



Northern Natural Gas Company
P.O. Box 3330
Omaha NE 68103-0330
402 398-7200

November 3, 2025

Via eFiling

Ms. Debbie-Anne Reese, Secretary
Federal Energy Regulatory Commission
888 First Street, N.E.
Washington, D.C. 20426

Re: Northern Natural Gas Company
Northern Lights 2025
Docket No. CP24-60-000
Bi-weekly Status Report No. 18

Dear Ms. Reese:

Pursuant to Condition 8 of the Order Issuing Certificate and Approving Abandonment issued by the Federal Energy Regulatory Commission February 19, 2025, Northern Natural Gas hereby submits for filing in the above-referenced docket its biweekly environmental inspector report for the period ending October 26, 2025.

Any questions regarding the filing should be directed at the undersigned at (402) 398-7138.

Respectfully submitted,

/s/ Donna Martens

Donna Martens
Senior Regulatory Analyst

Northern Natural Gas Company
Northern Lights 2025 (CP24-60-000)
Biweekly Status Report No. 18
Period Ending October 26, 2025

PROJECT DESCRIPTION

Northern Natural Gas (Northern) will construct and operate the Project, which will consist of (1) a 3.00-mile extension of its 36-inch-diameter Lake Mills to Albert Lea E-line; (2) a 2.42-mile extension of its 30-inch-diameter Elk River 3rd branch line; (3) a non-contiguous 1.90-mile extension of its 30-inch-diameter Farmington to Hugo C-line¹; (4) a 1.28-mile extension of its 8-inch-diameter Tomah branch line loop; (5) minor modifications to its existing La Crescent compressor station; and (6) aboveground facilities including a launcher, receiver and tie-in valve settings. All Project components are located in various counties in Minnesota and Wisconsin.

FEDERAL AUTHORIZATION STATUS

Northern has received all federal and state permits required under federal law for the Project.

Lake Mills to Albert Lea E-line

Northern will construct and operate an approximately 3.00-mile extension of its 36-inch-diameter MNM80105 Lake Mills to Albert Lea E-line in Freeborn County, Minnesota. Northern will remove the existing aboveground valve setting located in Section 16, Township 101 North, Range 22 West (Section 16, T101N, R22W), Freeborn County, Minnesota. Northern will construct and operate an aboveground valve setting at the terminus of the new extension on the north side of 165th Street in Section 33, T102N, R22W, Freeborn County, Minnesota.

Environmental Training

One contractor will construct the Lake Mills to Albert Lea E-line and associated aboveground facilities. The environmental training totals listed below reflect all training conducted to date for this component.

On-site Contractor: K & K, Inc. (K&K)

Overall Construction Start Date: Commenced April 21, 2025

Environmental Training Conducted: This reporting period: 0 Total to date: 40

Construction Status: K&K completed disposal of hydrostatic test water to the City of Albert Lea wastewater treatment facility. K&K continued grading subsoil north of 154th Street. K&K commenced topsoil restoration north of 154th Street. K&K continued removal of construction debris. Hodgman Drainage Company, Inc. (Hodgman), subcontractor for K&K, continued drain tile repairs between 140th Street and 154th Street. Hodgman completed drain tile repairs between 154th Street and 165th Street. K&K completed cleaning and drying the E-line. K&K completed removal of the tie-over valve setting north of County Road 9/135th Street². K&K completed grading and decompaction of subsoil north of 140th Street. K&K completed topsoil

¹ The total pipeline length of the Farmington to Hugo C-line extension was reduced from 1.91 miles to 1.90 miles as described in Northern's implementation plan and response to the conditions of the order (condition 5) filed with the Federal Energy Regulatory Commission (FERC) March 6, 2025.

² County Road 9 is also referred to as 135th Street.

restoration between 140th Street and 154th Street. TVT, LLC., (TVT), subcontractor for K&K, completed the hot tap for the 30-inch-diameter D-line north of 165th Street. K&K completed mechanical excavation for the tie-in north of 165th Street. Kodiak Field Services, LLC. (Kodiak), subcontractor for K&K, completed removal of the lake tank north of 165th Street. K&K completed mechanical excavation of the trench north of County Road 9/135th Street. K&K completed the tie-over tie-in north of 165th Street. K&K commenced the final tie-in north of County Road 9/135th Street.

