-10-Croot-Ciron-Cup-M	Fowl Mannagrass	Glyceria striata	4	0.25	14.7	Grass	N	N		10	W	Croot-Ciron-Cup-MM-Jpye-Bvervain-Shwgroc
327	(W)-10-Croot-Ciron-Cup-MM-Jpye-	327-(W)-10-Croot-Ciron-Cup-M	Fox Sedge	Carex vulpinoidea	4	0.25	9.2	Sedge	N	N		10	W	Croot-Ciron-Cup-MM-Jpye-Bvervain-Shwgroc
327	(DM)-11-Pcinque-Lplant-SilkAster-I	327-(DM)-11-Pcinque-Lplant-Sil	Prairie Cinquefoil	Potentilla arguta	0.5	0.03	2.2	Forb	N	N		11	DM	Pcinque-Lplant-SilkAster-PPclover-Rblzstar-W
327	(DM)-11-Pcinque-Lplant-SilkAster-I	327-(DM)-11-Pcinque-Lplant-Sil	Leadplant	Amorpha canescens	1	0.06	0.4	Legume	N	N		11	DM	Pcinque-Lplant-SilkAster-PPclover-Rblzstar-W
327	(DM)-11-Pcinque-Lplant-SilkAster-I	327-(DM)-11-Pcinque-Lplant-Sil	Silky Aster	Symphyotrichum sericeum	1	0.06	1.3	Forb	N	N		11	DM	Pcinque-Lplant-SilkAster-PPclover-Rblzstar-W
327	(DM)-11-Pcinque-Lplant-SilkAster-I	327-(DM)-11-Pcinque-Lplant-Sil	Purple Prairie Clover	Dalea purpurea	4	0.25	1.8	Legume	N	N		11	DM	Pcinque-Lplant-SilkAster-PPclover-Rblzstar-W
327	(DM)-11-Pcinque-Lplant-SilkAster-I	327-(DM)-11-Pcinque-Lplant-Sil	Rough Blazing Star	Liatris aspera	1	0.06	0.3	Forb	N	N		11	DM	Pcinque-Lplant-SilkAster-PPclover-Rblzstar-W
327	(DM)-11-Pcinque-Lplant-SilkAster-I	327-(DM)-11-Pcinque-Lplant-Sil	Wild Lupine	Lupinus perennis	6	0.38	0.1	Legume	N	N		11	DM	Pcinque-Lplant-SilkAster-PPclover-Rblzstar-W
327	(DM)-11-Pcinque-Lplant-SilkAster-I	327-(DM)-11-Pcinque-Lplant-Sil	Bergamot	Monarda fistulosa	0.5	0.03	0.9	Forb	N	N		11	DM	Pcinque-Lplant-SilkAster-PPclover-Rblzstar-W
327	(DM)-11-Pcinque-Lplant-SilkAster-I	327-(DM)-11-Pcinque-Lplant-Sil	Yellow Coneflower	Ratibida pinnata	1	0.06	0.6	Forb	N	N		11	DM	Pcinque-Lplant-SilkAster-PPclover-Rblzstar-W
327	(DM)-11-Pcinque-Lplant-SilkAster-I	327-(DM)-11-Pcinque-Lplant-Sil	Stiff Goldenrod	Oligoneuron rigidum	1	0.06	1.1	Forb	N	N		11	DM	Pcinque-Lplant-SilkAster-PPclover-Rblzstar-W
327	(DM)-11-Pcinque-Lplant-SilkAster-I	327-(DM)-11-Pcinque-Lplant-Sil	Pale Purple Coneflower	Echinacea pallida	2	0.13	0.2	Forb	N	N		11	DM	Pcinque-Lplant-SilkAster-PPclover-Rblzstar-W
327	(DM)-11-Pcinque-Lplant-SilkAster-I	327-(DM)-11-Pcinque-Lplant-Sil	Sideoats Grama	Bouteloua curtipendula	20	1.25	3.7	Grass	N	N		11	DM	Pcinque-Lplant-SilkAster-PPclover-Rblzstar-W
327	(DM)-11-Pcinque-Lplant-SilkAster-I	327-(DM)-11-Pcinque-Lplant-Sil	Little Bluestem	Schizachyrium scoparium	24	1.5	8.3	Grass	N	N		11	DM	Pcinque-Lplant-SilkAster-PPclover-Rblzstar-W
327	(DM)-11-Pcinque-Lplant-SilkAster-I	327-(DM)-11-Pcinque-Lplant-Sil	Indiangrass	Sorghastrum nutans	8	0.5	2.2	Grass	N	N		11	DM	Pcinque-Lplant-SilkAster-PPclover-Rblzstar-W
327	(DM)-11-Pcinque-Lplant-SilkAster-I	327-(DM)-11-Pcinque-Lplant-Sil	Prairie Junegrass	Koeleria macrantha	1	0.06	3.3	Grass	N	N		11	DM	Pcinque-Lplant-SilkAster-PPclover-Rblzstar-W
327	(DM)-11-Pcinque-Lplant-SilkAster-I	327-(DM)-11-Pcinque-Lplant-Sil	Prairie Dropseed	Sporobolus heterolepis	2	0.13	0.7	Grass	N	N		11	DM	Pcinque-Lplant-SilkAster-PPclover-Rblzstar-W
327	(DM)-11-Pcinque-Lplant-SilkAster-I	327-(DM)-11-Pcinque-Lplant-Sil	Switchgrass	Panicum virgatum	4	0.25	2.2	Grass	N	N		11	DM	Pcinque-Lplant-SilkAster-PPclover-Rblzstar-W
327	(DM)-12-LB-Sgrama-0-Swort-PPclo	327-(DM)-12-LB-Sgrama-0-Swo	Little Bluestem	Schizachyrium scoparium	16	1	5.5	Grass	N	Y		12	DM	LB-Sgrama-0-Swort-PPclover-Ycone-Pblzstar-
327	(DM)-12-LB-Sgrama-0-Swort-PPclo	327-(DM)-12-LB-Sgrama-0-Swo	Sideoats Grama	Bouteloua curtipendula	16	1	2.2	Grass	N	Y		12	DM	LB-Sgrama-0-Swort-PPclover-Ycone-Pblzstar-
327	(DM)-12-LB-Sgrama-0-Swort-PPclo	327-(DM)-12-LB-Sgrama-0-Swo	Illinois Tick Trefoil	Desmodium illinoense	5	0.31	0.5	Legume	N	Y		12	DM	LB-Sgrama-0-Swort-PPclover-Ycone-Pblzstar-
327	(DM)-12-LB-Sgrama-0-Swort-PPclo	327-(DM)-12-LB-Sgrama-0-Swo	Spiderwort	Tradescantia ohiensis	5	0.31	0.9	Forb	N	Y		12	DM	LB-Sgrama-0-Swort-PPclover-Ycone-Pblzstar-
327	(DM)-12-LB-Sgrama-0-Swort-PPclo	327-(DM)-12-LB-Sgrama-0-Swo	Purple Prairie Clover	Dalea purpurea	6	0.38	2.7	Legume	N	Y		12	DM	LB-Sgrama-0-Swort-PPclover-Ycone-Pblzstar-
327	(DM)-12-LB-Sgrama-0-Swort-PPclo	327-(DM)-12-LB-Sgrama-0-Swo	Yellow Coneflower	Ratibida pinnata	1	0.06	0.6	Forb	N	Y		12	DM	LB-Sgrama-0-Swort-PPclover-Ycone-Pblzstar-
327	(DM)-12-LB-Sgrama-0-Swort-PPclo	327-(DM)-12-LB-Sgrama-0-Swo	Prairie Blazing Star	Liatris pycnostachya	3	0.19	0.8	Forb	N	Y		12	DM	LB-Sgrama-0-Swort-PPclover-Ycone-Pblzstar-
327	(DM)-12-LB-Sgrama-0-Swort-PPclo	327-(DM)-12-LB-Sgrama-0-Swo	Rattlesnake Master	Eryngium yuccifolium	6	0.38	1.1	Forb	N	Y		12	DM	LB-Sgrama-0-Swort-PPclover-Ycone-Pblzstar-
327	(DM)-12-LB-Sgrama-0-Swort-PPclo	327-(DM)-12-LB-Sgrama-0-Swo	Showy Goldenrod	Solidago speciosa	4	0.25	8.7	Forb	N	Y		12	DM	LB-Sgrama-0-Swort-PPclover-Ycone-Pblzstar-
327	(DM)-12-LB-Sgrama-0-Swort-PPclo	327-(DM)-12-LB-Sgrama-0-Swo	Stiff Goldenrod	Oligoneuron rigidum	3	0.19	3.2	Forb	N	Y		12	DM	LB-Sgrama-0-Swort-PPclover-Ycone-Pblzstar-
327	(DM)-12-LB-Sgrama-0-Swort-PPclo	327-(DM)-12-LB-Sgrama-0-Swo	Smooth Blue Aster	Symphyotricum laeve	2	0.13	2.2	Forb	N	Y		12	DM	LB-Sgrama-0-Swort-PPclover-Ycone-Pblzstar-
327	(DM)-12-LB-Sgrama-0-Swort-PPclo	327-(DM)-12-LB-Sgrama-0-Swo	Prairie Cinquefoil	Potentilla arguta	2	0.13	9.2	Forb	N	Y		12	DM	LB-Sgrama-0-Swort-PPclover-Ycone-Pblzstar-
327	(M)-13-LB-Sgrama-Fbtongue-Swort-	327-(M)-13-LB-Sgrama-Fbtongu	Little Bluestem	Schizachyrium scoparium	16	1	5.5	Grass	N	Y		13	M	LB-Sgrama-Fbtongue-Swort-Galex-Ycone-PPc
327	(M)-13-LB-Sgrama-Fbtongue-Swort-	327-(M)-13-LB-Sgrama-Fbtongu	Sideoats Grama	Bouteloua curtipendula	16	1	2.2	Grass	N	Y		13	M	LB-Sgrama-Fbtongue-Swort-Galex-Ycone-PPc
327	(M)-13-LB-Sgrama-Fbtongue-Swort-	327-(M)-13-LB-Sgrama-Fbtongu	Foxglove Beardtongue	Penstemon digitalis	4	0.25	10.6	Forb	N	Y		13	M	LB-Sgrama-Fbtongue-Swort-Galex-Ycone-PPc
327	(M)-13-LB-Sgrama-Fbtongue-Swort-	327-(M)-13-LB-Sgrama-Fbtongu	Spiderwort	Tradescantia ohiensis	6	0.38	1.1	Forb	N	Y		13	M	LB-Sgrama-Fbtongue-Swort-Galex-Ycone-PPc
327	(M)-13-LB-Sgrama-Fbtongue-Swort-	327-(M)-13-LB-Sgrama-Fbtongu	Golden Alexanders	Zizia aurea	6	0.38	1.5	Forb	N	Y		13	M	LB-Sgrama-Fbtongue-Swort-Galex-Ycone-PPc
327	(M)-13-LB-Sgrama-Fbtongue-Swort-	327-(M)-13-LB-Sgrama-Fbtongu	Yellow Coneflower	Ratibida pinnata	1	0.06	0.6	Forb	N	Y		13	M	LB-Sgrama-Fbtongue-Swort-Galex-Ycone-PPc
327	(M)-13-LB-Sgrama-Fbtongue-Swort-	327-(M)-13-LB-Sgrama-Fbtongu	Purple Prairie Clover	Dalea purpurea	6	0.38	2.7	Legume	N	Y		13	M	LB-Sgrama-Fbtongue-Swort-Galex-Ycone-PPc
327	(M)-13-LB-Sgrama-Fbtongue-Swort-	327-(M)-13-LB-Sgrama-Fbtongu	Prairie Blazing Star	Liatris pycnostachya	4	0.25	1.1	Forb	N	Y		13	M	LB-Sgrama-Fbtongue-Swort-Galex-Ycone-PPc
327	(M)-13-LB-Sgrama-Fbtongue-Swort-	327-(M)-13-LB-Sgrama-Fbtongu	Rattlesnake Master	Eryngium yuccifolium	6	0.38	1.1	Forb	N	Y		13	M	LB-Sgrama-Fbtongue-Swort-Galex-Ycone-PPc
327	(M)-13-LB-Sgrama-Fbtongue-Swort-	327-(M)-13-LB-Sgrama-Fbtongu	New England Aster	Symphyotrichum novae-angliae	3	0.19	4.8	Forb	N	Y		13	M	LB-Sgrama-Fbtongue-Swort-Galex-Ycone-PPc
327	(M)-13-LB-Sgrama-Fbtongue-Swort-	327-(M)-13-LB-Sgrama-Fbtongu	Stiff Goldenrod	Oligoneuron rigidum	3	0.19	3.2	Forb	N	Y		13	M	LB-Sgrama-Fbtongue-Swort-Galex-Ycone-PPc
327	(M)-13-LB-Sgrama-Fbtongue-Swort-	327-(M)-13-LB-Sgrama-Fbtongu	Smooth Blue Aster	Symphyotrichum laeve	3	0.19	3.3	Forb	N	Y		13	M	LB-Sgrama-Fbtongue-Swort-Galex-Ycone-PPc
327	(WM)-14-BB-Indian-Fbtongue-Swor	327-(WM)-14-BB-Indian-Fbtong	Big Bluestem	Andropogon gerardii	16	1	3.8	Grass	N	Y		14	WM	BB-Indian-Fbtongue-Swort-Galex-Ycone-Pblz
327	(WM)-14-BB-Indian-Fbtongue-Swor	327-(WM)-14-BB-Indian-Fbtong	Indiangrass	Sorghastrum nutans	16	1	4.4	Grass	N	Y		14	WM	BB-Indian-Fbtongue-Swort-Galex-Ycone-Pblz
327	(WM)-14-BB-Indian-Fbtongue-Swor	327-(WM)-14-BB-Indian-Fbtong	Foxglove Beardtongue	Penstemon digitalis	4	0.25	10.6	Forb	N	Y		14	WM	BB-Indian-Fbtongue-Swort-Galex-Ycone-Pblz
327	(WM)-14-BB-Indian-Fbtongue-Swor	327-(WM)-14-BB-Indian-Fbtong	Spiderwort	Tradescantia ohiensis	6	0.38	1.1	Forb	N	Y		14	WM	BB-Indian-Fbtongue-Swort-Galex-Ycone-Pblz
327	(WM)-14-BB-Indian-Fbtongue-Swor	327-(WM)-14-BB-Indian-Fbtong	Golden Alexanders	Zizia aurea	5	0.31	1.3	Forb	N	Y		14	WM	BB-Indian-Fbtongue-Swort-Galex-Ycone-Pblz
327	(WM)-14-BB-Indian-Fbtongue-Swor	327-(WM)-14-BB-Indian-Fbtong	Yellow Coneflower	Ratibida pinnata	1	0.06	0.6	Forb	N	Y		14	WM	BB-Indian-Fbtongue-Swort-Galex-Ycone-Pblz
327	(WM)-14-BB-Indian-Fbtongue-Swor	327-(WM)-14-BB-Indian-Fbtong	Prairie Blazing Star	Liatris pycnostachya	3	0.19	0.8	Forb	N	Y		14	WM	BB-Indian-Fbtongue-Swort-Galex-Ycone-Pblz
327	(WM)-14-BB-Indian-Fbtongue-Swor	327-(WM)-14-BB-Indian-Fbtong	Rattlesnake Master	Eryngium yuccifolium	6	0.38	1.1	Forb	N	Y		14	WM	BB-Indian-Fbtongue-Swort-Galex-Ycone-Pblz
327	(WM)-14-BB-Indian-Fbtongue-Swor	327-(WM)-14-BB-Indian-Fbtong	New England Aster	Symphyotrichum novae-angliae	3	0.19	4.8	Forb	N	Y		14	WM	BB-Indian-Fbtongue-Swort-Galex-Ycone-Pblz
327	(WM)-14-BB-Indian-Fbtongue-Swor	327-(WM)-14-BB-Indian-Fbtong	Blue Vervain	Verbena hastata	4	0.25	8.5	Forb	N	Y		14	WM	BB-Indian-Fbtongue-Swort-Galex-Ycone-Pblz

327	(WM)-14-BB-Indian-Fbtongue-Swor	327-(WM)-14-BB-Indian-Fbtongu	Common Ironweed	Vernonia fasciculata	3	0.19	1.4	Forb	N	Y		14	WM	BB-Indian-Fbtongue-Swort-Galex-Ycone-Pblz
327	(WM)-14-BB-Indian-Fbtongue-Swor	327-(WM)-14-BB-Indian-Fbtongu	Cupplant	Silphium perfoliatum	3	0.19	0.1	Forb	N	Y		14	WM	BB-Indian-Fbtongue-Swort-Galex-Ycone-Pblz
327	(D-W)-15A-Switch	327-(D-W)-15A-Switch	Switchgrass	Panicum virgatum	112	7	63	Grass	N	N		15A	D-W	Switch
327	(D-W)-15B-BB	327-(D-W)-15B-BB	Big Bluestem	Andropogon gerardii	176	11	42	Grass	N	N		15B	D-W	BB
327	(D-W)-15C-Indian	327-(D-W)-15C-Indian	Indiangrass	Sorghastrum nutans	160	10	44	Grass	N	N		15C	D-W	Indian
327	(DM-M)-16A-SB-Tim-Alf	327-(DM-M)-16A-SB-Tim-Alf	Smooth Bromegrass	Bromus inermis	48	3	9	Grass	I	N		16A	DM-M	SB-Tim-Alf
327	(DM-M)-16A-SB-Tim-Alf	327-(DM-M)-16A-SB-Tim-Alf	Timothy	Phleum pratense	40	2.5	71	Grass	I	N		16A	DM-M	SB-Tim-Alf
327	(DM-M)-16A-SB-Tim-Alf	327-(DM-M)-16A-SB-Tim-Alf	Alfalfa	Medicago sativa	96	6	30	Legume	I	N		16A	DM-M	SB-Tim-Alf
327	(M-W)-16B-Orc-Tim-RC	327-(M-W)-16B-Orc-Tim-RC	Orchardgrass	Dactylis glomerata L.	32	2	30	Grass	I	N		16B	M-W	Orc-Tim-RC
327	(M-W)-16B-Orc-Tim-RC	327-(M-W)-16B-Orc-Tim-RC	Timothy	Phleum pratense	32	2	57	Grass	I	N		16B	M-W	Orc-Tim-RC
327	(M-W)-16B-Orc-Tim-RC	327-(M-W)-16B-Orc-Tim-RC	Red Clover	Trifolium pratense	80	5	30	Legume	I	N		16B	M-W	Orc-Tim-RC
327	(DM-M)-16C-Orc-Tim-Alf	327-(DM-M)-16C-Orc-Tim-Alf	Orchardgrass	Dactylis glomerata L.	32	2	30	Grass	I	N		16C	DM-M	Orc-Tim-Alf
327	(DM-M)-16C-Orc-Tim-Alf	327-(DM-M)-16C-Orc-Tim-Alf	Timothy	Phleum pratense	32	2	57	Grass	I	N		16C	DM-M	Orc-Tim-Alf
327	(DM-M)-16C-Orc-Tim-Alf	327-(DM-M)-16C-Orc-Tim-Alf	Alfalfa	Medicago sativa	96	6	30	Legume	I	N		16C	DM-M	Orc-Tim-Alf
327	(M-WM)-16D-SB-Tim-RC	327-(M-WM)-16D-SB-Tim-RC	Smooth Bromegrass	Bromus inermis	48	3	9	Grass	I	N		16D	M-WM	SB-Tim-RC
327	(M-WM)-16D-SB-Tim-RC	327-(M-WM)-16D-SB-Tim-RC	Timothy	Phleum pratense	40	2.5	71	Grass	I	N		16D	M-WM	SB-Tim-RC
327	(M-WM)-16D-SB-Tim-RC	327-(M-WM)-16D-SB-Tim-RC	Red Clover	Trifolium pratense	80	5	30	Legume	I	N		16D	M-WM	SB-Tim-RC
327	(M-WM)-16E-SB-Tim-Orc-RC-Lad(	327-(M-WM)-16E-SB-Tim-Orc-I	Smooth Bromegrass	Bromus inermis	32	2	6	Grass	I	N		16E	M-WM	SB-Tim-Orc-RC-LadC
327	(M-WM)-16E-SB-Tim-Orc-RC-Lad(	327-(M-WM)-16E-SB-Tim-Orc-I	Timothy	Phleum pratense	32	2	57	Grass	I	N		16E	M-WM	SB-Tim-Orc-RC-LadC
327	(M-WM)-16E-SB-Tim-Orc-RC-Lad(	327-(M-WM)-16E-SB-Tim-Orc-I	Orchardgrass	Dactylis glomerata L.	16	1	15	Grass	I	N		16E	M-WM	SB-Tim-Orc-RC-LadC
327	(M-WM)-16E-SB-Tim-Orc-RC-Lad(	327-(M-WM)-16E-SB-Tim-Orc-I	Red Clover	Trifolium pratense	80	5	30	Legume	I	N		16E	M-WM	SB-Tim-Orc-RC-LadC
327	(M-WM)-16E-SB-Tim-Orc-RC-Lad(	327-(M-WM)-16E-SB-Tim-Orc-I	White Ladino Clover	Trifolium repens	8	0.5	10	Legume	I	N		16E	M-WM	SB-Tim-Orc-RC-LadC
327	(M-WM)-16F-Orc-Tim-RC-LadC	327-(M-WM)-16F-Orc-Tim-RC-I	Orchardgrass	Dactylis glomerata L.	32	2	30	Grass	I	N		16F	M-WM	Orc-Tim-RC-LadC
327	(M-WM)-16F-Orc-Tim-RC-LadC	327-(M-WM)-16F-Orc-Tim-RC-I	Timothy	Phleum pratense	32	2	57	Grass	I	N		16F	M-WM	Orc-Tim-RC-LadC
327	(M-WM)-16F-Orc-Tim-RC-LadC	327-(M-WM)-16F-Orc-Tim-RC-I	Red Clover	Trifolium pratense	80	5	30	Legume	I	N		16F	M-WM	Orc-Tim-RC-LadC
327	(M-WM)-16F-Orc-Tim-RC-LadC	327-(M-WM)-16F-Orc-Tim-RC-I	White Ladino Clover	Trifolium repens	8	0.5	10	Legume	I	N		16F	M-WM	Orc-Tim-RC-LadC
327	(DM-WM)-16G-Orc-Tim-Btrefoil	327-(DM-WM)-16G-Orc-Tim-Bt	Orchardgrass	Dactylis glomerata L.	32	2	30	Grass	I	N		16G	DM-WM	Orc-Tim-Btrefoil
327	(DM-WM)-16G-Orc-Tim-Btrefoil	327-(DM-WM)-16G-Orc-Tim-Bt	Timothy	Phleum pratense	32	2	57	Grass	I	N		16G	DM-WM	Orc-Tim-Btrefoil
327	(DM-WM)-16G-Orc-Tim-Btrefoil	327-(DM-WM)-16G-Orc-Tim-Bt	Birdsfoot Trefoil	Lotus corniculatus	64	4	36	Legume	I	N		16G	DM-WM	Orc-Tim-Btrefoil
327	(M-WM)-16H-Tfesc-Tim-RC-LadC	327-(M-WM)-16H-Tfesc-Tim-RC	Tall Fescue	Schedonorus arundinaceus	48	3	15	Grass	I	N		16H	M-WM	Tfesc-Tim-RC-LadC
327	(M-WM)-16H-Tfesc-Tim-RC-LadC	327-(M-WM)-16H-Tfesc-Tim-RC	Timothy	Phleum pratense	32	2	57	Grass	I	N		16H	M-WM	Tfesc-Tim-RC-LadC
327	(M-WM)-16H-Tfesc-Tim-RC-LadC	327-(M-WM)-16H-Tfesc-Tim-RC	Red Clover	Trifolium pratense	64	4	24	Legume	I	N		16H	M-WM	Tfesc-Tim-RC-LadC
327	(M-WM)-16H-Tfesc-Tim-RC-LadC	327-(M-WM)-16H-Tfesc-Tim-RC	White Ladino Clover	Trifolium repens	16	1	20	Legume	I	N		16H	M-WM	Tfesc-Tim-RC-LadC
327	(DM-M)-17A-Orc-Tim-Alf-LadC	327-(DM-M)-17A-Orc-Tim-Alf-I	Orchardgrass	Dactylis glomerata L.	16	1	15	Grass	I	Y		17A	DM-M	Orc-Tim-Alf-LadC
327	(DM-M)-17A-Orc-Tim-Alf-LadC	327-(DM-M)-17A-Orc-Tim-Alf-I	Timothy	Phleum pratense	8	0.5	14	Grass	I	Y		17A	DM-M	Orc-Tim-Alf-LadC
327	(DM-M)-17A-Orc-Tim-Alf-LadC	327-(DM-M)-17A-Orc-Tim-Alf-I	Alfalfa	Medicago sativa	64	4	20	Legume	I	Y		17A	DM-M	Orc-Tim-Alf-LadC
327	(DM-M)-17A-Orc-Tim-Alf-LadC	327-(DM-M)-17A-Orc-Tim-Alf-I	White Ladino Clover	Trifolium repens	24	1.5	30	Legume	I	Y		17A	DM-M	Orc-Tim-Alf-LadC
327	(WM-W)-17B-Prye-Tfesc-RC-Aclov	327-(WM-W)-17B-Prye-Tfesc-R	Perennial Ryegrass	Lolium perenne	48	3	15	Grass	I	Y		17B	WM-W	Prye-Tfesc-RC-Aclover
327	(WM-W)-17B-Prye-Tfesc-RC-Aclov	327-(WM-W)-17B-Prye-Tfesc-R	Tall Fescue	Schedonorus arundinaceus	48	3	15	Grass	I	Y		17B	WM-W	Prye-Tfesc-RC-Aclover
327	(WM-W)-17B-Prye-Tfesc-RC-Aclov	327-(WM-W)-17B-Prye-Tfesc-R	Red Clover	Trifolium pratense	64	4	20	Legume	I	Y		17B	WM-W	Prye-Tfesc-RC-Aclover
327	(WM-W)-17B-Prye-Tfesc-RC-Aclov	327-(WM-W)-17B-Prye-Tfesc-R	Alsike Clover	Trifolium hybridum	24	1.5	23.4	Legume	I	X		17B	WM-W	Prye-Tfesc-RC-Aclover

STANDARD 342 MIXES REVISION DATE: 1/23/2013

criteria 0

STD	Mix #	std-mix	Common Name	Scientific Name	PLS (oz./A)	PLS (lbs./A)	Seeds/Square Foot	Type	Intro / Native	Poll. (Y/N)		Mix No.	MR	Mix Components
	No 342 mixes meet this criterion	LEAVE THIS ROW AS IS							N	Y				
	No 342 mixes meet this criterion	LEAVE THIS ROW AS IS							N	N				
		LEAVE THIS ROW AS IS							I	Y				
342	(DM-M)-1-SB-Crfesc-KB-Alf-R	342-(DM-M)-1-SB-Crfesc-KB	Smooth Bromegrass	Bromus inermis	160.0	10	30	Grass	I	N		1	DM-M	SB-Crfesc-KB-Alf-RC
342	(DM-M)-1-SB-Crfesc-KB-Alf-R	342-(DM-M)-1-SB-Crfesc-KB	Creeping Red Fescue	Festuca rubra	48.0	3	24	Grass	I	N		1	DM-M	SB-Crfesc-KB-Alf-RC
342	(DM-M)-1-SB-Crfesc-KB-Alf-R	342-(DM-M)-1-SB-Crfesc-KB	Kentucky Bluegrass	Poa pratensis	24.0	1.5	75	Grass	I	N		1	DM-M	SB-Crfesc-KB-Alf-RC
342	(DM-M)-1-SB-Crfesc-KB-Alf-R	342-(DM-M)-1-SB-Crfesc-KB	Alfalfa	Medicago sativa	48.0	3	15	Legume	I	N		1	DM-M	SB-Crfesc-KB-Alf-RC
342	(DM-M)-1-SB-Crfesc-KB-Alf-R	342-(DM-M)-1-SB-Crfesc-KB	Red Clover	Trifolium pratense	48.0	3	18	Legume	I	N		1	DM-M	SB-Crfesc-KB-Alf-RC
342	(DM-M)-2-SB-Tim-Alf	342-(DM-M)-2-SB-Tim-Alf	Smooth Bromegrass	Bromus inermis	240.0	15	46	Grass	I	N		2	DM-M	SB-Tim-Alf
342	(DM-M)-2-SB-Tim-Alf	342-(DM-M)-2-SB-Tim-Alf	Timothy	Phleum pratense	48.0	3	84	Grass	I	N		2	DM-M	SB-Tim-Alf
342	(DM-M)-2-SB-Tim-Alf	342-(DM-M)-2-SB-Tim-Alf	Alfalfa	Medicago sativa	112.0	7	35	Legume	I	N		2	DM-M	SB-Tim-Alf
342	(DM-M)-3-SB-Prye-Tfesc-Tim-I	342-(DM-M)-3-SB-Prye-Tfesc	Smooth Bromegrass	Bromus inermis	160.0	10	30	Grass	I	N		3	DM-M	SB-Prye-Tfesc-Tim-KB
342	(DM-M)-3-SB-Prye-Tfesc-Tim-I	342-(DM-M)-3-SB-Prye-Tfesc	Perennial Ryegrass	Lolium perenne	80.0	5	25	Grass	I	N		3	DM-M	SB-Prye-Tfesc-Tim-KB
342	(DM-M)-3-SB-Prye-Tfesc-Tim-I	342-(DM-M)-3-SB-Prye-Tfesc	Tall Fescue	Schedonorus arundinaceus	32.0	2	10	Grass	I	N		3	DM-M	SB-Prye-Tfesc-Tim-KB
342	(DM-M)-3-SB-Prye-Tfesc-Tim-I	342-(DM-M)-3-SB-Prye-Tfesc	Timothy	Phleum pratense	32.0	2	57	Grass	I	N		3	DM-M	SB-Prye-Tfesc-Tim-KB
342	(DM-M)-3-SB-Prye-Tfesc-Tim-I	342-(DM-M)-3-SB-Prye-Tfesc	Kentucky Bluegrass	Poa pratensis	16.0	1	50	Grass	I	N		3	DM-M	SB-Prye-Tfesc-Tim-KB
342	(DM-M)-4-SB-Crfesc-Alf-RC	342-(DM-M)-4-SB-Crfesc-Alf	Smooth Bromegrass	Bromus inermis	320.0	20	62	Grass	I	N		4	DM-M	SB-Crfesc-Alf-RC
342	(DM-M)-4-SB-Crfesc-Alf-RC	342-(DM-M)-4-SB-Crfesc-Alf	Creeping Red Fescue	Festuca rubra	80.0	5	40	Grass	I	N		4	DM-M	SB-Crfesc-Alf-RC
342	(DM-M)-4-SB-Crfesc-Alf-RC	342-(DM-M)-4-SB-Crfesc-Alf	Alfalfa	Medicago sativa	128.0	8	40	Legume	I	N		4	DM-M	SB-Crfesc-Alf-RC
342	(DM-M)-4-SB-Crfesc-Alf-RC	342-(DM-M)-4-SB-Crfesc-Alf	Red Clover	Trifolium pratense	64.0	4	24	Legume	I	N		4	DM-M	SB-Crfesc-Alf-RC
342	(DM-M)-5-SB-Alf	342-(DM-M)-5-SB-Alf	Smooth Bromegrass	Bromus inermis	480.0	30	93	Grass	I	N		5	DM-M	SB-Alf
342	(DM-M)-5-SB-Alf	342-(DM-M)-5-SB-Alf	Alfalfa	Medicago sativa	224.0	14	70	Legume	I	N		5	DM-M	SB-Alf
342	(DM-WM)-6-SB-Prye-Tim-Crfe	342-(DM-WM)-6-SB-Prye-Tim	Smooth Bromegrass	Bromus inermis	112.0	7	21	Grass	I	N		6	DM-WM	SB-Prye-Tim-Crfesc-KB-RC
342	(DM-WM)-6-SB-Prye-Tim-Crfe	342-(DM-WM)-6-SB-Prye-Tim	Perennial Ryegrass	Lolium perenne	48.0	3	15	Grass	I	N		6	DM-WM	SB-Prye-Tim-Crfesc-KB-RC
342	(DM-WM)-6-SB-Prye-Tim-Crfe	342-(DM-WM)-6-SB-Prye-Tim	Timothy	Phleum pratense	32.0	2	57	Grass	I	N		6	DM-WM	SB-Prye-Tim-Crfesc-KB-RC
342	(DM-WM)-6-SB-Prye-Tim-Crfe	342-(DM-WM)-6-SB-Prye-Tim	Creeping Red Fescue	Festuca rubra	16.0	1	8	Grass	I	N		6	DM-WM	SB-Prye-Tim-Crfesc-KB-RC
342	(DM-WM)-6-SB-Prye-Tim-Crfe	342-(DM-WM)-6-SB-Prye-Tim	Kentucky Bluegrass	Poa pratensis	16.0	1	50	Grass	I	N		6	DM-WM	SB-Prye-Tim-Crfesc-KB-RC
342	(DM-WM)-6-SB-Prye-Tim-Crfe	342-(DM-WM)-6-SB-Prye-Tim	Red Clover	Trifolium pratense	48.0	3	18	Legume	I	N		6	DM-WM	SB-Prye-Tim-Crfesc-KB-RC
342	(M)-7-SB-KB-Crfesc-Btrefoil	342-(M)-7-SB-KB-Crfesc-Btre	Smooth Bromegrass	Bromus inermis	112.0	7	21	Grass	I	N		7	M	SB-KB-Crfesc-Btrefoil
342	(M)-7-SB-KB-Crfesc-Btrefoil	342-(M)-7-SB-KB-Crfesc-Btre	Kentucky Bluegrass	Poa pratensis	48.0	3	150	Grass	I	N		7	M	SB-KB-Crfesc-Btrefoil
342	(M)-7-SB-KB-Crfesc-Btrefoil	342-(M)-7-SB-KB-Crfesc-Btre	Creeping Red Fescue	Festuca rubra	32.0	2	16	Grass	I	N		7	M	SB-KB-Crfesc-Btrefoil
342	(M)-7-SB-KB-Crfesc-Btrefoil	342-(M)-7-SB-KB-Crfesc-Btre	Birdsfoot Trefoil	Lotus corniculatus	32.0	2	18	Legume	I	N		7	M	SB-KB-Crfesc-Btrefoil
342	(M)-8-SB-Crfesc-KB	342-(M)-8-SB-Crfesc-KB	Smooth Bromegrass	Bromus inermis	240.0	15	45	Grass	I	N		8	M	SB-Crfesc-KB
342	(M)-8-SB-Crfesc-KB	342-(M)-8-SB-Crfesc-KB	Creeping Red Fescue	Festuca rubra	32.0	2	16	Grass	I	N		8	M	SB-Crfesc-KB
342	(M)-8-SB-Crfesc-KB	342-(M)-8-SB-Crfesc-KB	Kentucky Bluegrass	Poa pratensis	32.0	2	100	Grass	I	N		8	M	SB-Crfesc-KB
342	(M)-9-Prye-Crfesc-KB	342-(M)-9-Prye-Crfesc-KB	Perennial Ryegrass	Lolium perenne	160.0	10	50	Grass	I	N		9	M	Prye-Crfesc-KB
342	(M)-9-Prye-Crfesc-KB	342-(M)-9-Prye-Crfesc-KB	Creeping Red Fescue	Festuca rubra	64.0	4	32	Grass	I	N		9	M	Prye-Crfesc-KB
342	(M)-9-Prye-Crfesc-KB	342-(M)-9-Prye-Crfesc-KB	Kentucky Bluegrass	Poa pratensis	48.0	3	150	Grass	I	N		9	M	Prye-Crfesc-KB
342	(M)-10-SB-Prye-Tim-RC	342-(M)-10-SB-Prye-Tim-RC	Smooth Bromegrass	Bromus inermis	224.0	14	42	Grass	I	N		10	M	SB-Prye-Tim-RC
342	(M)-10-SB-Prye-Tim-RC	342-(M)-10-SB-Prye-Tim-RC	Perennial Ryegrass	Lolium perenne	64.0	4	20	Grass	I	N		10	M	SB-Prye-Tim-RC
342	(M)-10-SB-Prye-Tim-RC	342-(M)-10-SB-Prye-Tim-RC	Timothy	Phleum pratense	48.0	3	84	Grass	I	N		10	M	SB-Prye-Tim-RC
342	(M)-10-SB-Prye-Tim-RC	342-(M)-10-SB-Prye-Tim-RC	Red Clover	Trifolium pratense	48.0	3	18	Legume	I	N		10	M	SB-Prye-Tim-RC
342	(M)-11-SB-Crfesc	342-(M)-11-SB-Crfesc	Smooth Bromegrass	Bromus inermis	512.0	32	96	Grass	I	N		11	M	SB-Crfesc
342	(M)-11-SB-Crfesc	342-(M)-11-SB-Crfesc	Creeping Red Fescue	Festuca rubra	128.0	8	64	Grass	I	N		11	M	SB-Crfesc
342	(M)-12-KB-Crfesc	342-(M)-12-KB-Crfesc	Kentucky Bluegrass	Poa pratensis	64.0	4	200	Grass	I	N		12	M	KB-Crfesc
342	(M)-12-KB-Crfesc	342-(M)-12-KB-Crfesc	Creeping Red Fescue	Festuca rubra	48.0	3	24	Grass	I	N		12	M	KB-Crfesc
342	(M)-13-SB-Tim-RC	342-(M)-13-SB-Tim-RC	Smooth Bromegrass	Bromus inermis	224.0	14	43	Grass	I	N		13	M	SB-Tim-RC
342	(M)-13-SB-Tim-RC	342-(M)-13-SB-Tim-RC	Timothy	Phleum pratense	64.0	4	112	Grass	I	N		13	M	SB-Tim-RC
342	(M)-13-SB-Tim-RC	342-(M)-13-SB-Tim-RC	Red Clover	Trifolium pratense	48.0	3	18	Legume	I	N		13	M	SB-Tim-RC
342	(M)-14-SB-Tim-Aclover	342-(M)-14-SB-Tim-Aclover	Smooth Bromegrass	Bromus inermis	240.0	15	43	Grass	I	N		14	M	SB-Tim-Aclover
342	(M)-14-SB-Tim-Aclover	342-(M)-14-SB-Tim-Aclover	Timothy	Phleum pratense	56.0	3.5	112	Grass	I	N		14	M	SB-Tim-Aclover
342	(M)-14-SB-Tim-Aclover	342-(M)-14-SB-Tim-Aclover	Alsike Clover	Trifolium hybridum	32.0	2	32	Legume	I	N		14	M	SB-Tim-Aclover
342	(M)-15-SB-Tim-Btrefoil	342-(M)-15-SB-Tim-Btrefoil	Smooth Bromegrass	Bromus inermis	240.0	15	43	Grass	I	N		15	M	SB-Tim-Btrefoil
342	(M)-15-SB-Tim-Btrefoil	342-(M)-15-SB-Tim-Btrefoil	Timothy	Phleum pratense	56.0	3.5	112	Grass	I	N		15	M	SB-Tim-Btrefoil
342	(M)-15-SB-Tim-Btrefoil	342-(M)-15-SB-Tim-Btrefoil	Birdsfoot Trefoil	Lotus corniculatus	48.0	3	26	Legume	I	N		15	M	SB-Tim-Btrefoil
342	(WM)-16-SB-Tfesc-Prye-Tim-K	342-(WM)-16-SB-Tfesc-Prye-	Smooth Bromegrass	Bromus inermis	96.0	6	18	Grass	I	N		16	WM	SB-Tfesc-Prye-Tim-KB-RC
342	(WM)-16-SB-Tfesc-Prye-Tim-K	342-(WM)-16-SB-Tfesc-Prye-	Tall Fescue	Schedonorus arundinaceus	80.0	5	25	Grass	I	N		16	WM	SB-Tfesc-Prye-Tim-KB-RC
342	(WM)-16-SB-Tfesc-Prye-Tim-K	342-(WM)-16-SB-Tfesc-Prye-	Perennial Ryegrass	Lolium perenne	48.0	3	15	Grass	I	N		16	WM	SB-Tfesc-Prye-Tim-KB-RC
342	(WM)-16-SB-Tfesc-Prye-Tim-K	342-(WM)-16-SB-Tfesc-Prye-	Timothy	Phleum pratense	48.0	3	84	Grass	I	N		16	WM	SB-Tfesc-Prye-Tim-KB-RC
342	(WM)-16-SB-Tfesc-Prye-Tim-K	342-(WM)-16-SB-Tfesc-Prye-	Kentucky Bluegrass	Poa pratensis	32.0	2	100	Grass	I	N		16	WM	SB-Tfesc-Prye-Tim-KB-RC
342	(WM)-16-SB-Tfesc-Prye-Tim-K	342-(WM)-16-SB-Tfesc-Prye-	Red Clover	Trifolium pratense	48.0	3	18	Legume	I	N		16	WM	SB-Tfesc-Prye-Tim-KB-RC
342	(WM)-17-Rtop-Tim-RC	342-(WM)-17-Rtop-Tim-RC	Redtop	Agrostis gigantea	16.0	1	114	Grass	I	N		17	WM	Rtop-Tim-RC
342	(WM)-17-Rtop-Tim-RC	342-(WM)-17-Rtop-Tim-RC	Timothy	Phleum pratense	48.0	3	84	Grass	I	N		17	WM	Rtop-Tim-RC
342	(WM)-17-Rtop-Tim-RC	342-(WM)-17-Rtop-Tim-RC	Red Clover	Trifolium pratense	80.0	5	30	Legume	I	N		17	WM	Rtop-Tim-RC
342	(WM)-18-SB-Tim-Prye-KB-RC	342-(WM)-18-SB-Tim-Prye-K	Smooth Bromegrass	Bromus inermis	96.0	6	18	Grass	I	N		18	WM	SB-Tim-Prye-KB-RC
342	(WM)-18-SB-Tim-Prye-KB-RC	342-(WM)-18-SB-Tim-Prye-K	Timothy	Phleum pratense	48.0	3	84	Grass	I	N		18	WM	SB-Tim-Prye-KB-RC
342	(WM)-18-SB-Tim-Prye-KB-RC	342-(WM)-18-SB-Tim-Prye-K	Perennial Ryegrass	Lolium perenne	48.0	3	15	Grass	I	N		18	WM	SB-Tim-Prye-KB-RC
342	(WM)-18-SB-Tim-Prye-KB-RC	342-(WM)-18-SB-Tim-Prye-K	Kentucky Bluegrass	Poa pratensis	32.0	2	100	Grass	I	N		18	WM	SB-Tim-Prye-KB-RC
342	(WM)-18-SB-Tim-Prye-KB-RC	342-(WM)-18-SB-Tim-Prye-K	Red Clover	Trifolium pratense	48.0	3	18	Legume	I	N		18	WM	SB-Tim-Prye-KB-RC
342	(WM)-19-KB-Rtop-Tim-RC	342-(WM)-19-KB-Rtop-Tim-R	Kentucky Bluegrass	Poa pratensis	32.0	2	100	Grass	I	N		19	WM	KB-Rtop-Tim-RC
342	(WM)-19-KB-Rtop-Tim-RC	342-(WM)-19-KB-Rtop-Tim-R	Redtop	Agrostis gigantea	16.0	1	114	Grass	I	N		19	WM	KB-Rtop-Tim-RC
342	(WM)-19-KB-Rtop-Tim-RC	342-(WM)-19-KB-Rtop-Tim-R	Timothy	Phleum pratense	16.0	1	28	Grass	I	N		19	WM	KB-Rtop-Tim-RC
342	(WM)-19-KB-Rtop-Tim-RC	342-(WM)-19-KB-Rtop-Tim-R	Red Clover	Trifolium pratense	64.0	4	24	Legume	I	N		19	WM	KB-Rtop-Tim-RC
342	(W)-20-KB-Rtop-Aclover	342-(W)-20-KB-Rtop-Aclover	Kentucky Bluegrass	Poa pratensis	32.0	2	100	Grass	I	N		20	W	KB-Rtop-Aclover
342	(W)-20-KB-Rtop-Aclover	342-(W)-20-KB-Rtop-Aclover	Redtop	Agrostis gigantea	32.0	2	228	Grass	I	N		20	W	KB-Rtop-Aclover
342	(W)-20-KB-Rtop-Aclover	342-(W)-20-KB-Rtop-Aclover	Alsike Clover	Trifolium hybridum	32.0	2	32	Legume	I	N		20	W	KB-Rtop-Aclover
342	(W)-21-Rtop-Aclover	342-(W)-21-Rtop-Aclover	Redtop	Agrostis gigantea	48.0	3	342	Grass	I	N		21	W	Rtop-Aclover
342	(W)-21-Rtop-Aclover	342-(W)-21-Rtop-Aclover	Alsike Clover	Trifolium hybridum	48.0	3	48	Legume	I	N		21	W	Rtop-Aclover

