Item 7H.
BCWMC 1-21-21

BOARD OF WATER AND SOIL RESOURCES

Minnesota Wetland Conservation Act
Notice of Application

Local Government Unit: City of Plymouth	**County:** Hennepin
Applicant Name: Nathan Gonlin **Applicant Representative:** Kyle Uhler, Kjolhaug Environmental Services Company	
Project Name: 500 Pineview Lane North **LGU Project No. (if any):** 2020-27	
Date Complete Application Received by LGU: 12/30/2020	
Date this Notice was Sent by LGU: 1/7/2021	
Date that Comments on this Application Must Be Received By LGU[1]: 1/29/2021	

[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:

Application Materials

☒ Attached ☐ Other[1] (specify):

[1] Link to ftp or other accessible file sharing sites is acceptable.

Comments on this application should be sent to:

LGU Contact Person: Ben Scharenbroich, Water Resources Supervisor
E-Mail Address: bscharenbroich@plymouthmn.gov
Address and Phone Number: 3400 Plymouth Blvd, Plymouth, MN 55447
Decision-Maker for this Application:
☒ Staff ☐ Governing Board/Council ☐ Other (specify):

Notice Distribution (include name)

Required on all notices:

☒ SWCD TEP Member: **Ms. Stacey Lijewski, HCA, 701 Fourth Avenue South, Suite 700, Minneapolis, MN 55415-1600**
☒ BWSR TEP Member: **Ben Carlson, BWSR, 520 Lafayette Road North, St. Paul, MN 55401**

☐ LGU TEP Member (if different than LGU contact):

☒ DNR Representative: **Melissa Collins, MnDNR, 1200 Warner Road, St. Paul, MN 55106**
Lucas Youngsma, MnDNR, 1200 Warner Road, St. Paul, MN 55106

☒ Watershed District or Watershed Mgmt. Org.: **BCWMC 16145 Hillcrest Lane Eden Prairie MN 55346**

☒ Applicant (notice only): **Nathan Gonlin, 500 Pineview Lane North, Plymouth MN 55441**
☒ Agent/Consultant (notice only): **Kyle Uhler, Kjolhaug Environmental Services Company, 2500 Shadywood Road, Suite 130m Orono, MN 55331**

Optional or As Applicable:

☒ Corps of Engineers: **US Army Corps of Engineers, C/O Maria Delaundreau, 180 Fifth Street East, Suite 700, St. Paul MN 55101-1678**
☐ BWSR Wetland Mitigation Coordinator (required for bank plan applications only):
☐ Members of the Public (notice only): ☐ Other:

Signature:	**Date:**
	1/7/2021

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.

500 Pineview Lane North

Plymouth, Hennepin County, Minnesota

Wetland Delineation Report

Prepared for

Nathan and Courtney Golin

by

Kjolhaug Environmental Services Company, Inc.
(KES Project No. 2020-193)

December 14, 2020

500 Pineview Lane North

Plymouth, Hennepin County, Minnesota

Wetland Delineation Report

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500 Pineview Lane North

Plymouth, Hennepin County, Minnesota

Wetland Delineation Report

1. WETLAND DELINEATION SUMMARY

- The 1.24-acre 500 Pineview Lane North site was inspected on November 16, 2020 for the presence and extent of wetland.
- The National Wetlands Inventory (NWI) map showed one PFO1A wetland within the site boundaries.
- The soil survey showed predominately non-hydric hydric soil types on the property.
- The DNR Public Waters Inventory showed Cavanaugh Lake (DNR Public Water 27-110 P) located approximately 320 feet southwest of the property boundaries.
- The National Hydrography Dataset did not show any water bodies or watercourses within the property boundaries.
- One Type 1 (PEM1A) seasonally flooded basin wetland was identified and delineated within the property boundaries.

2. OVERVIEW

The 1.24-acre 500 Pineview Lane North site was inspected on November 16, 2020 for the presence and extent of wetland. The property was located in the Southwest ¼ of Section 35, Township 118 North, Range 22 West, City of Plymouth, Hennepin County, Minnesota. The site was situated east of Pineview Lane North and north of Sunset Trail North (**Figure 1**). The property corresponded to Hennepin County PID 3511822320037.

The site consisted a vacant-residential lot that was dominated by a canopy of quaking aspen, American elm, and white poplar trees with an understory dominated by common buckthorn shrubs. The topography sloped from an elevation of 998 feet msl in the south-central portion of the site down to 980 feet msl in the southwestern portion of the site.

The property was bordered on the west by Pineview Lane North and a single-family home, on the east, south and west by single-family homes.

One wetland was delineated within the site boundaries. The delineated wetland boundaries and existing conditions are shown on **Figure 2**.

Appendix A of this report includes a Joint Application Form for Activities Affecting Water Resources in Minnesota, which is submitted in request for: (1) a wetland boundary and type determination under the Minnesota Wetland Conservation Act (WCA), and (2) delineation concurrence and an Approved Jurisdictional Determination (AJD) under Section 404 of the Federal Clean Water Act.

3. METHODS

Wetlands were identified using the Routine Determination method described in the Corps of Engineers Wetlands Delineation Manual (Waterways Experiment Station, 1987) and the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Midwest Region (Version 2.0) as required under Section 404 of the Clean Water Act and the Minnesota Wetland Conservation Act.

Wetland boundaries were identified as the upper-most extent of wetland that met criteria for hydric soils, hydrophytic vegetation, and wetland hydrology. Wetland-upland boundaries were marked with pin flags that were located by a hand-held Trimble R1 GPS unit.

Soils, vegetation, and hydrology were documented at a representative location along the wetland-upland boundary. Plant species dominance was estimated based on the percent aerial or basal coverage visually estimated within a 30-foot radius for trees and vines, a 15-foot radius for the shrub layer, and a 5-foot radius for the herbaceous layer within the community type sampled.

Soils were characterized to a minimum depth of 24 inches (unless otherwise noted) using a Munsell Soil Color Book and standard soil texturing methodology. Hydric soil indicators used

are from Field Indicators of Hydric Soils in the United States (USDA Natural Resources Conservation Service (NRCS) in cooperation with the National Technical Committee for Hydric Soils, Version 8.1, 2017).

