

Minnesota Wetland Conservation Act

Notice of Application

Item 8C.
BCWMC 10-16-14

Local Government Unit (LGU) City of Plymouth	Address 3400 Plymouth Blvd. Plymouth, MN 55447
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1. PROJECT INFORMATION

Applicant Name Tom Gonyea Estate Development Corporation	Project Name Vicksburg Ridge	Date of Application 9/19/14	Application Number NA
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Type of Application (check all that apply):

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

Summary and description of proposed project (attach additional sheets as necessary):

The Vicksburg Ridge parcel located in Section 16, T118N, R22W, with a PID of 1611822220002 and generally located south of 46th Ave. N., east of Vicksburg Lane North, and north of Old Rockford Road was delineated for the presence of wetlands on July 16, 2014. One wetland was delineated on-site.

Wetland 1 is a Type 3 (PEM1C) shallow marsh dominated by reed canary grass with cattail species observed in deeper portions of the basin. This basin is designated MN DNR Public Water 101P.

2. APPLICATION REVIEW AND DECISION

Signing and mailing of this completed form to the appropriate recipients in accordance with 8420.0255, Subp. 3 provides notice that an application was made to the LGU under the Wetland Conservation Act as specified above. A copy of the application is attached. Comments can be submitted to:

Name and Title of LGU Contact Person Derek Asche Water Resources Manager	Comments must be received by (minimum 15 business-day comment period): October 16, 2014
Address (if different than LGU) Plymouth City Hall 3400 Plymouth Blvd. Plymouth, MN 55447	Date, time, and location of decision: October 17, 2014 9am Plymouth City Hall
Phone Number and E-mail Address 763-509-5526 dasche@plymouthmn.gov	Decision-maker for this application: <input checked="" type="checkbox"/> Staff <input type="checkbox"/> Governing Board or Council

Signature: _____

Derek Asche

Date: _____

9/23/14

3. LIST OF ADDRESSEES

<input checked="" type="checkbox"/>	HCD TEP member: Ms. Stacey Lijewski, HCD, 701 Fourth Avenue South, Suite 700, Minneapolis, MN, 55415-1600 (sent electronically)
<input checked="" type="checkbox"/>	BWSR TEP member: Mr. Ben Meyer, BWSR, 520 Lafayette Rd. N., St. Paul, MN, 55155 (sent electronically)
<input type="checkbox"/>	LGU TEP member (if different than LGU Contact):
<input checked="" type="checkbox"/>	DNR TEP member: Brooke Haworth, MN DNR, 1200 Warner Road, St. Paul, MN, 55106 (sent electronically)
<input type="checkbox"/>	DNR Regional Office (if different than DNR TEP member) Ms. Kate Drewry, DNR Division of Ecological and Water Resources, 1200 Warner Road, St. Paul, MN, 55106 (sent electronically)
<input checked="" type="checkbox"/>	WD or WMO (if applicable): BCWMC, c/o Laura Jester, Keystone Waters, LLC, 16415 Hillcrest Lane, Eden Prairie, MN, 55346 (sent electronically)
<input checked="" type="checkbox"/>	Applicant and Landowner (if different): Tom Gonyea, Estate Development Corporation, 15250 Wayzata Blvd., Suite 101, Wayzata, MN, 55391
<input checked="" type="checkbox"/>	Members of the public who requested notice: Richard and Patricia Davideit, 4420 Vicksburg Lane North, Plymouth, MN, 55446
<input checked="" type="checkbox"/>	Corps of Engineers Project Manager: Melissa Jenny, Army Corps of Engineers, 180 5 th Street East, Suite 700, St. Paul, MN, 55101-1678 (sent electronically)
<input type="checkbox"/>	BWSR Wetland Bank Coordinator (wetland bank plan decisions only)

4. MAILING INFORMATION

- For a list of BWSR TEP representatives: www.bwsr.state.mn.us/contact/WCA_areas.pdf
- For a list of DNR TEP representatives: www.bwsr.state.mn.us/wetlands/wca/DNR_TEP_contacts.pdf
- Department of Natural Resources Regional Offices:

NW Region:	NE Region:	Central Region:	Southern Region:
Reg. Env. Assess. Ecol. Div. Ecol. Resources 2115 Birchmont Beach Rd. NE Bemidji, MN 56601	Reg. Env. Assess. Ecol. Div. Ecol. Resources 1201 E. Hwy. 2 Grand Rapids, MN 55744	Reg. Env. Assess. Ecol. Div. Ecol. Resources 1200 Warner Road St. Paul, MN 55106	Reg. Env. Assess. Ecol. Div. Ecol. Resources 261 Hwy. 15 South New Ulm, MN 56073

For a map of DNR Administrative Regions, see: 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
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

5. ATTACHMENTS

In addition to the application, list any other attachments:	
<input checked="" type="checkbox"/>	Wetland Delineation Report dated 9/19/14 for Vicksburg Ridge by KES
<input type="checkbox"/>	
<input type="checkbox"/>	
<input type="checkbox"/>	
<input type="checkbox"/>	

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: Tom Gonyea, Estate Development Corporation

Mailing Address: 15250 Wayzata Boulevard Suite 101, Wayzata, MN 55391

Phone: (612) 990-0666

E-mail Address: tom@landmn.com

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

Mailing Address:

Phone:

E-mail Address:

Agent Name: Ben Carlson, Kjolhaug Environmental

Mailing Address: 26105 Wild Rose Lane, Shorewood, MN 55331

Phone: 952-401-8757

E-mail Address: ben@kjolhaugenv.com

PART TWO: Site Location Information

County: Hennepin

City/Township: Plymouth

Parcel ID and/or Address: PID 1611822220002 (4420 Vicksburg Lane North, Plymouth, MN)

Legal Description (Section, Township, Range): Section 16, Township 118N, Range 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): 9.9 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

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 Impact¹ Summary

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

Aquatic Resource ID (as noted on overhead view)	Aquatic Resource Type (wetland, lake, tributary etc.)	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

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

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

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

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

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

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: 9/19/2014

I hereby authorize _____ to act on my behalf as my agent in the processing of this application and to furnish, upon request, supplemental information in support of this application.

