Minnesota Wetland Conservation Act RCWMC 1-19-17 Notice of Application

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

City of Plymouth Plymouth, MN 55447			
1.	PROJECT INFORMATION		
Applicant Name Ben Scharenbroich	Project Name 4130 & 4135 Quinwood Lane N - Water Quality Pond Maintenance	Date of Application 12/14/16	Application Number NA
Type of Application (check all that a	oply):		
Wetland Boundary or Type	No-Loss ☐ Ex	emption	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

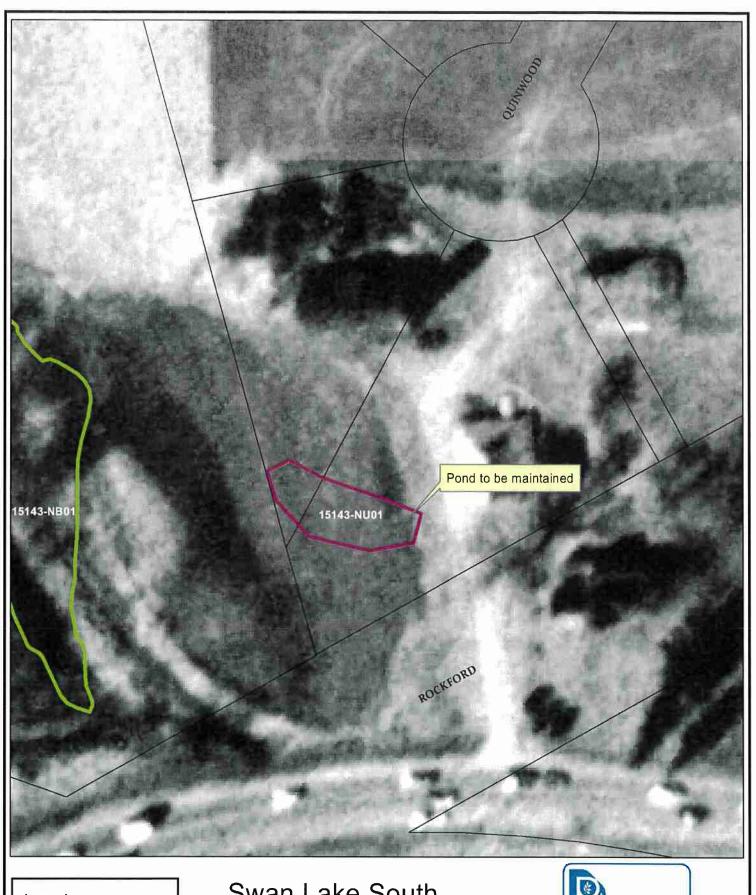
Signing and mailing of this completed form to the appropriate recipients in accordance with 8420.0255, Subp. 3 provides notice that an application was made to the LGU under the Wetland Conservation Act as specified above. A copy of the application is attached. Comments can be submitted to:

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

BWSR Forms 7-1-10 Page 1 of 5

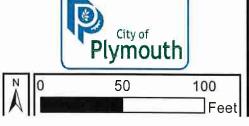
Signature:			12/14/16	
3. LIST OF ADDRESSEES				
X HCD TEP member: Ms. Stacey Lijewski, HCD, 701 Fourth Avenue South, Suite 700, Minneapolis, MN, 55415-1600 (sent electronically) X BWSR TEP member: Ms. Lynda Peterson, BWSR, 520 Lafayette Rd. N., St. Paul, MN, 55155 (sent electronically) LGU TEP member (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): 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 INFO	ORMATION		
For a list of BWSR TEP repres			reas.pdf	
For a list of DNR TEP represen		_		
Department of Natural Resource	ces Regional Offices:			
NW Region: Reg. Env. Assess. Ecol. Div. Ecol. Resources 2115 Birchmont Beach Rd. NE Bemidji, MN 56601	NW Region:NE Region:Central Region:Southern Region:Reg. Env. Assess. Ecol.Reg. Env. Assess. Ecol.Reg. Env. Assess.Reg. Env. Assess.Div. Ecol. ResourcesDiv. Ecol. ResourcesEcol.Div. Ecol. Resources2115 Birchmont Beach Rd. NE1201 E. Hwy. 2Div. Ecol. Resources261 Hwy. 15 South			
For a map of DNR Administra	tive Regions, see: http://fil		tdnr/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: Location Map Wetland Map				

BWSR Forms 7-1-10 Page 2 of 5



Legend
Surface Water Resources
Water Quality Pond
Wetland
Wetland Mitigation

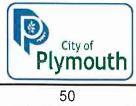
Swan Lake South 15143-NU01 Air Photo 1989





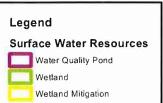
Legend
Surface Water Resources
Water Quality Pond
Wetland
Wetland Mitigation

Swan Lake South 15143-NU01 Air Photo 1997



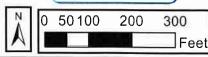
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Swan Lake South 15143-NU01 Project Location





Minnesota Wetland Conservation Act Notice of Application

Local Government Unit (LGU) City of Plymouth Address 3400 Plymouth Blvd. Plymouth, MN 55447				
1.	PROJECT INFORM	ATION		
Applicant Name Ben Scharenbroich	Project Name 12405 42 nd Place Nort Water Quality Pond Maintenance	h -	Date of Application 12/14/16	Application Number NA
Type of Application (check all that ap	pply):		_	
Wetland Boundary or Type	⊠ No-Loss	Exe	mption [] Sequencing
Replacemen	t Plan	Banki	ng Plan	
Summary and description of proposed	l project (attach additiona	al sheets as	necessary):	
The proposed project would consist to its original design. This plan is on south east of the homes at 12405 42 on the applicability of a no-loss, per sediment in wetlands that are presen removal of contaminated substrate, where the properties of a chieving the desired properties of existing utilities and public not result in additional wetland intrudes.	record with the City of I and Place North in Plymou WCA 8420.0415 (E) "E tly utilized as storm water when the excavated area ourpose and stabilized to associated with the operat works structures, including the property of the property works are the control of the property of the proper	Plymouth. The app th. The app xcavation ler managem is limited to prevent wation, routine ing pipeling	The project is loc licant has reques imited to remova tent basins, or ex to the minimum di ter quality degra- ter maintenance, or es, provided the a	ated to the ted a decision of deposited cavation and mensions dation." and emergency ctivity does

2. APPLICATION REVIEW AND DECISION

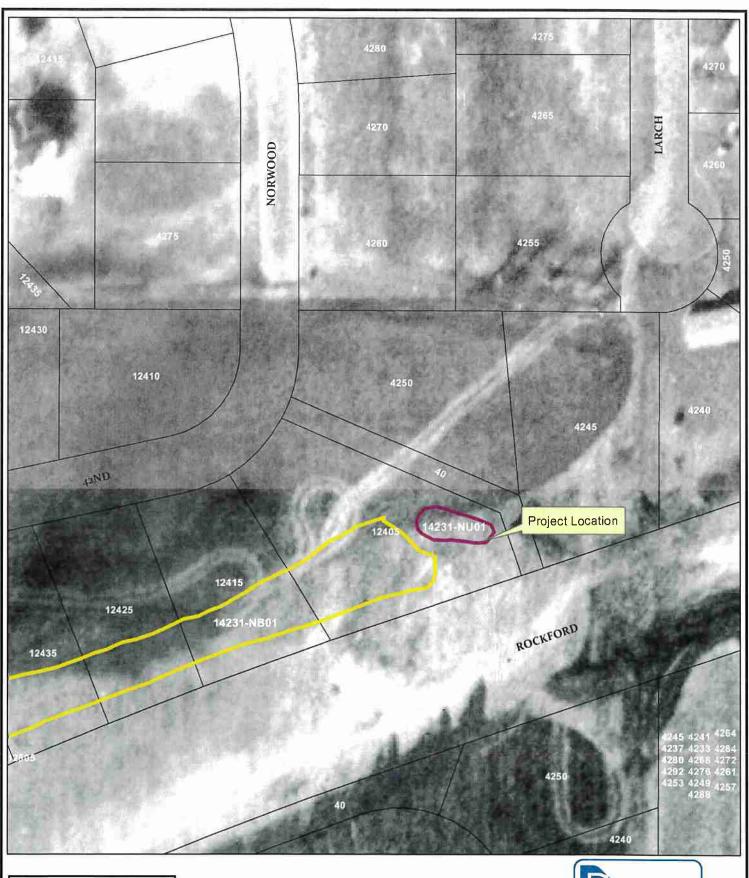
Signing and mailing of this completed form to the appropriate recipients in accordance with 8420.0255, Subp. 3 provides notice that an application was made to the LGU under the Wetland Conservation Act as specified above. A copy of the application is attached. Comments can be submitted to:

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

BWSR Forms 7-1-10 Page 1 of 5

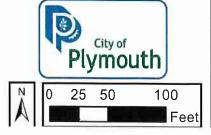
Signature: Dul Un	uh	Date:	12/16/16	
3. LIST OF ADDRESSEES				
X HCD TEP member: Ms. Stacey (sent electronically) X BWSR TEP member: Ms. Lynd LGU TEP member (if different) X DNR TEP member: Melissa Do DNR Regional Office (if different) Ms. Kate Drewry, DNR Divis (sent electronically) X WD or WMO (if applicable): Bo Prairie, MN, 55346 (sent elect) X Applicant and Landowner (if dir Richard & Kristina Beckfeld, Alan Berger, 4250 Norwood I BHJM Inc, 2437 Rice St, Ros Swan Lake South Homeowne Members of the public who requ X Corps of Engineers Project Paul, MN, 55101-1678 (sent electr BWSR Wetland Bank Coordina bank plan applications only)	da Peterson, BWSR, 520 Lafa; than LGU Contact): operalski, MN DNR, 1200 War than DNR TEP member) from of Ecological and Water F CWMC, c/o Laura Jester, Keytronically) fferent): 12405 42nd Place North, Plyn Lane North, Plymouth, MN, 5 eville, MN 55113 from Association, 4220 Pineview dested notice: Manager: Melissa Jenny, Arn conically)	yette Rd. N., St. Paul, MN, rner Road, St. Paul, MN, 55 Resources, 1200 Warner Ro ystone Waters, LLC, 16415 nouth, MN, 55442 5442 Lane North, Plymouth, M ny Corps of Engineers, 180	55155 (sent electronically) 5106 (sent electronically) 6ad, St. Paul, MN, 55106 6 Hillcrest Lane, Eden 8N 55442 5th Street East, Suite 700, St.	
For a list of BWSR TEP representations of DNR TEP represents of Natural Resources.	ntatives: www.bwsr.state.	e.mn.us/contact/WCA_		
PDepartment of Natural Resource NW Region: Reg. Env. Assess. Ecol. Div. Ecol. Resources 2115 Birchmont Beach Rd. NE Bemidji, MN 56601	NE Regional Offices: NE Region: Reg. Env. Assess. Ecol. Div. Ecol. Resources 1201 E. Hwy. 2 Grand Rapids, MN 55744	Central Region: Reg. Env. Assess. Ecol. Div. Ecol. Resources 1200 Warner Road St. Paul, MN 55106	Southern Region: Reg. Env. Assess. Ecol. Div. Ecol. Resources 261 Hwy. 15 South New Ulm, MN 56073	
For a map of DNR Administrat	tive Regions, see: http://fi		utdnr/dnr_regions.pdf	
For a list of Corps of Project M or send to:	Ianagers: www.mvp.usace	e.army.mil/regulatory/d	efault.asp?pageid=687	
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5. ATTACHMENTS				
In addition to the application, Location Map Wetland Map				

BWSR Forms 7-1-10 Page 2 of 5



Legend
Surface Water Resources
Water Quality Pond
Wetland
Wetland
Wetland Mitigation

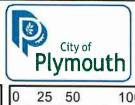
Swan Lake South 14231-NU01 Air Photo 1989

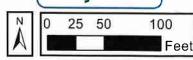






Swan Lake South 14231-NU01 Air Photo 2006

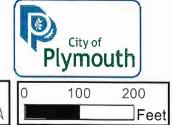






Legend
Surface Water Resources
Water Quality Pond
Wetland
Wetland Mitigation

Swan Lake South 14231-NU01 Project Location



Minnesota Wetland Conservation Act **Notice of Application**

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

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

2. APPLICATION REVIEW AND DECISION

structures, including pipelines, provided the activity does not result in additional wetland intrusion or

additional impacts, either wholly or partially"

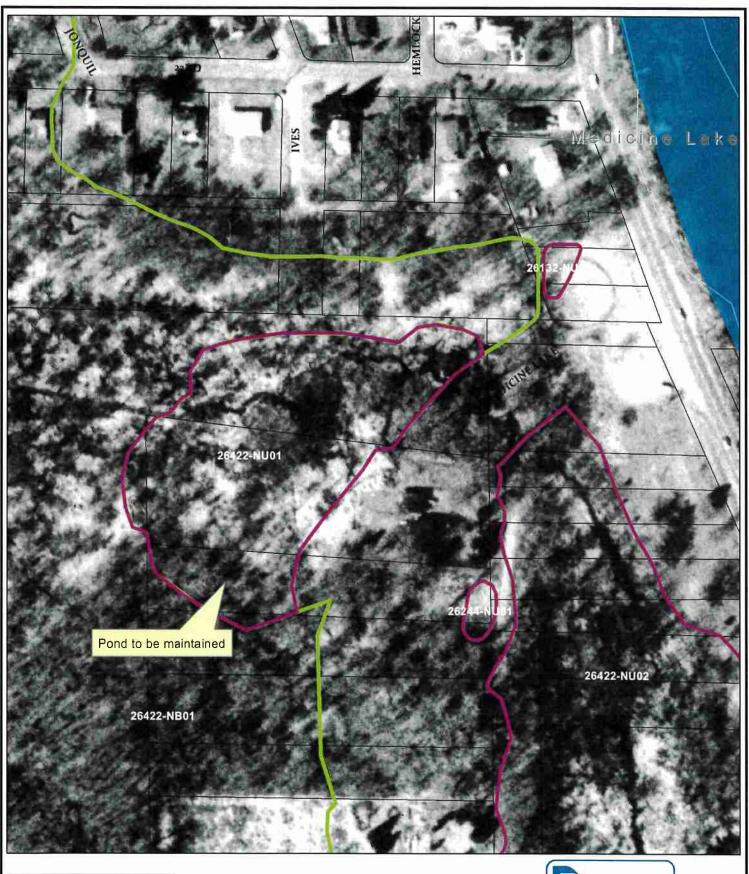
Signing and mailing of this completed form to the appropriate recipients in accordance with 8420.0255, Subp. 3 provides notice that an application was made to the LGU under the Wetland Conservation Act as specified above. A copy of the application is attached. Comments can be submitted to:

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

BWSR Forms 7-1-10 Page 1 of 5

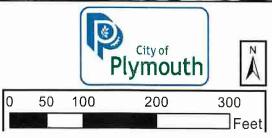
Signature: _ Kul U.	2 ch	Date:	12/16/16
•	3. LIST OF ADI		
X HCD TEP member: Ms. S MN, 55415-1600 (sent elec X BWSR TEP member: Ms electronically) LGU TEP member (if dif X DNR TEP member: Melis electronically) DNR Regional Office (if Ms. Kate Drewry, DNR Di MN, 55106 (sent electro X WD or WMO (if applicat Lane, Eden Prairie, MN, 5 Applicant and Landowne Members of the public w X Corps of Engineers Proje Suite 700, St. Paul, MN, 55 BWSR Wetland Bank Co Coordinator (wetland bank pl	tronically) Lynda Peterson, BWSR, ferent than LGU Contact) ssa Doperalski, MN DNR, different than DNR TEP: tvision of Ecological and Wonically) ble): BCWMC, c/o Laura & 5346 (sent electronically) r (if different): ho requested notice: ct Manager: Melissa Jenn 5101-1678 (sent electronical ordinator (wetland bank p	520 Lafayette Rd. N., St. 1200 Warner Road, St. P member) /ater Resources, 1200 Water, Keystone Waters,	Paul, MN, 55155 (sent Paul, MN, 55106 (sent Barner Road, St. Paul, LLC, 16415 Hillcrest Beers, 180 5th Street East,
	4. MAILING INFO		
For a list of BWSR TEP repres			- A
For a list of DNR TEP represer		mn.us/wetlands/wca/DN	NR_TEP_contacts.pdf
Department of Natural Resources Regional Offices:NW Region: Reg. Env. Assess. Ecol. Div. Ecol. ResourcesNE Region: Reg. Env. Assess. Ecol. Div. Ecol. ResourcesCentral Region: Reg. Env. Assess.Southern Region: Reg. Env. Assess.2115 Birchmont Beach Rd. NE Bemidji, MN 566011201 E. Hwy. 2 Grand Rapids, MN 55744Div. Ecol. Resources Div. Ecol. Resources St. Paul. MN 55106261 Hwy. 15 South New Ulm, MN 56073			
For a map of DNR Administrat		St. Paul, MN 55106 les.dnr.state.mn.us/abou	utdnr/dnr_regions.pdf
For a list of Corps of Project Mor send to:	lanagers: www.mvp.usaco	e.army.mil/regulatory/do	efault.asp?pageid=687
US Army Corp			
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. ATTACHI	MENTS	
In addition to the application, Location Map Wetland Map			