Mapped soils are separated into five classes based on the composition of hydric components and the Hydric Rating by Map Unit color classes utilized on Web Soil Survey. The five classes include Hydric (100 percent hydric components), Predominantly Hydric (66 to 99 percent hydric components), Partially Hydric (33 to 65 percent hydric components), Predominantly Non-Hydric (1 to 32 percent hydric components), and Non-Hydric (less than one percent hydric components).

Plants were identified using standard regional plant keys. Taxonomy and indicator status of plant species was taken from the 2016 National Wetland Plant List (U.S. Army Corps of Engineers 2016. National Wetland Plant List, version 3.3, Engineer Research and Development Center, Cold Regions Research and Engineering Laboratory, Hanover, NH).

4. RESULTS

4.1 Review of NWI, Soils, Public Waters and NHD Information

The National Wetlands Inventory (NWI) (Minnesota Geospatial Commons 2009-2014 and U.S. Fish and Wildlife Service) showed one PFO1A wetland within the site boundaries (**Figure 3**).

The Soil Survey (USDA NRCS 2015) showed that predominately non-hydric soil types on and near the property included Lester, and Dundas-Cordova soils. Soil types mapped on the property are listed in **Table 1** and a map showing soil types is included in **Figure 4**.

Table 1. Soil types mapped on the 500 Pineview Ln N site

Symbol	Soil Name	Acres	% of Area	% Hydric	Hydric Category
L22C2	Lester loam, 6 to 10 percent slopes, moderately eroded	0.7	61.5%	2	Predominantly non-hydric
L45A	Dundas-Cordova complex, 0 to 3 percent slopes	0.4	38.5%	30	Predominantly non-hydric

The Minnesota DNR Public Waters Inventory (Minnesota Department of Natural Resources 2015) Cavanaugh Lake (DNR Public Water 27-110 P) located approximately 320 feet southwest of the property boundaries (**Figure 5**).

The National Hydrography Dataset (U.S. Geological Survey 2015) showed no waterbodies or watercourses within the project boundaries (**Figure 6**).

4.2 Wetland Determinations and Delineations

Potential wetlands were evaluated during field observations on November 16, 2020. One wetland was identified and delineated on the property (**Figure 2**). Corresponding data forms are included

in **Appendix B**. The following descriptions of the wetlands and adjacent uplands reflects conditions observed at the time of the field visit. Herbaceous vegetation was senesced at the time of the wetland delineation. Precipitation conditions were within the normal range based on available 30-day rolling total precipitation and three-month antecedent precipitation data (**Appendix C**).

Wetland 1 was a Type 1 (PEM1A) seasonally flooded basin wetland located in southwestern portion of the property. The wetland consisted of a sparsely vegetated concave surface. Saturation was observed at the surface in the central portion of the wetland. This wetland covered approximately 207 square feet within the property boundaries.

Adjacent upland was dominated by ground ivy and common buckthorn with a canopy dominated by quaking aspen and American elm trees. Primary and secondary hydrology indicators were not observed on the upland.

The wetland boundary corresponded to a topographic rise that coincided with a transition from sparse vegetation to ground ivy and common buckhorn shrubs. The wetland was not shown on the NWI map and fell in an area mapped as predominantly non-hydric soil (Lester) on the soil survey. Wetland 1 drained to the west through a culvert under Pineview Lane just offsite at the southwestern edge of the wetland.

4.3 Other Areas

Other areas were investigated because they were: (1) observed to support a hydrophytic plant community, (2) had visible wetland hydrology indicators, (3) were shown as wetland on the NWI map, or (4) were depressional and mapped as hydric soil. Field investigation led to the conclusion that these areas were not wetland.

Area A was a depressional area located in the eastern portion of the site (**Figure 2**) that was shown as wetland (PFO1A) on the NWI map but was mapped as predominately non-hydric on the soil survey. This area was dominated by a canopy of white poplar, with an understory containing ground ivy and recently removed common buckthorn. Soils in this area were hydric and consisted of 10 inches of fill material over a buried horizon of black loam over depleted silt with iron concentrations (**Appendix B/ SPA**). The area was determined not to be wetland due to lack of hydrophytic vegetation and the lack of primary or two secondary indicators of wetland hydrology.

No other areas with hydrophytic vegetation or wetland hydrology were observed on the site. No other areas were shown as hydric soil on the soil survey or as wetland on the NWI map.

4.4 Request for Wetland Boundary and Jurisdictional Determination

Appendix A of this report includes a Joint Application Form for Activities Affecting Water Resources in Minnesota, which is submitted in request for: (1) a wetland boundary and type determination under the Minnesota Wetland Conservation Act (WCA), and (2) delineation

concurrence and an Approved Jurisdictional Determination (AJD) under Section 404 of the Federal Clean Water Act.

5. CERTIFICATION OF DELINEATION

The procedures utilized in the described delineation are based on the U.S. Army Corps of Engineers 1987 Wetlands Delineation Manual as required under Section 404 of the Clean Water Act and the Minnesota Wetland Conservation Act. This wetland delineation and report were prepared in compliance with the regulatory standards in place at the time the work was performed.

Site boundaries indicated on figures within this report are approximate and do not constitute an official survey product.

Delineation completed by: Kyle Uhler, GIS Specialist
Minnesota Certified Wetland Delineator No. 1353

Report prepared by: Kyle Uhler, GIS Specialist
Minnesota Certified Wetland Delineator No. 1353

Report reviewed by: _____ Date: December 14, 2020
Mark Kjolhaug, Professional Wetland Scientist No. 000845

500 Pineview Lane North

Wetland Delineation Report

FIGURES

1. Site Location
2. Existing Conditions
3. National Wetlands Inventory
4. Soil Survey
5. DNR Protected Waters Inventory
6. National Hydrography Dataset

