



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

October 17, 2024

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 Expansion
Docket No. CP24-60-000
Supplemental Comments to Environmental Assessment – Blanding's Turtle
Avoidance Plan

Dear Ms. Reese:

Northern Natural Gas (Northern) hereby submits for filing with the Federal Energy Regulatory Commission in the above-referenced docket supplemental information to Northern's comments filed October 15, 2024, in response to the Environmental Assessment (EA) issued September 13, 2024.¹ Specifically, Northern provides additional correspondence with the Minnesota Department of Natural Resources and the Blanding's Turtle Avoidance Plan and Construction Monitoring Protocol for the Farmington to Hugo C-line extension and the Elk River 3rd branch line extension; see attached.

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

Respectfully submitted,

/signed/ Donna Martens

Donna Martens
Senior Regulatory Analyst

cc: Parties of record

¹ Please note the October 15, 2024, filing inadvertently referred to the Northern Lights 2023 Expansion (Docket No. CP22-138-000) in the subject line instead of Northern Lights 2025. Northern apologizes for any inconvenience this may have caused.

Knabe, Susan

From: Knabe, Susan
Sent: Tuesday, October 15, 2024 4:29 PM
To: Collins, Melissa (DNR)
Subject: RE: Northern Natural Gas Pipeline - Kelley Farms/Keystone Woods

Great Melissa – thank you for letting me know!
I appreciate the acknowledgement.

Sue Knabe
Teams: 920-278-3220
Cell: 920-655-7215

Stantec



From: Collins, Melissa (DNR) <Melissa.Collins@state.mn.us>
Sent: Tuesday, October 15, 2024 3:15 PM
To: Knabe, Susan <Susan.Knabe@stantec.com>; Alemu, Tanya (She/Her/Hers) (DNR) <Tanya.Alemu@state.mn.us>
Cc: terry.plucker@nngco.com
Subject: RE: Northern Natural Gas Pipeline - Kelley Farms/Keystone Woods

Hi Sue,
I was able to receive your other email with the 25 MB file, so I think our Natural Heritage staff should have as well.

Thank you,

Melissa Collins

Regional Environmental Assessment Ecologist | Ecological and Water Resources
Pronouns: She/her/hers

Minnesota Department of Natural Resources

1200 Warner Road
St. Paul, MN 55106
Phone: 651-259-5755
Email: melissa.collins@state.mn.us
mndnr.gov



From: Knabe, Susan <Susan.Knabe@stantec.com>
Sent: Tuesday, October 15, 2024 3:12 PM

To: Alemu, Tanya (She/Her/Hers) (DNR) <Tanya.Alemu@state.mn.us>; Collins, Melissa (DNR) <Melissa.Collins@state.mn.us>
Cc: terry.plucker@nngco.com
Subject: RE: Northern Natural Gas Pipeline - Kelley Farms/Keystone Woods

Hello Tanya and Melissa

The updated version of the Blanding's Turtle Avoidance Plan and Construction Monitoring Protocol for the Elk River 3rd branch line and the Farmington to Hugo C-line (Keystone Woods WMA area) has been uploaded to the MDNR OneDrive this afternoon.

I also sent a copy via email back to Becky Horton but as the file is 25 MB, I am unsure if she will receive it.

This is the final report/document that I planned to upload to the MDNR website so please let me know if you have any questions or would like additional information/reports.

Thanks much
Sue

Sue Knabe
Teams: 920-278-3220
Cell: 920-655-7215

Stantec



From: Knabe, Susan
Sent: Tuesday, October 8, 2024 11:55 AM
To: 'Alemu, Tanya (She/Her/Hers) (DNR)' <Tanya.Alemu@state.mn.us>; 'Collins, Melissa (DNR)' <Melissa.Collins@state.mn.us>
Cc: terry.plucker@nngco.com
Subject: RE: Northern Natural Gas Pipeline - Kelley Farms/Keystone Woods

Hello Tanya and Melissa

Stantec uploaded its revised habitat assessment report for the Farmington to Hugo C-line to the OneDrive site that was previously sent. Below is an updated list of what is available for review.

This includes:

- Most recent cultural report with 100% survey coverage
- The initial MDNR NHI letter
- March 21, 2024 follow up letter from MDNR staff regarding the NHI review
- USFWS correspondence regarding completion of consultation for Farmington to Hugo
- USFWS D-Key for NLEB
- USFWS D-Key for other federally listed species
- USACE response to notification of wetland impacts from project
- Wetland Delineation Report
- Habitat Assessment Report

Note- we are still working on revising the following document but will upload them to this site and send you an email when available

Blanding's Turtle Construction Mitigation and Avoidance Plan

Thank you – if MDNR is able to acknowledge receipt of these documents and let us know when reviews are completed, that will assist us with filing consultation status on the FERC docket.

Please let me know if you have any questions.
Sue

Sue Knabe
Teams: 920-278-3220
Cell: 920-655-7215

Stantec



From: Knabe, Susan
Sent: Thursday, September 19, 2024 3:04 PM
To: Alemu, Tanya (She/Her/Hers) (DNR) <Tanya.Alemu@state.mn.us>
Cc: Collins, Melissa (DNR) <Melissa.Collins@state.mn.us>
Subject: RE: Northern Natural Gas Pipeline - Kelley Farms/Keystone Woods

Hi Tanya

I have uploaded the revised wetland delineation report for the Farmington to Hugo C-line to the OneDrive site that was previously sent.
We would like MDNR concurrence for your property as I believe it was mentioned you were now the LGU for the area south of 170th Street.

We are almost ready to submit the revised habitat assessment report and Blanding's turtle avoidance plan- they will be complete within the next week or two.

Please confirm receipt and let me know if any staff have any comments on the uploaded information to date.

Thank you
Sue

Sue Knabe
Teams: 920-278-3220
Cell: 920-655-7215

Stantec



From: Knabe, Susan
Sent: Thursday, August 29, 2024 2:20 PM
To: Alemu, Tanya (She/Her/Hers) (DNR) <Tanya.Alemu@state.mn.us>
Cc: Collins, Melissa (DNR) <Melissa.Collins@state.mn.us>
Subject: RE: Northern Natural Gas Pipeline - Kelley Farms/Keystone Woods

Hello Tanya

I just sent an invitation for you and Melissa to access a OneDrive Folder that has several reports, letters, emails consultations that we have completed to date for the Farmington to Hugo lateral.

This includes:

- Most recent cultural report with 100% survey coverage
- The initial MDNR NHI letter
- March 21, 2024 follow up letter from MDNR staff regarding the NHI review
- USFWS correspondence regarding completion of consultation for Farmington to Hugo
- USFWS D-Key for NLEB
- USFWS D-Key for other federally listed species
- USACE response to notification of wetland impacts from project

Note- we are still working on revising the following documents but will upload them to this site and send you an email when available

Wetland Delineation Report
Habitat Assessment Report
Blanding's Turtle Construction Mitigation and Avoidance Plan

Hopefully this will help with our continuing discussions regarding the Project. Please let me know if you have any questions about the attached or are looking for additional information!

Thanks
Sue

Sue Knabe
Teams: 920-278-3220
Cell: 920-655-7215

Stantec



From: Alemu, Tanya (She/Her/Hers) (DNR) <Tanya.Alemu@state.mn.us>
Sent: Wednesday, August 28, 2024 2:31 PM
To: Knabe, Susan <Susan.Knabe@stantec.com>
Cc: Collins, Melissa (DNR) <Melissa.Collins@state.mn.us>
Subject: RE: Northern Natural Gas Pipeline - Kelley Farms/Keystone Woods

Hello Susan,

Thank you for the follow up. YES, I would appreciate it if you could set up the OneDrive Folder for the reports to share with our staff.

Thanks again,
Tanya

Tanya Alemu
Realty Specialist | Division of Lands and Minerals (Central Region)

Minnesota Department of Natural Resources
1200 Warner Road
St. Paul, MN 55106
Phone: 651-259-5410

Email: Tanya.Alemu@state.mn.us
mndnr.gov



From: Knabe, Susan <Susan.Knabe@stantec.com>
Sent: Wednesday, August 28, 2024 1:08 PM
To: Alemu, Tanya (She/Her/Hers) (DNR) <Tanya.Alemu@state.mn.us>
Cc: Collins, Melissa (DNR) <Melissa.Collins@state.mn.us>
Subject: RE: Northern Natural Gas Pipeline - Kelley Farms/Keystone Woods

Hi Tanya

Just following up the email below to see if you had questions or if you wanted me to set up a OneDrive Folder to upload reports to share with MDNR Staff?

Thanks much
Sue

Sue Knabe
Teams: 920-278-3220
Cell: 920-655-7215

Stantec



From: Knabe, Susan
Sent: Friday, August 23, 2024 11:01 AM
To: Alemu, Tanya (She/Her/Hers) (DNR) <Tanya.Alemu@state.mn.us>
Cc: Collins, Melissa (DNR) <Melissa.Collins@state.mn.us>
Subject: RE: Northern Natural Gas Pipeline - Kelley Farms/Keystone Woods

Good morning Tanya and Melissa

Following up on our call with MDNR staff yesterday, we have attached shapefiles for the proposed temporary workspaces, the existing permanent easement, the delineated wetlands, and the proposed and existing pipeline centerlines. The shapefiles are separated out by type as that is how our GIS team likes to work with them but let me know if that doesn't work for you and we can combine them. We also provided a kmz for those that can't use shapefiles.

There was some discussion about FERC notifications and the mailing list – below is a screenshot of the MDNR staff that were included in the agency notification list to FERC. I know that Cynthia retired as she was our previous main POC – please let me know if you would like other staff added and we can send a revised list to FERC.

| | | | |
|------------------|--|-------------------------|--|
| Melissa Collins | | | MDNR - Threatened and Endangered Species |
| Haley Byron | | | MDNR - Threatened and Endangered Species |
| Cynthia Warzecha | | Energy Projects Planner | MDNR-Ecological and Water Resources Division |
| Tom Hovey | | Unit Supervisor | MDNR - Water Appropriations Permit Program |
| Susan Damon | | Assistant Director | MDNR - Division of Lands and Minerals |
| Joseph Henderson | | Director | MDNR - Division of Lands and Minerals |

The other thing I heard was discussions on reports and where things stand with environmental data so wanted to give you a written update on that as well:

1. Cultural field surveys are complete for 100% of the Project and the final cultural report was submitted to SHPO and FERC several weeks ago. We are happy to share with you but I will need to use a OneDrive or an MDNR site as the report is 180 MB in size
2. Stantec requested an MCE report for this project and also have completed a habitat assessment/rare, threatened and endangered species report that we can also share with MDNR staff.
3. Melissa-you sent back questions on the Blanding's turtle plan so that is in Stantec's court and we are working on revisions to get back to you. We have the text revisions made – we are just waiting for updated figures from GIS and then we can send the plan back to you.
4. Updated wetland/waterway delineation report is complete and reviewed – again we are just waiting on updated figures that show the new workspaces (that we just attached to this email). We are hoping to supply that to you next week for review

Please let me know if you have questions or would like any additional information. We look forward to continuing to work with MDNR.

Thanks
Sue

Sue Knabe
Teams: 920-278-3220
Cell: 920-655-7215

Stantec



From: Alemu, Tanya (She/Her/Hers) (DNR) <Tanya.Alemu@state.mn.us>
Sent: Thursday, August 22, 2024 1:04 PM
To: Knabe, Susan <Susan.Knabe@stantec.com>
Cc: Collins, Melissa (DNR) <Melissa.Collins@state.mn.us>
Subject: RE: Northern Natural Gas Pipeline - Kelley Farms/Keystone Woods

Hi Susan,

Please provide shapefiles for both the temporary workspaces and permanent easement information.

Thanks,
Tanya

Tanya Alemu
Realty Specialist | Division of Lands and Minerals (Central Region)
Minnesota Department of Natural Resources

1200 Warner Road
St. Paul, MN 55106
Phone: 651-259-5410
Email: Tanya.Alemu@state.mn.us
mndnr.gov



From: Knabe, Susan <Susan.Knabe@stantec.com>
Sent: Thursday, August 22, 2024 11:25 AM
To: Alemu, Tanya (She/Her/Hers) (DNR) <Tanya.Alemu@state.mn.us>
Subject: RE: Northern Natural Gas Pipeline - Kelley Farms/Keystone Woods

Hi Tanya

We did have a quick question for about the shapefiles. Do you want just the temporary workspaces or do you want to also see the permanent easement information?

The existing easement encompasses the "proposed" project easement so no permanent easement will be required.

Thanks
Sue

Sue Knabe
Teams: 920-278-3220
Cell: 920-655-7215

Stantec



From: Alemu, Tanya (She/Her/Hers) (DNR) <Tanya.Alemu@state.mn.us>
Sent: Thursday, August 22, 2024 9:30 AM
To: Knabe, Susan <Susan.Knabe@stantec.com>
Subject: RE: Northern Natural Gas Pipeline - Kelley Farms/Keystone Woods

Perfect – thank you for the update!

From: Knabe, Susan <Susan.Knabe@stantec.com>
Sent: Thursday, August 22, 2024 9:26 AM
To: Alemu, Tanya (She/Her/Hers) (DNR) <Tanya.Alemu@state.mn.us>
Subject: RE: Northern Natural Gas Pipeline - Kelley Farms/Keystone Woods

Good morning Tanya

Northern just finished meeting with their contractor yesterday and we wanted to further discuss workspaces this afternoon. Once the meeting is done, we should be able to have you shapefiles tomorrow.

Thanks
Sue

Sue Knabe
Teams: 920-278-3220
Cell: 920-655-7215

Stantec



From: Alemu, Tanya (She/Her/Hers) (DNR) <Tanya.Alemu@state.mn.us>
Sent: Thursday, August 22, 2024 8:09 AM
To: Knabe, Susan <Susan.Knabe@stantec.com>
Subject: RE: Northern Natural Gas Pipeline - Kelley Farms/Keystone Woods

Good Morning,

I am checking back on this. Have the updated shapefiles been completed yet?

Thanks,
Tanya

Tanya Alemu
Realty Specialist | Division of Lands and Minerals (Central Region)

Minnesota Department of Natural Resources
1200 Warner Road
St. Paul, MN 55106
Phone: 651-259-5410
Email: Tanya.Alemu@state.mn.us
mndnr.gov



From: Knabe, Susan <Susan.Knabe@stantec.com>
Sent: Monday, July 22, 2024 8:38 AM
To: Alemu, Tanya (She/Her/Hers) (DNR) <Tanya.Alemu@state.mn.us>
Subject: RE: Northern Natural Gas Pipeline - Kelley Farms/Keystone Woods

Perfect, I will send that along this week once the workspaces are finalized 😊

Sue Knabe
Teams: 920-278-3220
Cell: 920-655-7215

Stantec



From: Alemu, Tanya (She/Her/Hers) (DNR) <Tanya.Alemu@state.mn.us>
Sent: Monday, July 22, 2024 8:37 AM
To: Knabe, Susan <Susan.Knabe@stantec.com>
Subject: RE: Northern Natural Gas Pipeline - Kelley Farms/Keystone Woods

Good Morning,

If you could please send me the updated shapefiles just for the Farmington one we discussed once you have them, that would be great.

