WETLAND DELINEATION REPORT MacArthur Road Outlot - South End Delineation # 16.2020

October 28, 2020



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Aaron Menke
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Wetland Delineation Report MacArthur Road Outlot - South End Delineation # 16.2020

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- 1. Introduction
- 2. Site Description
- 3. Resource Review
- 4. Results and Conclusion Appendices



1. INTRODUCTION

The study area was delineated by Thompson and Associates Wetland Services at the request of Judy Fuller, Hollyhock Properties. Alice Thompson was the lead delineator, Aaron Menke was the field assistant. The site consists of approximately 1acre project area and is located on the south end of Outlot 1326-999 on the north side of MacArthurs Road, east of S, Comanche Lane (see Figure 1). More specifically, the study area is located within the NW ¼ of Section 8, Township 6 North, Range 19 East in the City of Waukesha, Waukesha County, WI. This report is being submitted as an assured wetland delineation.

This delineation was conducted on October 28, 2020. This was the last week of the 2020 field season. The weather was mild ~45 degrees F and sunny. Green vegetation included common buckthorn, Galium and reed canary grass.

As shown in Figure 2, precipitation maps documenting the 90 day departure from normal precipitation as shown on the Advance Hydrologic Prediction Service Website of the National Weather Service (National Oceanic and Atmospheric Administration) indicated that precipitation during the 90 days prior to the field visit was approximately -1 to -2 inches below normal. Precipitation maps documenting the 90 day percent of mean departure from normal indicate that the mean departure from precipitation was 90-100 % or within normal limits (75%-125% considered normal; <75% indicates drier conditions; >125% indicates wetter conditions). The Current Drought Condition as shown on the National Integrated Drought Information System- US Drought Portal is No Drought. The USDM uses a five-category system, labeled Abnormally Dry or D0, (a precursor to drought, not actually drought), and Moderate (D1), Severe (D2), Extreme (D3) and Exceptional (D4) Drought. Drought categories show experts' assessments of conditions related to dryness and drought including observations of how much water is available in streams, lakes, and soils compared to usual for the same time of year. U.S. Drought Monitor data go back to 2000.

As the precipitation was **normal** in the past 90 days, evidence of hydrology could include obvious primary indicators such as standing water, a high water table or saturation in the root zone. However, we also rely on more subtle primary and secondary indicators relying on indicators that persist even with local climatic variation or time of year and could include a positive FAC Neutral test that documents long term vegetation patterns due in part to moisture gradients; a concave basin at a geomorphic low point which indicates probable wet conditions; evidence of saturation or ponding on aerial photographs in multiple years; blackened leaves or water marks on trees indicating ponding etc. These are particularly useful if the local climate was drier in the 90 days prior to field work or in the drier season of the year.

2. SITE DESCRIPTION

The study area consists of the south end of a wooded outlot that contains an unnamed creek flowing on the west side. The wooded outlot contains a portion of upland adjacent Mac Arthur Road. The intent was to delineate this "usable" upland east of the creek. The outlot north of this "usable upland" was not a part of the project area.

The area east of the creek had a "lumpy" appearance with highs and lows, and a concrete structure similar to a farm spring house foundation. The appearance appeared human caused- not "microtopography" that is a natural formation.

3. RESOURCE REVIEW

The site is located on a **Topographic Map** in Figure 3.

According to the NRCS Soil Survey (Figure 4), the study area contains Ogden muck close to the creek and Brookstone silt loam, both are hydric soils. In addition; Hockheim loam was mapped which is an upland soil.

The Wisconsin Wetland Inventory (Figure 5) identifies one large wetland area on the site. The wetland is mapped as T3/E1K, or Forested Broad-leaved deciduous with persistent emergent / wet meadow vegetation and wet soil.

Historical maps (Figure 6) show the site changed over time in the following ways: in the 1941 aerial photo the area appears to be part of a larger agricultural farm field, and the creek is visible. The 1990 aerial shows residential development being built west of the creek. The 2000 aerial shows further residential development both west of the creek, and east of the outlot. The 2010 aerial appears similar to the present.

4. RESULTS AND CONCLUSION

• One Wetland was delineated within the study area (Figure 7). The study area contains "Significantly Disturbed" and "Problem" areas as outlined on Table 1 and shown on data sheets. This report does not presume to determine federal or

state jurisdiction or possible state wetland exemptions. The US Army Corps of Engineers and the Wisconsin Department of Natural Resources should be consulted with jurisdictional determination questions.

- Wetland A was ~0.7 acres located adjacent the stream.
- The wetland community type is Northern hardwoods forest and fresh wet meadow.
- Vegetation included box elder, cottonwood, stressed common buckthorn, red osier dogwood, reed canary grass and garlic mustard.
- o Soils met the Redox Dark Surface hydric soil indicator.
- Hydrology included a positive FAC-neutral test & geomorphic position as well as stressed shallow roots.
- The wetland line was placed at a shift from hydric vegetation including stressed common buckthorn that was replaced by upland vegetation including honeysuckle, unstressed common buckthorn and burdock. This was concurrent with a rise in topography and a loss of hydric soil indicators and stress on trees and shrubs. The line close to Mac Arthur Road included some high areas within lower ground as the soil appeared disturbed. The concrete structure was omitted from the wetland boundary.

Other Water Features:

A stream was located on the west side of the project area, flowing south under Mac Arthur Road. It was approximately 5 'wide with 2-3' high banks. Silts, sands and pebbles were the substrate. The water was ~6 inches deep, fast flowing and clear. The un named stream is mapped by the WDNR as WBIC 3000120 that flows south to join Pebble Creek and then to the Fox River.

Uplands

 Uplands were characterized by a steep rise in topography above the floodplain. The vegetation included black walnut, crabapple, box elder, common buckthorn, honeysuckle and Canada goldenrod, Queen Anne's lace, and garlic mustard.

Wetland Category for Stormwater Permitting *							
Wetland	Highly Susceptible	Moderately Susceptible	Less Susceptible				
А		X floodplain forest, fresh wet meadow					

Less Susceptible: Degraded wetlands dominated by 90% or greater invasive species. Farmed wetlands, gravel pits, dredge material or fill material sites included.

Moderately Susceptible: Shrub wetlands, floodplain forest, fresh wet meadows,

deep/shallow marsh, forested wetlands. Perennial and Intermittent streams (USGS 7.5 series or County Soil Survey Map) and lakes.

Highly Susceptible: Threatened and endangered species, fish and wildlife refuges, calcareous fens, wild and scenic rivers, sedge meadows, open and coniferous bogs, low prairies, coniferous swamps, lowland hardwood swamps, and ephemeral ponds. Outstanding and exceptional resource waters including trout streams included.

* These designations are based on the WDNR language, wetland delineation field work and the professional opinion of Thompson and Associates. These are suggested categories however the WDNR may modify these in their permit review. For example, some of the characteristics of a Highly Susceptible wetland may not be apparent to Thompson due to confidential data or data beyond the scope of this delineation (e.g.: rare species, high quality trout stream etc.).

The wetland line staked in the field by Thompson and Associates Wetland Services is an estimate of the wetland boundary and the opinions presented in this report are best estimates of the conditions at the time the wetlands were delineated.

Alice Thompson, lead delineator, is an Assured Delineator as explained at the Wisconsin Department of Natural Resources' (the "WDNR") web site, at http://www.dnr.state.wi.us/org/water/fhp/wetlands/boundaries.html. The WDNR considers Thompson's wetland delineation work to be "Assured" for purposes of Wisconsin waterway and wetland permits, such that Thompson's clients do not need to wait for concurrence letters from the WDNR before relying on such delineations and may expect that wetland delineation issues should not be the cause of delays in state waterway and wetland permit decisions.

This report will be submitted to the WDNR Assured Delineation Report Portal electronically. Thompson's work is reviewed annually by the WDNR Wetland ID program and one site a year is field verified as part of Thompson's continued assurance status. A client will be notified if their site is going to be spot-checked, and no additional fees will be required. The Assurance Program has a code of ethics that includes high moral and ethical standards and clear and scientifically accurate reporting to the WDNR. All of Thompson's reports are filed with the WDNR Wetland ID program, unless the client does not want to utilize the report and findings, or refuses to pay for the report. Any of Thompson's delineation work not filed with the WDNR is invalid.

The wetlands identified in this report may be subject to federal regulation under the jurisdiction of the U.S. Army Corps of Engineers (USACE), state regulation under the jurisdiction of the Wisconsin Department of Natural Resources (WDNR), and local jurisdiction under your local county, town, city or village. Municipalities, townships and counties may have local zoning authority over certain areas or types of wetland and waterways. The determination that a wetland or waterway is subject to federal, state or local regulatory jurisdiction is made independently by the agencies. As a result, there may be adjustments to boundaries or jurisdiction based upon review of a regulatory agency.

Any activity in the delineated wetland may require U.S. Army Corps of Engineers permit, State of Wisconsin Department of Natural Resources Water Quality Certification or Exemption, and local government permits. If the Client proceeds to change, modify or utilize the property in question without obtaining authorization from the appropriate regulatory agency, it will be done at the Client's own risk and Thompson and Associates Wetland Services shall not be responsible or liable for any resulting damages.

This field work and report is not intended to meet the requirements of an SEWRPC Environmental Corridor, WDNR Endangered Species Review, a navigability determination, or the location of either the Ordinary High Water Mark or floodplain.

APPENDICES:

- 1. Field Photographs
- 2. Figures
 - Figure 1. Location Map
 - Figure 2. NWS Departure from Mean Precipitation Maps
 - Figure 3. 2-ft Contour Map
 - Figure 4. Soil Map & Hydric Soil List with Minor Soils
 - Figure 5. Wisconsin Wetland Inventory
 - Figure 6. Historical Aerial Photographs
 - Figure 7. Wetland and Data Point Locations
- 3. Field Data and Results
 - Table 1. Significantly Disturbed and Problem Areas
 - Data Sheets



ROUTINE METHODOLOGY FOR DELINEATING WETLANDS

This delineation was performed according to guidelines set by the <u>U.S. Army Corps of Engineers 1987 Manual</u> and either the <u>2012 Regional Supplement to the Corp of Engineers Wetland Delineation Manual: Northcentral and Northeastern Region</u>, or the <u>2010 Regional Supplement to the Corp of Engineers Wetland Delineation Manual: Midwest Region</u>, depending on which region the site occurs within per US Army Corps of Engineers guidance. Additional DNR requirements and guidance that were presented at wetland delineation training courses and workshops offered by UW-Extension have also been incorporated including the "Guidance for Submittal of Delineation Reports to the St Paul District USACOE and WDNR" dated July 14, 2014 and the St Paul District USACOE "Guidance for Offsite Hydrology/Wetland Determinations" dated July 1, 2016.

