

Minnesota Wetland Conservation Act Notice of Application

Local Government Unit: City of Independence County: Hennepin						
Applicant Name: Mark Moorhouse Applicant Representative: Bryan Pynn						
Project Name: 7949 Co Rd 11 LGU Project No. (if any): IN401-24-02						
Date Complete Application Received by LGU: 09/06/2024						
Date this Notice was Sent by LGU: 09/10/2024						
Date that Comments on this Application Must Be Received By LGU¹: 10/01/2024						
¹ minimum 15 business day comment period for Boundary & Type, Sequencing, Replacement Plan and Bank Plan Applications						
WCA Decision Type - check all that apply						
☑ Wetland Boundary/Type ☐ Sequencing ☐ Replacement Plan ☐ Bank Plan (not credit purchase)						
☑ No-Loss (8420.0415) □Exemption (8420.0420)						
Part: □ A □ B □ C □ D □ E □ F □ G □ H Subpart: □ 2 □ 3 □ 4 □ 5 □ 6 □ 7 □ 8 □ 9						
Replacement Plan Impacts (replacement plan decisions only)						
Total WCA Impact Area Proposed: 0.46 acres						
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Application Materials						
Attached Other¹ (specify):						
¹ Link to ftp or other accessible file sharing sites is acceptable.						
Comments on this application should be sent to:						
LGU Contact Person: Nikki McDermond-Spies						
E-Mail Address: NikkiM@haa-inc.com						
Address and Phone Number: 3601 Thurston Ave., Anoka, MN 55303 Ph: (763) 852-0496						
Decision-Maker for this Application:						
☐ Staff ☐ Governing Board/Council ☐ Other (specify):						
Notice Distribution (include name)						
Notice Distribution (include name) Required on all notices:						
⊠ SWCD TEP Member: Stacey Lijewski (Stacey.lijewski@hennepin.us) ⊠ BWSR TEP Member: Jed Chesnut						
(Jed.chesnut@state.mn.us)						
☐ LGU TEP Member (if different than LGU contact):						
□ DNR Representative: Wes Saunders-Pearce, Wes.Saunders-Pearce@state.mn.us						
□ Watershed District or Watershed Mgmt. Org.: Andrew Vistad (Andrewv@haa-inc.com)						
☐ Applicant (notice only): ☐ Agent/Consultant (notice only): bryan@urbanecosystemsinc.com						
□ Applicant (notice only). □ Agent/ consultant (notice only). □ yan@urbanecosystemsinc.com						
Optional or As Applicable:						
☐ Corps of Engineers:						
☐ BWSR Wetland Mitigation Coordinator (required for bank plan applications only):						
☐ Members of the Public (notice only): ☐ Other:						
=======================================						
Signature: Date: 09/10/2024						
Signature: Niliz Neemad-Si						

This notice and accompanying application materials may be sent electronically or by mail. The LGU may opt to send a summary of the application to members of the public upon request per 8420.0255, Subp. 3.

Joint Application Form for Activities Affecting Water Resources in Minnesota

This joint application form is the accepted means for initiating review of proposals that may affect a water resource (wetland, tributary, lake, etc.) in the State of Minnesota under state and federal regulatory programs. Applicants for Minnesota Department of Natural Resources (DNR) Public Waters permits **MUST** use the MPARS online permitting system for submitting applications to the DNR. Applicants can use the information entered into MPARS to substitute for completing parts of this joint application form (see the paragraph on MPARS at the end of the joint application form instructions for additional information). This form is only applicable to the water resource aspects of proposed projects under state and federal regulatory programs; other local applications and approvals may be required. Depending on the nature of the project and the location and type of water resources impacted, multiple authorizations may be required as different regulatory programs have different types of jurisdiction over different types of resources.

Regulatory Review Structure

<u>Federal</u>

The St. Paul District of the U.S. Army Corps of Engineers (Corps) is the federal agency that regulates discharges of dredged or fill material into waters of the United States (wetlands, tributaries, lakes, etc.) under Section 404 of the Clean Water Act (CWA) and regulates work in navigable waters under Section 10 of the Rivers and Harbors Act. Applications are assigned to Corps project managers who are responsible for implementing the Corps regulatory program within a particular geographic area.

State

There are three state regulatory programs that regulate activities affecting water resources. The Wetland Conservation Act (WCA) regulates most activities affecting wetlands. It is administered by local government units (LGUs) which can be counties, townships, cities, watershed districts, watershed management organizations or state agencies (on state-owned land). The Minnesota DNR Division of Ecological and Water Resources issues permits for work in specially-designated public waters via the Public Waters Work Permit Program (DNR Public Waters Permits). The Minnesota Pollution Control Agency (MPCA) under Section 401 of the Clean Water Act certifies that discharges of dredged or fill material authorized by a federal permit or license comply with state water quality standards. One or more of these regulatory programs may be applicable to any one project.

Required Information

Prior to submitting an application, applicants are <u>strongly encouraged</u> to seek input from the Corps Project Manager and LGU staff to identify regulatory issues and required application materials for their proposed project. Project proponents can request a preapplication consultation with the Corps and LGU to discuss their proposed project by providing the information required in Sections 1 through 5 of this joint application form to facilitate a meaningful discussion about their project. Many LGUs provide a venue (such as regularly scheduled technical evaluation panel meetings) for potential applicants to discuss their projects with multiple agencies prior to submitting an application. Contact information is provided below.

The following bullets outline the information generally required for several common types of determinations/authorizations.

- For delineation approvals and/or jurisdictional determinations, submit Parts 1, 2 and 5, and Attachment A.
- For activities involving CWA/WCA exemptions, WCA no-loss determinations, and activities not requiring mitigation, submit Parts 1 through 5, and Attachment B.
- For activities requiring compensatory mitigation/replacement plan, submit Parts 1 thru 5, and Attachments C and D. For local road authority activities that qualify for the state's local road wetland replacement program, submit Parts 1 through 5, and Attachments C, D (if applicable), and E to both the <u>Corps and the LGU</u>.

