MINNEHAHA CREEK
WATERSHED DISTRICT
QUALITY OF WATER, QUALITY OF LIFE

Meeting: Board of Managers
Meeting date: 4/11/2024
Agenda Item #: 10.1
Item type: Permit

Title: Permit 24-075: CenterPoint Energy County Road 84 Paving Replacement Project

Prepared by: Name: Veronica Sannes, Permitting Assistant
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Recommendation:
Approval of MCWD permit application on the following conditions:

Conditions for permit issuance:
1. Reimbursement of District fees for engineering and legal review
2. Board of Managers approval of requested variance from Section 3(g) of the waterbody crossings and structures rule requirement requiring 100 feet setback for entrance and exit holes for directional drilling.

Summary and Background:
Location:
CenterPoint Energy (Applicant) has applied for a Minnehaha Creek Watershed District (MCWD or District) permit for the installation of a new natural gas distribution pipeline via horizonal directional drilling in the City of Orono for the CenterPoint Energy County Road 84 Paving Replacement Project (Project). The proposed Project would bore beneath 4 streams and 12 wetlands. Work will also take place within the 100-year floodplain of Lake Minnetonka and Classen Creek. The Project is located along the northern section of Lake Minnetonka, specifically along Bayside Road, Tonkawa Road, Leaf Street, and Old Crystal Bay in the City of Orono (Attachment A).

Proposed Project and Rule Triggers:
The Applicant proposes to abandon approximately 8,172 linear feet of natural gas pipeline and install approximately 5,097 linear feet of 2-inch-diameter and 4,572 linear feet of 4-inch-diameter natural gas pipeline using the method of horizonal directional drilling coupled with excavation pits to connect existing individual property service lines.

This work is needed due to a proposed Hennepin County road reconstruction project: County Road 84 Paving Replacement Project, which is subject to a separate MCWD permit. The County's road reconstruction project involves construction at depths that can cause damage to the existing distribution pipeline and connected service lines causing natural gas system issues, customer service issues, and public safety concerns. Relocating the natural gas utility prior to the road replacement would also prevent conflict with the new road if gas line maintenance were required. When possible, the Applicant's work will be done within the road right of way. Service lines will be installed to homes on private parcels as necessary. Distribution lines are to be contained within the road right of way and/or within a utility easement to reduce conflicts with future road reconstruction.

The Applicant has also submitted a Wetland Conservation Act no-loss application, which is currently under review by MCWD staff. The Project would require temporary impacts to two wetlands within the Project area for the respective excavation of two service line sites. There is no net fill to be added and the sites will be restored to preconstruction conditions after project completion.

The Project triggers MCWD's Erosion Control, Floodplain Alteration, and Waterbody Crossings and Structures rules. The Project meets the requirements for all applicable rules, with the exception of one requirement of the Waterbody Crossings and Structures rule. The Applicant has requested a variance from the required 100-foot minimum setback from the streambank for pilot, entrance, and exit holes, as shown in Attachment A. The Board of Managers delegation of permitting authority to the Administrator specifies that when a variance is requested, the Board will retain authority for both the permit decision and the variance request.

Request for Variance to Waterbody Crossings and Structures Rule:
The Applicant has requested the Board grant a variance to the Waterbody Crossings and Structures rule section 3(g), which requires a minimum 100-foot setback from waterbodies for horizontal directional drilling holes. The intent of this requirement is to protect nearby water resources from the movement of sediment from areas of bore pit disturbance and from the accidental discharge of drilling fluid that may bypass sediment and erosion control measures. The Applicant explains that this variance is necessary due to spatial constraints associated with the existing natural gas service infrastructure network in the area, the property parcel boundaries, and the future County Road 84 Paving Replacement Project located in the City of Orono.

The Applicant references bore/tie-in sites and service excavation sites. Bore/tie-in sites are associated with the main distribution line, while service excavation sites are associated with service lines directly servicing individual buildings. While some service excavation sites involve digging down to an existing line to make a connection without using the bore method, the ones referenced in the variance request involve horizontal drilling to route new service lines to homes on private parcels. These bore holes involve a smaller 2-inch diameter pipe and drill path compared to the main distribution line, whose bore holes are marked by the bore/tie-in site marker. For the remainder of this report, any pilot, entrance, or exit hole that involves horizontal drilling will be referred to as a "bore hole" for clarity.

There will be three bore holes that are associated with waterbody crossings within 100 feet of two streams. While there are additional bore holes within 100 feet from waterbodies, because they are not associated with a waterbody crossing, they are not subject to the Waterbody Crossings and Structures Rule. However, the District has taken note of the proximity and has taken it into account when reviewing the sites under the Erosion Control Rule. The bore holes cannot be relocated outside of the 100-foot setback due to the existing natural gas service infrastructure network in the area, property parcel boundaries, and the future County Road 84 Paving Replacement Project.

Therefore, the Applicant is proposing to operate within existing utility easements, which will require six bore hole sites to be located closer than 100 feet from the watercourses. Three of these sites are also associated with a service or distribution line which cross a waterbody and thus necessitate a variance. Staff have reviewed the proposed locations of the bore holes, and while they do not meet the required 100-foot setback, the applicant has proposed redundant BMPs to mitigate any potential risk of erosion and sediment transport.

District Rule Analysis:
Erosion Control Rule
MCWD's Erosion Control rule applies to a land disturbance of 5,000 square feet or the excavation, fill, or stockpiling on-site of 50 cubic yards of soil or earth materials. The Applicant is proposing 2,052 square feet (0.047 acres) of disturbance area and 337 cubic yards of excavation volume, thereby triggering the Erosion Control rule.

Per sections 5(a) and 5(b) of the rule, an erosion and sediment control plan has been submitted and displays erosion and sediment control BMPs.

The Site Plan (Attachment A), contains the Applicant's erosion control plan. Site sediment and erosion control practices include perimeter sediment controls around each excavation site, equipment cleaning, street sweeping, seeding of disturbed soil, and inlet protection. Specific Best Management Practices (BMPs) to be implemented will be determined on-site but BMPs that the Applicant has cited as site specific options include but are not limited to filter logs, silt fences, and drop-in inlet protection (Attachment B). Seed and erosion control blankets will be used for final stabilization of all sites of soil disturbance.

Staff find the erosion and sediment control rule requirements have been met.

Floodplain Alteration Rule
MCWD's Floodplain Alteration rule is triggered when work is proposed at or below the 100-year high water level of a waterbody. This rule requires that compensatory storage be created to offset any proposed volume of floodplain fill. The 100-year high water elevation for Lake Minnetonka is 931.5 feet (NGVD 29). There are six bore/tie-in sites, one cut and cap excavation site, and five service excavation sites within the 100-year floodplain. Land below the projected 100-year

high water elevation of Lake Minnetonka and Classen Creek will be temporarily disturbed during the utility construction process, thereby triggering the Floodplain Alteration rule.

Per section 3(a), the Project will cause no decrease in storage capacity below the 100-year high water elevation. The proposed work sites have been demonstrated by cut and fill calculations (Attachment C) to cause no net change in storage capacity for either waterbody, Lake Minnetonka or Classen Creek. Therefore, the Project is in conformance with this section of the rule.

Per section 3(b), the Project will not cause an increase in the 100-year flood elevation to Classen Creek. The Project proposes no net fill to the floodplain. Therefore, the Project is in conformance with this section of the rule.

Sections 3(c), 3(d), 3(e), and 3(f) of the rule do not apply, as there will be no fill, no new impervious surface, no ice ridge grading, and no construction of structures.

Waterbody Crossings and Structures Rule

MCWD's Waterbody Crossings and Structures rule applies to any project that proposes to place a road, highway, utility, bridge, boardwalk, or associated structure in contact with the bed or bank of a waterbody. A permit is required under the District's Waterbody Crossings and Structures rule for horizontal drilling under the bed of a waterbody. The District rules define a waterbody to include a watercourse, defined as "any channel having definable beds and banks capable of conducting generally confined runoff from adjacent lands." The Project triggers MCWD's Waterbody Crossings and Structures rule, due to the proposed crossings beneath four streams, all of which meet this definition of a watercourse.

The four watercourses to be crossed by the Project are (1) a first-order stream, (2) a third-order stream, (3) a fourth-order stream, and (4) a stream delineated by the Applicant in the field. The first order stream is an unnamed stream that discharges into Classen Creek, which later discharges into Lake Minnetonka. The third order stream, also unnamed, discharges directly into Lake Minnetonka. Classen Creek, the fourth order stream, receives water from Classen Lake and discharges into Lake Minnetonka. The final stream being crossed is a field delineated unnamed stream that is not in the District's stream order map/inventory. Three proposed bore holes are located within 100 feet of two of these waterbody crossings (i.e., the first-order stream and the field delineated stream), which prompts a variance.

Section 3. Criteria, of the Waterbody Crossings and Structures rule, requires that the project:

a) Meet a demonstrated public benefit for projects in public waters, and a specific need in all other cases.
b) Retain adequate hydraulic capacity.
c) Not restrict navigational capacity.
d) Preserve aquatic and upland wildlife passage.
e) Not adversely affect water quality.
f) Represent the minimal impact solution.
g) In the case of directional drilling provide three feet of vertical clearance and 100' setback for drill holes.

Per section 3(a), the proposed natural gas pipeline replacement meets a demonstrated public benefit and a specific need. The pipeline meets the specific need to connect residents to gas service; Hennepin County requires that it be relocated to allow for the County Road 84 Paving Replacement Project. Therefore, the Project is in conformance with this section of the rule.

Sections 3(b), 3(c), and 3(d) of the rule do not apply, as the crossing will be beneath the channel, and therefore the Applicant proposes no change in hydraulic or navigational capacity or passage of aquatic or upland wildlife along the channel banks.

Per section 3(e), the placement of the natural gas pipeline will not adversely affect water quality. The Applicant has indicated erosion and sediment control measures at all proposed bore holes (Attachment A) to ensure water quality is not affected by the temporary disturbance proposed as well as redundant BMPs (i.e., two rows of BMPs) for bore holes within the 100-foot setback. District staff finds the erosion control plan meets the requirements of the rule and the plan is sound for the purpose of this project.

Per section 3(f), the Applicant has submitted design alternatives to show the proposed plan meets the minimum impact solution with respect to all other reasonable alternatives. One alternative submitted is a no-build scenario. This option would minimize impact but would result in gas system issues, customer connection issues, and public safety concerns. The Project is being proposed as a result of a future road reconstruction project by Hennepin County and the relocation of facilities is to avoid conflict with the road reconstruction. A no-build scenario would result in future utility conflicts and impacts caused by the County project. Additionally, a no-build scenario does not meet the project goals. The second alternative submitted is to install the natural gas pipeline via an open-trench method. This open trench installation method would result in higher levels of soil disturbance adjacent to waterbodies near the project area. The Applicant noted that rerouting the new natural gas distribution line is not feasible due to the existing natural gas service infrastructure network in the area and the County Road 84 Paving Replacement Project. Based on the alternatives submitted for the Project, MCWD staff concur that the applicant has demonstrated that the proposed plan represents the minimal impact solution, as no other reasonable alternatives are apparent.

Per section 3(g), the proposed work shall provide for a minimum clearance of three feet below the bed of a waterbody, and a minimum setback of 100 feet from any stream bank for pilot, entrance, and exit holes, for projects involving horizontal directional drilling. Based on review of the plans and specifications, the Applicant can provide the required three feet minimum clearance below the bed of the waterbody, ensuring precision with a guidance system that tracks the location and depth of the drill head. Additionally, the Applicant can provide at least 100 feet of setback from the stream bank for all but three bore holes. The minimum setback of 100 feet is not being met due to the existing natural gas pipeline infrastructure and existing natural gas service lines to private properties. The Applicant has requested a variance to section 3(g) of the Waterbody Crossings and Structures rule, which has been analyzed under the 'Variance' heading below.