Maps used during the delineation included site location map, NRCS County soil maps, U.S.G.S. topographic map, Wisconsin Wetland Inventory Map, and aerial photography. NRCS Wetland Inventory Maps are provided when available and pertinent. Soil taxonomy is obtained from the NRCS Official Soil Series Descriptions (OSD). The indicator plant status was taken from the State of Wisconsin 2016 Wetland Plant List authored by Lichvar, R.W., D.L. Banks, W.N.Kirchner, and N.C. Melvin. The National Wetland Plant List: 2016 wetland ratings. U.S. Army Corps of Engineers. When an indicator was not given then the indicator listed in the Plants of the Chicago Region by Floyd Swink and Gerould Wilhelm (1994) was used. Typha plants area not identified to species level as recent research by Dr. Pamela Geddes documents the inability to accurately identify to species using current field characteristics, Similarly, Dr. Gary Fewless reports Craetegus sp. cannot be identified to species due to hybridization. The reference for landform descriptors is: Schoeneberger, P.J., Wysocki and Benham, 2012. Field Book for describing and sampling soils, Version 3.0, NRCS, Lincoln, NE. The NOAA Advanced Hydrologic Prediction Service Departure from Normal Map is used to calculate the 90-day departure from normal on the day of the delineation, and the 90 day percent of mean departure from normal. This NOAA data set uses radar, satellite data, and observed data from the 12 CONUS River Forecast Center. The NOAA "normal" precipitation is derived from PRISM climate data created at Oregon State University. As of 2015 the 30- year PRISM Normals have been updated utilizing the 1981-2010 dataset. The location of the project is geo-referenced on the map. The Current Drought Conditions Map is found on the National Integrated Drought Information System- US Drought Portal sponsored by the USDA, National Drought Mitigation Center and seven federal agencies including the U. S. Army Corps of Engineer and NOAA. It is updated weekly on www.drought.gov.

Data points were set in areas that exhibited obvious wetland and obvious upland characteristics. The location of each data point is in the midpoint of the number on the aerial map "Data Point Locations". At each data point, vegetation was identified, soils described, and hydrology noted. Vegetation was recorded as species and absolute percent cover. Herbaceous vegetation, shrub, and tree cover were estimated in circular plots of approximately 5, 15, and 30 feet in radius, respectively, with the center point being the soil pit. If the entire circular plot was not located within a single plant community, then the plot shape was adjusted accordingly with the total plot area remaining equivalent to the circular plot area. The absolute cover was estimated as precisely as possible with low cover estimated as 1%, 3%, or 5%. Vegetation greater than 5% absolute cover was estimated in additional increments of 5%. The appropriate test (Rapid Assessment, Dominance, Prevalence or Morphological Adaptations test) was used to determine dominant vegetation. All plots with a 50% dominance of hydrophytes were evaluated with the Prevalence Index. The wetland boundary was staked and located between the wetland and upland data points, at a consistent break in vegetation, topography, and soils.



BIOGRAPHIES OF FIELD INVESTIGATORS

Alice L. Thompson, Owner, Assured Wetland Delineator

Alice L. Thompson is an independent wetland consultant since 1989 and is certified by the Society of Wetland Scientists as a Senior Professional Wetland Scientist (SPWS). Thompson is a WDNR "assured" wetland delineator since 2006 (see WDNR letter as follows). She obtained a Master's degree in biological sciences at the University of Wisconsin-Milwaukee in 1995. Her professional interests include wetland restoration, mitigation, and the control of invasive plant species, especially reed canary grass. Ms. Thompson has satisfactorily completed the Wetland Delineation course offered by the Wisconsin Department of Administration, Coastal Management Program in 1998; the Advanced Wetland Delineation Training Workshop offered by the University of Wisconsin-La Crosse in 2002, 2008 and again in 2014; Advanced Hydric Soils offered by the Wetland Training Institute in 2004; the Primary Environmental Corridor Delineation Workshop offered by the Southeastern Wisconsin Regional Planning Commission in 2004; Wetland Plant Identification offered by Dr. Mohlenbrock, Biotic Consultants, 2003 and 2004; Ecological Geology Workshop, UWM Field Station, 2006; the Midwest Supplement Training offered by the US Army Corp of Engineers in 2009, Native Mussel Identification Workshop, UWM Field Station, 2012; Northern Michigan Wetland Plant Identification offered by the Michigan Wetlands Association, 2019; and the Critical Methods in Wetland Delineation offered annually by the Wisconsin Department of Natural Resources in 2018 and eight previous years since 2006. Thompson has taught a 2 day field workshop on "Wetland Delineation for Beginners" at the UW-Milwaukee Field Station (Saukville, WI) in 2017 and 2019.

Aaron J. Menke, Wetland Ecologist

Aaron J. Menke earned a Bachelor's degree in Applied Environmental Geography with a Biology minor and a Certificate in Geographic Information System (GIS) from the University of Wisconsin-Parkside in 2013. Menke has worked as a wetland consultant with Thompson and Associates for the past six years. His specialty includes utility environmental oversight and permitting, and construction environmental monitoring. Menke also assists on fieldwork including wetland delineation and wetland management. His professional interests include digital mapping techniques and modeling, wildlife management and wetland restoration. He attended the Wisconsin Wetlands Association Wetland Identification Workshop held in September, 2013 (Racine County). He has successfully completed the Basic Wetland Delineation course offered by the University of Wisconsin-La Crosse in 2014 and the Advanced Wetland Delineation course in 2018. He has annually attended Critical Methods in Wetland Delineation offered by the Wisconsin Department of Natural Resources from 2015 through 2020. He has also participated in a wide variety of webinars over the years offered by the Association of State Wetland Managers (ASWM); with notable topics including hydric soils, wetland restoration and mitigation, regulatory updates and tribal aquatic resource protection. He serves as a board member on the Kenosha - Racine Land Trust board of directors, and as President of the Friends of Hawthorn Hollow Nature Sanctuary and Arboretum board of directors.

State of Wisconsin DEPARTMENT OF NATURAL RESOURCES 1300 W Clairemont Avenue Eau Claire, WI 54701

Tony Evers, Governor Preston D. Cole, Secretary Telephone 608-266-2621 Toll Free 1-888-936-7463 TTY Access via relay - 711



March 19, 2020

Alice Thompson
Thompson & Associates
1514 Menomonee Avenue
South Milwaukee, WI 53172

Subject: 2020 Assured Wetland Delineator Confirmation

Dear Ms. Thompson:

This letter provides Wisconsin Department of Natural Resources (WDNR) confirmation for the wetland delineations you conduct during the 2020 growing season. You and your clients will not need to wait for the WDNR to review your wetland delineations before moving forward with project planning. This will help expedite the review process for WDNR's wetland regulatory program. Your name and contact information will continue to be listed on our website at: http://dnr.wi.gov/topic/wetlands/assurance.html.

In the instance where a municipality may require a letter of confirmation for your work prior to moving forward in the local regulatory process, this letter shall serve as that confirmation. Although your wetland delineations do not require WDNR field review, inclusion of a Wetland Delineation Report is required for projects needing State authorized wetland, waterway and/or storm water permit approvals.

If you or any client has a question regarding your status in the Wetland Delineation Professional Assurance Program, contact me by email at kara.brooks@wisconsin.gov or phone at 414-308-6780. Thank you for all your hard work and best wishes for the upcoming field season.

Sincerely,

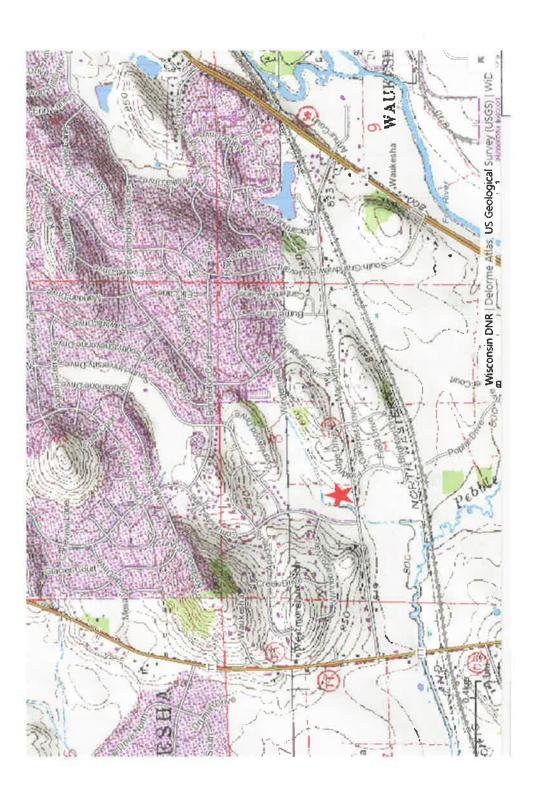
Kara Brooks

Wetland Identification Coordinator Bureau of Watershed Management

dnr.wi.gov wisconsin.gov

Naturally WISCONSIN





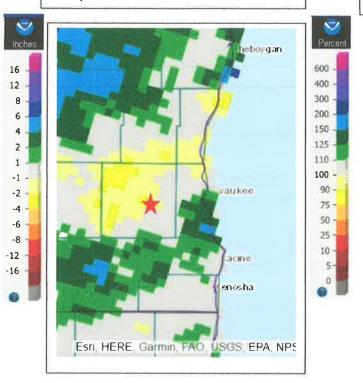
MacArthur Road Outlot 1326-999- south end **Location and USGS Topographic Map**





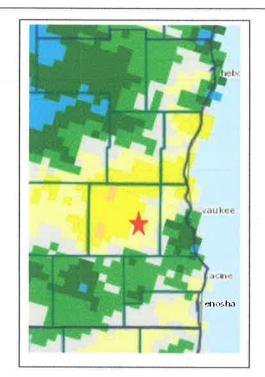


90 Day Departure From Normal Precipitation- inches



90 Day Departure Percent of Normal Precipitation-per cent

0-75=Drier than Normal; 75-125=Normal; 125-600+ =Wetter than Normal



Intensity:

D0 Abnormally Dry
D1 Moderate Drought
D2 Severe Drought
D3 Extreme Drought

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.

