Assured Wetland Delineation Report

Vilas Road Wetland Delineation Town of Cottage Grove, Dane County, Wisconsin

Stantec Project #: 193704691 Lead Delineator: Jeff Kraemer



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Sign-off Sheet

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Vilas Road INTRODUCTION October 27, 2016

1.0 INTRODUCTION

Stantec Consulting Services Inc. (Stantec) performed a wetland determination and delineation of the Vilas Road site (the "Study Area") on behalf of Reed and Leanne Widen. The wetland delineation was led by Jeff Kraemer of Stantec, an assured delineator qualified via the Wisconsin Department of Natural Resources (WDNR) Wetland Delineation Assurance Program, and assisted by Josh Sulman (see Appendix F for Delineator Qualifications). An initial site characterization was conducted on September 20, 2016 and finalized on October 13, 2016.

The Study Area is approximately 40.57 acres in size and located in Sections 16 and 17, Township 7 North, Range 11 East, Town of Cottage Grove, Dane County, Wisconsin. Specifically, the Study Area is located southwest of the intersection of Vilas Road and Clark Road (Figure 1). The purpose and objective of the wetland determination and delineation was to identify the extent and spatial arrangement of wetlands within the Study Area. Two wetland areas were identified within the Study Area.

Wetlands and waterways that are considered waters of the U.S. are subject to regulation under Section 404 of the Clean Water Act (CWA) and the jurisdictional regulatory authority lies with the U.S. Army Corps of Engineers (USACE). Additionally, the WDNR has regulatory authority over wetlands, navigable waters, and adjacent lands under Chapters 30 and 281 Wisconsin State Statutes, and Wisconsin Administrative Codes NR 103, 299, 350 and 353. Finally, counties, townships and municipalities may have local zoning authority over certain types of wetlands and waterways. Stantec recommends this report be submitted to local authorities, the WDNR and USACE for final jurisdictional review and concurrence. Delineations completed by a WDNR Assured Delineator do not need to obtain WDNR concurrence.



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2.0 METHODS

2.1 WETLANDS

Wetland determinations were based on the criteria and methods outlined in the U.S. Army Corps of Engineers Wetlands Delineation Manual, Technical Report Y-87-1 (1987) and subsequent guidance documents, and applicable Regional Supplements to the Corps of Engineers Wetland Delineation Manual.

The wetland determination involved the use of available resources to assist in the assessment such as U.S. Geological Survey (USGS) topographic maps, U.S. Department of Agriculture Natural Resources Conservation Service (NRCS) soil survey, WDNR Wisconsin Wetland Inventory (WWI) mapping, and aerial photography.

On-site wetland determinations were made using the three criteria (vegetation, soil, and hydrology) and technical approach defined in the USACE 1987 Manual and applicable Regional Supplement. According to procedures described in the 1987 Manual and applicable Regional Supplement, areas that under normal circumstances reflect a predominance of hydrophytic vegetation, hydric soils, and wetland hydrology (e.g., inundated or saturated soils) are considered wetlands.

Additionally, as climate plays an important role in the formation and identification of wetlands, the antecedent precipitation in the months leading up to the field investigations was reviewed. The current year's precipitation data was compared to long-term (30-year) precipitation averages and standard deviation to determine if precipitation was normal, wet, or dry for the area using a WETS analysis as developed by the NRCS.

A review of U.S. Department of Agriculture Farm Service Agency (FSA) annual aerial slides and other available aerial imagery was conducted for the Study Area to assist in the wetland determination because farmed areas with mapped poorly drained or somewhat poorly drained soils are present within the Study Area. The aerial imagery was reviewed for the appearance of wetland signatures. A wetland signature is field evidence, recorded by aerial imagery, of ponding, flooding, or impacts of saturation for sufficient duration, which meets wetland hydrology and possibly wetland vegetation criteria. Wetland signatures may vary based on the type and seasonal date of the aerial imagery. Signatures visible on FSA annual aerial slides in cropland for Wisconsin have been categorized as follows (USDA, NRCS 1998):

- 1. Hydrophytic vegetation (seen as a different color of green)
- 2. Surface water (usually black or white)
- 3. Drowned-out crops (bare soil or mud flats)
- 4. Differences in color due to different planting dates or isolated areas not farmed with the rest of the field
- 5. Inclusions of wet areas in set-aside program
- 6. Patches of greener color in "dry" years



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- 7. Crop stress (yellow) or sparse canopy (light green)
- 8. Saturated soil visible on infrared (IR) slides or photos

The antecedent precipitation in the months leading up to each aerial image was reviewed and compared to long-term (30-year) precipitation averages and standard deviation to determine if each year was normal, wet, or dry using a WETS analysis (Appendix D).

Mapped poorly and somewhat poorly drained soils were identified within the Study Area and available aerial imagery was analyzed for signatures of wetness consistency in these areas (Off-Site Aerial Imagery Analysis in Appendix E). Areas within agricultural fields are typically identified as wetland if they contain hydric soils and 50% or more of the aerial images taken in the five (or more) most recent normal precipitation years show any of the wetland signatures listed above. However, while the focus of the analysis is on wetland signatures visible in normal precipitation years, years considered wet or dry for received precipitation were also analyzed. Wetland determinations and wetland boundaries are identified based on the aerial image having the largest wetland boundary during a "normal" rainfall year if signatures were apparent in at least 50% of the years (USDA, NRCS 1998).

The uppermost wetland boundary and sampling points were identified and surveyed with a Global Positioning System (GPS) capable of sub-meter accuracy and mapped using Geographical Information System (GIS) software.



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3.0 RESULTS

3.1 SITE DESCRIPTION

The Study Area is comprised of wooded upland, mowed turfgrass lawn, a house and garage/pole barn, cultivated fields planted in soybeans in 2016, and two wetland areas. A paved driveway leading to the house and garage roughly bisects the Study Area from northeast to southwest. The Study Area is characterized by nearly level to steeply sloping topography. The southeastern portion of the Study Area is dominated by a steep wooded drumlin (ridge) oriented from north to south, while the western and northern portions of the Study Area are relatively flat. Elevation ranges from topographic highs of approximately 974 feet mean sea level (msl) at the top of the drumlin along the southern boundary of the Study Area, to topographic lows on the northwest of approximately 854 feet msl on the western boundary of the Study Area. The Study Area is bordered by Vilas Road on the east; woodland and adjacent residential properties on the south; a ditched waterway and agricultural fields to the west; and a wooded strip, residential property, and railroad tracks on the north.

Soils present within the Study Area and their hydric status are summarized in Table 1. Wetlands identified during the field investigation are located primarily within areas mapped as hydric/partially hyrdic and very poorly/poorly drained soils (Appendix A, Figures 2 and 3).



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Table 1. Summary of Soils Identified within the Study Area

Soil symbol: Soil Unit Name	Soil Unit Component	Soil Unit Component Percentage	Landform	Hydric status
BbA: Batavia silt loam, gravelly substratum, 0 to 2 percent slopes	Batavia-Gravelly substratum	100	Outwash plains	No
Ho: Houghton muck	Houghton	100	Depressions on stream terraces	Yes
KeB: Kegonsa silt loam, 2 to 6 percent slopes	Kegonsa	100	Outwash plains	No
KrE2: Kidder soils, 20 to 35 percent slopes, eroded	Kidder-Loam	60	Drumlins, recessionial moraines, terminal moraines	No
	Kidder-Sandy loam	30	Drumlins, recessionial moraines, terminal moraines	No
Mc: Marshan silt loam	Marshan	100	Depressions on stream terraces	Yes
MdC2: McHenry silt loam, 6 to 12 percent slopes, eroded	McHenry-Eroded	85-95	Moraines	No
	Kendall	2-7	Drainageways	No
	Kidder-Eroded	3-8	Moraines	No
Os: Orion silt loam, wet	Orion variant-Wet	100	Depressions on stream terraces, flood plains on stream terraces	Yes
	Otter		Flood plains	Yes
Soil symbol: Soil Unit Name	Soil Unit Component	Soil Unit Component Percentage	Landform	Hydric status
	Wacousta		Drainageways	Yes
	Sable		Drainageways	Yes
SaA: Sable silty clay loam, 0 to 2 percent slopes	Sable	85-100	Swales	Yes
	Muscatune	0-6	Ground moraines	No
	Ipava	0-7	Ground moraines	No
	Buckhart	0-4	Knolls	No
	Elburn	0-3	Outwash plains	No
Wa: Wacousta silty clay loam, 0 to 2 percent slopes	Wacousta	80-90	Interdrumlins	Yes
	Sable	5-10	Interdrumlins	Yes
	Sebewa	5-10	Interdrumlins	Yes

The Wisconsin Wetland Inventory (WWI) map identifies one forested (T3K, T3/S3K, T3/E2K) wetland area occupying the western uncultivated portion of the Study Area, and one excavated pond in the eastern portion of the Study Area (Appendix A, Figure 4). The larger field delineated wetland (W-1) is located primarily within the area identified as wetland by WWI. The smaller field delineated wetland (W-2) is associated with the WWI-mapped excavated pond (Appendix A, Figure 5).



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Average precipitation for the investigation area was obtained from the Dane County Regional Airport, Madison, WI National Weather Service (NWS) weather station (NWS station #WI837) and used for the WETS analyses, for the three-month periods preceding the two site investigations. A total of 21.56 inches of precipitation occurred in the three months preceding the October field investigation, compared to the long-term average of 11.34 inches. A total of 18.45 inches of precipitation occurred in the three months preceding the September field investigation, compared to the long-term average of 12.31 inches. Based on the WETS analyses, conditions were significantly wetter than normal for both site visits (Appendix D).

3.2 WETLANDS

Two wetlands were identified and delineated within the Study Area. Wetland determination data forms were completed for 13 sample points along transects through the wetlands and adjacent uplands and are contained in Appendix B. Photographs of the wetlands and adjacent lands are contained in Appendix C. The wetland boundary and sample point locations are shown on Figure 5 (Appendix A). The wetlands are summarized in Table 2 below and described in detail in the following sections.



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Table 2. Summary of Wetlands Identified within the Study Area

Wetland	Wetland Type	Adjacent Surface Waters	Acreage (on-site)
Wetland 1 (W-1)	Forested Wetland (T3K, T3/S3K, T3/E2K) / Farmed Wetland / Wet Meadow	Wetland is directly adjacent to a ditched waterway, tributary to Door Creek, identified as a perennial stream in DNR 24k hydrography.	12.45 acres
Wetland 2 (W-2)	Excavated Pond (WWI) / Shallow Marsh/ Forested Wetland	No direct surface water connections observed. May have connection to W-1 via culvert under driveway.	0.40 acres

3.2.1 Wetland 1

Wetland 1 (W-1) is a complex of primarily forested wetland with smaller components of wet meadow and farmed wetland that occupies a relatively flat basin located in the western portion of the Study Area. The wetland is surrounded by cultivated fields, except for an area of upland forest on the east. Wetland 1 is directly adjacent to a perennial waterway, identified on USGS topographic maps (Appendix A, Figure 1) and in WDNR 24k Hydrography (Appendix A, Figure 5) as a perennial stream, which is tributary to Door Creek beyond the Study Area limits. The waterway has been ditched and straightened, presumably to enhance drainage of the surrounding agricultural fields.

Vegetation

Dominant plant species identified at the four sample points completed within the forested wetland portion of W-1 consist of box elder (Acer negundo, FAC), American elm (Ulmus americana, FACW), common buckthorn (Rhamnus cathartica, FAC), deadly nightshade (Solanum dulcamara, FAC), stinging nettle (Urtica dioica, FAC), reed canary grass (Phalaris arundinacea, FACW), riverbank grape (Vitis riparia, FAC), gray dogwood (Cornus racemosa, FAC), American currant (Ribes americanum, FACW) and, in the farmed portion of W-1, soybeans (Glycine max, UPL). Other common species identified in the wetland are listed on the data form contained in Appendix B. The dominant species within the wetland are comprised mostly of hydrophytic vegetation (OBL, FACW, and/or FAC) and meet the hydrophytic vegetation criterion.

Hydrology

The wetland appears to have a seasonally inundated hydroperiod within the northern farmed wetland/wet meadow portion, and a seasonally to perennially saturated hydroperiod within the remainder of the wetland. Primary indicators of wetland hydrology observed at sample points in the Farmed Wetland portion of W-1 consisted of Surface Water (A1), High Water Table (A2) and Saturation (A3). Saturation (A3) and Drift Deposits (B3) were observed as primary indicators in the Forested wetland portion. Secondary indicators of wetland hydrology observed within the Farmed Wetland portion included Saturation Visible on Aerial Imagery (C9), Stunted or Stressed Plants (D1) and Geomorphic Position (D2), while secondary indicators observed in the Forested



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Wetland portion were Geomorphic Position (D2) and a positive FAC-Neutral Test (D5). Therefore, the wetland hydrology criterion was met.

Soils

Soils within the wetland are mapped by the NRCS as Sable silty clay loam (SaA), Wacousta silty clay loam (Wa), Marshan silt loam (Mc), McHenry silt loam (MdC2) and Houghton muck (Ho) (Appendix A, Figure 2). The soils observed at the sample points were largely consistent with mapped Wacousta and Sable series characteristics. However, sample points P4 and P7, which were placed within the well-drained McHenry silt loam, had soils that were consistent with the adjacent mapped very poorly drained Wacousta silty clay loam. Field indicators of hydric soil identified at sample points in W-1 consisted of NRCS field Indicators A11 - Depleted Below Dark Surface, A12 - Thick Dark Surface, F1 - Loamy Mucky Mineral, F3 - Depleted Matrix and F6 - Redox Dark Surface. Therefore, the hydric soil criterion was satisfied.

Wetland Boundary

The wetland boundary was determined based on distinct differences in vegetation, hydrology, soils, and topography consisting of the following: 1) Transition from a forested wetland community dominated by box elder, American elm, common buckthorn and riverbank grape, or a farmed wetland consisting of soybeans showing limited crop stress, to an upland forest community dominated by bur oak (Quercus macrocarpa, FACU), black cherry (Prunus serotina, FACU) and common buckthorn, or to upland agricultural field, consisting of a healthy soybean crop; 2) Transition from an area exhibiting wetland hydrology indicators within the wetland to a lack of wetland hydrology indicators within the adjacent upland; 3) Transition from soils exhibiting indicators of hydric soils to soils lacking hydric soil indicators; and 4) Transition from areas with consistent crop stress signatures in off-site aerial imagery in normal precipitation years, to areas lacking consistent wet signatures. The transition from wetland to upland characteristics generally correlated with a gradual topographic rise.

3.2.2 Wetland 2

Wetland 2 (W-2) is a small wetland located in the eastern portion of the Study Area. The majority of the wetland is comprised of an excavated pond, constructed in 2004-05, based on review of aerial imagery. The excavated pond includes a small area of shallow marsh vegetation along the margins. Remaining portions of W-2 consist of forested wetland. The wetland appears to be isolated from other surface waters under typical conditions. However, an outlet exists via a culvert under the driveway beyond the west boundary of W-2, which may accommodate ephemeral outflow to W-1.

Vegetation

Dominant plant species identified at the sample point completed within W-2 consist of cottonwood (*Populus deltoides*, FAC), box elder, and reed canary grass. Vegetation observed within the shallow marsh margin of the excavated pond is dominated by narrow-leaved cattail (*Typha angustifolia*, OBL) and the deeper portions of the pond support scattered white water-lily (*Nymphaea odorata*, OBL). Other common species identified in the wetland are listed on the data form contained in Appendix B. The dominant species within the wetland are comprised mostly of hydrophytic vegetation (OBL, FACW, and/or FAC) and meet the hydrophytic vegetation criterion.

Hydrology



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The wetland appears to have a perennially inundated hydroperiod within the central excavated portion and a seasonally saturated hydroperiod along the outer margin. Primary indicators of wetland hydrology were not observed at the sample point P3 within W-2. However secondary indicators of wetland hydrology were met and included Geomorphic Position (D2) and a positive FAC-Neutral Test (D5). Therefore, the wetland hydrology criterion was met.

Soils

Soils within the wetland are mapped by the NRCS as McHenry silt loam (MdC2), Batavia silt loam (BbA) and Wacousta silty clay loam (Wa). The majority of W-2, consisting of the excavated pond, is located within an area of mapped well-drained, non-hydric soils (Appendix A, Figure 2). The northern margin of W-2, consisting of the forested wetland portion, coincides with the mapped Wacousta series, a hydric, poorly drained soil. The soils observed at sample point P3 were generally consistent with the Wacousta series characteristics. Field indicators of hydric soil identified at the sample point consisted of NRCS field Indicator F6 – Redox Dark Surface. Therefore, the hydric soil criterion was satisfied.

Wetland Boundary

The wetland boundary was determined based on distinct differences in vegetation, hydrology, soils and topography consisting of the following: 1) Transition from a forested wetland community dominated by cottonwood, box elder, and reed canary grass, or an excavated pond dominated by narrow-leaved cattail and white water-lily, to an upland mowed lawn dominated by Kentucky bluegrass (*Poa pratensis*, FACU) or an upland forest community dominated by white oak (*Quercus alba*, FACU), black cherry, common buckthorn, and Bell's honeysuckle (*Lonicera X bella*, FACU); 2) Transition from an area exhibiting wetland hydrology indicators within the wetland to a lack of wetland hydrology indicators within the adjacent upland; and 3) Transition from soils exhibiting indicators of hydric soils to soils lacking hydric soil indicators. The transition from wetland to upland characteristics generally correlated with a well-defined topographic break along the margin of the excavated pond, and a gradual topographic rise along the margin of the forested wetland.

3.3 UPLAND

Upland within the Study Area consisted of cultivated agricultural land, upland forest, mowed turfgrass lawn, two buildings, and a paved driveway. Upland agricultural fields within the Study Area were characterized by a healthy soybean crop and a low coverage of weeds including common dandelion (Taraxacum officinale, FACU) and velvetleaf (Abutilon theophrasti, FACU). Additionally, there was a lack of consistent wet signatures during normal precipitation years as observed in a review of historic aerial imagery. Upland forest vegetation included typical upland canopy species such as white and bur oak, black cherry, and box elder; shrubby species including Bell's honeysuckle and common buckthorn; and herbaceous species such as garlic mustard (Alliaria petiolata, FACU), white avens (Geum canadense, FAC), and stickseed (Hackelia virginiana, FACU). Upland mowed lawn was dominated by Kentucky bluegrass. Uplands included areas of both mapped hydric and non-hydric soils, though indicators of wetland hydrology and hydrophytic vegetation were absent. Hydric soil indicators were observed at four of the seven upland sample point locations, and mapped hydric soil units extend across some upland portions of the Site. However, these areas lack hydrophytic vegetation and wetland hydrology indicators, even in a wetter than normal period, suggesting that these may be relict hydric soil indicators in areas that have been artificially drained.



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3.4 OTHER ENVIRONMENTAL CONSIDERATIONS

This report is limited to the identification of state and/or federally regulated wetlands within the Study Area. However, there may be other regulated environmental features within the Study Area, including, but not limited to, historical or archeological features, endangered or threatened species, navigable waters and/or floodplains, etc. Federal, state, and local units of government and regional planning organizations may have regulatory authority to control or restrict land uses within or in close proximity to these features. Stantec can assist with identification and/or assessment of additional regulated resources at your request, to the extent that the work is within our range of expertise.

Specifically, in the state of Wisconsin, Wis. Adm. Code NR 151.12 requires that a "protective area" or buffer be determined from the top of the channel of lakes, streams and rivers, or at the delineated boundary of wetlands. In accordance with NR 151.12, the width of the "protective area" for less susceptible wetlands is determined by using 10% of the average wetland width, no less than 10 feet or more than 30 feet. Moderately susceptible wetlands, lakes, and perennial and intermittent streams identified on USGS topographic maps or NRCS county soil survey maps (whichever is more current) require a protective buffer of 50 feet, and outstanding or exceptional resource waters, highly susceptible wetlands, and wetlands in areas of special natural resource interest require protective buffers of 75 feet. The wetlands identified within the Study Area are dominated by invasive plant species, specifically common buckthorn and reed canary grass. Therefore, based on the "protective buffer" standards provided by NR 151.12, it is Stantec's professional opinion that the wetland meets the criteria for less susceptible wetlands and the buffer from the wetland boundary would be 10 to 30 feet. However, the jurisdictional authority on wetland buffers rests with the WDNR. Local zoning authorities and/or a regional planning organization may have more restrictive buffers from wetlands than that imposed under NR 151.



Vilas Road CONCLUSION October 27, 2016

4.0 CONCLUSION

Stantec performed a wetland determination and delineation of the Vilas Road site on behalf of Reed and Leanne Widen. The approximately 40-acre Study Area is located in Sections 16 and 17, Township 7 North, Range 11 East, Town of Cottage Grove, Dane County, Wisconsin. The purpose and objective of the wetland determination and delineation was to identify the extent and spatial arrangement of wetlands within the Study Area.

Two wetlands were identified and delineated within the Study Area in accordance with state and federal guidelines and were subsequently flagged, surveyed with GPS, and mapped using GIS software. There were a combined total of 12.84 acres of wetlands within the Study Area. Wetlands were mostly composed of forested wetland, farmed wetland, an excavated pond, and wet meadow. Adjacent uplands were composed of cultivated land, mowed turfgrass, upland forest, a residence, garage, and paved driveway.

The USACE has regulatory authority over Waters of the U.S. including adjacent wetlands, and the WDNR has regulatory authority over wetlands, navigable waters, and adjacent lands under Chapters 30 and 281 Wisconsin State Statutes, and Wisconsin Administrative Codes NR 103, 299, 350 and 353. Finally counties, townships and municipalities may have local zoning authority over certain types of wetlands and waterways.

Prior to beginning work at this site or disturbing or altering wetlands, waterways, or adjacent lands in any way, Stantec recommends that the owner obtain the necessary permits or other agency regulatory review and concurrence with regard to the proposed work to comply with applicable regulations. Stantec can assist with identification and/or assessment of additional regulated resources at your request, to the extent that the work is within our range of expertise.

The information provided by Stantec regarding wetland boundaries is a scientific-based analysis of the wetland and upland conditions present within the Study Area at the time of the fieldwork. The delineation was performed by experienced and qualified professionals using standard practices and sound professional judgment. The ultimate decision on wetland boundaries rests with the USACE and, in some cases, the WDNR or a local unit of government. As a result, there may be adjustments to boundaries based upon review by a regulatory agency. An agency determination can vary from time to time depending on various factors including, but not limited to recent precipitation patterns and the season of the year. In addition, the physical characteristics of the Study Area can change over time, depending on the weather, vegetation patterns, drainage activities on adjacent parcels, or other events. Any of these factors can change the nature and extent of wetlands within the Study Area.

Stantec

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5.0 REFERENCES

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Vilas Road Appendix A– Figures October 27, 2016

Appendix A - Figures

Figure 1. Project Location and Topography

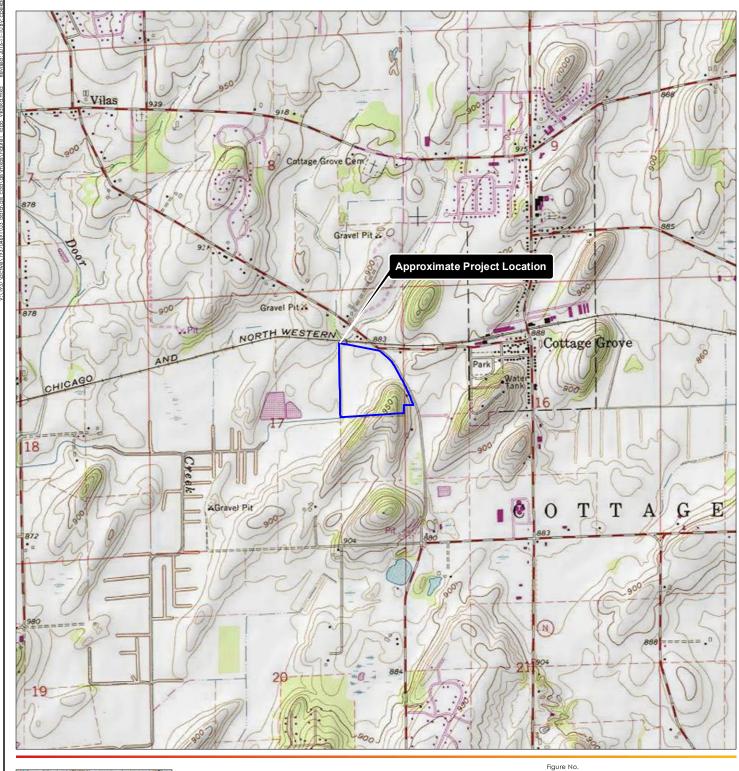
Figure 2. NRCS Soil Survey Data – Hydric Ratings

Figure 3. NRCS Soil Survey Data – Wetland Indicator Soils

Figure 4. Wisconsin Wetland Inventory

Figure 5. Field Collected Data







Approximate Project Boundary

- Coordinate System: NAD 1983 StatePlane Wisconsin South FIPS 4803 Feet
- Data Sources Include: Stantec, WDOT, WDNR
 Bachground: USGS 7.5' Topographic Quadrangles

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1

Title

Project Location and Topography

Client/Project Reed and Leanne Widen Vilas Road

Wetland Delineation

Project Location T7N, R11E, S17 & S16 T. of Cottage Grove, Dane Co., WI

193704691 Prepared by BM on 2016-08-23 Technical Review by BT on 2016-08-23 Independent Review by JK on 2016-10-17

0 1,000 2,000 Feet 1:24,000 (at original document size of 8.5x11)









Approximate Project Boundary NRCS Soil Survey Data

Hydric Ratings

Predominantly Hydric Soils

Partially Hydric Soils Non-Hydric Soils

Waterbody

DNR 24k Hydrography

→ Perennial Stream

Intermittent Stream

Figure No.

Title

NRCS Soil Survey Data Hydric Ratings

Client/Project
Reed and Leanne Widen Vilas Road Wetland Delineation

Project Location 17N, R11E, S17 & S16 T. of Cottage Grove, Dane Co., WI Prepared by BM on 2016-08-23 Technical Review by BT on 2016-08-23 Independent Review by JK on 2016-10-17

0 200 400 Feet 1:4,800 (at original document size of 8.5x11)



193704691



Coordinate System: NAD 1983 StatePlane Wisconsin South FIPS 4803 Feet

Data Sources Include: Stantec, WDOT, WDNR, NRCS
 Orthophotography: 2015 NAIP

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 1. Coordinate System: NAD 1983 StatePlane Wisconsin South FIPS 4803 Feet 2. Data Sources Include: Stantec, WDOT, WDNR, NRCS 3. Orthophotography: 2015 NAIP

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<u>Legend</u>

Approximate Project Boundary NRCS Soil Survey Data

Wetland Indcator Soils

Very Poorly Drained

Poorly Drained

Somewhat Poorly Drained

DNR 24k Hydrography

Perennial Stream

Intermittent Stream

Waterbody

Figure No.

Title

NRCS Soil Survey Data Wetland Indicator Soils

Client/Project Reed and Leanne Widen Vilas Road

Wetland Delineation Project Location 17N, R11E, S17 & S16 T. of Cottage Grove, Dane Co., WI

Prepared by BM on 2016-08-23 Technical Review by BT on 2016-08-23 Independent Review by JK on 2016-10-17 0 200 400 Feet 1:4,800 (at original document size of 8.5x11)







193704691

Legend Figure 4. WWI Wetland Class Points Dammed pond Excavated pond Filled excavated pond Filled/drained wetland Wetland too small to delineate Filled Points Wetland Class Areas Wetland Upland Filled Areas Municipality State Boundaries **County Boundaries** Major Roads Interstate Highway State Highway US Highway County and Local Roads County HWY Local Road Railroads Tribal Lands Rivers and Streams Intermittent Streams Lakes and Open water 0 **Notes** 0.1 0.06 0.1 Miles DISCLAIMER: The information shown on these maps has been obtained from various sources, and are of varying age, reliability and resolution. These maps are not intended to be used for navigation, nor are these maps an authoritative source of information about legal land

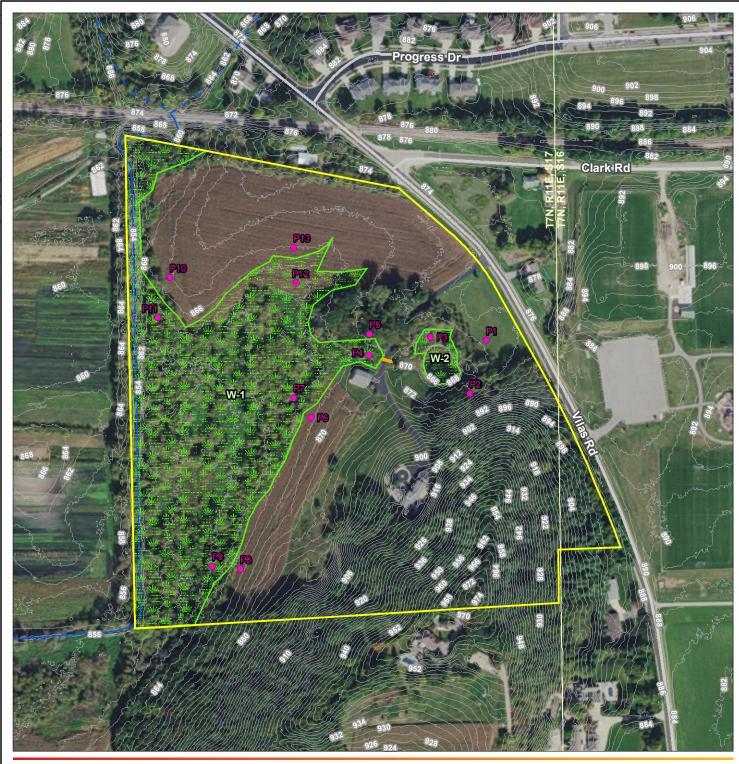
NAD_1983_HARN_Wisconsin_TM

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Approximate Project Boundary

Sample Point

Culvert

2ft Elevation Contours

🥌 Field Delineated Wetland

DNR 24k Hydrography

Perennial Stream

Intermittent Stream

Waterbody

Figure No.

Title

Field Collected Data

Client/Project Reed and Leanne Widen Vilas Road Wetland Delineation

Project Location 17N, R11E, S17 & S16 T. of Cottage Grove, Dane Co., WI 193704691 Prepared by BT on 2016-10-17 Technical Review by JD on 2016-10-17 Independent Review by JK on 2016-10-17

0 150 300 Feet 1:3,600 (at original document size of 8.5x11)





NAD 1983 StatePlane Wisconsin South FIPS 4803 Feet 2. Data Sources Include: Stantec, WDOT, WDNR 3. Orthophotography: ESRI

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Vilas Road Appendix B– Wetland Determination Data Forms October 27, 2016

Appendix B – Wetland Determination Data Forms





WETLAND DETERMINATION DATA FORM Northcentral-Northeast Region

Project/Site:	Vilas Road						Stantec Project #:	193704691		Date:	10/13/16
Applicant:		Leanne Widen					,			County:	Dane
Investigator #1:				Investi	igator #2:	Josh Su	lman			State:	Wisconsin
Soil Unit:	Sable silty				90.001 11 = 1		/I/WWI Classification:			Wetland ID:	adj. W-2
Landform:	Dip	oray rourn		Loc	al Relief:		ii vi vi Gidoomodiom			Sample Point:	P1
Slope (%):	0-2	Latitude:	N/A		ongitude:			Datum:	Ν/Δ	Community ID:	Upland mowed lawn
· · · · · · · · · · · · · · · · · · ·		ditions on the site ty					ain in remarke)	☐ Yes ☑		Section:	17
			•			(II IIO, expir	Are normal circumsta				7N
•		or Hydrology □ sig					☐ Yes	ances presem ☑No	l :	Township:	
		or Hydrology ☐ na	turally pr	obiemai	IC?		□ 162	⊴I4 0		Range:	11E
SUMMARY OF		10									
Hydrophytic Ve	_			□ Yes	_			Hydric Soils			
Wetland Hydrol				☐ Yes						Within A Wetlar	
Remarks:	Based on r	esults of a WETS a	ınalysis,	condition	ns are we	tter than	normal for this time or	f year. Samp	le point is l	ocated in mowe	ed turfgrass, about 25 ft.
	east of unn	nowed old field edg	e.								
HYDROLOGY											
Wetland Hydr	ology Indic	ators (Check here	if indicate	ore are r	not nreser	ot 🗔 🕩					
Primary:		ators (Check here	ii iiidicat	ors are r	iot preser	ιι ☑).			Secondary:		
<u>' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' </u>	A1 - Surface	Water		П	B9 - Wate	er-Stained	Leaves			B6 - Surface Soil	Cracks
l H	A2 - High Wa			H	B13 - Aqu				H	B10 - Drainage P	
	A3 - Saturation				B15 - Mar					B16 - Moss Trim	
	B1 - Water M	/larks			C1 - Hydr	ogen Sulfi	de Odor			C2 - Dry-Season	Water Table
	B2 - Sedime						spheres on Living Roots			C8 - Crayfish Bur	
	B3 - Drift De						educed Iron				isible on Aerial Imagery
	B4 - Algal Ma			_			duction in Tilled Soils			D1 - Stunted or S	
l H	B5 - Iron Dep			님	C7 - Thin				님	D2 - Geomorphic	
		on Visible on Aerial Ima y Vegetated Concave S	0 ,	Ц	Other (Ex	piain in Re	marks)			D3 - Shallow Aqu D4 - Microtopogra	
	Bo - Sparser	y vegetated Concave C	Juliace							D5 - FAC-Neutral	
First Observed	•										
Field Observat											
Surface Water	Present?	☐ Yes ☑ No	Depth:		(in.)			Wetland Hy	drology Pr	resent?	Yes ☑ No
Water Table Pr	esent?	☐ Yes ☑ No	Depth:		(in.)			Trotiana my	arology i i		165 🖫 146
Saturation Pres	ent?	☐ Yes	Depth:		(in.)						
Describe Record	ed Data (str	eam gauge, monitori	na well s	erial nho	otos previe	ous inspe	ctions) if available:		Historic Aeri	al Imagery Reviev	Λ/
	ed Data (3ti	cam gauge, monitori	rig weii, e	acriai pric	otos, previ	ous mape	ctions), if available.		Thotone / ten	ar imagery reviev	'
Remarks:											
SOILS											
):	Sable silty clay loar	m			S	eries Drainage Class:	poorly			
SOILS		Sable silty clay loar Typic Endoaquolls				S	eries Drainage Class:	poorly			
SOILS Map Unit Name Taxonomy (Sub	group):	Typic Endoaquolls	}	m the absence o	of indicators.) (Ty		•	•	d Grains; Location: F	PL=Pore Lining, M=Matrix)	
SOILS Map Unit Name Taxonomy (Sub	ogroup): otion (Describe to	Typic Endoaquolls	}				tion, D=Depletion, RM=Reduced Matrix, 0	CS=Covered/Coated Sand		PL=Pore Lining, M=Matrix)	Texture
SOILS Map Unit Name Taxonomy (Sub Profile Descrip	ogroup): otion (Describe to Bottom	Typic Endoaquolls the depth needed to document the in	dicator or confirr	Matrix		pe: C=Concentra	ntion, D=Depletion, RM=Reduced Matrix, G	CS=Covered/Coated Sand	T	Г	Texture (e.g. clay, sand, loam)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth	ogroup): otion (Describe to Bottom Depth	Typic Endoaquolls	dicator or confirm	Matrix (Moist)	%	pe: C=Concentra	tion, D=Depletion, RM=Reduced Matrix, 0	cS=Covered/Coated Sand		PL=Pore Lining, M=Matrix) Location	(e.g. clay, sand, loam)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	ogroup): otion (Describe to Bottom Depth 6	Typic Endoaquolls the depth needed to document the in Horizon 1	dicator or confirm Color 10YR	Matrix (Moist) 3/2	% 100	pe: C=Concentra	tion, D=Depletion, RM=Reduced Matrix, CRE Color (Moist)	cs=Covered/Coated Sand	Type 	Location 	(e.g. clay, sand, loam) silt loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 6	pgroup): otion (Describe to Bottom Depth 6 13	Typic Endoaquolls the depth needed to document the in	Color 10YR 10YR	Matrix (Moist) 3/2 3/2	% 100 95	pe: C=Concentra	ntion, D=Depletion, RM=Reduced Matrix, G	cS=Covered/Coated Sand	T	Г	(e.g. clay, sand, loam)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	pgroup): otion (Describe to Bottom Depth 6 13 17	Typic Endoaquolls the depth needed to document the in Horizon 1	dicator or confirm Color 10YR	Matrix (Moist) 3/2	% 100	pe: C=Concentra	tion, D=Depletion, RM=Reduced Matrix, CRE Color (Moist)	cs=Covered/Coated Sand	Type 	Location 	(e.g. clay, sand, loam) silt loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 6	pgroup): otion (Describe to Bottom Depth 6 13	Typic Endoaquolls the depth needed to document the in Horizon 1	Color 10YR 10YR	Matrix (Moist) 3/2 3/2	% 100 95	pe: C=Concentra	tion, D=Depletion, RM=Reduced Matrix, CRE Color (Moist)	cS=Covered/Coated Sand edox Features % 5	Type 	Location 	(e.g. clay, sand, loam) silt loam silt loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 6 13	pgroup): otion (Describe to Bottom Depth 6 13 17	Typic Endoaquolls the depth needed to document the in Horizon 1 2 3	Color 10YR 10YR 10YR	Matrix (Moist) 3/2 3/2 2/1	% 100 95 80	pe: C=Concentra 10YR	Color (Moist) 3/4	cS=Covered/Coated Sand	Type C	Location M 	(e.g. clay, sand, loam) silt loam silt loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 6 13 13	pgroup): Dition (Describe to Bottom Depth 6 13 17 17	Typic Endoaquolls the depth needed to document the in Horizon 1 2 3	Color 10YR 10YR 10YR 10YR	Matrix (Moist) 3/2 3/2 2/1 4/2	% 100 95 80 15	 10YR 10YR	Re Color (Moist) 3/4 4/4	cS=Covered/Coated Sand dox Features % 5 5	Type C C	Location M M	(e.g. clay, sand, loam) silt loam silt loam loam sandy clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 6 13 13 17	pgroup): ption (Describe to Bottom Depth 6 13 17 17 22	Typic Endoaquolls the depth needed to document the in Horizon 1 2 3 3 4	Color 10YR 10YR 10YR 10YR 10YR 10YR	Matrix (Moist) 3/2 3/2 2/1 4/2 4/1	% 100 95 80 15 95	 10YR 10YR 10YR	Color (Moist) 3/4 4/4 4/4	CS=Covered/Coated Sand cdox Features % 5 5 5 5	Type C C C	Location M M M	(e.g. clay, sand, loam) silt loam silt loam loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 6 13 13 17	pgroup): ption (Describe to Bottom Depth 6 13 17 17 22 24	Typic Endoaquolls the depth needed to document the in Horizon 1 2 3 4 5	Color 10YR 10YR 10YR 10YR 10YR 10YR 7.5YR	Matrix (Moist) 3/2 3/2 2/1 4/2 4/1	% 100 95 80 15 95	 10YR 10YR 10YR 7.5YR	Color (Moist) 3/4 4/4 4/4	CS=Covered/Coated Sand cdox Features % 5 5 10	Type C C C C	Location M M M	(e.g. clay, sand, loam) silt loam silt loam loam sandy clay loam clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 6 13 13 17 22	pgroup): otion (Describe to Bottom Depth 6 13 17 17 22 24	Typic Endoaquolls the depth needed to document the in Horizon 1 2 3 4 5	Color 10YR 10YR 10YR 10YR 10YR 7.5YR	Matrix (Moist) 3/2 3/2 2/1 4/2 4/1 5/1	% 100 95 80 15 95 90 	 10YR 10YR 10YR 7.5YR 	Color (Moist) 3/4 4/4 4/4 5/6	cs=Covered/Coated Sand edox Features % 5 5 5 10	Type C C	Location M M M M -	(e.g. clay, sand, loam) silt loam silt loam loam sandy clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 6 13 13 17 22 NRCS Hydric	pgroup): ption (Describe to Bottom Depth 6 13 17 17 22 24 Soil Field In	Typic Endoaquolls the depth needed to document the in Horizon 1 2 3 4 5 ndicators (check he	Color 10YR 10YR 10YR 10YR 10YR 7.5YR	Matrix (Moist) 3/2 3/2 2/1 4/2 4/1 5/1 icators a	% 100 95 80 15 95 90	10YR 10YR 10YR 7.5YR esent	Color (Moist) 3/4 4/4 4/4 5/6):	CS=Covered/Coated Sand cdox Features % 5 5 10 Indicator	Type C C C C s for Proble	Location M M M M M matic Soils ¹	(e.g. clay, sand, loam) silt loam silt loam loam sandy clay loam clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 6 13 13 17 22 NRCS Hydric	pgroup): ption (Describe to Bottom Depth 6 13 17 17 22 24 Soil Field In A1- Histosol	Typic Endoaquolls the depth needed to document the in Horizon 1 2 3 4 5 ndicators (check he	Color 10YR 10YR 10YR 10YR 10YR 7.5YR	Matrix (Moist) 3/2 3/2 2/1 4/2 4/1 5/1 icators a	% 100 95 80 15 95 90 are not pre	10YR 10YR 7.5YR esent value Below	tion, D=Depletion, RM=Reduced Matrix, or Re Color (Moist) 3/4 4/4 4/4 5/6): w Surface (LRR R, MLRA 149B)	cs=Covered/Coated Sand dox Features % 5 5 10 Indicator	Type C C C s for Proble	Location M M M M matic Soils ¹ Muck (LRR K, L, MLRA	(e.g. clay, sand, loam) silt loam silt loam loam sandy clay loam clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 6 13 13 17 22 NRCS Hydric	pgroup): ption (Describe to Bottom Depth 6 13 17 17 22 24 Soil Field In A1- Histosol A2 - Histic E	Typic Endoaquolls the depth needed to document the in Horizon 1 2 3 4 5 ndicators (check he	Color 10YR 10YR 10YR 10YR 10YR 7.5YR	Matrix (Moist) 3/2 3/2 2/1 4/2 4/1 5/1 icators a	% 100 95 80 15 95 90 are not pre	10YR 10YR 10YR 7.5YR esent □ value Below	tion, D=Depletion, RM=Reduced Matrix, Re Color (Moist) 3/4 4/4 4/4 5/6): ** Surface (LRR R, MLRA 149B) ace (LRR R, MLRA 149B)	CS=Covered/Coated Sand edox Features % 5 5 10 Indicator	Type C C C C s for Proble A10 - 2 cm	Location M M M M M M M M matic Soils Muck (LRR K, L, MLRA A) Prairie Redox (LRR	(e.g. clay, sand, loam) silt loam loam sandy clay loam clay loam 149B) RK, L, R)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 6 13 13 17 22 NRCS Hydric	bgroup): btion (Describe to Bottom Depth 6 13 17 17 22 24 Soil Field In A1- Histosol A2 - Histic E A3 - Black H	Typic Endoaquolls the depth needed to document the in Horizon 1 2 3 3 4 5 ndicators (check here)	Color 10YR 10YR 10YR 10YR 10YR 7.5YR	Matrix (Moist) 3/2 3/2 2/1 4/2 4/1 5/1 icators a	% 100 95 80 15 95 90 are not pre \$8 - Polyv \$9 - Thin \$11 - High	10YR 10YR 7.5YR esent value Below	tion, D=Depletion, RM=Reduced Matrix, or Re Color (Moist) 3/4 4/4 4/4 5/6): w Surface (LRR R, MLRA 149B) ace (LRR R, MLRA 149B) Sands	cS=Covered/Coated Sand edox Features % 5 5 10 Indicator	Type C C C C s for Proble A10 - 2 cm A16 - Coast S3 - 5cm Mi	Location M M M M M matic Soils Muck (LRR K, L, MLRA A) Prairie Redox (LRR L) Lucky Peat of Peat	(e.g. clay, sand, loam) silt loam loam sandy clay loam clay loam 149B) RK, L, R)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 6 13 13 17 22 NRCS Hydric	pgroup): ption (Describe to Bottom Depth 6 13 17 17 22 24 Soil Field In A1- Histosol A2 - Histic El A3 - Black H A4 - Hydroge	Typic Endoaquolls the depth needed to document the in Horizon 1 2 3 3 4 5 ndicators (check here) pipedon istic en Sulfide	Color 10YR 10YR 10YR 10YR 10YR 7.5YR	Matrix (Moist) 3/2 3/2 2/1 4/2 4/1 5/1 icators a	% 100 95 80 15 95 90	10YR 10YR 10YR 7.5YR value Below	tion, D=Depletion, RM=Reduced Matrix, or Re Color (Moist) 3/4 4/4 4/4 5/6): w Surface (LRR R, MLRA 149B) ace (LRR R, MLRA 149B) Sands Mineral (LRR K, L)	cs=Covered/Coated Sand edox Features % 5 5 10 Indicator	Type C C C C s for Proble A10 - 2 cm I A16 - Coast S3 - 5cm Me S7 - Dark S	Location M M M M M matic Soils Muck (LRR K, L, MLRA Prairie Redox (LRR Lucky Peat of Peat urface (LRR K, L, M)	(e.g. clay, sand, loam) silt loam loam sandy clay loam clay loam 149B) R K, L, R) (LRR K, L, R)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 6 13 17 22 NRCS Hydric	Bottom Depth 6 13 17 17 22 24 Soil Field Ir A1- Histosol A2 - Histic E A3 - Black H A4 - Hydroge A5 - Stratifie	Typic Endoaquolls the depth needed to document the in Horizon 1 2 3 4 5 ndicators (check here) pipedon istic en Sulfide d Layers	Color 10YR 10YR 10YR 10YR 10YR 7.5YR ere if indi	Matrix (Moist) 3/2 3/2 2/1 4/2 4/1 5/1 icators a	% 100 95 80 15 95 90 are not pre S8 - Polyv S9 - Thin S11 - High F1 - Loam F2 - Loam	10YR 10YR 10YR 10YR 7.5YR esent value Below Dark Surfa	tion, D=Depletion, RM=Reduced Matrix, Re Color (Moist) 3/4 4/4 4/4 5/6): w Surface (LRR R, MLRA 149B) ace (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix	CS=Covered/Coated Sand cdox Features % 5 5 10 Indicator	Type C C C C s for Proble A10 - 2 cm A16 - Coast S3 - 5cm Mi S7 - Dark S S8 - Polyval	Location M M M M M matic Soils Muck (LRR K, L, MLRA Prairie Redox (LRR ucky Peat of Peat urface (LRR K, L, M) ue Below Surface	(e.g. clay, sand, loam) silt loam loam loam sandy clay loam clay loam 149B) R K, L, R) (LRR K, L, R)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 6 13 13 17 22 NRCS Hydric	Bottom Depth 6 13 17 17 22 24 Soil Field Ir A1- Histosol A2 - Histic E A3 - Black H A4 - Hydroge A5 - Stratifie	Typic Endoaquolls the depth needed to document the in Horizon 1 2 3 3 4 5 ndicators (check here) pipedon istic en Sulfide d Layers ed Below Dark Surface	Color 10YR 10YR 10YR 10YR 10YR 7.5YR ere if indi	Matrix (Moist) 3/2 3/2 2/1 4/2 4/1 5/1 icators a	% 100 95 80 15 95 90	10YR 10YR 10YR 7.5YR 2sent value Below Dark Surfant Chroma ny Mucky May Gleyed eted Matrix	tion, D=Depletion, RM=Reduced Matrix, or Re Color (Moist) 3/4 4/4 4/4 5/6): w Surface (LRR R, MLRA 149B) ace (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix	cs=Covered/Coated Sand edox Features % 5 5 10 Indicator	Type C C C C C s for Proble A10 - 2 cm A16 - Coast S3 - 5cm Mi S7 - Dark Si S8 - Polyval S9 - Thin Da	Location M M M M M matic Soils Muck (LRR K, L, MLRA Prairie Redox (LRR Lucky Peat of Peat Lucky	(e.g. clay, sand, loam) silt loam loam sandy clay loam clay loam 149B) R K, L, R) (LRR K, L, R) (LRR K, L, R)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 6 13 17 22 NRCS Hydric	Bottom Depth 6 13 17 17 22 24 Soil Field Ir A1- Histosol A2 - Histic E A3 - Black H A4 - Hydroge A5 - Stratified A11 - Deplete	Typic Endoaquolls the depth needed to document the in Horizon 1 2 3 4 5 ndicators (check here) pipedon istic en Sulfide d Layers ed Below Dark Surface Dark Surface	Color 10YR 10YR 10YR 10YR 10YR 7.5YR ere if indi	Matrix (Moist) 3/2 3/2 2/1 4/2 4/1 5/1 icators a	% 100 95 80 15 95 90 are not pre S8 - Polyx S9 - Thin S11 - High F1 - Loam F2 - Loam F3 - Deple	10YR 10YR 10YR 7.5YR value Below Dark Surfant Chroma ny Mucky May Gleyed eted Matrix ox Dark Sur	tion, D=Depletion, RM=Reduced Matrix, Re Color (Moist) 3/4 4/4 4/4 5/6): w Surface (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix (rface	CS=Covered/Coated Sand edox Features % 5 5 10 Indicator	Type C C C C C s for Proble A10 - 2 cm I A16 - Coast S3 - 5cm Mi S7 - Dark Si S8 - Polyval S9 - Thin Da F12 - Iron-M	Location M M M M M matic Soils Muck (LRR K, L, MLRA Prairie Redox (LRR ucky Peat of Peat urface (LRR K, L, M) ue Below Surface	(e.g. clay, sand, loam) silt loam loam sandy clay loam clay loam 149B) R K, L, R) (LRR K, L, R) (LRR K, L, R) S (LRR K, L, R)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 6 13 17 22 NRCS Hydric	Bottom Depth 6 13 17 17 22 24 Soil Field Ir A1- Histosol A2 - Histic E A3 - Black H A4 - Hydroge A5 - Stratified A11 - Deplete A12 - Thick E S1 - Sandy N	Typic Endoaquolls the depth needed to document the in Horizon 1 2 3 4 5 ndicators (check here) pipedon istic en Sulfide d Layers ed Below Dark Surface Dark Surface	Color 10YR 10YR 10YR 10YR 10YR 7.5YR ere if indi	Matrix (Moist) 3/2 3/2 2/1 4/2 4/1 5/1 icators a	% 100 95 80 15 95 90	10YR 10YR 10YR 10YR 7.5YR esent value Below Dark Surfant Chroma ny Mucky M ny Gleyed eted Matrix ox Dark Sureted eted Dark	tion, D=Depletion, RM=Reduced Matrix, Re Color (Moist) 3/4 4/4 4/4 5/6): w Surface (LRR R, MLRA 149B) ace (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix crface Surface Surface	cS=Covered/Coated Sand edox Features % 5 5 10 Indicator	Type C C C C C s for Proble A10 - 2 cm I A16 - Coast S3 - 5cm Mi S7 - Dark Si S8 - Polyval S9 - Thin Da F12 - Iron-M F19 - Piedm	Location M M M M M M M	(e.g. clay, sand, loam) silt loam loam sandy clay loam clay loam 149B) R K, L, R) (LRR K, L, R) (LRR K, L, R) S (LRR K, L, R)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 6 13 17 22 NRCS Hydric	Bottom Depth 6 13 17 17 22 24 Soil Field Ir A1- Histosol A2 - Histic E A3 - Black H A4 - Hydroge A5 - Stratified A11 - Deplete A12 - Thick E S1 - Sandy E S5 - Sandy E	Typic Endoaquolls the depth needed to document the in Horizon 1 2 3 4 5 ndicators (check here) pipedon istic en Sulfide d Layers ed Below Dark Surface Dark Surface Muck Mineral Gleyed Matrix Redox	Color 10YR 10YR 10YR 10YR 10YR 7.5YR ere if indi	Matrix (Moist) 3/2 3/2 2/1 4/2 4/1 5/1 icators a	% 100 95 80 15 95 90	10YR 10YR 10YR 10YR 7.5YR esent value Below Dark Surfant Chroma ny Mucky M ny Gleyed eted Matrix ox Dark Sureted eted Dark	tion, D=Depletion, RM=Reduced Matrix, Re Color (Moist) 3/4 4/4 4/4 5/6): w Surface (LRR R, MLRA 149B) ace (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix crface Surface Surface	cs=Covered/Coated Sand edox Features % 5 5 10 Indicator	Type C C C C C s for Proble A10 - 2 cm I A16 - Coast S3 - 5cm Me S7 - Dark Se S8 - Polyval S9 - Thin Da F12 - Iron-Me F19 - Piedme F21 - Red P	Location M M M M M matic Soils Muck (LRR K, L, MLRA Prairie Redox (LRR Lucky Peat of Peat Lucky Peat L	(e.g. clay, sand, loam) silt loam loam loam sandy clay loam clay loam 149B) R K, L, R) (LRR K, L, R) (LRR K, L, R) S (LRR K, L, R) ils (MLRA 149B)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 6 13 17 22 NRCS Hydric	Bottom Depth 6 13 17 17 22 24 Soil Field In A1- Histosol A2 - Histic E A3 - Black H A4 - Hydroge A5 - Stratified A11 - Deplete A12 - Thick E S1 - Sandy N S4 - Sandy N S4 - Sandy N S6 - Stripped	Typic Endoaquolls the depth needed to document the in Horizon 1 2 3 3 4 5 ndicators (check here) pipedon istic en Sulfide d Layers ed Below Dark Surface Dark Surface Muck Mineral Gleyed Matrix Redox d Matrix	Color 10YR 10YR 10YR 10YR 10YR 7.5YR ere if indi	Matrix (Moist) 3/2 3/2 2/1 4/2 4/1 5/1 icators a	% 100 95 80 15 95 90	10YR 10YR 10YR 10YR 7.5YR esent value Below Dark Surfant Chroma ny Mucky M ny Gleyed eted Matrix ox Dark Sureted eted Dark	tion, D=Depletion, RM=Reduced Matrix, Re Color (Moist) 3/4 4/4 4/4 5/6): w Surface (LRR R, MLRA 149B) ace (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix crface Surface Surface	cs=Covered/Coated Sand edox Features % 5 5 10 Indicator	Type C C C C C C s for Proble A10 - 2 cm I A16 - Coast S3 - 5cm Mi S7 - Dark S S8 - Polyval S9 - Thin Da F12 - Iron-M F19 - Piedm F21 - Red P TA6 - Mesic TF12 - Very	Location M M M M M M matic Soils Muck (LRR K, L, MLRA Prairie Redox (LRR Lucky Peat of Peat Lucky Peat of	(e.g. clay, sand, loam) silt loam loam loam sandy clay loam clay loam 149B) R K, L, R) (LRR K, L, R) (LRR K, L, R) (LRR K, L, R) s (LRR K, L, R) ils (MLRA 149B)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 6 13 17 22 NRCS Hydric	Bottom Depth 6 13 17 17 22 24 Soil Field In A1- Histosol A2 - Histic E A3 - Black H A4 - Hydroge A5 - Stratified A11 - Deplete A12 - Thick E S1 - Sandy N S4 - Sandy N S4 - Sandy N S6 - Stripped	Typic Endoaquolls the depth needed to document the in Horizon 1 2 3 4 5 ndicators (check here) pipedon istic en Sulfide d Layers ed Below Dark Surface Dark Surface Muck Mineral Gleyed Matrix Redox	Color 10YR 10YR 10YR 10YR 10YR 7.5YR ere if indi	Matrix (Moist) 3/2 3/2 2/1 4/2 4/1 5/1 icators a	% 100 95 80 15 95 90	10YR 10YR 10YR 10YR 7.5YR esent value Below Dark Surfant Chroma ny Mucky M ny Gleyed eted Matrix ox Dark Sureted eted Dark	tion, D=Depletion, RM=Reduced Matrix, Re Color (Moist) 3/4 4/4 4/4 5/6): w Surface (LRR R, MLRA 149B) ace (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix crface Surface Surface	cs=Covered/Coated Sand cdox Features % 5 5 10 Indicator	Type C C C C C C s for Proble A10 - 2 cm I A16 - Coast S3 - 5cm Mi S7 - Dark Si S8 - Polyval S9 - Thin Da F12 - Iron-M F19 - Piedm F21 - Red P TA6 - Mesic TF12 - Very Other (Expla	Location M M M M M M M matic Soils Muck (LRR K, L, MLRA Prairie Redox (LRR Lucky Peat of Peat Lucky Peat of	(e.g. clay, sand, loam) silt loam loam loam sandy clay loam clay loam 149B) R K, L, R) (LRR K, L, R) (LRR K, L, R) ils (MLRA 149B) face
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 6 13 17 22 NRCS Hydric	Bottom Depth 6 13 17 17 22 24 Soil Field In A1- Histosol A2 - Histic E A3 - Black H A4 - Hydroge A5 - Stratified A11 - Deplete A12 - Thick E S1 - Sandy N S4 - Sandy N S4 - Sandy N S6 - Stripped	Typic Endoaquolls the depth needed to document the in Horizon 1 2 3 3 4 5 ndicators (check here) pipedon istic en Sulfide d Layers ed Below Dark Surface Dark Surface Muck Mineral Gleyed Matrix Redox d Matrix	Color 10YR 10YR 10YR 10YR 10YR 7.5YR ere if indi	Matrix (Moist) 3/2 3/2 2/1 4/2 4/1 5/1 icators a	% 100 95 80 15 95 90	10YR 10YR 10YR 10YR 7.5YR esent value Below Dark Surfant Chroma ny Mucky M ny Gleyed eted Matrix ox Dark Sureted eted Dark	tion, D=Depletion, RM=Reduced Matrix, Re Color (Moist) 3/4 4/4 4/4 5/6): w Surface (LRR R, MLRA 149B) ace (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix crface Surface Surface	cs=Covered/Coated Sand cdox Features % 5 5 10 Indicator	Type C C C C C C s for Proble A10 - 2 cm I A16 - Coast S3 - 5cm Mi S7 - Dark Si S8 - Polyval S9 - Thin Da F12 - Iron-M F19 - Piedm F21 - Red P TA6 - Mesic TF12 - Very Other (Expla	Location M M M M M M matic Soils Muck (LRR K, L, MLRA Prairie Redox (LRR Lucky Peat of Peat Lucky Peat of	(e.g. clay, sand, loam) silt loam loam loam sandy clay loam clay loam 149B) R K, L, R) (LRR K, L, R) (LRR K, L, R) ils (MLRA 149B) face
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 6 13 17 22 NRCS Hydric	Bottom Depth 6 13 17 17 22 24 Soil Field In A1- Histosol A2 - Histic E A3 - Black H A4 - Hydroge A5 - Stratified A11 - Deplete A12 - Thick E S1 - Sandy N S4 - Sandy N S4 - Sandy N S6 - Stripped	Typic Endoaquolls the depth needed to document the in Horizon 1 2 3 4 5 ndicators (check here) pipedon istic en Sulfide d Layers ed Below Dark Surface Dark Surface Muck Mineral Eleyed Matrix Redox d Matrix Irface (LRR R, MLRA 149B)	Color 10YR 10YR 10YR 10YR 10YR 7.5YR ere if indi	Matrix (Moist) 3/2 3/2 2/1 4/2 4/1 5/1 icators a	% 100 95 80 15 95 90	10YR 10YR 10YR 10YR 7.5YR esent value Below Dark Surfant Chroma ny Mucky M ny Gleyed eted Matrix ox Dark Sureted eted Dark	tion, D=Depletion, RM=Reduced Matrix, Re Color (Moist) 3/4 4/4 4/4 5/6): w Surface (LRR R, MLRA 149B) ace (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix crface Surface Surface	cs=Covered/Coated Sand cdox Features % 5 5 10 Indicator	Type C C C C C C C s for Proble A10 - 2 cm I A16 - Coast S3 - 5cm Me S7 - Dark Se S8 - Polyval S9 - Thin Da F12 - Iron-M F19 - Piedm F21 - Red P TA6 - Mesic TF12 - Very Other (Expla of hydrophytic veget or problematic.	Location M M M M M M M matic Soils Muck (LRR K, L, MLRA Prairie Redox (LRR Lucky Peat of Peat Lucky Peat of	(e.g. clay, sand, loam) silt loam loam loam sandy clay loam clay loam 149B) R K, L, R) (LRR K, L, R) (LRR K, L, R) ils (MLRA 149B) face