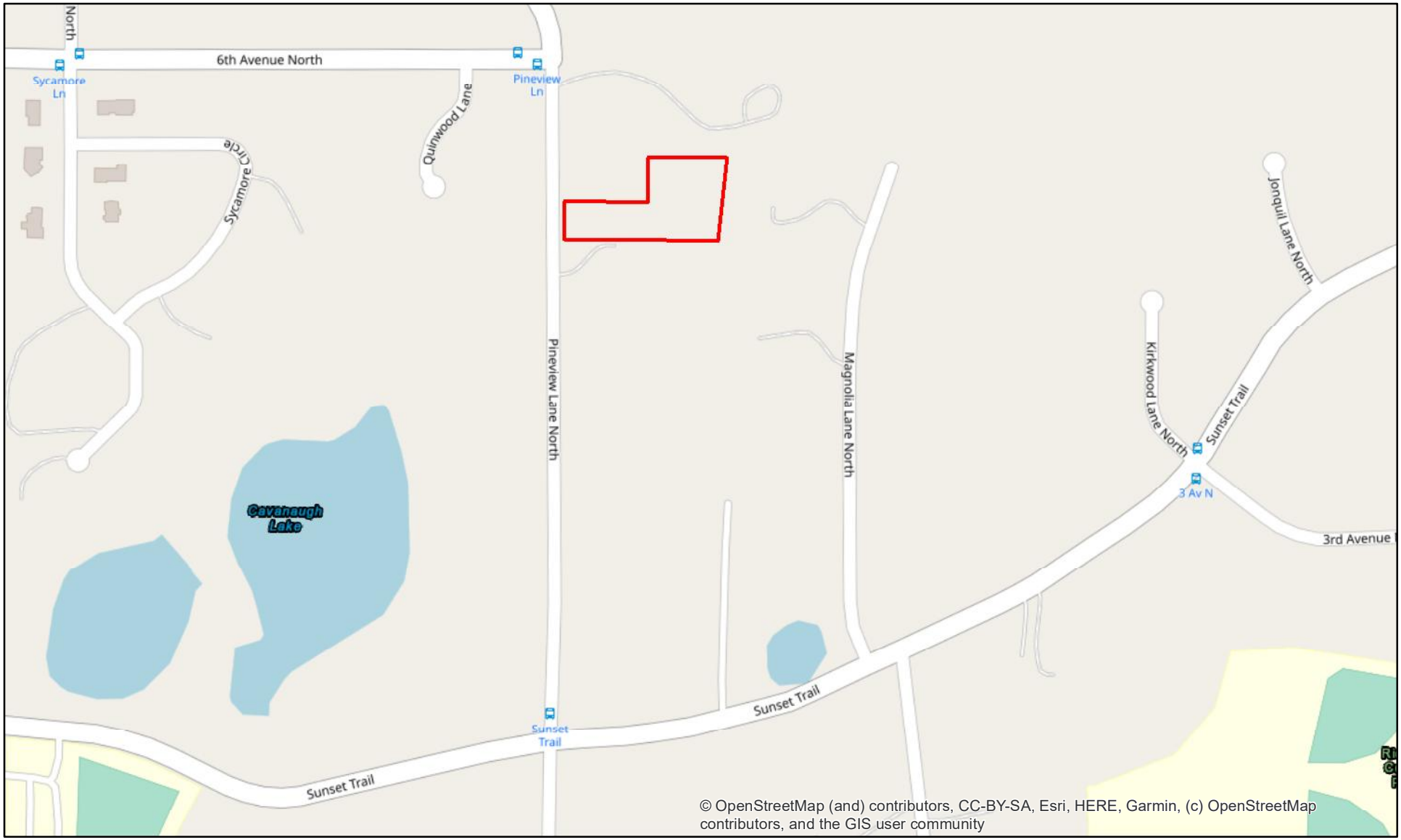


Figure 1 - Site Location Map

N

0 335 Feet

Site Boundary

KJOLHAUG ENVIRONMENTAL SERVICES COMPANY

Source: ESRI Streets Basemap

500 Pineview Lane N (KES 2020-193)
Plymouth, Minnesota

Note: Boundaries indicated on this figure are approximate and do not constitute an official survey product.

