

# Minnesota Wetland Conservation Act

## Notice of Decision

Local Government Unit (LGU) <b>City of Plymouth</b>	Address <b>3400 Plymouth Blvd Plymouth, MN 55447</b>
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### 1. PROJECT INFORMATION

Applicant Name <b>Wayzata Public Schools</b>	Project Name <b>Wayzata East Middle School</b>	Date of Application <b>12/03/2018</b>	Application Number <b>N/A</b>
<input checked="" type="checkbox"/> Attach site locator map.			

Type of Decision:

<input checked="" type="checkbox"/> Wetland Boundary or Type Sequencing	<input type="checkbox"/> No-Loss	<input type="checkbox"/> Exemption	<input type="checkbox"/>
<input type="checkbox"/> Replacement Plan	<input type="checkbox"/> Banking Plan		

Technical Evaluation Panel Findings and Recommendation (if any):

<input checked="" type="checkbox"/> Approve	<input type="checkbox"/> Approve with conditions	<input type="checkbox"/> Deny
Summary (or attach): A TEP was held on November 28th, 2018 to review the delineated wetland boundaries. The TEP located one wetland was located on the site. An upland trail that transects the wetland was identified during the field review. A channel was also identified along the eastern property edge that conveys water into the wetland. The delineated wetland boundaries were accepted as delineated in the field.		

### 2. LOCAL GOVERNMENT UNIT DECISION

Date of Decision: <b>01/23/2019</b>		
<input type="checkbox"/> Approved Denied	<input checked="" type="checkbox"/> Approved with conditions (include below)	<input type="checkbox"/>

LGU Findings and Conclusions (attach additional sheets as necessary):

Pinnacle Engineering investigated and delineated the Wayzata East Middle School site on October 9, 2018. During the delineation, 1 wetland area was delineated. A TEP field review of the delineated boundaries occurred on November 28th, 2018 with the boundaries generally accepted as delineated. An upland trail transecting the wetland and a channel along the eastern edge of the property were also identified during the TEP review. A revised figure 2 has been requested from the delineator.

The wetland boundary and type for Wetland 1 is approved with the following conditions:

- The City receives a copy of the surveyed wetland boundaries.
- Submit the MnRAM Assessment
- Submit GIS shapefiles.

For Replacement Plans using credits from the State Wetland Bank:


Bank Account #	Bank Service Area	County	Credits Approved for Withdrawal (sq. ft. or nearest .01 acre)
N/A			

**Replacement Plan Approval Conditions.** In addition to any conditions specified by the LGU, the approval of a Wetland Replacement Plan is conditional upon the following:

- Financial Assurance:** For project-specific replacement that is not in-advance, a financial assurance specified by the LGU must be submitted to the LGU in accordance with MN Rule 8420.0522, Subp. 9 (List amount and type in LGU Findings).
- Deed Recording:** For project-specific replacement, evidence must be provided to the LGU that the BWSR “Declaration of Restrictions and Covenants” and “Consent to Replacement Wetland” forms have been filed with the county recorder’s office in which the replacement wetland is located.
- Credit Withdrawal:** For replacement consisting of wetland bank credits, confirmation that BWSR has withdrawn the credits from the state wetland bank as specified in the approved replacement plan.

**Wetlands may not be impacted until all applicable conditions have been met!**

LGU Authorized Signature:

Signing and mailing of this completed form to the appropriate recipients in accordance with 8420.0255, Subp. 5 provides notice that a decision was made by the LGU under the Wetland Conservation Act as specified above. If additional details on the decision exist, they have been provided to the landowner and are available from the LGU upon request.		
Name <b>Vanessa Strong City of Plymouth</b>	Title <b>Water Resources Manager</b>	
Signature 	Date <b>01/23/2019</b>	Phone Number and E-mail <b>763-509-5526 vstrong@plymouthmn.gov</b>

THIS DECISION ONLY APPLIES TO THE MINNESOTA WETLAND CONSERVATION ACT. Additional approvals or permits from local, state, and federal agencies may be required. Check with all appropriate authorities before commencing work in or near wetlands.

Applicants proceed at their own risk if work authorized by this decision is started before the time period for appeal (30 days) has expired. If this decision is reversed or revised under appeal, the applicant may be responsible for restoring or replacing all wetland impacts.

This decision is valid for three years from the date of decision unless a longer period is advised by the TEP and specified in this notice of decision.

### 3. APPEAL OF THIS DECISION

Pursuant to MN Rule 8420.0905, any appeal of this decision can only be commenced by mailing a petition for appeal, including applicable fee, within thirty (30) calendar days of the date of the mailing of this Notice to the following as indicated:

Check one:

<input checked="" type="checkbox"/> Appeal of an LGU staff decision. Send petition and \$0 fee (if applicable) to:  <b>Vanessa Strong, Water Resources Manager City of Plymouth 3400 Plymouth Blvd. Plymouth, MN</b>	<input type="checkbox"/> Appeal of LGU governing body decision. Send petition and \$500 filing fee to: Executive Director Minnesota Board of Water and Soil Resources 520 Lafayette Road North St. Paul, MN 55155
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### 4. LIST OF ADDRESSEES