WETLAND DETERMINATION DATA FORM Northcentral-Northeast Region

Project/Site: Vilas Road Wetland ID: adj. W-2 Sample Point: P1

VEGETATION	(Species identified in all uppercase are non-na	tive spec	cies.)		
Tree Stratum (Plo	t size: 10 meter radius)				Davidson Tarian III.
4	<u>Species Name</u>	% Cover	<u>Dominant</u>	Ind.Status	Dominance Test Worksheet
1. 2.					Number of Deminent Species that are ORL EACIAL or EAC.
3.	_ 				Number of Dominant Species that are OBL, FACW, or FAC:(A)
3. 4.	_ 				Total Number of Deminant Species Agrees All Strate: 1 (R)
<u> </u>	_ -				Total Number of Dominant Species Across All Strata:1 (B)
6.	<u></u>				Percent of Dominant Species That Are OBL, FACW, or FAC: 0% (A/B)
7.	_ 				referr of borninant species that Are OBL, FACW, of FAC(A/B)
8.					Prevalence Index Worksheet
9.					Total % Cover of: Multiply by:
10.					OBL spp. 0 x 1 = 0
	Total Cover =	0			FACW spp. $\frac{0}{0}$ \times $2 = \frac{0}{0}$
					FAC spp. $\frac{0}{0}$ $\times 3 = \frac{0}{0}$
Sapling/Shrub Stra	atum (Plot size: 5 meter radius)				FACU spp. 94 x 4 = 376
1.					UPL spp. $0 x 5 = 0$
2.					
3.					Total 94 (A) 376 (B)
4.					
5.					Prevalence Index = B/A =
6.					
7.					
8.					Hydrophytic Vegetation Indicators:
9.					☐ Yes ☑ No Rapid Test for Hydrophytic Vegetation
10.	<u></u>				☐ Yes ☑ No Dominance Test is > 50%
	Total Cover =	0			☐ Yes ☑ No Prevalence Index is ≤ 3.0 *
					☐ Yes ☑ No Morphological Adaptations (Explain) *
,	t size: 2 meter radius)			EAGL	☐ Yes ☑ No Problem Hydrophytic Vegetation (Explain) *
1.	POA PRATENSIS	90	Y	FACU	* Indicators of hydric soil and wetland hydrology must be
2.	TARAXACUM OFFICINALE	2	N	FACU	present, unless disturbed or problematic.
3.	TRIFOLIUM REPENS PLANTAGO MAJOR	<u> </u>	N N	FACU	Definitions of Vegetation Strate:
4. 5.		<u>'</u>		FACU	Definitions of Vegetation Strata:
6	_ 				Tree - West valents 2 in (7 Com) on more in diameter at bases.
7.					Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height.
8.					
9.					Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft.
10.					tall.
11.					
12.					Herb - All herbaceous (non-woody) plants, regardless of size, and
13.					woody plants less than 3.28 ft. tall.
14.					
15.					Woody Vines - All woody vines greater than 3.28 ft. in height.
	Total Cover =	94			
Woody Vine Stratu	ım (Plot size: 10 meter radius)				
1.					
2.					
3.					Hydrophytic Vegetation Present ☐ Yes ☑ No
4.					
5.	Total Course				
Pemarka:	Vegetation is routinely moved. Nearby	0	and old fig	ald vogets	ation is dominated by non-hydrophytic vagatation including amosth brame. Canada
Remarks:	goldenrod.	urimow	eu olu 116	au vegeta	ation is dominated by non-hydrophytic vegetation including smooth brome, Canada
	<u> </u>				
Additional Ren	narke:				

Additional Remarks.



WETLAND DETERMINATION DATA FORM Northcentral-Northeast Region

Project/Site:	Vilas Road						Stantec Project #:	193704691		Date:	10/13/16
Applicant:	Reed and I	_eanne Widen					,			County:	Dane
Investigator #1:				Investi	gator #2:	Josh Su	lman			State:	Wisconsin
Soil Unit:	McHenry s				<u> </u>		I/WWI Classification:			Wetland ID:	adj. W-2
Landform:	Footslope			Loc	al Relief:					Sample Point:	P2
Slope (%):	3	Latitude:	N/A		ongitude:			Datum:	N/A	Community ID:	Upland Mesic Forest
· · · · · · · · · · · · · · · · · · ·		ditions on the site ty					ain in remarks)	☐ Yes ☑		Section:	17
		or Hydrology □ sig	•			(II IIO, CXPIC	Are normal circumsta			Township:	7N
•			•				✓ Yes	□No	. .	•	11E
		or Hydrology _□ nat	lurally pr	oblemat	16 !		₾ 103			Range:	TIE
SUMMARY OF		10		\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	N				D 10		
Hydrophytic Veg				□ Yes	_			Hydric Soils			☐ Yes ☑ No
Wetland Hydrol				☐ Yes						Within A Wetlar	
Remarks:							normal for this time of	•	•		-
	drumlin. A	strip of mowed law	n 20 feet	t northwe	est of sam	nple poin	t separates woods fro	m excavated	pond and a	issoc. wetland ((W-2).
HYDROLOGY											
	ology Indic	ators (Check here i	if indicate	ore are r	not nrasar	ot 🖂 🛝					
Primary:		ators (Check here i	ii iiidicat	JIS ale I	iot preser	ιι ☑).			Secondary:		
	A1 - Surface	Water			B9 - Wate	er-Stained	Leaves			B6 - Surface Soil	Cracks
_	A2 - High Wa			H	B13 - Aqu				H	B10 - Drainage P	
	A3 - Saturation				B15 - Mar					B16 - Moss Trim	
	B1 - Water M	⁄larks			C1 - Hydr	ogen Sulfi	de Odor			C2 - Dry-Season	Water Table
	B2 - Sedime						spheres on Living Roots			C8 - Crayfish Bur	
	B3 - Drift De						educed Iron				isible on Aerial Imagery
	B4 - Algal Ma			_			duction in Tilled Soils			D1 - Stunted or S	
	B5 - Iron Dep		agor.	님	C7 - Thin				H	D2 - Geomorphic	
		on Visible on Aerial Ima y Vegetated Concave S	•	Ц	Other (Ex	piain in Re	marks)		H	D3 - Shallow Aqu D4 - Microtopogra	
	Bo - Oparson	y vegetated concave c	Juliacc							D5 - FAC-Neutral	
Field Observet											
Field Observat											
Surface Water I		☐ Yes ☑ No	Depth:		(in.)			Wetland Hy	drology Pr	resent? □	Yes ☑ No
Water Table Pro	esent?	☐ Yes ☑ No	Depth:		(in.)						
Saturation Pres	ent?	☐ Yes ☑ No	Depth:		(in.)						
Describe Record	ed Data (str	eam gauge, monitori	ng well. a	erial pho	otos, previ	ous inspe	ctions), if available:		Historic Aeri	ial Imagery Reviev	V
		gaage,e	,		, p. c		outrained, in a rained for			3 · · · · · ·	
Lamarke:											
Remarks:											
SOILS											
SOILS Map Unit Name		McHenry silt loam				S	eries Drainage Class:	well			
SOILS Map Unit Name Taxonomy (Sub	group):	Typic Hapludalfs									
SOILS Map Unit Name Taxonomy (Sub	group):	Typic Hapludalfs	dicator or confirm	n the absence o	of indicators.) (Tyl				d Grains; Location: F	PL=Pore Lining, M=Matrix)	
SOILS Map Unit Name Taxonomy (Sub	group):	Typic Hapludalfs	dicator or confirm	m the absence o			tion, D=Depletion, RM=Reduced Matrix, C			PL=Pore Lining, M=Matrix)	Texture
SOILS Map Unit Name Taxonomy (Sub Profile Descrip	ogroup): otion (Describe to Bottom	Typic Hapludalfs		Matrix		pe: C=Concentra	tion, D=Depletion, RM=Reduced Matrix, C	CS=Covered/Coated Sand	T	PL=Pore Lining, M=Matrix) Location	Texture (e.g. clay, sand, loam)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth	group): otion (Describe to Bottom Depth	Typic Hapludalfs the depth needed to document the inc	Color	Matrix (Moist)	%	pe: C=Concentra	tion, D=Depletion, RM=Reduced Matrix, C	CS=Covered/Coated Sand		Г	(e.g. clay, sand, loam)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	egroup): otion (Describe to Bottom Depth 8	Typic Hapludalfs the depth needed to document the ind Horizon 1	Color 10YR	Matrix (Moist) 3/2	% 100	pe: C=Concentra	tion, D=Depletion, RM=Reduced Matrix, C	CS=Covered/Coated Sand dox Features %	Type 	Г	(e.g. clay, sand, loam) silt loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8	group): otion (Describe to Bottom Depth 8 10	Typic Hapludalfs the depth needed to document the inc	Color 10YR 10YR	Matrix (Moist) 3/2 3/2	% 100 60	pe: C=Concentra	tion, D=Depletion, RM=Reduced Matrix, C Re Color (Moist) 	CS=Covered/Coated Sand dox Features %	Type 	Location 	(e.g. clay, sand, loam) silt loam silt loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 8	pgroup): otion (Describe to Bottom Depth 8 10 10	Typic Hapludalfs the depth needed to document the inc Horizon 1 2 2	Color 10YR 10YR 10YR	Matrix (Moist) 3/2 3/2 5/3	% 100 60 35	e: C=Concentra	tion, D=Depletion, RM=Reduced Matrix, CRe Color (Moist) 4/6	cs=Covered/Coated Sand dox Features % 5	Type C	Location M	(e.g. clay, sand, loam) silt loam silt loam silt loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 8 10	pgroup): otion (Describe to Bottom Depth 8 10 10 16	Typic Hapludalfs the depth needed to document the ind Horizon 1	Color 10YR 10YR 10YR 10YR	Matrix (Moist) 3/2 3/2 5/3 5/3	% 100 60 35 95	e: C=Concentra 10YR 10YR	Re Color (Moist) 4/6 4/6	dox Features % 5 5	Type C C	Location M M	(e.g. clay, sand, loam) silt loam silt loam silt loam silt loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 8 10 16	pgroup): otion (Describe to Bottom Depth 8 10 10 16 20	Typic Hapludalfs the depth needed to document the inc Horizon 1 2 2	Color 10YR 10YR 10YR	Matrix (Moist) 3/2 3/2 5/3	% 100 60 35	e: C=Concentra	tion, D=Depletion, RM=Reduced Matrix, CRe Color (Moist) 4/6	cs=Covered/Coated Sand dox Features % 5	Type C C C	Location M	(e.g. clay, sand, loam) silt loam silt loam silt loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 8 10	pgroup): otion (Describe to Bottom Depth 8 10 10 16	Typic Hapludalfs the depth needed to document the inc Horizon 1 2 2	Color 10YR 10YR 10YR 10YR	Matrix (Moist) 3/2 3/2 5/3 5/3	% 100 60 35 95	e: C=Concentra 10YR 10YR	Re Color (Moist) 4/6 4/6	dox Features % 5 5	Type C C	Location M M	(e.g. clay, sand, loam) silt loam silt loam silt loam silt loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 8 10 16	pgroup): otion (Describe to Bottom Depth 8 10 10 16 20	Typic Hapludalfs the depth needed to document the ind Horizon 1 2 2 3 4	Color 10YR 10YR 10YR 10YR 10YR	Matrix (Moist) 3/2 3/2 5/3 5/3 5/3	% 100 60 35 95 95	 10YR 10YR 10YR	tion, D=Depletion, RM=Reduced Matrix, CRe Color (Moist) 4/6 4/6 4/6	dox Features % 5 5 5	Type C C C	Location M M M	(e.g. clay, sand, loam) silt loam silt loam silt loam silt loam loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 8 10 16	Bottom Depth 8 10 10 16 20 24	Typic Hapludalfs the depth needed to document the ince Horizon 1 2 2 3 4 5	Color 10YR 10YR 10YR 10YR 10YR 10YR 10YR	Matrix (Moist) 3/2 3/2 5/3 5/3 5/3	% 100 60 35 95 95	 10YR 10YR 10YR 10YR	tion, D=Depletion, RM=Reduced Matrix, CRe Color (Moist) 4/6 4/6 4/6	cs=Covered/Coated Sand dox Features % 5 5 5 10	Type C C C	Location M M M	(e.g. clay, sand, loam) silt loam silt loam silt loam silt loam loam loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 8 10 16 20	pgroup): otion (Describe to Bottom Depth 8 10 16 20 24	Typic Hapludalfs the depth needed to document the ince Horizon 1 2 2 3 4 5	Color 10YR 10YR 10YR 10YR 10YR 10YR 	Matrix (Moist) 3/2 3/2 5/3 5/3 5/3 4/3	% 100 60 35 95 95 90 	 10YR 10YR 10YR 10YR 	tion, D=Depletion, RM=Reduced Matrix, CRe Color (Moist) 4/6 4/6 4/6 4/6	cs=Covered/Coated Sand dox Features % 5 5 5 10	Type C C C	Location M M M M	(e.g. clay, sand, loam) silt loam silt loam silt loam silt loam loam loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 8 10 16 20 NRCS Hydric	pgroup): otion (Describe to Bottom Depth 8 10 10 16 20 24	Typic Hapludalfs the depth needed to document the ind Horizon 1 2 2 3 4 5 ndicators (check he	Color 10YR 10YR 10YR 10YR 10YR 10YR 	Matrix (Moist) 3/2 3/2 5/3 5/3 5/3 4/3 icators a	% 100 60 35 95 95 90 re not pre	10YR 10YR 10YR 10YR esent	tion, D=Depletion, RM=Reduced Matrix, CRe Color (Moist) 4/6 4/6 4/6 4/6):	CS=Covered/Coated Sand dox Features % 5 5 5 10 Indicator	Type C C C C s for Proble	Location M M M M matic Soils ¹	(e.g. clay, sand, loam) silt loam silt loam silt loam silt loam loam loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 8 10 16 20 NRCS Hydric	Bottom Depth 8 10 10 16 20 24 Soil Field In	Typic Hapludalfs the depth needed to document the ince Horizon 1 2 2 3 4 5 ndicators (check he	Color 10YR 10YR 10YR 10YR 10YR 10YR 	Matrix (Moist) 3/2 3/2 5/3 5/3 5/3 4/3 icators a	% 100 60 35 95 95 90 re not pre	10YR 10YR 10YR 10YR esent value Belov	tion, D=Depletion, RM=Reduced Matrix, CRe Color (Moist) 4/6 4/6 4/6 4/6	cs=Covered/Coated Sand dox Features % 5 5 5 10 Indicator	Type C C C C s for Proble	Location M M M M matic Soils ¹ Muck (LRR K, L, MLRA	(e.g. clay, sand, loam) silt loam silt loam silt loam silt loam loam loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 8 10 16 20 NRCS Hydric	pgroup): otion (Describe to Bottom Depth 8 10 10 16 20 24	Typic Hapludalfs the depth needed to document the ind Horizon 1 2 2 3 4 5 ndicators (check he	Color 10YR 10YR 10YR 10YR 10YR 10YR 	Matrix (Moist) 3/2 3/2 5/3 5/3 5/3 4/3 icators a	% 100 60 35 95 95 90 re not pre	10YR 10YR 10YR 10YR esent value Below	tion, D=Depletion, RM=Reduced Matrix, CRe Color (Moist) 4/6 4/6 4/6 4/6): w Surface (LRR R, MLRA 149B) ace (LRR R, MLRA 149B)	CS=Covered/Coated Sand dox Features % 5 5 5 10 Indicator	Type C C C C s for Proble A10 - 2 cm	Location M M M M matic Soils ¹	(e.g. clay, sand, loam) silt loam silt loam silt loam loam loam 149B) RK, L, R)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 8 10 16 20 NRCS Hydric	group): otion (Describe to Bottom Depth 8 10 10 16 20 24 Soil Field In A1- Histosol A2 - Histic E	Typic Hapludalfs the depth needed to document the ince Horizon 1 2 2 3 4 5 ndicators (check here)	Color 10YR 10YR 10YR 10YR 10YR 10YR 	Matrix (Moist) 3/2 3/2 5/3 5/3 5/3 4/3 icators a	% 100 60 35 95 95 90 re not pre \$8 - Polyv \$9 - Thin \$11 - High	10YR 10YR 10YR 10YR 10YR Core to the	tion, D=Depletion, RM=Reduced Matrix, CRe Color (Moist) 4/6 4/6 4/6 4/6): w Surface (LRR R, MLRA 149B) ace (LRR R, MLRA 149B)	cs=Covered/Coated Sand dox Features % 5 5 10 Indicator	Type C C C C s for Proble A10 - 2 cm A16 - Coast S3 - 5cm Mi	Location M M M M matic Soils Muck (LRR K, L, MLRA A) Prairie Redox (LRR	(e.g. clay, sand, loam) silt loam silt loam silt loam loam loam 149B) RK, L, R)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 8 10 16 20 NRCS Hydric	Bottom Depth 8 10 10 16 20 24 Soil Field In A1- Histosol A2 - Histic E A3 - Black H	Typic Hapludalfs the depth needed to document the ind Horizon 1 2 2 3 4 5 ndicators (check here) pipedon istic en Sulfide	Color 10YR 10YR 10YR 10YR 10YR 10YR 	Matrix (Moist) 3/2 3/2 5/3 5/3 5/3 4/3 icators a	% 100 60 35 95 95 90 re not pre \$8 - Polyv \$9 - Thin \$11 - High	10YR 10YR 10YR 10YR 10YR Concentration 10YR 10YR 10YR 10YR 10YR 10YR 10YR 10YR	tion, D=Depletion, RM=Reduced Matrix, CRe Color (Moist) 4/6 4/6 4/6 4/6 4/6): w Surface (LRR R, MLRA 149B) Sands Mineral (LRR K, L)	CS=Covered/Coated Sand dox Features % 5 5 5 10 Indicator	Type C C C C s for Proble A10 - 2 cm A16 - Coast S3 - 5cm Mi S7 - Dark S S8 - Polyval	Location M M M M M matic Soils Muck (LRR K, L, MLRA Prairie Redox (LRR ucky Peat of Peat urface (LRR K, L, M) ue Below Surface	(e.g. clay, sand, loam) silt loam silt loam silt loam loam loam 149B) R K, L, R) (LRR K, L, R)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 8 10 16 20 NRCS Hydric	Bottom Depth 8 10 10 16 20 24 Soil Field In A1- Histosol A2 - Histic E A3 - Black H A4 - Hydroge A5 - Stratified A11 - Deplete	Typic Hapludalfs the depth needed to document the ind Horizon 1 2 2 3 4 5 ndicators (check here) pipedon istic en Sulfide d Layers ed Below Dark Surface	Color 10YR 10YR 10YR 10YR 10YR 10YR ere if indi	Matrix (Moist) 3/2 3/2 5/3 5/3 5/3 4/3 icators a	% 100 60 35 95 95 90 re not pre S8 - Polyx S9 - Thin S11 - High F1 - Loam F2 - Loam F3 - Deple	10YR 10YR 10YR 10YR 10YR 10YR Chroma The	tion, D=Depletion, RM=Reduced Matrix, C Re Color (Moist) 4/6 4/6 4/6 4/6): w Surface (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix	cs=Covered/Coated Sand dox Features % 5 5 5 10 Indicator	Type C C C C C s for Proble A10 - 2 cm A16 - Coast S3 - 5cm Mi S7 - Dark Si S8 - Polyval S9 - Thin Da	Location M M M M M matic Soils Muck (LRR K, L, MLRA Prairie Redox (LRR Lucky Peat of Peat urface (LRR K, L, M) ue Below Surface ark Surface (LRR K, L	(e.g. clay, sand, loam) silt loam silt loam silt loam loam loam 149B) R K, L, R) (LRR K, L, R)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 8 10 16 20 NRCS Hydric	Bottom Depth 8 10 10 16 20 24 Soil Field Ir A1- Histosol A2 - Histic E A3 - Black H A4 - Hydroge A5 - Stratified A11 - Deplete A12 - Thick [Typic Hapludalfs the depth needed to document the ind Horizon 1 2 2 3 4 5 ndicators (check here) pipedon istic en Sulfide d Layers ed Below Dark Surface Dark Surface	Color 10YR 10YR 10YR 10YR 10YR 10YR ere if indi	Matrix (Moist) 3/2 3/2 5/3 5/3 5/3 4/3 icators a	% 100 60 35 95 95 90	10YR 10YR 10YR 10YR 10YR 10YR 10YR 10YR	tion, D=Depletion, RM=Reduced Matrix, CRe Color (Moist) 4/6 4/6 4/6 4/6): w Surface (LRR R, MLRA 149B) ace (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix Crface	CS=Covered/Coated Sand dox Features % 5 5 5 10 Indicator	Type C C C C C s for Proble A10 - 2 cm I A16 - Coast S3 - 5cm Mi S7 - Dark Si S8 - Polyval S9 - Thin Da F12 - Iron-M	Location M M M M M M M M Prairie Soils Prairie Redox (LRR K, L, MLRA A) Ucky Peat of Peat aurface (LRR K, L, M) ue Below Surface ark Surface (LRR K, L) langanese Masses	(e.g. clay, sand, loam) silt loam silt loam silt loam loam loam 149B) R K, L, R) (LRR K, L, R) (LRR K, L, R)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 8 10 16 20 NRCS Hydric	Bottom Depth 8 10 10 16 20 24 Soil Field Ir A1- Histosol A2 - Histic E A3 - Black H A4 - Hydroge A5 - Stratified A11 - Deplete A12 - Thick E S1 - Sandy N	Typic Hapludalfs the depth needed to document the incention Horizon 1 2 2 3 4 5 ndicators (check here) pipedon istic en Sulfide d Layers ed Below Dark Surface Dark Surface Muck Mineral	Color 10YR 10YR 10YR 10YR 10YR 10YR ere if indi	Matrix (Moist) 3/2 3/2 5/3 5/3 4/3 icators a	% 100 60 35 95 95 90 re not pre S8 - Polyv S9 - Thin S11 - High F1 - Loam F2 - Loam F3 - Deple F6 - Redo F7 - Deple	10YR 10YR 10YR 10YR 10YR 10YR 10YR 10YR	tion, D=Depletion, RM=Reduced Matrix, CRe Color (Moist) 4/6 4/6 4/6 4/6): w Surface (LRR R, MLRA 149B) ace (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix crface Surface	dox Features % 5 5 5 10 Indicator	Type	Location M M M M M matic Soils Muck (LRR K, L, MLRA Prairie Redox (LRR Lucky Peat of Peat Lucky Pea	(e.g. clay, sand, loam) silt loam silt loam silt loam loam loam 149B) R K, L, R) (LRR K, L, R) (LRR K, L, R)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 8 10 16 20 NRCS Hydric	Bottom Depth 8 10 10 16 20 24 Soil Field In A1- Histosol A2 - Histic E A3 - Black H A4 - Hydroge A5 - Stratified A12 - Thick E S1 - Sandy N S4 - Sandy N	Typic Hapludalfs the depth needed to document the ind Horizon 1 2 2 3 4 5 ndicators (check here) pipedon istic en Sulfide d Layers ed Below Dark Surface Dark Surface Muck Mineral Gleyed Matrix	Color 10YR 10YR 10YR 10YR 10YR 10YR ere if indi	Matrix (Moist) 3/2 3/2 5/3 5/3 4/3 icators a	% 100 60 35 95 95 90	10YR 10YR 10YR 10YR 10YR 10YR 10YR 10YR	tion, D=Depletion, RM=Reduced Matrix, CRe Color (Moist) 4/6 4/6 4/6 4/6): w Surface (LRR R, MLRA 149B) ace (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix crface Surface	CS=Covered/Coated Sand dox Features % 5 5 5 10 Indicator	Type C C C C C s for Proble A10 - 2 cm I A16 - Coast S3 - 5cm Me S7 - Dark Se S8 - Polyval S9 - Thin Da F12 - Iron-M F19 - Piedm F21 - Red P	Location M M M M M M matic Soils Muck (LRR K, L, MLRA Prairie Redox (LRR Lucky Peat of Peat Lucky Peat	(e.g. clay, sand, loam) silt loam silt loam silt loam loam loam 149B) R K, L, R) (LRR K, L, R) (LRR K, L, R) (LRR K, L, R) silt loam loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 8 10 16 20 NRCS Hydric	Bottom Depth 8 10 10 16 20 24 Soil Field Ir A1- Histosol A2 - Histic E A3 - Black H A4 - Hydroge A5 - Stratified A11 - Deplete A12 - Thick E S1 - Sandy E S5 - Sandy E	Typic Hapludalfs the depth needed to document the ind Horizon 1 2 3 4 5 ndicators (check here) pipedon istic en Sulfide d Layers ed Below Dark Surface Dark Surface Muck Mineral Gleyed Matrix Redox	Color 10YR 10YR 10YR 10YR 10YR 10YR ere if indi	Matrix (Moist) 3/2 3/2 5/3 5/3 4/3 icators a	% 100 60 35 95 95 90 re not pre S8 - Polyv S9 - Thin S11 - High F1 - Loam F2 - Loam F3 - Deple F6 - Redo F7 - Deple	10YR 10YR 10YR 10YR 10YR 10YR 10YR 10YR	tion, D=Depletion, RM=Reduced Matrix, CRe Color (Moist) 4/6 4/6 4/6 4/6): w Surface (LRR R, MLRA 149B) ace (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix crface Surface	cs=Covered/Coated Sand dox Features % 5 5 5 10 Indicator	Type C C C C C s for Proble A10 - 2 cm A16 - Coast S3 - 5cm Mi S7 - Dark Si S8 - Polyval S9 - Thin Da F12 - Iron-M F19 - Piedm F21 - Red P TA6 - Mesic	Location M M M M M matic Soils Muck (LRR K, L, MLRA Prairie Redox (LRR Lucky Peat of Peat Lucky Pea	(e.g. clay, sand, loam) silt loam silt loam silt loam loam loam 149B) R K, L, R) (LRR K, L, R) (LRR K, L, R) (LRR K, L, R) silt loam loam loam 149B)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 8 10 16 20 NRCS Hydric	Bottom Depth 8 10 10 16 20 24 Soil Field In A1- Histosol A2 - Histic E A3 - Black H A4 - Hydroge A5 - Stratified A11 - Deplete A12 - Thick E S1 - Sandy N S4 - Sandy N S4 - Sandy N S6 - Stripped	Typic Hapludalfs the depth needed to document the ind Horizon 1 2 3 4 5 ndicators (check here) pipedon istic en Sulfide d Layers ed Below Dark Surface Dark Surface Muck Mineral Gleyed Matrix Redox H Matrix	Color 10YR 10YR 10YR 10YR 10YR 10YR ere if indi	Matrix (Moist) 3/2 3/2 5/3 5/3 4/3 icators a	% 100 60 35 95 95 90 re not pre S8 - Polyv S9 - Thin S11 - High F1 - Loam F2 - Loam F3 - Deple F6 - Redo F7 - Deple	10YR 10YR 10YR 10YR 10YR 10YR 10YR 10YR	tion, D=Depletion, RM=Reduced Matrix, CRe Color (Moist) 4/6 4/6 4/6 4/6): w Surface (LRR R, MLRA 149B) ace (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix crface Surface	dox Features % 5 5 5 10 Indicator	Type C C C C C s for Proble A10 - 2 cm I A16 - Coast S3 - 5cm Mi S7 - Dark S S8 - Polyval S9 - Thin Da F12 - Iron-M F19 - Piedm F21 - Red P TA6 - Mesic TF12 - Very	Location M M M M M M matic Soils Muck (LRR K, L, MLRA Prairie Redox (LRR Lucky Peat of Peat Lucky Peat	(e.g. clay, sand, loam) silt loam silt loam silt loam loam loam 149B) R K, L, R) (LRR K, L, R) (LRR K, L, R) (LRR K, L, R) silt loam loam loam 149B)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 8 10 16 20 NRCS Hydric	Bottom Depth 8 10 10 16 20 24 Soil Field In A1- Histosol A2 - Histic E A3 - Black H A4 - Hydroge A5 - Stratified A11 - Deplete A12 - Thick E S1 - Sandy N S4 - Sandy N S4 - Sandy N S6 - Stripped	Typic Hapludalfs the depth needed to document the ind Horizon 1 2 3 4 5 ndicators (check here) pipedon istic en Sulfide d Layers ed Below Dark Surface Dark Surface Muck Mineral Gleyed Matrix Redox	Color 10YR 10YR 10YR 10YR 10YR 10YR ere if indi	Matrix (Moist) 3/2 3/2 5/3 5/3 4/3 icators a	% 100 60 35 95 95 90 re not pre S8 - Polyv S9 - Thin S11 - High F1 - Loam F2 - Loam F3 - Deple F6 - Redo F7 - Deple	10YR 10YR 10YR 10YR 10YR 10YR 10YR 10YR	tion, D=Depletion, RM=Reduced Matrix, CRe Color (Moist) 4/6 4/6 4/6 4/6): w Surface (LRR R, MLRA 149B) ace (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix crface Surface	cs=Covered/Coated Sand dox Features % 5 5 5 10 Indicator	Type C C C C C C s for Proble A10 - 2 cm I A16 - Coast S3 - 5cm Mi S7 - Dark Si S8 - Polyval S9 - Thin Da F12 - Iron-M F19 - Piedm F21 - Red P TA6 - Mesic TF12 - Very Other (Expla	Location M M M M M matic Soils Muck (LRR K, L, MLRA Prairie Redox (LRR Lucky Peat of Peat Lucky Pea	(e.g. clay, sand, loam) silt loam silt loam silt loam loam loam 149B) R K, L, R) (LRR K, L, R) (LRR K, L, R) ils (MLRA 149B) 145, 149B) face
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 8 10 16 20 NRCS Hydric	Bottom Depth 8 10 10 16 20 24 Soil Field In A1- Histosol A2 - Histic E A3 - Black H A4 - Hydroge A5 - Stratified A11 - Deplete A12 - Thick E S1 - Sandy N S4 - Sandy N S4 - Sandy N S6 - Stripped	Typic Hapludalfs the depth needed to document the ind Horizon 1 2 3 4 5 ndicators (check here) pipedon istic en Sulfide d Layers ed Below Dark Surface Dark Surface Muck Mineral Gleyed Matrix Redox H Matrix	Color 10YR 10YR 10YR 10YR 10YR 10YR ere if indi	Matrix (Moist) 3/2 3/2 5/3 5/3 4/3 icators a	% 100 60 35 95 95 90 re not pre S8 - Polyv S9 - Thin S11 - High F1 - Loam F2 - Loam F3 - Deple F6 - Redo F7 - Deple	10YR 10YR 10YR 10YR 10YR 10YR 10YR 10YR	tion, D=Depletion, RM=Reduced Matrix, CRe Color (Moist) 4/6 4/6 4/6 4/6): w Surface (LRR R, MLRA 149B) ace (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix crface Surface	cs=Covered/Coated Sand dox Features % 5 5 5 10 Indicator	Type C C C C C C s for Proble A10 - 2 cm I A16 - Coast S3 - 5cm Mi S7 - Dark Si S8 - Polyval S9 - Thin Da F12 - Iron-M F19 - Piedm F21 - Red P TA6 - Mesic TF12 - Very Other (Expla	Location M M M M M M M matic Soils Muck (LRR K, L, MLRA A) Prairie Redox (LRR K, L, M) ucky Peat of Peat urface (LRR K, L, M) ue Below Surface ark Surface (LRR K, L langanese Masses ont Floodplain Soil arent Material Spodic (MLRA 144A, A) Shallow Dark Surfain in Remarks)	(e.g. clay, sand, loam) silt loam silt loam silt loam loam loam 149B) R K, L, R) (LRR K, L, R) (LRR K, L, R) ils (MLRA 149B) 145, 149B) face
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 8 10 16 20 NRCS Hydric	Bottom Depth 8 10 10 16 20 24 Soil Field Ir A1- Histosol A2 - Histic E A3 - Black H A4 - Hydroge A5 - Stratified A12 - Thick E S1 - Sandy N S4 - Sandy N S4 - Sandy N S5 - Sandy F S6 - Stripped S7 - Dark Su	Typic Hapludalfs the depth needed to document the ind Horizon 1 2 3 4 5 ndicators (check here) pipedon istic en Sulfide d Layers ed Below Dark Surface Dark Surface Muck Mineral Eleyed Matrix Redox d Matrix Inface (LRR R, MLRA 149B)	Color 10YR 10YR 10YR 10YR 10YR ere if indi	Matrix (Moist) 3/2 3/2 5/3 5/3 4/3 icators a	% 100 60 35 95 95 90 re not pre S8 - Polyv S9 - Thin S11 - High F1 - Loam F2 - Loam F3 - Deple F6 - Redo F7 - Deple	10YR 10YR 10YR 10YR 10YR 10YR 10YR 10YR	tion, D=Depletion, RM=Reduced Matrix, CRe Color (Moist) 4/6 4/6 4/6 4/6): w Surface (LRR R, MLRA 149B) ace (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix crface Surface	cs=Covered/Coated Sand dox Features % 5 5 5 10 Indicator	Type C C C C C C s for Proble A10 - 2 cm I A16 - Coast S3 - 5cm Me S7 - Dark Se S8 - Polyval S9 - Thin Da F12 - Iron-M F19 - Piedm F21 - Red P TA6 - Mesic TF12 - Very Other (Expla of hydrophytic veget or problematic.	Location M M M M M M M matic Soils Muck (LRR K, L, MLRA A) Prairie Redox (LRR K, L, M) ucky Peat of Peat urface (LRR K, L, M) ue Below Surface ark Surface (LRR K, L langanese Masses ont Floodplain Soil arent Material Spodic (MLRA 144A, A) Shallow Dark Surfain in Remarks)	(e.g. clay, sand, loam) silt loam silt loam silt loam loam loam 149B) R K, L, R) (LRR K, L, R) (LRR K, L, R) ils (MLRA 149B) 145, 149B) face



WETLAND DETERMINATION DATA FORM Northcentral-Northeast Region

Project/Site: Vilas Road Wetland ID: adj. W-2 Sample Point: P2

VEGETATION	(Species identified in all uppercase are non-na	itive spec	cies.)		
Tree Stratum (Plo	ot size: 10 meter radius)				
4	Species Name		<u>Dominant</u>	Ind.Status	Dominance Test Worksheet
1.	Prunus serotina	50	Y	FACU	N
2.	Quercus alba	20	Y	FACU	Number of Dominant Species that are OBL, FACW, or FAC:2 (A)
3.	Acer negundo	10	N	FAC	Total Number of Deminent Charies Assess All Charter F. (D)
4. 5.					Total Number of Dominant Species Across All Strata:5(B)
6.	_ 				Percent of Dominant Species That Are OBL, FACW, or FAC: 40% (A/B)
7.					(VVB)
8.					Prevalence Index Worksheet
9.					Total % Cover of: Multiply by:
10.					OBL spp. $0 \times 1 = 0$
	Total Cover =	80			FACW spp.
					FAC spp. $\frac{135}{}$ $\times 3 = \frac{405}{}$
Sapling/Shrub Stra	atum (Plot size: 5 meter radius)				FACU spp. $x 4 = 340$
1.	RHAMNUS CATHARTICA	60	Υ	FAC	UPL spp. $0 x 5 = 0$
2.	LONICERA X BELLA	15	Υ	FACU	
3.					Total <u>220</u> (A) <u>745</u> (B)
4.					Decordance Index D/A 0.000
5. 6.	_ 				Prevalence Index = B/A = 3.386
7.					
8.	_ 				Hydrophytic Vegetation Indicators:
9.					☐ Yes ☑ No Rapid Test for Hydrophytic Vegetation
10.					☐ Yes ☑ No Dominance Test is > 50%
-	Total Cover =	75			☐ Yes ☑ No Prevalence Index is ≤ 3.0 *
					☐ Yes ☑ No Morphological Adaptations (Explain) *
Herb Stratum (Plo	t size: 2 meter radius)				☐ Yes ☑ No Problem Hydrophytic Vegetation (Explain) *
1.	RHAMNUS CATHARTICA	60	Υ	FAC	
2.	Cornus racemosa	5	N	FAC	* Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
3.					
4.					Definitions of Vegetation Strata:
5.					<u>_</u>
6					Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height.
7.					Height (BBH), regardess of height.
8. 9.			<u></u>		Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft.
9. 10.	_ 				tall.
11.					
12.					Herb - All herbaceous (non-woody) plants, regardless of size, and
13.					woody plants less than 3.28 ft. tall.
14.					
15.					Woody Vines - All woody vines greater than 3.28 ft. in height.
	Total Cover =	65			
Woody Vine Strate	um (Plot size: 10 meter radius)				
1.					
2.					
3.					Hydrophytic Vegetation Present ☐ Yes ☑ No
4.					
5.					
Domarka	Total Cover =	0			
Remarks:					
Additional Rer	marks:				