BWSR Forms 7-1-10 Page 2 of 5





Plymouth Creek Pond 26422-NU01 Air Photo 1989



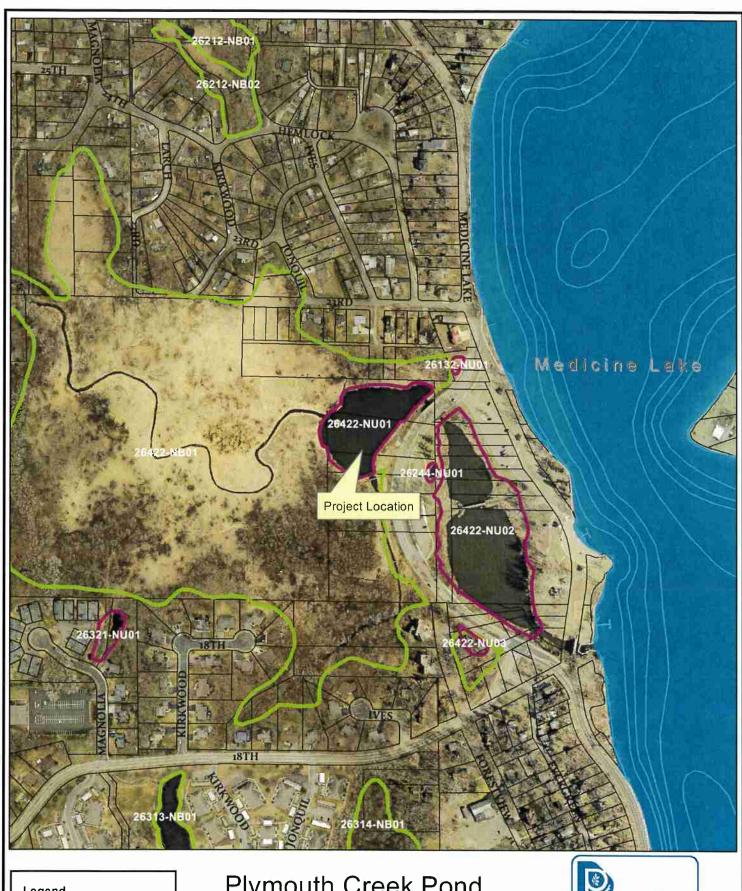




Plymouth Creek Pond 26422-NU01 Air Photo 2010



50 100 200 300 Feet





Plymouth Creek Pond 26422-NU01 Project Location





Minnesota Wetland Conservation Act **Notice of Application**

Local Government Unit (LGU) City of Plymouth	Address 3400 Plymouth Blvd. Plymouth, MN 55447			
	PROJECT INFORMA	ATION		
Applicant Name Ben Scharenbroich	Project Name Quinwood Lane & 31st North - Water Quality Maintenance		Date of Application 12/14/16	Application Number NA
Type of Application (check all that ap	ply):			
☐ Wetland Boundary or Type	⊠ No-Loss	Exer	nption	Sequencing
Replacement Plan Banking Plan				
Summary and description of proposed	l project (attach additiona	l sheets as	necessary):	
The proposed project would consist to its original design. This plan is on outlot located to the west of the of st in Plymouth. The applicant has requested as storm water management the excavated area is limited to the nand stabilized to prevent water qualiwith the operation, routine maintena structures, including pipelines, proviadditional impacts, either wholly or	of removing deposited sec record with the City of P reet intersection of Quinvested a decision on the ap o removal of deposited sec basins, or excavation and ninimum dimensions necestry degradation." and WCA nece, or emergency repair ded the activity does not a	diments fro lymouth. I wood Lane plicability ediment in removal co essary for a A 8420.04 of existing	om the water qua. The project is local North and 31st A of a no-loss, per wetlands that are of contaminated suchieving the design of the contaminate of the contamina	ated on an venue North WCA presently ubstrate, when ired purpose ity associated lic works

2. APPLICATION REVIEW AND DECISION

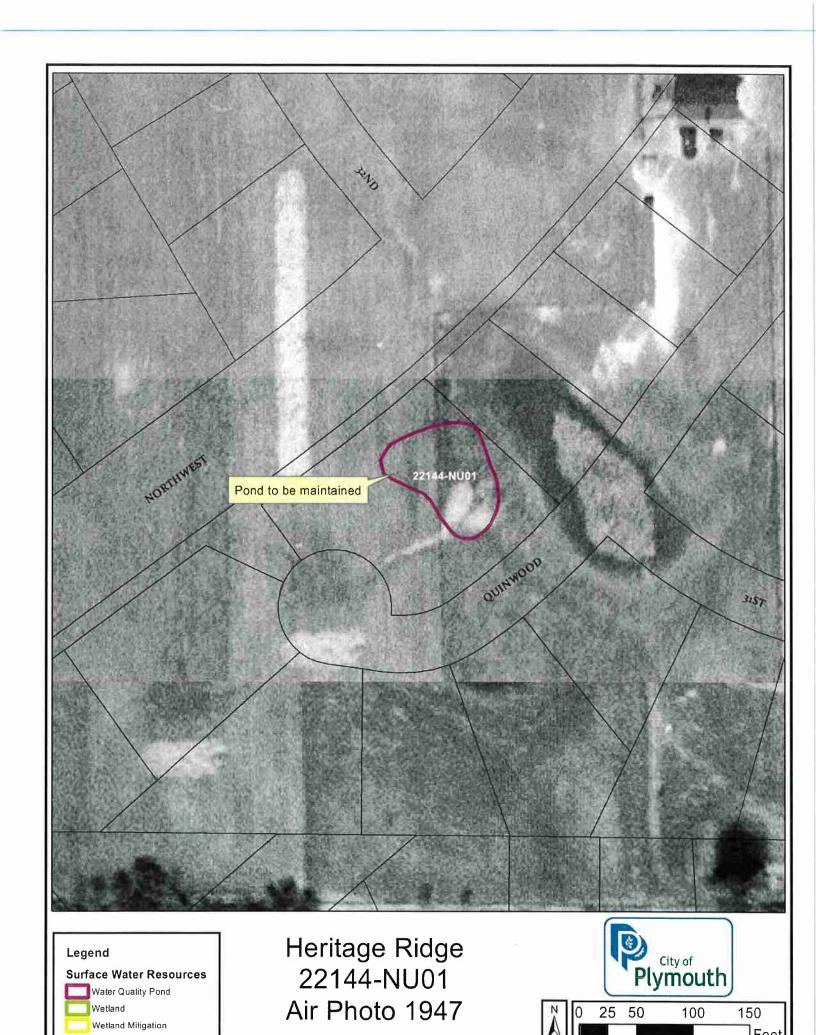
Signing and mailing of this completed form to the appropriate recipients in accordance with 8420.0255, Subp. 3 provides notice that an application was made to the LGU under the Wetland Conservation Act as specified above. A copy of the application is attached. Comments can be submitted to:

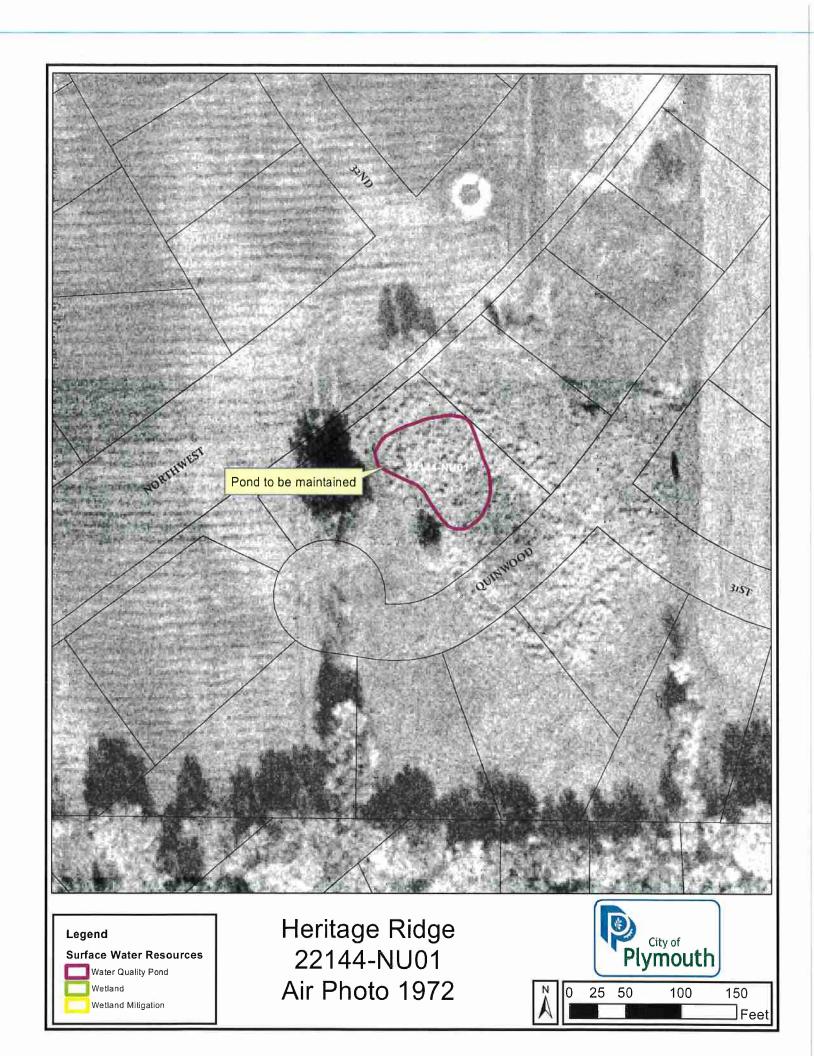
Name and Title of LGU Contact Person	Comments must be received by (minimum 15
Derek Asche	business-day comment period):
Water Resources Manager	January 10, 2017
Address (if different than LGU)	Date, time, and location of decision:
City of Plymouth	January 11, 2017
3400 Plymouth Blvd.	9AM
Plymouth, MN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

BWSR Forms 7-1-10 Page 1 of 6

Signature: Dul	Date:	12/16/14				
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): 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) BWSR Wetland Bank Coordinator (wetland bank plan decisions only) BWSR Wetland Bank Coordinator (wetland bank plan decisions only)						
For a list of BWSR TEP represer	ntatives: www.bwsr.state.	e.mn.us/contact/WCA_a	•			
Department of Natural Resource NW Region: Reg. Env. Assess. Ecol. Div. Ecol. Resources 2115 Birchmont Beach Rd. NE Bemidji, MN 56601	NE Regional Offices: NE Region: Reg. Env. Assess. Ecol. Div. Ecol. Resources 1201 E. Hwy. 2 Grand Rapids, MN 55744	Central Region: Reg. Env. Assess. Ecol. Div. Ecol. Resources 1200 Warner Road St. Paul, MN 55106	Southern Region: Reg. Env. Assess. Ecol. Div. Ecol. Resources 261 Hwy. 15 South New Ulm, MN 56073			
For a map of DNR Administrat			tdnr/dnr_regions.pdf			
For a list of Corps of Project M or send to:	Ianagers: <u>www.mvp.usace</u>	e.army.mil/regulatory/de	fault.asp?pageid=687			
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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	5. ATTACHMENTS					
In addition to the application, Location Map Wetland Map	list any other attachments	3:				

BWSR Forms 7-1-10 Page 2 of 6









Heritage Ridge 22144-NU01 Air Photo 1997

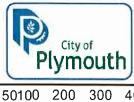


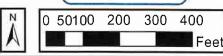
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Heritage Ridge 22144-NU01 Project Location





Minnesota Wetland Conservation Act Notice of Application

Local Government Unit (LGU) City of Plymouth	Address 3400 Plymouth Blvd. Plymouth, MN, 55447						
1.	1. PROJECT INFORMATION						
Applicant Name Adeel Ahmed NWICC	Project Name NWICC Parking Expansion	Lot	Date of Application 12/7/16	Application Number NA			
Type of Application (check all that ap	oply):						
	☐ No-Loss	☐ Exe	mption				
Replacemen	nt Plan	Bank	ing Plan				
storm water pond dominated by reed PEMCd/PF01B, wet meadow/shallowillow, box elder, American elm, and Due to the time of year and lack of a Spring 2017.	ow marsh/wooded sw nd cattail.	vamp wetland d	ominated by ree	ed canary grass,			
Signing and mailing of this complete Subp. 3 provides notice that an application of the subprovides in the subprovides are subprovided in the subp	cation was made to	opriate recipient the LGU under	s in accordance the Wetland Co				
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): 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			ision:				
Phone Number and E-mail Address 763-509-5526 dasche@plymouthmn.gov Decision-maker for this application: Staff Governing Board or Council							
Signature: Denk Auch	•		Date: /d	9/16			

BWSR Forms 7-1-10 Page 1 of 2

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

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

BWSR Forms 7-1-10 Page 2 of 2

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 Almed, NWICC Board of Directors
Mailing Address: 3300 Plymath Blvd, Plymath, MN 55447

Phone: 612-220-8046

E-mail Address: burujj @gmail-com

Authorized Contact (do not complete if same as above): 5AA

Mailing Address:

Phone:

E-mail Address:

Agent Name: Wayne Jacobson, WPC, PSS, Jacobson Environmental Malling Address: 5821 Humbolit Arn, Brooklyn Center, MN 55430 Phone: 612-802-6619 E-mail Address: ja cobsenenve msn. can

PART TWO: Site Location Information

County: Hemsepin

Parcel ID. and/or Address: 3300 Plymath Blvd, Plymath, NW 55447

Legal Description (Section, Township, Range): Sec. 21, TILBN, 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

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

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

PART THREE: General Project/Site Information

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

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

PART FOUR: Aquatic Resource Impact Summary

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

Aquatic Resource ID (as noted on overhead view)	Aquatic Resource Type (wetland, lake, tributary etc.)	drain, or	Impact	Overall Size of Aquatic Resource ³	Community Type(s) in Impact Area	County, Major Watershed #, and Bank Service Area # of Impact Area
						- mpact Area

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)".

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 Annlicant Signature

i Arti i ve. Applica	nt Signatur	9	
Check here if you are requesting a <u>pre-application</u> consultation with provided. Regulatory entities will not initiate a formal application review	the Corps and LGU wif this box is check	based on the in	nformation you have
By signature below, I attest that the information in this application is co- authority to undertake the work described herein.	mplete and accurate	a. I further atte	st that I possess the
Signature: X Mullhurl	Date:	si.	a _n
I hereby authorize to act on my behalf as my agent in the processing to act on my behalf as my agent in the processing supplemental information in supplemental informatio	cessing of this applic ort of this applicatio	cation and to fu n.	rnish, upon request,

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.

Minnesota Interagency Water Resource Application Form February 2014

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).

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".

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

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):

(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 LGL 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.mll/Missions/Regulatory/DelineationJDGuidance.aspx

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		Wetland ⁻	D		
ID _	ID Circular 39 Cowardin		Eggers & Reed	Dominant Vegetation	
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.

Wayne Jacobson, P.S.S., W.D.C., P.W.S., A.F.S.

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Woodland Species Noted

Trees

Eastern Cottonwood Box Fider 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

Wetland Delineation-Mitigation-Permitting-Monitoring-Banking-Functional Analysis-T & E Surveys Phase I Environmental Assessments-EAW's-Soil ID-Soil Analysis & Delineation-Environmental Referrals Pond & Lake Weed Control & Fish Stocking-Tree Surveys-Natural Resource Management Plans

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 nonwetlands, 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.

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

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(612) 802-6619 Cell

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.
- 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.

Wetland Delineation-Mitigation-Permitting-Monitoring-Banking-Functional Analysis-T & E Surveys Phase I Environmental Assessments-EAW's-Soil ID-Soil Analysis & Delineation-Environmental Referrals Pond & Lake Weed Control & Fish Stocking-Tree Surveys-Natural Resource Management Plans

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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.

Wayne Jacobson, P.S.S., W.D.C., P.W.S., A.F.S.

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(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.