Construction Modifications:

No construction modifications occurred during this reporting period.

Stream Crossings and Environmentally Sensitive Areas

No stream crossings or other environmentally sensitive areas were impacted during this reporting period.

Rain Events

No rain event of 0.50 inch or greater occurred during this reporting period. To date, the project has received 35.51 inches of precipitation.

Lake Mills to Albert Lea E-line Construction Progress			
Activity	Start Date	Completed	Notes
Survey	4/16/2025	99%	Survey is ongoing
Clearing	N/A	N/A	N/A
Grading	4/21/2025	5/30/2025	Grading is complete
Stringing	5/5/2025	5/19/2025	Stringing is complete
Welding	5/16/2025	99%	Welding is ongoing
Ditching	6/6/2025	99%	Ditching is ongoing
Lower-in	6/6/2025	99%	Lowering-in is ongoing
Backfill	6/6/2025	97%	Backfill is ongoing
Topsoil Restoration	9/27/2025	57%	K&K continued topsoil restoration
Removal of existing E-line tie-over valve setting	5/15/2025	10/15/2025	K&K completed removal of tie-over valve setting
New Lake Mills tie-in valve setting	6/15/2025	90%	K&K completed lowering in and tie-in
Clean-up			
Seeding	6/17/2025	20%	Seeding is ongoing
*Completed totals include either percentage completed or date all completed. All totals are approximate.			

Two-Week Projection

1. Complete sandblasting and coating
2. Complete trenching
3. Complete lowering-in
4. Complete backfill
5. Complete drain tile repairs
6. Continue restoration
7. Complete final tie-in and place in-service

Lake Mills to Albert Lea E-line Related Spill

No spills occurred during this reporting period.

Elk River 3rd Branch Line

Northern will construct and operate an approximately 2.42-mile extension of its 30-inch-diameter MNB87703 Elk River 3rd branch line in Washington County, Minnesota. The new extension will be tied in below ground approximately 260 feet north of the current terminus in Section 36, T32N, R21W, Washington County, Minnesota; the existing aboveground valve setting located on the east side of July Avenue in Section 36, T32N, R21W, Washington County, Minnesota, will be removed. The downstream tie-in to both Northern's 20-inch-diameter MNB87701 Elk River branch line and 20-inch-diameter MNB87702 Elk River loop will be completed with a new valve setting at the west side of Henna Avenue North in Section 3, T31N, R21W, Washington County, Minnesota.

Environmental Training

One contractor will construct the Elk River 3rd branch line extension. The environmental training totals listed below reflect all training conducted to date for this component.

On-site Contractor: Otis Minnesota Services, LLC (Otis)

Overall Construction Start Date: Commenced April 24, 2025

Environmental Training Conducted³: This reporting period: 0 Total to date: 90

Construction Status:

Otis completed stringing and bending on the Elk River 3rd branch line extension. Otis continued welding and coating the line pipe. Mears Group Inc. (Mears), a third-party horizontal directional drill (HDD) sub-contractor for Otis, commenced demobilization, removal of soundwalls and right of way (ROW) cleanup. Otis completed all ditching on the Elk River 3rd branch line extension project. Otis completed lowering-in from milepost (MP) 1.30 to MP 1.44 and from MP 2.25 to MP 2.35. Otis completed trench backfill from MP 1.30 to MP 1.44 and from MP 2.25 to MP 2.35. Otis completed the open-cut wetland crossing of ERT-15 from MP 1.36 to MP 1.38. Due to the failure of HDD P4-5 pullback activities, Northern will re-install the section of pipe temporarily removed at MP 1.0 to complete HDD P4-1 and return flow through the existing pipe. Northern plans to return in 2026 to complete HDD P4-5 and complete project installation activities.

Existing Elk River tie-over valve setting at MP 1.0

Otis completed welding, pressure testing, and drying branch line pipe to return the existing pipeline back to service.

