Wetland Delineation Report

North Mendota Energy and Technology Park Town of Westport, Dane County, Wisconsin Stantec Project #: 193703573 Lead Delineator: Kate Remus



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Sign-off Sheet

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1.0 INTRODUCTION

Stantec Consulting Services Inc. (Stantec) performed a wetland determination and delineation of an approximately 60 acre parcel proposed for development into the North Mendota Energy and Technology Park (the "Study Area") on behalf of Ruedebusch Development & Construction, Inc. The wetland delineation was led by Kate Remus of Stantec on April 17 and 23, 2015 (See Appendix F for Delineator Qualifications).

The Study Area is located in Section 22, Township 8 North, Range 9 East, in the Town of Westport, Dane County, Wisconsin. Specifically, the Study Area is located west of State Highway (STH) 113 between Kennedy Drive and River Road. The purpose and objective of the wetland determination and delineation was to identify the extent and spatial arrangement of wetlands, as well as to identify potentially jurisdictional waterways, within the Study Area. Two wetland areas and three waterways 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 Wisconsin Department of Natural Resources (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.



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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.

2.2 WATERWAYS

Review of waterway characteristics and determination of navigability and jurisdiction was beyond the scope of the investigation. However, if observed, waterways, waterbodies, culverts, and/or other connections to off-site wetland or aquatic features that may be under federal or state authority were surveyed using a GPS and mapped using GIS software.



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3.0 RESULTS

3.1 SITE DESCRIPTION

The Study Area is comprised of active agricultural fields, wetlands, tree lines, an abandoned farmstead in the northeast corner, and a grassed waterway through the western half. The Study Area has gentle rolling topography, sloping to the southwest from topographic highs of approximately 870 feet mean sea level (msl) on the northern area of the site to topographic lows in the southwestern portion of approximately 860 feet msl. The Study Area is bordered by River Road with a quarry and commercial development to the south, railroad tracks and agricultural land, wetland, and commercial development to the west, Kennedy Drive, a few residential properties, and agricultural land to the north, and STH 113 with wetland and agricultural lands to the east.

Soils present within the Study Area and their hydric status are summarized in Table 1. The large wetland (W1) identified during the field investigation is located primarily within an area mapped as hydric soils.

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
DnB: Dodge silt loam, 2 to 6 percent slopes	Dodge	100	Moraines	No
Mc: Marshan silt loam	Marshan	100	Depressions on stream terraces	Yes
MdC2: McHenry silt loam, 6 to 12 percent slopes, eroded	McHenry	100	Moraines	No
Pa: Palms muck, 0 to 2 percent slopes	Palms	75-95	Depressions on interdrumlins	Yes
	Houghton	3-15	Depressions on interdrumlins	Yes
	Adrian	2-10	Depressions on interdrumlins	Yes
SaA: Sable silty clay loam, 0 to 2 percent slopes	Sable	85-100	Swales	Yes
	Ipava	0-7	Ground moraines	No
	Muscatune	0-6	Ground moraines	No
	Buckhart	0-4	Knolls	No
	Elburn	0-3	Outwash plains	No



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Soil symbol: Soil Unit Name	Soil Unit Component	Soil Unit Component Percentage	Landform	Hydric status
ScB: St. Charles silt loam, 2 to 6 percent slopes	St. Charles	80-90	Till plains	No
	St. Charles- Moderately well drained	5-10	Till plains	No
	Virgil	3-5	Till plains	No
	Pella	2-5	Drainageways, ground moraines, depressions	Yes
VrB: Virgil silt loam, 1 to 4 percent slopes	Virgil	100	Till plains	No
	Wetter soils		Depressions	Yes

The Wisconsin Wetland Inventory (WWI) map identifies one wetland area within the southeast section of the Study Area (Appendix A, Figure 4). Three additional wetland areas are present outside the Study Area to the north, south, east, and west, separated from the Study Area by roads or railroad. The field delineated eastern wetland (W-1; Appendix A, Figure 5) is associated with the WWI-mapped wetland area within the Study Area. The field delineated western wetland (W-2) is not mapped by the WWI, but is associated with a mapped intermittent stream running between WWI-mapped wetland areas located off-site to the north and southwest.

Average precipitation for the investigation area was obtained from the Dane County Regional Airport National Weather Service (NWS) weather station (NWS station #WI837) in Madison, WI and used for the WETS analysis (Appendix D). A total of 5.44 inches of precipitation occurred in February, March, and from April 1 - 23, compared to the average of 6.13 inches. From April 1 - April 17, 2015 3.42 inches of precipitation were received and April 1 - April 23, 2015, a total of 4.14 inches was received, compared to the long-term average precipitation for April of 3.35 inches. Based on the WETS analysis, conditions were drier than normal in February and March, but wetter in April, resulting in an overall rank of normal for site conditions at the time of the field investigations.

3.2 WETLANDS

Two wetlands were identified and delineated within the Study Area (Figure 5, Appendix A). The wetland determination data forms completed for 22 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)	Wet meadow / Shallow Marsh / Hardwood Swamp - Shrub Carr – partially farmed (E1K, T3K, T3/S3K)	Immediately adjacent to two waterways (\$1 and \$2)	12.05 acres
Wetland 2 (W-2)	Wet meadow (grass waterway)	Immediately adjacent to an intermittent agricultural waterway (\$3)	0.59 acre

3.2.1 Wetland 1

Wetland 1 (W-1) is a wetland complex of wet meadow, shallow marsh, hardwood swamp communities with a narrow border of farmed wetland along its western edge. W-1 is adjacent to the eastern and southern boundaries of the Study Area and is directly connected to two unnamed waterways, S1 and S2, which flow through the wetland. Waterway S1 is mapped as an intermittent stream on the 24k hydro layer mapped by USGS (Appendix A, Figures 1) and visible in the WDNR 24k hydrography layer (Appendix A, Figures 2-4). Waterway S2 is not mapped by USGS or WDNR, but appeared to be intermittent and eventually dispersed into the emergent marsh community of W-1. The unnamed waterways associated with W-1 flow south, passing under River Road via a culvert and eventually discharge into Lake Mendota.

Vegetation

Dominant plant species identified at sample points completed within W-1 consist of reed canary grass (*Phalaris arundinacea*, FACW), path rush (*Juncus tenuis*, FAC), and stunted corn (*Zea mays*) stubble from 2014 within the farmed wetland portion (*Photo 6*, Appendix C). The central and southeastern portion of the wetland is comprised of shallow marsh and hardwood swamp communities which were observed to be dominated by narrow-leaf cattail (*Typha angustifolia*, OBL) and cottonwood (*Populus deltoides*, FAC) among others. Other common species identified at sample points completed within the wetland are listed on the data forms 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/saturated hydroperiod within the central portion and a seasonally saturated hydroperiod along the outer margin. Primary indicators of wetland hydrology were not observed at sample points P3, P4, P6, or P8. However, secondary indicators of wetland hydrology observed included Stunted or Stressed Plants (D1), Geomorphic Position (D2), a positive FAC-Neutral Test (D5), and also Saturation Visible on Aerial Imagery (C9) in farmed portions of W-1. Therefore, the wetland hydrology criterion was met.

Soils

Soils within the wetland are mapped by the NRCS as Palms muck (Pa), Sable silty clay loam (SaA), and Virgil silt loam (VrB) (Appendix A, Figure 2). The soils observed at the sample points were generally consistent with the Sable series characteristics. Field indicators of hydric soil



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identified at sample points P3, P4, P6, and P8 consisted of NRCS field Indicators A11-Depleted Below Dark Surface, A12-Thick Dark Surface, 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 wet meadow wetland community dominated by reed canary grass or farmed wetland community with weedy agricultural species present and evidence of crop stress in the form of stunted corn stubble to upland crop land with few agricultural weedy species present and robust corn stubble; 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 poorly and somewhat poorly drained soils exhibiting field indicators of hydric soil to somewhat poorly drained soils with various levels of disturbance or deposition over native soils lacking wetland indicators; and 4) within farmed portions, location of wetness signatures from the off-site aerial imagery analysis in normal precipitation years consistent with observations made in the field. The transition from wetland to upland characteristics generally correlated with a subtle topographic break.

3.2.2 Wetland 2

Wetland 2 (W-2) is a wet meadow community associated with a grassed waterway (S3) as is located in the western portion of the Study Area. A small portion of farmed wetland is present along the wet meadow community, primarily near the southern extent of W-2. The grassed waterway S3 is mapped as an unnamed intermittent stream on the 24k hydro layer mapped by USGS (Appendix A, Figure 1) and visible in the WDNR 24k hydrography layer (Appendix A, Figures 2-4). S3 flows south, passing under a railroad track and associated embankment via a box culvert and eventually discharges into a system of drainagways which flow into Lake Mendota.