10/14/2016 Date

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

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

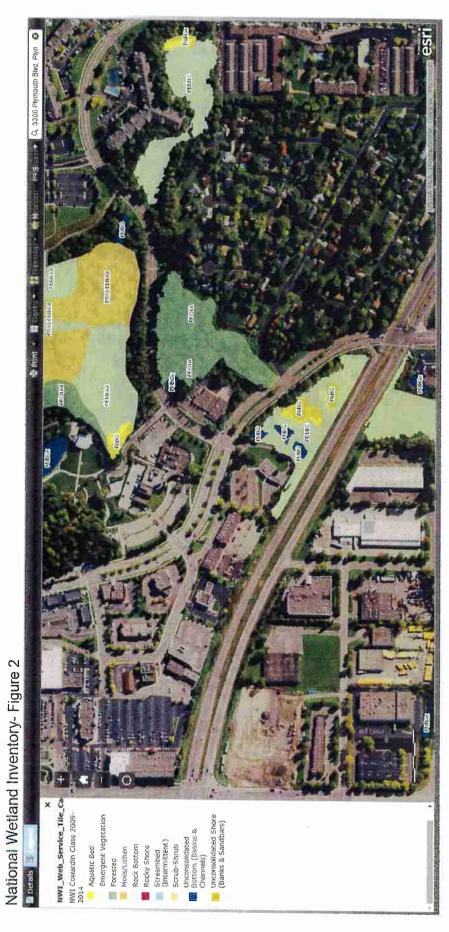
HOMESTEAD: Non-homestead MARKET VALUE: \$250,000

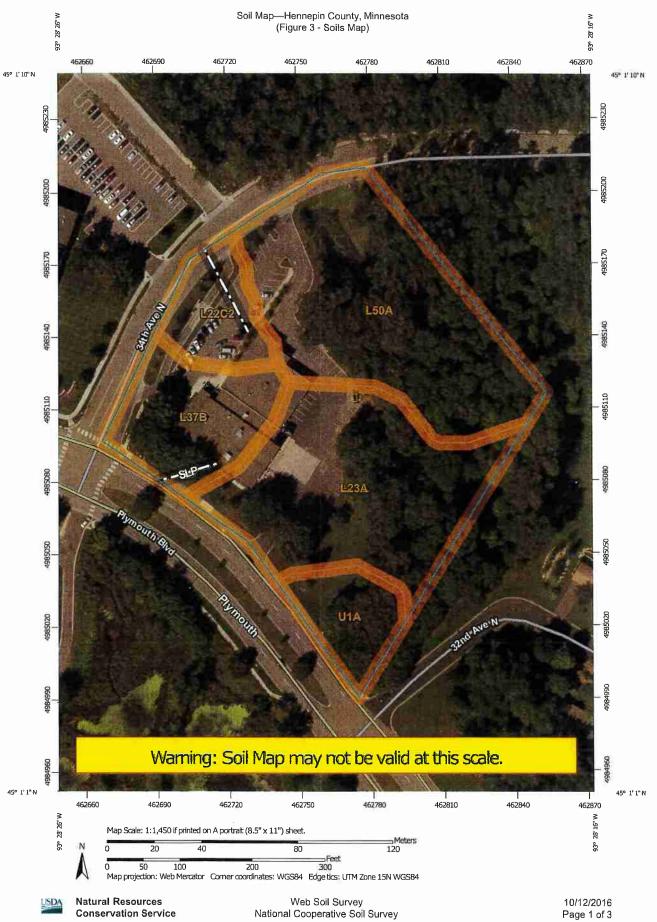
Comments:

Figure 1 - Site Location Map

This data (i) is furnished 'AS IS' with no representation as to completeness or accuracy; (ii) is furnished with no warranty of any kind; and (iii) is notsultable for legal, engineering or surveying purposes. Hennepin County shall not be liable for any damage, injury or loss resulting from this data.

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Map Unit Legend

	Hennepin County, Min	nesota (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%

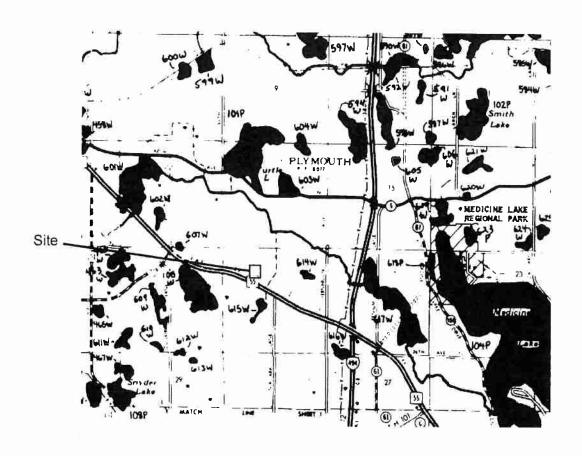


Figure 4
DNR Public Waters Inventory Map

 $\uparrow_{\mathbf{N}}$

Jacobson Environmental, PLLC

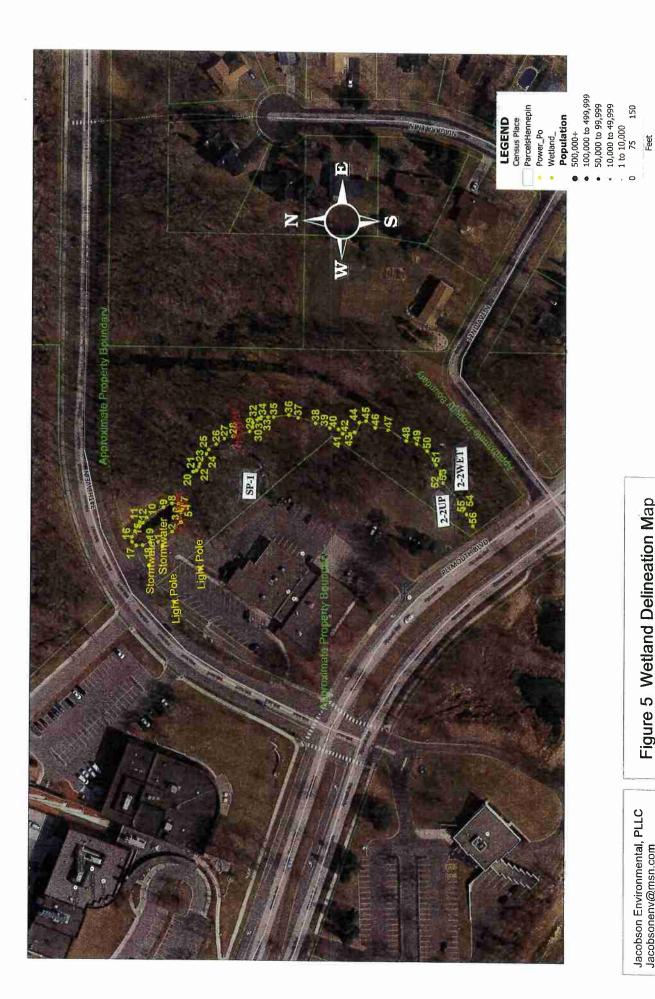
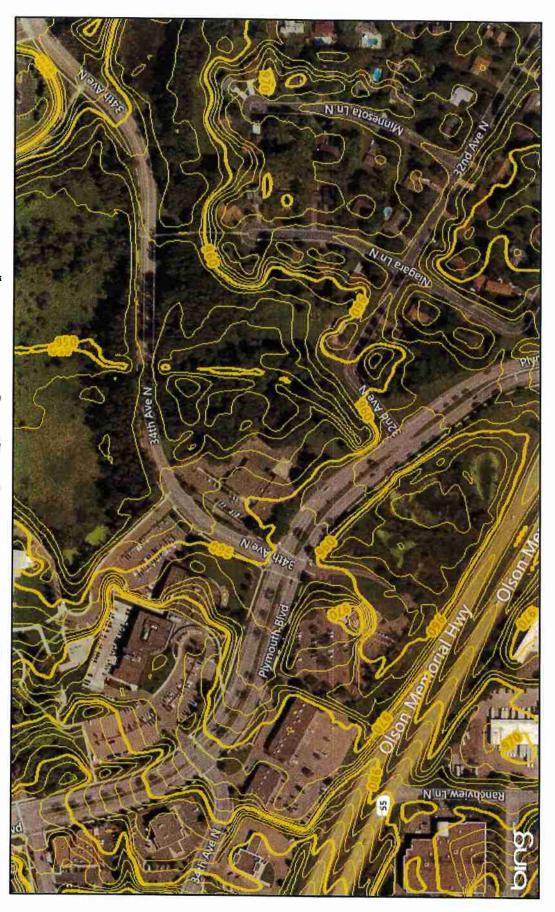


Figure 5 Wetland Delineation Map

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

Figure 6 - Topographic Map

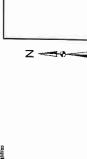


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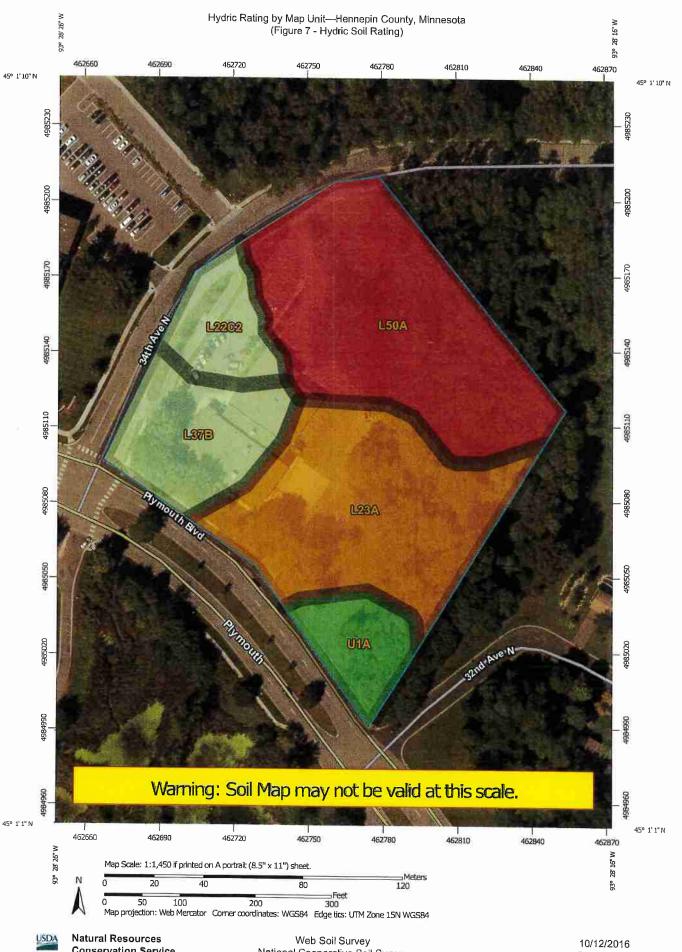
Extreme care was used during the compilation of this product. However, due to changes in ownership and the need to rely on outside information, errors or omissions may exist. If you should discover an oversight, we encourage you to let us know by calling the DNR at 1-888-646-6367 or by e-mail at info.dnr@state.mn.us,

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



Scale: 1:4,752





MAP LEGEND

Interstate Highways Aerial Photography Major Roads Local Roads **US Routes** Rails Transportation Background ŧ Not rated or not available Area of Interest (AOI) Hydric (33 to 65%) Hydric (66 to 99%) Hydric (1 to 32%) Not Hydric (0%) Hydric (100%) Soil Rating Polygons Area of Interest (AOI) Soil Rating Lines

MAP INFORMATION

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

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

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

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

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

Not rated or not available

Hydric (66 to 99%) Hydric (33 to 65%)

Hydric (100%)

Soil Rating Points

Hydric (1 to 32%)

Not Hydric (0%)

Hydric (33 to 65%)

Hydric (1 to 32%)

Not Hydric (0%)

Hydric (66 to 99%)

Hydric (100%)

} 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,

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

Not rated or not available

Streams and Canals

Water Features

Hydric Rating by Map Unit

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 Inte	rest		5.4	100.0%

APPENDIX A

Precipitation Data

Minnesota Climatology Working Group

State Climatology Office - DNR Division of Ecological and Water Resources University of Minnesota

home | current conditions | journal | past data | summaries | agriculture | other sites | contact us | search |

Precipitation Worksheet Using Gridded Database

Precipitation data for target wetland location:

county: Hennepin township name: Plymouth

township number: 118N 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)	1

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

Project/Site Islamic Community Center C	ity/County:	Plymou	th Sampling Date: 9/29/16
Applicant/Owner:	State	MN	
Investigator(s): WEJ & CMC	-		ip, Range: Sec. 21, T118N, R22W
Landform (hillslope, terrace, etc.): hillslope			ve, convex, none): convex
Slope (%): 2% Lat:	Long:		Datum:
Soil Map Unit Name Muskego and Houghton soils		JWI	Classification:
Are climatic/hydrologic conditions of the site typical for this tir	ne of the year?		If no, explain in remarks)
Are vegetation N soil N or hydrology N	· · · · · · · · · · · · · · · · · · ·	disturbed?	
Are vegetation N , soil N , or hydrology N	naturally pr		Are "normal circumstances" present? Yes
SUMMARY OF FINDINGS	- Hatarany pr	obicinatio:	(If needed, explain any answers in remarks.)
Hydrophytic vegetation present?	1		(in necessi, explain any answers in remarks.)
Hydric soil present?	Is the s	ampled are	a within a wetland?
Indicators of wetland hydrology present?		otional wetla	
Remarks: (Explain alternative procedures here or in a separa		raenai wetta	and site in.
According to three month antecedent precipitation	data, samplir	ng period v	vas considered to be wetter than normal
VEGETATION Use scientific names of plants.			
			I Danis T. (W. C.)
Absolution Tree Stratum (Plot size: 30' radius) % Cove	Apr. 10 10 10 10 10 10 10 10 10 10 10 10 10	Indicator Staus	Dominance Test Worksheet
1	Ороско	Otaus	Number of Dominant Species that are OBL, FACW, or FAC: 1 (A)
2	= (====(Total Number of Dominant
3	-		Species Across all Strata: 2 (B)
4			Percent of Dominant Species
5			that are OBL, FACW, or FAC 50.00% (A/B)
Sonling/Chruh stratus (Distrator 45)	= Total Cover		
Sapling/Shrub stratun (Plot size: 15' radius)			Prevalence Index Worksheet
2			Total % Cover of:
3			OBL species $0 \times 1 = 0$ FACW species $0 \times 2 = 0$
4			FAC species 50 x 3 = 150
5			FACU species 47 x 4 = 188
0	= Total Cover		UPL species 0 x 5 = 0
Herb stratum (Plot size: 5' radius)			Column totals 97 (A) 338 (B)
1 Poa pratensis 50	Y	FAC	Prevalence Index = B/A = 3.48
2 Glechoma hederacea 45	Υ	FACU	"
3 Cirsium arvense 2	N	FACU	Hydrophytic Vegetation Indicators:
5			Rapid test for hydrophytic vegetation
6			Dominance test is >50%
7			Prevalence index is ≤3.0*
8			Morphogical adaptations* (provide
9			supporting data in Remarks or on a separate sheet)
10	-		Problematic hydrophytic vegetation*
97	= Total Cover		(explain)
Woody vine stratum (Plot size: 30' radius)	-		*Indicators of hydric soil and wetland hydrology must be
1			present, unless disturbed or problematic
2			Hydrophytic
0	= Total Cover		vegetation present? N
Remarks: (Include photo numbers here or on a separate shee	1 \		present? N
- terrories (morage priore numbers nere of on a separate snee	ij		

~ ~	
C.1	111

1-UP

Profile Des	cription: (Desci	ribe to ti	he depth neede	to doc	ument t	he indica	ator or confirm the abs	sence of indicators)
Depth	Matrix		Red	lox Feat	ures		or committee do	Terrice of mateators.
(Inches)	Color (moist)	%	Color (moist)	%	Type*	Loc**	Texture	Remarks
0-6	10YR2/1	100					loam fill	
6-18	10YR3/1	100	7.7				loam fill	
18-24	10YR2/1	100				-		
	131112/	100		-	-		loam	+
*Type: C = 0	Concentration, D	= Deplet	ion, RM = Reduc	ed Matr	ix MS =	Masked	Sand Grains **Loc	Pation: DI = Doro Lining M = Mati
Hydric Sc	il Indicators:			od Mati	IX, 1410 -	Wasked		cation: PL = Pore Lining, M = Matrix blematic Hydric Soils:
	isol (A1)		San	dv Glevi	ed Matrix	v (S4)		Redox (A16) (LRR K, L, R)
	ic Epipedon (A2)			dy Redo		A (O-1)		S7) (LRR K, L)
	k Histic (A3)				trix (S6)		Iron-Manganes	se Masses (F12) (LRR K, L, R)
	rogen Sulfide (A	4)			ky Miner			Dark Surface (TF12)
Stra	tified Layers (A5)			ed Matri		Other (explain	
	n Muck (A10)	,			atrix (F3)		- Other (explain	in remains)
Dep	leted Below Dark	Surface			Surface			
	k Dark Surface (ark Surfa		*Indicators of hyd	drophytic vegetation and weltand
San	dy Mucky Minera	I (S1)			essions			be present, unless disturbed or
5 cm	n Mucky Peat or	Peat (S3		•		7	nyaralogy maar	problematic
Restrictive	Layer (if observ	ed).						
Туре:		ouj.					Hudria poil press	-42 N
Depth (inche	es):	-			e e		Hydric soil prese	ent? N
					0			
Remarks:								
T T								
								i i
HYDROLO	GY				-			
	drology Indicate	NE.						
				. 11. 115				
		or one is	required; check					dicators (minimum of two required)
	Nater (A1) ter Table (A2)				Fauna (B	,		e Soil Cracks (B6)
Saturatio						nts (B14)		ge Patterns (B10)
Water Ma						Odor (C		ason Water Table (C2)
	t Deposits (B2)			Oxidized Roots (C		heres on		h Burrows (C8)
	osits (B3)					uced Iron	(C4) Stunton	tion Visible on Aerial Imagery (C9)
	t or Crust (B4)							d or Stressed Plants (D1) orphic Position (D2)
Iron Dep				(C6)	ron redu	iction in i		eutral Test (D5)
Inundation	n Visible on Aeria	Ilmagen			ck Surfac	e (C7)		Sulfai Test (D0)
Sparsely	Vegetated Conca	ve Surfa			r Well Da			
Water-St	ained Leaves (B9)		_		Remarks)	1
Field Obser		-		.77	_			- 191-191-191-191-191-191-191-191-191-19
Surface water	r present?	Yes	No	Х	Depth (i	nches):		
Water table p		Yes	No		Depth (ii		>24 Ir	idicators of wetland
Saturation pr		Yes	No		Depth (ii			nydrology present? N
(includes cap						i le		
Describe rec	orded data (strea	ım gauge	e, monitoring wel	, aerial	photos, r	previous	inspections), if available	9'
			-				. ,,	
Dam-d.								
Remarks:								