STANDARD 512 MIXES

criteria: H-1

STD	Mix #	std-mix	Common Name	Scientific Name
		LEAVE THIS ROW AS IS		
		LEAVE THIS ROW AS IS		
512	(FSG 1)-H1-RC-Tfesc-Tim	512-(FSG 1)-H1-RC-Tfesc-Tim	Red Clover	Trifolium pratense
512	(FSG 1)-H1-RC-Tfesc-Tim	512-(FSG 1)-H1-RC-Tfesc-Tim	Tall Fescue	Schedonorus arundinaceus
512	(FSG 1)-H1-RC-Tfesc-Tim	512-(FSG 1)-H1-RC-Tfesc-Tim	Timothy	Phleum pratense
512	(FSG 2)-H2-Alf	512-(FSG 2)-H2-Alf	Alfalfa	Medicago sativa
512	(FSG 2,3,5,6)-H3-Alf-SB	512-(FSG 2,3,5,6)-H3-Alf-SB	Alfalfa	Medicago sativa
512	(FSG 2,3,5,6)-H3-Alf-SB	512-(FSG 2,3,5,6)-H3-Alf-SB	Smooth Bromegrass	Bromus inermis
512	(FSG 4,7)-H4-Aclover-Tfesc-Tim	512-(FSG 4,7)-H4-Aclover-Tfesc-Tim	Alsike Clover	Trifolium hybridum
512	(FSG 4,7)-H4-Aclover-Tfesc-Tim	512-(FSG 4,7)-H4-Aclover-Tfesc-Tim	Tall Fescue	Schedonorus arundinaceus
512	(FSG 4,7)-H4-Aclover-Tfesc-Tim	512-(FSG 4,7)-H4-Aclover-Tfesc-Tim	Timothy	Phleum pratense
512	(FSG 8)-H5-Alf-Tim	512-(FSG 8)-H5-Alf-Tim	Alfalfa	Medicago sativa
512	(FSG 8)-H5-Alf-Tim	512-(FSG 8)-H5-Alf-Tim	Timothy	Phleum pratense
512	(FSG 9)-H6-Alf-SB-Tim	512-(FSG 9)-H6-Alf-SB-Tim	Alfalfa	Medicago sativa
512	(FSG 9)-H6-Alf-SB-Tim	512-(FSG 9)-H6-Alf-SB-Tim	Smooth Bromegrass	Bromus inermis
512	(FSG 9)-H6-Alf-SB-Tim	512-(FSG 9)-H6-Alf-SB-Tim	Timothy	Phleum pratense
512	(FSG 1-9)-H7-Switch	512-(FSG 1-9)-H7-Switch	Switchgrass	Panicum virgatum
512	(FSG 1-9)-H8-BB	512-(FSG 1-9)-H8-BB	Big Bluestem	Andropogon gerardii
512	(FSG 1-9)-H9-Indian	512-(FSG 1-9)-H9-Indian	Indiangrass	Sorghastrum nutans
512	(FSG 1)-PP1-Aclover-Mfesc	512-(FSG 1)-PP1-Aclover-Mfesc	Alsike Clover	Trifolium hybridum
512	(FSG 1)-PP1-Aclover-Mfesc	512-(FSG 1)-PP1-Aclover-Mfesc	Meadow Fescue	Schedonorus pratensis
512	(FSG 1)-PP1A-Aclover-Orc	512-(FSG 1)-PP1A-Aclover-Orc	Alsike Clover	Trifolium hybridum
512	(FSG 1)-PP1A-Aclover-Orc	512-(FSG 1)-PP1A-Aclover-Orc	Orchardgrass	Dactylis glomerata L.
512	(FSG 1)-PP1B-Aclover-Tim	512-(FSG 1)-PP1B-Aclover-Tim	Alsike Clover	Trifolium hybridum
512	(FSG 1)-PP1B-Aclover-Tim	512-(FSG 1)-PP1B-Aclover-Tim	Timothy	Phleum pratense
512	(FSG 2-3)-PP2-Alf-SB-Orc	512-(FSG 2-3)-PP2-Alf-SB-Orc	Alfalfa	Medicago sativa
512	(FSG 2-3)-PP2-Alf-SB-Orc	512-(FSG 2-3)-PP2-Alf-SB-Orc	Smooth Bromegrass	Bromus inermis
512	(FSG 2-3)-PP2-Alf-SB-Orc	512-(FSG 2-3)-PP2-Alf-SB-Orc	Orchardgrass	Dactylis glomerata L.
512	(FSG 4)-PP4-Aclover-Mfesc-Tim	512-(FSG 4)-PP4-Aclover-Mfesc-Tim	Alsike Clover	Trifolium hybridum
512	(FSG 4)-PP4-Aclover-Mfesc-Tim	512-(FSG 4)-PP4-Aclover-Mfesc-Tim	Meadow Fescue	Schedonorus pratensis
512	(FSG 4)-PP4-Aclover-Mfesc-Tim	512-(FSG 4)-PP4-Aclover-Mfesc-Tim	Timothy	Phleum pratense
512	(FSG 4)-PP4B-Btrefoil-Mfesc-Tim	512-(FSG 4)-PP4B-Btrefoil-Mfesc-Tim	Birdsfoot Trefoil	Lotus corniculatus
512	(FSG 4)-PP4B-Btrefoil-Mfesc-Tim	512-(FSG 4)-PP4B-Btrefoil-Mfesc-Tim	Meadow Fescue	Schedonorus pratensis
512	(FSG 4)-PP4B-Btrefoil-Mfesc-Tim	512-(FSG 4)-PP4B-Btrefoil-Mfesc-Tim	Timothy	Phleum pratense
512	(FSG 5)-PP5-RC-LadC-Orc-Mfesc	512-(FSG 5)-PP5-RC-LadC-Orc-Mfesc	Red Clover	Trifolium pratense
512	(FSG 5)-PP5-RC-LadC-Orc-Mfesc	512-(FSG 5)-PP5-RC-LadC-Orc-Mfesc	White Ladino Clover	Trifolium repens
512	(FSG 5)-PP5-RC-LadC-Orc-Mfesc	512-(FSG 5)-PP5-RC-LadC-Orc-Mfesc	Orchardgrass	Dactylis glomerata L.
512	(FSG 5)-PP5-RC-LadC-Orc-Mfesc	512-(FSG 5)-PP5-RC-LadC-Orc-Mfesc	Meadow Fescue	Schedonorus pratensis
512	(FSG 5)-PP5B-RC-LadC-Festu-Mfesc	512-(FSG 5)-PP5B-RC-LadC-Festu-Mfesc	Red Clover	Trifolium pratense
512	(FSG 5)-PP5B-RC-LadC-Festu-Mfesc	512-(FSG 5)-PP5B-RC-LadC-Festu-Mfesc	White Ladino Clover	Trifolium repens
512	(FSG 5)-PP5B-RC-LadC-Festu-Mfesc	512-(FSG 5)-PP5B-RC-LadC-Festu-Mfesc	Festulolium	Festuca x Lolium
512	(FSG 5)-PP5B-RC-LadC-Festu-Mfesc	512-(FSG 5)-PP5B-RC-LadC-Festu-Mfesc	Meadow Fescue	Schedonorus pratensis
512	(FSG 6)-PP6-RC-Orc-SB	512-(FSG 6)-PP6-RC-Orc-SB	Red Clover	Trifolium pratense
512	(FSG 6)-PP6-RC-Orc-SB	512-(FSG 6)-PP6-RC-Orc-SB	Orchardgrass	Dactylis glomerata L.
512	(FSG 6)-PP6-RC-Orc-SB	512-(FSG 6)-PP6-RC-Orc-SB	Smooth Bromegrass	Bromus inermis
512	(FSG 7)-PP7-Aclover-Mfesc-Tim-Rtop	512-(FSG 7)-PP7-Aclover-Mfesc-Tim-Rtop	Alsike Clover	Trifolium hybridum
512	(FSG 7)-PP7-Aclover-Mfesc-Tim-Rtop	512-(FSG 7)-PP7-Aclover-Mfesc-Tim-Rtop	Meadow Fescue	Schedonorus pratensis
512	(FSG 7)-PP7-Aclover-Mfesc-Tim-Rtop	512-(FSG 7)-PP7-Aclover-Mfesc-Tim-Rtop	Timothy	Phleum pratense
512	(FSG 7)-PP7-Aclover-Mfesc-Tim-Rtop	512-(FSG 7)-PP7-Aclover-Mfesc-Tim-Rtop	Redtop	Agrostis gigantea
512	(FSG 7)-PP7B-Btrefoil-Mfesc-Tim-Rtop	512-(FSG 7)-PP7B-Btrefoil-Mfesc-Tim-Rtop	Birdsfoot Trefoil	Lotus corniculatus
512	(FSG 7)-PP7B-Btrefoil-Mfesc-Tim-Rtop	512-(FSG 7)-PP7B-Btrefoil-Mfesc-Tim-Rtop	Meadow Fescue	Schedonorus pratensis
512	(FSG 7)-PP7B-Btrefoil-Mfesc-Tim-Rtop	512-(FSG 7)-PP7B-Btrefoil-Mfesc-Tim-Rtop	Timothy	Phleum pratense
512	(FSG 7)-PP7B-Btrefoil-Mfesc-Tim-Rtop	512-(FSG 7)-PP7B-Btrefoil-Mfesc-Tim-Rtop	Redtop	Agrostis gigantea
512	(FSG 8)-PP8-LadC-Orc-Mfesc	512-(FSG 8)-PP8-LadC-Orc-Mfesc	White Ladino Clover	Trifolium repens
512	(FSG 8)-PP8-LadC-Orc-Mfesc	512-(FSG 8)-PP8-LadC-Orc-Mfesc	Orchardgrass	Dactylis glomerata L.
512	(FSG 8)-PP8-LadC-Orc-Mfesc	512-(FSG 8)-PP8-LadC-Orc-Mfesc	Meadow Fescue	Schedonorus pratensis
512	(FSG 8)-PP8B-LadC-Festu-Mfesc	512-(FSG 8)-PP8B-LadC-Festu-Mfesc	White Ladino Clover	Trifolium repens
512	(FSG 8)-PP8B-LadC-Festu-Mfesc	512-(FSG 8)-PP8B-LadC-Festu-Mfesc	Festulolium	Festuca x Lolium
512	(FSG 8)-PP8B-LadC-Festu-Mfesc	512-(FSG 8)-PP8B-LadC-Festu-Mfesc	Meadow Fescue	Schedonorus pratensis
512	(FSG 9)-PP9-RC-Orc-Mfesc	512-(FSG 9)-PP9-RC-Orc-Mfesc	Red Clover	Trifolium pratense
512	(FSG 9)-PP9-RC-Orc-Mfesc	512-(FSG 9)-PP9-RC-Orc-Mfesc	Orchardgrass	Dactylis glomerata L.
512	(FSG 9)-PP9-RC-Orc-Mfesc	512-(FSG 9)-PP9-RC-Orc-Mfesc	Meadow Fescue	Schedonorus pratensis
512	(FSG 1,4,7)-PHS1-KB-Mfesc-LadC	512-(FSG 1,4,7)-PHS1-KB-Mfesc-LadC	Kentucky Bluegrass	Poa pratensis
512	(FSG 1,4,7)-PHS1-KB-Mfesc-LadC	512-(FSG 1,4,7)-PHS1-KB-Mfesc-LadC	Meadow Fescue	Schedonorus pratensis
512	(FSG 1,4,7)-PHS1-KB-Mfesc-LadC	512-(FSG 1,4,7)-PHS1-KB-Mfesc-LadC	White Ladino Clover	Trifolium repens
512	(FSG 1,4,7)-PHS1A-KB-Mfesc-Btrefoil	512-(FSG 1,4,7)-PHS1A-KB-Mfesc-Btrefoil	Kentucky Bluegrass	Poa pratensis
512	(FSG 1,4,7)-PHS1A-KB-Mfesc-Btrefoil	512-(FSG 1,4,7)-PHS1A-KB-Mfesc-Btrefoil	Meadow Fescue	Schedonorus pratensis
512	(FSG 1,4,7)-PHS1A-KB-Mfesc-Btrefoil	512-(FSG 1,4,7)-PHS1A-KB-Mfesc-Btrefoil	Birdsfoot Trefoil	Lotus corniculatus
512	(FSG 5-8)-PHS2-KB-Festu-LadC	512-(FSG 5-8)-PHS2-KB-Festu-LadC	Kentucky Bluegrass	Poa pratensis

512	(FSG 5-8)-PHS2-KB-Festu-LadC	512-(FSG 5-8)-PHS2-KB-Festu-LadC	Festulolium	Festuca x Lolium
512	(FSG 5-8)-PHS2-KB-Festu-LadC	512-(FSG 5-8)-PHS2-KB-Festu-LadC	White Ladino Clover	Trifolium repens
512	(FSG 5-8)-PHS2A-KB-Prye-LadC	512-(FSG 5-8)-PHS2A-KB-Prye-LadC	Kentucky Bluegrass	Poa pratensis
512	(FSG 5-8)-PHS2A-KB-Prye-LadC	512-(FSG 5-8)-PHS2A-KB-Prye-LadC	Perennial Ryegrass	Lolium perenne
512	(FSG 5-8)-PHS2A-KB-Prye-LadC	512-(FSG 5-8)-PHS2A-KB-Prye-LadC	White Ladino Clover	Trifolium repens
512	(FSG 2-3)-PHS3-Alf-Orc	512-(FSG 2-3)-PHS3-Alf-Orc	Alfalfa	Medicago sativa
512	(FSG 2-3)-PHS3-Alf-Orc	512-(FSG 2-3)-PHS3-Alf-Orc	Orchardgrass	Dactylis glomerata L.

REVISION DATE: 12/14/2012

PLS (oz./A)	PLS (lbs./A)	Seeds/Square Foot	Type	Intro / Native	Poll. (Y/N)		Mix No.	FSG-MIX #	Mix Components	FSG
				I	Y					
				N	Y					
96.0	6	36	Legume	I	N		H1	FSG 1	RC-Tfesc-Tim	1
96.0	6	32	Grass	I	N		H1	FSG 1	RC-Tfesc-Tim	1
16.0	1	28	Grass	I	N		H1	FSG 1	RC-Tfesc-Tim	1
192.0	12	60	Legume	I	N		H2	FSG 2	Alf	2
160.0	10	50	Legume	I	N		H3	FSG 2,3,5,6	Alf-SB	2,3,5,6
64.0	4	12	Grass	I	N		H3	FSG 2,3,5,6	Alf-SB	2,3,5,6
48.0	3	48	Legume	I	N		H4	FSG 4,7	Aclover-Tfesc-Tim	4,7
96.0	6	32	Grass	I	N		H4	FSG 4,7	Aclover-Tfesc-Tim	4,7
16.0	1	28	Grass	I	N		H4	FSG 4,7	Aclover-Tfesc-Tim	4,7
128.0	8	40	Legume	I	N		H5	FSG 8	Alf-Tim	8
32.0	2	56	Grass	I	N		H5	FSG 8	Alf-Tim	8
128.0	8	40	Legume	I	N		H6	FSG 9	Alf-SB-Tim	9
64.0	4	12	Grass	I	N		H6	FSG 9	Alf-SB-Tim	9
16.0	1	28	Grass	I	N		H6	FSG 9	Alf-SB-Tim	9
112.0	7	63	Grass	N	N		H7	FSG 1-9	Switch	1-9
176.0	11	42	Grass	N	N		H8	FSG 1-9	BB	1-9
160.0	10	44	Grass	N	N		H9	FSG 1-9	Indian	1-9
32.0	2	32	Legume	I	N		PP1	FSG 1	Aclover-Mfesc	1
96.0	6	30	Grass	I	N		PP1	FSG 1	Aclover-Mfesc	1
32.0	2	32	Legume	I	N		PP1A	FSG 1	Aclover-Orc	1
48.0	3	48	Grass	I	N		PP1A	FSG 1	Aclover-Orc	1
32.0	2	32	Legume	I	N		PP1B	FSG 1	Aclover-Tim	1
24.0	1.5	42	Grass	I	N		PP1B	FSG 1	Aclover-Tim	1
96.0	6	30	Legume	I	N		PP2	FSG 2-3	Alf-SB-Orc	2-3
64.0	4	12	Grass	I	N		PP2	FSG 2-3	Alf-SB-Orc	2-3
64.0	4	64	Grass	I	N		PP2	FSG 2-3	Alf-SB-Orc	2-3
32.0	2	32	Legume	I	N		PP4	FSG 4	Aclover-Mfesc-Tim	4
96.0	6	30	Grass	I	N		PP4	FSG 4	Aclover-Mfesc-Tim	4
16.0	1	28	Grass	I	N		PP4	FSG 4	Aclover-Mfesc-Tim	4
48.0	3	26	Legume	I	N		PP4B	FSG 4	Btrefoil-Mfesc-Tim	4
96.0	6	30	Grass	I	N		PP4B	FSG 4	Btrefoil-Mfesc-Tim	4
16.0	1	28	Grass	I	N		PP4B	FSG 4	Btrefoil-Mfesc-Tim	4
80.0	5	30	Legume	I	N		PP5	FSG 5	RC-LadC-Orc-Mfesc	5
16.0	1	20	Legume	I	N		PP5	FSG 5	RC-LadC-Orc-Mfesc	5
48.0	3	48	Grass	I	N		PP5	FSG 5	RC-LadC-Orc-Mfesc	5
96.0	6	30	Grass	I	N		PP5	FSG 5	RC-LadC-Orc-Mfesc	5
80.0	5	30	Legume	I	N		PP5B	FSG 5	RC-LadC-Festu-Mfesc	5
16.0	1	20	Legume	I	N		PP5B	FSG 5	RC-LadC-Festu-Mfesc	5
112.0	7	36	Grass	I	N		PP5B	FSG 5	RC-LadC-Festu-Mfesc	5
96.0	6	30	Grass	I	N		PP5B	FSG 5	RC-LadC-Festu-Mfesc	5
80.0	5	30	Legume	I	N		PP6	FSG 6	RC-Orc-SB	6
64.0	4	64	Grass	I	N		PP6	FSG 6	RC-Orc-SB	6
64.0	4	12	Grass	I	N		PP6	FSG 6	RC-Orc-SB	6
32.0	2	32	Legume	I	N		PP7	FSG 7	Aclover-Mfesc-Tim-Rtop	7
96.0	6	30	Grass	I	N		PP7	FSG 7	Aclover-Mfesc-Tim-Rtop	7
16.0	1	28	Grass	I	N		PP7	FSG 7	Aclover-Mfesc-Tim-Rtop	7
16.0	1	114	Grass	I	N		PP7	FSG 7	Aclover-Mfesc-Tim-Rtop	7
48.0	3	26	Legume	I	N		PP7B	FSG 7	Btrefoil-Mfesc-Tim-Rtop	7
96.0	6	30	Grass	I	N		PP7B	FSG 7	Btrefoil-Mfesc-Tim-Rtop	7
16.0	1	28	Grass	I	N		PP7B	FSG 7	Btrefoil-Mfesc-Tim-Rtop	7
16.0	1	114	Grass	I	N		PP7B	FSG 7	Btrefoil-Mfesc-Tim-Rtop	7
16.0	1	20	Legume	I	N		PP8	FSG 8	LadC-Orc-Mfesc	8
48.0	3	48	Grass	I	N		PP8	FSG 8	LadC-Orc-Mfesc	8
96.0	6	30	Grass	I	N		PP8	FSG 8	LadC-Orc-Mfesc	8
16.0	1	20	Legume	I	N		PP8B	FSG 8	LadC-Festu-Mfesc	8
112.0	7	36	Grass	I	N		PP8B	FSG 8	LadC-Festu-Mfesc	8
96.0	6	30	Grass	I	N		PP8B	FSG 8	LadC-Festu-Mfesc	8
80.0	5	30	Legume	I	N		PP9	FSG 9	RC-Orc-Mfesc	9
48.0	3	48	Grass	I	N		PP9	FSG 9	RC-Orc-Mfesc	9
96.0	6	30	Grass	I	N		PP9	FSG 9	RC-Orc-Mfesc	9
64.0	4	200	Grass	I	N		PHS1	FSG 1,4,7	KB-Mfesc-LadC	1,4,7
64.0	4	20	Grass	I	N		PHS1	FSG 1,4,7	KB-Mfesc-LadC	1,4,7
16.0	1	20	Legume	I	N		PHS1	FSG 1,4,7	KB-Mfesc-LadC	1,4,7
64.0	4	200	Grass	I	N		PHS1A	FSG 1,4,7	KB-Mfesc-Btrefoil	1,4,7
64.0	4	20	Grass	I	N		PHS1A	FSG 1,4,7	KB-Mfesc-Btrefoil	1,4,7
48.0	3	26	Legume	I	N		PHS1A	FSG 1,4,7	KB-Mfesc-Btrefoil	1,4,7
32.0	2	100	Grass	I	N		PHS2	FSG 5-8	KB-Festu-LadC	5-8

112.0	7	35	Grass	I	N		PHS2	FSG 5-8	KB-Festu-LadC	5-8
16.0	1	20	Legume	I	N		PHS2	FSG 5-8	KB-Festu-LadC	5-8
32.0	2	100	Grass	I	N		PHS2A	FSG 5-8	KB-Prye-LadC	5-8
112.0	7	35	Grass	I	N		PHS2A	FSG 5-8	KB-Prye-LadC	5-8
16.0	1	20	Legume	I	N		PHS2A	FSG 5-8	KB-Prye-LadC	5-8
96.0	6	30	Legume	I	N		PHS3	FSG 2-3	Alf-Orc	2-3
48.0	3	48	Grass	I	N		PHS3	FSG 2-3	Alf-Orc	2-3

CRP MIXES

REVISION DATE: 11/30/2020

criteria: 0

STD	Mix #	std-mix	Common Name	Scientific Name	PLS (oz./A)	PLS (lbs./A)	Seeds/Square Foot	Type	Intro / Native	Poll. (Y/N)	Mix No.	MR	Mix Components
		LEAVE THIS ROW AS IS							I	Y			
		LEAVE THIS ROW AS IS							N	Y			
1	CP1-1-Alf-SB-Tim	1-CP1-1-Alf-SB-Tim	Alfalfa	Medicago sativa	96.00	6		Legume	I	N	CP1-1		Alf-SB-Tim
1	CP1-1-Alf-SB-Tim	1-CP1-1-Alf-SB-Tim	Smooth Bromegrass	Bromus inermis	48.00	3		Grass	I	N	CP1-1		Alf-SB-Tim
1	CP1-1-Alf-SB-Tim	1-CP1-1-Alf-SB-Tim	Timothy	Phleum pratense	32.00	2		Grass	I	N	CP1-1		Alf-SB-Tim
1	CP1-2-RC-Orc-Tim	1-CP1-2-RC-Orc-Tim	Red Clover	Trifolium pratense	80.00	5		Legume	I	N	CP1-2		RC-Orc-Tim
1	CP1-2-RC-Orc-Tim	1-CP1-2-RC-Orc-Tim	Orchardgrass	Dactylis glomerata L.	48.00	3		Grass	I	N	CP1-2		RC-Orc-Tim
1	CP1-2-RC-Orc-Tim	1-CP1-2-RC-Orc-Tim	Timothy	Phleum pratense	32.00	2		Grass	I	N	CP1-2		RC-Orc-Tim
1	CP1-3-Alf-Orc-Tim	1-CP1-3-Alf-Orc-Tim	Alfalfa	Medicago sativa	96.00	6		Legume	I	N	CP1-3		Alf-Orc-Tim
1	CP1-3-Alf-Orc-Tim	1-CP1-3-Alf-Orc-Tim	Orchardgrass	Dactylis glomerata L.	48.00	3		Grass	I	N	CP1-3		Alf-Orc-Tim
1	CP1-3-Alf-Orc-Tim	1-CP1-3-Alf-Orc-Tim	Timothy	Phleum pratense	32.00	2		Grass	I	N	CP1-3		Alf-Orc-Tim
1	CP1-4-RC-SB-Tim	1-CP1-4-RC-SB-Tim	Red Clover	Trifolium pratense	80.00	5		Legume	I	N	CP1-4		RC-SB-Tim
1	CP1-4-RC-SB-Tim	1-CP1-4-RC-SB-Tim	Smooth Bromegrass	Bromus inermis	48.00	3		Grass	I	N	CP1-4		RC-SB-Tim
1	CP1-4-RC-SB-Tim	1-CP1-4-RC-SB-Tim	Timothy	Phleum pratense	32.00	2		Grass	I	N	CP1-4		RC-SB-Tim
1	CP1-5-RC-SB-Tim-Orc	1-CP1-5-RC-SB-Tim-Orc	Red Clover	Trifolium pratense	80.00	5		Legume	I	N	CP1-5		RC-SB-Tim-Orc
1	CP1-5-RC-SB-Tim-Orc	1-CP1-5-RC-SB-Tim-Orc	Smooth Bromegrass	Bromus inermis	32.00	2		Grass	I	N	CP1-5		RC-SB-Tim-Orc
1	CP1-5-RC-SB-Tim-Orc	1-CP1-5-RC-SB-Tim-Orc	Timothy	Phleum pratense	32.00	2		Grass	I	N	CP1-5		RC-SB-Tim-Orc
1	CP1-5-RC-SB-Tim-Orc	1-CP1-5-RC-SB-Tim-Orc	Orchardgrass	Dactylis glomerata L.	16.00	1		Grass	I	N	CP1-5		RC-SB-Tim-Orc
1	CP1-6-RC-Tim-Orc-Rtop-LadC	1-CP1-6-RC-Tim-Orc-Rtop-LadC	Red Clover	Trifolium pratense	80.00	5		Legume	I	N	CP1-6		RC-Tim-Orc-Rtop-LadC
1	CP1-6-RC-Tim-Orc-Rtop-LadC	1-CP1-6-RC-Tim-Orc-Rtop-LadC	Timothy	Phleum pratense	32.00	2		Grass	I	N	CP1-6		RC-Tim-Orc-Rtop-LadC
1	CP1-6-RC-Tim-Orc-Rtop-LadC	1-CP1-6-RC-Tim-Orc-Rtop-LadC	Orchardgrass	Dactylis glomerata L.	16.00	1		Grass	I	N	CP1-6		RC-Tim-Orc-Rtop-LadC
1	CP1-6-RC-Tim-Orc-Rtop-LadC	1-CP1-6-RC-Tim-Orc-Rtop-LadC	Redtop	Agrostis gigantea	16.00	1		Grass	I	N	CP1-6		RC-Tim-Orc-Rtop-LadC
1	CP1-6-RC-Tim-Orc-Rtop-LadC	1-CP1-6-RC-Tim-Orc-Rtop-LadC	White Ladino Clover	Trifolium repens	8.00	0.5		Legume	I	N	CP1-6		RC-Tim-Orc-Rtop-LadC
1	CP1-7-Alf-Rtop-Tim-Orc	1-CP1-7-Alf-Rtop-Tim-Orc	Alfalfa	Medicago sativa	96.00	6		Legume	I	N	CP1-7		Alf-Rtop-Tim-Orc
1	CP1-7-Alf-Rtop-Tim-Orc	1-CP1-7-Alf-Rtop-Tim-Orc	Redtop	Agrostis gigantea	32.00	2		Grass	I	N	CP1-7		Alf-Rtop-Tim-Orc
1	CP1-7-Alf-Rtop-Tim-Orc	1-CP1-7-Alf-Rtop-Tim-Orc	Timothy	Phleum pratense	32.00	2		Grass	I	N	CP1-7		Alf-Rtop-Tim-Orc
1	CP1-7-Alf-Rtop-Tim-Orc	1-CP1-7-Alf-Rtop-Tim-Orc	Orchardgrass	Dactylis glomerata L.	16.00	1		Grass	I	N	CP1-7		Alf-Rtop-Tim-Orc
1	CP1-8-RC-KB-Orc-Rtop	1-CP1-8-RC-KB-Orc-Rtop	Red Clover	Trifolium pratense	80.00	5		Legume	I	N	CP1-8		RC-KB-Orc-Rtop
1	CP1-8-RC-KB-Orc-Rtop	1-CP1-8-RC-KB-Orc-Rtop	Kentucky Bluegrass	Poa pratensis	32.00	2		Grass	I	N	CP1-8		RC-KB-Orc-Rtop
1	CP1-8-RC-KB-Orc-Rtop	1-CP1-8-RC-KB-Orc-Rtop	Orchardgrass	Dactylis glomerata L.	16.00	1		Grass	I	N	CP1-8		RC-KB-Orc-Rtop
1	CP1-8-RC-KB-Orc-Rtop	1-CP1-8-RC-KB-Orc-Rtop	Redtop	Agrostis gigantea	16.00	1		Grass	I	N	CP1-8		RC-KB-Orc-Rtop
2	CP2_1-BB-Switch-Cmilkvetch-Besus-Ycone	2-CP2_1-BB-Switch-Cmilkvetch-Besus-Ycone	Big Bluestem	Andropogon gerardii	48.00	3		Grass	N	N	CP2_1		BB-Switch-Cmilkvetch-Besus-Ycone
2	CP2_1-BB-Switch-Cmilkvetch-Besus-Ycone	2-CP2_1-BB-Switch-Cmilkvetch-Besus-Ycone	Switchgrass	Panicum virgatum	16.00	1		Grass	N	N	CP2_1		BB-Switch-Cmilkvetch-Besus-Ycone
2	CP2_1-BB-Switch-Cmilkvetch-Besus-Ycone	2-CP2_1-BB-Switch-Cmilkvetch-Besus-Ycone	Canada Milkvetch	Astragalus canadensis	2.00	0.125		Legume	N	N	CP2_1		BB-Switch-Cmilkvetch-Besus-Ycone
2	CP2_1-BB-Switch-Cmilkvetch-Besus-Ycone	2-CP2_1-BB-Switch-Cmilkvetch-Besus-Ycone	Black-eyed Susan	Rudbeckia hirta	1.00	0.0625		Forb	N	N	CP2_1		BB-Switch-Cmilkvetch-Besus-Ycone
2	CP2_1-BB-Switch-Cmilkvetch-Besus-Ycone	2-CP2_1-BB-Switch-Cmilkvetch-Besus-Ycone	Yellow Coneflower	Ratibida pinnata	1.00	0.0625		Forb	N	N	CP2_1		BB-Switch-Cmilkvetch-Besus-Ycone
2	CP2_2-BB-Switch-Ttrefoil-Besus-Ycone	2-CP2_2-BB-Switch-Ttrefoil-Besus-Ycone	Big Bluestem	Andropogon gerardii	48.00	3		Grass	N	N	CP2_2		BB-Switch-Ttrefoil-Besus-Ycone
2	CP2_2-BB-Switch-Ttrefoil-Besus-Ycone	2-CP2_2-BB-Switch-Ttrefoil-Besus-Ycone	Switchgrass	Panicum virgatum	16.00	1		Grass	N	N	CP2_2		BB-Switch-Ttrefoil-Besus-Ycone
2	CP2_2-BB-Switch-Ttrefoil-Besus-Ycone	2-CP2_2-BB-Switch-Ttrefoil-Besus-Ycone	Showy Tick Trefoil	Desmodium canadense	6.00	0.375		Legume	N	N	CP2_2		BB-Switch-Ttrefoil-Besus-Ycone
2	CP2_2-BB-Switch-Ttrefoil-Besus-Ycone	2-CP2_2-BB-Switch-Ttrefoil-Besus-Ycone	Black-eyed Susan	Rudbeckia hirta	1.00	0.0625		Forb	N	N	CP2_2		BB-Switch-Ttrefoil-Besus-Ycone
2	CP2_2-BB-Switch-Ttrefoil-Besus-Ycone	2-CP2_2-BB-Switch-Ttrefoil-Besus-Ycone	Yellow Coneflower	Ratibida pinnata	1.00	0.0625		Forb	N	N	CP2_2		BB-Switch-Ttrefoil-Besus-Ycone
2	CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycon	2-CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-Be	Little Bluestem	Schizachyrium scoparium	24.00	1.5		Grass	N	N	CP2_3		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
2	CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycon	2-CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-Be	Sideoats Grama	Bouteloua curtipendula	16.00	1		Grass	N	N	CP2_3		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
2	CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycon	2-CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-Be	Big Bluestem	Andropogon gerardii	8.00	0.5		Grass	N	N	CP2_3		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
2	CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycon	2-CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-Be	Indiangrass	Sorghastrum nutans	8.00	0.5		Grass	N	N	CP2_3		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone

2	CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycon	2-CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-Be	Switchgrass	Panicum virgatum	8.00	0.5		Grass	N	N	CP2_3		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
2	CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycon	2-CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-Be	Purple Prairie Clover	Dalea purpurea	2.00	0.125		Legume	N	N	CP2_3		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
2	CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycon	2-CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-Be	Bergamot	Monarda fistulosa	1.00	0.0625		Forb	N	N	CP2_3		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
2	CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycon	2-CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-Be	Yellow Coneflower	Ratibida pinnata	1.00	0.0625		Forb	N	N	CP2_3		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
2	CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone	2-CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus-Y	Little Bluestem	Schizachyrium scoparium	20.00	1.25		Grass	N	N	CP2_4		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
2	CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone	2-CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus-Y	Canada Wildrye	Elymus canadensis	16.00	1		Grass	N	N	CP2_4		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
2	CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone	2-CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus-Y	Indiangrass	Sorghastrum nutans	16.00	1		Grass	N	N	CP2_4		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
2	CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone	2-CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus-Y	Big Bluestem	Andropogon gerardii	8.00	0.5		Grass	N	N	CP2_4		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
2	CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone	2-CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus-Y	Switchgrass	Panicum virgatum	8.00	0.5		Grass	N	N	CP2_4		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
2	CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone	2-CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus-Y	Bergamot	Monarda fistulosa	1.00	0.0625		Forb	N	N	CP2_4		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
2	CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone	2-CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus-Y	Black-eyed Susan	Rudbeckia hirta	1.00	0.0625		Forb	N	N	CP2_4		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
2	CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone	2-CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus-Y	Yellow Coneflower	Ratibida pinnata	1.00	0.0625		Forb	N	N	CP2_4		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
2	CP2_5-BB-Sgrama-Indian-PPclover-Sgrod-Ycone	2-CP2_5-BB-Sgrama-Indian-PPclover-Sgrod-Ycone	Big Bluestem	Andropogon gerardii	24.00	1.5		Grass	N	N	CP2_5		BB-Sgrama-Indian-PPclover-Sgrod-Ycone
2	CP2_5-BB-Sgrama-Indian-PPclover-Sgrod-Ycone	2-CP2_5-BB-Sgrama-Indian-PPclover-Sgrod-Ycone	Sideoats Grama	Bouteloua curtipendula	24.00	1.5		Grass	N	N	CP2_5		BB-Sgrama-Indian-PPclover-Sgrod-Ycone
2	CP2_5-BB-Sgrama-Indian-PPclover-Sgrod-Ycone	2-CP2_5-BB-Sgrama-Indian-PPclover-Sgrod-Ycone	Indiangrass	Sorghastrum nutans	8.00	0.5		Grass	N	N	CP2_5		BB-Sgrama-Indian-PPclover-Sgrod-Ycone
2	CP2_5-BB-Sgrama-Indian-PPclover-Sgrod-Ycone	2-CP2_5-BB-Sgrama-Indian-PPclover-Sgrod-Ycone	Purple Prairie Clover	Dalea purpurea	2.00	0.125		Legume	N	N	CP2_5		BB-Sgrama-Indian-PPclover-Sgrod-Ycone
2	CP2_5-BB-Sgrama-Indian-PPclover-Sgrod-Ycone	2-CP2_5-BB-Sgrama-Indian-PPclover-Sgrod-Ycone	Stiff Goldenrod	Oligoneuron rigidum	1.00	0.0625		Forb	N	N	CP2_5		BB-Sgrama-Indian-PPclover-Sgrod-Ycone
2	CP2_5-BB-Sgrama-Indian-PPclover-Sgrod-Ycone	2-CP2_5-BB-Sgrama-Indian-PPclover-Sgrod-Ycone	Yellow Coneflower	Ratibida pinnata	1.00	0.0625		Forb	N	N	CP2_5		BB-Sgrama-Indian-PPclover-Sgrod-Ycone
2	CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciro	2-CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bverv	Big Bluestem	Andropogon gerardii	16.00	1		Grass	N	N	CP2_6		BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
2	CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciro	2-CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bverv	Canada Wildrye	Elymus canadensis	16.00	1		Grass	N	N	CP2_6		BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
2	CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciro	2-CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bverv	Indiangrass	Sorghastrum nutans	16.00	1		Grass	N	N	CP2_6		BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
2	CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciro	2-CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bverv	Switchgrass	Panicum virgatum	16.00	1		Grass	N	N	CP2_6		BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
2	CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciro	2-CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bverv	Prairie Cordgrass	Spartina pectinata	8.00	0.5		Grass	N	N	CP2_6		BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
2	CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciro	2-CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bverv	Cupplant	Silphium perfoliatum	2.00	0.125		Forb	N	N	CP2_6		BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
2	CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciro	2-CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bverv	Blue Vervain	Verbena hastata	1.00	0.0625		Forb	N	N	CP2_6		BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
2	CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciro	2-CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bverv	Common Ironweed	Vernonia fasciculata	1.00	0.0625		Forb	N	N	CP2_6		BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
2	CP2_7-Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone	2-CP2_7-Switch-BB-Cwrye-Pcord-Berg-NEaster-Yc	Switchgrass	Panicum virgatum	32.00	2		Grass	N	N	CP2_7		Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
2	CP2_7-Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone	2-CP2_7-Switch-BB-Cwrye-Pcord-Berg-NEaster-Yc	Big Bluestem	Andropogon gerardii	16.00	1		Grass	N	N	CP2_7		Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
2	CP2_7-Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone	2-CP2_7-Switch-BB-Cwrye-Pcord-Berg-NEaster-Yc	Canada Wildrye	Elymus canadensis	16.00	1		Grass	N	N	CP2_7		Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
2	CP2_7-Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone	2-CP2_7-Switch-BB-Cwrye-Pcord-Berg-NEaster-Yc	Prairie Cordgrass	Spartina pectinata	4.00	0.25		Grass	N	N	CP2_7		Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
2	CP2_7-Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone	2-CP2_7-Switch-BB-Cwrye-Pcord-Berg-NEaster-Yc	Bergamot	Monarda fistulosa	1.00	0.0625		Forb	N	N	CP2_7		Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
2	CP2_7-Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone	2-CP2_7-Switch-BB-Cwrye-Pcord-Berg-NEaster-Yc	New England Aster	Symphyotrichum novae-a	1.00	0.0625		Forb	N	N	CP2_7		Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
2	CP2_7-Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone	2-CP2_7-Switch-BB-Cwrye-Pcord-Berg-NEaster-Yc	Yellow Coneflower	Ratibida pinnata	1.00	0.0625		Forb	N	N	CP2_7		Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
4	CP4D-1-RC-SB-Tim-Orc-RC	4-CP4D-1-RC-SB-Tim-Orc-RC	Red Clover	Trifolium pratense	96.00	6		Legume	I	N	CP4D-1		RC-SB-Tim-Orc-RC
4	CP4D-1-RC-SB-Tim-Orc-RC	4-CP4D-1-RC-SB-Tim-Orc-RC	Smooth Bromegrass	Bromus inermis	32.00	2		Grass	I	N	CP4D-1		RC-SB-Tim-Orc-RC
4	CP4D-1-RC-SB-Tim-Orc-RC	4-CP4D-1-RC-SB-Tim-Orc-RC	Timothy	Phleum pratense	32.00	2		Grass	I	N	CP4D-1		RC-SB-Tim-Orc-RC
4	CP4D-1-RC-SB-Tim-Orc-RC	4-CP4D-1-RC-SB-Tim-Orc-RC	Orchardgrass	Dactylis glomerata L.	8.00	0.5		Grass	I	N	CP4D-1		RC-SB-Tim-Orc-RC
4	CP4D-1-RC-SB-Tim-Orc-RC	4-CP4D-1-RC-SB-Tim-Orc-RC	Red Clover	Trifolium pratense	8.00	0.5		Legume	I	N	CP4D-1		RC-SB-Tim-Orc-RC
4	CP4D-2-Alf-SB-Tim-Orc	4-CP4D-2-Alf-SB-Tim-Orc	Alfalfa	Medicago sativa	112.00	7		Legume	I	N	CP4D-2		Alf-SB-Tim-Orc
4	CP4D-2-Alf-SB-Tim-Orc	4-CP4D-2-Alf-SB-Tim-Orc	Smooth Bromegrass	Bromus inermis	32.00	2		Grass	I	N	CP4D-2		Alf-SB-Tim-Orc
4	CP4D-2-Alf-SB-Tim-Orc	4-CP4D-2-Alf-SB-Tim-Orc	Timothy	Phleum pratense	16.00	1		Grass	I	N	CP4D-2		Alf-SB-Tim-Orc
4	CP4D-2-Alf-SB-Tim-Orc	4-CP4D-2-Alf-SB-Tim-Orc	Orchardgrass	Dactylis glomerata L.	8.00	0.5		Grass	I	N	CP4D-2		Alf-SB-Tim-Orc
4	CP4D-3-RC-Tim-SB-Orc	4-CP4D-3-RC-Tim-SB-Orc	Red Clover	Trifolium pratense	96.00	6		Legume	I	N	CP4D-3		RC-Tim-SB-Orc
4	CP4D-3-RC-Tim-SB-Orc	4-CP4D-3-RC-Tim-SB-Orc	Timothy	Phleum pratense	32.00	2		Grass	I	N	CP4D-3		RC-Tim-SB-Orc
4	CP4D-3-RC-Tim-SB-Orc	4-CP4D-3-RC-Tim-SB-Orc	Smooth Bromegrass	Bromus inermis	32.00	2		Grass	I	N	CP4D-3		RC-Tim-SB-Orc
4	CP4D-3-RC-Tim-SB-Orc	4-CP4D-3-RC-Tim-SB-Orc	Orchardgrass	Dactylis glomerata L.	8.00	0.5		Grass	I	N	CP4D-3		RC-Tim-SB-Orc
4	CP4D-4-RC-Tim-Orc-LadC	4-CP4D-4-RC-Tim-Orc-LadC	Red Clover	Trifolium pratense	96.00	6		Legume	I	N	CP4D-4		RC-Tim-Orc-LadC
4	CP4D-4-RC-Tim-Orc-LadC	4-CP4D-4-RC-Tim-Orc-LadC	Timothy	Phleum pratense	32.00	2		Grass	I	N	CP4D-4		RC-Tim-Orc-LadC
4	CP4D-4-RC-Tim-Orc-LadC	4-CP4D-4-RC-Tim-Orc-LadC	Orchardgrass	Dactylis glomerata L.	16.00	1		Grass	I	N	CP4D-4		RC-Tim-Orc-LadC

4	CP4D-4-RC-Tim-Orc-LadC	4-CP4D-4-RC-Tim-Orc-LadC	White Ladino Clover	Trifolium repens	8.00	0.5		Legume	I	N	CP4D-4		RC-Tim-Orc-LadC
4	CP4D-5-Indian-BB-Switch-Cmilkvetch-Besus-Ycone	4-CP4D-5-Indian-BB-Switch-Cmilkvetch-Besus-Yco	Indiangrass	Sorghastrum nutans	48.00	3		Grass	N	N	CP4D-5		Indian-BB-Switch-Cmilkvetch-Besus-Ycone
4	CP4D-5-Indian-BB-Switch-Cmilkvetch-Besus-Ycone	4-CP4D-5-Indian-BB-Switch-Cmilkvetch-Besus-Yco	Big Bluestem	Andropogon gerardii	16.00	1		Grass	N	N	CP4D-5		Indian-BB-Switch-Cmilkvetch-Besus-Ycone
4	CP4D-5-Indian-BB-Switch-Cmilkvetch-Besus-Ycone	4-CP4D-5-Indian-BB-Switch-Cmilkvetch-Besus-Yco	Switchgrass	Panicum virgatum	16.00	1		Grass	N	N	CP4D-5		Indian-BB-Switch-Cmilkvetch-Besus-Ycone
4	CP4D-5-Indian-BB-Switch-Cmilkvetch-Besus-Ycone	4-CP4D-5-Indian-BB-Switch-Cmilkvetch-Besus-Yco	Canada Milkvetch	Astragalus canadensis	2.00	0.125		Legume	N	N	CP4D-5		Indian-BB-Switch-Cmilkvetch-Besus-Ycone
4	CP4D-5-Indian-BB-Switch-Cmilkvetch-Besus-Ycone	4-CP4D-5-Indian-BB-Switch-Cmilkvetch-Besus-Yco	Black-eyed Susan	Rudbeckia hirta	1.00	0.0625		Forb	N	N	CP4D-5		Indian-BB-Switch-Cmilkvetch-Besus-Ycone
4	CP4D-5-Indian-BB-Switch-Cmilkvetch-Besus-Ycone	4-CP4D-5-Indian-BB-Switch-Cmilkvetch-Besus-Yco	Yellow Coneflower	Ratibida pinnata	1.00	0.0625		Forb	N	N	CP4D-5		Indian-BB-Switch-Cmilkvetch-Besus-Ycone
4	CP4D-6-Indian-BB-Switch-LB-Cmilkvetch-Besus-Ycone	4-CP4D-6-Indian-BB-Switch-LB-Cmilkvetch-Besus-	Indiangrass	Sorghastrum nutans	48.00	3		Grass	N	N	CP4D-6		Indian-BB-Switch-LB-Cmilkvetch-Besus-Ycone
4	CP4D-6-Indian-BB-Switch-LB-Cmilkvetch-Besus-Ycone	4-CP4D-6-Indian-BB-Switch-LB-Cmilkvetch-Besus-	Big Bluestem	Andropogon gerardii	16.00	1		Grass	N	N	CP4D-6		Indian-BB-Switch-LB-Cmilkvetch-Besus-Ycone
4	CP4D-6-Indian-BB-Switch-LB-Cmilkvetch-Besus-Ycone	4-CP4D-6-Indian-BB-Switch-LB-Cmilkvetch-Besus-	Switchgrass	Panicum virgatum	16.00	1		Grass	N	N	CP4D-6		Indian-BB-Switch-LB-Cmilkvetch-Besus-Ycone
4	CP4D-6-Indian-BB-Switch-LB-Cmilkvetch-Besus-Ycone	4-CP4D-6-Indian-BB-Switch-LB-Cmilkvetch-Besus-	Little Bluestem	Schizachyrium scoparium	16.00	1		Grass	N	N	CP4D-6		Indian-BB-Switch-LB-Cmilkvetch-Besus-Ycone
4	CP4D-6-Indian-BB-Switch-LB-Cmilkvetch-Besus-Ycone	4-CP4D-6-Indian-BB-Switch-LB-Cmilkvetch-Besus-	Canada Milkvetch	Astragalus canadensis	2.00	0.125		Legume	N	N	CP4D-6		Indian-BB-Switch-LB-Cmilkvetch-Besus-Ycone
4	CP4D-6-Indian-BB-Switch-LB-Cmilkvetch-Besus-Ycone	4-CP4D-6-Indian-BB-Switch-LB-Cmilkvetch-Besus-	Black-eyed Susan	Rudbeckia hirta	1.00	0.0625		Forb	N	N	CP4D-6		Indian-BB-Switch-LB-Cmilkvetch-Besus-Ycone
4	CP4D-6-Indian-BB-Switch-LB-Cmilkvetch-Besus-Ycone	4-CP4D-6-Indian-BB-Switch-LB-Cmilkvetch-Besus-	Yellow Coneflower	Ratibida pinnata	1.00	0.0625		Forb	N	N	CP4D-6		Indian-BB-Switch-LB-Cmilkvetch-Besus-Ycone
4	CP4D-7-Indian-BB-Switch-PPclover-Besus-Ycone	4-CP4D-7-Indian-BB-Switch-PPclover-Besus-Ycone	Indiangrass	Sorghastrum nutans	48.00	3		Grass	N	N	CP4D-7		Indian-BB-Switch-PPclover-Besus-Ycone
4	CP4D-7-Indian-BB-Switch-PPclover-Besus-Ycone	4-CP4D-7-Indian-BB-Switch-PPclover-Besus-Ycone	Big Bluestem	Andropogon gerardii	16.00	1		Grass	N	N	CP4D-7		Indian-BB-Switch-PPclover-Besus-Ycone
4	CP4D-7-Indian-BB-Switch-PPclover-Besus-Ycone	4-CP4D-7-Indian-BB-Switch-PPclover-Besus-Ycone	Switchgrass	Panicum virgatum	16.00	1		Grass	N	N	CP4D-7		Indian-BB-Switch-PPclover-Besus-Ycone
4	CP4D-7-Indian-BB-Switch-PPclover-Besus-Ycone	4-CP4D-7-Indian-BB-Switch-PPclover-Besus-Ycone	Purple Prairie Clover	Dalea purpurea	2.00	0.125		Legume	N	N	CP4D-7		Indian-BB-Switch-PPclover-Besus-Ycone
4	CP4D-7-Indian-BB-Switch-PPclover-Besus-Ycone	4-CP4D-7-Indian-BB-Switch-PPclover-Besus-Ycone	Black-eyed Susan	Rudbeckia hirta	1.00	0.0625		Forb	N	N	CP4D-7		Indian-BB-Switch-PPclover-Besus-Ycone
4	CP4D-7-Indian-BB-Switch-PPclover-Besus-Ycone	4-CP4D-7-Indian-BB-Switch-PPclover-Besus-Ycone	Yellow Coneflower	Ratibida pinnata	1.00	0.0625		Forb	N	N	CP4D-7		Indian-BB-Switch-PPclover-Besus-Ycone
4	CP4D-8-Indian-BB-LB-Switch-PPclover-Besus-Ycone	4-CP4D-8-Indian-BB-LB-Switch-PPclover-Besus-Yc	Indiangrass	Sorghastrum nutans	48.00	3		Grass	N	N	CP4D-8		Indian-BB-LB-Switch-PPclover-Besus-Ycone
4	CP4D-8-Indian-BB-LB-Switch-PPclover-Besus-Ycone	4-CP4D-8-Indian-BB-LB-Switch-PPclover-Besus-Yc	Big Bluestem	Andropogon gerardii	16.00	1		Grass	N	N	CP4D-8		Indian-BB-LB-Switch-PPclover-Besus-Ycone
4	CP4D-8-Indian-BB-LB-Switch-PPclover-Besus-Ycone	4-CP4D-8-Indian-BB-LB-Switch-PPclover-Besus-Yc	Little Bluestem	Schizachyrium scoparium	16.00	1		Grass	N	N	CP4D-8		Indian-BB-LB-Switch-PPclover-Besus-Ycone
4	CP4D-8-Indian-BB-LB-Switch-PPclover-Besus-Ycone	4-CP4D-8-Indian-BB-LB-Switch-PPclover-Besus-Yc	Switchgrass	Panicum virgatum	16.00	1		Grass	N	N	CP4D-8		Indian-BB-LB-Switch-PPclover-Besus-Ycone
4	CP4D-8-Indian-BB-LB-Switch-PPclover-Besus-Ycone	4-CP4D-8-Indian-BB-LB-Switch-PPclover-Besus-Yc	Purple Prairie Clover	Dalea purpurea	2.00	0.125		Legume	N	N	CP4D-8		Indian-BB-LB-Switch-PPclover-Besus-Ycone
4	CP4D-8-Indian-BB-LB-Switch-PPclover-Besus-Ycone	4-CP4D-8-Indian-BB-LB-Switch-PPclover-Besus-Yc	Black-eyed Susan	Rudbeckia hirta	1.00	0.0625		Forb	N	N	CP4D-8		Indian-BB-LB-Switch-PPclover-Besus-Ycone
4	CP4D-8-Indian-BB-LB-Switch-PPclover-Besus-Ycone	4-CP4D-8-Indian-BB-LB-Switch-PPclover-Besus-Yc	Yellow Coneflower	Ratibida pinnata	1.00	0.0625		Forb	N	N	CP4D-8		Indian-BB-LB-Switch-PPclover-Besus-Ycone
4	CP4D-9-Indian-BB-Switch-PPclover-Berg-Ycone	4-CP4D-9-Indian-BB-Switch-PPclover-Berg-Ycone	Indiangrass	Sorghastrum nutans	48.00	3		Grass	N	N	CP4D-9		Indian-BB-Switch-PPclover-Berg-Ycone
4	CP4D-9-Indian-BB-Switch-PPclover-Berg-Ycone	4-CP4D-9-Indian-BB-Switch-PPclover-Berg-Ycone	Big Bluestem	Andropogon gerardii	16.00	1		Grass	N	N	CP4D-9		Indian-BB-Switch-PPclover-Berg-Ycone
4	CP4D-9-Indian-BB-Switch-PPclover-Berg-Ycone	4-CP4D-9-Indian-BB-Switch-PPclover-Berg-Ycone	Switchgrass	Panicum virgatum	16.00	1		Grass	N	N	CP4D-9		Indian-BB-Switch-PPclover-Berg-Ycone
4	CP4D-9-Indian-BB-Switch-PPclover-Berg-Ycone	4-CP4D-9-Indian-BB-Switch-PPclover-Berg-Ycone	Purple Prairie Clover	Dalea purpurea	2.00	0.125		Legume	N	N	CP4D-9		Indian-BB-Switch-PPclover-Berg-Ycone
4	CP4D-9-Indian-BB-Switch-PPclover-Berg-Ycone	4-CP4D-9-Indian-BB-Switch-PPclover-Berg-Ycone	Bergamot	Monarda fistulosa	1.00	0.0625		Forb	N	N	CP4D-9		Indian-BB-Switch-PPclover-Berg-Ycone
4	CP4D-9-Indian-BB-Switch-PPclover-Berg-Ycone	4-CP4D-9-Indian-BB-Switch-PPclover-Berg-Ycone	Yellow Coneflower	Ratibida pinnata	1.00	0.0625		Forb	N	N	CP4D-9		Indian-BB-Switch-PPclover-Berg-Ycone
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swd	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-S	Little Bluestem	Schizachyrium scoparium	24.00	1.5		Grass	N	N	CP25-D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swd	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-S	Sideoats Grama	Bouteloua curtipendula	24.00	1.5		Grass	N	N	CP25-D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swd	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-S	Indiangrass	Sorghastrum nutans	8.00	0.5		Grass	N	N	CP25-D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swd	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-S	Big Bluestem	Andropogon gerardii	4.00	0.25		Grass	N	N	CP25-D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swd	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-S	Prairie Junegrass	Koeleria macrantha	2.00	0.125		Grass	N	N	CP25-D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swd	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-S	Purple Prairie Clover	Dalea purpurea	2.00	0.125		Legume	N	N	CP25-D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swd	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-S	Sand Dropseed	Sporobolus cryptandrus	2.00	0.125		Grass	N	N	CP25-D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swd	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-S	Spiderwort	Tradescantia ohiensis	1.00	0.0625		Forb	N	N	CP25-D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swd	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-S	Hoary Vervain	Verbena stricta	0.50	0.03125		Forb	N	N	CP25-D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swd	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-S	Leadplant	Amorpha canescens	0.50	0.03125		Legume	N	N	CP25-D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swd	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-S	Prairie Tickseed	Coreopsis palmata	0.50	0.03125		Forb	N	N	CP25-D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swd	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-S	Silky Aster	Symphyotrichum pratens	0.50	0.03125		Forb	N	N	CP25-D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swd	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-S	Stiff Goldenrod	Oligoneuron rigidum	0.50	0.03125		Forb	N	N	CP25-D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swd	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-S	Yellow Coneflower	Ratibida pinnata	0.50	0.03125		Forb	N	N	CP25-D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swd	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-S	Prairie Cinquefoil	Potentilla arguta	0.25	0.015625		Forb	N	N	CP25-D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swd	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-S	Spotted Mint	Monarda punctata	0.25	0.015625		Forb	N	N	CP25-D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint

25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclove	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdro	Little Bluestem	Schizachyrium scoparium	24.00	1.5		Grass	N	N	CP25-DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclove	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdro	Sideoats Grama	Bouteloua curtipendula	24.00	1.5		Grass	N	N	CP25-DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclove	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdro	Indiangrass	Sorghastrum nutans	8.00	0.5		Grass	N	N	CP25-DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclove	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdro	Switchgrass	Panicum virgatum	4.00	0.25		Grass	N	N	CP25-DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclove	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdro	Prairie Junegrass	Koeleria macrantha	2.00	0.125		Grass	N	N	CP25-DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclove	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdro	Prairie Dropseed	Sporobolus heterolepis	2.00	0.125		Grass	N	N	CP25-DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclove	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdro	Purple Prairie Clover	Dalea purpurea	2.00	0.125		Legume	N	N	CP25-DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclove	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdro	Round-Headed Bushclover	Lespedeza capitata	2.00	0.125		Legume	N	N	CP25-DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclove	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdro	Bergamot	Monarda fistulosa	1.00	0.0625		Forb	N	N	CP25-DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclove	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdro	Spiderwort	Tradescantia ohiensis	1.00	0.0625		Forb	N	N	CP25-DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclove	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdro	Yellow Coneflower	Ratibida pinnata	1.00	0.0625		Forb	N	N	CP25-DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclove	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdro	Leadplant	Amorpha canescens	0.50	0.03125		Legume	N	N	CP25-DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclove	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdro	Rough Blazing Star	Liatris aspera	0.50	0.03125		Forb	N	N	CP25-DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclove	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdro	Sky-Blue Aster	Symphyotrichum oolenta	0.50	0.03125		Forb	N	N	CP25-DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclove	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdro	Stiff Goldenrod	Oligoneuron rigidum	0.50	0.03125		Forb	N	N	CP25-DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclove	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdro	Prairie Cinquefoil	Potentilla arguta	0.25	0.015625		Forb	N	N	CP25-DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjur	Little Bluestem	Schizachyrium scoparium	24.00	1.5		Grass	N	N	CP25-KBB		Lplant-Rblzstar-Sgrod-Ycone-Berg-Pcinque-SkyAster
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjur	Sideoats Grama	Bouteloua curtipendula	24.00	1.5		Grass	N	N	CP25-KBB		Lplant-Rblzstar-Sgrod-Ycone-Berg-Pcinque-SkyAster
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjur	Indiangrass	Sorghastrum nutans	8.00	0.5		Grass	N	N	CP25-KBB		Lplant-Rblzstar-Sgrod-Ycone-Berg-Pcinque-SkyAster
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjur	Switchgrass	Panicum virgatum	8.00	0.5		Grass	N	N	CP25-KBB		Lplant-Rblzstar-Sgrod-Ycone-Berg-Pcinque-SkyAster
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjur	Wild Lupine	Lupinus perennis	3.00	0.1875		Legume	N	N	CP25-KBB		Lplant-Rblzstar-Sgrod-Ycone-Berg-Pcinque-SkyAster
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjur	Prairie Junegrass	Koeleria macrantha	2.00	0.125		Grass	N	N	CP25-KBB		Lplant-Rblzstar-Sgrod-Ycone-Berg-Pcinque-SkyAster
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjur	Prairie Dropseed	Sporobolus heterolepis	2.00	0.125		Grass	N	N	CP25-KBB		Lplant-Rblzstar-Sgrod-Ycone-Berg-Pcinque-SkyAster
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjur	Purple Prairie Clover	Dalea purpurea	2.00	0.125		Legume	N	N	CP25-KBB		Lplant-Rblzstar-Sgrod-Ycone-Berg-Pcinque-SkyAster
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjur	Pale Purple Coneflower	Echinacea pallida	1.00	0.0625		Forb	N	N	CP25-KBB		Lplant-Rblzstar-Sgrod-Ycone-Berg-Pcinque-SkyAster
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjur	Leadplant	Amorpha canescens	0.50	0.03125		Legume	N	N	CP25-KBB		Lplant-Rblzstar-Sgrod-Ycone-Berg-Pcinque-SkyAster
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjur	Rough Blazing Star	Liatris aspera	0.50	0.03125		Forb	N	N	CP25-KBB		Lplant-Rblzstar-Sgrod-Ycone-Berg-Pcinque-SkyAster
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjur	Stiff Goldenrod	Oligoneuron rigidum	0.50	0.03125		Forb	N	N	CP25-KBB		Lplant-Rblzstar-Sgrod-Ycone-Berg-Pcinque-SkyAster
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjur	Yellow Coneflower	Ratibida pinnata	0.50	0.03125		Forb	N	N	CP25-KBB		Lplant-Rblzstar-Sgrod-Ycone-Berg-Pcinque-SkyAster
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjur	Bergamot	Monarda fistulosa	0.25	0.015625		Forb	N	N	CP25-KBB		Lplant-Rblzstar-Sgrod-Ycone-Berg-Pcinque-SkyAster
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjur	Prairie Cinquefoil	Potentilla arguta	0.25	0.015625		Forb	N	N	CP25-KBB		Lplant-Rblzstar-Sgrod-Ycone-Berg-Pcinque-SkyAster
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjur	Sky-Blue Aster	Symphyotrichum oolenta	0.25	0.015625		Forb	N	N	CP25-KBB		Lplant-Rblzstar-Sgrod-Ycone-Berg-Pcinque-SkyAster
25	CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-	25-CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun	Little Bluestem	Schizachyrium scoparium	24.00	1.5		Grass	N	N	CP25-M		Berg-Besus-NEaster-SkyAster-Ycone-Croot
25	CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-	25-CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun	Indiangrass	Sorghastrum nutans	16.00	1		Grass	N	N	CP25-M		Berg-Besus-NEaster-SkyAster-Ycone-Croot
25	CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-	25-CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun	Big Bluestem	Andropogon gerardii	8.00	0.5		Grass	N	N	CP25-M		Berg-Besus-NEaster-SkyAster-Ycone-Croot
25	CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-	25-CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun	Canada Wildrye	Elymus canadensis	8.00	0.5		Grass	N	N	CP25-M		Berg-Besus-NEaster-SkyAster-Ycone-Croot
25	CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-	25-CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun	Switchgrass	Panicum virgatum	8.00	0.5		Grass	N	N	CP25-M		Berg-Besus-NEaster-SkyAster-Ycone-Croot
25	CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-	25-CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun	Ox-eye Sunflower	Heliopsis helianthoides	1.00	0.0625		Forb	N	N	CP25-M		Berg-Besus-NEaster-SkyAster-Ycone-Croot
25	CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-	25-CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun	Prairie Blazing Star	Liatris pycnostachya	1.00	0.0625		Forb	N	N	CP25-M		Berg-Besus-NEaster-SkyAster-Ycone-Croot
25	CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-	25-CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun	Purple Prairie Clover	Dalea purpurea	1.00	0.0625		Legume	N	N	CP25-M		Berg-Besus-NEaster-SkyAster-Ycone-Croot
25	CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-	25-CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun	Rosinweed	Silphium integrifolium	1.00	0.0625		Forb	N	N	CP25-M		Berg-Besus-NEaster-SkyAster-Ycone-Croot
25	CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-	25-CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun	Bergamot	Monarda fistulosa	0.50	0.03125		Forb	N	N	CP25-M		Berg-Besus-NEaster-SkyAster-Ycone-Croot
25	CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-	25-CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun	Black-eyed Susan	Rudbeckia hirta	0.50	0.03125		Forb	N	N	CP25-M		Berg-Besus-NEaster-SkyAster-Ycone-Croot
25	CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-	25-CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun	New England Aster	Symphyotrichum novae-a	0.50	0.03125		Forb	N	N	CP25-M		Berg-Besus-NEaster-SkyAster-Ycone-Croot
25	CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-	25-CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun	Sky-Blue Aster	Symphyotrichum oolenta	0.50	0.03125		Forb	N	N	CP25-M		Berg-Besus-NEaster-SkyAster-Ycone-Croot
25	CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-	25-CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun	Yellow Coneflower	Ratibida pinnata	0.50	0.03125		Forb	N	N	CP25-M		Berg-Besus-NEaster-SkyAster-Ycone-Croot
25	CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-	25-CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun	Culver's Root	Veronicastrum virginicum	0.25	0.015625		Forb	N	N	CP25-M		Berg-Besus-NEaster-SkyAster-Ycone-Croot
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgras	Canada Wildrye	Elymus canadensis	16.00	1		Grass	N	N	CP25-W		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgras	Switchgrass	Panicum virgatum	16.00	1		Grass	N	N	CP25-W		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot

25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgras	Indiangrass	Sorghastrum nutans	12.00	0.75		Grass	N	N	CP25-W		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgras	Big Bluestem	Andropogon gerardii	8.00	0.5		Grass	N	N	CP25-W		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgras	Prairie Cordgrass	Spartina pectinata	8.00	0.5		Grass	N	N	CP25-W		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgras	Fowl Mannagrass	Glyceria striata	4.00	0.25		Grass	N	N	CP25-W		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgras	Fox Sedge	Carex vulpinoidea	4.00	0.25		Sedge	N	N	CP25-W		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgras	Cupplant	Silphium perfoliatum	2.00	0.125		Forb	N	N	CP25-W		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgras	Showy Tick Trefoil	Desmodium canadense	2.00	0.125		Legume	N	N	CP25-W		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgras	Blue Vervain	Verbena hastata	1.00	0.0625		Forb	N	N	CP25-W		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgras	Golden Alexanders	Zizia aurea	1.00	0.0625		Forb	N	N	CP25-W		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgras	Marsh Milkweed	Asclepias incarnata	1.00	0.0625		Forb	N	N	CP25-W		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgras	Boneset	Eupatorium perfoliatum	0.50	0.03125		Forb	N	N	CP25-W		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgras	Common Ironweed	Vernonia fasciculata	0.50	0.03125		Forb	N	N	CP25-W		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgras	Joe-pye Weed	Eutrochium maculatum	0.50	0.03125		Forb	N	N	CP25-W		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgras	Culver's Root	Veronicastrum virginicum	0.25	0.015625		Forb	N	N	CP25-W		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
25	CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-WWIndig	25-CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-	Switchgrass	Panicum virgatum	24.00	1.5		Grass	N	N	CP25-WM		Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
25	CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-WWIndig	25-CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-	Canada Wildrye	Elymus canadensis	16.00	1		Grass	N	N	CP25-WM		Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
25	CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-WWIndig	25-CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-	Indiangrass	Sorghastrum nutans	12.00	0.75		Grass	N	N	CP25-WM		Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
25	CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-WWIndig	25-CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-	Big Bluestem	Andropogon gerardii	8.00	0.5		Grass	N	N	CP25-WM		Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
25	CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-WWIndig	25-CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-	Prairie Cordgrass	Spartina pectinata	4.00	0.25		Grass	N	N	CP25-WM		Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
25	CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-WWIndig	25-CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-	Cupplant	Silphium perfoliatum	2.00	0.125		Forb	N	N	CP25-WM		Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
25	CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-WWIndig	25-CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-	White wild indigo	Baptisia alba	1.50	0.09375		Legume	N	N	CP25-WM		Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
25	CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-WWIndig	25-CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-	Black-eyed Susan	Rudbeckia hirta	0.50	0.03125		Forb	N	N	CP25-WM		Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
25	CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-WWIndig	25-CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-	Common Ironweed	Vernonia fasciculata	0.50	0.03125		Forb	N	N	CP25-WM		Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
25	CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-WWIndig	25-CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-	Golden Alexanders	Zizia aurea	0.50	0.03125		Forb	N	N	CP25-WM		Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
25	CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-WWIndig	25-CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-	New England Aster	Symphyotrichum novae-a	0.50	0.03125		Forb	N	N	CP25-WM		Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
25	CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-WWIndig	25-CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-	Prairie Blazing Star	Liatris pycnostachya	0.50	0.03125		Forb	N	N	CP25-WM		Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
25	CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-WWIndig	25-CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-	Yellow Coneflower	Ratibida pinnata	0.50	0.03125		Forb	N	N	CP25-WM		Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
25	CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-WWIndig	25-CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-	Bergamot	Monarda fistulosa	0.25	0.015625		Forb	N	N	CP25-WM		Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
25	CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-WWIndig	25-CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-	Great St. John's Wort	Hypericum ascyron	0.25	0.015625		Forb	N	N	CP25-WM		Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
33	CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHbushclover	33-CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHb	Little Bluestem	Schizachyrium scoparium	32.00	2		Grass	N	N	CP33-1		Wsun-Ycone-Besus
33	CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHbushclover	33-CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHb	Sideoats Grama	Bouteloua curtipendula	32.00	2		Grass	N	N	CP33-1		Wsun-Ycone-Besus
33	CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHbushclover	33-CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHb	Canada Wildrye	Elymus canadensis	8.00	0.5		Grass	N	N	CP33-1		Wsun-Ycone-Besus
33	CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHbushclover	33-CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHb	Indiangrass	Sorghastrum nutans	8.00	0.5		Grass	N	N	CP33-1		Wsun-Ycone-Besus
33	CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHbushclover	33-CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHb	Purple Prairie Clover	Dalea purpurea	2.00	0.125		Legume	N	N	CP33-1		Wsun-Ycone-Besus
33	CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHbushclover	33-CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHb	Round-Headed Bushclover	Lespedeza capitata	2.00	0.125		Legume	N	N	CP33-1		Wsun-Ycone-Besus
33	CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHbushclover	33-CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHb	Purple Coneflower	Echinacea purpurea	1.00	0.0625		Forb	N	N	CP33-1		Wsun-Ycone-Besus
33	CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHbushclover	33-CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHb	Stiff Goldenrod	Oligoneuron rigidum	1.00	0.0625		Forb	N	N	CP33-1		Wsun-Ycone-Besus
33	CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHbushclover	33-CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHb	Fewleaf Sunflower	Helianthus occidentalis	1.00	0.0625		Forb	N	N	CP33-1		Wsun-Ycone-Besus
33	CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHbushclover	33-CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHb	Yellow Coneflower	Ratibida pinnata	1.00	0.0625		Forb	N	N	CP33-1		Wsun-Ycone-Besus
33	CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHbushclover	33-CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHb	Black-eyed Susan	Rudbeckia hirta	0.75	0.046875		Forb	N	N	CP33-1		Wsun-Ycone-Besus
33	CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rblzst	33-CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclo	Little Bluestem	Schizachyrium scoparium	24.00	1.5		Grass	N	N	CP33-2		SkyAster-Sgrod-Wsun
33	CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rblzst	33-CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclo	Sideoats Grama	Bouteloua curtipendula	20.00	1.25		Grass	N	N	CP33-2		SkyAster-Sgrod-Wsun
33	CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rblzst	33-CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclo	Indiangrass	Sorghastrum nutans	16.00	1		Grass	N	N	CP33-2		SkyAster-Sgrod-Wsun
33	CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rblzst	33-CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclo	Canada Wildrye	Elymus canadensis	8.00	0.5		Grass	N	N	CP33-2		SkyAster-Sgrod-Wsun
33	CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rblzst	33-CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclo	Purple Coneflower	Echinacea purpurea	2.00	0.125		Forb	N	N	CP33-2		SkyAster-Sgrod-Wsun
33	CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rblzst	33-CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclo	Purple Prairie Clover	Dalea purpurea	2.00	0.125		Legume	N	N	CP33-2		SkyAster-Sgrod-Wsun
33	CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rblzst	33-CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclo	Rough Blazing Star	Liatris aspera	2.00	0.125		Forb	N	N	CP33-2		SkyAster-Sgrod-Wsun
33	CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rblzst	33-CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclo	Black-eyed Susan	Rudbeckia hirta	1.00	0.0625		Forb	N	N	CP33-2		SkyAster-Sgrod-Wsun
33	CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rblzst	33-CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclo	Sky-Blue Aster	Symphyotrichum oolenta	1.00	0.0625		Forb	N	N	CP33-2		SkyAster-Sgrod-Wsun

33	CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rblzs	33-CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclov	Stiff Goldenrod	Oligoneuron rigidum	1.00	0.0625		Forb	N	N	CP33-2		SkyAster-Sgrod-Wsun
33	CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rblzs	33-CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclov	Fewleaf Sunflower	Helianthus occidentalis	1.00	0.0625		Forb	N	N	CP33-2		SkyAster-Sgrod-Wsun
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord-I	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedg	Canada Wildrye	Elymus canadensis	16.00	1		Grass	N	N	CP38B-WPHRA		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord-I	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedg	Indiangrass	Sorghastrum nutans	12.00	0.75		Grass	N	N	CP38B-WPHRA		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord-I	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedg	Switchgrass	Panicum virgatum	12.00	0.75		Grass	N	N	CP38B-WPHRA		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord-I	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedg	Big Bluestem	Andropogon gerardii	8.00	0.5		Grass	N	N	CP38B-WPHRA		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord-I	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedg	Fox Sedge	Carex vulpinoidea	8.00	0.5		Sedge	N	N	CP38B-WPHRA		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord-I	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedg	Prairie Cordgrass	Spartina pectinata	8.00	0.5		Grass	N	N	CP38B-WPHRA		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord-I	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedg	Fowl Mannagrass	Glyceria striata	4.00	0.25		Grass	N	N	CP38B-WPHRA		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord-I	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedg	Cupplant	Silphium perfoliatum	2.00	0.125		Forb	N	N	CP38B-WPHRA		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord-I	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedg	Showy Tick Trefoil	Desmodium canadense	2.00	0.125		Legume	N	N	CP38B-WPHRA		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord-I	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedg	Blue Vervain	Verbena hastata	1.00	0.0625		Forb	N	N	CP38B-WPHRA		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord-I	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedg	Golden Alexanders	Zizia aurea	1.00	0.0625		Forb	N	N	CP38B-WPHRA		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord-I	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedg	Marsh Milkweed	Asclepias incarnata	1.00	0.0625		Forb	N	N	CP38B-WPHRA		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord-I	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedg	Boneset	Eupatorium perfoliatum	0.50	0.03125		Forb	N	N	CP38B-WPHRA		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord-I	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedg	Common Ironweed	Vernonia fasciculata	0.50	0.03125		Forb	N	N	CP38B-WPHRA		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord-I	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedg	Joe-pye Weed	Eutrochium maculatum	0.50	0.03125		Forb	N	N	CP38B-WPHRA		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord-I	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedg	Culver's Root	Veronicastrum virginicum	0.25	0.015625		Forb	N	N	CP38B-WPHRA		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-CWGCA(CP1)1-RC-Orc-Tim	38-CP38E-CWGCA(CP1)1-RC-Orc-Tim	Red Clover	Trifolium pratense	80.00	5		Legume	I	N	CP38E-CWGCA(CP1)1		RC-Orc-Tim
38	CP38E-CWGCA(CP1)1-RC-Orc-Tim	38-CP38E-CWGCA(CP1)1-RC-Orc-Tim	Orchardgrass	Dactylis glomerata L.	48.00	3		Grass	I	N	CP38E-CWGCA(CP1)1		RC-Orc-Tim
38	CP38E-CWGCA(CP1)1-RC-Orc-Tim	38-CP38E-CWGCA(CP1)1-RC-Orc-Tim	Timothy	Phleum pratense	32.00	2		Grass	I	N	CP38E-CWGCA(CP1)1		RC-Orc-Tim
38	CP38E-CWGCA(CP1)2-Alf-Orc-Tim	38-CP38E-CWGCA(CP1)2-Alf-Orc-Tim	Alfalfa	Medicago sativa	96.00	6		Legume	I	N	CP38E-CWGCA(CP1)2		Alf-Orc-Tim
38	CP38E-CWGCA(CP1)2-Alf-Orc-Tim	38-CP38E-CWGCA(CP1)2-Alf-Orc-Tim	Orchardgrass	Dactylis glomerata L.	48.00	3		Grass	I	N	CP38E-CWGCA(CP1)2		Alf-Orc-Tim
38	CP38E-CWGCA(CP1)2-Alf-Orc-Tim	38-CP38E-CWGCA(CP1)2-Alf-Orc-Tim	Timothy	Phleum pratense	32.00	2		Grass	I	N	CP38E-CWGCA(CP1)2		Alf-Orc-Tim
38	CP38E-CWGCA(CP1)3-RC-Tim-Orc-Rtop-LadC	38-CP38E-CWGCA(CP1)3-RC-Tim-Orc-Rtop-LadC	Red Clover	Trifolium pratense	80.00	5		Legume	I	N	CP38E-CWGCA(CP1)3		RC-Tim-Orc-Rtop-LadC
38	CP38E-CWGCA(CP1)3-RC-Tim-Orc-Rtop-LadC	38-CP38E-CWGCA(CP1)3-RC-Tim-Orc-Rtop-LadC	Timothy	Phleum pratense	32.00	2		Grass	I	N	CP38E-CWGCA(CP1)3		RC-Tim-Orc-Rtop-LadC
38	CP38E-CWGCA(CP1)3-RC-Tim-Orc-Rtop-LadC	38-CP38E-CWGCA(CP1)3-RC-Tim-Orc-Rtop-LadC	Orchardgrass	Dactylis glomerata L.	16.00	1		Grass	I	N	CP38E-CWGCA(CP1)3		RC-Tim-Orc-Rtop-LadC
38	CP38E-CWGCA(CP1)3-RC-Tim-Orc-Rtop-LadC	38-CP38E-CWGCA(CP1)3-RC-Tim-Orc-Rtop-LadC	Redtop	Agrostis gigantea	16.00	1		Grass	I	N	CP38E-CWGCA(CP1)3		RC-Tim-Orc-Rtop-LadC
38	CP38E-CWGCA(CP1)3-RC-Tim-Orc-Rtop-LadC	38-CP38E-CWGCA(CP1)3-RC-Tim-Orc-Rtop-LadC	White Ladino Clover	Trifolium repens	8.00	0.5		Legume	I	N	CP38E-CWGCA(CP1)3		RC-Tim-Orc-Rtop-LadC
38	CP38E-CWGCA(CP1)4-Alf-Rtop-Tim-Orc	38-CP38E-CWGCA(CP1)4-Alf-Rtop-Tim-Orc	Alfalfa	Medicago sativa	96.00	6		Legume	I	N	CP38E-CWGCA(CP1)4		Alf-Rtop-Tim-Orc
38	CP38E-CWGCA(CP1)4-Alf-Rtop-Tim-Orc	38-CP38E-CWGCA(CP1)4-Alf-Rtop-Tim-Orc	Redtop	Agrostis gigantea	32.00	2		Grass	I	N	CP38E-CWGCA(CP1)4		Alf-Rtop-Tim-Orc
38	CP38E-CWGCA(CP1)4-Alf-Rtop-Tim-Orc	38-CP38E-CWGCA(CP1)4-Alf-Rtop-Tim-Orc	Timothy	Phleum pratense	32.00	2		Grass	I	N	CP38E-CWGCA(CP1)4		Alf-Rtop-Tim-Orc
38	CP38E-CWGCA(CP1)4-Alf-Rtop-Tim-Orc	38-CP38E-CWGCA(CP1)4-Alf-Rtop-Tim-Orc	Orchardgrass	Dactylis glomerata L.	16.00	1		Grass	I	N	CP38E-CWGCA(CP1)4		Alf-Rtop-Tim-Orc
38	CP38E-CWGCA(CP1)5-RC-KB-Orc-Rtop	38-CP38E-CWGCA(CP1)5-RC-KB-Orc-Rtop	Red Clover	Trifolium pratense	80.00	5		Legume	I	N	CP38E-CWGCA(CP1)5		RC-KB-Orc-Rtop
38	CP38E-CWGCA(CP1)5-RC-KB-Orc-Rtop	38-CP38E-CWGCA(CP1)5-RC-KB-Orc-Rtop	Kentucky Bluegrass	Poa pratensis	32.00	2		Grass	I	N	CP38E-CWGCA(CP1)5		RC-KB-Orc-Rtop
38	CP38E-CWGCA(CP1)5-RC-KB-Orc-Rtop	38-CP38E-CWGCA(CP1)5-RC-KB-Orc-Rtop	Orchardgrass	Dactylis glomerata L.	16.00	1		Grass	I	N	CP38E-CWGCA(CP1)5		RC-KB-Orc-Rtop
38	CP38E-CWGCA(CP1)5-RC-KB-Orc-Rtop	38-CP38E-CWGCA(CP1)5-RC-KB-Orc-Rtop	Redtop	Agrostis gigantea	16.00	1		Grass	I	N	CP38E-CWGCA(CP1)5		RC-KB-Orc-Rtop
38	CP38E-CWGCA(CP1)6-Alf-SB-Tim	38-CP38E-CWGCA(CP1)6-Alf-SB-Tim	Alfalfa	Medicago sativa	96.00	6		Legume	I	N	CP38E-CWGCA(CP1)6		Alf-SB-Tim
38	CP38E-CWGCA(CP1)6-Alf-SB-Tim	38-CP38E-CWGCA(CP1)6-Alf-SB-Tim	Smooth Bromegrass	Bromus inermis	48.00	3		Grass	I	N	CP38E-CWGCA(CP1)6		Alf-SB-Tim
38	CP38E-CWGCA(CP1)6-Alf-SB-Tim	38-CP38E-CWGCA(CP1)6-Alf-SB-Tim	Timothy	Phleum pratense	32.00	2		Grass	I	N	CP38E-CWGCA(CP1)6		Alf-SB-Tim
38	CP38E-CWGCA(CP1)7-RC-SB-Tim-Orc-LadC	38-CP38E-CWGCA(CP1)7-RC-SB-Tim-Orc-LadC	Red Clover	Trifolium pratense	80.00	5		Legume	I	N	CP38E-CWGCA(CP1)7		RC-SB-Tim-Orc-LadC
38	CP38E-CWGCA(CP1)7-RC-SB-Tim-Orc-LadC	38-CP38E-CWGCA(CP1)7-RC-SB-Tim-Orc-LadC	Smooth Bromegrass	Bromus inermis	32.00	2		Grass	I	N	CP38E-CWGCA(CP1)7		RC-SB-Tim-Orc-LadC
38	CP38E-CWGCA(CP1)7-RC-SB-Tim-Orc-LadC	38-CP38E-CWGCA(CP1)7-RC-SB-Tim-Orc-LadC	Timothy	Phleum pratense	32.00	2		Grass	I	N	CP38E-CWGCA(CP1)7		RC-SB-Tim-Orc-LadC
38	CP38E-CWGCA(CP1)7-RC-SB-Tim-Orc-LadC	38-CP38E-CWGCA(CP1)7-RC-SB-Tim-Orc-LadC	Orchardgrass	Dactylis glomerata L.	16.00	1		Grass	I	N	CP38E-CWGCA(CP1)7		RC-SB-Tim-Orc-LadC
38	CP38E-CWGCA(CP1)7-RC-SB-Tim-Orc-LadC	38-CP38E-CWGCA(CP1)7-RC-SB-Tim-Orc-LadC	White Ladino Clover	Trifolium repens	8.00	0.5		Legume	I	N	CP38E-CWGCA(CP1)7		RC-SB-Tim-Orc-LadC
38	CP38E-CWGCA(CP1)8-RC-SB-Tim	38-CP38E-CWGCA(CP1)8-RC-SB-Tim	Red Clover	Trifolium pratense	80.00	5		Legume	I	N	CP38E-CWGCA(CP1)8		RC-SB-Tim
38	CP38E-CWGCA(CP1)8-RC-SB-Tim	38-CP38E-CWGCA(CP1)8-RC-SB-Tim	Smooth Bromegrass	Bromus inermis	48.00	3		Grass	I	N	CP38E-CWGCA(CP1)8		RC-SB-Tim
38	CP38E-CWGCA(CP1)8-RC-SB-Tim	38-CP38E-CWGCA(CP1)8-RC-SB-Tim	Timothy	Phleum pratense	32.00	2		Grass	I	N	CP38E-CWGCA(CP1)8		RC-SB-Tim
38	CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-	38-CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-I	Little Bluestem	Schizachyrium scoparium	24.00	1.5		Grass	N	N	CP38E-CWGCA(CP2)D		LB-Sgrama-BB-Indian-PPclover-Besus-Rblzstar-Sgrod-Ycone

38	CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-	38-CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-I	Sideoats Grama	Bouteloua curtipendula	24.00	1.5		Grass	N	N	CP38E-CWGCA(CP2)D		LB-Sgrama-BB-Indian-PPclover-Besus-Rblzstar-Sgrod-Ycone
38	CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-	38-CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-I	Big Bluestem	Andropogon gerardii	8.00	0.5		Grass	N	N	CP38E-CWGCA(CP2)D		LB-Sgrama-BB-Indian-PPclover-Besus-Rblzstar-Sgrod-Ycone
38	CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-	38-CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-I	Indiangrass	Sorghastrum nutans	8.00	0.5		Grass	N	N	CP38E-CWGCA(CP2)D		LB-Sgrama-BB-Indian-PPclover-Besus-Rblzstar-Sgrod-Ycone
38	CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-	38-CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-I	Purple Prairie Clover	Dalea purpurea	2.00	0.125		Legume	N	N	CP38E-CWGCA(CP2)D		LB-Sgrama-BB-Indian-PPclover-Besus-Rblzstar-Sgrod-Ycone
38	CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-	38-CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-I	Black-eyed Susan	Rudbeckia hirta	1.00	0.0625		Forb	N	N	CP38E-CWGCA(CP2)D		LB-Sgrama-BB-Indian-PPclover-Besus-Rblzstar-Sgrod-Ycone
38	CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-	38-CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-I	Rough Blazing Star	Liatris aspera	1.00	0.0625		Forb	N	N	CP38E-CWGCA(CP2)D		LB-Sgrama-BB-Indian-PPclover-Besus-Rblzstar-Sgrod-Ycone
38	CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-	38-CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-I	Stiff Goldenrod	Oligoneuron rigidum	1.00	0.0625		Forb	N	N	CP38E-CWGCA(CP2)D		LB-Sgrama-BB-Indian-PPclover-Besus-Rblzstar-Sgrod-Ycone
38	CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-	38-CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-I	Yellow Coneflower	Ratibida pinnata	1.00	0.0625		Forb	N	N	CP38E-CWGCA(CP2)D		LB-Sgrama-BB-Indian-PPclover-Besus-Rblzstar-Sgrod-Ycone
38	CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-	38-CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian	Little Bluestem	Schizachyrium scoparium	24.00	1.5		Grass	N	N	CP38E-CWGCA(CP2)DM		Shwgrod-Sgrod-Ycone
38	CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-	38-CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian	Sideoats Grama	Bouteloua curtipendula	16.00	1		Grass	N	N	CP38E-CWGCA(CP2)DM		Shwgrod-Sgrod-Ycone
38	CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-	38-CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian	Big Bluestem	Andropogon gerardii	8.00	0.5		Grass	N	N	CP38E-CWGCA(CP2)DM		Shwgrod-Sgrod-Ycone
38	CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-	38-CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian	Indiangrass	Sorghastrum nutans	8.00	0.5		Grass	N	N	CP38E-CWGCA(CP2)DM		Shwgrod-Sgrod-Ycone
38	CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-	38-CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian	Switchgrass	Panicum virgatum	8.00	0.5		Grass	N	N	CP38E-CWGCA(CP2)DM		Shwgrod-Sgrod-Ycone
38	CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-	38-CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian	Purple Prairie Clover	Dalea purpurea	2.00	0.125		Legume	N	N	CP38E-CWGCA(CP2)DM		Shwgrod-Sgrod-Ycone
38	CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-	38-CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian	Bergamot	Monarda fistulosa	1.00	0.0625		Forb	N	N	CP38E-CWGCA(CP2)DM		Shwgrod-Sgrod-Ycone
38	CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-	38-CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian	Black-eyed Susan	Rudbeckia hirta	1.00	0.0625		Forb	N	N	CP38E-CWGCA(CP2)DM		Shwgrod-Sgrod-Ycone
38	CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-	38-CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian	Rough Blazing Star	Liatris aspera	1.00	0.0625		Forb	N	N	CP38E-CWGCA(CP2)DM		Shwgrod-Sgrod-Ycone
38	CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-	38-CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian	Showy Goldenrod	Solidago speciosa	1.00	0.0625		Forb	N	N	CP38E-CWGCA(CP2)DM		Shwgrod-Sgrod-Ycone
38	CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-	38-CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian	Stiff Goldenrod	Oligoneuron rigidum	1.00	0.0625		Forb	N	N	CP38E-CWGCA(CP2)DM		Shwgrod-Sgrod-Ycone
38	CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-	38-CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian	Yellow Coneflower	Ratibida pinnata	1.00	0.0625		Forb	N	N	CP38E-CWGCA(CP2)DM		Shwgrod-Sgrod-Ycone
38	CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Pb	38-CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Little Bluestem	Schizachyrium scoparium	20.00	1.25		Grass	N	N	CP38E-CWGCA(CP2)M		Shwgrod-Sgrod-Ycone
38	CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Pb	38-CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Canada Wildrye	Elymus canadensis	16.00	1		Grass	N	N	CP38E-CWGCA(CP2)M		Shwgrod-Sgrod-Ycone
38	CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Pb	38-CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Indiangrass	Sorghastrum nutans	16.00	1		Grass	N	N	CP38E-CWGCA(CP2)M		Shwgrod-Sgrod-Ycone
38	CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Pb	38-CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Big Bluestem	Andropogon gerardii	8.00	0.5		Grass	N	N	CP38E-CWGCA(CP2)M		Shwgrod-Sgrod-Ycone
38	CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Pb	38-CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Switchgrass	Panicum virgatum	8.00	0.5		Grass	N	N	CP38E-CWGCA(CP2)M		Shwgrod-Sgrod-Ycone
38	CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Pb	38-CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Big Bluestem	Andropogon gerardii	8.00	0.5		Grass	N	N	CP38E-CWGCA(CP2)M		Shwgrod-Sgrod-Ycone
38	CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Pb	38-CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Switchgrass	Panicum virgatum	8.00	0.5		Grass	N	N	CP38E-CWGCA(CP2)M		Shwgrod-Sgrod-Ycone
38	CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Pb	38-CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Prairie Blazing Star	Liatris pycnostachya	2.00	0.125		Forb	N	N	CP38E-CWGCA(CP2)M		Shwgrod-Sgrod-Ycone
38	CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Pb	38-CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Rough Blazing Star	Liatris aspera	2.00	0.125		Forb	N	N	CP38E-CWGCA(CP2)M		Shwgrod-Sgrod-Ycone
38	CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Pb	38-CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Bergamot	Monarda fistulosa	1.00	0.0625		Forb	N	N	CP38E-CWGCA(CP2)M		Shwgrod-Sgrod-Ycone
38	CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Pb	38-CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Black-eyed Susan	Rudbeckia hirta	1.00	0.0625		Forb	N	N	CP38E-CWGCA(CP2)M		Shwgrod-Sgrod-Ycone
38	CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Pb	38-CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Showy Goldenrod	Solidago speciosa	1.00	0.0625		Forb	N	N	CP38E-CWGCA(CP2)M		Shwgrod-Sgrod-Ycone
38	CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Pb	38-CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Stiff Goldenrod	Oligoneuron rigidum	1.00	0.0625		Forb	N	N	CP38E-CWGCA(CP2)M		Shwgrod-Sgrod-Ycone
38	CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Pb	38-CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Yellow Coneflower	Ratibida pinnata	1.00	0.0625		Forb	N	N	CP38E-CWGCA(CP2)M		Shwgrod-Sgrod-Ycone
38	CP38E-CWGCA(CP2)W-BB-Cwrye-Switch-Pcord-Cup-Bv	38-CP38E-CWGCA(CP2)W-BB-Cwrye-Switch-Pcor	Big Bluestem	Andropogon gerardii	16.00	1		Grass	N	N	CP38E-CWGCA(CP2)W		BB-Cwrye-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-CWGCA(CP2)W-BB-Cwrye-Switch-Pcord-Cup-Bv	38-CP38E-CWGCA(CP2)W-BB-Cwrye-Switch-Pcor	Canada Wildrye	Elymus canadensis	16.00	1		Grass	N	N	CP38E-CWGCA(CP2)W		BB-Cwrye-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-CWGCA(CP2)W-BB-Cwrye-Switch-Pcord-Cup-Bv	38-CP38E-CWGCA(CP2)W-BB-Cwrye-Switch-Pcor	Switchgrass	Panicum virgatum	16.00	1		Grass	N	N	CP38E-CWGCA(CP2)W		BB-Cwrye-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-CWGCA(CP2)W-BB-Cwrye-Switch-Pcord-Cup-Bv	38-CP38E-CWGCA(CP2)W-BB-Cwrye-Switch-Pcor	Prairie Cordgrass	Spartina pectinata	8.00	0.5		Grass	N	N	CP38E-CWGCA(CP2)W		BB-Cwrye-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-CWGCA(CP2)W-BB-Cwrye-Switch-Pcord-Cup-Bv	38-CP38E-CWGCA(CP2)W-BB-Cwrye-Switch-Pcor	Cupplant	Silphium perfoliatum	2.00	0.125		Forb	N	N	CP38E-CWGCA(CP2)W		BB-Cwrye-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-CWGCA(CP2)W-BB-Cwrye-Switch-Pcord-Cup-Bv	38-CP38E-CWGCA(CP2)W-BB-Cwrye-Switch-Pcor	Blue Vervain	Verbena hastata	1.00	0.0625		Forb	N	N	CP38E-CWGCA(CP2)W		BB-Cwrye-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-CWGCA(CP2)W-BB-Cwrye-Switch-Pcord-Cup-Bv	38-CP38E-CWGCA(CP2)W-BB-Cwrye-Switch-Pcor	Common Ironweed	Vernonia fasciculata	1.00	0.0625		Forb	N	N	CP38E-CWGCA(CP2)W		BB-Cwrye-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Pblzs	38-CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pc	Switchgrass	Panicum virgatum	32.00	2		Grass	N	N	CP38E-CWGCA(CP2)WM		Switch-BB-Cwrye-Pcord-Pblzstar-Berg-Besus-NEaster-Ycone
38	CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Pblzs	38-CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pc	Big Bluestem	Andropogon gerardii	16.00	1		Grass	N	N	CP38E-CWGCA(CP2)WM		Switch-BB-Cwrye-Pcord-Pblzstar-Berg-Besus-NEaster-Ycone
38	CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Pblzs	38-CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pc	Canada Wildrye	Elymus canadensis	16.00	1		Grass	N	N	CP38E-CWGCA(CP2)WM		Switch-BB-Cwrye-Pcord-Pblzstar-Berg-Besus-NEaster-Ycone
38	CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Pblzs	38-CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pc	Prairie Cordgrass	Spartina pectinata	4.00	0.25		Grass	N	N	CP38E-CWGCA(CP2)WM		Switch-BB-Cwrye-Pcord-Pblzstar-Berg-Besus-NEaster-Ycone
38	CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Pblzs	38-CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pc	Prairie Blazing Star	Liatris pycnostachya	2.00	0.125		Forb	N	N	CP38E-CWGCA(CP2)WM		Switch-BB-Cwrye-Pcord-Pblzstar-Berg-Besus-NEaster-Ycone
38	CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Pblzs	38-CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pc	Bergamot	Monarda fistulosa	1.00	0.0625		Forb	N	N	CP38E-CWGCA(CP2)WM		Switch-BB-Cwrye-Pcord-Pblzstar-Berg-Besus-NEaster-Ycone
38	CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Pblzs	38-CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pc	Black-eyed Susan	Rudbeckia hirta	1.00	0.0625		Forb	N	N	CP38E-CWGCA(CP2)WM		Switch-BB-Cwrye-Pcord-Pblzstar-Berg-Besus-NEaster-Ycone
38	CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Pblzs	38-CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pc	New England Aster	Symphyotrichum novae-a	1.00	0.0625		Forb	N	N	CP38E-CWGCA(CP2)WM		Switch-BB-Cwrye-Pcord-Pblzstar-Berg-Besus-NEaster-Ycone
38	CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Pblzs	38-CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pc	Yellow Coneflower	Ratibida pinnata	1.00	0.0625		Forb	N	N	CP38E-CWGCA(CP2)WM		Switch-BB-Cwrye-Pcord-Pblzstar-Berg-Besus-NEaster-Ycone
38	CP38E-GHRA(CP2)D-LB-Sgrama-BB-Indian-PPclover-Sg	38-CP38E-GHRA(CP2)D-LB-Sgrama-BB-Indian-PP	Little Bluestem	Schizachyrium scoparium	24.00	1.5		Grass	N	N	CP38E-GHRA(CP2)D		LB-Sgrama-BB-Indian-PPclover-Sgrod-Ycone