Minnesota Interagency Water Resource Application Form – Revised May 2021

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Submission Instructions

Send the completed joint application form and all required attachments to:

U.S Army Corps of Engineers. Applications may be sent directly to the appropriate Corps Office. For a current listing of areas of responsibilities and contact information, visit the St. Paul District's website at:

http://www.mvp.usace.army.mil/Missions/Regulatory.aspx and select "Minnesota" from the contact Information box. Alternatively, applications may be sent directly to the St. Paul District Headquarters and the Corps will forward them to the appropriate field office.

Section 401 Water Quality Certification: Applicants do not need to submit the joint application form to the MPCA unless specifically requested. The MPCA will request a copy of the completed joint application form directly from an applicant when they determine an individual 401 water quality certification is required for a proposed project.

Wetland Conservation Act Local Government Unit: Send to the appropriate Local Government Unit. If necessary, contact your county Soil and Water Conservation District (SWCD) office or visit the Board of Water and Soil Resources (BWSR) web site (www.bwsr.state.mn.us) to determine the appropriate LGU.

DNR Public Waters Permitting: In 2014 the DNR will begin using the Minnesota DNR Permitting and Reporting System (MPARS) for submission of Public Waters permit applications (https://webapps11.dnr.state.mn.us/mpars/public/authentication/login). Applicants for Public Waters permits MUST use the MPARS online permitting system for submitting applications to the DNR. To avoid duplication and to streamline the application process among the various resource agencies, applicants can use the information entered into MPARS to substitute for completing parts of this joint application form. The MPARS print/save function will provide the applicant with a copy of the Public Waters permit application which, at a minimum, will satisfy Parts one and two of this joint application. For certain types of activities, the MPARS application may also provide all of the necessary information required under Parts three and four of the joint application. However, it is the responsibility of the Applicant to make sure that the joint application contains all of the required information, including identification of all aquatic resources impacted by the project (see Part four of the joint application). After confirming that the MPARS application contains all of the required information in Parts one and two the Applicant may attach a copy to the joint application and fill in any missing information in the remainder of the joint application.

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Project Name and/or Number: Moorehouse Wetland Delineation and No-Loss

PART ONE: Applicant Information

If applicant is an entity (company, government entity, partnership, etc.), an authorized contact person must be identified. If the applicant is using an agent (consultant, lawyer, or other third party) and has authorized them to act on their behalf, the agent's contact information must also be provided.

Applicant/Landowner Name:

Mark Moorhouse 7949 County Road 11 Independence, MN 55359 MarkSMoorhouse@gmail.com

Authorized Contact (do not complete if same as above):

Mailing Address:

Phone:

E-mail Address:

Agent Name: Urban Ecosystems

Attn: Bryan Pynn

Mailing Address: 2500 University Ave. W #C8, St. Paul, MN 55114

Phone: 651.340.8568

E-mail Address: bryan@urbanecosystemsinc.com

PART TWO: Site Location Information

County: Hennepin

City/Township: Independance

Parcel ID and/or Address: 7949 County Road 11

Legal Description (Section, Township, Range): PID 0811824110002 Lat/Long (decimal degrees): 45.049926307177984, -93.727287360459

Attach a map showing the location of the site in relation to local streets, roads, highways. Approximate size of site (acres) or if a linear project, length (feet): See Attached

If you know that your proposal will require an individual Permit from the U.S. Army Corps of Engineers, you must provide the names and addresses of all property owners adjacent to the project site. This information may be provided by attaching a list to your application or by using block 25 of the Application for Department of the Army permit which can be obtained at:

http://www.mvp.usace.army.mil/Portals/57/docs/regulatory/Regulatory/Docs/engform 4345 2012oct.pdf

PART THREE: General Project/Site Information

If this application is related to a delineation approval, exemption determination, jurisdictional determination, or other correspondence submitted prior to this application then describe that here and provide the Corps of Engineers project number.

Describe the project that is being proposed, the project purpose and need, and schedule for implementation and completion. The project description must fully describe the nature and scope of the proposed activity including a description of all project elements that effect aquatic resources (wetland, lake, tributary, etc.) and must also include plans and cross section or profile drawings showing the location, character, and dimensions of all proposed activities and aquatic resource impacts.

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Project Name and/or Number: Moorehouse Wetland Delineation and No-Loss

PART FOUR: Aquatic Resource Impact¹ Summary

If your proposed project involves a direct or indirect impact to an aquatic resource (wetland, lake, tributary, etc.) identify each impact in the table below. Include all anticipated impacts, including those expected to be temporary. Attach an overhead view map, aerial photo, and/or drawing showing all of the aquatic resources in the project area and the location(s) of the proposed impacts. Label each aquatic resource on the map with a reference number or letter and identify the impacts in the following table.

Aquatic Resource ID (as noted on overhead view)	Aquatic Resource Type (wetland, lake, tributary etc.)	drain or	Duration of Impact Permanent (P) or Temporary (T) ¹	Size of Impact ²	Overall Size of Aquatic Resource ³	Existing Plant Community Type(s) in Impact Area ⁴	County, Major Watershed #, and Bank Service Area # of Impact Area ⁵
Wetland 1	Wetland	Excavation	Р	~20,000 SF	1.6 acres	Reed canary grass (T2)	Hennepin, 18, BSA 7

¹If impacts are temporary; enter the duration of the impacts in days next to the "T". For example, a project with a temporary access fill that would be removed after 220 days would be entered "T (220)".

If any of the above identified impacts have already occurred, identify which impacts they are and the circumstances associated with each:

PART FIVE: Applicant Signature

PAKI FIVE: Applicant signature
Check here if you are requesting a <u>pre-application</u> consultation with the Corps and LGU based on the information you have provided. Regulatory entities will not initiate a formal application review if this box is checked.
By signature below, I attest that the information in this application is complete and accurate. I further attest that I possess the authority to undertake the work described herein.
Signature: Date:
I hereby authorize to act on my behalf as my agent in the processing of this application and to furnish, upon request, supplemental information in support of this application.
1 The term "impact" as used in this joint application form is a generic term used for disclosure purposes to identify activities that may require approval from one or more regulatory agencies. For purposes of this form it is not meant to

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indicate whether or not those activities may require mitigation/replacement.