<input checked="" type="checkbox"/> SWCD TEP member: <b>Ms. Stacey Lijewski, HCD, 701 Fourth Avenue South, Suite 700, Minneapolis, MN 55415-1600 (sent electronically)</b> <input checked="" type="checkbox"/> BWSR TEP member: <b>Ben Carlson, BWSR 520 Lafayette Road North, St. Paul, MN 55401 (sent electronically)</b> <input checked="" type="checkbox"/> LGU TEP member (if different than LGU Contact): <b>Ben Scharenbroich, City of Plymouth, 3400 Plymouth Blvd, Plymouth, MN 55447 (sent electronically)</b> <input checked="" type="checkbox"/> DNR TEP member: <b>Becky Horton, MnDNR, 1200 Warner Road, St. Paul, MN 55106 (sent electronically)</b> <input type="checkbox"/> DNR Regional Office (if different than DNR TEP member) <input checked="" type="checkbox"/> WD or WMO (if applicable): <b>BCWMC, c/o Laura Jester, Keystone Waters, LLC, 16145 Hillcrest Lane, Eden Prairie, MN 55346 (sent electronically)</b> <input checked="" type="checkbox"/> Applicant and Landowner (if different) <input checked="" type="checkbox"/> Members of the public who requested notice: <b>Arlee Carlson, Sunde Land Surveying, 9001 East Bloomington Freeway, Suite 118, Bloomington, MN 55420 (sent electronically)</b>  <b>Scott Thelen, Pinnacle Engineering, Inc., 11541 95<sup>th</sup> Ave North, Minneapolis, MN 55369 (sent electronically)</b>  <input checked="" type="checkbox"/> Corps of Engineers Project Manager <input type="checkbox"/> BWSR Wetland Bank Coordinator (wetland bank plan decisions only)
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### 5. MAILING INFORMATION

➤ For a list of BWSR TEP representatives: [www.bwsr.state.mn.us/aboutbwsr/workareas/WCA\\_areas.pdf](http://www.bwsr.state.mn.us/aboutbwsr/workareas/WCA_areas.pdf)

➤ For a list of DNR TEP representatives: [www.bwsr.state.mn.us/wetlands/wca/DNR\\_TEP\\_contacts.pdf](http://www.bwsr.state.mn.us/wetlands/wca/DNR_TEP_contacts.pdf)

➤ Department of Natural Resources Regional Offices:

<b>NW Region:</b> Reg. Env. Assess. Ecol. Div. Ecol. Resources	<b>NE Region:</b> Reg. Env. Assess. Ecol. Div. Ecol. Resources	<b>Central Region:</b> Reg. Env. Assess. Ecol.	<b>Southern Region:</b> Reg. Env. Assess. Ecol. Div. Ecol. Resources
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2115 Birchmont Beach Rd. NE Bemidji, MN 56601	1201 E. Hwy. 2 Grand Rapids, MN 55744	Div. Ecol. Resources 1200 Warner Road St. Paul, MN 55106	261 Hwy. 15 South New Ulm, MN 56073
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For a map of DNR Administrative Regions, see: [http://files.dnr.state.mn.us/aboutdnr/dnr\\_regions.pdf](http://files.dnr.state.mn.us/aboutdnr/dnr_regions.pdf)

- For a list of Corps of Project Managers: [www.mvp.usace.army.mil/regulatory/default.asp?pageid=687](http://www.mvp.usace.army.mil/regulatory/default.asp?pageid=687)  
or send to:

US Army Corps of Engineers  
St. Paul District, ATTN: OP-R  
180 Fifth St. East, Suite 700  
St. Paul, MN 55101-1678

- For Wetland Bank Plan applications, also send a copy of the application to:

Minnesota Board of Water and Soil Resources  
Wetland Bank Coordinator  
520 Lafayette Road North  
St. Paul, MN 55155

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## 6. ATTACHMENTS

In addition to the site locator map, list any other attachments:

- Wayzata East Wetland Delineation Report**
- 
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- 
-



11541 95<sup>th</sup> Avenue North  
Minneapolis, MN 55369  
Tel: 763-315-4501  
Fax: 763-315-4507

October 19, 2018

Mr. Arlee Carlson  
Sunde Land Surveying  
9001 East Bloomington Freeway, Suite 118  
Bloomington, MN, 55420

**RE: Wetland Delineation Services  
School Dist. No 284  
12000 Ridgemount Avenue West  
Plymouth, Minnesota 55441  
Pinnacle Project Number: EM21080973**

Dear Mr. Carlson:

Pinnacle Engineering Inc. (Pinnacle) has performed a Wetland Determination and Delineation of the Wayzata East Middle School (ISD#284) property located at 12000 Ridgemount Avenue West in Plymouth, Hennepin County, Minnesota which is within portions SW  $\frac{1}{4}$  SE  $\frac{1}{4}$  of Section 35, TWP118N, R22W (Lat: 44.97959444; Long: -93.43388889°, WGS84). The site consists of a middle school building, wooded areas, community/school playfields, and wetlands. The delineation was conducted in substantial conformance with the 1987 U.S. Army Corps of Engineers Wetland Delineation Manual, updated February 25, 1997, and utilizes the Midwest Region Supplement. The field portion of the wetland delineation was performed within the growing season. The attached report documents the methods and findings of the delineation.

During the field assessment, it was determined that one area within the project area met two of the mandatory criteria of a wetland. The boundaries were flagged for survey by Sunde Land Surveying. The delineation will be reviewed by a representative of the City of Plymouth, who serve as the local governmental unit administering Minnesota's Wetland Conservation Act, and the U.S. Army Corps of Engineers, who administers the Clean Water Act.

If you have any questions or wish to discuss any particular aspect of the project, please contact me at (763) 277-8410. We look forward to being of continued service to you.

