Item 7F.
BCWMC 1-19-17

Minnesota Wetland Conservation Act
Notice of Application

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

1. PROJECT INFORMATION

Applicant Name	Project Name	Date of Application	Application Number
Ben Scharenbroich	**4130 & 4135 Quinwood Lane N - Water Quality Pond Maintenance**	**12/14/16**	**NA**

Type of Application (check all that apply):

☐ Wetland Boundary or Type ☒ No-Loss ☐ Exemption ☐ Sequencing
☐ Replacement Plan ☐ Banking Plan

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

The proposed project would consist of removing deposited sediments from the water quality pond back to its original design. This plan is on record with the City of Plymouth. The project is located to the south of the homes at 4130 & 4135 Quinwood Lane North in Plymouth. The applicant has requested a decision on the applicability of a no-loss, per WCA 8420.0415 (E) "Excavation limited to removal of deposited sediment in wetlands that are presently utilized as storm water management basins, or excavation and removal of contaminated substrate, when the excavated area is limited to the minimum dimensions necessary for achieving the desired purpose and stabilized to prevent water quality degradation." and WCA 8420.0415 (F) "An Activity associated with the operation, routine maintenance, or emergency repair of existing utilities and public works structures, including pipelines, provided the activity does not result in additional wetland intrusion or additional impacts, either wholly or partially"

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	Comments must be received by (minimum 15 business-day comment period):
Derek Asche **Water Resources Manager**	**January 10, 2017**
Address (if different than LGU) **City of Plymouth** **3400 Plymouth Blvd.** **Plymouth, MN 55447**	Date, time, and location of decision: **January 11, 2017** **9AM** **Plymouth City Hall**
Phone Number and E-mail Address **763-509-5526** **dasche@plymouthmn.gov**	Decision-maker for this application: ☒ Staff ☐ Governing Board or Council

Signature: Dan Clark **Date:** 12/16/16

3. LIST OF ADDRESSEES

X HCD TEP member: **Ms. Stacey Lijewski, HCD, 701 Fourth Avenue South, Suite 700, Minneapolis, MN, 55415-1600** **(sent electronically)**
X BWSR TEP member: **Ms. Lynda Peterson, BWSR, 520 Lafayette Rd. N., St. Paul, MN, 55155** **(sent electronically)**
☐ LGU TEP member (if different than LGU Contact):
X DNR TEP member: **Melissa Doperalski, MN DNR, 1200 Warner Road, St. Paul, MN, 55106** **(sent electronically)**
☐ 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)**
X WD or WMO (if applicable): **BCWMC, c/o Laura Jester, Keystone Waters, LLC, 16415 Hillcrest Lane, Eden Prairie, MN, 55346** **(sent electronically)**
X Applicant and Landowner (if different):
Ben and Meeta Baliga, 4130 Quinwood Lane N, Plymouth, MN, 55442
Steven Schulte, 4135 Quinwood Lane N, Plymouth, MN, 55442
Swan Lake South Homeowners Association, 4220 Pineview Lane North, Plymouth, MN 55442
Hennepin County Park Reserve District, 3800 Co Rd 24, Maple Plain, MN, 55359
Members of the public who requested notice:
X Corps of Engineers Project Manager: **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 decisions only) ☐ 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:

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

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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

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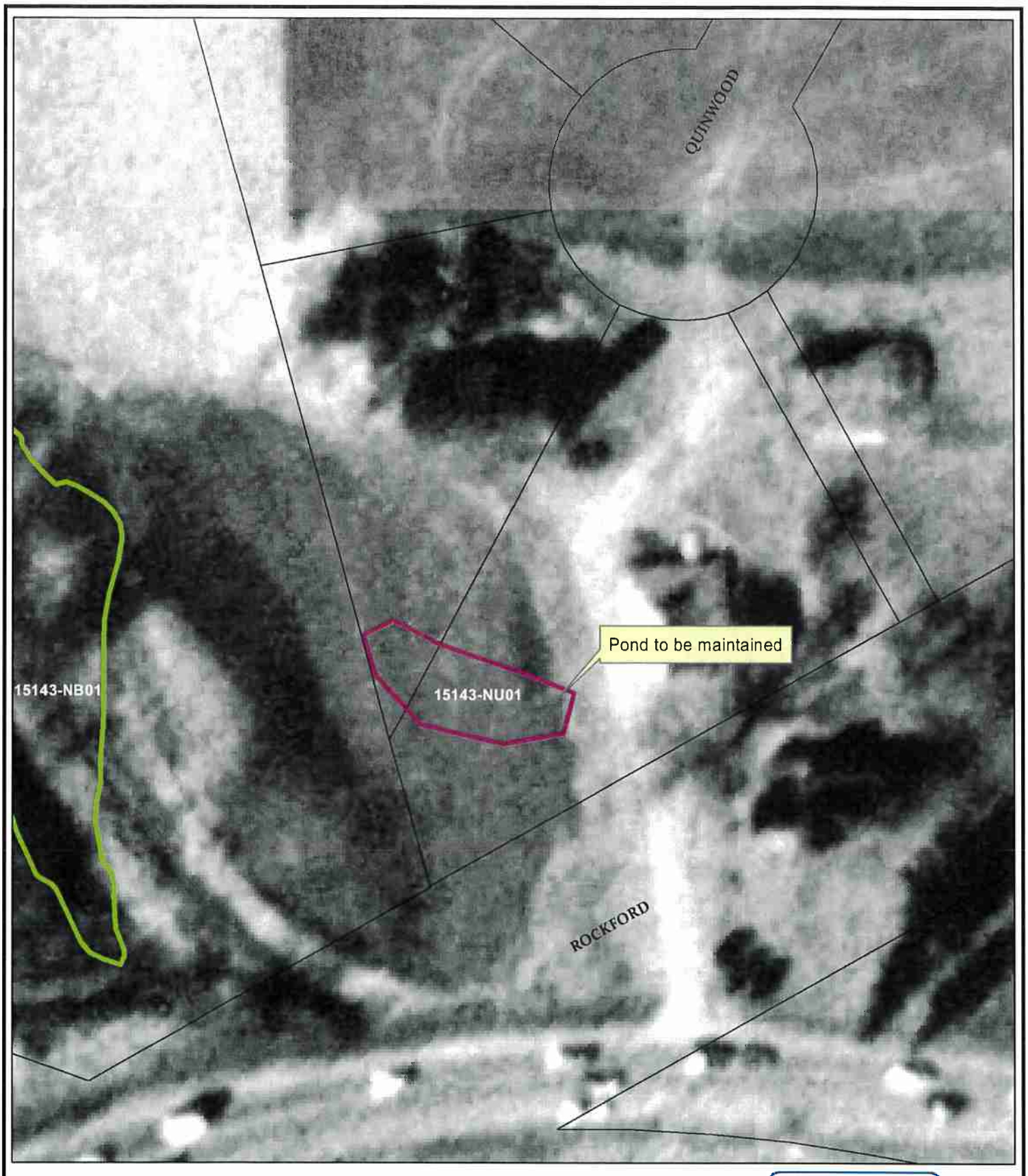
Minnesota Board of Water and Soil Resources
Wetland Bank Coordinator
520 Lafayette Road North
St. Paul, MN 55155

5. ATTACHMENTS

In addition to the application, list any other attachments:
☒ **Location Map**
☒ **Wetland Map**



Legend

Surface Water Resources

- Water Quality Pond
- Wetland
- Wetland Mitigation

Swan Lake South
15143-NU01
Air Photo 1989

City of Plymouth

N

0 50 100 Feet

Legend

Surface Water Resources

- Water Quality Pond
- Wetland
- Wetland Mitigation

Swan Lake South
15143-NU01
Air Photo 1997

City of Plymouth

N

0 50 100 Feet

Legend

Surface Water Resources

- Water Quality Pond
- Wetland
- Wetland Mitigation

Swan Lake South
15143-NU01
Project Location

City of Plymouth

N

0 50 100 200 300 Feet

Minnesota Wetland Conservation Act
Notice of Application

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

1. PROJECT INFORMATION

Applicant Name	Project Name	Date of Application	Application Number
Ben Scharenbroich	**12405 42nd Place North - Water Quality Pond Maintenance**	**12/14/16**	**NA**

Type of Application (check all that apply):

☐ Wetland Boundary or Type ☒ No-Loss ☐ Exemption ☐ Sequencing
☐ Replacement Plan ☐ Banking Plan

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

The proposed project would consist of removing deposited sediments from the water quality pond back to its original design. This plan is on record with the City of Plymouth. The project is located to the south east of the homes at 12405 42nd Place North in Plymouth. The applicant has requested a decision on the applicability of a no-loss, per WCA 8420.0415 (E) "Excavation limited to removal of deposited sediment in wetlands that are presently utilized as storm water management basins, or excavation and removal of contaminated substrate, when the excavated area is limited to the minimum dimensions necessary for achieving the desired purpose and stabilized to prevent water quality degradation." and WCA 8420.0415 (F) "An Activity associated with the operation, routine maintenance, or emergency repair of existing utilities and public works structures, including pipelines, provided the activity does not result in additional wetland intrusion or additional impacts, either wholly or partially"

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Derek Asche **Water Resources Manager**	**January 10, 2017**
Address (if different than LGU) **City of Plymouth** **3400 Plymouth Blvd.** **Plymouth, MN 55447**	Date, time, and location of decision: **January 11, 2017** **9AM** **Plymouth City Hall**
Phone Number and E-mail Address **763-509-5526** **dasche@plymouthmn.gov**	Decision-maker for this application: ☒ Staff ☐ Governing Board or Council

Signature: _____ **Date:** 12/14/16

3. LIST OF ADDRESSEES

X HCD TEP member: **Ms. Stacey Lijewski, HCD, 701 Fourth Avenue South, Suite 700, Minneapolis, MN, 55415-1600** **(sent electronically)**
X BWSR TEP member: **Ms. Lynda Peterson, BWSR, 520 Lafayette Rd. N., St. Paul, MN, 55155** **(sent electronically)**
☐ LGU TEP member (if different than LGU Contact):
X DNR TEP member: **Melissa Doperalski, MN DNR, 1200 Warner Road, St. Paul, MN, 55106** **(sent electronically)**
☐ 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)**
X WD or WMO (if applicable): **BCWMC, c/o Laura Jester, Keystone Waters, LLC, 16415 Hillcrest Lane, Eden Prairie, MN, 55346** **(sent electronically)**
X Applicant and Landowner (if different):
Richard & Kristina Beckfeld, 12405 42nd Place North, Plymouth, MN, 55442
Alan Berger, 4250 Norwood Lane North, Plymouth, MN, 55442
BHJM Inc, 2437 Rice St, Roseville, MN 55113
Swan Lake South Homeowners Association, 4220 Pineview Lane North, Plymouth, MN 55442
Members of the public who requested notice:
X Corps of Engineers Project Manager: **Melissa Jenny, Army Corps of Engineers, 180 5th Street East, Suite 700, St. Paul, MN, 55101-1678** **(sent electronically)**
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St. Paul District, ATTN: OP-R
180 Fifth St. East, Suite 700
St. Paul, MN 55101-1678