38	CP38E-GHRA(CP2)D-LB-Sgrama-BB-Indian-PPclover-Sg	38-CP38E-GHRA(CP2)D-LB-Sgrama-BB-Indian-PP	Sideoats Grama	Bouteloua curtipendula	24.00	1.5		Grass	N	N	CP38E-GHRA(CP2)D		LB-Sgrama-BB-Indian-PPclover-Sgrod-Ycone
38	CP38E-GHRA(CP2)D-LB-Sgrama-BB-Indian-PPclover-Sg	38-CP38E-GHRA(CP2)D-LB-Sgrama-BB-Indian-PP	Big Bluestem	Andropogon gerardii	8.00	0.5		Grass	N	N	CP38E-GHRA(CP2)D		LB-Sgrama-BB-Indian-PPclover-Sgrod-Ycone
38	CP38E-GHRA(CP2)D-LB-Sgrama-BB-Indian-PPclover-Sg	38-CP38E-GHRA(CP2)D-LB-Sgrama-BB-Indian-PP	Indiangrass	Sorghastrum nutans	8.00	0.5		Grass	N	N	CP38E-GHRA(CP2)D		LB-Sgrama-BB-Indian-PPclover-Sgrod-Ycone
38	CP38E-GHRA(CP2)D-LB-Sgrama-BB-Indian-PPclover-Sg	38-CP38E-GHRA(CP2)D-LB-Sgrama-BB-Indian-PP	Purple Prairie Clover	Dalea purpurea	2.00	0.125		Legume	N	N	CP38E-GHRA(CP2)D		LB-Sgrama-BB-Indian-PPclover-Sgrod-Ycone
38	CP38E-GHRA(CP2)D-LB-Sgrama-BB-Indian-PPclover-Sg	38-CP38E-GHRA(CP2)D-LB-Sgrama-BB-Indian-PP	Stiff Goldenrod	Oligoneuron rigidum	1.00	0.0625		Forb	N	N	CP38E-GHRA(CP2)D		LB-Sgrama-BB-Indian-PPclover-Sgrod-Ycone
38	CP38E-GHRA(CP2)D-LB-Sgrama-BB-Indian-PPclover-Sg	38-CP38E-GHRA(CP2)D-LB-Sgrama-BB-Indian-PP	Yellow Coneflower	Ratibida pinnata	1.00	0.0625		Forb	N	N	CP38E-GHRA(CP2)D		LB-Sgrama-BB-Indian-PPclover-Sgrod-Ycone
38	CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-Switch-PP	38-CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-S	Little Bluestem	Schizachyrium scoparium	24.00	1.5		Grass	N	N	CP38E-GHRA(CP2)DM		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-Switch-PP	38-CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-S	Sideoats Grama	Bouteloua curtipendula	16.00	1		Grass	N	N	CP38E-GHRA(CP2)DM		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-Switch-PP	38-CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-S	Big Bluestem	Andropogon gerardii	8.00	0.5		Grass	N	N	CP38E-GHRA(CP2)DM		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-Switch-PP	38-CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-S	Indiangrass	Sorghastrum nutans	8.00	0.5		Grass	N	N	CP38E-GHRA(CP2)DM		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-Switch-PP	38-CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-S	Switchgrass	Panicum virgatum	8.00	0.5		Grass	N	N	CP38E-GHRA(CP2)DM		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-Switch-PP	38-CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-S	Purple Prairie Clover	Dalea purpurea	2.00	0.125		Legume	N	N	CP38E-GHRA(CP2)DM		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-Switch-PP	38-CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-S	Bergamot	Monarda fistulosa	1.00	0.0625		Forb	N	N	CP38E-GHRA(CP2)DM		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-Switch-PP	38-CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-S	Yellow Coneflower	Ratibida pinnata	1.00	0.0625		Forb	N	N	CP38E-GHRA(CP2)DM		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Switch-Berg	38-CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Sw	Little Bluestem	Schizachyrium scoparium	20.00	1.25		Grass	N	N	CP38E-GHRA(CP2)M		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Switch-Berg	38-CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Sw	Canada Wildrye	Elymus canadensis	16.00	1		Grass	N	N	CP38E-GHRA(CP2)M		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Switch-Berg	38-CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Sw	Indiangrass	Sorghastrum nutans	16.00	1		Grass	N	N	CP38E-GHRA(CP2)M		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Switch-Berg	38-CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Sw	Big Bluestem	Andropogon gerardii	8.00	0.5		Grass	N	N	CP38E-GHRA(CP2)M		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Switch-Berg	38-CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Sw	Switchgrass	Panicum virgatum	8.00	0.5		Grass	N	N	CP38E-GHRA(CP2)M		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Switch-Berg	38-CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Sw	Bergamot	Monarda fistulosa	1.00	0.0625		Forb	N	N	CP38E-GHRA(CP2)M		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Switch-Berg	38-CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Sw	Black-eyed Susan	Rudbeckia hirta	1.00	0.0625		Forb	N	N	CP38E-GHRA(CP2)M		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Switch-Berg	38-CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Sw	Yellow Coneflower	Ratibida pinnata	1.00	0.0625		Forb	N	N	CP38E-GHRA(CP2)M		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-Cu	38-CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch	Big Bluestem	Andropogon gerardii	16.00	1		Grass	N	N	CP38E-GHRA(CP2)W		BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-Cu	38-CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch	Canada Wildrye	Elymus canadensis	16.00	1		Grass	N	N	CP38E-GHRA(CP2)W		BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-Cu	38-CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch	Indiangrass	Sorghastrum nutans	16.00	1		Grass	N	N	CP38E-GHRA(CP2)W		BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-Cu	38-CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch	Switchgrass	Panicum virgatum	16.00	1		Grass	N	N	CP38E-GHRA(CP2)W		BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-Cu	38-CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch	Prairie Cordgrass	Spartina pectinata	8.00	0.5		Grass	N	N	CP38E-GHRA(CP2)W		BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-Cu	38-CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch	Cupplant	Silphium perfoliatum	2.00	0.125		Forb	N	N	CP38E-GHRA(CP2)W		BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-Cu	38-CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch	Blue Vervain	Verbena hastata	1.00	0.0625		Forb	N	N	CP38E-GHRA(CP2)W		BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-Cu	38-CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch	Common Ironweed	Vernonia fasciculata	1.00	0.0625		Forb	N	N	CP38E-GHRA(CP2)W		BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-GHRA(CP2)WM-Switch-BB-Cwrye-Pcord-Berg-N	38-CP38E-GHRA(CP2)WM-Switch-BB-Cwrye-Pcor	Switchgrass	Panicum virgatum	32.00	2		Grass	N	N	CP38E-GHRA(CP2)WM		Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
38	CP38E-GHRA(CP2)WM-Switch-BB-Cwrye-Pcord-Berg-N	38-CP38E-GHRA(CP2)WM-Switch-BB-Cwrye-Pcor	Big Bluestem	Andropogon gerardii	16.00	1		Grass	N	N	CP38E-GHRA(CP2)WM		Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
38	CP38E-GHRA(CP2)WM-Switch-BB-Cwrye-Pcord-Berg-N	38-CP38E-GHRA(CP2)WM-Switch-BB-Cwrye-Pcor	Canada Wildrye	Elymus canadensis	16.00	1		Grass	N	N	CP38E-GHRA(CP2)WM		Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
38	CP38E-GHRA(CP2)WM-Switch-BB-Cwrye-Pcord-Berg-N	38-CP38E-GHRA(CP2)WM-Switch-BB-Cwrye-Pcor	Prairie Cordgrass	Spartina pectinata	4.00	0.25		Grass	N	N	CP38E-GHRA(CP2)WM		Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
38	CP38E-GHRA(CP2)WM-Switch-BB-Cwrye-Pcord-Berg-N	38-CP38E-GHRA(CP2)WM-Switch-BB-Cwrye-Pcor	Bergamot	Monarda fistulosa	1.00	0.0625		Forb	N	N	CP38E-GHRA(CP2)WM		Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
38	CP38E-GHRA(CP2)WM-Switch-BB-Cwrye-Pcord-Berg-N	38-CP38E-GHRA(CP2)WM-Switch-BB-Cwrye-Pcor	New England Aster	Symphyotrichum novae-a	1.00	0.0625		Forb	N	N	CP38E-GHRA(CP2)WM		Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
38	CP38E-GHRA(CP2)WM-Switch-BB-Cwrye-Pcord-Berg-N	38-CP38E-GHRA(CP2)WM-Switch-BB-Cwrye-Pcor	Yellow Coneflower	Ratibida pinnata	1.00	0.0625		Forb	N	N	CP38E-GHRA(CP2)WM		Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Little Bluestem	Schizachyrium scoparium	24.00	1.5		Grass	N	N	CP38E-GHRA(CP25)D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Sideoats Grama	Bouteloua curtipendula	24.00	1.5		Grass	N	N	CP38E-GHRA(CP25)D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Indiangrass	Sorghastrum nutans	8.00	0.5		Grass	N	N	CP38E-GHRA(CP25)D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Big Bluestem	Andropogon gerardii	4.00	0.25		Grass	N	N	CP38E-GHRA(CP25)D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Purple Prairie Clover	Dalea purpurea	2.00	0.125		Legume	N	N	CP38E-GHRA(CP25)D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Sand Dropseed	Sporobolus cryptandrus	2.00	0.125		Grass	N	N	CP38E-GHRA(CP25)D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Prairie Junegrass	Koeleria macrantha	1.00	0.0625		Grass	N	N	CP38E-GHRA(CP25)D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Spiderwort	Tradescantia ohiensis	1.00	0.0625		Forb	N	N	CP38E-GHRA(CP25)D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Hoary Vervain	Verbena stricta	0.50	0.03125		Forb	N	N	CP38E-GHRA(CP25)D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Leadplant	Amorpha canescens	0.50	0.03125		Legume	N	N	CP38E-GHRA(CP25)D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Prairie Tickseed	Coreopsis palmata	0.50	0.03125		Forb	N	N	CP38E-GHRA(CP25)D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Silky Aster	Symphyotrichum pratens	0.50	0.03125		Forb	N	N	CP38E-GHRA(CP25)D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint

38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Stiff Goldenrod	Oligoneuron rigidum	0.50	0.03125		Forb	N	N	CP38E-GHRA(CP25)D	Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Yellow Coneflower	Ratibida pinnata	0.50	0.03125		Forb	N	N	CP38E-GHRA(CP25)D	Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Prairie Cinquefoil	Potentilla arguta	0.25	0.015625		Forb	N	N	CP38E-GHRA(CP25)D	Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Spotted Mint	Monarda punctata	0.25	0.015625		Forb	N	N	CP38E-GHRA(CP25)D	Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjune	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Little Bluestem	Schizachyrium scoparium	24.00	1.5		Grass	N	N	CP38E-GHRA(CP25)DM	Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjune	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Sideoats Grama	Bouteloua curtipendula	24.00	1.5		Grass	N	N	CP38E-GHRA(CP25)DM	Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjune	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Indiangrass	Sorghastrum nutans	8.00	0.5		Grass	N	N	CP38E-GHRA(CP25)DM	Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjune	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Switchgrass	Panicum virgatum	4.00	0.25		Grass	N	N	CP38E-GHRA(CP25)DM	Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjune	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Prairie Junegrass	Koeleria macrantha	2.00	0.125		Grass	N	N	CP38E-GHRA(CP25)DM	Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjune	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Prairie Dropseed	Sporobolus heterolepis	2.00	0.125		Grass	N	N	CP38E-GHRA(CP25)DM	Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjune	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Purple Prairie Clover	Dalea purpurea	2.00	0.125		Legume	N	N	CP38E-GHRA(CP25)DM	Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjune	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Round-Headed Bushclover	Lespedeza capitata	2.00	0.125		Legume	N	N	CP38E-GHRA(CP25)DM	Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjune	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Bergamot	Monarda fistulosa	1.00	0.0625		Forb	N	N	CP38E-GHRA(CP25)DM	Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjune	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Spiderwort	Tradescantia ohiensis	1.00	0.0625		Forb	N	N	CP38E-GHRA(CP25)DM	Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjune	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Yellow Coneflower	Ratibida pinnata	1.00	0.0625		Forb	N	N	CP38E-GHRA(CP25)DM	Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjune	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Leadplant	Amorpha canescens	0.50	0.03125		Legume	N	N	CP38E-GHRA(CP25)DM	Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjune	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Rough Blazing Star	Liatris aspera	0.50	0.03125		Forb	N	N	CP38E-GHRA(CP25)DM	Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjune	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Sky-Blue Aster	Symphyotrichum oolenta	0.50	0.03125		Forb	N	N	CP38E-GHRA(CP25)DM	Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjune	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Stiff Goldenrod	Oligoneuron rigidum	0.50	0.03125		Forb	N	N	CP38E-GHRA(CP25)DM	Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjune	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Prairie Cinquefoil	Potentilla arguta	0.25	0.015625		Forb	N	N	CP38E-GHRA(CP25)DM	Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Switch-Oxe	38-CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Sv	Little Bluestem	Schizachyrium scoparium	24.00	1.5		Grass	N	N	CP38E-GHRA(CP25)M	Berg-Besus-NEaster-SBAster-Ycone-Croot
38	CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Switch-Oxe	38-CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Sv	Indiangrass	Sorghastrum nutans	16.00	1		Grass	N	N	CP38E-GHRA(CP25)M	Berg-Besus-NEaster-SBAster-Ycone-Croot
38	CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Switch-Oxe	38-CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Sv	Big Bluestem	Andropogon gerardii	8.00	0.5		Grass	N	N	CP38E-GHRA(CP25)M	Berg-Besus-NEaster-SBAster-Ycone-Croot
38	CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Switch-Oxe	38-CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Sv	Canada Wildrye	Elymus canadensis	8.00	0.5		Grass	N	N	CP38E-GHRA(CP25)M	Berg-Besus-NEaster-SBAster-Ycone-Croot
38	CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Switch-Oxe	38-CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Sv	Switchgrass	Panicum virgatum	8.00	0.5		Grass	N	N	CP38E-GHRA(CP25)M	Berg-Besus-NEaster-SBAster-Ycone-Croot
38	CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Switch-Oxe	38-CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Sv	Ox-eye Sunflower	Heliopsis helianthoides	1.00	0.0625		Forb	N	N	CP38E-GHRA(CP25)M	Berg-Besus-NEaster-SBAster-Ycone-Croot
38	CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Switch-Oxe	38-CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Sv	Prairie Blazing Star	Liatris pycnostachya	1.00	0.0625		Forb	N	N	CP38E-GHRA(CP25)M	Berg-Besus-NEaster-SBAster-Ycone-Croot
38	CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Switch-Oxe	38-CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Sv	Purple Prairie Clover	Dalea purpurea	1.00	0.0625		Legume	N	N	CP38E-GHRA(CP25)M	Berg-Besus-NEaster-SBAster-Ycone-Croot
38	CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Switch-Oxe	38-CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Sv	Rosinweed	Silphium integrifolium	1.00	0.0625		Forb	N	N	CP38E-GHRA(CP25)M	Berg-Besus-NEaster-SBAster-Ycone-Croot
38	CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Switch-Oxe	38-CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Sv	Bergamot	Monarda fistulosa	0.50	0.03125		Forb	N	N	CP38E-GHRA(CP25)M	Berg-Besus-NEaster-SBAster-Ycone-Croot
38	CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Switch-Oxe	38-CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Sv	Black-eyed Susan	Rudbeckia hirta	0.50	0.03125		Forb	N	N	CP38E-GHRA(CP25)M	Berg-Besus-NEaster-SBAster-Ycone-Croot
38	CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Switch-Oxe	38-CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Sv	New England Aster	Symphyotrichum novae-a	0.50	0.03125		Forb	N	N	CP38E-GHRA(CP25)M	Berg-Besus-NEaster-SBAster-Ycone-Croot
38	CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Switch-Oxe	38-CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Sv	Smooth Blue Aster	Symphyotrichum laeve	0.50	0.03125		Forb	N	N	CP38E-GHRA(CP25)M	Berg-Besus-NEaster-SBAster-Ycone-Croot
38	CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Switch-Oxe	38-CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Sv	Yellow Coneflower	Ratibida pinnata	0.50	0.03125		Forb	N	N	CP38E-GHRA(CP25)M	Berg-Besus-NEaster-SBAster-Ycone-Croot
38	CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Switch-Oxe	38-CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Sv	Culver's Root	Veronicastrum virginicum	0.25	0.015625		Forb	N	N	CP38E-GHRA(CP25)M	Berg-Besus-NEaster-SBAster-Ycone-Croot
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-F	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BI	Canada Wildrye	Elymus canadensis	16.00	1		Grass	N	N	CP38E-GHRA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-F	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BI	Switchgrass	Panicum virgatum	16.00	1		Grass	N	N	CP38E-GHRA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-F	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BI	Indiangrass	Sorghastrum nutans	12.00	0.75		Grass	N	N	CP38E-GHRA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-F	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BI	Big Bluestem	Andropogon gerardii	8.00	0.5		Grass	N	N	CP38E-GHRA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-F	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BI	Prairie Cordgrass	Spartina pectinata	8.00	0.5		Grass	N	N	CP38E-GHRA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-F	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BI	Fowl Mannagrass	Glyceria striata	4.00	0.25		Grass	N	N	CP38E-GHRA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-F	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BI	Fox Sedge	Carex vulpinoidea	4.00	0.25		Sedge	N	N	CP38E-GHRA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-F	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BI	Cupplant	Silphium perfoliatum	2.00	0.125		Forb	N	N	CP38E-GHRA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-F	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BI	Showy Tick Trefoil	Desmodium canadense	2.00	0.125		Legume	N	N	CP38E-GHRA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-F	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BI	Blue Vervain	Verbena hastata	1.00	0.0625		Forb	N	N	CP38E-GHRA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-F	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BI	Golden Alexanders	Zizia aurea	1.00	0.0625		Forb	N	N	CP38E-GHRA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-F	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BI	Marsh Milkweed	Asclepias incarnata	1.00	0.0625		Forb	N	N	CP38E-GHRA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-F	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BI	Boneset	Eupatorium perfoliatum	0.50	0.03125		Forb	N	N	CP38E-GHRA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-F	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BI	Common Ironweed	Vernonia fasciculata	0.50	0.03125		Forb	N	N	CP38E-GHRA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot

38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-F	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BI	Joe-pye Weed	Eutrochium maculatum	0.50	0.03125		Forb	N	N	CP38E-GHRA(CP25)W		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-F	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BI	Culver's Root	Veronicastrum virginicum	0.25	0.015625		Forb	N	N	CP38E-GHRA(CP25)W		Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Indian-Pcord	38-CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Ind	Switchgrass	Panicum virgatum	24.00	1.5		Grass	N	N	CP38E-GHRA(CP25)WM		Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
38	CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Indian-Pcord	38-CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Ind	Big Bluestem	Andropogon gerardii	20.00	1.25		Grass	N	N	CP38E-GHRA(CP25)WM		Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
38	CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Indian-Pcord	38-CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Ind	Canada Wildrye	Elymus canadensis	16.00	1		Grass	N	N	CP38E-GHRA(CP25)WM		Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
38	CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Indian-Pcord	38-CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Ind	Indiangrass	Sorghastrum nutans	12.00	0.75		Grass	N	N	CP38E-GHRA(CP25)WM		Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
38	CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Indian-Pcord	38-CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Ind	Prairie Cordgrass	Spartina pectinata	4.00	0.25		Grass	N	N	CP38E-GHRA(CP25)WM		Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
38	CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Indian-Pcord	38-CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Ind	Cupplant	Silphium perfoliatum	2.00	0.125		Forb	N	N	CP38E-GHRA(CP25)WM		Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
38	CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Indian-Pcord	38-CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Ind	White wild indigo	Baptisia alba	1.50	0.09375		Legume	N	N	CP38E-GHRA(CP25)WM		Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
38	CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Indian-Pcord	38-CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Ind	Black-eyed Susan	Rudbeckia hirta	0.50	0.03125		Forb	N	N	CP38E-GHRA(CP25)WM		Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
38	CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Indian-Pcord	38-CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Ind	Common Ironweed	Vernonia fasciculata	0.50	0.03125		Forb	N	N	CP38E-GHRA(CP25)WM		Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
38	CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Indian-Pcord	38-CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Ind	Golden Alexanders	Zizia aurea	0.50	0.03125		Forb	N	N	CP38E-GHRA(CP25)WM		Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
38	CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Indian-Pcord	38-CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Ind	New England Aster	Symphyotrichum novae-a	0.50	0.03125		Forb	N	N	CP38E-GHRA(CP25)WM		Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
38	CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Indian-Pcord	38-CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Ind	Prairie Blazing Star	Liatris pycnostachya	0.50	0.03125		Forb	N	N	CP38E-GHRA(CP25)WM		Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
38	CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Indian-Pcord	38-CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Ind	Yellow Coneflower	Ratibida pinnata	0.50	0.03125		Forb	N	N	CP38E-GHRA(CP25)WM		Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
38	CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Indian-Pcord	38-CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Ind	Bergamot	Monarda fistulosa	0.25	0.015625		Forb	N	N	CP38E-GHRA(CP25)WM		Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
38	CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Indian-Pcord	38-CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Ind	Great St. John's Wort	Hypericum ascyron	0.25	0.015625		Forb	N	N	CP38E-GHRA(CP25)WM		Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Little Bluestem	Schizachyrium scoparium	24.00	1.5		Grass	N	N	CP38E-KBB		Fspurge-Galex-Rblzstar-RHbushclover-Wsun-Berg-Ptick-Besus
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Canada Wildrye	Elymus canadensis	16.00	1		Grass	N	N	CP38E-KBB		Fspurge-Galex-Rblzstar-RHbushclover-Wsun-Berg-Ptick-Besus
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Indiangrass	Sorghastrum nutans	16.00	1		Grass	N	N	CP38E-KBB		Fspurge-Galex-Rblzstar-RHbushclover-Wsun-Berg-Ptick-Besus
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Big Bluestem	Andropogon gerardii	8.00	0.5		Grass	N	N	CP38E-KBB		Fspurge-Galex-Rblzstar-RHbushclover-Wsun-Berg-Ptick-Besus
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Sideoats Grama	Bouteloua curtipendula	8.00	0.5		Grass	N	N	CP38E-KBB		Fspurge-Galex-Rblzstar-RHbushclover-Wsun-Berg-Ptick-Besus
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Switchgrass	Panicum virgatum	8.00	0.5		Grass	N	N	CP38E-KBB		Fspurge-Galex-Rblzstar-RHbushclover-Wsun-Berg-Ptick-Besus
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Wild Lupine	Lupinus perennis	3.00	0.1875		Legume	N	N	CP38E-KBB		Fspurge-Galex-Rblzstar-RHbushclover-Wsun-Berg-Ptick-Besus
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Purple Prairie Clover	Dalea purpurea	2.00	0.125		Legume	N	N	CP38E-KBB		Fspurge-Galex-Rblzstar-RHbushclover-Wsun-Berg-Ptick-Besus
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Butterfly Milkweed	Asclepias tuberosa	1.00	0.0625		Forb	N	N	CP38E-KBB		Fspurge-Galex-Rblzstar-RHbushclover-Wsun-Berg-Ptick-Besus
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Flowering Spurge	Euphorbia corollata	1.00	0.0625		Forb	N	N	CP38E-KBB		Fspurge-Galex-Rblzstar-RHbushclover-Wsun-Berg-Ptick-Besus
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Golden Alexanders	Zizia aurea	1.00	0.0625		Forb	N	N	CP38E-KBB		Fspurge-Galex-Rblzstar-RHbushclover-Wsun-Berg-Ptick-Besus
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Rough Blazing Star	Liatris aspera	1.00	0.0625		Forb	N	N	CP38E-KBB		Fspurge-Galex-Rblzstar-RHbushclover-Wsun-Berg-Ptick-Besus
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Round-Headed Bushclover	Lespedeza capitata	1.00	0.0625		Legume	N	N	CP38E-KBB		Fspurge-Galex-Rblzstar-RHbushclover-Wsun-Berg-Ptick-Besus
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Fewleaf Sunflower	Helianthus occidentalis	1.00	0.0625		Forb	N	N	CP38E-KBB		Fspurge-Galex-Rblzstar-RHbushclover-Wsun-Berg-Ptick-Besus
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Bergamot	Monarda fistulosa	0.50	0.03125		Forb	N	N	CP38E-KBB		Fspurge-Galex-Rblzstar-RHbushclover-Wsun-Berg-Ptick-Besus
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Prairie Tickseed	Coreopsis palmata	0.50	0.03125		Forb	N	N	CP38E-KBB		Fspurge-Galex-Rblzstar-RHbushclover-Wsun-Berg-Ptick-Besus
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Black-eyed Susan	Rudbeckia hirta	0.40	0.025		Forb	N	N	CP38E-KBB		Fspurge-Galex-Rblzstar-RHbushclover-Wsun-Berg-Ptick-Besus
38	CP38E-KBB(CP1)1-Alf-Rtop-Tim-Orc	38-CP38E-KBB(CP1)1-Alf-Rtop-Tim-Orc	Alfalfa	Medicago sativa	96.00	6		Legume	I	N	CP38E-KBB(CP1)1		Alf-Rtop-Tim-Orc
38	CP38E-KBB(CP1)1-Alf-Rtop-Tim-Orc	38-CP38E-KBB(CP1)1-Alf-Rtop-Tim-Orc	Redtop	Agrostis gigantea	32.00	2		Grass	I	N	CP38E-KBB(CP1)1		Alf-Rtop-Tim-Orc
38	CP38E-KBB(CP1)1-Alf-Rtop-Tim-Orc	38-CP38E-KBB(CP1)1-Alf-Rtop-Tim-Orc	Timothy	Phleum pratense	32.00	2		Grass	I	N	CP38E-KBB(CP1)1		Alf-Rtop-Tim-Orc
38	CP38E-KBB(CP1)1-Alf-Rtop-Tim-Orc	38-CP38E-KBB(CP1)1-Alf-Rtop-Tim-Orc	Orchardgrass	Dactylis glomerata L.	16.00	1		Grass	I	N	CP38E-KBB(CP1)1		Alf-Rtop-Tim-Orc
38	CP38E-KBB(CP1)2-RC-KB-Orc-Rtop	38-CP38E-KBB(CP1)2-RC-KB-Orc-Rtop	Red Clover	Trifolium pratense	80.00	5		Legume	I	N	CP38E-KBB(CP1)2		RC-KB-Orc-Rtop
38	CP38E-KBB(CP1)2-RC-KB-Orc-Rtop	38-CP38E-KBB(CP1)2-RC-KB-Orc-Rtop	Kentucky Bluegrass	Poa pratensis	32.00	2		Grass	I	N	CP38E-KBB(CP1)2		RC-KB-Orc-Rtop
38	CP38E-KBB(CP1)2-RC-KB-Orc-Rtop	38-CP38E-KBB(CP1)2-RC-KB-Orc-Rtop	Orchardgrass	Dactylis glomerata L.	16.00	1		Grass	I	N	CP38E-KBB(CP1)2		RC-KB-Orc-Rtop
38	CP38E-KBB(CP1)2-RC-KB-Orc-Rtop	38-CP38E-KBB(CP1)2-RC-KB-Orc-Rtop	Redtop	Agrostis gigantea	16.00	1		Grass	I	N	CP38E-KBB(CP1)2		RC-KB-Orc-Rtop
38	CP38E-KBB(CP1)3-RC-SB-Tim	38-CP38E-KBB(CP1)3-RC-SB-Tim	Red Clover	Trifolium pratense	80.00	5		Legume	I	N	CP38E-KBB(CP1)3		RC-SB-Tim
38	CP38E-KBB(CP1)3-RC-SB-Tim	38-CP38E-KBB(CP1)3-RC-SB-Tim	Smooth Bromegrass	Bromus inermis	48.00	3		Grass	I	N	CP38E-KBB(CP1)3		RC-SB-Tim
38	CP38E-KBB(CP1)3-RC-SB-Tim	38-CP38E-KBB(CP1)3-RC-SB-Tim	Timothy	Phleum pratense	32.00	2		Grass	I	N	CP38E-KBB(CP1)3		RC-SB-Tim
38	CP38E-KBB(CP1)4-RC-Tim-Orc-Rtop	38-CP38E-KBB(CP1)4-RC-Tim-Orc-Rtop	Red Clover	Trifolium pratense	80.00	5		Legume	I	N	CP38E-KBB(CP1)4		RC-Tim-Orc-Rtop
38	CP38E-KBB(CP1)4-RC-Tim-Orc-Rtop	38-CP38E-KBB(CP1)4-RC-Tim-Orc-Rtop	Timothy	Phleum pratense	32.00	2		Grass	I	N	CP38E-KBB(CP1)4		RC-Tim-Orc-Rtop
38	CP38E-KBB(CP1)4-RC-Tim-Orc-Rtop	38-CP38E-KBB(CP1)4-RC-Tim-Orc-Rtop	Orchardgrass	Dactylis glomerata L.	16.00	1		Grass	I	N	CP38E-KBB(CP1)4		RC-Tim-Orc-Rtop
38	CP38E-KBB(CP1)4-RC-Tim-Orc-Rtop	38-CP38E-KBB(CP1)4-RC-Tim-Orc-Rtop	Redtop	Agrostis gigantea	16.00	1		Grass	I	N	CP38E-KBB(CP1)4		RC-Tim-Orc-Rtop

38	CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlup-PPclove	38-CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlu	Little Bluestem	Schizachyrium scoparium	36.00	2.25		Grass	N	N	CP38E-KBB(WHIP)		LB-Sgrama-BB-Pjune-Wlup-PPclover-Rblzstar-Ptick-Besus
38	CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlup-PPclove	38-CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlu	Sideoats Grama	Bouteloua curtipendula	16.00	1		Grass	N	N	CP38E-KBB(WHIP)		LB-Sgrama-BB-Pjune-Wlup-PPclover-Rblzstar-Ptick-Besus
38	CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlup-PPclove	38-CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlu	Big Bluestem	Andropogon gerardii	8.00	0.5		Grass	N	N	CP38E-KBB(WHIP)		LB-Sgrama-BB-Pjune-Wlup-PPclover-Rblzstar-Ptick-Besus
38	CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlup-PPclove	38-CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlu	Prairie Junegrass	Koeleria macrantha	4.00	0.25		Grass	N	N	CP38E-KBB(WHIP)		LB-Sgrama-BB-Pjune-Wlup-PPclover-Rblzstar-Ptick-Besus
38	CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlup-PPclove	38-CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlu	Wild Lupine	Lupinus perennis	3.00	0.1875		Legume	N	N	CP38E-KBB(WHIP)		LB-Sgrama-BB-Pjune-Wlup-PPclover-Rblzstar-Ptick-Besus
38	CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlup-PPclove	38-CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlu	Purple Prairie Clover	Dalea purpurea	2.00	0.125		Legume	N	N	CP38E-KBB(WHIP)		LB-Sgrama-BB-Pjune-Wlup-PPclover-Rblzstar-Ptick-Besus
38	CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlup-PPclove	38-CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlu	Rough Blazing Star	Liatris aspera	2.00	0.125		Forb	N	N	CP38E-KBB(WHIP)		LB-Sgrama-BB-Pjune-Wlup-PPclover-Rblzstar-Ptick-Besus
38	CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlup-PPclove	38-CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlu	Prairie Tickseed	Coreopsis palmata	1.00	0.0625		Forb	N	N	CP38E-KBB(WHIP)		LB-Sgrama-BB-Pjune-Wlup-PPclover-Rblzstar-Ptick-Besus
38	CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlup-PPclove	38-CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlu	Black-eyed Susan	Rudbeckia hirta	0.25	0.015625		Forb	N	N	CP38E-KBB(WHIP)		LB-Sgrama-BB-Pjune-Wlup-PPclover-Rblzstar-Ptick-Besus
38	CP38E-SWGCA(CP1)1-Alf-Rtop-Tim-Orc	38-CP38E-SWGCA(CP1)1-Alf-Rtop-Tim-Orc	Alfalfa	Medicago sativa	96.00	6		Legume	I	N	CP38E-SWGCA(CP1)1		Alf-Rtop-Tim-Orc
38	CP38E-SWGCA(CP1)1-Alf-Rtop-Tim-Orc	38-CP38E-SWGCA(CP1)1-Alf-Rtop-Tim-Orc	Redtop	Agrostis gigantea	32.00	2		Grass	I	N	CP38E-SWGCA(CP1)1		Alf-Rtop-Tim-Orc
38	CP38E-SWGCA(CP1)1-Alf-Rtop-Tim-Orc	38-CP38E-SWGCA(CP1)1-Alf-Rtop-Tim-Orc	Timothy	Phleum pratense	32.00	2		Grass	I	N	CP38E-SWGCA(CP1)1		Alf-Rtop-Tim-Orc
38	CP38E-SWGCA(CP1)1-Alf-Rtop-Tim-Orc	38-CP38E-SWGCA(CP1)1-Alf-Rtop-Tim-Orc	Orchardgrass	Dactylis glomerata L.	16.00	1		Grass	I	N	CP38E-SWGCA(CP1)1		Alf-Rtop-Tim-Orc
38	CP38E-SWGCA(CP1)2-RC-KB-Orc-Rtop	38-CP38E-SWGCA(CP1)2-RC-KB-Orc-Rtop	Red Clover	Trifolium pratense	80.00	5		Legume	I	N	CP38E-SWGCA(CP1)2		RC-KB-Orc-Rtop
38	CP38E-SWGCA(CP1)2-RC-KB-Orc-Rtop	38-CP38E-SWGCA(CP1)2-RC-KB-Orc-Rtop	Kentucky Bluegrass	Poa pratensis	32.00	2		Grass	I	N	CP38E-SWGCA(CP1)2		RC-KB-Orc-Rtop
38	CP38E-SWGCA(CP1)2-RC-KB-Orc-Rtop	38-CP38E-SWGCA(CP1)2-RC-KB-Orc-Rtop	Orchardgrass	Dactylis glomerata L.	16.00	1		Grass	I	N	CP38E-SWGCA(CP1)2		RC-KB-Orc-Rtop
38	CP38E-SWGCA(CP1)2-RC-KB-Orc-Rtop	38-CP38E-SWGCA(CP1)2-RC-KB-Orc-Rtop	Redtop	Agrostis gigantea	16.00	1		Grass	I	N	CP38E-SWGCA(CP1)2		RC-KB-Orc-Rtop
38	CP38E-SWGCA(CP1)3-RC-SB-Tim	38-CP38E-SWGCA(CP1)3-RC-SB-Tim	Red Clover	Trifolium pratense	80.00	5		Legume	I	N	CP38E-SWGCA(CP1)3		RC-SB-Tim
38	CP38E-SWGCA(CP1)3-RC-SB-Tim	38-CP38E-SWGCA(CP1)3-RC-SB-Tim	Smooth Bromegrass	Bromus inermis	48.00	3		Grass	I	N	CP38E-SWGCA(CP1)3		RC-SB-Tim
38	CP38E-SWGCA(CP1)3-RC-SB-Tim	38-CP38E-SWGCA(CP1)3-RC-SB-Tim	Timothy	Phleum pratense	32.00	2		Grass	I	N	CP38E-SWGCA(CP1)3		RC-SB-Tim
38	CP38E-SWGCA(CP1)4-RC-Tim-Orc-Rtop	38-CP38E-SWGCA(CP1)4-RC-Tim-Orc-Rtop	Red Clover	Trifolium pratense	80.00	5		Legume	I	N	CP38E-SWGCA(CP1)4		RC-Tim-Orc-Rtop
38	CP38E-SWGCA(CP1)4-RC-Tim-Orc-Rtop	38-CP38E-SWGCA(CP1)4-RC-Tim-Orc-Rtop	Timothy	Phleum pratense	32.00	2		Grass	I	N	CP38E-SWGCA(CP1)4		RC-Tim-Orc-Rtop
38	CP38E-SWGCA(CP1)4-RC-Tim-Orc-Rtop	38-CP38E-SWGCA(CP1)4-RC-Tim-Orc-Rtop	Orchardgrass	Dactylis glomerata L.	16.00	1		Grass	I	N	CP38E-SWGCA(CP1)4		RC-Tim-Orc-Rtop
38	CP38E-SWGCA(CP1)4-RC-Tim-Orc-Rtop	38-CP38E-SWGCA(CP1)4-RC-Tim-Orc-Rtop	Redtop	Agrostis gigantea	16.00	1		Grass	I	N	CP38E-SWGCA(CP1)4		RC-Tim-Orc-Rtop
38	CP38E-SWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-S	38-CP38E-SWGCA(CP2)D-LB-Sgrama-BB-Indian-I	Little Bluestem	Schizachyrium scoparium	24.00	1.5		Grass	N	N	CP38E-SWGCA(CP2)D		LB-Sgrama-BB-Indian-PPclover-Sgrod-Ycone
38	CP38E-SWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-S	38-CP38E-SWGCA(CP2)D-LB-Sgrama-BB-Indian-I	Sideoats Grama	Bouteloua curtipendula	24.00	1.5		Grass	N	N	CP38E-SWGCA(CP2)D		LB-Sgrama-BB-Indian-PPclover-Sgrod-Ycone
38	CP38E-SWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-S	38-CP38E-SWGCA(CP2)D-LB-Sgrama-BB-Indian-I	Big Bluestem	Andropogon gerardii	8.00	0.5		Grass	N	N	CP38E-SWGCA(CP2)D		LB-Sgrama-BB-Indian-PPclover-Sgrod-Ycone
38	CP38E-SWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-S	38-CP38E-SWGCA(CP2)D-LB-Sgrama-BB-Indian-I	Indiangrass	Sorghastrum nutans	8.00	0.5		Grass	N	N	CP38E-SWGCA(CP2)D		LB-Sgrama-BB-Indian-PPclover-Sgrod-Ycone
38	CP38E-SWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-S	38-CP38E-SWGCA(CP2)D-LB-Sgrama-BB-Indian-I	Purple Prairie Clover	Dalea purpurea	2.00	0.125		Legume	N	N	CP38E-SWGCA(CP2)D		LB-Sgrama-BB-Indian-PPclover-Sgrod-Ycone
38	CP38E-SWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-S	38-CP38E-SWGCA(CP2)D-LB-Sgrama-BB-Indian-I	Stiff Goldenrod	Oligoneuron rigidum	1.00	0.0625		Forb	N	N	CP38E-SWGCA(CP2)D		LB-Sgrama-BB-Indian-PPclover-Sgrod-Ycone
38	CP38E-SWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-S	38-CP38E-SWGCA(CP2)D-LB-Sgrama-BB-Indian-I	Yellow Coneflower	Ratibida pinnata	1.00	0.0625		Forb	N	N	CP38E-SWGCA(CP2)D		LB-Sgrama-BB-Indian-PPclover-Sgrod-Ycone
38	CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-I	38-CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian	Little Bluestem	Schizachyrium scoparium	24.00	1.5		Grass	N	N	CP38E-SWGCA(CP2)DM		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-I	38-CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian	Sideoats Grama	Bouteloua curtipendula	16.00	1		Grass	N	N	CP38E-SWGCA(CP2)DM		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-I	38-CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian	Big Bluestem	Andropogon gerardii	8.00	0.5		Grass	N	N	CP38E-SWGCA(CP2)DM		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-I	38-CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian	Indiangrass	Sorghastrum nutans	8.00	0.5		Grass	N	N	CP38E-SWGCA(CP2)DM		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-I	38-CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian	Switchgrass	Panicum virgatum	8.00	0.5		Grass	N	N	CP38E-SWGCA(CP2)DM		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-I	38-CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian	Purple Prairie Clover	Dalea purpurea	2.00	0.125		Legume	N	N	CP38E-SWGCA(CP2)DM		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-I	38-CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian	Bergamot	Monarda fistulosa	1.00	0.0625		Forb	N	N	CP38E-SWGCA(CP2)DM		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-I	38-CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian	Yellow Coneflower	Ratibida pinnata	1.00	0.0625		Forb	N	N	CP38E-SWGCA(CP2)DM		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Ber	38-CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Little Bluestem	Schizachyrium scoparium	20.00	1.25		Grass	N	N	CP38E-SWGCA(CP2)M		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Ber	38-CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Canada Wildrye	Elymus canadensis	16.00	1		Grass	N	N	CP38E-SWGCA(CP2)M		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Ber	38-CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Indiangrass	Sorghastrum nutans	16.00	1		Grass	N	N	CP38E-SWGCA(CP2)M		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Ber	38-CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Big Bluestem	Andropogon gerardii	8.00	0.5		Grass	N	N	CP38E-SWGCA(CP2)M		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Ber	38-CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Switchgrass	Panicum virgatum	8.00	0.5		Grass	N	N	CP38E-SWGCA(CP2)M		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Ber	38-CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Bergamot	Monarda fistulosa	1.00	0.0625		Forb	N	N	CP38E-SWGCA(CP2)M		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Ber	38-CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Black-eyed Susan	Rudbeckia hirta	1.00	0.0625		Forb	N	N	CP38E-SWGCA(CP2)M		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Ber	38-CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Yellow Coneflower	Ratibida pinnata	1.00	0.0625		Forb	N	N	CP38E-SWGCA(CP2)M		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-	38-CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Switc	Big Bluestem	Andropogon gerardii	16.00	1		Grass	N	N	CP38E-SWGCA(CP2)W		BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-	38-CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Switc	Canada Wildrye	Elymus canadensis	16.00	1		Grass	N	N	CP38E-SWGCA(CP2)W		BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron

38	CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-C	38-CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Switc	Indiangrass	Sorghastrum nutans	16.00	1		Grass	N	N	CP38E-SWGCA(CP2)W		BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-C	38-CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Switc	Switchgrass	Panicum virgatum	16.00	1		Grass	N	N	CP38E-SWGCA(CP2)W		BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-C	38-CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Switc	Prairie Cordgrass	Spartina pectinata	8.00	0.5		Grass	N	N	CP38E-SWGCA(CP2)W		BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-C	38-CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Switc	Cupplant	Silphium perfoliatum	2.00	0.125		Forb	N	N	CP38E-SWGCA(CP2)W		BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-C	38-CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Switc	Blue Vervain	Verbena hastata	1.00	0.0625		Forb	N	N	CP38E-SWGCA(CP2)W		BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-C	38-CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Switc	Common Ironweed	Vernonia fasciculata	1.00	0.0625		Forb	N	N	CP38E-SWGCA(CP2)W		BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-SWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Berg-	38-CP38E-SWGCA(CP2)WM-Switch-BB-Cwrye-Pc	Switchgrass	Panicum virgatum	32.00	2		Grass	N	N	CP38E-SWGCA(CP2)WM		Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
38	CP38E-SWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Berg-	38-CP38E-SWGCA(CP2)WM-Switch-BB-Cwrye-Pc	Big Bluestem	Andropogon gerardii	16.00	1		Grass	N	N	CP38E-SWGCA(CP2)WM		Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
38	CP38E-SWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Berg-	38-CP38E-SWGCA(CP2)WM-Switch-BB-Cwrye-Pc	Canada Wildrye	Elymus canadensis	16.00	1		Grass	N	N	CP38E-SWGCA(CP2)WM		Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
38	CP38E-SWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Berg-	38-CP38E-SWGCA(CP2)WM-Switch-BB-Cwrye-Pc	Prairie Cordgrass	Spartina pectinata	4.00	0.25		Grass	N	N	CP38E-SWGCA(CP2)WM		Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
38	CP38E-SWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Berg-	38-CP38E-SWGCA(CP2)WM-Switch-BB-Cwrye-Pc	Bergamot	Monarda fistulosa	1.00	0.0625		Forb	N	N	CP38E-SWGCA(CP2)WM		Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
38	CP38E-SWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Berg-	38-CP38E-SWGCA(CP2)WM-Switch-BB-Cwrye-Pc	New England Aster	Symphyotrichum novae-a	1.00	0.0625		Forb	N	N	CP38E-SWGCA(CP2)WM		Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
38	CP38E-SWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Berg-	38-CP38E-SWGCA(CP2)WM-Switch-BB-Cwrye-Pc	Yellow Coneflower	Ratibida pinnata	1.00	0.0625		Forb	N	N	CP38E-SWGCA(CP2)WM		Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Little Bluestem	Schizachyrium scoparium	24.00	1.5		Grass	N	N	CP38E-SWGCA(CP25)D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Sideoats Grama	Bouteloua curtipendula	24.00	1.5		Grass	N	N	CP38E-SWGCA(CP25)D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Indiangrass	Sorghastrum nutans	8.00	0.5		Grass	N	N	CP38E-SWGCA(CP25)D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Big Bluestem	Andropogon gerardii	4.00	0.25		Grass	N	N	CP38E-SWGCA(CP25)D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Purple Prairie Clover	Dalea purpurea	2.00	0.125		Legume	N	N	CP38E-SWGCA(CP25)D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Sand Dropseed	Sporobolus cryptandrus	2.00	0.125		Grass	N	N	CP38E-SWGCA(CP25)D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Prairie Junegrass	Koeleria macrantha	1.00	0.0625		Grass	N	N	CP38E-SWGCA(CP25)D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Spiderwort	Tradescantia ohiensis	1.00	0.0625		Forb	N	N	CP38E-SWGCA(CP25)D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Hoary Vervain	Verbena stricta	0.50	0.03125		Forb	N	N	CP38E-SWGCA(CP25)D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Leadplant	Amorpha canescens	0.50	0.03125		Legume	N	N	CP38E-SWGCA(CP25)D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Prairie Tickseed	Coreopsis palmata	0.50	0.03125		Forb	N	N	CP38E-SWGCA(CP25)D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Silky Aster	Symphyotrichum pratens	0.50	0.03125		Forb	N	N	CP38E-SWGCA(CP25)D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Stiff Goldenrod	Oligoneuron rigidum	0.50	0.03125		Forb	N	N	CP38E-SWGCA(CP25)D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Yellow Coneflower	Ratibida pinnata	0.50	0.03125		Forb	N	N	CP38E-SWGCA(CP25)D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Prairie Cinquefoil	Potentilla arguta	0.25	0.015625		Forb	N	N	CP38E-SWGCA(CP25)D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Spotted Mint	Monarda punctata	0.25	0.015625		Forb	N	N	CP38E-SWGCA(CP25)D		Lplant-Ptick-SilkAster-Sgrod-Ycone-Pcinque-Smint
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Little Bluestem	Schizachyrium scoparium	24.00	1.5		Grass	N	N	CP38E-SWGCA(CP25)DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Sideoats Grama	Bouteloua curtipendula	24.00	1.5		Grass	N	N	CP38E-SWGCA(CP25)DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Indiangrass	Sorghastrum nutans	8.00	0.5		Grass	N	N	CP38E-SWGCA(CP25)DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Switchgrass	Panicum virgatum	4.00	0.25		Grass	N	N	CP38E-SWGCA(CP25)DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Prairie Junegrass	Koeleria macrantha	2.00	0.125		Grass	N	N	CP38E-SWGCA(CP25)DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Prairie Dropseed	Sporobolus heterolepis	2.00	0.125		Grass	N	N	CP38E-SWGCA(CP25)DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Purple Prairie Clover	Dalea purpurea	2.00	0.125		Legume	N	N	CP38E-SWGCA(CP25)DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Round-Headed Bushclover	Lespedeza capitata	2.00	0.125		Legume	N	N	CP38E-SWGCA(CP25)DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Bergamot	Monarda fistulosa	1.00	0.0625		Forb	N	N	CP38E-SWGCA(CP25)DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Spiderwort	Tradescantia ohiensis	1.00	0.0625		Forb	N	N	CP38E-SWGCA(CP25)DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Yellow Coneflower	Ratibida pinnata	1.00	0.0625		Forb	N	N	CP38E-SWGCA(CP25)DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Leadplant	Amorpha canescens	0.50	0.03125		Legume	N	N	CP38E-SWGCA(CP25)DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Rough Blazing Star	Liatris aspera	0.50	0.03125		Forb	N	N	CP38E-SWGCA(CP25)DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Sky-Blue Aster	Symphyotrichum oolenta	0.50	0.03125		Forb	N	N	CP38E-SWGCA(CP25)DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Stiff Goldenrod	Oligoneuron rigidum	0.50	0.03125		Forb	N	N	CP38E-SWGCA(CP25)DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Prairie Cinquefoil	Potentilla arguta	0.25	0.015625		Forb	N	N	CP38E-SWGCA(CP25)DM		Berg-Swort-Ycone-Lplant-Rblzstar-SkyAster-Sgrod-Pcinque
38	CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-Switch-O	38-CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-	Little Bluestem	Schizachyrium scoparium	24.00	1.5		Grass	N	N	CP38E-SWGCA(CP25)M		Berg-Besus-NEaster-SBAster-Ycone-Croot
38	CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-Switch-O	38-CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-	Indiangrass	Sorghastrum nutans	16.00	1		Grass	N	N	CP38E-SWGCA(CP25)M		Berg-Besus-NEaster-SBAster-Ycone-Croot
38	CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-Switch-O	38-CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-	Big Bluestem	Andropogon gerardii	8.00	0.5		Grass	N	N	CP38E-SWGCA(CP25)M		Berg-Besus-NEaster-SBAster-Ycone-Croot
38	CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-Switch-O	38-CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-	Canada Wildrye	Elymus canadensis	8.00	0.5		Grass	N	N	CP38E-SWGCA(CP25)M		Berg-Besus-NEaster-SBAster-Ycone-Croot