Project/Site Islamic Community Center	City/Co	unty:	Plymou	h Sampling Date: 9/29/16	
Applicant/Owner:		State:	MN		
Investigator(s): WEJ & CMC		Sectio	n, Townshi	p, Range: Sec. 21, T118N, R22W	
Landform (hillslope, terrace, etc.): depression	n	Local re	lief (concav	ve, convex, none): concave	
Slope (%): 2% Lat:	L	.ong:		Datum:	
Soil Map Unit Name Muskego and Houghton soils		7	١W١	Classification: PUBH	
Are climatic/hydrologic conditions of the site typical for thi	is time of t	he year?		If no, explain in remarks)	
Are vegetation N , soil N , or hydrology	N si	ignificantly		Are "normal circumstances"	
Are vegetation N , soil N , or hydrology	_	aturally pro		present? Ye	es
SUMMARY OF FINDINGS		• •		(If needed, explain any answers in rema	
Hydrophytic vegetation present?					
Hydric soil present?		Is the sa	mpled are	a within a wetland?	
Indicators of wetland hydrology present?			ional wetlar		
Remarks: (Explain alternative procedures here or in a sep	arata ran				
		•			
According to three month antecedent precipital	tion data	, sampling	g period v	as considered to be wetter than nor	mal
VEGETATION Use scientific names of plants.	_				
	solute D		In all a sale	Dominance Test Worksheet	_
I was a first that the second of the second	_	ominant Species	Indicator Staus	Number of Dominant Species	
1				that are OBL, FACW, or FAC: 2	(A)
2			-	Total Number of Dominant	. (,)
3				Species Across all Strata: 2	(B)
4				Percent of Dominant Species	
5				that are OBL, FACW, or FAC: 100.00%	(A/B)
[(a-1)	0 = T	otal Cover			
Sapling/Shrub stratun (Plot size: 15' radius)				Prevalence Index Worksheet	
2				Total % Cover of: OBL species 50 x 1 = 50	
3				OBL species 50 x 1 = 50 FACW species 45 x 2 = 90	e (
4				FAC species 0 x3 = 0	ę
5				FACU species 0 x4 = 0	60
1	0 = To	otal Cover		UPL species 0 x 5 = 0	D)
Herb stratum (Plot size: 5' radius)				Column totals 95 (A) 140	(B)
1 Impatiens capensis	45	Y	FACW	Prevalence Index = B/A = 1.47	Ballion.
	35	Y	OBL		2
3 Lemna minor	15	N	OBL	Hydrophytic Vegetation Indicators:	
5				Rapid test for hydrophytic vegetatio	n
6				X Dominance test is >50% X Prevalence index is ≤3.0*	
7			-	_	
8	-	-		Morphogical adaptations* (provide supporting data in Remarks or on a	
9				separate sheet)	
10				Problematic hydrophytic vegetation*	*
	95 = To	otal Cover		(explain)	
Woody vine stratum (Plot size: 30' radius)				*Indicators of hydric soil and wetland hydrology	must be
1				present, unless disturbed or problematic	
2				Hydrophytic	
	0 = To	otal Cover		vegetation present?	
Remarks: (Include photo numbers here or on a separate s	heet\			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	1
The service of the separate s	nieci)				

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3	U	1	L

1-WET

	Matrix				lox Feat		in mulci	TO OF COUNTY	Talle abser	nce of indicators.)
(Inches)	Color (moist)	%	Color (m		%	Type*	Loc**	Textu	re	Remarks
0-4	10YR2/1	100				T		loam		
4-14	10YR4/2	98	7.5YR	4/6	2	С	PL	sandy clay k	nam	
14-24	10YR4/1	100						sandy clay is		
								sandy clay n	Jain	119
Type: C =	L Concentration, D	= Deplet	l tion, RM =	Reduc	ed Matr	ix, MS =	Masked	Sand Grains.	**Locat	ion: PL = Pore Lining, M = Ma
Hydric So	oil Indicators:								for Proble	ematic Hydric Soils:
	tisol (A1)		_			ed Matrix	(S4)	Coast	Prairie Red	dox (A16) (LRR K, L, R)
	tic Epipedon (A2)				dy Redo			— Dark	Surface (S7) (LRR K, L)
	ck Histic (A3)		_			trix (S6)				Masses (F12) (LRR K, L, R)
	drogen Sulfide (A				-	ky Miner	. ,			k Surface (TF12)
	atified Layers (A5)	_			ed Matri		Other	(explain in	remarks)
	m Muck (A10) pleted Below Dark	Curton	- (0.14) -			atrix (F3)				
	ck Dark Surface (= (A11) —	_		Surface				
	ndy Mucky Minera	,				ark Surfa				phytic vegetation and weltand
	n Mucky Peat or		2)	_ Kea	юх Берг	essions	(F8)	hydrolo		present, unless disturbed or
										problematic
estrictive /pe:	Layer (If observ	ea):								
								Hydric s	oil present	:? Y
epth (inche	es):									
	es):			.==			13-			·
emarks:	2									
emarks:	DGY	ors.	=							
emarks: IYDROLO Vetland Hy	DGY drology Indicate		s required:	check	all that	annly)		Seen	pdop. Jpdi	
YDROLO	DGY drology Indicato cators (minimum		s required;			100000000000000000000000000000000000000	13)	Seco		
YDROLO Vetland Hy rimary Indi C Surface	DGY drology Indicato cators (minimum Water (A1)		s required;		Aquatic I	Fauna (B	,	Seco	_Surface S	oil Cracks (B6)
YDROLO Vetland Hyrimary India C Surface C High Wa	OGY drology Indicato cators (minimum Water (A1) iter Table (A2)		s required;		Aquatic I True Aqı	Fauna (B uatic Plar	nts (B14)	-	Surface S Drainage	oil Cracks (B6) Patterns (B10)
YDROLO Vetland Hy Timary Indi Surface High Wa Saturatio Water M	DGY drology Indicate cators (minimum Water (A1) iter Table (A2) on (A3) arks (B1)		s required;	_	Aquatic I True Aqı Hydroge	Fauna (B uatic Plar n Sulfide	nts (B14) Odor (C	1)	Surface S Drainage Dry-Seas	ioil Cracks (B6) Patterns (B10) on Water Table (C2)
YDROLO Vetland Hy Timary Indi Surface High Wa Saturatio Water M Sedimer	DGY drology Indicate cators (minimum Water (A1) ter Table (A2) on (A3) arks (B1) at Deposits (B2)		s required;	_	Aquatic I True Aqı Hydroge	Fauna (B uatic Plar n Sulfide l Rhizosp	nts (B14) Odor (C	1)	Surface S Drainage Dry-Seas Crayfish 6	ioil Cracks (B6) Patterns (B10) on Water Table (C2) Burrows (C8)
YDROLO /etland Hy rimary Indi < Surface < High Wa < Saturatio Water M Sedimer Drift Dep	DGY drology Indicate cators (minimum Water (A1) ter Table (A2) on (A3) arks (B1) at Deposits (B2) posits (B3)		s required;		Aquatic I True Aqu Hydroge Oxidized Roots (C	Fauna (B uatic Plar n Sulfide l Rhizosp	nts (B14) Odor (C heres on	1) Living	Surface S Drainage Dry-Seas Crayfish 6 Saturation	ioil Cracks (B6) Patterns (B10) on Water Table (C2) Burrows (C8)
YDROLO /etland Hy rimary Indi < Surface < High Wa < Saturatio Water M Sedimer Drift Dep Algal Ma	DGY drology Indicato cators (minimum Water (A1) ter Table (A2) on (A3) arks (B1) at Deposits (B2) posits (B3) t or Crust (B4)		s required;		Aquatic I True Aqu Hydroge Oxidized Roots (C Presence Recent I	Fauna (Buatic Plar In Sulfide I Rhizosp (3) e of Redu	nts (B14) Odor (C heres on uced Iron	1) Living	Surface S Drainage Dry-Seas Crayfish 6 Saturation Stunted o	oil Cracks (B6) Patterns (B10) on Water Table (C2) Burrows (C8) n Visible on Aerial Imagery (C9)
YDROLO /etland Hy rimary Indi K Surface K High Wa K Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep	DGY drology Indicato cators (minimum Water (A1) tter Table (A2) on (A3) arks (B1) at Deposits (B2) osits (B3) t or Crust (B4) osits (B5)	of one is			Aquatic I True Aqu Hydroge Oxidized Roots (C Presence Recent I (C6)	Fauna (B uatic Plar n Sulfide I Rhizosp (3) e of Redu ron Redu	nts (B14) Odor (C heres on uced Iron action in T	1)	Surface S Drainage Dry-Seas Crayfish I Saturation Stunted of Geomorp	oil Cracks (B6) Patterns (B10) on Water Table (C2) Burrows (C8) n Visible on Aerial Imagery (C9) r Stressed Plants (D1)
YDROLO /etland Hy rimary Indi < Surface < High Wa < Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Inundation	drology Indicator cators (minimum Water (A1) iter Table (A2) on (A3) arks (B1) it Deposits (B2) it or Crust (B4) osits (B5) on Visible on Aeria	of one is	y (B7)		Aquatic I True Aqu Hydroge Oxidized Roots (C Presence Recent I (C6)	Fauna (B uatic Plar in Sulfide I Rhizosp (3) e of Redu ron Redu	nts (B14) Odor (Contents on the second contents on the second conten	1)	Surface S Drainage Dry-Seas Crayfish I Saturation Stunted of Geomorp	oil Cracks (B6) Patterns (B10) on Water Table (C2) Burrows (C8) n Visible on Aerial Imagery (C9) r Stressed Plants (D1) hic Position (D2)
YDROLO /etland Hy /mary Indi Surface High Wa Saturation Water M Sedimer Drift Dep Algal Ma Iron Dep Inundation Sparsely	DGY drology Indicator cators (minimum Water (A1) arer Table (A2) on (A3) arks (B1) at Deposits (B2) oosits (B3) t or Crust (B4) oosits (B5) on Visible on Aeria Vegetated Conca	of one is	y (B7)		Aquatic I True Aqu Hydroge Oxidized Roots (C Presenc Recent I (C6) Thin Mud Gauge o	Fauna (B uatic Plar n Sulfide I Rhizosp 3) e of Redu ron Redu ck Surfac or Well Da	ots (B14) Odor (Cinheres on suced Iron section in The (C7)	Living (C4) —	Surface S Drainage Dry-Seas Crayfish I Saturation Stunted of Geomorp	oil Cracks (B6) Patterns (B10) on Water Table (C2) Burrows (C8) n Visible on Aerial Imagery (C9) r Stressed Plants (D1) hic Position (D2)
YDROLO /etland Hy rimary Indi Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Inundatio Sparsely Water-Si	DGY drology Indicate cators (minimum Water (A1) ther Table (A2) on (A3) arks (B1) at Deposits (B2) posits (B3) t or Crust (B4) osits (B5) on Visible on Aeria Vegetated Conca	of one is	y (B7)		Aquatic I True Aqu Hydroge Oxidized Roots (C Presenc Recent I (C6) Thin Mud Gauge o	Fauna (B uatic Plar in Sulfide I Rhizosp (3) e of Redu ron Redu	ots (B14) Odor (Cinheres on suced Iron section in The (C7)	Living (C4) —	Surface S Drainage Dry-Seas Crayfish I Saturation Stunted of Geomorp	oil Cracks (B6) Patterns (B10) on Water Table (C2) Burrows (C8) n Visible on Aerial Imagery (C9) r Stressed Plants (D1) hic Position (D2)
YDROLO /etland Hy rimary Indi Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Inundatio Sparsely Water-Si eld Obser	drology Indicated cators (minimum Water (A1) of the Table (A2) on (A3) arks (B1) of the Deposits (B2) of the Crust (B4) of the Crust (B4) of the Crust (B5) on Visible on Aerial Vegetated Concatained Leaves (B9) vations:	of one is al Imager ave Surfa)	y (B7) ce (B8)		Aquatic I True Aqu Hydroge Oxidized Roots (C Presenc Recent I (C6) Thin Mud Gauge o	Fauna (Buatic Plar n Sulfide I Rhizosp 33) e of Redu ron Redu ck Surfac xplain in	nts (B14) Odor (C'heres on uced Iron uction in T e (C7) ata (D9) Remarks	1) Living (C4) Tilled Soils	Surface S Drainage Dry-Seas Crayfish I Saturation Stunted of Geomorp	oil Cracks (B6) Patterns (B10) on Water Table (C2) Burrows (C8) n Visible on Aerial Imagery (C9) r Stressed Plants (D1) hic Position (D2)
IYDROLO Vetland Hy rimary Indi X Surface X High Wa X Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Inundatio Sparsely Water-Si ield Obser urface wate	drology Indicate cators (minimum Water (A1) ther Table (A2) on (A3) arks (B1) at Deposits (B2) cosits (B3) therefore (B4) cosits (B5) on Visible on Aeria Vegetated Concatained Leaves (B9) vations: er present?	of one is	y (B7) ce (B8)	No	Aquatic I True Aqu Hydroge Oxidized Roots (C Presence Recent I (C6) Thin Muc Gauge o Other (E	Fauna (Buatic Plar in Sulfide I Rhizosp 33) e of Redu ron Redu ck Surfac or Well Da xplain in	nts (B14) Odor (C'heres on uced Iron uction in T e (C7) ata (D9) Remarks	1) Living (C4) Tilled Soils	Surface S Drainage Dry-Seas Crayfish I Saturatior Stunted o Geomorp FAC-Neur	Patterns (B10) on Water Table (C2) Burrows (C8) n Visible on Aerial Imagery (C9) r Stressed Plants (D1) hic Position (D2) tral Test (D5)
IYDROLO /etland Hy rimary Indi X Surface X High Wa X Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Inundatio Sparsely Water-Si ield Obser urface wate /ater table	drology Indicate cators (minimum Water (A1) ther Table (A2) on (A3) arks (B1) at Deposits (B2) cosits (B3) the Crust (B4) cosits (B5) on Visible on Aeria Vegetated Concatained Leaves (B9) vations: er present?	of one is	y (B7) ce (B8)	No No	Aquatic I True Aqu Hydroge Oxidized Roots (C Presence Recent I (C6) Thin Muc Gauge o Other (E	Fauna (Buatic Plar in Sulfide I Rhizosp 33) e of Redu ron Redu ck Surfac ir Well Da xplain in Depth (ii	nts (B14) Odor (C'heres on uced Iron uced Iron uction in T e (C7) ata (D9) Remarks nches):	1) Living (C4) Tilled Soils 2 surface	Surface S Drainage Dry-Seas Crayfish 6 Saturation Stunted o Geomorp FAC-Neur	coil Cracks (B6) Patterns (B10) On Water Table (C2) Burrows (C8) In Visible on Aerial Imagery (C9) In Stressed Plants (D1) In Position (D2) Itral Test (D5)
rimary Indi X Surface X High Wa X Saturatic Water M Sedimer Drift Dep Algal Ma Iron Dep Inundatic Sparsely Water-Si leld Obser urface wate /ater table aturation pi	drology Indicate cators (minimum Water (A1) ther Table (A2) on (A3) arks (B1) at Deposits (B2) cosits (B3) the Crust (B4) cosits (B5) on Visible on Aeria Vegetated Concatained Leaves (B9) vations: er present?	of one is	y (B7) ce (B8)	No	Aquatic I True Aqu Hydroge Oxidized Roots (C Presence Recent I (C6) Thin Muc Gauge o Other (E	Fauna (Buatic Plar in Sulfide I Rhizosp 33) e of Redu ron Redu ck Surfac or Well Da xplain in	nts (B14) Odor (C'heres on uced Iron uced Iron uction in T e (C7) ata (D9) Remarks nches):	1) Living (C4) Tilled Soils	Surface S Drainage Dry-Seas Crayfish 6 Saturation Stunted o Geomorp FAC-Neur	ioil Cracks (B6) Patterns (B10) On Water Table (C2) Burrows (C8) In Visible on Aerial Imagery (C9) In Stressed Plants (D1) In Position (D2) Itral Test (D5)
IYDROLO /etland Hy rimary Indi K Surface High Water M Sedimer Drift Dep Algal Ma Iron Dep Inundatio Sparsely Water-Si reld Obser urface water /ater table aturation pincludes cap	DGY drology Indicate cators (minimum Water (A1) ter Table (A2) on (A3) arks (B1) at Deposits (B3) tor Crust (B4) osits (B5) on Visible on Aeria Vegetated Concatained Leaves (B9 vations: er present? present? present?	of one is Il Imager Ive Surfa Yes Yes Yes	y (B7) ce (B8) X X X	Z0 Z	Aquatic I True Aqu Hydroge Oxidized Roots (C Presence Recent I (C6) Thin Muc Gauge o Other (E	Fauna (Buatic Plar in Sulfide I Rhizosp 33) e of Redu ron Redu ck Surfac ir Well Da xplain in Depth (ii Depth (ii	nts (B14) Odor (C'heres on uced Iron uced Iron uction in T e (C7) ata (D9) Remarks nches): nches):	1) Living (C4) Tilled Soils 2 Surface surface	Surface S Drainage Dry-Seas Crayfish E Saturation Stunted of Geomorp FAC-Neur	coil Cracks (B6) Patterns (B10) On Water Table (C2) Burrows (C8) In Visible on Aerial Imagery (C9 In Stressed Plants (D1) In Position (D2) Itral Test (D5)
YDROLO Tetland Hy Tmary Indi Surface High Water M Sedimer Drift Dep Algal Ma Iron Dep Inundatio Sparsely Water-Si eld Obser urface wate ater table aturation picludes cap	drology Indicate cators (minimum Water (A1) of the Table (A2) on (A3) arks (B1) of the Table (B4) osits (B3) of the Table on Aeria Vegetated Concatained Leaves (B9) vations: present?	of one is Il Imager Ive Surfa Yes Yes Yes	y (B7) ce (B8) X X X	Z0 Z	Aquatic I True Aqu Hydroge Oxidized Roots (C Presence Recent I (C6) Thin Muc Gauge o Other (E	Fauna (Buatic Plar in Sulfide I Rhizosp 33) e of Redu ron Redu ck Surfac ir Well Da xplain in Depth (ii Depth (ii	nts (B14) Odor (C'heres on uced Iron uced Iron uction in T e (C7) ata (D9) Remarks nches): nches):	1) Living (C4) Tilled Soils 2 Surface surface	Surface S Drainage Dry-Seas Crayfish E Saturation Stunted of Geomorp FAC-Neur	coil Cracks (B6) Patterns (B10) On Water Table (C2) Gurrows (C8) In Visible on Aerial Imagery (C9 In Stressed Plants (D1) In Position (D2) Itral Test (D5)
YDROLO Vetland Hy Mary Indi C Surface C High Wat C Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Inundatio Sparsely Water-Si eld Obser urface wate aturation procludes cap	DGY drology Indicate cators (minimum Water (A1) ter Table (A2) on (A3) arks (B1) at Deposits (B3) tor Crust (B4) osits (B5) on Visible on Aeria Vegetated Concatained Leaves (B9 vations: er present? present? present?	of one is Il Imager Ive Surfa Yes Yes Yes	y (B7) ce (B8) X X X	Z0 Z	Aquatic I True Aqu Hydroge Oxidized Roots (C Presence Recent I (C6) Thin Muc Gauge o Other (E	Fauna (Buatic Plar in Sulfide I Rhizosp 33) e of Redu ron Redu ck Surfac ir Well Da xplain in Depth (ii Depth (ii	nts (B14) Odor (C'heres on uced Iron uced Iron uction in T e (C7) ata (D9) Remarks nches): nches):	1) Living (C4) Tilled Soils 2 Surface surface	Surface S Drainage Dry-Seas Crayfish E Saturation Stunted of Geomorp FAC-Neur	coil Cracks (B6) Patterns (B10) On Water Table (C2) Gurrows (C8) In Visible on Aerial Imagery (C9 In Stressed Plants (D1) In Position (D2) Itral Test (D5)