Vegetation

Dominant plant species identified at sample points completed within W-1 consist of reed canary grass and stunted corn crop within the farmed wetland fringe portions. Other common species identified at sample points completed within the wetland are listed on the data forms 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 saturated hydroperiod. Primary indicators of wetland hydrology were not observed at sample points P12, P16, P18, or P20. However, secondary indicators of wetland hydrology observed included Geomorphic Position (D2), a positive FAC-Neutral Test (D5), and also Saturation Visible on Aerial Imagery (C9) in farmed portions of W-2. Therefore, the wetland hydrology criterion was met.

Soils

Soils within the wetland are mapped by the NRCS as Sable silty clay loam (SaA) and Virgil silt loam (VrB) (Appendix A, Figure 2). The Virgil series is considered a non-hydric soil by NRCS, but can contain inclusions of wetter hydric soils within depressions. The soils observed at the sample points were generally consistent with the wetter soils of the Virgil series that can be found within depressional areas. Field indicators of hydric soil identified at sample points P12, P16, P18, and



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P20 consisted of NRCS field Indicators A12-Thick Dark Surface 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 wet meadow wetland community dominated by reed canary grass or farmed wetland fringe area with weedy agricultural species present and evidence of crop stress in the form of stunted corn stubble to upland crop land with few agricultural weedy species present and robust corn stubble; 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 somewhat poorly drained soils within a depressional area exhibiting field indicators of hydric soil to somewhat poorly drained soils lacking hydric soil indicators; and 4) within the farmed portions, location of wetness signatures from the off-site aerial imagery analysis in normal precipitation years consistent with observations made in the field. The transition from wetland to upland characteristics generally correlated with a subtle topographic break.

3.3 UPLAND

Upland within the Study Area consisted of agricultural fields, tree lines, and an abandoned farmstead. As the majority of Study Area is agricultural land, a review of historic aerial imagery was conducted to evaluate the presence of wetland signatures. Sample points P10, P11, P14, P21, and P22 were completed in areas associated with mapped poorly drained or somewhat poorly drained soils or that appeared to be darker in color on recent aerial imagery, indicating potential wetland areas, during the aerial imagery review and were therefore field reviewed. A few of the upland sample points placed in the active agricultural fields did exhibit some hydrologic impact (native soils with hydric indicators overlain by many inches of depositional soils from upslope runoff) in the soils, but overall, conditions are not wet enough for a long enough duration to support wetland establishment. Evidence of soil deposition over native soil horizons was commonly seen throughout the Study Area and sample points P8, P9, P14, P16, P19, and P20 showed various levels of disturbance to the soils. Additionally, an active sump pump for an established draintile network was observed discharging water into S3. The established draintile network has influenced hydrology successfully for a long enough period of time to limit wetland establishment beyond the extent of W-2 as observed during field investigations.

The tree lines, present along a high topographic ridge in the west half of the Study Area and railroad embankment along the southwest boundary, and the abandoned farmstead in the northeastern corner of the Study Area, were dominated by common disturbance-driven species including box elder (Acer negundo, FAC), black cherry (Prunus serotina, FACU), hackberry (Celtis occidentalis, FAC), cottonwood, Bell's honeysuckle (Lonicera X bella, FACU), staghorn sumac (Rhus typhina, UPL), common burdock (Arctium minus, FACU), smooth brome (Bromus inermis, UPL), and Queen Anne's-lace (Daucus carota, UPL). Overall, upland areas were determined to be non-wetland based on a combination of the lack of hydrophytic vegetation, wetland hydrology, hydric soils, topographic position, non-stunted corn stubble, and/or the lack of observed wetland signatures during the aerial imagery review.



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3.4 WATERWAYS

Three waterways were identified within the Study Area and mapped, as they may be considered navigable and subject to federal and/or state authority. Two of the waterways, S1 and S3, appeared to have defined bed and banks, correlate with mapped intermittent streams on the USGS and WDNR 24K hydrography layers, and are identified as unnamed tributaries with Waterbody Identification Codes (WIBC) 806100 and 3000316, respectively. Waterway S2 is not associated with a mapped perennial or intermittent stream and did not appear to have defined bed and banks. Waterway S2 appeared to convey stormwater flow from culverts under STH 19 and eventually dissipated into W-1. Waterways S1 and S2 are immediately adjacent to W-1 and S3 is immediately adjacent to W-2; all three waterways flow south where they eventually connect to Lake Mendota.

3.5 OTHER ENVIRONMENTAL CONSIDERATIONS

This report is limited to the identification of state and/or federally regulated wetlands and waterways 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 greas 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 reed canary grass and narrowleaf cattail, but are immediately adjacent to waterways mapped as intermittent streams by USGS. Therefore, based on the "protective buffer" standards provided by NR 151.12, it is Stantec's professional opinion that the wetlands meet the criteria for moderately susceptible wetlands and the buffer from the wetland boundary would be 50 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.



North Mendota Energy and Technology Park CONCLUSION May 18, 2015

4.0 CONCLUSION

Stantec performed a wetland determination and delineation of the proposed site of the North Mendota Energy and Technology Park on behalf of Ruedebusch Development & Construction, Inc. The approximately 60-acre Study Area is located in Section 22, Township 8 North, Range 9 East, in the Town of Westport, Dane County, Wisconsin. The purpose and objective of the wetland determination and delineation was to identify the extent and spatial arrangement of wetlands and potentially jurisdictional waterways within the Study Area.

Two wetlands were identified and delineated within the Study Area in accordance with state and federal guidelines and were subsequently surveyed with GPS and mapped using GIS software. There were a combined total of 12.64 acres of wetlands within the Study Area. Wetlands were mostly composed of wet meadow, shallow marsh, hardwood swamp, and farmed wetland. Adjacent uplands were composed of agricultural lands, mesic tree lines, and an abandoned farmstead. Additionally, three waterways were identified and were surveyed with GPS and mapped using GIS software. Two of the waterways are associated with intermittent streams mapped by USGS and WDNR, and all three waterways flow off-site and eventually discharge into Lake Mendota.

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.



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5.0 REFERENCES

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North Mendota Energy and Technology Park Appendix A– Figures May 18, 2015

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

NAD 1983 StatePlane Wisconsin South FPS 4803 Feet 2. Data Sources Include: Stantec, WisDOT, WDNR 3. Background: USGS 7.5" Topographic Quadrangles

Disclaimer: Stantec assumes no responsibility for data supplied in electronic format. The recipient accepts full responsibility for verifying the accuracy and completeness of the data. The recipient releases Stantec, its offices, employees, consultants and agents, from any and all claims arising in any way from the content or provision of the data.

Title

Project Location and Topography

Client/Project
North Mendota Energy and Technology Park
Ruedebusch Development & Construction, Inc.

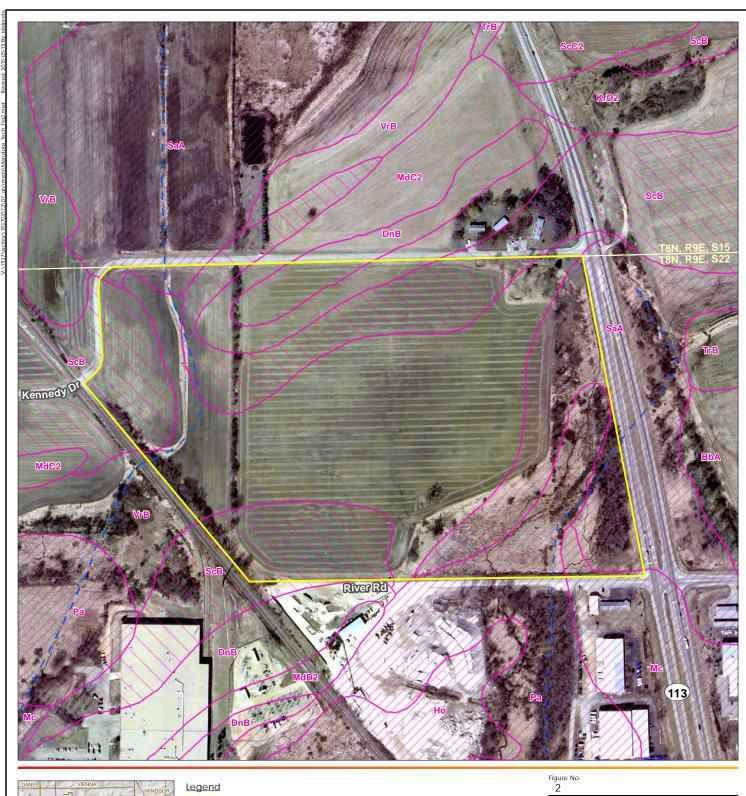
Project Location T08N, R09E, S22 T. of Westport Dane Co., WI

193703573 Prepared by KAS on 2015-03-09 Technical Review by MCP on 2015-03-09 Independent Review by KR on 2015-03-31

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









NOUES

1. Coordinate System: NAD 1983 StatePlane Wisconsin South FPS 4803 Feet

2. Data Sources Include: Stantec, NRCS, WDNR, and WisDOT

3. Orthophotography: 2010 WROC

Comporting approximation.
 Comporting a composition of the data supplied in electronic format. The recipient accepts full responsibility for verifying the accuracy and completeness of the data. The recipient releases Stantec, its officers, employees, consultants and agents, from any and all claims arising in any way from the content or provision of the data.