Sincerely,

**PINNACLE ENGINEERING, INC.**

Scott Thelen

Senior Project Scientist, Certified Wetland Scientist #1249

Corporate: 11541 95<sup>th</sup> Avenue North, Minneapolis, MN 55369  
800-366-3406 · Main: 763-315-4501 · Fax: 763-315-4507  
Minneapolis, MN · Rochester, MN · Omaha, NE · Minot, ND

[www.pineng.com](http://www.pineng.com)

**24 Hr. Emergency Response: 1-866-658-8883**



# **WETLAND DELINEATION REPORT**

## **FOR:**

**Wayzata East Middle School  
12000 Ridgemount Avenue West  
Plymouth, Minnesota 55441**

## **PREPARED FOR:**

**Sunde Land Surveying  
9001 East Bloomington Freeway,  
Suite 118  
Bloomington, Minnesota 55420**

## **SUBMITTED TO:**

**City of Plymouth  
3400 Plymouth Boulevard  
Plymouth, Minnesota 55447**

## **PREPARED BY:**

**Pinnacle Engineering, Inc.  
11541 95<sup>th</sup> Avenue North  
Maple Grove, Minnesota 55369**

**October 19, 2018  
(Revised November 29, 2018)**

**Pinnacle Project Number: EM21080973**

# WETLAND DETERMINATION AND DELINEATION

## FOR:

WAYZATA EAST MIDDLE SCHOOL  
12000 RIDGEMOUNT AVENUE WEST  
PLYMOUTH, MN 55441

## PREPARED FOR:

SUNDE LAND SURVEYING  
9001 EAST BLOOMINGTON FREEWAY, SUITE 118  
BLOOMINGTON, MINNESOTA 55420

## PREPARED BY:

PINNACLE ENGINEERING, INC.  
11541 95<sup>th</sup> AVENUE  
MAPLE GROVE, MINNESOTA 55369

PINNACLE PROJECT NUMBER: EM21080973

OCTOBER 19, 2018  
(REVISED NOVEMBER 29, 2018)

Prepared By:



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Breeka Li Goodlander  
Staff Scientist

Reviewed By:



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Scott Thelen  
Senior Scientist  
MN Certified Wetland Delineator # 1249

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- FIGURE 1: Site Location Map
- FIGURE 2: Site Layout Map
- FIGURE 3: Soil Survey Map
- FIGURE 4: National Wetland Inventory Map
- FIGURE 5: Public Waters Inventory Map
- FIGURE 6: Wetland Communities Sketch

## **APPENDICES**

- APPENDIX A: Data Forms
- APPENDIX B: Wetland Boundary Application
- APPENDIX C: Wetland Photographs

## 1.0 INTRODUCTION

### 1.1 Introduction

Pinnacle Engineering, Inc. (Pinnacle) performed a Wetland Determination and Delineation of the Wayzata East Middle School (Independent School District (ISD) No 284) property located at 12000 Ridgemount Avenue West in Plymouth, Hennepin County, Minnesota which is within portions of SW ¼ SE ¼ Section 35, TWP118N, R22W (Lat: 44.97959444; Long: -93.43388889°, WGS84). The Site consists of a middle school, athletic fields, parking areas, wooded areas, manicured lawns, and a wetland. The delineation was conducted in substantial conformance with the 1987 U.S. Army Corps of Engineers Wetland Delineation Manual, updated February 25, 1997, and utilizes the Midwest Region Supplement. The field portion of the wetland delineation was performed within the growing season. The attached report documents the methods and findings of the delineation.

### 1.2 Scope

Pinnacle conducted the on-site Level 2 Wetland Determination and Delineation in accordance with the criteria established in the 1987 U. S. Army Corps of Engineers Wetland Delineation Manual, updated in 1997, utilizing the Midwest Region Supplement. The work included the following items:

- Review of County Soil Surveys, USGS topographic maps, National Wetland Inventory (NWI) Maps, Public Water Inventory (PWI) maps, and aerial photographs.
- A site reconnaissance to determine if and where jurisdictional wetlands exist.
- Delineation of the identified wetlands within the area of interest boundaries.
- Preparation and submittal of this report summarizing the findings of our work.

## 2.0 BACKGROUND INFORMATION

### 2.1 Site Location and Use

The project area is located at 12000 Ridgemount Avenue West in Plymouth, Minnesota, which is within portions of SW ¼ SE ¼ Section 35, TWP118N, R22W (Lat: 44.97959444; Long: -93.43388889°, WGS84). The Site consists of a middle school, athletic fields, parking areas, wooded areas, manicured lawns, and a wetland. The Property Identification Number (PID) for the project area is 3511822340001. Figure 1 shows the site in its current configuration.

### 2.2 Surveys and Maps

Pinnacle conducted a review of the Hennepin County Soil Survey, topographic maps, Protected Waters Inventory (PWI), and National Wetland Inventory (NWI) maps for the

vicinity of the Site. The following sections summarize the information available at the time of this review.

### **2.2.1 USGS Topographic Maps**

The topographic map depicted the parcel as a steeply sloping area to the west in the northwestern portion and a relatively consistent topographic setting in the eastern portion, with a wetland in a depressed area in the northeastern portion of the Site. The sloping portion of the Site has a range in elevation of approximately 49 feet; from 976 feet mean sea level (MSL) elevation in the northwest corner to 924 feet MSL in the central portion of the Site (Figure 2). The eastern portion of the Site is relatively level with a range in elevation of approximately 10 feet, from 924 feet MSL to 910 feet MSL, with the northern depression having a range of approximately 18 feet from 924 feet MSL to 906 feet MSL, corresponding to Wetland 1 (Figure 2). Based on the contour intervals on the topographic map and our Site observations, surficial drainage appears to be to the northeast.

### **2.2.2 Soil Survey**

The Natural Resources Conservation Service (NRCS) Web Soil Survey, which is included as Figure 3, was reviewed for information pertaining to the Site soils. The Soil Survey indicated the Site soils are comprised of Lester loam, 6-10 percent slopes (L22C2), moderately eroded; Lester loam, 10-16 percent slopes, moderately eroded (L22D2); Lester loam, 10-22 percent slopes (L22E); Lester loam, morainic, 25-35 percent slopes, (L22F); Cordova loam, 0-2 percent slopes (L23A); Le Sueur loam, 1-3 percent slopes (L25A); Hamel, overwash-Hamel complex, 0-3 percent slopes (L36A); Nessel loam, 1-3 percent slopes (L44A); Dundas-Cordova complex, 0-3 percent slopes (L45A); Muskego and Houghton soils, 0-1 percent slopes (L50A); Lester-Malardi complex, 18-35 percent slopes (L70E); Urban land-Udorthents, wet substratum, complex, 0-2 percent slopes (U1A); Udorthents, wet substratum, 0-2 percent slopes (U2A); and Urban land-Udorthents (cut and filled land) complex, 0-6 percent slopes (U6B). Of the identified soil types, the NRCS indicated that Cordova loam, 0-2 percent slopes, and Muskego and Houghton soils, 0-1 percent slopes, are hydric soils. Soil samples collected during the wetland delineation were characterized and recorded on the data forms, which are included as Appendix A.