38	CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-Switch-O	38-CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-	Switchgrass	Panicum virgatum	8.00	0.5		Grass	N	N	CP38E-SWGCA(CP25)M	Berg-Besus-NEaster-SBAster-Ycone-Croot
38	CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-Switch-O	38-CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-	Ox-eye Sunflower	Heliopsis helianthoides	1.00	0.0625		Forb	N	N	CP38E-SWGCA(CP25)M	Berg-Besus-NEaster-SBAster-Ycone-Croot
38	CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-Switch-O	38-CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-	Prairie Blazing Star	Liatris pycnostachya	1.00	0.0625		Forb	N	N	CP38E-SWGCA(CP25)M	Berg-Besus-NEaster-SBAster-Ycone-Croot
38	CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-Switch-O	38-CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-	Purple Prairie Clover	Dalea purpurea	1.00	0.0625		Legume	N	N	CP38E-SWGCA(CP25)M	Berg-Besus-NEaster-SBAster-Ycone-Croot
38	CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-Switch-O	38-CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-	Rosinweed	Silphium integrifolium	1.00	0.0625		Forb	N	N	CP38E-SWGCA(CP25)M	Berg-Besus-NEaster-SBAster-Ycone-Croot
38	CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-Switch-O	38-CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-	Bergamot	Monarda fistulosa	0.50	0.03125		Forb	N	N	CP38E-SWGCA(CP25)M	Berg-Besus-NEaster-SBAster-Ycone-Croot
38	CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-Switch-O	38-CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-	Black-eyed Susan	Rudbeckia hirta	0.50	0.03125		Forb	N	N	CP38E-SWGCA(CP25)M	Berg-Besus-NEaster-SBAster-Ycone-Croot
38	CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-Switch-O	38-CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-	New England Aster	Symphyotrichum novae-a	0.50	0.03125		Forb	N	N	CP38E-SWGCA(CP25)M	Berg-Besus-NEaster-SBAster-Ycone-Croot
38	CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-Switch-O	38-CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-	Smooth Blue Aster	Symphyotrichum laeve	0.50	0.03125		Forb	N	N	CP38E-SWGCA(CP25)M	Berg-Besus-NEaster-SBAster-Ycone-Croot
38	CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-Switch-O	38-CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-	Yellow Coneflower	Ratibida pinnata	0.50	0.03125		Forb	N	N	CP38E-SWGCA(CP25)M	Berg-Besus-NEaster-SBAster-Ycone-Croot
38	CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-Switch-O	38-CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-	Culver's Root	Veronicastrum virginicum	0.25	0.015625		Forb	N	N	CP38E-SWGCA(CP25)M	Berg-Besus-NEaster-SBAster-Ycone-Croot
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-	Canada Wildrye	Elymus canadensis	16.00	1		Grass	N	N	CP38E-SWGCA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-	Switchgrass	Panicum virgatum	16.00	1		Grass	N	N	CP38E-SWGCA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-	Indiangrass	Sorghastrum nutans	12.00	0.75		Grass	N	N	CP38E-SWGCA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-	Big Bluestem	Andropogon gerardii	8.00	0.5		Grass	N	N	CP38E-SWGCA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-	Prairie Cordgrass	Spartina pectinata	8.00	0.5		Grass	N	N	CP38E-SWGCA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-	Fowl Mannagrass	Glyceria striata	4.00	0.25		Grass	N	N	CP38E-SWGCA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-	Fox Sedge	Carex vulpinoidea	4.00	0.25		Sedge	N	N	CP38E-SWGCA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-	Cupplant	Silphium perfoliatum	2.00	0.125		Forb	N	N	CP38E-SWGCA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-	Showy Tick Trefoil	Desmodium canadense	2.00	0.125		Legume	N	N	CP38E-SWGCA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-	Blue Vervain	Verbena hastata	1.00	0.0625		Forb	N	N	CP38E-SWGCA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-	Golden Alexanders	Zizia aurea	1.00	0.0625		Forb	N	N	CP38E-SWGCA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-	Marsh Milkweed	Asclepias incarnata	1.00	0.0625		Forb	N	N	CP38E-SWGCA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-	Boneset	Eupatorium perfoliatum	0.50	0.03125		Forb	N	N	CP38E-SWGCA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-	Common Ironweed	Vernonia fasciculata	0.50	0.03125		Forb	N	N	CP38E-SWGCA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-	Joe-pye Weed	Eutrochium maculatum	0.50	0.03125		Forb	N	N	CP38E-SWGCA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-	Culver's Root	Veronicastrum virginicum	0.25	0.015625		Forb	N	N	CP38E-SWGCA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-Indian-Pco	38-CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-I	Switchgrass	Panicum virgatum	24.00	1.5		Grass	N	N	CP38E-SWGCA(CP25)WM	Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
38	CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-Indian-Pco	38-CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-I	Big Bluestem	Andropogon gerardii	20.00	1.25		Grass	N	N	CP38E-SWGCA(CP25)WM	Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
38	CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-Indian-Pco	38-CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-I	Canada Wildrye	Elymus canadensis	16.00	1		Grass	N	N	CP38E-SWGCA(CP25)WM	Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
38	CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-Indian-Pco	38-CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-I	Indiangrass	Sorghastrum nutans	12.00	0.75		Grass	N	N	CP38E-SWGCA(CP25)WM	Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
38	CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-Indian-Pco	38-CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-I	Prairie Cordgrass	Spartina pectinata	4.00	0.25		Grass	N	N	CP38E-SWGCA(CP25)WM	Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
38	CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-Indian-Pco	38-CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-I	Cupplant	Silphium perfoliatum	2.00	0.125		Forb	N	N	CP38E-SWGCA(CP25)WM	Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
38	CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-Indian-Pco	38-CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-I	White wild indigo	Baptisia alba	1.50	0.09375		Legume	N	N	CP38E-SWGCA(CP25)WM	Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
38	CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-Indian-Pco	38-CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-I	Black-eyed Susan	Rudbeckia hirta	0.50	0.03125		Forb	N	N	CP38E-SWGCA(CP25)WM	Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
38	CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-Indian-Pco	38-CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-I	Common Ironweed	Vernonia fasciculata	0.50	0.03125		Forb	N	N	CP38E-SWGCA(CP25)WM	Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
38	CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-Indian-Pco	38-CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-I	Golden Alexanders	Zizia aurea	0.50	0.03125		Forb	N	N	CP38E-SWGCA(CP25)WM	Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
38	CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-Indian-Pco	38-CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-I	New England Aster	Symphyotrichum novae-a	0.50	0.03125		Forb	N	N	CP38E-SWGCA(CP25)WM	Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
38	CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-Indian-Pco	38-CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-I	Prairie Blazing Star	Liatris pycnostachya	0.50	0.03125		Forb	N	N	CP38E-SWGCA(CP25)WM	Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
38	CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-Indian-Pco	38-CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-I	Yellow Coneflower	Ratibida pinnata	0.50	0.03125		Forb	N	N	CP38E-SWGCA(CP25)WM	Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
38	CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-Indian-Pco	38-CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-I	Bergamot	Monarda fistulosa	0.25	0.015625		Forb	N	N	CP38E-SWGCA(CP25)WM	Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
38	CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-Indian-Pco	38-CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-I	Great St. John's Wort	Hypericum ascyron	0.25	0.015625		Forb	N	N	CP38E-SWGCA(CP25)WM	Galex-NEaster-Pblzstar-Ycone-Berg-GSJwort
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop-	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pju	Little Bluestem	Schizachyrium scoparium	32.00	2		Grass	N	N	CP38E-WPHRA(CP25)D	Swort-Berg-Lplant-Rblzstar-SkyAster-Besus-Pcinque-Sgrod-
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop-	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pju	Sideoats Grama	Bouteloua curtipendula	24.00	1.5		Grass	N	N	CP38E-WPHRA(CP25)D	Swort-Berg-Lplant-Rblzstar-SkyAster-Besus-Pcinque-Sgrod-
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop-	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pju	Indiangrass	Sorghastrum nutans	4.00	0.25		Grass	N	N	CP38E-WPHRA(CP25)D	Swort-Berg-Lplant-Rblzstar-SkyAster-Besus-Pcinque-Sgrod-
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop-	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pju	Prairie Junegrass	Koeleria macrantha	4.00	0.25		Grass	N	N	CP38E-WPHRA(CP25)D	Swort-Berg-Lplant-Rblzstar-SkyAster-Besus-Pcinque-Sgrod-
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop-	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pju	Prairie Dropseed	Sporobolus heterolepis	4.00	0.25		Grass	N	N	CP38E-WPHRA(CP25)D	Swort-Berg-Lplant-Rblzstar-SkyAster-Besus-Pcinque-Sgrod-
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop-	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pju	Switchgrass	Panicum virgatum	4.00	0.25		Grass	N	N	CP38E-WPHRA(CP25)D	Swort-Berg-Lplant-Rblzstar-SkyAster-Besus-Pcinque-Sgrod-
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop-	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pju	Purple Prairie Clover	Dalea purpurea	2.00	0.125		Legume	N	N	CP38E-WPHRA(CP25)D	Swort-Berg-Lplant-Rblzstar-SkyAster-Besus-Pcinque-Sgrod-

38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop-	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjur	Round-Headed Bushclover	Lespedeza capitata	2.00	0.125		Legume	N	N	CP38E-WPHRA(CP25)D	Swort-Berg-Lplant-Rblzstar-SkyAster-Besus-Pcinque-Sgrod-
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop-	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjur	Spiderwort	Tradescantia ohiensis	1.00	0.0625		Forb	N	N	CP38E-WPHRA(CP25)D	Swort-Berg-Lplant-Rblzstar-SkyAster-Besus-Pcinque-Sgrod-
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop-	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjur	Bergamot	Monarda fistulosa	0.50	0.03125		Forb	N	N	CP38E-WPHRA(CP25)D	Swort-Berg-Lplant-Rblzstar-SkyAster-Besus-Pcinque-Sgrod-
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop-	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjur	Leadplant	Amorpha canescens	0.50	0.03125		Legume	N	N	CP38E-WPHRA(CP25)D	Swort-Berg-Lplant-Rblzstar-SkyAster-Besus-Pcinque-Sgrod-
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop-	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjur	Rough Blazing Star	Liatris aspera	0.50	0.03125		Forb	N	N	CP38E-WPHRA(CP25)D	Swort-Berg-Lplant-Rblzstar-SkyAster-Besus-Pcinque-Sgrod-
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop-	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjur	Sky-Blue Aster	Symphyotrichum oolenta	0.50	0.03125		Forb	N	N	CP38E-WPHRA(CP25)D	Swort-Berg-Lplant-Rblzstar-SkyAster-Besus-Pcinque-Sgrod-
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop-	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjur	Black-eyed Susan	Rudbeckia hirta	0.25	0.015625		Forb	N	N	CP38E-WPHRA(CP25)D	Swort-Berg-Lplant-Rblzstar-SkyAster-Besus-Pcinque-Sgrod-
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop-	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjur	Prairie Cinquefoil	Potentilla arguta	0.25	0.015625		Forb	N	N	CP38E-WPHRA(CP25)D	Swort-Berg-Lplant-Rblzstar-SkyAster-Besus-Pcinque-Sgrod-
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop-	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjur	Stiff Goldenrod	Oligoneuron rigidum	0.25	0.015625		Forb	N	N	CP38E-WPHRA(CP25)D	Swort-Berg-Lplant-Rblzstar-SkyAster-Besus-Pcinque-Sgrod-
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop-	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjur	Yellow Coneflower	Ratibida pinnata	0.25	0.015625		Forb	N	N	CP38E-WPHRA(CP25)D	Swort-Berg-Lplant-Rblzstar-SkyAster-Besus-Pcinque-Sgrod-
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BI	Little Bluestem	Schizachyrium scoparium	32.00	2		Grass	N	N	CP38E-WPHRA(CP25)DM	Hvervain-Lplant-Ptick-SilkAster-Pcinque-Smint-Sgrod-Ycone
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BI	Sideoats Grama	Bouteloua curtipendula	24.00	1.5		Grass	N	N	CP38E-WPHRA(CP25)DM	Hvervain-Lplant-Ptick-SilkAster-Pcinque-Smint-Sgrod-Ycone
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BI	Prairie Junegrass	Koeleria macrantha	6.00	0.375		Grass	N	N	CP38E-WPHRA(CP25)DM	Hvervain-Lplant-Ptick-SilkAster-Pcinque-Smint-Sgrod-Ycone
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BI	Big Bluestem	Andropogon gerardii	4.00	0.25		Grass	N	N	CP38E-WPHRA(CP25)DM	Hvervain-Lplant-Ptick-SilkAster-Pcinque-Smint-Sgrod-Ycone
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BI	Indiangrass	Sorghastrum nutans	4.00	0.25		Grass	N	N	CP38E-WPHRA(CP25)DM	Hvervain-Lplant-Ptick-SilkAster-Pcinque-Smint-Sgrod-Ycone
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BI	Sand Dropseed	Sporobolus cryptandrus	4.00	0.25		Grass	N	N	CP38E-WPHRA(CP25)DM	Hvervain-Lplant-Ptick-SilkAster-Pcinque-Smint-Sgrod-Ycone
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BI	Butterfly Milkweed	Asclepias tuberosa	1.00	0.0625		Forb	N	N	CP38E-WPHRA(CP25)DM	Hvervain-Lplant-Ptick-SilkAster-Pcinque-Smint-Sgrod-Ycone
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BI	Purple Prairie Clover	Dalea purpurea	1.00	0.0625		Legume	N	N	CP38E-WPHRA(CP25)DM	Hvervain-Lplant-Ptick-SilkAster-Pcinque-Smint-Sgrod-Ycone
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BI	Spiderwort	Tradescantia ohiensis	1.00	0.0625		Forb	N	N	CP38E-WPHRA(CP25)DM	Hvervain-Lplant-Ptick-SilkAster-Pcinque-Smint-Sgrod-Ycone
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BI	Hoary Vervain	Verbena stricta	0.50	0.03125		Forb	N	N	CP38E-WPHRA(CP25)DM	Hvervain-Lplant-Ptick-SilkAster-Pcinque-Smint-Sgrod-Ycone
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BI	Leadplant	Amorpha canescens	0.50	0.03125		Legume	N	N	CP38E-WPHRA(CP25)DM	Hvervain-Lplant-Ptick-SilkAster-Pcinque-Smint-Sgrod-Ycone
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BI	Prairie Tickseed	Coreopsis palmata	0.50	0.03125		Forb	N	N	CP38E-WPHRA(CP25)DM	Hvervain-Lplant-Ptick-SilkAster-Pcinque-Smint-Sgrod-Ycone
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BI	Silky Aster	Symphyotrichum pratens	0.50	0.03125		Forb	N	N	CP38E-WPHRA(CP25)DM	Hvervain-Lplant-Ptick-SilkAster-Pcinque-Smint-Sgrod-Ycone
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BI	Prairie Cinquefoil	Potentilla arguta	0.25	0.015625		Forb	N	N	CP38E-WPHRA(CP25)DM	Hvervain-Lplant-Ptick-SilkAster-Pcinque-Smint-Sgrod-Ycone
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BI	Spotted Mint	Monarda punctata	0.25	0.015625		Forb	N	N	CP38E-WPHRA(CP25)DM	Hvervain-Lplant-Ptick-SilkAster-Pcinque-Smint-Sgrod-Ycone
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BI	Stiff Goldenrod	Oligoneuron rigidum	0.25	0.015625		Forb	N	N	CP38E-WPHRA(CP25)DM	Hvervain-Lplant-Ptick-SilkAster-Pcinque-Smint-Sgrod-Ycone
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BI	Yellow Coneflower	Ratibida pinnata	0.25	0.015625		Forb	N	N	CP38E-WPHRA(CP25)DM	Hvervain-Lplant-Ptick-SilkAster-Pcinque-Smint-Sgrod-Ycone
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BE	Little Bluestem	Schizachyrium scoparium	28.00	1.75		Grass	N	N	CP38E-WPHRA(CP25)M	Pblzstar-PPclover-Berg-Besus-NEaster-SkyAster-SBAster-Ycone-
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BE	Canada Wildrye	Elymus canadensis	12.00	0.75		Grass	N	N	CP38E-WPHRA(CP25)M	Pblzstar-PPclover-Berg-Besus-NEaster-SkyAster-SBAster-Ycone-
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BE	Sideoats Grama	Bouteloua curtipendula	12.00	0.75		Grass	N	N	CP38E-WPHRA(CP25)M	Pblzstar-PPclover-Berg-Besus-NEaster-SkyAster-SBAster-Ycone-
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BE	Big Bluestem	Andropogon gerardii	4.00	0.25		Grass	N	N	CP38E-WPHRA(CP25)M	Pblzstar-PPclover-Berg-Besus-NEaster-SkyAster-SBAster-Ycone-
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BE	Indiangrass	Sorghastrum nutans	4.00	0.25		Grass	N	N	CP38E-WPHRA(CP25)M	Pblzstar-PPclover-Berg-Besus-NEaster-SkyAster-SBAster-Ycone-
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BE	Switchgrass	Panicum virgatum	4.00	0.25		Grass	N	N	CP38E-WPHRA(CP25)M	Pblzstar-PPclover-Berg-Besus-NEaster-SkyAster-SBAster-Ycone-
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BE	Canada Milkvetch	Astragalus canadensis	2.00	0.125		Legume	N	N	CP38E-WPHRA(CP25)M	Pblzstar-PPclover-Berg-Besus-NEaster-SkyAster-SBAster-Ycone-
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BE	Ox-eye Sunflower	Heliopsis helianthoides	1.00	0.0625		Forb	N	N	CP38E-WPHRA(CP25)M	Pblzstar-PPclover-Berg-Besus-NEaster-SkyAster-SBAster-Ycone-
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BE	Prairie Blazing Star	Liatris pycnostachya	1.00	0.0625		Forb	N	N	CP38E-WPHRA(CP25)M	Pblzstar-PPclover-Berg-Besus-NEaster-SkyAster-SBAster-Ycone-
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BE	Purple Prairie Clover	Dalea purpurea	1.00	0.0625		Legume	N	N	CP38E-WPHRA(CP25)M	Pblzstar-PPclover-Berg-Besus-NEaster-SkyAster-SBAster-Ycone-
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BE	Bergamot	Monarda fistulosa	0.50	0.03125		Forb	N	N	CP38E-WPHRA(CP25)M	Pblzstar-PPclover-Berg-Besus-NEaster-SkyAster-SBAster-Ycone-
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BE	Black-eyed Susan	Rudbeckia hirta	0.50	0.03125		Forb	N	N	CP38E-WPHRA(CP25)M	Pblzstar-PPclover-Berg-Besus-NEaster-SkyAster-SBAster-Ycone-
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BE	New England Aster	Symphyotrichum novae-a	0.50	0.03125		Forb	N	N	CP38E-WPHRA(CP25)M	Pblzstar-PPclover-Berg-Besus-NEaster-SkyAster-SBAster-Ycone-
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BE	Sky-Blue Aster	Symphyotrichum oolenta	0.50	0.03125		Forb	N	N	CP38E-WPHRA(CP25)M	Pblzstar-PPclover-Berg-Besus-NEaster-SkyAster-SBAster-Ycone-
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BE	Smooth Blue Aster	Symphyotrichum laeve	0.50	0.03125		Forb	N	N	CP38E-WPHRA(CP25)M	Pblzstar-PPclover-Berg-Besus-NEaster-SkyAster-SBAster-Ycone-
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BE	Yellow Coneflower	Ratibida pinnata	0.50	0.03125		Forb	N	N	CP38E-WPHRA(CP25)M	Pblzstar-PPclover-Berg-Besus-NEaster-SkyAster-SBAster-Ycone-
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BE	Culver's Root	Veronicastrum virginicum	0.25	0.015625		Forb	N	N	CP38E-WPHRA(CP25)M	Pblzstar-PPclover-Berg-Besus-NEaster-SkyAster-SBAster-Ycone-
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsedg	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-	Canada Wildrye	Elymus canadensis	16.00	1		Grass	N	N	CP38E-WPHRA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsedg	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-	Indiangrass	Sorghastrum nutans	12.00	0.75		Grass	N	N	CP38E-WPHRA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsedg	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-	Switchgrass	Panicum virgatum	12.00	0.75		Grass	N	N	CP38E-WPHRA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsedg	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-	Big Bluestem	Andropogon gerardii	8.00	0.5		Grass	N	N	CP38E-WPHRA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsedg	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-	Fox Sedge	Carex vulpinoidea	8.00	0.5		Sedge	N	N	CP38E-WPHRA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot

38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsedg	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-	Prairie Cordgrass	Spartina pectinata	8.00	0.5		Grass	N	N	CP38E-WPHRA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsedg	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-	Fowl Mannagrass	Glyceria striata	4.00	0.25		Grass	N	N	CP38E-WPHRA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsedg	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-	Cupplant	Silphium perfoliatum	2.00	0.125		Forb	N	N	CP38E-WPHRA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsedg	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-	Showy Tick Trefoil	Desmodium canadense	2.00	0.125		Legume	N	N	CP38E-WPHRA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsedg	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-	Blue Vervain	Verbena hastata	1.00	0.0625		Forb	N	N	CP38E-WPHRA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsedg	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-	Golden Alexanders	Zizia aurea	1.00	0.0625		Forb	N	N	CP38E-WPHRA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsedg	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-	Marsh Milkweed	Asclepias incarnata	1.00	0.0625		Forb	N	N	CP38E-WPHRA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsedg	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-	Boneset	Eupatorium perfoliatum	0.50	0.03125		Forb	N	N	CP38E-WPHRA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsedg	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-	Common Ironweed	Vernonia fasciculata	0.50	0.03125		Forb	N	N	CP38E-WPHRA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsedg	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-	Joe-pye Weed	Eutrochium maculatum	0.50	0.03125		Forb	N	N	CP38E-WPHRA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsedg	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-	Culver's Root	Veronicastrum virginicum	0.25	0.015625		Forb	N	N	CP38E-WPHRA(CP25)W	Bvervain-Galex-MM-Bon-Ciron-Jpye-Croot
38	CP38E-Monarch(CP1)-Tim-Orc-RC-Cmilkweed-Besus-Ox	38-CP38E-Monarch(CP1)-Tim-Orc-RC-Cmilkweed-	Timothy	Phleum pratense	8.00	0.5	14.2	Grass	I	X	CP38E-Monarch(CP1)	Tim-Orc-RC-Cmilkweed-Besus-Oxeyesun-Sgrod
38	CP38E-Monarch(CP1)-Tim-Orc-RC-Cmilkweed-Besus-Ox	38-CP38E-Monarch(CP1)-Tim-Orc-RC-Cmilkweed-	Orchardgrass	Dactylis glomerata L.	8.00	0.5	7.5	Grass	I	X	CP38E-Monarch(CP1)	Tim-Orc-RC-Cmilkweed-Besus-Oxeyesun-Sgrod
38	CP38E-Monarch(CP1)-Tim-Orc-RC-Cmilkweed-Besus-Ox	38-CP38E-Monarch(CP1)-Tim-Orc-RC-Cmilkweed-	Red Clover	Trifolium pratense	4.80	0.3	1.9	Legume	I	X	CP38E-Monarch(CP1)	Tim-Orc-RC-Cmilkweed-Besus-Oxeyesun-Sgrod
38	CP38E-Monarch(CP1)-Tim-Orc-RC-Cmilkweed-Besus-Ox	38-CP38E-Monarch(CP1)-Tim-Orc-RC-Cmilkweed-	Common Milkweed	Asclepias syriaca	6.05	0.38	0.6	Forb	N	X	CP38E-Monarch(CP1)	Tim-Orc-RC-Cmilkweed-Besus-Oxeyesun-Sgrod
38	CP38E-Monarch(CP1)-Tim-Orc-RC-Cmilkweed-Besus-Ox	38-CP38E-Monarch(CP1)-Tim-Orc-RC-Cmilkweed-	Black-Eyed Susan	Rudbeckia hirta	0.96	0.06	2.2	Forb	N	X	CP38E-Monarch(CP1)	Tim-Orc-RC-Cmilkweed-Besus-Oxeyesun-Sgrod
38	CP38E-Monarch(CP1)-Tim-Orc-RC-Cmilkweed-Besus-Ox	38-CP38E-Monarch(CP1)-Tim-Orc-RC-Cmilkweed-	Ox-eye Sunflower	Heliopsis helianthoides	0.96	0.06	0.20	Forb	N	X	CP38E-Monarch(CP1)	Tim-Orc-RC-Cmilkweed-Besus-Oxeyesun-Sgrod
38	CP38E-Monarch(CP1)-Tim-Orc-RC-Cmilkweed-Besus-Ox	38-CP38E-Monarch(CP1)-Tim-Orc-RC-Cmilkweed-	Stiff Goldenrod	Oligoneuron rigidum	0.96	0.06	1.1	Forb	N	X	CP38E-Monarch(CP1)	Tim-Orc-RC-Cmilkweed-Besus-Oxeyesun-Sgrod
38	CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cwrye-Wpc	38-CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cv	Big Bluestem	Andropogon gerardii	4.00	0.25	1	Grass	N	X	CP38E-Monarch(CP2)	Sgrod-Shwgrod-NEaster
38	CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cwrye-Wpc	38-CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cv	Little Bluestem	Schizachyrium scopariu	24.00	1.5	8.3	Grass	N	X	CP38E-Monarch(CP2)	Sgrod-Shwgrod-NEaster
38	CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cwrye-Wpc	38-CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cv	Indiangrass	Sorghastrum nutans	4.00	0.25	1.2	Grass	N	X	CP38E-Monarch(CP2)	Sgrod-Shwgrod-NEaster
38	CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cwrye-Wpc	38-CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cv	Sideoats Grama	Bouteloua curtipendula	12.00	0.75	2.2	Grass	N	X	CP38E-Monarch(CP2)	Sgrod-Shwgrod-NEaster
38	CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cwrye-Wpc	38-CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cv	Canada Wildrye	Elymus canadensis	16.00	1	2	Grass	N	X	CP38E-Monarch(CP2)	Sgrod-Shwgrod-NEaster
38	CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cwrye-Wpc	38-CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cv	white prairie clover	Dalea candida	3.04	0.19	1.2	Legume	N	X	CP38E-Monarch(CP2)	Sgrod-Shwgrod-NEaster
38	CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cwrye-Wpc	38-CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cv	Common Milkweed	Asclepias syriaca	4.96	0.31	0.5	Forb	N	X	CP38E-Monarch(CP2)	Sgrod-Shwgrod-NEaster
38	CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cwrye-Wpc	38-CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cv	Black-eyed Susan	Rudbeckia hirta	0.96	0.06	2.2	Forb	N	X	CP38E-Monarch(CP2)	Sgrod-Shwgrod-NEaster
38	CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cwrye-Wpc	38-CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cv	Bergamot	Monarda fistulosa	0.96	0.06	1.8	Forb	N	X	CP38E-Monarch(CP2)	Sgrod-Shwgrod-NEaster
38	CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cwrye-Wpc	38-CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cv	Stiff Goldenrod	Oligoneuron rigidum	0.96	0.06	1.1	Forb	N	X	CP38E-Monarch(CP2)	Sgrod-Shwgrod-NEaster
38	CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cwrye-Wpc	38-CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cv	Showy Goldenrod	Solidago speciosa	0.48	0.03	1.1	Forb	N	X	CP38E-Monarch(CP2)	Sgrod-Shwgrod-NEaster
38	CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cwrye-Wpc	38-CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cv	New England Aster	Symphyotrichum novae	0.48	0.03	0.8	Forb	N	X	CP38E-Monarch(CP2)	Sgrod-Shwgrod-NEaster
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-Cwrye-Wp	38-CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	Big Bluestem	Andropogon gerardii	4.00	0.25	1	Grass	N	X	CP38E-Monarch(CP25)	Sgrod-Shwgrod-NEaster-Rblzstar-Rtlsnkmaster-Cup-SkyAster
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-Cwrye-Wp	38-CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	Little Bluestem	Schizachyrium scopariu	16.00	1	5.6	Grass	N	X	CP38E-Monarch(CP25)	Sgrod-Shwgrod-NEaster-Rblzstar-Rtlsnkmaster-Cup-SkyAster
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-Cwrye-Wp	38-CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	Indiangrass	Sorghastrum nutans	4.00	0.25	1.2	Grass	N	X	CP38E-Monarch(CP25)	Sgrod-Shwgrod-NEaster-Rblzstar-Rtlsnkmaster-Cup-SkyAster
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-Cwrye-Wp	38-CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	Sideoats Grama	Bouteloua curtipendula	8.00	0.5	1.5	Grass	N	X	CP38E-Monarch(CP25)	Sgrod-Shwgrod-NEaster-Rblzstar-Rtlsnkmaster-Cup-SkyAster
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-Cwrye-Wp	38-CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	Canada Wildrye	Elymus canadensis	8.00	0.5	1	Grass	N	X	CP38E-Monarch(CP25)	Sgrod-Shwgrod-NEaster-Rblzstar-Rtlsnkmaster-Cup-SkyAster
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-Cwrye-Wp	38-CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	white prairie clover	Dalea candida	3.04	0.19	1.2	Legume	N	X	CP38E-Monarch(CP25)	Sgrod-Shwgrod-NEaster-Rblzstar-Rtlsnkmaster-Cup-SkyAster
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-Cwrye-Wp	38-CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	Common Milkweed	Asclepias syriaca	4.96	0.31	0.5	Forb	N	X	CP38E-Monarch(CP25)	Sgrod-Shwgrod-NEaster-Rblzstar-Rtlsnkmaster-Cup-SkyAster
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-Cwrye-Wp	38-CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	Black-eyed Susan	Rudbeckia hirta	0.96	0.06	2.2	Forb	N	X	CP38E-Monarch(CP25)	Sgrod-Shwgrod-NEaster-Rblzstar-Rtlsnkmaster-Cup-SkyAster
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-Cwrye-Wp	38-CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	Bergamot	Monarda fistulosa	0.96	0.06	1.8	Forb	N	X	CP38E-Monarch(CP25)	Sgrod-Shwgrod-NEaster-Rblzstar-Rtlsnkmaster-Cup-SkyAster
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-Cwrye-Wp	38-CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	Stiff Goldenrod	Oligoneuron rigidum	0.96	0.06	1.1	Forb	N	X	CP38E-Monarch(CP25)	Sgrod-Shwgrod-NEaster-Rblzstar-Rtlsnkmaster-Cup-SkyAster
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-Cwrye-Wp	38-CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	Showy Goldenrod	Solidago speciosa	0.48	0.03	1.1	Forb	N	X	CP38E-Monarch(CP25)	Sgrod-Shwgrod-NEaster-Rblzstar-Rtlsnkmaster-Cup-SkyAster
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-Cwrye-Wp	38-CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	New England Aster	Symphyotrichum novae	0.48	0.03	0.8	Forb	N	X	CP38E-Monarch(CP25)	Sgrod-Shwgrod-NEaster-Rblzstar-Rtlsnkmaster-Cup-SkyAster
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-Cwrye-Wp	38-CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	Rough Blazing Star	Liatris aspera	0.48	0.03	0.2	Forb	N	X	CP38E-Monarch(CP25)	Sgrod-Shwgrod-NEaster-Rblzstar-Rtlsnkmaster-Cup-SkyAster
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-Cwrye-Wp	38-CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	Rattlesnake Master	Eryngium yuccifolium	0.96	0.06	0.2	Forb	N	X	CP38E-Monarch(CP25)	Sgrod-Shwgrod-NEaster-Rblzstar-Rtlsnkmaster-Cup-SkyAster
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-Cwrye-Wp	38-CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	Cupplant	Silphium perfoliatum	2.08	0.13	0.1	Forb	N	X	CP38E-Monarch(CP25)	Sgrod-Shwgrod-NEaster-Rblzstar-Rtlsnkmaster-Cup-SkyAster
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-Cwrye-Wp	38-CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	Sky-Blue Aster	Symphyotrichum oolen	0.96	0.06	1.9	Forb	N	X	CP38E-Monarch(CP25)	BB-LB-Indian-Sgrama-Cwrye-Wpclover-Cmilkweed-Besus-Berg-Sgrod-Shwgrod-NEaster-Rblzstar-Rtlsnkmaster-Cup-SkyAster
38	CP38E-GHRA(CP1)1-Alf-Rtop-Tim-Orc	38-CP38E-GHRA(CP1)1-Alf-Rtop-Tim-Orc	Alfalfa	Medicago sativa	96.00	6	30.2	Legume	I	X	CP38E-GHRA(CP1)1	Alf-Rtop-Tim-Orc
38	CP38E-GHRA(CP1)1-Alf-Rtop-Tim-Orc	38-CP38E-GHRA(CP1)1-Alf-Rtop-Tim-Orc	Redtop	Agrostis gigantea	32.00	2	229.2	Grass	I		CP38E-GHRA(CP1)1	Alf-Rtop-Tim-Orc

38	CP38E-GHRA(CP1)1-Alf-Rtop-Tim-Orc	38-CP38E-GHRA(CP1)1-Alf-Rtop-Tim-Orc	timothy	Phleum pratense	32.00	2	56.5	Grass	I	X	CP38E-GHRA(CP1)1		Alf-Rtop-Tim-Orc
38	CP38E-GHRA(CP1)1-Alf-Rtop-Tim-Orc	38-CP38E-GHRA(CP1)1-Alf-Rtop-Tim-Orc	Orchardgrass	Dactylis glomerata L.	16.00	1	15	Grass	I	X	CP38E-GHRA(CP1)1		Alf-Rtop-Tim-Orc
38	CP38E-GHRA(CP1)2-RC-KB-Orc-Rtop	38-CP38E-GHRA(CP1)2-RC-KB-Orc-Rtop	Red Clover	Trifolium pratense	80.00	5	31.6	Legume	I	X	CP38E-GHRA(CP1)2		RC-KB-Orc-Rtop
38	CP38E-GHRA(CP1)2-RC-KB-Orc-Rtop	38-CP38E-GHRA(CP1)2-RC-KB-Orc-Rtop	Kentucky Bluegrass	Poa pratensis	32.00	2	100	Grass	I		CP38E-GHRA(CP1)2		RC-KB-Orc-Rtop
38	CP38E-GHRA(CP1)2-RC-KB-Orc-Rtop	38-CP38E-GHRA(CP1)2-RC-KB-Orc-Rtop	Orchardgrass	Dactylis glomerata L.	16.00	1	15	Grass	I	X	CP38E-GHRA(CP1)2		RC-KB-Orc-Rtop
38	CP38E-GHRA(CP1)2-RC-KB-Orc-Rtop	38-CP38E-GHRA(CP1)2-RC-KB-Orc-Rtop	Redtop	Agrostis gigantea	16.00	1	114.6	Grass	I		CP38E-GHRA(CP1)2		RC-KB-Orc-Rtop
38	CP38E-GHRA(CP1)3-RC-SB-Tim	38-CP38E-GHRA(CP1)3-RC-SB-Tim	Red Clover	Trifolium pratense	80.00	5	31.6	Legume	I	X	CP38E-GHRA(CP1)3		RC-SB-Tim
38	CP38E-GHRA(CP1)3-RC-SB-Tim	38-CP38E-GHRA(CP1)3-RC-SB-Tim	Smooth Bromegrass	Bromus inermis	48.00	3	9.4	Grass	I		CP38E-GHRA(CP1)3		RC-SB-Tim
38	CP38E-GHRA(CP1)3-RC-SB-Tim	38-CP38E-GHRA(CP1)3-RC-SB-Tim	Timothy	Phleum pratense	32.00	2	56.5	Grass	I	X	CP38E-GHRA(CP1)3		RC-SB-Tim
38	CP38E-GHRA(CP1)4-RC-Tim-Orc-Rtop	38-CP38E-GHRA(CP1)4-RC-Tim-Orc-Rtop	Red Clover	Trifolium pratense	80.00	5	31.6	Legume	I	X	CP38E-GHRA(CP1)4		RC-Tim-Orc-Rtop
38	CP38E-GHRA(CP1)4-RC-Tim-Orc-Rtop	38-CP38E-GHRA(CP1)4-RC-Tim-Orc-Rtop	Timothy	Phleum pratense	32.00	2	56.5	Grass	I	X	CP38E-GHRA(CP1)4		RC-Tim-Orc-Rtop
38	CP38E-GHRA(CP1)4-RC-Tim-Orc-Rtop	38-CP38E-GHRA(CP1)4-RC-Tim-Orc-Rtop	Orchardgrass	Dactylis glomerata L.	16.00	1	15	Grass	I	X	CP38E-GHRA(CP1)4		RC-Tim-Orc-Rtop
38	CP38E-GHRA(CP1)4-RC-Tim-Orc-Rtop	38-CP38E-GHRA(CP1)4-RC-Tim-Orc-Rtop	Redtop	Agrostis gigantea	16.00	1	114.6	Grass	I		CP38E-GHRA(CP1)4		RC-Tim-Orc-Rtop
38	CP3-1-BB-LB-Indian-Sgrama-Sgrod-Ycone-PPclover	38-CP3-1-BB-LB-Indian-Sgrama-Sgrod-Ycone-PPcl	Big Bluestem	Andropogon gerardii	8.00	0.5	1.9	Grass	N	X	CP3-1		BB-LB-Indian-Sgrama-Sgrod-Ycone-PPclover
38	CP3-1-BB-LB-Indian-Sgrama-Sgrod-Ycone-PPclover	38-CP3-1-BB-LB-Indian-Sgrama-Sgrod-Ycone-PPcl	Little Bluestem	Schizachyrium scopariu	24.00	1.5	8.3	Grass	N	X	CP3-1		BB-LB-Indian-Sgrama-Sgrod-Ycone-PPclover
38	CP3-1-BB-LB-Indian-Sgrama-Sgrod-Ycone-PPclover	38-CP3-1-BB-LB-Indian-Sgrama-Sgrod-Ycone-PPcl	Indiangrass	Sorghastrum nutans	8.00	0.5	2.3	Grass	N	X	CP3-1		BB-LB-Indian-Sgrama-Sgrod-Ycone-PPclover
38	CP3-1-BB-LB-Indian-Sgrama-Sgrod-Ycone-PPclover	38-CP3-1-BB-LB-Indian-Sgrama-Sgrod-Ycone-PPcl	Sideoats Grama	Bouteloua curtipendula	24.00	1.5	4.4	Grass	N	X	CP3-1		BB-LB-Indian-Sgrama-Sgrod-Ycone-PPclover
38	CP3-1-BB-LB-Indian-Sgrama-Sgrod-Ycone-PPclover	38-CP3-1-BB-LB-Indian-Sgrama-Sgrod-Ycone-PPcl	Stiff Goldenrod	Oligoneuron rigidum	1.00	0.0625	1.1	Forb	N	X	CP3-1		BB-LB-Indian-Sgrama-Sgrod-Ycone-PPclover
38	CP3-1-BB-LB-Indian-Sgrama-Sgrod-Ycone-PPclover	38-CP3-1-BB-LB-Indian-Sgrama-Sgrod-Ycone-PPcl	Yellow Coneflower	Ratibida pinnata	1.00	0.0625	0.7	Forb	N	X	CP3-1		BB-LB-Indian-Sgrama-Sgrod-Ycone-PPclover
38	CP3-1-BB-LB-Indian-Sgrama-Sgrod-Ycone-PPclover	38-CP3-1-BB-LB-Indian-Sgrama-Sgrod-Ycone-PPcl	Purple Prairie Clover	Dalea purpurea	2.00	0.125	1	Legume	N	X	CP3-1		BB-LB-Indian-Sgrama-Sgrod-Ycone-PPclover
38	CP3-2-BB-Switch-LB-Indian-Cwrye-Ycone-Besus-Berg	38-CP3-2-BB-Switch-LB-Indian-Cwrye-Ycone-Besu	Big Bluestem	Andropogon gerardii	8.00	0.5	1.9	Grass	N	X	CP3-2		BB-Switch-LB-Indian-Cwrye-Ycone-Besus-Berg
38	CP3-2-BB-Switch-LB-Indian-Cwrye-Ycone-Besus-Berg	38-CP3-2-BB-Switch-LB-Indian-Cwrye-Ycone-Besu	Switchgrass	Panicum virgatum	8.00	0.5	4.5	Grass	N	X	CP3-2		BB-Switch-LB-Indian-Cwrye-Ycone-Besus-Berg
38	CP3-2-BB-Switch-LB-Indian-Cwrye-Ycone-Besus-Berg	38-CP3-2-BB-Switch-LB-Indian-Cwrye-Ycone-Besu	Little Bluestem	Schizachyrium scopariu	20.00	1.25	6.9	Grass	N	X	CP3-2		BB-Switch-LB-Indian-Cwrye-Ycone-Besus-Berg
38	CP3-2-BB-Switch-LB-Indian-Cwrye-Ycone-Besus-Berg	38-CP3-2-BB-Switch-LB-Indian-Cwrye-Ycone-Besu	Indiangrass	Sorghastrum nutans	16.00	1	4.5	Grass	N	X	CP3-2		BB-Switch-LB-Indian-Cwrye-Ycone-Besus-Berg
38	CP3-2-BB-Switch-LB-Indian-Cwrye-Ycone-Besus-Berg	38-CP3-2-BB-Switch-LB-Indian-Cwrye-Ycone-Besu	Canada Wildrye	Elymus canadensis	16.00	1	2	Grass	N	X	CP3-2		BB-Switch-LB-Indian-Cwrye-Ycone-Besus-Berg
38	CP3-2-BB-Switch-LB-Indian-Cwrye-Ycone-Besus-Berg	38-CP3-2-BB-Switch-LB-Indian-Cwrye-Ycone-Besu	Yellow Coneflower	Ratibida pinnata	1.00	0.0625	0.7	Forb	N	X	CP3-2		BB-Switch-LB-Indian-Cwrye-Ycone-Besus-Berg
38	CP3-2-BB-Switch-LB-Indian-Cwrye-Ycone-Besus-Berg	38-CP3-2-BB-Switch-LB-Indian-Cwrye-Ycone-Besu	Black-Eyed Susan	Rudbeckia hirta	1.00	0.0625	2.3	Forb	N	X	CP3-2		BB-Switch-LB-Indian-Cwrye-Ycone-Besus-Berg
38	CP3-2-BB-Switch-LB-Indian-Cwrye-Ycone-Besus-Berg	38-CP3-2-BB-Switch-LB-Indian-Cwrye-Ycone-Besu	Bergamot	Monarda fistulosa	1.00	0.0625	1.8	Forb	N	X	CP3-2		BB-Switch-LB-Indian-Cwrye-Ycone-Besus-Berg
38	CP3-3-BB-LB-Indian-Switch-Sgrama-PPclover-Berg-Ycon	38-CP3-3-BB-LB-Indian-Switch-Sgrama-PPclover-B	Big Bluestem	Andropogon gerardii	8.00	0.5	1.9	Grass	N	X	CP3-3		BB-LB-Indian-Switch-Sgrama-PPclover-Berg-Ycone
38	CP3-3-BB-LB-Indian-Switch-Sgrama-PPclover-Berg-Ycon	38-CP3-3-BB-LB-Indian-Switch-Sgrama-PPclover-B	Little Bluestem	Schizachyrium scopariu	24.00	1.5	8.3	Grass	N	X	CP3-3		BB-LB-Indian-Switch-Sgrama-PPclover-Berg-Ycone
38	CP3-3-BB-LB-Indian-Switch-Sgrama-PPclover-Berg-Ycon	38-CP3-3-BB-LB-Indian-Switch-Sgrama-PPclover-B	Indiangrass	Sorghastrum nutans	8.00	0.5	2.3	Grass	N	X	CP3-3		BB-LB-Indian-Switch-Sgrama-PPclover-Berg-Ycone
38	CP3-3-BB-LB-Indian-Switch-Sgrama-PPclover-Berg-Ycon	38-CP3-3-BB-LB-Indian-Switch-Sgrama-PPclover-B	Switchgrass	Panicum virgatum	8.00	0.5	4.5	Grass	N	X	CP3-3		BB-LB-Indian-Switch-Sgrama-PPclover-Berg-Ycone
38	CP3-3-BB-LB-Indian-Switch-Sgrama-PPclover-Berg-Ycon	38-CP3-3-BB-LB-Indian-Switch-Sgrama-PPclover-B	Sideoats Grama	Bouteloua curtipendula	16.00	1	3	Grass	N	X	CP3-3		BB-LB-Indian-Switch-Sgrama-PPclover-Berg-Ycone
38	CP3-3-BB-LB-Indian-Switch-Sgrama-PPclover-Berg-Ycon	38-CP3-3-BB-LB-Indian-Switch-Sgrama-PPclover-B	Purple Prairie Clover	Dalea purpurea	2.00	0.125	1	Legume	N	X	CP3-3		BB-LB-Indian-Switch-Sgrama-PPclover-Berg-Ycone
38	CP3-3-BB-LB-Indian-Switch-Sgrama-PPclover-Berg-Ycon	38-CP3-3-BB-LB-Indian-Switch-Sgrama-PPclover-B	Bergamot	Monarda fistulosa	1.00	0.0625	1.8	Forb	N	X	CP3-3		BB-LB-Indian-Switch-Sgrama-PPclover-Berg-Ycone
38	CP3-3-BB-LB-Indian-Switch-Sgrama-PPclover-Berg-Ycon	38-CP3-3-BB-LB-Indian-Switch-Sgrama-PPclover-B	Yellow Coneflower	Ratibida pinnata	1.00	0.0625	0.7	Forb	N	X	CP3-3		BB-LB-Indian-Switch-Sgrama-PPclover-Berg-Ycone
38	CP3-4-Switch-Pcord-BB-Indian-Cwrye-Ciron-Cup-Bvervai	38-CP3-4-Switch-Pcord-BB-Indian-Cwrye-Ciron-Cu	Switchgrass	Panicum virgatum	16.00	1	9	Grass	N	X	CP3-4		Switch-Pcord-BB-Indian-Cwrye-Ciron-Cup-Bvervain
38	CP3-4-Switch-Pcord-BB-Indian-Cwrye-Ciron-Cup-Bvervai	38-CP3-4-Switch-Pcord-BB-Indian-Cwrye-Ciron-Cu	Prairie Cordgrass	Spartina pectinata	8.00	0.5	1.3	Grass	N		CP3-4		Switch-Pcord-BB-Indian-Cwrye-Ciron-Cup-Bvervain
38	CP3-4-Switch-Pcord-BB-Indian-Cwrye-Ciron-Cup-Bvervai	38-CP3-4-Switch-Pcord-BB-Indian-Cwrye-Ciron-Cu	Big Bluestem	Andropogon gerardii	16.00	1	3.8	Grass	N	X	CP3-4		Switch-Pcord-BB-Indian-Cwrye-Ciron-Cup-Bvervain
38	CP3-4-Switch-Pcord-BB-Indian-Cwrye-Ciron-Cup-Bvervai	38-CP3-4-Switch-Pcord-BB-Indian-Cwrye-Ciron-Cu	Indiangrass	Sorghastrum nutans	16.00	1	4.5	Grass	N	X	CP3-4		Switch-Pcord-BB-Indian-Cwrye-Ciron-Cup-Bvervain
38	CP3-4-Switch-Pcord-BB-Indian-Cwrye-Ciron-Cup-Bvervai	38-CP3-4-Switch-Pcord-BB-Indian-Cwrye-Ciron-Cu	Canada Wildrye	Elymus canadensis	16.00	1	2	Grass	N	X	CP3-4		Switch-Pcord-BB-Indian-Cwrye-Ciron-Cup-Bvervain
38	CP3-4-Switch-Pcord-BB-Indian-Cwrye-Ciron-Cup-Bvervai	38-CP3-4-Switch-Pcord-BB-Indian-Cwrye-Ciron-Cu	Common Ironweed	Vernonia fasciculata	1.00	0.0625	0.5	Forb	N	X	CP3-4		Switch-Pcord-BB-Indian-Cwrye-Ciron-Cup-Bvervain
38	CP3-4-Switch-Pcord-BB-Indian-Cwrye-Ciron-Cup-Bvervai	38-CP3-4-Switch-Pcord-BB-Indian-Cwrye-Ciron-Cu	Cupplant	Silphium perfoliatum	2.00	0.125	0.1	Forb	N	X	CP3-4		Switch-Pcord-BB-Indian-Cwrye-Ciron-Cup-Bvervain
38	CP3-4-Switch-Pcord-BB-Indian-Cwrye-Ciron-Cup-Bvervai	38-CP3-4-Switch-Pcord-BB-Indian-Cwrye-Ciron-Cu	Blue Vervain	Verbena hastata	1.00	0.0625	2.2	Forb	N	X	CP3-4		Switch-Pcord-BB-Indian-Cwrye-Ciron-Cup-Bvervain
38	CP3-5-Switch-Pcord-BB-Cwrye-Berg-Ycone-NEaster	38-CP3-5-Switch-Pcord-BB-Cwrye-Berg-Ycone-NEa	Switchgrass	Panicum virgatum	32.00	2	17.9	Grass	N	X	CP3-5		Switch-Pcord-BB-Cwrye-Berg-Ycone-NEaster
38	CP3-5-Switch-Pcord-BB-Cwrye-Berg-Ycone-NEaster	38-CP3-5-Switch-Pcord-BB-Cwrye-Berg-Ycone-NEa	Prairie Cordgrass	Spartina pectinata	4.00	0.25	0.7	Grass	N		CP3-5		Switch-Pcord-BB-Cwrye-Berg-Ycone-NEaster
38	CP3-5-Switch-Pcord-BB-Cwrye-Berg-Ycone-NEaster	38-CP3-5-Switch-Pcord-BB-Cwrye-Berg-Ycone-NEa	Big Bluestem	Andropogon gerardii	16.00	1	3.8	Grass	N	X	CP3-5		Switch-Pcord-BB-Cwrye-Berg-Ycone-NEaster
38	CP3-5-Switch-Pcord-BB-Cwrye-Berg-Ycone-NEaster	38-CP3-5-Switch-Pcord-BB-Cwrye-Berg-Ycone-NEa	Canada Wildrye	Elymus canadensis	16.00	1	2	Grass	N	X	CP3-5		Switch-Pcord-BB-Cwrye-Berg-Ycone-NEaster
38	CP3-5-Switch-Pcord-BB-Cwrye-Berg-Ycone-NEaster	38-CP3-5-Switch-Pcord-BB-Cwrye-Berg-Ycone-NEa	Bergamot	Monarda fistulosa	1.00	0.0625	1.8	Forb	N	X	CP3-5		Switch-Pcord-BB-Cwrye-Berg-Ycone-NEaster

38	CP3-5-Switch-Pcord-BB-Cwrye-Berg-Ycone-NEaster	38-CP3-5-Switch-Pcord-BB-Cwrye-Berg-Ycone-NEa	Yellow Coneflower	Ratibida pinnata	1.00	0.0625	0.7	Forb	N	X	CP3-5		Switch-Pcord-BB-Cwrye-Berg-Ycone-NEaster
38	CP3-5-Switch-Pcord-BB-Cwrye-Berg-Ycone-NEaster	38-CP3-5-Switch-Pcord-BB-Cwrye-Berg-Ycone-NEa	New England Aster	Symphyotrichum novae	1.00	0.0625	1.7	Forb	N	X	CP3-5		Switch-Pcord-BB-Cwrye-Berg-Ycone-NEaster
STD	**Mix #**	**std-mix**	**Common Name**	**Scientific Name**	**(oz./A)**	**(lbs./A)**	**Seeds/Square Foot**	**Type**	**Native**	**(Y/N)**	**I**	**Mix No.**	**MR**
									N				