Approximate Project Boundary NRCS Soil Survey Data Hydric Rating

Predominantly Hydric Soils

Partially Hydric Soils Non-Hydric Soils

DNR 24k Hydrography



Intermittent Stream



Waterbody

Title

NRCS Soil Survey Data Hydric Ratings

Client/Project
North Mendota Energy and Technology Park
Ruedebusch Development & Construction, Inc.

Project Location T08N, R09E, S22 T. of Westport Dane Co., WI

193703573 Prepared by KAS on 2015-03-09 Technical Review by MCP on 2015-03-09 Independent Review by KR on 2015-05-15

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









NOUES

1. Coordinate System: NAD 1983 StatePlane Wisconsin South FPS 4803 Feet

2. Data Sources Include: Stantec, NRCS, WDNR, and WisDOT

3. Orthophotography: 2010 WROC

Comporting approximation.
 Comporting a composition of the data supplied in electronic format. The recipient accepts full responsibility for verifying the accuracy and completeness of the data. The recipient releases Stantec, its officers, employees, consultants and agents, from any and all claims arising in any way from the content or provision of the data.

Legend

Approximate Project Boundary NRCS Soil Survey Data Wetland Indicator 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
North Mendota Energy and Technology Park
Ruedebusch Development & Construction, Inc.

Project Location T08N, R09E, S22 T. of Westport Dane Co., WI

193703573 Prepared by KAS on 2015-03-09 Technical Review by MCP on 2015-03-09 Independent Review by KR on 2015-05-15

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









NAD 1983 StatePlane Wisconsin South FPS 4803 Feet 2. Data Sources Include: Stantec, WWI, WDNR, and WisDOT 3. Orthophotography: 2010 WROC

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<u>Legend</u>

Approximate Project Boundary

WWI Wetland Class Areas

:: Wetland

DNR 24k Hydrography





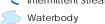




Figure No.



Wisconsin Wetland Inventory

Client/Project
North Mendota Energy and Technology Park
Ruedebusch Development & Construction, Inc.

Project Location T08N, R09E, S22 T. of Westport Dane Co., WI

193703573 Prepared by KAS on 2015-03-09 Technical Review by MCP on 2015-03-09 Independent Review by KR on 2015-05-15

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









<u>Legend</u>

Approximate Project Boundary

Sample Points

Field Delineated Waterway

Field Delineated Wetland

DNR 24k Hydrography







Waterbody



Figure No.

Title

Field Collected Data

Client/Project
North Mendota Energy and Technology Park
Ruedebusch Development & Construction, Inc.

Project Location T08N, R09E, S22 T. of Westport Dane Co., WI

193703573 Prepared by JD on 2015-04-24 Technical Review by CP on 2015-04-24 Independent Review by KR on 2015-05-15







NAD 1983 StatePlane Wisconsin South FPS 4803 Feet 2. Data Sources Include: Stantec, WDNR, and WisDOT 3. Orthophotography: 2010 WROC

Disclaimer: Stantec assumes no responsibility for data supplied in electronic format. The recipient accepts full responsibility for verifying the accuracy and completeness of the data. The recipient releases Stantec, its officers, employees, consultants and agents, from any and all claims arising in any way from the content or provision of the data.

North Mendota Energy and Technology Park Appendix B– Wetland Determination Data Forms May 18, 2015