### **2.2.3 Wetland Inventory Maps**

The United States Fish and Wildlife Service (USFWS)-National Wetland Inventory (NWI) map for the Site area depicted five wetland types within or adjacent to the Site boundaries. The wetland types are identified as Freshwater Pond (PABG), Freshwater Emergent Wetland (PEM1A), Freshwater Emergent Wetland (PEM1C), Freshwater Forested/Shrub Wetland (PFO1A), and Freshwater Emergent Wetland (PEM1A), which correspond to Wetland 1. NWI maps generally show the approximate location of wetlands as of the time of publication. The NWI map, as reviewed by Pinnacle, was compiled based on aerial photo interpretation and field surveys and is included as Figure 4.

## 2.2.4 Public Waters Inventory

The Minnesota Department of Natural Resources Public Waters Inventory (PWI) produces a map of the protected wetlands and waters of the State. The PWI map, which is included as Figure 5, indicates no public waters area located within the Site boundaries.

## 3.0 WETLAND DETERMINATION

### 3.1 Methodology

The wetland determination was made utilizing the techniques of the Routine Onsite Method, as described in the 1987 U. S. Army Corps of Engineers Wetland Delineation Manual, updated February 25, 1997 and utilizing the Midwest Region Supplement. Determination of hydric soils, site hydrology, and hydrophytic vegetation were made according to the procedures and guidelines described in the manual. Sampling locations were selected to be representative of wetland/upland transition areas.

Scott Thelen and Breeka Li Goodlander of Pinnacle assessed the wetlands in the project area on October 2, 2018. The assessment included probing the soils to observe the color and moisture, as well as other available hydric soil indicators, such as mottling, gleying, and oxidized root channels. The characteristics noted for each sampling location are documented in the data forms, which are included in Appendix A. Survey markers were placed along the delineated edge of the wetland for survey by Sunde Land Surveying. A figure of the wetland area is included as Figure 2.

To date, 2018 seasonal rainfall amounts were wetter than the average amount of rainfall for this area, even though July and August were considered average. September was 4.14 inches above the average amount of rainfall for this area. Rain precipitation in the amount of 5.72 inches occurred the fourteen days prior to the wetland delineation field visit. The Minnesota Climatology Working Group identifies the area as having been “wet” for the area. Pinnacle delineated complete or portions of one wetland basin within the Site during the field assessment.

### 3.2 Wetland Descriptions

Table 3.2.1 below summarizes the findings of the field investigation. Descriptions of the observed wetland types follow the summary table. Data forms for the field investigation can be found in Appendix A and photographs are included in Appendix C.

Wetland ID	Delineated Wetland Type	Wetland Size ac/sf		NWI Wetland Type	Dominant Wetland Vegetation	Hydric Soil (Yes/No)	Hydric Soil Indicator	Hydrology
1	Type 1, Seasonally flooded basin	2.45	9,915	PEM1A, PEM1C, PABG	Reed canary grass,	Yes	Depleted Below Dark Surface	Geomorphic Position (D2), FAC-Neutral Test

Type 3, Shallow marsh				common jewelweed		(A11), Depleted Matrix (F3)	(D5), Saturation (A3)
Type 5, Open Water Wetland							

**Wetland Type PEM1A**

The NWI Cowardin wetland classification system identifies the PEM1A label for a wetland that consists of a palustrine basin, with persistent emergent vegetation, that is temporarily flooded, and usually occur within a depressional area. The NWI map for the Site area indicated one PEM1A wetland partially contained within the Site boundaries, which corresponds to portions of Wetland 1.

**Wetland Type PEM1C**

The NWI Cowardin wetland classification system identifies the PEM1C label for a wetland that consists of palustrine basin. This wetland label also contains persistent emergent vegetation characterized by erect, rooted, herbaceous hydrophytes, excluding mosses and lichen. This vegetation is present for most the growing season in most of the year. These wetlands are usually dominated by perennial plants. This wetland is seasonally flooded. Surface water is present for extended periods especially early in the growing season but is absent by the end of the growing season in most years. The water table after flooding is variable, extending from saturated to the surface to a water table well below the ground surface. The NWI map for the Site area indicated one PEM1C wetland partially contained within the Site boundaries, which corresponds to portions of Wetland 1.

**Wetland Type PABG**

The NWI Cowardin wetland classification system identifies the PABG label for a wetland that consists of a palustrine basin, with an aquatic bed, that is intermittently exposed. The NWI map for the Site area indicated one PABG wetland partially contained within the Site boundaries, which corresponds to the majority of Wetland 1.

**4.0 DISCUSSION**

Pinnacle Engineering, Inc. (Pinnacle) performed a Wetland Determination and Delineation for the Wayzata East Middle School (ISD#284) property located at 12000 Ridgemount Avenue West in Plymouth, Hennepin County, Minnesota which is within portions of SW ¼ SE ¼ Section 35, TWP118N, R22W (Lat: 44.979783°; Long: -93.433933°, WGS84). The Site consists of a middle school, athletic fields, parking areas, wooded areas, manicured lawns, and a wetland. The Property Identification Number (PID) for the project area is 351182234001. The delineation was conducted in substantial conformance with the 1987 U.S. Army Corps of Engineers Wetland Delineation Manual, updated February 25, 1997, and utilizes the Midwest Region Supplement.