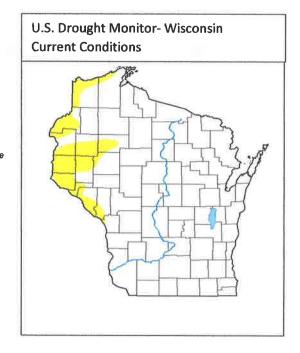
D4 Exceptional Drought



Sources: Advanced Hydrologic Precipitation Service Website, National Weather Service

National Integrated Drought Information System, U.S. Drought Monitor-WisconsIn (www.droughtmonitor.unl.edu)

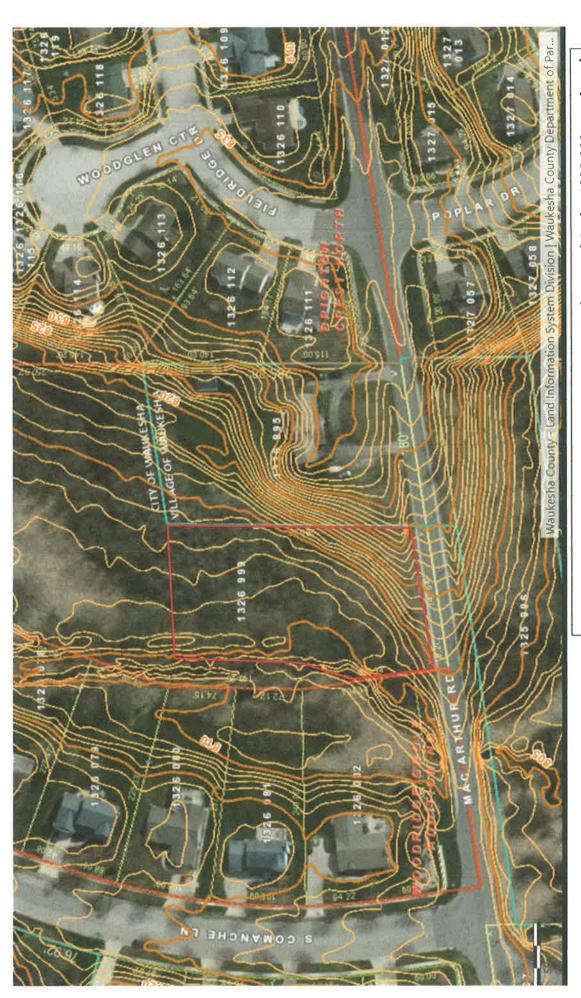
Project Area Starred in Red





MacArthur Road Outlot 1326-999- south end

90- Day Departure from Normal and Percent of Normal Precipitation & Current Drought Intensity





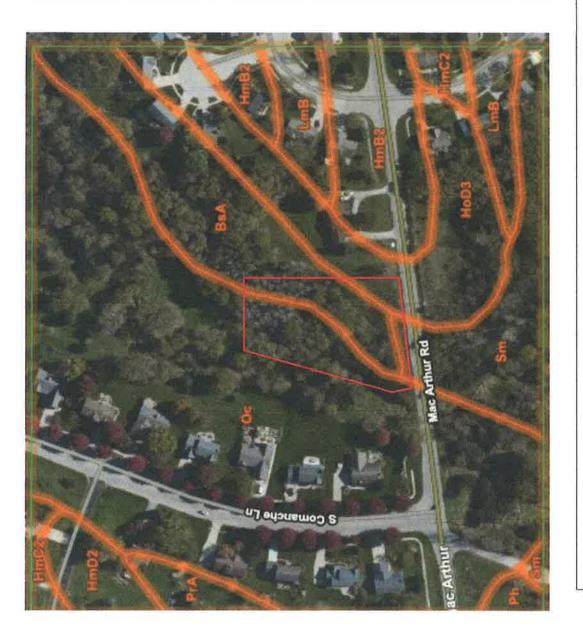
Contour Topography

Thompson & Associates
WESTAND SPRYICES

Project Area outlined in red

Source: Waukesha County GIS Website

Fig



MacArthur Road Outlot 1326-999- south end

NRCS Soil Survey

Figure 4

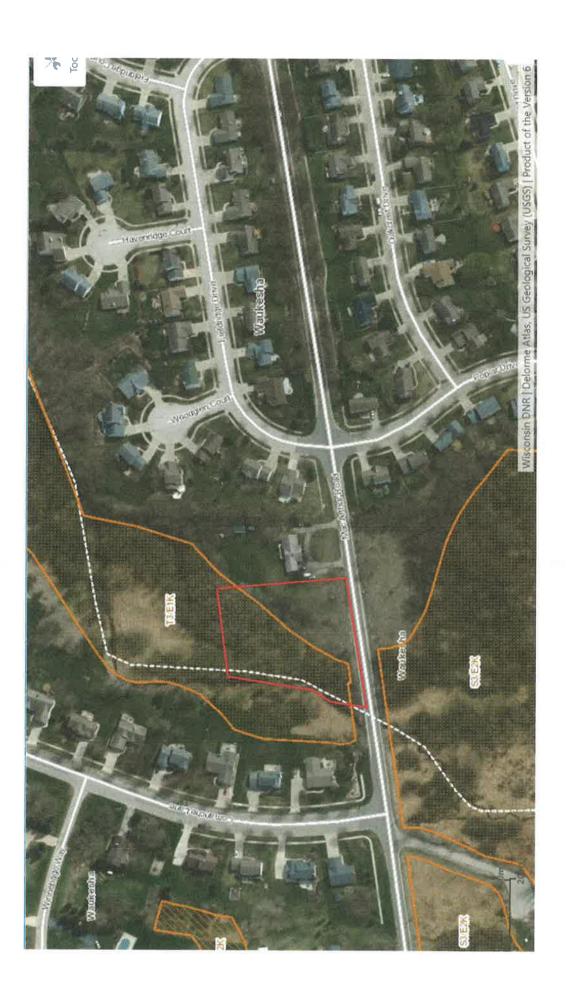
Project Area outlined in red

Source: NRCS Web Soil Survey, soils descriptions follow



Report—Hydric Soil List - All Components

Map symbol and map unit name	Component/Local Phase	Comp.	Landform	Hydric status	Hydric criteria met (code)
BsA: Brookston silt loam, 0 to 2 percent slopes	Brookston	85-95	Depressions	Yes	2
	Lamartine	2-6	Draws	No	
	Pella	3-9	Drainageways	Yes	2,3
HmB2: Hochheim loam, 2 to 6 percent slopes, eroded	Hochheim-Eroded	80-91	Drumlins	No	_
	Theresa-Eroded	6-12	Till plains	No	
	Lamartine	3-8	Drumlins	No	_
HmC2: Hochheim loam, 6 to 12 percent slopes, eroded	Hochheim-Eroded	85-92	Drumlins	No	_
	Theresa	4-8	Drumlins	No	-
	Hochheim	4-7	Drumlins	No	
HmD2: Hochheim loam, 12 to 20 percent slopes, eroded	Hochheim-Eroded	80-91	Drumlins	No	-
	Theresa	6-12	Drumlins	No	-
	Hochheim	3-8	Drumlins	No	
HoD3: Hochheim soils, 12 to 20 percent slopes, severely eroded	Hochheim	100	Drumlins,ground moraines	No	_
LmB: Lamartine silt loam, 0 to 3 percent slopes	Lamartine	80-91	Interdrumlins	No	-
	Pella	6-11	Drainageways	Yes	2,3
	Ossian	3-9	Depressions	Yes	2,3
Oc: Ogden muck	Ogden	100	Lakebeds,depression s	Yes	1,3
Ph: Pella silt loam, 0 to 2 percent slopes	Pella	80-91	Drainageways	Yes	2,3
	Kendall	5-9	Drainageways	No	
	Lamartine	4-8	Drainageways	No	
	Palms-Muck	1-3	Depressions	Yes	1,3
PrA: Pistakee silt loam, 1 to 3 percent slopes	Pistakee	90	Flood plains	No	_
	Wet alluviat land	4	Flood plains	Yes	2,3,4
	Juneau	3	Flood plains	No	-
	Pella	3	Depressions	Yes	2,3
Sm: Sebewa silt loam, 0 to 2 percent slopes	Sebewa	80-95	Depressions	Yes	2,3
	Adrian	3-12	Lakebeds (relict)	Yes	1,3



MacArthur Road Outlot 1326-999- south end

Wisconsin Wetland Inventory

Figure 5

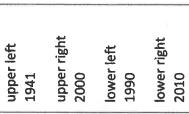


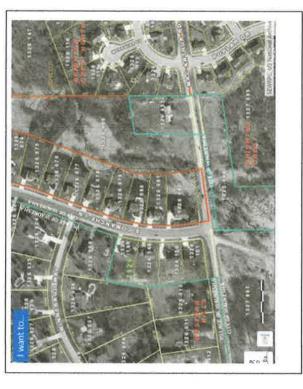
Project Area outlined in red Source: WDNR Surface Water Data Viewer













MacArthur Road Outlot 1326-999- south end

Historic Aerials

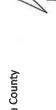










Figure 7



Source: Waukesha County GIS 2015 aerial

Project Area outlined in red



Wetland Delineation Photos taken on October 28, 2020



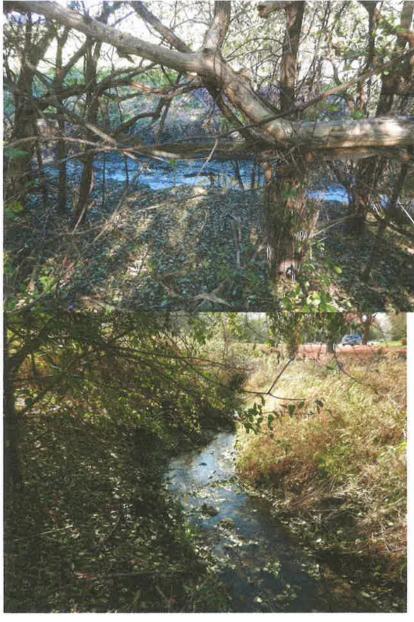
Upper left-Stream facing south

Center left–Stream from wetland facing west

Lower left– Stream flowing towards Mac Arthur Road in the background.

Center right- close up of stream

Lower right—Concrete structure on lumpy ground east of stream. Old spring house?

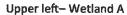






Wetland Delineation Photos taken on October 28, 2020



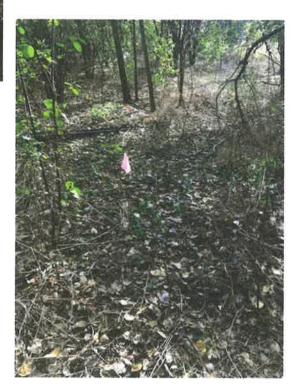


Center left— Wetland boundary facing northwest at concrete structure, wetland to left of photo, upland to right

Lower left-- Wetland A in background, Upland in foreground

Lower right- Wetland A in background, upland in foreground





Wetland Delineation Photos taken on October 28, 2020





Upper left— Mac Arthur Road on right facing east, upland in foreground, neighbors lot in background (at arrow beyond tree).

Center left— upland facing towards Mac Arthur Road.