Appendix B– Wetland Determination Data Forms





WETLAND DETERMINATION DATA FORM Northeast and Northcentral Region

Project/Site:		dota Energy and Te	٠.	•			Stantec Project #:	193703573		Date:	04/17/15
Applicant:		ch Development & 0	onstruc							County: State:	Dane Wisconsin
Investigator #1: Soil Unit:	Sable silty	clay loam		IIIVESII	gator #2:		I/WWI Classification:			Wetland ID:	W-1
Landform:	Backslope	ciay loairi		Loc	al Relief:		i/ VV VVI Classification.			Sample Point:	P1
Slope (%):	0-2	Latitude:	N/A		ongitude:			Datum:	N/A	Community ID:	Ag Field
. ,		ditions on the site ty					nin in remarks)	☑ Yes □		Section:	22
		or Hydrology □ sig				(**************************************	Are normal circumsta			Township:	8N
•		or Hydrology □ na	-				□ Yes	⊡No [.]		Range:	9 Dir: E
SUMMARY OF		, 0, 1	3 1							Ü	
Hydrophytic Ve	getation Pre	sent?		□ Yes	√ No			Hydric Soils	Present?		☐ Yes ☑ No
Wetland Hydrol	_			☐ Yes				Is This Samp	oling Point	Within A Wetlar	
Remarks:	Based on a	a WETS analysis, co	onditions	were no	ormal; hov	vever, 3.	42 inches of rain were	received in t	the area fro	m April 1 - April	17. Sample point
	located with	nin active agricultur	al field.								
HYDROLOGY											
Wetland Hydr	ology Indic	ators (Check here	f indicate	ors are r	not preser	nt 🗔):					
Primary:		atoro (orrean riaro)	. maioat	515 di 5 i	.o. p. ooo.	/-			Secondary:		
	A1 - Surface				B9 - Wate					B6 - Surface Soil	
	A2 - High Wa				B13 - Aqu					B10 - Drainage Pa	
l H	A3 - Saturation B1 - Water M			H	B15 - Mar C1 - Hydr	•			H	B16 - Moss Trim C2 - Dry-Season	
	B2 - Sedimer				-	-	spheres on Living Roots			C8 - Crayfish Bur	
	B3 - Drift Dep						educed Iron				isible on Aerial Imagery
	B4 - Algal Ma				C6 - Rece		duction in Tilled Soils			D1 - Stunted or S D2 - Geomorphic	
l H	B5 - Iron Dep B7 - Inundation	oosแร on Visible on Aerial Ima	agery		Other (Ex				H	D3 - Shallow Aqui	
		Vegetated Concave S	0 ,	_	O (2/	p				D4 - Microtopogra	
										D5 - FAC-Neutral	Test
Field Observat	tions:										
Surface Water	Present?	☐ Yes ☑ No	Depth:		(in.)			Wetland Hy	drology Dr	rocont?	Yes ☑ No
Water Table Pr	esent?	☐ Yes ☑ No	Depth:		(in.)			wetiand my	arology Fr	esciit:	163 🗹 110
Saturation Pres	sent?	☐ Yes ☑ No	Depth:		(in.)						
Describe Record	led Data (str	eam gauge, monitori	ng well, a	aerial pho	otos, previ	ous inspe	ctions), if available:		Aerial Image	ery Review	
Remarks:											
SOILS											
):	Sable silty clay loar	m			S	eries Drainage Class:	poorly			
SOILS Map Unit Name Taxonomy (Sub	ogroup):	Typic Endoaquolls						•			
SOILS Map Unit Name Taxonomy (Sub	ogroup):	Typic Endoaquolls					tion, 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		oe: C=Concentra	tion, D=Depletion, RM=Reduced Matrix, C	CS=Covered/Coated Sand	1		Texture
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth	ogroup): otion (Describe to Bottom Depth	Typic Endoaquolls	dicator or confirm	Matrix (Moist)	%	oe: C=Concentra	tion, 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 10	Typic Endoaquolls the depth needed to document the in Horizon 1	Color 7.5YR	Matrix (Moist) 3/1	% 100	oe: C=Concentra	tion, D=Depletion, RM=Reduced Matrix, C	CS=Covered/Coated Sand	1		(e.g. clay, sand, loam)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth	ogroup): otion (Describe to Bottom Depth	Typic Endoaquolls the depth needed to document the in	Color 7.5YR 10YR	Matrix (Moist) 3/1 5/4	% 100 65	oe: C=Concentra	tion, D=Depletion, RM=Reduced Matrix, C Red Color (Moist)	CS=Covered/Coated Sand	Туре	Location	(e.g. clay, sand, loam) loam clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	ogroup): otion (Describe to Bottom Depth 10	Typic Endoaquolls the depth needed to document the in Horizon 1	Color 7.5YR 10YR 10YR	Matrix (Moist) 3/1 5/4 5/8	% 100 65 30	pe: C=Concentra	tion, D=Depletion, RM=Reduced Matrix, C Rec Color (Moist)	CS=Covered/Coated Sand dox Features %	Type 	Location 	(e.g. clay, sand, loam) loam clay loam clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 10	Depth 10 18	Typic Endoaquolls the depth needed to document the in Horizon 1 2	Color 7.5YR 10YR 10YR 10YR	Matrix (Moist) 3/1 5/4 5/8 3/2	% 100 65 30 5	pe: C=Concentra	tion, D=Depletion, RM=Reduced Matrix, C Rec Color (Moist)	dox Features %	Type 	Location	(e.g. clay, sand, loam) loam clay loam clay loam clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 10	Degroup): Describe to Bottom Depth 10 18	Typic Endoaquolls the depth needed to document the in Horizon 1 2	Color 7.5YR 10YR 10YR	Matrix (Moist) 3/1 5/4 5/8	% 100 65 30	pe: C=Concentra	tion, D=Depletion, RM=Reduced Matrix, C Red Color (Moist)	CS=Covered/Coated Sand	Type	Location 	(e.g. clay, sand, loam) loam clay loam clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 10	Bottom Depth 10 18	Typic Endoaquolls the depth needed to document the in Horizon 1 2	Color 7.5YR 10YR 10YR 10YR	Matrix (Moist) 3/1 5/4 5/8 3/2	% 100 65 30 5	pe: C=Concentra	tion, D=Depletion, RM=Reduced Matrix, C Rec Color (Moist)	dox Features %	Type 	Location	(e.g. clay, sand, loam) loam clay loam clay loam clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 10 18	bgroup): btion (Describe to Bottom Depth 10 18 24	Typic Endoaquolls the depth needed to document the in Horizon 1 2 3	Color 7.5YR 10YR 10YR 10YR 2.5Y	Matrix (Moist) 3/1 5/4 5/8 3/2 6/3	% 100 65 30 5 90	 10YR	tion, D=Depletion, RM=Reduced Matrix, C Red Color (Moist) 5/8	dox Features % 10	Type C	Location M	(e.g. clay, sand, loam) loam clay loam clay loam clay loam clay loam clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 10 18	bgroup): btion (Describe to Bottom Depth 10 18 24	Typic Endoaquolls the depth needed to document the in Horizon 1 2 3	Color 7.5YR 10YR 10YR 10YR	Matrix (Moist) 3/1 5/4 5/8 3/2 6/3	% 100 65 30 5 90 	 10YR 	tion, D=Depletion, RM=Reduced Matrix, CRec	CS=Covered/Coated Sand dox Features % 10	Type	Location M	(e.g. clay, sand, loam) loam clay loam clay loam clay loam clay loam clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 10 18 NRCS Hydric	Bottom Depth 10 18 24 Soil Field Ir	Typic Endoaquolls the depth needed to document the in Horizon 1 2 3	Color 7.5YR 10YR 10YR 10YR	Matrix (Moist) 3/1 5/4 5/8 3/2 6/3 icators a	% 100 65 30 5 90 are not pre	 10YR esent 🗸	tion, D=Depletion, RM=Reduced Matrix, CRedColor (Moist) 5/8 5/8	CS=Covered/Coated Sand dox Features % 10 Indicator	Type s for Proble	Location M matic Soils 1	(e.g. clay, sand, loam) loam clay loam clay loam clay loam clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 10 18 NRCS Hydric	Bottom Depth 10 18 24 Soil Field In	Typic Endoaquolls the depth needed to document the in Horizon 1 2 3 adicators (check he	Color 7.5YR 10YR 10YR 10YR	Matrix (Moist) 3/1 5/4 5/8 3/2 6/3 icators a	% 100 65 30 5 90 are not pre	10YR esent value Belov	tion, D=Depletion, RM=Reduced Matrix, CRed Color (Moist) 5/8): w Surface (LRR R, MLRA 149B)	CS=Covered/Coated Sand dox Features % 10 Indicator	Type s for Proble A10 - 2 cm	Location M matic Soils ¹ Muck (LRR K, L, MLRA 1	(e.g. clay, sand, loam) loam clay loam clay loam clay loam clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 10 18 NRCS Hydric	Bottom Depth 10 18 24 30il Field Ir A1- Histosol A2 - Histic Ep	Typic Endoaquolls the depth needed to document the in Horizon 1 2 3 adicators (check here)	Color 7.5YR 10YR 10YR 10YR	Matrix (Moist) 3/1 5/4 5/8 3/2 6/3 icators a	% 100 65 30 5 90 are not pre S8 - Polys S9 - Thin	 10YR esent ☑ value Belov Dark Surfa	tion, D=Depletion, RM=Reduced Matrix, CRed Color (Moist) 5/8 Surface (LRR R, MLRA 149B) ace (LRR R, MLRA 149B)	CS=Covered/Coated Sand dox Features % 10 Indicator	Type	Location M matic Soils Muck (LRR K, L, MLRA 1) Prairie Redox (LRR	(e.g. clay, sand, loam) loam clay loam clay loam clay loam clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 10 18 NRCS Hydric	Bottom Depth 10 18 24 30 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Histosol A4 - Hydroge	Typic Endoaquolls the depth needed to document the in Horizon 1 2 3 adicators (check here) stic en Sulfide	Color 7.5YR 10YR 10YR 10YR	Matrix (Moist) 3/1 5/4 5/8 3/2 6/3 icators a	% 100 65 30 5 90 are not pre S8 - Polyx S9 - Thin S11 - High F1 - Loam	10YR esent value Below Dark Surfa	tion, D=Depletion, RM=Reduced Matrix, CRed Color (Moist) 5/8): w Surface (LRR R, MLRA 149B) ace (LRR R, MLRA 149B) Sands Mineral (LRR K, L)	CS=Covered/Coated Sand dox Features % 10 Indicator	Type	Location M matic Soils Muck (LRR K, L, MLRA 1) Prairie Redox (LRR ucky Peat of Peat (urface (LRR K, L, M)	(e.g. clay, sand, loam) loam clay loam clay loam 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	Typic Endoaquolls the depth needed to document the in Horizon 1 2 3 ndicators (check here) cipedon istic en Sulfide d Layers	Color 7.5YR 10YR 10YR 2.5Y ere if ind	Matrix (Moist) 3/1 5/4 5/8 3/2 6/3 icators a	% 100 65 30 5 90	10YR esent value Below Dark Surfa	tion, D=Depletion, RM=Reduced Matrix, CRed Color (Moist) 5/8): w Surface (LRR R, MLRA 149B) ace (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix	CS=Covered/Coated Sand dox Features % 10 Indicator	Type	Location M matic Soils Muck (LRR K, L, MLRA 1 Prairie Redox (LRR ucky Peat of Peat (urface (LRR K, L, M) ue Below Surface	(e.g. clay, sand, loam) loam clay loam 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 10 18 NRCS Hydric	Bottom Depth 10 18 24 24 Soil Field Ir A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A11 - Deplete	Typic Endoaquolls the depth needed to document the in Horizon 1 2 3 ndicators (check he bipedon istic en Sulfide d Layers ed Below Dark Surface	Color 7.5YR 10YR 10YR 2.5Y ere if ind	Matrix (Moist) 3/1 5/4 5/8 3/2 6/3 icators a	% 100 65 30 5 90 see not presserved see Polyx S9 - Thin S11 - High F1 - Loam F2 - Loam F3 - Deple		tion, D=Depletion, RM=Reduced Matrix, C Red Color (Moist) 5/8): w Surface (LRR R, MLRA 149B) ace (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix	CS=Covered/Coated Sand dox Features % 10 Indicator	Type	Location M 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	(e.g. clay, sand, loam) loam clay loam 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 10 18 NRCS Hydric	Bottom Depth 10 18 24 Soil Field Ir A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified	Typic Endoaquolls the depth needed to document the in Horizon 1 2 3 adicators (check here) cipedon distic en Sulfide d Layers ed Below Dark Surface Dark Surface	Color 7.5YR 10YR 10YR 2.5Y ere if ind	Matrix (Moist) 3/1 5/4 5/8 3/2 6/3 icators a	% 100 65 30 5 90 see not presserved see Polyx S9 - Thin S11 - High F1 - Loam F2 - Loam F3 - Deple		tion, D=Depletion, RM=Reduced Matrix, C Red Color (Moist) 5/8): w Surface (LRR R, MLRA 149B) ace (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix crface	CS=Covered/Coated Sand dox Features % 10 Indicator	Type 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 M matic Soils Muck (LRR K, L, MLRA 1 Prairie Redox (LRR ucky Peat of Peat (urface (LRR K, L, M) ue Below Surface	(e.g. clay, sand, loam) loam clay loam clay loam clay loam clay loam (LAPB) 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	Bottom Depth 10 18 24 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	Typic Endoaquolls the depth needed to document the in Horizon 1 2 3 adicators (check he cipedon istic en Sulfide d Layers ed Below Dark Surface Dark Surface Muck Mineral Gleyed Matrix	Color 7.5YR 10YR 10YR 2.5Y ere if ind	Matrix (Moist) 3/1 5/4 5/8 3/2 6/3 icators a	% 100 65 30 5 90	e: C=Concentra 10YR esent	tion, D=Depletion, RM=Reduced Matrix, C Red Color (Moist) 5/8): w Surface (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix crface Surface	CS=Covered/Coated Sand dox Features % 10 Indicator	Type	Location M 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 dont Floodplain Soilarent Material	(e.g. clay, sand, loam) loam clay loam clay loam clay loam clay loam (LRR K, L, R)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 10 18 NRCS Hydric	Bottom Depth 10 18 24 24 Soil Field Ir A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A12 - Thick E S1 - Sandy E S4 - Sandy E S5 - Sandy E	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	Color 7.5YR 10YR 10YR 2.5Y ere if ind	Matrix (Moist) 3/1 5/4 5/8 3/2 6/3 icators a	% 100 65 30 5 90	e: C=Concentra 10YR esent	tion, D=Depletion, RM=Reduced Matrix, C Red Color (Moist) 5/8): w Surface (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix crface Surface	CS=Covered/Coated Sand dox Features % 10 Indicator	Type	Location 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 langanese Masses ont Floodplain Soil arent Material Spodic (MLRA 144A, 1	(e.g. clay, sand, loam) loam clay loam clay loam clay loam clay loam (LRR K, L, R) (LRR K, L, R) (LRR K, L, R) (LRR K, L, R) (S (LRR K, L, R) (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 24 Soil Field In 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	Typic Endoaquolls the depth needed to document the in Horizon 1 2 3 adicators (check he bipedon istic en Sulfide d Layers ed Below Dark Surface Dark Surface Muck Mineral Gleyed Matrix Redox I Matrix	Color 7.5YR 10YR 10YR 2.5Y ere if ind	Matrix (Moist) 3/1 5/4 5/8 3/2 6/3 icators a	% 100 65 30 5 90	e: C=Concentra 10YR esent	tion, D=Depletion, RM=Reduced Matrix, C Red Color (Moist) 5/8): w Surface (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix crface Surface	cs=Covered/Coated Sand dox Features % 10 Indicator	Type	Location M 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 Soi earent Material Spodic (MLRA 144A, 1 Shallow Dark Surf	(e.g. clay, sand, loam) loam clay loam clay loam clay loam clay loam (LRR K, L, R) (LRR K, L, R) (LRR K, L, R) (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 24 Soil Field In 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	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	Color 7.5YR 10YR 10YR 2.5Y ere if ind	Matrix (Moist) 3/1 5/4 5/8 3/2 6/3 icators a	% 100 65 30 5 90	e: C=Concentra 10YR esent	tion, D=Depletion, RM=Reduced Matrix, C Red Color (Moist) 5/8): w Surface (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix crface Surface	CS=Covered/Coated Sand dox Features % 10 Indicator	Type C	Location 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 langanese Masses ont Floodplain Soil arent Material Spodic (MLRA 144A, 1	(e.g. clay, sand, loam) loam clay loam clay loam clay loam clay loam (LRR K, L, R) (LRR 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 10 18 NRCS Hydric	Bottom Depth 10 18 24 24 Soil Field In 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	Typic Endoaquolls the depth needed to document the in Horizon 1 2 3 adicators (check he bipedon istic en Sulfide d Layers ed Below Dark Surface Dark Surface Muck Mineral Gleyed Matrix Redox I Matrix	Color 7.5YR 10YR 10YR 2.5Y ere if ind	Matrix (Moist) 3/1 5/4 5/8 3/2 6/3 icators a	% 100 65 30 5 90	e: C=Concentra 10YR esent	tion, D=Depletion, RM=Reduced Matrix, C Red Color (Moist) 5/8): w Surface (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix crface Surface	CS=Covered/Coated Sand dox Features % 10 Indicator Indicator Indicator Indicato	Type 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 matic Soils Muck (LRR K, L, MLRA 1) Prairie Redox (LRR k, L, M) ucky Peat of Peat ourface (LRR K, L, M) ue Below Surface ark Surface (LRR K, L danganese Masses and Floodplain Soilarent Material Spodic (MLRA 144A, 1) Shallow Dark Surfain in Remarks)	(e.g. clay, sand, loam) loam clay loam clay loam clay loam clay loam (LRR K, L, R) (LRR 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 10 18 NRCS Hydric	Bottom Depth 10 18 24 24 Soil Field In 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	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 I Matrix I Matri	Color 7.5YR 10YR 10YR 2.5Y ere if ind	Matrix (Moist) 3/1 5/4 5/8 3/2 6/3 icators a	% 100 65 30 5 90	e: C=Concentra 10YR esent	tion, D=Depletion, RM=Reduced Matrix, C Red Color (Moist) 5/8): w Surface (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix crface Surface	CS=Covered/Coated Sand dox Features % 10 Indicator	Type 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 matic Soils Muck (LRR K, L, MLRA 1) Prairie Redox (LRR k, L, M) ucky Peat of Peat ourface (LRR K, L, M) ue Below Surface ark Surface (LRR K, L danganese Masses and Floodplain Soilarent Material Spodic (MLRA 144A, 1) Shallow Dark Surfain in Remarks)	(e.g. clay, sand, loam) loam clay loam clay loam clay loam clay loam (LRR K, L, R) (LRR K, L, R) (LRR K, L, R) (LRR K, L, R) (S (LRR K, L, R)