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²Impacts less than 0.01 acre should be reported in square feet. Impacts 0.01 acre or greater should be reported as acres and rounded to the nearest 0.01 acre. Tributary impacts must be reported in linear feet of impact and an area of impact by indicating first the linear feet of impact along the flowline of the stream followed by the area impact in parentheses). For example, a project that impacts 50 feet of a stream that is 6 feet wide would be reported as 50 ft (300 square feet).

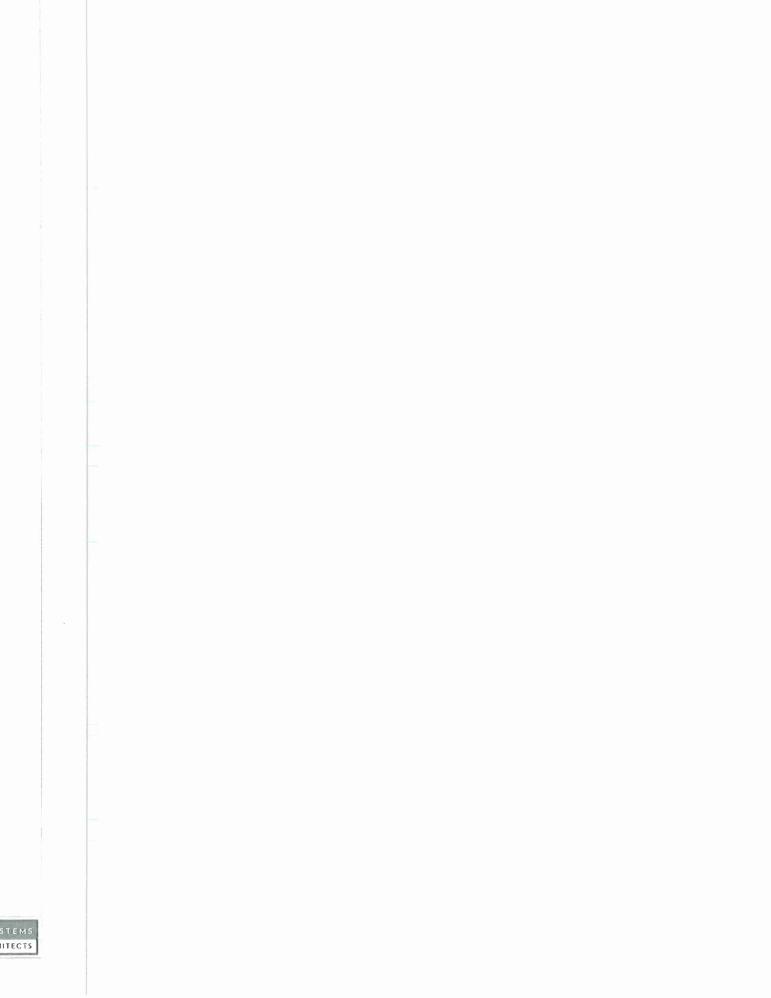
³This is generally only applicable if you are applying for a de minimis exemption under MN Rules 8420.0420 Subp. 8, otherwise enter "N/A".

⁴Use Wetland Plants and Plant Community Types of Minnesota and Wisconsin 3rd Ed. as modified in MN Rules 8420.0405 Subp. 2.

⁵Refer to Major Watershed and Bank Service Area maps in MN Rules 8420.0522 Subp. 7.







Project Name and/or Number: Moorehouse Wetland Delineation and No-Loss

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Attachment A Request for Delineation Review, Wetland Type Determination, or **Jurisdictional Determination**

(Corps) and/or the Wetland Conservation Act Local Government Unit (LGU) provide me with the following (check all that apply):
X Wetland Type Confirmation
X Delineation Concurrence. Concurrence with a delineation is a written notification from the Corps and a decision from the LGU concurring, not concurring, or commenting on the boundaries of the aquatic resources delineated on the property. Delineation concurrences are generally valid for five years unless site conditions change. Under this request alone, the Corps will not address the jurisdictional status of the aquatic resources on the property, only the boundaries of the resources within the review area (including wetlands, tributaries, lakes, etc.).
Preliminary Jurisdictional Determination. A preliminary jurisdictional determination (PJD) is a non-binding written indication from the Corps that waters, including wetlands, identified on a parcel may be waters of the United States. For purposes of computation of impacts and compensatory mitigation requirements, a permit decision made on the basis of a PJD will treat all waters and wetlands in the review area as if they are jurisdictional waters of the U.S. PJDs are advisory in nature and may not be appealed.
Approved Jurisdictional Determination. An approved jurisdictional determination (AJD) is an official Corps determination that jurisdictional waters of the United States are either present or absent on the property. AJDs can generally be relied upon by the affected party for five years. An AJD may be appealed through the Corps administrative appeal process.
In order for the Corps and LGU to process your request, the wetland delineation must be prepared in accordance with the 1987 Corps of Engineers Wetland Delineation Manual, any approved Regional Supplements to the 1987 Manual, and the <i>Guidelines for Submitting Wetland Delineations in Minnesota</i> (2013). http://www.mvp.usace.army.mil/Missions/Regulatory/DelineationJDGuidance.aspx
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Project Name and/or Number:

Attachment B

Supporting Information for Applications Involving Exemptions, No Loss Determinations, and Activities Not Requiring Mitigation

Complete this part *if* you maintain that the identified aquatic resource impacts in Part Four do not require wetland replacement/compensatory mitigation OR *if* you are seeking verification that the proposed water resource impacts are either exempt from replacement or are not under CWA/WCA jurisdiction.

Identify the specific exemption or no-loss provision for which you believe your project or site qualifies:

No Loss for excavation of reed canary grass Type 2 wetland fringe.