Thanks so much!
Tanya

From: Knabe, Susan <Susan.Knabe@stantec.com>
Sent: Friday, July 19, 2024 4:57 PM
To: Alemu, Tanya (She/Her/Hers) (DNR) <Tanya.Alemu@state.mn.us>
Subject: RE: Northern Natural Gas Pipeline - Kelley Farms/Keystone Woods

This message may be from an external email source.

Do not select links or open attachments unless verified. Report all suspicious emails to Minnesota IT Services Security Operations Center.

Hi Tanya

Yes, I can certainly send those over. Did you want a shape file for every project component in Minnesota or just the Farmington one we are discussing during our meetings?

The shapefiles for the over projects were submitted as part of the MCE consultation process so Melissa, Molly and Becky should have copies for their reviews.

Please let me know – we are in the process of slightly updating the Farmington footprint to address the new wetlands we just found so that will likely be available early next week?

Thanks
Sue

Sue Knabe
Teams: 920-278-3220
Cell: 920-655-7215

Stantec



From: Alemu, Tanya (She/Her/Hers) (DNR) <Tanya.Alemu@state.mn.us>
Sent: Friday, July 19, 2024 11:22 AM

To: Knabe, Susan <Susan.Knabe@stantec.com>

Subject: Northern Natural Gas Pipeline - Kelley Farms/Keystone Woods

You don't often get email from tanya.alemu@state.mn.us. [Learn why this is important](#)

Hello Susan,

Thank you for the good conversation this morning. After reviewing my emails, I do not have the shapefiles we discussed. Could you please email those to me?

Thanks again,
Tanya

Tanya Alemu

Realty Specialist | Division of Lands and Minerals (Central Region)

Minnesota Department of Natural Resources

1200 Warner Road

St. Paul, MN 55106

Phone: 651-259-5410

Email: Tanya.Alemu@state.mn.us

mndnr.gov





Stantec Consulting Services Inc.
2300 Swan Lake Boulevard Suite 202, Independence IA 50644-9708

October 14, 2024
File: 172608212

Becky Horton
Nongame Wildlife Specialist Sr.
Ecological & Water Resources Division
MN DNR Central Region
Minnesota Department of Natural Resources
1200 Warner Road
St. Paul, MN 55106

Dear Ms. Horton,

Reference: Avoidance Plan and Construction Monitoring Protocol for the Blanding's Turtle - Northern Natural Gas Northern Lights 2025 Expansion Project, Elk River 3rd Branch Line and Farmington to Hugo C-Line

Stantec Consulting Services Inc. (Stantec) was retained by Northern Natural Gas (Northern) to develop an avoidance plan and construction monitoring protocol (Avoidance Plan) for the state-threatened Blanding's turtle (*Emydoidea blandingii*), which will be implemented in suitable Blanding's turtle habitat along the Northern Natural Gas Northern Lights 2025 Expansion Project (Project) (see attached Figure 1 for overview). The purpose of developing and implementing this Avoidance Plan is to avoid the incidental take of Blanding's turtles during construction of the Project.

Stantec used its existing MDNR license to complete a review of the NHIS database for Blanding's turtle records in the vicinity of the Project along with completing detailed field habitat assessments within the Environmental Study Boundary (ESB) of each of the five project components. Only two of the components in Minnesota had Blanding's turtle records and/or suitable Blanding's turtle habitat present, which are described below along with each component's corresponding Minnesota Conservation Explorer (MCE) number:

1. **Elk River 3rd Branch Line (MCE 2024-00037)** - Two occurrences of Blanding's turtle were identified in the NHIS within a one-mile buffer of the ESB. Northern also identified suitable Blanding's turtle nesting and overwintering habitat within the footprint of the Elk River 3rd branch line. Northern has assumed the presence of Blanding's turtles in the wetlands and intermittent and perennial waterbodies and is therefore implementing the avoidance measures described below.

Northern plans to use horizontal direction drill (HDD) to cross under all waterbody and wetland complexes with suitable Blanding's turtle habitat except for wetland ERT-W15, which will be crossed via open-cut trench method. Per the Elk River 3rd Branch Line Wetland Delineation Report (Stantec, 2024), Wetland ERT-W15 is considered a disturbed Type 2 wet meadow, with dense vegetative cover consisting mostly of non-native, invasive reed canary grass (*Phalaris arundinacea*) and hybrid cattail (*Typha x glauca*). See image below.

Reference: Avoidance Plan and Construction Monitoring Protocol for the Blanding's Turtle - Northern Natural Gas Northern Lights 2025 Expansion Project, Elk River 3rd Branch Line and Farmington to Hugo C-Line



Photograph of ERT-W15 taken November 11, 2023.

2. **Farmington to Hugo C-line (MCE 2024-00036)** – four occurrences of Blanding's turtle were identified in the NHIS within a one-mile buffer of the ESB. Northern also identified suitable Blanding's turtle nesting and overwintering habitat within the footprint of the Farmington to Hugo C-line. Northern has assumed the presence of Blanding's turtles in the wetlands and is therefore implementing the avoidance measures described below.

Northern plans to use horizontal direction drill (HDD) to cross under all wetland complexes with suitable Blanding's turtle habitat except for wetlands FRM-W12 and FRM-W13, which will be crossed via open-cut trench method. Per the Farmington to Hugo C-Line Wetland Delineation Report (Stantec, 2024), Wetlands FRM-W12 and FRM-W13 are considered Type 1 seasonally flooded basins, with dense vegetative cover consisting mostly of a mix of native and non-native grasses and sedges such as prairie cord grass (*Spartina pectinata*), reed canary grass, and blunt broom sedge (*Carex tribuloides*). See images below.



Photograph of FRM-W12 taken June 20, 2024.



Photograph of FRM-W13 taken June 20, 2024.

Reference: Avoidance Plan and Construction Monitoring Protocol for the Blanding's Turtle - Northern Natural Gas Northern Lights 2025 Expansion Project, Elk River 3rd Branch Line and Farmington to Hugo C-Line

AVOIDANCE MEASURES

Regardless of the construction method used (i.e., HDD, conventional bore, or trenching), exclusion fencing (i.e., silt fence) will be installed as the primary avoidance measure. Exclusion fencing will be installed with "turn-backs" at the ends and any openings to direct turtles away from the construction area. Northern will also install hay bales across any openings to close them off at the end of each working day, where practicable. Northern proposes a two-plan approach (Plan A and Plan B) depending on timing of FERC approval.

OPTION PLAN A

Northern understands that MDNR staff would prefer that the exclusion fencing be installed prior to April 1, 2025; however, that is dependent entirely on receipt of FERC's notice to proceed as Northern cannot begin any actions until the notice is received. Additionally, the lease agreement between Northern and MDNR would need to be executed prior to any construction activities. Northern will contact MDNR if weather is unfavorable to install the turtle exclusion fence by April 1, 2025, due to significant frost or snow cover still remaining. Assuming Northern receives FERC notice to proceed and lease agreement execution prior to March 2025, Northern will install exclusion fencing prior to April 1, 2025. Under Option Plan A, Stantec biologists will be onsite to sweep/clear the Project area of Blanding's turtles prior to the installation of exclusion fence and erosion control devices. Once all perimeter controls have been installed and workspace areas have been enclosed per the attached figures, Stantec biologist will perform periodic turtle sweeps, two to three times per week, until the start of construction. Once construction of the Project has initiated, Stantec biologist will continue to monitor exclusion fence until all workspace areas have been mowed or cleared of vegetation and for two to three days after, assuming final installation of perimeter controls is complete to ensure no Blanding's turtles are trapped inside the exclusion fence. After which, Northern's trained onsite EIs will take over the monitoring and removal of turtles.

Perimeter controls will be installed per the following:

1. Within the Elk River 3rd branch line (MCE 2024-00037), exclusion fencing, or hay bales will be installed within approved workspaces, including around HDD entry and exit points and any suitable Blanding's turtle habitat. Northern will also install exclusion fence along proposed temporary access roads where they are adjacent to a wetland or a waterbody; and along the northern and southern workspace boundary within wetland ERT-W15. Hay bales will be utilized where applicable at access points to enclose workspace prior to the start of construction and during non-active construction hours, once construction of the Project has been initiated. Northern will not install exclusion fence or hay bales around existing roads or private driveways and the HDD foot-traffic only travel lanes. See Attached Figure 2 for placement of fencing and hay bales.
2. Within the Farmington to Hugo C-line (MCE 2024-00036) workspace, exclusion fencing, or hay bales will be installed within approved workspaces around HDD entry and exit points and any suitable Blanding's turtle habitat. Northern will also install exclusion fence along the proposed temporary access road PD05 where it is adjacent to a wetland or a waterbody; and along the eastern and western workspace boundaries within wetlands FRM-W12 and FRM-W13. Hay bales will be utilized where applicable at access points to enclose workspace prior to the start of construction and during non-active construction hours, once construction of the Project has been initiated. Northern will not install exclusion fence or hay bales around existing roads or private driveways and the HDD foot-traffic only travel lanes. See Attached Figure 2 for placement of fencing and hay bales.

Reference: Avoidance Plan and Construction Monitoring Protocol for the Blanding's Turtle - Northern Natural Gas Northern Lights 2025 Expansion Project, Elk River 3rd Branch Line and Farmington to Hugo C-Line

ADDITIONAL AVOIDANCE MEASURES

In addition to the use of exclusion fencing, Northern will implement MDNR recommendations from their Blanding's Turtle Fact Sheet "list 1". Northern will implement the following measures with slight modifications to those mitigation measures discussing roads and landscaping/vegetation maintenance as described below.

1. No known turtle nests will be disturbed.
2. Open-cut trenches will be constructed with "escape ramps" allowing turtles that fall into the trench to walk out.
3. Access roads/road approaches through wetlands will be air bridged (using mats) or include a graveled road approach with an appropriately sized temporary culvert to fit the ditch; culverts will be flat-bottomed or elliptical, where applicable. These crossings will be removed upon completion of construction so they will only be present for one season.
4. Northern's environmental inspection staff will make construction personnel aware of the possible presence of Blanding's turtles in the project area. A flyer with an illustration of a Blanding's turtle will be given to all contractors working in the area. Homeowners also will be informed of the presence of Blanding's turtles in the area. Construction personnel will be asked to watch for any turtles within the construction areas or on access roads and adjacent public roadways.
5. Turtles that are in imminent danger will be moved by hand out of active Project workspaces by the environmental inspector. All personnel will be instructed to notify the EI upon any turtle sightings.
6. Turtles that are not in imminent danger will be left undisturbed. Northern's EI's will make this determination based on the construction activity in the area.
7. With the exception of wetlands ERT-W15, FRM-W12 and FRM-W13 described above, small, vegetated temporary wetlands (Types 2 & 3) will not be dredged, deepened, filled, or converted to storm water retention basins (these wetlands provide important habitat during spring and summer).
8. Northern will install mats in wetlands ERT-W15, FRM-W12 and FRM-W13 for the open-cut crossings. All equipment except the initial fence installation and a single pass to excavate the trench will operate from the mats. Backfill and restoration equipment also will operate from the mats.
9. Wetlands will be protected from pollutants; use of fertilizers and pesticides will be avoided by Northern. Erosion will be prevented to keep silt and sediment from reaching wetlands and lakes.
10. Mulch and hydro-mulch, if used, will not contain synthetic (plastic) fiber additives.
11. Erosion control mesh, if used, will be limited to bio-netting or wildlife friendly netting, specifically, Category 3N or 4N in the 2016 and 2018 Minnesota DOT standards.
12. Trenches will be checked for turtles prior to being backfilled and the sites will be returned to original grade to the extent practicable.
13. Utility access and maintenance roads will be kept to a minimum.
14. Construction areas will be returned to preconstruction conditions with as much natural contour as possible.
 - Graded areas within wetlands will be allowed to revegetate naturally from seeds present in the wetland soils or re-seeded with an appropriate and approved native wetland seed mix at the landowners request, following the completion of ground disturbance activities.

Reference: Avoidance Plan and Construction Monitoring Protocol for the Blanding's Turtle - Northern Natural Gas Northern Lights 2025 Expansion Project, Elk River 3rd Branch Line and Farmington to Hugo C-Line

15. Per Section VII A.5 in the Upland Erosion Control, Revegetation and Maintenance Plan, vegetation management shall not be done more than every three years. Trenches will be checked for turtles prior to being backfilled and the sites will be returned to original grade.

ADDITIONAL MITIGATION MEASURES PER MDNR

1. Stantec biologists will be onsite to sweep/clear the Project areas prior to the installation of exclusion fence and erosion control devices. Stantec biologists also will be onsite to sweep/clear areas for turtles during initial vegetation clearing and grading activities. Initial vegetation clearing typically consists of mechanical mowing or hand trimming, where appropriate. Grading activities will consist of topsoil removal and/or excavation activities, re-grading pre-existing contours to the extent possible once segregated soil has been replaced appropriately, and restoration.
2. Stantec will continue to monitor exclusion fence until all perimeter controls are fully installed per the figures and for two to three days after final installation is complete to ensure no Blanding's turtles are trapped inside the exclusion fence, after which, Northern's trained onsite EIs will take over the monitoring and removal of turtles.

ADDITIONAL MITIGATION MEASURES PER MDNR (INADVERTENT RELEASE [IR] IN WETLAND OR STREAM)

1. Monitor during drilling – if a Blanding's turtle is found impacted by an IR, Northern/Stantec will transport the turtle to a licensed wildlife rehabilitator for cleaning and assessment. Once the turtle is cleaned and assessed as ready to release, Northern/Stantec will transport the turtle back to the project location and release it in an unimpacted suitable habitat near where it was found. If a turtle is not impacted by the IR but is still found inside fence, the biologist will simply relocate the turtle outside of the exclusion fence. The turtle monitoring and relocation during HDD work will be conducted by Northern's onsite and trained EIs.
2. There will be zero risk to turtles as a result of foot traffic along the tracking wire/travel lane as turtles will have been previously removed during the exclusion fence installation and monitoring and because foot traffic is not a concern. Additionally, Northern's EIs will complete a visual sweep for Blanding's turtles during their inspections of the HDD travel lanes. As such, Northern is not proposing to install exclusion fence along the HDD travel lanes due to the wetland disturbance that would be caused.
3. Habitat impacts from IR remediation – In the event of an IR, Northern will completely enclose the IR with silt fence or other sediment control devices to prevent access to the IR by any Blanding's turtles that may be present in the vicinity. Northern will restore the habitat/wetland by removing the release with vac truck hoses and/or hand tools. Once the mud is cleaned out, the wetland vegetation will be allowed to regrow naturally. Northern will monitor and reseed/overseed the area with wetland vegetation if regrowth is not occurring naturally. Northern will also monitor for turtles during the clean-up to ensure they are not present and not harmed by the remediation activities.
4. Temporary short-term habitat impacts in wetlands may occur in discrete areas from an IR and foot traffic/hand tools needed for the clean-up. Herbaceous vegetation may be laid over due to foot traffic; however, this is a short-term impact, and the vegetation will return. Northern does not typically impact

Reference: Avoidance Plan and Construction Monitoring Protocol for the Blanding's Turtle - Northern Natural Gas Northern Lights 2025 Expansion Project, Elk River 3rd Branch Line and Farmington to Hugo C-Line

the shrub or wooded layers during remediation. Other unimpacted areas within the same wetland complexes will remain, allowing for turtles to temporarily relocate if needed during construction or remediation. In Minnesota, Blanding's turtles typically inhabit marsh/open water areas or slow-moving streams with mud bottoms, so not every wetland is habitat.