Lower left- from Wetland A facing upland towards Mac Arthur Road

Lower right- from high point at Mac Arthur Road facing north—Wetland A in background





Table 1.	Summary of "Significantly	/ Disturbed" and '	'Problem" Areas							
Site:	MacArthur Road Outlot - South End									
Signific	antly Disturbed Areas	Corresponding Data Points	Description	Justification for wetland with less than 3 parameters						
	Farmed Field									
V	Managed plant community	4	mowed within past month- vegetation was identifiable.							
	Soil Removal									
V	Fill	2	"lumpy ground", with a concrete structure close by- possible dredge fill or historic farm disturbance.							
	Subsurface Plow									
	Surface Layer Removed									
	Man-Made Structure			, , , , , , , , , , , , , , , , , , , ,						
	Dam/Levee									
	Channelization									
	Drainage									
	Human-induced wetland									
	Change in River									
Problem	Areas	Corresponding Data Points	Description	Justification for wetland with less than 3 parameters						
	Highly seasonal wetland									
	Vegetated flats									
	FACU dominated wetland									
	Beaver impoundment									
	Problem soils- red parent material, sandy etc.									
	Fluvial Soils									
	Vernal pools									
	Multi-year wet/dry cycle									
	White pine swamp									
	Other									
misleading	j. Disturbed areas include human	-caused disturbance	r more of three parameters (vegetation, so or disturbance due to a significant, catast ently due to the nature of soils or vegetation	rophic natural event. Problem areas are						

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Mac Arthur Pil Out 10+	- Send cityl	County: Warkshal Warkshampling Date: 10/28 /2020
Applicant/Owner: Hollyhock Properties		State: WI Sampling Point:
Investigator(s): TAWS - Alice Thompson Advon Many	د	Section & Township (N, Range (East) West
	Other:	Local relief: concave, convex, linear, other:
Soil Map Unit Name: Brookstone silt	Joan /	Dadla much introduction: T3 E1K
Are climatic/hydrologic conditions on the site typical for this time of	of year? Yes	No Reason: Previous 90 day Precipitation WET NORMAL DRY
Are Vegetation, Soil, or Hydrologys		ed? Are "Normal Circumstances" present? Yes X No
Are Vegetation, Soil, or Hydrology		
SUMMARY OF FINDINGS - Attach site map showing sa	mpling point loc	^ .
Hydrophytic Vegetation Present? YesNo	-	Is the Sampled Area within Wetland Fr
Hydric Soil Present? YesNo	-	a Wetland? Yes No
Wetland Hydrology Present? YesNo		Wetland Type: Marsh Fresh Wet Meadow Sedge Meadow Shrub Carr N, Hardwood Swamp Coniferous Swamp Riverine Ephemeral Basin Dune& Swale Farmed Welland
N Remarks:	20 (0)	
stream shelf on edge	0 -10	ming Stream
H Last week of fill &	1660 >02	Sund Jay 45°F gran include
VECETATION. Lies ecientific names of plants	buck	son, Sunny day 45°F, green includes
VEGETATION - Use scientific names of plants.	100.00	
Tree Stretum (Diet size: equiv to 201 radius)	Absolute % Domi Cover Spec	inant Indicator Dominance Test worksheet:
Tree Stratum (Plot size: equiv to 30' radius)	Cover Spec	Number of Dominant Species That Are
1		OBL, FACW, or FAC:(A)
2		Total Number of Dominant Species
3		(B)
4.		Percent of Dominant Species That Are
5		OBL, FACW, or FAC:(A/B)
	= Tota	al Cover
Sapling/Shrub Stratum (Plot size: equiv to 15' radius)	1-0	Prevalence Index worksheet:
1. Rhamus culturation	-100 -M	Total % Cover of: Multiply by:
2 COINUS alba	/	M → Toc W OBL species x1=
3.		FACW species x 2 =
4		FAC species x 3 =
5	11	FACU species x 4 =
6.		UPL species x 5 =
7.	ž	
151/	130 = Tota	al Cover 65 26 Prevalence Index = B/A =
Herb Stratum (Plot size: equiv to 5' radius)	· +	Hydrophytic Vegetation Indicators:
Herb Stratum (Plot size: equiv to 5' radius)	10 M	Rapid Test for Hydrophytic Vegetation
2. Allaria petiolata	30 0	Dominance Test is >50%
3,		Prevalence Index is ≤3.0¹
4.		Morphological Adaptations¹ (Provide supporting data in Remarks)
5.		Problematic Hydrophytic Vegetation¹ (Explain)
6.	F1	¹Indicators of hydric soil and wetland hydrology must be present, unless
7		disturbed or problematic.
		Definitions of Vegetation Strata:
8.		Tree - Woody plants 3 in. (7,6cm) or more in diameter at breast
9.		height (DBH), regardless of height,
10,	HO = Tota	Sapling/shrub - Woody plants less than 3 in, DBH and greater than
Woody Vine Stratum (Plot size: equiv to 30' radius)		3.28 (1m) tall.
1		Herb - All herbaceous (non-woody) plants, regardless of size, and
		woody plants less than 3.28 ft tall.
2.		Woody vines - All woody vines greater than 3,28 ft in height,
J		al Cover Is Hydrophytic Vegetation Present? Yes X No
Remarks:	= 10ta	19 Hydrophydic vagotation Fleschit? 165 // 100

SOIL								Sampling Point:
	ion: (Describe to the d	epth needed	to document the indic	ator or confi	rm the abs	ence of ind	licators.)	
Depth (inches)	Matrix		Redox Feature					
(mones)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-14	1045 511	90	107 R 5 18	10		<u></u>	511+ loan w	
	1/2						high organ	ine mother
14-26	1012211	70	104R 4/6	30		m	511+ 10amel	
					-		high organ	mix mater
Type: C=Coppe	ntration D=Doplation I	PM-Paduage	Matrix, CS=Covered or	Coated Sand	Grains		21 ocation: PI =Po	re Lining, M≕Matrix.
	cators: (For LRR K)	RIVI=Reduced	I Matrix, CS=Covered or	Coaled Sand	Grains.		Indicators for Problematic H	
Thick Dark Sandy Muc Sandy Gley Sandy Red Stripped M	edon (A2) c (A3) Sulfide (A4) ayers (A5) lelow Dark Surface (A1: Surface (A12) cky Mineral (S1) yed Matrix (S4) lox (S5) atrix (S6)		Dark Surface (High Chroma S Loamy Mucky Loamy Gleyed Depleted Matri Redox Dark Su Depleted Dark Redox Depress Marl (F10)	Sands (S11) of Mineral (F1) Matrix (F2) x (F3) urface (F6) Surface (F7) sions (F8)			2 cm Muck (A10) Coast Prairie Redox (A 5 cm Mucky Peat or Pe Dark Surface (S7) Polyvalue Below Surfa Thin Dark Surface (S9) Iron-Manganese Masse Red Parent Material (F Very Shallow Dark Sur Other (Explain in Rema	ce (S8)) es (F12) '21)* face (F22)*
Type: Depth (inch	es):	\ 0 0 M	4 Muckey	Minen	اس ب	Nich	Is Hydric Soil Present?	Yes X No
,								
HYDROLOGY								100 m
Surface Water High Water Saturation Water Marl Sediment I Drift Deposed Algal Mat of Iron Deposed Inundation	rs (minimum of one is re ater (A1) r Table (A2) (A3) ks (B1) Deposits (B2) sits (B3) or Crust (B4)	ry (B7)	wall that apply) Water-Staine Aquatic Faun Marl Deposits Hydrogen Su Oxidized Rhi Presence of I Recent Iron F Thin Muck Su Other (Explain	a (B13) s (B15) lifide Odor (C zospheres on Reduced Iron Reduction in T urface (C7)	1) Living Roo (C4) Filled Soils (Surface Soil Cra Drainage Patteri Moss Trim Lines Dry-Season Wal Crayfish Burrow Saturation Visible	ns (B10) s (B16) ter Table (C2) (B/1 or later s (C8) le on Aerial Imagery (C9) sed Plants (D1) sition (D2) d (D3) c Relief (D4)
Field Observation Surface Water Prese Water Table Prese Saturation Prese	resent? Yes	sN	o Depth (inch	nes):		Is We	etland Hydrology Present?	Yes No

Remarks:

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: MacArmur RD Outlat - 5	send	City/County:	Warker	hal waskshareampling Date:	10 28 12020
Applicant/Owner: Hollyhock Properties			-	State: WI Sampling Point:	2-
Investigator(s): TAWS - Alice Thompson Aavon Me	ne			Section 7 Township 6 N, Range	9 East)West
Landform: Summit Shoulder Backslope Footslope Toeslope Urban Modified	Other:			concave, convex linear, other:	X
Soil Map Unit Name: Brookstone Silt 100	m			WWI classification; T3	EIK
Are climatic/hydrologic conditions on the site typical for this time	e of year?	Yes X	No	Reason: Previous 90 day Precipitation WETT	JORMAJ. DRY
Are Vegetation , Soll, or Hydrology	_significantly d	isturbed? 🖟		Are "Normal Circumstances" present?	Yes No
Are Vegetation, Soil, or Hydrology					now normal
SUMMARY OF FINDINGS - Attach site map showing :	sampling poi	nt locations,	transects,	important features, etc.	
	ło			d Area within	watered A
1	lo		Wetland?	YesNo	
Υ	lo	We Sw	etland Type: Maramp Riverine	arsh Fresh Wet Meadow Sedge Meadow Shrub Ca Ephemeral Basin Dune& Swale Farmed Wetland	rr N. Hardwood Swamp Coniferous
N Remarks: 4 50mm highs lows	toward I'm	N 14. 0	tal f	am disturbance	
O X-50mm	401-01			C-11/4 PC-36	
T OF Creek divergina	2 - 6	on evete	Stave	store adjacent pl	191 (Sec-bivalo)
Н	0	,		old spring co	olm ?
VEGETATION - Use scientific names of plants.					0 ×
	Absolute %	Dominant	Indicator	Dominance Test worksheet:	
Tree Stratum (Plot size: equiv to 30' radius)	Cover	Species?	Status	Number of Dominant Species That Are	4
1. Acer negunalo			Fac	OBL, FACW, or FAC:	(A)
2	-,			Total Number of Dominant Species	5
3.,				Across All Strata:	(B)
4.				Percent of Dominant Species That Are	(A/B)
5.				OBL, FACW, or FAC:	(A/B)
	20	= Total Cover	10 4		
Sapling/Shrub Stratum (Plot size: equiv to 15' radius)	n,		1	Prevalence Index worksheet:	and a
1. Louicera Hartarica			FILU_		Multiply by:
2. Phanenus cathartica	100		Fac	OBL species x 1 =	
3.				FACW species x 2 =	(
4.				FAC species x 3 =	
5.				FACU species x 4 =	
6.				UPL species x 5 :	
7.				Column Totals: (A)	(B)
· -	\30	= Total Cover	65	Prevalence Index = B/A =	
Herb Stratum (Plot size: equiv to 5' radius)			. 1	Hydrophytic Vegetation Indicators:	
1. Primus Serotina	5		Fred	Rapid Test for Hydrophytic Vegetation	חכ
2. Hacklia virginiana	10		FULV	▲ Dominance Test is >50%	
3. Arction mints	10		FACY	Prevalence Index is ≤3.01	
4 Rhannus contraction	20	Ma	FAL	Morphological Adaptations¹ (Provide	supporting data in Remarks)
5. Allania Petiolatz	50	4	FAC	Problematic Hydrophytic Vegetation	' (Explain)
6. Circaea canadine	5		FACV	Indicators of hydric soil and wetland hydrol	logy must be present, unless
			12	disturbed or problematic.	
7			-	Definitions of Vegetation Strata:	
8,			-	Tree - Woody plants 3 in. (7,6cm) or mo	ore in diameter at breast
9,				height (DBH), regardless of height,	
10	100	- Total Cavar		. Sapling/shrub - Woody plants less than	3 in DBH and greater than
Meady Vine Stratum (Plot size: equiv to 20' radius)		= Total Cover	50/20	3.28 (1m) tall	•
Woody Vine Stratum (Plot size: equiv to 30' radius)				Herb - All herbaceous (non-woody) plan	nts, regardless of size, and
1.		-	1=	woody plants less than 3.28 ft tall.	
2.				. Woody vines - All woody vines greater	than 3,28 ft in height.
3.		- Total Course	-	Is Hydrophytic Vegetation Present?	Yes X No
Demorko		= Total Cover			
Remarks: Mostly facultative	dist10	ance	reget	Lyon my	of
T 12 11 11	1.1.0	2005			
TAL: TALU - dis	とうない	CA Charles			