¹ The term "impact" as used in this joint application form is a generic term used for disclosure purposes to identify activities that may require approval from one or more regulatory agencies. For purposes of this form it is not meant to 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>

Vicksburg Ridge

Plymouth, Minnesota

Wetland Delineation Report

Prepared for
Estate Development Corporation

by
Kjolhaug Environmental Services Company, Inc.
(KES Project No. 2014-136)

September 19, 2014

PO PER
SHAWN DANCE
9/19/14

WETLAND DELINEATION SUMMARY

- The 9.9 acre Vicksburg Ridge parcel was inspected on July 16, 2014 for the presence and extent of wetland.
- The NWI-map showed one PEM1A wetland along the eastern edge of the review area.
- The soil survey showed the Dundas-Cordova complex and Houghton and Muskego soils as the hydric soil types present within the review area.
- The DNR Protected Waters map shows DNR Protected Waters (27-101 P) within the review area.
- One Type 3 (PEM1C) shallow marsh wetland was delineated within the review area.

Vicksburg Ridge

Plymouth, Minnesota

Wetland Delineation Report

I. INTRODUCTION

The Vicksburg Ridge parcel was inspected on July 16, 2014 for the presence and extent of wetland. The property encompassed 9.9 acres and was located in Section 16, Township 118N, Range 22W, Plymouth, Hennepin County, Minnesota. Generally the site was south of 46th Avenue North, north of Old Rockford Road, and east of Vicksburg Lane North (**Figure 1**). The site limits corresponded to Hennepin County PID 1611822220002 (4420 Vicksburg Lane North, Plymouth, MN).

The site was dominated by hardwood forest and cool season grasses. One single-family home was present. Adjacent land use was primarily residential single-family homes and a church to the south of the site. The site sloped generally from west to east with one wetland basin present along the eastern edge of the parcel (**Figure 2**).

II. METHODS

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

Wetland boundaries were identified as the upper-most extent of wetlands, which met criteria for hydric soils, hydrophytic vegetation, and wetland hydrology. Wetland-upland boundaries were marked with pin flags and were located by Alliant surveyors.

Soils, vegetation, and hydrology were documented at representative locations 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, 15-foot radius for the shrub layer, and a 5-foot radius for the herbaceous layer within the community type being sampled.

Soils were characterized to a minimum depth of 18-20 inches (unless otherwise noted) utilizing Munsell Soil Color Charts and standard soil texturing methodology. Hydric soil indicators used in reporting are from the NTCHS Field Indicators of Hydric Soils in the United States (USDA Natural Resources Conservation Service Version 7, 2010) which are commonly found in the Midwest.

Plants were identified using standard regional plant keys. Taxonomy and indicator status of plant species was taken from the *2012 National Wetland Plant List* (Lichvar, R.W. and Kartesz, J.T. 2009. North American Digital Flora: National Wetland Plant List, version 2.4.0 (https://wetland_plants.usace.army.mil). U.S. Army Corps of Engineers, Engineer Research and Development Center, Cold Regions Research and Engineering Laboratory, Hanover, NH, and BONAP, Chapel Hill, NC.)

III. RESULTS

Review of NWI, Soils, and DNR Information

The *National Wetland Inventory Map (NWI)* (Osseo Quadrangle, MN DNR 2013) showed one PEM1A wetland within the review area (**Figure 3**).

The Soil Survey of Hennepin County, Minnesota

(<http://soils.usda.gov/survey/geography/ssurgo/>) the Dundas-Cordova complex and Houghton and Muskego soils as the hydric soil types present within the review area. A map indicating the soil types present within the parcel is included as **Figure 4**.

The *DNR Protected Waters Map, Hennepin County* (<http://deli.dnr.state.mn.us/>) indicated DNR Protected Waters (27-101 P) within the review area (**Figure 5**).

Wetland Determinations and Delineations

Potential wetlands were evaluated in greater detail during field observations on July 16, 2014. One (1) wetland was identified on the subject site (**Figure 2**). Corresponding data forms are included in **Appendix A**. The following description of the wetlands and their adjacent upland reflects conditions observed at the time of the field visit. At that time climatic conditions were significantly wetter than normal based on available precipitation data (30-day rolling average) and year-to-date was above average (**Appendix B**). A survey of the wetland boundary by Alliant Engineering is included in **Appendix C**.

Wetland 1 was a Type 3 (PEM1C) shallow marsh. The wetland was dominated by reed canary grass with cattail species observed in deeper portions of the basin (off the site to the east). The wetland had saturation within 12 inches of the surface (at the sample point location).

Adjacent upland at the sample location was dominated by boxelder trees, buckthorn shrubs, and an herbaceous layer of ground ivy, nightshade, Virginia creeper, hog peanut, and burdock.

The delineated boundary followed an abrupt change in topography and was placed along the transition zone from wetland to upland plant communities and where hydrology indicators were no longer present. Wetland 1 was indicated on the NWI map as a PEM1A wetland.

Other Areas

No other areas with wetland vegetation or hydrology indicators were observed on the site. No other areas were shown as wetland on the NWI map. Hydric soil (Dundas-Cordova complex) is mapped in the southwest corner of the site however, this area was dominated by upland plant species (smooth brome and Kentucky bluegrass) and was lacking hydrology indicators.

IV. CERTIFICATION OF DELINEATION

The procedures utilized in the described delineation are based on the COE 1987 Wetland Delineation Manual as required by Section 404 of the Clean Water Act and the Minnesota Wetland Conservation Act. Both the delineation and report were conducted in compliance with regulatory standards in place at the time the work was completed.