Section 3(h) of the rule does not apply; this is not a sanitary service project.

In summary, upon satisfaction of the recommended conditions, the project meets the requirements of the Waterbody Crossings and Structures rule, apart from section 3(g), as noted above, for which the Applicant has requested a variance.

Variance Request and Analysis:

Waterbody Crossings and Structures Requirements:

The Variance and Exception rule allows the Board of Managers to hear requests for variances from strict compliance with provisions of the District Rules if the Board determines that the request meets five criteria.

1. Due to special conditions inherent to the property, strict compliance results in hardship.

2. The hardship, not economic in nature, was not created by the landowner, or its representative.

3. Granting a variance will not merely serve as a convenience to the applicant.

4. There is no feasible and prudent alternative to the proposed activity requiring the variance.

5. Granting a variance will not impair or be contrary to the intent of the rule.

Variance Analysis:

Each variance criterion is analyzed below,

1. Because of special conditions inherent to the property that do not apply generally to other land or structures in the District, strict compliance with a provision of the District rule will cause undue hardship to the applicant;
    a. The Applicant has submitted a variance application (Attachment D), citing the alignment and positions of the three bore holes as a special condition inherent to the site location and an existing condition that was not created by the Applicant. Industry standard requires distribution lines to be located within the road right of way or a utility easement, and service lines to private property are to be installed so they do not cross another property. The Applicant is not a property owner and must work in alignment with private property boundaries and existing road rights-of-way.

2. The hardship was not created by the applicant, its owner or representative, or a contractor. Economic hardship is not grounds for issuing a variance;
    a. The Applicant is proposing to install the new natural gas distribution pipeline via horizontal directional drilling, with entrance and exit holes positioned on either side of the streams to traverse beneath them. The Applicant is not able to move the proposed locations of the natural gas distribution pipelines or service lines due to the location of existing CenterPoint Energy infrastructure, property parcel boundaries, and the future Hennepin County Road 84 Paving Replacement Project.

3. Granting the variance will not serve merely as a convenience to the applicant;
    a. The Applicant is providing a public utility service to the property owners in this neighborhood and not installing this natural gas distribution and service lines would cause public safety concerns as well as a hardship to the Applicant, property owners, and Hennepin County through the future paving project.

4. There is no feasible and prudent alternative to the proposed activity requiring the variance;
    a. The Applicant has explored alternative routing options for this location, none of which are feasible due to the existing natural gas service infrastructure network, property parcel boundaries, and the future County Road 84 Paving Replacement Project.

        One alternative would be to not carry through with the project. This could result in gas system issues, customer connection issues, and public safety concerns. This is also infeasible due to the County road reconstruction project.

        The second alternative option explored was to use an open-trench installation method, which would result in a larger area of disturbance and a greater threat of pollution or sedimentation of surface waters.

        Each site presents its own set of constraints. At the waterbody crossing along Bayside Road, as shown on Page 8 of Figure 2, two bore holes prompt a variance, one located 62 feet away and the other 74 feet away from the streambank. The service line will run perpendicular to the stream. The northern bore hole is associated with an existing house meter and cannot be relocated. Due to the parallel alignment of the distribution line and the stream, any attempt to relocate the southern bore hole would not bring it outside the 100-foot setback.

        At the waterbody crossing west of Leaf Street, as shown on Page 9 of Figure 2, one bore hole prompts a variance, situated 45 feet away from the streambank. Relocation of the bore hole or associated service line isn't feasible as moving it southwards would entail crossing a wetland, eastwards would place the bore hole within a wetland and outside of the right-of-way, and northwards would still result in crossing a field delineated waterbody and being within 100 feet of the waterbody crossing.

5. Granting the variance will not impair or be contrary to the intent of the rule.
    a. The purposes of the Waterbody Crossings and Structures rule, as set forth at section 1, are to discourage the use of beds and banks of waterbodies for the placement of utilities, to preserve the ecological integrity of the riparian and aquatic habitat, and to encourage the improvement of wildlife passage and habitat.

    b. The Applicant will not work within the bed or bank of the stream and will provide a clearance of three feet beneath the bed of the stream and the proposed utility. The Applicant has submitted plans (Attachment A) that cite where the distribution line is to be installed and the positions of the bore holes in relation to the streams.

        The proposed bore hole locations near the streams are set back as far as possible to prevent work from being done near the streams, prevent destabilization of the bank, sedimentation into the stream, and

permanent impacts. The proposed bore holes to connect the new service lines to the property meters are approximately 45, 62, and 74 feet from the top of bank.

The Applicant has provided an erosion and sediment control plan that shows additional erosion and sedimentation control measures will be taken at bore hole locations within the 100-foot setback. These measures involve installing redundant BMPs for temporary disturbance to ensure that the stream will not be impacted by the bore hole locations. The specific BMPs used will be determined on site but the Applicant has provided a Description of Best Management Practices and Applicability Table (Attachment B).

c. The District's revision to the rule that has received preliminary Board approval no longer would require a variance from the 100-foot setback. Instead, the rule would state: "The setback may be reduced if the applicant demonstrates that it is infeasible to meet a wider setback, and on the basis of an erosion control plan and other appropriate measures that will preserve streambank integrity and prevent sediment movement." This suggests that the Board is satisfied that managing the setback issue by means of careful site practices is consistent with the rule's intent.

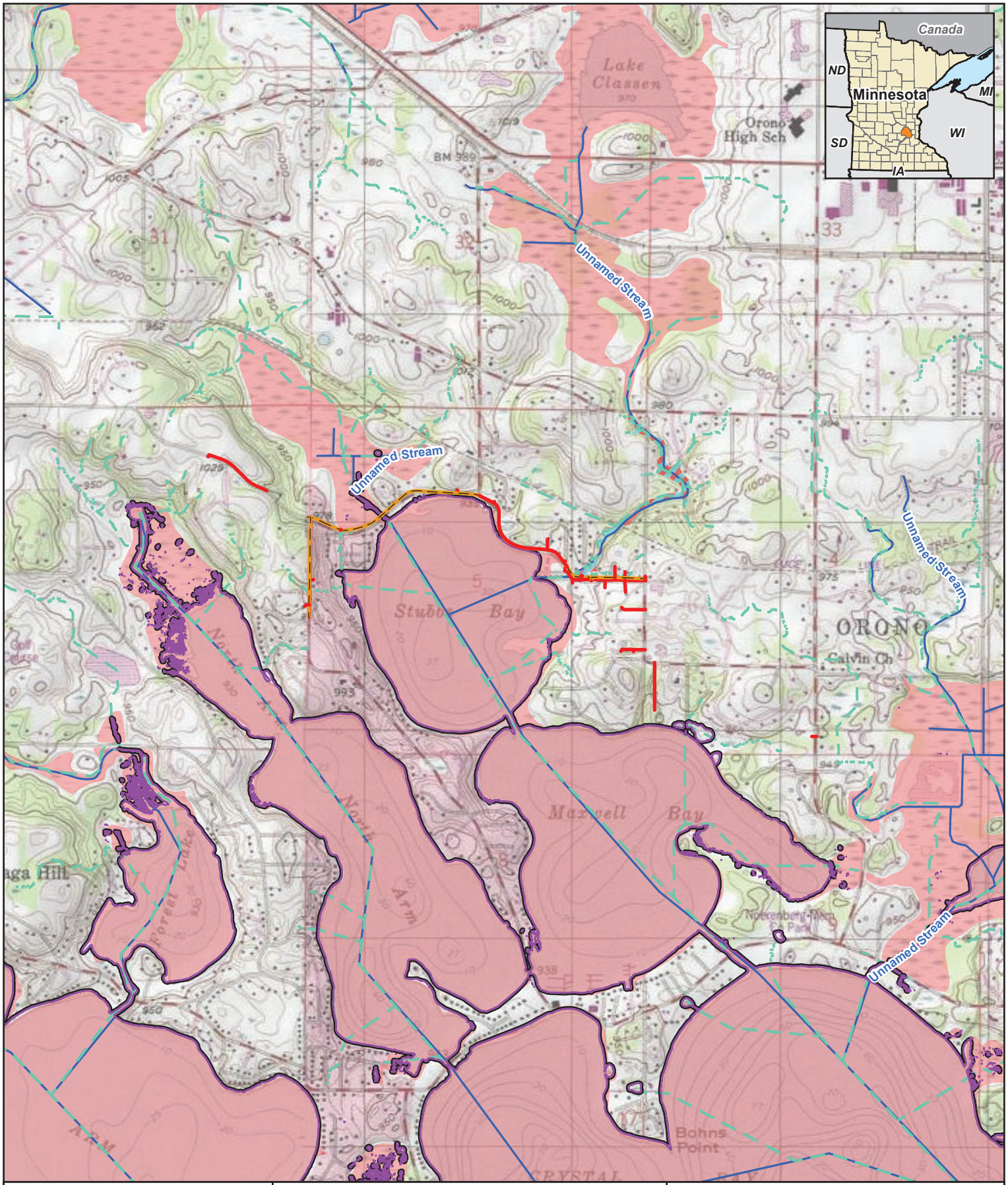
Summary:
The Applicant has applied for a MCWD permit for the Erosion Control, Floodplain Alteration, and Waterbody Crossings and Structures rules and a Variance to the required 100-foot minimum setback requirement of the Waterbody Crossings and Structures rule for bore holes.

Based on staff and District Engineer analysis of the submittals provided by the Applicant, there is a sound technical basis to find that the proposed bore holes cannot feasibly be moved further from the stream top of bank. Staff concurs in the factual statements and technical justifications stated above in the variance application.

Staff recommends approval of the permit application with the conditions listed at the beginning of this report.

Attachments:
- Attachment A: Site Plans
- Attachment B: Description of Best Management Practices and Applicability Table
- Attachment C: Cut and Fill Calculations
- Attachment D: Variance Request

Attachment A: Site Plans



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For Environmental Review Purposes Only

Figure 1: Site Location Map

Cty Rd 84 Paving Repl Project (WO# 110022923)