The USGS topographic map review indicated the project area varies in elevation and hydrology collects in a depressional area within the northeast portion of the Site. Hydric soils, vegetation and geomorphic locations were observed in the wetland located within the Site boundaries. The soil survey map indicated the presence of hydric soils mainly in Wetland 1. The NWI map identified five wetland types on the Site, although the PEM1A and PFO1A mapped along the eastern boundary of the Site did not meet the wetland criteria during site assessment; therefore, were not flagged. The PWI map did not identify any protected water bodies within the project area.

To date, 2018 seasonal rainfall amounts were wetter than the average amount of rainfall for this area, even though July and August were considered average. Rain precipitation in the amount of 5.72 inches occurred the fourteen days prior to the wetland delineation field visit.

Wetland 1 is in a depressional area in the northeastern portion of the Site and surficial and groundwater hydrology appear to hydrate the wetland area. The wetland/upland transition is mostly topographically driven and closely follows the toe of the slope of the adjacent hillside. Wetland 1 is comprised of three wetland types, of which the PABG/PEM1A wetland types and PEM1C wetland type are separated by a paved walking path but connected via culverts.

One delineated wetland displayed wetland characteristics and met all three wetland criteria during the on-site investigation; therefore, Pinnacle placed flags along the wetland boundary. The delineation will be reviewed by the City of Plymouth, who serve as the local governmental unit administering Minnesota's Wetland Conservation Act and the U.S. Army Corps of Engineers, who administers the Clean Water Act.

## 5.0 CONCLUSION

Pinnacle Engineering, Inc. (Pinnacle) performed a Wetland Determination and Delineation of the Wayzata East Middle School (ISD#284) property located at 12000 Ridgemount Avenue West in Plymouth, Hennepin County, Minnesota. The delineation was conducted in substantial conformance with the 1987 U.S. Army Corps of Engineers Wetland Delineation Manual, updated February 25, 1997, and utilizes the Midwest Regional Supplement.

During the field assessment, it was determined that one area within the project boundaries met all three mandatory criteria of a wetland, and the boundary was flagged and surveyed by Sunde Land Surveying. The delineation will be reviewed by the City of Plymouth, who serve as the local governmental unit administering Minnesota's Wetland Conservation Act and the U.S. Army Corps of Engineers, who administers the Clean Water Act.

## 6.0 STANDARD OF CARE

Environmental services performed by Pinnacle for the project have been conducted in a manner consistent with the degree of care and technical skill appropriately exercised by environmental professionals currently practicing in this area under similar budget and time constraints. Recommendations or opinions contained in this report represent our professional judgment and are generally based upon available information and currently accepted practices for environmental professionals. Other than this, no other warranty is implied nor is it expressed.

## 7.0 REFERENCES

Eggers, Steve D. and Reed, Donald M., Wetland Plants and Plant Communities of Minnesota and Wisconsin, 1997, U. S. Army Corps of Engineers, St. Paul District.

Lyon, John Grimson, Practical Handbook for Wetland Identification and Delineation, 1993, Lewis Publishers, Boca Raton, Florida

United States Department of Agricultural, Natural Resources Conservation Service, Data Gateway <<http://datagateway.nrcs.usda.gov/>> (October 9, 2018).

Hennepin County Interactive Maps, <<https://gis.hennepin.us/property/map/default.aspx>> (October 9, 2018).

U.S Fish and Wildlife Service National Wetlands Inventory  
<http://www.fws.gov/wetlands/data/WebMapServices.html> > (October 9, 2018).

U. S. Army Corps of Engineers, U. S. Army Corps of Engineers Wetland Delineation Manual, 1987, updated on February 25, 1997, Washington, D. C.

Interim Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Midwest Region, October 2010, Washington, D. C.

Minnesota Geospatial Commons (<https://gisdata.mn.gov/dataset/water-mn-public-waters>), NWI data (<https://gisdata.mn.gov/dataset/water-nat-wetlands-inv-2009-2014>), generated by Breeka Li Goodlander using <<https://gisdata.mn.gov/>>, October 9, 2018.

**FIGURE 1**  
**Site Location Map**

**WETLAND DETERMINATION AND DELINEATION**





File: Figure 1 - Site Location.mxd 10.5.mxd



11541 95th Ave N.  
Minneapolis, MN 55369  
(763) 315-4501  
www.pineng.com

Figure 1.  
Site Location

Wayzata East Middle School  
12000 Ridgemount Ave W  
Plymouth, MN 55441

LEGEND



Site Boundary



Site Location

PROJECT NUMBER: EM20180973

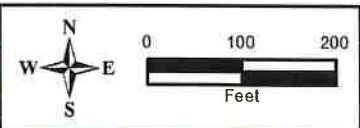
DRAWN: BG  
REVIEWED: MB

DATE: 10/09/2018

**FIGURE 2**

**Site Layout**

**WETLAND DETERMINATION AND DELINEATION**



File: Figure 2 - Site Layout (Revised).mxd



11541 95th Ave N.  
 Minneapolis, MN 55369  
 (763) 315-4501  
 www.pineng.com

Figure 2.  
 Site Layout  
 (Revised)

Wayzata East Middle School  
 12000 Ridgemount Ave N  
 Plymouth, MN 55441

LEGEND

- Site Boundary
- Sampling Point
- Transect
- Wetland
- Water Conveyance
- 2ft Contour

PROJECT NUMBER: EM20180973

DRAWN: BG  
 REVIEWED: MB

DATE: 11/29/2018

**FIGURE 3**  
**Soil Survey**

**WETLAND DETERMINATION AND DELINEATION**





File: Figure 3 - NRCS Soils.mxd



11541 95th Ave N.  
 Minneapolis, MN 55369  
 (763) 315-4501  
 www.pineng.com

Figure 3.  
 NRCS Soils  
 Wayzata East Middle School  
 12000 Ridgemount Ave W  
 Plymouth, Ave 55441