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

Delineation Completed by:

Ben Carlson, Wetland Specialist
Certified Wetland Delineator No. 1125



Report reviewed by: _____ Date: September 19, 2014

Mark Kjolhaug, Professional Wetland Scientist No. 000845

Vicksburg Ridge

Wetland Delineation Report

Figures:

- Figure 1 – Site Location Map
- Figure 2 – Property Boundary/Delineation Map
- Figure 3 – NWI Map
- Figure 4 – Soil Survey Map
- Figure 5 – DNR Protected Waters Map

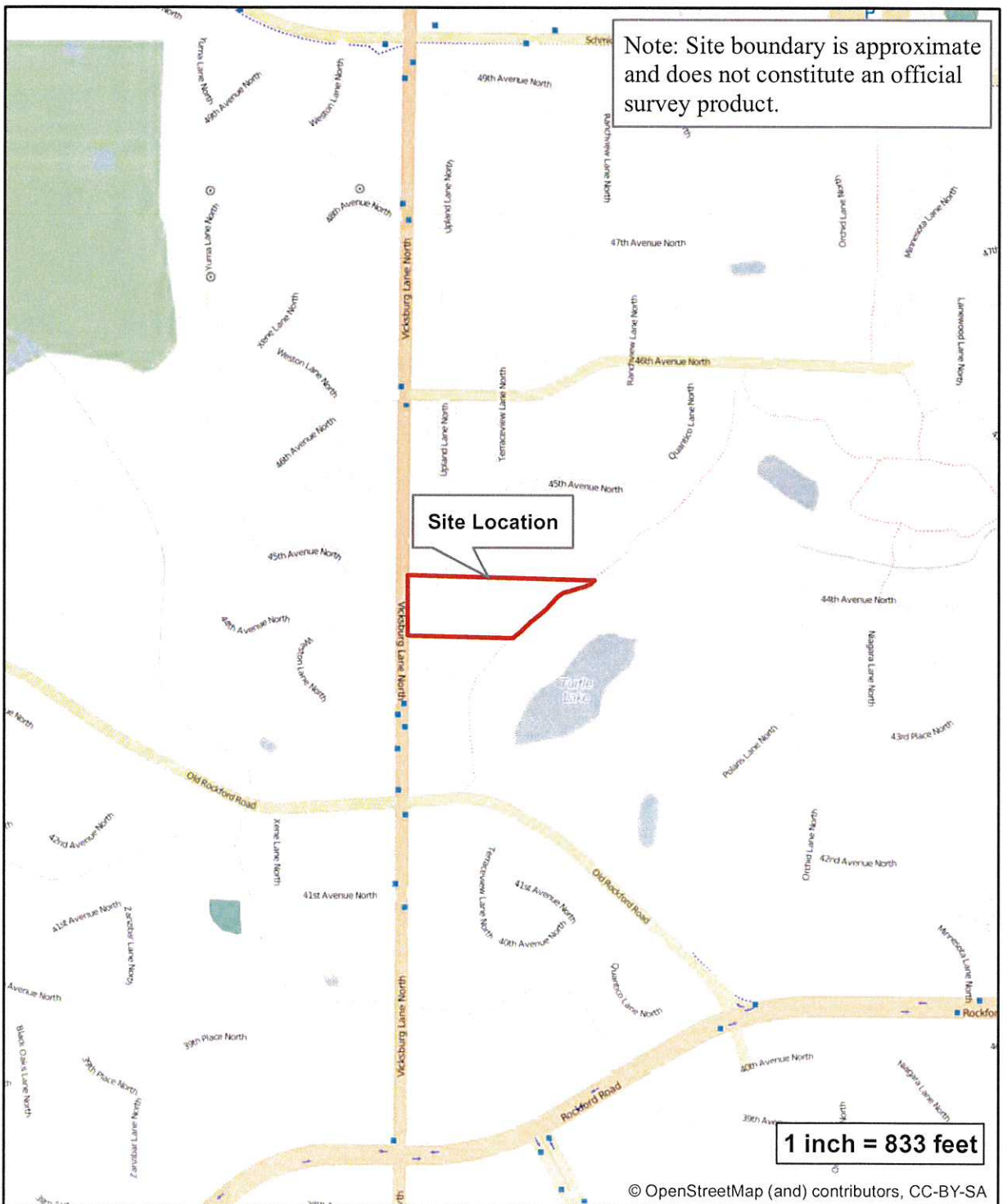



Figure 1 - Site Location Map



KJOLHAUG ENVIRONMENTAL SERVICES COMPANY

Vicksburg Ridge (KES 2014-136)
Plymouth, Minnesota

N






Figure 3 - NWI Map (2013 MN DNR)