Project/Site Islamic Community Center	City/	County:	Plymout	th Sampling Date: 9/29/16
Applicant/Owner:		State:	MN	
Investigator(s): WEJ & CMC		Secti	on, Townshi	
Landform (hillslope, terrace, etc.): hillslo	pe			/e, convex, none): convex
Slope (%): 2% Lat:		Long:	·	Datum:
Soil Map Unit Name Muskego and Houghton soils			4WI	Classification:
Are climatic/hydrologic conditions of the site typical for	r this time	of the year?	N (If no, explain in remarks)
Are vegetation N soil N , or hydrolo		significantly		· · · · · · · · · · · · · · · · · · ·
Are vegetation N , soil N , or hydrolo		naturally pro		Are "normal circumstances" present? Yes
SUMMARY OF FINDINGS	·	, , , ,		(If needed, explain any answers in remarks.)
Hydrophytic vegetation present? Y				(in needed, explain any anowers in remarks.)
Hydric soil present?		Is the s	ampled are:	a within a wetland?
Indicators of wetland hydrology present?			tional wetlar	
			tional frontial	id dito ib.
Remarks: (Explain alternative procedures here or in a	separate i	eport.)		
According to three month antecedent precip	itation da	ata, samplir	ng period v	vas considered to be wetter than normal
VEGETATION Use scientific names of plant	7.5			
I = 0, 1 = 1 = 1 = 1 = 1 = 1 = 1 = 1 = 1 = 1	Absolute % Cover	Dominant Species	Indicator	Dominance Test Worksheet
1 Acer negundo	60	Y	Staus FAC	Number of Dominant Species that are OBL, FACW, or FAC: 2 (A)
2 Fraxinus pennsylvanica	5	N	FACW	
3		=		Total Number of Dominant Species Across all Strata; 3 (B)
4		***************************************		Percent of Dominant Species
5				that are OBL, FACW, or FAC: 66.67% (A/B)
	65	= Total Cover		
Sapling/Shrub stratur (Plot size: 15' radius)				Prevalence Index Worksheet
1 Rhamnus cathartica	20	Y	FAC	Total % Cover of
2				OBL species 0 x 1 = 0
3				FACW species 5 x 2 = 10
5				FAC species 90 x 3 = 270 FACU species 75 x 4 = 300
	20	= Total Cover		FACU species 75 x 4 = 300 UPL species 0 x 5 = 0
Herb stratum (Plot size: 5' radius)		10101 00101		Column totals 170 (A) 580 (B)
1 Ageratina altissima	70	Υ	FACU	Prevalence Index = B/A = 3,41
2 Viola sororia	5		FAC	Trovalence mack - B/A = 3,41
3 Galium boreale	5	N	FAC	Hydrophytic Vegetation Indicators:
4 Arctium minus	5	N	FACU	Rapid test for hydrophytic vegetation
5				X Dominance test is >50%
6				Prevalence index is ≤3.0*
8				Morphogical adaptations* (provide
9				supporting data in Remarks or on a
10				separate sheet)
-	85	Total Cover		Problematic hydrophytic vegetation* (explain)
Woody vine stratum (Plot size: 30' radius)		1010100001		
1				*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic
2				Hydrophytic
	0	Total Cover		vegetation
				present? Y
Remarks: (Include photo numbers here or on a separa	te sheet)			

2-1 UP

Depth	Matrix					TIC TITATO	ator or confirm t	The state of meloatoron
(Inches)	Color (moist)	%	Color (moist)	lox Feat %	<u>ures</u> Type*	Loc**	Texture	Demonto
0-12	10YR2/1	100	Color (moist)	70	Туре	Loc		Remarks
12-24	10YR4/1	98	7 5VD4/6		-	- DI	loam	
12-24	101114/1	90	7.5YR4/6	2	С	PL	clay loam	
					-			
							4	
ype: C = 0	Concentration, D	= Deple	tion, RM = Reduc	ed Matr	ix, MS =	Masked	Sand Grains.	**Location: PL = Pore Lining, M = Ma
Hydric So	oil Indicators:							or Problematic Hydric Soils:
	tisol (A1)				ed Matrix	x (S4)		rairie Redox (A16) (LRR K, L, R)
	tic Epipedon (A2)			dy Red				rface (S7) (LRR K, L)
	ck Histic (A3)	4			atrix (S6)			nganese Masses (F12) (LRR K, L, R)
	Irogen Sulfide (A	,			ky Miner			allow Dark Surface (TF12)
	atified Layers (A5 m Muck (A10)	,			ed Matri		Other (e	xplain in remarks)
	eleted Below Dark	c Surface			atrix (F3) : Surface			
	ck Dark Surface (ark Surfa		*Indiantors	of hydrophysic constation and the second
	idy Mucky Minera				ressions		hydrology	of hydrophytic vegetation and weltand must be present, unless disturbed or
	m Mucky Peat or					()	11, 6, 6, 6, 6	problematic
estrictive	Layer (if observ	ed):			-			
pe:							Hydric soi	present? Y
epth (inche	es):		N. C.		-		Hydric soi	present? Y
epth (inche	es):				<u>-</u>		Hydric soi	present? Y
epth (inche	DGY				-		Hydric soi	present? Y
epth (inche emarks: YDROLO etland Hy	DGY drology Indicato				-		Hydric soi	present? Y
epth (inche emarks: YDROLO etland Hy rimary Indi	DGY drology Indicato cators (minimum		s required; check				Second	lary Indicators (minimum of two require
YDROLO etland Hy imary Indi Surface	DGY drology Indicato cators (minimum Water (A1)			Aquatic	Fauna (B		Second	lary Indicators (minimum of two require Surface Soil Cracks (B6)
YDROLO etland Hy imary Indi Surface High Wa	DGY drology Indicato cators (minimum Water (A1) ter Table (A2)		_	Aquatic True Aq	Fauna (B uatic Plar	nts (B14)	Second	lary Indicators (minimum of two require Surface Soil Cracks (B6) Drainage Patterns (B10)
YDROLO etland Hy imary Indi Surface High Wa Saturatio	DGY drology Indicato cators (minimum Water (A1) ter Table (A2)		_	Aquatic True Aq Hydroge	Fauna (B uatic Plar en Sulfide	nts (B14) Odor (C	Second ——	lary Indicators (minimum of two require Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2)
YDROLO etland Hy imary Indi Surface High Wa Saturatic Water M	DGY drology Indicato cators (minimum Water (A1) ter Table (A2) on (A3)		=	Aquatic True Aq Hydroge	Fauna (B uatic Plar en Sulfide d Rhizosp	nts (B14) Odor (C	Second —— 1) —— Living	lary Indicators (minimum of two require Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8)
YDROLO etland Hy imary Indi Surface High Wa Saturatio Water M Sedimer Drift Dep	DGY drology Indicato cators (minimum Water (A1) ter Table (A2) on (A3) arks (B1) at Deposits (B2) posits (B3)		Ξ	Aquatic True Aq Hydroge Oxidized Roots ((Fauna (B uatic Plar en Sulfide d Rhizosp	nts (B14) Odor (Conheres on	Second	lary Indicators (minimum of two require Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9)
YDROLO etland Hy imary Indi Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma	drology Indicators (minimum Water (A1) of the Table (A2) on (A3) arks (B1) of the Table (B2) on (B3) of the Table (B4) of the Table (B4)			Aquatic True Aq Hydroge Oxidized Roots (C Presenc Recent	Fauna (B uatic Plar en Sulfide d Rhizosp C3) e of Redu	nts (B14) Odor (Control Otheres on	Second 1) Living	lary Indicators (minimum of two require Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8)
YDROLO etland Hy imary Indi Surface High Wa Saturatic Water M Sedimer Drift Dep Algal Ma Iron Dep	drology Indicato cators (minimum Water (A1) ter Table (A2) on (A3) arks (B1) at Deposits (B2) posits (B3) t or Crust (B4) osits (B5)	of one is	=	Aquatic True Aq Hydroge Oxidized Roots (C Presend Recent (C6)	Fauna (B uatic Plar en Sulfide d Rhizosp C3) ee of Redu Iron Redu	nts (B14) Odor (Control of the control of the contr	Second 1)	lary Indicators (minimum of two require 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)
YDROLO etland Hy imary Indi Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Inundatio	drology Indicator cators (minimum Water (A1) ter Table (A2) on (A3) arks (B1) at Deposits (B2) posits (B3) t or Crust (B4) osits (B5) on Visible on Aeria	of one is	y (B7)	Aquatic True Aq Hydroge Oxidized Roots (C Presend Recent (C6) Thin Mu	Fauna (B uatic Plar en Sulfide d Rhizosp C3) ee of Redu Iron Redu	nts (B14) Odor (Coheres on uced Iron action in Total	Second 1)	lary Indicators (minimum of two require 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)
YDROLO etland Hy imary Indi Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Inundatio Sparsely	drology Indicators (minimum Water (A1) of the Table (A2) on (A3) of the Table (B4) o	of one is al Imager ave Surfa	y (B7) ————————————————————————————————————	Aquatic True Aq Hydroge Oxidized Roots (C Presend Recent (C6) Thin Mu Gauge (C	Fauna (B uatic Plar en Sulfide d Rhizosp C3) ee of Redu Iron Redu ck Surfac or Well Da	nts (B14) Odor (Croheres on uced Iron uction in The (C7) ata (D9)	Second	lary Indicators (minimum of two require 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)
YDROLO Yetland Hy Yimary Indi Surface High Wa Saturatic Water M Sedimer Drift Dep Algal Ma Iron Dep Inundatic Sparsely Water-S	drology Indicators (minimum Water (A1) of the Table (A2) on (A3) of the Table (B2) of the Table (B4) o	of one is al Imager ave Surfa	y (B7) ————————————————————————————————————	Aquatic True Aq Hydroge Oxidized Roots (C Presend Recent (C6) Thin Mu Gauge (C	Fauna (B uatic Plar en Sulfide d Rhizosp C3) ee of Redu Iron Redu	nts (B14) Odor (Croheres on uced Iron uction in The (C7) ata (D9)	Second	lary Indicators (minimum of two require 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)
YDROLO etland Hy imary Indi Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Inundatio Sparsely Water-Sield Obser	drology Indicators (minimum Water (A1) of the Table (A2) on (A3) of the Table (B2) of the Table (B4) o	of one is al Imager ave Surfa	y (B7) ————————————————————————————————————	Aquatic True Aq Hydroge Oxidized Roots (C Presend Recent (C6) Thin Mu Gauge (C	Fauna (B uatic Plar en Sulfide d Rhizosp C3) ee of Redu Iron Redu ck Surfac or Well Da explain in	nts (B14) Odor (Coheres on uced Iron uction in Tale (C7) ata (D9) Remarks	Second	lary Indicators (minimum of two require 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)
YDROLO Yetland Hy Ymary Indi Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Inundatio Sparsely Water-Si eld Obser urface water	drology Indicate cators (minimum Water (A1) ther Table (A2) on (A3) arks (B1) arks (B1) to Crust (B4) cosits (B5) on Visible on Aeria Vegetated Concatained Leaves (B9 vations: er present?	of one is al Imager ave Surfa)	y (B7) loce (B8) No No No	Aquatic True Aq Hydroge Oxidized Roots (C Presenc Recent (C6) Thin Mu Gauge (Other (E	Fauna (B uatic Plar en Sulfide d Rhizosp C3) ee of Redu Iron Redu ck Surfac or Well Da	nts (B14) dor (Control of the control of the contro	Second	lary Indicators (minimum of two require 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)
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rimary Indi Surface High Wal Saturatic Water M Sedimer Drift Dep Algal Mal Iron Dep Inundatic Sparsely Water-S eld Obser urface wate fater table aturation p	drology Indicate cators (minimum Water (A1) ther Table (A2) on (A3) arks (B1) arks (B3) to Crust (B4) cosits (B5) to Crust (B4) cosits (B5) vegetated Concatained Leaves (B9 vations: present? present? present?	al Imager ave Surfa) Yes Yes	y (B7) ce (B8) No X No X No	Aquatic True Aq Hydroge Oxidized Roots (C Presenc Recent (C6) Thin Mu Gauge C Other (E	Fauna (B uatic Plar en Sulfide d Rhizosp C3) ee of Redu Iron Redu ck Surfac or Well Da explain in Depth (i Depth (i	nts (B14) dor (Conheres on uced from uction in 1 at a (D9) Remarks nches): nches):	Second 1) Living (C4) Filled Soils 20 14	lary Indicators (minimum of two require 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) Indicators of wetland hydrology present?
YDROLO etland Hy imary Indi Surface High Wa Saturatio Water M Sedimer Drift Dep Inundatic Sparsely Water-S eld Obser urface wate ater table aturation p cludes ca	drology Indicate cators (minimum Water (A1) ther Table (A2) on (A3) arks (B1) arks (B3) to Crust (B4) cosits (B5) to Crust (B4) cosits (B5) vegetated Concatained Leaves (B9 vations: present? present? present?	al Imager ave Surfa) Yes Yes	y (B7) loce (B8) No No No	Aquatic True Aq Hydroge Oxidized Roots (C Presenc Recent (C6) Thin Mu Gauge C Other (E	Fauna (B uatic Plar en Sulfide d Rhizosp C3) ee of Redu Iron Redu ck Surfac or Well Da explain in Depth (i Depth (i	nts (B14) dor (Conheres on uced from uction in 1 at a (D9) Remarks nches): nches):	Second 1) Living (C4) Filled Soils 20 14	lary Indicators (minimum of two require 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) Indicators of wetland hydrology present?
YDROLO etland Hy imary Indi Surface High Wa Saturatio Water M Sedimer Drift Dep Inundatic Sparsely Water-S eld Obser urface wate ater table aturation p cludes ca	drology Indicate cators (minimum Water (A1) ther Table (A2) on (A3) arks (B1) arks (B3) to Crust (B4) cosits (B5) to Crust (B4) cosits (B5) vegetated Concatained Leaves (B9 vations: present? present? present?	al Imager ave Surfa) Yes Yes	y (B7) ce (B8) No X No X No	Aquatic True Aq Hydroge Oxidized Roots (C Presenc Recent (C6) Thin Mu Gauge C Other (E	Fauna (B uatic Plar en Sulfide d Rhizosp C3) ee of Redu Iron Redu ck Surfac or Well Da explain in Depth (i Depth (i	nts (B14) dor (Conheres on uced from uction in 1 at a (D9) Remarks nches): nches):	Second 1) Living (C4) Filled Soils 20 14	lary Indicators (minimum of two require 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) Indicators of wetland hydrology present?