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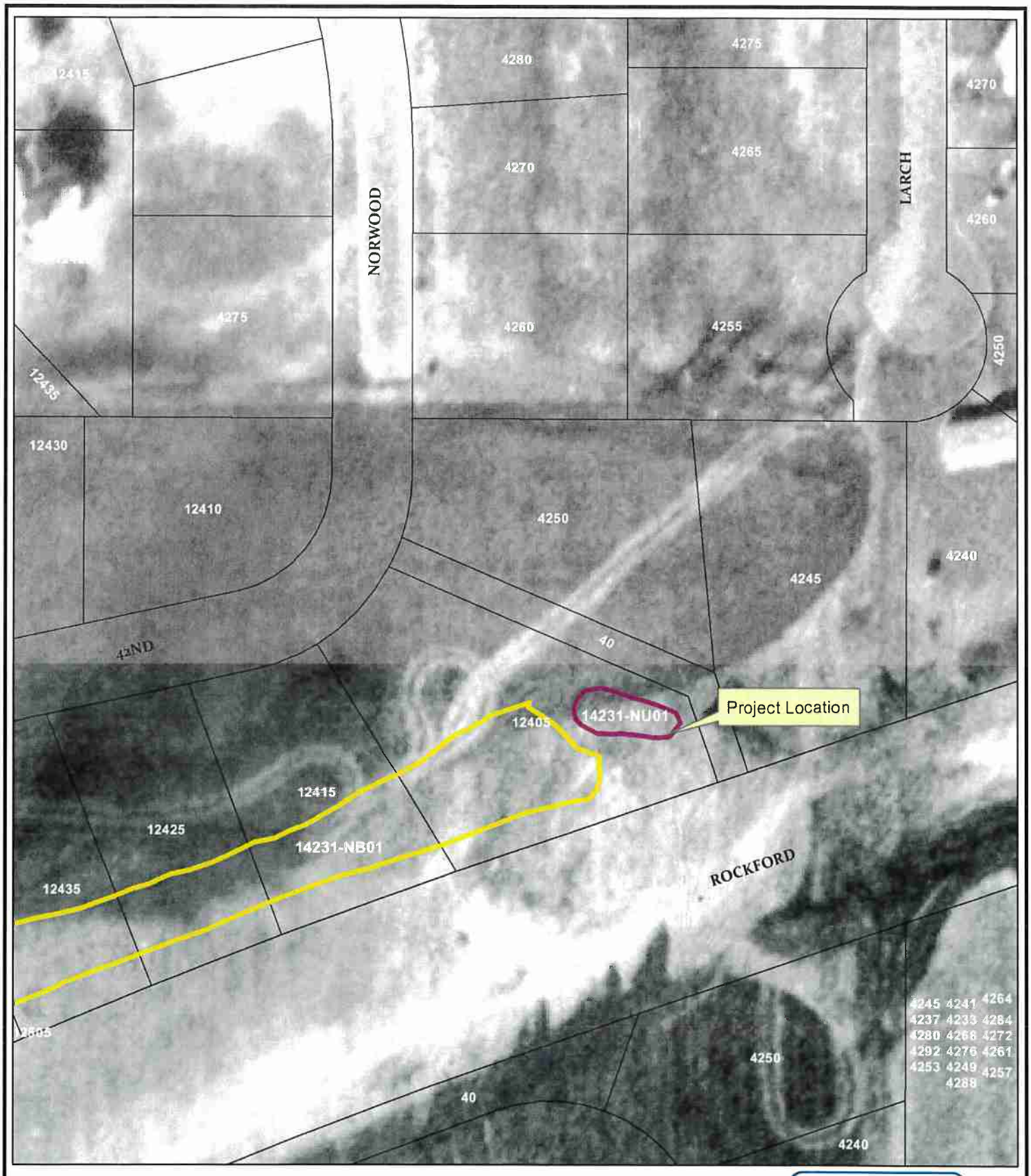
Wetland Bank Coordinator
520 Lafayette Road North
St. Paul, MN 55155

5. ATTACHMENTS

In addition to the application, list any other attachments:
☒ **Location Map**
☒ **Wetland Map**



Legend

Surface Water Resources

- Water Quality Pond
- Wetland
- Wetland Mitigation

Swan Lake South
14231-NU01
Air Photo 1989

City of Plymouth

N

0 25 50 100 Feet

Legend

Surface Water Resources

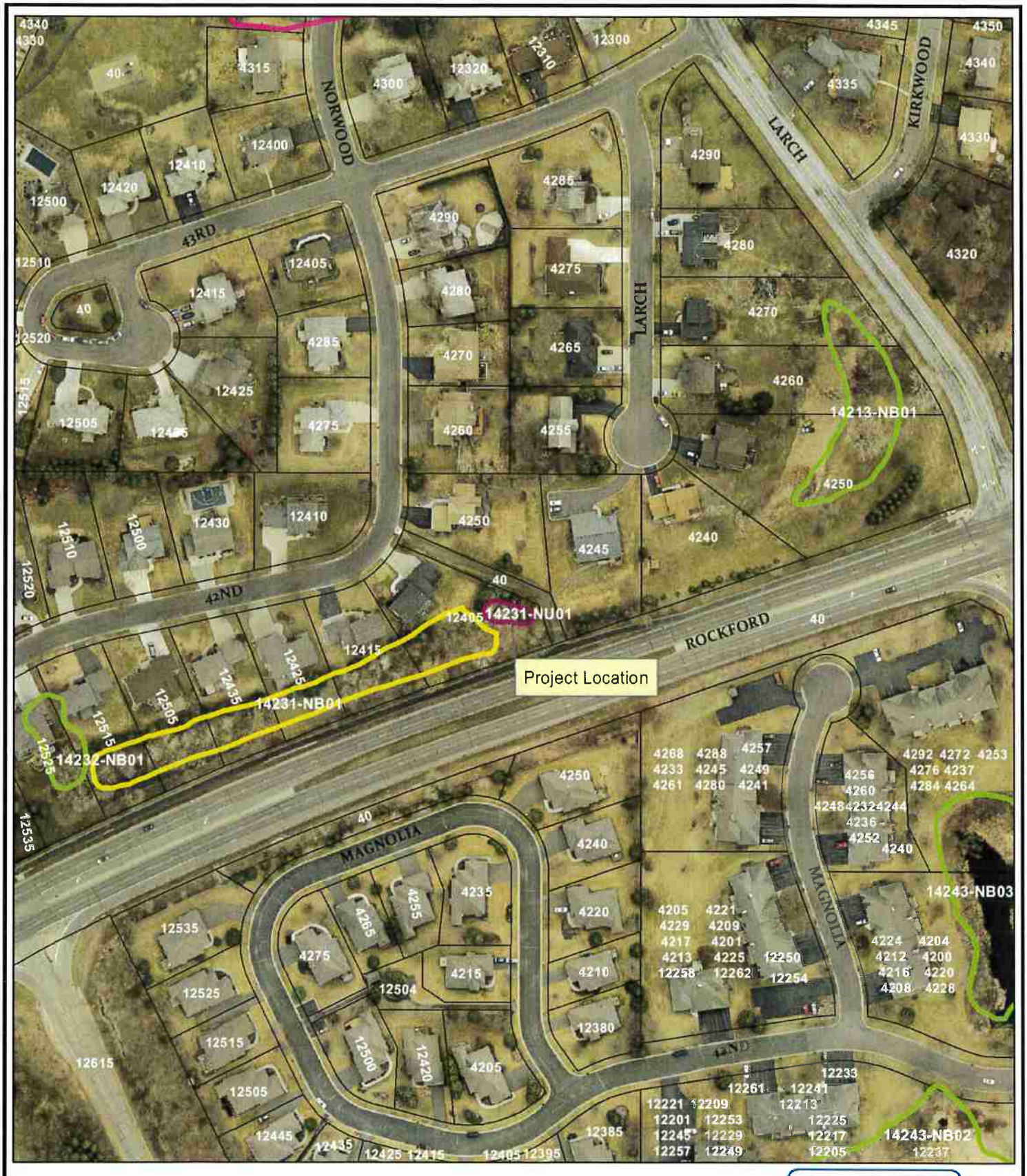
- Water Quality Pond
- Wetland
- Wetland Mitigation

Swan Lake South
14231-NU01
Air Photo 2006

City of Plymouth

N

0 25 50 100 Feet



Legend

Surface Water Resources

- Water Quality Pond
- Wetland
- Wetland Mitigation

Swan Lake South
14231-NU01
Project Location

City of Plymouth

N

0 100 200 Feet

Minnesota Wetland Conservation Act
Notice of Application

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

1. PROJECT INFORMATION

Applicant Name	Project Name	Date of Application	Application Number
Ben Scharenbroich	**Plymouth Creek Pond (West Medicine Lake Park) - Water Quality Pond Maintenance**	**12/14/16**	**NA**

Type of Application (check all that apply):

☐ Wetland Boundary or Type ☒ No-Loss ☐ Exemption ☐ Sequencing
☐ Replacement Plan ☐ Banking Plan

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

The proposed project would consist of removing deposited sediments from the water quality pond back to its original design. This plan was approved for construction by the MN DNR (Permit # 2009-0322) and is on record with the City of Plymouth. The project is located within West Medicine Lake Park in Plymouth. The applicant has requested a decision on the applicability of a no-loss, per WCA 8420.0415 (E) "Excavation limited to removal of deposited sediment in wetlands that are presently utilized as storm water management basins, or excavation and removal of contaminated substrate, when the excavated area is limited to the minimum dimensions necessary for achieving the desired purpose and stabilized to prevent water quality degradation." and WCA 8420.0415 (F) "An Activity associated with the operation, routine maintenance, or emergency repair of existing utilities and public works structures, including pipelines, provided the activity does not result in additional wetland intrusion or additional impacts, either wholly or partially"

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Phone Number and E-mail Address **763-509-5526** **dasche@plymouthmn.gov**	Decision-maker for this application: ☒ Staff ☐ Governing Board or Council

Signature: Dick Osuch **Date:** 12/16/10

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Applicant and Landowner (if different):
Members of the public who requested notice:

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➢

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

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

5. ATTACHMENTS

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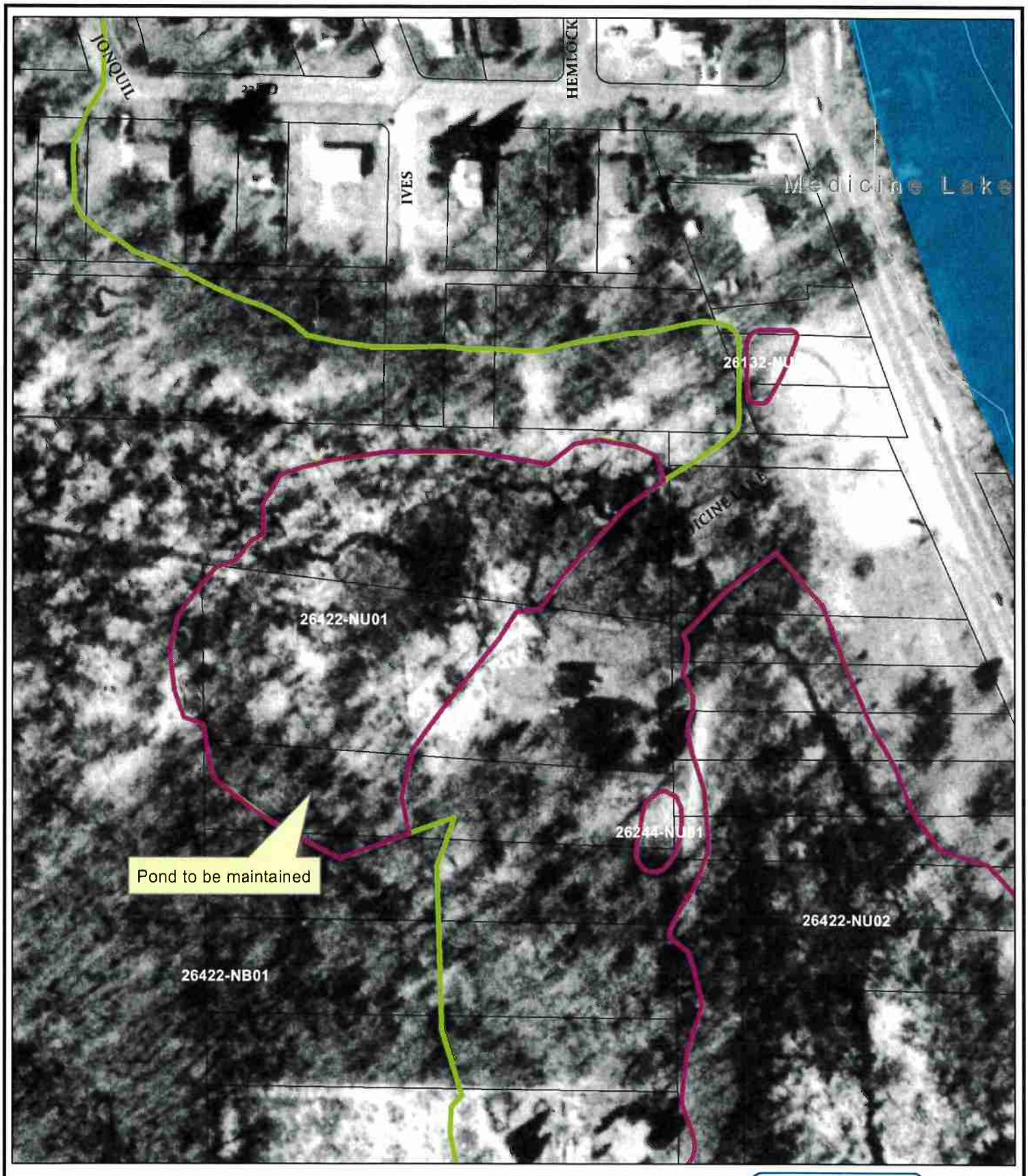


Legend

Surface Water Resources

- Water Quality Pond
- Wetland
- Wetland Mitigation

Plymouth Creek Pond
26422-NU01
Air Photo 1989

City of Plymouth

N

0 50 100 200 300 Feet

Legend

Surface Water Resources

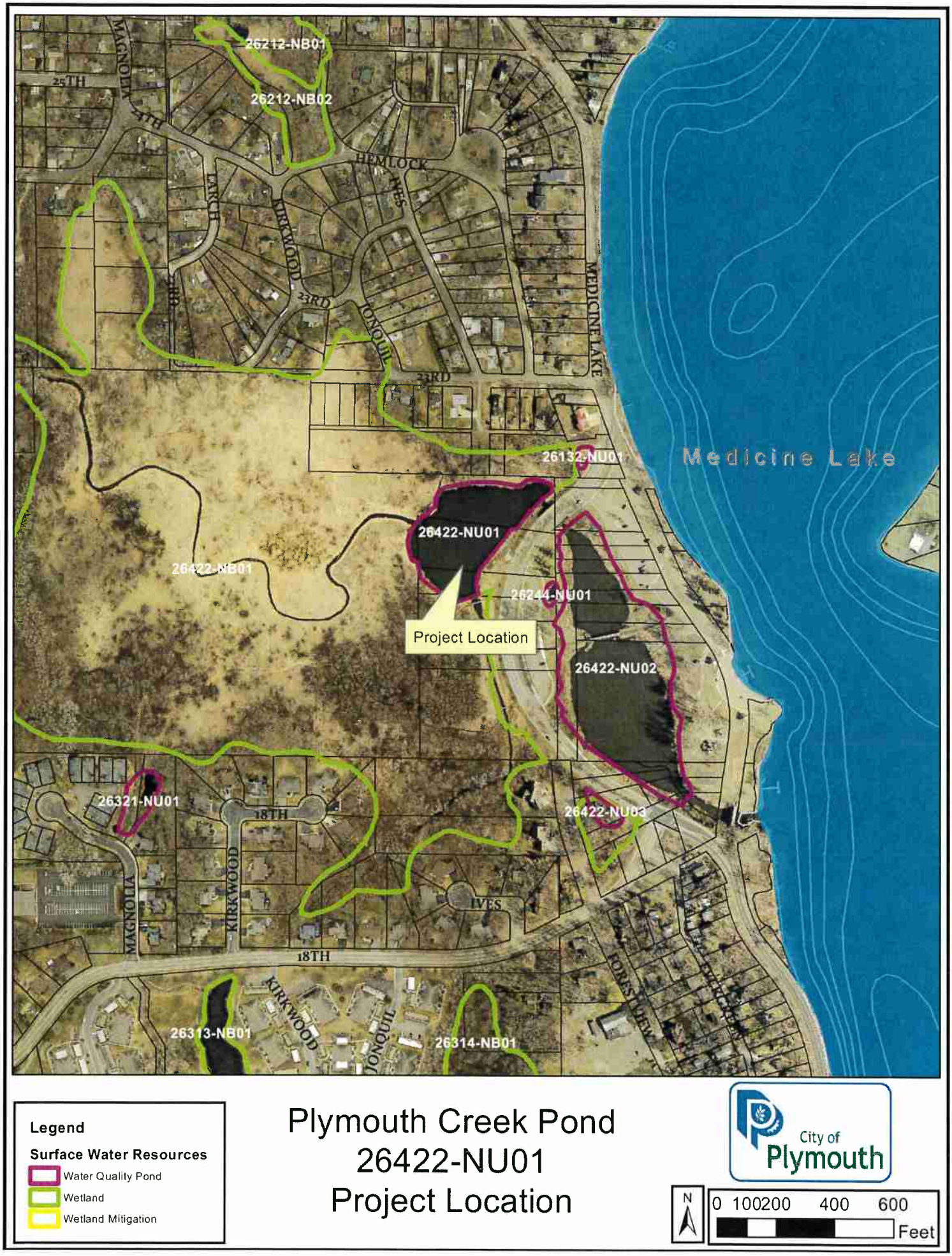
- Water Quality Pond
- Wetland
- Wetland Mitigation

Plymouth Creek Pond
26422-NU01
Air Photo 2010

City of Plymouth

N

0 50 100 200 300 Feet


26212-NB01
26212-NB02
25TH
24TH
MAGNOLIA
LARCH
KIRKWOOD
HEMLOCK
IVES
23RD
TONQUIL
MEDICINE LAKE
Medicine Lake
26132-NU01
26422-NU01
26422-NB01
26244-NU01
Project Location
26422-NU02
26422-NU03
26321-NU01
18TH
FORESTVIEW
26313-NB01
26314-NB01
Legend
Surface Water Resources
Water Quality Pond
Wetland
Wetland Mitigation
Plymouth Creek Pond
26422-NU01
Project Location
City of Plymouth
N
0 100200 400 600
Feet

Minnesota Wetland Conservation Act
Notice of Application

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

1. PROJECT INFORMATION

Applicant Name	Project Name	Date of Application	Application Number
Ben Scharenbroich	**Quinwood Lane & 31st Avenue North - Water Quality Pond Maintenance**	**12/14/16**	**NA**

Type of Application (check all that apply):

☐ Wetland Boundary or Type ☒ No-Loss ☐ Exemption ☐ Sequencing
☐ Replacement Plan ☐ Banking Plan

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

The proposed project would consist of removing deposited sediments from the water quality pond back to its original design. This plan is on record with the City of Plymouth. The project is located on an outlot located to the west of the of street intersection of Quinwood Lane North and 31st Avenue North in Plymouth. The applicant has requested a decision on the applicability of a no-loss, per WCA 8420.0415 (E) "Excavation limited to removal of deposited sediment in wetlands that are presently utilized as storm water management basins, or excavation and removal of contaminated substrate, when the excavated area is limited to the minimum dimensions necessary for achieving the desired purpose and stabilized to prevent water quality degradation." and WCA 8420.0415 (F) "An Activity associated with the operation, routine maintenance, or emergency repair of existing utilities and public works structures, including pipelines, provided the activity does not result in additional wetland intrusion or additional impacts, either wholly or partially"

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Phone Number and E-mail Address **763-509-5526** **dasche@plymouthmn.gov**	Decision-maker for this application: ☒ Staff ☐ Governing Board or Council

Signature: Derk Clark **Date:** 12/16/14

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X HCD TEP member: **Ms. Stacey Lijewski, HCD, 701 Fourth Avenue South, Suite 700, Minneapolis, MN, 55415-1600** (sent electronically)
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Ms. Kate Drewry, DNR Division of Ecological and Water Resources, 1200 Warner Road, St. Paul, MN, 55106 (sent electronically)
X WD or WMO (if applicable): **BCWMC, c/o Laura Jester, Keystone Waters, LLC, 16415 Hillcrest Lane, Eden Prairie, MN, 55346** (sent electronically)
X Applicant and Landowner (if different):
Heritage Ridge Plt 2 Homeowners Association, 3200 Pineview Lane N, Plymouth, MN, 55441
Members of the public who requested notice:

X Corps of Engineers Project Manager: **Melissa Jenny, Army Corps of Engineers, 180 5th Street East, Suite 700, St. Paul, MN, 55101-1678** (sent electronically)
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In addition to the application, list any other attachments:
☒ **Location Map**
☒ **Wetland Map**