KJOLHAUG ENVIRONMENTAL SERVICES COMPANY

Vicksburg Ridge (KES No. 2014-136)
Plymouth, Minnesota



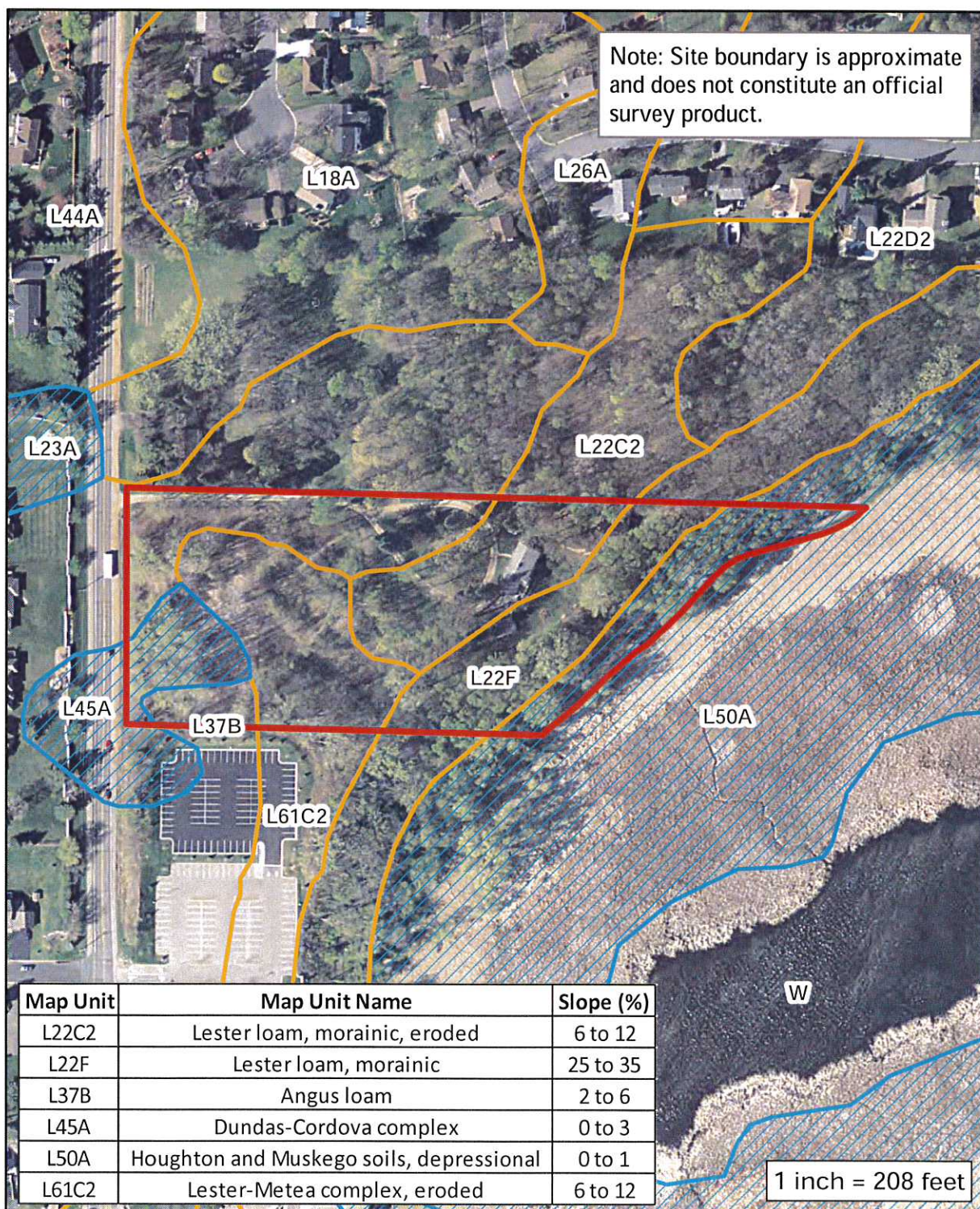


Figure 4 - Soil Survey Map

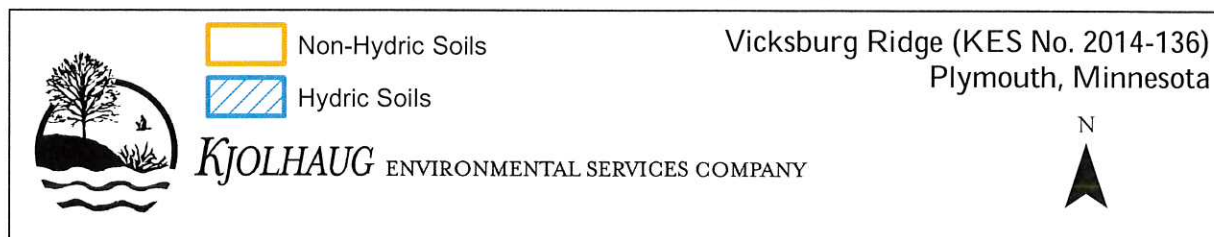
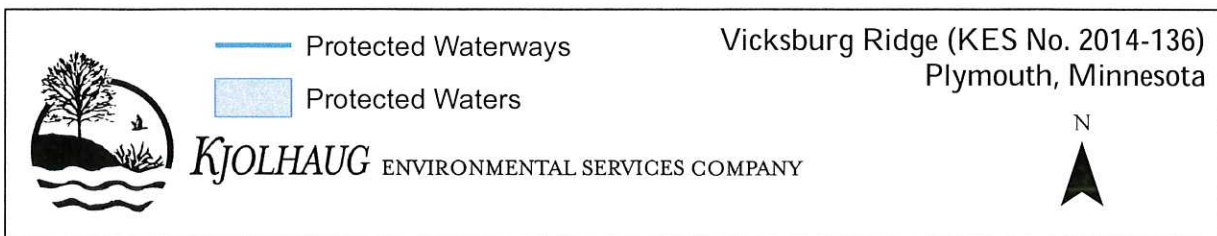




Figure 5 - DNR Protected Waters Map



Vicksburg Ridge

Wetland Delineation Report

Appendix A: Data Forms

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site Vicksburg Ridge City/County: Plymouth/Hennepin Sampling Date: 7/16/14
 Applicant/Owner: Estate Development State: MN Sampling Point: 1-1 Up
 Investigator(s): B. Carlson (WDC #1125) Section, Township, Range: S16 T118N R22W
 Landform (hillslope, terrace, etc.): Slope Local relief (concave, convex, none): Concave
 Slope (%): 5 Lat: Long: Datum:
 Soil Map Unit Name Lester (Non-Hydric) NWI Classification: None

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

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

Are vegetation , soil , or hydrology naturally problematic? present? Yes

SUMMARY OF FINDINGS

(If needed, explain any answers in remarks.)

Hydrophytic vegetation present? <u>N</u>	Is the sampled area within a wetland? <u>N</u> If yes, optional wetland site ID: <u></u>
Hydric soil present? <u>N</u>	
Indicators of wetland hydrology present? <u>N</u>	

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

30-day precipitation rolling average above normal range

VEGETATION -- Use scientific names of plants.

Tree Stratum	(Plot size: <u>30</u>)	Absolute % Cover	Dominant Species	Indicator Status	Dominance Test Worksheet
1 <u>Acer negundo</u>		30	Y	FAC	
2					Total Number of Dominant Species Across all Strata: <u>6</u> (B)
3					Percent of Dominant Species that are OBL, FACW, or FAC: <u>50.00%</u> (A/B)
4					
5					
		30	= Total Cover		
Sapling/Shrub stratum	(Plot size: <u>15</u>)	Absolute % Cover	Dominant Species	Indicator Status	Prevalence Index Worksheet
1 <u>Rhamnus cathartica</u>		20	Y	FAC	
2					OBL species <u>0</u> x 1 = <u>0</u>
3					FACW species <u>0</u> x 2 = <u>0</u>
4					FAC species <u>75</u> x 3 = <u>225</u>
5					FACU species <u>85</u> x 4 = <u>340</u>
		20	= Total Cover		UPL species <u>0</u> x 5 = <u>0</u>
					Column totals <u>160</u> (A) <u>565</u> (B)
					Prevalence Index = B/A = <u>3.53</u>
Herb stratum	(Plot size: <u>5</u>)	Absolute % Cover	Dominant Species	Indicator Status	Hydrophytic Vegetation Indicators:
1 <u>Glechoma hederacea</u>		30	Y	FACU	
2 <u>Parthenocissus quinquefolia</u>		20	Y	FACU	Dominance test is >50%
3 <u>Amphicarpaea bracteata</u>		20	Y	FAC	Prevalence index is ≤3.0*
4 <u>Circaea canadensis</u>		20	Y	FACU	Morphological adaptations* (provide supporting data in Remarks or on a separate sheet)
5 <u>Arctium minus</u>		15	N	FACU	Problematic hydrophytic vegetation* (explain)
6 <u>Alliaria petiolata</u>		5	N	FAC	
7					
8					
9					
10					
		110	= Total Cover		
Woody vine stratum	(Plot size: <u>15</u>)	Absolute % Cover	Dominant Species	Indicator Status	Hydrophytic vegetation present? <u>N</u>
1					
2					
		0	= Total Cover		