Sec. 78. Minnesota Statutes 2022, section 103G.222, subdivision 1, is amended to read:

Subdivision 1. Requirements. (a) Wetlands must not be drained or filled, wholly or partially, unless replaced by actions that provide at least equal public value under a replacement plan approved as provided in section 103G.2242, a replacement plan under a local governmental unit's comprehensive wetland protection and management plan approved by the board under section 103G.2243, or, if a permit to mine is required under section 93.481, under a mining reclamation plan approved by the commissioner under the permit to mine. Project-specific wetland-replacement plans submitted as part of a project for which a permit to mine is required and approved by the commissioner on or after July 1, 1991, may include surplus wetland credits to be allocated by the commissioner to offset future mining-related wetland impacts under any permits to mine held by the permittee, the operator, the permittee's or operator's parent, an affiliated subsidiary, or an assignee pursuant to an assignment under section 93.481, subdivision 5. For project-specific wetland replacement completed prior to wetland impacts authorized or conducted under a permit to mine within the Great Lakes and Rainy River watershed basins, those basins shall be are considered a single watershed for purposes of determining wetlandreplacement ratios. Mining reclamation plans shall must apply the same principles and standards for replacing wetlands that are applicable to mitigation plans approved as provided in section 103G.2242. The commissioner must provide notice of an application for wetland replacement under a permit to mine to the county in which the impact is proposed and the county in which a mitigation site is proposed. Public value must be determined in accordance with section 103B.3355 or a comprehensive wetland protection and management plan established under section 103G.2243. Sections 103G.221 to 103G.2372 also apply to excavation in permanently and semipermanently flooded areas of types 3, 4, and 5 wetlands.

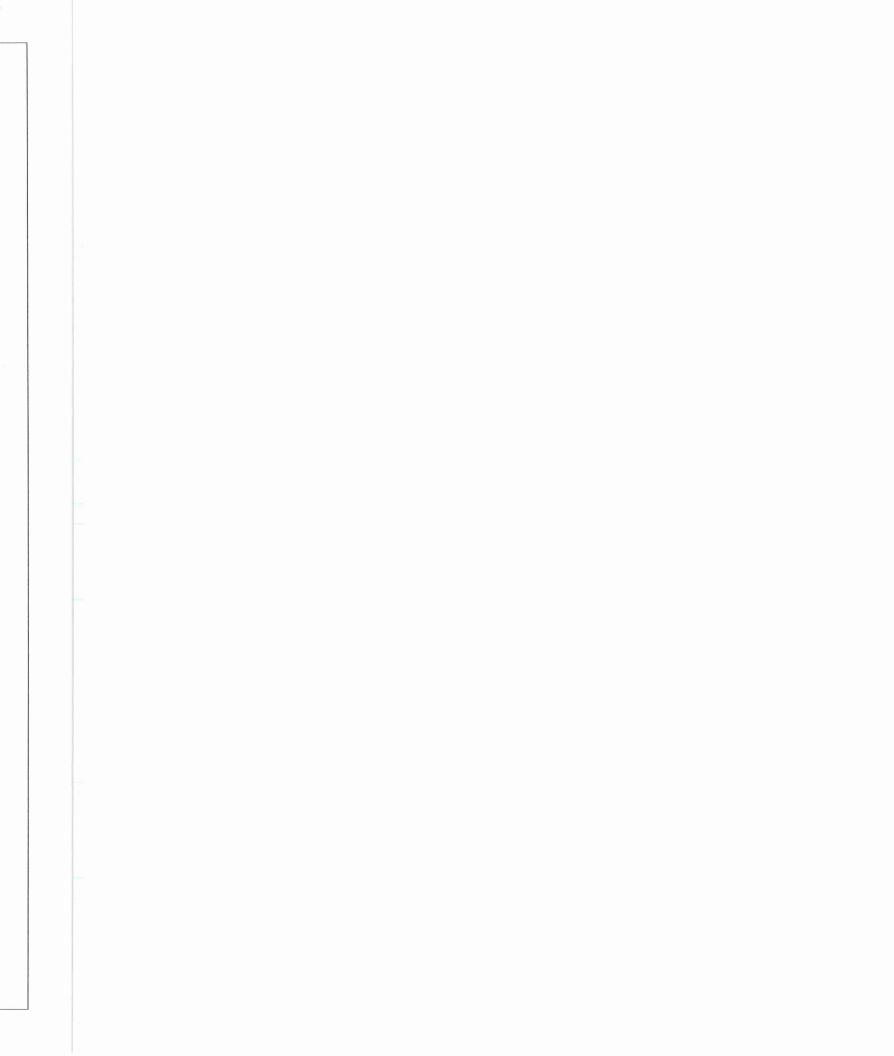
NOTE: 2024 WCA rule changes no longer reference Circular 39 types, but the proposed excavation is only within reed canary grass dominated area that is not permanently or semipermanently flooded.

Provide a detailed explanation of how your project or site qualifies for the above. Be specific and provide and refer to attachments and exhibits that support your contention. Applicants should refer to rules (e.g. WCA rules), guidance documents (e.g. BWSR guidance, Corps guidance letters/public notices), and permit conditions (e.g. Corps General Permit conditions) to determine the necessary information to support the application. Applicants are strongly encouraged to contact the WCA LGU and Corps Project Manager prior to submitting an application if they are unsure of what type of information to provide:

As noted above, the excavation will only occur within areas that are not regulated under the WCA. See attached grading plan and grading notes.

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DATE: 7/13/24 DRAWN: BJP CHECKED: mk