STD	Mix #	std-mix	Common Name	Scientific Name	PLS (oz./A)	PLS (lbs./A)	Seeds/Square Foot	Type	Intro / Native	Poll. (Y/N)	Mix No.	MR	Mix Components
		LEAVE THIS ROW AS IS							N	Y			
2	CP2_1-BB-Switch-Cmilkvetch-Besus-Ycone	2-CP2_1-BB-Switch-Cmilkvetch-Besus-Ycone	Big Bluestem	Andropogon gerardii	48	3		Grass	N	N	CP2_1		BB-Switch-Cmilkvetch-Besus-Ycone
2	CP2_1-BB-Switch-Cmilkvetch-Besus-Ycone	2-CP2_1-BB-Switch-Cmilkvetch-Besus-Ycone	Switchgrass	Panicum virgatum	16	1		Grass	N	N	CP2_1		BB-Switch-Cmilkvetch-Besus-Ycone
2	CP2_1-BB-Switch-Cmilkvetch-Besus-Ycone	2-CP2_1-BB-Switch-Cmilkvetch-Besus-Ycone	Canada Milkvetch	Astragalus canadensis	2	0.125		Legume	N	N	CP2_1		BB-Switch-Cmilkvetch-Besus-Ycone
2	CP2_1-BB-Switch-Cmilkvetch-Besus-Ycone	2-CP2_1-BB-Switch-Cmilkvetch-Besus-Ycone	Black-eyed Susan	Rudbeckia hirta	1	0.0625		Forb	N	N	CP2_1		BB-Switch-Cmilkvetch-Besus-Ycone
2	CP2_1-BB-Switch-Cmilkvetch-Besus-Ycone	2-CP2_1-BB-Switch-Cmilkvetch-Besus-Ycone	Yellow Coneflower	Ratibida pinnata	1	0.0625		Forb	N	N	CP2_1		BB-Switch-Cmilkvetch-Besus-Ycone
2	CP2_2-BB-Switch-Ttrefoil-Besus-Ycone	2-CP2_2-BB-Switch-Ttrefoil-Besus-Ycone	Big Bluestem	Andropogon gerardii	48	3		Grass	N	N	CP2_2		BB-Switch-Ttrefoil-Besus-Ycone
2	CP2_2-BB-Switch-Ttrefoil-Besus-Ycone	2-CP2_2-BB-Switch-Ttrefoil-Besus-Ycone	Switchgrass	Panicum virgatum	16	1		Grass	N	N	CP2_2		BB-Switch-Ttrefoil-Besus-Ycone
2	CP2_2-BB-Switch-Ttrefoil-Besus-Ycone	2-CP2_2-BB-Switch-Ttrefoil-Besus-Ycone	Showy Tick Trefoil	Desmodium canadense	6	0.375		Legume	N	N	CP2_2		BB-Switch-Ttrefoil-Besus-Ycone
2	CP2_2-BB-Switch-Ttrefoil-Besus-Ycone	2-CP2_2-BB-Switch-Ttrefoil-Besus-Ycone	Black-eyed Susan	Rudbeckia hirta	1	0.0625		Forb	N	N	CP2_2		BB-Switch-Ttrefoil-Besus-Ycone
2	CP2_2-BB-Switch-Ttrefoil-Besus-Ycone	2-CP2_2-BB-Switch-Ttrefoil-Besus-Ycone	Yellow Coneflower	Ratibida pinnata	1	0.0625		Forb	N	N	CP2_2		BB-Switch-Ttrefoil-Besus-Ycone
2	CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Yco	2-CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-B	Little Bluestem	Schizachyrium scoparium	24	1.5		Grass	N	N	CP2_3		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
2	CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Yco	2-CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-B	Sideoats Grama	Bouteloua curtipendula	16	1		Grass	N	N	CP2_3		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
2	CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Yco	2-CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-B	Big Bluestem	Andropogon gerardii	8	0.5		Grass	N	N	CP2_3		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
2	CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Yco	2-CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-B	Indiangrass	Sorghastrum nutans	8	0.5		Grass	N	N	CP2_3		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
2	CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Yco	2-CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-B	Switchgrass	Panicum virgatum	8	0.5		Grass	N	N	CP2_3		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
2	CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Yco	2-CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-B	Purple Prairie Clover	Dalea purpurea	2	0.125		Legume	N	N	CP2_3		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
2	CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Yco	2-CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-B	Bergamot	Monarda fistulosa	1	0.0625		Forb	N	N	CP2_3		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
2	CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Yco	2-CP2_3-LB-Sgrama-BB-Indian-Switch-PPclover-B	Yellow Coneflower	Ratibida pinnata	1	0.0625		Forb	N	N	CP2_3		LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
2	CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone	2-CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus	Little Bluestem	Schizachyrium scoparium	20	1.25		Grass	N	N	CP2_4		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
2	CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone	2-CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus	Canada Wildrye	Elymus canadensis	16	1		Grass	N	N	CP2_4		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
2	CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone	2-CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus	Indiangrass	Sorghastrum nutans	16	1		Grass	N	N	CP2_4		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
2	CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone	2-CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus	Big Bluestem	Andropogon gerardii	8	0.5		Grass	N	N	CP2_4		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
2	CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone	2-CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus	Switchgrass	Panicum virgatum	8	0.5		Grass	N	N	CP2_4		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
2	CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone	2-CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus	Bergamot	Monarda fistulosa	1	0.0625		Forb	N	N	CP2_4		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
2	CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone	2-CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus	Black-eyed Susan	Rudbeckia hirta	1	0.0625		Forb	N	N	CP2_4		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
2	CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone	2-CP2_4-LB-Cwrye-Indian-BB-Switch-Berg-Besus	Yellow Coneflower	Ratibida pinnata	1	0.0625		Forb	N	N	CP2_4		LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
2	CP2_5-BB-Sgrama-Indian-PPclover-Sgrod-Ycone	2-CP2_5-BB-Sgrama-Indian-PPclover-Sgrod-Ycon	Big Bluestem	Andropogon gerardii	24	1.5		Grass	N	N	CP2_5		BB-Sgrama-Indian-PPclover-Sgrod-Ycone
2	CP2_5-BB-Sgrama-Indian-PPclover-Sgrod-Ycone	2-CP2_5-BB-Sgrama-Indian-PPclover-Sgrod-Ycon	Sideoats Grama	Bouteloua curtipendula	24	1.5		Grass	N	N	CP2_5		BB-Sgrama-Indian-PPclover-Sgrod-Ycone
2	CP2_5-BB-Sgrama-Indian-PPclover-Sgrod-Ycone	2-CP2_5-BB-Sgrama-Indian-PPclover-Sgrod-Ycon	Indiangrass	Sorghastrum nutans	8	0.5		Grass	N	N	CP2_5		BB-Sgrama-Indian-PPclover-Sgrod-Ycone
2	CP2_5-BB-Sgrama-Indian-PPclover-Sgrod-Ycone	2-CP2_5-BB-Sgrama-Indian-PPclover-Sgrod-Ycon	Purple Prairie Clover	Dalea purpurea	2	0.125		Legume	N	N	CP2_5		BB-Sgrama-Indian-PPclover-Sgrod-Ycone
2	CP2_5-BB-Sgrama-Indian-PPclover-Sgrod-Ycone	2-CP2_5-BB-Sgrama-Indian-PPclover-Sgrod-Ycon	Stiff Goldenrod	Oligoneuron rigidum	1	0.0625		Forb	N	N	CP2_5		BB-Sgrama-Indian-PPclover-Sgrod-Ycone
2	CP2_5-BB-Sgrama-Indian-PPclover-Sgrod-Ycone	2-CP2_5-BB-Sgrama-Indian-PPclover-Sgrod-Ycon	Yellow Coneflower	Ratibida pinnata	1	0.0625		Forb	N	N	CP2_5		BB-Sgrama-Indian-PPclover-Sgrod-Ycone
2	CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ci	2-CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bve	Big Bluestem	Andropogon gerardii	16	1		Grass	N	N	CP2_6		BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
2	CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ci	2-CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bve	Canada Wildrye	Elymus canadensis	16	1		Grass	N	N	CP2_6		BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
2	CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ci	2-CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bve	Indiangrass	Sorghastrum nutans	16	1		Grass	N	N	CP2_6		BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
2	CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ci	2-CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bve	Switchgrass	Panicum virgatum	16	1		Grass	N	N	CP2_6		BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
2	CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ci	2-CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bve	Prairie Cordgrass	Spartina pectinata	8	0.5		Grass	N	N	CP2_6		BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
2	CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ci	2-CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bve	Cupplant	Silphium perfoliatum	2	0.125		Forb	N	N	CP2_6		BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron

2	CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ci	2-CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bve	Blue Vervain	Verbena hastata	1	0.0625		Forb	N	N	CP2_6	BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
2	CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ci	2-CP2_6-BB-Cwrye-Indian-Switch-Pcord-Cup-Bve	Common Ironweed	Vernonia fasciculata	1	0.0625		Forb	N	N	CP2_6	BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
2	CP2_7-Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone	2-CP2_7-Switch-BB-Cwrye-Pcord-Berg-NEaster-Y	Switchgrass	Panicum virgatum	32	2		Grass	N	N	CP2_7	Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
2	CP2_7-Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone	2-CP2_7-Switch-BB-Cwrye-Pcord-Berg-NEaster-Y	Big Bluestem	Andropogon gerardii	16	1		Grass	N	N	CP2_7	Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
2	CP2_7-Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone	2-CP2_7-Switch-BB-Cwrye-Pcord-Berg-NEaster-Y	Canada Wildrye	Elymus canadensis	16	1		Grass	N	N	CP2_7	Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
2	CP2_7-Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone	2-CP2_7-Switch-BB-Cwrye-Pcord-Berg-NEaster-Y	Prairie Cordgrass	Spartina pectinata	4	0.25		Grass	N	N	CP2_7	Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
2	CP2_7-Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone	2-CP2_7-Switch-BB-Cwrye-Pcord-Berg-NEaster-Y	Bergamot	Monarda fistulosa	1	0.0625		Forb	N	N	CP2_7	Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
2	CP2_7-Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone	2-CP2_7-Switch-BB-Cwrye-Pcord-Berg-NEaster-Y	New England Aster	Symphyotrichum novae-a	1	0.0625		Forb	N	N	CP2_7	Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
2	CP2_7-Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone	2-CP2_7-Switch-BB-Cwrye-Pcord-Berg-NEaster-Y	Yellow Coneflower	Ratibida pinnata	1	0.0625		Forb	N	N	CP2_7	Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
4	CP4D-5-Indian-BB-Switch-Cmilkvetch-Besus-Ycone	4-CP4D-5-Indian-BB-Switch-Cmilkvetch-Besus-Yc	Indiangrass	Sorghastrum nutans	48	3		Grass	N	N	CP4D-5	Indian-BB-Switch-Cmilkvetch-Besus-Ycone
4	CP4D-5-Indian-BB-Switch-Cmilkvetch-Besus-Ycone	4-CP4D-5-Indian-BB-Switch-Cmilkvetch-Besus-Yc	Big Bluestem	Andropogon gerardii	16	1		Grass	N	N	CP4D-5	Indian-BB-Switch-Cmilkvetch-Besus-Ycone
4	CP4D-5-Indian-BB-Switch-Cmilkvetch-Besus-Ycone	4-CP4D-5-Indian-BB-Switch-Cmilkvetch-Besus-Yc	Switchgrass	Panicum virgatum	16	1		Grass	N	N	CP4D-5	Indian-BB-Switch-Cmilkvetch-Besus-Ycone
4	CP4D-5-Indian-BB-Switch-Cmilkvetch-Besus-Ycone	4-CP4D-5-Indian-BB-Switch-Cmilkvetch-Besus-Yc	Canada Milkvetch	Astragalus canadensis	2	0.125		Legume	N	N	CP4D-5	Indian-BB-Switch-Cmilkvetch-Besus-Ycone
4	CP4D-5-Indian-BB-Switch-Cmilkvetch-Besus-Ycone	4-CP4D-5-Indian-BB-Switch-Cmilkvetch-Besus-Yc	Black-eyed Susan	Rudbeckia hirta	1	0.0625		Forb	N	N	CP4D-5	Indian-BB-Switch-Cmilkvetch-Besus-Ycone
4	CP4D-5-Indian-BB-Switch-Cmilkvetch-Besus-Ycone	4-CP4D-5-Indian-BB-Switch-Cmilkvetch-Besus-Yc	Yellow Coneflower	Ratibida pinnata	1	0.0625		Forb	N	N	CP4D-5	Indian-BB-Switch-Cmilkvetch-Besus-Ycone
4	CP4D-6-Indian-BB-Switch-LB-Cmilkvetch-Besus-Ycone	4-CP4D-6-Indian-BB-Switch-LB-Cmilkvetch-Besus	Indiangrass	Sorghastrum nutans	48	3		Grass	N	N	CP4D-6	Indian-BB-Switch-LB-Cmilkvetch-Besus-Ycone
4	CP4D-6-Indian-BB-Switch-LB-Cmilkvetch-Besus-Ycone	4-CP4D-6-Indian-BB-Switch-LB-Cmilkvetch-Besus	Big Bluestem	Andropogon gerardii	16	1		Grass	N	N	CP4D-6	Indian-BB-Switch-LB-Cmilkvetch-Besus-Ycone
4	CP4D-6-Indian-BB-Switch-LB-Cmilkvetch-Besus-Ycone	4-CP4D-6-Indian-BB-Switch-LB-Cmilkvetch-Besus	Switchgrass	Panicum virgatum	16	1		Grass	N	N	CP4D-6	Indian-BB-Switch-LB-Cmilkvetch-Besus-Ycone
4	CP4D-6-Indian-BB-Switch-LB-Cmilkvetch-Besus-Ycone	4-CP4D-6-Indian-BB-Switch-LB-Cmilkvetch-Besus	Little Bluestem	Schizachyrium scoparium	16	1		Grass	N	N	CP4D-6	Indian-BB-Switch-LB-Cmilkvetch-Besus-Ycone
4	CP4D-6-Indian-BB-Switch-LB-Cmilkvetch-Besus-Ycone	4-CP4D-6-Indian-BB-Switch-LB-Cmilkvetch-Besus	Canada Milkvetch	Astragalus canadensis	2	0.125		Legume	N	N	CP4D-6	Indian-BB-Switch-LB-Cmilkvetch-Besus-Ycone
4	CP4D-6-Indian-BB-Switch-LB-Cmilkvetch-Besus-Ycone	4-CP4D-6-Indian-BB-Switch-LB-Cmilkvetch-Besus	Black-eyed Susan	Rudbeckia hirta	1	0.0625		Forb	N	N	CP4D-6	Indian-BB-Switch-LB-Cmilkvetch-Besus-Ycone
4	CP4D-6-Indian-BB-Switch-LB-Cmilkvetch-Besus-Ycone	4-CP4D-6-Indian-BB-Switch-LB-Cmilkvetch-Besus	Yellow Coneflower	Ratibida pinnata	1	0.0625		Forb	N	N	CP4D-6	Indian-BB-Switch-LB-Cmilkvetch-Besus-Ycone
4	CP4D-7-Indian-BB-Switch-PPclover-Besus-Ycone	4-CP4D-7-Indian-BB-Switch-PPclover-Besus-Ycon	Indiangrass	Sorghastrum nutans	48	3		Grass	N	N	CP4D-7	Indian-BB-Switch-PPclover-Besus-Ycone
4	CP4D-7-Indian-BB-Switch-PPclover-Besus-Ycone	4-CP4D-7-Indian-BB-Switch-PPclover-Besus-Ycon	Big Bluestem	Andropogon gerardii	16	1		Grass	N	N	CP4D-7	Indian-BB-Switch-PPclover-Besus-Ycone
4	CP4D-7-Indian-BB-Switch-PPclover-Besus-Ycone	4-CP4D-7-Indian-BB-Switch-PPclover-Besus-Ycon	Switchgrass	Panicum virgatum	16	1		Grass	N	N	CP4D-7	Indian-BB-Switch-PPclover-Besus-Ycone
4	CP4D-7-Indian-BB-Switch-PPclover-Besus-Ycone	4-CP4D-7-Indian-BB-Switch-PPclover-Besus-Ycon	Purple Prairie Clover	Dalea purpurea	2	0.125		Legume	N	N	CP4D-7	Indian-BB-Switch-PPclover-Besus-Ycone
4	CP4D-7-Indian-BB-Switch-PPclover-Besus-Ycone	4-CP4D-7-Indian-BB-Switch-PPclover-Besus-Ycon	Black-eyed Susan	Rudbeckia hirta	1	0.0625		Forb	N	N	CP4D-7	Indian-BB-Switch-PPclover-Besus-Ycone
4	CP4D-7-Indian-BB-Switch-PPclover-Besus-Ycone	4-CP4D-7-Indian-BB-Switch-PPclover-Besus-Ycon	Yellow Coneflower	Ratibida pinnata	1	0.0625		Forb	N	N	CP4D-7	Indian-BB-Switch-PPclover-Besus-Ycone
4	CP4D-8-Indian-BB-LB-Switch-PPclover-Besus-Ycone	4-CP4D-8-Indian-BB-LB-Switch-PPclover-Besus-Y	Indiangrass	Sorghastrum nutans	48	3		Grass	N	N	CP4D-8	Indian-BB-LB-Switch-PPclover-Besus-Ycone
4	CP4D-8-Indian-BB-LB-Switch-PPclover-Besus-Ycone	4-CP4D-8-Indian-BB-LB-Switch-PPclover-Besus-Y	Big Bluestem	Andropogon gerardii	16	1		Grass	N	N	CP4D-8	Indian-BB-LB-Switch-PPclover-Besus-Ycone
4	CP4D-8-Indian-BB-LB-Switch-PPclover-Besus-Ycone	4-CP4D-8-Indian-BB-LB-Switch-PPclover-Besus-Y	Little Bluestem	Schizachyrium scoparium	16	1		Grass	N	N	CP4D-8	Indian-BB-LB-Switch-PPclover-Besus-Ycone
4	CP4D-8-Indian-BB-LB-Switch-PPclover-Besus-Ycone	4-CP4D-8-Indian-BB-LB-Switch-PPclover-Besus-Y	Switchgrass	Panicum virgatum	16	1		Grass	N	N	CP4D-8	Indian-BB-LB-Switch-PPclover-Besus-Ycone
4	CP4D-8-Indian-BB-LB-Switch-PPclover-Besus-Ycone	4-CP4D-8-Indian-BB-LB-Switch-PPclover-Besus-Y	Purple Prairie Clover	Dalea purpurea	2	0.125		Legume	N	N	CP4D-8	Indian-BB-LB-Switch-PPclover-Besus-Ycone
4	CP4D-8-Indian-BB-LB-Switch-PPclover-Besus-Ycone	4-CP4D-8-Indian-BB-LB-Switch-PPclover-Besus-Y	Black-eyed Susan	Rudbeckia hirta	1	0.0625		Forb	N	N	CP4D-8	Indian-BB-LB-Switch-PPclover-Besus-Ycone
4	CP4D-8-Indian-BB-LB-Switch-PPclover-Besus-Ycone	4-CP4D-8-Indian-BB-LB-Switch-PPclover-Besus-Y	Yellow Coneflower	Ratibida pinnata	1	0.0625		Forb	N	N	CP4D-8	Indian-BB-LB-Switch-PPclover-Besus-Ycone
4	CP4D-9-Indian-BB-Switch-PPclover-Berg-Ycone	4-CP4D-9-Indian-BB-Switch-PPclover-Berg-Ycone	Indiangrass	Sorghastrum nutans	48	3		Grass	N	N	CP4D-9	Indian-BB-Switch-PPclover-Berg-Ycone
4	CP4D-9-Indian-BB-Switch-PPclover-Berg-Ycone	4-CP4D-9-Indian-BB-Switch-PPclover-Berg-Ycone	Big Bluestem	Andropogon gerardii	16	1		Grass	N	N	CP4D-9	Indian-BB-Switch-PPclover-Berg-Ycone
4	CP4D-9-Indian-BB-Switch-PPclover-Berg-Ycone	4-CP4D-9-Indian-BB-Switch-PPclover-Berg-Ycone	Switchgrass	Panicum virgatum	16	1		Grass	N	N	CP4D-9	Indian-BB-Switch-PPclover-Berg-Ycone
4	CP4D-9-Indian-BB-Switch-PPclover-Berg-Ycone	4-CP4D-9-Indian-BB-Switch-PPclover-Berg-Ycone	Purple Prairie Clover	Dalea purpurea	2	0.125		Legume	N	N	CP4D-9	Indian-BB-Switch-PPclover-Berg-Ycone
4	CP4D-9-Indian-BB-Switch-PPclover-Berg-Ycone	4-CP4D-9-Indian-BB-Switch-PPclover-Berg-Ycone	Bergamot	Monarda fistulosa	1	0.0625		Forb	N	N	CP4D-9	Indian-BB-Switch-PPclover-Berg-Ycone
4	CP4D-9-Indian-BB-Switch-PPclover-Berg-Ycone	4-CP4D-9-Indian-BB-Switch-PPclover-Berg-Ycone	Yellow Coneflower	Ratibida pinnata	1	0.0625		Forb	N	N	CP4D-9	Indian-BB-Switch-PPclover-Berg-Ycone
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Sv	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover	Little Bluestem	Schizachyrium scoparium	24	1.5		Grass	N	N	CP25-D	LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swort-Hvervain-Lpla
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Sv	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover	Sideoats Grama	Bouteloua curtipendula	24	1.5		Grass	N	N	CP25-D	LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swort-Hvervain-Lpla
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Sv	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover	Indiangrass	Sorghastrum nutans	8	0.5		Grass	N	N	CP25-D	LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swort-Hvervain-Lpla
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Sv	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover	Big Bluestem	Andropogon gerardii	4	0.25		Grass	N	N	CP25-D	LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swort-Hvervain-Lpla
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Sv	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover	Prairie Junegrass	Koeleria macrantha	2	0.125		Grass	N	N	CP25-D	LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swort-Hvervain-Lpla
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Sv	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover	Purple Prairie Clover	Dalea purpurea	2	0.125		Legume	N	N	CP25-D	LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swort-Hvervain-Lpla
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Sv	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover	Sand Dropseed	Sporobolus cryptandrus	2	0.125		Grass	N	N	CP25-D	LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swort-Hvervain-Lpla
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Sv	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover	Spiderwort	Tradescantia ohiensis	1	0.0625		Forb	N	N	CP25-D	LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swort-Hvervain-Lpla
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Sv	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover	Hoary Vervain	Verbena stricta	0.5	0.03125		Forb	N	N	CP25-D	LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swort-Hvervain-Lpla
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Sv	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover	Leadplant	Amorpha canescens	0.5	0.03125		Legume	N	N	CP25-D	LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swort-Hvervain-Lpla
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Sv	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover	Prairie Tickseed	Coreopsis palmata	0.5	0.03125		Forb	N	N	CP25-D	LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swort-Hvervain-Lpla
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Sv	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover	Silky Aster	Symphyotrichum pratens	0.5	0.03125		Forb	N	N	CP25-D	LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swort-Hvervain-Lpla
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Sv	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover	Stiff Goldenrod	Oligoneuron rigidum	0.5	0.03125		Forb	N	N	CP25-D	LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swort-Hvervain-Lpla
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Sv	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover	Yellow Coneflower	Ratibida pinnata	1	0.03125		Forb	N	N	CP25-D	LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swort-Hvervain-Lpla
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Sv	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover	Prairie Cinquefoil	Potentilla arguta	0.25	0.015625		Forb	N	N	CP25-D	LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swort-Hvervain-Lpla
25	CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Sv	25-CP25-D-LB-Sgrama-Indian-BB-Pjune-PPclover	Spotted Mint	Monarda punctata	0	0.015625		Forb	N	N	CP25-D	LB-Sgrama-Indian-BB-Pjune-PPclover-Sdrop-Swort-Hvervain-Lpla
25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclo	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pd	Little Bluestem	Schizachyrium scoparium	24	1.5		Grass	N	N	CP25-DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-Bi
25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclo	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pd	Sideoats Grama	Bouteloua curtipendula	24	1.5		Grass	N	N	CP25-DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-Bi
25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclo	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pd	Indiangrass	Sorghastrum nutans	8	0.5		Grass	N	N	CP25-DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-Bi
25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclo	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pd	Switchgrass	Panicum virgatum	4	0.25		Grass	N	N	CP25-DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-Bi
25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclo	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pd	Prairie Junegrass	Koeleria macrantha	2	0.125		Grass	N	N	CP25-DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-Bi
25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclo	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pd	Prairie Dropseed	Sporobolus heterolepis	2	0.125		Grass	N	N	CP25-DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-Bi
25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclo	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pd	Purple Prairie Clover	Dalea purpurea	2	0.125		Legume	N	N	CP25-DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-Bi
25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclo	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pd	Round-Headed Bushclover	Lespedeza capitata	2	0.125		Legume	N	N	CP25-DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-Bi
25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclo	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pd	Bergamot	Monarda fistulosa	1	0.0625		Forb	N	N	CP25-DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-Bi
25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclo	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pd	Spiderwort	Tradescantia ohiensis	1	0.0625		Forb	N	N	CP25-DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-Bi
25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclo	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pd	Yellow Coneflower	Ratibida pinnata	1	0.0625		Forb	N	N	CP25-DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-Bi
25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclo	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pd	Leadplant	Amorpha canescens	0.5	0.03125		Legume	N	N	CP25-DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-Bi
25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclo	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pd	Rough Blazing Star	Liatris aspera	1	0.03125		Forb	N	N	CP25-DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-Bi
25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclo	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pd	Sky-Blue Aster	Symphyotrichum oolenta	1	0.03125		Forb	N	N	CP25-DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-Bi

25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclo	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pd	Stiff Goldenrod	Oligoneuron rigidum	0.5	0.03125		Forb	N	N	CP25-DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
25	CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclo	25-CP25-DM-LB-Sgrama-Indian-Switch-Pjune-Pd	Prairie Cinquefoil	Potentilla arguta	0.25	0.015625		Forb	N	N	CP25-DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pju	Little Bluestem	Schizachyrium scoparium	24	1.5		Grass	N	N	CP25-KBB	LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-PPclover-PPCone-Lp
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pju	Sideoats Grama	Bouteloua curtipendula	24	1.5		Grass	N	N	CP25-KBB	LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-PPclover-PPCone-Lp
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pju	Indiangrass	Sorghastrum nutans	8	0.5		Grass	N	N	CP25-KBB	LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-PPclover-PPCone-Lp
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pju	Switchgrass	Panicum virgatum	8	0.5		Grass	N	N	CP25-KBB	LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-PPclover-PPCone-Lp
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pju	Wild Lupine	Lupinus perennis	3	0.1875		Legume	N	N	CP25-KBB	LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-PPclover-PPCone-Lp
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pju	Prairie Junegrass	Koeleria macrantha	2	0.125		Grass	N	N	CP25-KBB	LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-PPclover-PPCone-Lp
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pju	Prairie Dropseed	Sporobolus heterolepis	2	0.125		Grass	N	N	CP25-KBB	LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-PPclover-PPCone-Lp
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pju	Purple Prairie Clover	Dalea purpurea	2	0.125		Legume	N	N	CP25-KBB	LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-PPclover-PPCone-Lp
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pju	Pale Purple Coneflower	Echinacea pallida	1	0.0625		Forb	N	N	CP25-KBB	LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-PPclover-PPCone-Lp
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pju	Leadplant	Amorpha canescens	0.5	0.03125		Legume	N	N	CP25-KBB	LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-PPclover-PPCone-Lp
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pju	Rough Blazing Star	Liatris aspera	0.5	0.03125		Forb	N	N	CP25-KBB	LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-PPclover-PPCone-Lp
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pju	Stiff Goldenrod	Oligoneuron rigidum	0.5	0.03125		Forb	N	N	CP25-KBB	LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-PPclover-PPCone-Lp
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pju	Yellow Coneflower	Ratibida pinnata	1	0.03125		Forb	N	N	CP25-KBB	LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-PPclover-PPCone-Lp
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pju	Bergamot	Monarda fistulosa	0	0.015625		Forb	N	N	CP25-KBB	LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-PPclover-PPCone-Lp
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pju	Prairie Cinquefoil	Potentilla arguta	0.25	0.015625		Forb	N	N	CP25-KBB	LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-PPclover-PPCone-Lp
25	CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop	25-CP25-KBB-LB-Sgrama-Indian-Switch-Wlup-Pju	Sky-Blue Aster	Symphyotrichum oolenta	0.25	0.015625		Forb	N	N	CP25-KBB	LB-Sgrama-Indian-Switch-Wlup-Pjune-Pdrop-PPclover-PPCone-Lp
25	CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzsta	25-CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesu	Little Bluestem	Schizachyrium scoparium	24	1.5		Grass	N	N	CP25-M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
25	CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzsta	25-CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesu	Indiangrass	Sorghastrum nutans	16	1		Grass	N	N	CP25-M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
25	CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzsta	25-CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesu	Big Bluestem	Andropogon gerardii	8	0.5		Grass	N	N	CP25-M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
25	CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzsta	25-CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesu	Canada Wildrye	Elymus canadensis	8	0.5		Grass	N	N	CP25-M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
25	CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzsta	25-CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesu	Switchgrass	Panicum virgatum	8	0.5		Grass	N	N	CP25-M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
25	CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzsta	25-CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesu	Ox-eye Sunflower	Heliopsis helianthoides	1	0.0625		Forb	N	N	CP25-M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
25	CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzsta	25-CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesu	Prairie Blazing Star	Liatris pycnostachya	1	0.0625		Forb	N	N	CP25-M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
25	CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzsta	25-CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesu	Purple Prairie Clover	Dalea purpurea	1	0.0625		Legume	N	N	CP25-M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
25	CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzsta	25-CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesu	Rosinweed	Silphium integrifolium	1	0.0625		Forb	N	N	CP25-M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
25	CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzsta	25-CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesu	Bergamot	Monarda fistulosa	0.5	0.03125		Forb	N	N	CP25-M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
25	CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzsta	25-CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesu	Black-eyed Susan	Rudbeckia hirta	0.5	0.03125		Forb	N	N	CP25-M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
25	CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzsta	25-CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesu	New England Aster	Symphyotrichum novae-a	0.5	0.03125		Forb	N	N	CP25-M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
25	CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzsta	25-CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesu	Sky-Blue Aster	Symphyotrichum oolenta	0.5	0.03125		Forb	N	N	CP25-M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
25	CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzsta	25-CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesu	Yellow Coneflower	Ratibida pinnata	0.5	0.03125		Forb	N	N	CP25-M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
25	CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzsta	25-CP25-M-LB-Indian-BB-Cwrye-Switch-Oxeyesu	Culver's Root	Veronicastrum virginicum	0	0.015625		Forb	N	N	CP25-M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsed	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgr	Canada Wildrye	Elymus canadensis	16	1		Grass	N	N	CP25-W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsed	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgr	Switchgrass	Panicum virgatum	16	1		Grass	N	N	CP25-W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsed	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgr	Indiangrass	Sorghastrum nutans	12	0.75		Grass	N	N	CP25-W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsed	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgr	Big Bluestem	Andropogon gerardii	8	0.5		Grass	N	N	CP25-W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsed	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgr	Prairie Cordgrass	Spartina pectinata	8	0.5		Grass	N	N	CP25-W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsed	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgr	Fowl Mannagrass	Glyceria striata	4	0.25		Grass	N	N	CP25-W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsed	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgr	Fox Sedge	Carex vulpinoidea	4	0.25		Sedge	N	N	CP25-W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsed	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgr	Cupplant	Silphium perfoliatum	2	0.125		Forb	N	N	CP25-W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsed	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgr	Showy Tick Trefoil	Desmodium canadense	2	0.125		Legume	N	N	CP25-W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsed	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgr	Blue Vervain	Verbena hastata	1	0.0625		Forb	N	N	CP25-W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsed	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgr	Golden Alexanders	Zizia aurea	1	0.0625		Forb	N	N	CP25-W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsed	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgr	Marsh Milkweed	Asclepias incarnata	1	0.0625		Forb	N	N	CP25-W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsed	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgr	Boneset	Eupatorium perfoliatum	0.5	0.03125		Forb	N	N	CP25-W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsed	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgr	Common Ironweed	Vernonia fasciculata	1	0.03125		Forb	N	N	CP25-W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsed	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgr	Joe-pye Weed	Eutrochium maculatum	1	0.03125		Forb	N	N	CP25-W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
25	CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsed	25-CP25-W-Cwrye-Switch-Indian-BB-Pcord-Fmgr	Culver's Root	Veronicastrum virginicum	0	0.015625		Forb	N	N	CP25-W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
25	CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-WWInd	25-CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cu	Switchgrass	Panicum virgatum	24	1.5		Grass	N	N	CP25-WM	Switch-Cwrye-Indian-BB-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
25	CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-WWInd	25-CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cu	Canada Wildrye	Elymus canadensis	16	1		Grass	N	N	CP25-WM	Switch-Cwrye-Indian-BB-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
25	CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-WWInd	25-CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cu	Indiangrass	Sorghastrum nutans	12	0.75		Grass	N	N	CP25-WM	Switch-Cwrye-Indian-BB-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
25	CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-WWInd	25-CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cu	Big Bluestem	Andropogon gerardii	8	0.5		Grass	N	N	CP25-WM	Switch-Cwrye-Indian-BB-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
25	CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-WWInd	25-CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cu	Prairie Cordgrass	Spartina pectinata	4	0.25		Grass	N	N	CP25-WM	Switch-Cwrye-Indian-BB-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
25	CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-WWInd	25-CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cu	Cupplant	Silphium perfoliatum	2	0.125		Forb	N	N	CP25-WM	Switch-Cwrye-Indian-BB-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
25	CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-WWInd	25-CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cu	White wild indigo	Baptisia alba	1.5	0.09375		Legume	N	N	CP25-WM	Switch-Cwrye-Indian-BB-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
25	CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-WWInd	25-CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cu	Black-eyed Susan	Rudbeckia hirta	0.5	0.03125		Forb	N	N	CP25-WM	Switch-Cwrye-Indian-BB-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
25	CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-WWInd	25-CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cu	Common Ironweed	Vernonia fasciculata	0.5	0.03125		Forb	N	N	CP25-WM	Switch-Cwrye-Indian-BB-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
25	CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-WWInd	25-CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cu	Golden Alexanders	Zizia aurea	0.5	0.03125		Forb	N	N	CP25-WM	Switch-Cwrye-Indian-BB-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
25	CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-WWInd	25-CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cu	New England Aster	Symphyotrichum novae-a	0.5	0.03125		Forb	N	N	CP25-WM	Switch-Cwrye-Indian-BB-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
25	CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-WWInd	25-CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cu	Prairie Blazing Star	Liatris pycnostachya	0.5	0.03125		Forb	N	N	CP25-WM	Switch-Cwrye-Indian-BB-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
25	CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-WWInd	25-CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cu	Yellow Coneflower	Ratibida pinnata	0.5	0.03125		Forb	N	N	CP25-WM	Switch-Cwrye-Indian-BB-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
25	CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-WWInd	25-CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cu	Bergamot	Monarda fistulosa	0.25	0.015625		Forb	N	N	CP25-WM	Switch-Cwrye-Indian-BB-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
25	CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cup-WWInd	25-CP25-WM-Switch-Cwrye-Indian-BB-Pcord-Cu	Great St. John's Wort	Hypericum ascyron	0	0.015625		Forb	N	N	CP25-WM	Switch-Cwrye-Indian-BB-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
33	CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHbushclov	33-CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RH	Little Bluestem	Schizachyrium scoparium	32	2		Grass	N	N	CP33-1	LB-Sgrama-Cwrye-Indian-PPclover-RHbushclover-PPcone-Sgrod-\
33	CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHbushclov	33-CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RH	Sideoats Grama	Bouteloua curtipendula	32	2		Grass	N	N	CP33-1	LB-Sgrama-Cwrye-Indian-PPclover-RHbushclover-PPcone-Sgrod-\
33	CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHbushclov	33-CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RH	Canada Wildrye	Elymus canadensis	8	0.5		Grass	N	N	CP33-1	LB-Sgrama-Cwrye-Indian-PPclover-RHbushclover-PPcone-Sgrod-\
33	CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHbushclov	33-CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RH	Indiangrass	Sorghastrum nutans	8	0.5		Grass	N	N	CP33-1	LB-Sgrama-Cwrye-Indian-PPclover-RHbushclover-PPcone-Sgrod-\
33	CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHbushclov	33-CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RH	Purple Prairie Clover	Dalea purpurea	2	0.125		Legume	N	N	CP33-1	LB-Sgrama-Cwrye-Indian-PPclover-RHbushclover-PPcone-Sgrod-\
33	CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHbushclov	33-CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RH	Round-Headed Bushclover	Lespedeza capitata	2	0.125		Legume	N	N	CP33-1	LB-Sgrama-Cwrye-Indian-PPclover-RHbushclover-PPcone-Sgrod-\
33	CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHbushclov	33-CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RH	Purple Coneflower	Echinacea purpurea	1	0.0625		Forb	N	N	CP33-1	LB-Sgrama-Cwrye-Indian-PPclover-RHbushclover-PPcone-Sgrod-\

33	CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHbushclov	33-CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RH	Stiff Goldenrod	Oligoneuron rigidum	1	0.0625		Forb	N	N	CP33-1	LB-Sgrama-Cwrye-Indian-PPclover-RHbushclover-PPcone-Sgrod-\
33	CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHbushclov	33-CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RH	Fewleaf Sunflower	Helianthus occidentalis	1	0.0625		Forb	N	N	CP33-1	LB-Sgrama-Cwrye-Indian-PPclover-RHbushclover-PPcone-Sgrod-\
33	CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHbushclov	33-CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RH	Yellow Coneflower	Ratibida pinnata	1	0.0625		Forb	N	N	CP33-1	LB-Sgrama-Cwrye-Indian-PPclover-RHbushclover-PPcone-Sgrod-\
33	CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RHbushclov	33-CP33-1-LB-Sgrama-Cwrye-Indian-PPclover-RH	Black-eyed Susan	Rudbeckia hirta	0.75	0.046875		Forb	N	N	CP33-1	LB-Sgrama-Cwrye-Indian-PPclover-RHbushclover-PPcone-Sgrod-\
33	CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rbl	33-CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPc	Little Bluestem	Schizachyrium scoparium	24	1.5		Grass	N	N	CP33-2	LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rblzstar-Besus-SkyAst
33	CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rbl	33-CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPc	Sideoats Grama	Bouteloua curtipendula	20	1.25		Grass	N	N	CP33-2	LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rblzstar-Besus-SkyAst
33	CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rbl	33-CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPc	Indiangrass	Sorghastrum nutans	16	1		Grass	N	N	CP33-2	LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rblzstar-Besus-SkyAst
33	CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rbl	33-CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPc	Canada Wildrye	Elymus canadensis	8	0.5		Grass	N	N	CP33-2	LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rblzstar-Besus-SkyAst
33	CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rbl	33-CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPc	Purple Coneflower	Echinacea purpurea	2	0.125		Forb	N	N	CP33-2	LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rblzstar-Besus-SkyAst
33	CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rbl	33-CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPc	Purple Prairie Clover	Dalea purpurea	2	0.125		Legume	N	N	CP33-2	LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rblzstar-Besus-SkyAst
33	CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rbl	33-CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPc	Rough Blazing Star	Liatris aspera	2	0.125		Forb	N	N	CP33-2	LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rblzstar-Besus-SkyAst
33	CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rbl	33-CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPc	Black-eyed Susan	Rudbeckia hirta	1	0.0625		Forb	N	N	CP33-2	LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rblzstar-Besus-SkyAst
33	CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rbl	33-CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPc	Sky-Blue Aster	Symphyotrichum oolenta	1	0.0625		Forb	N	N	CP33-2	LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rblzstar-Besus-SkyAst
33	CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rbl	33-CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPc	Stiff Goldenrod	Oligoneuron rigidum	1	0.0625		Forb	N	N	CP33-2	LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rblzstar-Besus-SkyAst
33	CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rbl	33-CP33-2-LB-Sgrama-Indian-Cwrye-PPcone-PPc	Fewleaf Sunflower	Helianthus occidentalis	1	0.0625		Forb	N	N	CP33-2	LB-Sgrama-Indian-Cwrye-PPcone-PPclover-Rblzstar-Besus-SkyAst
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsed	Canada Wildrye	Elymus canadensis	16	1		Grass	N	N	CP38B-WPHRA	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsed	Indiangrass	Sorghastrum nutans	12	0.75		Grass	N	N	CP38B-WPHRA	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsed	Switchgrass	Panicum virgatum	12	0.75		Grass	N	N	CP38B-WPHRA	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsed	Big Bluestem	Andropogon gerardii	8	0.5		Grass	N	N	CP38B-WPHRA	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsed	Fox Sedge	Carex vulpinoidea	8	0.5		Sedge	N	N	CP38B-WPHRA	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsed	Prairie Cordgrass	Spartina pectinata	8	0.5		Grass	N	N	CP38B-WPHRA	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsed	Fowl Mannagrass	Glyceria striata	4	0.25		Grass	N	N	CP38B-WPHRA	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsed	Cupplant	Silphium perfoliatum	2	0.125		Forb	N	N	CP38B-WPHRA	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsed	Showy Tick Trefoil	Desmodium canadense	2	0.125		Legume	N	N	CP38B-WPHRA	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsed	Blue Vervain	Verbena hastata	1	0.0625		Forb	N	N	CP38B-WPHRA	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsed	Golden Alexanders	Zizia aurea	1	0.0625		Forb	N	N	CP38B-WPHRA	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsed	Marsh Milkweed	Asclepias incarnata	1	0.0625		Forb	N	N	CP38B-WPHRA	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsed	Boneset	Eupatorium perfoliatum	0.5	0.03125		Forb	N	N	CP38B-WPHRA	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsed	Common Ironweed	Vernonia fasciculata	1	0.03125		Forb	N	N	CP38B-WPHRA	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsed	Joe-pye Weed	Eutrochium maculatum	1	0.03125		Forb	N	N	CP38B-WPHRA	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsedge-Pcord	38-CP38B-WPHRA-Cwrye-Indian-Switch-BB-Fsed	Culver's Root	Veronicastrum virginicum	0	0.015625		Forb	N	N	CP38B-WPHRA	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-B	38-CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-P	Little Bluestem	Schizachyrium scoparium	24	1.5		Grass	N	N	CP38E-CWGCA(CP2)D	LB-Sgrama-BB-Indian-PPclover-Besus-Rblzstar-Sgrod-Ycone
38	CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-B	38-CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-P	Sideoats Grama	Bouteloua curtipendula	24	1.5		Grass	N	N	CP38E-CWGCA(CP2)D	LB-Sgrama-BB-Indian-PPclover-Besus-Rblzstar-Sgrod-Ycone
38	CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-B	38-CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-P	Big Bluestem	Andropogon gerardii	8	0.5		Grass	N	N	CP38E-CWGCA(CP2)D	LB-Sgrama-BB-Indian-PPclover-Besus-Rblzstar-Sgrod-Ycone
38	CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-B	38-CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-P	Indiangrass	Sorghastrum nutans	8	0.5		Grass	N	N	CP38E-CWGCA(CP2)D	LB-Sgrama-BB-Indian-PPclover-Besus-Rblzstar-Sgrod-Ycone
38	CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-B	38-CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-P	Purple Prairie Clover	Dalea purpurea	2	0.125		Legume	N	N	CP38E-CWGCA(CP2)D	LB-Sgrama-BB-Indian-PPclover-Besus-Rblzstar-Sgrod-Ycone
38	CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-B	38-CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-P	Black-eyed Susan	Rudbeckia hirta	1	0.0625		Forb	N	N	CP38E-CWGCA(CP2)D	LB-Sgrama-BB-Indian-PPclover-Besus-Rblzstar-Sgrod-Ycone
38	CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-B	38-CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-P	Rough Blazing Star	Liatris aspera	1	0.0625		Forb	N	N	CP38E-CWGCA(CP2)D	LB-Sgrama-BB-Indian-PPclover-Besus-Rblzstar-Sgrod-Ycone
38	CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-B	38-CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-P	Stiff Goldenrod	Oligoneuron rigidum	1	0.0625		Forb	N	N	CP38E-CWGCA(CP2)D	LB-Sgrama-BB-Indian-PPclover-Besus-Rblzstar-Sgrod-Ycone
38	CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-B	38-CP38E-CWGCA(CP2)D-LB-Sgrama-BB-Indian-P	Yellow Coneflower	Ratibida pinnata	1	0.0625		Forb	N	N	CP38E-CWGCA(CP2)D	LB-Sgrama-BB-Indian-PPclover-Besus-Rblzstar-Sgrod-Ycone
38	CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-I	38-CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian	Little Bluestem	Schizachyrium scoparium	24	1.5		Grass	N	N	CP38E-CWGCA(CP2)DM	LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Besus-Rblzstar-Shwg
38	CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-I	38-CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian	Sideoats Grama	Bouteloua curtipendula	16	1		Grass	N	N	CP38E-CWGCA(CP2)DM	LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Besus-Rblzstar-Shwg
38	CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-I	38-CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian	Big Bluestem	Andropogon gerardii	8	0.5		Grass	N	N	CP38E-CWGCA(CP2)DM	LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Besus-Rblzstar-Shwg
38	CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-I	38-CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian	Indiangrass	Sorghastrum nutans	8	0.5		Grass	N	N	CP38E-CWGCA(CP2)DM	LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Besus-Rblzstar-Shwg
38	CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-I	38-CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian	Switchgrass	Panicum virgatum	8	0.5		Grass	N	N	CP38E-CWGCA(CP2)DM	LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Besus-Rblzstar-Shwg
38	CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-I	38-CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian	Purple Prairie Clover	Dalea purpurea	2	0.125		Legume	N	N	CP38E-CWGCA(CP2)DM	LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Besus-Rblzstar-Shwg
38	CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-I	38-CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian	Bergamot	Monarda fistulosa	1	0.0625		Forb	N	N	CP38E-CWGCA(CP2)DM	LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Besus-Rblzstar-Shwg
38	CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-I	38-CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian	Black-eyed Susan	Rudbeckia hirta	1	0.0625		Forb	N	N	CP38E-CWGCA(CP2)DM	LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Besus-Rblzstar-Shwg
38	CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-I	38-CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian	Rough Blazing Star	Liatris aspera	1	0.0625		Forb	N	N	CP38E-CWGCA(CP2)DM	LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Besus-Rblzstar-Shwg
38	CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-I	38-CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian	Showy Goldenrod	Solidago speciosa	1	0.0625		Forb	N	N	CP38E-CWGCA(CP2)DM	LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Besus-Rblzstar-Shwg
38	CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-I	38-CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian	Stiff Goldenrod	Oligoneuron rigidum	1	0.0625		Forb	N	N	CP38E-CWGCA(CP2)DM	LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Besus-Rblzstar-Shwg
38	CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-I	38-CP38E-CWGCA(CP2)DM-LB-Sgrama-BB-Indian	Yellow Coneflower	Ratibida pinnata	1	0.0625		Forb	N	N	CP38E-CWGCA(CP2)DM	LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Besus-Rblzstar-Shwg
38	CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Pbl	38-CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Little Bluestem	Schizachyrium scoparium	20	1.25		Grass	N	N	CP38E-CWGCA(CP2)M	LB-Cwrye-Indian-BB-Switch-Pblzstar-Rblzstar-Berg-Besus-Shwgro
38	CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Pbl	38-CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Canada Wildrye	Elymus canadensis	16	1		Grass	N	N	CP38E-CWGCA(CP2)M	LB-Cwrye-Indian-BB-Switch-Pblzstar-Rblzstar-Berg-Besus-Shwgro
38	CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Pbl	38-CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Indiangrass	Sorghastrum nutans	16	1		Grass	N	N	CP38E-CWGCA(CP2)M	LB-Cwrye-Indian-BB-Switch-Pblzstar-Rblzstar-Berg-Besus-Shwgro
38	CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Pbl	38-CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Big Bluestem	Andropogon gerardii	8	0.5		Grass	N	N	CP38E-CWGCA(CP2)M	LB-Cwrye-Indian-BB-Switch-Pblzstar-Rblzstar-Berg-Besus-Shwgro
38	CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Pbl	38-CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Switchgrass	Panicum virgatum	8	0.5		Grass	N	N	CP38E-CWGCA(CP2)M	LB-Cwrye-Indian-BB-Switch-Pblzstar-Rblzstar-Berg-Besus-Shwgro
38	CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Pbl	38-CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Prairie Blazing Star	Liatris pycnostachya	2	0.125		Forb	N	N	CP38E-CWGCA(CP2)M	LB-Cwrye-Indian-BB-Switch-Pblzstar-Rblzstar-Berg-Besus-Shwgro
38	CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Pbl	38-CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Rough Blazing Star	Liatris aspera	2	0.125		Forb	N	N	CP38E-CWGCA(CP2)M	LB-Cwrye-Indian-BB-Switch-Pblzstar-Rblzstar-Berg-Besus-Shwgro
38	CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Pbl	38-CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Bergamot	Monarda fistulosa	1	0.0625		Forb	N	N	CP38E-CWGCA(CP2)M	LB-Cwrye-Indian-BB-Switch-Pblzstar-Rblzstar-Berg-Besus-Shwgro
38	CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Pbl	38-CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Black-eyed Susan	Rudbeckia hirta	1	0.0625		Forb	N	N	CP38E-CWGCA(CP2)M	LB-Cwrye-Indian-BB-Switch-Pblzstar-Rblzstar-Berg-Besus-Shwgro
38	CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Pbl	38-CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Showy Goldenrod	Solidago speciosa	1	0.0625		Forb	N	N	CP38E-CWGCA(CP2)M	LB-Cwrye-Indian-BB-Switch-Pblzstar-Rblzstar-Berg-Besus-Shwgro
38	CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Pbl	38-CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Stiff Goldenrod	Oligoneuron rigidum	1	0.0625		Forb	N	N	CP38E-CWGCA(CP2)M	LB-Cwrye-Indian-BB-Switch-Pblzstar-Rblzstar-Berg-Besus-Shwgro
38	CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Pbl	38-CP38E-CWGCA(CP2)M-LB-Cwrye-Indian-BB-S	Yellow Coneflower	Ratibida pinnata	1	0.0625		Forb	N	N	CP38E-CWGCA(CP2)M	LB-Cwrye-Indian-BB-Switch-Pblzstar-Rblzstar-Berg-Besus-Shwgro
38	CP38E-CWGCA(CP2)W-BB-Cwrye-Switch-Pcord-Cup-Bv	38-CP38E-CWGCA(CP2)W-BB-Cwrye-Switch-Pcor	Big Bluestem	Andropogon gerardii	16	1		Grass	N	N	CP38E-CWGCA(CP2)W	BB-Cwrye-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-CWGCA(CP2)W-BB-Cwrye-Switch-Pcord-Cup-Bv	38-CP38E-CWGCA(CP2)W-BB-Cwrye-Switch-Pcor	Canada Wildrye	Elymus canadensis	16	1		Grass	N	N	CP38E-CWGCA(CP2)W	BB-Cwrye-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-CWGCA(CP2)W-BB-Cwrye-Switch-Pcord-Cup-Bv	38-CP38E-CWGCA(CP2)W-BB-Cwrye-Switch-Pcor	Switchgrass	Panicum virgatum	16	1		Grass	N	N	CP38E-CWGCA(CP2)W	BB-Cwrye-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-CWGCA(CP2)W-BB-Cwrye-Switch-Pcord-Cup-Bv	38-CP38E-CWGCA(CP2)W-BB-Cwrye-Switch-Pcor	Prairie Cordgrass	Spartina pectinata	8	0.5		Grass	N	N	CP38E-CWGCA(CP2)W	BB-Cwrye-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-CWGCA(CP2)W-BB-Cwrye-Switch-Pcord-Cup-Bv	38-CP38E-CWGCA(CP2)W-BB-Cwrye-Switch-Pcor	Cupplant	Silphium perfoliatum	2	0.125		Forb	N	N	CP38E-CWGCA(CP2)W	BB-Cwrye-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-CWGCA(CP2)W-BB-Cwrye-Switch-Pcord-Cup-Bv	38-CP38E-CWGCA(CP2)W-BB-Cwrye-Switch-Pcor	Blue Vervain	Verbena hastata	1	0.0625		Forb	N	N	CP38E-CWGCA(CP2)W	BB-Cwrye-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-CWGCA(CP2)W-BB-Cwrye-Switch-Pcord-Cup-Bv	38-CP38E-CWGCA(CP2)W-BB-Cwrye-Switch-Pcor	Common Ironweed	Vernonia fasciculata	1	0.0625		Forb	N	N	CP38E-CWGCA(CP2)W	BB-Cwrye-Switch-Pcord-Cup-Bvervain-Ciron