Legend

Surface Water Resources

- Water Quality Pond
- Wetland
- Wetland Mitigation

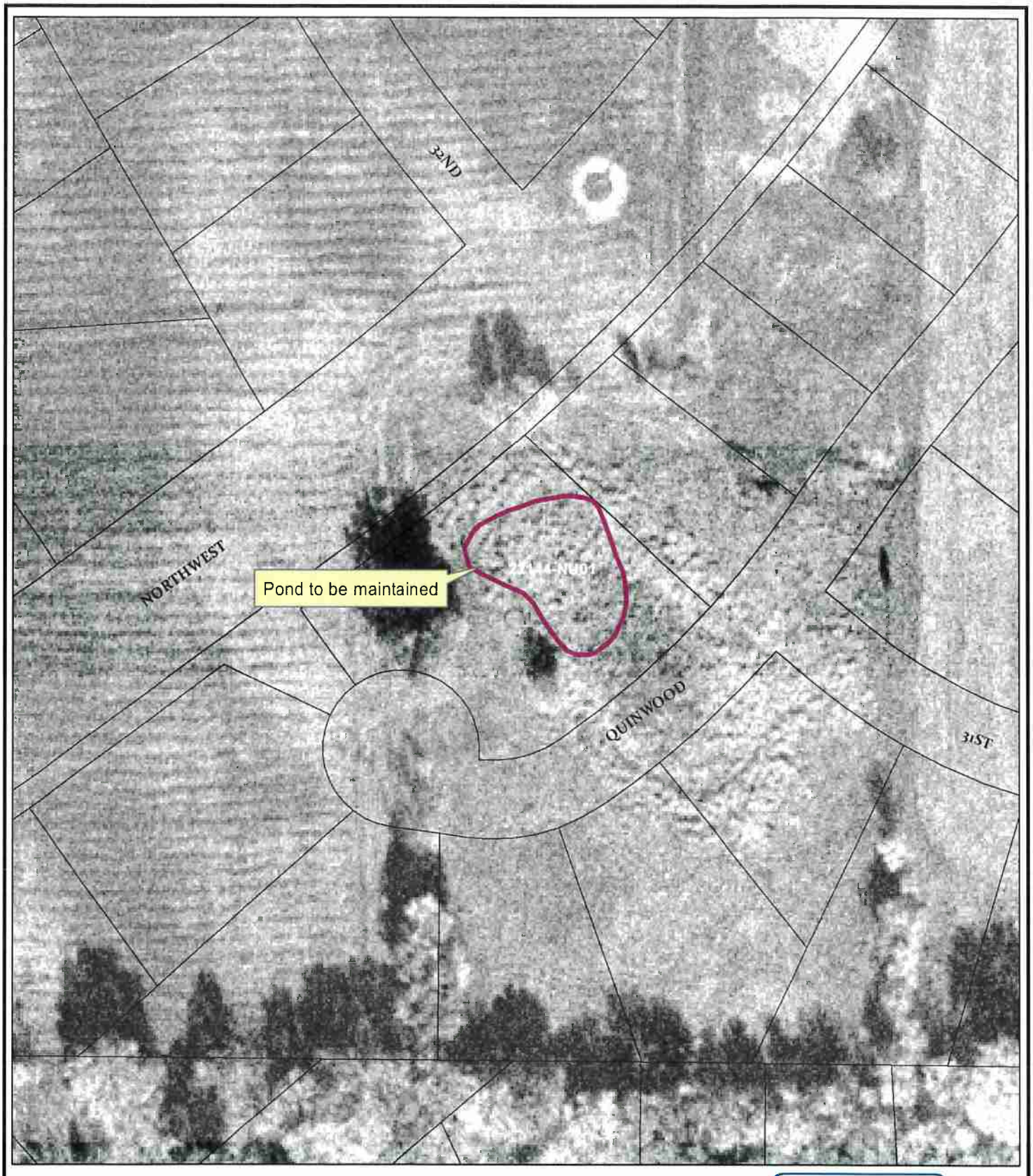
Heritage Ridge
22144-NU01
Air Photo 1947

City of Plymouth

N

0 25 50 100 150

Feet



Legend

Surface Water Resources

- Water Quality Pond
- Wetland
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Heritage Ridge
22144-NU01
Air Photo 1972

City of Plymouth

N

0 25 50 100 150 Feet

Legend

Surface Water Resources

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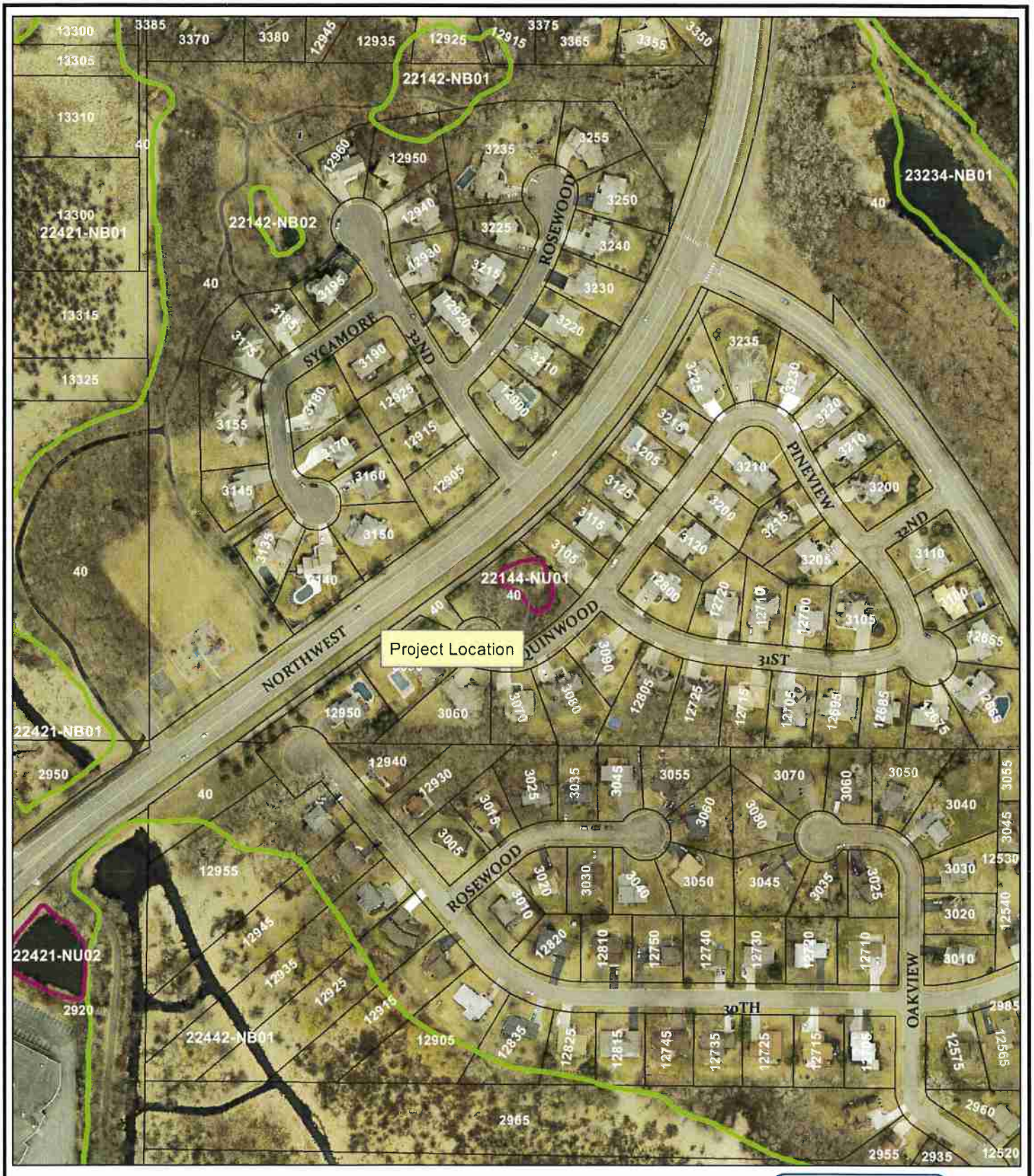
Heritage Ridge
22144-NU01
Air Photo 1997

City of Plymouth

N

0 25 50 100 150 Feet



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Heritage Ridge
22144-NU01
Project Location

City of Plymouth

N

0 50100 200 300 400 Feet

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1. PROJECT INFORMATION

Applicant Name	Project Name	Date of Application	Application Number
Adeel Ahmed **NWICC**	**NWICC Parking Lot Expansion**	**12/7/16**	**NA**

Type of Application (check all that apply):

☒ Wetland Boundary or Type Sequencing ☐ No-Loss ☐ Exemption ☐

☐ Replacement Plan ☐ Banking Plan

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

Jacobson Environmental investigated the 3300 Plymouth Blvd. site on September 29, 2016 for the presence and extent of wetland. Two wetlands were identified on-site. Wetland 1 is a Type 5, PUBGx, storm water pond dominated by reed canary grasss, cattail, and duckweed. Wetland 2 is a Type 2/3/7 PEMCd/PF01B, wet meadow/shallow marsh/wooded swamp wetland dominated by reed canary grass, willow, box elder, American elm, and cattail.

Due to the time of year and lack of growing season, a boundary determination may not be possible until Spring 2017.

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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	Comments must be received by (minimum 15 business-day comment period):
Derek Asche **Water Resources Manager**	**January 10, 2016**
Address (if different than LGU) **City of Plymouth** **3400 Plymouth Blvd.** **Plymouth, MN, 55447**	Date, time, and location of decision: **January 11, 2016** **9am** **Plymouth City Hall**
Phone Number and E-mail Address **763-509-5526** **dasche@plymouthmn.gov**	Decision-maker for this application: ☒ Staff ☐ Governing Board or Council

Signature: Derek Asche **Date:** 12/9/16

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: **Becky Horton, 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):
BCWMC, c/o Laura Jester, Keystone Waters LLC, 16145 Hillcrest Lane, Eden Prairie, MN, 553467 (sent electronically)
☒ Applicant (notice only) and Landowner (if different):
Adeel Ahmed, NWICC Board of Directors, 3300 Plymouth Blvd., Plymouth, MN, 55447(sent electronically)
☒ Members of the public who requested notice (notice only):
Wayne Jacobson, Jacobson Environmental (sent electronically)
☒ 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:

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:
☒ **Wetland Delineation Report dated 10/14/16 by Jacobson Environmental for 3300 Plymouth Blvd**
☐
☐

Project Name and/or Number: 2016-250

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: Adeal Ahmad, NWICC Board of Directors
Mailing Address: 3300 Plymouth Blvd, Plymouth, MN 55447
Phone: 612-220-8046
E-mail Address: burujj@gmail.com

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

Agent Name: Wayne Jacobson, WPC, PSS, Jacobson Environmental
Mailing Address: 5821 Humboldt Ave N, Brooklyn Center, MN 55430
Phone: 612-802-6619
E-mail Address: jacobsonenv@msn.com

PART TWO: Site Location Information

County: Hennepin City/Township: Plymouth
Parcel ID and/or Address: 3300 Plymouth Blvd, Plymouth, MN 55447
Legal Description (Section, Township, Range): Sec. 21, T118N, R22W
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): 2.54 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.

PO DT 12/9/14

Project Name and/or Number:

PART FOUR: Aquatic Resource Impact[1] Summary

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

Aquatic Resource ID (as noted on overhead view)	Aquatic Resource Type (wetland, lake, tributary etc.)	Type of Impact (fill, excavate, drain, or remove vegetation)	Duration of Impact Permanent (P) or Temporary (T)[1]	Size of Impact[2]	Overall Size of Aquatic Resource [3]	Existing Plant Community Type(s) in Impact Area[4]	County, Major Watershed #, and Bank Service Area # of Impact Area[5]

[1]If impacts are temporary; enter the duration of the impacts in days next to the "T". For example, a project with a temporary access fill that would be removed after 220 days would be entered "T (220)".
[2]Impacts less than 0.01 acre should be reported in square feet. Impacts 0.01 acre or greater should be reported as acres and rounded to the nearest 0.01 acre. Tributary impacts must be reported in linear feet of impact and an area of impact by indicating first the linear feet of impact along the flowline of the stream followed by the area impact in parentheses). For example, a project that impacts 50 feet of a stream that is 6 feet wide would be reported as 50 ft (300 square feet).
[3]This is generally only applicable if you are applying for a de minimis exemption under MN Rules 8420.0420 Subp. 8, otherwise enter "N/A".
[4]Use *Wetland Plants and Plant Community Types of Minnesota and Wisconsin* 3rd Ed. as modified in MN Rules 8420.0405 Subp. 2.
[5]Refer to Major Watershed and Bank Service Area maps in MN Rules 8420.0522 Subp. 7.