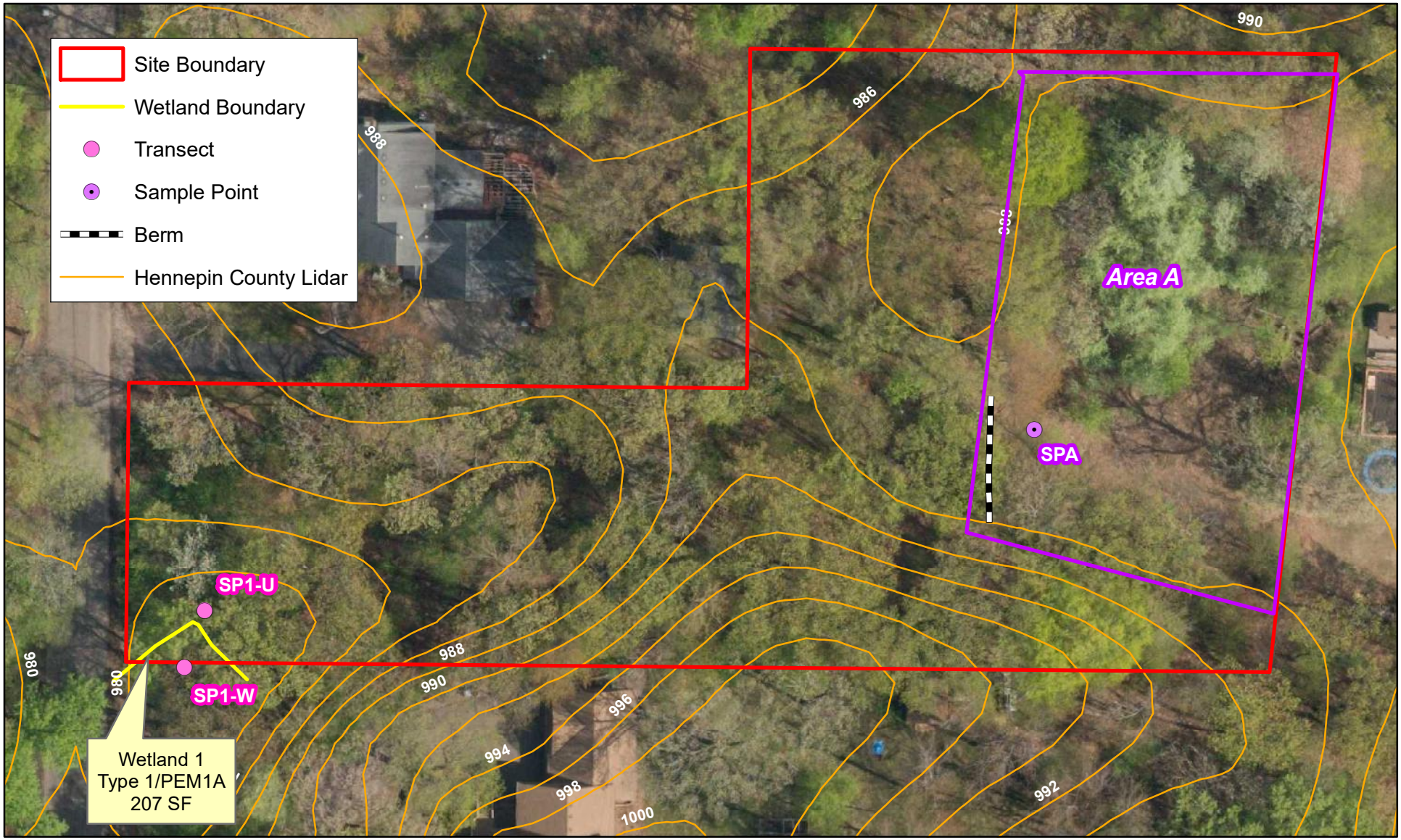


Figure 2 - Existing Conditions

N

0 45 Feet

KJOLHAUG ENVIRONMENTAL SERVICES COMPANY

Source: MNGEO Spatial Commons

500 Pineview Lane N (KES 2020-193)
Plymouth, Minnesota

Note: Boundaries indicated on this figure are approximate and do not constitute an official survey product.

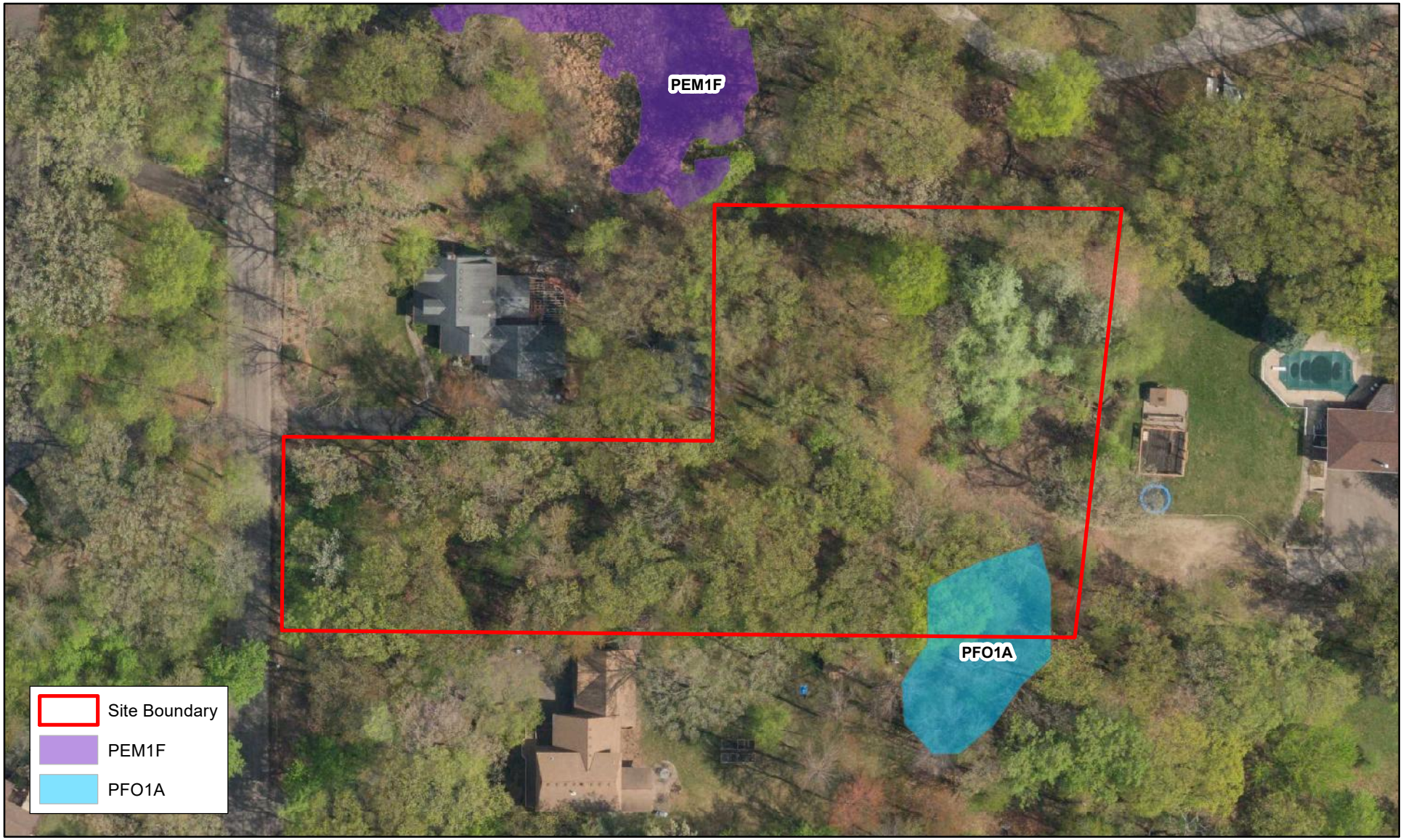


Figure 3 - National Wetlands Inventory

N

0 65 Feet

KJOLHAUG ENVIRONMENTAL SERVICES COMPANY

Source: MNGEO Spatial Commons, USFWS

500 Pineview Lane N (KES 2020-193)
Plymouth, Minnesota

Note: Boundaries indicated on this figure are approximate and do not constitute an official survey product.

Figure 4 - Soil Survey

N

0 125 Feet

KJOLHAUG ENVIRONMENTAL SERVICES COMPANY

Source: MNGEO Spatial Commons, USDA, NRCS

500 Pineview Lane N (KES 2020-193)
Plymouth, Minnesota

Note: Boundaries indicated on this figure are approximate and do not constitute an official survey product.