38	CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Pblzs	38-CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pc	Switchgrass	Panicum virgatum	32	2		Grass	N	N	CP38E-CWGCA(CP2)WM	Switch-BB-Cwrye-Pcord-Pblzstar-Berg-Besus-NEaster-Ycone
38	CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Pblzs	38-CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pc	Big Bluestem	Andropogon gerardii	16	1		Grass	N	N	CP38E-CWGCA(CP2)WM	Switch-BB-Cwrye-Pcord-Pblzstar-Berg-Besus-NEaster-Ycone
38	CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Pblzs	38-CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pc	Canada Wildrye	Elymus canadensis	16	1		Grass	N	N	CP38E-CWGCA(CP2)WM	Switch-BB-Cwrye-Pcord-Pblzstar-Berg-Besus-NEaster-Ycone
38	CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Pblzs	38-CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pc	Prairie Cordgrass	Spartina pectinata	4	0.25		Grass	N	N	CP38E-CWGCA(CP2)WM	Switch-BB-Cwrye-Pcord-Pblzstar-Berg-Besus-NEaster-Ycone
38	CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Pblzs	38-CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pc	Prairie Blazing Star	Liatris pycnostachya	2	0.125		Forb	N	N	CP38E-CWGCA(CP2)WM	Switch-BB-Cwrye-Pcord-Pblzstar-Berg-Besus-NEaster-Ycone
38	CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Pblzs	38-CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pc	Bergamot	Monarda fistulosa	1	0.0625		Forb	N	N	CP38E-CWGCA(CP2)WM	Switch-BB-Cwrye-Pcord-Pblzstar-Berg-Besus-NEaster-Ycone
38	CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Pblzs	38-CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pc	Black-eyed Susan	Rudbeckia hirta	1	0.0625		Forb	N	N	CP38E-CWGCA(CP2)WM	Switch-BB-Cwrye-Pcord-Pblzstar-Berg-Besus-NEaster-Ycone
38	CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Pblzs	38-CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pc	New England Aster	Symphyotrichum novae-a	1	0.0625		Forb	N	N	CP38E-CWGCA(CP2)WM	Switch-BB-Cwrye-Pcord-Pblzstar-Berg-Besus-NEaster-Ycone
38	CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Pblzs	38-CP38E-CWGCA(CP2)WM-Switch-BB-Cwrye-Pc	Yellow Coneflower	Ratibida pinnata	1	0.0625		Forb	N	N	CP38E-CWGCA(CP2)WM	Switch-BB-Cwrye-Pcord-Pblzstar-Berg-Besus-NEaster-Ycone
38	CP38E-GHRA(CP2)D-LB-Sgrama-BB-Indian-PPclover-Sg	38-CP38E-GHRA(CP2)D-LB-Sgrama-BB-Indian-PP	Little Bluestem	Schizachyrium scoparium	24	1.5		Grass	N	N	CP38E-GHRA(CP2)D	LB-Sgrama-BB-Indian-PPclover-Sgrod-Ycone
38	CP38E-GHRA(CP2)D-LB-Sgrama-BB-Indian-PPclover-Sg	38-CP38E-GHRA(CP2)D-LB-Sgrama-BB-Indian-PP	Sideoats Grama	Bouteloua curtipendula	24	1.5		Grass	N	N	CP38E-GHRA(CP2)D	LB-Sgrama-BB-Indian-PPclover-Sgrod-Ycone
38	CP38E-GHRA(CP2)D-LB-Sgrama-BB-Indian-PPclover-Sg	38-CP38E-GHRA(CP2)D-LB-Sgrama-BB-Indian-PP	Big Bluestem	Andropogon gerardii	8	0.5		Grass	N	N	CP38E-GHRA(CP2)D	LB-Sgrama-BB-Indian-PPclover-Sgrod-Ycone
38	CP38E-GHRA(CP2)D-LB-Sgrama-BB-Indian-PPclover-Sg	38-CP38E-GHRA(CP2)D-LB-Sgrama-BB-Indian-PP	Indiangrass	Sorghastrum nutans	8	0.5		Grass	N	N	CP38E-GHRA(CP2)D	LB-Sgrama-BB-Indian-PPclover-Sgrod-Ycone
38	CP38E-GHRA(CP2)D-LB-Sgrama-BB-Indian-PPclover-Sg	38-CP38E-GHRA(CP2)D-LB-Sgrama-BB-Indian-PP	Purple Prairie Clover	Dalea purpurea	2	0.125		Legume	N	N	CP38E-GHRA(CP2)D	LB-Sgrama-BB-Indian-PPclover-Sgrod-Ycone
38	CP38E-GHRA(CP2)D-LB-Sgrama-BB-Indian-PPclover-Sg	38-CP38E-GHRA(CP2)D-LB-Sgrama-BB-Indian-PP	Stiff Goldenrod	Oligoneuron rigidum	1	0.0625		Forb	N	N	CP38E-GHRA(CP2)D	LB-Sgrama-BB-Indian-PPclover-Sgrod-Ycone
38	CP38E-GHRA(CP2)D-LB-Sgrama-BB-Indian-PPclover-Sg	38-CP38E-GHRA(CP2)D-LB-Sgrama-BB-Indian-PP	Yellow Coneflower	Ratibida pinnata	1	0.0625		Forb	N	N	CP38E-GHRA(CP2)D	LB-Sgrama-BB-Indian-PPclover-Sgrod-Ycone
38	CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-Switch-PP	38-CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-S	Little Bluestem	Schizachyrium scoparium	24	1.5		Grass	N	N	CP38E-GHRA(CP2)DM	LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-Switch-PP	38-CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-S	Sideoats Grama	Bouteloua curtipendula	16	1		Grass	N	N	CP38E-GHRA(CP2)DM	LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-Switch-PP	38-CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-S	Big Bluestem	Andropogon gerardii	8	0.5		Grass	N	N	CP38E-GHRA(CP2)DM	LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-Switch-PP	38-CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-S	Indiangrass	Sorghastrum nutans	8	0.5		Grass	N	N	CP38E-GHRA(CP2)DM	LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-Switch-PP	38-CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-S	Switchgrass	Panicum virgatum	8	0.5		Grass	N	N	CP38E-GHRA(CP2)DM	LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-Switch-PP	38-CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-S	Purple Prairie Clover	Dalea purpurea	2	0.125		Legume	N	N	CP38E-GHRA(CP2)DM	LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-Switch-PP	38-CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-S	Bergamot	Monarda fistulosa	1	0.0625		Forb	N	N	CP38E-GHRA(CP2)DM	LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-Switch-PP	38-CP38E-GHRA(CP2)DM-LB-Sgrama-BB-Indian-S	Yellow Coneflower	Ratibida pinnata	1	0.0625		Forb	N	N	CP38E-GHRA(CP2)DM	LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Switch-Berg-	38-CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Swi	Little Bluestem	Schizachyrium scoparium	20	1.25		Grass	N	N	CP38E-GHRA(CP2)M	LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Switch-Berg-	38-CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Swi	Canada Wildrye	Elymus canadensis	16	1		Grass	N	N	CP38E-GHRA(CP2)M	LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Switch-Berg-	38-CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Swi	Indiangrass	Sorghastrum nutans	16	1		Grass	N	N	CP38E-GHRA(CP2)M	LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Switch-Berg-	38-CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Swi	Big Bluestem	Andropogon gerardii	8	0.5		Grass	N	N	CP38E-GHRA(CP2)M	LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Switch-Berg-	38-CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Swi	Switchgrass	Panicum virgatum	8	0.5		Grass	N	N	CP38E-GHRA(CP2)M	LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Switch-Berg-	38-CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Swi	Bergamot	Monarda fistulosa	1	0.0625		Forb	N	N	CP38E-GHRA(CP2)M	LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Switch-Berg-	38-CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Swi	Black-eyed Susan	Rudbeckia hirta	1	0.0625		Forb	N	N	CP38E-GHRA(CP2)M	LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Switch-Berg-	38-CP38E-GHRA(CP2)M-LB-Cwrye-Indian-BB-Swi	Yellow Coneflower	Ratibida pinnata	1	0.0625		Forb	N	N	CP38E-GHRA(CP2)M	LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-C	38-CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch	Big Bluestem	Andropogon gerardii	16	1		Grass	N	N	CP38E-GHRA(CP2)W	BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-C	38-CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch	Canada Wildrye	Elymus canadensis	16	1		Grass	N	N	CP38E-GHRA(CP2)W	BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-C	38-CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch	Indiangrass	Sorghastrum nutans	16	1		Grass	N	N	CP38E-GHRA(CP2)W	BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-C	38-CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch	Switchgrass	Panicum virgatum	16	1		Grass	N	N	CP38E-GHRA(CP2)W	BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-C	38-CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch	Prairie Cordgrass	Spartina pectinata	8	0.5		Grass	N	N	CP38E-GHRA(CP2)W	BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-C	38-CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch	Cupplant	Silphium perfoliatum	2	0.125		Forb	N	N	CP38E-GHRA(CP2)W	BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-C	38-CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch	Blue Vervain	Verbena hastata	1	0.0625		Forb	N	N	CP38E-GHRA(CP2)W	BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-C	38-CP38E-GHRA(CP2)W-BB-Cwrye-Indian-Switch	Common Ironweed	Vernonia fasciculata	1	0.0625		Forb	N	N	CP38E-GHRA(CP2)W	BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-GHRA(CP2)WM-Switch-BB-Cwrye-Pcord-Berg-N	38-CP38E-GHRA(CP2)WM-Switch-BB-Cwrye-Pco	Switchgrass	Panicum virgatum	32	2		Grass	N	N	CP38E-GHRA(CP2)WM	Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
38	CP38E-GHRA(CP2)WM-Switch-BB-Cwrye-Pcord-Berg-N	38-CP38E-GHRA(CP2)WM-Switch-BB-Cwrye-Pco	Big Bluestem	Andropogon gerardii	16	1		Grass	N	N	CP38E-GHRA(CP2)WM	Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
38	CP38E-GHRA(CP2)WM-Switch-BB-Cwrye-Pcord-Berg-N	38-CP38E-GHRA(CP2)WM-Switch-BB-Cwrye-Pco	Canada Wildrye	Elymus canadensis	16	1		Grass	N	N	CP38E-GHRA(CP2)WM	Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
38	CP38E-GHRA(CP2)WM-Switch-BB-Cwrye-Pcord-Berg-N	38-CP38E-GHRA(CP2)WM-Switch-BB-Cwrye-Pco	Prairie Cordgrass	Spartina pectinata	4	0.25		Grass	N	N	CP38E-GHRA(CP2)WM	Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
38	CP38E-GHRA(CP2)WM-Switch-BB-Cwrye-Pcord-Berg-N	38-CP38E-GHRA(CP2)WM-Switch-BB-Cwrye-Pco	Bergamot	Monarda fistulosa	1	0.0625		Forb	N	N	CP38E-GHRA(CP2)WM	Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
38	CP38E-GHRA(CP2)WM-Switch-BB-Cwrye-Pcord-Berg-N	38-CP38E-GHRA(CP2)WM-Switch-BB-Cwrye-Pco	New England Aster	Symphyotrichum novae-a	1	0.0625		Forb	N	N	CP38E-GHRA(CP2)WM	Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
38	CP38E-GHRA(CP2)WM-Switch-BB-Cwrye-Pcord-Berg-N	38-CP38E-GHRA(CP2)WM-Switch-BB-Cwrye-Pco	Yellow Coneflower	Ratibida pinnata	1	0.0625		Forb	N	N	CP38E-GHRA(CP2)WM	Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Little Bluestem	Schizachyrium scoparium	24	1.5		Grass	N	N	CP38E-GHRA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Sideoats Grama	Bouteloua curtipendula	24	1.5		Grass	N	N	CP38E-GHRA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Indiangrass	Sorghastrum nutans	8	0.5		Grass	N	N	CP38E-GHRA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Big Bluestem	Andropogon gerardii	4	0.25		Grass	N	N	CP38E-GHRA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Purple Prairie Clover	Dalea purpurea	2	0.125		Legume	N	N	CP38E-GHRA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Sand Dropseed	Sporobolus cryptandrus	2	0.125		Grass	N	N	CP38E-GHRA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Prairie Junegrass	Koeleria macrantha	1	0.0625		Grass	N	N	CP38E-GHRA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Spiderwort	Tradescantia ohiensis	1	0.0625		Forb	N	N	CP38E-GHRA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Hoary Vervain	Verbena stricta	0.5	0.03125		Forb	N	N	CP38E-GHRA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Leadplant	Amorpha canescens	0.5	0.03125		Legume	N	N	CP38E-GHRA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Prairie Tickseed	Coreopsis palmata	0.5	0.03125		Forb	N	N	CP38E-GHRA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Silky Aster	Symphyotrichum pratens	0.5	0.03125		Forb	N	N	CP38E-GHRA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Stiff Goldenrod	Oligoneuron rigidum	0.5	0.03125		Forb	N	N	CP38E-GHRA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Yellow Coneflower	Ratibida pinnata	0.5	0.03125		Forb	N	N	CP38E-GHRA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Prairie Cinquefoil	Potentilla arguta	0.25	0.015625		Forb	N	N	CP38E-GHRA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-PPclover-S	38-CP38E-GHRA(CP25)D-LB-Sgrama-Indian-BB-P	Spotted Mint	Monarda punctata	0	0.015625		Forb	N	N	CP38E-GHRA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjun	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Little Bluestem	Schizachyrium scoparium	24	1.5		Grass	N	N	CP38E-GHRA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjun	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Sideoats Grama	Bouteloua curtipendula	24	1.5		Grass	N	N	CP38E-GHRA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjun	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Indiangrass	Sorghastrum nutans	8	0.5		Grass	N	N	CP38E-GHRA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjun	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Switchgrass	Panicum virgatum	4	0.25		Grass	N	N	CP38E-GHRA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjun	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Prairie Junegrass	Koeleria macrantha	2	0.125		Grass	N	N	CP38E-GHRA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjun	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Prairie Dropseed	Sporobolus heterolepis	2	0.125		Grass	N	N	CP38E-GHRA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjun	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Purple Prairie Clover	Dalea purpurea	2	0.125		Legume	N	N	CP38E-GHRA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjun	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Round-Headed Bushclover	Lespedeza capitata	2	0.125		Legume	N	N	CP38E-GHRA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B

38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjun	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Bergamot	Monarda fistulosa	1	0.0625		Forb	N	N	CP38E-GHRA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjun	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Spiderwort	Tradescantia ohiensis	1	0.0625		Forb	N	N	CP38E-GHRA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjun	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Yellow Coneflower	Ratibida pinnata	1	0.0625		Forb	N	N	CP38E-GHRA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjun	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Leadplant	Amorpha canescens	0.5	0.03125		Legume	N	N	CP38E-GHRA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjun	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Rough Blazing Star	Liatris aspera	1	0.03125		Forb	N	N	CP38E-GHRA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjun	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Sky-Blue Aster	Symphyotrichum oolenta	1	0.03125		Forb	N	N	CP38E-GHRA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjun	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Stiff Goldenrod	Oligoneuron rigidum	0.5	0.03125		Forb	N	N	CP38E-GHRA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
38	CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Switch-Pjun	38-CP38E-GHRA(CP25)DM-LB-Sgrama-Indian-Sw	Prairie Cinquefoil	Potentilla arguta	0.25	0.015625		Forb	N	N	CP38E-GHRA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
38	CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Switch-Oxe	38-CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Sw	Little Bluestem	Schizachyrium scoparium	24	1.5		Grass	N	N	CP38E-GHRA(CP25)M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
38	CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Switch-Oxe	38-CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Sw	Indiangrass	Sorghastrum nutans	16	1		Grass	N	N	CP38E-GHRA(CP25)M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
38	CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Switch-Oxe	38-CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Sw	Big Bluestem	Andropogon gerardii	8	0.5		Grass	N	N	CP38E-GHRA(CP25)M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
38	CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Switch-Oxe	38-CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Sw	Canada Wildrye	Elymus canadensis	8	0.5		Grass	N	N	CP38E-GHRA(CP25)M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
38	CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Switch-Oxe	38-CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Sw	Switchgrass	Panicum virgatum	8	0.5		Grass	N	N	CP38E-GHRA(CP25)M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
38	CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Switch-Oxe	38-CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Sw	Ox-eye Sunflower	Heliopsis helianthoides	1	0.0625		Forb	N	N	CP38E-GHRA(CP25)M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
38	CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Switch-Oxe	38-CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Sw	Prairie Blazing Star	Liatris pycnostachya	1	0.0625		Forb	N	N	CP38E-GHRA(CP25)M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
38	CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Switch-Oxe	38-CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Sw	Purple Prairie Clover	Dalea purpurea	1	0.0625		Legume	N	N	CP38E-GHRA(CP25)M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
38	CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Switch-Oxe	38-CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Sw	Rosinweed	Silphium integrifolium	1	0.0625		Forb	N	N	CP38E-GHRA(CP25)M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
38	CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Switch-Oxe	38-CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Sw	Bergamot	Monarda fistulosa	0.5	0.03125		Forb	N	N	CP38E-GHRA(CP25)M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
38	CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Switch-Oxe	38-CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Sw	Black-eyed Susan	Rudbeckia hirta	0.5	0.03125		Forb	N	N	CP38E-GHRA(CP25)M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
38	CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Switch-Oxe	38-CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Sw	New England Aster	Symphyotrichum novae-a	0.5	0.03125		Forb	N	N	CP38E-GHRA(CP25)M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
38	CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Switch-Oxe	38-CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Sw	Smooth Blue Aster	Symphyotrichum laeve	0.5	0.03125		Forb	N	N	CP38E-GHRA(CP25)M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
38	CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Switch-Oxe	38-CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Sw	Yellow Coneflower	Ratibida pinnata	0.5	0.03125		Forb	N	N	CP38E-GHRA(CP25)M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
38	CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Switch-Oxe	38-CP38E-GHRA(CP25)M-LB-Indian-BB-Cwrye-Sw	Culver's Root	Veronicastrum virginicum	0	0.015625		Forb	N	N	CP38E-GHRA(CP25)M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-B	Canada Wildrye	Elymus canadensis	16	1		Grass	N	N	CP38E-GHRA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-B	Switchgrass	Panicum virgatum	16	1		Grass	N	N	CP38E-GHRA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-B	Indiangrass	Sorghastrum nutans	12	0.75		Grass	N	N	CP38E-GHRA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-B	Big Bluestem	Andropogon gerardii	8	0.5		Grass	N	N	CP38E-GHRA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-B	Prairie Cordgrass	Spartina pectinata	8	0.5		Grass	N	N	CP38E-GHRA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-B	Fowl Mannagrass	Glyceria striata	4	0.25		Grass	N	N	CP38E-GHRA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-B	Fox Sedge	Carex vulpinoidea	4	0.25		Sedge	N	N	CP38E-GHRA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-B	Cupplant	Silphium perfoliatum	2	0.125		Forb	N	N	CP38E-GHRA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-B	Showy Tick Trefoil	Desmodium canadense	2	0.125		Legume	N	N	CP38E-GHRA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-B	Blue Vervain	Verbena hastata	1	0.0625		Forb	N	N	CP38E-GHRA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-B	Golden Alexanders	Zizia aurea	1	0.0625		Forb	N	N	CP38E-GHRA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-B	Marsh Milkweed	Asclepias incarnata	1	0.0625		Forb	N	N	CP38E-GHRA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-B	Boneset	Eupatorium perfoliatum	0.5	0.03125		Forb	N	N	CP38E-GHRA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-B	Common Ironweed	Vernonia fasciculata	1	0.03125		Forb	N	N	CP38E-GHRA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-B	Joe-pye Weed	Eutrochium maculatum	1	0.03125		Forb	N	N	CP38E-GHRA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-BB-Pcord-	38-CP38E-GHRA(CP25)W-Cwrye-Switch-Indian-B	Culver's Root	Veronicastrum virginicum	0	0.015625		Forb	N	N	CP38E-GHRA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Indian-Pcor	38-CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Ind	Switchgrass	Panicum virgatum	24	1.5		Grass	N	N	CP38E-GHRA(CP25)WM	Switch-BB-Cwrye-Indian-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
38	CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Indian-Pcor	38-CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Ind	Big Bluestem	Andropogon gerardii	20	1.25		Grass	N	N	CP38E-GHRA(CP25)WM	Switch-BB-Cwrye-Indian-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
38	CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Indian-Pcor	38-CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Ind	Canada Wildrye	Elymus canadensis	16	1		Grass	N	N	CP38E-GHRA(CP25)WM	Switch-BB-Cwrye-Indian-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
38	CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Indian-Pcor	38-CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Ind	Indiangrass	Sorghastrum nutans	12	0.75		Grass	N	N	CP38E-GHRA(CP25)WM	Switch-BB-Cwrye-Indian-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
38	CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Indian-Pcor	38-CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Ind	Prairie Cordgrass	Spartina pectinata	4	0.25		Grass	N	N	CP38E-GHRA(CP25)WM	Switch-BB-Cwrye-Indian-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
38	CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Indian-Pcor	38-CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Ind	Cupplant	Silphium perfoliatum	2	0.125		Forb	N	N	CP38E-GHRA(CP25)WM	Switch-BB-Cwrye-Indian-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
38	CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Indian-Pcor	38-CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Ind	White wild indigo	Baptisia alba	1.5	0.09375		Legume	N	N	CP38E-GHRA(CP25)WM	Switch-BB-Cwrye-Indian-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
38	CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Indian-Pcor	38-CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Ind	Black-eyed Susan	Rudbeckia hirta	0.5	0.03125		Forb	N	N	CP38E-GHRA(CP25)WM	Switch-BB-Cwrye-Indian-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
38	CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Indian-Pcor	38-CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Ind	Common Ironweed	Vernonia fasciculata	0.5	0.03125		Forb	N	N	CP38E-GHRA(CP25)WM	Switch-BB-Cwrye-Indian-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
38	CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Indian-Pcor	38-CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Ind	Golden Alexanders	Zizia aurea	0.5	0.03125		Forb	N	N	CP38E-GHRA(CP25)WM	Switch-BB-Cwrye-Indian-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
38	CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Indian-Pcor	38-CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Ind	New England Aster	Symphyotrichum novae-a	0.5	0.03125		Forb	N	N	CP38E-GHRA(CP25)WM	Switch-BB-Cwrye-Indian-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
38	CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Indian-Pcor	38-CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Ind	Prairie Blazing Star	Liatris pycnostachya	0.5	0.03125		Forb	N	N	CP38E-GHRA(CP25)WM	Switch-BB-Cwrye-Indian-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
38	CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Indian-Pcor	38-CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Ind	Yellow Coneflower	Ratibida pinnata	0.5	0.03125		Forb	N	N	CP38E-GHRA(CP25)WM	Switch-BB-Cwrye-Indian-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
38	CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Indian-Pcor	38-CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Ind	Bergamot	Monarda fistulosa	0.25	0.015625		Forb	N	N	CP38E-GHRA(CP25)WM	Switch-BB-Cwrye-Indian-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
38	CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Indian-Pcor	38-CP38E-GHRA(CP25)WM-Switch-BB-Cwrye-Ind	Great St. John's Wort	Hypericum ascyron	0	0.015625		Forb	N	N	CP38E-GHRA(CP25)WM	Switch-BB-Cwrye-Indian-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Little Bluestem	Schizachyrium scoparium	24	1.5		Grass	N	N	CP38E-KBB	LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-PPclover-Bmilkweed-F
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Canada Wildrye	Elymus canadensis	16	1		Grass	N	N	CP38E-KBB	LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-PPclover-Bmilkweed-F
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Indiangrass	Sorghastrum nutans	16	1		Grass	N	N	CP38E-KBB	LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-PPclover-Bmilkweed-F
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Big Bluestem	Andropogon gerardii	8	0.5		Grass	N	N	CP38E-KBB	LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-PPclover-Bmilkweed-F
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Sideoats Grama	Bouteloua curtipendula	8	0.5		Grass	N	N	CP38E-KBB	LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-PPclover-Bmilkweed-F
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Switchgrass	Panicum virgatum	8	0.5		Grass	N	N	CP38E-KBB	LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-PPclover-Bmilkweed-F
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Wild Lupine	Lupinus perennis	3	0.1875		Legume	N	N	CP38E-KBB	LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-PPclover-Bmilkweed-F
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Purple Prairie Clover	Dalea purpurea	2	0.125		Legume	N	N	CP38E-KBB	LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-PPclover-Bmilkweed-F
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Butterfly Milkweed	Asclepias tuberosa	1	0.0625		Forb	N	N	CP38E-KBB	LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-PPclover-Bmilkweed-F
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Flowering Spurge	Euphorbia corollata	1	0.0625		Forb	N	N	CP38E-KBB	LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-PPclover-Bmilkweed-F
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Golden Alexanders	Zizia aurea	1	0.0625		Forb	N	N	CP38E-KBB	LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-PPclover-Bmilkweed-F
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Rough Blazing Star	Liatris aspera	1	0.0625		Forb	N	N	CP38E-KBB	LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-PPclover-Bmilkweed-F
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Round-Headed Bushclover	Lespedeza capitata	1	0.0625		Legume	N	N	CP38E-KBB	LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-PPclover-Bmilkweed-F
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Fewleaf Sunflower	Helianthus occidentalis	1	0.0625		Forb	N	N	CP38E-KBB	LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-PPclover-Bmilkweed-F
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Bergamot	Monarda fistulosa	0.5	0.03125		Forb	N	N	CP38E-KBB	LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-PPclover-Bmilkweed-F
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Prairie Tickseed	Coreopsis palmata	1	0.03125		Forb	N	N	CP38E-KBB	LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-PPclover-Bmilkweed-F
38	CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-	38-CP38E-KBB-LB-Cwrye-Indian-BB-Sgrama-Swit	Black-eyed Susan	Rudbeckia hirta	0	0.025		Forb	N	N	CP38E-KBB	LB-Cwrye-Indian-BB-Sgrama-Switch-Wlup-PPclover-Bmilkweed-F

38	CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlup-PPclove	38-CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlup	Little Bluestem	Schizachyrium scoparium	36	2.25		Grass	N	N	CP38E-KBB(WHIP)	LB-Sgrama-BB-Pjune-Wlup-PPclover-Rblzstar-Ptick-Besus
38	CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlup-PPclove	38-CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlup	Sideoats Grama	Bouteloua curtipendula	16	1		Grass	N	N	CP38E-KBB(WHIP)	LB-Sgrama-BB-Pjune-Wlup-PPclover-Rblzstar-Ptick-Besus
38	CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlup-PPclove	38-CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlup	Big Bluestem	Andropogon gerardii	8	0.5		Grass	N	N	CP38E-KBB(WHIP)	LB-Sgrama-BB-Pjune-Wlup-PPclover-Rblzstar-Ptick-Besus
38	CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlup-PPclove	38-CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlup	Prairie Junegrass	Koeleria macrantha	4	0.25		Grass	N	N	CP38E-KBB(WHIP)	LB-Sgrama-BB-Pjune-Wlup-PPclover-Rblzstar-Ptick-Besus
38	CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlup-PPclove	38-CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlup	Wild Lupine	Lupinus perennis	3	0.1875		Legume	N	N	CP38E-KBB(WHIP)	LB-Sgrama-BB-Pjune-Wlup-PPclover-Rblzstar-Ptick-Besus
38	CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlup-PPclove	38-CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlup	Purple Prairie Clover	Dalea purpurea	2	0.125		Legume	N	N	CP38E-KBB(WHIP)	LB-Sgrama-BB-Pjune-Wlup-PPclover-Rblzstar-Ptick-Besus
38	CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlup-PPclove	38-CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlup	Rough Blazing Star	Liatris aspera	2	0.125		Forb	N	N	CP38E-KBB(WHIP)	LB-Sgrama-BB-Pjune-Wlup-PPclover-Rblzstar-Ptick-Besus
38	CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlup-PPclove	38-CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlup	Prairie Tickseed	Coreopsis palmata	1	0.0625		Forb	N	N	CP38E-KBB(WHIP)	LB-Sgrama-BB-Pjune-Wlup-PPclover-Rblzstar-Ptick-Besus
38	CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlup-PPclove	38-CP38E-KBB(WHIP)-LB-Sgrama-BB-Pjune-Wlup	Black-eyed Susan	Rudbeckia hirta	0.25	0.015625		Forb	N	N	CP38E-KBB(WHIP)	LB-Sgrama-BB-Pjune-Wlup-PPclover-Rblzstar-Ptick-Besus
38	CP38E-SWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-S	38-CP38E-SWGCA(CP2)D-LB-Sgrama-BB-Indian-P	Little Bluestem	Schizachyrium scoparium	24	1.5		Grass	N	N	CP38E-SWGCA(CP2)D	LB-Sgrama-BB-Indian-PPclover-Sgrod-Ycone
38	CP38E-SWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-S	38-CP38E-SWGCA(CP2)D-LB-Sgrama-BB-Indian-P	Sideoats Grama	Bouteloua curtipendula	24	1.5		Grass	N	N	CP38E-SWGCA(CP2)D	LB-Sgrama-BB-Indian-PPclover-Sgrod-Ycone
38	CP38E-SWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-S	38-CP38E-SWGCA(CP2)D-LB-Sgrama-BB-Indian-P	Big Bluestem	Andropogon gerardii	8	0.5		Grass	N	N	CP38E-SWGCA(CP2)D	LB-Sgrama-BB-Indian-PPclover-Sgrod-Ycone
38	CP38E-SWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-S	38-CP38E-SWGCA(CP2)D-LB-Sgrama-BB-Indian-P	Indiangrass	Sorghastrum nutans	8	0.5		Grass	N	N	CP38E-SWGCA(CP2)D	LB-Sgrama-BB-Indian-PPclover-Sgrod-Ycone
38	CP38E-SWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-S	38-CP38E-SWGCA(CP2)D-LB-Sgrama-BB-Indian-P	Purple Prairie Clover	Dalea purpurea	2	0.125		Legume	N	N	CP38E-SWGCA(CP2)D	LB-Sgrama-BB-Indian-PPclover-Sgrod-Ycone
38	CP38E-SWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-S	38-CP38E-SWGCA(CP2)D-LB-Sgrama-BB-Indian-P	Stiff Goldenrod	Oligoneuron rigidum	1	0.0625		Forb	N	N	CP38E-SWGCA(CP2)D	LB-Sgrama-BB-Indian-PPclover-Sgrod-Ycone
38	CP38E-SWGCA(CP2)D-LB-Sgrama-BB-Indian-PPclover-S	38-CP38E-SWGCA(CP2)D-LB-Sgrama-BB-Indian-P	Yellow Coneflower	Ratibida pinnata	1	0.0625		Forb	N	N	CP38E-SWGCA(CP2)D	LB-Sgrama-BB-Indian-PPclover-Sgrod-Ycone
38	CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-P	38-CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian	Little Bluestem	Schizachyrium scoparium	24	1.5		Grass	N	N	CP38E-SWGCA(CP2)DM	LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-P	38-CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian	Sideoats Grama	Bouteloua curtipendula	16	1		Grass	N	N	CP38E-SWGCA(CP2)DM	LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-P	38-CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian	Big Bluestem	Andropogon gerardii	8	0.5		Grass	N	N	CP38E-SWGCA(CP2)DM	LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-P	38-CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian	Indiangrass	Sorghastrum nutans	8	0.5		Grass	N	N	CP38E-SWGCA(CP2)DM	LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-P	38-CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian	Switchgrass	Panicum virgatum	8	0.5		Grass	N	N	CP38E-SWGCA(CP2)DM	LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-P	38-CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian	Purple Prairie Clover	Dalea purpurea	2	0.125		Legume	N	N	CP38E-SWGCA(CP2)DM	LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-P	38-CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian	Bergamot	Monarda fistulosa	1	0.0625		Forb	N	N	CP38E-SWGCA(CP2)DM	LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian-Switch-P	38-CP38E-SWGCA(CP2)DM-LB-Sgrama-BB-Indian	Yellow Coneflower	Ratibida pinnata	1	0.0625		Forb	N	N	CP38E-SWGCA(CP2)DM	LB-Sgrama-BB-Indian-Switch-PPclover-Berg-Ycone
38	CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Ber	38-CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-Sv	Little Bluestem	Schizachyrium scoparium	20	1.25		Grass	N	N	CP38E-SWGCA(CP2)M	LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Ber	38-CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-Sv	Canada Wildrye	Elymus canadensis	16	1		Grass	N	N	CP38E-SWGCA(CP2)M	LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Ber	38-CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-Sv	Indiangrass	Sorghastrum nutans	16	1		Grass	N	N	CP38E-SWGCA(CP2)M	LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Ber	38-CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-Sv	Big Bluestem	Andropogon gerardii	8	0.5		Grass	N	N	CP38E-SWGCA(CP2)M	LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Ber	38-CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-Sv	Switchgrass	Panicum virgatum	8	0.5		Grass	N	N	CP38E-SWGCA(CP2)M	LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Ber	38-CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-Sv	Bergamot	Monarda fistulosa	1	0.0625		Forb	N	N	CP38E-SWGCA(CP2)M	LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Ber	38-CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-Sv	Black-eyed Susan	Rudbeckia hirta	1	0.0625		Forb	N	N	CP38E-SWGCA(CP2)M	LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-Switch-Ber	38-CP38E-SWGCA(CP2)M-LB-Cwrye-Indian-BB-Sv	Yellow Coneflower	Ratibida pinnata	1	0.0625		Forb	N	N	CP38E-SWGCA(CP2)M	LB-Cwrye-Indian-BB-Switch-Berg-Besus-Ycone
38	CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-	38-CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Swit	Big Bluestem	Andropogon gerardii	16	1		Grass	N	N	CP38E-SWGCA(CP2)W	BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-	38-CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Swit	Canada Wildrye	Elymus canadensis	16	1		Grass	N	N	CP38E-SWGCA(CP2)W	BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-	38-CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Swit	Indiangrass	Sorghastrum nutans	16	1		Grass	N	N	CP38E-SWGCA(CP2)W	BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-	38-CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Swit	Switchgrass	Panicum virgatum	16	1		Grass	N	N	CP38E-SWGCA(CP2)W	BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-	38-CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Swit	Prairie Cordgrass	Spartina pectinata	8	0.5		Grass	N	N	CP38E-SWGCA(CP2)W	BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-	38-CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Swit	Silphium perfoliatum	Cupplant	2	0.125		Forb	N	N	CP38E-SWGCA(CP2)W	BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-	38-CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Swit	Blue Vervain	Verbena hastata	1	0.0625		Forb	N	N	CP38E-SWGCA(CP2)W	BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Switch-Pcord-	38-CP38E-SWGCA(CP2)W-BB-Cwrye-Indian-Swit	Common Ironweed	Vernonia fasciculata	1	0.0625		Forb	N	N	CP38E-SWGCA(CP2)W	BB-Cwrye-Indian-Switch-Pcord-Cup-Bvervain-Ciron
38	CP38E-SWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Berg	38-CP38E-SWGCA(CP2)WM-Switch-BB-Cwrye-Pc	Switchgrass	Panicum virgatum	32	2		Grass	N	N	CP38E-SWGCA(CP2)WM	Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
38	CP38E-SWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Berg	38-CP38E-SWGCA(CP2)WM-Switch-BB-Cwrye-Pc	Big Bluestem	Andropogon gerardii	16	1		Grass	N	N	CP38E-SWGCA(CP2)WM	Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
38	CP38E-SWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Berg	38-CP38E-SWGCA(CP2)WM-Switch-BB-Cwrye-Pc	Canada Wildrye	Elymus canadensis	16	1		Grass	N	N	CP38E-SWGCA(CP2)WM	Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
38	CP38E-SWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Berg	38-CP38E-SWGCA(CP2)WM-Switch-BB-Cwrye-Pc	Prairie Cordgrass	Spartina pectinata	4	0.25		Grass	N	N	CP38E-SWGCA(CP2)WM	Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
38	CP38E-SWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Berg	38-CP38E-SWGCA(CP2)WM-Switch-BB-Cwrye-Pc	Bergamot	Monarda fistulosa	1	0.0625		Forb	N	N	CP38E-SWGCA(CP2)WM	Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
38	CP38E-SWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Berg	38-CP38E-SWGCA(CP2)WM-Switch-BB-Cwrye-Pc	New England Aster	Symphyotrichum novae-a	1	0.0625		Forb	N	N	CP38E-SWGCA(CP2)WM	Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
38	CP38E-SWGCA(CP2)WM-Switch-BB-Cwrye-Pcord-Berg	38-CP38E-SWGCA(CP2)WM-Switch-BB-Cwrye-Pc	Yellow Coneflower	Ratibida pinnata	1	0.0625		Forb	N	N	CP38E-SWGCA(CP2)WM	Switch-BB-Cwrye-Pcord-Berg-NEaster-Ycone
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Little Bluestem	Schizachyrium scoparium	24	1.5		Grass	N	N	CP38E-SWGCA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Sideoats Grama	Bouteloua curtipendula	24	1.5		Grass	N	N	CP38E-SWGCA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Indiangrass	Sorghastrum nutans	8	0.5		Grass	N	N	CP38E-SWGCA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Big Bluestem	Andropogon gerardii	4	0.25		Grass	N	N	CP38E-SWGCA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Purple Prairie Clover	Dalea purpurea	2	0.125		Legume	N	N	CP38E-SWGCA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Sand Dropseed	Sporobolus cryptandrus	2	0.125		Grass	N	N	CP38E-SWGCA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Prairie Junegrass	Koeleria macrantha	1	0.0625		Grass	N	N	CP38E-SWGCA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Spiderwort	Tradescantia ohiensis	1	0.0625		Forb	N	N	CP38E-SWGCA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Hoary Vervain	Verbena stricta	0.5	0.03125		Forb	N	N	CP38E-SWGCA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Leadplant	Amorpha canescens	0.5	0.03125		Legume	N	N	CP38E-SWGCA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Prairie Tickseed	Coreopsis palmata	0.5	0.03125		Forb	N	N	CP38E-SWGCA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Silky Aster	Symphyotrichum pratens	0.5	0.03125		Forb	N	N	CP38E-SWGCA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Stiff Goldenrod	Oligoneuron rigidum	1	0.03125		Forb	N	N	CP38E-SWGCA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Yellow Coneflower	Ratibida pinnata	0.5	0.03125		Forb	N	N	CP38E-SWGCA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Prairie Cinquefoil	Potentilla arguta	0.25	0.015625		Forb	N	N	CP38E-SWGCA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-PPclover	38-CP38E-SWGCA(CP25)D-LB-Sgrama-Indian-BB-	Spotted Mint	Monarda punctata	0	0.015625		Forb	N	N	CP38E-SWGCA(CP25)D	LB-Sgrama-Indian-BB-PPclover-Sdrop-Pjune-Swort-Hvervain-Lpla
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Little Bluestem	Schizachyrium scoparium	24	1.5		Grass	N	N	CP38E-SWGCA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Sideoats Grama	Bouteloua curtipendula	24	1.5		Grass	N	N	CP38E-SWGCA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Indiangrass	Sorghastrum nutans	8	0.5		Grass	N	N	CP38E-SWGCA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Switchgrass	Panicum virgatum	4	0.25		Grass	N	N	CP38E-SWGCA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Prairie Junegrass	Koeleria macrantha	2	0.125		Grass	N	N	CP38E-SWGCA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Prairie Dropseed	Sporobolus heterolepis	2	0.125		Grass	N	N	CP38E-SWGCA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Purple Prairie Clover	Dalea purpurea	2	0.125		Legume	N	N	CP38E-SWGCA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Round-Headed Bushclover	Lespedeza capitata	2	0.125		Legume	N	N	CP38E-SWGCA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B