WETLAND DETERMINATION DATA FORM

Northeast and Northcentral Region

Project/Site: North Mendota Energy and Technology Park Sample Point: P1 Wetland ID: W-1 **VEGETATION** (Species identified in all uppercase are non-native species.) Tree Stratum (Plot size: 10 meter radius) **Dominance Test Worksheet** Species Name % Cover Dominant Ind.Status 1. 2. Number of Dominant Species that are OBL, FACW, or FAC: 3. 4. Total Number of Dominant Species Across All Strata: 1 5. 6. Percent of Dominant Species That Are OBL, FACW, or FAC: 0% (A/B) 7. 8. **Prevalence Index Worksheet** 9. Total % Cover of: Multiply by: 10. x 1 =OBL spp. Total Cover = 0 x 2 =FACW spp. FAC spp. x 3 =0 x 4 =Sapling/Shrub Stratum (Plot size: 5 meter radius) FACU spp. 8 x = 51. UPL spp. 2. 3. --Total (B) --4. 5. --Prevalence Index = B/A = 4.000 --6. --7. --8. **Hydrophytic Vegetation Indicators:** 9. ☐ Yes ✓ No Rapid Test for Hydrophytic Vegetation 10. ☐ Yes ☑ No Dominance Test is > 50% Total Cover = ☐ Yes ☑ No Prevalence Index is ≤ 3.0 * ☐ Yes ☑ No Morphological Adaptations (Explain) * Herb Stratum (Plot size: 2 meter radius) ☐ Yes ☑ No Problem Hydrophytic Vegetation (Explain) * TARAXACUM OFFICINALE 2 **FACU** 1. * Indicators of hydric soil and wetland hydrology must be 2. present, unless disturbed or problematic. 3. **Definitions of Vegetation Strata:** 4. 5. --Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast 6 height (DBH), regardless of height. 8. Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft. 9. 10. 11. --Herb - All herbaceous (non-woody) plants, regardless of size, and 12. woody plants less than 3.28 ft. tall. 13. --14. --Woody Vines - All woody vines greater than 3.28 ft. in height. 15. --Total Cover = 2 Woody Vine Stratum (Plot size: 10 meter radius) 1. 2. 3. **Hydrophytic Vegetation Present** ☐ Yes ☑ No 4. 5. Total Cover = 0 Sample point located in active ag field planted to corn in 2014. Based on corn stubble present, no crop stress observed. Few weedy species Remarks: present.