Figure 5 - DNR Public Waters Inventory

N

0 165 Feet

KJOLHAUG ENVIRONMENTAL SERVICES COMPANY

Source: MNGEO Spatial Commons, MN DNR

500 Pineview Lane N (KES 2020-193)
Plymouth, Minnesota

Note: Boundaries indicated on this figure are approximate and do not constitute an official survey product.

Figure 6 - National Hydrography Dataset

N

0 215 Feet

KJOLHAUG ENVIRONMENTAL SERVICES COMPANY

Source: MNGEO Spatial Commons, USGS

500 Pineview Lane N (KES 2020-193)
Plymouth, Minnesota

Note: Boundaries indicated on this figure are approximate and do not constitute an official survey product.

500 Pineview Lane North

Wetland Delineation Report

APPENDIX A

Joint Application Form for Activities Affecting Water Resources in Minnesota

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

Federal

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 **strongly encouraged** 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 pre-application 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 Corps and the LGU.

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.

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: Nathan and Courtney Golin
Mailing Address: 2400 Zane Ave N, Golden Valley, MN
Phone: 612-384-1405
E-mail Address: nate.golin@gmail.com

Authorized Contact (do not complete if same as above):
Mailing Address:
Phone:
E-mail Address:

Agent Name: Kyle Uhler
Mailing Address: 2500 Shadywood Road #130, Orono MN 55331
Phone: 952-401-8757 Ext. #4
E-mail Address: Kyle@kjolhaugenv.com

PART TWO: Site Location Information

County: Hennepin **City/Township: Plymouth**
Parcel ID and/or Address: 3511822320037/ 500 Pineview Ln N
Legal Description (Section, Township, Range): S:35 T:118N R:22W
Lat/Long (decimal degrees):
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): 1.24

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/RegulatoryDocs/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.

PART FOUR: Aquatic Resource Impact[1] 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.)	**Type of Impact** (fill, excavate, drain, or remove vegetation)	**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]

[1]If 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)".
[2]Impacts 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).
[3]This is generally only applicable if you are applying for a de minimis exemption under MN Rules 8420.0420 Subp. 8, otherwise enter "N/A".
[4]Use *Wetland Plants and Plant Community Types of Minnesota and Wisconsin* 3rd Ed. as modified in MN Rules 8420.0405 Subp. 2.
[5]Refer to Major Watershed and Bank Service Area maps in MN Rules 8420.0522 Subp. 7.

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

☐ Check here if you are requesting a pre-application 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: 11/27/2020

I hereby authorize Kjolhaug Environmental Services Company 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 indicate whether or not those activities may require mitigation/replacement.

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

By submission of the enclosed wetland delineation report, I am requesting that the U.S. Army Corps of Engineers, St. Paul District (Corps) and/or the Wetland Conservation Act Local Government Unit (LGU) provide me with the following (check all that apply):

☒ **Wetland Type Confirmation**

☒ **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 *Guidelines for Submitting Wetland Delineations in Minnesota* (2013).
http://www.mvp.usace.army.mil/Missions/Regulatory/DelineationJDGuidance.aspx

500 Pineview Lane North

Wetland Delineation Report

APPENDIX B

Wetland Delineation Data Forms

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: 500 Pineview Ln N | City/County: Plymouth/Hennepin | Sampling Date: 11/16/2020

Applicant/Owner: See Joint Application Form | State: MN | Sampling Point: SP1-U

Investigator(s): K. Uhler | Section, Township, Range: S 35, T118N, R22W

Landform (hillslope, terrace, etc.): Hillslope | Local relief (concave, convex, none): Linear

Slope (%): 2 to 3 | Lat: | Long: | Datum:

Soil Map Unit Name: Lester | NWI Classification: None

Are climatic/hydrologic conditions of the site typical for this time of the year? Y (If no, explain in remarks)

Are vegetation ____, soil ____, or hydrology ____ significantly disturbed? Are "normal circumstances" present? Yes

Are vegetation ____, soil ____, or hydrology ____ naturally problematic?

SUMMARY OF FINDINGS

(If needed, explain any answers in remarks.)

Hydrophytic vegetation present?	N
Hydric soil present?	N
Indicators of wetland hydrology present?	N

Is the sampled area within a wetland? N

If yes, optional wetland site ID:

Remarks: (Explain alternative procedures here or in a separate report.)

Both the 30-day precipitation rolling average and Gridded database precipitation worksheet within the normal range.

VEGETATION -- Use scientific names of plants.

Tree Stratum (Plot size: 30 ft Radius)	Absolute % Cover	Dominant Species	Indicator Staus
1 *Populus grandidentata*	30	Y	FACU
2 *Ulmus americana*	10	Y	FACW
3			
4			
5			
	40	= Total Cover	

Sapling/Shrub stratun (Plot size: 15 ft Radius)			
1 *Rhamnus cathartica*	20	Y	FAC
2 *Sambucus canadensis*	10	Y	UPL
3			
4			
5			
	30	= Total Cover	

Herb stratum (Plot size: 5 ft Radius)			
1 *Glechoma hederacea*	20	Y	FACU
2			
3			
4			
5			
6			
7			
8			
9			
10			
	20	= Total Cover	

Woody vine stratum (Plot size: 30 ft Radius)			
1			
2			
	0	= Total Cover	

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across all Strata: 5 (B)

Percent of Dominant Species that are OBL, FACW, or FAC: 40.00% (A/B)

Prevalence Index Worksheet

Total % Cover of:

OBL species	0	x 1 =	0
FACW species	10	x 2 =	20
FAC species	20	x 3 =	60
FACU species	50	x 4 =	200
UPL species	10	x 5 =	50
Column totals	90 (A)		330 (B)

Prevalence Index = B/A = 3.67

Hydrophytic Vegetation Indicators:

- ____ Rapid test for hydrophytic vegetation
- ____ Dominance test is >50%
- ____ Prevalence index is ≤3.0*
- ____ Morphogical adaptations* (provide supporting data in Remarks or on a separate sheet)
- ____ Problematic hydrophytic vegetation* (explain)