WETLAND DETERMINATION DATA FORM Northcentral-Northeast Region

Project/Site: Applicant:	Vilas Road Reed and I	_eanne Widen					Stantec Project #:	193704691		Date: County:	10/13/16 Dane
Investigator #1:				Investi	gator #2:	Josh Su	lman			State:	Wisconsin
Soil Unit:		silty clay loam					/I/WWI Classification:	none		Wetland ID:	W-2
Landform:	Depression	1		Loc	al Relief:	Concave	Э			Sample Point:	P3
Slope (%):	0	Latitude:	N/A	Lo	ongitude:	N/A		Datum:	N/A	Community ID:	Forested Wetland
Are climatic/hyd	drologic cond	ditions on the site ty	pical for	this time	e of year?	(If no, expla	ain in remarks)	□ Yes ☑	No	Section:	17
_		or Hydrology ☐ sig	-				Are normal circumsta	•	t?	Township:	7N
		or Hydrology ☐ na	turally pr	oblemati	ic?			□No		Range:	11E
SUMMARY OF											
Hydrophytic Ve	~			Yes ✓			,	Hydric Soils			
Wetland Hydrol			<u> </u>							Within A Wetlar	
Remarks:			nalysis,	condition	ns are we	tter than	normal for this time of	ryear. Samp	le point is l	ocated in lightly	wooded wetland 25
	teet north c	of excavated pond.									
HYDROLOGY											
Wetland Hydro	ology Indic	ators (Check here	if indicate	ors are n	ot preser	nt □):					
<u>Primary:</u>				_		.			Secondary:		
	A1 - Surface				B9 - Wate					B6 - Surface Soil	
I H	A2 - High Wa A3 - Saturation				B13 - Aqu B15 - Mar					B10 - Drainage P B16 - Moss Trim	
	B1 - Water M				C1 - Hydr	•				C2 - Dry-Season	
	B2 - Sedimer	•			C3 - Oxidi	ized Rhizo	spheres on Living Roots			C8 - Crayfish Bur	rows
	B3 - Drift Dep	•					educed Iron Eduction in Tilled Soils			C9 - Saturation V D1 - Stunted or S	isible on Aerial Imagery
I H	B4 - Algal Ma B5 - Iron Dep			_	Co - Rece C7 - Thin					D1 - Stuffled of S D2 - Geomorphic	
		on Visible on Aerial Ima	agery		Other (Ex					D3 - Shallow Aqu	
	B8 - Sparsely	y Vegetated Concave S	Surface							D4 - Microtopogra	
									✓	D5 - FAC-Neutral	Test
Field Observat	ions:										
Surface Water		☐ Yes ☑ No	Depth:		(in.)			Wetland Hy	drology Pr	esent?	Yes □ No
Water Table Pr		☐ Yes ☑ No	Depth:		(in.)			Trottana 119	u. c. c g y		100 🗀 110
Saturation Pres	ent?	☐ Yes ☑ No	Depth:		(in.)						
Describe Record	led Data (str	eam gauge, monitori	ng well, a	aerial pho	otos, previ	ous inspe	ctions), if available:		Historic Aeri	al Imagery Reviev	V
Remarks:											
Remarks:											
Remarks: SOILS											
):	Wacousta silty clay	/ loam			S	eries Drainage Class:	very poorly			
SOILS Map Unit Name Taxonomy (Sub	group):	Typic Endoaquolls					-				
SOILS Map Unit Name Taxonomy (Sub	ogroup): otion (Describe to	Typic Endoaquolls					ation, D=Depletion, RM=Reduced Matrix, C	CS=Covered/Coated Sand		PL=Pore Lining, M=Matrix)	
SOILS Map Unit Name Taxonomy (Sub Profile Descrip	ogroup): otion (Describe to Bottom	Typic Endoaquolls the depth needed to document the in	dicator or confire	Matrix	_	pe: C=Concentra	ntion, D=Depletion, RM=Reduced Matrix, C	CS=Covered/Coated Sand	1		Texture
SOILS Map Unit Name Taxonomy (Sub	ogroup): otion (Describe to Bottom Depth	Typic Endoaquolls	dicator or confirm	Matrix (Moist)	%	pe: C=Concentra	ation, D=Depletion, RM=Reduced Matrix, C	CS=Covered/Coated Sand		PL=Pore Lining, M=Matrix) Location	(e.g. clay, sand, loam)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	ogroup): otion (Describe to Bottom Depth 4	Typic Endoaquolls the depth needed to document the in	color 10YR	Matrix (Moist) 3/1	% 100	pe: C=Concentra	Reduced Matrix, C Red Color (Moist)	CS=Covered/Coated Sand	Type 	Location 	(e.g. clay, sand, loam) silt loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 4	ogroup): otion (Describe to Bottom Depth 4 20	Typic Endoaquolls the depth needed to document the in Horizon 1 2	dicator or confirmation Color 10YR 10YR	Matrix (Moist) 3/1 3/1	% 100 95	e: C=Concentra	Color (Moist) 3/4	cs=Covered/Coated Sand dox Features % 5	Type C	Location PL	(e.g. clay, sand, loam) silt loam silty clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	ogroup): otion (Describe to Bottom Depth 4	Typic Endoaquolls the depth needed to document the in	color 10YR	Matrix (Moist) 3/1	% 100	pe: C=Concentra	Reduced Matrix, C Red Color (Moist)	CS=Covered/Coated Sand	Type 	Location 	(e.g. clay, sand, loam) silt loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 4	ogroup): otion (Describe to Bottom Depth 4 20	Typic Endoaquolls the depth needed to document the in Horizon 1 2	dicator or confirmation Color 10YR 10YR	Matrix (Moist) 3/1 3/1	% 100 95	e: C=Concentra	Color (Moist) 3/4	cs=Covered/Coated Sand dox Features % 5	Type C	Location PL	(e.g. clay, sand, loam) silt loam silty clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 4	pgroup): otion (Describe to Bottom Depth 4 20 26	Typic Endoaquolls the depth needed to document the in Horizon 1 2	dicator or confirmation Color 10YR 10YR	Matrix (Moist) 3/1 3/1	% 100 95	 10YR 10YR	Color (Moist) 3/4	CS=Covered/Coated Sand dox Features % 5 2	Type C C	Location PL	(e.g. clay, sand, loam) silt loam silty clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 4 20	pgroup): otion (Describe to Bottom Depth 4 20 26	Typic Endoaquolls the depth needed to document the in Horizon 1 2 3	Color 10YR 10YR 10YR	Matrix (Moist) 3/1 3/1 5/1	% 100 95 98 	 10YR 10YR	Color (Moist) 3/4 5/6	cs=Covered/Coated Sand dox Features % 5 2	Type C C	Location PL M	(e.g. clay, sand, loam) silt loam silty clay loam clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 4 20	pgroup): Dificial (Describe to Bottom Depth 4 20 26	Typic Endoaquolls the depth needed to document the in Horizon 1 2 3	Color 10YR 10YR 10YR	Matrix (Moist) 3/1 3/1 5/1 	% 100 95 98 	 10YR 10YR 	Color (Moist) 3/4 5/6	cs=Covered/Coated Sand dox Features % 5 2	Type C C	Location PL M	(e.g. clay, sand, loam) silt loam silty clay loam clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 4 20	ogroup): otion (Describe to Bottom Depth 4 20 26	Typic Endoaquolls the depth needed to document the in Horizon 1 2 3	Color 10YR 10YR	Matrix (Moist) 3/1 3/1 5/1	% 100 95 98 	10YR 10YR	Color (Moist) 3/4 5/6	CS=Covered/Coated Sand dox Features % 5 2	Type C C	Location PL M	(e.g. clay, sand, loam) silt loam silty clay loam clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 4 20 NRCS Hydric	pgroup): otion (Describe to Bottom) Depth 4 20 26 Soil Field In	Typic Endoaquolls the depth needed to document the in Horizon 1 2 3	Color 10YR 10YR	Matrix (Moist) 3/1 3/1 5/1 icators a	% 100 95 98 re not pre	10YR 10YR esent	Color (Moist) 3/4 5/6);	CS=Covered/Coated Sand dox Features % 5 2 Indicator	Type C C s for Proble	Location PL M matic Soils 1	(e.g. clay, sand, loam) silt loam silty clay loam clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 4 20 NRCS Hydric	bgroup): otion (Describe to Bottom) Depth 4 20 26 Soil Field In A1- Histosol	Typic Endoaquolls the depth needed to document the in Horizon 1 2 3 ndicators (check he	Color 10YR 10YR	Matrix (Moist) 3/1 3/1 5/1 icators a	% 100 95 98 re not pre	10YR 10YR esent □	Color (Moist) 3/4 5/6): w Surface (LRR R, MLRA 149B)	CS=Covered/Coated Sand dox Features % 5 2 Indicator	Type C C s for Proble	Location PL M matic Soils ¹ Muck (LRR K, L, MLRA	(e.g. clay, sand, loam) silt loam silty clay loam clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 4 20 NRCS Hydric	pgroup): Display (Describe to Bottom) Depth 4 20 26 Soil Field In A1- Histosol A2 - Histic Ep	Typic Endoaquolls the depth needed to document the in Horizon 1 2 3 ndicators (check he	Color 10YR 10YR	Matrix (Moist) 3/1 3/1 5/1 icators a	% 100 95 98 re not pre S8 - Polyv S9 - Thin	10YR 10YR esent □ value Belov	Color (Moist) 3/4 5/6	CS=Covered/Coated Sand dox Features % 5 2 Indicator	Type C C s for Proble A10 - 2 cm I A16 - Coast	Location PL M matic Soils Muck (LRR K, L, MLRA Prairie Redox (LRR	(e.g. clay, sand, loam) silt loam silty clay loam clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 4 20 NRCS Hydric	Bottom Depth 4 20 26 Soil Field Ir A1- Histosol A2 - Histic Ep A3 - Black Hi	Typic Endoaquolls the depth needed to document the in Horizon 1 2 3 ndicators (check here)	Color 10YR 10YR	Matrix (Moist) 3/1 3/1 5/1 icators a	% 100 95 98 sere not pre S8 - Polyv S9 - Thin S11 - High	10YR 10YR esent □ value Belov Dark Surfa	ation, D=Depletion, RM=Reduced Matrix, Control (Moist) 3/4 5/6): w Surface (LRR R, MLRA 149B) ace (LRR R, MLRA 149B) Sands	CS=Covered/Coated Sand dox Features % 5 2 Indicator	Type C C	Location PL M matic Soils ¹ Muck (LRR K, L, MLRA	(e.g. clay, sand, loam) silt loam silty clay loam clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 4 20 NRCS Hydric	Bottom Depth 4 20 26 Soil Field Ir A1- Histosol A2 - Histic Ep A3 - Black Histosol A4 - Hydroge A5 - Stratified	Typic Endoaquolls the depth needed to document the in Horizon 1 2 3 ndicators (check here) pipedon istic en Sulfide d Layers	Color 10YR 10YR 10YR ere if ind	Matrix (Moist) 3/1 3/1 5/1 icators a	% 100 95 98 sere not pre S8 - Polyv S9 - Thin S11 - High	10YR 10YR value Below	ation, D=Depletion, RM=Reduced Matrix, Control (Moist) 3/4 5/6): w Surface (LRR R, MLRA 149B) ace (LRR R, MLRA 149B) Sands Mineral (LRR K, L)	CS=Covered/Coated Sand dox Features % 5 2 Indicator	Type C C	Location PL M matic Soils Muck (LRR K, L, MLRA Prairie Redox (LRR	(e.g. clay, sand, loam) silt loam silty clay loam clay loam (149B) R K, L, R) (LRR K, L, R)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 4 20 NRCS Hydric	Bottom Depth 4 20 26 Soil Field Ir A1- Histosol A2 - Histic El A3 - Black Hi A4 - Hydroge A5 - Stratified A11 - Deplete	Typic Endoaquolls the depth needed to document the in Horizon 1 2 3 ndicators (check here) pipedon istic en Sulfide d Layers ed Below Dark Surface	Color 10YR 10YR 10YR ere if ind	Matrix (Moist) 3/1 3/1 5/1 icators a	% 100 95 98 ser not presser Polyv S9 - Thin S11 - High F1 - Loam F2 - Loam F3 - Deple	10YR 10YR	Color (Moist) 3/4 5/6): w Surface (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix	CS=Covered/Coated Sand dox Features % 5 2 Indicator	Type C C s for Proble A10 - 2 cm I A16 - Coast S3 - 5cm Mu S7 - Dark Su S8 - Polyval S9 - Thin Da	Location PL M matic Soils Muck (LRR K, L, MLRA Prairie Redox (LRR ucky Peat of Peat urface (LRR K, L, M) ue Below Surface ark Surface (LRR K, L	(e.g. clay, sand, loam) silt loam silty clay loam clay loam (LRR K, L, R) (LRR K, L)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 4 20 NRCS Hydric	Bottom Depth 4 20 26 Soil Field Ir A1- Histosol A2 - Histic El A3 - Black Hi A4 - Hydroge A5 - Stratified A11 - Deplete A12 - Thick I	Typic Endoaquolls the depth needed to document the in Horizon 1 2 3 ndicators (check here) pipedon istic en Sulfide d Layers ed Below Dark Surface Dark Surface	Color 10YR 10YR 10YR ere if ind	Matrix (Moist) 3/1 3/1 5/1 icators a	% 100 95 98 sere not pressere Polyv S9 - Thin S11 - High F1 - Loam F2 - Loam F3 - Deple F6 - Redo	10YR 10YR 10YR value Below Dark Surfant Chroma ny Mucky Mary Gleyed eted Matrix ox Dark Sur	Tation, D=Depletion, RM=Reduced Matrix, Control (Moist) 3/4 5/6): w Surface (LRR R, MLRA 149B) ace (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix crface	CS=Covered/Coated Sand dox Features % 5 2 Indicator	Type C C s for Proble A10 - 2 cm I A16 - Coast S3 - 5cm Mu S7 - Dark Su S8 - Polyval S9 - Thin Da F12 - Iron-M	Location PL M matic Soils Muck (LRR K, L, MLRA Prairie Redox (LRR ucky Peat of Peat urface (LRR K, L, M) ue Below Surface ark Surface (LRR K, L	(e.g. clay, sand, loam) silt loam silty clay loam clay loam (LRR K, L, R) (LRR K, L, R) (LRR K, L, R)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 4 20 NRCS Hydric	Bottom Depth 4 20 26 Soil Field Ir A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A11 - Deplete A12 - Thick E S1 - Sandy M	Typic Endoaquolls the depth needed to document the in Horizon 1 2 3 ndicators (check he pipedon istic en Sulfide d Layers ed Below Dark Surface Dark Surface Muck Mineral	Color 10YR 10YR 10YR ere if ind	Matrix (Moist) 3/1 3/1 5/1 icators a	% 100 95 98 re not pre S8 - Polyv S9 - Thin S11 - High F1 - Loam F2 - Loam F3 - Deple F6 - Redo F7 - Deple	10YR 10YR	Color (Moist) 3/4 5/6): w Surface (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix crface Surface	CS=Covered/Coated Sand dox Features % 5 2 Indicator	Type C C	Location PL M matic Soils Muck (LRR K, L, MLRA Prairie Redox (LRR Lucky Peat of Peat urface (LRR K, L, M) ue Below Surface ark Surface (LRR K, L langanese Masses ont Floodplain Soi	(e.g. clay, sand, loam) silt loam silty clay loam clay loam (LRR K, L, R) (LRR K, L, R) (LRR K, L, R)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 4 20 NRCS Hydric	Bottom Depth 4 20 26 Soil Field Ir A1- Histosol A2 - Histic El A3 - Black Hi A4 - Hydroge A5 - Stratified A11 - Deplete A12 - Thick I	Typic Endoaquolls the depth needed to document the in Horizon 1 2 3 ndicators (check he pipedon istic en Sulfide d Layers ed Below Dark Surface Dark Surface Muck Mineral Gleyed Matrix	Color 10YR 10YR 10YR ere if ind	Matrix (Moist) 3/1 3/1 5/1 icators a	% 100 95 98 sere not pressere Polyv S9 - Thin S11 - High F1 - Loam F2 - Loam F3 - Deple F6 - Redo	10YR 10YR	Color (Moist) 3/4 5/6): w Surface (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix crface Surface	CS=Covered/Coated Sand dox Features % 5 2 Indicator	Type C C s for Proble A10 - 2 cm I A16 - Coast S3 - 5cm Mt S7 - Dark St S8 - Polyval S9 - Thin Da F12 - Iron-M F19 - Piedm F21 - Red P	Location PL M matic Soils Muck (LRR K, L, MLRA Prairie Redox (LRR ucky Peat of Peat urface (LRR K, L, M) ue Below Surface ark Surface (LRR K, L	(e.g. clay, sand, loam) silt loam silty clay loam clay loam (LRR K, L, R)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 4 20 NRCS Hydric	Bottom Depth 4 20 26 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A11 - Deplete A12 - Thick E S1 - Sandy N S4 - Sandy N S4 - Sandy N S5 - Sandy R S6 - Stripped	Typic Endoaquolls the depth needed to document the in Horizon 1 2 3 ndicators (check here) pipedon istic en Sulfide d Layers ed Below Dark Surface Dark Surface Muck Mineral Gleyed Matrix Redox d Matrix	Color 10YR 10YR 10YR ere if ind	Matrix (Moist) 3/1 3/1 5/1 icators a	% 100 95 98 re not pre S8 - Polyv S9 - Thin S11 - High F1 - Loam F2 - Loam F3 - Deple F6 - Redo F7 - Deple	10YR 10YR	Color (Moist) 3/4 5/6): w Surface (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix crface Surface	CS=Covered/Coated Sand dox Features % 5 2 Indicator	Type C C C	Location PL M matic Soils Muck (LRR K, L, MLRA Prairie Redox (LRR Lucky Peat of Peat urface (LRR K, L, M) ue Below Surface ark Surface (LRR K, L langanese Masses langanese langanese Masses langanese Masses langanese Masses langanese	(e.g. clay, sand, loam) silt loam silty clay loam clay loam (LRR K, L, R)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 4 20 NRCS Hydric	Bottom Depth 4 20 26 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A11 - Deplete A12 - Thick E S1 - Sandy N S4 - Sandy N S4 - Sandy N S5 - Sandy R S6 - Stripped	Typic Endoaquolls the depth needed to document the in Horizon 1 2 3 ndicators (check here) pipedon istic en Sulfide d Layers ed Below Dark Surface Dark Surface Muck Mineral Gleyed Matrix Redox	Color 10YR 10YR 10YR ere if ind	Matrix (Moist) 3/1 3/1 5/1 icators a	% 100 95 98 re not pre S8 - Polyv S9 - Thin S11 - High F1 - Loam F2 - Loam F3 - Deple F6 - Redo F7 - Deple	10YR 10YR	Color (Moist) 3/4 5/6): w Surface (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix crface Surface	CS=Covered/Coated Sand dox Features % 5 2 Indicator	Type C C C s for Proble A10 - 2 cm I A16 - Coast S3 - 5cm Mt S7 - Dark St S8 - Polyval S9 - Thin Da F12 - Iron-M F19 - Piedm F21 - Red P TA6 - Mesic TF12 - Very Other (Expla	Location PL M matic Soils Muck (LRR K, L, MLRA A) Prairie Redox (LRR K, L, M) ue Below Surface urface (LRR K, L, M) ue Below Surface ark Surface (LRR K, L) langanese Masses ont Floodplain Soil arent Material Spodic (MLRA 144A, A) Shallow Dark Surfain in Remarks)	(e.g. clay, sand, loam) silt loam silty clay loam clay loam 149B) R K, L, R) (LRR K, L, R) (LRR K, L, R) ils (MLRA 149B) 145, 149B) face
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 4 20 NRCS Hydric	Bottom Depth 4 20 26 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A11 - Deplete A12 - Thick E S1 - Sandy N S4 - Sandy N S4 - Sandy N S5 - Sandy R S6 - Stripped	Typic Endoaquolls the depth needed to document the in Horizon 1 2 3 ndicators (check here) pipedon istic en Sulfide d Layers ed Below Dark Surface Dark Surface Muck Mineral Gleyed Matrix Redox d Matrix	Color 10YR 10YR 10YR ere if ind	Matrix (Moist) 3/1 3/1 5/1 icators a	% 100 95 98 re not pre S8 - Polyv S9 - Thin S11 - High F1 - Loam F2 - Loam F3 - Deple F6 - Redo F7 - Deple	10YR 10YR	Color (Moist) 3/4 5/6): w Surface (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix crface Surface	CS=Covered/Coated Sand dox Features % 5 2 Indicator Indicator Indicator	Type C C C s for Proble A10 - 2 cm I A16 - Coast S3 - 5cm Mt S7 - Dark St S8 - Polyval S9 - Thin Da F12 - Iron-M F19 - Piedm F21 - Red P TA6 - Mesic TF12 - Very Other (Expla	Location PL M matic Soils Muck (LRR K, L, MLRA Prairie Redox (LRR Lucky Peat of Peat urface (LRR K, L, M) ue Below Surface ark Surface (LRR K, L langanese Masses langanese langanese Masses langanese Masses langanese Masses langanese	(e.g. clay, sand, loam) silt loam silty clay loam clay loam 149B) R K, L, R) (LRR K, L, R) (LRR K, L, R) ils (MLRA 149B) 145, 149B) face
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 4 20 NRCS Hydric	Bottom Depth 4 20 26 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A11 - Deplete A12 - Thick E S1 - Sandy N S4 - Sandy N S4 - Sandy N S5 - Sandy R S6 - Stripped	Typic Endoaquolls the depth needed to document the in Horizon 1 2 3 ndicators (check he pipedon istic en Sulfide d Layers ed Below Dark Surface Dark Surface Muck Mineral Eleyed Matrix Redox d Matrix Irface (LRR R, MLRA 149B)	Color 10YR 10YR 10YR ere if ind	Matrix (Moist) 3/1 3/1 5/1 icators a	% 100 95 98 re not pre S8 - Polyv S9 - Thin S11 - High F1 - Loam F2 - Loam F3 - Deple F6 - Redo F7 - Deple	10YR 10YR	Color (Moist) 3/4 5/6): w Surface (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix crface Surface	CS=Covered/Coated Sand dox Features % 5 2 Indicator Indicator Indicator	Type C C C	Location PL M matic Soils Muck (LRR K, L, MLRA A) Prairie Redox (LRR K, L, M) ue Below Surface urface (LRR K, L, M) ue Below Surface ark Surface (LRR K, L) langanese Masses ont Floodplain Soil arent Material Spodic (MLRA 144A, A) Shallow Dark Surfain in Remarks)	(e.g. clay, sand, loam) silt loam silty clay loam clay loam 149B) R K, L, R) (LRR K, L, R) (LRR K, L, R) ils (MLRA 149B) 145, 149B) face
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 4 20 NRCS Hydric	Bottom Depth 4 20 26 Soil Field In A1- Histosol A2 - Histic El A3 - Black Hi A4 - Hydroge A5 - Stratified A1- Deplete A12 - Thick E S1 - Sandy N S4 - Sandy N S4 - Sandy N S4 - Sandy N S5 - Sandy N S6 - Stripped S7 - Dark Su	Typic Endoaquolls the depth needed to document the in Horizon 1 2 3 ndicators (check he pipedon istic en Sulfide d Layers ed Below Dark Surface Dark Surface Muck Mineral Eleyed Matrix Redox d Matrix Irface (LRR R, MLRA 149B)	Color 10YR 10YR 10YR ere if ind	Matrix (Moist) 3/1 3/1 5/1 icators a	% 100 95 98 sere not pres S8 - Polyv S9 - Thin S11 - High F1 - Loam F2 - Loam F3 - Deple F6 - Redo F7 - Deple F8 - Redo	10YR 10YR	Color (Moist) 3/4 5/6): w Surface (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix crface Surface	CS=Covered/Coated Sand dox Features % 5 2 Indicator Indicator Indicat	Type C C C	Location PL M matic Soils Muck (LRR K, L, MLRA A Prairie Redox (LRR LUCKY Peat of Peat urface (LRR K, L, M) ue Below Surface ark Surface (LRR K, L langanese Masses ant Floodplain Soil arent Material Spodic (MLRA 144A, A Shallow Dark Surfain in Remarks) ation and wetland hydrology	(e.g. clay, sand, loam) silt loam silty clay loam clay loam 149B) R K, L, R) (LRR K, L, R) (LRR K, L, R) ils (MLRA 149B) 145, 149B) face



WETLAND DETERMINATION DATA FORM Northcentral-Northeast Region

Project/Site: Vilas Road Wetland ID: W-2 Sample Point: P3

VEGETATION	(Species identified in all uppercase are non-na	tive spec	cies.)		
Tree Stratum (Plo	ot size: 10 meter radius)				
	<u>Species Name</u>		<u>Dominant</u>	Ind.Status	Dominance Test Worksheet
1.	Acer negundo	20	Υ	FAC	
2.	Populus deltoides	10	Υ	FAC	Number of Dominant Species that are OBL, FACW, or FAC:3(A)
3.	Ulmus americana	5	N	FACW	
4.					Total Number of Dominant Species Across All Strata:3(B)
5.					
6.					Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)
7.					December of the Manual Alexander
8.					Prevalence Index Worksheet
9.					Total % Cover of: Multiply by:
10.	Total Course				OBL spp. 0 x 1 = 0
	Total Cover =	35			FACW spp. $\frac{109}{2}$ \times 2 = $\frac{218}{2}$
0 1: (0) 1 0:	(D) () () () ()				FAC spp. $\frac{35}{105}$ $\times 3 = \frac{105}{105}$
	atum (Plot size: 5 meter radius)		NI.	E A C \ A \	FACU spp. 15 $\times 4 = 60$
1.	Sambucus nigra	2	N	FACW	UPL spp
2.					T-1-1 (A)
3.	_ 				Total 159 (A) 383 (B)
4.					Dravelance Index - D/A - 2 400
5.	_ 				Prevalence Index = B/A = 2.409
6.	_ 				
7.	_ 				Hydrophytia Vagatatian Indicatora
8.					Hydrophytic Vegetation Indicators:
9.	_ 				☐ Yes ☐ No Rapid Test for Hydrophytic Vegetation
10.	Total Cover =	2			✓ Yes ☐ No Dominance Test is > 50%
	Total Cover –	2			
Llamb Ctratum (Dia	t size. 2 meter redice)				☐ Yes ☐ No Morphological Adaptations (Explain) *
Herb Stratum (Plo	t size: 2 meter radius) PHALARIS ARUNDINACEA	80	Υ	FACW	☐ Yes ☑ No Problem Hydrophytic Vegetation (Explain) *
2.	Impatiens capensis	20	N	FACW	* Indicators of hydric soil and wetland hydrology must be
3.	CIRSIUM ARVENSE	15	N	FACU	present, unless disturbed or problematic.
	Urtica dioica	5	N	FAC	Definitions of Vegetation Strata:
5.	Symphyotrichum lanceolatum	2	N	FACW	Definitions of Vegetation Strata.
6					Tree - Westerlands 2 in (7.0 mm) as a disposition of based
					Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height.
8.					
9.					Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft.
10.					tall.
11.					
12.					Herb - All herbaceous (non-woody) plants, regardless of size, and
13.					woody plants less than 3.28 ft. tall.
14.					
15.					Woody Vines - All woody vines greater than 3.28 ft. in height.
	Total Cover =	122			-
Woody Vine Stratu	um (Plot size: 10 meter radius)				
1.					
2.					
3.					Hydrophytic Vegetation Present ☑ Yes ☐ No
4.					
5.					
	Total Cover =	0			
Remarks:				<u> </u>	
Additional Rer	marks:				

Additional Remarks.



WETLAND DETERMINATION DATA FORM Northcentral-Northeast Region

Project/Site:	Vilas Road						Stantec Project #:	193704691		Date:	10/13/16
Applicant:		_eanne Widen					,			County:	Dane
Investigator #1:				Investi	igator #2:	Josh Su	lman			State:	Wisconsin
Soil Unit:		silty clay loam			9-11-1		/I/WWI Classification:	none		Wetland ID:	W-1
Landform:	Depression	•		Loc	al Relief:					Sample Point:	P4
Slope (%):	0	Latitude:	N/A		ongitude:			Datum:	N/A	Community ID:	Forested Wetland
· · · · · · · · · · · · · · · · · · ·		ditions on the site ty					ain in remarks)	☐ Yes ☑		Section:	17
		or Hydrology □ sig	•			(II IIO, EXPIR	Are normal circumsta			Township:	7N
_			-				✓ Yes	ances presen □No	. :	'	11E
		or Hydrology □ nat	lurally pr	Oblemat	ic?		<u> </u>			Range:	TIE
SUMMARY OF		10		\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	N			11 1: 0 :	D 10		
Hydrophytic Ve	_			✓ Yes				Hydric Soils			☑ Yes □ No
Wetland Hydrol			<u> </u>				1.6 (1)			Within A Wetlar	
Remarks:			•			tter than	normal for this time o	f year. Samp	le point loc	ated in seasona	al drainageway
	extending e	east from W-1, 30 ft	north o	t existin	g garage.						
HYDROLOGY											
Wetland Hydr	ology Indic	ators (Check here i	if indicate	ors are r	not preser	nt □):					
Primary:		atoro (orroon rioro)	ii iii ai cat	0.0 0.0 .	ю р. 000.				Secondary:		
	A1 - Surface	Water			B9 - Wate	r-Stained	Leaves			B6 - Surface Soil	Cracks
	A2 - High Wa				B13 - Aqu					B10 - Drainage P	
	A3 - Saturation				B15 - Mar	•				B16 - Moss Trim	
	B1 - Water M				C1 - Hydr	•				C2 - Dry-Season	
	B2 - Sedimer						spheres on Living Roots			C8 - Crayfish Bur	
	B3 - Drift Dep	•					educed Iron eduction in Tilled Soils		님	D1 - Saturation V	isible on Aerial Imagery
l H	B4 - Algal Ma B5 - Iron Dep			_	Co - Rece C7 - Thin					D2 - Geomorphic	
l H		on Visible on Aerial Ima	agery	H	Other (Ex					D3 - Shallow Aqu	
l		y Vegetated Concave S	•		Othor (EX	piani iii i te	marke)			D4 - Microtopogra	
		, 3								D5 - FAC-Neutral	
Field Observat	ions:										
Surface Water		□ Voc. □ No.	Donth		(in)						
		☐ Yes ☑ No	Depth:		(in.)			Wetland Hy	drology Pr	resent? ☑	Yes □ No
Water Table Pr		☐ Yes ☑ No	Depth:		(in.)						
Saturation Pres	ent?	☐ Yes ☑ No	Depth:		(in.)						
Describe Record	led Data (str	eam gauge, monitori	ng well, a	aerial pho	otos, previ	ous inspe	ctions), if available:		Historic Aeri	ial Imagery Reviev	V
Damanlan	Sample no	int located in acces	and the section		_						
Remarks:	Salliple pu	ini localed in seaso	naı draın	ageway.	, fed by cu	ulvert und	der driveway, descend	ding west into	main body	of W-1.	
Remarks:	Sample po	int located in seaso	nai drain	ageway,	, fed by cu	ulvert und	der driveway, descend	ding west into	main body	of W-1.	
	Sample po	int located in seaso	nai drain	ageway,	, fed by cı	ulvert und	der driveway, descend	ding west into	main body	of W-1.	
SOILS				ageway,	, fed by cı		•		main body	of W-1.	
SOILS Map Unit Name): :	Wacousta silty clay	/ loam	ageway	, fed by cı		der driveway, descender descender descender descender descender descender descender descender descender descend		main body	of W-1.	
SOILS Map Unit Name Taxonomy (Sub	e: ogroup):	Wacousta silty clay Typic Endoaquolls	/ loam			S	eries Drainage Class:	very poorly			
SOILS Map Unit Name Taxonomy (Sub	e: ogroup): otion (Describe to	Wacousta silty clay Typic Endoaquolls	/ loam	n the absence o	of indicators.) (Typ	S	eries Drainage Class:	very poorly CS=Covered/Coated Sand	d Grains; Location: F		Teyture
SOILS Map Unit Name Taxonomy (Sub Profile Descrip	e: ogroup): otion (Describe to Bottom	Wacousta silty clay Typic Endoaquolls the depth needed to document the in	/ loam	m the absence of Matrix	of indicators.) (Typ	S	eries Drainage Class: ation, D=Depletion, RM=Reduced Matrix, Re	very poorly CS=Covered/Coated Sand dox Features	d Grains; Location: F	PL=Pore Lining, M=Matrix)	Texture
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth	e: ogroup): otion (Describe to Bottom Depth	Wacousta silty clay Typic Endoaquolls	dicator or confirm	m the absence of Matrix	of indicators.) (Type of the second of the s	S De: C=Concentra	eries Drainage Class: ation, D=Depletion, RM=Reduced Matrix, Re Color (Moist)	very poorly CS=Covered/Coated Sand dox Features %	d Grains; Location: F	PL=Pore Lining, M=Matrix) Location	(e.g. clay, sand, loam)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	e: ogroup): otion (Describe to Bottom Depth	Wacousta silty clay Typic Endoaquolls the depth needed to document the in Horizon 1	dicator or confirmation Color 10YR	m the absence of Matrix (Moist)	of indicators.) (Type of the second of the s	Se: C=Concentra	eries Drainage Class: ation, D=Depletion, RM=Reduced Matrix, Re Color (Moist) 3/4	very poorly CS=Covered/Coated Sand cdox Features % 8	d Grains; Location: F	PL=Pore Lining, M=Matrix) Location M	(e.g. clay, sand, loam) silt loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth	e: ogroup): otion (Describe to Bottom Depth	Wacousta silty clay Typic Endoaquolls the depth needed to document the in	dicator or confirm	m the absence of Matrix	of indicators.) (Type of the second of the s	S De: C=Concentra	eries Drainage Class: ation, D=Depletion, RM=Reduced Matrix, Re Color (Moist)	very poorly CS=Covered/Coated Sand dox Features %	d Grains; Location: F	PL=Pore Lining, M=Matrix) Location	(e.g. clay, sand, loam)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	e: ogroup): otion (Describe to Bottom Depth	Wacousta silty clay Typic Endoaquolls the depth needed to document the in Horizon 1	dicator or confirmation Color 10YR	m the absence of Matrix (Moist)	of indicators.) (Type of the second of the s	Se: C=Concentra	eries Drainage Class: ation, D=Depletion, RM=Reduced Matrix, Re Color (Moist) 3/4	very poorly CS=Covered/Coated Sand cdox Features % 8	d Grains; Location: F	PL=Pore Lining, M=Matrix) Location M	(e.g. clay, sand, loam) silt loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8	e: ogroup): otion (Describe to Bottom Depth 8 14	Wacousta silty clay Typic Endoaquolls the depth needed to document the in Horizon 1 2	dicator or confirmation Color 10YR	m the absence of Matrix (Moist)	% 92 90	Se: C=Concentra 10YR 10YR	eries Drainage Class: ation, D=Depletion, RM=Reduced Matrix, Re Color (Moist) 3/4 3/4	very poorly CS=Covered/Coated Sand dox Features % 8 4	Type C C	PL=Pore Lining, M=Matrix) Location M M	(e.g. clay, sand, loam) silt loam silty clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 8	e: ogroup): otion (Describe to Bottom Depth 8 14 14	Wacousta silty clay Typic Endoaquolls the depth needed to document the in Horizon 1 2 2	color 10YR 10YR	m the absence of Matrix (Moist) 2/1 2/1	% 92 90	Se: C=Concentra 10YR 10YR 10YR	eries Drainage Class: ation, D=Depletion, RM=Reduced Matrix, Re Color (Moist) 3/4 3/4 4/1	very poorly CS=Covered/Coated Sand edox Features % 8 4 6	Type C C D	PL=Pore Lining, M=Matrix) Location M M M	(e.g. clay, sand, loam) silt loam silty clay loam silty clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 8	e: Degroup): Depth 8 14 14 24	Wacousta silty clay Typic Endoaquolls the depth needed to document the in Horizon 1 2 2	dicator or confirmation of the color of the	m the absence of Matrix (Moist) 2/1 2/1	% 92 90	Se: C=Concentra 10YR 10YR 10YR 10YR	eries Drainage Class: ation, D=Depletion, RM=Reduced Matrix, Re Color (Moist) 3/4 3/4 4/1	very poorly CS=Covered/Coated Sand dox Features % 8 4 6 5	Type C C D	PL=Pore Lining, M=Matrix) Location M M M	(e.g. clay, sand, loam) silt loam silty clay loam silty clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 8	e: ogroup): otion (Describe to Bottom Depth 8 14 14 24	Wacousta silty clay Typic Endoaquolls the depth needed to document the in Horizon 1 2 2 3	dicator or confirmation of the color of the	m the absence of Matrix (Moist) 2/1 2/1	% 92 90	Se: C=Concentra 10YR 10YR 10YR 10YR	eries Drainage Class: ation, D=Depletion, RM=Reduced Matrix, Re Color (Moist) 3/4 3/4 4/1 5/6	very poorly CS=Covered/Coated Sand dox Features % 8 4 6 5	Type C C D	PL=Pore Lining, M=Matrix) Location M M M M	(e.g. clay, sand, loam) silt loam silty clay loam silty clay loam clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 8	e: Digroup): Display (Describe to Bottom Depth 8 14 14 24	Wacousta silty clay Typic Endoaquolls the depth needed to document the in Horizon 1 2 2 3	dicator or confirmation of the confirmation of	m the absence of Matrix (Moist) 2/1 2/1	% 92 90	Se: C=Concentra 10YR 10YR 10YR 10YR	eries Drainage Class: ation, D=Depletion, RM=Reduced Matrix, Re Color (Moist) 3/4 3/4 4/1	very poorly CS=Covered/Coated Sand dox Features % 8 4 6 5	Type C C D C	PL=Pore Lining, M=Matrix) Location M M M	(e.g. clay, sand, loam) silt loam silty clay loam silty clay loam clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 8 14	e: Digroup): Display (Describe to Bottom Depth 8 14 14 24	Wacousta silty clay Typic Endoaquolls the depth needed to document the in Horizon 1 2 2 3	color Color 10YR 10YR 10YR	m the absence of Matrix (Moist) 2/1 2/1 5/1	% 92 90 95	10YR 10YR 10YR 10YR 	eries Drainage Class: ation, D=Depletion, RM=Reduced Matrix, Re Color (Moist) 3/4 3/4 4/1 5/6	very poorly CS=Covered/Coated Sand edox Features % 8 4 6 5	Type C C C	Location M M M M	(e.g. clay, sand, loam) silt loam silty clay loam silty clay loam clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 8 14 NRCS Hydric	pgroup): Depth Bottom Depth 8 14 14 24 Soil Field In	Wacousta silty clay Typic Endoaquolls the depth needed to document the in Horizon 1 2 2 3 ndicators (check he	color Color 10YR 10YR 10YR	m the absence of Matrix (Moist) 2/1 2/1 5/1 icators a	% 92 90 95 are not pre	See: C=Concentral 10YR 10YR 10YR 10YR esent □	eries Drainage Class: ation, D=Depletion, RM=Reduced Matrix, Re Color (Moist) 3/4 3/4 4/1 5/6):	very poorly CS=Covered/Coated Sand dox Features % 8 4 6 5 Indicator	Type C C C s for Proble	Location M M M M matic Soils ¹	(e.g. clay, sand, loam) silt loam silty clay loam silty clay loam clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 8 14 NRCS Hydric	Bottom Depth 8 14 14 24 Soil Field In	Wacousta silty clay Typic Endoaquolls the depth needed to document the in Horizon 1 2 2 3 ndicators (check he	color Color 10YR 10YR 10YR	m the absence of Matrix (Moist) 2/1 2/1 5/1 icators a	% 92 90 95 sere not pre	Se: C=Concentra 10YR 10YR 10YR esent □ ralue Belov	eries Drainage Class: ation, D=Depletion, RM=Reduced Matrix, Re Color (Moist) 3/4 3/4 4/1 5/6): w Surface (LRR R, MLRA 149B)	very poorly CS=Covered/Coated Sand dox Features % 8 4 6 5 Indicator	Type C C D C s for Proble	Location M M M M matic Soils ¹ Muck (LRR K, L, MLRA	(e.g. clay, sand, loam) silt loam silty clay loam silty clay loam clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 8 14 NRCS Hydric	e: ogroup): otion (Describe to Bottom Depth 8 14 14 24 Soil Field In A1- Histosol A2 - Histic Ep	Wacousta silty clay Typic Endoaquolls the depth needed to document the in Horizon 1 2 2 3 ndicators (check he	color Color 10YR 10YR 10YR	m the absence of Matrix (Moist) 2/1 2/1 5/1 icators a	% 92 90 95 are not pre	10YR 10YR 10YR 10YR esent value Belov Dark Surfa	eries Drainage Class: ation, D=Depletion, RM=Reduced Matrix, Re Color (Moist) 3/4 3/4 4/1 5/6 Surface (LRR R, MLRA 149B) ace (LRR R, MLRA 149B)	very poorly CS=Covered/Coated Sand dox Features % 8 4 6 5 Indicator	Type C C D C s for Proble A10 - 2 cm I	Location M M M M M matic Soils ¹ Muck (LRR K, L, MLRA ² Prairie Redox (LRR	(e.g. clay, sand, loam) silt loam silty clay loam silty clay loam clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 8 14 NRCS Hydric	Bottom Depth 8 14 14 24 Soil Field Ir A1- Histosol A2 - Histic Ep A3 - Black Hi	Wacousta silty clay Typic Endoaquolls the depth needed to document the in Horizon 1 2 2 3 ndicators (check here) pipedon istic	color Color 10YR 10YR 10YR	m the absence of Matrix (Moist) 2/1 2/1 5/1 icators a	% 92 90 95 are not pre S8 - Polyv S9 - Thin S11 - Higl	10YR 10YR 10YR 10YR esent value Below Dark Surfa	eries Drainage Class: ation, D=Depletion, RM=Reduced Matrix, Re Color (Moist) 3/4 3/4 4/1 5/6): w Surface (LRR R, MLRA 149B) ace (LRR R, MLRA 149B) Sands	very poorly CS=Covered/Coated Sand dox Features % 8 4 6 5 Indicator	Type C C D C s for Proble A10 - 2 cm A16 - Coast S3 - 5cm Mi	Location M M M M matic Soils Muck (LRR K, L, MLRA Prairie Redox (LRR ucky Peat of Peat	(e.g. clay, sand, loam) silt loam silty clay loam silty clay loam clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 8 14 NRCS Hydric	Bottom Depth 8 14 14 24 Soil Field Ir A1- Histosol A2 - Histic Ep A3 - Black Histosol A4 - Hydroge	Wacousta silty clay Typic Endoaquolls the depth needed to document the in Horizon 1 2 2 3 ndicators (check here) pipedon istic en Sulfide	color Color 10YR 10YR 10YR	m the absence of Matrix (Moist) 2/1 2/1 5/1 icators a	% 92 90 95 S8 - Polyw S9 - Thin S11 - High F1 - Loam	10YR 10YR 10YR 10YR esent value Below Dark Surfan Chroma	eries Drainage Class: ation, D=Depletion, RM=Reduced Matrix, Re Color (Moist) 3/4 3/4 4/1 5/6): w Surface (LRR R, MLRA 149B) ace (LRR R, MLRA 149B) Sands Mineral (LRR K, L)	very poorly CS=Covered/Coated Sand dox Features % 8 4 6 5 Indicator	Type C C D C s for Proble A10 - 2 cm I A16 - Coast S3 - 5cm Mt S7 - Dark S	Location M M M M M M M M M M Prairie Redox (LRR k, L, MLRA A Prairie Redox (LRR k, L, MLRA A Prairie Redox (LRR k, L, M)	(e.g. clay, sand, loam) silt loam silty clay loam clay loam (LRR K, L, R)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 8 14 NRCS Hydric	Bottom Depth 8 14 14 24 Soil Field Ir A1- Histosol A2 - Histic Ep A3 - Black Histosol A4 - Hydroge A5 - Stratified	Wacousta silty clay Typic Endoaquolls the depth needed to document the in Horizon 1 2 2 3 ndicators (check here) pipedon istic en Sulfide d Layers	dicator or confirmation of the color of the	m the absence of Matrix (Moist) 2/1 2/1 5/1 icators a	% 92 90 95 sre not pre S8 - Polyv S9 - Thin S11 - High F1 - Loam F2 - Loam	10YR 10YR 10YR 10YR 10YR 10YR Chroma The Sent In Chroma The Surfact Ch	eries Drainage Class: ation, D=Depletion, RM=Reduced Matrix, Re Color (Moist) 3/4 3/4 4/1 5/6): w Surface (LRR R, MLRA 149B) ace (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix	very poorly CS=Covered/Coated Sand dox Features % 8 4 6 5 Indicator	Type C C D C s for Proble A10 - 2 cm I A16 - Coast S3 - 5cm Mi S7 - Dark S S8 - Polyval	Location M M M M M M M M M PL=Pore Lining, M=Matrix) M M M M M M Prairie Soils 1 Prairie Redox (LRR ucky Peat of Peat urface (LRR K, L, M) ue Below Surface	(e.g. clay, sand, loam) silt loam silty clay loam clay loam (LRR K, L, R) (LRR K, L)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 8 8 14 NRCS Hydric	Bottom Depth 8 14 14 24 Soil Field Ir A1- Histosol A2 - Histic Ep A3 - Black Histosol A4 - Hydroge A5 - Stratified	Wacousta silty clay Typic Endoaquolls the depth needed to document the in Horizon 1 2 2 3 ndicators (check he pipedon istic en Sulfide d Layers ed Below Dark Surface	dicator or confirmation of the color of the	m the absence of Matrix (Moist) 2/1 2/1 5/1 icators a	% 92 90 95 S8 - Polyw S9 - Thin S11 - High F1 - Loam	10YR 10YR 10YR 10YR 10YR 10YR 10YR 10YR	eries Drainage Class: ation, D=Depletion, RM=Reduced Matrix, Re Color (Moist) 3/4 4/1 5/6	very poorly CS=Covered/Coated Sand dox Features % 8 4 6 5 Indicator	Type C C D C s for Proble A10 - 2 cm A16 - Coast S3 - 5cm Mi S7 - Dark Si S8 - Polyval S9 - Thin Da	Location M M M M M matic Soils Muck (LRR K, L, MLRA Prairie Redox (LRR ucky Peat of Peat urface (LRR K, L, M) ue Below Surface ark Surface (LRR K, L	(e.g. clay, sand, loam) silt loam silty clay loam clay loam (LRR K, L, R) (LRR K, L)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 8 14 NRCS Hydric	Bottom Depth 8 14 14 24 Soil Field Ir A1- Histosol A2 - Histic El A3 - Black Hi A4 - Hydroge A5 - Stratified A11 - Deplete	Wacousta silty clay Typic Endoaquolls the depth needed to document the in Horizon 1 2 2 3 ndicators (check here) pipedon istic en Sulfide d Layers ed Below Dark Surface Dark Surface	dicator or confirmation of the color of the	m the absence of Matrix (Moist) 2/1 2/1 5/1 icators a	% 92 90 95	10YR 10YR 10YR 10YR 10YR 10YR 10YR 10YR	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, Re Color (Moist) 3/4 4/1 5/6 N: w Surface (LRR R, MLRA 149B) ace (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix crface	very poorly CS=Covered/Coated Sand dox Features % 8 4 6 5 Indicator	Type C C D C s for Proble A10 - 2 cm I A16 - Coast S3 - 5cm Mi S7 - Dark Si S8 - Polyval S9 - Thin Da F12 - Iron-M	Location M M M M M M M M M M M M C	(e.g. clay, sand, loam) silt loam silty clay loam clay loam (LRR K, L, R) (LRR K, L, R) (LRR K, L, R)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 8 8 14 NRCS Hydric	Bottom Depth 8 14 14 24 Soil Field Ir A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A11 - Deplete A12 - Thick E S1 - Sandy M	Wacousta silty clay Typic Endoaquolls the depth needed to document the in Horizon 1 2 2 3 ndicators (check here) pipedon istic en Sulfide d Layers ed Below Dark Surface Dark Surface	dicator or confirmation of the color of the	m the absence of Matrix (Moist) 2/1 2/1 5/1 icators a	% 92 90 95 sere not presser Polyw S9 - Thin S11 - High F1 - Loam F2 - Loam F3 - Deple F6 - Redo	10YR 10YR 10YR 10YR 10YR 10YR 10YR 10YR	eries Drainage Class: ation, D=Depletion, RM=Reduced Matrix, Re Color (Moist) 3/4 4/1 5/6): w Surface (LRR R, MLRA 149B) ace (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix crface Surface	very poorly CS=Covered/Coated Sand dox Features % 8 4 6 5 Indicator	Type C C D C	Location M M M M M matic Soils Muck (LRR K, L, MLRA Prairie Redox (LRR ucky Peat of Peat urface (LRR K, L, M) ue Below Surface ark Surface (LRR K, L	(e.g. clay, sand, loam) silt loam silty clay loam clay loam (LRR K, L, R) (LRR K, L, R) (LRR K, L, R)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 8 14 NRCS Hydric	Bottom Depth 8 14 14 24 Soil Field Ir A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A1- Deplete A12 - Thick E S1 - Sandy N S4 - Sandy R S5 - Sandy R	Wacousta silty clay Typic Endoaquolls the depth needed to document the in Horizon 1 2 2 3 ndicators (check here) pipedon istic en Sulfide d Layers ed Below Dark Surface Dark Surface Muck Mineral Gleyed Matrix Redox	dicator or confirmation of the color of the	m the absence of Matrix (Moist) 2/1 2/1 5/1 icators a	% 92 90 95	10YR 10YR 10YR 10YR 10YR 10YR 10YR 10YR	eries Drainage Class: ation, D=Depletion, RM=Reduced Matrix, Re Color (Moist) 3/4 4/1 5/6): w Surface (LRR R, MLRA 149B) ace (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix crface Surface	very poorly CS=Covered/Coated Sand dox Features % 8 4 6 5 Indicator	Type C C D C s for Proble A10 - 2 cm I A16 - Coast S3 - 5cm Mi S7 - Dark Si S8 - Polyval S9 - Thin Da F12 - Iron-M F19 - Piedm F21 - Red P TA6 - Mesic	Location M M M M M M M M M M M M M	(e.g. clay, sand, loam) silt loam silty clay loam clay loam (LRR K, L, R) (LRR K, L, R) (LRR K, L, R) (S (MLRA 149B)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 8 14 NRCS Hydric	Bottom Depth 8 14 14 24 Soil Field Ir A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A1- Deplete A12 - Thick E S1 - Sandy N S4 - Sandy N S4 - Sandy N S5 - Sandy R S6 - Stripped	Wacousta silty clay Typic Endoaquolls the depth needed to document the in Horizon 1 2 2 3 hdicators (check he pipedon istic en Sulfide d Layers ed Below Dark Surface Dark Surface Muck Mineral Gleyed Matrix Redox H Matrix	dicator or confirmation of the color of the	m the absence of Matrix (Moist) 2/1 2/1 5/1 icators a	% 92 90 95	10YR 10YR 10YR 10YR 10YR 10YR 10YR 10YR	eries Drainage Class: ation, D=Depletion, RM=Reduced Matrix, Re Color (Moist) 3/4 4/1 5/6): w Surface (LRR R, MLRA 149B) ace (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix crface Surface	very poorly CS=Covered/Coated Sand dox Features	Type C C D C s for Proble A10 - 2 cm A16 - Coast S3 - 5cm Mi S7 - Dark Si S8 - Polyval S9 - Thin Da F12 - Iron-M F19 - Piedm F21 - Red P TA6 - Mesic TF12 - Very	Location M M M M M M M M M M M M C	(e.g. clay, sand, loam) silt loam silty clay loam clay loam (LRR K, L, R) (LRR K, L, R) (LRR K, L, R) (S (MLRA 149B)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 8 14 NRCS Hydric	Bottom Depth 8 14 14 24 Soil Field Ir A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A1- Deplete A12 - Thick E S1 - Sandy N S4 - Sandy N S4 - Sandy N S5 - Sandy R S6 - Stripped	Wacousta silty clay Typic Endoaquolls the depth needed to document the in Horizon 1 2 2 3 ndicators (check here) pipedon istic en Sulfide d Layers ed Below Dark Surface Dark Surface Muck Mineral Gleyed Matrix Redox	dicator or confirmation of the color of the	m the absence of Matrix (Moist) 2/1 2/1 5/1 icators a	% 92 90 95	10YR 10YR 10YR 10YR 10YR 10YR 10YR 10YR	eries Drainage Class: ation, D=Depletion, RM=Reduced Matrix, Re Color (Moist) 3/4 4/1 5/6): w Surface (LRR R, MLRA 149B) ace (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix crface Surface	very poorly CS=Covered/Coated Sand cdox Features % 8 4 6 5 Indicator	Type C C C D C s for Proble A10 - 2 cm I A16 - Coast S3 - 5cm Mi S7 - Dark Si S8 - Polyval S9 - Thin Da F12 - Iron-M F19 - Piedm F21 - Red P TA6 - Mesic TF12 - Very Other (Expla	Location M M M M M M M M M M M M M	(e.g. clay, sand, loam) silt loam silty clay loam clay loam (LRR K, L, R) (LRR K, L, R) ils (MLRA 149B) face
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 8 14 NRCS Hydric	Bottom Depth 8 14 14 24 Soil Field Ir A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A1- Deplete A12 - Thick E S1 - Sandy N S4 - Sandy N S4 - Sandy N S5 - Sandy R S6 - Stripped	Wacousta silty clay Typic Endoaquolls the depth needed to document the in Horizon 1 2 2 3 hdicators (check he pipedon istic en Sulfide d Layers ed Below Dark Surface Dark Surface Muck Mineral Gleyed Matrix Redox H Matrix	dicator or confirmation of the color of the	m the absence of Matrix (Moist) 2/1 2/1 5/1 icators a	% 92 90 95	10YR 10YR 10YR 10YR 10YR 10YR 10YR 10YR	eries Drainage Class: ation, D=Depletion, RM=Reduced Matrix, Re Color (Moist) 3/4 4/1 5/6): w Surface (LRR R, MLRA 149B) ace (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix crface Surface	very poorly CS=Covered/Coated Sand cdox Features % 8 4 6 5 Indicator Indicator Indicator Indicator	Type C C C D C s for Proble A10 - 2 cm I A16 - Coast S3 - 5cm Mi S7 - Dark Si S8 - Polyval S9 - Thin Da F12 - Iron-M F19 - Piedm F21 - Red P TA6 - Mesic TF12 - Very Other (Expla	Location M M M M M M M M M M M M C	(e.g. clay, sand, loam) silt loam silty clay loam clay loam (LRR K, L, R) (LRR K, L, R) ils (MLRA 149B) face
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 8 14 NRCS Hydric	Bottom Depth 8 14 14 24 Soil Field Ir A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A1- Deplete A12 - Thick E S1 - Sandy N S4 - Sandy N S4 - Sandy N S5 - Sandy R S6 - Stripped	Wacousta silty clay Typic Endoaquolls the depth needed to document the in Horizon 1 2 2 3 hdicators (check he pipedon istic en Sulfide d Layers ed Below Dark Surface Dark Surface Muck Mineral Eleyed Matrix Redox d Matrix Inface (LRR R, MLRA 149B)	dicator or confirmation of the color of the	m the absence of Matrix (Moist) 2/1 2/1 5/1 icators a	% 92 90 95	10YR 10YR 10YR 10YR 10YR 10YR 10YR 10YR	eries Drainage Class: ation, D=Depletion, RM=Reduced Matrix, Re Color (Moist) 3/4 4/1 5/6): w Surface (LRR R, MLRA 149B) ace (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix crface Surface	very poorly CS=Covered/Coated Sand cdox Features % 8 4 6 5 Indicator Indicator Indicator Indicator	Type C C D C s for Proble A10 - 2 cm I A16 - Coast S3 - 5cm Me S7 - Dark Se S8 - Polyval S9 - Thin Da F12 - Iron-M F19 - Piedm F21 - Red P TA6 - Mesic TF12 - Very Other (Expla of hydrophytic veget or problematic.	Location M M M M M M M M M M M M M	(e.g. clay, sand, loam) silt loam silty clay loam clay loam (LRR K, L, R) (LRR K, L, R) ils (MLRA 149B) face