LEGEND  
 Site Boundary  
 NRCS Soils

PROJECT NUMBER: EM20180973

DRAWN: BG  
 REVIEWED: MB







DATE: 10/09/2018

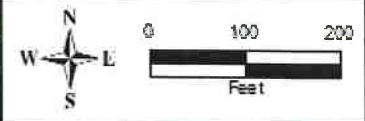
# **FIGURE 4**

## **National Wetland Inventory**

**WETLAND DETERMINATION AND DELINEATION**

### Wetland Types

-  Freshwater Emergent
-  Freshwater Emergent Wetland
-  Freshwater Forested/Shrub Wetland
-  Freshwater Pond
-  Lake
-  Riverine



File: Figure 4 - NWI Map.mxd



11541 95th Ave N.  
 Minneapolis, MN 55369  
 (783) 315-4501  
 www.pineng.com

Figure 4.  
 NWI Wetlands Map

Wayzata East Middle School  
 12000 Ridgemount Ave W  
 Plymouth, MN 55441

### LEGEND

 Site Boundary

PROJECT NUMBER: EM20180973

DRAWN: BG  
 REVIEWED: MB

DATE: 10/09/2018

# **FIGURE 5**

## **Public Waters Inventory**

**WETLAND DETERMINATION AND DELINEATION**





File: Figure 5 - PWI Map.mxd



11541 95th Ave N.  
 Minneapolis, MN 55369  
 (763) 315-4501  
 www.pineng.com

Figure 5.  
 MnDNR PWI Map

Wayzata East Middle School  
 12000 Ridgemount Ave W  
 Plymouth, MN 55441

LEGEND

-  Site Boundary
-  Public Waters
-  PWI Watercourses

PROJECT NUMBER: EM20180973

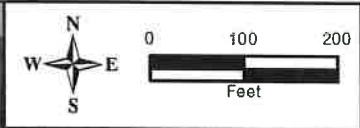
DRAWN: BG  
 REVIEWED: MB

DATE: 10/09/2018

## **FIGURE 6**

# **Wetland Communities Map**

**WETLAND DETERMINATION AND DELINEATION**



File: Figure 6 - Wetland Communities.mxd



11541 95th Ave N.  
 Minneapolis, MN 55369  
 (763) 315-4501  
 www.pineng.com

Figure 6.  
 Wetland Communities  
 (Revised)

Wayzata East Middle School  
 12000 Ridgemount Ave N  
 Plymouth, MN 55441

**LEGEND**

-  Site Boundary
-  Open Water Wetland
-  Shallow Marsh
-  Seasonally Flooded Basin
-  Water Conveyance

PROJECT NUMBER: EM20180973

DRAWN: BG  
 REVIEWED: MB

DATE: 11/29/2018

# **APPENDIX A**

## **WETLAND DETERMINATION DATA FORMS Midwest Region**

**WETLAND DETERMINATION AND DELINEATION**

**WETLAND DETERMINATION DATA FORM – Midwest Region**

Project/Site: Wayzata East Middle School City/County: Plymouth/Hennepin Sampling Date: 10/2/2018  
 Applicant/Owner: ISD 284 State: MN Sampling Point: W1-1W  
 Investigator(s): Scott Thelen Section, Township, Range: S35 T118N R22W  
 Landform (hillside, terrace, etc.): Terrace Local relief (concave, convex, none): Concave  
 Slope (%): 2 Lat: 44.979783° Long: -93.433933° Datum: WGS84  
 Soil Map Unit Name: Muskego and Houghton soils, 0 to 1 percent slopes NWI classification: PABG

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No      (If no, explain in Remarks.)  
 Are Vegetation     , Soil     , or Hydrology      significantly disturbed? Are "Normal Circumstances" present? Yes X No       
 Are Vegetation     , Soil     , or Hydrology      naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes <u>X</u> No <u>    </u> Hydric Soil Present? Yes <u>X</u> No <u>    </u> Wetland Hydrology Present? Yes <u>X</u> No <u>    </u>	<b>Is the Sampled Area within a Wetland?</b> Yes <u>X</u> No <u>    </u>
---	--

Remarks:  
 Wetland adjacent to school manicured lawns (baseball and soccer fields).

**VEGETATION – Use scientific names of plants.**

Tree Stratum	(Plot size: <u>30</u> )	Absolute % Cover	Dominant Species?	Indicator Status	
1.					
2.					
3.					
4.					
5.					
=Total Cover					
Sapling/Shrub Stratum	(Plot size: <u>15</u> )				
1.					
2.					
3.					
4.					
5.					
=Total Cover					
Herb Stratum	(Plot size: <u>5</u> )				
1.	<u>Phalaris arundinacea</u>	<u>40</u>	<u>Yes</u>	<u>FACW</u>	
2.	<u>Impatiens capensis</u>	<u>10</u>	<u>No</u>	<u>FACW</u>	
3.	<u>Solidago gigantea</u>	<u>10</u>	<u>No</u>	<u>FACW</u>	
4.					
5.					
6.					
7.					
8.					
9.					
10.					
=Total Cover					
<u>60</u> =Total Cover					
Woody Vine Stratum	(Plot size: <u>15</u> )				
1.					
2.					
=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: 100.0% (A/B)

**Prevalence Index worksheet:**

Total % Cover of:	Multiply by:
OBL species <u>0</u>	x 1 = <u>0</u>
FACW species <u>60</u>	x 2 = <u>120</u>
FAC species <u>0</u>	x 3 = <u>0</u>
FACU species <u>0</u>	x 4 = <u>0</u>
UPL species <u>0</u>	x 5 = <u>0</u>
Column Totals: <u>60</u> (A)	<u>120</u> (B)
Prevalence Index = B/A = <u>2.00</u>	

**Hydrophytic Vegetation Indicators:**

     1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0<sup>1</sup>

     4 - Morphological Adaptations<sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)

     Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)

<sup>1</sup>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

**Hydrophytic Vegetation Present?** Yes X No

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

**SOIL**

Sampling Point: W1-1W

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-6	10YR 2/1	100					Loamy/Clayey	
6-9	10YR 4/1	95	10YR 4/6	5	C	M	Loamy/Clayey	Prominent redox concentrations
9-18	10YR 4/2	95	10YR 4/6	5	C	M	Loamy/Clayey	Prominent redox concentrations

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

<sup>2</sup>Location: PL=Pore Lining, M=Matrix.