*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

Hydrophytic vegetation present? N

Remarks: (Include photo numbers here or on a separate sheet)

SOIL

Sampling Point: SP1-U

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type*	Loc**	Texture	Remarks
0-10	10YR2/1	100					Loam	
10-24	10YR3/2	88	10YR4/6	2	C	M	Sandy clay loam	
			10YR5/1	10	D	M		

*Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. **Location: PL = Pore Lining, M = Matrix

Hydric Soil Indicators:

- ___ Histisol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils:

- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ Dark Surface (S7) (**LRR K, L**)
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (explain in remarks)

*Indicators of hydrophytic vegetation and weltand hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric soil present? N

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- X Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface water present?	Yes		No	X	Depth (inches):	
Water table present?	Yes	X	No		Depth (inches):	22
Saturation present? (includes capillary fringe)	Yes	X	No		Depth (inches):	19

Indicators of wetland hydrology present? N

Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: 500 Pineview Ln N | City/County: Plymouth/Hennepin | Sampling Date: 11/16/2020

Applicant/Owner: See Joint Application Form | State: MN | Sampling Point: SP1-W

Investigator(s): K. Uhler | Section, Township, Range: S 35, T118N, R22W

Landform (hillslope, terrace, etc.): Depression | Local relief (concave, convex, none): Concave

Slope (%): 0 to 1 | Lat: | Long: | Datum:

Soil Map Unit Name: Lester | NWI Classification: None

Are climatic/hydrologic conditions of the site typical for this time of the year? Y (If no, explain in remarks)

Are vegetation ____, soil ____, or hydrology ____ significantly disturbed? Are "normal circumstances" present? Yes

Are vegetation ____, soil ____, or hydrology ____ naturally problematic?

SUMMARY OF FINDINGS

(If needed, explain any answers in remarks.)

Hydrophytic vegetation present?	Y		
Hydric soil present?	Y	**Is the sampled area within a wetland?**	Y
Indicators of wetland hydrology present?	Y	If yes, optional wetland site ID:	Wetland 1

Remarks: (Explain alternative procedures here or in a separate report.)

Both the 30-day precipitation rolling average and Gridded database precipitation worksheet within the normal range.

VEGETATION -- Use scientific names of plants.

Tree Stratum (Plot size: 30 ft Radius)	Absolute % Cover	Dominant Species	Indicator Staus
1			
2			
3			
4			
5			
	0	= Total Cover	
Sapling/Shrub stratun (Plot size: 15 ft Radius)			
1			
2			
3			
4			
5			
	0	= Total Cover	
Herb stratum (Plot size: 5 ft Radius)			
1 *Phalaris arundinacea*	5	Y	FACW
2			
3			
4			
5			
6			
7			
8			
9			
10			
	5	= Total Cover	
Woody vine stratum (Plot size: 30 ft Radius)			
1			
2			
	0	= Total Cover	

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across all Strata: 1 (B)

Percent of Dominant Species that are OBL, FACW, or FAC: 100.00% (A/B)

Prevalence Index Worksheet

Total % Cover of:

OBL species	0	x 1 =	0
FACW species	5	x 2 =	10
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column totals	5 (A)		10 (B)

Prevalence Index = B/A = 2.00

Hydrophytic Vegetation Indicators:

- ____ Rapid test for hydrophytic vegetation
- X Dominance test is >50%
- X Prevalence index is ≤3.0*
- ____ Morphogical adaptations* (provide supporting data in Remarks or on a separate sheet)
- ____ Problematic hydrophytic vegetation* (explain)

*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

Hydrophytic vegetation present? Y

Remarks: (Include photo numbers here or on a separate sheet)

Sparsely vegetated concave surface

SOIL

Sampling Point: SP1-W

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type*	Loc**	Texture	Remarks
0-6	10YR2/1	100					Clay loam	
6-42	10YR2/1	95	10YR4/6	5	C	M	Clay loam	

*Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. **Location: PL = Pore Lining, M = Matrix

Hydric Soil Indicators:

- ___ Histisol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- X Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils:

- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ Dark Surface (S7) (**LRR K, L**)
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (explain in remarks)

*Indicators of hydrophytic vegetation and weltand hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric soil present? Y

Remarks:

Assumed A12

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- X High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- X Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface water present?	Yes		No	X	Depth (inches):	
Water table present?	Yes	X	No		Depth (inches):	4
Saturation present? (includes capillary fringe)	Yes	X	No		Depth (inches):	0

Indicators of wetland hydrology present? Y

Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: 500 Pineview Ln N | City/County: Plymouth/Hennepin | Sampling Date: 11/16/2020

Applicant/Owner: See Joint Application Form | State: MN | Sampling Point: SP-A

Investigator(s): K. Uhler | Section, Township, Range: S 35, T118N, R22W

Landform (hillslope, terrace, etc.): Depression | Local relief (concave, convex, none): Concave

Slope (%): 1 to 2 | Lat: | Long: | Datum:

Soil Map Unit Name: Lester | NWI Classification: None

Are climatic/hydrologic conditions of the site typical for this time of the year? Y (If no, explain in remarks)

Are vegetation X, soil X, or hydrology ____ significantly disturbed? Are "normal circumstances" present? Yes

Are vegetation ____, soil ____, or hydrology ____ naturally problematic?

SUMMARY OF FINDINGS

(If needed, explain any answers in remarks.)

Hydrophytic vegetation present?	N
Hydric soil present?	Y
Indicators of wetland hydrology present?	N

Is the sampled area within a wetland? N

If yes, optional wetland site ID:

Remarks: (Explain alternative procedures here or in a separate report.)

Both the 30-day precipitation rolling average and Gridded database precipitation worksheet within the normal range. Vegetation and soils were significantly disturbed, sample area was recently cleared of brush and fill material was observed.

VEGETATION -- Use scientific names of plants.