WETLAND DETERMINATION DATA FORM Northcentral-Northeast Region

Project/Site: Vilas Road Wetland ID: W-1 Sample Point: P4

VEGETATION	(Species identified in all uppercase are non-na	ative spec	cies.)		
Tree Stratum (PI	ot size: 10 meter radius) <u>Species Name</u>	º/ Cover	Dominant	Ind Status	Dominance Test Worksheet
1.	Acer negundo	% Cover 20	Dominant Y	Ind.Status FAC	Dominance rest worksheet
2.	Acer negunao	20			Number of Dominant Species that are OBL EACW or EAC: $\frac{3}{3}$ (A)
3.					Number of Dominant Species that are OBL, FACW, or FAC:3(A)
					Total Number of Deminant Species Across All Strate: 3 (P)
4.					Total Number of Dominant Species Across All Strata:3(B)
5.	_ 				Device that Device the Conscion That Are ODL FACIAL or FAC: 4009/ (A/D)
6.					Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)
7.					Drevelence Index Merkeheet
8.					Prevalence Index Worksheet
9.					Total % Cover of: Multiply by:
10.	Total Cavar -				OBL spp. $0 \times 1 = 0$
	Total Cover =	20			FACW spp. $\frac{40}{2}$ \times $2 = \frac{80}{2}$
0 11 101 1 01					FAC spp. $\frac{120}{120}$ x 3 = $\frac{360}{120}$
	ratum (Plot size: 5 meter radius)	00		E A C	FACU spp. 0 x 4 = 0
1.	RHAMNUS CATHARTICA	80	Υ	FAC	UPL spp. $0 x 5 = 0$
2.					
3.					Total 160 (A) 440 (B)
4.					B
5.					Prevalence Index = B/A = 2.750
6.					
7.					
8.					Hydrophytic Vegetation Indicators:
9.					☐ Yes ☑ No Rapid Test for Hydrophytic Vegetation
10.					☑ Yes ☐ No Dominance Test is > 50%
	Total Cover =	80			
					☐ Yes ☑ No Morphological Adaptations (Explain) *
,	ot size: 2 meter radius)			_	☐ Yes ☑ No Problem Hydrophytic Vegetation (Explain) *
1.	Ribes americanum	40	Υ	FACW	* Indicators of hydric soil and wetland hydrology must be
2.	RHAMNUS CATHARTICA	10	N	FAC	present, unless disturbed or problematic.
3.	Geum canadense	10	N	FAC	
4.					Definitions of Vegetation Strata:
5.					
6					Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast
7.					height (DBH), regardless of height.
8.					
9.					Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft. tall.
10.					
11.					
12.					Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft. tall.
13.					woody plants less than 3.20 ft. tall.
14.					
15.					Woody Vines - All woody vines greater than 3.28 ft. in height.
	Total Cover =	60			
Woody Vine Strat	um (Plot size: 10 meter radius)				
1.	<u></u>				
2.					
3.					Hydrophytic Vegetation Present ☑ Yes ☐ No
4.					
5.					
	Total Cover =	0			
Remarks:					
Additional Re	marks:				
	· · · · · · · · · · · · · · · · · · ·	·			



WETLAND DETERMINATION DATA FORM Northcentral-Northeast Region

Project/Site:	Vilas Road						Stantec Project #:	193704691		Date:	10/13/16
Applicant:	Reed and	Leanne Widen					-			County:	Dane
Investigator #1				Invest	igator #2:					State:	Wisconsin
Soil Unit:	Wacousta	silty clay loam					I/WWI Classification:	none		Wetland ID:	adj. W-1
Landform:	Terrace				al Relief:					Sample Point:	P5
Slope (%):	0	Latitude:			ongitude:			Datum:		Community ID:	Upland Forest
		ditions on the site ty	•			(If no, expla		□ Yes ☑		Section:	17
_		or Hydrology ☐ sig	-	•			Are normal circumsta	•	t?	Township:	7N
		or Hydrology □ nat	turally pr	oblemat	ic?		☑ Yes	□No		Range:	11E
SUMMARY OF											
Hydrophytic Ve	•			☐ Yes				Hydric Soils			☐ Yes ☑ No
Wetland Hydro				☐ Yes						Within A Wetlar	
Remarks:			nalysis,	conditio	ns are we	tter than	normal for this time of	f year. Samp	le point loc	ated in oak fore	est with brushy
	understory										
HYDROLOGY											
Wetland Hydi	rology Indic	ators (Check here i	if indicat	ors are r	not preser	nt ☑):					
<u>Primary</u>	_	•			·				Secondary:		
	A1 - Surface				B9 - Wate					B6 - Surface Soil	
] A2 - High Wa] A3 - Saturati				B13 - Aqu					B10 - Drainage P B16 - Moss Trim	
]				B15 - Mar C1 - Hydr	•			H	C2 - Dry-Season	
	B2 - Sedime				-	-	spheres on Living Roots			C8 - Crayfish Bur	
	B3 - Drift De	posits					educed Iron			C9 - Saturation V	isible on Aerial Imagery
] B4 - Algal Ma						duction in Tilled Soils			D1 - Stunted or S	
	B5 - Iron De	•	agory.	님	C7 - Thin Other (Ex					D2 - Geomorphic D3 - Shallow Aqu	
		on Visible on Aerial Ima y Vegetated Concave S		Ш	Other (EX	piaiii iii Re	illaiks)			D4 - Microtopogra	
	,	y regulate a constant of								D5 - FAC-Neutral	
Field Observa	ntions:										
Surface Water		☐ Yes ☑ No	Depth:		(in.)						
Water Table P		☐ Yes ☑ No	Depth:		(in.)			Wetland Hy	drology P	resent?	Yes ☑ No
Saturation Pres		☐ Yes ☑ No	Depth:		(in.)						
			•				ations if and labor		I listavia Asu	ial las a same Davidae	
	ded Data (Str	eam gauge, monitori	ng weii, a	aeriai pho	otos, previ	ous inspe	ections), if available:		HISTORIC Aer	ial Imagery Review	V
Remarks:											
SOILS											
Map Unit Nam		Wacousta silty clay				S	eries Drainage Class:	very poorly			
Taxonomy (Su	<u> </u>	Typic Endoaquolls									
		the depth needed to document the in	dicator or confir			oe: C=Concentra	ation, D=Depletion, RM=Reduced Matrix, 0			PL=Pore Lining, M=Matrix)	Tavduma
Тор	Bottom			Matrix				dox Features		1	Texture
Depth	Depth	Horizon	+	(Moist)	%		Color (Moist)	%	Туре	Location	(e.g. clay, sand, loam)
0	6	1	10YR	2/2	100						silt loam
6	16	2	10YR	3/2	100						silt loam
16	24	3	10YR	4/2	90	10YR	4/6	10	С	M	clay loam
							<u></u>				
Ī		1	i					1			
				 icators a							
NRCS Hydric	Soil Field I	 ndicators (check he			 are not pre	 esent ☑		 Indicator	 rs for Proble		
NRCS Hydric	Soil Field II A1- Histosol A2 - Histic E	 ndicators (check he pipedon			are not pre S8 - Polyw S9 - Thin	esent ☑ value Belo Dark Surfa): w Surface (LRR R, MLRA 149B) ace (LRR R, MLRA 149B)	 Indicator	 	ematic Soils ¹ Muck (LRR K, L, MLRA to Prairie Redox (LRF	 149B) R K, L, R)
NRCS Hydric	Soil Field In A1- Histosol A2 - Histic E A3 - Black H	 ndicators (check he pipedon istic			 are not pre S8 - Polyv S9 - Thin S11 - Higl	 esent ☑ ralue Belo Dark Surfa n Chroma): w Surface (LRR R, MLRA 149B) ace (LRR R, MLRA 149B) Sands	 Indicator	 rs for Proble A10 - 2 cm A16 - Coast S3 - 5cm M	ematic Soils ¹ Muck (LRR K, L, MLRA t Prairie Redox (LRF ucky Peat of Peat	 149B) R K, L, R)
NRCS Hydric	 Soil Field II A1- Histosol A2 - Histic E A3 - Black H A4 - Hydroge	 ndicators (check he pipedon istic en Sulfide			 S8 - Polyo S9 - Thin S11 - Higl F1 - Loam	esent ☑ value Belo Dark Surfa n Chroma ny Mucky I): w Surface (LRR R, MLRA 149B) ace (LRR R, MLRA 149B) Sands Mineral (LRR K, L)	 Indicator	 S for Proble A10 - 2 cm A16 - Coast S3 - 5cm M S7 - Dark S	matic Soils 1 Muck (LRR K, L, MLRA Prairie Redox (LRR ucky Peat of Peat urface (LRR K, L, M)	 149B) R K, L, R) (LRR K, L, R)
NRCS Hydric	Soil Field II A1- Histosol A2 - Histic E A3 - Black H A4 - Hydroge A5 - Stratifie	ndicators (check he pipedon istic en Sulfide d Layers	 ere if ind		S8 - Polyo S9 - Thin S11 - Higl F1 - Loam F2 - Loam	ralue Belo Dark Surfa n Chroma ny Mucky I): w Surface (LRR R, MLRA 149B) ace (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix	 Indicator	 S for Problem A10 - 2 cm A16 - Coast S3 - 5cm M S7 - Dark S S8 - Polyva	ematic Soils ¹ Muck (LRR K, L, MLRA t Prairie Redox (LRF ucky Peat of Peat	 149B) R K, L, R) (LRR K, L, R)
NRCS Hydric	Soil Field II A1- Histosol A2 - Histic E A3 - Black H A4 - Hydroge A5 - Stratifie	ndicators (check he pipedon istic en Sulfide d Layers ed Below Dark Surface	 ere if ind		 S8 - Polyo S9 - Thin S11 - Higl F1 - Loam	esent ☑ ralue Belo Dark Surfa n Chroma ny Mucky I ny Gleyed eted Matrix	""" """ """ """ """ """ """	 Indicator	 S for Proble A10 - 2 cm A16 - Coast S3 - 5cm M S7 - Dark S S8 - Polyva S9 - Thin Da	matic Soils 1 Muck (LRR K, L, MLRA Prairie Redox (LRF ucky Peat of Peat urface (LRR K, L, M) lue Below Surface	 149B) R K, L, R) (LRR K, L, R) (LRR K, L)
NRCS Hydric	Soil Field II A1- Histosol A2 - Histic E A3 - Black H A4 - Hydroge A5 - Stratifie A11 - Deplet A12 - Thick I S1 - Sandy II	ndicators (check he pipedon istic en Sulfide d Layers ed Below Dark Surface Dark Surface Muck Mineral	 ere if ind		S8 - Polyo S9 - Thin S11 - High F1 - Loam F2 - Loam F3 - Deple F6 - Redo	esent ralue Belo Dark Surfa n Chroma ny Mucky I ny Gleyed eted Matrix x Dark Su eted Dark	""" """ """ """ """ """ """	 Indicator	 S for Problem A10 - 2 cm A16 - Coast S3 - 5cm M S7 - Dark S S8 - Polyva S9 - Thin Data F12 - Iron-N F19 - Piedm	matic Soils 1 Muck (LRR K, L, MLRA E Prairie Redox (LRR ucky Peat of Peat urface (LRR K, L, M) lue Below Surface ark Surface (LRR K, L Manganese Masses	 149B) R K, L, R) (LRR K, L, R) (LRR K, L) -) S (LRR K, L, R)
NRCS Hydric	Soil Field II A1- Histosol A2 - Histic E A3 - Black H A4 - Hydroge A5 - Stratifie A11 - Deplet A12 - Thick I S1 - Sandy II S4 - Sandy II	ndicators (check here) pipedon istic en Sulfide d Layers ed Below Dark Surface Dark Surface Muck Mineral Gleyed Matrix	 ere if ind		S8 - Polyon S9 - Thin S11 - High F1 - Loam F2 - Loam F3 - Deple F6 - Redo	esent ralue Belo Dark Surfa n Chroma ny Mucky I ny Gleyed eted Matrix x Dark Su eted Dark	""" """ """ """ """ """ """	 Indicator		matic Soils 1 Muck (LRR K, L, MLRA to Prairie Redox (LRR ucky Peat of Peat urface (LRR K, L, M) Jue Below Surface ark Surface (LRR K, L) Manganese Masses to the Parent Material	149B) R K, L, R) (LRR K, L, R) (LRR K, L) -) S (LRR K, L, R) ils (MLRA 149B)
NRCS Hydric	Soil Field II A1- Histosol A2 - Histic E A3 - Black H A4 - Hydroge A5 - Stratifie A11 - Deplet A12 - Thick I S1 - Sandy I S4 - Sandy I S5 - Sandy F	ndicators (check here) pipedon istic en Sulfide d Layers ed Below Dark Surface Dark Surface Muck Mineral Gleyed Matrix Redox	 ere if ind		S8 - Polyo S9 - Thin S11 - High F1 - Loam F2 - Loam F3 - Deple F6 - Redo	esent ralue Belo Dark Surfa n Chroma ny Mucky I ny Gleyed eted Matrix x Dark Su eted Dark	""" """ """ """ """ """ """	Indicator	 S for Problem A10 - 2 cm A16 - Coast S3 - 5cm M S7 - Dark S S8 - Polyva S9 - Thin Da F12 - Iron-N F19 - Piedm F21 - Red F TA6 - Mesic	matic Soils 1 Muck (LRR K, L, MLRA Prairie Redox (LRR ucky Peat of Peat urface (LRR K, L, M) lue Below Surface ark Surface (LRR K, L Manganese Masses nont Floodplain So Parent Material Spodic (MLRA 144A,	 149B) R K, L, R) (LRR K, L, R) (LRR K, L) -) S (LRR K, L, R) ilS (MLRA 149B)
NRCS Hydric	Soil Field II A1- Histosol A2 - Histic E A3 - Black H A4 - Hydroge A5 - Stratifie A11 - Deplet A12 - Thick I S1 - Sandy I S4 - Sandy I S5 - Sandy F	ndicators (check he pipedon istic en Sulfide d Layers ed Below Dark Surface Dark Surface Muck Mineral Gleyed Matrix Redox d Matrix	 ere if ind		S8 - Polyo S9 - Thin S11 - High F1 - Loam F2 - Loam F3 - Deple F6 - Redo	esent ralue Belo Dark Surfa n Chroma ny Mucky I ny Gleyed eted Matrix x Dark Su eted Dark	""" """ """ """ """ """ """	Indicator	S for Proble A10 - 2 cm A16 - Coast S3 - 5cm M S7 - Dark S S8 - Polyva S9 - Thin Da F12 - Iron-N F19 - Piedm F21 - Red F TA6 - Mesic	matic Soils 1 Muck (LRR K, L, MLRA to Prairie Redox (LRR ucky Peat of Peat urface (LRR K, L, M) Jue Below Surface ark Surface (LRR K, L) Manganese Massement Floodplain Soil Parent Material to Spodic (MLRA 144A, b) Shallow Dark Surface	 149B) R K, L, R) (LRR K, L, R) (LRR K, L) -) S (LRR K, L, R) ilS (MLRA 149B)
NRCS Hydric	Soil Field II A1- Histosol A2 - Histic E A3 - Black H A4 - Hydroge A5 - Stratifie A11 - Deplet A12 - Thick I S1 - Sandy I S4 - Sandy I S5 - Sandy F	ndicators (check here) pipedon istic en Sulfide d Layers ed Below Dark Surface Dark Surface Muck Mineral Gleyed Matrix Redox	 ere if ind		S8 - Polyo S9 - Thin S11 - High F1 - Loam F2 - Loam F3 - Deple F6 - Redo	esent ralue Belo Dark Surfa n Chroma ny Mucky I ny Gleyed eted Matrix x Dark Su eted Dark	""" """ """ """ """ """ """	Indicator		matic Soils 1 Muck (LRR K, L, MLRA Prairie Redox (LRR ucky Peat of Peat urface (LRR K, L, M) lue Below Surface ark Surface (LRR K, L Manganese Masses nont Floodplain So Parent Material Spodic (MLRA 144A,	149B) R K, L, R) (LRR K, L, R) (LRR K, L) -) S (LRR K, L, R) ills (MLRA 149B) 145, 149B) face
NRCS Hydric	Soil Field II A1- Histosol A2 - Histic E A3 - Black H A4 - Hydroge A5 - Stratifie A11 - Deplet A12 - Thick I S1 - Sandy II S4 - Sandy II S5 - Sandy II S6 - Stripped S7 - Dark St	pipedon istic en Sulfide d Layers ed Below Dark Surface Dark Surface Muck Mineral Gleyed Matrix Redox d Matrix urface (LRR R, MLRA 149B)	 ere if ind		S8 - Polyones S8 - Polyones S9 - Thin S11 - High F1 - Loam F2 - Loam F3 - Deple F6 - Redo F7 - Deple F8 - Redo	esent ralue Belo Dark Surfa n Chroma ny Mucky I ny Gleyed eted Matrix x Dark Su eted Dark	""" """ """ """ """ """ """	Indicator Indicator		matic Soils 1 Muck (LRR K, L, MLRA Prairie Redox (LRR ucky Peat of Peat urface (LRR K, L, M) lue Below Surface ark Surface (LRR K, L Manganese Masses nont Floodplain Soil Parent Material Spodic (MLRA 144A, Shallow Dark Sur ain in Remarks) tation and wetland hydrology	149B) R K, L, R) (LRR K, L, R) (LRR K, L) -) S (LRR K, L, R) ils (MLRA 149B) 145, 149B) face must be present, unless
NRCS Hydric	Soil Field II A1- Histosol A2 - Histic E A3 - Black H A4 - Hydroge A5 - Stratifie A11 - Deplet A12 - Thick I S1 - Sandy I S4 - Sandy I S5 - Sandy F	pipedon istic en Sulfide d Layers ed Below Dark Surface Dark Surface Muck Mineral Gleyed Matrix Redox d Matrix urface (LRR R, MLRA 149B)	 ere if ind		S8 - Polyo S9 - Thin S11 - High F1 - Loam F2 - Loam F3 - Deple F6 - Redo	esent ralue Belo Dark Surfa n Chroma ny Mucky I ny Gleyed eted Matrix x Dark Su eted Dark	""" """ """ """ """ """ """	Indicator		matic Soils 1 Muck (LRR K, L, MLRA Prairie Redox (LRR ucky Peat of Peat urface (LRR K, L, M) lue Below Surface ark Surface (LRR K, L Manganese Masses nont Floodplain Soil Parent Material Spodic (MLRA 144A, Shallow Dark Surfain in Remarks)	149B) R K, L, R) (LRR K, L, R) (LRR K, L) -) S (LRR K, L, R) ills (MLRA 149B) 145, 149B) face



WETLAND DETERMINATION DATA FORM Northcentral-Northeast Region

Project/Site: Vilas Road Wetland ID: adj. W-1 Sample Point: P5

VEGETATION	(Species identified in all uppercase are non-na	ative spec	cies.)		
	lot size: 10 meter radius)				
	<u>Species Name</u>		<u>Dominant</u>	Ind.Status	Dominance Test Worksheet
1.	Quercus macrocarpa	60	Υ	FACU	
2.	Acer negundo	20	N	FAC	Number of Dominant Species that are OBL, FACW, or FAC:(A)
3.	Prunus serotina	10	N	FACU	
4.	Ulmus americana	8	N	FACW	Total Number of Dominant Species Across All Strata: 4 (B)
5.	ACER PLATANOIDES	5	N	UPL	
6.					Percent of Dominant Species That Are OBL, FACW, or FAC: 50% (A/B)
7.					
8.					Prevalence Index Worksheet
9.					Total % Cover of: Multiply by:
10.					OBL spp. 0 \times 1 = 0
	Total Cover =	103			FACW spp. 8 x 2 = 16
	rotal cover	100			FAC spp. 65 x 3 = 195
Sanling/Shrub St	ratum (Plot size: 5 meter radius)				FACU spp. $\frac{120}{120}$ $\times 4 = \frac{180}{480}$
1	Prunus serotina	30	Υ	FACU	UPL spp. $\frac{120}{5}$ $\times 5 = \frac{400}{25}$
2.	RHAMNUS CATHARTICA	10	Y	FAC	Δ1 L 3pp
3.					Total 198 (A) 716 (B)
					Total 198 (A) 716 (B)
<u>4.</u> 5.					Drevelence Index = D/A = 2.646
					Prevalence Index = B/A = 3.616
6.					
7.					
8.					Hydrophytic Vegetation Indicators:
9.					☐ Yes ☑ No Rapid Test for Hydrophytic Vegetation
10.					☐ Yes ☑ No Dominance Test is > 50%
	Total Cover =	40			☐ Yes ☑ No Prevalence Index is ≤ 3.0 *
					☐ Yes ☑ No Morphological Adaptations (Explain) *
Herb Stratum (Pl	ot size: 2 meter radius)				☐ Yes ☑ No Problem Hydrophytic Vegetation (Explain) *
1.	RHAMNUS CATHARTICA	25	Υ	FAC	* Indicators of budric soil and watland budrology must be
2.	Prunus serotina	10	N	FACU	* Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
3.	Geum canadense	10	N	FAC	present, unless distarsed of problematic.
4.	Hackelia virginiana	5	N	FACU	Definitions of Vegetation Strata:
5.	ALLIARIA PETIOLATA	5	N	FACU	
6					Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast
7.					height (DBH), regardless of height.
8.					
9.					Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft.
10.					tall.
11.					
12.					Herb - All herbaceous (non-woody) plants, regardless of size, and
13.					woody plants less than 3.28 ft. tall.
14.					
14. 15.					Woody Vines - All woody vines greater than 3.28 ft. in height.
13.	Total Cover =	 55			VVOOdy VIIIes - / iii iissay viiiss g. satar aran s.25 it iii iisigiit
	Total Cover =	55			
\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	ture (Diet einer 40 martan matte				
vvoody vine Stra	tum (Plot size: 10 meter radius)				
1.					
2.					Uhadaa ahadia Masadada a Barasada (2017)
3.					Hydrophytic Vegetation Present ☐ Yes ☑ No
4.					
5.					
	Total Cover =	0			
Remarks:					
Additional Re	emarks:				

Additional Remarks.



WETLAND DETERMINATION DATA FORM Northcentral-Northeast Region

Project/Site:	Vilas Road						Stantec Project #:	193704691		Date:	10/13/16
Applicant:		Leanne Widen				County					Dane
Investigator #1:				Investi	igator #2:	Josh Su	lman			State:	Wisconsin
Soil Unit:	McHenry s				<u> </u>		I/WWI Classification:			Wetland ID:	W-1
Landform:	Footslope			Loc	al Relief:					Sample Point:	P6
Slope (%):	3	Latitude:	N/A		ongitude:			Datum:	N/A	Community ID:	Upland Ag Field
· · · · · · · · · · · · · · · · · · ·	drologic cond	ditions on the site ty					ain in remarks)	□ Yes ☑		Section:	17
		or Hydrology □ sig	•			(**************************************	Are normal circumsta			Township:	7N
•		or Hydrology □ na					□ Yes	☑No		Range:	11E
SUMMARY OF		or rigarology	tarany pr	obiomat	.0.					range.	112
Hydrophytic Ve		sent?		□ Yes	. ☑ No			Hydric Soils	Present?		☐ Yes ☑ No
Wetland Hydrol	_			☐ Yes						Within A Wetlar	
Remarks:			nalvsis				normal for this time o				
rtemants.	healthy cro		iriaryolo,	Cortaition	is are we	tter triair	normal for this time o	r year. Camp	ic point loc	atea iii soybean	Thola With Standing
HADBOLOCA	ricality or o	γ.									
HYDROLOGY											
_		ators (Check here i	if indicate	ors are r	not preser	nt ☑):					
Primary:		\\/a4a			DO 14/a4a	Ota:	l		Secondary:	DC Comford Call	Overelan
	A1 - Surface A2 - High Wa			님	B9 - Wate B13 - Aqu					B6 - Surface Soil B10 - Drainage P	
l H	A3 - Saturation			H	B15 - Aqu					B16 - Moss Trim	
 	B1 - Water M				C1 - Hydr	•				C2 - Dry-Season	
	B2 - Sedime						spheres on Living Roots			C8 - Crayfish Bur	
	B3 - Drift De	•					educed Iron				isible on Aerial Imagery
I H	B4 - Algal Ma B5 - Iron Dep			_	Co - Rece C7 - Thin		duction in Tilled Soils		님	D1 - Stunted or S D2 - Geomorphic	
l		on Visible on Aerial Ima	agerv	H	Other (Ex					D3 - Shallow Aqu	
		y Vegetated Concave S	-	_	(,			D4 - Microtopogra	
										D5 - FAC-Neutral	Test
Field Observat	ions:										
Surface Water	Present?	☐ Yes ☑ No	Depth:		(in.)			187 41 111		10 -	
Water Table Pr		☐ Yes ☑ No	Depth:		(in.)			Wetland Hy	drology Pr	resent?	Yes ☑ No
Saturation Pres	ent?	☐ Yes ☑ No	Depth:		(in.)						
Dosoribo Bosord	lad Data (etr	eam gauge, monitori				oue inene	etions) if available:		Historic Apri	al Imagery Reviev	N.
	•			•	otos, previ	ous mspe	Clions), ii avallable.		Thistoric Acri	al illiagery reviev	V
						م ام ما مالم	last of that almost the	_ :			
Remarks:	Review of a	aerial imagery for th	ie sampl	e point l	ocation in	dicated a	lack of wet signature	es in most nori	mal years.		
	Review of a	aerial imagery for th	ie sampl	e point lo	ocation in	dicated a	lack of wet signature	s in most nor	mal years.		
SOILS			ie sampl	e point lo	ocation in				mal years.		
SOILS Map Unit Name):	McHenry silt loam	ie sampl	e point lo	ocation in		lack of wet signature eries Drainage Class:		mal years.		
SOILS Map Unit Name Taxonomy (Sub	e: ogroup):	McHenry silt loam Typic Hapludalfs		•		S	eries Drainage Class:	well	•		
SOILS Map Unit Name Taxonomy (Sub	e: ogroup): otion (Describe to	McHenry silt loam Typic Hapludalfs		n the absence o	of indicators.) (Ty	S	eries Drainage Class:	well CS=Covered/Coated Sand	d Grains; Location: F	PL=Pore Lining, M=Matrix)	
SOILS Map Unit Name Taxonomy (Sub Profile Descrip	e: ogroup): otion (Describe to Bottom	McHenry silt loam Typic Hapludalfs the depth needed to document the in	dicator or confire	n the absence o	of indicators.) (Ty	Sope: C=Concentra	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, Re	well CS=Covered/Coated Sance dox Features	d Grains; Location: F	Г	Texture
SOILS Map Unit Name Taxonomy (Sub	e: ogroup): otion (Describe to Bottom Depth	McHenry silt loam Typic Hapludalfs	dicator or confirm	m the absence of Matrix	of indicators.) (Ty	Spe: C=Concentra	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, Re Re Color (Moist)	well CS=Covered/Coated Sance dox Features %	d Grains; Location: F	Location	(e.g. clay, sand, loam)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip	e: ogroup): otion (Describe to Bottom Depth 8	McHenry silt loam Typic Hapludalfs the depth needed to document the in	dicator or confire	n the absence o	of indicators.) (Ty	Sope: C=Concentra	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, Re	well CS=Covered/Coated Sance dox Features	d Grains; Location: F	Г	_
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth	e: ogroup): otion (Describe to Bottom Depth	McHenry silt loam Typic Hapludalfs the depth needed to document the in	dicator or confirm	m the absence of Matrix	of indicators.) (Ty	Spe: C=Concentra	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, Re Re Color (Moist)	well CS=Covered/Coated Sance dox Features %	d Grains; Location: F	Location	(e.g. clay, sand, loam)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	e: ogroup): otion (Describe to Bottom Depth 8	McHenry silt loam Typic Hapludalfs the depth needed to document the in Horizon	dicator or confirm	m the absence of Matrix (Moist) 3/2	of indicators.) (Type of the second of the s	pe: C=Concentra	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, Re Re Color (Moist)	well CS=Covered/Coated Sance dox Features % 2	d Grains; Location: F	Location	(e.g. clay, sand, loam)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8	e: ogroup): otion (Describe to Bottom Depth 8 12	McHenry silt loam Typic Hapludalfs the depth needed to document the in Horizon 1 2	Color 10YR 10YR	m the absence of Matrix (Moist) 3/2 2/1	of indicators.) (Type of the second s	pe: C=Concentra	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, Re Re Color (Moist)	well CS=Covered/Coated Sance dox Features % 2	d Grains; Location: F	Location	(e.g. clay, sand, loam)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 8	e: pgroup): ption (Describe to Bottom Depth 8 12 12	McHenry silt loam Typic Hapludalfs the depth needed to document the in Horizon 1 2 2	Color 10YR 10YR 10YR	Matrix (Moist) 3/2 2/1 3/1	% 98 90 10	Sope: C=Concentra	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, Re Color (Moist) 3/3	well CS=Covered/Coated Sand dox Features % 2	Type C	Location M 	(e.g. clay, sand, loam) silty clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 8 8 12	e: pgroup): ption (Describe to Bottom Depth 8 12 12 18	McHenry silt loam Typic Hapludalfs the depth needed to document the in Horizon 1 2 2 3	Color 10YR 10YR 10YR 10YR	m the absence of Matrix (Moist) 3/2 2/1 3/1 3/1	% 98 90 10 95	Sepe: C=Concentrate 10YR 10YR	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, Re Color (Moist) 3/3 3/6	well CS=Covered/Coated Sance dox Features % 2 5	Type C C	Location M M	(e.g. clay, sand, loam) silty clay loam clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 8 8 12	pgroup): ption (Describe to Depth 8 12 12 18 24	McHenry silt loam Typic Hapludalfs the depth needed to document the in Horizon 1 2 2 3	Color 10YR 10YR 10YR 10YR 10YR	m the absence of Matrix (Moist) 3/2 2/1 3/1 3/1	% 98 90 10 95	Sepe: C=Concentrate 10YR 10YR	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, Re Color (Moist) 3/3 3/6	well CS=Covered/Coated Sance dox Features % 2 5 10	Type C C	Location M M	(e.g. clay, sand, loam) silty clay loam clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 8 8 12	pgroup): Deption (Describe to Depth 8 12 12 18 24	McHenry silt loam Typic Hapludalfs the depth needed to document the in Horizon 1 2 2 3	Color 10YR 10YR 10YR 10YR 10YR 10YR	m the absence of Matrix (Moist) 3/2 2/1 3/1 3/1	% 98 90 10 95	De: C=Concentra 10YR 10YR 10YR 10YR 10YR	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, Re Color (Moist) 3/3 3/6 5/8	well CS=Covered/Coated Sance dox Features % 2 5 10	Type C C C	Location M M	(e.g. clay, sand, loam) silty clay loam clay loam clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 8 12 18	pgroup): ption (Describe to Depth 8 12 12 18 24	McHenry silt loam Typic Hapludalfs the depth needed to document the in Horizon 1 2 2 3 4	Color 10YR 10YR 10YR 10YR 10YR	m the absence of Matrix (Moist) 3/2 2/1 3/1 3/1 4/1	% 98 90 10 95 90	10YR 10YR 10YR	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, Re Color (Moist) 3/3 3/6 5/8	well CS=Covered/Coated Sand dox Features % 2 5 10	Type C C C	Location M M M	(e.g. clay, sand, loam) silty clay loam clay loam clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 8 12 18 NRCS Hydric	pgroup): ption (Describe to Depth 8 12 12 18 24	McHenry silt loam Typic Hapludalfs the depth needed to document the in Horizon 1 2 2 3 4 ndicators (check he	Color 10YR 10YR 10YR 10YR 10YR	m the absence of Matrix (Moist) 3/2 2/1 3/1 3/1 4/1 icators a	% 98 90 10 95 90 are not pre	10YR 10YR 10YR seent Seent	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, Re Color (Moist) 3/3 3/6 5/8	well CS=Covered/Coated Sance dox Features % 2 5 10 Indicator	Type C C C S for Proble	Location M M	(e.g. clay, sand, loam) silty clay loam clay loam clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 8 12 18 NRCS Hydric	pgroup): Dition (Describe to Bottom Depth 8 12 12 18 24 Soil Field In A1- Histosol A2 - Histic E	McHenry silt loam Typic Hapludalfs the depth needed to document the in Horizon 1 2 2 3 4 ndicators (check he	Color 10YR 10YR 10YR 10YR 10YR	m the absence of Matrix (Moist) 3/2 2/1 3/1 3/1 4/1 icators a	% 98 90 10 95 90 sre not pre	10YR 10YR 10YR 10YR esent value Below	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, Re Color (Moist) 3/3 3/6 5/8	well CS=Covered/Coated Sand dox Features % 2 5 10 Indicator	Type C C C C C	Location M M M matic Soils ¹	(e.g. clay, sand, loam) silty clay loam clay loam clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 8 12 18 NRCS Hydric	pgroup): Dtion (Describe to Bottom Depth 8 12 12 18 24 Soil Field In A1- Histosol A2 - Histic E A3 - Black H	McHenry silt loam Typic Hapludalfs the depth needed to document the in Horizon 1 2 2 3 4 ndicators (check here)	Color 10YR 10YR 10YR 10YR 10YR	m the absence of Matrix (Moist) 3/2 2/1 3/1 3/1 4/1 icators a	% 98 90 10 95 90 sre not pre S8 - Polyy S9 - Thin S11 - Higl	10YR 10YR 10YR 10YR 2sent ☑ value Belov Dark Surfa	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, Re Color (Moist) 3/3 3/6 5/8 Surface (LRR R, MLRA 149B) ace (LRR R, MLRA 149B) Sands	well CS=Covered/Coated Sand dox Features % 2 5 10 Indicator	Type C C C C C S for Proble A10 - 2 cm A16 - Coast S3 - 5cm Mi	Location M M M matic Soils Muck (LRR K, L, MLRA Prairie Redox (LRR Lucky Peat of Peat	(e.g. clay, sand, loam) silty clay loam clay loam clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 8 12 18 NRCS Hydric	Bottom Depth 8 12 12 18 24 Soil Field Ir A1- Histosol A2 - Histic E A3 - Black H A4 - Hydroge	McHenry silt loam Typic Hapludalfs the depth needed to document the in Horizon 1 2 2 3 4 ndicators (check here) pipedon istic en Sulfide	Color 10YR 10YR 10YR 10YR 10YR	m the absence of Matrix (Moist) 3/2 2/1 3/1 3/1 4/1 icators a	% 98 90 10 95 90 see not presser S8 - Polyw S9 - Thin S11 - High F1 - Loam	10YR 10YR 10YR 10YR esent value Below Dark Surfant Chroma	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, Re Color (Moist) 3/3 3/6 5/8 "" W Surface (LRR R, MLRA 149B) ace (LRR R, MLRA 149B) Sands Mineral (LRR K, L)	well CS=Covered/Coated Sand dox Features % 2 5 10 Indicator	Type C C C C C C A10 - 2 cm I A16 - Coast S3 - 5cm Mt S7 - Dark S	Location M M M matic Soils Muck (LRR K, L, MLRA Prairie Redox (LRR Lucky Peat of Peat urface (LRR K, L, M)	(e.g. clay, sand, loam) silty clay loam clay loam clay loam (RK, L, R) (LRR K, L, R)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 8 12 18 NRCS Hydric	pgroup): Dtion (Describe to Bottom Depth 8 12 12 18 24 Soil Field In A1- Histosol A2 - Histic El A3 - Black HI A4 - Hydroge A5 - Stratified	McHenry silt loam Typic Hapludalfs the depth needed to document the in Horizon 1 2 2 3 4 ndicators (check here) pipedon istic en Sulfide d Layers	Color 10YR 10YR 10YR 10YR ere if indi	m the absence of Matrix (Moist) 3/2 2/1 3/1 3/1 4/1 icators a	% 98 90 10 95 90 sre not pre S8 - Polyv S9 - Thin S11 - High F1 - Loam F2 - Loam	10YR 10YR 10YR 10YR 20 10YR 10YR 10YR 10YR 10YR 10YR 10YR 10Y	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, Re Color (Moist) 3/3 3/6 5/8): w Surface (LRR R, MLRA 149B) ace (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix	well CS=Covered/Coated Sance dox Features % 2 5 10 Indicator	Type C C C C C C S for Proble A10 - 2 cm I A16 - Coast S3 - 5 cm Mi S7 - Dark S S8 - Polyval	Location M M M matic Soils Muck (LRR K, L, MLRA Prairie Redox (LRR Lucky Peat of Peat urface (LRR K, L, M) ue Below Surface	(e.g. clay, sand, loam) silty clay loam clay loam clay loam (LRR K, L, R) (LRR K, L, R)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 8 8 12 18 NRCS Hydric	pgroup): Dtion (Describe to Bottom Depth 8 12 12 18 24 Soil Field In A1- Histosol A2 - Histic El A3 - Black HI A4 - Hydroge A5 - Stratified	McHenry silt loam Typic Hapludalfs the depth needed to document the in Horizon 1 2 2 3 4 ndicators (check he pipedon istic en Sulfide d Layers ed Below Dark Surface	Color 10YR 10YR 10YR 10YR ere if indi	m the absence of Matrix (Moist) 3/2 2/1 3/1 3/1 4/1 icators a	% 98 90 10 95 90 see not presser S8 - Polyw S9 - Thin S11 - High F1 - Loam	10YR 10YR 10YR 10YR 10YR 10YR 10YR 10YR 10YR	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, Re Color (Moist) 3/3 3/6 5/8 "" W Surface (LRR R, MLRA 149B) Sace (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix (well CS=Covered/Coated Sand dox Features % 2 5 10 Indicator	Type C C C C C S for Proble A10 - 2 cm A16 - Coast S3 - 5cm Mi S7 - Dark Si S8 - Polyval S9 - Thin Da	Location M M M M matic Soils Muck (LRR K, L, MLRA Prairie Redox (LRR Lucky Peat of Peat urface (LRR K, L, M) ue Below Surface ark Surface (LRR K, L	(e.g. clay, sand, loam) silty clay loam clay loam clay loam (LAPB) R K, L, R) (LRR K, L, R)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 8 12 18 NRCS Hydric	Bottom Depth 8 12 12 18 24 Soil Field Ir A1- Histosol A2 - Histic E A3 - Black H A4 - Hydroge A5 - Stratified A11 - Deplete	McHenry silt loam Typic Hapludalfs the depth needed to document the in Horizon 1 2 2 3 4 ndicators (check here) pipedon istic en Sulfide d Layers ed Below Dark Surface Dark Surface	Color 10YR 10YR 10YR 10YR ere if indi	m the absence of Matrix (Moist) 3/2 2/1 3/1 3/1 4/1 icators a	% 98 90 10 95 90 are not pre S8 - Polyx S9 - Thin S11 - High F1 - Loam F2 - Loam F3 - Deple	10YR 10YR 10YR 10YR 20 10YR 10YR 10YR 10YR 10YR 10YR 10YR 10Y	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, Re Color (Moist) 3/3 3/6 5/8 N Surface (LRR R, MLRA 149B) Sace (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix Crface	well CS=Covered/Coated Sance dox Features % 2 5 10 Indicator	Type C C C C C C A10 - 2 cm I A16 - Coast S3 - 5 cm Mi S7 - Dark Si S8 - Polyval S9 - Thin Da F12 - Iron-M	Location M M M matic Soils Muck (LRR K, L, MLRA Prairie Redox (LRR Lucky Peat of Peat urface (LRR K, L, M) ue Below Surface	(e.g. clay, sand, loam) silty clay loam clay loam clay loam (LRR K, L, R) (LRR K, L, R) (LRR K, L, R)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 8 8 12 18 NRCS Hydric	Bottom Depth 8 12 12 18 24 Soil Field In A1- Histosol A2 - Histic E A3 - Black H A4 - Hydroge A5 - Stratified A12 - Thick E S1 - Sandy N S4 - Sandy N	McHenry silt loam Typic Hapludalfs the depth needed to document the in Horizon 1 2 2 3 4 ndicators (check here) pipedon istic en Sulfide d Layers ed Below Dark Surface Dark Surface Muck Mineral Gleyed Matrix	Color 10YR 10YR 10YR 10YR ere if indi	m the absence of Matrix (Moist) 3/2 2/1 3/1 3/1 4/1 icators a	% 98 90 10 95 90	10YR 10YR 10YR 10YR 10YR 10YR 10YR Casent ☑ Value Belov Dark Surfan Chroma The Mucky May Gleyed Exted Matrix Exted Dark Surfan The	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, Re Color (Moist) 3/3 3/6 5/8 "" "Surface (LRR R, MLRA 149B) Sace (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix Crface Surface	well CS=Covered/Coated Sand dox Features % 2 5 10 Indicator	Type C C C C C C A10 - 2 cm I A16 - Coast S3 - 5cm Mt S7 - Dark S S8 - Polyval S9 - Thin Da F12 - Iron-M F19 - Piedm F21 - Red P	Location M M M matic Soils Muck (LRR K, L, MLRA Prairie Redox (LRR Lucky Peat of Peat urface (LRR K, L, M) ue Below Surface ark Surface (LRR K, L langanese Masses cont Floodplain Soil	(e.g. clay, sand, loam) silty clay loam clay loam clay loam (IA9B) R K, L, R) (LRR K, L, R) (LRR K, L, R) (LRR K, L, R) (S (LRR K, L, R) ills (MLRA 149B)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 8 12 18 NRCS Hydric	Bottom Depth 8 12 12 18 24 Soil Field In A1- Histosol A2 - Histic E A3 - Black H A4 - Hydroge A5 - Stratified A12 - Thick E S1 - Sandy N S4 - Sandy N S4 - Sandy N	McHenry silt loam Typic Hapludalfs the depth needed to document the in Horizon 1 2 2 3 4 ndicators (check here) pipedon istic en Sulfide d Layers ed Below Dark Surface Dark Surface Muck Mineral Gleyed Matrix Redox	Color 10YR 10YR 10YR 10YR ere if indi	m the absence of Matrix (Moist) 3/2 2/1 3/1 3/1 4/1 icators a	% 98 90 10 95 90	10YR 10YR 10YR 10YR 10YR 10YR 10YR Casent ☑ Value Belov Dark Surfan Chroma The Mucky May Gleyed Exted Matrix Exted Dark Surfan The	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, Re Color (Moist) 3/3 3/6 5/8 "" "Surface (LRR R, MLRA 149B) Sace (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix Crface Surface	well CS=Covered/Coated Sance dox Features % 2 5 10 Indicator	Type C C C C C C C A16 - Coast S3 - 5cm Mi S7 - Dark Si S8 - Polyval S9 - Thin Da F12 - Iron-M F19 - Piedm F21 - Red P TA6 - Mesic	Location M M M M M matic Soils Muck (LRR K, L, MLRA Prairie Redox (LRR Lucky Peat of Peat Lucky Peat L	(e.g. clay, sand, loam) silty clay loam clay loam clay loam (LRR K, L, R) (S (LRR K, L, R) (S (LRR K, L, R) (S (MLRA 149B)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 8 8 12 18 NRCS Hydric	Bottom Depth 8 12 12 18 24 Soil Field Ir A1- Histosol A2 - Histic E A3 - Black H A4 - Hydroge A5 - Stratified A11 - Deplete A12 - Thick E S1 - Sandy N S4 - Sandy N S4 - Sandy N S6 - Stripped	McHenry silt loam Typic Hapludalfs the depth needed to document the in Horizon 1 2 2 3 4 ndicators (check he pipedon istic en Sulfide d Layers ed Below Dark Surface Muck Mineral Gleyed Matrix Redox d Matrix	Color 10YR 10YR 10YR 10YR ere if indi	m the absence of Matrix (Moist) 3/2 2/1 3/1 3/1 4/1 icators a	% 98 90 10 95 90	10YR 10YR 10YR 10YR 10YR 10YR 10YR Casent ☑ Value Belov Dark Surfan Chroma The Mucky May Gleyed Exted Matrix Exted Dark Surfan The	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, Re Color (Moist) 3/3 3/6 5/8 "" "Surface (LRR R, MLRA 149B) Sace (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix Crface Surface	well CS=Covered/Coated Sand dox Features % 2 5 10 Indicator	Type C C C C C C A10 - 2 cm I A16 - Coast S3 - 5cm Mt S7 - Dark St S8 - Polyval S9 - Thin Da F12 - Iron-M F19 - Piedm F21 - Red P TA6 - Mesic TF12 - Very	Location M M M M matic Soils Muck (LRR K, L, MLRA Prairie Redox (LRR Lucky Peat of Peat urface (LRR K, L, M) ue Below Surface ark Surface (LRR K, L langanese Masses ont Floodplain Soil arent Material Spodic (MLRA 144A, 1) Shallow Dark Sur	(e.g. clay, sand, loam) silty clay loam clay loam clay loam (LRR K, L, R) (S (LRR K, L, R) (S (LRR K, L, R) (S (MLRA 149B)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 8 12 18 NRCS Hydric	Bottom Depth 8 12 12 18 24 Soil Field Ir A1- Histosol A2 - Histic E A3 - Black H A4 - Hydroge A5 - Stratified A11 - Deplete A12 - Thick E S1 - Sandy N S4 - Sandy N S4 - Sandy N S6 - Stripped	McHenry silt loam Typic Hapludalfs the depth needed to document the in Horizon 1 2 2 3 4 ndicators (check here) pipedon istic en Sulfide d Layers ed Below Dark Surface Dark Surface Muck Mineral Gleyed Matrix Redox	Color 10YR 10YR 10YR 10YR ere if indi	m the absence of Matrix (Moist) 3/2 2/1 3/1 3/1 4/1 icators a	% 98 90 10 95 90	10YR 10YR 10YR 10YR 10YR 10YR 10YR Casent ☑ Value Belov Dark Surfan Chroma The Mucky May Gleyed Exted Matrix Exted Dark Surfan The	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, Re Color (Moist) 3/3 3/6 5/8 "" "Surface (LRR R, MLRA 149B) Sace (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix Crface Surface	well CS=Covered/Coated Sance dox Features % 2 5 10 Indicator	Type C C C C C C C A10 - 2 cm I A16 - Coast S3 - 5cm Mi S7 - Dark Si S8 - Polyval S9 - Thin Da F12 - Iron-M F19 - Piedm F21 - Red P TA6 - Mesic TF12 - Very Other (Expla	Location M M M M M matic Soils Muck (LRR K, L, MLRA Prairie Redox (LRR Lucky Peat of Peat Lucky Peat L	(e.g. clay, sand, loam) silty clay loam clay loam clay loam 149B) R K, L, R) (LRR K, L, R) (LRR K, L, R) ils (MLRA 149B) 145, 149B) face
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 8 12 18 NRCS Hydric	Bottom Depth 8 12 12 18 24 Soil Field Ir A1- Histosol A2 - Histic E A3 - Black H A4 - Hydroge A5 - Stratified A11 - Deplete A12 - Thick E S1 - Sandy N S4 - Sandy N S4 - Sandy N S6 - Stripped	McHenry silt loam Typic Hapludalfs the depth needed to document the in Horizon 1 2 2 3 4 ndicators (check he pipedon istic en Sulfide d Layers ed Below Dark Surface Muck Mineral Gleyed Matrix Redox d Matrix	Color 10YR 10YR 10YR 10YR ere if indi	m the absence of Matrix (Moist) 3/2 2/1 3/1 3/1 4/1 icators a	% 98 90 10 95 90	10YR 10YR 10YR 10YR 10YR 10YR 10YR Casent ☑ Value Belov Dark Surfan Chroma The Mucky May Gleyed Exted Matrix Exted Dark Surfan The	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, Re Color (Moist) 3/3 3/6 5/8 "" "Surface (LRR R, MLRA 149B) Sace (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix Crface Surface	well CS=Covered/Coated Sance dox Features % 2 5 10 Indicator Indicator Indicator Indicator	Type C C C C C C C A10 - 2 cm I A16 - Coast S3 - 5cm Mi S7 - Dark Si S8 - Polyval S9 - Thin Da F12 - Iron-M F19 - Piedm F21 - Red P TA6 - Mesic TF12 - Very Other (Expla	Location M M M M matic Soils Muck (LRR K, L, MLRA Prairie Redox (LRR Lucky Peat of Peat Lucky Peat o	(e.g. clay, sand, loam) silty clay loam clay loam clay loam 149B) R K, L, R) (LRR K, L, R) (LRR K, L, R) ils (MLRA 149B) 145, 149B) face
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 8 8 12 18 NRCS Hydric	Bottom Depth 8 12 12 18 24 Soil Field In A1- Histosol A2 - Histic E A3 - Black H A4 - Hydroge A5 - Stratified A12 - Thick E S1 - Sandy N S4 - Sandy N S4 - Sandy N S4 - Sandy N S5 - Sandy N S6 - Stripped S7 - Dark Su	McHenry silt loam Typic Hapludalfs the depth needed to document the in Horizon 1 2 2 3 4 ndicators (check here) pipedon istic en Sulfide d Layers ed Below Dark Surface Dark Surface Muck Mineral Gleyed Matrix Redox d Matrix Irface (LRR R, MLRA 149B)	Color 10YR 10YR 10YR 10YR ere if indi	m the absence of Matrix (Moist) 3/2 2/1 3/1 3/1 4/1 icators a	% 98 90 10 95 90	10YR 10YR 10YR 10YR 10YR 10YR 10YR Casent ☑ Value Belov Dark Surfan Chroma The Mucky May Gleyed Exted Matrix Exted Dark Surfan The	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, Re Color (Moist) 3/3 3/6 5/8 "" "Surface (LRR R, MLRA 149B) Sace (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix Crface Surface	well CS=Covered/Coated Sance dox Features % 2 5 10 Indicator Indicator Indicator Indicator	Type C C C C C C C C A10 - 2 cm I A16 - Coast S3 - 5cm Mt S7 - Dark St S8 - Polyval S9 - Thin Da F12 - Iron-M F19 - Piedm F21 - Red P TA6 - Mesic TF12 - Very Other (Expla of hydrophytic veget or problematic.	Location M M M M matic Soils Muck (LRR K, L, MLRA Prairie Redox (LRR Lucky Peat of Peat Lucky Peat o	(e.g. clay, sand, loam) silty clay loam clay loam clay loam 149B) R K, L, R) (LRR K, L, R) (LRR K, L, R) ils (MLRA 149B) 145, 149B) face



WETLAND DETERMINATION DATA FORM Northcentral-Northeast Region

Project/Site: Vilas Road Wetland ID: W-1 Sample Point: P6

VEGETATION	(Species identified in all uppercase are non-na	tive spec	cies.)		
Tree Stratum (Pl	ot size: 10 meter radius)	0/ 0	- · ·	1 101 1	Deminance Test Werkshoot
1.	<u>Species Name</u>	% Cover	<u>Dominant</u>	Ind.Status	Dominance Test Worksheet
2.					Number of Dominant Species that are OBL, FACW, or FAC: 0 (A)
3.					(7.ty
4.					Total Number of Dominant Species Across All Strata: 1 (B)
5.					
6.					Percent of Dominant Species That Are OBL, FACW, or FAC:(A/B)
7.					
8.					Prevalence Index Worksheet
9. 10.					Total % Cover of: Multiply by:
10.	Total Cover =	0			OBL spp. 0 x 1 = 0
	Total Covel –	U			FACW spp. $\begin{array}{c ccccc} & 0 & & x & 2 = & & 0 \\ & & & & & & & & & & & & & & & &$
Sapling/Shrub Str	ratum (Plot size: 5 meter radius)				FACU spp. 0 x 4 = 0
1.					UPL spp. $80 x 5 = 400$
2.					· · · · · · · · · · · · · · · · · · ·
3.					Total <u>80</u> (A) <u>400</u> (B)
4.					
5.					Prevalence Index = B/A = 5.000
6.					
7.					Hydrophytic Vegetation Indicators
8. 9.					Hydrophytic Vegetation Indicators:
10.					☐ Yes☑ No☐ Yes☑ No☐ Dominance Test is > 50%
10.	Total Cover =	0			☐ Yes ☑ No Prevalence Index is ≤ 3.0 *
	rotal oove.	· ·			☐ Yes ☑ No Morphological Adaptations (Explain) *
Herb Stratum (Pl	ot size: 2 meter radius)				☐ Yes ☑ No Problem Hydrophytic Vegetation (Explain) *
1.	GLYCINE MAX	80	Υ	UPL	
2.					* Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
3.					
4.					Definitions of Vegetation Strata:
5.					Trac
6 7.					Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height.
8.	_ 				
9.					Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft.
10.					tall.
11.					
12.					Herb - All herbaceous (non-woody) plants, regardless of size, and
13.					woody plants less than 3.28 ft. tall.
14.					
15.					Woody Vines - All woody vines greater than 3.28 ft. in height.
	Total Cover =	80			
Woody Vino Strat	um (Plot size: 10 meter redius)				
1.	um (Plot size: 10 meter radius)				
2.					
3.					Hydrophytic Vegetation Present ☐ Yes ☑ No
4.					
5.					
	Total Cover =	0			
Remarks:	Soybeans at the sample point are 3 fee	t tall, wi	th no cro	p stress a	and no weeds present.
A 31-3241					
Additional Re	marks:				

Additional Remarks.