Additional Remarks:

Sample point located in active agricultural field planted to corn in 2014. Corn stubble appeared to be full size/not stressed and only sparse weedy species were observed. The upland determination is supported by the lack of wetland hydrology indicators, hydric soil indicators, and hydrophytic vegetation.



WETLAND DETERMINATION DATA FORM Northeast and Northcentral Region

Project/Site:	North Men	dota Energy and Te	chnology	/ Park			Stantec Project #:	193703573		Date:	04/17/15
Applicant:		ch Development & C	0.				•			County:	Dane
Investigator #1:		·			igator #2:					State:	Wisconsin
Soil Unit:	Sable silty	clay loam				NW	I/WWI Classification:			Wetland ID:	W-1
Landform:	Backslope	•		Loc	al Relief:	Linear				Sample Point:	P2
Slope (%):	0-2	Latitude:	N/A	L	ongitude:	N/A		Datum:	N/A	Community ID:	Field Edge
	drologic cond	ditions on the site ty	pical for				ain in remarks)	☑ Yes □		Section:	22
		or Hydrology □ sig	•				Are normal circumsta		t?	Township:	8N
•		or Hydrology □ nat	-					□No ˙		Range:	9 Dir: E
SUMMARY OF		or right oregin in the	, in a second				_			· · · · · · · · · · · · · · · · · · ·	
Hydrophytic Ve		esent?		□ Yes	. ☑ No			Hydric Soils	Present?		☐ Yes ☑ No
Wetland Hydrol	•			☐ Yes						Within A Wetlar	
Remarks:			onditions				of rain were received				
Nemaiks.	uncropped		Jilullions	Were no	Jillai, 3.4	2 11101163	or rain were received	iii tile alea ii	ош дрш т	- April 17. Sain	pie point located in
	uncropped	neid edge.									
HYDROLOGY											
Wetland Hydro	ology Indic	ators (Check here i	f indicate	ors are r	not preser	nt 🗤):					
<u>Primary:</u>									Secondary:		
	A1 - Surface				B9 - Wate					B6 - Surface Soil	
ᅵ	A2 - High Wa			님	B13 - Aqu				님	B10 - Drainage P	
l	A3 - Saturation			片	B15 - Mar C1 - Hydr				H	B16 - Moss Trim C2 - Dry-Season	
l H	B2 - Sedime			H	-	-	spheres on Living Roots			C8 - Crayfish Bur	
l ä	B3 - Drift De						educed Iron			-	isible on Aerial Imagery
l	B4 - Algal Ma	-					duction in Tilled Soils			D1 - Stunted or S	0 ,
	B5 - Iron Dep				C7 - Thin					D2 - Geomorphic	Position
		on Visible on Aerial Ima	•		Other (Ex	plain in Re	marks)			D3 - Shallow Aqu	
	B8 - Sparsel	y Vegetated Concave S	Surface							D4 - Microtopogra	
										D5 - FAC-Neutral	l est
Field Observat	ions:										
Surface Water	Present?	☐ Yes ☑ No	Depth:		(in.)			Motlered Her	duala es a Du		Vaa 🗆 Na
Water Table Pr	esent?	☐ Yes ☑ No	Depth:		(in.)			Wetland Hy	arology Pr	resent?	Yes ☑ No
Saturation Pres	ent?	☐ Yes ☑ No	Depth:		(in.)						
Dogoribo Bogord	ad Data (atr	eam gauge, monitori		orial pha		oue inene	otions) if available:		Aerial Image	ory Poviow	
	ed Data (Sti	eam gauge, monitori	ing wen, a	ienai pric	nos, previ	ous mape	clions), ii avallable.		Acriai image	STY INCOICW	
Remarks:											
SOILS											
SOILS Map Unit Name		Sable silty clay loar				S	eries Drainage Class:	poorly			
SOILS Map Unit Name Taxonomy (Sub	group):	Typic Endoaquolls						•			
SOILS Map Unit Name Taxonomy (Sub	group):	Typic Endoaquolls					tion, D=Depletion, RM=Reduced Matrix, C	CS=Covered/Coated Sand		PL=Pore Lining, M=Matrix)	
SOILS Map Unit Name Taxonomy (Sub	group):	Typic Endoaquolls		n the absence o			tion, D=Depletion, RM=Reduced Matrix, C	•		PL=Pore Lining, M=Matrix)	Texture
SOILS Map Unit Name Taxonomy (Sub	ogroup): otion (Describe to	Typic Endoaquolls	dicator or confirn			oe: C=Concentra	tion, 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	ogroup): otion (Describe to Bottom	Typic Endoaquolls the depth needed to document the inc	dicator or confirn	Matrix		oe: C=Concentra	tion, D=Depletion, RM=Reduced Matrix, C	CS=Covered/Coated Sand	T	T	
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth	ogroup): otion (Describe to Bottom Depth	Typic Endoaquolls the depth needed to document the inc	dicator or confirm	Matrix (Moist)	%	oe: C=Concentra	tion, D=Depletion, RM=Reduced Matrix, C	cs=Covered/Coated Sand	T	T	(e.g. clay, sand, loam)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8	pgroup): otion (Describe to Bottom Depth 8 10	Typic Endoaquolls the depth needed to document the ince Horizon 1 2	Color 10YR 10YR	Matrix (Moist) 2/1 2/1	% 100 98	e: C=Concentra	tion, D=Depletion, RM=Reduced Matrix, C Red Color (Moist) 2/2	cs=Covered/Coated Sand dox Features % 2	Type C	Location M	(e.g. clay, sand, loam) silt loam silt loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 10	pgroup): otion (Describe to Bottom Depth 8 10 17	Typic Endoaquolls the depth needed to document the ince Horizon 1 2 3	Color 10YR 10YR 10YR	Matrix (Moist) 2/1 2/1 4/3	% 100 98 90	 10YR 10YR	tion, D=Depletion, RM=Reduced Matrix, C Red Color (Moist) 2/2 5/6	dox Features % 2 10	Type C C	Location M M	(e.g. clay, sand, loam) silt loam silt loam clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8	pgroup): otion (Describe to Bottom Depth 8 10 17 22	Typic Endoaquolls the depth needed to document the ince Horizon 1 2	Color 10YR 10YR 10YR 10YR	Matrix (Moist) 2/1 2/1	% 100 98	e: C=Concentra	tion, D=Depletion, RM=Reduced Matrix, C Red Color (Moist) 2/2	cs=Covered/Coated Sand dox Features % 2 10 15	Type C	Location M	(e.g. clay, sand, loam) silt loam silt loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 10	pgroup): otion (Describe to Bottom Depth 8 10 17 22	Typic Endoaquolls the depth needed to document the ince Horizon 1 2 3	Color 10YR 10YR 10YR 10YR	Matrix (Moist) 2/1 2/1 4/3	% 100 98 90	 10YR 10YR	tion, D=Depletion, RM=Reduced Matrix, C Red Color (Moist) 2/2 5/6	dox Features % 2 10 15	Type C C C	Location M M	(e.g. clay, sand, loam) silt loam silt loam clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 10 17	pgroup): otion (Describe to Bottom Depth 8 10 17 22	Typic Endoaquolls the depth needed to document the ind Horizon 1 2 3 4	Color 10YR 10YR 10YR 10YR	Matrix (Moist) 2/1 2/1 4/3	% 100 98 90 85 	 10YR 10YR 10YR 	tion, D=Depletion, RM=Reduced Matrix, CRed Color (Moist) 2/2 5/6 6/8	dox Features % 2 10 15	Type C C	Location M M M	(e.g. clay, sand, loam) silt loam silt loam clay loam clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 10	pgroup): otion (Describe to Bottom Depth 8 10 17 22	Typic Endoaquolls the depth needed to document the ince Horizon 1 2 3	Color 10YR 10YR 10YR 10YR	Matrix (Moist) 2/1 2/1 4/3	% 100 98 90	 10YR 10YR	tion, D=Depletion, RM=Reduced Matrix, C Red Color (Moist) 2/2 5/6	dox Features % 2 10 15	Type C C C	Location M M	(e.g. clay, sand, loam) silt loam silt loam clay loam clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 10 17	pgroup): otion (Describe to Bottom Depth 8 10 17 22	Typic Endoaquolls the depth needed to document the ind Horizon 1 2 3 4	Color 10YR 10YR 10YR 10YR	Matrix (Moist) 2/1 2/1 4/3 5/3 	% 100 98 90 85 	 10YR 10YR 10YR 	tion, D=Depletion, RM=Reduced Matrix, CRed Color (Moist) 2/2 5/6 6/8	cs=Covered/Coated Sand dox Features % 2 10 15	Type C C	Location M M	(e.g. clay, sand, loam) silt loam silt loam clay loam clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 10 17 NRCS Hydric	pgroup): otion (Describe to Bottom Depth 8 10 17 22 Soil Field In	Typic Endoaquolls the depth needed to document the ind Horizon 1 2 3 4 ndicators (check he	Color 10YR 10YR 10YR 10YR	Matrix (Moist) 2/1 2/1 4/3 5/3 cators a	% 100 98 90 85 are not pre	10YR 10YR 10YR esent Decidation	tion, D=Depletion, RM=Reduced Matrix, CRed Color (Moist) 2/2 5/6 6/8):	cs=Covered/Coated Sand dox Features % 2 10 15 Indicator	Type C C s for Proble	Location M M matic Soils ¹	(e.g. clay, sand, loam) silt loam silt loam clay loam clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 10 17 NRCS Hydric	pgroup): ption (Describe to Bottom Depth 8 10 17 22 Soil Field In A1- Histosol	Typic Endoaquolls the depth needed to document the ind Horizon 1 2 3 4 ndicators (check he	Color 10YR 10YR 10YR 10YR	Matrix (Moist) 2/1 2/1 4/3 5/3 cators a	% 100 98 90 85 sre not pre	10YR 10YR 10YR esent value Below	tion, D=Depletion, RM=Reduced Matrix, CRed Color (Moist) 2/2 5/6 6/8): w Surface (LRR R, MLRA 149B)	cs=Covered/Coated Sand dox Features % 2 10 15 Indicator	Type C C s for Proble	Location M M M matic Soils ¹ Muck (LRR K, L, MLRA	(e.g. clay, sand, loam) silt loam silt loam clay loam clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 10 17 NRCS Hydric	pgroup): ption (Describe to Bottom Depth 8 10 17 22 Soil Field In A1- Histosol A2 - Histic E	Typic Endoaquolls the depth needed to document the ind Horizon 1 2 3 4 ndicators (check he	Color 10YR 10YR 10YR 10YR	Matrix (Moist) 2/1 2/1 4/3 5/3 cators a	% 100 98 90 85 sre not pre	10YR 10YR 10YR esent ☑ value Belov	tion, D=Depletion, RM=Reduced Matrix, CRed Color (Moist) 2/2 5/6 6/8): w Surface (LRR R, MLRA 149B) ace (LRR R, MLRA 149B)	cs=Covered/Coated Sand dox Features % 2 10 15 Indicator	Type C C s for Proble A10 - 2 cm A16 - Coast	Location M M M matic Soils Muck (LRR K, L, MLRA Prairie Redox (LRR	(e.g. clay, sand, loam) silt loam silt loam clay loam clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 10 17 NRCS Hydric	pgroup): ption (Describe to Bottom Depth 8 10 17 22 Soil Field In A1- Histosol A2 - Histic E A3 - Black H	Typic Endoaquolls the depth needed to document the ind Horizon 1 2 3 4 ndicators (check he	Color 10YR 10YR 10YR 10YR	Matrix (Moist) 2/1 2/1 4/3 5/3 cators a	% 100 98 90 85 sre not pre S8 - Polyv S9 - Thin S11 - High	10YR 10YR 10YR esent ☑ value Belov Dark Surfa	tion, D=Depletion, RM=Reduced Matrix, CRed Color (Moist) 2/2 5/6 6/8): w Surface (LRR R, MLRA 149B) ace (LRR R, MLRA 149B) Sands	cs=Covered/Coated Sand dox Features % 2 10 15 Indicator	Type C C C s for Proble A10 - 2 cm A16 - Coast S3 - 5cm Mo	Location M M M matic Soils Prairie Redox (LRR ucky Peat of Peat	(e.g. clay, sand, loam) silt loam silt loam clay loam clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 10 17 NRCS Hydric	pgroup): ption (Describe to Bottom Depth 8 10 17 22 Soil Field In A1- Histosol A2 - Histic E A3 - Black H A4 - Hydroge	Typic Endoaquolls the depth needed to document the incent the depth needed to document the incent the incent the depth needed to document the incent the incent the depth needed to document the incent the depth needed to document the incent the depth needed to document the incent the incent the depth needed to document the incent the incent the incent the depth needed to document the incent the in	Color 10YR 10YR 10YR 10YR	Matrix (Moist) 2/1 2/1 4/3 5/3 cators a	% 100 98 90 85 sre not pre S8 - Polyv S9 - Thin S11 - High F1 - Loam	10YR 10YR 10YR 10YR esent	tion, D=Depletion, RM=Reduced Matrix, CRed Color (Moist) 2/2 5/6 6/8): w Surface (LRR R, MLRA 149B) ace (LRR R, MLRA 149B) Sands Mineral (LRR K, L)	cs=Covered/Coated Sand dox Features % 2 10 15 Indicator	Type C C C s for Proble A10 - 2 cm I A16 - Coast S3 - 5cm Me S7 - Dark S	Location M M M matic Soils Muck (LRR K, L, MLRA A Prairie Redox (LRR ucky Peat of Peat urface (LRR K, L, M)	(e.g. clay, sand, loam) silt loam silt loam clay loam clay loam (149B) R K, L, R) (LRR K, L, R)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 10 17 NRCS Hydric	Bottom Depth 8 10 17 22 Soil Field In A1- Histosol