New Elk River tie-in valve setting

Otis completed hot taps, bolt up and backfill around hot taps. Otis installed 20-inch-diameter fabrication piping and aboveground piping. Otis completed installation of support piers, bull pens, backfill around valve setting and bolt up of 20-inch-diameter fabrication piping. Otis completed hydrostatic testing and drying of 20-inch-diameter fabrication piping.

Construction Modifications: There were no construction modifications during this reporting period.

³ The same contractor and crews are constructing the Elk River 3rd branch line and Farmington-to-Hugo C-Line extension projects. The numbers reflect the training provided to the one contractor and any subcontractors; however, are double counted between the two projects.

Stream Crossings and Environmentally Sensitive Areas

Open cut-crossing of wetland ERT-15 was completed and restored.

Rain Events

No rain event of 0.50 inch or greater occurred during this reporting period. To date the project has received 23.45 inches of precipitation.

Elk River 3rd Branch Line Construction Progress			
Activity	Start Date	Completed	Notes
Survey	4/10/2025	5/2/2025	Primary survey is complete
Clearing	4/28/2025	5/10/2025	Clearing is complete
Grading	5/6/2025	6/7/2025	Grading is complete
Stringing	5/15/2025	6/21/2025	Stringing is complete
Welding	5/16/2025	80%	Welding is ongoing
Ditching	7/9/2025	10/23/2025	Ditching is complete
HDD ERT P4-1	9/6/2025	9/24/2025	North Country completed the HDD
HDD ERT P4-2	7/15/2025	8/15/2025	Mears completed the HDD
HDD ERT P4-3	5/22/2025	6/14/2025	Mears completed the HDD
HDD ERT P4-4	9/6/2025	9/12/2025	North Country completed the HDD
HDD ERT P4-5	6/20/2025	0%	Mears extracted the HDD pipe 10/7/2025
HDD ERT P4-6	6/20/2025	6/25/2025	Mears completed the HDD
HDD ERT P4-7	7/01/2025	7/3/2025	Mears completed the HDD
Lower-in	7/9/2025	90%	Otis continued lowering-in
Backfill	7/9/2025	90%	Otis continued backfill
Topsoil Restoration	7/28/2025	30%	Otis continued restoration
Existing Elk River tie-over valve setting to be removed	10/12/2025	20%	Otis commenced removal. Otis plans to reinstall the section of pipe removed to facilitate HDD P4-1 activities.
New Elk River tie-in valve setting	10/12/2025	70%	Otis commenced construction
Clean-up	10/1/2025	33%	Otis commenced cleanup
Seeding	10/1/2025	25%	Otis commenced seeding
*Completed totals include either percentage completed or date all completed. All totals are approximate.			

Two-Week Projection

1. Continue welding, sandblasting, and coating
2. Reinstall pipe at MP 1.0 removed to facilitate HDD P4-1 activities
3. Complete lowering-in and backfill
4. Complete restoration activities for winter.
5. Remediate failed HDD P4-5 bore hole and subsidence areas.

Elk River 3rd Branch Line Related Spill

No spills occurred during this reporting period.

Farmington to Hugo C-Line Extension

Northern will construct and operate a non-contiguous 1.90-mile extension of its 30-inch-diameter Farmington to Hugo C-line in Washington County, Minnesota. The new extension will be tied in below ground within Northern's existing Hugo compressor station in Section 6, T31N, R20W, Washington County, Minnesota. The downstream tie-in to Northern's 24-inch-diameter MNM86501 B-line will be

completed at a new below-ground⁴ valve setting in Section 7, T31N, R20W, Washington County, Minnesota.

Environmental Training

One contractor will construct the Farmington to Hugo C-line extension and associated aboveground facilities. The environmental training totals listed below reflect all training conducted to date for this component.

On-site Contractor: Otis Minnesota Services, LLC (Otis)

Overall Construction Start Date: May 3, 2025

Environmental Training Conducted³: This reporting period: 0 Total to date: 90

Construction Status:

Otis completed backfill within the Hugo compressor station. Otis completed stringing and welding line pipe. Otis continued backfill. Otis completed ditching and lowering-in. Otis continued restoration of the topsoil. Otis completed the open-cut crossing and restoration of wetland FRM-W12. Otis completed hydrostatic testing. Otis continued temporary seeding. Otis prepared for tie-in activities scheduled for October 27, 2025.