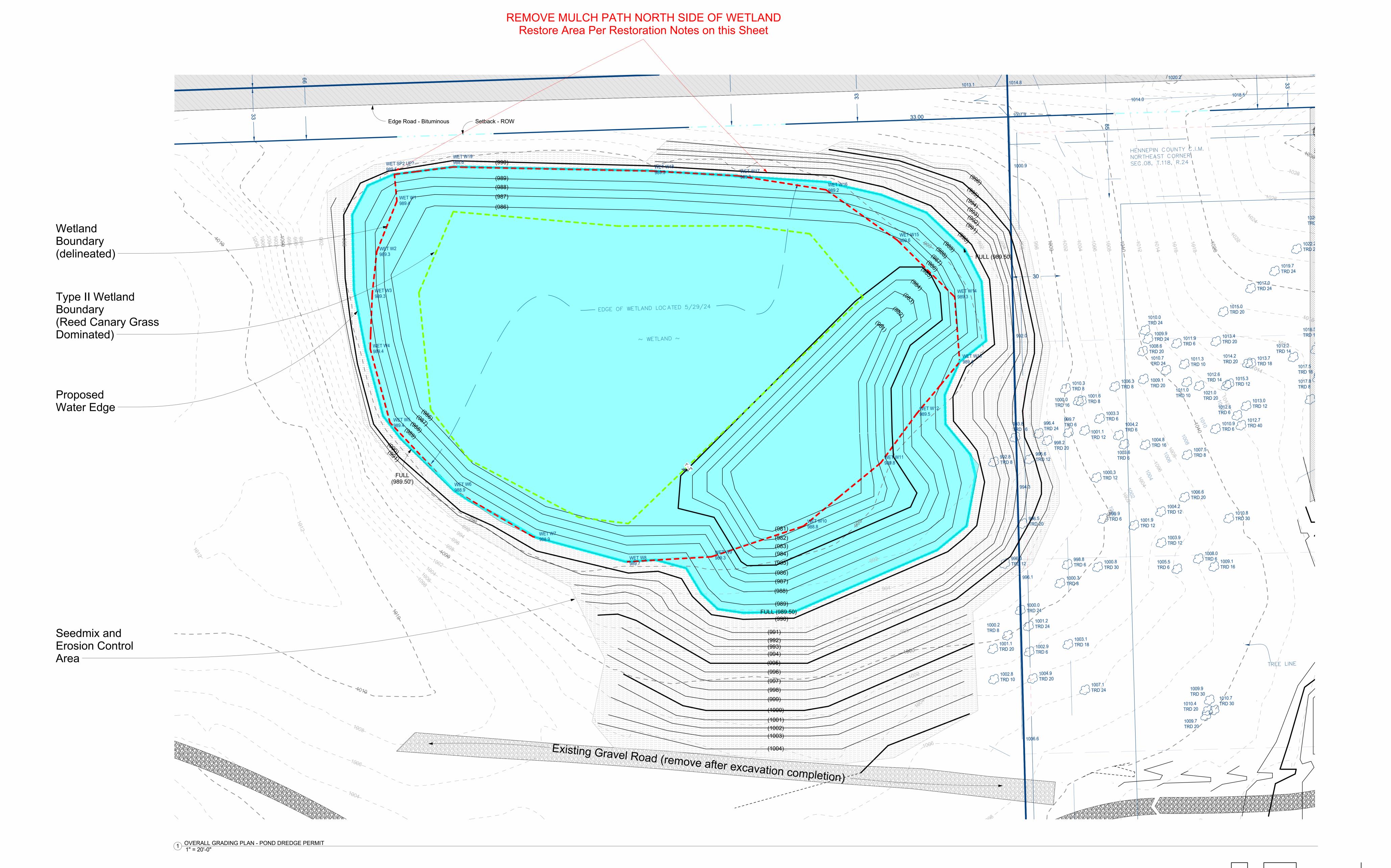
APPROVED: mk

GRADING LEGEND

EXISTING CONTOURS

+ (890.00) PROPOSED SPOT ELEVATIONS

PROPOSED CONTOURS



CRITICAL EXCAVATION NOTES

MULCH PATH REMOVAL: Remove mulch path on north side of wetland as it is considered Wetland Fill. Restore this area back to vegetation per notes on this

EXCAVATION LIMITS: Excavation/Dredging and Shaping of wetland (within delineated boundary) shall only take place in areas dominated by Reed Canary Grass (Approximate Type II Wetland Boundary). If an area is in question, confirm with Landscape Architect prior to proceeding with additional excavation.

EXCAVATION, SEEDMIX, AND EROSION CONTROL NOTES

Dredge and Topsoil Salvage: Dredge spoils and salvaged topsoil that will be re-used onsite should be temporarily stored on a relatively flat area on the east side of the wetalnd; surrounded by silt fence to limit erosion. Soils being salvaged for reincorporation should not be mucky, but rather the richer upland edge topsoils that will support plant growth in the futre upland areas of the wetalnd restoration plan. DO NOT REUSE SOILS WITH REED CANARY GRASS PRESENT.

Dredge Spoils: Coordinate with Landscape Architect to determine best upland site to spread unused dredge spoils and seed for permanent cover. There is ample room on the property and a space should be located which does not directly drain to any other adjacent wetland or waterway.

General Grading: No Slopes steeper than 5:1 under water

Silt Fence: Encircle wetland edge (5' minimum from water edge) with silt fence to limit upland runoff and silt from re-entering the wetland. Coordinate with L.A. for proper and limited access points to limit the amount of distrubance to the wetland edge. Silt Fence shall move with new excavated edge at the end of each day.

Buffer Decompaction: Decompact wetland buffer areas that have been affected/compacted by excavation equipment. Use a toothed excavator bucket before incorporating salvage topsoils.

Temporary Cover Crop: All areas left exposed for more than 7 days without construction activity shall be cat-tracked across the slope and seeded with Avena sativa (Oats).

Plant Salvage and Reuse: Salvage Emergent Plants for replanting. Coordinate with Landscape Architect for species, temporary storage, and replanting placement.

Permanent Vegetation Seedmix: Apply MNDOT Seedmix 34-262 (Wet Prairie Seedmix) to all disturbed areas above the water line. Follow MNDOT Seeding Manual (2023 Edition) for prep, sowing, and establishment protocol. Areas more than 2' vertical above wetland edge shall be seeded with 35-241 (Mesic Prairie Seedmix).

Erosion Control Blanket: All areas that were disturbed above the proposed water line (see seeded area boundary) will be covered with single-sided natural-net straw erosion control blanket after permanent seedmix has been applied (see seedmix spec above).

Wetland Delineation Report

Mark Moorhouse - 7949 County Rd 11 Independence, MN



August 29, 2024

Prepared for: Urban Ecosystems Inc.

Prepared by: Jay's Wildcraft



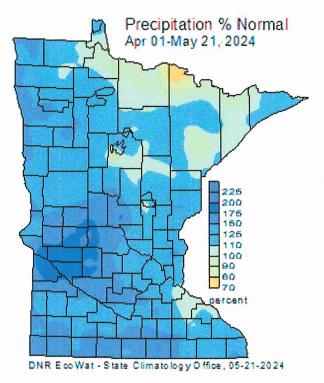


Background

Jay's Wildcraft completed a wetland delineation on the portion of the site adjacent to CR 11 (PID # 0811824110002) at 7949 County Road 11 in Independence, Minnesota. The site is in SEC 02 of TWP 116, RNG 023, Hennepin County, Minnesota (Figure 1). The site consists of woods, ag fields, and and adjacent newly constructed home. The approximate site and sample locations are shown on an aerial photo in Figure 2. The field wetland delineation was done on May 24, 2024. The purpose of this delineation was to identify potential wetlands on the site for planning for wildlife pond enhacements and for regulatory purposes.