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

PART FIVE: Applicant Signature

☐ Check here if you are requesting a pre-application consultation with the Corps and LGU based on the information you have provided. Regulatory entities will not initiate a formal application review if this box is checked.

By signature below, I attest that the information in this application is complete and accurate. I further attest that I possess the authority to undertake the work described herein.

Signature: X _____ Date:

I hereby authorize Wayne Jacobson 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.

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

Jacobson Environmental, PLLC www.jacobsonenvironmental.com
Environmental Consultants Wayne Jacobson, P.S.S., W.D.C., P.W.S., A.F.S.

5821 Humboldt Avenue North, Brooklyn Center, MN 55430 (612) 802-6619 Cell
Email: jacobsonenv@msn.com

October 14, 2016

Adeel Ahmed
NWICC Board of Directors
3300 Plymouth Boulevard
Plymouth, MN 55447

RE:

Project Name:	**3300 Plymouth Boulevard Delineation**
Comm. No.:	**2016-250**
Project Location:	**City of Plymouth – Hennepin County** **PID# 2111822210003** **T118N, R22W, Section 21**
Project Description:	**Wetland Delineation Report**

Jacobson Environmental, PLLC. (JE) visited the above referenced site on September 29, 2016 to perform an official wetland delineation in accordance with the 1987 U.S. Army Corps of Engineers Wetland Delineation Manual and the 2010 Regional Supplement to the Corps of Engineers Wetland Delineation: Midwest Region.

The site is 2.54 acres in size, and is located at 3300 Plymouth Boulevard in Plymouth. The National Wetlands Inventory (NWI) map showed one wetland near the property boundaries. The soil survey showed Muskego and Houghton muck and Cordova loam as the main hydric soil types on the property. One wetland and one storm pond was delineated near the site boundaries, which are summarized below.

Basin ID	Wetland Type			Dominant Vegetation
	Circular 39	Cowardin	Eggers & Reed	
1	5	PUBGx	Storm Pond	Reed canary grass, cattail, duckweed
2	2/3/7	PEMCd/ PFO1B	Wet meadow/Shallow Marsh/Wooded Swamp	Reed canary grass, willow, box elder, American elm, cattail

The parcel is a combination of woodland, and improved building areas. The storm pond and wetland is just off the property to the east in Plymouth, MN. See Figure 1 for a Site Location Map. The site contains a large commercial building, and a large portion of the site has a parking lot to be expanded. Two basins were delineated near the site boundaries, shown on Figure 5. All figures and appendices referenced by this report are presented at the end of the text. The purpose of this study was to investigate the project area, identify areas meeting the technical criteria for wetlands, delineate the jurisdictional extent of the wetland basins and classify the wetland habitat.

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Email: jacobsonenv@msn.com

Woodland Species Noted

Trees
Eastern Cottonwood
Box Elder
Quaking Aspen

Shrubs
Common Buckthorn
Staghorn Sumac
Tartarian Honeysuckle

Herbs
Virginia Creeper
Northern Bedstraw
Hog Peanut
Common Burdock
White Snakeroot
Tall Goldenrod

Wetland Species Noted

Trees
Black Willow
Green Ash
American Elm

Shrubs
Red-Osier Dogwood
Black Willow

Herbs
Reed Canary Grass
Field Horsetail
Narrowleaf Catail
Spotted Touch-Me-Not
Lake Sedge
Bittersweet Nightshade

The growing season for this site is approximately from 4/15 to 10/15 where the air temperature averages above 28 degrees F. The growing season in 2016 started in April. This site is in the big woods subsection ecoregion according to Minnesota DNR and the annual precipitation averages 31.14 inches. The pre-settlement vegetation was maple-basswood forest in this area.

The previous three month's precipitation data suggests that the sampling period was wetter than normal. Due to the fairly abrupt topographic break between the upland and wetland boundary of Basin 2, it is unlikely the precipitation totals in this period affected the wetland boundary, even though the period was considered to be wetter than normal. The boundary of Basin 1 may have been affected by the wetness of the sampling date due to the pond level between upland and wetland. Antecedent precipitation data is located in Appendix A.

This wetland delineation was performed on September 29, 2016 and reported by Wayne Jacobson, Minnesota Professional Soil Scientist #30611, Society of Wetland Scientists – Professional Wetland Scientist #1000, University of Minnesota / BWSR Wetland Delineator, Certified #1019, American Fisheries Society – Associate Fisheries Scientist #A-171.

Methodology

The wetlands on the subject property were delineated using the routine determination methodology set forth in the 1987 U.S. Army Corps of Engineers *Wetlands Delineation Manual.* Wetland boundaries were determined through a routine analysis of the vegetation, soils and hydrology which must all show wetland characteristics in order for an area to be delineated as a wetland. Wetlands are areas that are saturated or inundated with surface and or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in hydric soil conditions. Examples of wetlands include seasonally flooded basins, floodplain forests, wet meadows, shallow and deep marshes, shrub swamps, wooded swamps, fens, and bogs.

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Vegetation

The plant species within the parcel were catalogued and assigned a wetland indicator status according to: Lichvar, R.W., Butterwick, N.C. Melvin, and W.N. Kirchner, 2016. *The National Wetland Plant List:* 2016 Update of Wetland Ratings, Phytoneuron 2016-30: 1-17..

In the text of this report and on the enclosed data forms, the plant indicator status follows the plant's scientific name unless a status has not been assigned. The hydrophytic plant criterion is met when more than 50 percent of the dominant species by the 50/20 rule for each stratum (herb, shrub/sapling, tree, and woody vine) were assigned an obligate (OBL)[1], facultative wet (FACW), and/or facultative (FAC) wetland status.

With the 50/20 rule, dominants are generally measured by absolute % cover in each stratum which individually or collectively account for more than 50% of total vegetative cover in the stratum, plus any other species which itself accounts for at least 20% of the total vegetative cover.

Soils

A hydric soil is a soil formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part. If a soil exhibits the indicators of a hydric soil or is identified as a hydric soil the hydric soil criterion is met.

The break between hydric and non-hydric soils was determined by excavating soil pits along transects crossing the wetland/upland eco-tone and evaluating the soil colors, textures, and presence or absence of redoximorphic indicators (i.e., mottles, gley or oxidized rhizospheres). Hydric Soil Indicators for the Midwest Region were noted as presented in the National Technical Committee for Hydric Soils *Field Indicators of Hydric Soils in the United States version 7.0* (USDA NRCS 2010) if present at each sample point. Also, upper soil profiles were compared to the mapped or inclusionary soil series found in the sample area for soil identification purposes.

Cautions used in applying the Field Indicators of Hydric Soils

There are hydric soils with morphologies that are difficult to interpret. These include soils with black, gray, or red parent material; soils with high pH; soils high or low in content of organic matter; recently developed hydric soils, and soils high in iron inputs. In some cases we do not currently have indicators to assist in the identification of hydric soils in these situations. As long as the soil meets the definition of a hydric soil, the lack of an indicator does not preclude the soil from being hydric. The indicators were developed mostly to identify the boundary of hydric soil areas and generally work best on the margins. Not all of the obviously wetter hydric soils will be identified by the indicators. Redoximorphic features are most likely to occur in soils that cycle between anaerobic (reduced) and aerobic (oxidized) conditions.

Morphological features of hydric soils indicate that saturation and anaerobic conditions have existed under either contemporary or former hydrologic regimes. Where soil morphology seems inconsistent with

[1] OBL=Obligate Wetland, occurs an estimated 99% in wetlands. FACW=Facultative Wetland, has an estimated 67%-99% probability of occurrence in wetlands. FAC=Facultative, is equally likely to occur in wetlands and non-wetlands, 34%-66% probability. FACU=Facultative Upland, occurs in wetlands only occasionally, 1%-23% probability. UPL=Upland, almost never occurs in wetlands, <1% probability. NI= No Indicator, insufficient information available to determine an indicator status. Positive or negative sign previously indicated a frequency toward higher (+) or lower (-) frequency of occurrence with an category.

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the landscape, vegetation, or observable hydrology, it may be necessary to obtain the assistance of an experienced soil or wetland scientist to determine whether the soil is hydric.

To clarify on some Hennepin County sites,

1. Many of these soils have black or gray parent materials
2. Many of the soils have a high organic matter content
3. The hydric soil margin is typically higher than the wetland boundary margin on the site

4. Not all of the obviously wetter soils will be identified by the indicators
5. Many of the hydric soils are Mollisols which are classic problem hydric soils in many cases

Wetland Classification

Wetland classifications discussed in the text are set forth in *Wetlands and Deepwater Habitats of the United States* (FWS/OBS Publication 79/31, Cowardin et al. 1979) and *Wetlands of the United States* (USFWS Circular 39, Shaw and Fredine, 1971.) Additionally, plant community types as named by Eggers and Reed (1998) are given.

Topographic maps, National Wetlands Inventory maps, the Web Soil Survey, Aerial Photographs, and DNR Protected Waters maps were consulted to locate potential wetland habitats.

The Routine On-site Determination Method was used on this site. In this method, the following procedures were used:

1) The vegetative community was sampled in all present strata to determine whether 50% of the dominant plant species were hydrophytic using the 50/20 method.

2) Soil pits were dug using a dutch auger to depths of 18"-40", noting soil profiles and any hydric soil characteristics.

3) Signs of wetland hydrology were noted and were compared to field criteria such as depth to shallow water table and depth of soil saturation found in the soil pits.

Wetland edges were marked with orange numbered pin flags. 4-foot wood lath marked with orange "wetland boundary" flagging tape or flagging tied on vegetation may be used if site conditions warrant. Any wetlands were mapped using modern GPS methods by others accurate to 12 inches in the horizontal plane. At least one sample point transect crosses each delineated wetland edge. These transects consist of an upland sample point, and a wetland sample point. Other sample points may be located in areas which have one or more of the wetland vegetation, soils, or hydrologic characteristics present, or where questionable conditions exist. Sample points are marked with orange pin flags with a pink ribbon tied on them. Sample data sheets are found in Appendix B.

Results

Basin 1

Basin 1 is a PUBGx Type 5 storm pond dominated by duckweed, cattails, and reed canary grass, and is located off the east edge of the property. The pooled water supported the growth of cattails and reed canarygrass on the fringe, and the open water portion had duckweed.

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Basin 2

Basin 2 is a PEMCd/PFO1B Type 2/3/7 ditched wet meadow/shallow marsh/wooded swamp dominated by willows, box elder, american elm, cattails, and reed canary grass, and is located off the east of the property. The wetland soil here was typically saturated at the surface, and water was ponded in the interior of the basin.