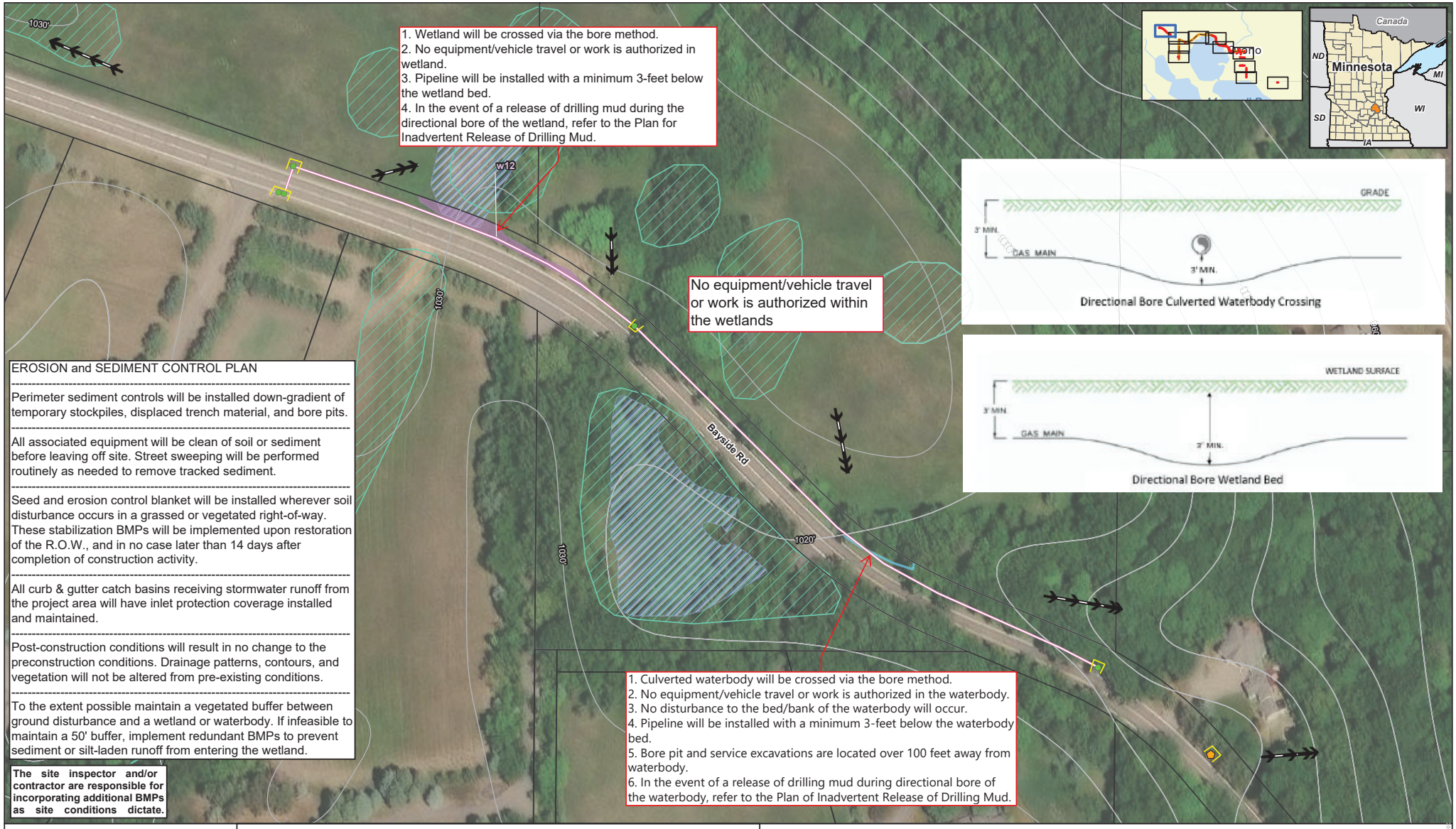
CenterPoint Energy

Orono, Hennepin County, Minnesota

- Proposed Pipeline
- Proposed Abandonment
- Lake Minnetonka Ordinary High Water Level (929.4 ft)
- Lake Minnetonka 100-Year Ordinary High Water Level (931.5 ft)
- Minnehaha Creek Watershed District Stream
- NHD Waterbody
- 1% Annual Chance Flood Hazard
- Regulatory Floodway

Source:

Date: (3/18/2024)



EROSION and SEDIMENT CONTROL PLAN

Perimeter sediment controls will be installed down-gradient of temporary stockpiles, displaced trench material, and bore pits.

All associated equipment will be clean of soil or sediment before leaving off site. Street sweeping will be performed routinely as needed to remove tracked sediment.

Seed and erosion control blanket will be installed wherever soil disturbance occurs in a grassed or vegetated right-of-way. These stabilization BMPs will be implemented upon restoration of the R.O.W., and in no case later than 14 days after completion of construction activity.

All curb & gutter catch basins receiving stormwater runoff from the project area will have inlet protection coverage installed and maintained.

Post-construction conditions will result in no change to the preconstruction conditions. Drainage patterns, contours, and vegetation will not be altered from pre-existing conditions.

To the extent possible maintain a vegetated buffer between ground disturbance and a wetland or waterbody. If infeasible to maintain a 50' buffer, implement redundant BMPs to prevent sediment or silt-laden runoff from entering the wetland.

The site inspector and/or contractor are responsible for incorporating additional BMPs as site conditions dictate.

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CenterPoint Energy

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Figure 2: Site Plan

Cty Rd 84 Paving Repl Project(WO# 110022923)

CenterPoint Energy

Orono, Hennepin County, Minnesota

- Bore/Tie-In Site
- Service Excavation
- BMP
- 2" Proposed Pipeline - Bore Method
- Stormwater Flow
- 10' Contour
- Minnehaha Creek Watershed District Stream
- Minnehaha Creek Watershed District Wetland
- Field Delineated Waterway
- Field Determined Wetland
- NHD Waterbody
- NWI Wetland
- Parcel

Sources:

Date: 1/42/2024

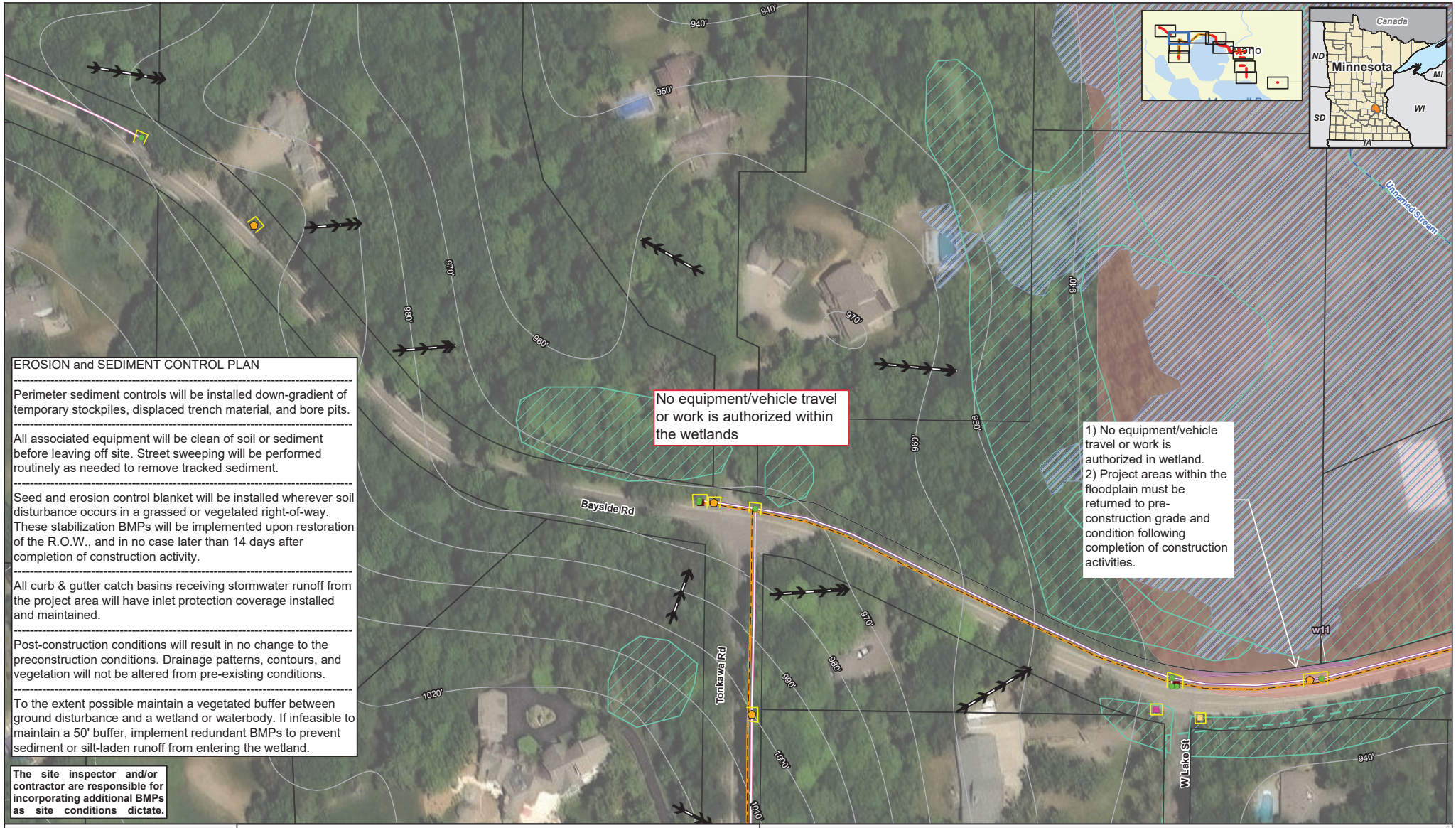

Figure 2: Site Plan

Cty Rd 84 Paving Repl Project(WO# 110022923)
CenterPoint Energy
Orono, Hennepin County, Minnesota
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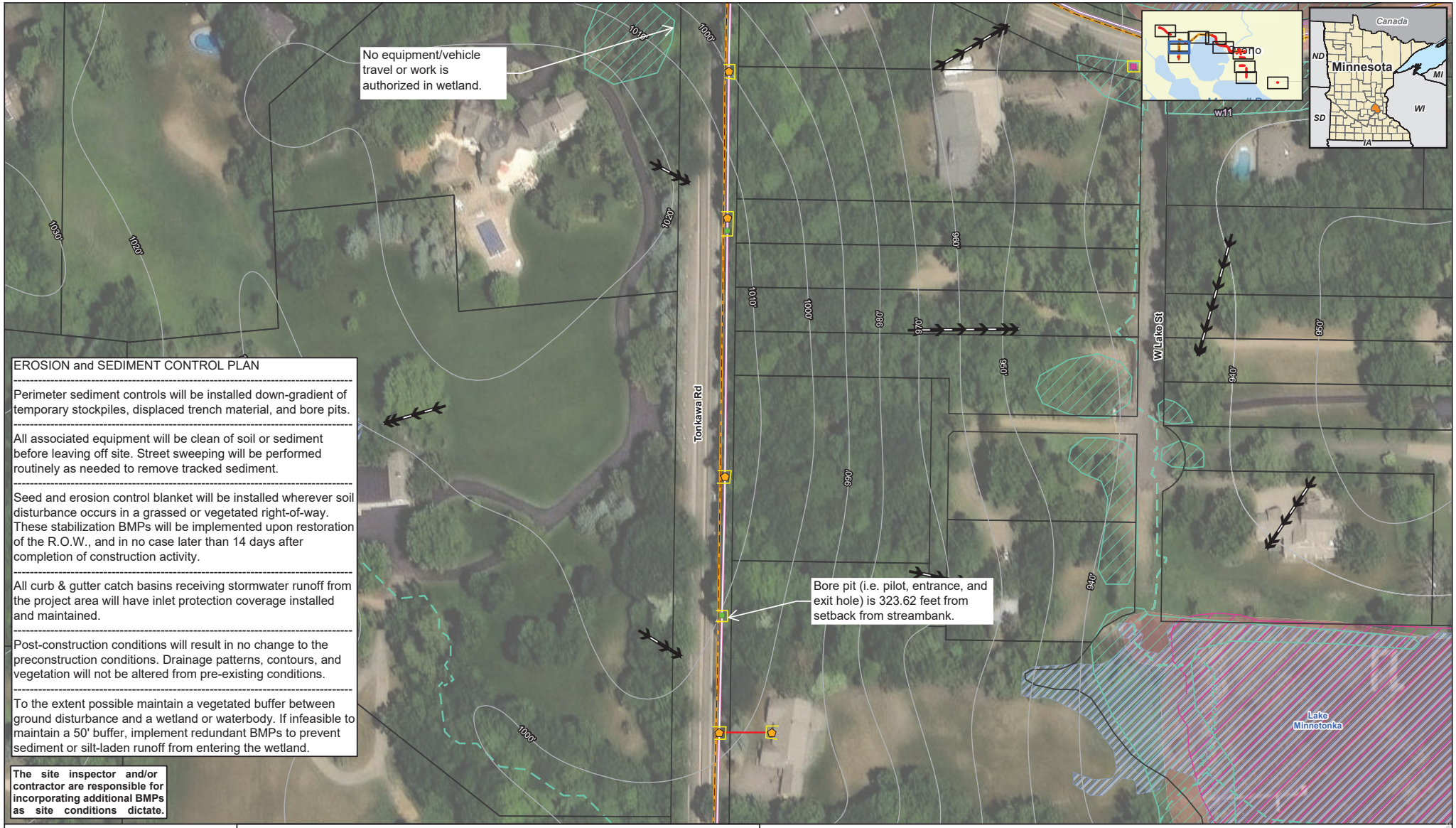