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

SOIL

Sampling Point: 1-1 Up

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*	Loc**		
0-12	10YR 3/2	100					Clay loam	
12-20	10YR 3/2	95	7.5YR 4/6	5	C	M	Sandy loam	

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

Hydric Soil Indicators:

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

Indicators for Problematic Hydric Soils:

- | |
|--|
| <input type="checkbox"/> Coast Prairie Redox (A16) (LRR K, L, R) |
| <input type="checkbox"/> Dark Surface (S7) (LRR K, L) |
| <input type="checkbox"/> Iron-Manganese Masses (F12) (LRR K, L, R) |
| <input type="checkbox"/> Very Shallow Dark Surface (TF12) |
| <input type="checkbox"/> Other (explain in remarks) |

*Indicators of hydrophytic vegetation and wetland 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)

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

Secondary Indicators (minimum of two required)

- | |
|--|
| <input type="checkbox"/> Surface Soil Cracks (B6) |
| <input type="checkbox"/> Drainage Patterns (B10) |
| <input type="checkbox"/> Dry-Season Water Table (C2) |
| <input type="checkbox"/> Crayfish Burrows (C8) |
| <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) |
| <input type="checkbox"/> Stunted or Stressed Plants (D1) |
| <input type="checkbox"/> Geomorphic Position (D2) |
| <input type="checkbox"/> FAC-Neutral Test (D5) |

Field Observations:

Surface water present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Depth (inches): _____
Water table present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Depth (inches): _____
Saturation present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Depth (inches): _____

 (includes capillary fringe)
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 Owens Property City/County: Prior Lake/Scott Sampling Date: 6/11/2014
 Applicant/Owner: Stonebrooke Engineering State: MN Sampling Point: 1-1 Wet
 Investigator(s): B. Carlson (WDC #1125) Section, Township, Range: S6 T114N R21W
 Landform (hillslope, terrace, etc.): Basin Local relief (concave, convex, none): Concave
 Slope (%): 1 to 3 Lat: Long: Datum:
 Soil Map Unit Name Houghton and Muskego (Hydric) VWI Classification: PEM1A

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

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

Are vegetation , soil , or hydrology naturally problematic? present? Yes

SUMMARY OF FINDINGS

(If needed, explain any answers in remarks.)

Hydrophytic vegetation present? <u>Y</u>	Is the sampled area within a wetland? <u>Y</u> If yes, optional wetland site ID: <u></u>
Hydric soil present? <u>Y</u>	
Indicators of wetland hydrology present? <u>Y</u>	

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

30-day precipitation rolling average above normal range

VEGETATION -- Use scientific names of plants.

Tree Stratum	(Plot size: <u>30</u>)	Absolute % Cover	Dominant Species	Indicator Status	Dominance Test Worksheet Number of Dominant Species that are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across all Strata: <u>1</u> (B) Percent of Dominant Species that are OBL, FACW, or FAC: <u>100.00%</u> (A/B)
1					
2					
3					
4					
5					
		<u>0</u>	= Total Cover		Prevalence Index Worksheet Total % Cover of: OBL species <u>0</u> x 1 = <u>0</u> FACW species <u>110</u> x 2 = <u>220</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>110</u> (A) <u>220</u> (B) Prevalence Index = B/A = <u>2.00</u>
Sapling/Shrub stratum	(Plot size: <u>15</u>)				
1					
2					
3					
4					
5					
		<u>0</u>	= Total Cover		
Herb stratum	(Plot size: <u>5</u>)				Hydrophytic Vegetation Indicators: Rapid test for hydrophytic vegetation <input checked="" type="checkbox"/> Dominance test is >50% <input checked="" type="checkbox"/> Prevalence index is ≤3.0* Morphological 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
1	<i>Phalaris arundinacea</i>	100	Y	FACW	
2	<i>Urtica dioica</i>	10	N	FACW	
3					
4					
5					
6					
7					
8					
9					
10					
		<u>110</u>	= Total Cover		
Woody vine stratum	(Plot size: <u>15</u>)				Hydrophytic vegetation present? <u>Y</u>
1					
2					
		<u>0</u>	= Total Cover		

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

SOIL

Sampling Point: 1-1 Wet

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*	Loc**		
0-8	10YR 4/1	100					Clay loam	
8-20	10YR 4/1	90	7.5YR 4/6	10	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:

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

Indicators for Problematic Hydric Soils:

- | |
|--|
| <input type="checkbox"/> Coast Prairie Redox (A16) (LRR K, L, R) |
| <input type="checkbox"/> Dark Surface (S7) (LRR K, L) |
| <input type="checkbox"/> Iron-Manganese Masses (F12) (LRR K, L, R) |
| <input type="checkbox"/> Very Shallow Dark Surface (TF12) |
| <input type="checkbox"/> Other (explain in remarks) |

*Indicators of hydrophytic vegetation and wetland 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)

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

Secondary Indicators (minimum of two required)

- | |
|--|
| <input type="checkbox"/> Surface Soil Cracks (B6) |
| <input type="checkbox"/> Drainage Patterns (B10) |
| <input type="checkbox"/> Dry-Season Water Table (C2) |
| <input type="checkbox"/> Crayfish Burrows (C8) |
| <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) |
| <input type="checkbox"/> Stunted or Stressed Plants (D1) |
| <input checked="" type="checkbox"/> Geomorphic Position (D2) |
| <input checked="" type="checkbox"/> FAC-Neutral Test (D5) |