In the event of an IR, short-term habitat impacts in waterbodies may result in the same concerns described above along with a temporary increase in turbidity in the waterbody or open-water wetland. Northern will utilize empty drums, trench boxes, or sandbags to contain an IR if one occurs in a waterbody. Additionally, turbidity curtains will be deployed if feasible to limit the spread of turbid water. MDNR provided Northern with a restriction window of October 1 to April 15 for Blanding's turtle. Therefore, Northern will limit the HDD drill window for the perennial waterbody, Hardwood Creek (ERT-S01) on Elk River 3rd branch line to April 16 to September 30, 2025. No other wetland or waterbodies on the Project provide suitable overwintering habitat for Blanding's turtles. Additionally, small-short term impacts from discrete IR events will not have a major effect on turtles or their habitat.

5. Northern does not anticipate any tree or shrub removal in wetlands that are considered to be suitable Blanding's turtle habitat. Removal of a limb or a stump will not impact turtle habitat.
6. No long-term impacts from an IR that would make the wetland unsuitable for turtle use in future years are expected. The habitat will not be destroyed, excavated, removed, or filled.
7. The drilling mud consists of bentonite, water, and non-toxic additives; therefore, no long-term toxic impact is expected that would affect water quality in the wetlands/Blanding's turtle habitat. Per its HDD Plan, Northern has committed that all proposed drilling fluid additives will be compliant with the NSF/ANSI 60 – Drinking Water Treatment Chemicals – Health Effects list. Northern will not approve the use of drilling fluid additives containing cationic or anionic polyacrylamides for use under wetlands and waterbodies (footnote #2), nor allow additives that require flushing to be used after the initial pilot pass (footnote #3). All drilling fluid additives will be approved by Northern's environmental specialist responsible for permitting the Project.

Turtles can return to any temporarily impacted habitat as soon as vegetation regrows.

OPTION PLAN B

In the event that FERC's notice to proceed is not received prior to April 1, 2025, or the MDNR lease agreement is not executed, or pending unfavorable weather conditions, Northern will install exclusion fencing prior to ground disturbance activities occurring onsite. Northern will follow installation guidance as described in bullet points 1 and 2 in Option Plan A above, as well as implement the additional avoidance measures described in the Section below (also included in Option Plan A).

Under Option Plan B, Stantec biologist would perform daily turtle sweeps and monitoring, for the extent of Project until all vegetation has been mowed or cleared; and up to 2-days after final installation of all perimeter controls has been completed and the workspace areas have been fully enclosed to their fullest potential. At that point, Northern's trained onsite EIs will take over the monitoring and removal of turtles.

Reference: Avoidance Plan and Construction Monitoring Protocol for the Blanding's Turtle - Northern Natural Gas Northern Lights 2025 Expansion Project, Elk River 3rd Branch Line and Farmington to Hugo C-Line

ADDITIONAL AVOIDANCE MEASURES

In addition to the use of exclusion fencing, Northern will implement MDNR recommendations from their Blanding's Turtle Fact Sheet "list 1". Northern will implement the following measures with slight modifications to those mitigation measures discussing roads and landscaping/vegetation maintenance as described below.

1. No known turtle nests will be disturbed.
2. Open-cut trenches will be constructed with "escape ramps" allowing turtles that fall into the trench to walk out.
3. Access roads/road approaches through wetlands will be air bridged (using mats) or include a graveled road approach with an appropriately sized temporary culvert to fit the ditch; culverts will be flat-bottomed or elliptical, where applicable. These crossings will be removed upon completion of construction so they will only be present for one season.
4. Northern's environmental inspection staff will make construction personnel aware of the possible presence of Blanding's turtles in the project area. A flyer with an illustration of a Blanding's turtle will be given to all contractors working in the area. Homeowners also will be informed of the presence of Blanding's turtles in the area. Construction personnel will be asked to watch for any turtles within the construction areas or on access roads and adjacent public roadways.
5. Turtles that are in imminent danger will be moved by hand out of active Project workspaces by the environmental inspector. All personnel will be instructed to notify the EI upon any turtle sightings.
6. Turtles that are not in imminent danger will be left undisturbed. Northern's EI's will make this determination based on the construction activity in the area.
7. With the exception of wetlands ERT-W15, FRM-W12 and FRM-W13 described above, small, vegetated temporary wetlands (Types 2 & 3) will not be dredged, deepened, filled, or converted to storm water retention basins (these wetlands provide important habitat during spring and summer).
8. Northern will install mats in wetlands ERT-W15, FRM-W12 and FRM-W13 for the open-cut crossings. All equipment except the initial fence installation and a single pass to excavate the trench will operate from the mats. Backfill and restoration equipment also will operate from the mats.
9. Wetlands will be protected from pollutants; use of fertilizers and pesticides will be avoided by Northern. Erosion will be prevented to keep silt and sediment from reaching wetlands and lakes.
10. Mulch and hydro-mulch, if used, will not contain synthetic (plastic) fiber additives.
11. Erosion control mesh, if used, will be limited to bio-netting or wildlife friendly netting, specifically, Category 3N or 4N in the 2016 and 2018 Minnesota DOT standards.
12. Trenches will be checked for turtles prior to being backfilled and the sites will be returned to original grade to the extent practicable.
13. Utility access and maintenance roads will be kept to a minimum.
14. Construction areas will be returned to preconstruction conditions with as much natural contour as possible.
 - Graded areas within wetlands will be allowed to revegetate naturally from seeds present in the wetland soils or re-seeded with an appropriate and approved native wetland seed mix at the landowners request, following the completion of ground disturbance activities.

Reference: Avoidance Plan and Construction Monitoring Protocol for the Blanding's Turtle - Northern Natural Gas Northern Lights 2025 Expansion Project, Elk River 3rd Branch Line and Farmington to Hugo C-Line

15. Per Section VII A.5 in the Upland Erosion Control, Revegetation and Maintenance Plan, vegetation management shall not be done more than every three years. Trenches will be checked for turtles prior to being backfilled and the sites will be returned to original grade.

ADDITIONAL MITIGATION MEASURES PER MDNR

1. Stantec biologists will be onsite to sweep/clear the Project areas prior to the installation of exclusion fence and erosion control devices. Stantec biologists also will be onsite to sweep/clear areas for turtles during initial vegetation clearing and grading activities. Initial vegetation clearing typically consists of mechanical mowing or hand trimming, where appropriate. Grading activities will consist of topsoil removal and/or excavation activities, re-grading pre-existing contours to the extent possible once segregated soil has been replaced appropriately, and restoration.
2. Stantec will continue to monitor exclusion fence until all perimeter controls are fully installed per the figures and for two to three days after final installation is complete to ensure no Blanding's turtles are trapped inside the exclusion fence, after which, Northern's trained onsite EIs will take over the monitoring and removal of turtles.

ADDITIONAL MITIGATION MEASURES PER MDNR (INADVERTENT RELEASE [IR] IN WETLAND OR STREAM)

1. Monitor during drilling – if a Blanding's turtle is found impacted by an IR, Northern/Stantec will transport the turtle to a licensed wildlife rehabilitator for cleaning and assessment. Once the turtle is cleaned and assessed as ready to release, Northern/Stantec will transport the turtle back to the project location and release it in an unimpacted suitable habitat near where it was found. If a turtle is not impacted by the IR but is still found inside fence, the biologist will simply relocate the turtle outside of the exclusion fence. The turtle monitoring and relocation during HDD work will be conducted by Northern's onsite and trained EIs.
2. There will be zero risk to turtles as a result of foot traffic along the tracking wire/travel lane as turtles will have been previously removed during the exclusion fence installation and monitoring and because foot traffic is not a concern. Additionally, Northern's EIs will complete a visual sweep for Blanding's turtles during their inspections of the HDD travel lanes. As such, Northern is not proposing to install exclusion fence along the HDD travel lanes due to the wetland disturbance that would be caused.
3. Habitat impacts from IR remediation – In the event of an IR, Northern will completely enclose the IR with silt fence or other sediment control devices to prevent access to the IR by any Blanding's turtles that may be present in the vicinity. Northern will restore the habitat/wetland by removing the release with vac truck hoses and/or hand tools. Once the mud is cleaned out, the wetland vegetation will be allowed to regrow naturally. Northern will monitor and reseed/overseed the area with wetland vegetation if regrowth is not occurring naturally. Northern will also monitor for turtles during the clean-up to ensure they are not present and not harmed by the remediation activities.
4. Temporary short-term habitat impacts in wetlands may occur in discrete areas from an IR and foot traffic/hand tools needed for the clean-up. Herbaceous vegetation may be laid over due to foot traffic; however, this is a short-term impact, and the vegetation will return. Northern does not typically impact

Reference: Avoidance Plan and Construction Monitoring Protocol for the Blanding's Turtle - Northern Natural Gas Northern Lights 2025 Expansion Project, Elk River 3rd Branch Line and Farmington to Hugo C-Line

the shrub or wooded layers during remediation. Other unimpacted areas within the same wetland complexes will remain, allowing for turtles to temporarily relocate if needed during construction or remediation. In Minnesota, Blanding's turtles typically inhabit marsh/open water areas or slow-moving streams with mud bottoms, so not every wetland is habitat.

In the event of an IR, short-term habitat impacts in waterbodies may result in the same concerns described above along with a temporary increase in turbidity in the waterbody or open-water wetland. Northern will utilize empty drums, trench boxes, or sandbags to contain an IR if one occurs in a waterbody. Additionally, turbidity curtains will be deployed if feasible to limit the spread of turbid water. MDNR provided Northern with a restriction window of October 1 to April 15 for Blanding's turtle. Therefore, Northern will limit the HDD drill window for the perennial waterbody, Hardwood Creek (ERT-S01) on Elk River 3rd branch line) to April 16 to September 30, 2025. No other wetland or waterbodies on the Project provide suitable overwintering habitat for Blanding's turtles. Additionally, small-short term impacts from discrete IR events will not have a major effect on turtles or their habitat.

5. Northern does not anticipate any tree or shrub removal in wetlands that are considered to be suitable Blanding's turtle habitat. Removal of a limb or a stump will not impact turtle habitat.
6. No long-term impacts from an IR that would make the wetland unsuitable for turtle use in future years are expected. The habitat will not be destroyed, excavated, removed, or filled.
7. The drilling mud consists of bentonite, water, and non-toxic additives; therefore, no long-term toxic impact is expected that would affect water quality in the wetlands/Blanding's turtle habitat. Per its HDD Plan, Northern has committed that all proposed drilling fluid additives will be compliant with the NSF/ANSI 60 – Drinking Water Treatment Chemicals – Health Effects list. Northern will not approve the use of drilling fluid additives containing cationic or anionic polyacrylamides for use under wetlands and waterbodies (footnote #2), nor allow additives that require flushing to be used after the initial pilot pass (footnote #3). All drilling fluid additives will be approved by Northern's environmental specialist responsible for permitting the Project.
8. Turtles can return to any temporarily impacted habitat as soon as vegetation regrows.

CONSTRUCTION MONITORING PROTOCOLS

A qualified Stantec environmental monitor will walk ahead of the silt fence trenching crew and equipment to clear the fencing installation area of Blanding's turtles, along with other amphibians and reptiles, during installation of the exclusion fence (i.e., silt fence). The environmental monitor will make an initial sweep of the exclusion area and relocate any Blanding's turtles found within the fenced exclusion areas prior to work being conducted at the site on that day. The Stantec environmental monitor will monitor Blanding's turtle habitat during active vegetation removal and during silt fence installation. Based on past experience, a Stantec environmental monitor also will conduct the turtle sweeps during the installation of exclusion fence and the following two to three days of construction. After that time, Northern's onsite environmental inspection staff will take over the turtle sweeps which will continue daily for the duration of construction/restoration activities.

Stantec environmental monitors also will conduct turtle sweeps of potential habitat during the initial vegetation mowing and grading phase of construction, which will immediately follow installation of the erosion control best management practices. The same turtle protocols as described above will apply to this phase.

Reference: Avoidance Plan and Construction Monitoring Protocol for the Blanding's Turtle - Northern Natural Gas Northern Lights 2025 Expansion Project, Elk River 3rd Branch Line and Farmington to Hugo C-Line

Blanding's turtles observed in the work area will immediately be removed by hand from the area by the environmental monitor and placed in suitable habitat outside of the Project area. All individuals relocated will be recorded (date, time, age, sex, capture coordinates, release coordinates, etc.), photographed, and reported to the MDNR at the conclusion of construction. Turtles observed outside of the Project workspaces and, therefore, not in imminent danger will be left undisturbed. Results of the turtle monitoring will be reported to the MDNR within 10 days of completion. Any dead Blanding's turtle found on site throughout the course of the project will be recorded (approximate age, possible cause of death), photographed, and reported to the MDNR at the conclusion of activities.

ENVIRONMENTAL MONITORING SCHEDULE

Stantec expects the environmental monitor will be needed for approximately 20 to 30 days for Option A and approximately 40 to 60 days for Option B at each of the two components. Once the initial sweeps are done, a Stantec qualified environmental monitor will continue to monitor workspace areas until final installation of all perimeter controls are in place and a qualified biologist determines the site monitoring activities can be handed off to Northern's EI. Northern's EI's will have been trained in turtle identification and handling and will continue to search each site as needed until work at that site is completed. Stantec staff will be working directly under the supervision of Terry VanDeWalle, a Senior Ecologist with over 30 years of experience conducting herpetological surveys in the Upper Midwest and listed on the Minnesota List of Qualified Surveyors for state-listed reptile and amphibian species.

Based on the above, Northern's intent is to exclude turtles from Project workspaces using silt fence and hay bales. If you have any questions, or require additional information, please contact me at the number listed below.

Regards,

Stantec Consulting Services Inc.