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CenterPoint Energy

For Environmental Review Purposes Only

Figure 2: Site Plan

Cty Rd 84 Paving Repl Project(WO# 110022923)

CenterPoint Energy

Orono, Hennepin County, Minnesota

- Bore/Tie-In Site
- Cut and Cap
- Service Excavation
- Culvert
- Storm Drain
- BMP
- 2" Proposed Pipeline - Bore Method
- 4" Proposed Pipeline - Bore Method
- Proposed Service Line - Bore Method
- Proposed Abandonment
- Stormwater Flow
- 10' Contour
- Minnehaha Creek Watershed District Stream
- Minnehaha Creek Watershed District Wetland
- Field Determined Wetland
- PWI Basin
- NHD Waterbody
- NWI Wetland
- 1% Annual Chance Flood Hazard
- Parcel

Sources:

Date: (4/2/2024)

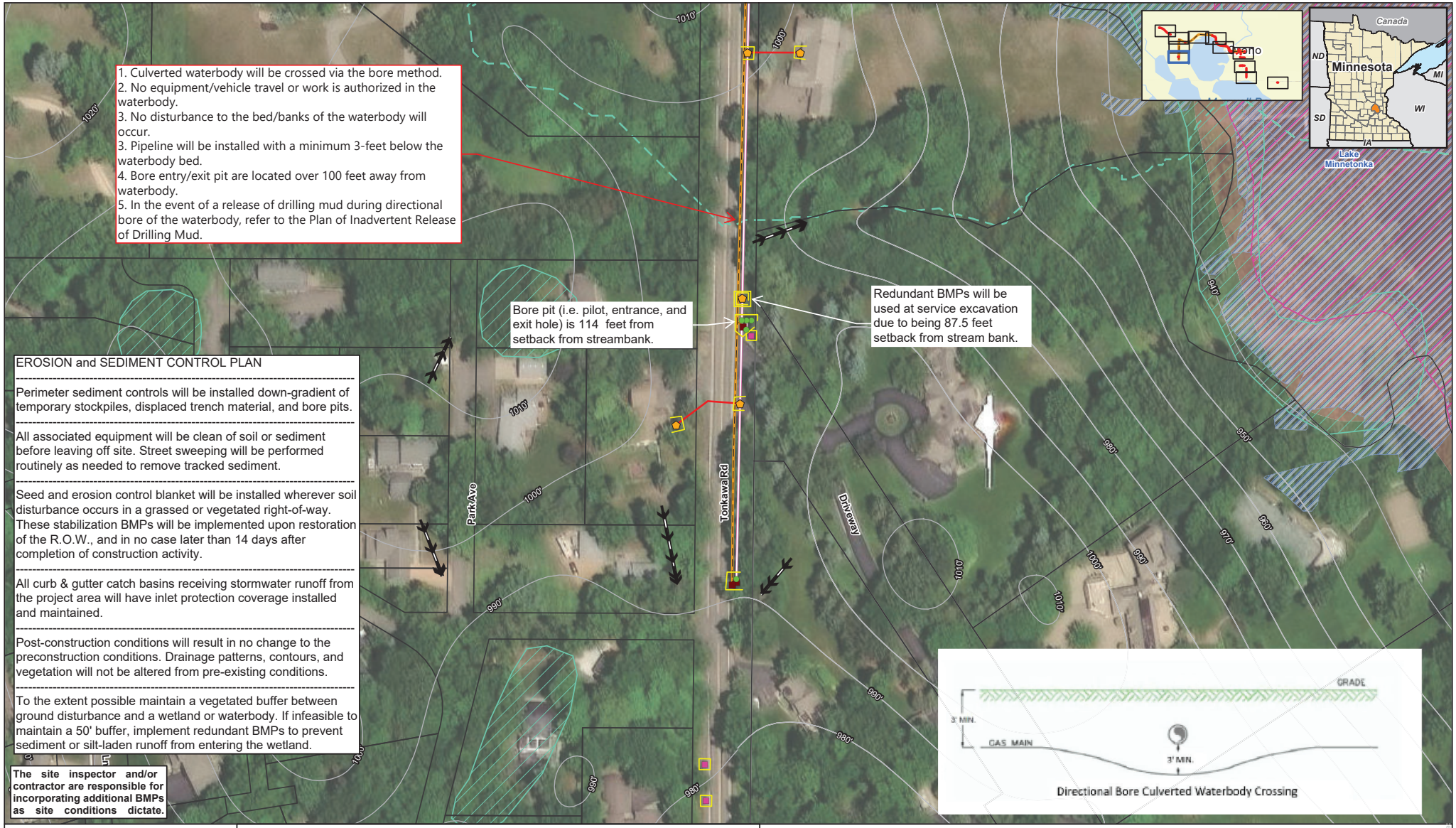

Figure 2: Site Plan

Cty Rd 84 Paving Repl Project(WO# 110022923)
CenterPoint Energy
Orono, Hennepin County, Minnesota
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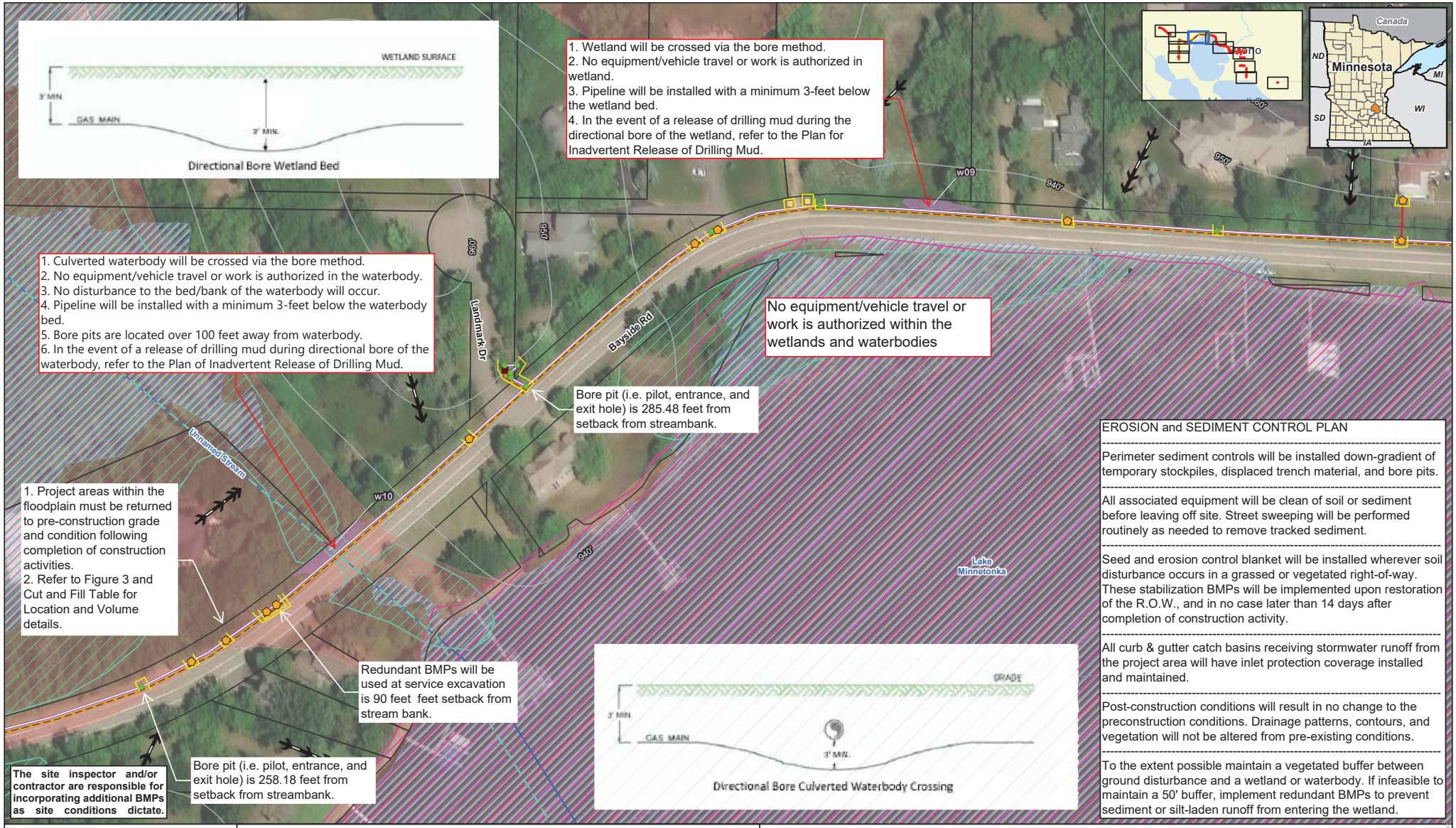

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CenterPoint Energy
For Environmental Review Purposes Only

Figure 2: Site Plan

Cty Rd 84 Paving Repl Project(WO# 110022923)
CenterPoint Energy
Orono, Hennepin County, Minnesota
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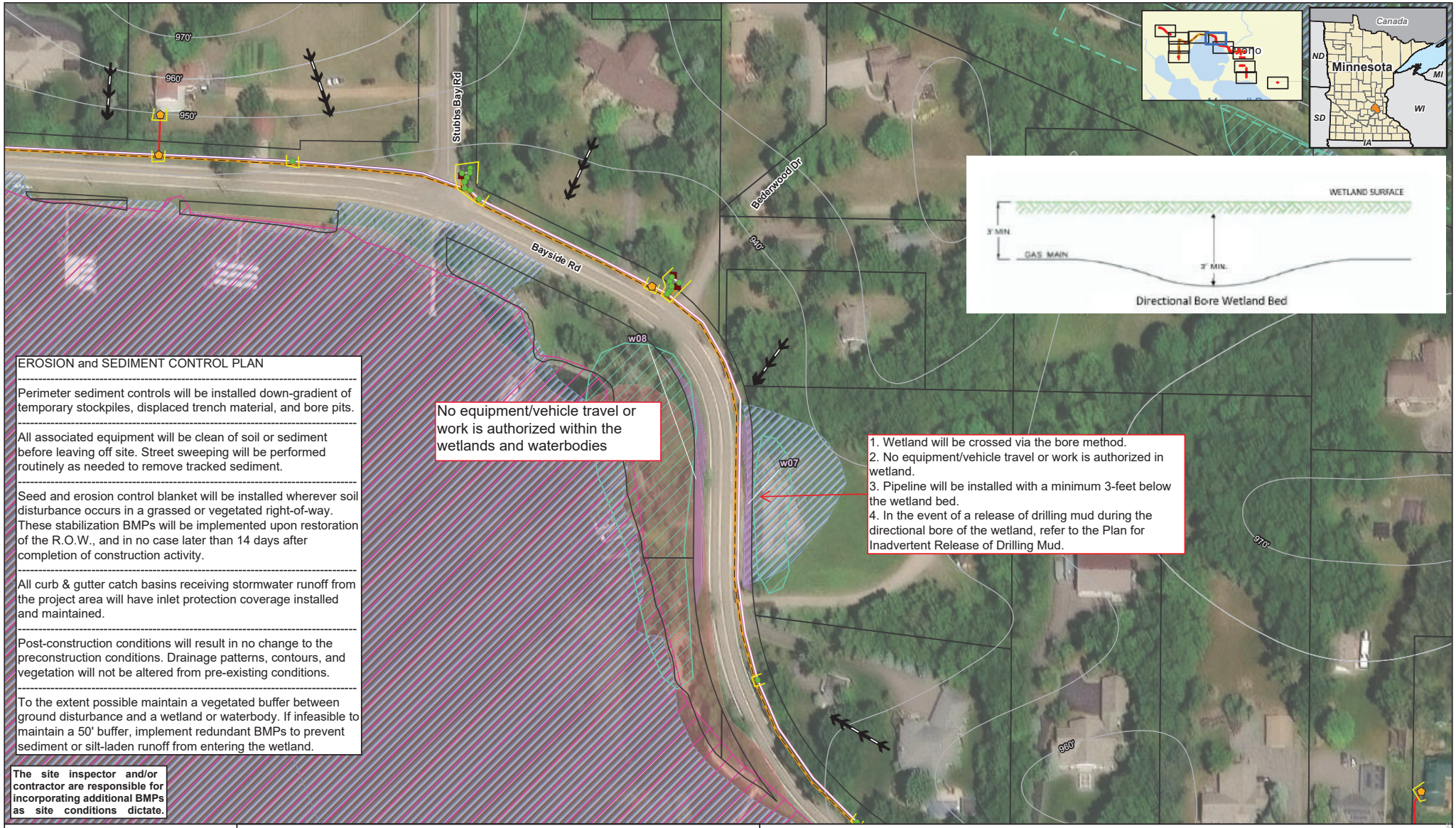
- Bore/Tie-In Site
- Cut and Cap
- Service Excavation
- Culvert
- BMP
- 4" Proposed Pipeline - Bore Method
- Proposed Service Line - Bore Method
- Proposed Abandonment
- Stormwater Flow
- 10' Contour
- Minnehaha Creek Watershed District Stream
- Minnehaha Creek Watershed District Wetland
- Field Delineated Waterway
- Field Determined Wetland
- PWI Basin
- NHD Waterbody
- NWI Wetland
- 1% Annual Chance Flood Hazard
- Parcel