Adjacent upland was dominated by common buckthorn, an understory of sphagnum moss, Virginia creeper, and hog peanut, and a canopy of green ash, cottonwood, and box elder trees. Primary and secondary hydrology indicators were not observed in the upland.

The wetland boundary followed a change in vegetation from wetland to upland plant communities, as well as a gradual change in topography. Basin 1 was not identified on the NWI map, and may be an incidental wetland dug in upland soils for stormwater treatment.

Additional Areas

A depression was found along Basin 2's wetland boundary that was just to the east of the property. A sample was taken at this SP-1 location which showed upland characteristics as reflected on the data sheet.

Confirmation of Jurisdictional Status

We are submitting this report to the client and regulatory agencies to request a wetland boundary and type determination. We have enclosed an official WCA Approval of Wetland Type and Boundary form in Appendix D along with a USCOE wetland delineation concurrence request.

Conclusion

This wetland delineation meets the standards and criteria described in the 1987 U.S. Army Corps of Engineers Wetland Delineation Manual and the 2012 Regional Supplement to the Corps of Engineers Wetland Delineation: Midwest Region. This was a Routine On Site Determination and the results reflect the conditions present at the time of the delineation.

If any wetland impacts are planned for this project, permits would be necessary from the City of Plymouth and other agencies.

Jacobson Environmental, PLLC
Environmental Consultants
www.jacobsonenvironmental.com
Wayne Jacobson, P.S.S., W.D.C., P.W.S., A.F.S.

5821 Humboldt Avenue North, Brooklyn Center, MN 55430 **(612) 802-6619 Cell**
Email: jacobsonenv@msn.com

I certify that I performed the field analysis and wrote the report for this wetland delineation. Thank you for the opportunity to provide wetland services on this important project.

Wayne E. Jacobson
Professional Soil Scientist #30611
Professional Wetland Scientist #1000
Wetland Delineator, Certified #1019
Associate Fisheries Scientist #A-171
Jacobson Environmental, PLLC.

10/14/2016
Date

Regulators: Derek Asche, City of Plymouth
Melissa Jenny, USCOE
Ben Meyer, BWSR
Stacey Lijewski, Hennepin DES

FIGURES

Hennepin County Property Map

Date: 10/12/2016

PARCEL ID: 2111822210003

OWNER NAME: N W Islamic Community Center

PARCEL ADDRESS: 3300 Plymouth Blvd, Plymouth MN 55447

PARCEL AREA: 2.54 acres, 110,685 sq ft

A-T-B: Abstract

SALE PRICE: $770,000

SALE DATA: 09/2011

SALE CODE: Excluded From Ratio Studies

ASSESSED 2015, PAYABLE 2016
- PROPERTY TYPE: Commercial-Preferred
- HOMESTEAD: Non-Homestead
- MARKET VALUE: $204,600
- TAX TOTAL: $6,226.04

ASSESSED 2016, PAYABLE 2017
- PROPERTY TYPE: Commercial-preferred
- HOMESTEAD: Non-homestead
- MARKET VALUE: $250,000

Comments:

Figure 1 - Site Location Map

National Wetland Inventory- Figure 2

Soil Map—Hennepin County, Minnesota
(Figure 3 - Soils Map)

Map Scale: 1:1,450 if printed on A portrait (8.5" x 11") sheet.

N

Meters: 0 20 40 80 120

Feet: 0 50 100 200 300

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 15N WGS84

Map Unit Legend

Hennepin County, Minnesota (MN053)			
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
L22C2	Lester loam, 6 to 10 percent slopes, moderately eroded	0.4	8.1%
L23A	Cordova loam, 0 to 2 percent slopes	1.8	32.7%
L37B	Angus loam, 2 to 6 percent slopes	0.8	14.0%
L50A	Muskego and Houghton soils, 0 to 1 percent slopes	2.0	37.8%
U1A	Urban land-Udorthents, wet substratum, complex, 0 to 2 percent slopes	0.4	7.4%
Totals for Area of Interest		**5.4**	**100.0%**

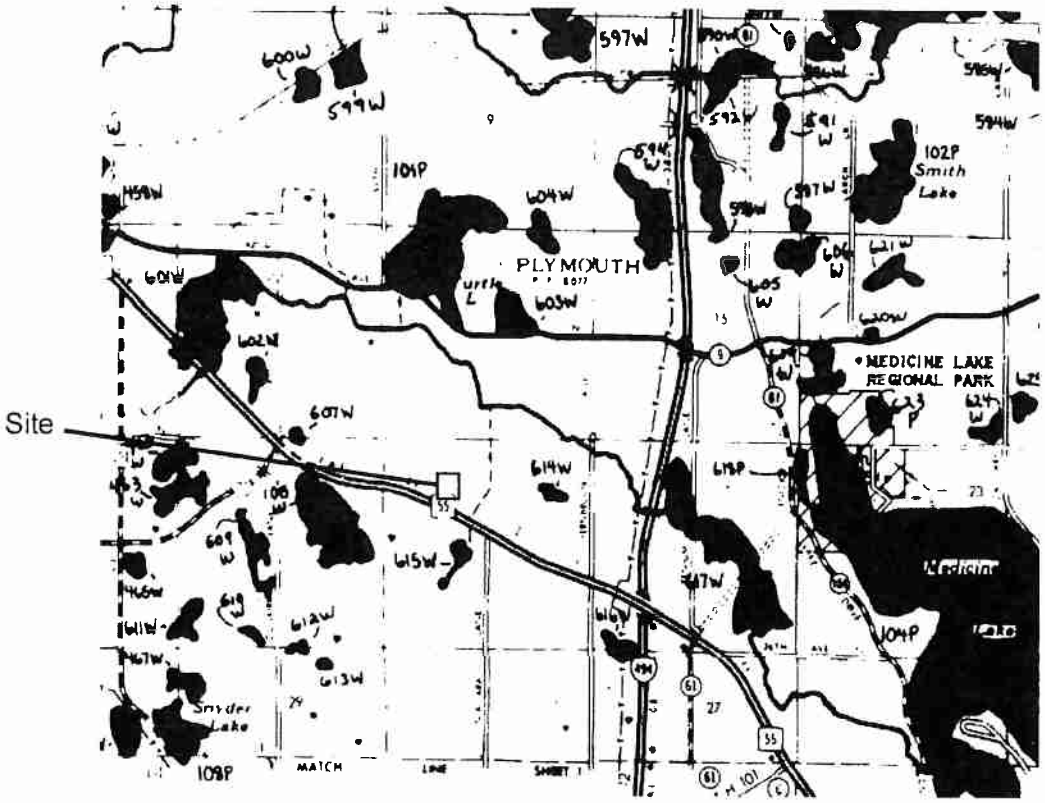
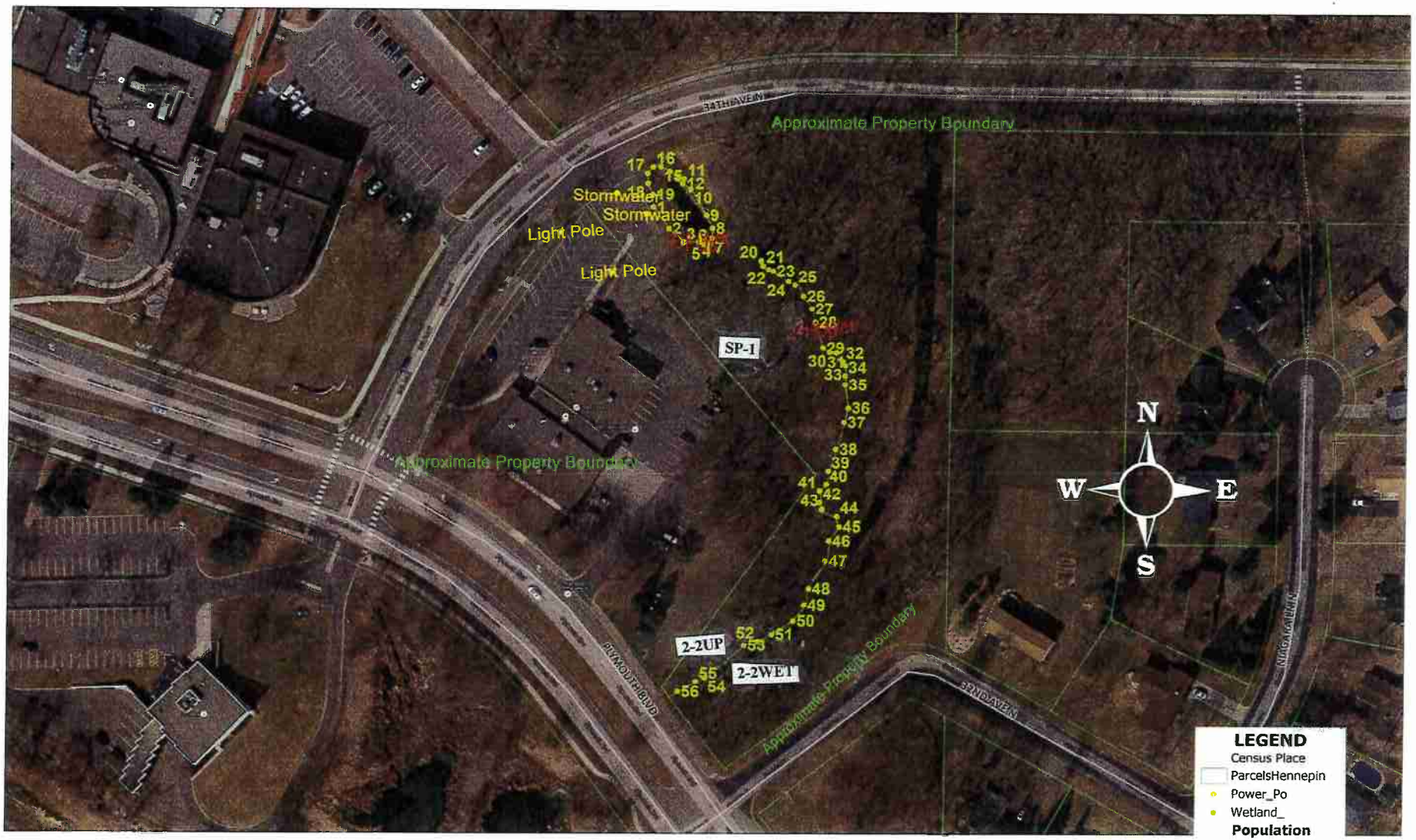


Figure 4
DNR Public Waters Inventory Map

↑N

Jacobson Environmental, PLLC



Jacobson Environmental, PLLC
Jacobsonenv@msn.com
612-802-6619

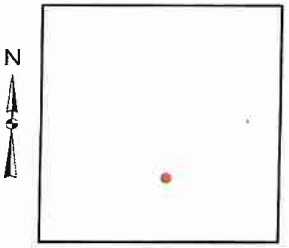
Figure 5 Wetland Delineation Map

Figure 6 - Topographic Map

Note: Elevation images and contours were generated from LiDAR derived elevation surfaces acquired 2007-2012.

0 0.0175 0.035 0.07 0.105 Miles

Scale: 1:4,752



Created on 10/12/2016

Hydric Rating by Map Unit—Hennepin County, Minnesota
(Figure 7 - Hydric Soil Rating)

Map Scale: 1:1,450 if printed on A portrait (8.5" x 11") sheet.