Terry VanDeWalle

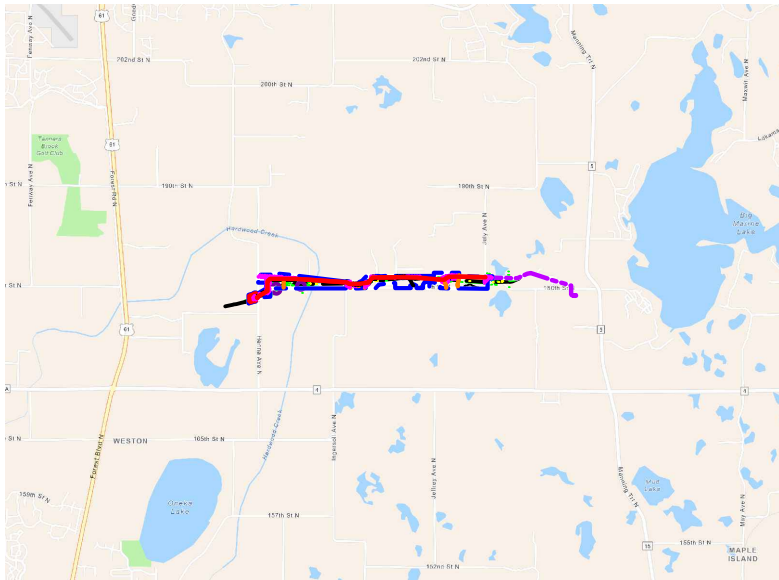
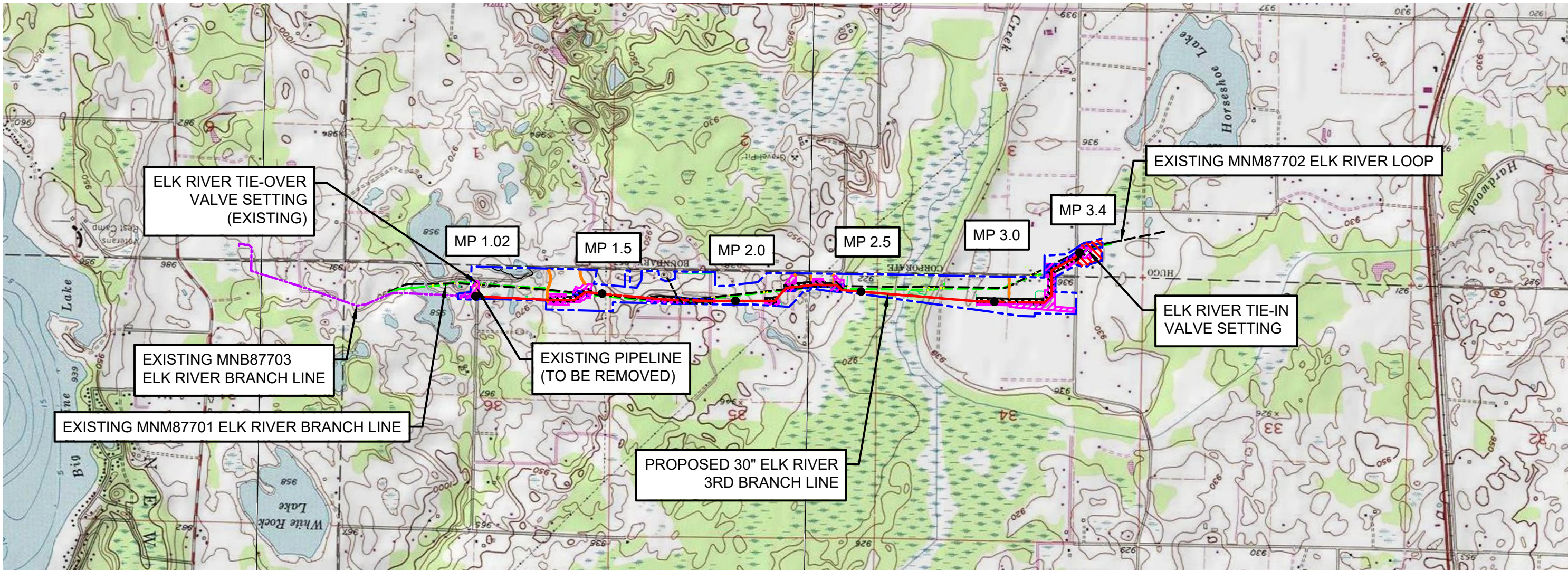
Senior Ecologist

Phone: 319.334.3755

terry.vandewalle@stantec.com

Attachments: Figure 1 – Project Overview Maps
Figure 2 – Blanding's Turtle Avoidance Plan

c. Terry Plucker, Northern Natural Gas Company
Susan Knabe, Stantec

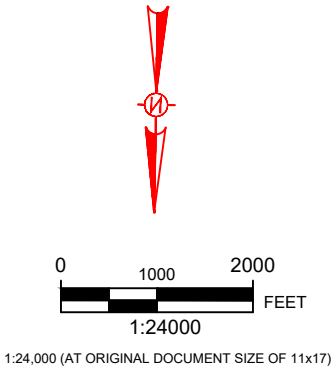


NOTES:
COORDINATE SYSTEM: NAD 1983 UTM ZONE 15F
DATA SOURCES INCLUDE: STANTEC, NNG, NADS, ESRI

LEGEND

- MILEPOST
- PROPOSED 30" ELK RIVER 3RD BRANCH LINE
- EXISTING MNB87703 ELK RIVER BRANCH LINE
- EXISTING MNM87702 ELK RIVER LOOP
- EXISTING MNB87701 ELK RIVER BRANCH LINE
- EXISTING PIPELINE (TO BE REMOVED)
- PROJECT PERMANENT ROW
- EXISTING PERMANENT ROW
- TEMP. WORKSPACE
- EXTRA TEMP. WORKSPACE
- TEMP. ACCESS ROAD
- STAGING AREA
- ENVIRONMENTAL
- SURVEY BOUNDARY

NOTE:
PROPOSED 30" ELK RIVER 3RD BRANCH LINE
RELATES TO MCE 2024-00037



INTERNAL INFORMATION
DISTRIBUTION/COPIES LIMITED TO
PROJECT NEEDS


| NO. | REVISION - DESCRIPTION | BY | DATE | CHK'D | APP'D |
|-----|------------------------|----|---------|-------|-------|
| F1 | RE-ISSUED FOR FERC | MB | 10/4/24 | ED | GC |
| F | ISSUED FOR FERC | AC | 2/2/24 | ED | GC |

FILED WITH FERC
ANY CHANGES FROM WHAT IS
SHOWN MUST BE IDENTIFIED
AND REVIEWED BY
REGULATORY BEFORE
IMPLEMENTATION

| STATUS | CHECKED | | APPROVED | |
|--------|---------|------|----------|------|
| | BY | DATE | BY | DATE |
| PRELIM | | | | |
| BID | | | | |
| CONST. | | | | |


| | |
|----------------|-------------------|
| FAC CODE: N/A | REL W.O. AS NOTED |
| PL# | CONST. YR |
| STA# N/A | PO# N/A |
| DESIGN | BY |
| DRAWN | DATE |
| ASBUILT | |
| FILE NO. - | |
| SCALE: 1:24000 | |

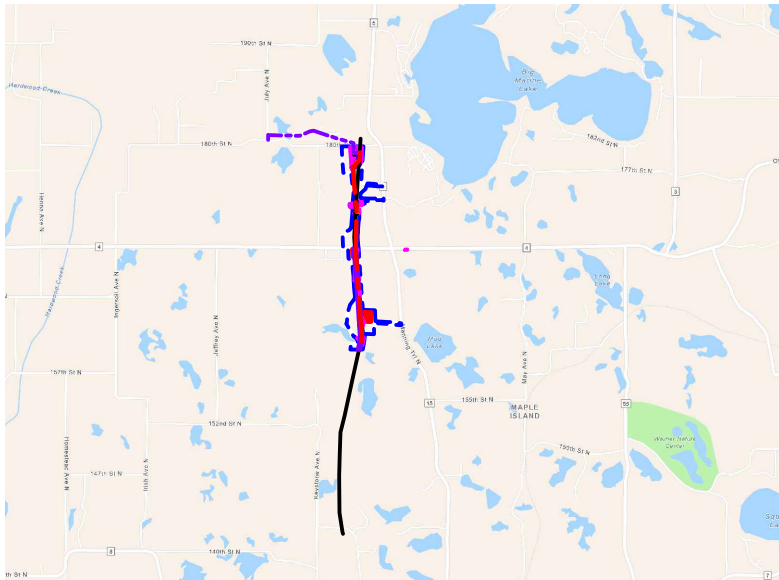
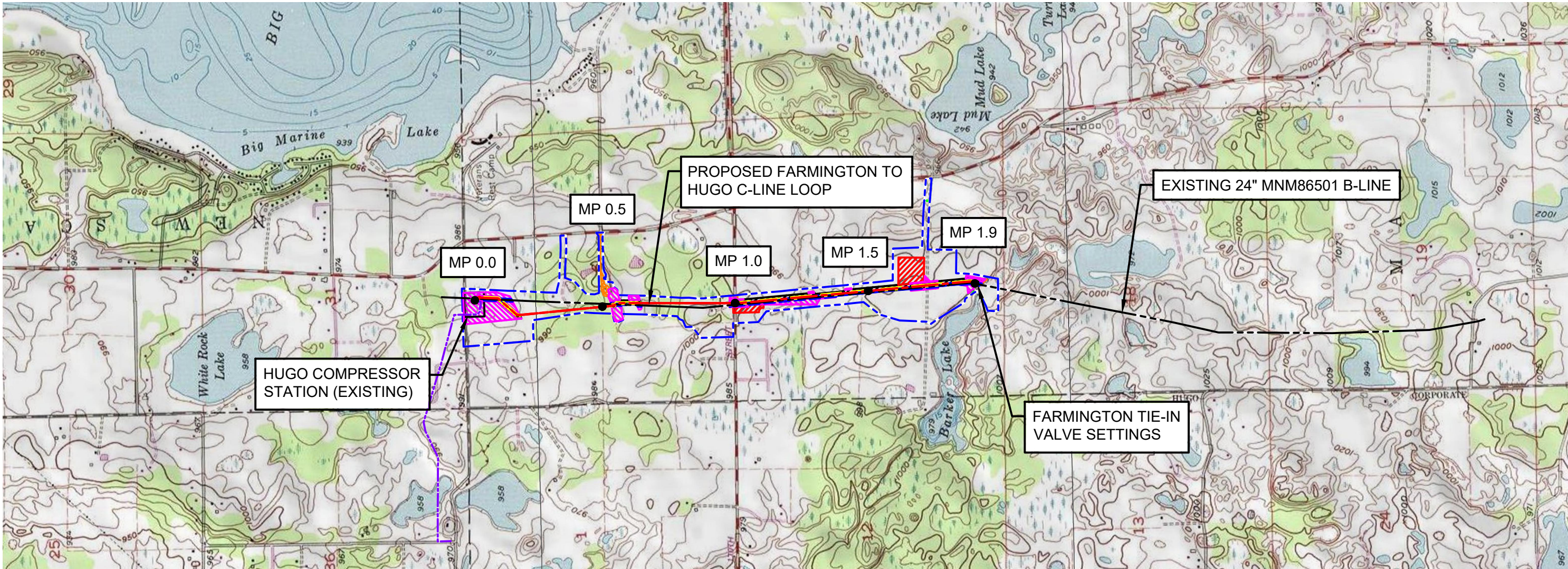
NORTHERN LIGHTS 2025 EXPANSION PROJECT
ELK RIVER 3RD BRANCH LINE EXTENSION
PROJECT LOCATION AND TOPOGRAPHIC
SEC 34, 35 & 36, T32N, R21W & SEC 3, T31N, R21W
WASHINGTON COUNTY, MINNESOTA



PROJECT NO.
01146979

DWG. NO.
ERT TOP01





LEGEND

- MILEPOST
- PROPOSED 30" FARMINGTON TO HUGO C-LINE LOOP
- EXISTING 30" MNB87703 ELK RIVER 3RD BRANCH LINE
- EXISTING 24" MNM86501 B-LINE
- PROJECT PERMANENT ROW
- EXISTING PERMANENT ROW
- TEMP. WORKSPACE
- EXTRA TEMP. WORKSPACE
- TEMP. ACCESS ROAD
- STAGING AREA
- ENVIRONMENTAL SURVEY BOUNDARY

NOTE:
PROPOSED FARMINGTON TO HUGO C-LINE LOOP RELATES TO MCE 2024-00036



1:24,000 (AT ORIGINAL DOCUMENT SIZE OF 11x17)

NOTES:
COORDINATE SYSTEM: NAD 1983 UTM ZONE 15F
DATA SOURCES INCLUDE: STANTEC, NNG, NADS, ESRI

INTERNAL INFORMATION
DISTRIBUTION/COPIES LIMITED TO PROJECT NEEDS


| NO. | REVISION - DESCRIPTION | BY | DATE | CHK'D | APP'D |
|-----|------------------------|----|---------|-------|-------|
| F1 | RE-ISSUED FOR FERC | MB | 10/4/24 | ED | GC |
| F | ISSUED FOR FERC | AC | 2/2/24 | ED | GC |

FILED WITH FERC
ANY CHANGES FROM WHAT IS SHOWN MUST BE IDENTIFIED AND REVIEWED BY REGULATORY BEFORE IMPLEMENTATION

| STATUS | CHECKED | | APPROVED | |
|--------|---------|------|----------|------|
| | BY | DATE | BY | DATE |
| PRELIM | | | | |
| BID | | | | |
| CONST. | | | | |


| | |
|----------------|-------------------|
| FAC CODE: N/A | REL W.O. AS NOTED |
| PL# | CONST. YR |
| STA# N/A | POI# N/A |
| DESIGN | BY |
| DRAWN | DATE |
| ASBUILT | |
| FILE NO. - | |
| SCALE: 1:24000 | |

NORTHERN LIGHTS 2025 EXPANSION PROJECT
FARMINGTON TO HUGO C-LINE LOOP
PROJECT LOCATION AND TOPOGRAPHIC
SEC 6 & 7, T31N, R20W
WASHINGTON COUNTY, MINNESOTA



PROJECT NO.
01146968

DWG. NO.
FAR TOP01



V:\1726\Active\172608212\03_data\gis_cad\gis\mxd\172608212_NL_2025_Delineation_Report\172608212_NL_2025_Delineation_Report.aprx Revised: 2024-10-14 By: jmarly