Sources:
Date: 1/42/2024



EROSION and SEDIMENT CONTROL PLAN

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All associated equipment will be clean of soil or sediment before leaving off site. Street sweeping will be performed routinely as needed to remove tracked sediment.

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The site inspector and/or contractor are responsible for incorporating additional BMPs as site conditions dictate.

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CenterPoint Energy

For Environmental Review Purposes Only

Figure 2: Site Plan

Cty Rd 84 Paving Repl Project(WO# 110022923)

CenterPoint Energy

Orono, Hennepin County, Minnesota

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- Cut and Cap
- Service Excavation
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- 4" Proposed Pipeline - Bore Method
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- Field Determined Wetland
- PWI Basin
- NHD Waterbody
- NWI Wetland
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Sources:

Date: 1/4/2024

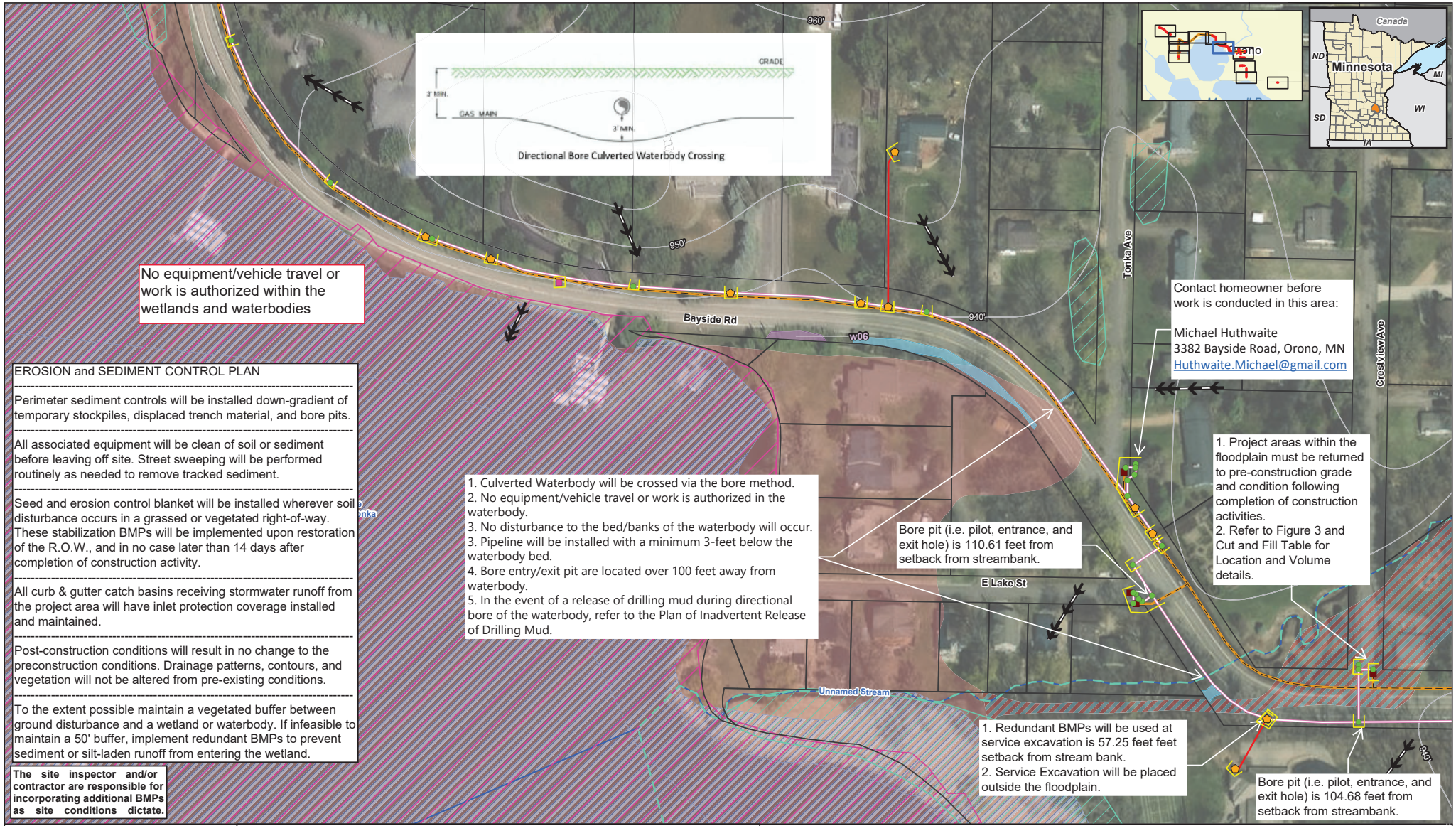

Figure 2: Site Plan

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CenterPoint Energy
Orono, Hennepin County, Minnesota

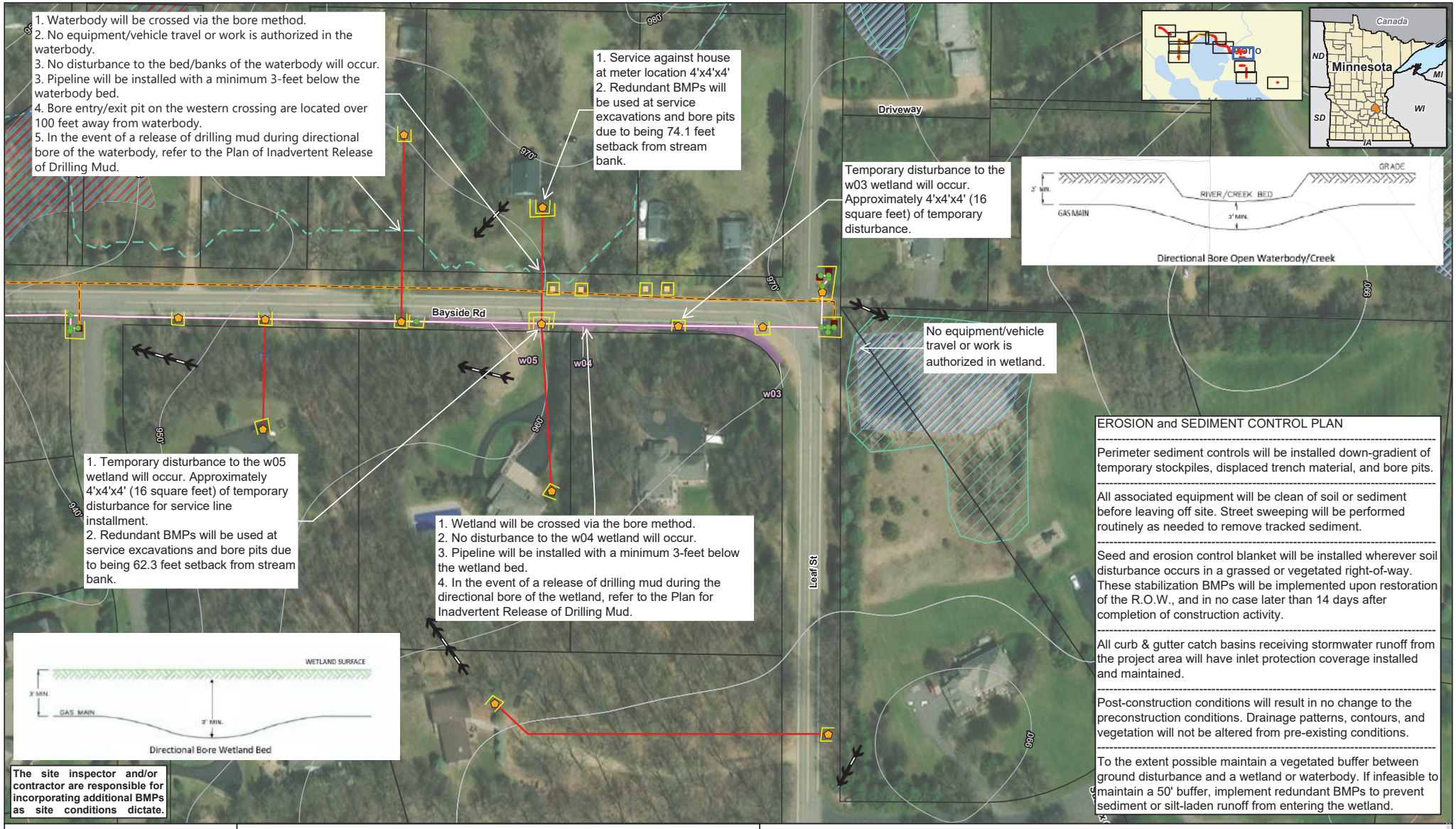
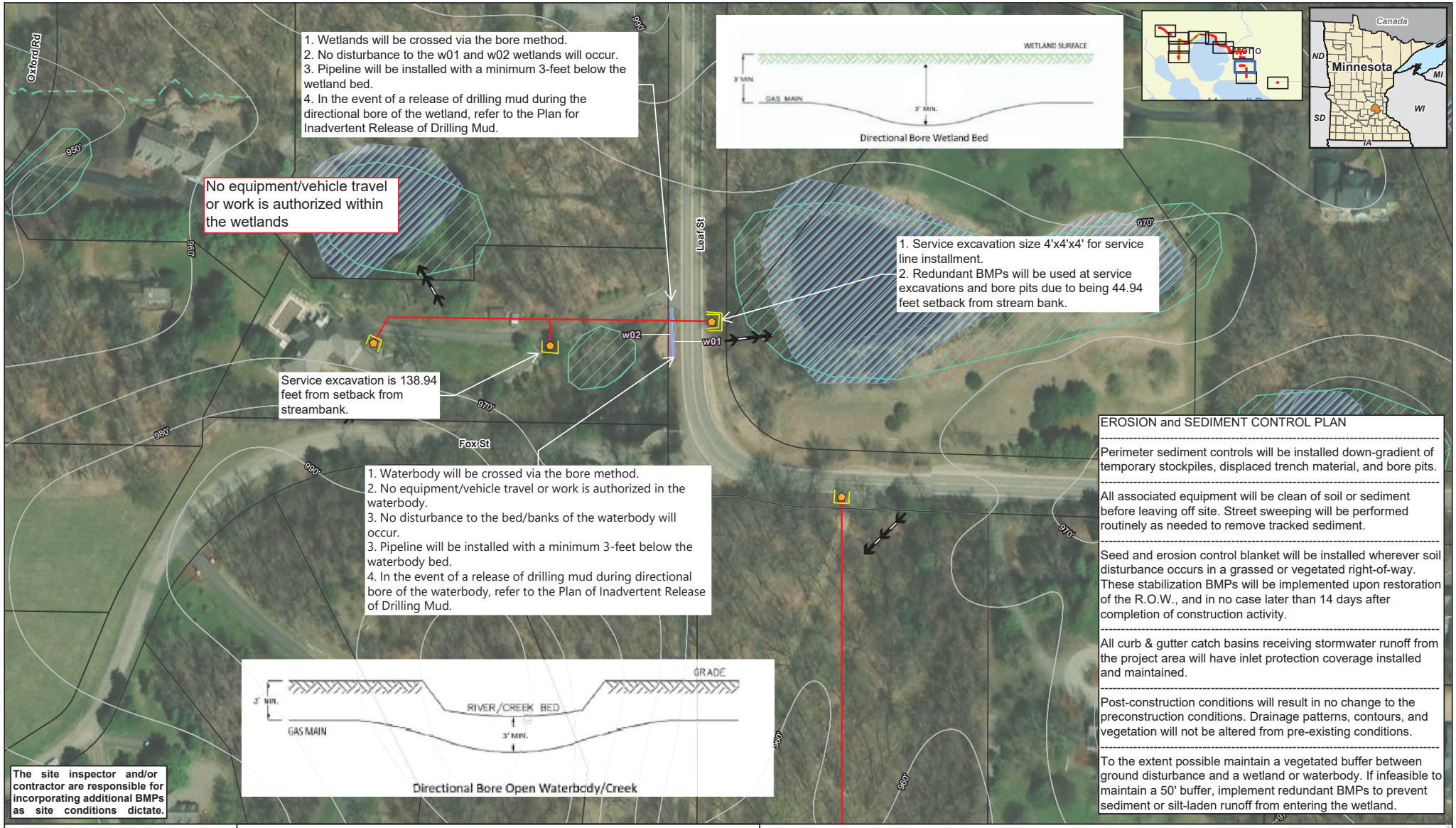