Tree Stratum (Plot size: 30 ft Radius)	Absolute % Cover	Dominant Species	Indicator Staus
1 *Fraxinus pennsylvanica*	10	Y	FACW
2 *Populus alba*	2	N	UPL
3			
4			
5			
	12	= Total Cover	
Sapling/Shrub stratun (Plot size: 15 ft Radius)			
1			
2			
3			
4			
5			
	0	= Total Cover	
Herb stratum (Plot size: 5 ft Radius)			
1 *Glechoma hederacea*	10	Y	FACU
2			
3			
4			
5			
6			
7			
8			
9			
10			
	10	= Total Cover	
Woody vine stratum (Plot size: 30 ft Radius)			
1			
2			
	0	= Total Cover	

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across all Strata: 2 (B)

Percent of Dominant Species that are OBL, FACW, or FAC: 50.00% (A/B)

Prevalence Index Worksheet

Total % Cover of:

OBL species	0	x 1 =	0
FACW species	10	x 2 =	20
FAC species	0	x 3 =	0
FACU species	10	x 4 =	40
UPL species	2	x 5 =	10
Column totals	22 (A)		70 (B)

Prevalence Index = B/A = 3.18

Hydrophytic Vegetation Indicators:

- ____ Rapid test for hydrophytic vegetation
- ____ Dominance test is >50%
- ____ Prevalence index is ≤3.0*
- ____ Morphogical adaptations* (provide supporting data in Remarks or on a separate sheet)
- ____ Problematic hydrophytic vegetation* (explain)

*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

Hydrophytic vegetation present? N

Remarks: (Include photo numbers here or on a separate sheet)

Area A partially cleared, piles of buckthorn on the site. Area A contained a small grove of white poplar (UPL) on the north end.

SOIL

Sampling Point: SP-A

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type*	Loc**	Texture	Remarks
0-10	10YR3/2	85	10YR4/6	10	C	M	Sandy clay loam	Gravel inclusions/disturbed
			10YR6/2	5	D	M		
10-18	10YR2/1	100					Loam	
18-30	10YR6/2	95	10YR4/6	5	C	M	Silt	

*Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. **Location: PL = Pore Lining, M = Matrix

Hydric Soil Indicators:

- ___ Histisol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- X Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils:

- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ Dark Surface (S7) (**LRR K, L**)
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (explain in remarks)

*Indicators of hydrophytic vegetation and weltand hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric soil present? Y

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface water present?	Yes	___	No	X	Depth (inches): ___
Water table present?	Yes	___	No	X	Depth (inches): ___
Saturation present? (includes capillary fringe)	Yes	___	No	X	Depth (inches): ___

Indicators of wetland hydrology present? N

Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

500 Pineview Lane North

Wetland Delineation Report

APPENDIX C

Precipitation Data

Minnesota State Climatology Office

State Climatology Office - DNR Division of Ecological and Water Resources

Precipitation Worksheet Using Gridded Database

Precipitation data for target wetland location:

county: **Hennepin** township number: **118N**
township name: **Plymouth** range number: **22W**
nearest community: **Medicine Lake** section number: **35**

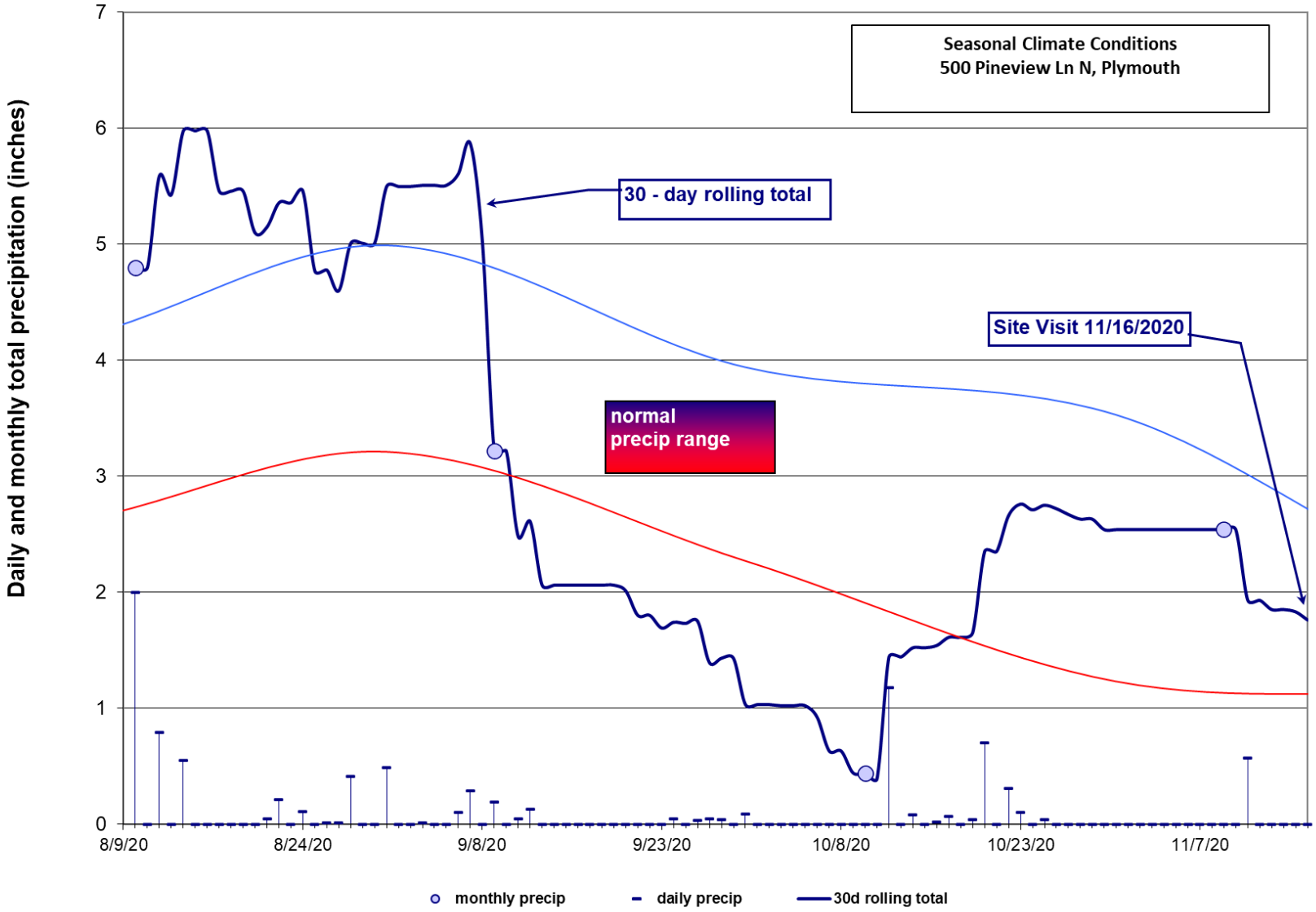
Aerial photograph or site visit date:
Monday, November 16, 2020