38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Bergamot	Monarda fistulosa	1	0.0625		Forb	N	N	CP38E-SWGCA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Spiderwort	Tradescantia ohiensis	1	0.0625		Forb	N	N	CP38E-SWGCA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Yellow Coneflower	Ratibida pinnata	1	0.0625		Forb	N	N	CP38E-SWGCA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Leadplant	Amorpha canescens	0.5	0.03125		Legume	N	N	CP38E-SWGCA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Rough Blazing Star	Liatris aspera	1	0.03125		Forb	N	N	CP38E-SWGCA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Sky-Blue Aster	Symphyotrichum oolenta	1	0.03125		Forb	N	N	CP38E-SWGCA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Stiff Goldenrod	Oligoneuron rigidum	0.5	0.03125		Forb	N	N	CP38E-SWGCA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
38	CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-Switch-Pju	38-CP38E-SWGCA(CP25)DM-LB-Sgrama-Indian-S	Prairie Cinquefoil	Potentilla arguta	0.25	0.015625		Forb	N	N	CP38E-SWGCA(CP25)DM	LB-Sgrama-Indian-Switch-Pjune-Pdrop-PPclover-RHbushclover-B
38	CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-Switch-Ox	38-CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-S	Little Bluestem	Schizachyrium scoparium	24	1.5		Grass	N	N	CP38E-SWGCA(CP25)M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
38	CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-Switch-Ox	38-CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-S	Indiangrass	Sorghastrum nutans	16	1		Grass	N	N	CP38E-SWGCA(CP25)M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
38	CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-Switch-Ox	38-CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-S	Big Bluestem	Andropogon gerardii	8	0.5		Grass	N	N	CP38E-SWGCA(CP25)M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
38	CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-Switch-Ox	38-CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-S	Canada Wildrye	Elymus canadensis	8	0.5		Grass	N	N	CP38E-SWGCA(CP25)M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
38	CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-Switch-Ox	38-CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-S	Switchgrass	Panicum virgatum	8	0.5		Grass	N	N	CP38E-SWGCA(CP25)M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
38	CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-Switch-Ox	38-CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-S	Ox-eye Sunflower	Heliopsis helianthoides	1	0.0625		Forb	N	N	CP38E-SWGCA(CP25)M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
38	CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-Switch-Ox	38-CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-S	Prairie Blazing Star	Liatris pycnostachya	1	0.0625		Forb	N	N	CP38E-SWGCA(CP25)M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
38	CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-Switch-Ox	38-CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-S	Purple Prairie Clover	Dalea purpurea	1	0.0625		Legume	N	N	CP38E-SWGCA(CP25)M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
38	CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-Switch-Ox	38-CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-S	Rosinweed	Silphium integrifolium	1	0.0625		Forb	N	N	CP38E-SWGCA(CP25)M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
38	CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-Switch-Ox	38-CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-S	Bergamot	Monarda fistulosa	0.5	0.03125		Forb	N	N	CP38E-SWGCA(CP25)M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
38	CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-Switch-Ox	38-CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-S	Black-eyed Susan	Rudbeckia hirta	0.5	0.03125		Forb	N	N	CP38E-SWGCA(CP25)M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
38	CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-Switch-Ox	38-CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-S	New England Aster	Symphyotrichum novae-a	0.5	0.03125		Forb	N	N	CP38E-SWGCA(CP25)M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
38	CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-Switch-Ox	38-CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-S	Smooth Blue Aster	Symphyotrichum laeve	0.5	0.03125		Forb	N	N	CP38E-SWGCA(CP25)M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
38	CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-Switch-Ox	38-CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-S	Yellow Coneflower	Ratibida pinnata	0.5	0.03125		Forb	N	N	CP38E-SWGCA(CP25)M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
38	CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-Switch-Ox	38-CP38E-SWGCA(CP25)M-LB-Indian-BB-Cwrye-S	Culver's Root	Veronicastrum virginicum	0	0.015625		Forb	N	N	CP38E-SWGCA(CP25)M	LB-Indian-BB-Cwrye-Switch-Oxeyesun-Pblzstar-PPclover-Rweed-I
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian	Canada Wildrye	Elymus canadensis	16	1		Grass	N	N	CP38E-SWGCA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian	Switchgrass	Panicum virgatum	16	1		Grass	N	N	CP38E-SWGCA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian	Indiangrass	Sorghastrum nutans	12	0.75		Grass	N	N	CP38E-SWGCA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian	Big Bluestem	Andropogon gerardii	8	0.5		Grass	N	N	CP38E-SWGCA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian	Prairie Cordgrass	Spartina pectinata	8	0.5		Grass	N	N	CP38E-SWGCA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian	Fowl Mannagrass	Glyceria striata	4	0.25		Grass	N	N	CP38E-SWGCA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian	Fox Sedge	Carex vulpinoidea	4	0.25		Sedge	N	N	CP38E-SWGCA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian	Cupplant	Silphium perfoliatum	2	0.125		Forb	N	N	CP38E-SWGCA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian	Showy Tick Trefoil	Desmodium canadense	2	0.125		Legume	N	N	CP38E-SWGCA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian	Blue Vervain	Verbena hastata	1	0.0625		Forb	N	N	CP38E-SWGCA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian	Golden Alexanders	Zizia aurea	1	0.0625		Forb	N	N	CP38E-SWGCA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian	Marsh Milkweed	Asclepias incarnata	1	0.0625		Forb	N	N	CP38E-SWGCA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian	Boneset	Eupatorium perfoliatum	0.5	0.03125		Forb	N	N	CP38E-SWGCA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian	Common Ironweed	Vernonia fasciculata	1	0.03125		Forb	N	N	CP38E-SWGCA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian	Joe-pye Weed	Eutrochium maculatum	1	0.03125		Forb	N	N	CP38E-SWGCA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian-BB-Pcord	38-CP38E-SWGCA(CP25)W-Cwrye-Switch-Indian	Culver's Root	Veronicastrum virginicum	0	0.015625		Forb	N	N	CP38E-SWGCA(CP25)W	Cwrye-Switch-Indian-BB-Pcord-Fmgrass-Fsedge-Cup-Ttrefoil-Bve
38	CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-Indian-Pco	38-CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-I	Switchgrass	Panicum virgatum	24	1.5		Grass	N	N	CP38E-SWGCA(CP25)WM	Switch-BB-Cwrye-Indian-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
38	CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-Indian-Pco	38-CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-I	Big Bluestem	Andropogon gerardii	20	1.25		Grass	N	N	CP38E-SWGCA(CP25)WM	Switch-BB-Cwrye-Indian-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
38	CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-Indian-Pco	38-CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-I	Canada Wildrye	Elymus canadensis	16	1		Grass	N	N	CP38E-SWGCA(CP25)WM	Switch-BB-Cwrye-Indian-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
38	CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-Indian-Pco	38-CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-I	Indiangrass	Sorghastrum nutans	12	0.75		Grass	N	N	CP38E-SWGCA(CP25)WM	Switch-BB-Cwrye-Indian-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
38	CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-Indian-Pco	38-CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-I	Prairie Cordgrass	Spartina pectinata	4	0.25		Grass	N	N	CP38E-SWGCA(CP25)WM	Switch-BB-Cwrye-Indian-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
38	CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-Indian-Pco	38-CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-I	Cupplant	Silphium perfoliatum	2	0.125		Forb	N	N	CP38E-SWGCA(CP25)WM	Switch-BB-Cwrye-Indian-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
38	CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-Indian-Pco	38-CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-I	White wild indigo	Baptisia alba	1.5	0.09375		Legume	N	N	CP38E-SWGCA(CP25)WM	Switch-BB-Cwrye-Indian-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
38	CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-Indian-Pco	38-CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-I	Black-eyed Susan	Rudbeckia hirta	0.5	0.03125		Forb	N	N	CP38E-SWGCA(CP25)WM	Switch-BB-Cwrye-Indian-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
38	CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-Indian-Pco	38-CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-I	Common Ironweed	Vernonia fasciculata	0.5	0.03125		Forb	N	N	CP38E-SWGCA(CP25)WM	Switch-BB-Cwrye-Indian-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
38	CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-Indian-Pco	38-CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-I	Golden Alexanders	Zizia aurea	0.5	0.03125		Forb	N	N	CP38E-SWGCA(CP25)WM	Switch-BB-Cwrye-Indian-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
38	CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-Indian-Pco	38-CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-I	New England Aster	Symphyotrichum novae-a	0.5	0.03125		Forb	N	N	CP38E-SWGCA(CP25)WM	Switch-BB-Cwrye-Indian-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
38	CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-Indian-Pco	38-CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-I	Prairie Blazing Star	Liatris pycnostachya	0.5	0.03125		Forb	N	N	CP38E-SWGCA(CP25)WM	Switch-BB-Cwrye-Indian-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
38	CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-Indian-Pco	38-CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-I	Yellow Coneflower	Ratibida pinnata	0.5	0.03125		Forb	N	N	CP38E-SWGCA(CP25)WM	Switch-BB-Cwrye-Indian-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
38	CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-Indian-Pco	38-CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-I	Bergamot	Monarda fistulosa	0.25	0.015625		Forb	N	N	CP38E-SWGCA(CP25)WM	Switch-BB-Cwrye-Indian-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
38	CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-Indian-Pco	38-CP38E-SWGCA(CP25)WM-Switch-BB-Cwrye-I	Great St. John's Wort	Hypericum ascyron	0	0.015625		Forb	N	N	CP38E-SWGCA(CP25)WM	Switch-BB-Cwrye-Indian-Pcord-Cup-WWIndigo-Besus-Ciron-Gale
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pju	Little Bluestem	Schizachyrium scoparium	32	2		Grass	N	N	CP38E-WPHRA(CP25)D	LB-Sgrama-Indian-Pjune-Pdrop-Switch-PPclover-RHbushclover-S
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pju	Sideoats Grama	Bouteloua curtipendula	24	1.5		Grass	N	N	CP38E-WPHRA(CP25)D	LB-Sgrama-Indian-Pjune-Pdrop-Switch-PPclover-RHbushclover-S
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pju	Indiangrass	Sorghastrum nutans	4	0.25		Grass	N	N	CP38E-WPHRA(CP25)D	LB-Sgrama-Indian-Pjune-Pdrop-Switch-PPclover-RHbushclover-S
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pju	Prairie Junegrass	Koeleria macrantha	4	0.25		Grass	N	N	CP38E-WPHRA(CP25)D	LB-Sgrama-Indian-Pjune-Pdrop-Switch-PPclover-RHbushclover-S
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pju	Prairie Dropseed	Sporobolus heterolepis	4	0.25		Grass	N	N	CP38E-WPHRA(CP25)D	LB-Sgrama-Indian-Pjune-Pdrop-Switch-PPclover-RHbushclover-S
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pju	Switchgrass	Panicum virgatum	4	0.25		Grass	N	N	CP38E-WPHRA(CP25)D	LB-Sgrama-Indian-Pjune-Pdrop-Switch-PPclover-RHbushclover-S
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pju	Purple Prairie Clover	Dalea purpurea	2	0.125		Legume	N	N	CP38E-WPHRA(CP25)D	LB-Sgrama-Indian-Pjune-Pdrop-Switch-PPclover-RHbushclover-S
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pju	Round-Headed Bushclover	Lespedeza capitata	2	0.125		Legume	N	N	CP38E-WPHRA(CP25)D	LB-Sgrama-Indian-Pjune-Pdrop-Switch-PPclover-RHbushclover-S
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pju	Spiderwort	Tradescantia ohiensis	1	0.0625		Forb	N	N	CP38E-WPHRA(CP25)D	LB-Sgrama-Indian-Pjune-Pdrop-Switch-PPclover-RHbushclover-S
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pju	Bergamot	Monarda fistulosa	0.5	0.03125		Forb	N	N	CP38E-WPHRA(CP25)D	LB-Sgrama-Indian-Pjune-Pdrop-Switch-PPclover-RHbushclover-S
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pju	Leadplant	Amorpha canescens	0.5	0.03125		Legume	N	N	CP38E-WPHRA(CP25)D	LB-Sgrama-Indian-Pjune-Pdrop-Switch-PPclover-RHbushclover-S
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pju	Rough Blazing Star	Liatris aspera	0.5	0.03125		Forb	N	N	CP38E-WPHRA(CP25)D	LB-Sgrama-Indian-Pjune-Pdrop-Switch-PPclover-RHbushclover-S
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pju	Sky-Blue Aster	Symphyotrichum oolenta	0.5	0.03125		Forb	N	N	CP38E-WPHRA(CP25)D	LB-Sgrama-Indian-Pjune-Pdrop-Switch-PPclover-RHbushclover-S
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pju	Black-eyed Susan	Rudbeckia hirta	0.25	0.015625		Forb	N	N	CP38E-WPHRA(CP25)D	LB-Sgrama-Indian-Pjune-Pdrop-Switch-PPclover-RHbushclover-S
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pju	Prairie Cinquefoil	Potentilla arguta	0.25	0.015625		Forb	N	N	CP38E-WPHRA(CP25)D	LB-Sgrama-Indian-Pjune-Pdrop-Switch-PPclover-RHbushclover-S
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pju	Stiff Goldenrod	Oligoneuron rigidum	0	0.015625		Forb	N	N	CP38E-WPHRA(CP25)D	LB-Sgrama-Indian-Pjune-Pdrop-Switch-PPclover-RHbushclover-S
38	CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pjune-Pdrop	38-CP38E-WPHRA(CP25)D-LB-Sgrama-Indian-Pju	Yellow Coneflower	Ratibida pinnata	0	0.015625		Forb	N	N	CP38E-WPHRA(CP25)D	LB-Sgrama-Indian-Pjune-Pdrop-Switch-PPclover-RHbushclover-S

38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-B	Little Bluestem	Schizachyrium scoparium	32	2		Grass	N	N	CP38E-WPHRA(CP25)DM	LB-Sgrama-Pjune-BB-Indian-Sdrop-Bmilkweed-PPclover-Swort-H
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-B	Sideoats Grama	Bouteloua curtipendula	24	1.5		Grass	N	N	CP38E-WPHRA(CP25)DM	LB-Sgrama-Pjune-BB-Indian-Sdrop-Bmilkweed-PPclover-Swort-H
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-B	Prairie Junegrass	Koeleria macrantha	6	0.375		Grass	N	N	CP38E-WPHRA(CP25)DM	LB-Sgrama-Pjune-BB-Indian-Sdrop-Bmilkweed-PPclover-Swort-H
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-B	Big Bluestem	Andropogon gerardii	4	0.25		Grass	N	N	CP38E-WPHRA(CP25)DM	LB-Sgrama-Pjune-BB-Indian-Sdrop-Bmilkweed-PPclover-Swort-H
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-B	Indiangrass	Sorghastrum nutans	4	0.25		Grass	N	N	CP38E-WPHRA(CP25)DM	LB-Sgrama-Pjune-BB-Indian-Sdrop-Bmilkweed-PPclover-Swort-H
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-B	Sand Dropseed	Sporobolus cryptandrus	4	0.25		Grass	N	N	CP38E-WPHRA(CP25)DM	LB-Sgrama-Pjune-BB-Indian-Sdrop-Bmilkweed-PPclover-Swort-H
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-B	Butterfly Milkweed	Asclepias tuberosa	1	0.0625		Forb	N	N	CP38E-WPHRA(CP25)DM	LB-Sgrama-Pjune-BB-Indian-Sdrop-Bmilkweed-PPclover-Swort-H
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-B	Purple Prairie Clover	Dalea purpurea	1	0.0625		Legume	N	N	CP38E-WPHRA(CP25)DM	LB-Sgrama-Pjune-BB-Indian-Sdrop-Bmilkweed-PPclover-Swort-H
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-B	Spiderwort	Tradescantia ohiensis	1	0.0625		Forb	N	N	CP38E-WPHRA(CP25)DM	LB-Sgrama-Pjune-BB-Indian-Sdrop-Bmilkweed-PPclover-Swort-H
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-B	Hoary Vervain	Verbena stricta	0.5	0.03125		Forb	N	N	CP38E-WPHRA(CP25)DM	LB-Sgrama-Pjune-BB-Indian-Sdrop-Bmilkweed-PPclover-Swort-H
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-B	Leadplant	Amorpha canescens	0.5	0.03125		Legume	N	N	CP38E-WPHRA(CP25)DM	LB-Sgrama-Pjune-BB-Indian-Sdrop-Bmilkweed-PPclover-Swort-H
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-B	Prairie Tickseed	Coreopsis palmata	0.5	0.03125		Forb	N	N	CP38E-WPHRA(CP25)DM	LB-Sgrama-Pjune-BB-Indian-Sdrop-Bmilkweed-PPclover-Swort-H
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-B	Silky Aster	Symphyotrichum pratens	0.5	0.03125		Forb	N	N	CP38E-WPHRA(CP25)DM	LB-Sgrama-Pjune-BB-Indian-Sdrop-Bmilkweed-PPclover-Swort-H
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-B	Prairie Cinquefoil	Potentilla arguta	0.25	0.015625		Forb	N	N	CP38E-WPHRA(CP25)DM	LB-Sgrama-Pjune-BB-Indian-Sdrop-Bmilkweed-PPclover-Swort-H
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-B	Spotted Mint	Monarda punctata	0.25	0.015625		Forb	N	N	CP38E-WPHRA(CP25)DM	LB-Sgrama-Pjune-BB-Indian-Sdrop-Bmilkweed-PPclover-Swort-H
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-B	Stiff Goldenrod	Oligoneuron rigidum	0	0.015625		Forb	N	N	CP38E-WPHRA(CP25)DM	LB-Sgrama-Pjune-BB-Indian-Sdrop-Bmilkweed-PPclover-Swort-H
38	CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-BB-Indian-	38-CP38E-WPHRA(CP25)DM-LB-Sgrama-Pjune-B	Yellow Coneflower	Ratibida pinnata	0	0.015625		Forb	N	N	CP38E-WPHRA(CP25)DM	LB-Sgrama-Pjune-BB-Indian-Sdrop-Bmilkweed-PPclover-Swort-H
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB	Little Bluestem	Schizachyrium scoparium	28	1.75		Grass	N	N	CP38E-WPHRA(CP25)M	LB-Cwrye-Sgrama-BB-Indian-Switch-Cmilkvetch-Oxeyesun-Pblzst
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB	Canada Wildrye	Elymus canadensis	12	0.75		Grass	N	N	CP38E-WPHRA(CP25)M	LB-Cwrye-Sgrama-BB-Indian-Switch-Cmilkvetch-Oxeyesun-Pblzst
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB	Sideoats Grama	Bouteloua curtipendula	12	0.75		Grass	N	N	CP38E-WPHRA(CP25)M	LB-Cwrye-Sgrama-BB-Indian-Switch-Cmilkvetch-Oxeyesun-Pblzst
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB	Big Bluestem	Andropogon gerardii	4	0.25		Grass	N	N	CP38E-WPHRA(CP25)M	LB-Cwrye-Sgrama-BB-Indian-Switch-Cmilkvetch-Oxeyesun-Pblzst
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB	Indiangrass	Sorghastrum nutans	4	0.25		Grass	N	N	CP38E-WPHRA(CP25)M	LB-Cwrye-Sgrama-BB-Indian-Switch-Cmilkvetch-Oxeyesun-Pblzst
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB	Switchgrass	Panicum virgatum	4	0.25		Grass	N	N	CP38E-WPHRA(CP25)M	LB-Cwrye-Sgrama-BB-Indian-Switch-Cmilkvetch-Oxeyesun-Pblzst
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB	Canada Milkvetch	Astragalus canadensis	2	0.125		Legume	N	N	CP38E-WPHRA(CP25)M	LB-Cwrye-Sgrama-BB-Indian-Switch-Cmilkvetch-Oxeyesun-Pblzst
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB	Ox-eye Sunflower	Heliopsis helianthoides	1	0.0625		Forb	N	N	CP38E-WPHRA(CP25)M	LB-Cwrye-Sgrama-BB-Indian-Switch-Cmilkvetch-Oxeyesun-Pblzst
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB	Prairie Blazing Star	Liatris pycnostachya	1	0.0625		Forb	N	N	CP38E-WPHRA(CP25)M	LB-Cwrye-Sgrama-BB-Indian-Switch-Cmilkvetch-Oxeyesun-Pblzst
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB	Purple Prairie Clover	Dalea purpurea	1	0.0625		Legume	N	N	CP38E-WPHRA(CP25)M	LB-Cwrye-Sgrama-BB-Indian-Switch-Cmilkvetch-Oxeyesun-Pblzst
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB	Bergamot	Monarda fistulosa	0.5	0.03125		Forb	N	N	CP38E-WPHRA(CP25)M	LB-Cwrye-Sgrama-BB-Indian-Switch-Cmilkvetch-Oxeyesun-Pblzst
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB	Black-eyed Susan	Rudbeckia hirta	0.5	0.03125		Forb	N	N	CP38E-WPHRA(CP25)M	LB-Cwrye-Sgrama-BB-Indian-Switch-Cmilkvetch-Oxeyesun-Pblzst
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB	New England Aster	Symphyotrichum novae-a	0.5	0.03125		Forb	N	N	CP38E-WPHRA(CP25)M	LB-Cwrye-Sgrama-BB-Indian-Switch-Cmilkvetch-Oxeyesun-Pblzst
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB	Sky-Blue Aster	Symphyotrichum oolenta	0.5	0.03125		Forb	N	N	CP38E-WPHRA(CP25)M	LB-Cwrye-Sgrama-BB-Indian-Switch-Cmilkvetch-Oxeyesun-Pblzst
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB	Smooth Blue Aster	Symphyotrichum laeve	0.5	0.03125		Forb	N	N	CP38E-WPHRA(CP25)M	LB-Cwrye-Sgrama-BB-Indian-Switch-Cmilkvetch-Oxeyesun-Pblzst
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB	Yellow Coneflower	Ratibida pinnata	1	0.03125		Forb	N	N	CP38E-WPHRA(CP25)M	LB-Cwrye-Sgrama-BB-Indian-Switch-Cmilkvetch-Oxeyesun-Pblzst
38	CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB-Indian-S	38-CP38E-WPHRA(CP25)M-LB-Cwrye-Sgrama-BB	Culver's Root	Veronicastrum virginicum	0	0.015625		Forb	N	N	CP38E-WPHRA(CP25)M	LB-Cwrye-Sgrama-BB-Indian-Switch-Cmilkvetch-Oxeyesun-Pblzst
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsed	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch	Canada Wildrye	Elymus canadensis	16	1		Grass	N	N	CP38E-WPHRA(CP25)W	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsed	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch	Indiangrass	Sorghastrum nutans	12	0.75		Grass	N	N	CP38E-WPHRA(CP25)W	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsed	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch	Switchgrass	Panicum virgatum	12	0.75		Grass	N	N	CP38E-WPHRA(CP25)W	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsed	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch	Big Bluestem	Andropogon gerardii	8	0.5		Grass	N	N	CP38E-WPHRA(CP25)W	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsed	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch	Fox Sedge	Carex vulpinoidea	8	0.5		Sedge	N	N	CP38E-WPHRA(CP25)W	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsed	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch	Prairie Cordgrass	Spartina pectinata	8	0.5		Grass	N	N	CP38E-WPHRA(CP25)W	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsed	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch	Fowl Mannagrass	Glyceria striata	4	0.25		Grass	N	N	CP38E-WPHRA(CP25)W	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsed	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch	Cupplant	Silphium perfoliatum	2	0.125		Forb	N	N	CP38E-WPHRA(CP25)W	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsed	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch	Showy Tick Trefoil	Desmodium canadense	2	0.125		Legume	N	N	CP38E-WPHRA(CP25)W	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsed	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch	Blue Vervain	Verbena hastata	1	0.0625		Forb	N	N	CP38E-WPHRA(CP25)W	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsed	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch	Golden Alexanders	Zizia aurea	1	0.0625		Forb	N	N	CP38E-WPHRA(CP25)W	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsed	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch	Marsh Milkweed	Asclepias incarnata	1	0.0625		Forb	N	N	CP38E-WPHRA(CP25)W	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsed	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch	Boneset	Eupatorium perfoliatum	0.5	0.03125		Forb	N	N	CP38E-WPHRA(CP25)W	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsed	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch	Common Ironweed	Vernonia fasciculata	1	0.03125		Forb	N	N	CP38E-WPHRA(CP25)W	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsed	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch	Joe-pye Weed	Eutrochium maculatum	1	0.03125		Forb	N	N	CP38E-WPHRA(CP25)W	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch-BB-Fsed	38-CP38E-WPHRA(CP25)W-Cwrye-Indian-Switch	Culver's Root	Veronicastrum virginicum	0	0.015625		Forb	N	N	CP38E-WPHRA(CP25)W	Cwrye-Indian-Switch-BB-Fsedge-Pcord-Fmgrass-Cup-Ttrefoil-Bve
38	CP38E-Monarch(CP1)-Tim-Orc-RC-Cmilkweed-Besus-O	38-CP38E-Monarch(CP1)-Tim-Orc-RC-Cmilkweed	Common Milkweed	Asclepias syriaca	6	0.378	0.6	Forb	N	X	CP38E-Monarch(CP1)	Tim-Orc-RC-Cmilkweed-Besus-Oxeyesun-Sgrod
38	CP38E-Monarch(CP1)-Tim-Orc-RC-Cmilkweed-	38-CP38E-Monarch(CP1)-Tim-Orc-RC-Cm	Black-Eyed Susan	Rudbeckia hirta	0.96	0.06	2.2	Forb	N	X	CP38E-Monarch(CP1)	Tim-Orc-RC-Cmilkweed-Besus-Oxeyesun-Sgrod
38	CP38E-Monarch(CP1)-Tim-Orc-RC-Cmilkweed-	38-CP38E-Monarch(CP1)-Tim-Orc-RC-Cm	Ox-eye Sunflower	Heliopsis helianthoides	0.96	0.06	0.2	Forb	N	X	CP38E-Monarch(CP1)	Tim-Orc-RC-Cmilkweed-Besus-Oxeyesun-Sgrod
38	CP38E-Monarch(CP1)-Tim-Orc-RC-Cmilkweed-	38-CP38E-Monarch(CP1)-Tim-Orc-RC-Cm	Stiff Goldenrod	Oligoneuron rigidum	0.96	0.06	1.1	Forb	N	X	CP38E-Monarch(CP1)	Tim-Orc-RC-Cmilkweed-Besus-Oxeyesun-Sgrod
38	CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cv	38-CP38E-Monarch(CP2)-BB-LB-Indian-Sg	Big Bluestem	Andropogon gerardii	4	0.25	1	Grass	N	X	CP38E-Monarch(CP2)	BB-LB-Indian-Sgrama-Cwrye-Wpclover-Cmilkweed-Besus-Berg-Sg
38	CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cv	38-CP38E-Monarch(CP2)-BB-LB-Indian-Sg	Little Bluestem	Schizachyrium scoparium	24	1.5	8.3	Grass	N	X	CP38E-Monarch(CP2)	BB-LB-Indian-Sgrama-Cwrye-Wpclover-Cmilkweed-Besus-Berg-Sg
38	CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cv	38-CP38E-Monarch(CP2)-BB-LB-Indian-Sg	Indiangrass	Sorghastrum nutans	4	0.25	1.2	Grass	N	X	CP38E-Monarch(CP2)	BB-LB-Indian-Sgrama-Cwrye-Wpclover-Cmilkweed-Besus-Berg-Sg
38	CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cv	38-CP38E-Monarch(CP2)-BB-LB-Indian-Sg	Sideoats Grama	Bouteloua curtipendula	12	0.75	2.2	Grass	N	X	CP38E-Monarch(CP2)	BB-LB-Indian-Sgrama-Cwrye-Wpclover-Cmilkweed-Besus-Berg-Sg
38	CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cv	38-CP38E-Monarch(CP2)-BB-LB-Indian-Sg	Canada Wildrye	Elymus canadensis	16	1	2	Grass	N	X	CP38E-Monarch(CP2)	BB-LB-Indian-Sgrama-Cwrye-Wpclover-Cmilkweed-Besus-Berg-Sg
38	CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cv	38-CP38E-Monarch(CP2)-BB-LB-Indian-Sg	white prairie clover	Dalea candida	3.04	0.19	1.2	Legume	N	X	CP38E-Monarch(CP2)	BB-LB-Indian-Sgrama-Cwrye-Wpclover-Cmilkweed-Besus-Berg-Sg
38	CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cv	38-CP38E-Monarch(CP2)-BB-LB-Indian-Sg	Common Milkweed	Asclepias syriaca	4.96	0.31	0.5	Forb	N	X	CP38E-Monarch(CP2)	BB-LB-Indian-Sgrama-Cwrye-Wpclover-Cmilkweed-Besus-Berg-Sg
38	CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cv	38-CP38E-Monarch(CP2)-BB-LB-Indian-Sg	Black-eyed Susan	Rudbeckia hirta	0.96	0.06	2.2	Forb	N	X	CP38E-Monarch(CP2)	BB-LB-Indian-Sgrama-Cwrye-Wpclover-Cmilkweed-Besus-Berg-Sg
38	CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cv	38-CP38E-Monarch(CP2)-BB-LB-Indian-Sg	Bergamot	Monarda fistulosa	0.96	0.06	1.8	Forb	N	X	CP38E-Monarch(CP2)	BB-LB-Indian-Sgrama-Cwrye-Wpclover-Cmilkweed-Besus-Berg-Sg
38	CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cv	38-CP38E-Monarch(CP2)-BB-LB-Indian-Sg	Stiff Goldenrod	Oligoneuron rigidum	0.96	0.06	1.1	Forb	N	X	CP38E-Monarch(CP2)	BB-LB-Indian-Sgrama-Cwrye-Wpclover-Cmilkweed-Besus-Berg-Sg
38	CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cv	38-CP38E-Monarch(CP2)-BB-LB-Indian-Sg	Showy Goldenrod	Solidago speciosa	0.48	0.03	1.1	Forb	N	X	CP38E-Monarch(CP2)	BB-LB-Indian-Sgrama-Cwrye-Wpclover-Cmilkweed-Besus-Berg-Sg
38	CP38E-Monarch(CP2)-BB-LB-Indian-Sgrama-Cv	38-CP38E-Monarch(CP2)-BB-LB-Indian-Sg	New England Aster	Symphyotrichum novae-angliae	0.48	0.03	0.8	Forb	N	X	CP38E-Monarch(CP2)	BB-LB-Indian-Sgrama-Cwrye-Wpclover-Cmilkweed-Besus-Berg-Sg

38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	38-CP38E-Monarch(CP25)-BB-LB-Indian-S	Big Bluestem	Andropogon gerardii	4	0.25	1	Grass	N	X	CP38E-Monarch(CP25)	BB-LB-Indian-Sgrama-Cwrye-Wpclover-Cmilkweed-Besus-Berg-Sg
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	38-CP38E-Monarch(CP25)-BB-LB-Indian-S	Little Bluestem	Schizachyrium scoparium	16	1	5.6	Grass	N	X	CP38E-Monarch(CP25)	BB-LB-Indian-Sgrama-Cwrye-Wpclover-Cmilkweed-Besus-Berg-Sg
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	38-CP38E-Monarch(CP25)-BB-LB-Indian-S	Indiangrass	Sorghastrum nutans	4	0.25	1.2	Grass	N	X	CP38E-Monarch(CP25)	BB-LB-Indian-Sgrama-Cwrye-Wpclover-Cmilkweed-Besus-Berg-Sg
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	38-CP38E-Monarch(CP25)-BB-LB-Indian-S	Sideoats Grama	Bouteloua curtipendula	8	0.5	1.5	Grass	N	X	CP38E-Monarch(CP25)	BB-LB-Indian-Sgrama-Cwrye-Wpclover-Cmilkweed-Besus-Berg-Sg
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	38-CP38E-Monarch(CP25)-BB-LB-Indian-S	Canada Wildrye	Elymus canadensis	8	0.5	1	Grass	N	X	CP38E-Monarch(CP25)	BB-LB-Indian-Sgrama-Cwrye-Wpclover-Cmilkweed-Besus-Berg-Sg
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	38-CP38E-Monarch(CP25)-BB-LB-Indian-S	white prairie clover	Dalea candida	3.04	0.19	1.2	Legume	N	X	CP38E-Monarch(CP25)	BB-LB-Indian-Sgrama-Cwrye-Wpclover-Cmilkweed-Besus-Berg-Sg
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	38-CP38E-Monarch(CP25)-BB-LB-Indian-S	Common Milkweed	Asclepias syriaca	4.96	0.31	0.5	Forb	N	X	CP38E-Monarch(CP25)	BB-LB-Indian-Sgrama-Cwrye-Wpclover-Cmilkweed-Besus-Berg-Sg
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	38-CP38E-Monarch(CP25)-BB-LB-Indian-S	Black-eyed Susan	Rudbeckia hirta	0.96	0.06	2.2	Forb	N	X	CP38E-Monarch(CP25)	BB-LB-Indian-Sgrama-Cwrye-Wpclover-Cmilkweed-Besus-Berg-Sg
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	38-CP38E-Monarch(CP25)-BB-LB-Indian-S	Bergamot	Monarda fistulosa	0.96	0.06	1.8	Forb	N	X	CP38E-Monarch(CP25)	BB-LB-Indian-Sgrama-Cwrye-Wpclover-Cmilkweed-Besus-Berg-Sg
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	38-CP38E-Monarch(CP25)-BB-LB-Indian-S	Stiff Goldenrod	Oligoneuron rigidum	0.96	0.06	1.1	Forb	N	X	CP38E-Monarch(CP25)	BB-LB-Indian-Sgrama-Cwrye-Wpclover-Cmilkweed-Besus-Berg-Sg
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	38-CP38E-Monarch(CP25)-BB-LB-Indian-S	Showy Goldenrod	Solidago speciosa	0.48	0.03	1.1	Forb	N	X	CP38E-Monarch(CP25)	BB-LB-Indian-Sgrama-Cwrye-Wpclover-Cmilkweed-Besus-Berg-Sg
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	38-CP38E-Monarch(CP25)-BB-LB-Indian-S	New England Aster	Symphyotrichum novae-angliae	0.48	0.03	0.8	Forb	N	X	CP38E-Monarch(CP25)	BB-LB-Indian-Sgrama-Cwrye-Wpclover-Cmilkweed-Besus-Berg-Sg
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	38-CP38E-Monarch(CP25)-BB-LB-Indian-S	Rough Blazing Star	Liatris aspera	0.48	0.03	0.2	Forb	N	X	CP38E-Monarch(CP25)	BB-LB-Indian-Sgrama-Cwrye-Wpclover-Cmilkweed-Besus-Berg-Sg
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	38-CP38E-Monarch(CP25)-BB-LB-Indian-S	Rattlesnake Master	Eryngium yuccifolium	0.96	0.06	0.2	Forb	N	X	CP38E-Monarch(CP25)	BB-LB-Indian-Sgrama-Cwrye-Wpclover-Cmilkweed-Besus-Berg-Sg
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	38-CP38E-Monarch(CP25)-BB-LB-Indian-S	Cupplant	Silphium perfoliatum	2.08	0.13	0.1	Forb	N	X	CP38E-Monarch(CP25)	BB-LB-Indian-Sgrama-Cwrye-Wpclover-Cmilkweed-Besus-Berg-Sg
38	CP38E-Monarch(CP25)-BB-LB-Indian-Sgrama-C	38-CP38E-Monarch(CP25)-BB-LB-Indian-S	Sky-Blue Aster	Symphyotrichum oolentangiense	0.96	0.06	1.9	Forb	N	X	CP38E-Monarch(CP25)	BB-LB-Indian-Sgrama-Cwrye-Wpclover-Cmilkweed-Besus-Berg-Sg
38	CP3-1-BB-LB-Indian-Sgrama-Sgrod-Ycone-PPcl	38-CP3-1-BB-LB-Indian-Sgrama-Sgrod-Yc	Big Bluestem	Andropogon gerardii	8	0.5	1.9	Grass	N	X	CP3-1	BB-LB-Indian-Sgrama-Sgrod-Ycone-PPclover
38	CP3-1-BB-LB-Indian-Sgrama-Sgrod-Ycone-PPcl	38-CP3-1-BB-LB-Indian-Sgrama-Sgrod-Yc	Little Bluestem	Schizachyrium scoparium	24	1.5	8.3	Grass	N	X	CP3-1	BB-LB-Indian-Sgrama-Sgrod-Ycone-PPclover
38	CP3-1-BB-LB-Indian-Sgrama-Sgrod-Ycone-PPcl	38-CP3-1-BB-LB-Indian-Sgrama-Sgrod-Yc	Indiangrass	Sorghastrum nutans	8	0.5	2.3	Grass	N	X	CP3-1	BB-LB-Indian-Sgrama-Sgrod-Ycone-PPclover
38	CP3-1-BB-LB-Indian-Sgrama-Sgrod-Ycone-PPcl	38-CP3-1-BB-LB-Indian-Sgrama-Sgrod-Yc	Sideoats Grama	Bouteloua curtipendula	24	1.5	4.4	Grass	N	X	CP3-1	BB-LB-Indian-Sgrama-Sgrod-Ycone-PPclover
38	CP3-1-BB-LB-Indian-Sgrama-Sgrod-Ycone-PPcl	38-CP3-1-BB-LB-Indian-Sgrama-Sgrod-Yc	Stiff Goldenrod	Oligoneuron rigidum	1	0.0625	1.1	Forb	N	X	CP3-1	BB-LB-Indian-Sgrama-Sgrod-Ycone-PPclover
38	CP3-1-BB-LB-Indian-Sgrama-Sgrod-Ycone-PPcl	38-CP3-1-BB-LB-Indian-Sgrama-Sgrod-Yc	Yellow Coneflower	Ratibida pinnata	1	0.0625	0.7	Forb	N	X	CP3-1	BB-LB-Indian-Sgrama-Sgrod-Ycone-PPclover
38	CP3-1-BB-LB-Indian-Sgrama-Sgrod-Ycone-PPcl	38-CP3-1-BB-LB-Indian-Sgrama-Sgrod-Yc	Purple Prairie Clover	Dalea purpurea	2	0.125	1	Legume	N	X	CP3-1	BB-LB-Indian-Sgrama-Sgrod-Ycone-PPclover
38	CP3-2-BB-Switch-LB-Indian-Cwrye-Ycone-Besu	38-CP3-2-BB-Switch-LB-Indian-Cwrye-Yc	Big Bluestem	Andropogon gerardii	8	0.5	1.9	Grass	N	X	CP3-2	BB-Switch-LB-Indian-Cwrye-Ycone-Besus-Berg
38	CP3-2-BB-Switch-LB-Indian-Cwrye-Ycone-Besu	38-CP3-2-BB-Switch-LB-Indian-Cwrye-Yc	Switchgrass	Panicum virgatum	8	0.5	4.5	Grass	N	X	CP3-2	BB-Switch-LB-Indian-Cwrye-Ycone-Besus-Berg
38	CP3-2-BB-Switch-LB-Indian-Cwrye-Ycone-Besu	38-CP3-2-BB-Switch-LB-Indian-Cwrye-Yc	Little Bluestem	Schizachyrium scoparium	20	1.25	6.9	Grass	N	X	CP3-2	BB-Switch-LB-Indian-Cwrye-Ycone-Besus-Berg
38	CP3-2-BB-Switch-LB-Indian-Cwrye-Ycone-Besu	38-CP3-2-BB-Switch-LB-Indian-Cwrye-Yc	Indiangrass	Sorghastrum nutans	16	1	4.5	Grass	N	X	CP3-2	BB-Switch-LB-Indian-Cwrye-Ycone-Besus-Berg
38	CP3-2-BB-Switch-LB-Indian-Cwrye-Ycone-Besu	38-CP3-2-BB-Switch-LB-Indian-Cwrye-Yc	Canada Wildrye	Elymus canadensis	16	1	2	Grass	N	X	CP3-2	BB-Switch-LB-Indian-Cwrye-Ycone-Besus-Berg
38	CP3-2-BB-Switch-LB-Indian-Cwrye-Ycone-Besu	38-CP3-2-BB-Switch-LB-Indian-Cwrye-Yc	Yellow Coneflower	Ratibida pinnata	1	0.0625	0.7	Forb	N	X	CP3-2	BB-Switch-LB-Indian-Cwrye-Ycone-Besus-Berg
38	CP3-2-BB-Switch-LB-Indian-Cwrye-Ycone-Besu	38-CP3-2-BB-Switch-LB-Indian-Cwrye-Yc	Black-Eyed Susan	Rudbeckia hirta	1	0.0625	2.3	Forb	N	X	CP3-2	BB-Switch-LB-Indian-Cwrye-Ycone-Besus-Berg
38	CP3-2-BB-Switch-LB-Indian-Cwrye-Ycone-Besu	38-CP3-2-BB-Switch-LB-Indian-Cwrye-Yc	Bergamot	Monarda fistulosa	1	0.0625	1.8	Forb	N	X	CP3-2	BB-Switch-LB-Indian-Cwrye-Ycone-Besus-Berg
38	CP3-3-BB-LB-Indian-Switch-Sgrama-PPclover-B	38-CP3-3-BB-LB-Indian-Switch-Sgrama-PP	Big Bluestem	Andropogon gerardii	8	0.5	1.9	Grass	N	X	CP3-3	BB-LB-Indian-Switch-Sgrama-PPclover-Berg-Ycone
38	CP3-3-BB-LB-Indian-Switch-Sgrama-PPclover-B	38-CP3-3-BB-LB-Indian-Switch-Sgrama-PP	Little Bluestem	Schizachyrium scoparium	24	1.5	8.3	Grass	N	X	CP3-3	BB-LB-Indian-Switch-Sgrama-PPclover-Berg-Ycone
38	CP3-3-BB-LB-Indian-Switch-Sgrama-PPclover-B	38-CP3-3-BB-LB-Indian-Switch-Sgrama-PP	Indiangrass	Sorghastrum nutans	8	0.5	2.3	Grass	N	X	CP3-3	BB-LB-Indian-Switch-Sgrama-PPclover-Berg-Ycone
38	CP3-3-BB-LB-Indian-Switch-Sgrama-PPclover-B	38-CP3-3-BB-LB-Indian-Switch-Sgrama-PP	Switchgrass	Panicum virgatum	8	0.5	4.5	Grass	N	X	CP3-3	BB-LB-Indian-Switch-Sgrama-PPclover-Berg-Ycone
38	CP3-3-BB-LB-Indian-Switch-Sgrama-PPclover-B	38-CP3-3-BB-LB-Indian-Switch-Sgrama-PP	Sideoats Grama	Bouteloua curtipendula	16	1	3	Grass	N	X	CP3-3	BB-LB-Indian-Switch-Sgrama-PPclover-Berg-Ycone
38	CP3-3-BB-LB-Indian-Switch-Sgrama-PPclover-B	38-CP3-3-BB-LB-Indian-Switch-Sgrama-PP	Purple Prairie Clover	Dalea purpurea	2	0.125	1	Legume	N	X	CP3-3	BB-LB-Indian-Switch-Sgrama-PPclover-Berg-Ycone
38	CP3-3-BB-LB-Indian-Switch-Sgrama-PPclover-B	38-CP3-3-BB-LB-Indian-Switch-Sgrama-PP	Bergamot	Monarda fistulosa	1	0.0625	1.8	Forb	N	X	CP3-3	BB-LB-Indian-Switch-Sgrama-PPclover-Berg-Ycone
38	CP3-3-BB-LB-Indian-Switch-Sgrama-PPclover-B	38-CP3-3-BB-LB-Indian-Switch-Sgrama-PP	Yellow Coneflower	Ratibida pinnata	1	0.0625	0.7	Forb	N	X	CP3-3	BB-LB-Indian-Switch-Sgrama-PPclover-Berg-Ycone
38	CP3-4-Switch-Pcord-BB-Indian-Cwrye-Ciron-Cu	38-CP3-4-Switch-Pcord-BB-Indian-Cwrye-C	Switchgrass	Panicum virgatum	16	1	9	Grass	N	X	CP3-4	Switch-Pcord-BB-Indian-Cwrye-Ciron-Cup-Bvervain
38	CP3-4-Switch-Pcord-BB-Indian-Cwrye-Ciron-Cu	38-CP3-4-Switch-Pcord-BB-Indian-Cwrye-C	Prairie Cordgrass	Spartina pectinata	8	0.5	1.3	Grass	N		CP3-4	Switch-Pcord-BB-Indian-Cwrye-Ciron-Cup-Bvervain
38	CP3-4-Switch-Pcord-BB-Indian-Cwrye-Ciron-Cu	38-CP3-4-Switch-Pcord-BB-Indian-Cwrye-C	Big Bluestem	Andropogon gerardii	16	1	3.8	Grass	N	X	CP3-4	Switch-Pcord-BB-Indian-Cwrye-Ciron-Cup-Bvervain
38	CP3-4-Switch-Pcord-BB-Indian-Cwrye-Ciron-Cu	38-CP3-4-Switch-Pcord-BB-Indian-Cwrye-C	Indiangrass	Sorghastrum nutans	16	1	4.5	Grass	N	X	CP3-4	Switch-Pcord-BB-Indian-Cwrye-Ciron-Cup-Bvervain
38	CP3-4-Switch-Pcord-BB-Indian-Cwrye-Ciron-Cu	38-CP3-4-Switch-Pcord-BB-Indian-Cwrye-C	Canada Wildrye	Elymus canadensis	16	1	2	Grass	N	X	CP3-4	Switch-Pcord-BB-Indian-Cwrye-Ciron-Cup-Bvervain
38	CP3-4-Switch-Pcord-BB-Indian-Cwrye-Ciron-Cu	38-CP3-4-Switch-Pcord-BB-Indian-Cwrye-C	Common Ironweed	Vernonia fasciculata	1	0.0625	0.5	Forb	N	X	CP3-4	Switch-Pcord-BB-Indian-Cwrye-Ciron-Cup-Bvervain
38	CP3-4-Switch-Pcord-BB-Indian-Cwrye-Ciron-Cu	38-CP3-4-Switch-Pcord-BB-Indian-Cwrye-C	Cupplant	Silphium perfoliatum	2	0.125	0.1	Forb	N	X	CP3-4	Switch-Pcord-BB-Indian-Cwrye-Ciron-Cup-Bvervain
38	CP3-4-Switch-Pcord-BB-Indian-Cwrye-Ciron-Cu	38-CP3-4-Switch-Pcord-BB-Indian-Cwrye-C	Blue Vervain	Verbena hastata	1	0.0625	2.2	Forb	N	X	CP3-4	Switch-Pcord-BB-Indian-Cwrye-Ciron-Cup-Bvervain
38	CP3-5-Switch-Pcord-BB-Cwrye-Berg-Ycone-NEA	38-CP3-5-Switch-Pcord-BB-Cwrye-Berg-Yc	Switchgrass	Panicum virgatum	32	2	17.9	Grass	N	X	CP3-5	Switch-Pcord-BB-Cwrye-Berg-Ycone-NEaster
38	CP3-5-Switch-Pcord-BB-Cwrye-Berg-Ycone-NEA	38-CP3-5-Switch-Pcord-BB-Cwrye-Berg-Yc	Prairie Cordgrass	Spartina pectinata	4	0.25	0.7	Grass	N		CP3-5	Switch-Pcord-BB-Cwrye-Berg-Ycone-NEaster
38	CP3-5-Switch-Pcord-BB-Cwrye-Berg-Ycone-NEA	38-CP3-5-Switch-Pcord-BB-Cwrye-Berg-Yc	Big Bluestem	Andropogon gerardii	16	1	3.8	Grass	N	X	CP3-5	Switch-Pcord-BB-Cwrye-Berg-Ycone-NEaster
38	CP3-5-Switch-Pcord-BB-Cwrye-Berg-Ycone-NEA	38-CP3-5-Switch-Pcord-BB-Cwrye-Berg-Yc	Canada Wildrye	Elymus canadensis	16	1	2	Grass	N	X	CP3-5	Switch-Pcord-BB-Cwrye-Berg-Ycone-NEaster
38	CP3-5-Switch-Pcord-BB-Cwrye-Berg-Ycone-NEA	38-CP3-5-Switch-Pcord-BB-Cwrye-Berg-Yc	Monarda fistulosa	Monarda fistulosa	1	0.0625	1.8	Forb	N	X	CP3-5	Switch-Pcord-BB-Cwrye-Berg-Ycone-NEaster
38	CP3-5-Switch-Pcord-BB-Cwrye-Berg-Ycone-NEA	38-CP3-5-Switch-Pcord-BB-Cwrye-Berg-Yc	Yellow Coneflower	Ratibida pinnata	1	0.0625	0.7	Forb	N	X	CP3-5	Switch-Pcord-BB-Cwrye-Berg-Ycone-NEaster
38	CP3-5-Switch-Pcord-BB-Cwrye-Berg-Ycone-NEA	38-CP3-5-Switch-Pcord-BB-Cwrye-Berg-Yc	New England Aster	Symphyotrichum novae-angliae	1	0.0625	1.7	Forb	N	X	CP3-5	Switch-Pcord-BB-Cwrye-Berg-Ycone-NEaster

STD	Mix #	std-mix	Common Name	Scientific Name	PLS (oz./A)	PLS (lbs./A)	Seeds/Square Foot	Type	Intro / Native	Poll. (Y/N)	MIXDescrip	Mix No.	MR
	0												

STD	Mix #	std-mix	Common Name	Scientific Name	PLS (oz./A)	PLS (lbs./A)	Seeds/Square Foot	Type	Intro / Native	Poll. (Y/N)	Mix No.	MR	Mix Components
38	CP3-1-BB-LB-Indian-Sgrama-Sgrod-Ycone-PPcl	38-CP3-1-BB-LB-Indian-Sgrama-Sgrod-Yc	Big Bluestem	Andropogon gerardii	8	0.5	1.9	Grass	N	X	CP3-1		BB-LB-Indian-Sgrama-Sgrod-Ycone-PPclover
38	CP3-1-BB-LB-Indian-Sgrama-Sgrod-Ycone-PPcl	38-CP3-1-BB-LB-Indian-Sgrama-Sgrod-Yc	Indiangrass	Sorghastrum nutans	8	0.5	2.3	Grass	N	X	CP3-1		BB-LB-Indian-Sgrama-Sgrod-Ycone-PPclover
38	CP3-1-BB-LB-Indian-Sgrama-Sgrod-Ycone-PPcl	38-CP3-1-BB-LB-Indian-Sgrama-Sgrod-Yc	Little Bluestem	Schizachyrium scoparium	24	1.5	8.3	Grass	N	X	CP3-1		BB-LB-Indian-Sgrama-Sgrod-Ycone-PPclover
38	CP3-1-BB-LB-Indian-Sgrama-Sgrod-Ycone-PPcl	38-CP3-1-BB-LB-Indian-Sgrama-Sgrod-Yc	Purple Prairie Clover	Dalea purpurea	2	0.125	1	Legume	N	X	CP3-1		BB-LB-Indian-Sgrama-Sgrod-Ycone-PPclover
38	CP3-1-BB-LB-Indian-Sgrama-Sgrod-Ycone-PPcl	38-CP3-1-BB-LB-Indian-Sgrama-Sgrod-Yc	Sideoats Grama	Bouteloua curtipendula	24	1.5	4.4	Grass	N	X	CP3-1		BB-LB-Indian-Sgrama-Sgrod-Ycone-PPclover
38	CP3-1-BB-LB-Indian-Sgrama-Sgrod-Ycone-PPcl	38-CP3-1-BB-LB-Indian-Sgrama-Sgrod-Yc	Stiff Goldenrod	Oligoneuron rigidum	1	0.0625	1.1	Forb	N	X	CP3-1		BB-LB-Indian-Sgrama-Sgrod-Ycone-PPclover
38	CP3-1-BB-LB-Indian-Sgrama-Sgrod-Ycone-PPcl	38-CP3-1-BB-LB-Indian-Sgrama-Sgrod-Yc	Yellow Coneflower	Ratibida pinnata	1	0.0625	0.7	Forb	N	X	CP3-1		BB-LB-Indian-Sgrama-Sgrod-Ycone-PPclover

Appendix 7E
Draft SWPPPs for V2F and NL27 Projects