Figure 2: Site Plan

Cty Rd 84 Paving Repl Project(WO# 110022923)
CenterPoint Energy
Orono, Hennepin County, Minnesota



0 50 100 Feet
1:1,200
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CenterPoint Energy
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Figure 2: Site Plan

Cty Rd 84 Paving Repl Project(WO# 110022923)
CenterPoint Energy
Orono, Hennepin County, Minnesota
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- Service Excavation
- BMP
- Proposed Service Line - Bore Method
- Stormwater Flow
- 10' Contour
- Minnehaha Creek Watershed District Stream
- Minnehaha Creek Watershed District Wetland
- Field Delineated Waterway
- Field Determined Wetland
- NHD Waterbody
- NWI Wetland
- Parcel

Sources:
Date: 1/42/2024

The site inspector and/or contractor are responsible for incorporating additional BMPs as site conditions dictate.

0 50 100 Feet

1:1,200

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Figure 2: Site Plan

Cty Rd 84 Paving Repl Project(WO# 110022923)

CenterPoint Energy

Orono, Hennepin County, Minnesota

- Service Excavation
- BMP
- Proposed Service Line - Bore Method
- Stormwater Flow
- 10' Contour
- Minnehaha Creek Watershed District Stream
- Minnehaha Creek Watershed District Wetland
- PWI Basin
- NHD Waterbody
- NWI Wetland
- 1% Annual Chance Flood Hazard
- Parcel

Sources:

Date: 1/42/2024

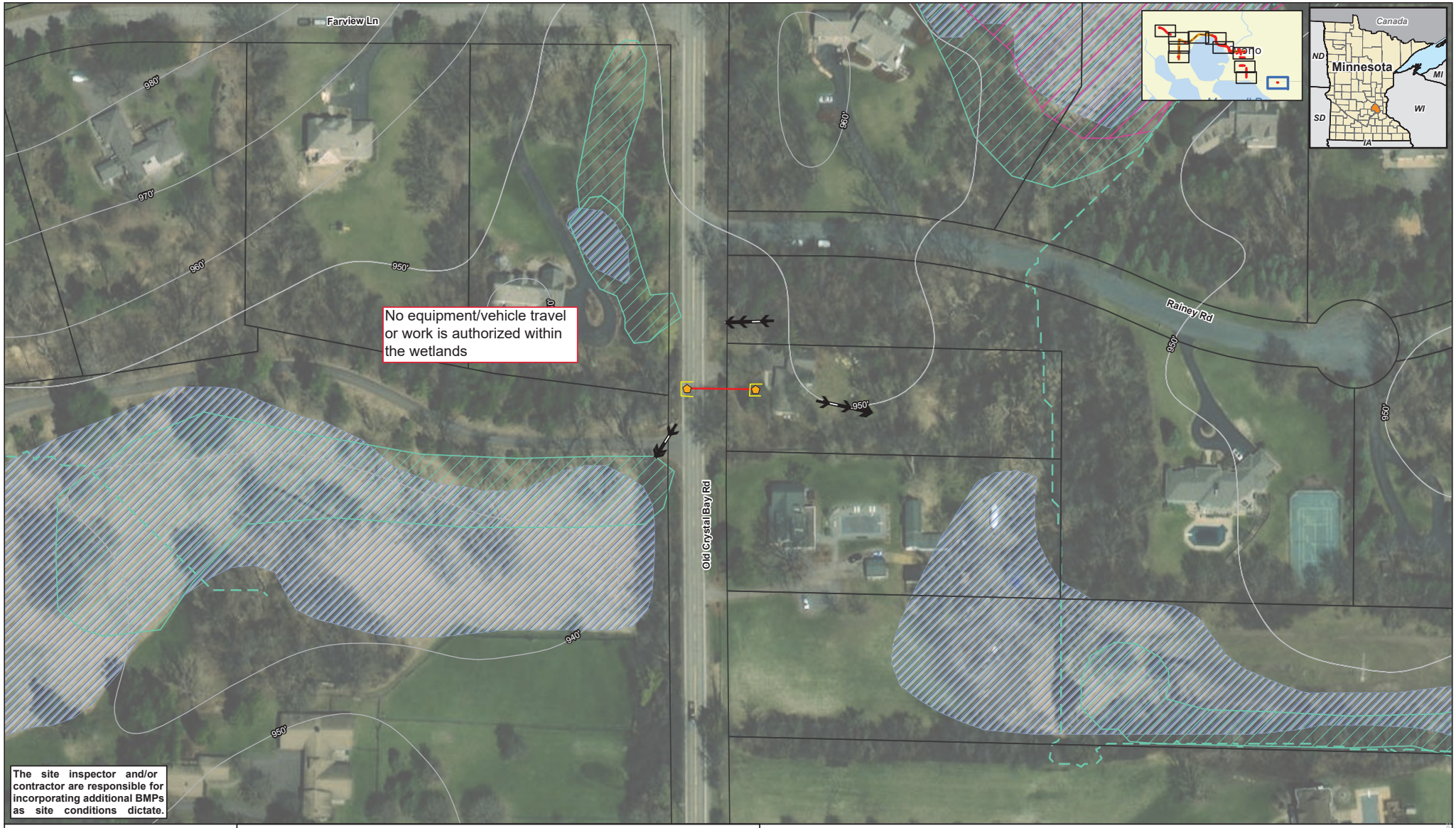

Figure 2: Site Plan

Cty Rd 84 Paving Repl Project(WO# 110022923)
CenterPoint Energy
Orono, Hennepin County, Minnesota
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Attachment B: Description of Best Management Practices and Applicability Table

CenterPoint Energy Gas Operations
Description of Best Management Practices and Applicability

BMP Type	BMP Name	Use	Application	Example Photo
Sediment Control Temporary	Drop-in Inlet Protection (Dandy Bags)	Used to filter stormwater flowing to a storm drain downslope of construction activities. Inlet protection is a required under stormwater regulations. This is a supplemental sediment control. Primary sediment controls should be installed at the construction site upslope of the receiving drain.	Inlet protection must have an overflow outlet and shall be installed per manufacturers specifications. Check and clean debris/sediment out daily. Inlet protections reduces the capacity of the storm sewer and may need to be pulled during large storm events.	
Sediment Control Temporary	Filter Logs	Used as an alternative perimeter control to silt fence. Most frequently used as perimeter control adjacent to curbs, smaller spoil piles, as a ditch check, or as a redundant best management practice. Only those filled with compost and using a biodegradable netting are considered biodegradable. All other types have to be removed upon achieving final stabilization.	Fiber logs are used as sediment and stormwater velocity control devices. They are typically made from tubes of plastic netting or biodegradable burlap material filled with woodchips, straw, rice straw, coconut fiber, or compost. Fiber logs come in a variety of sizes from 9 to 20 inches in diameter and in different lengths. Must be installed to manufacturers specifications. Good alternative to silt fence and straw bales for use as perimeter control or ditch check; however, the appropriate diameter log is critical. This product can be reused over several projects, except when used in areas of invasive/noxious species.	
Sediment Control Temporary	Road Cleaning	Used in conjunction with stabilization of construction entrances. All sediment tracked from project onto public roadways should be cleaned on a daily basis. Sediment removal may be done manual or using a wet street sweeper.	Where excessive tracking occurs on roadways or sidewalks, evaluate additional BMPs to reduce tracking. Cleanup should occur at the end of every day.	

BMP Type	BMP Name	Use	Application	
Sediment Control Temporary	Sandbags	Used for short-term perimeter controls (24 hours) or as ditch check. Do not use as perimeter control if adjacent to a sensitive feature or to protect storm sewer inlets.	As a barrier, they can slow stormwater flow offsite and provide some filtration of stormwater. Do not use sandbags in streets if prohibited by road authority.	
Sediment Control Temporary	Silt Fence	Used as a perimeter control, inlet protection, or slope breaker and occasional ditch check. Used as perimeter control along project workspaces and spoil piles or to divert water around the site. Must be removed upon final stabilization.	Most common BMP; typically used as a perimeter control but may be used as a ditch check or slope breaker in areas of low flow. Must be installed per manufacturers specifications including but not limited to: fabric shall be trenched-in properly, with locally approved stakes (wood or metal). Stakes will be on the downslope side of the fence. Proper maintenance is key for this BMP.	
Sediment Control Temporary	Straw/Hay Bales	Used as ditch checks and occasionally perimeter controls. May also be used in dewatering structures. Do not use on hard surfaces or in wetlands. Weed free bales may be broken up and used as mulch on ROW in lieu of removal. Use may be prohibited in some cities or counties.	Must be staked and trenched in properly to be effective. Use weed-free straw/hay. Replace saturated bales to ensure stormwater flow through the bale.	
Sediment Control Temporary	Super Silt Fence	Used in areas of extreme erosion potential, to protect sensitive resources, or to contain spoil piles where staking of silt fence is not possible (e.g., road surfaces).	Silt fence reinforced with chain-link or concrete jersey barriers wrapped in geotextile fabric. Avoid tearing fabric when moving jersey barriers.	