Field Observations:

Surface water present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Depth (inches): _____
Water table present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Depth (inches): _____
Saturation present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Depth (inches): <u>12</u>

 (includes capillary fringe)
Indicators of wetland hydrology present? Y

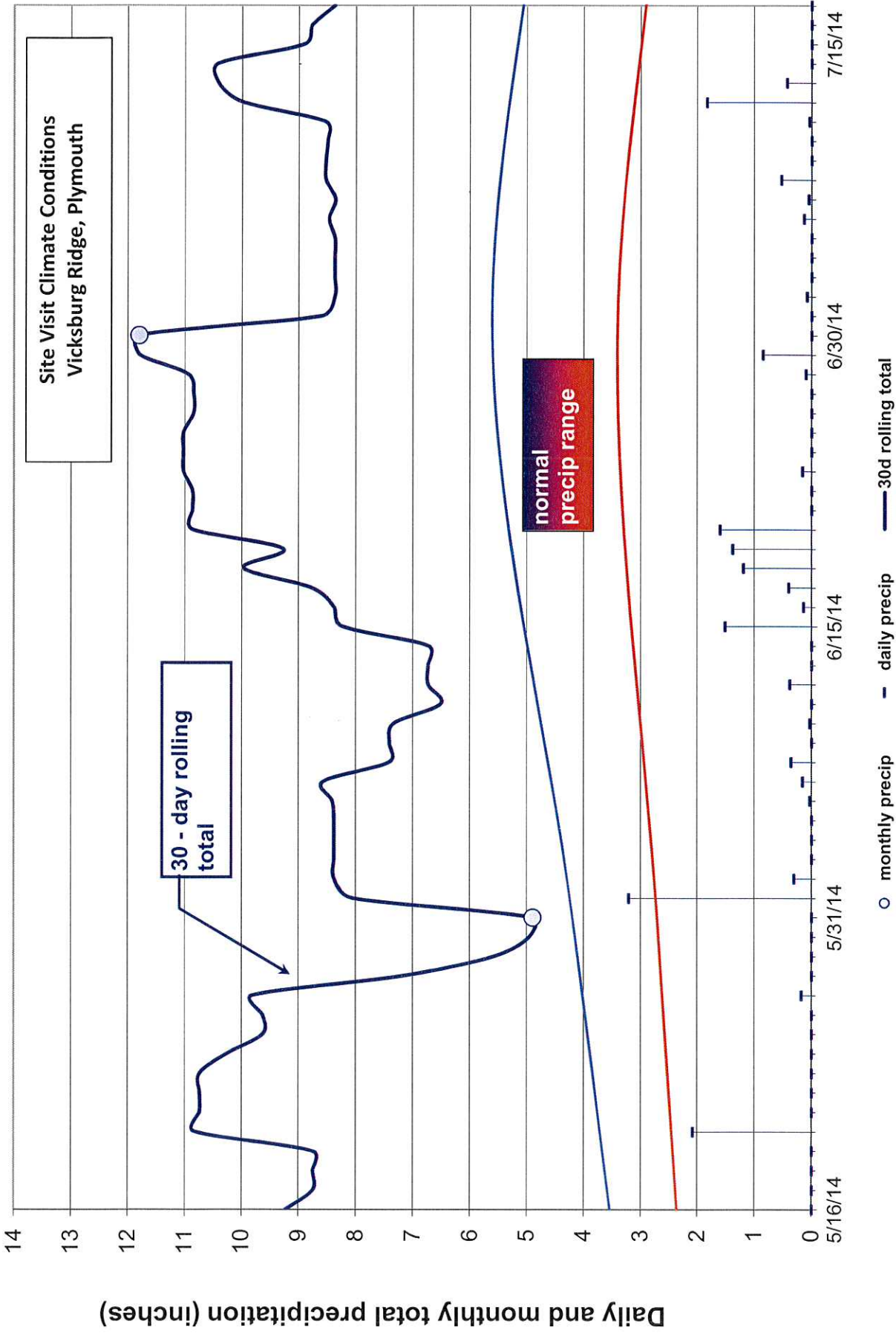
Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Vicksburg Ridge

Wetland Delineation Report

Appendix B: Precipitation Data



Vicksburg Ridge, Plymouth: Precipitation Summary

Source: Minnesota Climatology Working Group

Monthly Totals: 2014

Target: T118N R22W S16, Lat: 45.02925 Lon: 93.47164

mon	year	cc	tttN	rrw	ss	nnnn	ooooooo	pre
Jan	2014	27	119N	22W	33	SWCD		1.22
Feb	2014	27	119N	22W	33	SWCD		.72
Mar	2014	27	119N	22W	33	SWCD		.80
Apr	2014	27	118N	22W	22	MOSQ	PLYMOUTH	7.58
May	2014	27	118N	22W	17	SWCD		4.95
Jun	2014	27	118N	22W	17	SWCD		11.80