N

0 20 40 80 120 Meters

0 50 100 200 300 Feet

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 15N WGS84

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils

Soil Rating Polygons
- Hydric (100%)
- Hydric (66 to 99%)
- Hydric (33 to 65%)
- Hydric (1 to 32%)
- Not Hydric (0%)
- Not rated or not available

Soil Rating Lines
- Hydric (100%)
- Hydric (66 to 99%)
- Hydric (33 to 65%)
- Hydric (1 to 32%)
- Not Hydric (0%)
- Not rated or not available

Soil Rating Points
- Hydric (100%)
- Hydric (66 to 99%)
- Hydric (33 to 65%)
- Hydric (1 to 32%)
- Not Hydric (0%)
- Not rated or not available

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:12,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL: http://websoilsurvey.nrcs.usda.gov
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Hennepin County, Minnesota
Survey Area Data: Version 11, Sep 18, 2015

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Aug 26, 2014—Sep 7, 2014

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Hydric Rating by Map Unit

Hydric Rating by Map Unit— Summary by Map Unit — Hennepin County, Minnesota (MN053)				
Map unit symbol	**Map unit name**	**Rating**	**Acres in AOI**	**Percent of AOI**
L22C2	Lester loam, 6 to 10 percent slopes, moderately eroded	2	0.4	8.1%
L23A	Cordova loam, 0 to 2 percent slopes	95	1.8	32.7%
L37B	Angus loam, 2 to 6 percent slopes	5	0.8	14.0%
L50A	Muskego and Houghton soils, 0 to 1 percent slopes	100	2.0	37.8%
U1A	Urban land-Udorthents, wet substratum, complex, 0 to 2 percent slopes	0	0.4	7.4%
Totals for Area of Interest			**5.4**	**100.0%**

APPENDIX A

Precipitation Data

Precipitation Worksheet Using Gridded Database

Precipitation data for target wetland location:

county: **Hennepin** township number: **118N**
township name: **Plymouth** range number: **22W**
nearest community: **Plymouth** section number: **21**

Aerial photograph or site visit date:
Thursday, September 29, 2016

Score using 1981-2010 normal period

values are in inches A 'R' following a monthly total indicates a provisional value derived from radar-based estimates.	first prior month: **August 2016**	second prior month: **July 2016**	third prior month: **June 2016**
estimated precipitation total for this location:	**7.70R**	**6.19**	**2.94**
there is a 30% chance this location will have less than:	3.16	2.50	3.32
there is a 30% chance this location will have more than:	4.91	4.41	5.44
type of month: dry normal wet	**wet**	**wet**	dry
monthly score	**3 * 3 = 9**	**2 * 3 = 6**	**1 * 1 = 1**
multi-month score: 6 to 9 (dry) 10 to 14 (normal) 15 to 18 (wet)	**16 (Wet)**		

Other Resources:

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

APPENDIX B

Sample Data Sheets

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: Islamic Community Center | City/County: Plymouth | Sampling Date: 9/29/16
Applicant/Owner: | State: MN | Sampling Point: 1-UP
Investigator(s): WEJ & CMC | Section, Township, Range: Sec. 21, T118N, R22W
Landform (hillslope, terrace, etc.): hillslope | Local relief (concave, convex, none): convex
Slope (%): 2% | Lat: | Long: | Datum:
Soil Map Unit Name: Muskego and Houghton soils | NWI Classification:
Are climatic/hydrologic conditions of the site typical for this time of the year? N (If no, explain in remarks)
Are vegetation N, soil N, or hydrology N significantly disturbed? Are "normal circumstances"
Are vegetation N, soil N, or hydrology N naturally problematic? present? Yes

SUMMARY OF FINDINGS

(If needed, explain any answers in remarks.)

Hydrophytic vegetation present?	N	
Hydric soil present?	N	**Is the sampled area within a wetland?** N
Indicators of wetland hydrology present?	N	f yes, optional wetland site ID:

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

According to three month antecedent precipitation data, sampling period was considered to be wetter than normal

VEGETATION -- Use scientific names of plants.

Tree Stratum (Plot size: 30' radius)	Absolute % Cover	Dominant Species	Indicator Staus
1			
2			
3			
4			
5			
	0	= Total Cover	

Sapling/Shrub stratun (Plot size: 15' radius)			
1			
2			
3			
4			
5			
	0	= Total Cover	

Herb stratum (Plot size: 5' radius)			
1 *Poa pratensis*	50	Y	FAC
2 *Glechoma hederacea*	45	Y	FACU
3 *Cirsium arvense*	2	N	FACU
4			
5			
6			
7			
8			
9			
10			
	97	= Total Cover	

Woody vine stratum (Plot size: 30' radius)			
1			
2			
	0	= Total Cover	

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC: 1 (A)
Total Number of Dominant Species Across all Strata: 2 (B)
Percent of Dominant Species that are OBL, FACW, or FAC: 50.00% (A/B)

Prevalence Index Worksheet

Total % Cover of:

OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	50	x 3 =	150
FACU species	47	x 4 =	188
UPL species	0	x 5 =	0
Column totals	97 (A)		338 (B)

Prevalence Index = B/A = 3.48

Hydrophytic Vegetation Indicators:

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

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

Hydrophytic vegetation present? N

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

SOIL

Sampling Point: 1-UP

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

Depth (Inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type*	Loc**	Texture	Remarks
0-6	10YR2/1	100					loam fill	
6-18	10YR3/1	100					loam fill	
18-24	10YR2/1	100					loam	

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

Hydric Soil Indicators:

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

Indicators for Problematic Hydric Soils:

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

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric soil present? N

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

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

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ 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):	>24
Saturation present? (includes capillary fringe)	Yes ___	No	X	Depth (inches):	>24

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: Islamic Community Center | City/County: Plymouth | Sampling Date: 9/29/16
Applicant/Owner: | State: MN | Sampling Point: 1-WET
Investigator(s): WEJ & CMC | Section, Township, Range: Sec. 21, T118N, R22W
Landform (hillslope, terrace, etc.): depression | Local relief (concave, convex, none): concave
Slope (%): 2% | Lat: | Long: | Datum:
Soil Map Unit Name: Muskego and Houghton soils | NWI Classification: PUBH
Are climatic/hydrologic conditions of the site typical for this time of the year? N (If no, explain in remarks)
Are vegetation N, soil N, or hydrology N significantly disturbed? Are "normal circumstances"
Are vegetation N, soil N, or hydrology N naturally problematic? present? Yes

SUMMARY OF FINDINGS

(If needed, explain any answers in remarks.)

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

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

According to three month antecedent precipitation data, sampling period was considered to be wetter than normal

VEGETATION -- Use scientific names of plants.

Tree Stratum (Plot size: 30' radius)	Absolute % Cover	Dominant Species	Indicator Staus
1			
2			
3			
4			
5			
	0	= Total Cover	

Sapling/Shrub stratun (Plot size: 15' radius)			
1			
2			
3			
4			
5			
	0	= Total Cover	

Herb stratum (Plot size: 5' radius)			
1 *Impatiens capensis*	45	Y	FACW
2 *Typha angustifolia*	35	Y	OBL
3 *Lemna minor*	15	N	OBL
4			
5			
6			
7			
8			
9			
10			
	95	= Total Cover	

Woody vine stratum (Plot size: 30' radius)			
1			
2			
	0	= Total Cover	

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC: 2 (A)
Total Number of Dominant Species Across all Strata: 2 (B)
Percent of Dominant Species that are OBL, FACW, or FAC: 100.00% (A/B)

Prevalence Index Worksheet

Total % Cover of:

OBL species	50	x 1 =	50
FACW species	45	x 2 =	90
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column totals	95 (A)		140 (B)

Prevalence Index = B/A = 1.47

Hydrophytic Vegetation Indicators:

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

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

Hydrophytic vegetation present? Y

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

SOIL

Sampling Point: 1-WET

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

Depth (Inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type*	Loc**	Texture	Remarks
0-4	10YR2/1	100					loam	
4-14	10YR4/2	98	7.5YR4/6	2	C	PL	sandy clay loam	
14-24	10YR4/1	100					sandy clay loam	

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

Hydric Soil Indicators:

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

Indicators for Problematic Hydric Soils:

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

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric soil present? Y

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

- X Surface Water (A1)
- X High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ 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	X	No	___	Depth (inches): 2
Water table present?	Yes	X	No	___	Depth (inches): surface
Saturation present? (includes capillary fringe)	Yes	X	No	___	Depth (inches): surface

Indicators of wetland hydrology present? Y

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

Remarks:

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: Islamic Community Center | City/County: Plymouth | Sampling Date: 9/29/16
Applicant/Owner: | State: MN | Sampling Point: 2-1 UP
Investigator(s): WEJ & CMC | Section, Township, Range: Sec. 21, T118N, R22W
Landform (hillslope, terrace, etc.): hillslope | Local relief (concave, convex, none): convex
Slope (%): 2% | Lat: | Long: | Datum:
Soil Map Unit Name: Muskego and Houghton soils | NWI Classification:
Are climatic/hydrologic conditions of the site typical for this time of the year? N (If no, explain in remarks)
Are vegetation N, soil N, or hydrology N significantly disturbed? Are "normal circumstances"
Are vegetation N, soil N, or hydrology N naturally problematic? present? Yes

SUMMARY OF FINDINGS

(If needed, explain any answers in remarks.)

Hydrophytic vegetation present?	Y	Is the sampled area within a wetland?	N
Hydric soil present?	Y	f yes, optional wetland site ID:	
Indicators of wetland hydrology present?	N		

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

According to three month antecedent precipitation data, sampling period was considered to be wetter than normal

VEGETATION -- Use scientific names of plants.

Tree Stratum (Plot size: 30' radius)	Absolute % Cover	Dominant Species	Indicator Staus
1 *Acer negundo*	60	Y	FAC
2 *Fraxinus pennsylvanica*	5	N	FACW
3			
4			
5			
	65	= Total Cover	
Sapling/Shrub stratur (Plot size: 15' radius)			
1 *Rhamnus cathartica*	20	Y	FAC
2			
3			
4			
5			
	20	= Total Cover	
Herb stratum (Plot size: 5' radius)			
1 *Ageratina altissima*	70	Y	FACU
2 *Viola sororia*	5	N	FAC
3 *Galium boreale*	5	N	FAC
4 *Arctium minus*	5	N	FACU
5			
6			
7			
8			
9			
10			
	85	= Total Cover	
Woody vine stratum (Plot size: 30' radius)			
1			
2			
	0	= Total Cover	

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC: 2 (A)
Total Number of Dominant Species Across all Strata: 3 (B)
Percent of Dominant Species that are OBL, FACW, or FAC: 66.67% (A/B)

Prevalence Index Worksheet

Total % Cover of:

OBL species	0	x 1 =	0
FACW species	5	x 2 =	10
FAC species	90	x 3 =	270
FACU species	75	x 4 =	300
UPL species	0	x 5 =	0
Column totals	170 (A)		580 (B)

Prevalence Index = B/A = 3.41

Hydrophytic Vegetation Indicators:

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

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

Hydrophytic vegetation present? Y

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

SOIL

Sampling Point: 2-1 UP

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

Depth (Inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type*	Loc**	Texture	Remarks
0-12	10YR2/1	100					loam	
12-24	10YR4/1	98	7.5YR4/6	2	C	PL	clay loam	

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

Hydric Soil Indicators:

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

Indicators for Problematic Hydric Soils:

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

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric soil present? Y

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

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

Secondary Indicators (minimum of two required)

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

Field Observations:

Surface water present?	Yes	___	No	X	Depth (inches): -
Water table present?	Yes	X	No	___	Depth (inches): 20
Saturation present? (includes capillary fringe)	Yes	X	No	___	Depth (inches): 14

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: Islamic Community Center | City/County: Plymouth | Sampling Date: 9/29/16

Applicant/Owner: | State: MN | Sampling Point: 2-1 WET

Investigator(s): WEJ & CMC | Section, Township, Range: Sec. 21, T118N, R22W

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

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

Soil Map Unit Name: Muskego and Houghton soils | NWI Classification: PFO1Bd

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

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

Are vegetation N, soil N, or hydrology N naturally problematic? (If needed, explain any answers in remarks.)