BMP Type	BMP Name	Use	Application	
Erosion Control Temporary/ Permanent	Erosion Control Blanket	Used to stabilize soil as a temporary or permanent erosion control. Should be used with seed for final stabilization. Use on excavated areas, steep slopes, or approaches to stormwater conveyances (e.g., ditches, waterbody banks, upland borders with wetlands). Use the appropriate blanket for the land use post construction (i.e, do not use a blanket with netting of 12 months in an area that will be mowed in 3 months)	Seedbed preparation should be completed before application. Blankets should be installed per manufacturers specifications. Installation includes installing blanket with the flow of water, overlapping the edges, trenching in the upslope edge, and using the appropriate staples and spacing. At wetlands and waterbodies, a netless erosion control blanket should be used.	
Erosion Control Temporary/ Permanent	Hydromulch & Hydroseed	Used to apply mulch and seed for temporary and permanent soil stabilization. Used in steeper slopes or areas where rapid stabilization is needed. Do not apply in areas of heavy foot traffic. Must be applied directly to bare soils and never in frozen conditions or over snow, unless otherwise specified by the manufacturer.	Hyrdomulch and hydroseeding are used to prevent erosion and encourage revegetation. Both are usually made from a slurry of water, wood or cellulose fibers, and a tackifier agent, and are differentiated by the inclusion of seed and fertilizer. Typical application rate is 2.5 tons/acre depending on the material being applied. All applications should follow manufacturer's specifications.	
Erosion Control Temporary/ Permanent	Mulch	Used as a temporary or permanent soil stabilization measure. If used for permanent stabilization it must be applied with a perennial seed mix. Mulch may be used in front of sediment controls to reduce flow velocity and capture sediments in areas of high discharge, or in between redundant BMPs. It should not be applied in wetlands.	Mulch typically used is weed-free straw or hay. Mulch must be crimped in to keep it in place. Typical application rate is 2 tons/acre or 90 percent ground coverage.	

BMP Type	BMP Name	Use	Application	
Erosion Control Temporary	Plastic Sheeting	Used for temporary cover for very short-term projects (24 to 48 hours) or soil piles left overnight.	Sandbags should be used to weigh the plastic in place and prevent sediment loss. Do not use dirt clods to secure bottom. If using for potential contaminated soils cover, use compost logs with the plastic cover.	
Erosion Control Permanent	Retain Existing Vegetation	Project phasing is a recognized erosion control that includes limiting vegetation removal to trenchline only, where possible. Minimizes erosion onsite and the need for sediment controls. Where existing vegetation was retained, limit final grading to those areas where vegetation was removed.	Where possible, retain a buffer of existing vegetation upslope of sediment controls. This will reduce runoff velocity, capture sediment, and reduce repair/maintenance to sediment controls.	
Erosion Control Temporary/ Permanent	Seeding	Used to reestablish vegetative cover on disturbed soils and as an erosion control measure on soil piles. Requirements for seed installation vary by state and seed mixes may be determined by road authority. Consider soil characteristics when selecting a seed mix. In droughty or arid areas, site may be stabilized using mulch/erosion control blankets. Good temporary erosion control for spoil piles.	Temporary/permanent stabilization measure that should be combined with mulch, erosion control blanket, or hydromulch. Apply where permit requires stabilization of spoil piles or disturbed areas no longer under construction (14-day, 7-day, or 24-hour application timelines). Prepare seedbed with adequate topsoil and amendments (unless prohibited by permits). Permanent seeding required for all projects unless covering with sod, gravel, or other road material. Water regularly following application of permanent seeding measures.	

BMP Type	BMP Name	Use	Application	Example Photo
Erosion Control Permanent	Sod	Used for final soil stabilization in lieu of seeding. Typically used in residential areas, grassy public areas, or areas requiring immediate stabilization.	Sod installation should include proper staking, overlapping edges, and thorough watering. Must be watered for 30 days or until rooted.	
Erosion & Sediment Control Temporary	Staging	Staging can include the intentional placement of spoil piles where stormwater flow is directed to the excavation or minimizing impacts in areas where the work is not to occur immediately. Minimizes or eliminates the need for perimeter control on smaller scale projects.	Store spoil piles upslope of excavation area and away from waterbodies, wetlands, and stormwater conveyances. Install sediment controls prior to initiating ground disturbing activities. Avoid working over previously stabilized areas where possible.	
Erosion & Sediment Control Temporary/ Permanent	Slope Breakers	Used to reduce runoff velocity, divert water off the construction right-of-way, and prevent sediment deposition into sensitive resources. Temporary slope breakers can be constructed of soil berms, silt fence, straw bales, or sandbags (see BMPs above). Permanent slope breakers can be constructed of soil, stone, or similar materials.	Install on slopes greater than 5 percent using the spacing guidance below. Direct the outflow of each slope breaker off the construction right-of-way to a well-vegetated area or energy dissipation device. Outfalls cannot be directed into wetlands, waterbodies, or other sensitive areas. **Slope (%) — Spacing (feet)** 5 - 15 — 300 >15 - 30 — 200 >30 — 100	

BMP Type	BMP Name	Use	Application	Example Photo
Resource Protection	Waste Management	Maintain a clean construction site. Waste materials should be contained and picked up daily. Any sediment controls left onsite after final stabilization are considered construction waste and should be removed. Do not store chemicals or refuel vehicles near wetlands or other water resources. Applicable for all projects.	All spills should be cleaned up immediately (follow CenterPoint's Spill Plan). Water from concrete washouts or wet-concrete cuts must be contained and disposed of properly. Any waste materials from construction should be removed from the site. Sediment controls should be removed after final stabilization is achieved.	

Key Compliance Points for Construction Stormwater

1. **BMPs must be used on all projects regardless of their size.**
2. A construction stormwater permit and SWPPP is required for all projects with 1 acre or more of ground disturbance or part of a Common Plan of Development and a copy of these documents must be kept onsite during construction.
3. BMPs should be installed as directed in the Pocket Buddy text and specifically to protect sensitive resources on and off site, minimize erosion onsite and prevent sediment flow offsite.
4. Vehicle travel or construction activities are not authorized within wetlands/waterbodies unless a permit for that specific activity has been provided with construction documents.
5. Changes in the project footprint or construction methods must be communicated to the Project Designer and Regional Environmental Specialist immediately before proceeding.
6. Final restoration measures should be initiated immediately in portions of the site where construction activities have permanently ceased. Temporary stabilization is required where construction has ceased and will not resume for the period of time specified in applicable permits.
7. Return the on-site SWPPP and all original documents (i.e., inspection reports, site photos) to the Regional Environmental Specialist upon final stabilization and the completion of construction activities.

Environmental Services Contact Information

Chris LaNasa Environmental Programs Manager	612-321-5448 (Office) 612-916-9213 (Cell)	Hugh Santos, Jr. Lead Environmental Specialist (LA, MS)	318-429-2532 (Office) 318-510-5119 (Cell)
Colton Peshek Lead Environmental Specialist (MN)	612-321-5447 (Office) 612-499-4087 (Cell)	Mark Wannemueller Lead Environmental Specialist (IN, OH)	812-491-4601 (Office) 812-228-9541 (Cell)
Justin Suchecki Lead Environmental Specialist (TX)	713-207-5681 (Office) 832-470-3098 (Cell)		

Attachment C: Cut and Fill Calculations

0 375 750 Feet

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Figure 3: Floodplain Cut and Fill Locations

Cty Rd 84 Paving Repl Project(WO# 110022923)

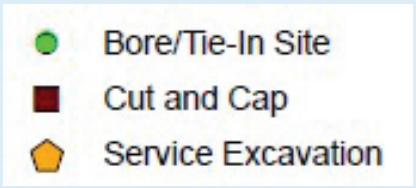
CenterPoint Energy

Orono, Hennepin County, Minnesota

- Bore/Tie-In Site
- Cut and Cap
- Service Excavation
- 2" Proposed Pipeline - Bore Method
- 4" Proposed Pipeline - Bore Method
- Proposed Service Line - Bore Method
- Proposed Abandonment
- 1% Annual Chance Flood Hazard
- Regulatory Floodway

Sources:

Date: 1/30/2024

	For padding around the pipes only.	For padding around the pipes only.	
Soil Removal and Fill Locations Bore/Tie-In Sites = b-01, b-02... Cut and Cap Excavation = c-01 Service Excavations = s-01, s-02...	Soil Removed Volume (Yd^3)	Clean Fill Added Volume (Yd^3)	Net Decrease in Storage Capacity Y/N
b-01	0.015	0.015	No
b-02	0.015	0.015	No
b-03	0.015	0.015	No
b-04	0.015	0.015	No
b-05	0.015	0.015	No
c-01	0.015	0.015	No
s-01	0.015	0.015	No
s-02	0.015	0.015	No
s-03	0.015	0.015	No
s-04	0.015	0.015	No
s-05	0.015	0.015	No
Total Volumes	1.65	1.65	No

Attachment D: Variance Request

REQUEST FOR VARIANCE AND STATEMENT OF HARDSHIP

MINNEHAHA CREEK WATERSHED DISTRICT (MCWD)
15320 MINNETONKA BLVD. **Phone: 952-471-0590**
MINNETONKA, MN 55345 **Fax: 952-471-0682**

A request for a Variance must be accompanied by a MCWD Water Resources Application

Project Details:

Project address: Bayside Rd, Tonkawa Rd, and Leaf St City: Orono State: MN Zip: 55356

County: Hennepin Property ID number (PID): Road rights-of-way

The Board of Managers may hear requests for variances from strict compliance with provisions of the District Rules in instances where strict enforcement of the rules would cause an undue hardship because of circumstances unique to the property under consideration. The Board of Managers may grant variances where it is demonstrated that such action will remain in spirit and with the intent of these rules. An applicant granted a variance form full compliance with a requirement of the rules would be required to meet the requirement to the greatest degree feasible short of full compliance. A variance must be approved by a two-thirds majority of managers voting.

To grant a variance, the Board of Managers must determine, based on a showing by the applicant:

- That because of special conditions inherent to the property, which do not apply generally to other land or structures in the District, strict compliance with a provision of a District rule will cause undue hardship to the applicant or property owner;
- That the hardship was not created by the landowner, the landowner's agent or representative, or a contractor. Economic hardship is not grounds for issuing a variance.
- That granting such variance will not merely serve as a convenience to the applicant.
- That there is no feasible and prudent alternative to the proposed activity requiring the variance.
- That granting the variance will not impair or be contrary to the intent of these rules.

A variance will remain valid only as long as the underlying permit remains valid.

A violation of any condition of approval of a permit subject to a variance shall constitute grounds for termination of the variance.

Variance Requested From MCWD Rule(s):

- ☐ Erosion Control
- ☐ Floodplain Alteration
- ☐ Wetland Protection
- ☐ Shoreline & Streambank Stabilization
- ■ Waterbody Crossings & Structures
- ☐ Stormwater Management
- ☐ Appropriations
- ☐ Illicit Discharge

Provision(s) and Requirement(s) of the Rule(s):

Waterbody Crossings and Structures Rule 3.g.
"A minimum setback of 100 feet from any stream bank for pilot, entrance, and exit holes, for projects involving horizontal directional drilling"

Requested Variance:

Three service excavations for the project will be less than 100 feet from the stream bank and are crossing a stream.

Please complete the below narrative to be used as the variance justification that will be considered by the Board of Managers. Please note that economic hardship is not grounds for issuing a variance.

Describe the special conditions inherent to the property and how strict compliance with the rule will cause an undue hardship.

Please refer to variance supplement.

Describe how the special condition was not created by the applicant, the representative, or a contractor.