SOIL			

Sampling Point: 2

	ion. (Describe to the d	eptn neede	d to document the indi	cator or confi	rm the abs	ence of in	dicators.)	
Depth (inches)	Matrix		Redox Featur	es				
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-8	10 YE Z /Z	100					51 Hy clay	loam
8-22	104R-211	80	10× R 518	20	Cur	5~	Sift loam	W hyhou
	ntration, D=Depletion, F cators: (For LRR K)	RM=Reduced	Matrix, CS=Covered o	r Coated Sand	Grains.			: PL=Pore Lining, M=Matrix.
			5 1 5 6					ematic Hydric Soils³:
— Histosol (A	•		Dark Surface	• •			2 cm Muck (A1	0)
Histic Epipe	edon (A2)		High Chroma	Sands (S11) G	reat Lakes sho	res	Coast Prairie F	Redox (A16)
Black Histic	c (A3)		Loamy Mucky	Mineral (F1)			5 cm Mucky Po	eat or Peat (S3)
Hydrogen S	Sulfide (A4)		Loamy Gleyed	d Matrix (F2)			Dark Surface (S7)
Stratified La	ayers (A5)		Depleted Matr	rix (F3)				w Surface (S8)
	elow Dark Surface (A11)	Redox Dark S	CONTRACTOR OF THE			Thin Dark Surf	50. V 31344
	Surface (A12)	,	Depleted Dark					se Masses (F12)
1111100000000 1100	ky Mineral (S1)						Red Parent Ma	
_			Redox Depres	ssions (FO)				
	ved Matrix (S4)		Marl (F10)					Dark Surface (F22)*
Sandy Red							Other (Explain	in Remarks)
Stripped Ma			drology must be present					
strictive Laye	r (if observed):							
Туре:								
Depth (inche	es):					- 1	Is Hydric Soil Pres	ent? Yes No
	Concrete	s-tw	ethre near	- by				
YDROLOGY								
etland Hydrolog	gy Indicators:						Secondary Indi	cators (minimum of two required)
imary Indicators	s (minimum of one is red	quired: check	(all that apply)				Surface	Soil Cracks (B6)
Surface Wa	iter (A1)		Water-Staine	ed Leaves (B9)				Patterns (B10)
High Water	Table (A2)		Aquatic Faur	na (B13)				m Lines (B16)
Saturation ((A3)		Marl Deposit	s (B15)				son Water Table (C2) (8/1 or later)
Water Mark	s (B1)		Hydrogen Su	ılfide Odor (C1)			Burrows (C8)
Sediment D	eposits (B2)		Oxidized Rhi	zospheres on I	Living Roots	(C3)	Saturation	on Visible on Aerial Imagery (C9)
Drift Deposi	its (B3)		Presence of	Reduced Iron ((C4)			or Stressed Plants (D1)
Algal Mat o	r Crust (B4)		Recent Iron I	Reduction in Ti	lled Soils (C	6)	Geomor	ohic Position (D2)
Iron Deposi	ts (B5)		Thin Muck S	urface (C7)				Aquitard (D3)
	Visible on Aerial Imager		Other (Expla	in in Remarks)			_	ographic Relief (D4)
Sparsely Ve	egetated Concave Surfa	ce (B8)						utral Test (D5)
ld Observatio	no.					_		
		B1.	D4-2	>				
rface Water Pro			1/			-		
ater Table Pres						-		2/
aturation Preser		No	Depth (inch	nes):		ls We	tland Hydrology Pres	ent? YesX No
cludes capillary		monitorina ··	/ell, aerial photos, previo	vie inercations) if availabl			
-compo meconde	o Data (stream yauye,	on.comy w	ron, aenai priotos, previo	ous inspections), ii avallabl	€.		
emarks:	J.		. ,		, _0 .	1	, 111	(A)
	* termer	abo	re data	poin-	T	, 60	+ 5+11	in Stram
	Lland -	1.010						

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

er			State: WI Sampling Point: 3 Section 8 Township 6 N , Range 19 (East) West
ег			
ег		Local relief: c	
		Lucai lellei. C	concave convex linear, other:
100			WWI classification: boundary of T3 EIK
уеаг?	Yes X	No	Reason: Previous 90 day Precipitation WETGVORMAN DRY
nificantly di	isturbed?		Are "Normal Circumstances" present? YesNo
blematic?			,
pling poi	nt locations,	transects, i	important features, etc.
	ls	the Sample	d Area within
X	1		YesNoX
X	We	etland Type: Ma	arsh Fresh Wet Meadow Sedge Meadow Shrub Carr N, Hardwood Swamp Coniferous Ephemeral Basin Dune& Swale Farmed Welland
bsolute %	Dominant	Indicator	Dominance Test worksheet:
Cover	Species?	Status	Number of Dominant Species That Are
30_	24		OBL, FACW, or FAC: (A)
30	roj	FAC	Total Number of Dominant Species
	A		Across All Strata: (B)
			D. J. (D. vizzz) Ozoria That Are
		-	Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)
60	= Total Cover	201-	
		20/12	Prevalence Index worksheet:
	\sim	Fac	Total % Cover of: Multiply by:
20	M)	FACY	OBL species x 1 =
			FACW species x 2 =
			FAC species x 3 =
			FACU species x 4 =
			UPL species x 5 =
- FA	= Total Cayer		Column Totals: (A)(B) Prevalence Index = B/A =
200	- Total Cover	25/10	Hydrophytic Vegetation Indicators:
800	M	Fac.	Rapid Test for Hydrophytic Vegetation
30		Fac V	✓ Dominance Test is >50%
5	- 14		
20			Prevalence Index is ≤3.01
30	<u>M</u>	100	Morphological Adaptations¹ (Provide supporting data in Remarks)
			Problematic Hydrophytic Vegetation¹ (Explain)
			Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
			Definitions of Vegetation Strata:
			Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height.
			Thought (2011), Togardood of Holging
155	= Total Cover	78/ 21	Sapling/shrub - Woody plants less than 3 in. DBH and greater than
		1010	3.28 (1m) tall.
			Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
			Woody vines - All woody vines greater than 3.28 ft in height.
	= Total Cover		Is Hydrophytic Vegetation Present? Yes No No
			4
	Solute % Cover 30 20 50 30 20 50	bsolute % Dominant Species? O = Total Cover O = Total Cover	Is the Sampler a Wetland? Wetland Type: Ma Swamp Riverine Species Status

	7
oint:	ン

		ueptn needed	to document the indi		iriii tile abs	ence or inc	icators.)	
Depth inches)	Matrix		Redox Feature					
	Color (moist)	<u></u> %	Color (moist)	%	Type¹_	Loc²	Texture Remar	ks
0-3_	1041501	100					Silt loam	
3-11	104 P2 1	100					sily day leave	
11-22	1047 5/2	100					soundy day loam	
72- 13	10425/3	100					Sandy clay loan	
33-34	1042513	95	1042 5/	4 5		<u></u>	sandy day loam	
		· · · · · · ·			5			
ype: C=Concentra	ation, D=Depletion,	RM=Reduced	Matrix, CS=Covered or	r Coated Sand	Grains.		² Location: PL=Pore Lining, M=N	1atrix.
dric Soil Indicate	ors: (For LRR K)						Indicators for Problematic Hydric Soils3:	
Histosol (A1)			Dark Surface	(S7)			2 cm Muck (A10)	
Histic Epipedo	on (A2)		High Chroma	Sands (S11) 6	Freat Lakes sho	res	Coast Prairie Redox (A16)	
Black Histic (A	(3)		Loamy Mucky	Mineral (F1)			5 cm Mucky Peat or Peat (S3)	
 Hydrogen Sulf	fide (A4)		Loamy Gleyed				Dark Surface (S7)	
Stratified Laye			Depleted Matr				Polyvalue Below Surface (S8)	
	w Dark Surface (A1	1)	Redox Dark S				Thin Dark Surface (S9)	
Thick Dark Su	,	• • •					Iron-Manganese Masses (F12)	
_			Depleted Dark					
Sandy Mucky	` '		Redox Depres	ssions (FB)			Red Parent Material (F21)*	
Sandy Gleyed			Marl (F10)				Very Shallow Dark Surface (F22)*	
Sandy Redox	(S5)						Other (Explain in Remarks)	
Stripped Matri:	x (S6)							
strictive Layer (i Type:	f observed):							\
Depth (inches):							Is Hydric Soil Present? Yes	No
								NO
smarks.	11	77.7	2 1 100	11/04.	100	Ked V	ery closely +	
0-11	11-22	اه یا	> , N	16 N -7 -		,	1 21 30.19 91	
1		1			32			
MOHIS	le samp	les,	reboy	att 33	3		ery closely at	
YDROLOGY								
etland Hydrology I							Secondary Indicators (minimum of tw	o required)
imary Indicators (n	ninimum of one is re	equired: check	all that apply)				Surface Soil Cracks (B6)	
Surface Water	(A1)		Water-Staine	d Leaves (B9))		Drainage Patterns (B10)	
High Water Ta	ble (A2)		Aquatic Faur	na (B13)			Moss Trim Lines (B16)	
Saturation (A3)		Marl Deposit	s (B15)			Dry-Season Water Table (C2)	(8/1 or later)
Water Marks (I	B1)			ılfide Odor (C1	1)		Crayfish Burrows (C8)	(,
Sediment Depo	osits (B2)			zospheres on	•	(C3)	Saturation Visible on Aerial Ima	agery (C9)
Drift Deposits (Reduced Iron	-	. (/	Stunted or Stressed Plants (D1	
Algal Mat or Ci				Reduction in T		:6)	Geomorphic Position (D2)	,
Iron Deposits (` '		Thin Muck S			,0,	Shallow Aquitard (D3)	
_	ible on Aerial Image	en/ (B7)		in in Remarks)		/		
	_	,	Other (Explai	iii iii Kemarks,)		Microtopographic Relief (D4)	11 - 4
		ace (Do)					FAC-Neutral Test (D5)	13 Faces
Sparsely Vege	lated Concave Sun					_		
Sparsely Vege	4							
	\$	s No	Depth (inch	nes):				
Sparsely Vege	ent? Ye		Depth (inch			2:		
Sparsely Vege eld Observations: urface Water Prese ater Table Present	ent? Ye	s No	Depth (inch	nes):		le Met	land Hudrology Present?	No Y
Sparsely Vege eld Observations: urface Water Prese	ent? Ye	s No		nes):		ls Wet	and Hydrology Present? Yes	No X
Sparsely Vege eld Observations: urface Water Prese ater Table Present aturation Present? icludes capillary fri	ent? Ye	s No No	Depth (inch	nes):	s), if availabl		and Hydrology Present? Yes	No_ <u>/</u>
Sparsely Vege eld Observations: urface Water Prese ater Table Present uturation Present? cludes capillary fri	ent? Ye	s No No	Depth (inch	nes):	s), if availabl		and Hydrology Present? Yes	No X
Sparsely Vege eld Observations: urface Water Prese ater Table Present uturation Present? cludes capillary fri escribe Recorded D	ent? Ye	s No No	Depth (inch	nes):	s), if availabl		and Hydrology Present? Yes	No. <u>_X</u>
Sparsely Vege Pld Observations: rface Water Prese ater Table Present? cludes capillary fri scribe Recorded I marks:	ent? Ye ? Ye Ye nge) Data (stream gauge	s No No , monitoring we	Depth (inch Depth (inch ell, aerial photos, previo	nes): pus inspections	s), if availabl		and Hydrology Present? Yes	No X
Sparsely Vege old Observations: rface Water Presenter Table Present turation Present? cludes capillary fri scribe Recorded D	ent? Ye ? Ye Ye nge) Data (stream gauge	s No No , monitoring we	Depth (inch	nes): nes): pus inspections	s), if available	e:		No X