WETLAND DETERMINATION DATA FORM Northcentral-Northeast Region

Project/Site:	Vilas Road						Stantec Project #:	193704691		Date:	10/13/16	
Applicant:	Reed and I			,			County:	Dane				
Investigator #1:				Invest	igator #2:	Josh Su	ılman			State:	Wisconsin	
Soil Unit:	McHenry s						/I/WWI Classification:	T3K		Wetland ID:	W-1	
Landform:	Depression			Loc	cal Relief:					Sample Point:	P7	
Slope (%):	0	Latitude:	N/A	L	ongitude:	N/A		Datum:	N/A	Community ID:	Forested Wetland	
· · · · · · · · · · · · · · · · · · ·		ditions on the site ty					ain in remarks)	☐ Yes ☑		Section:	17	
		or Hydrology □ sig	•			(,	Are normal circumst			Township:	7N	
•		or Hydrology □ nat		•			□ Yes	□No		Range:	11E	
SUMMARY OF		or riyarology nat	tarany pr	obioina	.10 .					range.	112	
Hydrophytic Ve		sent?		✓ Yes	s ⊓ No			Hydric Soils	Dresent?			
Wetland Hydro	_			✓ Yes	_					Within A Wetla		
Remarks:			nalveie			ttor than	normal for this time o				e of extensive forested	
Remarks.	wetland.	esuits of a VVETS a	iriarysis,	Conditio	iis are we	ller man		ı year. Sampi	e point loca	aleu al east eug	je di exterisive idrestet	
	welland.											
HYDROLOGY												
Wetland Hydr	ology Indic	ators (Check here i	if indicat	ors are r	not preser	nt □):						
<u>Primary</u>				_		.			Secondary:			
	A1 - Surface				B9 - Wate					B6 - Surface Soil		
	A2 - High Wa A3 - Saturati				B13 - Aqu B15 - Mar					B10 - Drainage P B16 - Moss Trim		
	B1 - Water N				C1 - Hydr	•			H	C2 - Dry-Season		
	B2 - Sedime				-	_	spheres on Living Roots			C8 - Crayfish Bur		
	B3 - Drift De						educed Iron				isible on Aerial Imagery	
	B4 - Algal Ma				C6 - Rece	ent Iron Re	eduction in Tilled Soils			D1 - Stunted or S	0 1	
	B5 - Iron Dep	•			C7 - Thin				\Box	D2 - Geomorphic		
		on Visible on Aerial Ima			Other (Ex	plain in Re	emarks)			D3 - Shallow Aqu		
	B8 - Sparsely	y Vegetated Concave S	Surface							D4 - Microtopogra		
							T			D5 - FAC-Neutra		
Field Observat	tions:											
Surface Water	Present?	☐ Yes ☑ No	Depth:		(in.)			Wetland Hy	drology D	resent?	Yes □ No	
Water Table Pr	esent?		Depth:	20	(in.)			wettand my	diology P	ieseiit:	163 110	
Saturation Pres	sent?		Depth:	0	(in.)							
Describe Record	led Data (str	eam gauge, monitori	na well :	aerial nho	ntos nrevi	ous inspe	Lections) if available:		Historic Aer	rial Imagery Reviev	N	
Remarks:	Jou Data (oti	gaage, memer		<u></u>	, p. o		outerie), il available.				·	
Nemarks.												
0011.0												
SOILS		B.4. 1.1. 216.1										
Map Unit Name		McHenry silt loam				5	eries Drainage Class:	well				
Taxonomy (Sub	<u> </u>	Typic Hapludalfs										
		the depth needed to document the inc	dicator or confir			pe: C=Concentr	ation, D=Depletion, RM=Reduced Matrix,			PL=Pore Lining, M=Matrix)		
Тор	Bottom			Matrix			Re	dox Features	}	•	Texture	
Depth	Depth	Horizon	Color	(Moist)	%		Color (Moist)	%	Type	Location	(e.g. clay, sand, loam	
0	20	1	10YR	2/1	100						mucky loam	
20	26	2	5Y	5/1	98	10YR	5/6	2	С	PL	clay loam	
		ndicators (check he	ere if ind		•		•		rs for Proble	ematic Soils ¹		
	A1- Histosol						w Surface (LRR R, MLRA 149B)			Muck (LRR K, L, MLRA		
	A2 - Histic E						ace (LRR R, MLRA 149B)	☐ A16 - Coast Prairie Redox (LRR K, L, R)				
	A3 - Black H				S11 - Higl					ucky Peat of Peat	(LRR K, L, R)	
l H	A4 - Hydroge					-	Mineral (LRR K, L)	닏		Surface (LRR K, L, M)		
	A5 - Stratified	•			F2 - Loan			님	•	lue Below Surface		
		ed Below Dark Surface	;		F3 - Deple F6 - Redo			S9 - Thin Dark Surface (LRR K, L)F12 - Iron-Manganese Masses (LRR K, L, R)				
	S1 - Sandy N				F7 - Deple			H		nont Floodplain So		
l H	•	Gleyed Matrix			F8 - Redo			H		Parent Material	113 (MLRA 149B)	
]	S5 - Sandy F	=			10-11600	v pehies	JIOHJ			Spodic (MLRA 144A,	145 149R\	
l H	S6 - Stripped							H		/ Shallow Dark Sur		
	• •	I rface (LRR R, MLRA 149B)							•	ain in Remarks)		
	_ 5	,, <u>.</u>							of hydrophytic vege	etation and wetland hydrology	y must be present, unless	
Restrictive Layer				_					or problematic.		.,	
(If Observed)	Type:	N/A		Depth:	N/A			Hydric Soil	Present?	✓	Yes □ No	
Remarks:										y are similar to		



Project/Site: Vilas Road Wetland ID: W-1 Sample Point: P7

VEGETATION	(Species identified in all uppercase are non-na	ative spe	cies.)		
Tree Stratum (F	Plot size: 10 meter radius)				
	<u>Species Name</u>		<u>Dominant</u>	Ind.Status	Dominance Test Worksheet
1.	Acer negundo	60	Υ	FAC	
2.	RHAMNUS CATHARTICA	10	N	FAC	Number of Dominant Species that are OBL, FACW, or FAC: 4 (A)
3.					
4.					Total Number of Dominant Species Across All Strata: 4 (B)
5.					
6.					Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)
7.					
8.					Prevalence Index Worksheet
9.					Total % Cover of: Multiply by:
10.	Total Cayer -	70			OBL spp. $0 \times 1 = 0$
	Total Cover =	70			FACW spp. 29
Capling/Chruh C	treture (Diet einer Emeter redice)				FAC spp. $\begin{array}{cccccccccccccccccccccccccccccccccccc$
Sapiing/Shrub S	tratum (Plot size: 5 meter radius) RHAMNUS CATHARTICA	25	Υ	FAC	FACU spp. $\begin{array}{cccccccccccccccccccccccccccccccccccc$
2.	Sambucus nigra	4		FACW	UPL spp
3.					Total 176 (A) 509 (B)
3. 4.					Total <u>176</u> (A) <u>509</u> (B)
 5.					Prevalence Index = B/A = 2.892
6.					1 10 validities index = B// =
7.					
8.					Hydrophytic Vegetation Indicators:
9.					☐ Yes ☑ No Rapid Test for Hydrophytic Vegetation
10.					✓ Yes ☐ No Dominance Test is > 50%
	Total Cover =	29			✓ Yes ☐ No Prevalence Index is ≤ 3.0 *
					☐ Yes ☑ No Morphological Adaptations (Explain) *
Herb Stratum (P	lot size: 2 meter radius)				☐ Yes ☑ No Problem Hydrophytic Vegetation (Explain) *
1.	Urtica dioica	40	Υ	FAC	
2.	PHALARIS ARUNDINACEA	20	Υ	FACW	* Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
3.	Pilea pumila	5	N	FACW	present, unless disturbed of problematic.
4.	ALLIARIA PETIOLATA	5	N	FACU	Definitions of Vegetation Strata:
5.	Galium aparine	5	N	FACU	
6	Geum canadense	2	N	FAC	Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast
7.					height (DBH), regardless of height.
8.					
9.					Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft. tall.
10.					tan.
11.					
12.					Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft. tall.
13.					, ,
14.					All mando dinas annotas trans 0.00 ft to be take
15.					Woody Vines - All woody vines greater than 3.28 ft. in height.
	Total Cover =	77			
Manaka Vina Ota	otives (Diet einer 40 meeten verdige)				
vvoody vine Stra	atum (Plot size: 10 meter radius)				
2.					
3.					Hydrophytic Vogetation Present Ves Ves
3. 4.					Hydrophytic Vegetation Present ✓ Yes No
4. 5.					
J.	Total Cover =	0			
Remarks:	Bare ground/moss covers 50% of herb		at samp	le point	
ramains.	Dare ground/moss covers 50 /6 or nerb	Jualuli	ι αι σαιτιμ	ιο ροπι.	
Additional D	omarke:				
Additional Re	tiliai No.				

Additional Remarks.



Project/Site: Applicant:	Vilas Road Reed and L	_eanne Widen					Stantec Project #:	193704691		Date: County:	10/13/16 Dane
Investigator #1:				Investi	gator #2:	Josh Su	lman			State:	Wisconsin
Soil Unit:	McHenry si						/I/WWI Classification:	none		Wetland ID:	adj. to W-1
Landform:	Footslope			Loc	al Relief:	Linear				Sample Point:	P8
Slope (%):	3	Latitude:	N/A	Lo	ongitude:	N/A		Datum:	N/A	Community ID:	Upland Ag Field
Are climatic/hyc	drologic cond	ditions on the site ty	pical for	this time	e of year?	(If no, expla	ain in remarks)	□ Yes ☑	No	Section:	17
•		or Hydrology ☐ sig	-				Are normal circumsta	•	t?	Township:	7N
		or Hydrology □ nat	turally pr	oblemati	ic?		☐ Yes	⊡No		Range:	11E
SUMMARY OF											
Hydrophytic Ve	_			□ Yes				Hydric Soils			☑ Yes ☐ No
Wetland Hydrol			n alvaia	☐ Yes						Within A Wetlar	
Remarks:			inaiysis,	conditior	ns are we	tter than	normal for this time of	r year. Samp	ie point ioc	ated in soybean	field with standing,
	healthy cro	φ.									
HYDROLOGY											
		ators (Check here i	if indicate	ors are n	ot preser	nt ☑):					
<u>Primary:</u>	: A1 - Surface	Water			B9 - Wate	r Stained	Leaves		Secondary:	B6 - Surface Soil	Cracke
_	A2 - High Wa			H	B13 - Aqu				H	B10 - Drainage Pa	
	A3 - Saturation				B15 - Mar	l Deposits				B16 - Moss Trim	Lines
	B1 - Water M				C1 - Hydro					C2 - Dry-Season	
	B2 - Sedimer B3 - Drift Dep	•					spheres on Living Roots educed Iron			C8 - Crayfish Bur	rows isible on Aerial Imagery
	B4 - Algal Ma	•					duction in Tilled Soils			D1 - Stunted or S	0,
	B5 - Iron Dep	oosits			C7 - Thin					D2 - Geomorphic	
		on Visible on Aerial Ima	0 ,		Other (Ex	plain in Re	emarks)			D3 - Shallow Aqui	
"	Bo - Sparsery	y Vegetated Concave S	burrace							D4 - Microtopogra D5 - FAC-Neutral	-
Field Observat	ions:								_		
Surface Water		☐ Yes ☑ No	Depth:		(in.)						
Water Table Pro		☐ Yes ☑ No	Depth:		(in.)			Wetland Hy	drology Pr	resent?	Yes ☑ No
Saturation Pres		☐ Yes ☑ No	Depth:		(in.)						
					. ,	oue inene	etions) if available:		Historia Apri	ial Imagany Bayiay	,
Describe Necord	icu Dala tali										
							ctions), if available:	n moet norma		al Imagery Review	
Remarks:							ck of wet signatures ir	n most norma		ai iiiagery Review	'
Remarks:								n most norma		ai iiiagery Review	
Remarks:	Review of a	aerial imagery for th				nows a la	ck of wet signatures ir			ai illiagery Review	
Remarks:	Review of a					nows a la				ai iiiagery Review	
Remarks: SOILS Map Unit Name Taxonomy (Sub	Review of a	aerial imagery for the McHenry silt loam Typic Hapludalfs	e sampl	e point lo	ocation sh	nows a la	ck of wet signatures ir	well	ıl years.		
Remarks: SOILS Map Unit Name Taxonomy (Sub	Review of a	aerial imagery for the McHenry silt loam Typic Hapludalfs	e sampl	e point lo	ocation sh	nows a la	ck of wet signatures in eries Drainage Class:	well	d Grains; Location: F		Texture
Remarks: SOILS Map Unit Name Taxonomy (Sub	Review of a	aerial imagery for the McHenry silt loam Typic Hapludalfs	dicator or confin	e point lo	ocation sh	nows a la	ck of wet signatures in eries Drainage Class:	well CS=Covered/Coated Sand	d Grains; Location: F		Texture
Remarks: SOILS Map Unit Name Taxonomy (Sub Profile Descrip	Review of a	McHenry silt loam Typic Hapludalfs the depth needed to document the in	dicator or confin	n the absence o	of indicators.) (Type	nows a la	ck of wet signatures in eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, C	well CS=Covered/Coated Sand dox Features	d Grains; Location: F	PL=Pore Lining, M=Matrix)	Texture
Remarks: SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth	Review of a e: ogroup): otion (Describe to Bottom Depth	McHenry silt loam Typic Hapludalfs the depth needed to document the in	dicator or confin	m the absence of Matrix (Moist)	ocation shows indicators.) (Type %	S concentra	ck of wet signatures in eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, C Red Color (Moist)	well CS=Covered/Coated Sand dox Features %	d Grains; Location: F	PL=Pore Lining, M=Matrix) Location	Texture (e.g. clay, sand, loam)
Remarks: SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	Review of a series	McHenry silt loam Typic Hapludalfs the depth needed to document the in Horizon	dicator or confirmation Color 10YR	m the absence of Matrix (Moist) 3/2	of indicators.) (Type 90	S concentration of the second	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, C Red Color (Moist) 3/3	well CS=Covered/Coated Sanc dox Features % 4	d Grains; Location: F	PL=Pore Lining, M=Matrix) Location M	Texture (e.g. clay, sand, loam) silt loam
Remarks: SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 10	Review of a second control	McHenry silt loam Typic Hapludalfs the depth needed to document the in Horizon 1 2	dicator or confirm Color 10YR 10YR	m the absence of Matrix (Moist) 3/2 4/2	of indicators.) (Type 90 95	Se: C=Concentra	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, Class Red Color (Moist) 3/3 4/6	well CS=Covered/Coated Sand dox Features % 4 5	d Grains; Location: F Type C C	PL=Pore Lining, M=Matrix) Location M M	Texture (e.g. clay, sand, loam) silt loam silty clay loam
Remarks: SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 10	Review of a series	McHenry silt loam Typic Hapludalfs the depth needed to document the in Horizon 1 2	dicator or confirm Color 10YR 10YR	m the absence of Matrix (Moist) 3/2 4/2	of indicators.) (Type 90 95	Se: C=Concentra 10YR 10YR 10YR	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, Class Red Color (Moist) 3/3 4/6	well CS=Covered/Coated Sance dox Features % 4 5 5	Type C C C	PL=Pore Lining, M=Matrix) Location M M	Texture (e.g. clay, sand, loam) silt loam silty clay loam
Remarks: SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 10 18	Review of a series	McHenry silt loam Typic Hapludalfs the depth needed to document the in Horizon 1 2 3	dicator or confirm Color 10YR 10YR	m the absence of Matrix (Moist) 3/2 4/2 5/1	of indicators.) (Type 90 95 95 95	Se: C=Concentra 10YR 10YR 10YR	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, Class Red Color (Moist) 3/3 4/6 5/8	well CS=Covered/Coated Sanc dox Features % 4 5 5	Type C C C	Location M M M	Texture (e.g. clay, sand, loam) silt loam silty clay loam clay loam
Remarks: SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 10 18	Review of a series	McHenry silt loam Typic Hapludalfs the depth needed to document the in Horizon 1 2 3	color 10YR 10YR 10YR	m the absence of Matrix (Moist) 3/2 4/2 5/1	of indicators.) (Type 90 95 95	some: C=Concentra 10YR 10YR 10YR	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, Class Red Color (Moist) 3/3 4/6 5/8	well CS=Covered/Coated Sand dox Features % 4 5	Type C C C	PL=Pore Lining, M=Matrix) Location M M M	Texture (e.g. clay, sand, loam) silt loam silty clay loam clay loam
Remarks: SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 10 18	Review of a series	McHenry silt loam Typic Hapludalfs the depth needed to document the in Horizon 1 2 3	color Color 10YR 10YR 10YR	m the absence of Matrix (Moist) 3/2 4/2 5/1	% 90 95 95	sows a land	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, CRec Color (Moist) 3/3 4/6 5/8	well CS=Covered/Coated Sand dox Features % 4 5	Type C C	Location M M M	Texture (e.g. clay, sand, loam) silt loam silty clay loam clay loam
Remarks: SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 10 18 NRCS Hydric	Review of a series	McHenry silt loam Typic Hapludalfs the depth needed to document the in Horizon 1 2 3 ndicators (check he	color Color 10YR 10YR 10YR	m the absence of Matrix (Moist) 3/2 4/2 5/1 icators a	% 90 95 95 are not pre	Se: C=Concentra 10YR 10YR 10YR esent	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, CRed Color (Moist) 3/3 4/6 5/8):	well CS=Covered/Coated Sand dox Features % 4 5 Indicator	Type C C C s for Proble	Location M M M matic Soils ¹	Texture (e.g. clay, sand, loam) silt loam silty clay loam clay loam
Remarks: SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 10 18 NRCS Hydric	Review of a second process of the second pro	McHenry silt loam Typic Hapludalfs the depth needed to document the in Horizon 1 2 3 ndicators (check he	color Color 10YR 10YR 10YR	m the absence of Matrix (Moist) 3/2 4/2 5/1 icators a	% 90 95 95 re not pre	See: C=Concentra 10YR 10YR 10YR esent □ value Belov	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, CRec Color (Moist) 3/3 4/6 5/8	well CS=Covered/Coated Sand dox Features % 4 5 Indicator	Type C C C s for Proble	PL=Pore Lining, M=Matrix) Location M M M matic Soils ¹ Muck (LRR K, L, MLRA 1	Texture (e.g. clay, sand, loam) silt loam silty clay loam clay loam
Remarks: SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 10 18 NRCS Hydric	Review of a series	McHenry silt loam Typic Hapludalfs the depth needed to document the in Horizon 1 2 3 ndicators (check he	color Color 10YR 10YR 10YR	m the absence of Matrix (Moist) 3/2 4/2 5/1 icators a	% 90 95 95 re not pre	Source: C=Concentra 10YR 10YR 10YR esent □ value Belov Dark Surfa	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, Class Red Color (Moist) 3/3 4/6 5/8	well CS=Covered/Coated Sand dox Features % 4 5 Indicator	Type C C C s for Proble A10 - 2 cm A16 - Coast	Location M M M matic Soils ¹	Texture (e.g. clay, sand, loam) silt loam silty clay loam clay loam
Remarks: SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 10 18 NRCS Hydric	Review of a series	McHenry silt loam Typic Hapludalfs the depth needed to document the in Horizon 1 2 3 ndicators (check here) pipedon istic en Sulfide	color Color 10YR 10YR 10YR	m the absence of Matrix (Moist) 3/2 4/2 5/1 icators a	ocation should be should b	See: C=Concentra 10YR 10YR 10YR esent □ ralue Below Dark Surfan Chroma	ck of wet signatures in eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, Classification (Moist) 3/3 4/6 5/8): w Surface (LRR R, MLRA 149B) ace (LRR R, MLRA 149B) Sands Mineral (LRR K, L)	well CS=Covered/Coated Sand dox Features % 4 5 Indicator	Type C C C s for Proble A10 - 2 cm A16 - Coast S3 - 5cm Mi S7 - Dark S	Location M M M matic Soils ¹ Prairie Redox (LRR K, L, MLRA 1) Prairie Redox (LRR Lucky Peat of Peat curface (LRR K, L, M)	Texture (e.g. clay, sand, loam) silt loam silty clay loam clay loam (49B) EK, L, R) (LRR K, L, R)
Remarks: SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 10 18 NRCS Hydric	Review of a second process of the second pro	McHenry silt loam Typic Hapludalfs the depth needed to document the in Horizon 1 2 3 ndicators (check here) pipedon istic en Sulfide d Layers	dicator or confirm Color 10YR 10YR ere if ind	m the absence of Matrix (Moist) 3/2 4/2 5/1 icators a	of indicators.) (Type	See: C=Concentra 10YR 10YR 10YR esent □ value Below Dark Surfan Chroma ny Mucky May Gleyed	ck of wet signatures in eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, Control (Moist) 3/3 4/6 5/8	well CS=Covered/Coated Sand dox Features % 4 5 Indicator	Type C C C s for Proble A10 - 2 cm A16 - Coast S3 - 5cm Mi S7 - Dark S S8 - Polyval	Location M M M matic Soils Prairie Redox (LRR ucky Peat of Peat ourface (LRR K, L, M) ue Below Surface	Texture (e.g. clay, sand, loam) silt loam silty clay loam clay loam (LRR K, L, R)
Remarks: SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 10 18 NRCS Hydric	Review of a series	McHenry silt loam Typic Hapludalfs the depth needed to document the in Horizon 1 2 3 ndicators (check here) pipedon istic en Sulfide d Layers ed Below Dark Surface	dicator or confirm Color 10YR 10YR ere if ind	m the absence of Matrix (Moist) 3/2 4/2 5/1 icators a	% 90 95 95	Se: C=Concentra 10YR 10YR 10YR esent value Below Dark Surfan Chroma ny Mucky N	ck of wet signatures in eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, CRet Color (Moist) 3/3 4/6 5/8): w Surface (LRR R, MLRA 149B) Sace (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix (well CS=Covered/Coated Sand dox Features % 4 5 5 Indicator	Type C C C C s for Proble A10 - 2 cm A16 - Coast S3 - 5cm Mi S7 - Dark Si S8 - Polyval S9 - Thin Da	Location M M M M matic Soils Prairie Redox (LRR K, L, MLRA 1) Prairie Redox (LRR ucky Peat of Peat ourface (LRR K, L, M) ue Below Surface ark Surface (LRR K, L	Texture (e.g. clay, sand, loam) silt loam silty clay loam clay loam (49B) EK, L, R) (LRR K, L, R) (LRR K, L, R)
Remarks: SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 10 18 NRCS Hydric	Review of a second process of the second pro	McHenry silt loam Typic Hapludalfs the depth needed to document the in Horizon 1 2 3 ndicators (check here) pipedon istic en Sulfide d Layers ed Below Dark Surface Dark Surface	dicator or confirm Color 10YR 10YR ere if ind	m the absence of Matrix (Moist) 3/2 4/2 5/1 icators a	of indicators.) (Type	Source: C=Concentra 10YR 10YR 10YR esent value Below Dark Surfan Chroma ny Mucky M ny Gleyed eted Matrix x Dark Su	ck of wet signatures in eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, Class Red Color (Moist) 3/3 4/6 5/8	well CS=Covered/Coated Sance dox Features % 4 5 Indicator	Type C C C C s for Proble A10 - 2 cm A16 - Coast S3 - 5 cm Mi S7 - Dark Si S8 - Polyval S9 - Thin Da F12 - Iron-M	Location M M M matic Soils Prairie Redox (LRR ucky Peat of Peat ourface (LRR K, L, M) ue Below Surface	Texture (e.g. clay, sand, loam) silt loam silty clay loam clay loam (LRR K, L, R) (LRR K, L, R) (LRR K, L, R)
Remarks: SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 10 18 NRCS Hydric	Review of a series	McHenry silt loam Typic Hapludalfs the depth needed to document the in Horizon 1 2 3 ndicators (check here) pipedon istic en Sulfide d Layers ed Below Dark Surface Dark Surface Muck Mineral Gleyed Matrix	dicator or confirm Color 10YR 10YR ere if ind	m the absence of Matrix (Moist) 3/2 4/2 5/1 icators a	of indicators.) (Type	See: C=Concentra 10YR 10YR 10YR	ck of wet signatures in eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, Control (Moist) 3/3 4/6 5/8	well CS=Covered/Coated Sand dox Features % 4 5 5 Indicator	Type C C C C s for Proble A10 - 2 cm I A16 - Coast S3 - 5cm Me S7 - Dark Se S8 - Polyval S9 - Thin Da F12 - Iron-Me F19 - Piedm F21 - Red P	Location M M M M matic Soils Muck (LRR K, L, MLRA 1) Prairie Redox (LRR ucky Peat of Peat ourface (LRR K, L, M) ue Below Surface ark Surface (LRR K, L danganese Masses and Floodplain Soilarent Material	Texture (e.g. clay, sand, loam) silt loam silty clay loam clay loam (LRR K, L, R)
Remarks: SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 10 18 NRCS Hydric	Review of a second process of the second pro	McHenry silt loam Typic Hapludalfs the depth needed to document the in Horizon 1 2 3 ndicators (check here) pipedon istic en Sulfide d Layers ed Below Dark Surface Dark Surface Muck Mineral Gleyed Matrix Redox	dicator or confirm Color 10YR 10YR ere if ind	m the absence of Matrix (Moist) 3/2 4/2 5/1 icators a	% 90 95 95 re not pre S8 - Polyv S9 - Thin S11 - High F1 - Loam F2 - Loam F3 - Deple F6 - Redo F7 - Deple	See: C=Concentra 10YR 10YR 10YR	ck of wet signatures in eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, Control (Moist) 3/3 4/6 5/8	well CS=Covered/Coated Sand dox Features % 4 5 5 Indicator	Type C C C C C	Location M M M M M matic Soils Muck (LRR K, L, MLRA 1 Prairie Redox (LRR ucky Peat of Peat ourface (LRR K, L, M) ue Below Surface ark Surface (LRR K, L langanese Masses ont Floodplain Soil arent Material Spodic (MLRA 144A, 1	Texture (e.g. clay, sand, loam) silt loam silty clay loam clay loam (LRR K, L, R)
Remarks: SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 10 18 NRCS Hydric	Review of a series to proup): otion (Describe to pepth 10 18 24	McHenry silt loam Typic Hapludalfs the depth needed to document the in Horizon 1 2 3 ndicators (check here) pipedon istic en Sulfide d Layers ed Below Dark Surface Dark Surface Muck Mineral Gleyed Matrix Redox d Matrix	dicator or confirm Color 10YR 10YR ere if ind	m the absence of Matrix (Moist) 3/2 4/2 5/1 icators a	% 90 95 95 re not pre S8 - Polyv S9 - Thin S11 - High F1 - Loam F2 - Loam F3 - Deple F6 - Redo F7 - Deple	See: C=Concentra 10YR 10YR 10YR	ck of wet signatures in eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, Control (Moist) 3/3 4/6 5/8	well CS=Covered/Coated Sand dox Features % 4 5 5 Indicator	Type C C C C C	Location M M M M matic Soils Muck (LRR K, L, MLRA 1) Prairie Redox (LRR ucky Peat of Peat ourface (LRR K, L, M) ue Below Surface ark Surface (LRR K, L danganese Masses and Floodplain Soilarent Material	Texture (e.g. clay, sand, loam) silt loam silty clay loam clay loam (LRR K, L, R)
Remarks: SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 10 18 NRCS Hydric	Review of a series to proup): otion (Describe to pepth 10 18 24	McHenry silt loam Typic Hapludalfs the depth needed to document the in Horizon 1 2 3 ndicators (check here) pipedon istic en Sulfide d Layers ed Below Dark Surface Dark Surface Muck Mineral Gleyed Matrix Redox	dicator or confirm Color 10YR 10YR ere if ind	m the absence of Matrix (Moist) 3/2 4/2 5/1 icators a	% 90 95 95 re not pre S8 - Polyv S9 - Thin S11 - High F1 - Loam F2 - Loam F3 - Deple F6 - Redo F7 - Deple	See: C=Concentra 10YR 10YR 10YR	ck of wet signatures in eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, Control (Moist) 3/3 4/6 5/8	well CS=Covered/Coated Sance dox Features % 4 5 5 Indicator Indicator Indicator Indicator	Type C C C C C C	Location M M M M matic Soils Muck (LRR K, L, MLRA 1 Prairie Redox (LRR ucky Peat of Peat ourface (LRR K, L, M) ue Below Surface ark Surface (LRR K, L) langanese Masses ont Floodplain Soil earent Material Spodic (MLRA 144A, 1 Shallow Dark Surface	Texture (e.g. clay, sand, loam) silt loam silty clay loam clay loam (LRR K, L, R) (S (LRR K, L, R) (LRR K, L, R) (S (MLRA 149B) (S (MLRA 149B) (S (MLRA 149B)
Remarks: SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 10 18 NRCS Hydric	Review of a group): Dion (Describe to Bottom Depth 10 18 24	McHenry silt loam Typic Hapludalfs the depth needed to document the in Horizon 1 2 3 ndicators (check here) pipedon istic en Sulfide d Layers ed Below Dark Surface Dark Surface Muck Mineral Cleyed Matrix Redox d Matrix Irface (LRR R, MLRA 149B)	dicator or confirm Color 10YR 10YR ere if ind	m the absence of Matrix (Moist) 3/2 4/2 5/1 icators a	of indicators.) (Type	See: C=Concentra 10YR 10YR 10YR	ck of wet signatures in eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, Control (Moist) 3/3 4/6 5/8	well CS=Covered/Coated Sance dox Features % 4 5 5 Indicator Indicator	Type C C C C C C C S for Proble A10 - 2 cm I A16 - Coast S3 - 5cm Mi S7 - Dark Si S8 - Polyval S9 - Thin Da F12 - Iron-M F19 - Piedm F21 - Red P TA6 - Mesic TF12 - Very Other (Expla of hydrophytic veget or problematic.	Location M M M M matic Soils Muck (LRR K, L, MLRA 1 Prairie Redox (LRR k, L, MLRA 1 Prairie Redox (LRR k, L, M) ue Below Surface ark Surface (LRR K, L, M) ue Below Surface ark Surface (LRR K, L) langanese Masses ont Floodplain Soi earent Material Spodic (MLRA 144A, 1 Shallow Dark Surfain in Remarks) ation and wetland hydrology	Texture (e.g. clay, sand, loam) silt loam silty clay loam clay loam 49B) s.K, L, R) (LRR K, L, R) (LRR K, L, R) (LRR K, L, R) Is (MLRA 149B) 45, 149B) face must be present, unless
Remarks: SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 10 18 NRCS Hydric	Review of a series to proup): otion (Describe to pepth 10 18 24	McHenry silt loam Typic Hapludalfs the depth needed to document the in Horizon 1 2 3 ndicators (check here) pipedon istic en Sulfide d Layers ed Below Dark Surface Dark Surface Muck Mineral Cleyed Matrix Redox d Matrix Irface (LRR R, MLRA 149B)	dicator or confirm Color 10YR 10YR ere if ind	m the absence of Matrix (Moist) 3/2 4/2 5/1 icators a	% 90 95 95 re not pre S8 - Polyv S9 - Thin S11 - High F1 - Loam F2 - Loam F3 - Deple F6 - Redo F7 - Deple	See: C=Concentra 10YR 10YR 10YR	ck of wet signatures in eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, Control (Moist) 3/3 4/6 5/8	well CS=Covered/Coated Sance dox Features % 4 5 5 Indicator Indicator Indicator Indicator	Type C C C C C C C S for Proble A10 - 2 cm I A16 - Coast S3 - 5cm Mi S7 - Dark Si S8 - Polyval S9 - Thin Da F12 - Iron-M F19 - Piedm F21 - Red P TA6 - Mesic TF12 - Very Other (Expla of hydrophytic veget or problematic.	Location M M M M matic Soils Muck (LRR K, L, MLRA 1) Prairie Redox (LRR k, L, M) ue Below Surface urface (LRR K, L, M) ue Below Surface ark Surface (LRR K, L) langanese Masses ont Floodplain Soil arent Material Spodic (MLRA 144A, 1) Shallow Dark Surface ain in Remarks)	Texture (e.g. clay, sand, loam) silt loam silty clay loam clay loam (LRR K, L, R) (S (LRR K, L, R) (LRR K, L, R) (S (MLRA 149B) (S (MLRA 149B) (S (MLRA 149B)



Project/Site: Vilas Road Wetland ID: adj. to W-1 Sample Point: P8

VEGETATION	(Species identified in all uppercase are non-na	tive spec	cies.)		
Tree Stratum (Plo	t size: 10 meter radius)	0/ 0	Damir - 1	ئ- ئا امرا ئ- ئا امرا	Dominance Test Worksheet
1.	<u>Species Name</u>	% Cover	<u>Dominant</u>	Ind.Status	Dominance Test Worksheet
2.	_ 				Number of Deminant Species that are OPL_EACW or EAC: 0 (A)
	_ -				Number of Dominant Species that are OBL, FACW, or FAC:(A)
3.	_ -				Total Number of Deminent Charins Assess All Ctrates (D)
4.					Total Number of Dominant Species Across All Strata:1 (B)
5.					
6.					Percent of Dominant Species That Are OBL, FACW, or FAC:(A/B)
7.					
8.					Prevalence Index Worksheet
9.	<u></u>				Total % Cover of: Multiply by:
10.					OBL spp 0
	Total Cover =	0			FACW spp 0
					FAC spp
Sapling/Shrub Stra	atum (Plot size: 5 meter radius)				FACU spp 0
1.					UPL spp. $x 5 = 400$
2.					
3.					Total <u>80</u> (A) <u>400</u> (B)
4.					
5.					Prevalence Index = B/A = 5.000
6.					
7.					
8.					Hydrophytic Vegetation Indicators:
9.					☐ Yes ☑ No Rapid Test for Hydrophytic Vegetation
10.					☐ Yes ☑ No Dominance Test is > 50%
10.	Total Cover =	0			☐ Yes ☑ No Prevalence Index is ≤ 3.0 *
	Total Gover –	· ·			☐ Yes ☑ No Morphological Adaptations (Explain) *
Horb Stratum (Dla	t size: 2 meter redius)				
1	t size: 2 meter radius) GLYCINE MAX	80	Υ	UPL	☐ Yes ☑ No Problem Hydrophytic Vegetation (Explain) *
2.					* Indicators of hydric soil and wetland hydrology must be
3.	_ 				present, unless disturbed or problematic.
					Definitions of Vegetation Strata:
4.	_ - _				Definitions of Vegetation Strata.
5.					Two
6	_ - _				Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height.
7.					Height (BBH), regardess of Height.
8.					O . II IOI . I Woody plants loss than 2 in DDU and greater than 2.29 ft
9.					Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft. tall.
10.					
11.	<u></u>				
12.	<u></u>				Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft. tall.
13.					noos, plante loos than olde it tall
14.					
15.					Woody Vines - All woody vines greater than 3.28 ft. in height.
	Total Cover =	80			
Woody Vine Stratu	ım (Plot size: 10 meter radius)				
1.					
2.					
3.					Hydrophytic Vegetation Present ☐ Yes ☑ No
4.					
5.					
	Total Cover =	0			
Remarks:	Healthy soy crop at sample point, show		rop stres	s, no we	eds.
	, page and a second	J - 1	,	,	
<u> </u>					
Additional Ren	narke:				
Auditional Ker	iiai r/3.				

 Additional Remarks:			