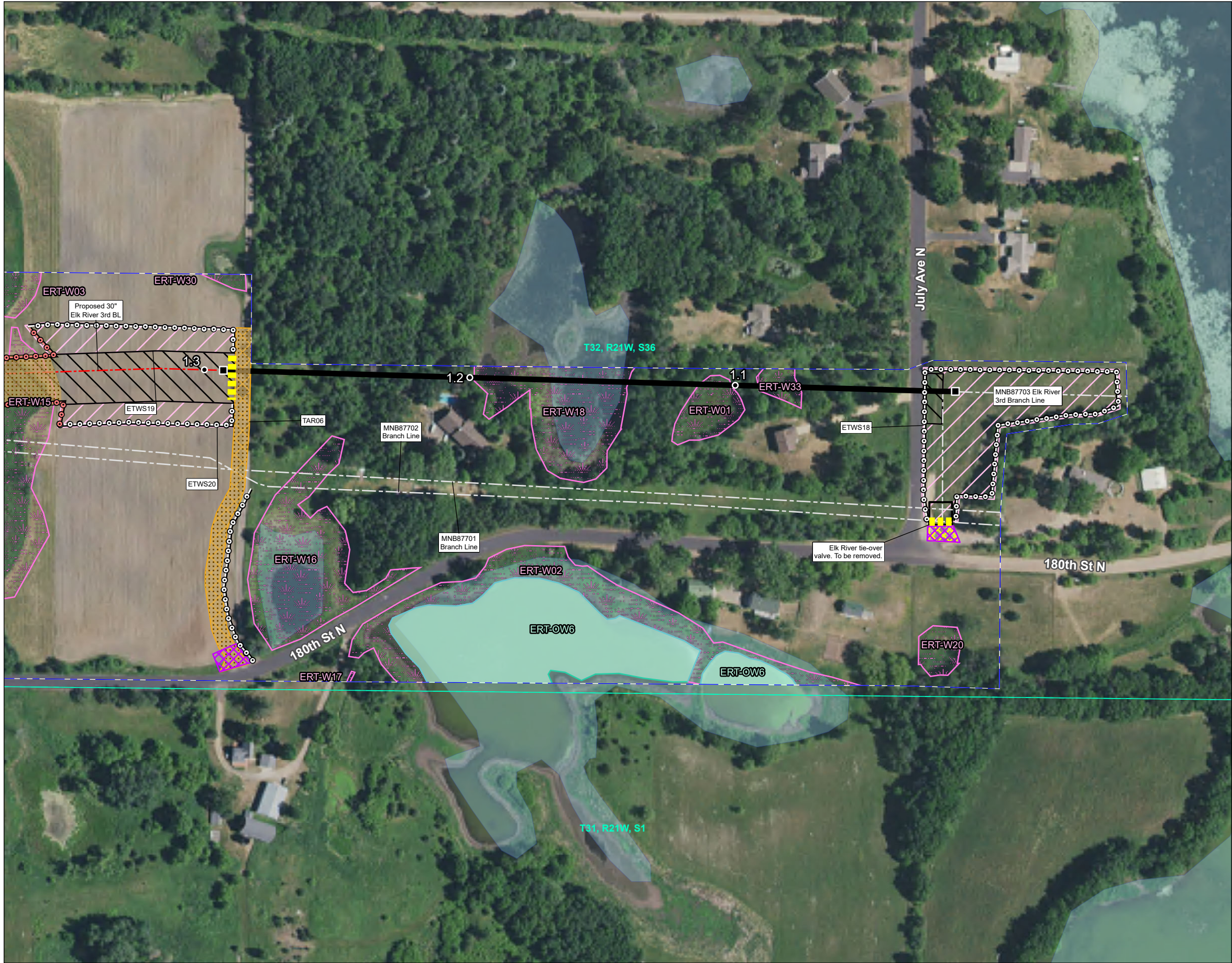


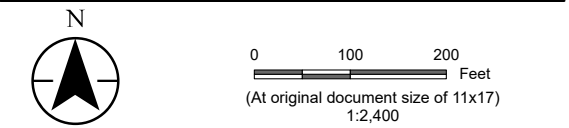
Figure No.
2

Title
**Field Collected Data
MCE 2024-00037**

Client/Project
Northern Natural Gas
Northern Lights 2025 Expansion Project
Wetland Delineation - Elk River 3rd BL Extension

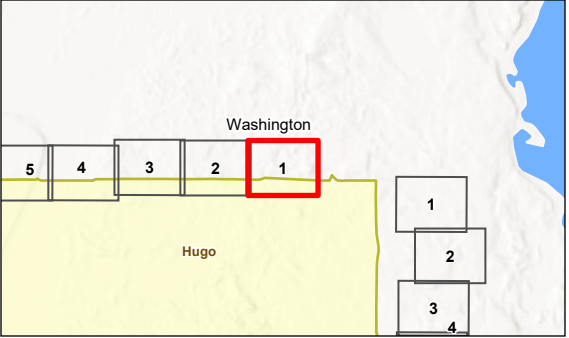
Project Location
Washington Co., MN

Prepared by JM on 2024-10-10
TR by SF on 2024-10-10
IR by NN on 2024-10-14



- Legend
- Milepost
 - HDD Entry/Exit
 - HDD Segment
 - - - Proposed Centerline
 - - - Existing Centerline
 - Hay Bale
 - Silt Fence
 - Redundant Silt Fence
 - Tracking Pad
 - Matting
 - Environmental Survey Boundary
 - Existing Facility
 - Extra Temporary Workspace
 - Existing Drive
 - Temporary Access Road
 - Temporary Workspace
 - Field Delineated Waterway
 - Field Delineated Open Water
 - Field Delineated Waterway Area
 - Field Delineated Wetland
 - National Hydrography Dataset / DNR 24k Hydrography
 - Perennial Stream
 - Intermittent Stream
 - Waterbody

NOTE: The exact location of exclusion fencing versus hay bales installed onsite at the entrance and exit points to temporary workspace, extra temporary workspace, and staging areas, will be determined by Northern's onsite Environmental Inspector at the time of construction.



Notes

1. Coordinate System: NAD 1983 UTM Zone 15N
2. Data Sources: Stantec, NNG, NADS, USGS, WDNR, MnDNR
3. Background: 2021 NAIP



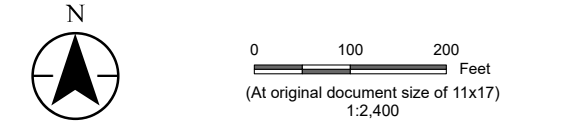
V:\1726\Active\172608212\03_data\gis_cad\gis\mxd\172608212_NL2025_Delineation_Report\172608212_NL2025_Delineation_Report.aprx Revised: 2024-10-14 By: jmarly



Figure No.
2
Title
BLANDING'S TURTLE AVOIDANCE PLAN
MCE 2024-00037

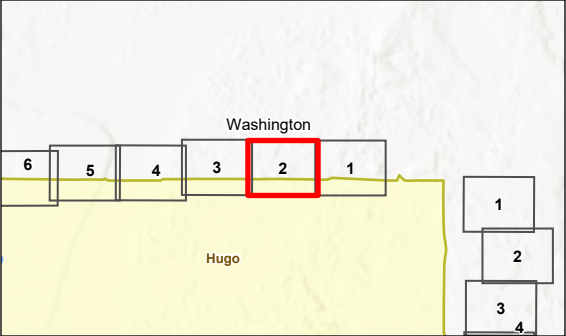
Client/Project
Northern Natural Gas
Northern Lights 2025 Expansion Project
Wetland Delineation - Elk River 3rd BL Extension
172608212

Project Location
Washington Co., MN
Prepared by JM on 2024-10-10
TR by SF on 2024-10-10
IR by NN on 2024-10-14



- Legend
- | | |
|---------------------------------|--|
| • Milepost | △ Culvert |
| ■ HDD Entry/Exit | Field Delineated Waterway |
| — HDD Segment | Field Delineated Open Water |
| - - - Proposed Centerline | Field Delineated Waterway Area |
| - - - Existing Centerline | Field Delineated Wetland |
| ■ Hay Bale | National Hydrography Dataset / DNR 24k Hydrography |
| ○ Silt Fence | Perennial Stream |
| ○ Redundant Silt Fence | Intermittent Stream |
| ■ Tracking Pad | Waterbody |
| ■ Matting | |
| ■ Environmental Survey Boundary | |
| ■ Extra Temporary Workspace | |
| ■ Temporary Access Road | |
| ■ Temporary Workspace | |

NOTE: The exact location of exclusion fencing versus hay bales installed onsite at the entrance and exit points to temporary workspace, extra temporary workspace, and staging areas, will be determined by Northern's onsite Environmental Inspector at the time of construction.



Notes
1. Coordinate System: NAD 1983 UTM Zone 15N
2. Data Sources: Stantec, NNG, NADS, USGS, WDNR, MnDNR
3. Background: 2021 NAIP



V:\1726\Active\172608212\03_data\gis_cad\gis\mxd\172608212_NL2025_Delineation_Report\172608212_NL2025_Delineation_Report.aprx
Revised: 2024-10-14 By: jmart

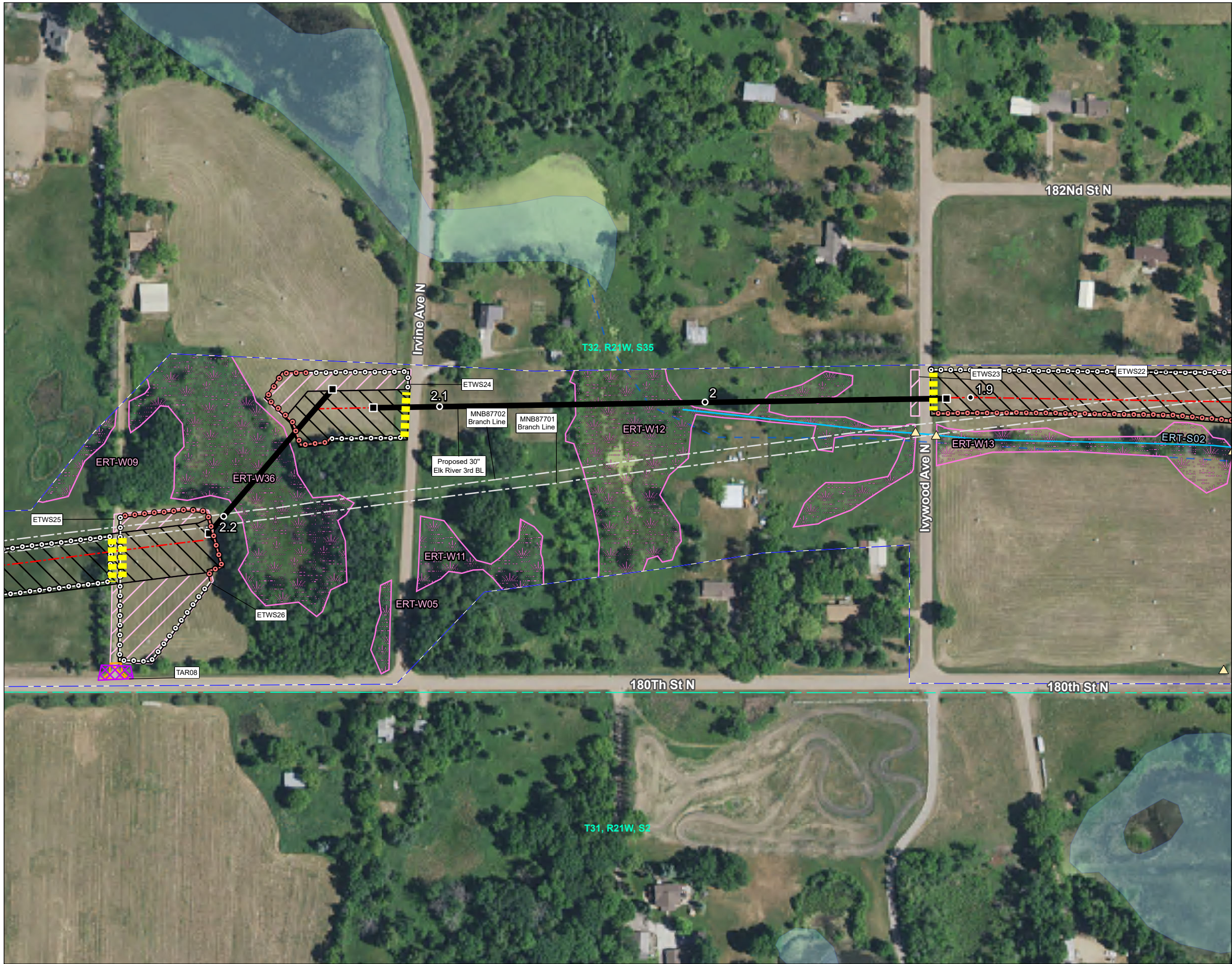


Figure No.
2

Title
**BLANDING'S TURTLE AVOIDANCE PLAN
MCE 2024-00037**

Client/Project
Northern Natural Gas
Northern Lights 2025 Expansion Project
Wetland Delineation - Elk River 3rd BL Extension

172608212

Project Location
Washington Co., MN

Prepared by JM on 2024-10-10
TR by SF on 2024-10-10
IR by NN on 2024-10-14

N

0100200

Feet

(At original document size of 11x17)
1:2,400

Legend

• Milepost

■ HDD Entry/Exit

■ HDD Segment

--- Proposed Centerline

--- Existing Centerline

■ Hay Bale

○ Silt Fence

○ Redundant Silt Fence

■ Tracking Pad

■ Environmental Survey Boundary

■ Extra Temporary Workspace

■ Temporary Access Road

■ Temporary Workspace

▲ Culvert

Field Delineated Waterway

Field Delineated Open Water

Field Delineated Waterway Area

Field Delineated Wetland

National Hydrography Dataset / DNR 24k Hydrography

Perennial Stream

Intermittent Stream

Waterbody

NOTE: The exact location of exclusion fencing versus hay bales installed onsite at the entrance and exit points to temporary workspace, extra temporary workspace, and staging areas, will be determined by Northern's onsite Environmental Inspector at the time of construction.

Notes
1. Coordinate System: NAD 1983 UTM Zone 15N
2. Data Sources: Stantec, NNG, NADS, USGS, WDNR, MnDNR
3. Background: 2021 NAIP

Page 3 of 6

Disclaimer: This document has been prepared based on information provided by others as cited in the Notes section. Stantec has not verified the accuracy and/or completeness of this information and shall not be responsible for any errors or omissions which may be incorporated herein as a result. Stantec assumes no responsibility for data supplied in electronic format, and the recipient accepts full responsibility for verifying the accuracy and completeness of the data.