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Machethur Rd Out of -S	end	City/County:	Warkest	na Waskish Sampling Date:	10/28 /2020
Applicant/Owner: Holly hock properties				State: WI Sampling Point:	a)
nvestigator(s): TAWS - Alice Thompson Aavon Ma				Section & Township 6 N, Range	19 East West
andform: Summit Shoulder Backslope Toeslope Urban Modified	Other:		Local relief:	concave convex, linear, other:	
Soil Map Unit Name: Hoch heim Loam	Y			WWI classification:	<u> </u>
Are climatic/hydrologic conditions on the site typical for this tir	ne of year?	Yes X	No	Reason: Previous 90 day Precipitation WET	
Are Vegetation <u>,</u> Soil <u>,</u> or Hydrology		turbed? 🙌	ore of	Are "Normal Circumstances" present?	YesNo
Are Vegetation, Soil, or Hydrology					
SUMMARY OF FINDINGS - Attach site map showing	sampling point	locations,	transects,	important features, etc.	
Hydrophytic Vegetation Present? YesX	No		•	d Area within	*
Hydric Soil Present? Yes	No 🙏		Wetland?	YesNo	
Wetland Hydrology Present? Yes	No X			arsh Fresh Wet Meadow Sedge Meadow Shrub C Ephemeral Basin Dune& Swale Farmed Wetland	
N Remarks: Mowed win last	month:	003	sible de	ID verethou	
O R		1			
T					
VEGETATION - Use scientific names of plants,					
		Dominant	Indicator	Dominance Test worksheet:	
Tree Stratum (Plot size: equiv to 30' radius)	Cover _	Species?	Status Fac V	Number of Dominant Species That Are	
1		<u>~</u>	FAL	OBL, FACW, or FAC:	(A)
2. Aux negundo	<u> </u>	<u>~~</u>	700	Total Number of Dominant Species	(0
3,				Across All Strata:	(B)
4.				Percent of Dominant Species That Are	80
5				OBL, FACW, or FAC:	(A/B)
	_60 =	Total Cover	30/12	<u> </u>	
Sapling/Shrub Straturn (Plot size: equiv to 15' radius)	~~	LEGISLE	- 1	Prevalence Index worksheet:	***************************************
1. Rhamous commisca		M	the	Total % Cover of:	Multiply by:
2. Viburum lendegs	LØ	_M_	tac	OBL species x 1	
3.				FACW species x 2	=
4,	-9			FAC species x 3	=
5.				FACU species x 4	=
6,				UPL species x 5	
7,				Column Totals: (A)	(B)
-	40 =	Total Cover	20/8	Prevalence Index = B/A =	
Herb Stratum (Plot size: equiv to 5' radius)	4		1	Hydrophytic Vegetation Indicators:	
1. soldas canadansis	60	M	Facu	Rapid Test for Hydrophytic Vegetati	ion
2. PASTICAL SOTIA	5		FALV	Dominance Test is >50%	
3. Tarraxacum officimale	5		Fre	Prevalence Index is ≤3,01	
4. Allapia Petislata	20	M	FAC	Morphological Adaptations¹ (Provide	supporting data in Remarks)
5. Davius caroton	10		FILU	Problematic Hydrophytic Vegetation	1 ¹ (Explain)
6.				Indicators of hydric soil and wetland hydro	ology must be present, unless
7				disturbed or problematic.	
8				Definitions of Vegetation Strata:	
0				Tree - Woody plants 3 in. (7.6cm) or m	ore in diameter at breast
9			12	height (DBH), regardless of height.	
10.	100	= Total Cover	50 70	Sapling/shrub - Woody plants less that	n 3 in, DBH and greater than
Woody Vine Stratum (Plot size: equiv to 30' radius)			3 (5)	3,28 (1m) tall	
1407.				Herb - All herbaceous (non-woody) pla	ints, regardless of size, and
				woody plants less than 3.28 ft tall.	
2.				Woody vines - All woody vines greater	than 3.28 ft in height.
J		= Total Cover		Is Hydrophytic Vegetation Present?	Yes Y No
Remarks:					
Dominated by free!	tative	3154	v b ance	· vegetation	
, , , , , , , , , , , , , , , , , , , ,					
I					

Profile Descript	ion: (Describe to the de	enth needer	to document the ind	icator or confir	m the abec	nce of inc	licatore \	Sampling Point:
Depth	Matrix	pui noodoc	Redox Featur		iii uie abse	ince of inc	ilcators.,	
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc²	Texture	Remarks
0-14	10/22/2	100					silty day	loam
14-20	10/23/4	100						4
							5110/ 2/4	y loam
						_		
Type: C=Conce	ntration, D=Depletion, R	M=Reduced	Matrix, CS=Covered o	r Coated Sand (Grains.		²Location:	PL=Pore Lining, M=Matrix
•	cators: (For LRR K)						Indicators for Proble	matic Hydric Soils³:
Histosol (A	'		Dark Surface				2 cm Muck (A10	•
Histic Epip	, ,			Sands (S11) Gr	eat Lakes sho	res	Coast Prairie R	, ,
Black Histic	` '		Loamy Mucky	. ,			5 cm Mucky Pe	• •
· ·	Sulfide (A4)		Loamy Gleye				Dark Surface (S	<i>'</i>
Stratified L	,		Depleted Mat	гіх (F3)			Polyvalue Belov	v Surface (S8)
Depleted B	elow Dark Surface (A11)	Redox Dark S	Surface (F6)			Thin Dark Surfa	ce (S9)
Thick Dark	Surface (A12)		Depleted Dar	k Surface (F7)			Iron-Manganese	e Masses (F12)
Sandy Muc	ky Mineral (S1)		Redox Depre	ssions (F8)			Red Parent Mat	erial (F21)*
Sandy Gle	yed Matrix (S4)		Marl (F10)				Very Shallow Da	ark Surface (F22)*
Sandy Red	lox (S5)						Other (Explain i	n Remarks)
Stripped M	atrix (S6)						_	
3Indicators of hy	drophytic vegetation and	wetland hyd	Irology must be presen	t, unless disturb	ed or proble	ematic, * T	est Indicators	
Restrictive Laye	er (if observed):							
Type:			====					
Depth (inch	es):						Is Hydric Soil Prese	ent? Yes No
Remarks:								
HYDROLOGY	•							
Wetland Hydrolo								cators (minimum of two required)
	s (minimum of one is red	uired: check						Soil Cracks (B6)
Surface Wa	` '			ed Leaves (B9)				Patterns (B10)
High Water Saturation	Table (A2)		Aquatic Fau Marl Deposi					n Lines (B16)
Water Mark	, ,			, ,				on Water Table (C2) (8/1 or late
	Oeposits (B2)			ulfide Odor (C1) izospheres on L		(C3)		Burrows (C8)
Drift Depos				Reduced Iron (-	(03)	_	n Visible on Aerial Imagery (C9) or Stressed Plants (D1)
	r Crust (B4)			Reduction in Til		6)		hic Position (D2)
Iron Depos			Thin Muck S		.54 55113 (0	~/		Aguitard (D3)

Depth (inches):

Depth (inches):

Depth (inches):

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

Field Observations: Surface Water Present?

Water Table Present?

(includes capillary fringe)

Saturation Present?

Remarks:

Sparsely Vegetated Concave Surface (B8)

oh slope

Microtopographic Relief (D4)

FAC-Neutral Test (D5)

Is Wetland Hydrology Present?

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region MALLAMON Road Ortlot - Sent City/County: Warysha | Warksha Sampling Date: Applicant/Owner: Hallyhack Traperts State: WI Sampling Point: Section 8 Township 6 N, Range 9 (East) West Investigator(s): TAWS - Alice Thompson Agree Menye Landform: Summit Shoulder Backstope Footstope Toeslope Orban Modified Local relief concave convex, linear, other: Soil Map Unit Name: Brookstone Sit Joan WWI classification: T3 | E1 K No Reason: Previous 90 day Precipitation WET NORMADORY Are climatic/hydrologic conditions on the site typical for this time of year? , Soil _____ or Hydrology significantly disturbed? Are "Normal Circumstances" present? Are Vegetation _____, Soil _____, or Hydrology _____ problematic? SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc. Is the Sampled Area within Hydrophytic Vegetation Present? a Wetland? a vvetland?