Soil Map Unit Name Muskego and Houghton soils Are climatic/hydrologic conditions of the site typical for this time of the year? Are vegetation N , soil N , or hydrology N significantly disturbed? Are "normal circumstances"	Project/Site Islamic Community Center	City/0	County:	Plymou	th Sampling Date: 9/29/16
Investigator(s) WeJ & CMO Section, Township, Range Sec. 21, T118N, R22W Loadform (hillslope, terrace, etc.): depression Load relief (concave, convex, none): concave	Applicant/Owner:		State:	MN	
Landform (Fillislope, terrace, etc.): depression Local relief (concave, convex, none): Concave	Investigator(s): WEJ & CMC		Section	on, Townshi	
Slope (St) 2% Lat:	Landform (hillslope, terrace, etc.): depress	ion			
Solt May Unit Name Muskego and Houghton solts Are climatic/hydrologic conditions of the site typical for this time of the year? Not receptation Not soil Not not hydrology Not significantly disturbed? Are vegetation Not soil Not not hydrology Not significantly disturbed? Are vegetation Not soil Not not hydrology Not significantly disturbed? Are vegetation Not soil Not not hydrology Not significantly disturbed? Are vegetation not soil Not not hydrology Not significantly disturbed? Are vegetation present? Yes SUMMARY OF EINDINGS Hydrophytic vegetation present? Yes Hydrophytic vegetation present? Yes Hydrophytic vegetation present? Yes Are "normal circumstances" present? Yes (if needed, explain any answers in remarks.) Are "normal circumstances" present? Yes (if needed, explain any answers in remarks.) Hydrophytic vegetation present? Yes Are "normal circumstances" present? Yes (if needed, explain any answers in remarks.) Are "normal circumstances" present? Yes (if needed, explain any answers in remarks.) Are "normal circumstances" present? Yes (if needed, explain any answers in remarks.) Are "normal circumstances" present? Yes (if needed, explain any answers in remarks.) Are "normal circumstances" present? Yes (if needed, explain any answers in remarks.) Are "normal circumstances" (if needed, explain any answers in remarks.) Yes Hydrophytic vegetation hydrology present? Yes Are "normal circumstances" (if needed, explain any answers in remarks.) Are "normal circumstances" (if needed, explain any answers in remarks.) Are "normal circumstances" (if needed, explain any answers in remarks.) Are "normal circumstances" (if needed, explain any answers in remarks.) Yes Hydrophytic vegetation hydrology must be present? Yes Dominance Test Worksheet Number of Dominant Species	Slope (%): 2% Lat:		•	·	
Are cigration N , soil N , or hydrology N aignificantly disturbed? Are regetation N , soil N , or hydrology N aignificantly disturbed? Are regetation N , soil N , or hydrology N naturally problematic? SUMMARY OF FINDINGS Hydrophytic vegetation present? Y Y Is the sampled area within a wettand? Y Hydric soil present? Hydrophytic vegetation present? Y Y Is the sampled area within a wettand? Y Indicators of wetland hydrology present? Y Y Indicators of wetland hydrology present? According to three month antecedent precipitation data, sampling period was considered to be wetter than normal vegetation within a wetland? Fire Stratum (Plot size: 30' radius) Absolute Dominant Indicator Species Staus Number of Dominant Species Indicators of Mydrophytic vegetation (A) Salix nigre Sapling/Shrub stratum (Plot size: 15' radius) 20 = Total Cover Sapling/Shrub stratum (Plot size: 15' radius) 20 = Total Cover Sapling/Shrub stratum (Plot size: 5' radius) 30 Y FACW Prevalence Index Worksheet Fire Stratum (Plot size: 5' radius) 40 = Total Cover Sapling/Shrub stratum (Plot size: 5' radius) 1 Phalairs arundinacea 30 Y FACW Prevalence Index Worksheet Fire Stratum (Plot size: 5' radius) 1 Phalairs arundinacea 30 Y FACW Prevalence Index Worksheet Fire Stratum (Plot size: 5' radius) 1 Phalairs arundinacea 30 Y FACW Prevalence Index Worksheet Fire Stratum (Plot size: 5' radius) 1 Phalairs arundinacea 30 Y FACW Prevalence Index Score (Size) 1 Score (Si	Soil Map Unit Name Muskego and Houghton soils			1WI	
Are vegetation N , soil N , or hydrology N	Are climatic/hydrologic conditions of the site typical for	this time o	of the year?		
Are vegetation N soll N or hydrology N naturally problematic? SUMMARY OF FINDINGS Hydrohytic vegetation present? Yes hydrocopy for the present of the present? Yes hydrocopy for segetation present? Yes problematic for segments. Indicators of wetland hydrology present? Yes problematic for segments. Indicators of wetland hydrology present? Yes presents for segments. Indicators of wetland hydrology present? Yes presents within a wetland? Yes presents within a wetland? Yes presents works and the present of the segments of the segments of the segments. Indicator	STAIN PAGE		10		
Hydrophylic vegetation present? Hydrophylic vegetation present? Indicators of wetland hydrology present? Indicators of wetland hydrology present? Indicators of wetland hydrology present? According to three month antecedent precipitation data, sampling period was considered to be wetter than normal vegetation. **Tree Stratum** (Plot size: 30' radius**) **Sailx nigra** **Sailx nigra** **Sailx nigra** **Sailing/Shrub stratum** (Flot size: 15' radius**) **Pervalence Index Worksheet** **Total Number of Dominant Species** **Sappling/Shrub stratum** (Flot size: 15' radius**) **Pervalence Index Worksheet** **Total Number of Dominant Species** **Sappling/Shrub stratum** (Flot size: 15' radius**) **Pervalence Index Worksheet** **Total Number of Dominant Species** **Sappling/Shrub stratum** (Flot size: 15' radius**) **Pervalence Index Worksheet** **Total Number of Dominant Species** **To	Are vegetation N soil N , or hydrolog	IV N	,		
Hydrophytic vegetation present? Hydrophytic vegetation present? Hydrophytic vegetation present? Hydrophytic vegetation present? Hydrophytic vegetation Free Stratum (Plot size: 15' radius) Saping/Shrub stratum (Plot size: 15' radius) 1 Pralaris arundinacea Ageratina altissima (Plot size: 5' radius) 1 Phalaris arundinacea Ageratina altissima (Plot size: 5' radius) 1 Prevalence Index Worksheet (Plot size: 5' radius) 1 Pralaris arundinacea Ageratina altissima (Plot size: 5' radius) 1 Pralaris arundinacea Ageratina altissima (Plot size: 30' radius) 1 Problematic hydrophytic vegetation			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		· 8
Hydric soil present? Y Y	Hydrophytic vegetation present?				(Tantana,)
Indicators of wetland hydrology present? Y fyes, 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 Salix nigra		1	Is the sa	mpled are	a within a wetland?
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. VEGETATION Use scientific names of plants.	Indicators of wetland hydrology present?	1			
VEGETATION Use scientific names of plants. Tree Stratum	Remarks: (Evolain alternative procedures here or in a				id die 15.
VEGETATION Use scientific names of plants. Absolute Species Status Tree Stratum (Plot size 30' radius) Absolute % Cover Species Status OBL Total Number of Dominant Species Status Species Species Status Species	Internative procedures here of in a s	separate re	eport.)		
VEGETATION Use scientific names of plants. Absolute Species Status Tree Stratum (Plot size 30' radius) Absolute % Cover Species Status OBL Total Number of Dominant Species Status Species Species Status Species	According to three month antecedent precipi	tation da	ta, samplin	g period v	vas considered to be wetter than normal
Tree Stratum					
Number of Dominant Species					
Salix nigra	l = a, , , , , , , , , , , , , , , , , ,				
Total Number of Dominant Species Across all Strata: 3 (B) Percent of Dominant Species Across all Strata: 3 (B) Percent of Dominant Species that are OBL, FACW, or FAC: 66.67% (AVB) Percent of Dominant Species that are OBL, FACW, or FAC: 66.67% (AVB) Percent of Dominant Species that are OBL, FACW, or FAC: 66.67% (AVB) Percent of Dominant Species that are OBL, FACW, or FAC: 66.67% (AVB) Percent of Dominant Species that are OBL, FACW, or FAC: 66.67% (AVB) Percent of Dominant Species that are OBL, FACW, or FAC: 66.67% (AVB) Percent of Dominant Species that are OBL, FACW, or FAC: 66.67% (AVB) Percent of Dominant Species that are OBL, FACW, or FAC: 66.67% (AVB) Percent of Dominant Species that are OBL, FACW, or FAC: 66.67% (AVB) Percent of Dominant Species that are OBL, FACW, or FAC: 66.67% (AVB) Percent of Dominant Species that are OBL, FACW, or FAC: 66.67% (AVB) Percent of Dominant Species that are OBL, FACW, or FAC: 66.67% (AVB) Percent of Dominant Species that are OBL, FACW, or FAC: 66.67% (AVB) Percent of Dominant Species that are OBL, FACW, or FAC: 66.67% (AVB) Percent of Dominant Species that are OBL, FACW, or FAC: 66.67% (AVB) Percent of Dominant Species that are OBL, FACW, or FAC: 66.67% (AVB) Percent of Dominant Species 20 x 1 = 20					I de la companya del companya de la companya del companya de la co
Species Across all Strata: 3 (B) Percent of Dominant Species that are OBL, FACW, or FAC: 66.67% (A/B)					
Percent of Dominant Species that are OBL, FACW, or FAC: 66.67% (A/B)	3				0 1 1 1 1 1 1
Sapling/Shrub stratur (Plot size: 15' radius 15' ra	4				***************************************
Prevalence Index Worksheet Total % Cover of;	5				Lu
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) FACU species 10 x 4 = 40 UPL species 0 x 5 = 0 Column totals 60 (A) 120 (B) FACU species 10 x 4 = 40 UPL species 10 x 4 = 40 UP	-	20 =	Total Cover		
OBL species 20 x 1 = 20	Sapling/Shrub stratun (Plot size: 15' radius)				
FACW species 30 x 2 = 60	2				1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
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 Hydrophytic vegetation index is ≤3.0* The 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) Woody vine stratum (Plot size: 30' radius) 1	3				
FACU species 10	4				
Herb stratum (Plot size: 5' radius 1 Phalaris arundinacea 30 Y FACW Prevalence Index = B/A = 2.00 (B)	5				
1 Phalaris arundinacea 2 Ageratina altissima 3		0 =	Total Cover		
1 Phalaris arundinacea 2 Ageratina altissima 10 Y FACU 3 Hydrophytic Vegetation Indicators: Rapid test for hydrophytic vegetation X Dominance test is >50% X 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 #Hydrophytic vegetation *Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic Hydrophytic vegetation	Herb stratum (Plot size: 5' radius)				Column totals 60 (A) 120 (B)
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) Woody vine stratum (Plot size: 30' radius) Problematic hydrophytic vegetation* (explain) *Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic Hydrophytic vegetation	1 Phalaris arundinacea	30	Y	FACW	
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 *Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic Hydrophytic vegetation	2 Ageratina altissima	10	Y	FACU	
X Dominance test is >50% X Prevalence index is ≤3.0*	3				Hydrophytic Vegetation Indicators:
X Dollination test is ≥30% X Prevalence index is ≤3.0* Morphogical adaptations* (provide supporting data in Remarks or on a separate sheet) 10 Problematic hydrophytic vegetation* (explain) Woody vine stratum (Plot size: 30' radius) 1 Problematic hydrophytic vegetation* (explain) *Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic Hydrophytic vegetation	4				Rapid test for hydrophytic vegetation
Morphogical adaptations* (provide supporting data in Remarks or on a separate sheet) Problematic hydrophytic vegetation* (explain) Woody vine stratum (Plot size: 30' radius) 1					
supporting data in Remarks or on a separate sheet) Problematic hydrophytic vegetation* (explain) Woody vine stratum (Plot size: 30' radius) I	7				X Prevalence index is ≤3.0*
separate sheet) Problematic hydrophytic vegetation* (explain) Woody vine stratum (Plot size: 30' radius) 1	8			= ***	
Problematic hydrophytic vegetation* (explain) Woody vine stratum (Plot size: 30' radius) 1	9	-			
Woody vine stratum (Plot size: 30' radius) 1	10				
1		40 =	Total Cover		
present, unless disturbed or problematic Hydrophytic Total Cover vegetation	Woody vine stratum (Plot size: 30' radius)				*Indicators of hydric soil and wetland hydrology must be
0 = Total Cover vegetation	1				
1000001	2				1
hieseift		0 =	Total Cover		
Remarks: (Include photo numbers here or on a separate sheet)	Remarks: (Include photo numbers here as as a	a a ba : 1)		-	hieselift 1
55% bare ground at this sample point		e sneet)			
gaa at the outtiple point	11.12 24.0 growing at this sample point				

Sampling Point: 2-1 WET

Depth (Inches)			io aopiii nocasi	111111	Cilionic Ci		tor or contain the	ne absence of indicators.)
(Inches)	Matrix	n/		dox Feat				
	Color (moist)	<u>%</u>	Color (moist)	%	Type*	Loc**	Texture	Remarks
0-8	10YR3/1	100					loam	
8-24	10YR4/1	98	7.5YR4/6	2	С	PL	mucky loam	
*Type: C = 6	Concentration, D	= Deplet	ion, RM = Reduc	ed Matr	ix, MS =	Masked	Sand Grains.	**Location: PL = Pore Lining, M = Matr
Hydric So	oil Indicators:							or Problematic Hydric Soils:
His Bla Hyc Stra 2 cr	tisol (A1) tic Epipedon (A2) ck Histic (A3) drogen Sulfide (A atified Layers (A5 m Muck (A10)	4) ·)	Sar Stri Loa Loa Dep	ndy Redo pped Ma my Muc my Gley	ed Matrix ox (S5) atrix (S6) ky Minera ed Matria atrix (F3)	al (F1) x (F2)	Dark Sur Iron-Man Very Sha	rairie Redox (A16) (LRR K, L, R) face (S7) (LRR K, L) riganese Masses (F12) (LRR K, L, R) fallow Dark Surface (TF12) riganin in remarks)
Thic	bleted Below Dari ck Dark Surface (ady Mucky Minera m Mucky Peat or	(A12) al (S1) Peat (S3	e (A11) Red Dep Red	lox Dark leted Da	Surface ark Surfa essions	(F6) ce (F7)		of hydrophytic vegetation and weltand must be present, unless disturbed or problematic
ype:	Layer (if observ	ea):					Hydric soil	procent? V
Depth (inche	es):				8		Hydric soil	present? Y
HVDBO! 4	nev.							
YDROLO	drology Indicate							
	cators (minimum		required: check	all that	annlu)		0	
Primary Indi Surface X High Wa X Saturatic Water M Sedimer Drift Dep Algal Ma Iron Dep Inundatic Sparsely Water-Si	Water (A1) Inter Table (A2) Inter Table (A2) Inter Table (A2) Inter Table (B1) Inter Table (B3) Inter Table (B3) Inter Table (B4) Inter Table	of one is	(B7)	Aquatic True Aqu Hydroge Oxidized Roots (C Presenc Recent I (C6) Thin Mud Gauge of	Fauna (Buatic Plar n Sulfide I Rhizosp (3) e of Redu ron Redu ck Surfac	nts (B14) Odor (C' wheres on uced Iron uction in T	(C4) (C4) (C5) (C6) (C6) (C6) (C6) (C6) (C6) (C6) (C6	ary 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)
Primary Indi Surface X High Wa X Saturatic Water M Sedimer Drift Dep Algal Ma Iron Dep Inundatic Sparsely Water-Si Field Obser Surface water Water table Saturation pi	Water (A1) ater Table (A2) on (A3) arks (B1) at Deposits (B2) osits (B3) at or Crust (B4) osits (B5) on Visible on Aeria v Vegetated Concatained Leaves (B9 vations: er present? present?	of one is	(B7)	Aquatic True Aqu Hydroge Oxidized Roots (C Presenc Recent I (C6) Thin Mud Gauge of	Fauna (Buatic Plar n Sulfide I Rhizosp (3) e of Redu ron Redu ck Surfac	nts (B14) Odor (C' inheres on uced Iron ucidion in T ise (C7) ata (D9) Remarks: nches):	(C4) (C4) (C5) (C6) (C6) (C6) (C6) (C6) (C6) (C6) (C6	Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Drayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2)
Primary Indi Surface X High Wa X Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Inundatio Sparsely Water-Si Field Obser Surface water Vater table Saturation princludes cap	Water (A1) Inter Table (A2) Inter Table (A2) Inter Table (A2) Inter Table (A2) Inter Table (B2) Inter Table (B3) Inter Table (B3) Inter Table (B4) Inter Table (B4) Inter Table (B4) Inter Table (B4) Inter Table (B5) Inter Table	al Imager ave Surfa) Yes Yes	(B7) ce (B8) No X No X No	Aquatic True Aqu Hydroge Oxidizec Roots (C Presenc Recent I (C6) Thin Mu Gauge c Other (E	Fauna (Buatic Plaran Sulfide I Rhizospi 33) e of Reduron Reduck Surfacor Well Daxplain in Depth (iii Depth (ii	nts (B14) Odor (C' od	(C4) (C4) (C4) (C5) (C4) (C5) (C5) (C5) (C5) (C5) (C5) (C5) (C5	Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Drayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2) FAC-Neutral Test (D5) Indicators of wetland hydrology present?
Primary Indi Surface X High Wa X Saturatio Water M Sedimer Drift Dep Algal Ma tron Dep Inundatio Sparsely Water-Si Field Obser Surface water Vater table Saturation princludes cap	Water (A1) Inter Table (A2) Inter Table (A2) Inter Table (A2) Inter Table (A2) Inter Table (B2) Inter Table (B3) Inter Table (B3) Inter Table (B4) Inter Table (B4) Inter Table (B4) Inter Table (B4) Inter Table (B5) Inter Table	al Imager ave Surfa) Yes Yes	(B7) ce (B8) No X No X No	Aquatic True Aqu Hydroge Oxidizec Roots (C Presenc Recent I (C6) Thin Mu Gauge c Other (E	Fauna (Buatic Plaran Sulfide I Rhizospi 33) e of Reduron Reduck Surfacor Well Daxplain in Depth (iii Depth (ii	nts (B14) Odor (C' od	Living C(C4) Silled Soils C(C4) C(C4	Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Drayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2) FAC-Neutral Test (D5) Indicators of wetland hydrology present?