Construction Modifications: There were no construction modifications during this reporting period.

Stream Crossings and Environmentally Sensitive Areas

Wetland FRM-W12 was crossed by open cut methods and restored during this reporting period.

Rain Events

No rain event of 0.50 inch or greater occurred during this reporting period. To date the project has received 24.12 inches of precipitation.

Farmington to Hugo C-Line Construction Progress			
Activity	Start Date	Completed	Notes
Survey	4/26/2025	5/5/2025	Survey is complete
Clearing	5/3/2025	5/9/2025	Clearing is complete
Grading	6/9/2025	8/15/2025	Grading is complete
Stringing	6/18/2025	10/13/2025	Stringing is complete
Welding	6/20/2025	99%	Welding is ongoing
Ditching	7/24/2025	10/13/2025	Ditching is complete
HDD FAR P4-1	8/19/2025	9/17/2025	North Country completed HDD
HDD FAR P4-2	8/26/2025	9/26/2025	North Country completed HDD
Lower-in	7/24/2025	10/13/2025	Otis continued lowering-in
Backfill	7/28/2025	95%	Otis continued backfill
Topsoil Restoration	7/11/2025	75%	Otis continued topsoil restoration
Hugo compressor station launcher and valves	5/22/2025	99%	Otis completed backfill in the Hugo compressor station
Farmington tie-over valve setting	6/17/2025	90%	Otis completed testing and prepared for tie-in activities.
Clean-up	8/1/2025	75%	Otis commenced clean up

⁴ As described in Northern's implementation plan and response to the conditions of the order (condition 5) filed with FERC March 6, 2025, the new downstream valve setting for the Farmington to Hugo C-line extension will be below ground in accordance with the landowner's request rather than aboveground as originally proposed.

Seeding	8/2/2025	50%	Otis commenced temporary seed
*Completed totals include either percentage completed or date all completed. All totals are approximate.			

Two-Week Projection

1. Commence painting in the Hugo compressor station
2. Complete tie-in activities
3. Continue temporary seeding
4. Continue project clean-up
5. Complete pipeline backfill
6. Continue restoration
7. Request project ready for service approval and place in service upon approval

Farmington to Hugo C-line Related Spill Totals

No spills occurred during this reporting period.

Tomah Branch Line Loop

Northern constructed and is operating an approximately 1.28-mile extension of its 8-inch-diameter WIB11902 Tomah branch line loop in Monroe County, Wisconsin. The new extension was tied in below ground to the current terminus of the Tomah branch line loop in Section 1, T17N, R4W, Monroe County, Wisconsin, and the existing tie-in valve setting and receiver facility at this location were removed. The down-stream tie-in to Northern's 6-inch-diameter WIB11901 branch line is located in Section 6, T17N, R3W, Monroe County, Wisconsin.

Environmental Training

One contractor constructed the Tomah branch line loop.

On-site Contractor: K & K, Inc. (K&K)

Overall Construction Start Date: Commenced May 12, 2025

Construction Status: K&K completed topsoil restoration. K&K completed harley raking and seeding the ROW. K&K completed cleaning up construction debris from the staging area. K&K completed demobilization of equipment from the staging area. K&K completed installation of erosion control blankets (ECBs) in roadside ditches where road approaches were removed.

FERC granted approval to place the Tomah branch line loop extension into service on September 24, 2025; the pipeline extension was placed in service September 30, 2025.

Construction Modifications: There were no construction modifications during this reporting period.

Stream Crossings and Environmentally Sensitive Areas

No stream crossings or other environmentally sensitive areas were impacted during this reporting period.

Rain Events

One rain event of 0.50 inch or greater occurred during this reporting period. One rain event of 1.20 inches occurred October 15, 2025. To date, the project has received 31.40 inches of precipitation.