V:\1726\Active\172608212\03_data\gis_cad\gis\mxd\172608212_NL2025_Delineation_Report\172608212_NL2025_Delineation_Report.aprx Revised: 2024-10-14 By: jmarly

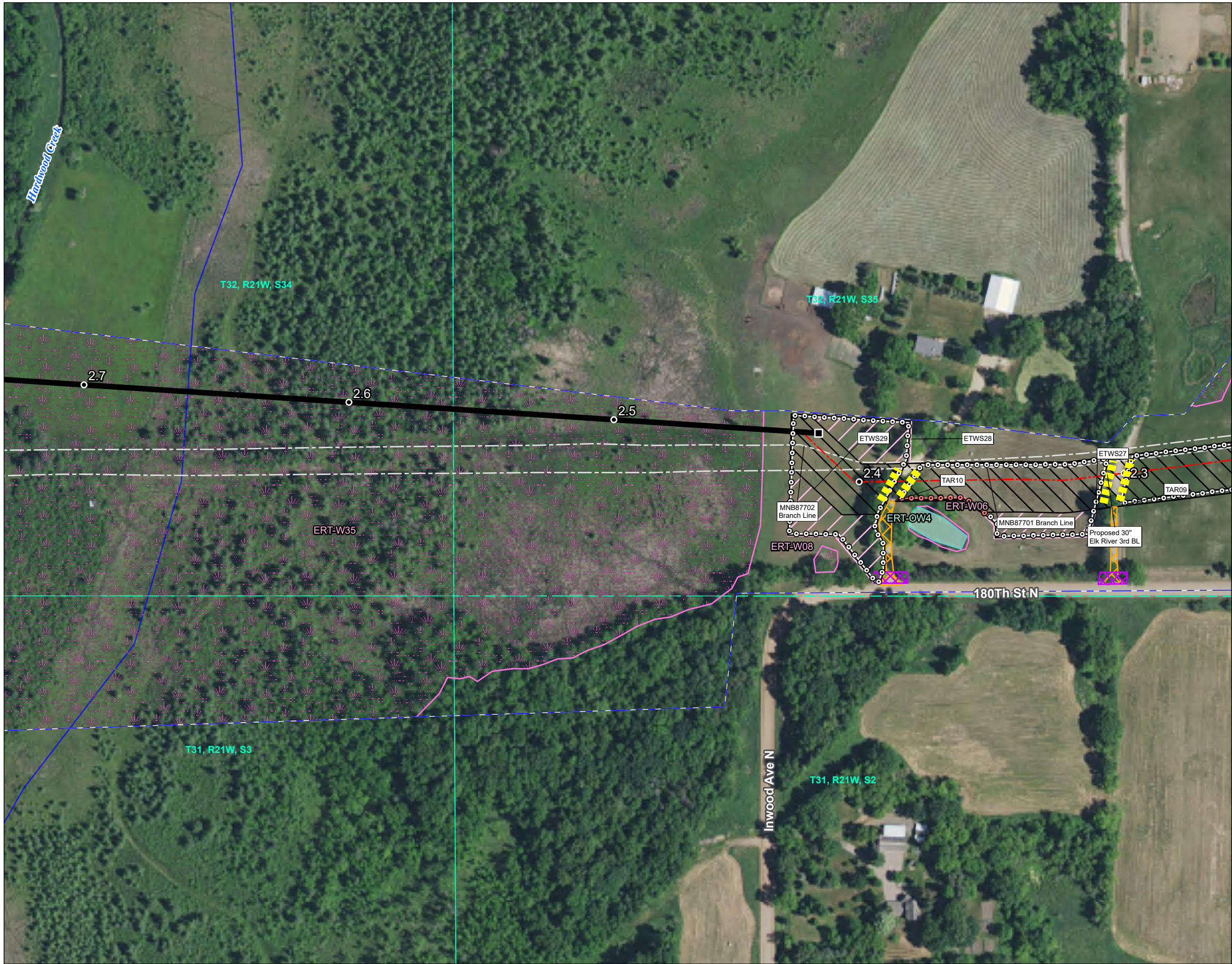


Figure No.
2

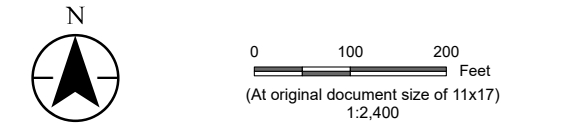
Title
**BLANDING'S TURTLE AVOIDANCE PLAN
MCE 2024-00037**

Client/Project
Northern Natural Gas
Northern Lights 2025 Expansion Project
Wetland Delineation - Elk River 3rd BL Extension

172608212

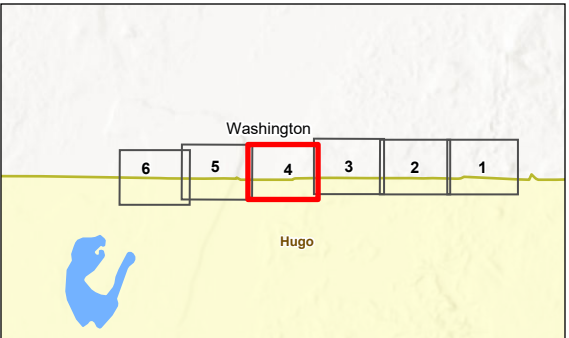
Project Location
Washington Co., MN

Prepared by JM on 2024-10-10
TR by SF on 2024-10-10
IR by NN on 2024-10-14



- Legend
- Milepost
 - HDD Entry/Exit
 - HDD Segment
 - - - Proposed Centerline
 - Existing Centerline
 - Hay Bale
 - Silt Fence
 - Redundant Silt Fence
 - Tracking Pad
 - Environmental Survey Boundary
 - Extra Temporary Workspace
 - Temporary Access Road
 - Temporary Workspace
 - Field Delineated Waterway
 - Field Delineated Open Water
 - Field Delineated Waterway Area
 - Field Delineated Wetland
 - National Hydrography Dataset / DNR 24k Hydrography
 - Perennial Stream
 - Intermittent Stream
 - Waterbody

NOTE: The exact location of exclusion fencing versus hay bales installed onsite at the entrance and exit points to temporary workspace, extra temporary workspace, and staging areas, will be determined by Northern's onsite Environmental Inspector at the time of construction.



Notes

1. Coordinate System: NAD 1983 UTM Zone 15N
2. Data Sources: Stantec, NNG, NADS, USGS, WDNR, MnDNR
3. Background: 2021 NAIP



V:\1726\Active\172608212\03_data\gis_cad\gis\mxd\172608212_NL2025_Delineation_Report\172608212_NL2025_Delineation_Report.aprx Revised: 2024-10-14 By: jmarly

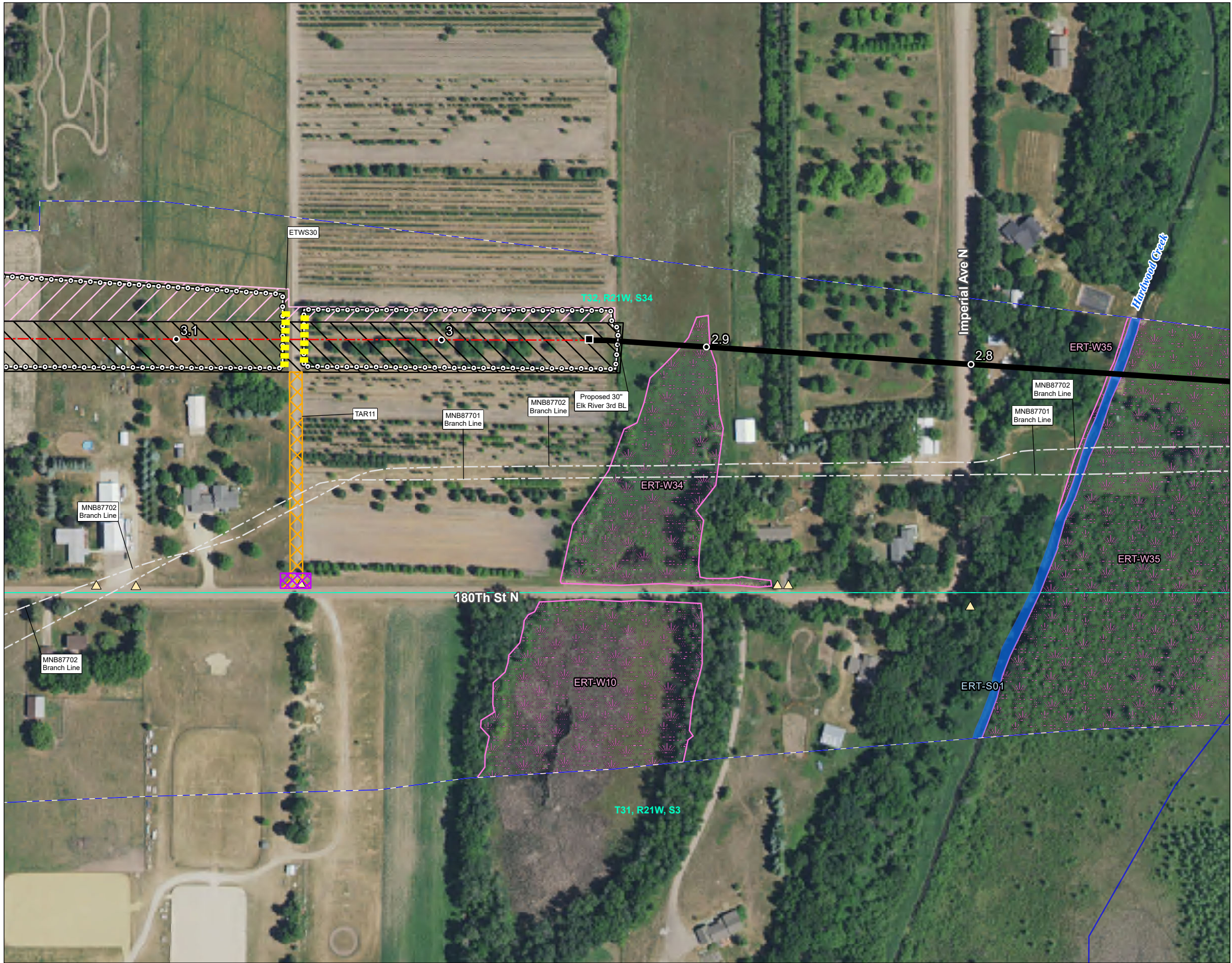


Figure No.
2

Title
**BLANDING'S TURTLE AVOIDANCE PLAN
MCE 2024-00037**

Client/Project
Northern Natural Gas
Northern Lights 2025 Expansion Project
Wetland Delineation - Elk River 3rd BL Extension

Project Location
Washington Co., MN

Prepared by JM on 2024-10-10
TR by SF on 2024-10-10
IR by NN on 2024-10-14

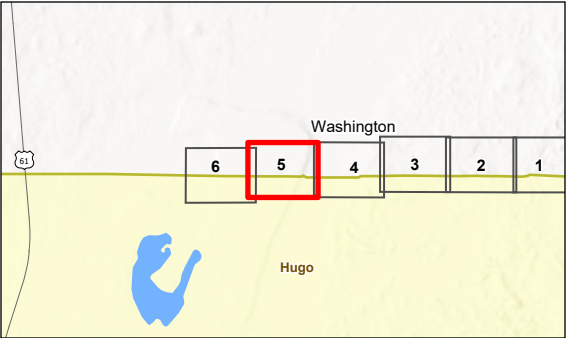
N

0 100 200 Feet
(At original document size of 11x17)
1:2,400

Legend

| | |
|---------------------------------|--|
| • Milepost | △ Culvert |
| ■ HDD Entry/Exit | Field Delineated Waterway |
| — HDD Segment | Field Delineated Open Water |
| — Proposed Centerline | Field Delineated Waterway Area |
| — Existing Centerline | Field Delineated Wetland |
| ■ Hay Bale | National Hydrography Dataset / DNR 24k Hydrography |
| ○ Silt Fence | Perennial Stream |
| ■ Tracking Pad | Intermittent Stream |
| ■ Environmental Survey Boundary | Waterbody |
| ■ Extra Temporary Workspace | |
| ■ Temporary Access Road | |
| ■ Temporary Workspace | |

NOTE: The exact location of exclusion fencing versus hay bales installed onsite at the entrance and exit points to temporary workspace, extra temporary workspace, and staging areas, will be determined by Northern's onsite Environmental Inspector at the time of construction.



Notes

1. Coordinate System: NAD 1983 UTM Zone 15N
2. Data Sources: Stantec, NNG, NADS, USGS, WDNR, MnDNR
3. Background: 2021 NAIP



V:\1726\Active\172608212\03_data\gis\mxd\172608212_NL2025_Delineation_Report\172608212_NL2025_Delineation_Report.aprx Revised: 2024-10-14 By: jmarly

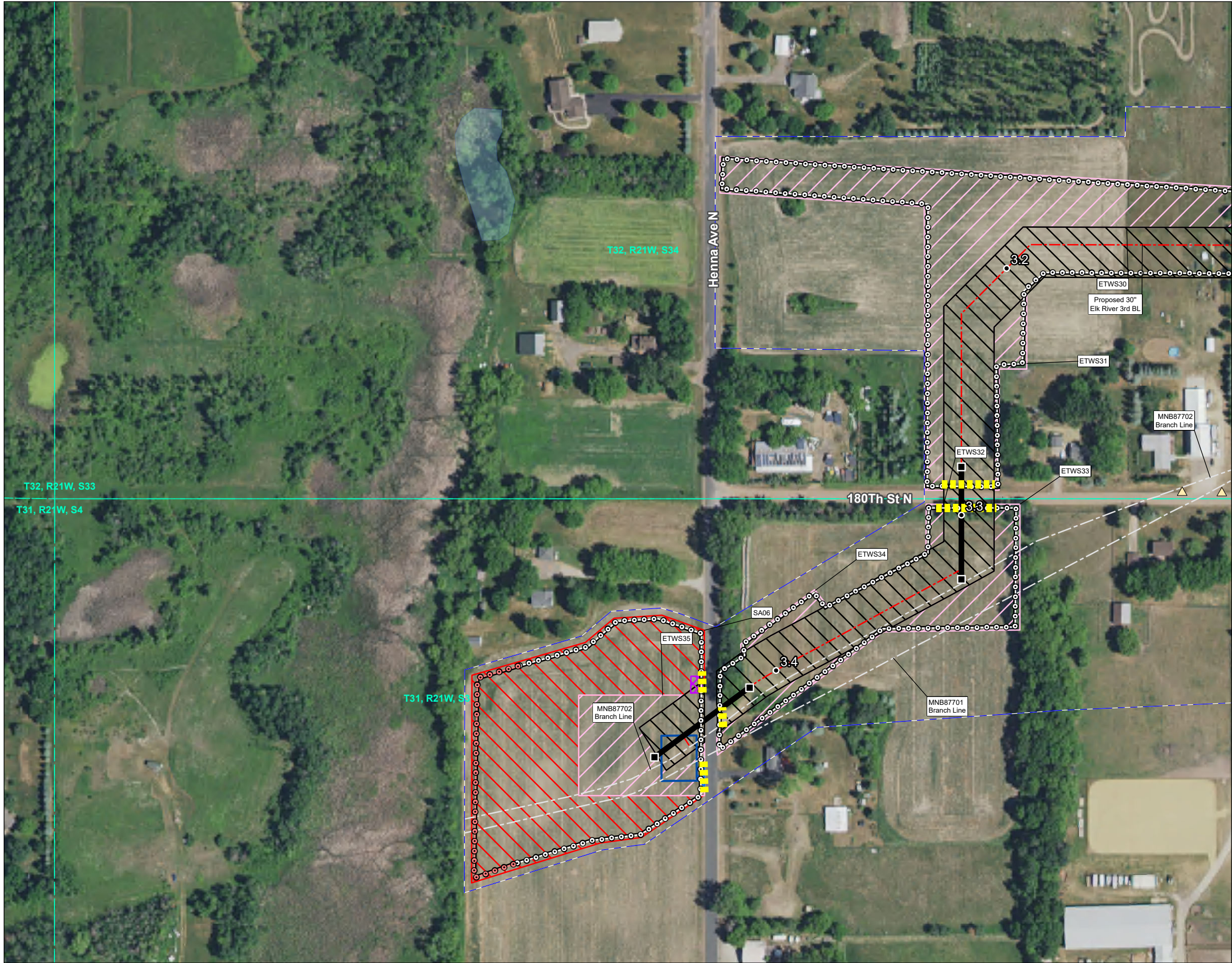


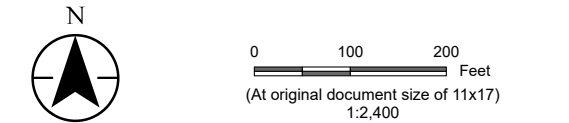
Figure No.
2
Title
**BLANDING'S TURTLE AVOIDANCE PLAN
MCE 2024-00037**

Client/Project
Northern Natural Gas
Northern Lights 2025 Expansion Project
Wetland Delineation - Elk River 3rd BL Extension

Project Location
Washington Co., MN

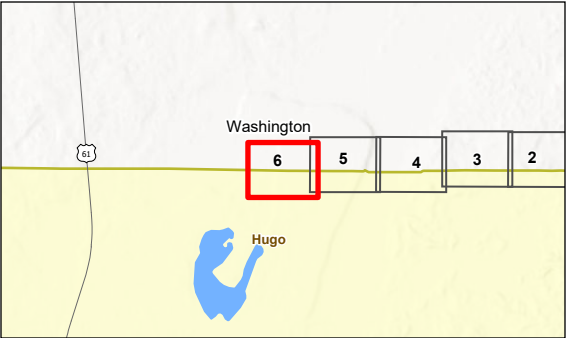
172608212

Prepared by JM on 2024-10-10
TR by SF on 2024-10-10
IR by NN on 2024-10-14



- Legend
- Milepost
 - HDD Entry/Exit
 - HDD Segment
 - - - Proposed Centerline
 - Existing Centerline
 - Hay Bale
 - Silt Fence
 - Redundant Silt Fence
 - Tracking Pad
 - Environmental Survey Boundary
 - Proposed Facility
 - Extra Temporary Workspace
 - Proposed Drive
 - Temporary Workspace
 - Staging Area
 - ▲ Culvert
 - Field Delineated Waterway
 - Field Delineated Open Water
 - Field Delineated Waterway Area
 - Field Delineated Wetland
 - National Hydrography Dataset / DNR 24k Hydrography
 - Perennial Stream
 - Intermittent Stream
 - Waterbody

NOTE: The exact location of exclusion fencing versus hay bales installed onsite at the entrance and exit points to temporary workspace, extra temporary workspace, and staging areas, will be determined by Northern's onsite Environmental Inspector at the time of construction.