Methodologies

The site was evaluated for wetlands based on the methods contained in the "Level 2 Routine Wetland Delineation" section of the U.S. Army Corps of Engineers "Wetland Delineation Manual" (Technical Report Y87-1, 1987) and the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region. This is the methodology currently used to determine wetlands by both the U.S. Army Corps of Engineers for implementation of Section 404 of the Clean Water Act and by the Minnesota Wetland Conservation Act. According to the Climatology Working Groups' webpage, the area was at 110-125% of normal precipitation at the time of the site visit. Using the Corps of Engineers Antecedent Precipitation Tool (APT), antecedent precipitation for the preceding three months was Wetter Than Normal at the time of the site visit.



Resource Maps Review

The National Wetlands Inventory (NWI) (Figure 2) identifies the wetland as wetland. The Soil Survey (Figure 3) shows the wetland area as Klossner, depressional.

Sample Point 1

Sample Point 1 (SP-1) was established to evaluate the wetland area close to the wetland edge. The vegetation was dominated by reed canary grass and jewelweed. The soils were black muck at the surface



over a layer of silt loam (erosion deposition with 50% redoximorphic features) over more muck. Standing water was observed at around six inches below the surface.

Sample Point 2

Sample Point 2 (SP-2) was established a few feet landward of the wetland edge. The vegetation at SP-2 was dominated by garlic mustard, bedstraw, and mullein. Soils consisted of a few inches of brown loam over light brown sandy clay. No water was observed in the soil pit.

Wetland Boundary and Classification

Figure 4 shows the wetland bounary. The classification of the wetland is based on observations of the site. The wetland type is predominantly Type 3 shallow marsh with a fringe of Type 2 wet meadow.

Wetland Classification

Classification of the wetland is based on observations of the site and is included in Table 1 below.

Table 1. Summary of Wetland Characteristics wetland

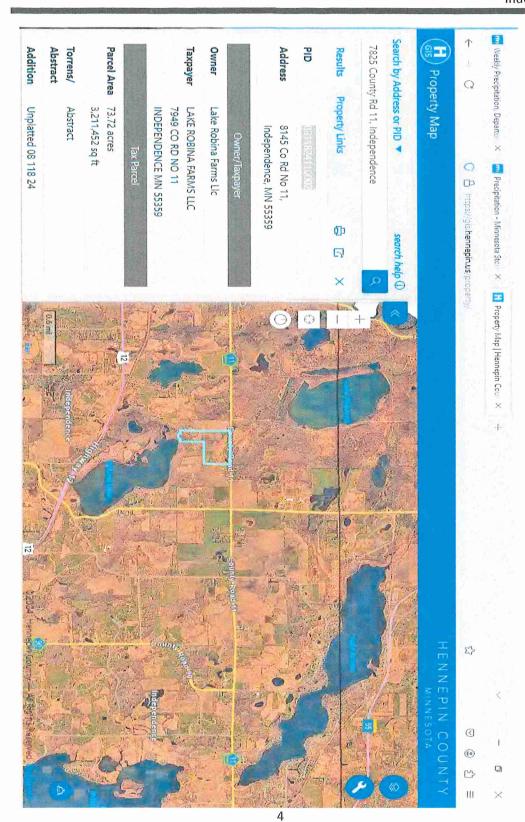
Wetland	Classification	Isolated	Area (acres)	Comments
А	PEMB/C/F	Υ	1.6	Closed depression. Cattail and open water with reed canary grass fringe.

The information contained herein represents findings during wetland evaluation activities conducted on May 24, 2024 at the referenced site.

Respectfully Submitted,	
	8 <u>-29-24</u>
Jay Riggs	
Certified Wetland Delineator	



Figure 1. Location Map 7825 County Rd 11 Independence, MN











Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
L22C2	Lester loam, 6 to 10 percent slopes, moderately eroded	0.5	5.6%
L22F Lester foam, morainic, 25 to 35 percent stopes		1.6	17.6%
L378	Angus Ibam, 2 to 6 percent slopes	0.5	5.2%
L40B	Angus-Kilkenny complex, 2 to 6 percent slopes	0.0	0.5%
L41G2	Lester-Kilkeriny complex: 6 to 10 percent slopes, moderately eroded	3.3	36.5%
L41D2 Lester-Kilkenny complex. 16 percent slopes, moderately eroded		0.0	0.2%
L49A	Klossner soils, depressional, 0 to 1 percent slopes	1,0	21,2%
L70D2	Lester-Malardi complex, 12 to 18 percent slopes, eroded	1.2	13.2%
Totals for Area of Interest		9.2	100.0%



Figure 4. Site Survey with Wetland Boundary

7825 County Rd 11 Independence, MN





1 INCH = 30 FEET PAPER: 36X48

CAST IRON MONUMENT

★ REBAR MONUMENT FOUND

▲ PK NAIL MONUMENT FOUND

○ PK NAIL W/ ALUMINUM DISC

△ PK NAIL MONUMENT SET

∆ SURVEY CONTROL POINT

E ELECTRIC TRANSFORMER

C CABLE TV PEDESTAL

© ELECTRIC MANHOLE

FIBER OPTIC MANHOLE

□ FIRE DEPT. HOOK UP

E ELECTRIC METER

ELECTRIC OUTLET

Ö YARD LIGHT

☆ LIGHT POLE

FLAG POLE

FP FUEL PUMP

FT FUEL TANK

© GAS METER

GE GENERATOR

GUARD POST

H HAND HOLE

MAIL BOX

PT PROPANE TANK

A A/C UNIT

DRILL HOLE FOUND

O IRON PIPE MONUMENT SET DO POWER POLE

X CHISELED "X" MONUMENT FOUND S SANITARY MANHOLE

● IRON PIPE MONUMENT FOUND < GUY WIRE

PIEZOMETER

SANITARY CLEANOUT

① TELEPHONE MANHOLE

TELEPHONE PEDESTAL

W WATERMAIN MANHOLE

STORM MANHOLE

TREE CONIFEROUS

UTILITY MANHOLE

U UTILITY PEDESTAL

UTILITY VAULT

WATER METER

□ WATER SPIGOT

CURB STOP

GATE VALVE

M HYDRANT

SB SOIL BORING

→ SIGN

MW MONITORING WELL

IRRIGATION VALVE

PIV POST INDICATOR VALVE

WELL

TREE DECIDUOUS

STORM DRAIN

NEW TOPO EXHIBIT

PREPARED FOR: MARK MOOREHOUSE

DATE: 6/13/24 JOB #: 60155-006

WOE WALKOUT ELEVATION

FFE FIRST FLOOR ELEVATION

GFE GARAGE FLOOR ELEVATION

TOF TOP OF FOUNDATION ELEV.