Tomah Branch Line Loop Construction Progress			
Activity	Start Date	Completed	Notes
Survey	4/22/2025	98%	Survey is ongoing
Clearing	5/14/2025	5/23/2025	Clearing is complete
Grading	5/16/2025	8/2/2025	Grading is complete
Stringing	6/2/2025	7/9/2025	Stringing is complete
Welding	6/3/2025	8/23/2025	Welding is complete
Ditching	7/9/2025	8/4/2025	Ditching is complete
HDD TBL P4-1	7/15/2025	7/16/2025	P4-1 is complete
HDD TBL P4-2	7/7/2025	7/12/2025	P4-2 is complete
Lower-in	7/10/2025	8/4/2025	Lowering-in is complete
Backfill	7/14/2025	8/30/2025	Backfill is complete
Topsoil Restoration	8/9/2025	10/20/2025	Restoration is complete
Remove Tomah branch line loop receiver facility	6/11/2025	8/23/2025	K&K completed removal at receiver site
Remove Tomah Tie-over valve setting	6/12/2025	8/23/2025	K&K completed removal of valve setting
Clean-up	8/9/2025	10/20/2025	Clean-up is complete
Seeding	8/14/2025	10/20/2025	Seeding is complete
*Completed totals include either percentage completed or date all completed. All totals are approximate.			

La Crescent Compressor Station

Northern completed minor aboveground facility modifications within its existing La Crescent compressor station facility. The facility modifications consisted of the replacement of the current blind flanges with compressor cylinder end caps.

Archrock Services LP (Archrock) made the modifications at the La Crescent compressor station.

Construction Status: Construction was completed August 27, 2025. FERC granted Northern's request to place the facility in service September 15, 2025. The modifications were placed in service September 26, 2025.

La Crescent Compressor Station Modifications Construction Progress			
Activity	Start Date	Completed	Notes
Compressor modifications	7/22/2025	8/27/2025	Compressor modifications are complete
*Completed totals include either percentage completed or date all completed. All totals are approximate.			

PROJECT-WIDE AGENCY COMMUNICATIONS AND SITE VISITS

On October 21, 2025, Clay Roeseler, Tetra Tech third-party inspector for FERC, conducted an environmental compliance inspection of the Elk River 3rd branch line, Farmington-to-Hugo C-line extension, and Lake Mills-to-Albert Lea E-line extension projects.

On October 23, 2025, Northern requested approval to use additional extra temporary workspace on the Elk River 3rd branch line to remediate subsidence areas that occurred during HDD P4-5 activities. The variance request included a grouting and remediation plan, which was approved by the Minnesota Department of Natural Resources (MN DNR). The MN DNR has since approved a revised plan, which added a statement on periodic monitoring following restoration; the specific seed mix requested by the landowner also was added to the plan (see attached). FERC approved the variance request October 28, 2025.

PROJECT-WIDE LANDOWNER CONCERNS

No project-wide landowner concerns were raised during this reporting period.

PROJECT-WIDE NON-COMPLIANCE CONCERNS

No project-wide non-compliance concerns were raised during this reporting period.

PHOTOS

Lake Mills to Albert Lea E-line



Facing northwest at milepost (MP) 34.2, K&K loading out hydrostatic test water for disposal



Facing east at MP 32.27, repaired drain tile



Facing south at MP 32.92, K&K grading subsoil south of 154th Street



Facing northwest at MP 32.93, K&K removing construction debris (broken mat) from temporary workspace



Facing north at MP 31.2, valve setting removal north of County Road 9/135th Street



Facing west at MP 31.2, dryers utilized to dry E-line



Facing north at MP 34.2, TVT performing D-line hot tap north of 165th Street



Facing south at MP 32.85, TVT decompacting subsoil north of 140th Street



Facing northwest at MP 32.6, K&K utilizing track hoe to pull topsoil



Facing southwest at MP 32.61, K&K restoring topsoil



Facing northwest at MP 34.2, Kodiak disassembled lake tank for removal



Facing northwest at MP 31.2, K&K mechanically excavating trench north of County Road 9/135th Street



Facing west at MP 34.2, K&K lowering-in tie-over fabrication for the tie-in north of 165th Street