Refer to variance supplement

Provide a minimum of two alternatives that were considered and why they were rejected to demonstrate that there is no feasible and prudent alternative to the proposed activity requiring the variance.

Refer to variance supplement

Referring to the Policy of the Rule(s), describe how the intent of the rule(s) will be met.

Refer to variance supplement

Describe the special conditions inherent to the property and how strict compliance with the rule will cause an undue hardship.

CenterPoint Energy (CenterPoint) must relocate their existing natural gas pipeline in order to lower the pipeline and avoid conflict with a future Hennepin County 2024 Repaving Project located in City of Orono. The County project involves tearing up the roadway which includes cuts at depths that can cause damage to the existing distribution pipeline and connected service lines causing gas system issues, customer connection issues, and public safety concerns.

Following Public Rights-Of-Way Standards, CenterPoint must relocate their distribution line along road rights-of-way (ROW), outside of privately owned property, and outside of paved roads.

Three service excavations are proposed within 100 feet of setback and crossing waterbodies along the Project cannot be relocated due to engineering constraints. Please see Images 1 and 2 below which include special conditions and constraints for each excavation site (2 of the excavations are located on Image 1 and the 3rd on Image 2).

Describe how the special condition was not created by the applicant, the representative, or a contractor.

Following Public Rights-Of-Way Standards, CenterPoint must relocate their existing natural gas pipeline for the Hennepin County 2024 Repaving Project. Due to items previously noted above, three service line excavations will need to be setback less than 100 feet from the stream bank.

Provide a minimum of two alternatives that were considered and why they were rejected to demonstrate that there is no feasible and prudent alternative to the proposed activity requiring the variance.

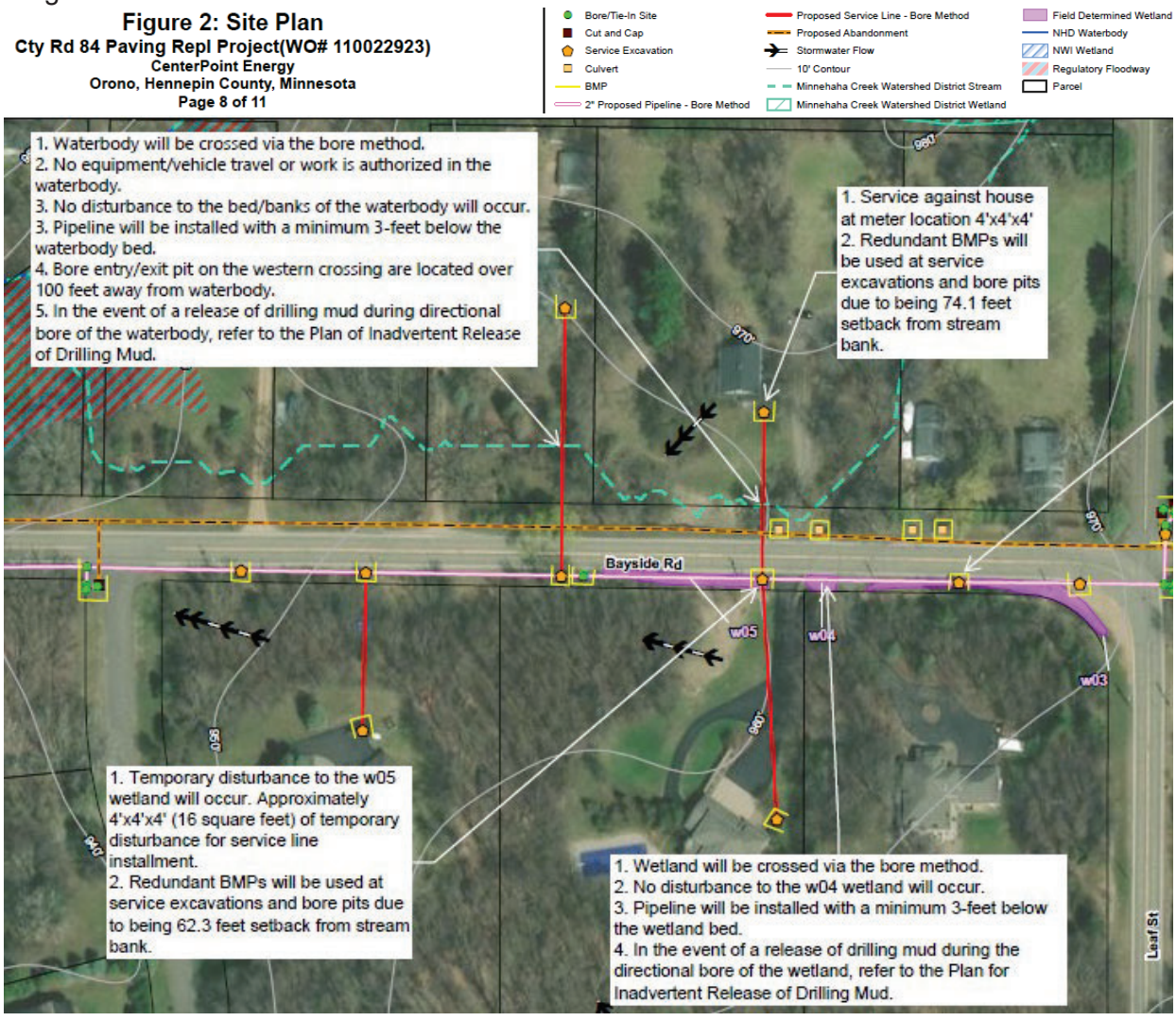
CenterPoint has considered all possible alternatives; however, alternative routing is not feasible due to the existing natural gas service infrastructure network in the area, property parcel boundaries, and the future Hennepin County 2024 Repaving Project. The first alternative would be a no-build scenario which would result in gas system issues, customer connection issues, and public safety concerns. The second alternative would be an open-trench installation method. This open trench installation method would result in higher levels of soil disturbance adjacent to waterbodies near the Project area. Therefore, the installation of pipeline as proposed is the safest method for both public safety and the environment.

Referring to the Policy of the Rule(s), describe how the intent of the rule(s) will be met.

1.a. CenterPoint will not work within the bed or bank of the crossed waterbodies. CenterPoint will complete their activities using the low-impact directional bore method. At each bore pit best management practices (BMPs) will be utilized. At bore pits within 100 feet of the waterbodies, redundant BMPs (i.e., two rows of BMPs) will be utilized. Based on site conditions, CenterPoint will utilize appropriate BMPs for each location. BMPs that may be utilized are referenced in the attached document titled "*Description of Best Management Practices and Applicability*."

1.b. CenterPoint's construction activities will be temporary, and all workspaces will be returned to pre-construction conditions.
1.c. CenterPoint's activities will be conducted using the directional bore method allowing wildlife passage and habitat improvement.

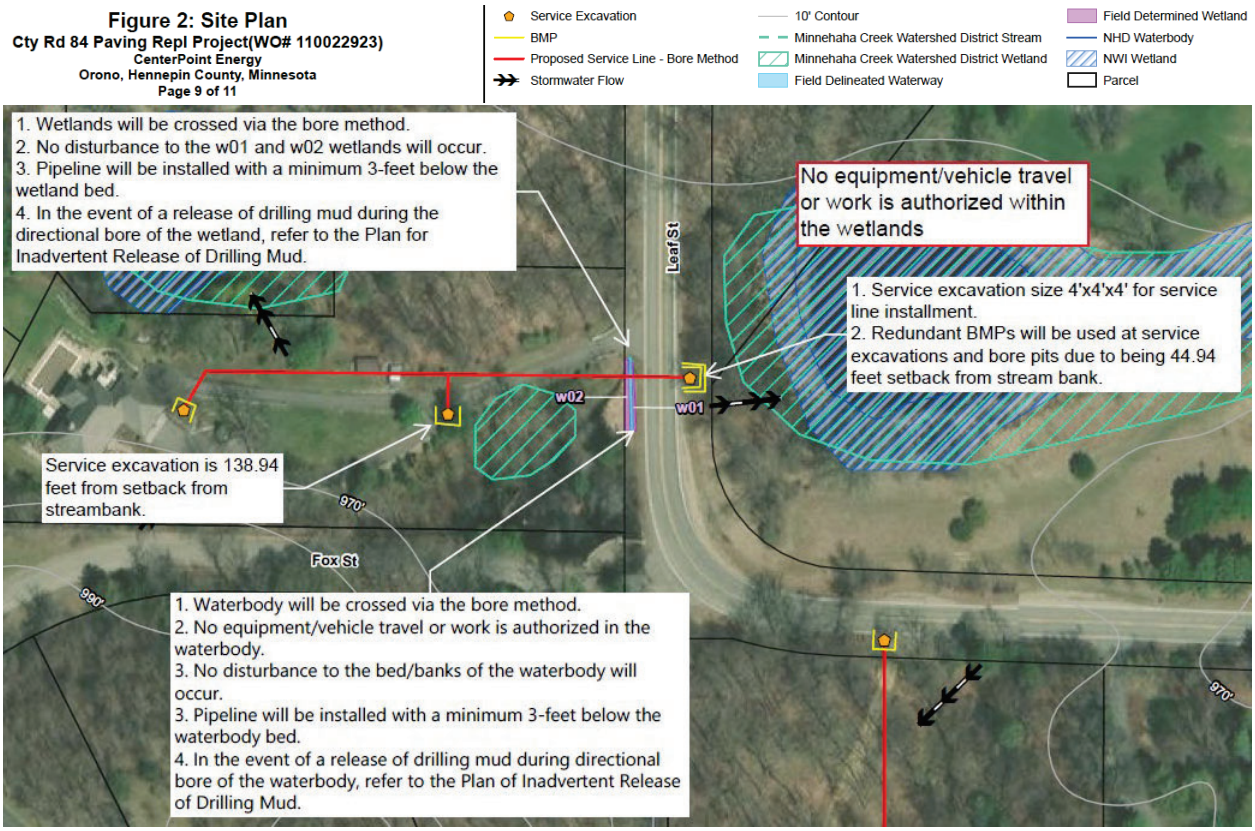
Image 1:



As mentioned above, CenterPoint needs to install new distribution line within Public Rights-Of-Way to avoid conflict with the Hennepin County 2024 Repaving Project. Additionally, CenterPoint needs to tie-in new service lines to existing homes to avoid gas system issues, customer connection issues, and public safety concerns. The service lines to homes need to be installed on private properties (parcels). A service line cannot be relocated onto another private property. As such, two service excavations will be located within the 100 ft setback from the stream bank. At the point of crossing, the waterbody crossed is open and the service line will be installed with a minimum 3-feet below the waterbody bed.

1) The service excavation within 100 feet of setback on the north side of Bayside Rd is due to the location of the existing house meter and cannot be relocated.
2) The service excavation within 100 feet of setback on the south side of Bayside Rd is due to having to tie into the new distribution line which is located in road rights-of-way (ROW) and outside of paved roads. In addition, to install the new service line to the private home where the existing meter is located on the north side of Bayside Rd.

Image 2:



As mentioned above, CenterPoint needs to install new distribution line within Public Rights-Of-Way to avoid conflict with the Hennepin County 2024 Repaving Project. Additionally, CenterPoint needs to tie-in new service lines to existing homes to avoid gas system issues, customer connection issues, and public safety concerns. The service lines to homes need to be installed on private properties (parcels). A service line cannot be relocated onto another private property. As such, one service excavation will be located within the 100 ft setback from the stream bank. At the point of crossing, the waterbody crossed is culverted and the service line will be installed with a minimum 3-feet below the waterbody bed.

1) The service excavation within 100 feet of setback on the east side of Leaf St is due to having to tie into existing CenterPoint infrastructure which is located in road rights-of-way

(ROW). In addition, to install the new service lines to the private homes located on the west side of Leaf St.