Yes No

Wetland Type: Marsh (Fresh Wet Meadow) Sedge Meadow. Shrub Carr. N. Hardwood Swamp Coniferous
Swamp (Riverine) Ephemeral Basin Dune& Swale Farmed Wetland Hydric Soil Present? Wetland Hydrology Present? Yes Remarks: between VEGETATION - Use scientific names of plants. Dominance Test worksheet: Indicator Absolute % Dominant Species? Status Tree Stratum (Plot size: equiv to 30' radius) Cover Number of Dominant Species That Are Acer neaundo FAL OBL, FACW, or FAC: Total Number of Dominant Species Across All Strata: (B) Percent of Dominant Species That Are 00 (A/B) OBL. FACW, or FAC: = Total Cover 40 12 Prevalence Index worksheet: Sapling/Shrub Stratum (Plot size: equiv to 15' radius) Ehannus contraction Total % Cover of: Multiply by: x 1 = OBL species **FACW** species FAC species x 3 = ____ FACU species x 4 = UPL species Column Totals: Prevalence Index = B/A = = Total Cover 25 Hydrophytic Vegetation Indicators: Herb Stratum (Plot size: equiv to 5' radius) 1. Phalis arundinaline Rapid Test for Hydrophytic Vegetation 2. Galium aspenellum ✓ Dominance Test is >50% Fac Allaria petrolata 20 Prevalence Index is ≤3.01 Morphological Adaptations¹ (Provide supporting data in Remarks) Problematic Hydrophytic Vegetation¹ (Explain) Indicators of hydric soil and wetland hydrology must be present, unless Definitions of Vegetation Strata: Tree - Woody plants 3 in. (7,6cm) or more in diameter at breast height (DBH), regardless of height. Sapling/shrub - Woody plants less than 3 in, DBH and greater than 155 = Total Cover 3.28 (1m) tail. Woody Vine Stratum (Plot size: equiv to 30' radius) Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines - All woody vines greater than 3.28 ft in height. = Total Cover Is Hydrophytic Vegetation Present? No

Remarks:

SOIL								Sampling Point:	5
Profile Description	on: (Describe to the	depth neede	d to document the ind	icator or conf	irm the abs	ence of ind	icators.)		
Depth	Matrix		Redox Featur				,		
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc²	Texture	Remarks	
D-14	1048511	98	104 251 8	Z	4	m	silt loam		
14 - 27	1048211	80	1042518	20		~	Gilt loan	with high	OM
07-20	104R3/2	- Seo	104R416	20		m 6	we writer to	109m	0, (
			17 18 18:3				C SITT CLAY	(20,100)	
¹Type: C=Concer	ntration, D=Depletion,	RM=Reduce	d Matrix, CS=Covered o	r Coated Sand	f Grains.	1	² Location: PI	_=Pore Lining, M=Matrix	ζ,
Hydric Soil Indic	ators: (For LRR K)						Indicators for Problema		
Histosol (A1	1)		Dark Surface	(S7)			2 cm Muck (A10)		
Histic Epipe	edon (A2)		High Chroma	Sands (S11)	Great Lakes sho	ores	Coast Prairie Red	ox (A16)	
Black Histic	(A3)		Loamy Mucky	Mineral (F1)			5 cm Mucky Peat	or Peat (S3)	
Hydrogen S	Sulfide (A4)		Loamy Gleye	d Matrix (F2)			Dark Surface (S7))	
Stratified La	ayers (A5)		Depleted Mat	rix (F3)			Polyvalue Below 8	Surface (S8)	
Depleted Be	elow Dark Surface (A1	1)	Redox Dark S	Surface (F6)			Thin Dark Surface	(S9)	
Thick Dark S	Surface (A12)		Depleted Dark	k Surface (F7)			Iron-Manganese N	Masses (F12)	
Sandy Muck	ky Mineral (S1)		Redox Depres	ssions (F8)			Red Parent Mater	ial (F21)*	
Sandy Gley	ed Matrix (S4)		Marl (F10)				Very Shallow Dark	Surface (F22)*	
Sandy Redo	ox (\$5)						Other (Explain in	Remarks)	
Stripped Ma	atrix (S6)								
3Indicators of hyd	drophytic vegetation ar	nd wetland hy	rdrology must be presen	t, unless distu	rbed or prob	ematic.* Te	est Indicators		
Restrictive Layer	r (if observed):								
Туре:	·							M	
Depth (inche	es):						is Hydric Soil Present	? Yes	No
Remarks:	very blace	(C S 2)) - a. 8/cult	do sec	ve do				
HYDROLOGY									
Wetland Hydrolog	y Indicators:						Secondary Indical	ors (minimum of two red	quired)
Primary Indicators	(minimum of one is re	equired: chec					Surface Soi	l Cracks (B6)	
Surface Wal			Water-Stains)			atterns (B10)	
High Water			Aquatic Fau				Moss Trim		
Saturation (/	,		Marl Deposit		43				3/1 or later)
Water Marks Sediment Do				ulfide Odor (C [.] izospheres on		(C3)	Crayfish Bu	. ,	, (CO)
Drift Deposit				Reduced Iron	_	· (00)		/isible on Aerial Imagery Stressed Plants (D1)	y (UB)
Algal Mat or			_	Reduction in 1	. ,	(6)		Position (D2)	
Iron Deposit	, ,		Thin Muck S			/	Shallow Aq		
Inundation V	√isible on Aerial Image	ery (B7)		ain in Remarks)			aphic Relief (D4)	
Sparsely Ve	egetated Concave Surf	face (B8)					FAC-Neutra		
Field Observation	ns:								
Surface Water Pre		s N	ο _{\ /} Depth (incl	hes):					
Water Table Prese						7.			
Saturation Presen						s Wetl	and Hydrology Present	? Yes X	No
(includes capillary		×=====	- /1 Dopui (inci			- 3 ***	and rijarology i lesell	. 145 _/_	
		, monitoring v	well, aerial photos, previ	ous inspection	s), if availab	le:			

bern to creek, however likely floods high water or water pools behind bern

Slight

Remarks:

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region City/County: Waskisha | Waskish Sampling Date: MICAPHUY ROAD ONLOT Send Applicant/Owner: Hollyhock Proprieties State: WI Sampling Point: Section Township 6 N Range 19 (East) West Investigator(s): TAWS - Alice Thompson Local relief: concave, convex, linear, other: Landform: Summit Shoulder Backslope Footslope Toeslope Urban Modified Soil Map Unit Name: Brookstone Sitt Loam WWI classification: (7) Reason: Previous 90 day Precipitation WET NORMALDRY Are climatic/hydrologic conditions on the site typical for this time of year? _Soil _ significantly disturbed? Are "Normal Circumstances" present? , or Hydrology Are Vegetation _____, Soil _____, or Hydrology _____ problematic? SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc. Is the Sampled Area within Hydrophytic Vegetation Present? a Wetland? No Hydric Soil Present? Yes Wetland Type: Marsh Fresh Wet Meadow Sedge Meadow Shrub Carr N, Hardwood Swamp Coniferous Wetland Hydrology Present? Yes Swamp Riverine Ephemeral Basin Dune& Swale Farmed Wetland Remarks: 0 VEGETATION - Use scientific names of plants. Dominance Test worksheet: Dominant Indicator Absolute % Species? Status Tree Stratum (Plot size: equiv to 30' radius) Cover Number of Dominant Species That Are 101 OBL, FACW, or FAC: Malus corprhatia FUL Total Number of Dominant Species Across All Strata: Percent of Dominant Species That Are 6 (A/B) OBL, FACW, or FAC: = Total Cover Prevalence Index worksheet: Sapling/Shrub Stratum (Plot size: equiv to 15' radius) Rhammis carrantice Total % Cover of: Multiply by: x 1 = **OBL** species **FACW** species FAC species FACU species UPL species x 5 = Column Totals: 30 = Total Cover 15 Prevalence Index = B/A = Hydrophytic Vegetation Indicators: Herb Stratum (Plot size: equiv to 5' radius) Allaria schio satz Rapid Test for Hydrophytic Vegetation Galium asserellum Ob ★ Dominance Test is >50% 40 FACL Prevalence Index is ≤3.01 Morphological Adaptations¹ (Provide supporting data in Remarks) Problematic Hydrophytic Vegetation¹ (Explain) *Indicators of hydric soi! and wetland hydrology must be present, unless disturbed or problematic. Definitions of Vegetation Strata: Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. Sapling/shrub - Woody plants less than 3 in DBH and greater than 3.28 (1m) tall. Woody Vine Stratum (Plot size: equiv to 30' radius) Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines - All woody vines greater than 3.28 ft in height. Is Hydrophytic Vegetation Present? = Total Cover Remarks:

Sampling Point: ___

10	1		
	í	n	
w	١	ν	

Depth	Matrix		d to document the indicate Redox Features						
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc²	Texture	Remarks	
0-10	10422/2	100	· · ·		71:-		silt loam		
10-11	101/22/1	80	104E 5/8	20		100	college day	· llos m	
11-19			10 15 010				51.111 Elay	· Jacket	
11-11	10x 6 511	100			-		Gilty clay		
			=						
							V		
		RM=Reduce	d Matrix, CS=Covered or 0	Coated Sand	Grains.			ore Lining, M=Matrix.	
	ators: (For LRR K)						Indicators for Problematic	Hydric Soils ³ :	
- Histosol (A1	•		Dark Surface (S				2 cm Muck (A10)		
Histic Epipe			High Chroma S	, ,	Freat Lakes sho	res	Coast Prairie Redox	(A16)	
Black Histic	' '		Loamy Mucky N	/lineral (F1)			5 cm Mucky Peat or	Peat (S3)	
Hydrogen S	ulfide (A4)		Loamy Gleyed I	Matrix (F2)			Dark Surface (S7)		
Stratified La	iyers (A5)		Depleted Matrix	(F3)			Polyvalue Below Sur	face (S8)	
Depleted Be	elow Dark Surface (A	11)	Redox Dark Sui	face (F6)			Thin Dark Surface (S	9)	
Thick Dark S	Surface (A12)		Depleted Dark S	Surface (F7)			Iron-Manganese Mas	sses (F12)	
Sandy Muck	ky Mineral (S1)		Redox Depress	ions (F8)			Red Parent Material	(F21)*	
_	ed Matrix (S4)		Marl (F10)	(-/			Very Shallow Dark S		
Sandy Redo							Other (Explain in Re	· · ·	
Stripped Ma							— Other (Explain III 10)	narko)	
_		nd wetland hy	drology must be present,	unless distur	bed or proble	ematic. * T	est Indicators		
strictive Layer									
Туре:									
Depth (inche:	s):						Is Hydric Soil Present?	Yes	No 🔀
YDROLOGY									
etland Hydrolog	-	oguisod, chac	le all that awals A					(minimum of two requ	uired)
Surface Wat	(minimum of one is r	equirea: cnec		1 (DO)			Surface Soil C	, ,	
High Water	. ,		Water-Stained)		Drainage Patte	, ,	
Saturation (A			Aquatic Fauna Marl Deposits				Moss Trim Line		
Water Marks					`\				'1 or later)
Sediment De			— Hydrogen Sulfi Oxidized Rhizo			(C2)	Crayfish Burro		(00)
Drift Deposit			Presence of R		-	(03)		ble on Aerial Imagery	(C9)
— Algal Mat or	` '		Recent Iron Re		, ,	C \		essed Plants (D1)	
Iron Deposits			Thin Muck Sur		illed Solls (C	0)	Geomorphic P	, ,	
	/isible on Aerial Imag	en/ (R7)	Other (Explain				Shallow Aquita		
_	getated Concave Sur	,	Other (Explain	iii ixemaiks,	,		Microtopograp FAC-Neutral T		
old Observation	ns:					-	#=/: 		
ırface Water Pre		s N	o \ / Depth (inche	s):					
ater Table Prese	ent? Ye	s N	Depth (inche	s):					
aturation Present	t? Ye	es N				Is We	tland Hydrology Present?	Yes	No 🎠
ncludes capillary				-		2			7
escribe Recorded	d Data (stream gauge	e, monitoring v	vell, aerial photos, previou	s inspections	s), if available	e:			
emarks:									
`	No Stress	0	trees						