Project/Site:	Vilas Road						Stantec Project #:	193704691		Date:	10/13/16
Applicant:		_eanne Widen					,			County:	Dane
Investigator #1:				Investi	igator #2:	Josh Su	lman			State:	Wisconsin
Soil Unit:		silty clay loam			<u> </u>		I/WWI Classification:	S3K		Wetland ID:	W-1
Landform:	Toeslope			Loc	al Relief:					Sample Point:	P9
Slope (%):	0	Latitude:	N/A		ongitude:			Datum:	N/A	Community ID:	Forested Wetland
		ditions on the site ty					nin in remarks)	☐ Yes ☑		Section:	17
		or Hydrology □ sig	•			(II TIO, OXPIC	Are normal circumsta			Township:	7N
_		or Hydrology ☐ sig	_	•			✓ Yes	□No		•	11E
SUMMARY OF			lurally pr	Oblemat	il C !		<u> </u>			Range:	TIE
		a a m t O		— Vaa	— No			Lludria Caila	Dragonto		□ Vaa □ Na
Hydrophytic Ve	•			☑ Yes				Hydric Soils		\(\lambda \) \\\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\	✓ Yes □ No
Wetland Hydrol										Within A Wetlan	
Remarks:		esults of a WEIS a	ınaıysıs,	conditioi	ns are we	tter than	normal for this time of	r year. Samp	ie point ioc	ated in forested	wetland at base of
	slope.										
HYDROLOGY											
Wetland Hydr	ology Indic	ators (Check here i	if indicate	ors are r	not preser	nt					
Primary:		(– ,			Secondary:		
	A1 - Surface	Water			B9 - Wate	er-Stained	Leaves			B6 - Surface Soil	Cracks
▮ □	A2 - High Wa				B13 - Aqu					B10 - Drainage Pa	
	A3 - Saturation				B15 - Mar	•				B16 - Moss Trim I	
	B1 - Water M B2 - Sedime			님	C1 - Hydr	•	spheres on Living Roots			C2 - Dry-Season \ C8 - Crayfish Burr	
l H	B3 - Drift De						educed Iron				sible on Aerial Imagery
l	B4 - Algal Ma						duction in Tilled Soils			D1 - Stunted or St	0,
	B5 - Iron Dep				C7 - Thin	Muck Surf	ace		V	D2 - Geomorphic	Position
		on Visible on Aerial Ima	-		Other (Ex	plain in Re	marks)			D3 - Shallow Aqui	
	B8 - Sparsely	y Vegetated Concave S	Surface							D4 - Microtopogra	
_									<u> </u>	D5 - FAC-Neutral	
Field Observat	tions:										
Surface Water	Present?	☐ Yes ☑ No	Depth:		(in.)			Wetland Hy	drology Pr	resent?	Yes □ No
Water Table Pr	esent?	☑ Yes □ No	Depth:	18	(in.)			wetiana my	arology i i	escrit:	103 🗀 110
Saturation Pres	ent?	☑ Yes □ No	Depth:	14	(in.)						
Describe Record	led Data (str	eam gauge, monitori	ng well a	erial pho	ntos previ	ous inspe	ctions) if available:		N/A		
Remarks:		gaage, meinten	,		, p. o						
riciliarits.											
SOILS											
SOILS Man Unit Name		Magazista cilturale:	, la am				orios Droinago Class	vom v no ordv			
Map Unit Name		Wacousta silty clay				S	eries Drainage Class:	very poorly			
Map Unit Name Taxonomy (Sub	group):	Typic Endoaquolls	}								
Map Unit Name Taxonomy (Sub Profile Descrip	ogroup): otion (Describe to	Typic Endoaquolls	}				tion, D=Depletion, RM=Reduced Matrix, 0	CS=Covered/Coated Sand		PL=Pore Lining, M=Matrix)	Taskura
Map Unit Name Taxonomy (Sub Profile Descrip Top	ogroup): otion (Describe to Bottom	Typic Endoaquolls the depth needed to document the in	dicator or confin	Matrix		pe: C=Concentra	tion, D=Depletion, RM=Reduced Matrix, C	CS=Covered/Coated Sand	T		Texture
Map Unit Name Taxonomy (Sub Profile Descrip	ogroup): otion (Describe to Bottom Depth	Typic Endoaquolls	dicator or confin	Matrix (Moist)	%	pe: C=Concentra	tion, D=Depletion, RM=Reduced Matrix, 0	CS=Covered/Coated Sand		PL=Pore Lining, M=Matrix) Location	(e.g. clay, sand, loam)
Map Unit Name Taxonomy (Sub Profile Descrip Top	ogroup): otion (Describe to Bottom	Typic Endoaquolls the depth needed to document the in	dicator or confin	Matrix		pe: C=Concentra	tion, D=Depletion, RM=Reduced Matrix, C	CS=Covered/Coated Sand	T		
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth	ogroup): otion (Describe to Bottom Depth	Typic Endoaquolls the depth needed to document the in	dicator or confin	Matrix (Moist)	%	pe: C=Concentra	tion, D=Depletion, RM=Reduced Matrix, C	cS=Covered/Coated Sand	T		(e.g. clay, sand, loam)
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	ogroup): otion (Describe to Bottom Depth 8	Typic Endoaquolls the depth needed to document the in Horizon 1	dicator or confinence of the c	Matrix (Moist) 2/1	% 100	pe: C=Concentra	tion, D=Depletion, RM=Reduced Matrix, C	cS=Covered/Coated Sand	Type 		(e.g. clay, sand, loam) mucky loam
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8	ogroup): otion (Describe to Bottom Depth 8 12	Typic Endoaquolls the depth needed to document the in Horizon 1 2	dicator or confirmation of the color	Matrix (Moist) 2/1 3/1	% 100 100	pe: C=Concentra	tion, D=Depletion, RM=Reduced Matrix, C Re- Color (Moist) 	cs=Covered/Coated Sand	Type 	Location 	(e.g. clay, sand, loam) mucky loam silty clay loam
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8	Bottom Depth 8 12 24	Typic Endoaquolls the depth needed to document the in Horizon 1 2	Color 10YR 10YR 5Y	Matrix (Moist) 2/1 3/1	% 100 100	pe: C=Concentra	tion, D=Depletion, RM=Reduced Matrix, C Re- Color (Moist) 	cs=Covered/Coated Sand dox Features % 10	Type 	Location 	(e.g. clay, sand, loam) mucky loam silty clay loam
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8	Depth 8 12 24	Typic Endoaquolls the depth needed to document the in Horizon 1 2	Color 10YR 10YR 5Y	Matrix (Moist) 2/1 3/1	% 100 100	e: C=Concentra	tion, D=Depletion, RM=Reduced Matrix, C Re- Color (Moist) 	cs=Covered/Coated Sand	Type D	Location 	(e.g. clay, sand, loam) mucky loam silty clay loam
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8	Bottom Depth 8 12 24	Typic Endoaquolls the depth needed to document the in Horizon 1 2	Color 10YR 10YR 5Y	Matrix (Moist) 2/1 3/1	% 100 100	e: C=Concentra	tion, D=Depletion, RM=Reduced Matrix, C Re- Color (Moist) 	ccs=Covered/Coated Sand	Type D	Location 	(e.g. clay, sand, loam) mucky loam silty clay loam clay loam
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8	Bottom Depth 8 12 24	Typic Endoaquolls the depth needed to document the in Horizon 1 2 3	Color 10YR 10YR 5Y	Matrix (Moist) 2/1 3/1	% 100 100	 5Y 	tion, D=Depletion, RM=Reduced Matrix, CRe Color (Moist) 6/1	CS=Covered/Coated Sand	Type D	Location M	(e.g. clay, sand, loam) mucky loam silty clay loam clay loam
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 12	bgroup): btion (Describe to Bottom Depth 8 12 24	Typic Endoaquolls the depth needed to document the in Horizon 1 2 3	Color 10YR 10YR 5Y	Matrix (Moist) 2/1 3/1 5/2	% 100 100 90 	 5Y 	tion, D=Depletion, RM=Reduced Matrix, CRe Color (Moist) 6/1	cs=Covered/Coated Sand	Type D	Location M	(e.g. clay, sand, loam) mucky loam silty clay loam clay loam
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 12 NRCS Hydric	Bottom Depth 8 12 24 Soil Field In	Typic Endoaquolls the depth needed to document the in Horizon 1 2 3 ndicators (check he	Color 10YR 10YR 5Y	Matrix (Moist) 2/1 3/1 5/2 icators a	% 100 100 90 are not pre	pe: C=Concentra	tion, D=Depletion, RM=Reduced Matrix, CRe Color (Moist) 6/1	CS=Covered/Coated Sand dox Features % 10 Indicator	Type s for Proble	Location M matic Soils ¹	(e.g. clay, sand, loam) mucky loam silty clay loam clay loam
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 12 NRCS Hydric	Bottom Depth 8 12 24 Soil Field In	Typic Endoaquolls the depth needed to document the in Horizon 1 2 3 andicators (check he	Color 10YR 10YR 5Y	Matrix (Moist) 2/1 3/1 5/2 icators a	% 100 100 90 878 - Polyv	e: C=Concentra	tion, D=Depletion, RM=Reduced Matrix, CRe Color (Moist) 6/1): v Surface (LRR R, MLRA 149B)	cs=Covered/Coated Sand dox Features % 10 Indicator	Type s for Proble	Location M	(e.g. clay, sand, loam) mucky loam silty clay loam clay loam
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 12 NRCS Hydric	Bottom Depth 8 12 24 Soil Field In A1- Histosol A2 - Histic E	Typic Endoaquolls the depth needed to document the in Horizon 1 2 3 ndicators (check he	Color 10YR 10YR 5Y	Matrix (Moist) 2/1 3/1 5/2 icators a	% 100 100 90 sre not pre	e: C=Concentra 5Y esent □ value Belov Dark Surfa	tion, D=Depletion, RM=Reduced Matrix, CRe Color (Moist) 6/1	CS=Covered/Coated Sand edox Features % 10 Indicator	Type D	Location M	(e.g. clay, sand, loam) mucky loam silty clay loam clay loam 49B) K, L, R)
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 12 NRCS Hydric	Bottom Depth 8 12 24 Soil Field In	Typic Endoaquolls the depth needed to document the in Horizon 1 2 3 ndicators (check here)	Color 10YR 10YR 5Y	Matrix (Moist) 2/1 3/1 5/2 icators a	% 100 100 90 sre not pre S8 - Polys S9 - Thin S11 - High	esent □ value Belov Dark Surfa	tion, D=Depletion, RM=Reduced Matrix, CRe Color (Moist) 6/1): v Surface (LRR R, MLRA 149B) ace (LRR R, MLRA 149B) Sands	cS=Covered/Coated Sand cdox Features % 10 Indicator	Type	Location M	(e.g. clay, sand, loam) mucky loam silty clay loam clay loam 49B) K, L, R)
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 12 NRCS Hydric	Bottom Depth 8 12 24 Soil Field In A1- Histosol A2 - Histic E A3 - Black H	Typic Endoaquolls the depth needed to document the in Horizon 1 2 3 ndicators (check here) pipedon istic en Sulfide	Color 10YR 10YR 5Y	Matrix (Moist) 2/1 3/1 5/2 icators a	% 100 100 90 sre not pre S8 - Polys S9 - Thin S11 - High	e: C=Concentra 5Y esent □ value Belov Dark Surfa n Chroma	tion, D=Depletion, RM=Reduced Matrix, CRe Color (Moist) 6/1 6/1 N Surface (LRR R, MLRA 149B) Sands Mineral (LRR K, L)	cs=Covered/Coated Sand dox Features % 10 Indicator	Type s for Proble A10 - 2 cm I A16 - Coast S3 - 5cm Me S7 - Dark S	Location M matic Soils ¹ Muck (LRR K, L, MLRA 1) Prairie Redox (LRR Lucky Peat of Peat ((e.g. clay, sand, loam) mucky loam silty clay loam clay loam 49B) K, L, R) LRR K, L, R)
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 12 NRCS Hydric	Bottom Depth 8 12 24 Soil Field In A1- Histosol A2 - Histic E A3 - Black H A4 - Hydroge A5 - Stratified A11 - Deplete	Typic Endoaquolls the depth needed to document the in Horizon 1 2 3 ndicators (check here) pipedon istic en Sulfide d Layers ed Below Dark Surface	Color 10YR 10YR 5Y ere if ind	Matrix (Moist) 2/1 3/1 5/2 icators a	% 100 100 90 S8 - Polyx S9 - Thin S11 - High F1 - Loam F2 - Loam F3 - Deple	e: C=Concentra 5Y esent value Below Dark Surfa n Chroma ny Mucky M ny Gleyed eted Matrix	tion, D=Depletion, RM=Reduced Matrix, C Re Color (Moist) 6/1): w Surface (LRR R, MLRA 149B) RCE (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix	cs=Covered/Coated Sand edox Features % 10 Indicator	Type	Location M M Muck (LRR K, L, MLRA 1 Prairie Redox (LRR ucky Peat of Peat (urface (LRR K, L, M) ue Below Surface (ark Surface (LRR K, L)	(e.g. clay, sand, loam) mucky loam silty clay loam clay loam 49B) K, L, R) LRR K, L, R)
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 12 NRCS Hydric	Bottom Depth 8 12 24 Soil Field In A1- Histosol A2 - Histic E A3 - Black Hi A4 - Hydroge A5 - Stratified A11 - Deplete A12 - Thick [Typic Endoaquolls the depth needed to document the in Horizon 1 2 3 ndicators (check here) pipedon istic en Sulfide d Layers ed Below Dark Surface Dark Surface	Color 10YR 10YR 5Y ere if ind	Matrix (Moist) 2/1 3/1 5/2 icators a	% 100 100 90	esent — calue Below Dark Surfant Chroma Ny Mucky May Gleyed eted Matrix ox Dark Surfant Chroma	tion, D=Depletion, RM=Reduced Matrix, CRe Color (Moist) 6/1	CS=Covered/Coated Sand edox Features % 10 Indicator	Type D s for Proble A10 - 2 cm I A16 - Coast S3 - 5cm Mi S7 - Dark Si S8 - Polyval S9 - Thin Da F12 - Iron-M	Location M Muck (LRR K, L, MLRA 1 Prairie Redox (LRR Lucky Peat of Peat (Lurface (LRR K, L, M) ue Below Surface (LRR K, L) langanese Masses	(e.g. clay, sand, loam) mucky loam silty clay loam clay loam 49B) K, L, R) LRR K, L, R) (LRR K, L, R)
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 12 NRCS Hydric	Bottom Depth 8 12 24 Soil Field Ir A1- Histosol A2 - Histic E A3 - Black Hi A4 - Hydroge A5 - Stratified A11 - Deplete A12 - Thick II S1 - Sandy IV	Typic Endoaquolls the depth needed to document the in Horizon 1 2 3 ndicators (check he pipedon istic en Sulfide d Layers ed Below Dark Surface Dark Surface Muck Mineral	Color 10YR 10YR 5Y ere if ind	Matrix (Moist) 2/1 3/1 5/2 icators a	% 100 100 90	pe: C=Concentra 5Y esent □ value Belov Dark Surfa n Chroma ny Mucky M ny Gleyed eted Matrix ox Dark Su eted Dark	tion, D=Depletion, RM=Reduced Matrix, C Re Color (Moist) 6/1): w Surface (LRR R, MLRA 149B) BCE (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Watrix frace Surface	cS=Covered/Coated Sand cdox Features % 10 Indicator	Type D	Location M M matic Soils ¹ Vuck (LRR K, L, MLRA 1 Prairie Redox (LRR ucky Peat of Peat (urface (LRR K, L, M) ue Below Surface (ark Surface (LRR K, L) langanese Masses ont Floodplain Soil	(e.g. clay, sand, loam) mucky loam silty clay loam clay loam 49B) K, L, R) LRR K, L, R) (LRR K, L, R)
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 12 NRCS Hydric	Bottom Depth 8 12 24 Soil Field In A1- Histosol A2 - Histic E A3 - Black H A4 - Hydroge A5 - Stratified A1- Deplete A12 - Thick E S1 - Sandy N S4 - Sandy N	Typic Endoaquolls the depth needed to document the in Horizon 1 2 3	Color 10YR 10YR 5Y ere if ind	Matrix (Moist) 2/1 3/1 5/2 icators a	% 100 100 90	pe: C=Concentra 5Y esent □ value Belov Dark Surfa n Chroma ny Mucky M ny Gleyed eted Matrix ox Dark Su eted Dark	tion, D=Depletion, RM=Reduced Matrix, C Re Color (Moist) 6/1): w Surface (LRR R, MLRA 149B) BCE (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Watrix frace Surface	cs=Covered/Coated Sand edox Features % 10 Indicator	Type D s for Proble A10 - 2 cm I A16 - Coast S3 - 5cm Me S7 - Dark Se S8 - Polyval S9 - Thin Da F12 - Iron-Me F19 - Piedme F21 - Red P	Location M M matic Soils Muck (LRR K, L, MLRA 1- Prairie Redox (LRR LICKY Peat of Peat (LUTFACE (LRR K, L, M) LUCKY Peat of Peat (LUTFACE (LRR K, L) LUTF	(e.g. clay, sand, loam) mucky loam silty clay loam clay loam 49B) K, L, R) LRR K, L, R) (LRR K, L, R) (LRR K, L, R) (S (MLRA 149B)
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 12 NRCS Hydric	Bottom Depth 8 12 24 Soil Field Ir A1- Histosol A2 - Histic E A3 - Black H A4 - Hydroge A5 - Stratified A12 - Thick E S1 - Sandy E S4 - Sandy E S5 - Sandy F	Typic Endoaquolls the depth needed to document the in Horizon 1 2 3 ndicators (check here) pipedon istic en Sulfide d Layers ed Below Dark Surface Dark Surface Muck Mineral Gleyed Matrix Redox	Color 10YR 10YR 5Y ere if ind	Matrix (Moist) 2/1 3/1 5/2 icators a	% 100 100 90	pe: C=Concentra 5Y esent □ value Belov Dark Surfa n Chroma ny Mucky M ny Gleyed eted Matrix ox Dark Su eted Dark	tion, D=Depletion, RM=Reduced Matrix, C Re Color (Moist) 6/1): w Surface (LRR R, MLRA 149B) BCE (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Watrix frace Surface	CS=Covered/Coated Sand cdox Features % 10 Indicator	Type D	Location M M matic Soils Muck (LRR K, L, MLRA 1 Prairie Redox (LRR L) Lucky Peat of Peat (Lurface (LRR K, L, M) Lucky Peat of Peat (Lurface (LRR K, L) Lu	(e.g. clay, sand, loam) mucky loam silty clay loam clay loam 49B) K, L, R) LRR K, L, R) (LRR K, L, R) (LRR K, L, R) (S (LRR K, L, R) (S (MLRA 149B)
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 12 NRCS Hydric	Bottom Depth 8 12 24 Soil Field In A1- Histosol A2 - Histic E A3 - Black Hi A4 - Hydroge A5 - Stratified A1- Deplete A12 - Thick E S1 - Sandy N S4 - Sandy N S4 - Sandy N S5 - Sandy R S6 - Stripped	Typic Endoaquolls the depth needed to document the in Horizon 1 2 3 ndicators (check here) pipedon istic en Sulfide d Layers ed Below Dark Surface Dark Surface Muck Mineral Gleyed Matrix Redox	Color 10YR 10YR 5Y ere if ind	Matrix (Moist) 2/1 3/1 5/2 icators a	% 100 100 90	pe: C=Concentra 5Y esent □ value Belov Dark Surfa n Chroma ny Mucky M ny Gleyed eted Matrix ox Dark Su eted Dark	tion, D=Depletion, RM=Reduced Matrix, C Re Color (Moist) 6/1): w Surface (LRR R, MLRA 149B) BCE (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Watrix frace Surface	cs=Covered/Coated Sand dox Features % 10 Indicator	Type D s for Proble A10 - 2 cm I A16 - Coast S3 - 5cm Mt S7 - Dark S S8 - Polyval S9 - Thin Da F12 - Iron-M F19 - Piedm F21 - Red P TA6 - Mesic TF12 - Very	Location M M matic Soils Muck (LRR K, L, MLRA 1. Prairie Redox (LRR ucky Peat of Peat (urface (LRR K, L, M) ue Below Surface (urface (LRR K, L, M) ark Surface (LRR K, L) langanese Masses ont Floodplain Soil arent Material Spodic (MLRA 144A, 1. Shallow Dark Surf	(e.g. clay, sand, loam) mucky loam silty clay loam clay loam 49B) K, L, R) LRR K, L, R) (LRR K, L, R) (LRR K, L, R) (S (LRR K, L, R) (S (MLRA 149B)
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 12 NRCS Hydric	Bottom Depth 8 12 24 Soil Field In A1- Histosol A2 - Histic E A3 - Black Hi A4 - Hydroge A5 - Stratified A1- Deplete A12 - Thick E S1 - Sandy N S4 - Sandy N S4 - Sandy N S5 - Sandy R S6 - Stripped	Typic Endoaquolls the depth needed to document the in Horizon 1 2 3 ndicators (check here) pipedon istic en Sulfide d Layers ed Below Dark Surface Dark Surface Muck Mineral Gleyed Matrix Redox H Matrix	Color 10YR 10YR 5Y ere if ind	Matrix (Moist) 2/1 3/1 5/2 icators a	% 100 100 90	pe: C=Concentra 5Y esent □ value Belov Dark Surfa n Chroma ny Mucky M ny Gleyed eted Matrix ox Dark Su eted Dark	tion, D=Depletion, RM=Reduced Matrix, C Re Color (Moist) 6/1): w Surface (LRR R, MLRA 149B) Sce (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Watrix frace Surface	cs=Covered/Coated Sand dox Features % 10 Indicator	Type D	Location M M matic Soils Muck (LRR K, L, MLRA 1 Prairie Redox (LRR L) Lucky Peat of Peat (Lurface (LRR K, L, M) Lucky Peat of Peat (Lurface (LRR K, L) Lu	(e.g. clay, sand, loam) mucky loam silty clay loam clay loam 49B) K, L, R) LRR K, L, R) (LRR K, L, R) (LRR K, L, R) (S (MLRA 149B) 45, 149B) face
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 12 NRCS Hydric	Bottom Depth 8 12 24 Soil Field In A1- Histosol A2 - Histic E A3 - Black Hi A4 - Hydroge A5 - Stratified A1- Deplete A12 - Thick E S1 - Sandy N S4 - Sandy N S4 - Sandy N S5 - Sandy R S6 - Stripped	Typic Endoaquolls the depth needed to document the in Horizon 1 2 3 ndicators (check here) pipedon istic en Sulfide d Layers ed Below Dark Surface Dark Surface Muck Mineral Gleyed Matrix Redox H Matrix	Color 10YR 10YR 5Y ere if ind	Matrix (Moist) 2/1 3/1 5/2 icators a	% 100 100 90	pe: C=Concentra 5Y esent □ value Belov Dark Surfa n Chroma ny Mucky M ny Gleyed eted Matrix ox Dark Su eted Dark	tion, D=Depletion, RM=Reduced Matrix, C Re Color (Moist) 6/1): w Surface (LRR R, MLRA 149B) Sce (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Watrix frace Surface	cs=Covered/Coated Sand dox Features % 10 Indicator Indicator Indicator Indicat	Type D	Location M M matic Soils Muck (LRR K, L, MLRA 1 Prairie Redox (LRR Lucky Peat of Peat (LURFACE (LRR K, L, M) LURFACE (LRR K, L) LURFACE (LR	(e.g. clay, sand, loam) mucky loam silty clay loam clay loam 49B) K, L, R) LRR K, L, R) (LRR K, L, R) (LRR K, L, R) (S (MLRA 149B) 45, 149B) face
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 12 NRCS Hydric	Bottom Depth 8 12 24 Soil Field In A1- Histosol A2 - Histic E A3 - Black Hi A4 - Hydroge A5 - Stratified A1- Deplete A12 - Thick E S1 - Sandy N S4 - Sandy N S4 - Sandy N S5 - Sandy R S6 - Stripped	Typic Endoaquolls the depth needed to document the in Horizon 1 2 3 ndicators (check here) pipedon istic en Sulfide d Layers ed Below Dark Surface Dark Surface Muck Mineral Bleyed Matrix Redox d Matrix Irface (LRR R, MLRA 149B)	Color 10YR 10YR 5Y ere if ind	Matrix (Moist) 2/1 3/1 5/2 icators a	% 100 100 90	pe: C=Concentra 5Y esent □ value Belov Dark Surfa n Chroma ny Mucky M ny Gleyed eted Matrix ox Dark Su eted Dark	tion, D=Depletion, RM=Reduced Matrix, C Re Color (Moist) 6/1): w Surface (LRR R, MLRA 149B) Sce (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Watrix frace Surface	cs=Covered/Coated Sand dox Features % 10 Indicator	Type D	Location M M matic Soils Muck (LRR K, L, MLRA 1 Prairie Redox (LRR Lucky Peat of Peat (LURFACE (LRR K, L, M) LURFACE (LRR K, L) LURFACE (LR	(e.g. clay, sand, loam) mucky loam silty clay loam clay loam 49B) K, L, R) LRR K, L, R) (LRR K, L, R) (LRR K, L, R) (S (MLRA 149B) 45, 149B) face
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 12 NRCS Hydric	Bottom Depth 8 12 24 Soil Field In A1- Histosol A2 - Histic E A3 - Black H A4 - Hydroge A5 - Stratified A11 - Deplete A12 - Thick I S1 - Sandy I S4 - Sandy I S5 - Sandy I S6 - Stripped S7 - Dark Su	Typic Endoaquolls the depth needed to document the in Horizon 1 2 3 ndicators (check here) pipedon istic en Sulfide d Layers ed Below Dark Surface Dark Surface Muck Mineral Bleyed Matrix Redox d Matrix Irface (LRR R, MLRA 149B)	Color 10YR 10YR 5Y ere if ind	Matrix (Moist) 2/1 3/1 5/2 icators a	% 100 100 90	pe: C=Concentra 5Y esent □ value Belov Dark Surfa n Chroma ny Mucky M ny Gleyed eted Matrix ox Dark Su eted Dark	tion, D=Depletion, RM=Reduced Matrix, C Re Color (Moist) 6/1): w Surface (LRR R, MLRA 149B) Sce (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Watrix frace Surface	cs=Covered/Coated Sand dox Features % 10 Indicator Indicator Indicator Indicat	Type D	Location M M matic Soils Muck (LRR K, L, MLRA 1 Prairie Redox (LRR Lucky Peat of Peat (Lurface (LRR K, L, M) Lurface (LRR K, L, M) Lurface (LRR K, L) Langanese Masses Lont Floodplain Soil Larent Material Spodic (MLRA 144A, 1 Shallow Dark Surfain in Remarks) Lation and wetland hydrology	(e.g. clay, sand, loam) mucky loam silty clay loam clay loam 49B) K, L, R) LRR K, L, R) (LRR K, L, R) (LRR K, L, R) (S (MLRA 149B) 45, 149B) face must be present, unless



Project/Site: Vilas Road Wetland ID: W-1 Sample Point: P9

VEGETATION Tree Stretum (Ple	(Species identified in all uppercase are non-na ot size: 10 meter radius)	ative spec	cies.)		
Tree Stratum (Pic	Species Name	% Cover	Dominant	Ind.Status	Dominance Test Worksheet
1.	Ulmus americana	60	Y	FACW	Bommanoo 100t Workonoot
2.	Acer negundo	20	Y	FAC	Number of Dominant Species that are OBL, FACW, or FAC: 7 (A)
3.					
4.					Total Number of Dominant Species Across All Strata:8(B)
5.					
6.					Percent of Dominant Species That Are OBL, FACW, or FAC: 88% (A/B)
7.					
8.					Prevalence Index Worksheet
9.					Total % Cover of: Multiply by:
10.	Total Cover =	80			OBL spp. $0 \times 1 = 0$
	Total Cover =	80			FACW spp. 65 $x 2 = 130$ FAC spp. 90 $x 3 = 270$
Sanling/Shrub Str	atum (Plot size: 5 meter radius)				FAC spp. $\begin{array}{cccccccccccccccccccccccccccccccccccc$
1.	Cornus racemosa	10	Υ	FAC	UPL spp. $\frac{27}{0}$ $x = \frac{108}{0}$
2.	RHAMNUS CATHARTICA	5	Ү	FAC	от 2 орр х о
3.	Ulmus americana	5	Y	FACW	Total 182 (A) 508 (B)
4.	LONICERA X BELLA	2	 N	FACU	10tal(X)(B)
5.					Prevalence Index = B/A = 2.791
6.					
7.					
8.					Hydrophytic Vegetation Indicators:
9.					☐ Yes ☑ No Rapid Test for Hydrophytic Vegetation
10.					✓ Yes ☐ No Dominance Test is > 50%
	Total Cover =	22			✓ Yes ☐ No Prevalence Index is ≤ 3.0 *
					☐ Yes ☑ No Morphological Adaptations (Explain) *
Herb Stratum (Plo	t size: 2 meter radius)				☐ Yes ☑ No Problem Hydrophytic Vegetation (Explain) *
1.	Geum canadense	50	Υ	FAC	* Indicators of budgie call and watered budgetons and be
2.	ALLIARIA PETIOLATA	25	Υ	FACU	* Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
3.					procent, arried dictarged or proportionale.
4.					Definitions of Vegetation Strata:
5.					
6					Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast
7.					height (DBH), regardless of height.
8.					• Weeds plants less than 2 in DDU and spectar than 2 20 ft
9.					Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft. tall.
10.					
11.					Herb - All herbaceous (non-woody) plants, regardless of size, and
12.					woody plants less than 3.28 ft. tall.
13. 14.					
14. 15.					Woody Vines - All woody vines greater than 3.28 ft. in height.
15.	Total Cover =	 75			VVOCUY VIIIes 1 7 iii Woody Viiioo grouter than 6:20 it. iii Holgin.
	Total Cover –	75			
Woody Vine Strate	um (Plot size: 10 meter radius)				
1.	Vitis riparia	5	Y	FAC	
2.					
3.					Hydrophytic Vegetation Present ☑ Yes ☐ No
4.					
5.					
	Total Cover =	5			
Remarks:					
Additional Rer	marke:				
Auditional Ref	iiai no.				



Project/Site:	Vilas Road						Stantec Project #:	193704691		Date:	10/13/16
Applicant:		₋eanne Widen					,			County:	Dane
Investigator #1:				Investi	gator #2:	Josh Su	lman			State:	Wisconsin
Soil Unit:	Sable silty				<u> </u>						adj. W-1
Landform:	Rise	olay loam		Loc	al Relief:		"TTTT GIGGOMGGGG.	•		Wetland ID: Sample Point:	P10
Slope (%):	Tues	Latitude:	N/A		ongitude:			Datum:	N/A	Community ID:	Upland Ag Field
· · · · · · · · · · · · · · · · · · ·	Irologic cond	ditions on the site ty					ain in remarks)	☐ Yes ☑		Section:	17
		or Hydrology □ sig	•			(II IIO, EXPIR	Are normal circumsta			Township:	7N
•			-				☐ Yes	ances presen ☑No	ι:	•	11E
		or Hydrology □ na	turany pr	obiemati	16 !		□ 163	<u> </u>		Range:	TIE
SUMMARY OF		10		\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	N			11 1: 0 :	D 10		
Hydrophytic Ve	•			□ Yes	_			Hydric Soils			☑ Yes □ No
Wetland Hydrol			<u> </u>	☐ Yes						Within A Wetlar	
Remarks:			ınalysis,	conditior	ns are we	tter than	normal for this time o	f year. Samp	le point is l	ocated in soybe	an field with healthy
	standing cr	op.									
HYDROLOGY											
Wetland Hydro	ology Indic	ators (Check here i	if indicate	ors are n	ot preser	nt 🗔):					
Primary:		atoro (orroan riaro)	ii iii ai cat		ю р. 000.	, i			Secondary:		
	A1 - Surface	Water			B9 - Wate	er-Stained	Leaves			B6 - Surface Soil	Cracks
	A2 - High Wa				B13 - Aqu					B10 - Drainage P	
	A3 - Saturation				B15 - Mar	•				B16 - Moss Trim	
	B1 - Water M				C1 - Hydr	•				C2 - Dry-Season	
l	B2 - Sedimer B3 - Drift Dep						spheres on Living Roots educed Iron			C8 - Crayfish Bur	rows isible on Aerial Imagery
l H	B4 - Algal Ma						duction in Tilled Soils		님	D1 - Stunted or S	0 ,
l H	B5 - Iron Dep			_	C7 - Thin				H	D2 - Geomorphic	
l		on Visible on Aerial Ima	agery		Other (Ex					D3 - Shallow Aqu	
		y Vegetated Concave S	•		•		,			D4 - Microtopogra	
										D5 - FAC-Neutral	Test
Field Observat	ions:										
Surface Water		☐ Yes ☑ No	Depth:		(in.)						
Water Table Pro		☐ Yes ☑ No	Depth:		1. 1			Wetland Hy	drology Pı	resent?	Yes ☑ No
Saturation Pres		☐ Yes ☑ No	-		(in.)						
			Depth:		(in.)						
Describe Record	ed Data (str	eam gauge, monitori	ng well, a	aerial pho	otos, previ	ous inspe	ctions), if available:		Historic Aer	ial Imagery Reviev	V
				•			7,			<u> </u>	
Remarks:	Review of a	aerial imagery for sa	ample po				k of consistent wet sig	gnatures in no	rmal years		
Remarks:	Review of a	aerial imagery for sa	ample po				·	gnatures in no	ormal years		
Remarks: SOILS	Review of a	aerial imagery for sa	ample po				·	gnatures in no	ormal years		
SOILS						ites a lac	k of consistent wet sig		ormal years		
SOILS Map Unit Name	:	Sable silty clay loai	 m			ites a lac	·		ormal years		
SOILS Map Unit Name Taxonomy (Sub	: ogroup):	Sable silty clay load	m	int locat	ion indica	ites a lac	k of consistent wet sign	poorly	,		
SOILS Map Unit Name Taxonomy (Sub	e: ogroup): otion (Describe to	Sable silty clay load	m	n the absence o	ion indica	ites a lac	k of consistent wet significant wet significan	CS=Covered/Coated Sand	d Grains; Location: F		Texture
SOILS Map Unit Name Taxonomy (Sub Profile Descrip	egroup): otion (Describe to Bottom	Sable silty clay load Typic Endoaquolls the depth needed to document the in	m Sidicator or confin	n the absence of	ion indica	see: C=Concentra	k of consistent wet significant wet significan	cs=Covered/Coated Sandedox Features	d Grains; Location: F	PL=Pore Lining, M=Matrix)	Texture (e.g. clav. sand. loam)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth	e: ogroup): otion (Describe to Bottom Depth	Sable silty clay load	m dicator or confirm	n the absence of Matrix	ion indicators.) (Type 19/10)	Sepe: C=Concentra	k of consistent wet significant wet significan	cs=Covered/Coated Sandedox Features	d Grains; Location: F	PL=Pore Lining, M=Matrix) Location	(e.g. clay, sand, loam)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	egroup): otion (Describe to Bottom Depth 10	Sable silty clay load Typic Endoaquolls the depth needed to document the in Horizon 1	m dicator or confirm Color	m the absence of Matrix (Moist) 4/2	of indicators.) (Type 97	se: C=Concentra	k of consistent wet significant wet significant wet significant wet significant wet significant with the consistent wet significant wet significan	cs=Covered/Coated Sandedox Features % 3	d Grains; Location: F	PL=Pore Lining, M=Matrix) Location M	(e.g. clay, sand, loam) silt loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 10	egroup): ogroup): btion (Describe to Depth 10 18	Sable silty clay load Typic Endoaquolls the depth needed to document the in Horizon 1 2	dicator or confirmation Color 10YR 10YR	m the absence of Matrix (Moist) 4/2 6/1	of indicators.) (Type 97 95	se: C=Concentra 10YR 7.5YR	k of consistent wet signaries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, Re Color (Moist) 3/3 4/6	cs=Covered/Coated Sandedox Features % 3 5	Type C C	PL=Pore Lining, M=Matrix) Location M M	(e.g. clay, sand, loam) silt loam silty clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	egroup): otion (Describe to Bottom Depth 10	Sable silty clay load Typic Endoaquolls the depth needed to document the in Horizon 1	m dicator or confirm Color	m the absence of Matrix (Moist) 4/2	of indicators.) (Type 97	se: C=Concentra	k of consistent wet significant wet significant wet significant wet significant wet significant with the consistent wet significant wet significan	cs=Covered/Coated Sandedox Features % 3	d Grains; Location: F	PL=Pore Lining, M=Matrix) Location M	(e.g. clay, sand, loam) silt loam
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SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 10	pgroup): ption (Describe to Bottom Depth 10 18 24	Sable silty clay load Typic Endoaquolls the depth needed to document the in Horizon 1 2 3	m dicator or confine Color 10YR 10YR	m the absence of Matrix (Moist) 4/2 6/1	of indicators.) (Type 97 95	Sope: C=Concentral 10YR 7.5YR 7.5YR	k of consistent wet signary cries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, Re Color (Moist) 3/3 4/6 4/6	cs=Covered/Coated Sanded Sande	Type C C C	PL=Pore Lining, M=Matrix) Location M M M	(e.g. clay, sand, loam) silt loam silty clay loam silty clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 10 18	pgroup): ption (Describe to Bottom Depth 10 18 24	Sable silty clay load Typic Endoaquolls the depth needed to document the in Horizon 1 2 3	m dicator or confine Color 10YR 10YR	m the absence of Matrix (Moist) 4/2 6/1 6/1	% 97 95 90	see: C=Concentra 10YR 7.5YR 7.5YR	k of consistent wet signature. eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, Re Color (Moist) 3/3 4/6 4/6	conty co	Type C C C	Location M M M	(e.g. clay, sand, loam) silt loam silty clay loam silty clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 10 18 NRCS Hydric	pgroup): ption (Describe to Bottom Depth 10 18 24 Soil Field In	Sable silty clay load Typic Endoaquolls the depth needed to document the in Horizon 1 2 3	m dicator or confine Color 10YR 10YR	m the absence of Matrix (Moist) 4/2 6/1 6/1 cators a	mon indicators.) (Type of indicators.) (Type	Sepe: C=Concentral 10YR 7.5YR 7.5YR esent □	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, Re Color (Moist) 3/3 4/6 4/6):	cs=Covered/Coated Sanded Sande	Type C C C s for Proble	Location M M M matic Soils ¹	(e.g. clay, sand, loam) silt loam silty clay loam silty clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 10 18 NRCS Hydric	pgroup): Deption (Describe to Depth 10 18 24 Soil Field In A1- Histosol	Sable silty clay load Typic Endoaquolls the depth needed to document the in Horizon 1 2 3 ndicators (check he	m dicator or confine Color 10YR 10YR	m the absence of Matrix (Moist) 4/2 6/1 6/1 cators a	mon indicators.) (Type of indicators.) (Type	Sope: C=Concentra 10YR 7.5YR 7.5YR esent □ value Belov	k of consistent wet signature of the sig	cs=Covered/Coated Sanded Sande	Type C C C s for Proble	Location M M M matic Soils ¹ Muck (LRR K, L, MLRA	(e.g. clay, sand, loam) silt loam silty clay loam silty clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 10 18 NRCS Hydric	pgroup): ption (Describe to Bottom Depth 10 18 24 Soil Field In	Sable silty clay load Typic Endoaquolls the depth needed to document the in Horizon 1 2 3 ndicators (check head	m dicator or confine Color 10YR 10YR	m the absence of Matrix (Moist) 4/2 6/1 6/1 cators a	mon indicators.) (Type of indicators.) (Type	Sepe: C=Concentra 10YR 7.5YR 7.5YR esent □ value Belov Dark Surfa	k of consistent wet signature. eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, Re Color (Moist) 3/3 4/6 4/6	cs=Covered/Coated Sanded Sande	Type C C C s for Proble A10 - 2 cm	Location M M M matic Soils ¹ Muck (LRR K, L, MLRA ² Prairie Redox (LRR	(e.g. clay, sand, loam) silt loam silty clay loam silty clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 10 18 NRCS Hydric	pgroup): Deption (Describe to Bottom Depth 10 18 24 Soil Field In A1- Histosol A2 - Histic Ep	Sable silty clay load Typic Endoaquolls the depth needed to document the in Horizon 1 2 3 ndicators (check here)	m dicator or confine Color 10YR 10YR	m the absence of Matrix (Moist) 4/2 6/1 6/1 cators a	ion indicators.) (Type of indicators.) (Type	10YR 7.5YR 7.5YR esent value Belov Dark Surfa	k of consistent wet signature. eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, Re Color (Moist) 3/3 4/6 4/6	cs=Covered/Coated Sanded Sande	Type C C C s for Proble A10 - 2 cm A16 - Coast S3 - 5cm Mi	Location M M M matic Soils ¹ Muck (LRR K, L, MLRA	(e.g. clay, sand, loam) silt loam silty clay loam silty clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 10 18 NRCS Hydric	pgroup): Deption (Describe to Bottom) Depth 10 18 24 Soil Field In A1- Histosol A2 - Histic En A3 - Black History	Sable silty clay load Typic Endoaquolls the depth needed to document the in Horizon 1 2 3 ndicators (check here) sitic en Sulfide	m dicator or confine Color 10YR 10YR	m the absence of Matrix (Moist) 4/2 6/1 6/1 cators a	ion indicators.) (Type of indicators.) (Type	10YR 7.5YR 7.5YR esent value Below Dark Surfa	k of consistent wet signature of the consistent with the consistent wet signature of the consistent with the consisten	cs=Covered/Coated Sanded Sande	Type C C C s for Proble A10 - 2 cm A16 - Coast S3 - 5cm Mt S7 - Dark S	Location M M M matic Soils Muck (LRR K, L, MLRA Prairie Redox (LRR ucky Peat of Peat	(e.g. clay, sand, loam) silt loam silty clay loam silty clay loam (149B) R K, L, R) (LRR K, L, R)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 10 18 NRCS Hydric	Bottom Depth 10 18 24 Soil Field Ir A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A11 - Deplete	Sable silty clay load Typic Endoaquolls the depth needed to document the in Horizon 1 2 3 ndicators (check here) sistic en Sulfide d Layers ed Below Dark Surface	m dicator or confine Color 10YR 10YR ere if ind	m the absence of Matrix (Moist) 4/2 6/1 6/1 cators a	mon indicators.) (Type of indicators.) (Type	10YR 7.5YR 7.5YR esent value Below Dark Surfanch Chroma ny Mucky May Gleyed eted Matrix	k of consistent wet signature of the consistent with the consistent wet signature of the consistent with the consistent wet signature of the consistent with the consistent wet signature of the consistent with the consistent wet signature of the consistent with the consistent with the consistent wet signature of the consistent with the c	cs=Covered/Coated Sanderdox Features % 3 5 10 Indicator	Type C C C C s for Proble A10 - 2 cm A16 - Coast S3 - 5cm Mi S7 - Dark S S8 - Polyval S9 - Thin Da	Location M M M M matic Soils Muck (LRR K, L, MLRA Prairie Redox (LRR ucky Peat of Peat urface (LRR K, L, M) ue Below Surface ark Surface (LRR K, L	(e.g. clay, sand, loam) silt loam silty clay loam silty clay loam (149B) R K, L, R) (LRR K, L, R) (LRR K, L, R)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 10 18 NRCS Hydric	pgroup): ption (Describe to Bottom Depth 10 18 24	Sable silty clay load Typic Endoaquolls the depth needed to document the in Horizon 1 2 3 ndicators (check here) cipedon istic en Sulfide d Layers ed Below Dark Surface Dark Surface	m dicator or confine Color 10YR 10YR ere if ind	m the absence of Matrix (Moist) 4/2 6/1 6/1 icators a	of indicators.) (Type	10YR 7.5YR 7.5YR value Below Dark Surfant Chroma ny Mucky May Gleyed eted Matrix ox Dark Su	k of consistent wet signature. eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, Re Color (Moist) 3/3 4/6 4/6	cs=Covered/Coated Sandedox Features % 3 5 10 Indicator	Type C C C C s for Proble A10 - 2 cm A16 - Coast S3 - 5cm Me S7 - Dark S S8 - Polyval S9 - Thin Da F12 - Iron-M	Location M M M matic Soils Muck (LRR K, L, MLRA A Prairie Redox (LRR L) Lucky Peat of Peat	(e.g. clay, sand, loam) silt loam silty clay loam silty clay loam (LRR K, L, R) (LRR K, L, R) (LRR K, L, R)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 10 18 NRCS Hydric	Bottom Depth 10 18 24 Soil Field Ir A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A11 - Deplete A12 - Thick E S1 - Sandy M	Sable silty clay load Typic Endoaquolls the depth needed to document the in Horizon 1 2 3 ndicators (check here) sistic en Sulfide d Layers ed Below Dark Surface Dark Surface Muck Mineral	m dicator or confine Color 10YR 10YR ere if ind	m the absence of Matrix (Moist) 4/2 6/1 6/1 icators a	ion indicators.) (Type of indicators.) (Type	10YR 7.5YR 7.5YR 7.5YR esent value Below Dark Surfant Chroma ny Mucky May Gleyed eted Matrix ox Dark Sureted Dark	k of consistent wet signature	cs=Covered/Coated Sanderdox Features % 3 5 10 Indicator	Type C C C C s for Proble A10 - 2 cm A16 - Coast S3 - 5cm Mi S7 - Dark S S8 - Polyval S9 - Thin Da F12 - Iron-M F19 - Piedm	Location M M M M matic Soils Muck (LRR K, L, MLRA Prairie Redox (LRR Lucky Peat of Peat Lucky Peat	(e.g. clay, sand, loam) silt loam silty clay loam silty clay loam (LRR K, L, R) (LRR K, L, R) (LRR K, L, R)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 10 18 NRCS Hydric	Bottom Depth 10 18 24 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A12 - Thick E S1 - Sandy N S4 - Sandy N	Sable silty clay load Typic Endoaquolls the depth needed to document the in Horizon 1 2 3 ndicators (check here) stic en Sulfide d Layers ed Below Dark Surface Dark Surface Muck Mineral Gleyed Matrix	m dicator or confine Color 10YR 10YR ere if ind	m the absence of Matrix (Moist) 4/2 6/1 6/1 icators a	of indicators.) (Type	10YR 7.5YR 7.5YR 7.5YR esent value Below Dark Surfant Chroma ny Mucky May Gleyed eted Matrix ox Dark Sureted Dark	k of consistent wet signature	cs=Covered/Coated Sanderdox Features % 3 5 10 Indicator	Type C C C C s for Proble A10 - 2 cm A16 - Coast S3 - 5cm Mi S7 - Dark S S8 - Polyval S9 - Thin Da F12 - Iron-M F19 - Piedm F21 - Red P	Location M M M M M matic Soils Muck (LRR K, L, MLRA Prairie Redox (LRR Lucky Peat of Peat Lurface (LRR K, L, M) ue Below Surface Lark Surface (LRR K, L Langanese Masses Langanese Mass	(e.g. clay, sand, loam) silt loam silty clay loam silty clay loam (149B) R K, L, R) (LRR K, L, R) (LRR K, L, R) (LRR K, L, R) (S (LRR K, L, R) (IS (MLRA 149B)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 10 18 NRCS Hydric	group): ption (Describe to Bottom Depth 10 18 24	Sable silty clay load Typic Endoaquolls the depth needed to document the in Horizon 1 2 3 ndicators (check here) cipedon istic en Sulfide d Layers ed Below Dark Surface Dark Surface Muck Mineral Gleyed Matrix Redox	m dicator or confine Color 10YR 10YR ere if ind	m the absence of Matrix (Moist) 4/2 6/1 6/1 icators a	ion indicators.) (Type of indicators.) (Type	10YR 7.5YR 7.5YR 7.5YR esent value Below Dark Surfant Chroma ny Mucky May Gleyed eted Matrix ox Dark Sureted Dark	k of consistent wet signature of consistent wet signature. eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, Re Color (Moist) 3/3 4/6 4/6	cs=Covered/Coated Sanderdox Features % 3 5 10 Indicator	Type C C C C s for Proble A10 - 2 cm A16 - Coast S3 - 5cm Mi S7 - Dark S S8 - Polyval S9 - Thin Da F12 - Iron-M F19 - Piedm F21 - Red P TA6 - Mesic	Location M M M M M M M Company of the second of th	(e.g. clay, sand, loam) silt loam silty clay loam silty clay loam 149B) R K, L, R) (LRR K, L, R) (LRR K, L, R) (LRR K, L, R) (S (LRR K, L, R) (S (LRR K, L, R) (S (MLRA 149B)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 10 18 NRCS Hydric	Bottom Depth 10 18 24 Soil Field Ir A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A11 - Deplete A12 - Thick E S1 - Sandy N S4 - Sandy N S4 - Sandy N S6 - Stripped	Sable silty clay load Typic Endoaquolls the depth needed to document the in Horizon 1 2 3 ndicators (check here) bipedon istic en Sulfide d Layers ed Below Dark Surface Dark Surface Muck Mineral Gleyed Matrix Redox I Matrix	m dicator or confine Color 10YR 10YR ere if ind	m the absence of Matrix (Moist) 4/2 6/1 6/1 icators a	ion indicators.) (Type of indicators.) (Type	10YR 7.5YR 7.5YR 7.5YR esent value Below Dark Surfant Chroma ny Mucky May Gleyed eted Matrix ox Dark Sureted Dark	k of consistent wet signature of consistent wet signature. eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, Re Color (Moist) 3/3 4/6 4/6	cs=Covered/Coated Sanderdox Features % 3 5 10 Indicator	Type C C C C C s for Proble A10 - 2 cm A16 - Coast S3 - 5cm Mi S7 - Dark S S8 - Polyval S9 - Thin Da F12 - Iron-N F19 - Piedm F21 - Red P TA6 - Mesic TF12 - Very	Location M M M M M M M M M M M M C	(e.g. clay, sand, loam) silt loam silty clay loam silty clay loam 149B) R K, L, R) (LRR K, L, R) (LRR K, L, R) (LRR K, L, R) (S (LRR K, L, R) (S (LRR K, L, R) (S (MLRA 149B)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 10 18 NRCS Hydric	Bottom Depth 10 18 24 Soil Field Ir A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A11 - Deplete A12 - Thick E S1 - Sandy N S4 - Sandy N S4 - Sandy N S6 - Stripped	Sable silty clay load Typic Endoaquolls the depth needed to document the in Horizon 1 2 3 ndicators (check here) cipedon istic en Sulfide d Layers ed Below Dark Surface Dark Surface Muck Mineral Gleyed Matrix Redox	m dicator or confine Color 10YR 10YR ere if ind	m the absence of Matrix (Moist) 4/2 6/1 6/1 icators a	ion indicators.) (Type of indicators.) (Type	10YR 7.5YR 7.5YR 7.5YR esent value Below Dark Surfant Chroma ny Mucky May Gleyed eted Matrix ox Dark Sureted Dark	k of consistent wet signature of consistent wet signature. eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, Re Color (Moist) 3/3 4/6 4/6	cs=Covered/Coated Sance edox Features % 3 5 10 Indicator	Type C C C C C S for Proble A10 - 2 cm A16 - Coast S3 - 5cm Mi S7 - Dark S S8 - Polyval S9 - Thin Da F12 - Iron-M F19 - Piedm F21 - Red P TA6 - Mesic TF12 - Very Other (Expla	Location M M M M M M M Company of the second of th	(e.g. clay, sand, loam) silt loam silty clay loam silty clay loam (LRR K, L, R) (S (LRR K, L, R) (S (MLRA 149B) (145, 149B) (face
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 10 18 NRCS Hydric	Bottom Depth 10 18 24 Soil Field Ir A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A11 - Deplete A12 - Thick E S1 - Sandy N S4 - Sandy N S4 - Sandy N S6 - Stripped	Sable silty clay load Typic Endoaquolls the depth needed to document the in Horizon 1 2 3 ndicators (check here) bipedon istic en Sulfide d Layers ed Below Dark Surface Dark Surface Muck Mineral Gleyed Matrix Redox I Matrix	m dicator or confine Color 10YR 10YR ere if ind	m the absence of Matrix (Moist) 4/2 6/1 6/1 icators a	ion indicators.) (Type of indicators.) (Type	10YR 7.5YR 7.5YR 7.5YR esent value Below Dark Surfant Chroma ny Mucky May Gleyed eted Matrix ox Dark Sureted Dark	k of consistent wet signature of consistent wet signature. eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, Re Color (Moist) 3/3 4/6 4/6	cs=Covered/Coated Sance edox Features % 3 5 10 Indicator	Type C C C C C S for Proble A10 - 2 cm A16 - Coast S3 - 5cm Mi S7 - Dark S S8 - Polyval S9 - Thin Da F12 - Iron-M F19 - Piedm F21 - Red P TA6 - Mesic TF12 - Very Other (Expla	Location M M M M matic Soils Muck (LRR K, L, MLRA A Prairie Redox (LRR K, L, M) ue Below Surface urface (LRR K, L, M) ue Below Surface ark Surface (LRR K, L langanese Masses ont Floodplain Soil arent Material Spodic (MLRA 144A, A Shallow Dark Surfain in Remarks)	(e.g. clay, sand, loam) silt loam silty clay loam silty clay loam (LRR K, L, R) (LRR K, L, R) (LRR K, L, R) (S (LRR K, L, R) (S (MLRA 149B) (145, 149B) face
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 10 18 NRCS Hydric	Bottom Depth 10 18 24 Soil Field Ir A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A11 - Deplete A12 - Thick E S1 - Sandy N S4 - Sandy N S4 - Sandy N S6 - Stripped	Sable silty clay load Typic Endoaquolls the depth needed to document the in Horizon 1 2 3 ndicators (check here) stic en Sulfide d Layers ed Below Dark Surface Oark Surface Muck Mineral Gleyed Matrix Redox Matrix	m dicator or confine Color 10YR 10YR ere if ind	m the absence of Matrix (Moist) 4/2 6/1 6/1 icators a	ion indicators.) (Type of indicators.) (Type	10YR 7.5YR 7.5YR 7.5YR esent value Below Dark Surfant Chroma ny Mucky May Gleyed eted Matrix ox Dark Sureted Dark	k of consistent wet signature of consistent wet signature. eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, Re Color (Moist) 3/3 4/6 4/6	cs=Covered/Coated Sance edox Features % 3 5 10 Indicator	Type C C C C C C S for Proble A10 - 2 cm A16 - Coast S3 - 5cm Me S7 - Dark S S8 - Polyval S9 - Thin Da F12 - Iron-M F19 - Piedm F21 - Red P TA6 - Mesic TF12 - Very Other (Expla of hydrophytic veget or problematic.	Location M M M M matic Soils Muck (LRR K, L, MLRA A Prairie Redox (LRR K, L, M) ue Below Surface urface (LRR K, L, M) ue Below Surface ark Surface (LRR K, L langanese Masses ont Floodplain Soil arent Material Spodic (MLRA 144A, A Shallow Dark Surfain in Remarks)	(e.g. clay, sand, loam) silt loam silty clay loam silty clay loam (LRR K, L, R) (LRR K, L, R) (LRR K, L, R) (S (LRR K, L, R) (S (MLRA 149B) (145, 149B) face



Project/Site: Vilas Road Wetland ID: adj. W-1 Sample Point: P10

VEGETATION		ative spe	cies.)		
Tree Stratum (P	lot size: 10 meter radius)	0/ Cover	Dominant	Ind Ctatus	Dominance Test Worksheet
1.	<u>Species Name</u>	% Cover	<u>Dominant</u>	Ind.Status	Dominance rest worksneet
2.					Number of Dominant Species that are OBL, FACW, or FAC: 0 (A)
3.					
4.					Total Number of Dominant Species Across All Strata:1 (B)
5.					
6.					Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)
7.					Dravalance Index Morkshoot
8. 9.					Prevalence Index Worksheet <u>Total % Cover of:</u> <u>Multiply by:</u>
10.					OBL spp. 0 $\times 1 = 0$
	Total Cover =	0			FACW spp. $0 \times 2 = 0$
					FAC spp. $1 \times 3 = 3$
Sapling/Shrub St	ratum (Plot size: 5 meter radius)				FACU spp. $3 x 4 = 12$
1.					UPL spp. $x 5 = 350$
2.					Tetal 74 (A)
3. 4.					Total <u>74</u> (A) <u>365</u> (B)
4. 5.					Prevalence Index = B/A = 4.932
6.					
7.					
8.					Hydrophytic Vegetation Indicators:
9.					☐ Yes ☑ No Rapid Test for Hydrophytic Vegetation
10.					☐ Yes ☑ No Dominance Test is > 50%
	Total Cover =	0			Yes ☑ No Prevalence Index is ≤ 3.0 *
					☐ Yes ☑ No Morphological Adaptations (Explain) *
Herb Stratum (PI	ot size: 2 meter radius) GLYCINE MAX	70	Y	UPL	☐ Yes ☑ No Problem Hydrophytic Vegetation (Explain) *
2.	TARAXACUM OFFICINALE	2	N .	FACU	* Indicators of hydric soil and wetland hydrology must be
3.	Vitis riparia	1	N	FAC	present, unless disturbed or problematic.
4.	ABUTILON THEOPHRASTI	1	N	FACU	Definitions of Vegetation Strata:
5.					
6					Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast
7.					height (DBH), regardless of height.
8.					Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft.
9. 10.					tall.
11.	_ 				
12.					Herb - All herbaceous (non-woody) plants, regardless of size, and
13.					woody plants less than 3.28 ft. tall.
14.					
15.					Woody Vines - All woody vines greater than 3.28 ft. in height.
	Total Cover =	74			
Woody Vine Stra	tum (Plot size: 10 meter radius)				
1.					
2.					
3.					Hydrophytic Vegetation Present ☐ Yes ☑ No
4.					
5.	Total Cover =	0			
Remarks:			s of crop	stress. W	Veeds present at low density, are overall predominantly non-hydrophytic.
· tomanto	23,23a Stop at dample point onewood	oigin	2 01 01 0p 1	21. 300. V	. 2222 p. 222 at 1211 actionly, and everall prodoffinding from hydrophytic.
Additional Re	marks:				

Additional Remarks.