May/June/July Daily Records

Date	Precip.	Date	Precip.	Date	Precip.
May 1, 2014	.06	Jun 1, 2014	3.20	Jul 1, 2014	0
May 2, 2014	.02	Jun 2, 2014	.31	Jul 2, 2014	.08
May 3, 2014	0	Jun 3, 2014	0	Jul 3, 2014	0
May 4, 2014	0	Jun 4, 2014	0	Jul 4, 2014	0
May 5, 2014	0	Jun 5, 2014	0	Jul 5, 2014	0
May 6, 2014	0	Jun 6, 2014	.03	Jul 6, 2014	.13
May 7, 2014	0	Jun 7, 2014	.16	Jul 7, 2014	.05
May 8, 2014	0	Jun 8, 2014	.36	Jul 8, 2014	.53
May 9, 2014	1.52	Jun 9, 2014	0	Jul 9, 2014	0
May 10, 2014	0	Jun 10, 2014	.03	Jul 10, 2014	0
May 11, 2014	.11	Jun 11, 2014	0	Jul 11, 2014	.04
May 12, 2014	.82	Jun 12, 2014	.38	Jul 12, 2014	1.83
May 13, 2014	.16	Jun 13, 2014	0	Jul 13, 2014	.43
May 14, 2014	0	Jun 14, 2014	0	Jul 14, 2014	0
May 15, 2014	0	Jun 15, 2014	1.51	Jul 15, 2014	0
May 16, 2014	0	Jun 16, 2014	.14	Jul 16, 2014	0
May 17, 2014	0	Jun 17, 2014	.40	Jul 17, 2014	0 site visit
May 18, 2014	0	Jun 18, 2014	1.19	Jul 18, 2014	0
May 19, 2014	0	Jun 19, 2014	1.38	Jul 19, 2014	0
May 20, 2014	2.08	Jun 20, 2014	1.60	Jul 20, 2014	0
May 21, 2014	0	Jun 21, 2014	0	Jul 21, 2014	0
May 22, 2014	0	Jun 22, 2014	0	Jul 22, 2014	0
May 23, 2014	0	Jun 23, 2014	.16	Jul 23, 2014	0
May 24, 2014	0	Jun 24, 2014	0	Jul 24, 2014	0
May 25, 2014	0	Jun 25, 2014	0	Jul 25, 2014	.65
May 26, 2014	0	Jun 26, 2014	0	Jul 26, 2014	0
May 27, 2014	.18	Jun 27, 2014	0	Jul 27, 2014	0
May 28, 2014	0	Jun 28, 2014	.10	Jul 28, 2014	.03
May 29, 2014	0	Jun 29, 2014	.85	Jul 29, 2014	0
May 30, 2014	0	Jun 30, 2014	0	Jul 30, 2014	0
May 31, 2014	0			Jul 31, 2014	0

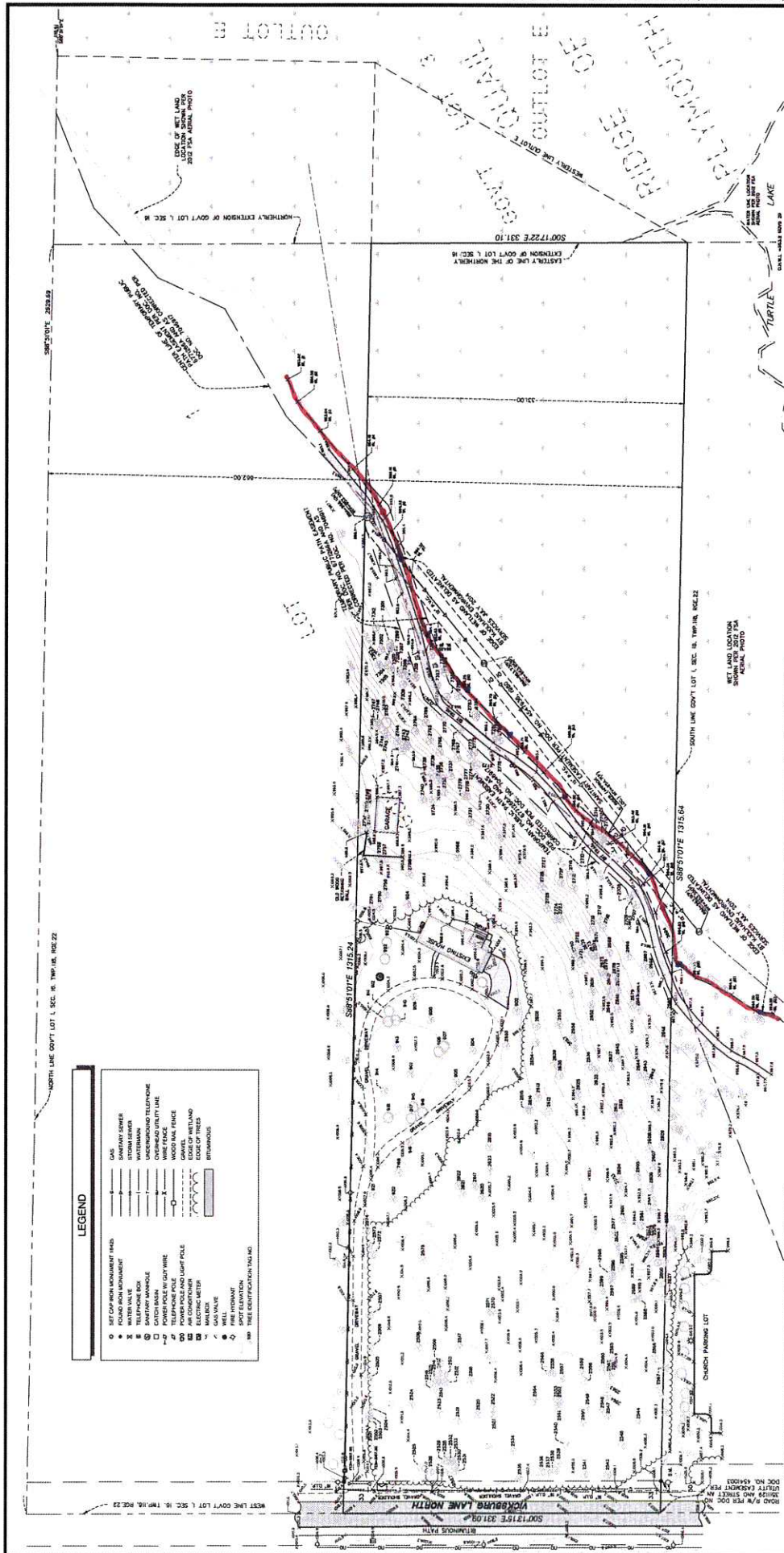
1981-2010 Summary Statistics

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	WARM	ANN	WAT
30%	0.51	0.41	1.28	1.99	2.71	3.41	2.52	3.17	2.14	1.30	1.06	0.67	17.05	28.22	27.30
70%	1.02	0.91	1.95	2.90	4.19	5.61	4.56	5.10	3.69	3.33	2.04	1.44	21.52	33.98	34.44
mean	0.81	0.78	1.79	2.69	3.57	4.46	4.13	4.15	3.37	2.46	1.70	1.16	19.68	31.06	30.86

Vicksburg Ridge

Wetland Delineation Report

Appendix C: Wetland Boundary Survey



Minnesota Wetland Conservation Act

Notice of Application

Local Government Unit (LGU) City of Plymouth	Address 3400 Plymouth Blvd. Plymouth, MN, 55447
--	---

1. PROJECT INFORMATION

Applicant Name Ryan Raske, AECOM	Project Name Canadian Pacific Railroad Siding	Date of Application 8/25/14	Application Number
--	---	---------------------------------------	--------------------

Type of Application (check all that apply):

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

Summary and description of proposed project (attach additional sheets as necessary):

The applicant is requesting approval of wetland boundary and type for 17 wetlands and 5 waterbodies stretching from State Highway 55 to Pineview Lane in Plymouth, MN. Note that Bass Creek, a DNR Public Water, transverses the site at several locations.