Facing northeast at MP 34.2, K&K grinding a tie-over weld north of 165th Street



Facing northeast at MP 34.2, K&K making a tie-over weld north of 165th Street

Elk River 3rd Branch Line



Facing east near MP 1.34, backfill ongoing



Facing east near MP 2.36, ditching was completed



Facing west near MP 3.42, backfill and pier installation completed



Facing east sound wall removal ongoing for HDD P4-5



Facing east near MP 3.42, aboveground piping installed



Facing east near MP 1.0, welding pipe fabrication



Facing north near MP 1.0, ditching completed for tie-in section

Farmington-Hugo C-Line Extension



Facing south at MP 0.65, Otis continuing topsoil restoration



Facing north at MP 1.1, Otis seeding and mulching the ROW



Facing south at MP 1.05, Northern Clearing Inc. continuing mat removal



Facing north at MP 1.25, ROW restored up to a travel lane



Facing west at MP 0.1, Otis completing the hydrostatic test



Facing south at MP 1.6, ROW vegetated with temporary annual rye seed

Tomah Branch Line Loop



Facing east near MP 3.5, K&K restoring topsoil



Facing north near MP 3.5, K&K harley raking staging area



Facing east near MP 3.5, K&K installing ECBs



Facing north near MP 3.5, K&K seeding roadside ditch

Martens, Donna (Northern Natural Gas)

From: Scollan, Daniel (DNR) <daniel.scollan@state.mn.us>
Sent: Thursday, October 23, 2025 10:20 AM
To: Knabe, Susan; Noland, Nathan
Cc: Plucker, Terry (Northern Natural Gas)
Subject: RE: Northern Natural Gas - Subsidence in ERT-W34 (public water - 82020700)

Hello Susan,

I've reviewed the revised plan. It is approved. I will save the revised plan and this approval to the Permit file.

Best Regards,

Dan Scollan

East Metro Area Hydrologist – Ramsey and Washington Counties
Division of Ecological and Water Resources

Minnesota Department of Natural Resources

1200 Warner Road
St. Paul, MN 55106
Phone: 651-259-5732
Fax: 651-772-7977
Email: daniel.scollan@state.mn.us
mndnr.gov



From: Knabe, Susan <Susan.Knabe@stantec.com>
Sent: Wednesday, October 22, 2025 12:38 PM
To: Scollan, Daniel (DNR) <daniel.scollan@state.mn.us>; Noland, Nathan <Nathan.Noland@stantec.com>
Cc: Plucker, Terry (Northern Natural Gas) <terry.plucker@nngco.com>
Subject: RE: Northern Natural Gas - Subsidence in ERT-W34 (public water - 82020700)

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Hello Dan

Thank you again for your assistance with the restoration. On Friday, you contacted Nate and requested a monitoring commitment be added into the plan.

Sorry for the delay on providing the update back to you but please see the attached PDF.

There is a monitoring section added at the end.

We made another small edit to the previous plan which is to adjust the seed mix to the MNL Pollinator Mix – Wet Mesic in both the wetland and upland per a specific landowner request.

Please let me know if you have any questions or further comments.

Thank you
Sue

Susan Knabe

Senior Principal

Mobile: 920-655-7215
susan.knabe@stantec.com



From: Scollan, Daniel (DNR) <daniel.scollan@state.mn.us>
Sent: Tuesday, October 14, 2025 10:37 AM
To: Noland, Nathan <Nathan.Noland@stantec.com>
Cc: Knabe, Susan <Susan.Knabe@stantec.com>; Plucker, Terry (Northern Natural Gas) <terry.plucker@nngco.com>
Subject: RE: Northern Natural Gas - Subsidence in ERT-W34 (public water - 82020700)

Hello Nathan,

I've reviewed the plan, and have no questions or concerns. It is approved. I will save the plan and this approval to the Permit file.

Best Regards,

Dan Scollan

East Metro Area Hydrologist – Ramsey and Washington Counties
Division of Ecological and Water Resources

Minnesota Department of Natural Resources

1200 Warner Road
St. Paul, MN 55106
Phone: 651-259-5732
Fax: 651-772-7977
Email: daniel.scollan@state.mn.us
mndnr.gov



From: Noland, Nathan <Nathan.Noland@stantec.com>
Sent: Monday, October 13, 2025 5:03 PM
To: Scollan, Daniel (DNR) <daniel.scollan@state.mn.us>
Cc: Knabe, Susan <Susan.Knabe@stantec.com>; Plucker, Terry (Northern Natural Gas) <terry.plucker@nngco.com>
Subject: Northern Natural Gas - Subsidence in ERT-W34 (public water - 82020700)