Project/Site:	Vilas Road						Stantec Project #:	193704691		Date:	10/13/16
Applicant:		_eanne Widen		Invocti	gotor #2:	look Su	ılman			County:	Dane
Investigator #1: Soil Unit:	Marshan si			mvesu	gator #2:		/I/WWI Classification:	Tak		State: Wetland ID:	Wisconsin W-1
Landform:	Depression			Loc	al Relief:			TOR		Sample Point:	P11
Slope (%):	0	Latitude:	N/A		ongitude:		C	Datum:	N/A	Community ID:	Forested Wetland
- ' '	drologic cond	ditions on the site ty					ain in remarks)	☐ Yes ☑		Section:	17
		or Hydrology □ sig	•			(11110) 011	Are normal circumsta			Township:	7N
•		or Hydrology □ nat	-	•				□No		Range:	11E
SUMMARY OF		, 0, 🗆	3 1							Ü	
Hydrophytic Veg	getation Pre	sent?		✓ Yes	□ No			Hydric Soils	Present?		
Wetland Hydrol	~			_ ☑ Yes				Is This Samp	oling Point '	Within A Wetlar	
Remarks:					ns are we	tter than	normal for this time of	f year. Samp	le point loc	ated in forested	wetland, east of
	ditched wat	terway, west of ag f	ield edge	Э.							
HYDROLOGY											
Wetland Hydro	ology Indic	ators (Check here i	f indicate	ors are r	ot preser	nt □):					
Primary:		•				_ ,			Secondary:		
_	A1 - Surface A2 - High Wa				B9 - Wate					B6 - Surface Soil	
l H	A3 - Saturation			H	B13 - Aqu B15 - Mar					B10 - Drainage Pa B16 - Moss Trim	
	B1 - Water M				C1 - Hydr	ogen Sulfi	de Odor			C2 - Dry-Season	
	B2 - Sedimer	•					spheres on Living Roots			C8 - Crayfish Bur	
l H	B3 - Drift De _l B4 - Algal Ma	•					educed Iron eduction in Tilled Soils			D1 - Stunted or S	isible on Aerial Imagery tressed Plants
	B5 - Iron Dep				C7 - Thin				V	D2 - Geomorphic	
		on Visible on Aerial Ima	0 ,		Other (Ex	plain in Re	emarks)			D3 - Shallow Aqu	
	B8 - Sparsely	y Vegetated Concave S	Surrace							D4 - Microtopogra D5 - FAC-Neutral	
Field Observat	ione										
Surface Water		□ Ves □ No	Depth:		(in.)						
Water Table Pro		☐ Yes ☑ No ☐ Yes ☑ No	Depth:		(in.)			Wetland Hy	drology Pr	resent? ⊡	Yes □ No
Saturation Pres		☐ Yes ☑ No	Depth:		(in.)						
			•		. ,	oue inene	ations) if available.		N/A		
		eam gauge, monitori	ng wen, a	aenai pric	nos, previ	ous mspe	ctions), ii avallable.		IN/A		
Domarko:	Lydroporio	d likely reduced as	rocult of	latoral o	ffoot of d	rainaga	ditab to weet				
Remarks:	Hydroperio	d likely reduced as	result of	lateral e	ffect of d	rainage o	ditch to west.				
	Hydroperio	d likely reduced as	result of	lateral e	effect of d	rainage (ditch to west.				
SOILS		•	result of	lateral e	ffect of d			very poorly			
SOILS Map Unit Name): :	Marshan silt loam		lateral e	effect of d		ditch to west. eries Drainage Class:	very poorly			
SOILS Map Unit Name Taxonomy (Sub	e: ogroup):	Marshan silt loam Typic Endoaquolls				S			d Grains; Location: F	PL=Pore Lining, M=Matrix)	
SOILS Map Unit Name Taxonomy (Sub	e: ogroup):	Marshan silt loam Typic Endoaquolls			of indicators.) (Ty	S	eries Drainage Class: ation, D=Depletion, RM=Reduced Matrix, C			PL=Pore Lining, M=Matrix)	Texture
SOILS Map Unit Name Taxonomy (Sub	e: ogroup): otion (Describe to	Marshan silt loam Typic Endoaquolls	dicator or confin	m the absence o	of indicators.) (Ty	S	eries Drainage Class: ation, D=Depletion, RM=Reduced Matrix, C	CS=Covered/Coated Sand		PL=Pore Lining, M=Matrix) Location	Texture (e.g. clay, sand, loam)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip	e: ogroup): otion (Describe to Bottom	Marshan silt loam Typic Endoaquolls the depth needed to document the in	dicator or confin	m the absence o	of indicators.) (Ty	S	eries Drainage Class: ation, D=Depletion, RM=Reduced Matrix, C	CS=Covered/Coated Sand	1		
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth	e: ogroup): otion (Describe to Bottom Depth	Marshan silt loam Typic Endoaquolls the depth needed to document the in	dicator or confirm	m the absence of Matrix	of indicators.) (Ty	Se: C=Concentra	eries Drainage Class: ation, D=Depletion, RM=Reduced Matrix, C Rec Color (Moist)	CS=Covered/Coated Sand	Туре	Location	(e.g. clay, sand, loam)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	e: ogroup): otion (Describe to Bottom Depth	Marshan silt loam Typic Endoaquolls the depth needed to document the in Horizon 1	dicator or confirmation of the color	m the absence of Matrix (Moist)	of indicators.) (Type 100 % 100	Se: C=Concentra	eries Drainage Class: ation, D=Depletion, RM=Reduced Matrix, C Red Color (Moist)	CS=Covered/Coated Sand	Type 	Location 	(e.g. clay, sand, loam) mucky loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8	e: ogroup): otion (Describe to Bottom Depth 8 24	Marshan silt loam Typic Endoaquolls the depth needed to document the in Horizon 1 2	Color 10YR 10YR	m the absence of Matrix (Moist) 2/1 5/1	% 100 100	Se: C=Concentra	eries Drainage Class: ation, D=Depletion, RM=Reduced Matrix, C Rec Color (Moist)	cs=Covered/Coated Sand	Type	Location 	(e.g. clay, sand, loam) mucky loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8	e: ogroup): otion (Describe to Bottom Depth 8 24	Marshan silt loam Typic Endoaquolls the depth needed to document the in Horizon 1 2	Color 10YR 10YR	m the absence of Matrix (Moist) 2/1 5/1	% 100 100	See: C=Concentra	eries Drainage Class: ation, D=Depletion, RM=Reduced Matrix, C Red Color (Moist)	cs=Covered/Coated Sand	Type	Location 	(e.g. clay, sand, loam) mucky loam clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8	e: ogroup): otion (Describe to Bottom Depth 8 24	Marshan silt loam Typic Endoaquolls the depth needed to document the in Horizon 1 2	Color 10YR 10YR	m the absence of Matrix (Moist) 2/1 5/1	% 100 100	Se: C=Concentra	eries Drainage Class: ation, D=Depletion, RM=Reduced Matrix, C Red Color (Moist)	CS=Covered/Coated Sand	Type	Location	(e.g. clay, sand, loam) mucky loam clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8	e: Digroup): Display (Describe to Bottom Depth 8 24	Marshan silt loam Typic Endoaquolls the depth needed to document the in Horizon 1 2	Color 10YR 10YR	Matrix (Moist) 2/1 5/1	% 100 100	Se: C=Concentra	eries Drainage Class: ation, D=Depletion, RM=Reduced Matrix, C Rec Color (Moist)	CS=Covered/Coated Sand	Type	Location	(e.g. clay, sand, loam) mucky loam clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8	e: Digroup): Display (Describe to Bottom Depth 8 24	Marshan silt loam Typic Endoaquolls the depth needed to document the in Horizon 1 2	Color 10YR 10YR	m the absence of Matrix (Moist) 2/1 5/1	% 100 100	De: C=Concentra	eries Drainage Class: ation, D=Depletion, RM=Reduced Matrix, Correct Reduced	CS=Covered/Coated Sand	Type	Location	(e.g. clay, sand, loam) mucky loam clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 NRCS Hydric	e: Degroup): Depth Bottom Depth 8 24 Soil Field In	Marshan silt loam Typic Endoaquolls the depth needed to document the in Horizon 1 2	Color 10YR 10YR	m the absence of Matrix (Moist) 2/1 5/1 icators a	% 100 100 are not pre	se: C=Concentra	eries Drainage Class: ation, D=Depletion, RM=Reduced Matrix, C Red Color (Moist)	CS=Covered/Coated Sand dox Features % Indicator	Type	Location matic Soils ¹	(e.g. clay, sand, loam) mucky loam clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 NRCS Hydric	Bottom Depth 8 24 Soil Field In	Marshan silt loam Typic Endoaquolls the depth needed to document the in Horizon 1 2 ndicators (check he	Color 10YR 10YR	m the absence of Matrix (Moist) 2/1 5/1 icators a	% 100 100 re not pre	se: C=Concentra	eries Drainage Class: ation, D=Depletion, RM=Reduced Matrix, CRecord (Moist)	CS=Covered/Coated Sand dox Features % Indicator	Type	Location Matic Soils ¹ Vuck (LRR K, L, MLRA 1	(e.g. clay, sand, loam) mucky loam clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 NRCS Hydric	Bottom Depth 8 24 Soil Field Ir A1- Histosol A2 - Histic Ep A3 - Black Hi	Marshan silt loam Typic Endoaquolls the depth needed to document the in Horizon 1 2 ndicators (check here)	Color 10YR 10YR	m the absence of Matrix (Moist) 2/1 5/1 icators a	% 100 100 re not pre	se: C=Concentra	eries Drainage Class: ation, D=Depletion, RM=Reduced Matrix, C Rec Color (Moist)	CS=Covered/Coated Sand dox Features % Indicator	Type	Location matic Soils ¹	(e.g. clay, sand, loam) mucky loam clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 NRCS Hydric	Bottom Depth 8 24 Soil Field Ir A1- Histosol A2 - Histic Ep A3 - Black Histosol A4 - Hydroge	Marshan silt loam Typic Endoaquolls the depth needed to document the in Horizon 1 2 ndicators (check here) pipedon istic en Sulfide	Color 10YR 10YR	m the absence of Matrix (Moist) 2/1 5/1 icators a	% 100 100 sere not presser Polyv S9 - Thin S11 - High F1 - Loam	se: C=Concentra	eries Drainage Class: ation, D=Depletion, RM=Reduced Matrix, Correct Reduced Reduced Matrix, Correct Reduced	CS=Covered/Coated Sand dox Features % Indicator	Type	Location matic Soils ¹ Vuck (LRR K, L, MLRA 1 Prairie Redox (LRR ucky Peat of Peat ourface (LRR K, L, M)	(e.g. clay, sand, loam) mucky loam clay loam 149B) RK, L, R) (LRR K, L, R)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 NRCS Hydric	Bottom Depth 8 24 Soil Field Ir A1- Histosol A2 - Histic El A3 - Black Hi A4 - Hydroge A5 - Stratified	Marshan silt loam Typic Endoaquolls the depth needed to document the in Horizon 1 2 ndicators (check here) pipedon istic en Sulfide d Layers	Color 10YR 10YR ere if ind	m the absence of Matrix (Moist) 2/1 5/1 icators a	% 100 100 sre not pre S8 - Polyv S9 - Thin S11 - Higl F1 - Loam F2 - Loam	e: C=Concentra	eries Drainage Class: ation, D=Depletion, RM=Reduced Matrix, CRec Color (Moist)	CS=Covered/Coated Sand dox Features % Indicator	Type	Location matic Soils Muck (LRR K, L, MLRA 1 Prairie Redox (LRR LICKY Peat of Peat aurface (LRR K, L, M) ue Below Surface	(e.g. clay, sand, loam) mucky loam clay loam (LRR K, L, R) (LRR K, L)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 NRCS Hydric	Bottom Depth 8 24 Soil Field Ir A1- Histosol A2 - Histic El A3 - Black Hi A4 - Hydroge A5 - Stratified	Marshan silt loam Typic Endoaquolls the depth needed to document the in Horizon 1 2 ndicators (check he pipedon istic en Sulfide d Layers ed Below Dark Surface	Color 10YR 10YR ere if ind	m the absence of Matrix (Moist) 2/1 5/1 icators a	% 100 100 sere not presser Polyv S9 - Thin S11 - High F1 - Loam	esent	eries Drainage Class: ation, D=Depletion, RM=Reduced Matrix, CRed Color (Moist)	CS=Covered/Coated Sand dox Features % Indicator	Type	Location matic Soils Muck (LRR K, L, MLRA 1 Prairie Redox (LRR ucky Peat of Peat aurface (LRR K, L, M) ue Below Surface ark Surface (LRR K, L	(e.g. clay, sand, loam) mucky loam clay loam (t.RR K, L, R) (LRR K, L) (t.R)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 NRCS Hydric	Bottom Depth 8 24 Soil Field Ir A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A11 - Deplete A12 - Thick E S1 - Sandy M	Marshan silt loam Typic Endoaquolls the depth needed to document the in Horizon 1 2 ndicators (check he pipedon istic en Sulfide d Layers ed Below Dark Surface Dark Surface Dark Surface Muck Mineral	Color 10YR 10YR ere if ind	m the absence of Matrix (Moist) 2/1 5/1 icators a	% 100 100	e: C=Concentra	eries Drainage Class: ation, D=Depletion, RM=Reduced Matrix, CRed Color (Moist)	cs=Covered/Coated Sand dox Features % Indicator	Type	Location matic Soils ¹ Muck (LRR K, L, MLRA 1 Prairie Redox (LRR Lucky Peat of Peat aurface (LRR K, L, M) ue Below Surface ark Surface (LRR K, L langanese Masses ont Floodplain Soi	(e.g. clay, sand, loam) mucky loam clay loam (LRR K, L, R) (LRR K, L, R) (LRR K, L, R)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 NRCS Hydric	Bottom Depth 8 24 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A11 - Deplete A12 - Thick E S1 - Sandy M S4 - Sandy M	Marshan silt loam Typic Endoaquolls the depth needed to document the in Horizon 1 2 hdicators (check he pipedon istic en Sulfide d Layers ed Below Dark Surface Dark Surface Dark Surface Muck Mineral Gleyed Matrix	Color 10YR 10YR ere if ind	m the absence of Matrix (Moist) 2/1 5/1 icators a	% 100 100 se not pre S8 - Polys S9 - Thin S11 - High F1 - Loam F2 - Loam F3 - Deple F6 - Redo	e: C=Concentra	eries Drainage Class: ation, D=Depletion, RM=Reduced Matrix, CRed Color (Moist)	CS=Covered/Coated Sand dox Features % Indicator	Type	Location	(e.g. clay, sand, loam) mucky loam clay loam (LRR K, L, R)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 NRCS Hydric	Bottom Depth 8 24 Soil Field Ir A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A12 - Thick E S1 - Sandy N S4 - Sandy R S5 - Sandy R	Marshan silt loam Typic Endoaquolls the depth needed to document the in Horizon 1 2 ndicators (check here) pipedon istic en Sulfide d Layers ed Below Dark Surface Dark Surface Muck Mineral Gleyed Matrix Redox	Color 10YR 10YR ere if ind	m the absence of Matrix (Moist) 2/1 5/1 icators a	% 100 100	e: C=Concentra	eries Drainage Class: ation, D=Depletion, RM=Reduced Matrix, CRed Color (Moist)	CS=Covered/Coated Sand dox Features % Indicator	Type	Location matic Soils Muck (LRR K, L, MLRA Prairie Redox (LRR Lucky Peat of Peat Lucky Peat Lucky Peat of Peat Lucky Pe	(e.g. clay, sand, loam) mucky loam clay loam (LRR K, L, R)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 NRCS Hydric	Bottom Depth 8 24 Soil Field Ir A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A1- Deplete A12 - Thick E S1 - Sandy N S4 - Sandy N S4 - Sandy N S4 - Sandy N S5 - Sandy R S6 - Stripped	Marshan silt loam Typic Endoaquolls the depth needed to document the in Horizon 1 2 ndicators (check here) pipedon istic en Sulfide d Layers ed Below Dark Surface Dark Surface Muck Mineral Gleyed Matrix Redox	Color 10YR 10YR ere if ind	m the absence of Matrix (Moist) 2/1 5/1 icators a	% 100 100	e: C=Concentra	eries Drainage Class: ation, D=Depletion, RM=Reduced Matrix, CRed Color (Moist)	cs=Covered/Coated Sand dox Features % Indicator	Type	Location	(e.g. clay, sand, loam) mucky loam clay loam (LRR K, L, R)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 NRCS Hydric	Bottom Depth 8 24 Soil Field Ir A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A1- Deplete A12 - Thick E S1 - Sandy N S4 - Sandy N S4 - Sandy N S4 - Sandy N S5 - Sandy R S6 - Stripped	Marshan silt loam Typic Endoaquolls the depth needed to document the in Horizon 1 2	Color 10YR 10YR ere if ind	m the absence of Matrix (Moist) 2/1 5/1 icators a	% 100 100	e: C=Concentra	eries Drainage Class: ation, D=Depletion, RM=Reduced Matrix, CRed Color (Moist)	CS=Covered/Coated Sand dox Features % Indicator Indicator	Type	Location matic Soils Muck (LRR K, L, MLRA 1 Prairie Redox (LRR ucky Peat of Peat aurface (LRR K, L, M) ue Below Surface ark Surface (LRR K, L) langanese Masses ont Floodplain Soil arent Material Spodic (MLRA 144A, 1) Shallow Dark Surface	(e.g. clay, sand, loam) mucky loam clay loam (LRR K, L, R) (LRR K, L) (LRR K, L)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 NRCS Hydric	Bottom Depth 8 24 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A11 - Deplete A12 - Thick E S1 - Sandy N S4 - Sandy N S4 - Sandy N S4 - Sandy N S5 - Sandy N S6 - Stripped S7 - Dark Su	Marshan silt loam Typic Endoaquolls the depth needed to document the in Horizon 1 2 ndicators (check here) pipedon istic en Sulfide d Layers ed Below Dark Surface Dark Surface Muck Mineral Bleyed Matrix Redox d Matrix arface (LRR R, MLRA 149B)	Color 10YR 10YR ere if ind	m the absence of Matrix (Moist) 2/1 5/1 icators a	% 100 100	e: C=Concentra	eries Drainage Class: ation, D=Depletion, RM=Reduced Matrix, CRed Color (Moist)	CS=Covered/Coated Sand dox Features % Indicator Indicator Indicator Indicator Indicator Indicator Indicator Indicator Indicator Indicator Indicator Indicator Indicator Indicator Indicator Indicator Indicator	Type	Location	(e.g. clay, sand, loam) mucky loam clay loam 149B) R K, L, R) (LRR K, L, R) (LRR K, L, R) (LRR K, L, R) (S (LRR K, L, R) (IS (MLRA 149B) (IS (MLRA 149B) (IS (MLRA 149B) (IS (MLRA 149B)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 NRCS Hydric	Bottom Depth 8 24 Soil Field Ir A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A1- Deplete A12 - Thick E S1 - Sandy N S4 - Sandy N S4 - Sandy N S4 - Sandy N S5 - Sandy R S6 - Stripped	Marshan silt loam Typic Endoaquolls the depth needed to document the in Horizon 1 2 ndicators (check here) pipedon istic en Sulfide d Layers ed Below Dark Surface Dark Surface Muck Mineral Bleyed Matrix Redox d Matrix arface (LRR R, MLRA 149B)	Color 10YR 10YR ere if ind	m the absence of Matrix (Moist) 2/1 5/1 icators a	% 100 100	e: C=Concentra	eries Drainage Class: ation, D=Depletion, RM=Reduced Matrix, CRed Color (Moist)	CS=Covered/Coated Sand dox Features % Indicator Indicator	Type	Location matic Soils Muck (LRR K, L, MLRA 1 Prairie Redox (LRR L, L) Lucky Peat of Peat aurface (LRR K, L, M) Lucky Peat of Peat aurface (LRR K, L) Lucky Peat of	(e.g. clay, sand, loam) mucky loam clay loam (LRR K, L, R) (LRR K, L) (LRR K, L)



Project/Site: Vilas Road Wetland ID: W-1 Sample Point: P11

VEGETATION	(Species identified in all uppercase are non-na	ative spec	cies.)		
Tree Stratum (Plo	t size: 10 meter radius)				
_	Species Name			Ind.Status	Dominance Test Worksheet
1.	Acer negundo	70	Y	FAC	
2.	Ulmus americana	20	Y	FACW	Number of Dominant Species that are OBL, FACW, or FAC:5(A)
3.	MORUS ALBA	10	N	FACU	
4.					Total Number of Dominant Species Across All Strata:5(B)
5.					
6.					Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)
7.					
8.					Prevalence Index Worksheet
9.					Total % Cover of: Multiply by:
10.					OBL spp. $0 x 1 = 0$
	Total Cover =	100			FACW spp. $\frac{31}{2}$ $\times 2 = \frac{62}{2}$
					FAC spp. 220 x 3 = 660
Sapling/Shrub Stra	atum (Plot size: 5 meter radius)				FACU spp. $\frac{40}{}$ $x = \frac{160}{}$
1.	RHAMNUS CATHARTICA	30	Y	FAC	UPL spp. $\underline{\qquad}$ $x = \underline{\qquad}$
2.	Acer negundo	15	Y	FAC	
3.	MORUS ALBA	5	N	FACU	Total <u>291</u> (A) <u>882</u> (B)
4.	Sambucus nigra	4	N	FACW	
5.					Prevalence Index = B/A = 3.031
6.					
7.					
8.					Hydrophytic Vegetation Indicators:
9.					☐ Yes ☑ No Rapid Test for Hydrophytic Vegetation
10.					☑ Yes ☐ No Dominance Test is > 50%
	Total Cover =	54			☐ Yes ☑ No Prevalence Index is ≤ 3.0 *
					☐ Yes ☑ No Morphological Adaptations (Explain) *
,	size: 2 meter radius)			540	☐ Yes ☑ No Problem Hydrophytic Vegetation (Explain) *
1.	SOLANUM DULCAMARA	70	Y	FAC	* Indicators of hydric soil and wetland hydrology must be
2.	Geum canadense	25	N	FAC	present, unless disturbed or problematic.
3.	ARCTIUM MINUS	15	N	FACU	
4.	Hackelia virginiana	10	N	FACU	Definitions of Vegetation Strata:
5.	Fallopia scandens	8	N	FAC	-
6	Bidens frondosa	5	N	FACW	Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height.
7.	Symphyotrichum lateriflorum	2	N	FAC	rieight (DDH), regardless of fleight.
8.	PHALARIS ARUNDINACEA	2	N	FACW	Carelline w/Ohamah Woody plants loss than 3 in DBH and greater than 3.29 ft
9.	<u></u>				Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft. tall.
10.					
11.					Light All harbacoous (non woody) plants, regardless of size, and
12.					Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft. tall.
13.					
14.					All woody vines greater than 2.30 ft, in height
15.					Woody Vines - All woody vines greater than 3.28 ft. in height.
	Total Cover =	137			
vvoody Vine Stratu	ım (Plot size: 10 meter radius)				
1.	<u></u>				
2.					Uhadasa sahadia Wasada Cara Bara and Saha Saha
3.					Hydrophytic Vegetation Present ☑ Yes ☐ No
4.					
5.	 				
Dame	Total Cover =	0	an almost		although not be provided as 2-day to 12-bit by the EAOU
Remarks:					although not by prevalence index, due to high coverage by FACU species.
	Vegetation likely responding to artificial	urainag	je errects	from alto	THE WEST.
Additional Ren	narke:				

Additional Remarks.	
	•



Project/Site:	Vilas Road						Stantec Project #:	193704691		Date:	10/13/16
Applicant:	·								Dane		
• •	#1: Jeff Kraemer Investigator #2: Josh Sulman									State:	Wisconsin
Soil Unit:							/I/WWI Classification:			Wetland ID:	W-1
Landform:	Dip	olay loam		Loc	al Relief:					Sample Point:	P12
Slope (%):	1	Latitude:	Ν/Δ		ongitude:			Datum:	Ν/Δ	Community ID:	Farmed Wetland
· · · · · · · · · · · · · · · · · · ·	Irologic con	ditions on the site ty					oin in romarka)	☐ Yes ☑		Section:	17
·		•	•			(II IIO, expia	Are normal circumsta				7N
•		or Hydrology □ sig	-	*			☐ Yes	ances presen ☑No	l :	Township:	
		or Hydrology	lurally pr	obiemai	IC?		□ 162	⊴INO		Range:	11E
SUMMARY OF											
Hydrophytic Ve								Hydric Soils			
Wetland Hydrol										Within A Wetlar	
Remarks:			•				normal for this time o	•	•		
	soybean fie	eld. Vegetation sign	nificantly	disturbe	d due to	cultivatio	n, thus wetland detern	nination made	e on basis o	of wetland hydro	ology and soils.
HYDROLOGY											
	ology Indic	ators (Check here i	if indicate	ore are r	not nracar	ot \•					
Primary:		ators (Check here i	ii iiiuicati	ors are r	ioi presei	п 🗀 🕖			Secondary:		
	A1 - Surface	Water			B9 - Wate	er-Stained	Leaves			B6 - Surface Soil	Cracks
_	A2 - High Wa			H	B13 - Aqu				H	B10 - Drainage Pa	
	A3 - Saturation				B15 - Mar				ī	B16 - Moss Trim	
	B1 - Water M	larks			C1 - Hydr	•				C2 - Dry-Season	Water Table
	B2 - Sedime				C3 - Oxidi	ized Rhizo	spheres on Living Roots			C8 - Crayfish Burn	rows
	B3 - Drift De						educed Iron				isible on Aerial Imagery
	B4 - Algal Ma			_			duction in Tilled Soils			D1 - Stunted or S	
	B5 - Iron Dep				C7 - Thin				뇓	D2 - Geomorphic	
		on Visible on Aerial Ima	0 ,		Other (Ex	piain in Re	emarks)			D3 - Shallow Aqui	
	bo - Sparser	Vegetated Concave S	burrace							D4 - Microtopogra D5 - FAC-Neutral	
										Do - 1 Ao-Neutral	
Field Observat	ions:										
Surface Water I	Present?		Depth:	0.5	(in.)			Wetland Hy	drology Pr	rosont?	Yes □ No
Water Table Pro	esent?		Depth:	0	(in.)			wetiand my	drology Fi	esent:	163 🖺 110
Saturation Pres	ent?		Depth:	0	(in.)						
Describe Pecord	ed Data (etr	eam gauge, monitori	na woll a	orial pho	otos provi	ous inspe	etions) if available:		Historic Aeri	al Imagery Review	M.
	<u> </u>						<u> </u>				
	DOVION OF	annol imaganı, tar th									
Remarks:				-			_	•		•	3 of 5 dry years. Crop
				-			et signatures for most aves early in wetland i	•		•	3 of 5 dry years. Crop
SOILS				-			_	•		•	3 of 5 dry years. Crop
	stress visib		; current	-		ed its lea	_	relative to nor		•	3 of 5 dry years. Crop
SOILS Map Unit Name	stress visib	le in aerial imagery	; current	-		ed its lea	aves early in wetland i	relative to nor		•	3 of 5 dry years. Crop
SOILS Map Unit Name Taxonomy (Sub	stress visib	le in aerial imagery Sable silty clay loar Typic Endoaquolls	; current	crop of	soy dropp	ed its lea	eries Drainage Class:	relative to nor poorly	n-wetland p	ortion of field.	3 of 5 dry years. Crop
SOILS Map Unit Name Taxonomy (Sub	stress visib	le in aerial imagery Sable silty clay loar Typic Endoaquolls	; current	m the absence of	soy dropp	ed its lea	eries Drainage Class:	poorly CS=Covered/Coated Sand	n-wetland p	ortion of field.	
SOILS Map Unit Name Taxonomy (Sub Profile Descrip	stress visib	Sable silty clay loar Typic Endoaquolls the depth needed to document the inc	m dicator or confin	m the absence of	soy dropp	spe: C=Concentra	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, Re	poorly CS=Covered/Coated Sanded cdox Features	n-wetland p	ortion of field. PL=Pore Lining, M=Matrix)	Texture
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth	stress visib	le in aerial imagery Sable silty clay loar Typic Endoaquolls	current m dicator or confirm Color	m the absence of Matrix (Moist)	soy dropp of indicators.) (Type	Spe: C=Concentra	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, Re Color (Moist)	poorly CS=Covered/Coated Sanderdox Features %	d Grains; Location: F	ortion of field. PL=Pore Lining, M=Matrix) Location	Texture (e.g. clay, sand, loam)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	e: ogroup): otion (Describe to Bottom Depth 8	Sable silty clay loar Typic Endoaquolls the depth needed to document the incention Horizon	current m dicator or confirm Color 10YR	m the absence of Matrix (Moist) 3/1	of indicators.) (Type 95	spe: C=Concentra	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, Re	poorly CS=Covered/Coated Sanded cdox Features	n-wetland p	ortion of field. PL=Pore Lining, M=Matrix)	Texture (e.g. clay, sand, loam) silty clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8	stress visible stress	Sable silty clay loar Typic Endoaquolls the depth needed to document the inc Horizon 1 2	current dicator or confirm Color 10YR 10YR	m the absence of Matrix (Moist) 3/1 2/1	of indicators.) (Type 100 % 95 100	pe: C=Concentra	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, Re Color (Moist) 3/4	poorly CS=Covered/Coated Sand edox Features % 5	d Grains; Location: F	PL=Pore Lining, M=Matrix) Location M	Texture (e.g. clay, sand, loam) silty clay loam silty clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	e: ogroup): otion (Describe to Bottom Depth 8	Sable silty clay loar Typic Endoaquolls the depth needed to document the incention Horizon	current m dicator or confirm Color 10YR	m the absence of Matrix (Moist) 3/1	of indicators.) (Type 95	Spe: C=Concentra	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, Re Color (Moist)	poorly CS=Covered/Coated Sand edox Features % 5	d Grains; Location: F	ortion of field. PL=Pore Lining, M=Matrix) Location	Texture (e.g. clay, sand, loam) silty clay loam
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SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8	stress visib	Sable silty clay loar Typic Endoaquolls the depth needed to document the inc Horizon 1 2	current dicator or confirm Color 10YR 10YR	m the absence of Matrix (Moist) 3/1 2/1	of indicators.) (Type 100 % 95 100	pe: C=Concentra	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, Re Color (Moist) 3/4	poorly CS=Covered/Coated Sand edox Features % 5 8	d Grains; Location: F	PL=Pore Lining, M=Matrix) Location M	Texture (e.g. clay, sand, loam) silty clay loam silty clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8	stress visib	Sable silty clay loar Typic Endoaquolls the depth needed to document the inc Horizon 1 2	current Color 10YR 10YR 10YR	m the absence of Matrix (Moist) 3/1 2/1	of indicators.) (Type 100 % 95 100	special distribution of the second se	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, Re Color (Moist) 3/4	poorly CS=Covered/Coated Sander cdox Features % 5 8	d Grains; Location: F	PL=Pore Lining, M=Matrix) Location M	Texture (e.g. clay, sand, loam) silty clay loam silty clay loam
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SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8	stress visib	Sable silty clay loar Typic Endoaquolls the depth needed to document the inc Horizon 1 2	current Color 10YR 10YR 10YR	m the absence of Matrix (Moist) 3/1 2/1	of indicators.) (Type 100 % 95 100	pe: C=Concentra 10YR 10YR	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, Re Color (Moist) 3/4	poorly CS=Covered/Coated Sand edox Features % 5 8	Type C C	PL=Pore Lining, M=Matrix) Location M	Texture (e.g. clay, sand, loam) silty clay loam silty clay loam silty clay
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SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 12 NRCS Hydric	stress visib	Sable silty clay loar Typic Endoaquolls the depth needed to document the inc Horizon 1 2 3 ndicators (check he	current Color 10YR 10YR 10YR	m the absence of Matrix (Moist) 3/1 2/1 5/1 icators a	soy dropp of indicators.) (Type % 95 100 92 sere not pressure s8 - Polyv	sed its lease seem seem seem seem seem seem seem	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, Re Color (Moist) 3/4 5/6): w Surface (LRR R, MLRA 149B)	relative to nor poorly CS=Covered/Coated Sand edox Features % 5 8 Indicator	Type C C C s for Proble	CL=Pore Lining, M=Matrix) Location M M matic Soils ¹ Muck (LRR K, L, MLRA 1	Texture (e.g. clay, sand, loam) silty clay loam silty clay loam silty clay
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 12 NRCS Hydric	stress visib	Sable silty clay loar Typic Endoaquolls the depth needed to document the int Horizon 1 2 3 ndicators (check head	current Color 10YR 10YR 10YR	m the absence of Matrix (Moist) 3/1 2/1 5/1 icators a	soy dropp of indicators.) (Type % 95 100 92 see not pre S8 - Polyx S9 - Thin	pe: C=Concentra 10YR 10YR esent □ value Below Dark Surfa	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, Re Color (Moist) 3/4 5/6 Surface (LRR R, MLRA 149B) ace (LRR R, MLRA 149B)	poorly CS=Covered/Coated Sander cdox Features % 5 8 Indicator	Type C C C	CL=Pore Lining, M=Matrix) Location M M matic Soils Muck (LRR K, L, MLRA 1) Prairie Redox (LRR	Texture (e.g. clay, sand, loam) silty clay loam silty clay loam silty clay
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 12 NRCS Hydric	stress visible group): ption (Describe to Depth 8 12 24 Soil Field In A1- Histosol A2 - Histic E A3 - Black H	Sable silty clay loar Typic Endoaquolls the depth needed to document the inc Horizon 1 2 3 ndicators (check here) pipedon stic	current Color 10YR 10YR 10YR	m the absence of Matrix (Moist) 3/1 2/1 5/1 icators a	soy dropp of indicators.) (Type % 95 100 92 see not pre S8 - Polyx S9 - Thin S11 - High	Ded its lease Seed its lease Seed its lease Seed In Seed its lease Seed In Chroma	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, Re Color (Moist) 3/4 5/6 Surface (LRR R, MLRA 149B) Sands	poorly CS=Covered/Coated Sander cdox Features % 5 8 Indicator	Type C C C	CL=Pore Lining, M=Matrix) Location M M matic Soils Prairie Redox (LRR Lucky Peat of Peat (LRR)	Texture (e.g. clay, sand, loam) silty clay loam silty clay loam silty clay
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 12 NRCS Hydric	stress visib	Sable silty clay loar Typic Endoaquolls the depth needed to document the inc Horizon 1 2 3 ndicators (check here) stic en Sulfide	current Color 10YR 10YR 10YR	m the absence of Matrix (Moist) 3/1 2/1 5/1 icators a	soy dropp of indicators.) (Type % 95 100 92 see not pre S8 - Polyx S9 - Thin S11 - High F1 - Loam	Ded its lease Service C=Concentrate 10YR 10YR esent □ value Below Dark Surfate Chroma	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, Re Color (Moist) 3/4 5/6): w Surface (LRR R, MLRA 149B) ace (LRR R, MLRA 149B) Sands Mineral (LRR K, L)	poorly CS=Covered/Coated Sander cdox Features % 5 8 Indicator	Type C C C S for Proble A10 - 2 cm I A16 - Coast S3 - 5cm Mt S7 - Dark S	CL=Pore Lining, M=Matrix) Location M M matic Soils Prairie Redox (LRR k, L, MLRA 1) Prairie Redox (LRR k, L, MLRA 2) Ucky Peat of Peat (LRR k, L, M)	Texture (e.g. clay, sand, loam) silty clay loam silty clay loam silty clay (149B) RK, L, R) (LRR K, L, R)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 12 NRCS Hydric	stress visible group): ption (Describe to Bottom Depth 8 12 24 Soil Field In A1- Histosol A2 - Histic E A3 - Black HI A4 - Hydroge A5 - Stratified	Sable silty clay loar Typic Endoaquolls the depth needed to document the ind Horizon 1 2 3 ndicators (check here) cipedon stic en Sulfide d Layers	current Color 10YR 10YR 10YR ere if ind	m the absence of Matrix (Moist) 3/1 2/1 5/1 icators a	soy dropp of indicators.) (Type % 95 100 92 see not pre S8 - Polyv S9 - Thin S11 - High F1 - Loam F2 - Loam	Ded its lease Seed its lease Seed In Chroma by Mucky May Gleyed	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, Re Color (Moist) 3/4 5/6): w Surface (LRR R, MLRA 149B) ace (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix	poorly CS=Covered/Coated Sander cdox Features % 5 8 Indicator	Type C C s for Proble A10 - 2 cm A16 - Coast S3 - 5cm Mi S7 - Dark S S8 - Polyval	CL=Pore Lining, M=Matrix) Location M M matic Soils Muck (LRR K, L, MLRA 1 Prairie Redox (LRR Lucky Peat of Peat (LRR K, L, M) ue Below Surface	Texture (e.g. clay, sand, loam) silty clay loam silty clay loam silty clay (LRR K, L, R)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 12 NRCS Hydric	stress visible group): ption (Describe to Bottom Depth 8 12 24 Soil Field In A1- Histosol A2 - Histic E A3 - Black HI A4 - Hydroge A5 - Stratified	Sable silty clay loar Typic Endoaquolls the depth needed to document the ind Horizon 1 2 3 ndicators (check here) bipedon stic en Sulfide d Layers ed Below Dark Surface	current Color 10YR 10YR 10YR ere if ind	m the absence of Matrix (Moist) 3/1 2/1 5/1 icators a	soy dropp of indicators.) (Type % 95 100 92 see not pre S8 - Polyx S9 - Thin S11 - High F1 - Loam	Ded its lease Seed its lease Seed its lease Seed In Seed Its lease Seed	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, Re Color (Moist) 3/4 5/6): w Surface (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix (poorly CS=Covered/Coated Sand cdox Features 8 Indicator	Type C C C	CL=Pore Lining, M=Matrix) Location M M matic Soils Prairie Redox (LRR k, L, MLRA 1) Prairie Redox (LRR k, L, MLRA 2) Ucky Peat of Peat (LRR k, L, M)	Texture (e.g. clay, sand, loam) silty clay loam silty clay loam silty clay (LRR K, L, R) (LRR K, L)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 12 NRCS Hydric	stress visible group): ption (Describe to Bottom Depth 8 12 24 Soil Field Ir A1- Histosol A2 - Histic E A3 - Black H A4 - Hydroge A5 - Stratified A11 - Deplete	Sable silty clay loar Typic Endoaquolls the depth needed to document the interpretation Horizon 1 2 3 ndicators (check here) cipedon stic en Sulfide d Layers ed Below Dark Surface Dark Surface	current Color 10YR 10YR 10YR ere if ind	m the absence of Matrix (Moist) 3/1 2/1 5/1 icators a	soy dropp of indicators.) (Type % 95 100 92 see not pre S8 - Polyx S9 - Thin S11 - High F1 - Loam F2 - Loam F3 - Deple	ped its lease Septer C=Concentrate 10YR 10YR value Below Dark Surfate Chroma ny Mucky May Gleyed eted Matrix ox Dark Sur	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, Re Color (Moist) 3/4 5/6 "Surface (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix (rface	poorly CS=Covered/Coated Sand cdox Features % 5 8 Indicator	Type C C S for Proble A10 - 2 cm A16 - Coast S3 - 5cm Mi S7 - Dark Si S8 - Polyval S9 - Thin Da F12 - Iron-M	CL=Pore Lining, M=Matrix) Location M M matic Soils Muck (LRR K, L, MLRA 1 Prairie Redox (LRR ucky Peat of Peat ourface (LRR K, L, M) ue Below Surface ark Surface (LRR K, L	Texture (e.g. clay, sand, loam) silty clay loam silty clay loam silty clay (LRR K, L, R) (LRR K, L, R) (LRR K, L, R)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 12 NRCS Hydric	stress visible group): ption (Describe to Bottom Depth 8 12 24 Soil Field In A1- Histosol A2 - Histic E A3 - Black H A4 - Hydroge A5 - Stratified A11 - Deplete A12 - Thick [Sable silty clay loar Typic Endoaquolls the depth needed to document the inc Horizon 1 2 3 ndicators (check here) bipedon stic en Sulfide d Layers ed Below Dark Surface Dark Surface Muck Mineral	current Color 10YR 10YR 10YR ere if ind	m the absence of Matrix (Moist) 3/1 2/1 5/1 icators a	soy dropp of indicators.) (Type % 95 100 92 see not pre S8 - Polyx S9 - Thin S11 - High F1 - Loam F2 - Loam F3 - Deple F6 - Redo	10YR 10YR 10YR	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, Re Color (Moist) 3/4 5/6	poorly CS=Covered/Coated Sand cdox Features % 5 8 Indicator	Type C C C S for Proble A10 - 2 cm I A16 - Coast S3 - 5cm Mt S7 - Dark Si S8 - Polyval S9 - Thin Da F12 - Iron-M F19 - Piedm F21 - Red P	CL=Pore Lining, M=Matrix) Location M M matic Soils Muck (LRR K, L, MLRA 1) Prairie Redox (LRR ucky Peat of Peat ourface (LRR K, L, M) ue Below Surface ark Surface (LRR K, L danganese Masses and Floodplain Soilarent Material	Texture (e.g. clay, sand, loam) silty clay loam silty clay loam silty clay (LRR K, L, R)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 12 NRCS Hydric	stress visible group): ption (Describe to Depth 8 12 24	Sable silty clay loar Typic Endoaquolls the depth needed to document the ind Horizon 1 2 3 ndicators (check here) bipedon stic en Sulfide d Layers ed Below Dark Surface Oark Surface Muck Mineral Gleyed Matrix Redox	current Color 10YR 10YR 10YR ere if ind	m the absence of Matrix (Moist) 3/1 2/1 5/1 icators a	soy dropp of indicators.) (Type % 95 100 92 see not pre S8 - Polyx S9 - Thin S11 - High F1 - Loam F2 - Loam F3 - Deple F6 - Redo F7 - Deple	10YR 10YR 10YR	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, Re Color (Moist) 3/4 5/6	poorly CS=Covered/Coated Sand cdox Features % 5 8 Indicator	Type C C C S for Proble A10 - 2 cm A16 - Coast S3 - 5cm Mi S7 - Dark Si S8 - Polyval S9 - Thin Da F12 - Iron-M F19 - Piedm F21 - Red P TA6 - Mesic	CL=Pore Lining, M=Matrix) Location M M matic Soils Muck (LRR K, L, MLRA 1 Prairie Redox (LRR Lucky Peat of Peat aurface (LRR K, L, M) ue Below Surface ark Surface (LRR K, L danganese Masses and Floodplain Soils arent Material Spodic (MLRA 144A, 1	Texture (e.g. clay, sand, loam) silty clay loam silty clay loam silty clay (LRR K, L, R)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 12 NRCS Hydric	stress visibilities: ogroup): otion (Describe to Bottom Depth 8 12 24	Sable silty clay loar Typic Endoaquolls the depth needed to document the ind Horizon 1 2 3 ndicators (check here) bipedon stic en Sulfide d Layers ed Below Dark Surface Dark Surface Muck Mineral Gleyed Matrix Redox Matrix	current Color 10YR 10YR 10YR ere if ind	m the absence of Matrix (Moist) 3/1 2/1 5/1 icators a	soy dropp of indicators.) (Type % 95 100 92 see not pre S8 - Polyx S9 - Thin S11 - High F1 - Loam F2 - Loam F3 - Deple F6 - Redo F7 - Deple	10YR 10YR 10YR	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, Re Color (Moist) 3/4 5/6	poorly CS=Covered/Coated Sand cdox Features 8 Indicator	Type C C C C S for Proble A10 - 2 cm Modern S3 - 5 cm Modern S3 - 5 cm Modern S4 - Polyval S7 - Dark S6 S8 - Polyval S9 - Thin Daren S	CL=Pore Lining, M=Matrix) Location M M matic Soils Muck (LRR K, L, MLRA 1 Prairie Redox (LRR Lucky Peat of Peat ourface (LRR K, L, M) ue Below Surface ark Surface (LRR K, L langanese Masses cont Floodplain Soil earent Material Spodic (MLRA 144A, 1 Shallow Dark Surf	Texture (e.g. clay, sand, loam) silty clay loam silty clay loam silty clay (LRR K, L, R)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 12 NRCS Hydric	stress visibilities: ogroup): otion (Describe to Bottom Depth 8 12 24	Sable silty clay loar Typic Endoaquolls the depth needed to document the ind Horizon 1 2 3 ndicators (check here) bipedon stic en Sulfide d Layers ed Below Dark Surface Oark Surface Muck Mineral Gleyed Matrix Redox	current Color 10YR 10YR 10YR ere if ind	m the absence of Matrix (Moist) 3/1 2/1 5/1 icators a	soy dropp of indicators.) (Type % 95 100 92 see not pre S8 - Polyx S9 - Thin S11 - High F1 - Loam F2 - Loam F3 - Deple F6 - Redo F7 - Deple	10YR 10YR 10YR	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, Re Color (Moist) 3/4 5/6	poorly CS=Covered/Coated Sand cdox Features % 5 8 Indicator	Type C C C S for Proble A10 - 2 cm I A16 - Coast S3 - 5cm Mi S7 - Dark Si S8 - Polyval S9 - Thin Da F12 - Iron-M F19 - Piedm F21 - Red P TA6 - Mesic TF12 - Very Other (Expla	CL=Pore Lining, M=Matrix) Location M M Muck (LRR K, L, MLRA 1 Prairie Redox (LRR k, L, M) ue Below Surface urface (LRR K, L, M) ue Below Surface ark Surface (LRR K, L langanese Masses lont Floodplain Soi arent Material Spodic (MLRA 144A, 1 Shallow Dark Surface ain in Remarks)	Texture (e.g. clay, sand, loam) silty clay loam silty clay loam silty clay (LRR K, L, R) (LRR K, L, R) (LRR K, L, R) (LRR K, L, R) (S (LRR K, L, R) (S (LRR K, L, R) (S (MLRA 149B) (145, 149B) (face
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 12 NRCS Hydric	stress visibilities: ogroup): otion (Describe to Bottom Depth 8 12 24	Sable silty clay loar Typic Endoaquolls the depth needed to document the ind Horizon 1 2 3 ndicators (check here) bipedon stic en Sulfide d Layers ed Below Dark Surface Dark Surface Muck Mineral Gleyed Matrix Redox Matrix	current Color 10YR 10YR 10YR ere if ind	m the absence of Matrix (Moist) 3/1 2/1 5/1 icators a	soy dropp of indicators.) (Type % 95 100 92 see not pre S8 - Polyx S9 - Thin S11 - High F1 - Loam F2 - Loam F3 - Deple F6 - Redo F7 - Deple	10YR 10YR 10YR	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, Re Color (Moist) 3/4 5/6	poorly CS=Covered/Coated Sander cdox Features % 5 8 Indicator Indicator Indicator Indicator	Type C C C S for Proble A10 - 2 cm I A16 - Coast S3 - 5cm Mi S7 - Dark Si S8 - Polyval S9 - Thin Da F12 - Iron-M F19 - Piedm F21 - Red P TA6 - Mesic TF12 - Very Other (Expla	CL=Pore Lining, M=Matrix) Location M M matic Soils Muck (LRR K, L, MLRA 1 Prairie Redox (LRR Lucky Peat of Peat ourface (LRR K, L, M) ue Below Surface ark Surface (LRR K, L langanese Masses langanese Masses cont Floodplain Soil earent Material Spodic (MLRA 144A, 1 Shallow Dark Surf	Texture (e.g. clay, sand, loam) silty clay loam silty clay loam silty clay (LRR K, L, R) (LRR K, L, R) (LRR K, L, R) (LRR K, L, R) (S (LRR K, L, R) (S (LRR K, L, R) (S (MLRA 149B) (145, 149B) (face
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 12 NRCS Hydric	stress visibilities: ogroup): otion (Describe to Bottom Depth 8 12 24	Sable silty clay loar Typic Endoaquolls the depth needed to document the interpretation Horizon 1 2 3 ndicators (check here) stic en Sulfide d Layers ed Below Dark Surface Oark Surface Muck Mineral Gleyed Matrix Redox Matrix Redox Matrix Redox Matrix Mat	current Color 10YR 10YR 10YR ere if ind	m the absence of Matrix (Moist) 3/1 2/1 5/1 icators a	soy dropp of indicators.) (Type % 95 100 92 see not pre S8 - Polyx S9 - Thin S11 - High F1 - Loam F2 - Loam F3 - Deple F6 - Redo F7 - Deple	10YR 10YR 10YR	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, Re Color (Moist) 3/4 5/6	poorly CS=Covered/Coated Sander cdox Features % 5 8 Indicator Indicator Indicator Indicator	Type C C C C S for Proble A10 - 2 cm I A16 - Coast S3 - 5cm Mi S7 - Dark Si S8 - Polyval S9 - Thin Da F12 - Iron-M F19 - Piedm F21 - Red P TA6 - Mesic TF12 - Very Other (Expla of hydrophytic veget or problematic.	CL=Pore Lining, M=Matrix) Location M M Muck (LRR K, L, MLRA 1 Prairie Redox (LRR k, L, M) ue Below Surface urface (LRR K, L, M) ue Below Surface ark Surface (LRR K, L langanese Masses lont Floodplain Soi arent Material Spodic (MLRA 144A, 1 Shallow Dark Surface ain in Remarks)	Texture (e.g. clay, sand, loam) silty clay loam silty clay loam silty clay (LRR K, L, R) (LRR K, L, R) (LRR K, L, R) (LRR K, L, R) (S (LRR K, L, R) (S (LRR K, L, R) (S (MLRA 149B) (145, 149B) (face



Project/Site: Vilas Road Wetland ID: W-1 Sample Point: P12

VEGETATION	(Species identified in all uppercase are non-na	ative spe	cies.)		
Tree Stratum (P	ot size: 10 meter radius)				
	<u>Species Name</u>	% Cover	<u>Dominant</u>	Ind.Status	Dominance Test Worksheet
1.					
2.					Number of Dominant Species that are OBL, FACW, or FAC:0(A)
3.					
4.					Total Number of Dominant Species Across All Strata:1(B)
5.					
6.					Percent of Dominant Species That Are OBL, FACW, or FAC:(A/B)
7.					
8.					Prevalence Index Worksheet
9.					Total % Cover of: Multiply by:
10.	T.(1.) O				OBL spp. 0 x 1 = 0
	Total Cover =	0			FACW spp. 0 x 2 = 0
0 11 (0) 1 0					FAC spp.
Sapling/Shrub St	ratum (Plot size: 5 meter radius)				FACU spp. $0 \times 4 = 0$
1.					UPL spp. $\frac{70}{}$ x 5 = $\frac{350}{}$
2.					T-(-) (A) (D)
3.	_ 				Total(A)(B)
4.					Decorder of Index D/A 5.000
5.					Prevalence Index = B/A = 5.000
6.					
7.					Hydrophytic Veretation Indicators
8.	_ 				Hydrophytic Vegetation Indicators:
9.					☐ Yes ☑ No Rapid Test for Hydrophytic Vegetation
10.	Total Cavar -				☐ Yes ☑ No Dominance Test is > 50%
	Total Cover =	0			☐ Yes ☑ No Prevalence Index is ≤ 3.0 *
Lie de Otre Cer (Di	at all a O and the said all all				☐ Yes ☐ No Morphological Adaptations (Explain) *
Herb Stratum (Pl	ot size: 2 meter radius) GLYCINE MAX	70		UPL	☑ Yes □ No Problem Hydrophytic Vegetation (Explain) *
2.			<u> </u>		* Indicators of hydric soil and wetland hydrology must be
3.	_ 				present, unless disturbed or problematic.
4.					Definitions of Vegetation Strata:
5.					Definitions of Vegetation Strata.
6					Tree - West valents 2 in (7 Com) on more in diameter at bases.
					Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height.
8.					
9.					Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft.
10.					tall.
11.					
12.					Herb - All herbaceous (non-woody) plants, regardless of size, and
13.					woody plants less than 3.28 ft. tall.
14.					
15.					Woody Vines - All woody vines greater than 3.28 ft. in height.
10.	Total Cover =	70			
	Total Gover –	70			
Woody Vine Stra	tum (Plot size: 10 meter radius)				
1.					
2.					
3.					Hydrophytic Vegetation Present ☑ Yes ☐ No
4.					
5.					
	Total Cover =	0			
Remarks:	Current year's soy crop appears to hav point is disturbed due to cultivation.	e senes	sced and	dropped i	ts leaves early in response to saturation / high water table. Vegetation at sample

Additional Remarks:

Wetland determination made on basis of consistent wet signatures in normal years; hydric soils; and disturbed vegetation (farmed). It is unusual to have primary indicators of wetland hydrology in what is typically the Dry Season, but abnormally wet conditions were present. Thus, the presence of wet signatures under normal precipitation conditions provide stronger evidence that this sample point location is in wetland.