**Hydric Soil Indicators:**

- Histosol (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)
- Dark Surface (S7)
- 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<sup>3</sup>:**

- ? Coast Prairie Redox (A16)
- Iron-Manganese Masses (F12)
- Red Parent Material (F21)
- Very Shallow Dark Surface (F22)
- Other (Explain in Remarks)

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if observed):**

Type: \_\_\_\_\_  
Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes  No

**Remarks:**

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. ([http://www.nrcs.usda.gov/Internet/FSE\\_DOCUMENTS/nrcs142p2\\_051293.docx](http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx))

**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)
- Geomorphic Position (D2)
- FAC-Neutral Test (D5)

**Field Observations:**

Surface Water Present? Yes  No  Depth (inches): \_\_\_\_\_  
 Water Table Present? Yes  No  Depth (inches): \_\_\_\_\_  
 Saturation Present? Yes  No  Depth (inches): 10  
 (includes capillary fringe)

Wetland Hydrology Present? Yes  No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

**Remarks:**

**WETLAND DETERMINATION DATA FORM – Midwest Region**

Project/Site: Wayzata East Middle School City/County: Plymouth/Hennepin Sampling Date: 10/2/2018  
 Applicant/Owner: ISD 284 State: MN Sampling Point: W1-1U  
 Investigator(s): Scott Thelen Section, Township, Range: S35 T118N R22W  
 Landform (hillside, terrace, etc.): Terrace Local relief (concave, convex, none): Concave  
 Slope (%): 2 Lat: 44.979783° Long: -93.433933° Datum: WGS84  
 Soil Map Unit Name: Muskego and Houghton soils, 0 to 1 percent slopes NWI classification: PABG

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No      (If no, explain in Remarks.)  
 Are Vegetation     , Soil     , or Hydrology      significantly disturbed? Are "Normal Circumstances" present? Yes X No       
 Are Vegetation     , Soil     , or Hydrology      naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes <u>    </u> No <u>X</u>	<b>Is the Sampled Area within a Wetland?</b> Yes <u>    </u> No <u>X</u>
Hydric Soil Present? Yes <u>    </u> No <u>X</u>	
Wetland Hydrology Present? Yes <u>    </u> No <u>X</u>	

Remarks:  
 Wetland adjacent to school manicured lawns (baseball and soccer fields).

**VEGETATION – Use scientific names of plants.**

Tree Stratum (Plot size: <u>30</u> )	Absolute % Cover	Dominant Species?	Indicator Status	<b>Dominance Test worksheet:</b>
1. <u>Fraxinus pennsylvanica</u>	<u>5</u>	Yes	FACW	
2. <u>Acer rubrum</u>	<u>5</u>	Yes	FAC	Total Number of Dominant Species Across All Strata: <u>6</u> (B)
3. <u>Populus deltoides</u>	<u>5</u>	Yes	FAC	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>50.0%</u> (A/B)
4. _____				
5. _____				
	<u>15</u>	=Total Cover		
Sapling/Shrub Stratum (Plot size: <u>15</u> )	Absolute % Cover	Dominant Species?	Indicator Status	<b>Prevalence Index worksheet:</b>
1. _____				
2. _____				OBL species <u>0</u> x 1 = <u>0</u>
3. _____				FACW species <u>15</u> x 2 = <u>30</u>
4. _____				FAC species <u>10</u> x 3 = <u>30</u>
5. _____				FACU species <u>40</u> x 4 = <u>160</u>
				UPL species <u>0</u> x 5 = <u>0</u>
				Column Totals: <u>65</u> (A) <u>220</u> (B)
				Prevalence Index = B/A = <u>3.38</u>
Herb Stratum (Plot size: <u>5</u> )	Absolute % Cover	Dominant Species?	Indicator Status	<b>Hydrophytic Vegetation Indicators:</b>
1. <u>Glechoma hederacea</u>	<u>10</u>	Yes	FACU	
2. <u>Cirsium vulgare</u>	<u>10</u>	Yes	FACU	<u>    </u> 2 - Dominance Test is >50%
3. <u>Urtica dioica</u>	<u>5</u>	No	FACW	<u>    </u> 3 - Prevalence Index is ≤3.0 <sup>1</sup>
4. <u>Parthenocissus quinquefolia</u>	<u>5</u>	No	FACU	<u>    </u> 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)
5. <u>Dactylis glomerata</u>	<u>5</u>	No	FACU	<u>    </u> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
6. <u>Asclepias syriaca</u>	<u>10</u>	Yes	FACU	<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
7. <u>Phalaris arundinacea</u>	<u>5</u>	No	FACW	
8. _____				
9. _____				
10. _____				
	<u>50</u>	=Total Cover		
Woody Vine Stratum (Plot size: <u>15</u> )	Absolute % Cover	Dominant Species?	Indicator Status	<b>Hydrophytic Vegetation Present?</b> Yes <u>    </u> No <u>X</u>
1. _____				
2. _____				

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

**SOIL**

Sampling Point: W1-1U

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-8	10YR 2/1	100					Loamy/Clayey	
8-15	10YR 4/3	100					Loamy/Clayey	
15-17	10YR 4/2	100					Loamy/Clayey	
17-18	10YR 4/2	95	10YR 4/6	5	C	PL	Loamy/Clayey	Prominent redox concentrations
18-20	10YR 4/2	100					Loamy/Clayey	

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

<sup>2</sup>Location: PL=Pore Lining, M=Matrix.