Notes
1. Coordinate System: NAD 1983 UTM Zone 15N
2. Data Sources: Stantec, NNG, NADS, USGS, WDNR, MnDNR
3. Background: 2021 NAIP



V:\1726\Active\172608212\03_data\gis_cad\gis\mxd\172608212_NL2025_Delineation_Report\172608212_NL2025_Delineation_Report.aprx Revised: 2024-10-14 By: jmartv

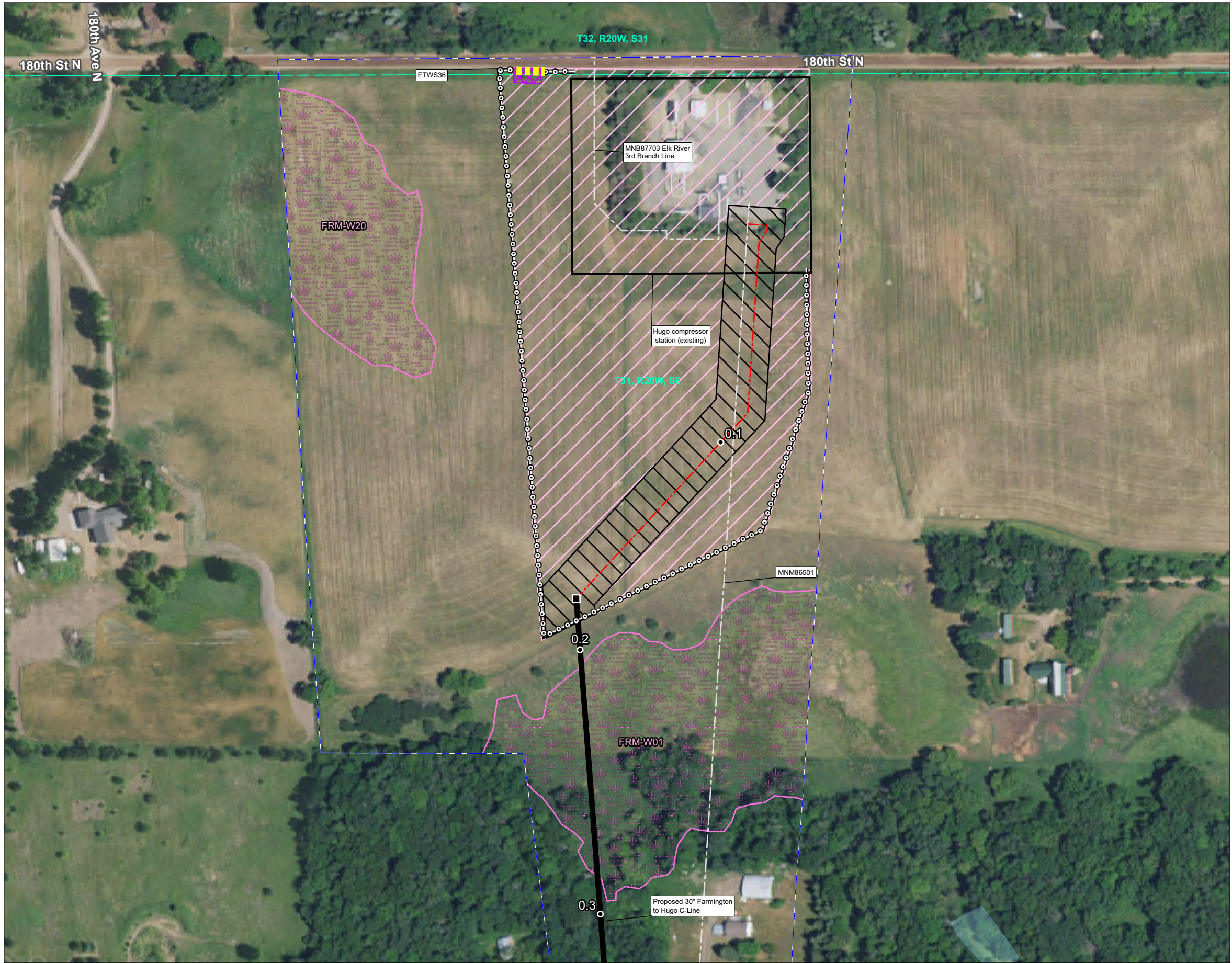


Figure No.
2

Title
**BLANDING'S TURTLE AVOIDANCE PLAN
MCE 2024-00036**

Client/Project
Northern Natural Gas
Northern Lights 2025 Expansion Project
Wetland Delineation - Farmington to Hugo C-Line Extension

Project Location
Washington Co., MN

Prepared by JM on 2024-10-10
TR by SF on 2024-10-10
IR by NN on 2024-10-14

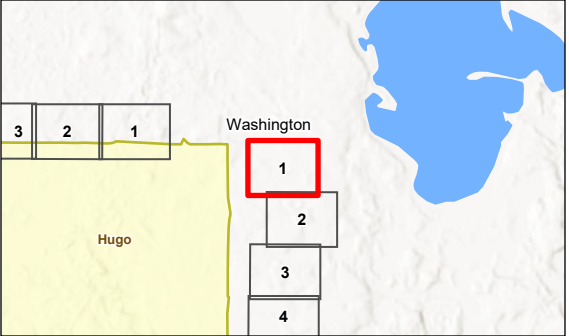
N

0 100 200 Feet
(At original document size of 11x17)
1:2,400

Legend

- Milepost
- HDD Entry/Exit
- HDD Segment
- - - Proposed Centerline
- - - Existing Centerline
- Hay Bale
- Silt Fence
- Tracking Pad
- Environmental Survey Boundary
- Existing Facility
- Extra Temporary Workspace
- Temporary Workspace
- Field Delineated Waterway
- Field Delineated Open Water
- Field Delineated Waterway Area
- Field Delineated Wetland
- National Hydrography Dataset / DNR 24k Hydrography
- Perennial Stream
- Intermittent Stream
- Waterbody

NOTE: The exact location of exclusion fencing versus hay bales installed onsite at the entrance and exit points to temporary workspace, extra temporary workspace, and staging areas, will be determined by Northern's onsite Environmental Inspector at the time of construction.



Notes

1. Coordinate System: NAD 1983 UTM Zone 15N
2. Data Sources: Stantec, NNG, NADS, USGS, WDNR, MnDNR
3. Background: 2021 NAIP



V:\1726\Active\172608212\03_data\gis_cad\gis\mxd\172608212_NL_2025_Delineation_Report\172608212_NL_2025_Delineation_Report.aprx Revised: 2024-10-14 By: jmart

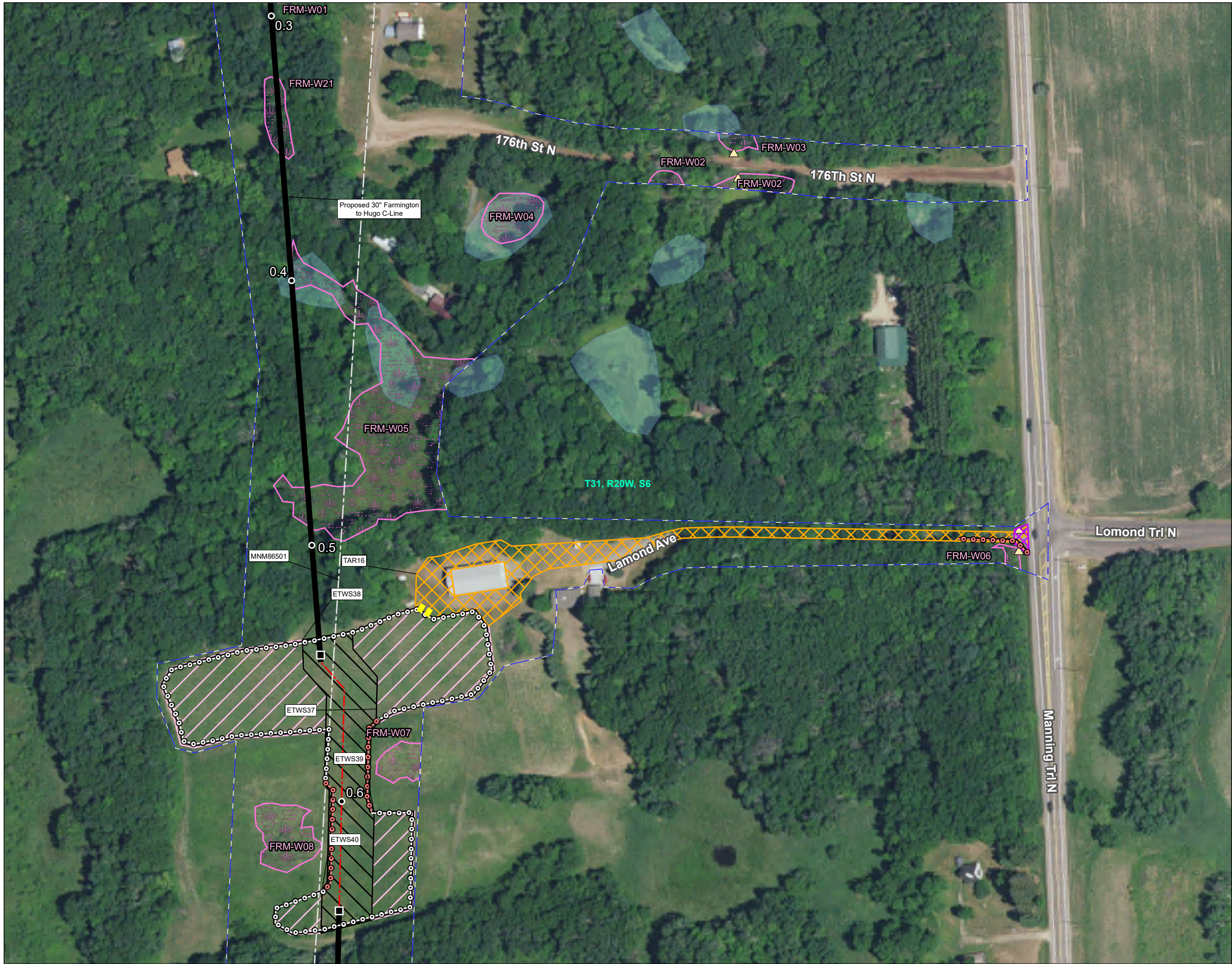


Figure No.
2

Title
**BLANDING'S TURTLE AVOIDANCE PLAN
MCE 2024-00036**

Client/Project
Northern Natural Gas
Northern Lights 2025 Expansion Project
Wetland Delineation - Farmington to Hugo C-Line Extension

172608212

Project Location
Washington Co., MN

Prepared by JM on 2024-10-10
TR by SF on 2024-10-10
IR by NN on 2024-10-14

N

0100200

Feet

(At original document size of 11x17)
1:2,400

Legend

•

Milepost

■

HDD Entry/Exit

—

HDD Segment

Proposed Centerline

Existing Centerline

■

Hay Bale

○

Silt Fence

○

Redundant Silt Fence

■

Tracking Pad

■

Environmental Survey Boundary

■

Extra Temporary Workspace

■

Temporary Access Road

■

Temporary Workspace

▲

Culvert

—

Field Delineated Waterway

—

Field Delineated Open Water

■

Field Delineated Waterway Area

■

Field Delineated Wetland

—

National Hydrography Dataset / DNR 24k Hydrography

—

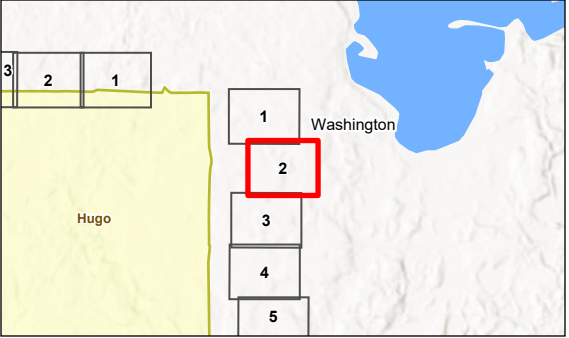
Perennial Stream

Intermittent Stream

■

Waterbody

NOTE: The exact location of exclusion fencing versus hay bales installed onsite at the entrance and exit points to temporary workspace, extra temporary workspace, and staging areas, will be determined by Northern's onsite Environmental Inspector at the time of construction.



Notes
1. Coordinate System: NAD 1983 UTM Zone 15N
2. Data Sources: Stantec, NNG, NADS, USGS, WDNR, MnDNR
3. Background: 2021 NAIP



V:\1726\Active\172608212\03_data\gis_cad\gis\mxd\172608212_NL_2025_Delineation_Report\172608212_NL_2025_Delineation_Report.aprx Revised: 2024-10-14 By: jmart



Figure No.
2

Title
**BLANDING'S TURTLE AVOIDANCE PLAN
MCE 2024-00036**

Client/Project
Northern Natural Gas
Northern Lights 2025 Expansion Project
Wetland Delineation - Farmington to Hugo C-Line Extension

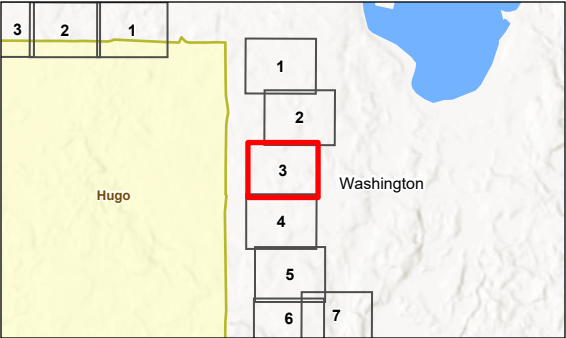
Project Location
Washington Co., MN

Prepared by JM on 2024-10-10
TR by SF on 2024-10-10
IR by NN on 2024-10-14



- Legend
- Milepost
 - HDD Segment
 - - - Proposed Centerline
 - Existing Centerline
 - Hay Bale
 - Silt Fence
 - ⊠ Tracking Pad
 - Environmental Survey Boundary
 - Extra Temporary Workspace
 - Temporary Access Road
 - Temporary Workspace
 - Staging Area
 - Field Delineated Waterway
 - Field Delineated Open Water
 - Field Delineated Waterway Area
 - Field Delineated Wetland
 - National Hydrography Dataset / DNR 24k Hydrography
 - Perennial Stream
 - Intermittent Stream
 - Waterbody

NOTE: The exact location of exclusion fencing versus hay bales installed onsite at the entrance and exit points to temporary workspace, extra temporary workspace, and staging areas, will be determined by Northern's onsite Environmental Inspector at the time of construction.