Project/Site:	Vilas Road						Stantec Project #:	193704691		Date:	10/13/16
Applicant:	Reed and I	eed and Leanne Widen County: Dane							Dane		
• •	#1: Jeff Kraemer Investigator #2: Josh Sulman									State:	Wisconsin
Soil Unit:	Sable silty clay loam NWI/WWI Classificat							: none		Wetland ID:	Adj. W-1
Landform:	Rise	,		Loc	al Relief:					Sample Point:	P13
Slope (%):	1	Latitude:	N/A		ongitude:			Datum:	N/A	Community ID:	Upland Ag Field
· · · · · · · · · · · · · · · · · · ·	Irologic cond	ditions on the site ty					ain in remarks)	☐ Yes ☑		Section:	17
		or Hydrology □ sig	•			(II TIO, EXPIR	Are normal circumst			Township:	7N
•			-	•			☐ Yes	ances presen ⊡No	. :	•	11E
		or Hydrology □ na	lurally pr	oblemat	ic?		□ 163	⊡110		Range:	TIE
SUMMARY OF		10		\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	NI				D 10		
Hydrophytic Ve				□ Yes				Hydric Soils			☑ Yes □ No
Wetland Hydrol				☐ Yes						Within A Wetlar	
Remarks:				condition	ns are we	tter than	normal for this time of	of year. Samp	le point is l	ocated on slight	t rise in soybean field
	north of flo	oded farmed wetlan	ıd.								
HYDROLOGY											
Wetland Hydr	ology Indic	ators (Check here	if indicate	ore are r	not nreser	nt 🖂 🕩					
Primary:		ators (Check here	ii iiidicat	ors are r	iot preser	ıı			Secondary:		
<u> </u>	A1 - Surface	Water		П	B9 - Wate	er-Stained	Leaves			B6 - Surface Soil	Cracks
l	A2 - High Wa				B13 - Aqu					B10 - Drainage P	
	A3 - Saturation					l Deposits				B16 - Moss Trim	
	B1 - Water M				C1 - Hydr	•				C2 - Dry-Season	
	B2 - Sedimer						spheres on Living Roots			C8 - Crayfish Bur	
	B3 - Drift Dep						educed Iron				isible on Aerial Imagery
ᅵ	B4 - Algal Ma			_	C6 - Rece		duction in Tilled Soils		님	D1 - Stunted or S	
l H	B5 - Iron Dep	oosแร on Visible on Aerial Ima	agery	H	Other (Ex				H	D2 - Geomorphic D3 - Shallow Aqu	
l		Vegetated Concave S	0 ,	Ц	Other (LX	piairi iri ixe	illaiks)		Ä	D4 - Microtopogra	
		, regetates contains t	- C.							D5 - FAC-Neutral	
Field Observat	iono										
					/! - \						
Surface Water		☐ Yes ☑ No	Depth:		(in.)			Wetland Hy	drology Pi	resent?	Yes ☑ No
Water Table Pr		☐ Yes ☑ No	Depth:		(in.)			•	O,		
Saturation Pres	ent?	☐ Yes ☑ No	Depth:		(in.)						
Describe Record	ed Data (str	eam gauge, monitori	ng well, a	aerial pho	otos, previ	ous inspe	ctions), if available:		Historic Aer	ial Imagery Review	V
Remarks:	Sample no	int is located on a s	م ما المانية	a a series la lie	ata a ta a			. (la a a a la a a 41	11 6	and all transmissions days
i nelliains.		iiil is iucaleu uii a s	liant toba	odrabnic	rise. in a	location	without consistent we	et signatures. I	based on tr	ne results of an	aeriai imadery review.
Remarks.	Campic po	init is located on a s	light topo	ograpnic	rise, in a	location	without consistent we	et signatures, i	based on tr	ne results of an	aeriai imagery review.
	campic po	int is located on a s	light topo	ograpnic	rise, in a	location	without consistent we	et signatures, i	based on tr	ne results of an	aeriai imagery review.
SOILS				ograpnic	rise, in a				based on tr	ne results of an	aeriai imagery review.
SOILS Map Unit Name	:	Sable silty clay loai	m .	ograpnic	rise, in a		without consistent we eries Drainage Class:		based on tr	ne results of an	aeriai imagery review.
SOILS Map Unit Name Taxonomy (Sub	group):	Sable silty clay load	m			S	eries Drainage Class:	: poorly			aeriai imagery review.
SOILS Map Unit Name Taxonomy (Sub	e: ogroup): otion (Describe to	Sable silty clay load	m	m the absence o	of indicators.) (Ty	S	eries Drainage Class:	: poorly CS=Covered/Coated Sand	d Grains; Location: F		
SOILS Map Unit Name Taxonomy (Sub Profile Descrip	egroup): ogroup): otion (Describe to Bottom	Sable silty clay load Typic Endoaquolls the depth needed to document the in	n dicator or confin	m the absence o	of indicators.) (Ty	Sope: C=Concentra	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, Re	: poorly CS=Covered/Coated Sanded edox Features	d Grains; Location: F	PL=Pore Lining, M=Matrix)	Texture
SOILS Map Unit Name Taxonomy (Sub	e: ogroup): otion (Describe to Bottom Depth	Sable silty clay load	dicator or confin	m the absence of Matrix	of indicators.) (Ty	Sope: C=Concentra	eries Drainage Class:	: poorly CS=Covered/Coated Sand	d Grains; Location: F		Texture
SOILS Map Unit Name Taxonomy (Sub Profile Descrip	egroup): ogroup): otion (Describe to Bottom	Sable silty clay load Typic Endoaquolls the depth needed to document the in	n dicator or confin	m the absence o	of indicators.) (Ty	Sope: C=Concentra	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, Re	: poorly CS=Covered/Coated Sanded edox Features	d Grains; Location: F	PL=Pore Lining, M=Matrix)	Texture
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth	e: ogroup): otion (Describe to Bottom Depth	Sable silty clay load Typic Endoaquolls the depth needed to document the in	dicator or confin	m the absence of Matrix	of indicators.) (Ty	Sope: C=Concentra	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, Re	: poorly CS=Covered/Coated Sanded edox Features	d Grains; Location: F	PL=Pore Lining, M=Matrix)	Texture (e.g. clay, sand, loam)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	egroup): otion (Describe to Bottom Depth 8	Sable silty clay load Typic Endoaquolls the depth needed to document the in Horizon 1	dicator or confinence Color 10YR	m the absence of Matrix (Moist)	of indicators.) (Ty	pe: C=Concentra	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, Recolor (Moist)	: poorly CS=Covered/Coated Sand edox Features %	d Grains; Location: F	PL=Pore Lining, M=Matrix) Location	Texture (e.g. clay, sand, loam) silty clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8	egroup): ogroup): btion (Describe to Depth 8 18	Sable silty clay load Typic Endoaquolls the depth needed to document the in Horizon 1 2	dicator or confinence of the color of the co	Matrix (Moist) 3/1 5/2	of indicators.) (Ty % 100 80	pe: C=Concentra	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, Re Color (Moist) 5/6	: poorly CS=Covered/Coated Sand edox Features % 20	d Grains; Location: F Type C	PL=Pore Lining, M=Matrix) Location M	Texture (e.g. clay, sand, loam) silty clay loam silty clay
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8	egroup): otion (Describe to Bottom Depth 8 18 24	Sable silty clay load Typic Endoaquolls the depth needed to document the in Horizon 1 2	dicator or confinence of the c	Matrix (Moist) 3/1 5/2	of indicators.) (Ty % 100 80	pe: C=Concentra	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, Re Color (Moist) 5/6	cs=Covered/Coated Sand edox Features % 20 20	d Grains; Location: F Type C	PL=Pore Lining, M=Matrix) Location M	Texture (e.g. clay, sand, loam) silty clay loam silty clay
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8	pgroup): ption (Describe to Depth 8 18 24	Sable silty clay load Typic Endoaquolls the depth needed to document the in Horizon 1 2	Color 10YR 5Y 5Y	Matrix (Moist) 3/1 5/2	of indicators.) (Ty % 100 80	pe: C=Concentra 10YR 10YR	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, Re Color (Moist) 5/6	: poorly CS=Covered/Coated Sand edox Features % 20 20	Type C C	PL=Pore Lining, M=Matrix) Location M	Texture (e.g. clay, sand, loam) silty clay loam silty clay silty clay
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8	egroup): otion (Describe to Bottom Depth 8 18 24	Sable silty clay load Typic Endoaquolls the depth needed to document the in Horizon 1 2	dicator or confinence of the c	Matrix (Moist) 3/1 5/2	of indicators.) (Ty % 100 80	pe: C=Concentra 10YR 10YR	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, Re Color (Moist) 5/6	cs=Covered/Coated Sanded Sande	d Grains; Location: F Type C	PL=Pore Lining, M=Matrix) Location M	Texture (e.g. clay, sand, loam) silty clay loam silty clay
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8	pgroup): ption (Describe to Depth 8 18 24	Sable silty clay load Typic Endoaquolls the depth needed to document the in Horizon 1 2	Color 10YR 5Y 5Y	Matrix (Moist) 3/1 5/2	of indicators.) (Ty % 100 80	pe: C=Concentra 10YR 10YR	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, Re Color (Moist) 5/6	: poorly CS=Covered/Coated Sand edox Features % 20 20	Type C C	PL=Pore Lining, M=Matrix) Location M	Texture (e.g. clay, sand, loam) silty clay loam silty clay silty clay
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8	pgroup): Deption (Describe to Depth 8 18 24	Sable silty clay load Typic Endoaquolls the depth needed to document the in Horizon 1 2	dicator or confirmation of the confirmation of	Matrix (Moist) 3/1 5/2	of indicators.) (Ty % 100 80	pe: C=Concentra 10YR 10YR	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, Recolor (Moist) 5/6 5/6	CS=Covered/Coated Sanded Sande	Type C C	Location M M	Texture (e.g. clay, sand, loam) silty clay loam silty clay silty clay
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 18	e: ogroup): otion (Describe to Depth 8 18 24	Sable silty clay load Typic Endoaquolls the depth needed to document the in Horizon 1 2	Color 10YR 5Y	m the absence of Matrix (Moist) 3/1 5/2 5/2	% 100 80 95	10YR 10YR	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, Rec Color (Moist) 5/6 5/6	: poorly CS=Covered/Coated Sand edox Features % 20 20	Type C C	Location M M	Texture (e.g. clay, sand, loam) silty clay loam silty clay silty clay
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 18 NRCS Hydric	pgroup): Deption (Describe to Depth 8 18 24 Soil Field In A1- Histosol	Sable silty clay load Typic Endoaquolls the depth needed to document the in Horizon 1 2 3 ndicators (check he	Color 10YR 5Y	m the absence of Matrix (Moist) 3/1 5/2 5/2 icators a	% 100 80 95 are not pre	pe: C=Concentra 10YR 10YR esent □ /alue Belov	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, Rec Color (Moist) 5/6 5/6): w Surface (LRR R, MLRA 149B)	cs=Covered/Coated Sandedox Features % 20 20 Indicator	Type C C s for Proble	Location M M	Texture (e.g. clay, sand, loam) silty clay loam silty clay silty clay
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 18 NRCS Hydric	pgroup): Deption (Describe to Bottom Depth 8 18 24 Soil Field In A1- Histosol A2 - Histic Ep	Sable silty clay load Typic Endoaquolls the depth needed to document the in Horizon 1 2 3 ndicators (check here)	Color 10YR 5Y	m the absence of Matrix (Moist) 3/1 5/2 5/2 icators a	% 100 80 95 sre not pre S8 - Polys S9 - Thin	pe: C=Concentra 10YR 10YR esent □ /alue Below Dark Surfa	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, Recolor (Moist) 5/6 5/6	CS=Covered/Coated Sandedox Features % 20 20 Indicator	Type C C s for Proble A10 - 2 cm	Location Location M M matic Soils ¹ Muck (LRR K, L, MLRA A) Prairie Redox (LRR	Texture (e.g. clay, sand, loam) silty clay loam silty clay silty clay
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 18 NRCS Hydric	pgroup): Deption (Describe to Depth 8 18 24	Sable silty clay load Typic Endoaquolls the depth needed to document the in Horizon 1 2 3 ndicators (check here)	Color 10YR 5Y	m the absence of Matrix (Moist) 3/1 5/2 5/2 icators a	% 100 80 95 sre not pre S8 - Polys S9 - Thin S11 - High	pe: C=Concentra 10YR 10YR esent □ /alue Belov Dark Surfa	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, Recolor (Moist) 5/6 5/6): w Surface (LRR R, MLRA 149B) ace (LRR R, MLRA 149B) Sands	CS=Covered/Coated Sandedox Features % 20 20 Indicator	Type C C s for Proble A10 - 2 cm A16 - Coast S3 - 5cm Mi	Location Location M M matic Soils ¹ Muck (LRR K, L, MLRA Prairie Redox (LRR ucky Peat of Peat	Texture (e.g. clay, sand, loam) silty clay loam silty clay silty clay
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 18 NRCS Hydric	Bottom Depth 8 18 24 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Histoge	Sable silty clay load Typic Endoaquolls the depth needed to document the in Horizon 1 2 3 ndicators (check here) stic en Sulfide	Color 10YR 5Y	m the absence of Matrix (Moist) 3/1 5/2 5/2 icators a	% 100 80 95 sre not pre S8 - Polys S9 - Thin S11 - High F1 - Loan	pe: C=Concentra 10YR 10YR esent □ /alue Below Dark Surfa th Chroma ny Mucky M	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, Re Color (Moist) 5/6 5/6): w Surface (LRR R, MLRA 149B) ace (LRR R, MLRA 149B) Sands Mineral (LRR K, L)	CS=Covered/Coated Sandedox Features % 20 20 Indicator	Type C C s for Proble A10 - 2 cm A16 - Coast S3 - 5cm Me S7 - Dark S	Location Location M M M matic Soils Prairie Redox (LRR K, L, MLRA Prairie Redox (LRR k, L, M)	Texture (e.g. clay, sand, loam) silty clay loam silty clay silty clay (149B) R K, L, R) (LRR K, L, R)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 18 NRCS Hydric	pgroup): Deption (Describe to Bottom) Depth 8 18 24 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black History A4 - Hydroge A5 - Stratified	Sable silty clay load Typic Endoaquolls the depth needed to document the in Horizon 1 2 3 ndicators (check here) cipedon istic en Sulfide d Layers	dicator or confinence of the c	m the absence of Matrix (Moist) 3/1 5/2 5/2 icators a	% 100 80 95 sre not pre S8 - Polyo S9 - Thin S11 - High F1 - Loam F2 - Loam	pe: C=Concentra 10YR 10YR	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, Re Color (Moist) 5/6 5/6): w Surface (LRR R, MLRA 149B) ace (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix	cs=Covered/Coated Sandedox Features % 20 20 Indicator	Type C C s for Proble A10 - 2 cm A16 - Coast S3 - 5cm Mi S7 - Dark S S8 - Polyval	Location Location M M matic Soils Muck (LRR K, L, MLRA Prairie Redox (LRR ucky Peat of Peat urface (LRR K, L, M) ue Below Surface	Texture (e.g. clay, sand, loam) silty clay loam silty clay silty clay (LRR K, L, R) (LRR K, L)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 18 NRCS Hydric	Bottom Depth 8 18 24 Soil Field Ir A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A11 - Deplete	Sable silty clay load Typic Endoaquolls the depth needed to document the in Horizon 1 2 3 ndicators (check here) sistic en Sulfide d Layers ed Below Dark Surface	dicator or confinence of the c	m the absence of Matrix (Moist) 3/1 5/2 5/2 icators a	% 100 80 95 sre not pre S8 - Poly S9 - Thin S11 - High F1 - Loam F2 - Loam F3 - Deple	pe: C=Concentra 10YR 10YR 10YR esent value Below Dark Surfa th Chroma ny Mucky M ny Gleyed eted Matrix	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, Re Color (Moist) 5/6 5/6	: poorly CS=Covered/Coated Sand edox Features % 20 20 Indicator	Type C C C	Location Location M M M matic Soils M Muck (LRR K, L, MLRA Prairie Redox (LRR ucky Peat of Peat urface (LRR K, L, M) ue Below Surface ark Surface (LRR K, L	Texture (e.g. clay, sand, loam) silty clay loam silty clay silty clay (LRR K, L, R) (LRR K, L)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 18 NRCS Hydric	pgroup): Deption (Describe to Bottom Depth 8 18 24	Sable silty clay load Typic Endoaquolls the depth needed to document the in Horizon 1 2 3 ndicators (check here) cipedon istic en Sulfide d Layers ed Below Dark Surface Dark Surface	dicator or confinence of the c	m the absence of Matrix (Moist) 3/1 5/2 5/2 icators a	% 100 80 95 sre not pre S8 - Polyo S9 - Thin S11 - High F1 - Loam F2 - Loam F3 - Deple F6 - Redo	pe: C=Concentra 10YR 10YR seent park Surfa th Chroma ny Mucky M ny Gleyed eted Matrix ox Dark Su	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, Rec Color (Moist) 5/6 5/6	CS=Covered/Coated Sanded Sande	Type C C s for Proble A10 - 2 cm A16 - Coast S3 - 5cm Me S7 - Dark S S8 - Polyval S9 - Thin Da F12 - Iron-M	Location Location M M M matic Soils Muck (LRR K, L, MLRA Prairie Redox (LRR K, L, MLRA Prairie Redox (LRR K, L, M) ue Below Surface (LRR K, L, M) ue Below Surface (LRR K, L) ark Surface (LRR K, L) anganese Masses	Texture (e.g. clay, sand, loam) silty clay loam silty clay silty clay 149B) R K, L, R) (LRR K, L, R) (LRR K, L, R)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 18 NRCS Hydric	Bottom Depth 8 18 24 Soil Field Ir A1- Histosol A2 - Histic E A3 - Black Hi A4 - Hydroge A5 - Stratified A11 - Deplete A12 - Thick E S1 - Sandy M	Sable silty clay load Typic Endoaquolls the depth needed to document the in Horizon 1 2 3 hdicators (check here) cipedon istic en Sulfide d Layers ed Below Dark Surface Dark Surface Muck Mineral	dicator or confinence of the c	m the absence of Matrix (Moist) 3/1 5/2 5/2 icators a	% 100 80 95 sre not pre S8 - Polyo S9 - Thin S11 - High F1 - Loam F2 - Loam F3 - Deple F6 - Redo	pe: C=Concentra 10YR 10YR	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, Re Color (Moist) 5/6 5/6): w Surface (LRR R, MLRA 149B) ace (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix crface Surface	CS=Covered/Coated Sanded Sande	Type C C C	Location Location M M M matic Soils M Muck (LRR K, L, MLRA Prairie Redox (LRR ucky Peat of Peat urface (LRR K, L, M) ue Below Surface ark Surface (LRR K, L	Texture (e.g. clay, sand, loam) silty clay loam silty clay silty clay 149B) R K, L, R) (LRR K, L, R) (LRR K, L, R)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 18 NRCS Hydric	pgroup): Deption (Describe to Bottom Depth 8 18 24	Sable silty clay load Typic Endoaquolls the depth needed to document the in Horizon 1 2 3 ndicators (check here) cipedon istic en Sulfide d Layers ed Below Dark Surface Dark Surface Muck Mineral Gleyed Matrix	dicator or confinence of the c	m the absence of Matrix (Moist) 3/1 5/2 5/2 icators a	% 100 80 95 sre not pre S8 - Polyx S9 - Thin S11 - High F1 - Loam F2 - Loam F3 - Deple F6 - Redo	pe: C=Concentra 10YR 10YR	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, Re Color (Moist) 5/6 5/6): w Surface (LRR R, MLRA 149B) ace (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix crface Surface	CS=Covered/Coated Sanded Sande	Type C C C	Location Location M M M M matic Soils Muck (LRR K, L, MLRA L Locky Peat of Peat aurface (LRR K, L, M) ue Below Surface ark Surface (LRR K, L langanese Masses and Floodplain Soilarent Material	Texture (e.g. clay, sand, loam) silty clay loam silty clay silty clay (149B) R K, L, R) (LRR K, L, R) (LRR K, L, R) ils (MLRA 149B)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 18 NRCS Hydric	Bottom Depth 8 18 24 Soil Field Ir A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A11 - Deplete A12 - Thick E S1 - Sandy N S4 - Sandy N S4 - Sandy N S6 - Stripped	Sable silty clay load Typic Endoaquolls the depth needed to document the in Horizon 1 2 3 ndicators (check here) bipedon istic en Sulfide d Layers ed Below Dark Surface Dark Surface Muck Mineral Gleyed Matrix Redox I Matrix	dicator or confinence of the c	m the absence of Matrix (Moist) 3/1 5/2 5/2 icators a	% 100 80 95 sre not pre S8 - Polyx S9 - Thin S11 - High F1 - Loam F2 - Loam F3 - Deple F6 - Redo	pe: C=Concentra 10YR 10YR	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, Re Color (Moist) 5/6 5/6): w Surface (LRR R, MLRA 149B) ace (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix crface Surface	: poorly CS=Covered/Coated Sander edox Features %	Type C C C	Location Location M M M M matic Soils Muck (LRR K, L, MLRA Prairie Redox (LRR ucky Peat of Peat urface (LRR K, L, M) ue Below Surface ark Surface (LRR K, L langanese Masses ont Floodplain Soil arent Material Spodic (MLRA 144A, Shallow Dark Sur	Texture (e.g. clay, sand, loam) silty clay loam silty clay silty clay (LRR K, L, R)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 18 NRCS Hydric	Bottom Depth 8 18 24 Soil Field Ir A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A11 - Deplete A12 - Thick E S1 - Sandy N S4 - Sandy N S4 - Sandy N S6 - Stripped	Sable silty clay load Typic Endoaquolls the depth needed to document the in Horizon 1 2 3 ndicators (check here) cipedon istic en Sulfide d Layers ed Below Dark Surface Dark Surface Muck Mineral Gleyed Matrix Redox	dicator or confinence of the c	m the absence of Matrix (Moist) 3/1 5/2 5/2 icators a	% 100 80 95 sre not pre S8 - Polyx S9 - Thin S11 - High F1 - Loam F2 - Loam F3 - Deple F6 - Redo	pe: C=Concentra 10YR 10YR	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, Re Color (Moist) 5/6 5/6): w Surface (LRR R, MLRA 149B) ace (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix crface Surface	: poorly CS=Covered/Coated Sand edox Features % 20 20 Indicator	Type C C C	Location Location M M M matic Soils Muck (LRR K, L, MLRA L Prairie Redox (LRR L urface (LRR K, L, M) ue Below Surface ark Surface (LRR K, L anganese Masses cont Floodplain Soil arent Material Spodic (MLRA 144A, 184) Shallow Dark Surfain in Remarks)	Texture (e.g. clay, sand, loam) silty clay loam silty clay silty clay 149B) R K, L, R) (LRR K, L, R) (LRR K, L, R) ils (MLRA 149B) 145, 149B) face
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 18 NRCS Hydric	Bottom Depth 8 18 24 Soil Field Ir A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A11 - Deplete A12 - Thick E S1 - Sandy N S4 - Sandy N S4 - Sandy N S6 - Stripped	Sable silty clay load Typic Endoaquolls the depth needed to document the in Horizon 1 2 3 ndicators (check here) bipedon istic en Sulfide d Layers ed Below Dark Surface Dark Surface Muck Mineral Gleyed Matrix Redox I Matrix	dicator or confinence of the c	m the absence of Matrix (Moist) 3/1 5/2 5/2 icators a	% 100 80 95 sre not pre S8 - Polyx S9 - Thin S11 - High F1 - Loam F2 - Loam F3 - Deple F6 - Redo	pe: C=Concentra 10YR 10YR	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, Re Color (Moist) 5/6 5/6): w Surface (LRR R, MLRA 149B) ace (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix crface Surface	CS=Covered/Coated Sanderdox Features % 20 20 Indicator Indicator	Type C C C	Location Location M M M M matic Soils Muck (LRR K, L, MLRA Prairie Redox (LRR ucky Peat of Peat urface (LRR K, L, M) ue Below Surface ark Surface (LRR K, L langanese Masses ont Floodplain Soil arent Material Spodic (MLRA 144A, Shallow Dark Sur	Texture (e.g. clay, sand, loam) silty clay loam silty clay silty clay 149B) R K, L, R) (LRR K, L, R) (LRR K, L, R) ils (MLRA 149B) 145, 149B) face
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 18 NRCS Hydric	Bottom Depth 8 18 24 Soil Field Ir A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A11 - Deplete A12 - Thick E S1 - Sandy N S4 - Sandy N S4 - Sandy N S6 - Stripped	Sable silty clay load Typic Endoaquolls the depth needed to document the in Horizon 1 2 3 ndicators (check here) stic en Sulfide d Layers ed Below Dark Surface Oark Surface Muck Mineral Gleyed Matrix Redox I Matrix rface (LRR R, MLRA 149B)	dicator or confinence of the c	m the absence of Matrix (Moist) 3/1 5/2 5/2 icators a	% 100 80 95 sre not pre S8 - Polyx S9 - Thin S11 - High F1 - Loam F2 - Loam F3 - Deple F6 - Redo	pe: C=Concentra 10YR 10YR	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, Re Color (Moist) 5/6 5/6): w Surface (LRR R, MLRA 149B) ace (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix crface Surface	CS=Covered/Coated Sanderdox Features % 20 20 Indicator Indicator	Type C C C	Location Location M M M matic Soils Muck (LRR K, L, MLRA L Prairie Redox (LRR L urface (LRR K, L, M) ue Below Surface ark Surface (LRR K, L anganese Masses cont Floodplain Soil arent Material Spodic (MLRA 144A, 184) Shallow Dark Surfain in Remarks)	Texture (e.g. clay, sand, loam) silty clay loam silty clay silty clay 149B) R K, L, R) (LRR K, L, R) (LRR K, L, R) ils (MLRA 149B) 145, 149B) face
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 18 NRCS Hydric	pgroup): Dtion (Describe to Bottom Depth 8 18 24	Sable silty clay load Typic Endoaquolls the depth needed to document the in Horizon 1 2 3 ndicators (check here) stic en Sulfide d Layers ed Below Dark Surface Oark Surface Muck Mineral Gleyed Matrix Redox I Matrix rface (LRR R, MLRA 149B)	Color 10YR 5Y ere if ind	m the absence of Matrix (Moist) 3/1 5/2 5/2 icators a	% 100 80 95 sre not pre S8 - Polyx S9 - Thin S11 - High F1 - Loam F2 - Loam F3 - Deple F6 - Redo F7 - Deple F8 - Redo	pe: C=Concentra 10YR 10YR	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, Re Color (Moist) 5/6 5/6): w Surface (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix crface Surface Surface Sions	CS=Covered/Coated Sander Sedox Features % 20 20 Indicator	Type C C C	Location Location M M M matic Soils Muck (LRR K, L, MLRA Prairie Redox (LRR ucky Peat of Peat urface (LRR K, L, M) ue Below Surface ark Surface (LRR K, L anganese Masses nont Floodplain Soil arent Material Spodic (MLRA 144A, Shallow Dark Surian in Remarks) station and wetland hydrology	Texture (e.g. clay, sand, loam) silty clay loam silty clay silty clay 149B) R K, L, R) (LRR K, L, R) (LRR K, L, R) ils (MLRA 149B) 145, 149B) face must be present, unless



Project/Site: Vilas Road Wetland ID: Adj. W-1 Sample Point: P13

VEGETATION	(Species identified in all uppercase are non-na	ative spec	ies.)		
Tree Stratum (Plo	t size: 10 meter radius)				
	<u>Species Name</u>	% Cover	<u>Dominant</u>	Ind.Status	Dominance Test Worksheet
1.					Number of Devilors (Oscalar (L.) ODL EACH EAC (A)
2.					Number of Dominant Species that are OBL, FACW, or FAC:(A)
3.	<u></u>				Total Number of Descinant Consider Assess All Charles (D)
4.	<u></u>				Total Number of Dominant Species Across All Strata:1(B)
5.					Develop of Develop the Consider That Ave CDI FACIAL or FAC: (A/D)
6.	<u></u>				Percent of Dominant Species That Are OBL, FACW, or FAC:(A/B)
7.					Drevelence Index Merkeheet
8. 9.					Prevalence Index Worksheet
10.					Total % Cover of: Multiply by:
10.	Total Cover =	0			OBL spp. $\begin{array}{cccccccccccccccccccccccccccccccccccc$
	Total Cover –	U			FAC spp. $\frac{0}{0}$ $\frac{x}{3} = \frac{0}{0}$
Sanling/Shruh Stra	atum (Plot size: 5 meter radius)				FAC spp. $\begin{array}{cccccccccccccccccccccccccccccccccccc$
1					UPL spp. $\frac{0}{70}$ $\frac{1}{2}$ $$
2.					O1 L 3ρρ
3.					Total 70 (A) 350 (B)
4.					10tal(/t)(B)
5.					Prevalence Index = B/A = 5.000
6.					
7.					
8.					Hydrophytic Vegetation Indicators:
9.					☐ Yes ☑ No Rapid Test for Hydrophytic Vegetation
10.					☐ Yes ☑ No Dominance Test is > 50%
	Total Cover =	0			☐ Yes ☑ No Prevalence Index is ≤ 3.0 *
					☐ Yes ☐ No Morphological Adaptations (Explain) *
Herb Stratum (Plo	t size: 2 meter radius)				☐ Yes ☐ No Problem Hydrophytic Vegetation (Explain) *
1.	GLYCINE MAX	70	Υ	UPL	
2.					* Indicators of hydric soil and wetland hydrology must be
3.					present, unless disturbed or problematic.
4.					Definitions of Vegetation Strata:
5.					
6					Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast
7.					height (DBH), regardless of height.
8.					
9.					Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft. tall.
10.					tall.
11.					
12.					Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft. tall.
13.					woody planto 1000 than 0.20 ft. tall.
14.					
15.	<u></u>				Woody Vines - All woody vines greater than 3.28 ft. in height.
	Total Cover =	70			
Woody Vine Stratu	ım (Plot size: 10 meter radius)				
1.					
2.					
3.					Hydrophytic Vegetation Present ☐ Yes ☑ No
4.					
5.	Total Course				
Pomorko:	Total Cover =	0 on stres	o or woo	de proces	s+
Remarks:	Healthy soy crop at sample point, no cro	op stres	s or weed	us preser	it.
Additional Ren	narks:				

	Additional Remarks:
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ı	
ı	
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ASSURED WETLAND DELINEATION REPORT

Vilas Road Appendix C– Site Photographs October 27, 2016

Appendix C – Site Photographs





Photo 1. Overview of north soybean field from driveway, view west.



Photo 3. Upland Forest at P2, view west



Photo 5. South upland field, P8 view southwest.



Photo 2. Upland mowed lawn at P1, view south.



Photo 4. Upland Forest at P5, view west



Photo 6. North upland field, P13 view west.

Vilas Road Snyder & Associates, Inc. Photos taken October 13, 2016 Wetland Delineation Report Town of Cottage Grove, Dane County, Wisconsin Stantec Project #: 193704691



Photo 7. W-1 forested wetland: P4 view west.



Photo 8. W-1 forested wetland: P7 view west.



Photo 9. W-1 forested wetland, west of P9: view west.



Photo 10. W-1 farmed wetland: P12 view north.



Photo 11. Ditch waterway, west edge of W-1, view upstream (north).



Photo 12. Ditch waterway, west edge of W-1, view downstream (south).



Photo 13. W-2 excavated pond, view west.



Photo 14. W-2 excavated pond, view north.



Photo 15. W-2 forested wetland: P3, view east.



Photo 16. W-2 forested wetland: P3, view west.

ASSURED WETLAND DELINEATION REPORT

Vilas Road Appendix D– WETS Analysis October 27, 2016

Appendix D – WETS Analysis



WETS Analysis Worksheet

Project Name: Vilas Road
Project Number: 193704691
Period of interest: June - August

Station: MADISON DANE RGNL AP, WI837

County: Dane County, WI

Long-term rainfall records (from WETS table)

		,		,
		3 years in 10		3 years in 10
	Month	less than	Normal	greater than
1st month prior:	August	3.07	4.33	5.12
2nd month prior:	July	2.88	3.93	4.62
3rd month prior:	June	2.36	4.05	4.92

Sum = **12.31**

Site determination

	Site	Condition	Condition**	Month	
	Rainfall (in)	Dry/Normal*/Wet	Value	Weight	Product
	7.87	Wet	3	3	9
	5.23	Wet	3	2	6
	5.35	Wet	3	1	3
Sum =	18.45			Sum*** =	18

Determination:

Wet Dry Normal

*Normal precipitation with 30% to 70% probability of occurrence

Condition value: *If sum is:

Dry = 1 6 to 9 then period has been drier than normal

Normal = 2 10 to 14 then period has been normal

Wet = 3 15 to 18 then period has been wetter than normal

Precipitation data source: USDA Field Office Climate Data

Reference: Donald E.Woodward, ed. 1997. Hydrology Tools for Wetland Determination, Chapter 19. Engineering Field Handbook. U.S. Department of Agriculture,

Natural Resources Conservation Service, Fort Worth, TX.

WETS Analysis Worksheet

Project Name: Vilas Road Project Number: 193704691

Period of interest: July - September

Station: MADISON DANE RGNL AP, WI837

County: Dane County, WI

Long-term rainfall records (from WETS table)

		3 years in 10		3 years in 10
	Month	less than	Normal	greater than
1st month prior:	September	1.58	3.08	3.77
2nd month prior:	August	3.07	4.33	5.12
3rd month prior:	July	2.88	3.93	4.62

Sum = **11.34**

Site determination

_					
	Site	Condition	Condition**	Month	
	Rainfall (in)	Dry/Normal*/Wet	Value	Weight	Product
	8.46	Wet	3	3	9
	7.87	Wet	3	2	6
	5.23	Wet	3	1	3
Sum =	21.56			Sum*** =	18

Determination:

Wet Dry Normal

*Normal precipitation with 30% to 70% probability of occurrence

Condition value: *If sum is:

Dry = 1 6 to 9 then period has been drier than normal

Normal = 2 10 to 14 then period has been normal

Wet = 3 15 to 18 then period has been wetter than normal

Precipitation data source: USDA Field Office Climate Data

Reference: Donald E.Woodward, ed. 1997. Hydrology Tools for Wetland Determination, Chapter 19. Engineering Field Handbook. U.S. Department of Agriculture,

Natural Resources Conservation Service, Fort Worth, TX.

ASSURED WETLAND DELINEATION REPORT

Vilas Road Appendix E– Off-Site Aerial Imagery Analysis October 27, 2016

Appendix E – Off-Site Aerial Imagery Analysis



Off-Site Aerial Photography Review¹

Vilas Road Wetland Delineation - Cottage Grove, WI

Project Location: Sections 16 & 17, Township 7N, Range 11E, Dane County

Year	Monthly	/ Rainfall in	Inches 2	Wotness	Cropped ³ ?	Signature 4,52	Interpretation
1980	2.36	2.08	3.43	Normal	CR	N	No wetness signatures observed
1981	3.42	0.64	4.99	Normal	CR	Y+ 5, 6a, 6b	wet signature across central portion of north field, west side of south field
1982	3.26	4.34	3.40	Normal	CR	Y-, 6a	wet signature across central portion of north field
1983	2.23	4.21	1.85	Normal	CR	Y+, 3, 5, 6a	wet signature across central portion of north field
1985	1.52	3.35	3.06	Normal	CR	Y-, 6a	wet signatures in central & NW portions of north field; west edge of south field
1990	1.90	5.35	4.88	Normal	CR	Y-, 6e	wet signature across central portion of north field
1994	2.57	1.33	5.66	Normal	CR	Y-, 6c	stressed crop visible in southern portion of north field
1995	4.14	3.92	1.22	Normal	CR	N	No wetness signatures observed
1997	2.50	1.94	5.23	Normal	CR	Y-, 3	wet signature, south edge north field
2002	3.45	2.92	3.70	Normal	CR	Y+, 6a	dark green across eastern 2/3 of north field; house built
2004	1.76	10.84	3.93	Normal	CR	Y-, 3	wet signature in south central portion of north field
2005	1.68	3.96	1.65	Normal	CR	Y-, 5	central portion of north field, W side of south field green, rest of fields brown; excavated pond; add. dist., south portion of south field
2006	5.04	4.61	2.29	Normal	CR	N	No wetness signatures observed

Does slide/aerial photo analysis indicate the site is a wetland?

Yes: wet signatures were most commonly seen in the south-central portion of the north ag field, across the field to the north edge, and on the west edge of the south ag field. The excavated pond first appeared in 2005.

10 out of 13 most the recent "normal" precipitation years had wetland signatures present in south-central portion of north field 3 out of 13 most the recent "normal" precipitation years had wetland signatures present in west edge of south field



¹ Farm Service Agency (FSA) slides are used for this review unless otherwise noted. Assumption is made that FSA slides are taken in July; as a result, precipitation analysis focuses on three r

² Precipitation data from NWS weather station #WI837 - Dane County Regional Airport, Madison, WI

³ CR = cropped (row crop or tilled), NC = not cropped (hay, pasture, fallow, etc.)

⁴ Y = wetness signature present (+ = strong, - = weak); N = No wetness signature

⁵ Interpretation Codes - Feature: 1=water, 2=mud flat, 3=bare spot, 4=drowned crop, 5=planted late; Color: 6a=dark green, 6b=light green, 6c=yellow, 6d=brown, 6e=black; Manipulation: 7a=ditched, 7b=tiled, 7d=tree/brush removal, 8=plowed/tilled; Other: write explanation as needed

ASSURED WETLAND DELINEATION REPORT

Vilas Road Appendix F– Delineator Qualifications October 27, 2016

Appendix F– Delineator Qualifications



Senior Scientist / Project Manager



Mr. Kraemer specializes in environmental regulatory support and policy. He has substantial experience working with the local, state, and federal regulatory agencies on complex, often controversial projects. Mr. Kraemer has substantial experience assisting clients at the project planning level to identify and plan for environmental regulatory implications and risk across many industry sectors with particular expertise in the utility and private development industries. Mr. Kraemer has a thorough understanding of the technical and regulatory aspects of environmental projects. His experience includes: Project critical issues analysis/permitting feasibly assessments; Wetland and other natural resource investigations, mitigation planning, and permitting; Clean Water Act and Endangered Species Act studies and consultation; and National Environmental Policy Act documentation (EA/EIS).

In addition to environmental regulatory expertise, Mr. Kraemer has a strong technical background in wetland ecology and botany and manages Stantec's Midwest ecological restoration implementation group. This group is responsible for building, managing, and monitoring natural area restoration projects such as wetland mitigation. Mr. Kraemer is an assured wetland professional through the Wisconsin Department of Natural Resources Wetland Delineation Professional Assurance Initiative and has extensive environmental consulting experience as both a field ecologist and project manager.

EDUCATION

Wetland Training Institute, Training, Wetland Soils and Hydrology, 2003

Vegetation of Wisconsin Workshop, Training, UW-Milwaukee, 2000

Wetland Delineation Training Workshop, Continuing Education and Extension, UW-La Crosse, 2001

Identification of Sedges Workshop, Training, UW-Milwaukee, 2001

Environmental Corridor Delineation Workshop, Training, Southeastern Wisconsin Regional Planning Commission (SEWRPC), 2004

M.S. – Biological Sciences (Emphasis in Wetland Ecology), University of Wisconsin, Milwaukee, Wisconsin, 2003

B.S. – Biological Sciences (Emphasis in Aquatic Biology), University of Wisconsin, La Crosse, Wisconsin, 1999

Assured Wetland Delineator, Milwaukee, Wisconsin, 2008

REGISTRATIONS

Professionally Assured Wetland Delineator, Wisconsin Department of Natural Resources

Wetland Professional in Training (WPIT), Society of Wetland Scientists Certification Program

MEMBERSHIPS

Member, Society of Wetland Scientists

Member, Wisconsin Wetlands Association

PROJECT EXPERIENCE

Commercial / Retail Development

Commercial Development, Windsor, Wisconsin Completed wetland delineation/evaluation, wetland permitting, and wetland mitigation planning in support of the commercial development project.

Fitchburg Technology Campus, Fitchburg, Wisconsin

Completed woodland assessment, tree survey, and woodland restoration and management plan in support of retail and commercial development project.

Senior Scientist / Project Manager

Conventional Power

Edgewater Generation Facility, Sheboygan, Wisconsin

Managed and coordinated environmental regulatory process for expansion of existing fly-ash disposal facility which required approvals from the USACE and WDNR for wetland impacts associated with the project.

Waukegan Power Station, Lake County, Illinois

Provided threatened and endangered species consultation and wetland surveying along Lake Michigan shorelines for permitting a dredging activity and expansion of the facility.

Nelson Dewey Power Generation Facility Expansion Project, Caseville, Wisconsin

Completed comprehensive field evaluations of wetlands in preparation of NEPA documentation for expansion of the facility.

Waukegan Power Generation Facility Expansion Project, Lake County, Illinois

Completed field evaluations of wetlands and threatened and endangered species in coordination with Section 404 permitting requirements for expansion of the facility.

Invasive Species Survey, Prairie Du Sac, Wisconsin

Conducted a purple loosestrife survey on Lake Wisconsin shorelines and wetlands in order to develop a purple loosestrife management plan in support of the hydroelectric facility FERC licensing.

Ecosystem Restoration

Campus Facility Native Landscape Management, Milwaukee County, Wisconsin

Managed and coordinated development of a native landscape plan for the 50 acres of open space surrounding Northwestern Mutual's campus facility. The plan consisted of wetland, woodland, and prairie restoration. Following completion and approval of the plan, continued to manage and coordinate the implementation of native landscape installation and long-term management.

Threatened Plant Species Consultation, Port Wing, Wisconsin

Completed comprehensive study of a threatened plant species population (Petasites sagittutus) in support of STH 13 Reconstruction project including preparation of relocation and monitoring plan, physical relocation of plants, and follow-up annual monitoring. This project resulted in one of the first documented, successful relocation of this species after five years of monitoring.

Neptune Wetland Mitigation Site, Richland County, Wisconsin

Completed annual comprehensive vegetation surveys, mapping, performance evaluations, and reporting of a 50-acre wetland mitigation bank site.

Lake Koshkonong Water Level and Wetland Studies, Lake Koshkonong, Wisconsin

Developed and conducted wetland studies for development of a water level management plan: E. prairie fringed orchid hydrology study; Floodplain forest/hydrology study; Floristic quality assessment/vegetation mapping within 4000 acres of wetlands.

Wildcat Mountain Wetland Mitigation Monitoring, Vernon County, Wisconsin

Completed comprehensive vegetation surveys, mapping, performance evaluations, and reporting of 38-acre mitigation site.

Jug Creek Wetland Mitigation Monitoring, Vernon County, Wisconsin

Completed comprehensive vegetation surveys, mapping, performance evaluations, and reporting of 10-acre mitigation site.

Wetland Mitigation Bank Monitoring and Remediation, Oakdale, Wisconsin

Completed annual mitigation site monitoring, vegetation surveys, and performance evaluations of 60-acre mitigation bank site. Completed mitigation remediation management plan for compliance with USACE performance standards.

Samuelson Fen Restoration, Portage, Indiana

Developed restoration plan to restore a degraded 30-acre fen, conducted vegetation surveys, floristic quality assessments and hydrology monitoring.

^{*} denotes projects completed with other firms

Senior Scientist / Project Manager

Healthcare

Badger Prairie Health Care Center Expansion Project, Verona, Wisconsin

Completed wetland delineation/evaluations and wetland permitting in support of the expansion of the healthcare facility.

Oil and Gas Pipelines

New Gas Pipeline Project, Wausau, Wisconsin

Completed environmental surveys along proposed gas pipeline corridor including environmental assessments, threatened and endangered plant species survey, and identification of wetland and upland community types.

Southern Access Expansion Project, Wisconsin

Crude Petroleum Pipeline Project. Completed wetland delineations and habitat assessments along a 343 mile proposed crude petroleum pipeline corridor through Wisconsin as part of Enbridge Energy's Southern Access Expansion Program.

Power Transmission & Distribution

ComEd Prairie Programs, Various Locations, Illinois

Project manager for supporting ComEd's Prairie Program. ComEd initiated this program to restore native prairie habitats within their electric transmission Rights-of-way (ROW) and buffers. Stantec manages this program in coordination with ComEd which includes development of native management plans; coordination with site stewards; development of annual budgets; development of performance standards, and identifying new sites and stewards for program expansion. Stantec's implementation services include a full range of prairie restoration and management including preparing and installing new prairies and managing existing prairies through herbiciding, mowing, shrub removal; and prescribed burning. Currently there are over 100 acres of ROW within the prairie program in various stages of development.

Prairie Program

Project manager for supporting ComEd's Prairie Program. ComEd initiated this program to restore native prairie habitats within their electric transmission Rights-of-way (ROW) and buffers. Stantec manages this program in coordination with ComEd which includes development of native management plans; coordination with site stewards; development of annual budgets; development of performance standards, and identifying new sites and stewards for program expansion. Stantec's implementation services include a full range of prairie restoration and management including preparing and installing new prairies and managing existing prairies through herbiciding, mowing, shrub removal; and prescribed burning. Currently there are over 100 acres of ROW within the prairie program in various stages of development.

Electric Transmission Line Projects

Managed support for environmental and GIS services to gain regulatory approvals for new transmission lines. Provided project support for: transmission line siting; critical issues analysis; route matrices; GIS data acquisition and mapping services, coordination of regulatory agency meetings, completion of field wetland delineations; threatened and endangered species; biological assessment and Section 404 permitting, CPCN approvals; community advisory and public workshop support, and expert witness testimony.

LaSalle-Ottawa, LaSalle County, IL;

Wood River Refinery, Madison County, IL;

Rockwood-Big River, Jefferson County, MO;

Saddle Creek 73, Franklin County, MO.

Havana Rebuild, Mason County, IL

345 kV Transmission Line Project, Wisconsin

Arrowhead to Weston. Completed wetland delineations, threatened and endangered plant surveys, and habitat assessments along a 208 mile proposed new transmission line.

Endangered Species Support, Wisconsin

Conducted Karner Blue butterfly surveys (federally endangered) along transmission line right-of-ways.

Residential Development

Country View Estates, DeForest, Wisconsin

Completed wetland delineation/evaluation, wetland permitting, and mitigation planning in support of a 400-acre mixed residential/commercial/recreational development project.

^{*} denotes projects completed with other firms

Senior Scientist / Project Manager

Northeast Neighborhood Plan, Fitchburg, Wisconsin

Developed wetland protection standards for the City of Fitchburg's NE Neighborhood Plan.

Wesenberg Development, New Glarus, Wisconsin

Conducted threatened and endangered plant species surveys, wetland delineations, and floristic quality assessment in support of the residential development.

Westwynde Development, Sun Prairie, Wisconsin

Completed wetland delineation/evaluations, wetland permitting, wetland mitigation planning, and upland prairie restoration planning in support of the residential development.

Westshore Development Restoration Design, Oconomowoc, Wisconsin

Designed a 30-acre upland habitat enhancement and wetland restoration plan in support of gaining regulatory approvals for residential development.

Warehouse / Light Industrial

Manufacturing Facility Expansion Project, Arcadia, Wisconsin

Developed and gained WDNR/USACE approval for 35-acre wetland mitigation plan in support of wetland impact application for expansion of the manufacturing facility; continue to monitor and coordinate implementation of mitigation plan.

Industrial Facility Expansion Project, Hustisford, Wisconsin

Completed wetland delineation/evaluation, wetland permitting, and wetland mitigation planning in support of the expansion of the industrial facility.

Trucking Facility Expansion, Franklin, Wisconsin

Completed wetland delineation/evaluation, wetland permitting, and wetland mitigation design for expansion of the trucking facility.

^{*} denotes projects completed with other firms

Senior Scientist / Project Manager

PUBLICATIONS

Presentation. Lake Koshkonong Wetlands: Diversity, Floristic Quality, and Community Mapping. *Lake Koshkonong Wetland Association*, 2006.

Presentation. Management of the Eastern Prairie Fringed Orchid in the Lake Koshkonong Wetlands. Lake Koshkonong Wetland Association, 2006.

Presentation. Lake Koshkonong Water Level Controversy: A Balance between Recreation and Wetland Protection. WWA Annual Science Forum, 2005.

Presentation. Lake Koshkonong Water Levels and Growth Rate of Trees in Bordering Floodplain Forests.. Lake Koshkonong Wetland Association, 2005.

Presentation. Floodplain forest hydrology and management implications: Lake Koshkonong as a case study. Wisconsin Wetlands Association Annual Science Forum, 2004.

Kraemer, J. Using wetland plants as indicators of fine scale variation in hydrology: the plant community-environment relationship in sedge meadows. *Master's Thesis defense*, 2003.

Presentation. Effects of invasive plant species on natural communities. *UW-Milwaukee*, *Biology* Department, 2001.