2. APPLICATION REVIEW AND DECISION

Signing and mailing of this completed form to the appropriate recipients in accordance with 8420.0255, Subp. 3 provides notice that an application was made to the LGU under the Wetland Conservation Act as specified above. A copy of the application is attached. Comments can be submitted to:

Name and Title of LGU Contact Person Derek Asche Water Resources Manager	Comments must be received by (minimum 15 business-day comment period): October 9, 2014
Address (if different than LGU) Plymouth City Hall 3400 Plymouth Blvd. Plymouth, MN 55447	Date, time, and location of decision: October 10, 2014 9am Plymouth City Hall
Phone Number and E-mail Address 763-509-5526 dasche@plymouthmn.gov	Decision-maker for this application: <input checked="" type="checkbox"/> Staff <input type="checkbox"/> Governing Board or Council

Signature:  Date: _____

3. LIST OF ADDRESSEES

- ☒ SWCD TEP member: Ms. Stacey Lijewski, HCD, 701 Fourth Avenue South, Suite 700, Minneapolis, MN, 55415-1600 (sent electronically)
- ☒ BWSR TEP member: Ben Meyer, BWSR, 520 Lafayette Road North, St. Paul, MN, 55401-1397 (sent electronically)
- ☐ LGU TEP member (if different than LGU Contact):
- ☒ DNR TEP member: Brooke Haworth, MN DNR, 1200 Warner Road, St. Paul, MN, 55106 (sent electronically)
- ☒ DNR Regional Office (if different than DNR TEP member)
Kate Drewry, Area Hydrologist, MN DNR, 1200 Warner Road, St. Paul, MN, 55106 (sent electronically)
- ☒ WD or WMO (if applicable):
SCWMC, c/o Judie Anderson, 3235 Fernbrook Lane N, Plymouth, MN, 55447 (sent electronically)
ECWMC, c/o Judie Anderson, 3235 Fernbrook Lane N, Plymouth, MN, 55447 (sent electronically)
BCWMC, c/o Laura Jester, Keystone Waters, LLC, 16415 Hillcrest Lane, Eden Prairie, MN, 55346 (sent electronically)
- ☒ Applicant (notice only) and Landowner (if different):
CP Railroad, c/o Ryan Raske, AECOM, 800 LaSalle Ave., Suite 110, Minneapolis, MN, 55402 (sent electronically)
- ☐ Members of the public who requested notice (notice only):
- ☒ Corps of Engineers Project Manager (notice only): Melissa Jenny, Army Corps of Engineers, 180 5th Street East, Suite 700, St. Paul, MN, 55101-1678 (sent electronically)
- ☐ BWSR Wetland Bank Coordinator (wetland bank plan applications only)

4. MAILING INFORMATION

- For a list of BWSR TEP representatives: www.bwsr.state.mn.us/contact/WCA_areas.pdf
- For a list of DNR TEP representatives: www.bwsr.state.mn.us/wetlands/wca/DNR_TEP_contacts.pdf
- Department of Natural Resources Regional Offices:

<u>NW Region:</u>	<u>NE Region:</u>	<u>Central Region:</u>	<u>Southern Region:</u>
Reg. Env. Assess. Ecol.	Reg. Env. Assess. Ecol.	Reg. Env. Assess. Ecol.	Reg. Env. Assess. Ecol.
Div. Ecol. Resources	Div. Ecol. Resources	Div. Ecol. Resources	Div. Ecol. Resources
2115 Birchmont Beach Rd. NE	1201 E. Hwy. 2	1200 Warner Road	261 Hwy. 15 South
Bemidji, MN 56601	Grand Rapids, MN 55744	St. Paul, MN 55106	New Ulm, MN 56073

For a map of DNR Administrative Regions, see: 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
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

5. ATTACHMENTS

In addition to the application, list any other attachments:

- ☒ TEP FOF from September 11, 2014
- ☒ Wetland Delineation report dated August 22, 2014 by AECOM
- ☐

Minnesota Wetland Conservation Act

Technical Evaluation Panel Findings Report

Date(s) of Site Visit/Meeting: September 11, 2014 LGU: City of Plymouth
County: Hennepin LGU Contact: Derek Asche
Project Name: Canadian Pacific Siding Phone #: 763-509-5526
Location of Project: See attached report Email: dasche@plymouthmn.gov
(attach map if possible) Address:

TEP ATTENDEES:

LGU: Derek Asche

~~SWCD: Stacey Lijewski~~

BWSR: Ben Meyer

DNR:

OTHER ATTENDEES:

Ryan Raske

Patrick Flannery

Eric Deyaert

OTHER ATTENDEES:

Melissa Jenny, USACOE

John Cannon

PROJECT DESCRIPTION AND PURPOSE OF MEETING:

Review wetland boundaries along 4 miles of track.

TYPE OF MEETING: Check all applicable

☐ Office ☒ On-Site ☐ Phone Conference ☐ E-Mail ☐ Other: _____

TEP FINDINGS AND RECOMMENDATIONS¹:

1. Ditch portion of WAHE005 is non-wetland. Reduce polygon as appropriate.
2. Add two wetlands just west of Northwest Boulevard. One on north side and one on south side of tracts.
3. Bass Creek, MN DNR Public Water, runs intermittently from WAHE002 in the west to Pineview Lane in the east.

SIGNATURES

SWCD Representative

Date

Do not concur ☐

BWSR Representative

9/16/2014

Date

Do not concur ☐

Derek Asche
LGU Representative

Date

Do not concur ☐

DNR Representative

Date

Do not concur ☐

¹ TEP Findings should be a meaningful concise summary detailing the project conditions, technical data, and what rules apply. The TEP recommendation should be clear, based on rule and best professional judgement.