LOE LOWEST OPENING ELEV.

---- FO ---- FIBER OPTIC UNDERGROUND

----- TELEPHONE UNDERGROUND

RAILROAD SIGNAL

RAILROAD SWITCH

WETLAND BUFFER SIGN

SATELLITE DISH

CONCRETE

— CONCRETE CURB

- 960 _ _ CONTOUR EXISTING

960 CONTOUR PROPOSED

----- GAS UNDERGROUND

----- OHU----- OVERHEAD UTILITY

----->> STORM SEWER

RETAINING WALL

TRAFFIC SIGNAL

HIHHH RAILROAD TRACKS

----- I ----- WATERMAIN

 \bigcirc

----- UTL----- UTILITY UNDERGROUND

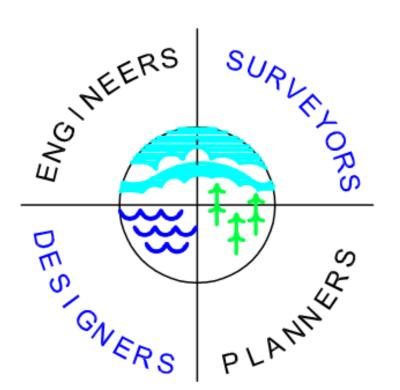
TREE LINE
SANITARY SEWER

BITUMINOUS

----- CTV----- CABLE TV

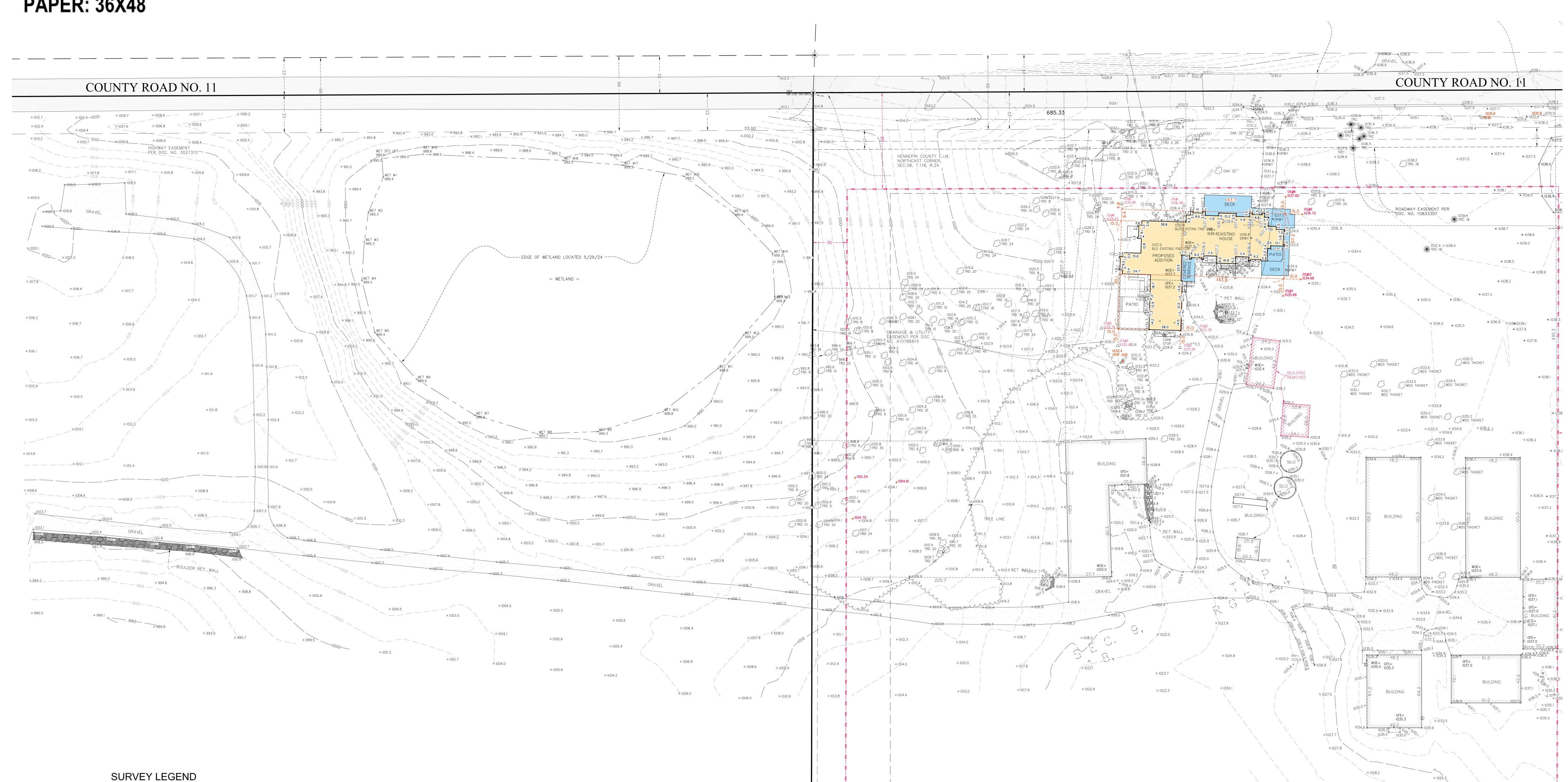
** TREE CONIFEROUS REMOVED ---- DT ---- DRAIN TILE

TREE DECIDUOUS REMOVED ----- ELC---- ELECTRIC UNDERGROUND



SATHRE-BERGQUIST, INC.