SUMMARY OF FINDINGS

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

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

According to three month antecedent precipitation data, sampling period was considered to be wetter than normal

VEGETATION -- Use scientific names of plants.

Tree Stratum (Plot size: 30' radius)	Absolute % Cover	Dominant Species	Indicator Staus
1 *Salix nigra*	20	Y	OBL
2			
3			
4			
5			
	20 = Total Cover		
Sapling/Shrub stratun (Plot size: 15' radius)			
1			
2			
3			
4			
5			
	0 = Total Cover		
Herb stratum (Plot size: 5' radius)			
1 *Phalaris arundinacea*	30	Y	FACW
2 *Ageratina altissima*	10	Y	FACU
3			
4			
5			
6			
7			
8			
9			
10			
	40 = Total Cover		
Woody vine stratum (Plot size: 30' radius)			
1			
2			
	0 = Total Cover		

Dominance Test Worksheet

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

Total Number of Dominant Species Across all Strata: 3 (B)

Percent of Dominant Species that are OBL, FACW, or FAC: 66.67% (A/B)

Prevalence Index Worksheet

Total % Cover of:

OBL species	20	x 1 =	20
FACW species	30	x 2 =	60
FAC species	0	x 3 =	0
FACU species	10	x 4 =	40
UPL species	0	x 5 =	0
Column totals	60 (A)		120 (B)

Prevalence Index = B/A = 2.00

Hydrophytic Vegetation Indicators:

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

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

Hydrophytic vegetation present? Y

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

55% bare ground at this sample point

SOIL

Sampling Point: 2-1 WET

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

Depth (Inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type*	Loc**	Texture	Remarks
0-8	10YR3/1	100					loam	
8-24	10YR4/1	98	7.5YR4/6	2	C	PL	mucky loam	

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

Hydric Soil Indicators:

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

Indicators for Problematic Hydric Soils:

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

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric soil present? Y

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

- ___ Surface Water (A1)
- X High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ 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 X	Depth (inches): -		
Water table present?	Yes X	No ___	Depth (inches): 6		
Saturation present? (includes capillary fringe)	Yes X	No ___	Depth (inches): surface		

Indicators of wetland hydrology present? Y

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

Remarks:

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: Islamic Community Center | City/County: Plymouth | Sampling Date: 9/29/16

Applicant/Owner: | State: MN | Sampling Point: 2-2 UP

Investigator(s): WEJ & CMC | Section, Township, Range: Sec. 21, T118N, R22W

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

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

Soil Map Unit Name: Urban land-Udorthents, wet substratum | NWI Classification:

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

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

Are vegetation N, soil N, or hydrology N naturally problematic? (If needed, explain any answers in remarks.)

SUMMARY OF FINDINGS

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

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

According to three month antecedent precipitation data, sampling period was considered to be wetter than normal

VEGETATION -- Use scientific names of plants.

Tree Stratum (Plot size: 30' radius)	Absolute % Cover	Dominant Species	Indicator Staus
1			
2			
3			
4			
5			
	0	= Total Cover	
Sapling/Shrub stratun (Plot size: 15' radius)			
1			
2			
3			
4			
5			
	0	= Total Cover	
Herb stratum (Plot size: 5' radius)			
1 *Poa pratensis*	45	Y	FAC
2 *Solidago altissima*	30	Y	FACU
3 *Arctium minus*	10	N	FACU
4 *Glechoma hederacea*	10	N	FACU
5			
6			
7			
8			
9			
10			
	95	= Total Cover	
Woody vine stratum (Plot size: 30' radius)			
1			
2			
	0	= Total Cover	

Dominance Test Worksheet

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

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

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

Prevalence Index Worksheet

Total % Cover of:

OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	45	x 3 =	135
FACU species	50	x 4 =	200
UPL species	0	x 5 =	0
Column totals	95 (A)		335 (B)

Prevalence Index = B/A = 3.53

Hydrophytic Vegetation Indicators:

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

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

Hydrophytic vegetation present? N

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

SOIL

Sampling Point: 2-2 UP

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

Depth (Inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type*	Loc**	Texture	Remarks
0-6	10YR2/1	100					loam	
6-14	10YR3/1	100					loam	
14-24	10YR3/1	98	7.5YR4/6	2	C	PL	loam	

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

Hydric Soil Indicators:

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

Indicators for Problematic Hydric Soils:

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

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric soil present? Y

Remarks:

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 X	Depth (inches):	-	
Water table present?	Yes ___	No X	Depth (inches):	>24	
Saturation present? (includes capillary fringe)	Yes ___	No X	Depth (inches):	>24	

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: Islamic Community Center | City/County: Plymouth | Sampling Date: 9/29/16

Applicant/Owner: | State: MN | Sampling Point: 2-2 WET

Investigator(s): WEJ & CMC | Section, Township, Range: Sec. 21, T118N, R22W

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

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

Soil Map Unit Name: Urban land-Udorthents, wet substratum | NWI Classification: PFO1Bd

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

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

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

SUMMARY OF FINDINGS

(If needed, explain any answers in remarks.)

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

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

According to three month antecedent precipitation data, sampling period was considered to be wetter than normal

VEGETATION -- Use scientific names of plants.

Tree Stratum (Plot size: 30' radius)	Absolute % Cover	Dominant Species	Indicator Staus
1 *Acer negundo*	60	Y	FAC
2 *Populus deltoides*	30	Y	FAC
3			
4			
5			
	90	= Total Cover	

Sapling/Shrub stratun (Plot size: 15' radius)			
1			
2			
3			
4			
5			
	0	= Total Cover	

Herb stratum (Plot size: 5' radius)			
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
	0	= Total Cover	

Woody vine stratum (Plot size: 30' radius)			
1 *Vitis riparia*	10	Y	FACW
2			
	10	= Total Cover	

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across all Strata: 3 (B)

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

Prevalence Index Worksheet

Total % Cover of:

OBL species	0	x 1 =	0
FACW species	10	x 2 =	20
FAC species	90	x 3 =	270
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column totals	100 (A)		290 (B)

Prevalence Index = B/A = 2.90

Hydrophytic Vegetation Indicators:

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

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

Hydrophytic vegetation present? Y

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

95% bare ground and open water at this sample point

SOIL

Sampling Point: 2-2 WET

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

Depth (Inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type*	Loc**	Texture	Remarks
0-6	10YR2/1	100					sand	
6-24	10YR5/1	100					loam	

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

Hydric Soil Indicators:

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

Indicators for Problematic Hydric Soils:

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

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric soil present? Y

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

- X Surface Water (A1)
- X High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ 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	X	No	___	Depth (inches): 1
Water table present?	Yes	X	No	___	Depth (inches): surface
Saturation present? (includes capillary fringe)	Yes	X	No	___	Depth (inches): surface

Indicators of wetland hydrology present? Y

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

Remarks:

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: Islamic Community Center | City/County: Plymouth | Sampling Date: 9/29/16
Applicant/Owner: | State: MN | Sampling Point: SP-1
Investigator(s): WEJ & CMC | Section, Township, Range: Sec. 21, T118N, R22W
Landform (hillslope, terrace, etc.): depression | Local relief (concave, convex, none): concave
Slope (%): 2% | Lat: | Long: | Datum:
Soil Map Unit Name: Muskego and Houghton soils | NWI Classification:
Are climatic/hydrologic conditions of the site typical for this time of the year? N (If no, explain in remarks)
Are vegetation N, soil N, or hydrology N significantly disturbed? Are "normal circumstances"
Are vegetation N, soil N, or hydrology N naturally problematic? present? Yes

SUMMARY OF FINDINGS

(If needed, explain any answers in remarks.)

Hydrophytic vegetation present? N	**Is the sampled area within a wetland?** N
Hydric soil present? N	f yes, optional wetland site ID:
Indicators of wetland hydrology present? N	

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

According to three month antecedent precipitation data, sampling period was considered to be wetter than normal

VEGETATION -- Use scientific names of plants.

Tree Stratum (Plot size: 30' radius)	Absolute % Cover	Dominant Species	Indicator Staus
1 *Acer negundo*	70	Y	FAC
2 *Populus alba*	20	Y	UPL
3			
4			
5			
	90	= Total Cover	
Sapling/Shrub stratun (Plot size: 15' radius)			
1			
2			
3			
4			
5			
	0	= Total Cover	
Herb stratum (Plot size: 5' radius)			
1 *Impatiens capensis*	40	Y	FACW
2 *Ageratina altissima*	10	Y	FACU
3			
4			
5			
6			
7			
8			
9			
10			
	50	= Total Cover	
Woody vine stratum (Plot size: 30' radius)			
1			
2			
	0	= Total Cover	

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC: 2 (A)
Total Number of Dominant Species Across all Strata: 4 (B)
Percent of Dominant Species that are OBL, FACW, or FAC: 50.00% (A/B)

Prevalence Index Worksheet

Total % Cover of:

OBL species	0	x 1 =	0
FACW species	40	x 2 =	80
FAC species	70	x 3 =	210
FACU species	10	x 4 =	40
UPL species	20	x 5 =	100
Column totals	140 (A)		430 (B)

Prevalence Index = B/A = 3.07

Hydrophytic Vegetation Indicators:

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

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

Hydrophytic vegetation present? N

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

45% bare ground at this sample point

SOIL

Sampling Point: SP-1

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

Depth (Inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type*	Loc**	Texture	Remarks
0-6	10YR4/1	100					gravel sand fill	rocks to 2"
6-24	10YR2/1	100					loam	

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

Hydric Soil Indicators:

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

Indicators for Problematic Hydric Soils:

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

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric soil present? N

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

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

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ 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):	>24	
Saturation present? (includes capillary fringe)	Yes ___	No X	Depth (inches):	>24	

Indicators of wetland hydrology present? N

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

Remarks:

APPENDIX C

Site Photos

Basin 1

Northwestern portion of Basin 2

Northeastern portion of Basin 2

Sample point SP-1

Sample point 1-WET

Sample point 2-1 WET

Sample point 2-2 WET

APPENDIX D

Wetland Delineation Approval Forms