Notes

1. Coordinate System: NAD 1983 UTM Zone 15N
2. Data Sources: Stantec, NNG, NADS, USGS, WDNR, MnDNR
3. Background: 2021 NAIP



V:\1726\Active\172608212\03_data\gis_cad\gis\mxd\172608212_NL_2025_Delineation_Report\172608212_NL_2025_Delineation_Report.aprx Revised: 2024-10-14 By: jmarly



Figure No.
2

Title
BLANDING'S TURTLE AVOIDANCE PLAN
MCE 2024-00036

Client/Project
Northern Natural Gas
Northern Lights 2025 Expansion Project
Wetland Delineation - Farmington to Hugo C-Line Extension

Project Location
Washington Co., MN

Prepared by JM on 2024-10-10
TR by SF on 2024-10-10
IR by NN on 2024-10-14

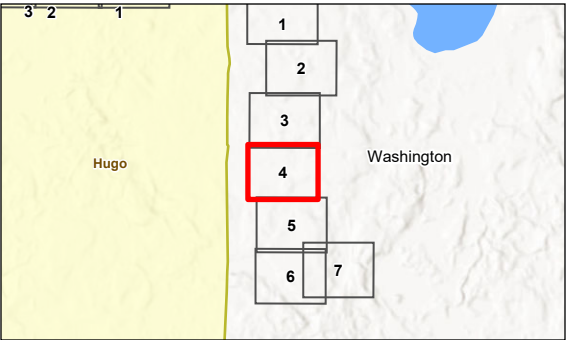
N

0 100 200 Feet
(At original document size of 11x17)
1:2,400

Legend

- Milepost
- HDD Entry/Exit
- HDD Segment
- Proposed Centerline
- Existing Centerline
- Hay Bale
- Silt Fence
- Redundant Silt Fence
- Tracking Pad
- Environmental Survey Boundary
- Extra Temporary Workspace
- Temporary Access Road
- Temporary Workspace
- Staging Area
- Field Delineated Waterway
- Field Delineated Open Water
- Field Delineated Waterway Area
- Field Delineated Wetland
- National Hydrography Dataset / DNR 24k Hydrography
- Perennial Stream
- Intermittent Stream
- Waterbody

NOTE: The exact location of exclusion fencing versus hay bales installed onsite at the entrance and exit points to temporary workspace, extra temporary workspace, and staging areas, will be determined by Northern's onsite Environmental Inspector at the time of construction.



Notes

1. Coordinate System: NAD 1983 UTM Zone 15N
2. Data Sources: Stantec, NNG, NADS, USGS, WDNR, MnDNR
3. Background: 2021 NAIP



V:\1726\Active\172608212\03_data\gis\mxd\172608212_NL2025_Delineation_Report\172608212_NL2025_Delineation_Report.aprx Revised: 2024-10-14 By: jmart

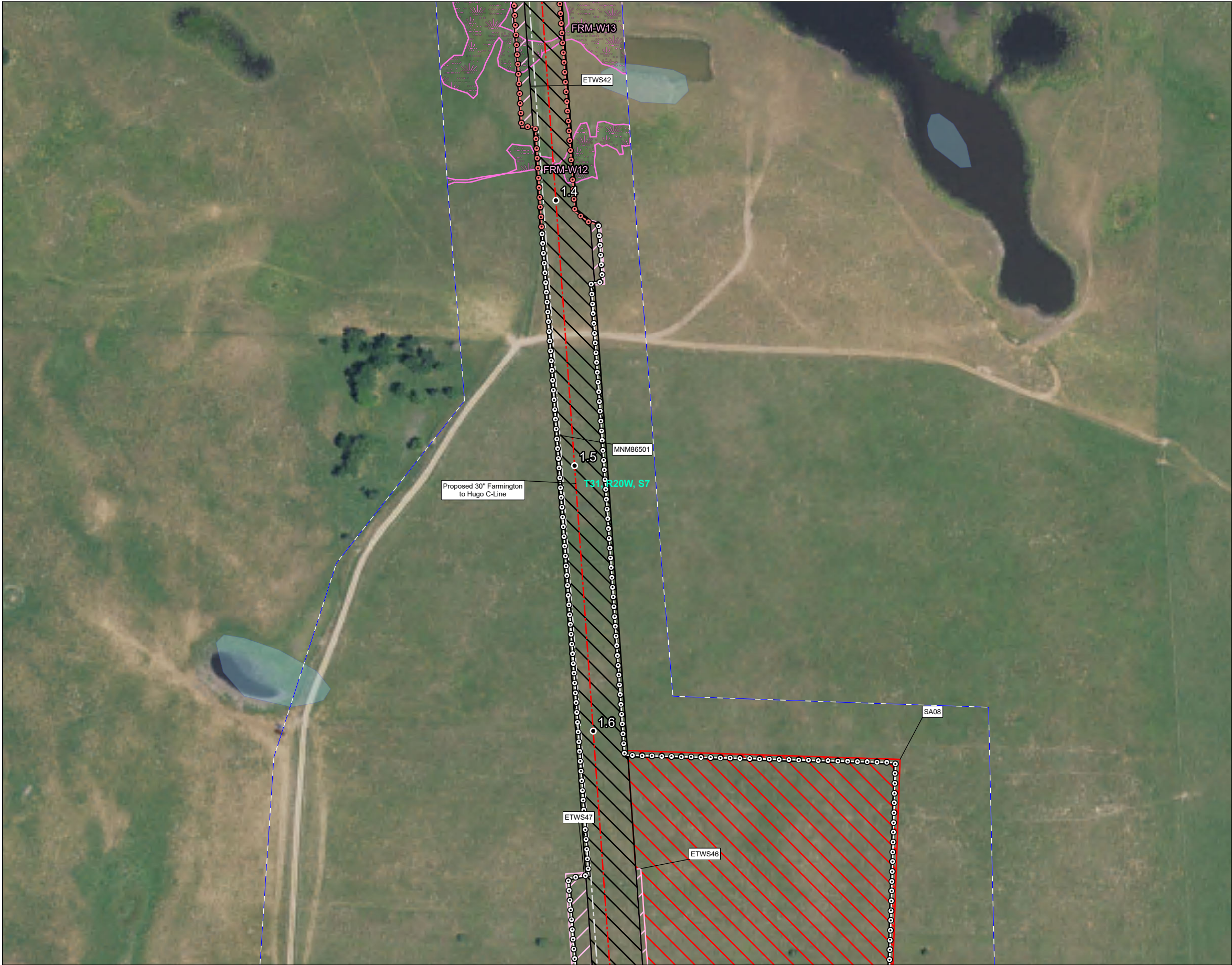


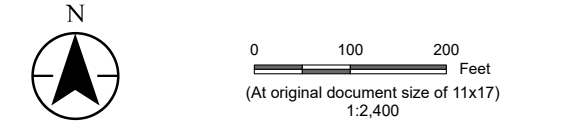
Figure No.
2
Title
BLANDING'S TURTLE AVOIDANCE PLAN
MCE 2024-00036

Client/Project
Northern Natural Gas
Northern Lights 2025 Expansion Project
Wetland Delineation - Farmington to Hugo C-Line Extension

172608212

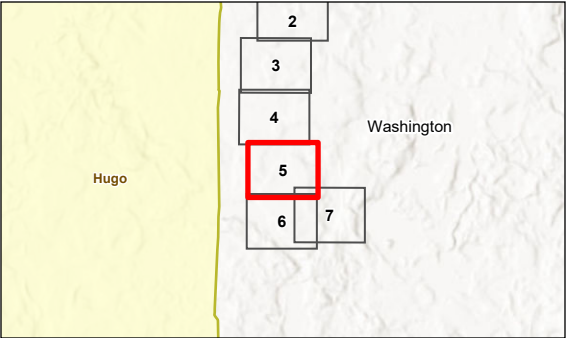
Project Location
Washington Co., MN

Prepared by JM on 2024-10-10
TR by SF on 2024-10-10
IR by NN on 2024-10-14



- Legend
- Milepost
 - ▬ HDD Segment
 - - - Proposed Centerline
 - Existing Centerline
 - Silt Fence
 - Redundant Silt Fence
 - Environmental Survey Boundary
 - Extra Temporary Workspace
 - Temporary Workspace
 - Staging Area
 - Field Delineated Waterway
 - Field Delineated Open Water
 - Field Delineated Waterway Area
 - Field Delineated Wetland
 - National Hydrography Dataset / DNR 24k Hydrography
 - Perennial Stream
 - Intermittent Stream
 - Waterbody

NOTE: The exact location of exclusion fencing versus hay bales installed onsite at the entrance and exit points to temporary workspace, extra temporary workspace, and staging areas, will be determined by Northern's onsite Environmental Inspector at the time of construction.



Notes
1. Coordinate System: NAD 1983 UTM Zone 15N
2. Data Sources: Stantec, NNG, NADS, USGS, WDNR, MnDNR
3. Background: 2021 NAIP



V:\1726\Active\172608212\03_data\gis\mxd\172608212_NL_2025_Delineation_Report\172608212_NL_2025_Delineation_Report.aprx Revised: 2024-10-14 By: jmart



Figure No.
2

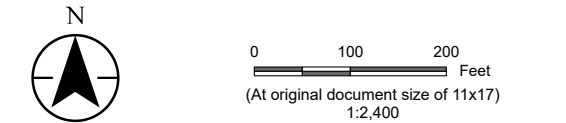
Title
BLANDING'S TURTLE AVOIDANCE PLAN
MCE 2024-00036

Client/Project
Northern Natural Gas
Northern Lights 2025 Expansion Project
Wetland Delineation - Farmington to Hugo C-Line Extension

172608212

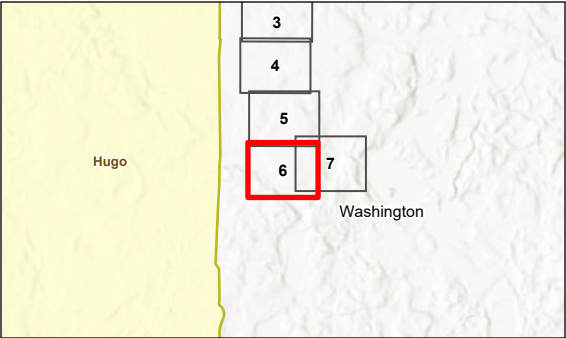
Project Location
Washington Co., MN

Prepared by JM on 2024-10-10
TR by SF on 2024-10-10
IR by NN on 2024-10-14



- Legend
- | | |
|---------------------------------|--|
| • Milepost | △ Culvert |
| ▬ HDD Segment | Field Delineated Waterway |
| ▬ Proposed Centerline | Field Delineated Open Water |
| ▬ Existing Centerline | Field Delineated Waterway Area |
| ■ Hay Bale | Field Delineated Wetland |
| ○ Silt Fence | National Hydrography Dataset / DNR 24k Hydrography |
| ○ Redundant Silt Fence | Perennial Stream |
| □ Environmental Survey Boundary | Intermittent Stream |
| □ Proposed Facility | Waterbody |
| □ Extra Temporary Workspace | |
| □ Proposed Drive | |
| □ Temporary Access Road | |
| □ Temporary Workspace | |
| □ Staging Area | |

NOTE: The exact location of exclusion fencing versus hay bales installed onsite at the entrance and exit points to temporary workspace, extra temporary workspace, and staging areas, will be determined by Northern's onsite Environmental Inspector at the time of construction.



Notes

1. Coordinate System: NAD 1983 UTM Zone 15N
2. Data Sources: Stantec, NNG, NADS, USGS, WDNR, MnDNR
3. Background: 2021 NAIP



V:\1726\Active\172608212\03_data\gis_cad\gis\mxd\172608212_NL2025_Delineation_Report\172608212_NL2025_Delineation_Report.aprx Revised: 2024-10-14 By: jmart



Figure No.
2

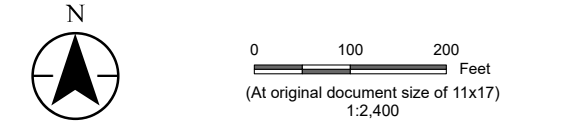
Title
**BLANDING'S TURTLE AVOIDANCE PLAN
MCE 2024-00036**

Client/Project
Northern Natural Gas
Northern Lights 2025 Expansion Project
Wetland Delineation - Farmington to Hugo C-Line Extension

172608212

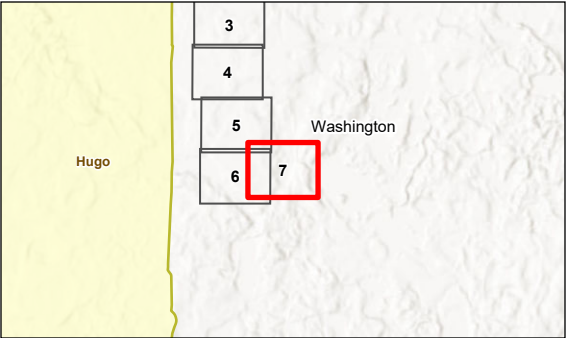
Project Location
Washington Co., MN

Prepared by JM on 2024-10-10
TR by SF on 2024-10-10
IR by NN on 2024-10-14



- Legend
- | | |
|---------------------------------|--|
| • Milepost | Field Delineated Waterway |
| █ HDD Segment | Field Delineated Open Water |
| --- Proposed Centerline | Field Delineated Waterway Area |
| — Existing Centerline | Field Delineated Wetland |
| ⊗ Silt Fence | National Hydrography Dataset / DNR 24k Hydrography |
| ⊗ Tracking Pad | Perennial Stream |
| □ Environmental Survey Boundary | Intermittent Stream |
| □ Proposed Drive | Waterbody |
| □ Staging Area | |

NOTE: The exact location of exclusion fencing versus hay bales installed onsite at the entrance and exit points to temporary workspace, extra temporary workspace, and staging areas, will be determined by Northern's onsite Environmental Inspector at the time of construction.



Notes

- Coordinate System: NAD 1983 UTM Zone 15N
- Data Sources: Stantec, NNG, NADS, USGS, WDNR, MnDNR
- Background: 2021 NAIP