Project/Site Islamic Community Center	City/C	county:	Plymou	th Sampling Date: 9/29/16
Applicant/Owner:		State:	MN	
Investigator(s): WEJ & CMC		Section	n, Townshi	
Landform (hillslope, terrace, etc.): hillslope				/e, convex, none): convex
Slope (%): 2% Lat:		Long:	(Datum:
Soil Map Unit Name Urban land-Udorthents, wet substratu	Jm	· · · ·	JWI	Classification:
Are climatic/hydrologic conditions of the site typical for thi		f the year?		If no, explain in remarks)
Are vegetation N , soil N , or hydrology		significantly		_ ·
Are vegetation N , soil N , or hydrology		naturally pro		Are "normal circumstances"
SUMMARY OF FINDINGS		natarany pro	olernatie:	present? Yes (If needed, explain any answers in remarks.)
Hydrophytic vegetation present?				(if fleeded, explain any answers in remarks.)
Hydric soil present?		le tho ea	mpled are	a within a wetland?
Indicators of wetland hydrology present? N	- 1		impled are ional wetlar	
				id site ID.
Remarks: (Explain alternative procedures here or in a seg	oarate re	port.)		
According to three month antecedent precipita	tion dat	a. sampline	a period v	vas considered to be wetter than normal
			3 =	The series of to be weller than normal
VEGETATION Use scientific names of plants.				
l = n: : (n: : :			Indicator	Dominance Test Worksheet
Tree Stratum (Plot size: 30' radius) % (Cover	Species	Staus	Number of Dominant Species
2			-	that are OBL, FACW, or FAC: 1 (A)
3				Total Number of Dominant
4				Species Across all Strata: 2 (B)
5				Percent of Dominant Species that are OBL, FACW, or FAC: 50.00% (A/B)
	0 =	Total Cover		that are OBL, FACW, or FAC: 50.00% (A/B)
Sapling/Shrub stratun (Plot size: 15' radius)				Prevalence Index Worksheet
1				Total % Cover of:
2				OBL species 0 x 1 = 0
3				FACW species 0 x 2 = 0
5				FAC species45x3 =135
<u> </u>	0 -	T-t-LO		FACU species 50 x 4 = 200
Herb stratum (Plot size: 5' radius)	0 =	Total Cover		UPL species 0 x 5 = 0
	46		E4.0	Column totals 95 (A) 335 (B)
	45 30		FAC	Prevalence Index = B/A = 3.53
	10		FACU	Hydrophytic Vegetation Indicators:
	10	-N -	FACU	Rapid test for hydrophytic vegetation
5				Dominance test is >50%
6				Prevalence index is ≤3.0*
7				Morphogical adaptations* (provide
8				supporting data in Remarks or on a
9				separate sheet)
10		-		Problematic hydrophytic vegetation*
	95 = '	Total Cover		(explain)
Woody vine stratum (Plot size: 30' radius)				*Indicators of hydric soil and wetland hydrology must be
2			-	present, unless disturbed or problematic
* 	0 -	Total Cause		Hydrophytic vegetation
	U =	Total Cover		present? N
Remarks: (Include photo numbers here or on a separate s	heet)			

2-2 UP

Profile Des	cription: (Desc	ribe to t	he depth need	ed to doc	ument t	he indic	ator or confirm t	he absence	of indicators.)
Depth	Matrix		R	edox Feat	tures				
(Inches)	Color (moist)	%	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	С	PL	loam		
				·			100111		
				+					
				-					
	-		-		-				
*Type: C = (Concentration, D	= Deplet	ion, RM = Red	uced Matr	ix, MS =	Masked	Sand Grains.	**Location:	PL = Pore Lining, M = Matri
Hydric Sc	oil Indicators:								tic Hydric Soils:
	tisol (A1)		Sa	andy Gley	ed Matrix	k (S4)			(A16) (LRR K, L, R)
	tic Epipedon (A2)	ŀ	Sa	andy Red	ox (S5)			rface (S7) (LI	
	ck Histic (A3)		St	ripped Ma	atrix (S6)		Iron-Mar	nganese Mas	ses (F12) (LRR K, L, R)
	lrogen Sulfide (A		Lo	amy Muc	ky Miner	al (F1)			urface (TF12)
	atified Layers (A5)	Lo	amy Gley	ed Matri	x (F2)	the Property of the last of th	xplain in rem	
	n Muck (A10)		De	epleted M			***************************************		•
	leted Below Dark		e (A11) Re	edox Dark	Surface	(F6)			
	ck Dark Surface (De	epleted Da	ark Surfa	ce (F7)	*Indicators	of hydrophy	tic vegetation and weltand
	dy Mucky Minera	, ,		edox Depi	essions	(F8)			sent, unless disturbed or
5 cr	n Mucky Peat or	Peat (S3	3)				, 0,		lematic
Restrictive	Layer (if observ	ed):			-				
Type:		·					Hydric soil	present?	Υ
Depth (inche	es):						,	. p. 000	
HYDROLO	OGY								
Wetland Hy	drology indicate	ors:						277	
Primary India	cators (minimum	of one is	required; chec	k all that	apply)		Second	lary Indicator	s (minimum of two required)
	Water (A1)				Fauna (B	13)		Surface Soil C	
	ter Table (A2)		-		uatic Plar			Drainage Patt	
Saturatio			-		n Sulfide				Vater Table (C2)
Water Ma	arks (B1)		37F		Rhizosp			Crayfish Burro	
	t Deposits (B2)			Roots (C	C3)				sible on Aerial Imagery (C9)
	osits (B3)			Presenc	e of Redu	iced Iron	(C4)	Stunted or Str	ressed Plants (D1)
	t or Crust (B4)		34		ron Redu	ction in 1		Geomorphic F	
	osits (B5)			(C6)				FAC-Neutral 1	
	n Visible on Aeria				ck Surfac				
	Vegetated Conca		ce (B8)	_	r Well Da	()			
	ained Leaves (89)		Other (E	xplain in	Remarks)		
Field Obser									
Surface water		Yes	No	X	Depth (ii				
Water table p		Yes	No No	X	Depth (ii		>24		ors of wetland
Saturation pr		Yes	No	X	Depth (ii	nches):	>24	hydrol	ogy present? N
(includes car									
Describe rec	orded data (strea	ım gauge	e, monitoring w	ell, aerial	photos, p	previous	inspections), if a	vailable:	
Remarks:						_			

Project/Site Islamic Community Center	City/	County;	Plymou	th Sampling Date: 9/29/16
Applicant/Owner:	3	State:	MN	
Investigator(s): WEJ & CMC		Section	on, Townshi	
Landform (hillslope, terrace, etc.): depression	on			ve, convex, none): concave
Slope (%): 2% Lat:		Long:	,	Datum:
Soil Map Unit Name Urban land-Udorthents, wet substrat	tum	· —	NVI	Classification: PFO1Bd
Are climatic/hydrologic conditions of the site typical for the	his time	of the year?		If no, explain in remarks)
Are vegetation N soil N , or hydrology		significantly	_	
Are vegetation N , soil N , or hydrology		naturally pro		Are "normal circumstances" present? Yes
SUMMARY OF FINDINGS				(If needed, explain any answers in remarks.)
Hydrophytic vegetation present?				the second explained by an entire in ternament
Hydric soil present?		Is the sa	ampled are	a within a wetland?
Indicators of wetland hydrology present? Y			tional wetla	· ·
				and one is.
Remarks: (Explain alternative procedures here or in a se	ерагате г	report.)		
According to three month antecedent precipita	ation da	ata, samplin	g period v	vas considered to be wetter than normal
VEGETATION Use scientific names of plants.				
T	osolute Cover	Dominant Species	Indicator Staus	Dominance Test Worksheet
1 Acer negundo	60	Y	FAC	Number of Dominant Species that are OBL, FACW, or FAC: 3 (A)
2 Populus deltoides	30	· · · · ·	FAC	Total Number of Dominant
3				Species Across all Strata 3 (B)
4				Percent of Dominant Species
5				that are OBL, FACW, or FAC: 100.00% (A/B)
	90	= Total Cover		
Sapling/Shrub stratun (Plot size: 15' radius)				Prevalence Index Worksheet
2				Total % Cover of:
3				OBL species $0 \times 1 = 0$ FACW species $10 \times 2 = 20$
4				FACW species 10 x 2 = 20 FAC species 90 x 3 = 270
5				FACU species $0 \times 4 = 0$
	0	= Total Cover		UPL species 0 x 5 = 0
Herb stratum (Plot size: 5' radius)				Column totals 100 (A) 290 (B)
1				Prevalence Index = B/A = 2.90
2				
3				Hydrophytic Vegetation Indicators:
4				Rapid test for hydrophytic vegetation
5				X Dominance test is >50%
7	_			X Prevalence index is ≤3.0*
8				Morphogical adaptations* (provide
9				supporting data in Remarks or on a separate sheet)
10		——		Problematic hydrophytic vegetation*
7	0	Total Cover		(explain)
Woody vine stratum (Plot size: 30' radius)				*Indicators of hydric soil and wetland hydrology must be
1 Vitis riparia	10	Y	FACW	present, unless disturbed or problematic
2				Hydrophytic
	10	= Total Cover		vegetation present? Y
Remarks: (include photo numbers here or on a separate	aba=4)			present? Y
95% bare ground and open water at this sam		int		
2 - 1 - 1 - 2 - 2 - 2 - 1 - 1 - 2 - 2 -	יטים אטי	n it		

2-2 WET

	cription: (Desc	ribe to ti	ne depth	needed	to doc	ument ti	he indic	ator or confirm	n the absen	ce of indicators.)
Depth	Matrix			Red	ox Feat	ures			T	
(Inches)	Color (moist)	%	Color (moist)	%	Type*	Loc**	Textu	re	Remarks
0-6	10YR2/1	100					la a	sand		
6-24	10YR5/1	100						loam		
-:										
				=1====						
		-								
Type: C = C	Concentration, D	= Deplet	ion, RM	= Reduc	ed Matr	x, MS =	Masked	Sand Grains.	**Locatio	on: PL = Pore Lining, M = Ma
•	il Indicators:							Indicator	s for Proble	matic Hydric Soils:
	isol (A1)					ed Matrix	k (S4)	Coast	Prairie Red	ox (A16) (LRR K, L, R)
	ic Epipedon (A2))	_		dy Redo				Surface (S7)	
	k Histic (A3)		0	Stri	oped Ma	trix (S6)		Iron-N	Nanganese N	fasses (F12) (LRR K, L, R)
	rogen Sulfide (A		_			ky Miner		Very	Shallow Dark	Surface (TF12)
	tified Layers (A5)				ed Matri		Other	(explain in re	emarks)
	n Muck (A10)					atrix (F3)				
-	leted Below Darl		e (A11) _			Surface				
	k Dark Surface (_			irk Surfa		*Indicat	ors of hydrop	phytic vegetation and weltand
	dy Mucky Minera	٠, ,		Red	lox Depr	essions	(F8)	hydrok		present, unless disturbed or
	n Mucky Peat or		3)						р	roblematic
	Layer (if observ	ed):								**************************************
ype:								Hydric s	oil present?	? Y
epth (inche	es):									-
YDROLC										
	drology Indicate									V-=
	cators (minimum	of one is	required					Seco	indary Indica	itors (minimum of two require
X Surface V						Fauna (B	•			oil Cracks (B6)
	ter Table (A2)					uatic Plar				Patterns (B10)
Saturatio							Odor (C			n Water Table (C2)
—Water Ma	t Deposits (B2)				Oxidized	Rhizosp	heres on	Living		urrows (C8)
Occinien					Roots (C			104V		Visible on Aerial Imagery (C9)
_	osita (Do)						iced Iron	(04)	_	Stressed Plants (D1)
Drift Dep	or Crust (B4)				Docant I	ron Dodu	otion in T	Filled Coile -		i - D:ti (D0)
Drift Depo	t or Crust (B4) osits (B5)					ron Redu	iction in T	Filled Soils		ic Position (D2)
Drift Depo Algal Mat	osits (B5)	al Imagen	y (B7)		(C6)			Filled Soils		ic Position (D2) al Test (D 5)
Drift Depo Algal Mat Iron Depo Inundatio	osits (B5) n Visible on Aeria			_	(C6) Thin Muc	ck Surfac	e (C7)	Filled Soils		, ,
Drift Depo Algal Mat Iron Depo Inundatio Sparsely	osits (B5)	ive Surfa		Ξ	(C6) Thin Muc Gauge o	ck Surfac r Well Da	e (C7)	=		, ,
Drift Depo Algal Mat Iron Depo Inundatio Sparsely Water-Sta	osits (B5) n Visible on Aeria Vegetated Conca ained Leaves (B9	ive Surfa		Ξ	(C6) Thin Muc Gauge o	ck Surfac r Well Da	e (C7) ata (D9)	=		, ,
Drift Depi Algal Mat Iron Depo Inundatio Sparsely Water-Str ield Observ urface wate	osits (B5) In Visible on Aeria Vegetated Conca ained Leaves (B9 vations: In present?	ive Surfa		Ξ	(C6) Thin Muc Gauge o Other (E	ck Surfac r Well Da	e (C7) ata (D9) Remarks	=		, ,
Drift Depi Algal Mat Iron Depo Inundatio Sparsely Water-Str ield Observ urface wate	osits (B5) In Visible on Aeria Vegetated Conca ained Leaves (B9 vations: In present? In present?	Yes Yes	X X	No No	(C6) Thin Muc Gauge o Other (E	ck Surfac r Well Da xplain in	e (C7) ata (D9) Remarks nches):	=	FAC-Neutr	, ,
Drift Depi Algal Mat Iron Depo Inundatio Sparsely Water-Staileld Observurface water Vater table paturation pr	osits (B5) In Visible on Aeria Vegetated Conca ained Leaves (B9 vations: In present? In present? In present? In present?	ave Surfa) Yes	ce (B8)	No No	(C6) Thin Muc Gauge o Other (E	ck Surfac r Well Da xplain in Depth (i	e (C7) ata (D9) Remarks nches):)	FAC-Neutr	ral Test (D5)
Drift Depi- Algal Mat Iron Depo Inundatio Sparsely Water-Sta iield Observantace wate Vater table particulates cap	osits (B5) In Visible on Aeria Vegetated Conca alined Leaves (B9 vations: In present? oresent? esent? osillary fringe)	Yes Yes Yes Yes	X X X	No No No	(C6) Thin Muc Gauge o Other (E	ck Surfac r Well Da xplain in Depth (in Depth (in Depth (in	e (C7) ata (D9) Remarks nches): nches):) 1 surface surface	FAC-Neutr	ral Test (D5)
Drift Depi- Algal Mat Iron Depo Inundatio Sparsely Water-Sti ield Observarface wate Vater table paturation princludes cap	osits (B5) In Visible on Aeria Vegetated Conca ained Leaves (B9 vations: In present? In present? In present? In present?	Yes Yes Yes Yes	X X X	No No No	(C6) Thin Muc Gauge o Other (E	ck Surfac r Well Da xplain in Depth (in Depth (in Depth (in	e (C7) ata (D9) Remarks nches): nches):) 1 surface surface	FAC-Neutr	ral Test (D5)
Drift Depi- Algal Mat Iron Depo Inundatio Sparsely Water-Sta iield Observantace wate Vater table particulates cap	osits (B5) In Visible on Aeria Vegetated Conca alined Leaves (B9 vations: In present? oresent? esent? osillary fringe)	Yes Yes Yes Yes	X X X	No No No	(C6) Thin Muc Gauge o Other (E	ck Surfac r Well Da xplain in Depth (in Depth (in Depth (in	e (C7) ata (D9) Remarks nches): nches):) 1 surface surface	FAC-Neutr	ral Test (D5)
Drift Depi- Algal Mat Iron Depo Inundatio Sparsely Water-Sti Field Observiorface wate Vater table particulates cap	osits (B5) In Visible on Aeria Vegetated Conca alined Leaves (B9 vations: In present? oresent? esent? osillary fringe)	Yes Yes Yes Yes	X X X	No No No	(C6) Thin Muc Gauge o Other (E	ck Surfac r Well Da xplain in Depth (in Depth (in Depth (in	e (C7) ata (D9) Remarks nches): nches):) 1 surface surface	FAC-Neutr	ral Test (D5)