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Dan, as we discussed on the phone on Friday, attached is the draft restoration plan for restoring the area in wetland ERT-W34 (Public Water unnamed wetland 82020700) where subsidence occurred during construction on the Northern Lights 2025 – Elk River 3rd Branch Line Project. The subsidence in this wetland formed on October 7, 2025, as the stuck horizontal directional drill (HDD) pipe was removed underneath the wetland (see attached figure for location of event). All HDD activities have been halted, and the HDD pipe has been removed from the ground. The subsidence has been stabilized and no additional features have formed within the wetland.

Attached is the draft restoration plan for your review and comments, or approval to allow Northern's contractor to restore the area as described within the draft plan. Once you have been able to review the plan we would like to setup a virtual meeting to discuss any comments and/or questions you might have, as necessary.

Thank you for your time and we will look for your feedback. If a meeting is needed to discuss questions or comments you have we would like to set that up this week in order to expedite initiation of restoration activities onsite.

Nathan

Environmental Scientist

Direct: (763) 479 4228

nathan.noland@stantec.com

Stantec

One Carlson Parkway North, Suite 100, Plymouth MN 55447-4440, United States



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Preliminary Grouting Plan for Elk River HDD P4-5 Near the Public Water Wetland

The current horizontal directional drill (HDD) crossing of Hardwood Creek, Corrie's Swamp and MN Public Water Wetland 82020700 was unsuccessful. Prior to the start of the HDD, Northern obtained a Minnesota Department of Natural Resources (MDNR) Public Waters Work Permit # 2025-0663 for the HDD crossing.

During the HDD drilling activities, several small subsidence features formed on the exit side of the drill (west side) and one subsidence feature formed near the entry side (east side). All HDD activities have been halted and the HDD pipe has been removed from the ground. The subsidence features have stabilized and no additional features have formed.

All subsidence areas are in an upland with the exception of one approximately 11-foot by 8-foot area in ERT-W34, which is MDNR public water wetland 82020700. Due to safety concerns, personnel have not been able to determine the depth of the subsidence. The subsidence in this wetland formed on October 7, 2025 as the stuck HDD pipe was removed. Below is a screenshot of the subsidence in the wetland area.



Northern has a two-step plan to stabilize and restore this area before resuming any construction and is asking for MDNR to review and approve the summary below.

1. Step one will be to stabilize the current HDD hole as the pipe has been removed. The onsite contractor will install approximately 400 feet of tremie pipe from both the entry and exit sides; they will use a high-viscosity drilling

mud with stabilizers to grout the HDD annular space and reduce future risk of subsidence. The contractor will complete the grouting in stages to ensure the hole is being filled – every 100 feet, they will pump in approximately 40 cubic yards of grout through the tremie line. Once that is filled, the tremie pipe will be pulled back another 100 feet and 40 more cubic yards of grout will be installed. This process will continue until they reach the HDD exit pit. The contractor will fill the HDD exit pit with compacted sand and approximately 12 inches of topsoil.

2. Once the HDD borehole is stabilized, Step 2 will address the surface subsidence restoration in the public water wetland. The onsite contractor will install an approximate 230-foot long by 16-foot wide timber mat road parallel to the subsidence to safely operate equipment to restore the area and minimize further wetland impacts. The contractor will next install sand in several-foot lifts that will be compacted to ensure a solid surface. The upper 18-inches will be backfilled with a combination of topsoil and peat moss (high organic matter content) from a certified vendor/clean fill. Northern will oversee the area with quick oats for winter stabilization and monitor the area next spring. Per the landowner request, Northern will oversee the entire disturbance area (wetland and upland) with the MNL Pollinator Mix – Wet Mesic.
3. Upland areas will be restored in a similar fashion with the exception of using only topsoil in the upper 18 inches and will be seeded with the MNL Pollinator Mix – Wet Mesic seed mix.

Monitoring

Northern will periodically monitor the restored areas, concurrent with their commitment to post-construction wetland revegetation monitoring that is required by the Federal Energy Regulatory Commission. If additional subsidence occurs after that date, Northern will remediate these areas as notified by landowners.