14000 25TH AVENUE NORTH, SUITE 120 PLYMOUTH MN 55447 (952) 476-6000 WWW.SATHRE.COM



APPENDIX A

Data Forms



WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: Moorehouse Pond	(City/County: Indepen	dence	Sampling Date: 5-24-24	
			State: MN	Sampling Point: U1	
Investigator(s): Jay Riggs Section, Township, Range: 7825 County Rd 11					
Landform (hillslope, terrace, etc.): hillslope transition to depression Local relief (concave, convex, none): Concave					
Slope (%): 0 Lat:				Datum:	
Klosenor					
Are climatic / hydrologic conditions on the site typical for	this time of yea	ar? Yes No _	(If no, explain in F	temarks.)	
Are Vegetation, Soil, or Hydrology	_ significantly	disturbed? Are	'Normal Circumstances"	present? Yes X No	
Are Vegetation, Soil, or Hydrology	_ naturally pro	blematic? (If ne	eded, explain any answe	ers in Remarks.)	
SUMMARY OF FINDINGS - Attach site ma	p showing	sampling point l	ocations, transects	, important features, etc.	
Hydrophytic Vegetation Present? Yes					
Hydric Soil Present? Yes	No X	Is the Sampled		🗸	
Wetland Hydrology Present? Yes	No X	within a Wetlar	nd? Yes	No <u>X</u>	
Remarks:					
Above average precipitation.					
VEGETATION – Use scientific names of plan	its.				
Tree Stratum (Plot size:)	Absolute	Dominant Indicator Species? Status	Dominance Test work	(sheet:	
1. Populus deltoides (Plains Cottonwood)	100	FAC	Number of Dominant S That Are OBL, FACW,		
2			Total Number of Domir		
3			Species Across All Stra		
4			Percent of Dominant S	peries	
5			That Are OBL, FACW,		
Sapling/Shrub Stratum (Plot size:)		= Total Cover	Prevalence Index wo	/ksheet:	
1				Multiply by:	
2.			OBL species	x 1 =	
3		Management Management of the Control	FACW species	x 2 =	
4			FAC species	x 3 =	
5			FACU species 90	x 4 = 360	
Herb Stratum (Plot size:)	0	= Total Cover	UPL species 10	x = 50 (A) 410 (B)	
1. Alliaria petiolata (Garlic Mustard)	70	y FACU	Column Totals: 100	(A) 410 (B)	
Galium aparine (bedstraw)	20	n FACU	Prevalence Index	c = B/A =4.1	
3. Verbascum thapsus (Common Mullein)	10	n UPL	Hydrophytic Vegetati		
4			1 - Rapid Test for	Hydrophytic Vegetation	
5			2 - Dominance Te		
6			3 - Prevalence Ind		
7				Adaptations ¹ (Provide supporting so or on a separate sheet)	
8				phytic Vegetation¹ (Explain)	
9.				. , , , , , , , , , , , , , , , , , , ,	
10.	00	- Total Cover	¹ Indicators of hydric so	il and wetland hydrology must	
Woody Vine Stratum (Plot size:)		= Total Cover	be present, unless dist	urbed or problematic.	
1.			Hydrophytic		
2			Vegetation Present? Ye	es No_X_	
		= Total Cover	Fresentr Ye	9 NO	
Remarks: (Include photo numbers here or on a separa	ite sheet.)				
Photo 2					

Sampling	Point:	
Samonno	- OIIII	

Depth Matrix	Redox Features	2 T
(inches) Color (moist) % 0-3 10yr 3/2	Color (moist) % Type ¹ Loc	Z Texture Remarks
3-18 10yr 5/1		sandy clay
-		
-		
¹ Type: C=Concentration, D=Depletion, RM=F	Reduced Matrix, MS=Masked Sand Grains.	² Location: PL=Pore Lining, M=Matrix.
Hydric Soil Indicators:	,	Indicators for Problematic Hydric Soils ³ :
Histosol (A1)	Sandy Gleyed Matrix (S4)	Coast Prairie Redox (A16)
Histic Epipedon (A2)	Sandy Redox (S5)	Dark Surface (S7)
Black Histic (A3)	Stripped Matrix (S6)	Iron-Manganese Masses (F12)
Hydrogen Sulfide (A4)	Loamy Mucky Mineral (F1)	Very Shallow Dark Surface (TF12)
Stratified Layers (A5)	Loamy Gleyed Matrix (F2)	Other (Explain in Remarks)
2 cm Muck (A10)	Depleted Matrix (F3)	
Depleted Below Dark Surface (A11)	Redox Dark Surface (F6)	3
Thick Dark Surface (A12)	Depleted Dark Surface (F7)	Indicators of hydrophytic vegetation and
Sandy Mucky Mineral (S1)	Redox Depressions (F8)	wetland hydrology must be present, unless disturbed or problematic.
5 cm Mucky Peat or Peat (S3) Restrictive Layer (if observed):		unless disturbed of problematic.
Type:		Hydric Soil Present? Yes No X
Depth (inches):		
HADBOI OGA		
Wetland Hydrology Indicators:		
Wetland Hydrology Indicators: Primary Indicators (minimum of one is require		Secondary Indicators (minimum of two required)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is require Surface Water (A1)	Water-Stained Leaves (B9)	Surface Soil Cracks (B6)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is require Surface Water (A1) High Water Table (A2)	Water-Stained Leaves (B9) Aquatic Fauna (B13)	Surface Soil Cracks (B6) Drainage Patterns (B10)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is require Surface Water (A1) High Water Table (A2) Saturation (A3)	Water-Stained Leaves (B9)Aquatic Fauna (B13)True Aquatic Plants (B14)	Surface Soil Cracks (B6)Drainage Patterns (B10)Dry-Season Water Table (C2)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is require Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1)	Water-Stained Leaves (B9)Aquatic Fauna (B13)True Aquatic Plants (B14)Hydrogen Sulfide Odor (C1)	Surface Soil Cracks (B6)Drainage Patterns (B10)Dry-Season Water Table (C2)Crayfish Burrows (C8)
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