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: MaxAvthur Roal Outlet	Send	City/County:	Warkshi	Waskish - Sampling Date: 10 28 /2020
Applicant/Owner: Hollyhock Properties				State: WI Sampling Point:
Investigator(s): TAWS - Alice Thompson Ann	Ke			Section & Township & N , Range 19 (East) West
Landform: Summit Shoulder Backslope Footslope Toeslope Urban Modified	Other:			concave, convex, linear, other:
Soil Map Unit Name:	opin			WWI classification: T3 / EZ K
Are climatic/hydrologic conditions on the site typical for this time	of year?	Yes	No	Reason: Previous 90 day Precipitation WET NORMAD DRY
Are Vegetation, Soil, or Hydrology	significantly	disturbed?		Are "Normal Circumstances" present? Yes No
Are Vegetation, Soil, or Hydrology	problematic?			·
SUMMARY OF FINDINGS - Attach site map showing s	ampling po	int locations,	transects,	important features, etc.
Hydrophytic Vegetation Present? YesN			the Sample Wetland?	d Area within Y Wottand A
Hydric Soil Present? Yes No		- 1		Yes No arsh Fresh Wet Meadow Sedge Meadow Shrub Carr N. Hardwood Swamp Conferous
Wetland Hydrology Present? YesN				Ephemeral Basin Dune& Swale Farmed Wetland
N Remarks:				
O R				
T H				
VEGETATION - Use scientific names of plants,				
	Absolute 9/	Desident	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: equiv to 30' radius)	Absolute % Cover	Dominant Species?	Status	
1 Populus de Hoiles	100		Fac	Number of Dominant Species That Are OBL, FACW, or FAC: (A)
2 Add Maria Do	30		FAC	· · · · · · · · · · · · · · · · · · ·
2. Aur negondo				Total Number of Dominant Species Across All Strata: (B)
3.			:	Across All Otrata.
4				Percent of Dominant Species That Are
5	130	= Total Cover	65 26	OBL, FACW, or FAC:
Sapling/Shrub Stratum (Plot size: equiv to 15' radius)	150	- Total Cover	0-126	Prevalence Index worksheet:
1. Phannes commatic	70	۸۸	Fac	Total % Cover of: Multiply by:
	<u> </u>			
2				OBL species x 1 =
3,				FACW species x 2 =
4:				FAC species x 3 =
5,				FACU species x 4 =
6.				UPL species x 5 =
7,				Column Totals: (A)(B)
		= Total Cover		Prevalence Index = B/A =
Herb Stratum (Plot size: equiv to 5' radius)	00		<u>-</u> ,	Hydrophytic Vegetation Indicators:
1. Allaha patrolatia	· <u>~ % </u>	-	- Fac	Rapid Test for Hydrophytic Vegetation
2.				Dominance Test is >50%
3				Prevalence Index is ≤3.0¹
4				Morphological Adaptations¹ (Provide supporting data in Remarks)
5.				Problematic Hydrophytic Vegetation¹ (Explain)
6,			-	¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
7	·			Definitions of Vegetation Strata:
8.				Tree - Woody plants 3 in. (7,6cm) or more in diameter at breast
9,	2,5		==	height (DBH), regardless of height.
10.	80	= Total Cover	40/16	Sapling/shrub - Woody plants less than 3 in, DBH and greater than 3.28 (1m) tall.
Woody Vine Stratum (Plot size: equiv to 30' radius)				Herb - All herbaceous (non-woody) plants, regardless of size, and
1,			-	woody plants less than 3,28 ft tall.
2.				Woody vines - All woody vines greater than 3,28 ft in height.
3.		= Total Cover	-	Is Hydrophytic Vegetation Present? Yes No
Remarks:	-	. 5.0 50701		100 11

90	R	
au	E	ᆫ

anling Doint:

Profile Description: (Depth	Matrix		Redox Feature			** 110	· ·			
(inches)	Color (moist)	%	Color (moist)	% %	Type ¹	Loc²	Texture);	Remarks	
						LUC	0 '11	Toan	Nemano	
0-9	104/2/2	95	1048 416	10		m	tive s. H	- Toak		
9-20	104R 41	7 100					5:17 10	900		
	1 - 11 - 61									
					-		-			
Type: C=Concentration	on, D=Depletion,	RM=Reduced	Matrix, CS=Covered or	Coated Sand	Grains.			tion: PL=Pore L		
Hydric Soil Indicators	s: (For LRR K)							roblematic Hydr	ic Soils³:	
— Histosol (A1)			Dark Surface				2 cm Mucl			
Histic Epipedon ((A2)		High Chroma	Sands (S11) o	Great Lakes shor	es	Coast Prai	rie Redox (A16)	1	
Black Histic (A3)			Loamy Mucky	Mineral (F1)			5 cm Mucl	y Peat or Peat	(S3)	
Hydrogen Sulfide	e (A4)		Loamy Gleyed	Matrix (F2)			Dark Surfa	ice (S7)		
Stratified Layers	(A5)		Depleted Matr	ix (F3)			Polyvalue	Below Surface ((S8)	
Depleted Below [Dark Surface (A1	1)	Depleted Mate	urface (F6)			Thin Dark	Surface (S9)		
Thick Dark Surface	ice (A12)		Depleted Dark	Surface (F7)			Iron-Mang	anese Masses ((F12)	
Sandy Mucky Mir	neral (S1)		Redox Depres	sions (F8)			Red Parer	it Material (F21)	*	
Sandy Gleyed Ma	atrix (S4)		Marl (F10)				Very Shall	ow Dark Surface	e (F22)*	
Sandy Redox (St	5)						Other (Exp	olain in Remarks	s)	
Stripped Matrix (\$	S6)									
3Indicators of hydroph	ytic vegetation ar	nd wetland hyd	drology must be presen	t, unless distur	rbed or proble	ematic * 1	Test Indicators			
						omado.				
Restrictive Laver (if o	observea):					Tinado.				
	observea):					Jinuto.				
Restrictive Layer (if o Type: Depth (inches):	observed):						ls Hydric Soil	Present?	Yes X	No
	observed):							Present?	Yes X	No
Type: Depth (inches):	observed):							Present?	Yes X	No
Type: Depth (inches): Remarks:	noserved):							Present?	Yes X	No
Type: Depth (inches): Remarks: HYDROLOGY	-						Is Hydric Soil	Present?	adam	
Type: Depth (inches): Remarks: HYDROLOGY Wetland Hydrology Ind	dicators:	equired: check	c all that apply)				Is Hydric Soil		imum of two re	
Type: Depth (inches): Remarks: HYDROLOGY Wetland Hydrology Ind	dicators: nimum of one is re	equired: check		ed Leaves (B9	()		Is Hydric Soil Secondary	/ Indicators (min	nimum of two re	
Type: Depth (inches): Remarks: HYDROLOGY Wetland Hydrology Ind Primary Indicators (min	dicators: nimum of one is re	equired: check))		Is Hydric Soil Secondary Sur	/ Indicators (min ace Soil Cracks	nimum of two re : (B6) B10)	
Type: Depth (inches): Remarks: HYDROLOGY Wetland Hydrology Ind Primary Indicators (min Surface Water (A	dicators: nimum of one is re	equired: check	Water-Stain	na (B13)))		Secondary Sur	/ Indicators (min ace Soil Cracks inage Patterns (nimum of two re (B6) B10) 16)	quired)
Type: Depth (inches): Remarks: HYDROLOGY Wetland Hydrology Ind Primary Indicators (min Surface Water (A High Water Table	dicators: nimum of one is re A1) e (A2)	equired: check	Water-Staind Aquatic Faul Marl Deposi Hydrogen St	na (B13) ts (B15) ulfide Odor (C	1)		Secondary Suri Dra Mos	/ Indicators (min ace Soil Cracks inage Patterns (is Trim Lines (B Season Water yfish Burrows (C	imum of two re : (B6) B10) 16) Table (C2) (quired) 9/1 or laterj
Type: Depth (inches): Remarks: HYDROLOGY Wetland Hydrology Ind Primary Indicators (min Surface Water (A High Water Table Saturation (A3) Water Marks (B1 Sediment Deposi	dicators: nimum of one is re A1) e (A2) l) sits (B2)	equired: check	Water-Staind Aquatic Faul Marl Deposi Hydrogen St	na (B13) is (B15) ulfide Odor (C izospheres on	1) Living Roots		Secondary Sur Dra Mos Dry Cra Satr	v Indicators (min face Soil Cracks inage Patterns (is Trim Lines (B Season Water yfish Burrows (C uration Visible o	nimum of two re is (B6) B10) 16) Table (C2) (C8) In Aerial Imager	quired) 9/1 or later,
Type: Depth (inches): Remarks: HYDROLOGY Wetland Hydrology Ind Primary Indicators (min Surface Water (A High Water Table Saturation (A3) Water Marks (B1 Sediment Deposit Drift Deposits (B3)	dicators: nimum of one is re A1) e (A2) l) sits (B2) 3)	equired: check	Water-Stain Aquatic Fau Marl Deposi Hydrogen St Oxidized Rh Presence of	na (B13) ls (B15) ulfide Odor (C izospheres on Reduced Iron	1) Living Roots (C4)	(C3)	Secondary Survey Secondary Survey Dura Mos Dry Cra Satt	v Indicators (min face Soil Cracks inage Patterns (is Trim Lines (B Season Water yfish Burrows (C uration Visible o inted or Stressed	imum of two re is (B6) B10) 16) Table (C2) (C8) In Aerial Imager I Plants (D1)	quired) 9/1 or later,
Type: Depth (inches): Remarks: HYDROLOGY Wetland Hydrology Ind Primary Indicators (min Surface Water (A High Water Table Saturation (A3) Water Marks (B1 Sediment Deposits (B3 Algal Mat or Crus	dicators: nimum of one is re A1) e (A2) l) sits (B2) 3) st (B4)	equired: check	Water-Stain Aquatic Faul Marl Deposi Hydrogen Stain Oxidized Rh Presence of Recent Iron	na (B13) ls (B15) ulfide Odor (C izospheres on Reduced Iron Reduction in 1	1) Living Roots (C4)	(C3)	Secondary Surl Dra Mos Dry Cra Satu	y Indicators (min face Soil Cracks inage Patterns (is Trim Lines (B Season Water yfish Burrows (C uration Visible o inted or Stressed imorphic Positio	imum of two re (B6) B10) 16) Table (C2) (C8) In Aerial Imager I Plants (D1) In (D2)	quired) 9/1 or later,
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