Score using 1981-2010 normal period

values are in inches A 'R' following a monthly total indicates a provisional value derived from radar-based estimates.	first prior month: **October 2020**	second prior month: **September 2020**	third prior month: **August 2020**
estimated precipitation total for this location:	**2.52R**	**1.02R**	**5.33R**
there is a 30% chance this location will have less than:	1.23	2.27	3.21
there is a 30% chance this location will have more than:	3.53	3.94	4.99
type of month: dry normal wet	**normal**	**dry**	**wet**
monthly score	**3 * 2 = 6**	**2 * 1 = 2**	**1 * 3 = 3**
multi-month score: 6 to 9 (dry) 10 to 14 (normal) 15 to 18 (wet)	**11 (Normal)**		

Other Resources:

- retrieve daily precipitation data
- view radar-based precipitation estimates
- view weekly precipitation maps
- *Evaluating Antecedent Precipitation Conditions* (BWSR)


Seasonal Climate Conditions
500 Pineview Ln N, Plymouth
Daily and monthly total precipitation (inches)
30 - day rolling total
Site Visit 11/16/2020
normal
precip range
7
6
5
4
3
2
1
0
8/9/20
8/24/20
9/8/20
9/23/20
10/8/20
10/23/20
11/7/20
monthly precip
daily precip
30d rolling total

Plymouth, MN: Precipitation Summary
Source: Minnesota Climatology Working Group

Monthly Totals: 2020

Target: T118N R22W S35, Lat: 44.98590 Lon: 93.43079

mon	year	cc	tttN	rrW	ss	nnnn	oooooooo	pre
Jan	2020	27	118N	21W	20	NWS	NEW HOPE	.87
Feb	2020	27	118N	21W	20	NWS	NEW HOPE	.55
Mar	2020	27	118N	21W	20	NWS	NEW HOPE	2.57
Apr	2020	27	118N	21W	20	NWS	NEW HOPE	1.66
May	2020	27	118N	21W	20	NWS	NEW HOPE	4.10
Jun	2020	27	118N	21W	20	NWS	NEW HOPE	3.47
Jul	2020	27	118N	21W	20	NWS	NEW HOPE	2.45
Aug	2020	27	118N	21W	20	NWS	NEW HOPE	5.50
Sep	2020	27	118N	21W	20	NWS	NEW HOPE	1.03
Oct	2020	27	118N	21W	20	NWS	NEW HOPE	2.54

September/October/November Daily Records

Date	Precip.
Sep 1, 2020	0
Sep 2, 2020	0
Sep 3, 2020	.01
Sep 4, 2020	0
Sep 5, 2020	0
Sep 6, 2020	.10
Sep 7, 2020	.29
Sep 8, 2020	T
Sep 9, 2020	.19
Sep 10, 2020	0
Sep 11, 2020	.05
Sep 12, 2020	.13
Sep 13, 2020	0
Sep 14, 2020	0
Sep 15, 2020	0
Sep 16, 2020	0
Sep 17, 2020	0
Sep 18, 2020	0
Sep 19, 2020	0
Sep 20, 2020	0
Sep 21, 2020	T
Sep 22, 2020	0
Sep 23, 2020	0
Sep 24, 2020	.05
Sep 25, 2020	0
Sep 26, 2020	.03
Sep 27, 2020	.05
Sep 28, 2020	.04
Sep 29, 2020	0
Sep 30, 2020	.09

Date	Precip.
Oct 1, 2020	0
Oct 2, 2020	0
Oct 3, 2020	0
Oct 4, 2020	0
Oct 5, 2020	0
Oct 6, 2020	0
Oct 7, 2020	0
Oct 8, 2020	0
Oct 9, 2020	0
Oct 10, 2020	m
Oct 11, 2020	0
Oct 12, 2020	1.18
Oct 13, 2020	0
Oct 14, 2020	.08
Oct 15, 2020	0
Oct 16, 2020	.02
Oct 17, 2020	.07
Oct 18, 2020	0
Oct 19, 2020	.04
Oct 20, 2020	.70
Oct 21, 2020	0
Oct 22, 2020	.31
Oct 23, 2020	.10
Oct 24, 2020	0
Oct 25, 2020	.04
Oct 26, 2020	0
Oct 27, 2020	0
Oct 28, 2020	0
Oct 29, 2020	0
Oct 30, 2020	0
Oct 31, 2020	0

Date	Precip.	
Nov 1, 2020	0	
Nov 2, 2020	0	
Nov 3, 2020	0	
Nov 4, 2020	0	
Nov 5, 2020	0	
Nov 6, 2020	0	
Nov 7, 2020	0	
Nov 8, 2020	0	
Nov 9, 2020	0	
Nov 10, 2020	0	
Nov 11, 2020	0.57	
Nov 12, 2020	0	
Nov 13, 2020	0	
Nov 14, 2020	0	
Nov 15, 2020	0	
Nov 16, 2020	0	Site Visit
Nov 17, 2020	0	
Nov 18, 2020	0	

1981-2010 Summary Statistics

	Jan	*Feb*	*Mar*	*Apr*	*May*	*Jun*	*Jul*	*Aug*	*Sep*	*Oct*	*Nov*	*Dec*	*WARM*	*ANN*	*WAT*
30%	0.47	0.42	1.15	1.93	2.56	3.22	2.61	2.90	2.29	1.26	1.07	0.61	16.27	26.64	26.13
70%	1.14	0.85	1.96	2.78	4.08	5.38	4.20	4.77	4.07	3.29	2.00	1.40	21.59	33.44	33.01
mean	0.81	0.77	1.71	2.56	3.43	4.40	3.93	4.08	3.40	2.39	1.67	1.14	19.24	30.29	30.12