Project/Site Islamic Community Center		/County;	Plymou	th Sampling Date: 9/29/16
Applicant/Owner:		State;	MN	
Investigator(s): WEJ & CMC		Section	on, Townshi	
Landform (hillslope, terrace, etc.): depres	ssion			ve, convex, none): concave
Slope (%): 2% Lat:		Long:	,	Datum:
Soil Map Unit Name Muskego and Houghton soils			1WI	Classification:
Are climatic/hydrologic conditions of the site typical for	or this time	of the year?		If no, explain in remarks)
Are vegetation N , soil N , or hydrological N		significantly		
Are vegetation N soil N or hydrolo		naturally pro		Are "normal circumstances" present? Yes
SUMMARY OF FINDINGS	-	•		(If needed, explain any answers in remarks.)
Hydrophytic vegetation present? N				(* modes) explain dity allowers in remarks.)
Hydric soil present?		Is the sa	moled are	a within a wetland?
Indicators of wetland hydrology present?			tional wetlar	
Remarks: (Explain alternative procedures here or in a			aronar wettar	id dite 15.
According to three month antecedent precip	oitation d	ata, samplin	g period v	vas considered to be wetter than normal
VEGETATION Use scientific names of plan				
VEGETATION - Ose scientific frames of plan		D	1 11	I Daminana Tari Malala
Tree Stratum (Plot size: 30' radius)	Absolute % Cover	Dominant Species	Indicator Staus	Dominance Test Worksheet
1 Acer negundo	70	Y	FAC	Number of Dominant Species that are OBL, FACW, or FAC: 2 (A)
2 Populus alba	20	<u> </u>	UPL	Total Number of Dominant
3			-	Species Across all Strata: 4 (B)
4				Percent of Dominant Species
5				that are OBL, FACW, or FAC: 50,00% (A/B)
O	90	= Total Cover	1000	· · · · · · · · · · · · · · · · · · ·
Sapling/Shrub stratun (Plot size: 15' radius)				Prevalence Index Worksheet
		(/ /		Total % Cover of:
3				OBL species 0 x 1 = 0
4				FACW species 40 x 2 = 80 FAC species 70 x 3 = 210
5	-			FAC species $70 \times 3 = 210$ FACU species $10 \times 4 = 40$
	0	= Total Cover		UPL species 20 x 5 = 100
Herb stratum (Plot size: 5' radius)				Column totals 140 (A) 430 (B)
1 Impatiens capensis	40	Υ	FACW	Prevalence Index = B/A = 3.07
2 Ageratina altissima	10	Υ .	FACU	
3				Hydrophytic Vegetation Indicators:
4				Rapid test for hydrophytic vegetation
5				Dominance test is >50%
7				Prevalence index is ≤3.0*
8				Morphogical adaptations* (provide
9	_		·	supporting data in Remarks or on a separate sheet)
10			-	
	50	= Total Cover		Problematic hydrophytic vegetation* (explain)
Woody vine stratum (Plot size: 30' radius)				
1				*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic
2		*********	-	Hydrophytic
1	0	= Total Cover		vegetation
Demodes (I - I, d - I - I				present? N
Remarks: (Include photo numbers here or on a separa	ite sheet)			
45% bare ground at this sample point				

SP-1

Depth	empirem (Desc		c acptil neede	u to doc	ument t	ie muica	itor or confir	m the abse	nce of indicators.)
	Matrix		Re	dox Feat	ures				
(Inches)	Color (moist)	%	Color (moist)	%	Type*	Loc**	Textu	иге	Remarks
0-6	10YR4/1	100					gravel sand	fill	rocks to 2"
6-24	10YR2/1	100					loam		
				-					
		\vdash		-		-			
	-	-			-				
		-							
*Type: C = 0	Concentration, D	= Depleti	on, RM = Redu	ced Matr	ix, MS =	Masked	Sand Grains.	**Loca	tion: PL = Pore Lining, M = Mat
	il Indicators:					27.72			ematic Hydric Soils:
	isol (A1)		Sa	ndy Gley	ed Matrix	(S4)			dox (A16) (LRR K, L, R)
Hist	ic Epipedon (A2))	Sa	ndy Redo	x (S5)				7) (LRR K, L)
	ck Histic (A3)		Str	ipped Ma	trix (S6)		Iron-N	Manganese	Masses (F12) (LRR K, L, R)
	rogen Sulfide (A		Lo:	amy Muc	ky Miner	al (F1)			rk Surface (TF12)
	itified Layers (A5	ı)	Los	amy Gley	ed Matri:	x (F2)		(explain in	
	n Muck (A10)		De	pleted Ma	atrix (F3)				
	leted Below Darl		(A11) Re	dox Dark	Surface	(F6)			
	k Dark Surface (٠,	De	pleted Da	ark Surfa	ce (F7)	*Indicat	tors of hydro	ophytic vegetation and weltand
	dy Mucky Minera			dox Depr	essions	(F8)			e present, unless disturbed or
5 cm	n Mucky Peat or	Peat (S3)							problematic
Restrictive	Layer (if observ	ed):							277 117 11 11 11 11 11
Туре							Hydric s	soil presen	t? N
Depth (inche	es):						,	, , , , , , , , , , , , , , , , , , ,	· · · · · · · · · · · · · · · · · · ·
HYDROLO	ncv.								
HAlberni	JGY								
		- 5140-							-E
Wetland Hy	drology Indicate						20		
Wetland Hy e Primary India	drology Indicato cators (minimum		required; chec				Seco		cators (minimum of two required
Wetland Hye Primary Indic Surface N	drology Indicato cators (minimum Water (A1)		required; chec	Aquatic	Fauna (B		Sec	Surface	Soil Cracks (B6)
Wetland Hy Primary Indio Surface N High Wa	drology Indicato cators (minimum Water (A1) ter Table (A2)		required; chec	Aquatic True Aq	Fauna (B uatic Plar	nts (B14)		Surface : Drainage	Soil Cracks (B6) Patterns (B10)
Wetland Hydrimary Indic Surface Number High Wa Saturatio	drology Indicato cators (minimum Water (A1) ter Table (A2) n (A3)		required; chec	Aquatic True Aqu Hydroge	Fauna (B uatic Plar n Sulfide	nts (B14) Odor (C1	— —	Surface : Drainage Dry-Seas	Soil Cracks (B6) Patterns (B10) son Water Table (C2)
Wetland Hy Primary Indic Surface V High Wa Saturatio Water Mi	drology Indicato cators (minimum Water (A1) ter Table (A2) in (A3) arks (B1)		required; chec	Aquatic True Aqu Hydroge Oxidized	Fauna (B Jatic Plar n Sulfide l Rhizosp	nts (B14) Odor (C1	— —	Surface Surfac	Soil Cracks (B6) Patterns (B10) son Water Table (C2) Burrows (C8)
Wetland Hydromery Indice Surface Notes High Wares Saturation Water March Sedimen	drology Indicato cators (minimum Water (A1) ter Table (A2) n (A3)		required; chec	Aquatic True Aqu Hydroge Oxidized Roots (C	Fauna (B uatic Plar n Sulfide l Rhizosp :3)	nts (B14) Odor (C heres on	Living	Surface Surfac	Soil Cracks (B6) Patterns (B10) son Water Table (C2) Burrows (C8) in Visible on Aerial Imagery (C9)
Wetland Hy Primary Indic Surface \ High Wa Saturatio Water M: Sedimen Drift Dep	drology Indicate cators (minimum Water (A1) ter Table (A2) n (A3) arks (B1) t Deposits (B2)		required; chec	Aquatic True Aqu Hydroge Oxidized Roots (C	Fauna (B uatic Plar n Sulfide l Rhizosp (3) e of Redu	nts (B14) Odor (C1 heres on	Living (C4)	Surface S Drainage Dry-Seas Crayfish Saturatio	Soil Cracks (B6) Patterns (B10) Son Water Table (C2) Burrows (C8) Visible on Aerial Imagery (C9) Or Stressed Plants (D1)
Wetland Hydromary Indice Surface Notes High Was Saturation Water Missedimen Drift Dep Algal Ma	drology Indicate cators (minimum Water (A1) ter Table (A2) in (A3) arks (B1) t Deposits (B2) osits (B3)		required; chec	Aquatic True Aqu Hydroge Oxidized Roots (C	Fauna (B uatic Plar n Sulfide l Rhizosp (3) e of Redu	nts (B14) Odor (C1 heres on	Living	Surface Surface Drainage Dry-Seas Crayfish Saturation Stunted Geomore	Soil Cracks (B6) Patterns (B10) Son Water Table (C2) Burrows (C8) Visible on Aerial Imagery (C9) or Stressed Plants (D1) Ohic Position (D2)
Wetland Hydromary India Surface Note High Was Saturation Water Mater Material Material Material Materia	drology Indicate cators (minimum Water (A1) ter Table (A2) in (A3) arks (B1) t Deposits (B2) osits (B3) t or Crust (B4)	of one is		Aquatic True Aqu Hydroge Oxidized Roots (C Presence Recent I (C6)	Fauna (B uatic Plar n Sulfide l Rhizosp (3) e of Redu	nts (B14) Odor (C- heres on uced Iron action in T	Living (C4)	Surface Surface Drainage Dry-Seas Crayfish Saturation Stunted Geomore	Soil Cracks (B6) Patterns (B10) Son Water Table (C2) Burrows (C8) Visible on Aerial Imagery (C9) Or Stressed Plants (D1)
Primary India Surface N High Wa Saturatio Water Mi Sedimen Drift Dep Algal Ma Iron Depo	drology indicated cators (minimum Water (A1) ter Table (A2) in (A3) arks (B1) t Deposits (B2) osits (B3) t or Crust (B4) osits (B5) in Visible on Aeria Vegetated Conca	of one is	(B7)	Aquatic True Aqu Hydroge Oxidized Roots (C Presence Recent I (C6) Thin Muc	Fauna (B uatic Plar n Sulfide l Rhizosp (3) e of Redu ron Redu	ots (B14) Odor (Cr heres on uced Iron action in T	Living (C4)	Surface Surface Drainage Dry-Seas Crayfish Saturation Stunted Geomore	Soil Cracks (B6) Patterns (B10) Son Water Table (C2) Burrows (C8) Visible on Aerial Imagery (C9) or Stressed Plants (D1) Ohic Position (D2)
Primary India Surface N High Wa Saturatio Water Mi Sedimen Drift Dep Algal Ma Iron Depo	drology indicated cators (minimum Water (A1) ter Table (A2) in (A3) arks (B1) t Deposits (B2) osits (B3) t or Crust (B4) osits (B5) in Visible on Aeria	of one is	(B7)	Aquatic True Aqu Hydroge Oxidized Roots (C Presence Recent I (C6) Thin Muc Gauge o	Fauna (Buatic Plan n Sulfide l Rhizosp 3) e of Reduron Reduck ck Surfac	nts (B14) Odor (C ² heres on uced Iron uction in T e (C7) uta (D9)	Living (C4)	Surface Surface Drainage Dry-Seas Crayfish Saturation Stunted Geomore	Soil Cracks (B6) Patterns (B10) Son Water Table (C2) Burrows (C8) Visible on Aerial Imagery (C9) or Stressed Plants (D1) Ohic Position (D2)
Wetland Hy Primary Indic Surface N High Wa Saturatio Water M Sedimen Drift Dep Algal Ma Iron Depo Inundatio Sparsely Water-St	drology indicated cators (minimum Water (A1) ter Table (A2) on (A3) arks (B1) t Deposits (B2) osits (B3) t or Crust (B4) osits (B5) on Visible on Aeria Vegetated Concalained Leaves (B9	of one is	(B7)	Aquatic True Aqu Hydroge Oxidized Roots (C Presence Recent I (C6) Thin Muc Gauge o	Fauna (B Latic Plar n Sulfide l Rhizosp (3) e of Redu ron Redu ck Surfac r Well Da	nts (B14) Odor (C ² heres on uced Iron uction in T e (C7) uta (D9)	Living (C4)	Surface Surface Drainage Dry-Seas Crayfish Saturation Stunted Geomore	Soil Cracks (B6) Patterns (B10) Son Water Table (C2) Burrows (C8) Visible on Aerial Imagery (C9) or Stressed Plants (D1) Ohic Position (D2)
Wetland Hy Primary Indic Surface N High Wa Saturatio Water M Sedimen Drift Dep Algal Ma Iron Depo Inundatio Sparsely Water-St Field Obser Surface wate	drology indicated cators (minimum Water (A1) ter Table (A2) on (A3) arks (B1) t Deposits (B2) osits (B3) t or Crust (B4) osits (B5) on Visible on Aeria Vegetated Conca ained Leaves (B9 vations:	of one is	(B7)	Aquatic True Aqu Hydroge Oxidized Roots (C Presence Recent I (C6) Thin Muc Gauge o Other (E	Fauna (B Jatic Plar n Sulfide I Rhizosp 3) e of Redu ron Redu ck Surfac r Well Da xplain in	nts (B14) Odor (Cr heres on uced Iron uction in T e (C7) ata (D9) Remarks	Living (C4)	Surface Surface Drainage Dry-Seas Crayfish Saturation Stunted Geomore	Soil Cracks (B6) Patterns (B10) Son Water Table (C2) Burrows (C8) Visible on Aerial Imagery (C9) or Stressed Plants (D1) Ohic Position (D2)
Wetland Hy Primary Indic Surface N High Wa Saturatio Water M Sedimen Drift Dep Algal Ma Iron Depi Inundatio Sparsely Water-St Field Obser Surface water Vater table p	drology indicate cators (minimum Water (A1) ter Table (A2) in (A3) arks (B1) t Deposits (B2) osits (B3) t or Crust (B4) osits (B5) in Visible on Aeria Vegetated Conca ained Leaves (B9 vations: present?	of one is Imagery ave Surfac Yes Yes	(B7) e (B8) No	Aquatic True Aqu Hydroge Oxidized Roots (C Presence Recent I (C6) Thin Muc Gauge o Other (E	Fauna (Buatic Plar n Sulfide I Rhizosp 3) e of Reduron Reduck Surfac r Well Da xplain in Depth (ii	nts (B14) Odor (Cr heres on uced Iron uction in T e (C7) ata (D9) Remarks uches):	Living (C4)	Surface : Drainage Dry-Seas Crayfish Saturatio Stunted : Geomore FAC-Neu	Soil Cracks (B6) Patterns (B10) Son Water Table (C2) Burrows (C8) Visible on Aerial Imagery (C9) or Stressed Plants (D1) Ohic Position (D2)
Wetland Hy Primary Indic Surface N High Wa Saturatio Water M Sedimen Drift Dep Algal Ma Iron Depi Inundatic Sparsely Water-St Field Obser Surface water Water table p Saturation pri	drology indicate cators (minimum Water (A1) ter Table (A2) in (A3) arks (B1) t Deposits (B2) osits (B3) t or Crust (B4) osits (B5) in Visible on Aeria Vegetated Conca ained Leaves (B9 vations: er present? present?	of one is Imagery ave Surfac Yes	(B7) e (B8)	Aquatic True Aqu Hydroge Oxidized Roots (C Presence Recent I (C6) Thin Muc Gauge o Other (E	Fauna (B Jatic Plar n Sulfide I Rhizosp 3) e of Redu ron Redu ck Surfac r Well Da xplain in	nts (B14) Odor (Cr heres on uced Iron uction in T e (C7) ata (D9) Remarks uches):	(C4) — — — — — — — — — — — — — — — — — — —	Surface : Drainage Dry-Seas Crayfish Saturatio Stunted Geomore FAC-Neu	Soil Cracks (B6) Patterns (B10) Son Water Table (C2) Burrows (C8) In Visible on Aerial Imagery (C9) For Stressed Plants (D1) Fohic Position (D2) Utral Test (D5)
Wetland Hy Primary Indic Surface V High Wa Saturatio Water Mi Sedimen Drift Dep Algal Ma Iron Depo Inundatio Sparsely Water-St Field Obser Surface water Vater table p Saturation pr Includes cap	drology indicate cators (minimum Water (A1) ter Table (A2) in (A3) arks (B1) t Deposits (B2) osits (B3) t or Crust (B4) osits (B5) in Visible on Aeria Vegetated Conca ained Leaves (B9 vations: present? present?	of one is al Imagery ave Surface Yes Yes Yes	(B7) e (B8) No No No	Aquatic True Aqu Hydroge Oxidized Roots (C Presence Recent I (C6) Thin Muc Gauge o Other (E X X	Fauna (Bruatic Plar n Sulfide l Rhizosp 3) e of Reduron Reduron Reduron ck Surfac r Well Da xplain in Depth (in Depth (in	nts (B14) Odor (C heres on uced Iron uction in T e (C7) ata (D9) Remarks nches): nches):	(C4) (C4) (C4) (C4) (C4) (C4) (C4) (C4)	Surface : Drainage Dry-Seas Crayfish Saturatio Stunted : Geomore FAC-Neu	Soil Cracks (B6) Patterns (B10) Son Water Table (C2) Burrows (C8) In Visible on Aerial Imagery (C9) Or Stressed Plants (D1) Othic Position (D2) Utral Test (D5)
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APPENDIX C

Site Photos



Basin 1



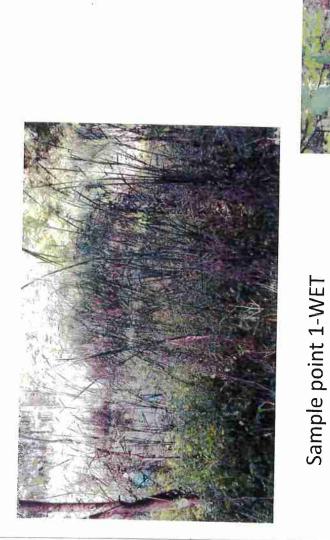
Northeastern portion of Basin 2



Northwestern portion of Basin 2



Sample point SP-1



Sample point 2-1 WET



Sample point 2-2 WET

APPENDIX D

Wetland Delineation Approval Forms