**Hydric Soil Indicators:**

- Histosol (A1)  Sandy Gleyed Matrix (S4)
- Histic Epipedon (A2)  Sandy Redox (S5)
- Black Histic (A3)  Stripped Matrix (S6)
- Hydrogen Sulfide (A4)  Dark Surface (S7)
- Stratified Layers (A5)  Loamy Mucky Mineral (F1)
- 2 cm Muck (A10)  Loamy Gleyed Matrix (F2)
- Depleted Below Dark Surface (A11)  Depleted Matrix (F3)
- Thick Dark Surface (A12)  Redox Dark Surface (F6)
- Sandy Mucky Mineral (S1)  Depleted Dark Surface (F7)
- 5 cm Mucky Peat or Peat (S3)  Redox Depressions (F8)

**Indicators for Problematic Hydric Soils<sup>3</sup>:**

- Coast Prairie Redox (A16)
- Iron-Manganese Masses (F12)
- Red Parent Material (F21)
- Very Shallow Dark Surface (F22)
- Other (Explain in Remarks)

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if observed):**

Type: \_\_\_\_\_  
Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes \_\_\_\_\_ No X

**Remarks:**

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. ([http://www.nrcs.usda.gov/Internet/FSE\\_DOCUMENTS/nrcs142p2\\_051293.docx](http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx))

**HYDROLOGY**

**Wetland Hydrology Indicators:**

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

- Surface Water (A1)  Water-Stained Leaves (B9)
- High Water Table (A2)  Aquatic Fauna (B13)
- Saturation (A3)  True Aquatic Plants (B14)
- Water Marks (B1)  Hydrogen Sulfide Odor (C1)
- Sediment Deposits (B2)  Oxidized Rhizospheres on Living Roots (C3)
- Drift Deposits (B3)  Presence of Reduced Iron (C4)
- Algal Mat or Crust (B4)  Recent Iron Reduction in Tilled Soils (C6)
- Iron Deposits (B5)  Thin Muck Surface (C7)
- Inundation Visible on Aerial Imagery (B7)  Gauge or Well Data (D9)
- Sparsely Vegetated Concave Surface (B8)  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)
- 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? Yes \_\_\_\_\_ No X Depth (inches): \_\_\_\_\_  
 (includes capillary fringe)

Wetland Hydrology Present? Yes \_\_\_\_\_ No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

**Remarks:**



**APPENDIX B**

**WETLAND BOUNDARY APPLICATIONS**

**WETLAND DETERMINATION AND DELINEATION**

Project Name and/or Number:

## 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:** ISD#284

**Mailing Address:** 210 County Road 101 N, P.O. Box 660, Wayzata, MN 55391

**Phone:** 763-745-5171

**E-mail Address:** Steven.dey@wayzataschools.org

**Authorized Contact (do not complete if same as above):** Pinnacle Engineering, Inc., Scott Thelen

**Mailing Address:** 11541 95<sup>th</sup> Avenue North, Maple Grove, MN 55369

**Phone:** 763-277-8410

**E-mail Address:** sthelen@pineng.com

**Agent Name:** Scott Thelen

**Mailing Address:** 11541 95<sup>th</sup> Avenue North, Maple Grove, MN 55369

**Phone:** 763-277-8410

**E-mail Address:** sthelen@pineng.com

## PART TWO: Site Location Information

**County:** Hennepin

**City/Township:** Plymouth

**Parcel ID and/or Address:** PID 351182234001

**Legal Description (Section, Township, Range):** S35, T118N, R22W

**Lat/Long (decimal degrees):** Lat: 44.979783° N, Long: -93.433933° W

**Attach a map showing the location of the site in relation to local streets, roads, highways.** Attached

**Approximate size of site (acres) or if a linear project, length (feet):** 37.75-acres

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](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.

**Building and ground improvements.**

Project Name and/or Number:

## PART FOUR: Aquatic Resource Impact<sup>1</sup> 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) <sup>1</sup>	Size of Impact <sup>2</sup>	Overall Size of Aquatic Resource <sup>3</sup>	Existing Plant Community Type(s) in Impact Area <sup>4</sup>	County, Major Watershed #, and Bank Service Area # of Impact Area <sup>5</sup>

<sup>1</sup>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)".

<sup>2</sup>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).

<sup>3</sup>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".

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

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

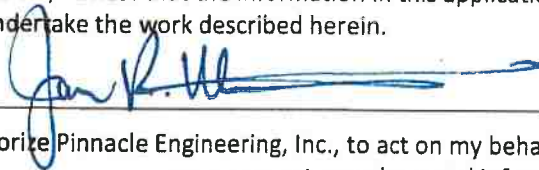
If any of the above identified impacts have already occurred, identify which impacts they are, and the circumstances associated with each:

## 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: October 9, 2018

I hereby authorize Pinnacle Engineering, Inc., 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.

<sup>1</sup> 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.

Project Name and/or Number:

## 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>

# **APPENDIX C**

## **Wetland Photographs**

**WETLAND DETERMINATION AND DELINEATION**



View of Wetland 1 looking east on path.



View of Wetland 1 looking northeast on path.



View of Wetland 1 looking north at sampling point W1-1W.



View of Wetland 1 vegetation facing west at sampling point W1-1W.



View of Wetland 1, looking east at sampling W1-1W.



View of culvert draining from the south to Wetland 1.