A2 - Histic E A3 - Black H A4 - Hydroge A5 - Stratifie	Typic Endoaquolls the depth needed to document the incent the depth needed to document the incent the incent the depth needed to document the incent the incent the depth needed to document the incent the depth needed to document the incent the depth needed to document the incent the incent the depth needed to document the incent the incen	Color 10YR 10YR 10YR 10YR ere if indi	Matrix (Moist) 2/1 2/1 4/3 5/3 cators a	% 100 98 90 85 sre not pre S8 - Polyv S9 - Thin S11 - High F1 - Loam F2 - Loam	10YR 10YR 10YR 10YR esent ralue Below Dark Surfan Chroma Ny Mucky M	tion, D=Depletion, RM=Reduced Matrix, CRed Color (Moist) 2/2 5/6 6/8): w Surface (LRR R, MLRA 149B) ace (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix	cs=Covered/Coated Sand dox Features % 2 10 15 Indicator	Type C C C s for Proble A10 - 2 cm A16 - Coast S3 - 5cm Mi S7 - Dark Si S8 - Polyval	Location M M M matic Soils Muck (LRR K, L, MLRA A Prairie Redox (LRR ucky Peat of Peat urface (LRR K, L, M) ue Below Surface	(e.g. clay, sand, loam) silt loam silt loam clay loam clay loam (LRR K, L, R) (LRR K, L)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 10 17 NRCS Hydric	Bottom Depth 8 10 17 22 Soil Field In A1- Histosol A2 - Histic E A3 - Black H A4 - Hydroge A5 - Stratifie	Typic Endoaquolls the depth needed to document the incent the depth needed to document the incent the incent the depth needed to document the incent the incent the depth needed to document the incent the incent the depth needed to document the incent the incent the incent the depth needed to document the incent the in	Color 10YR 10YR 10YR 10YR ere if indi	Matrix (Moist) 2/1 2/1 4/3 5/3 cators a	% 100 98 90 85 sre not pre S8 - Polyv S9 - Thin S11 - High F1 - Loam	10YR 10YR 10YR 10YR esent	tion, D=Depletion, RM=Reduced Matrix, CRed Color (Moist) 2/2 5/6 6/8): w Surface (LRR R, MLRA 149B) ace (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix	cs=Covered/Coated Sand dox Features % 2 10 15 Indicator	Type C C C s for Proble A10 - 2 cm A16 - Coast S3 - 5cm Me S7 - Dark S S8 - Polyval S9 - Thin Da	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	(e.g. clay, sand, loam) silt loam silt 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 10 17 NRCS Hydric	Bottom Depth 8 10 17 22 Soil Field II A1- Histosol A2 - Histic E A3 - Black H A4 - Hydroge A5 - Stratified A11 - Deplete	Typic Endoaquolls the depth needed to document the incent the depth needed to document the incent the incent the depth needed to document the incent the incent the depth needed to document the incent the depth needed to document the incent the depth needed to document the incent the incent the depth needed to document the incent the incent the depth needed to document the incent the incent the depth needed to document the incent t	Color 10YR 10YR 10YR 10YR ere if indi	Matrix (Moist) 2/1 2/1 4/3 5/3 cators a	% 100 98 90 85 see not presserved for the presserved for t	10YR 10YR 10YR esent value Below Dark Surfant Chroma ny Mucky May Gleyed eted Matrix ox Dark Sur	tion, D=Depletion, RM=Reduced Matrix, CRed Color (Moist) 2/2 5/6 6/8): w Surface (LRR R, MLRA 149B) ace (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix crface	cs=Covered/Coated Sand dox Features % 2 10 15 Indicator	Type 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	Location M M M matic Soils Muck (LRR K, L, MLRA A Prairie Redox (LRR ucky Peat of Peat urface (LRR K, L, M) ue Below Surface	(e.g. clay, sand, loam) silt loam silt 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 10 17 NRCS Hydric	Bottom Depth 8 10 17 22 Soil Field II A1- Histosol A2 - Histic E A3 - Black H A4 - Hydroge A5 - Stratified A11 - Deplete A12 - Thick I S1 - Sandy N	Typic Endoaquolls the depth needed to document the incent the depth needed to document the incent the incent the depth needed to document the incent the incent the depth needed to document the incent the depth needed to document the incent the depth needed to document the incent the incent the depth needed to document the incent the incent the depth needed to document the incent the incent the depth needed to document the incent t	Color 10YR 10YR 10YR 10YR ere if indi	Matrix (Moist) 2/1 2/1 4/3 5/3 cators a	% 100 98 90 85 see not pre S8 - Polyv S9 - Thin S11 - High F1 - Loam F2 - Loam F3 - Deple F6 - Redo	10YR 10YR 10YR 10YR esent calue Below Dark Surfan Chroma ny Mucky M ny Gleyed eted Matrix ox Dark Sur eted Dark	tion, D=Depletion, RM=Reduced Matrix, CRed Color (Moist) 2/2 5/6 6/8): w Surface (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix crface Surface Surface	cs=Covered/Coated Sand dox Features % 2 10 15 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	Location M M M matic Soils Muck (LRR K, L, MLRA A Prairie Redox (LRR ucky Peat of Peat urface (LRR K, L, M) ue Below Surface ark Surface (LRR K, L langanese Masses	(e.g. clay, sand, loam) silt loam silt 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 10 17 NRCS Hydric	Bottom Depth 8 10 17 22 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	Typic Endoaquolls the depth needed to document the incent the depth needed to document the incent the incent the depth needed to document the incent the incent the depth needed to document the incent the incent the depth needed to document the incent the depth needed to document the incent the incent the depth needed to document the incent the incent the depth needed to document the incent the incent the depth needed to document the incent t	Color 10YR 10YR 10YR 10YR ere if indi	Matrix (Moist) 2/1 2/1 4/3 5/3 cators a	% 100 98 90 85	10YR 10YR 10YR 10YR esent calue Below Dark Surfan Chroma ny Mucky M ny Gleyed eted Matrix ox Dark Sur eted Dark	tion, D=Depletion, RM=Reduced Matrix, CRed Color (Moist) 2/2 5/6 6/8): w Surface (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix crface Surface Surface	cs=Covered/Coated Sand dox Features % 2 10 15 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	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 langanese Masses ont Floodplain Soil arent Material Spodic (MLRA 144A, 1	(e.g. clay, sand, loam) silt loam silt loam clay loam clay loam (LRR K, L, R) (LRR K, L, R) (LRR K, L, R) (LRR K, L, R) (S (LRR K, L, R) (S (MLRA 149B)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 10 17 NRCS Hydric	Bottom Depth 8 10 17 22 Soil Field II A1- Histosol A2 - Histic E A3 - Black H A4 - Hydroge A5 - Stratified A11 - Deplete A12 - Thick II S1 - Sandy II S4 - Sandy II S5 - Sandy II S6 - Stripped	Typic Endoaquolls the depth needed to document the incent of the dep	Color 10YR 10YR 10YR 10YR ere if indi	Matrix (Moist) 2/1 2/1 4/3 5/3 cators a	% 100 98 90 85	10YR 10YR 10YR 10YR esent calue Below Dark Surfan Chroma ny Mucky M ny Gleyed eted Matrix ox Dark Sur eted Dark	tion, D=Depletion, RM=Reduced Matrix, CRed Color (Moist) 2/2 5/6 6/8): w Surface (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix crface Surface Surface	cs=Covered/Coated Sand dox Features % 2 10 15 Indicator	Type C C C s for Proble A10 - 2 cm May A16 - Coast S3 - 5cm May S7 - Dark S3 S8 - Polyval S9 - Thin Dark S12 - Iron-May F12 - Iron-May F12 - Red Pay TA6 - Mesic TF12 - Very	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, 1) Shallow Dark Surface	(e.g. clay, sand, loam) silt loam silt loam clay loam clay loam (LRR K, L, R) (LRR K, L, R) (LRR K, L, R) (LRR K, L, R) (S (LRR K, L, R) (S (MLRA 149B)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 10 17 NRCS Hydric	Bottom Depth 8 10 17 22 Soil Field II A1- Histosol A2 - Histic E A3 - Black H A4 - Hydroge A5 - Stratified A11 - Deplete A12 - Thick II S1 - Sandy II S4 - Sandy II S5 - Sandy II S6 - Stripped	Typic Endoaquolls the depth needed to document the incent the depth needed to document the incent the incent the depth needed to document the incent the incent the depth needed to document the incent the incent the depth needed to document the incent the depth needed to document the incent the incent the depth needed to document the incent the incent the depth needed to document the incent the incent the depth needed to document the incent t	Color 10YR 10YR 10YR 10YR ere if indi	Matrix (Moist) 2/1 2/1 4/3 5/3 cators a	% 100 98 90 85	10YR 10YR 10YR 10YR esent calue Below Dark Surfan Chroma ny Mucky M ny Gleyed eted Matrix ox Dark Sur eted Dark	tion, D=Depletion, RM=Reduced Matrix, CRed Color (Moist) 2/2 5/6 6/8): w Surface (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix crface Surface Surface	cs=Covered/Coated Sand dox Features % 2 10 15 Indicator	Type C C C s for Proble A10 - 2 cm I A16 - Coast S3 - 5cm Me 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 A) Prairie Redox (LRR K, L, M) ucky Peat of Peat urface (LRR K, L, M) ue Below Surface ark Surface (LRR K, L Manganese Masses nont Floodplain Soil arent Material Spodic (MLRA 144A, A) Shallow Dark Surfain in Remarks)	(e.g. clay, sand, loam) silt loam silt loam clay loam clay loam (LRR K, L, R) (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 8 10 17 NRCS Hydric	Bottom Depth 8 10 17 22 Soil Field II A1- Histosol A2 - Histic E A3 - Black H A4 - Hydroge A5 - Stratified A11 - Deplete A12 - Thick II S1 - Sandy II S4 - Sandy II S5 - Sandy II S6 - Stripped	Typic Endoaquolls the depth needed to document the incent of the dep	Color 10YR 10YR 10YR 10YR ere if indi	Matrix (Moist) 2/1 2/1 4/3 5/3 cators a	% 100 98 90 85	10YR 10YR 10YR 10YR esent calue Below Dark Surfan Chroma ny Mucky M ny Gleyed eted Matrix ox Dark Sur eted Dark	tion, D=Depletion, RM=Reduced Matrix, CRed Color (Moist) 2/2 5/6 6/8): w Surface (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix crface Surface Surface	cs=Covered/Coated Sand dox Features % 2 10 15 Indicator	Type C C C s for Proble A10 - 2 cm I A16 - Coast S3 - 5cm Me 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 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, 1) Shallow Dark Surface	(e.g. clay, sand, loam) silt loam silt loam clay loam clay loam (LRR K, L, R) (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 8 10 17 NRCS Hydric	Bottom Depth 8 10 17 22 Soil Field II A1- Histosol A2 - Histic E A3 - Black H A4 - Hydroge A5 - Stratified A11 - Deplete A12 - Thick II S1 - Sandy II S4 - Sandy II S5 - Sandy II S6 - Stripped	Typic Endoaquolls the depth needed to document the incent the incent the depth needed to document the incent the incent the depth needed to document the incent the incent the depth needed to document the incent the incent the depth needed to document the incent th	Color 10YR 10YR 10YR 10YR ere if indi	Matrix (Moist) 2/1 2/1 4/3 5/3 cators a	% 100 98 90 85	10YR 10YR 10YR 10YR esent calue Below Dark Surfan Chroma ny Mucky M ny Gleyed eted Matrix ox Dark Sur eted Dark	tion, D=Depletion, RM=Reduced Matrix, CRed Color (Moist) 2/2 5/6 6/8): w Surface (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix crface Surface Surface	cs=Covered/Coated Sand dox Features % 2 10 15 Indicator	Type C C C C s for Proble A10 - 2 cm I A16 - Coast S3 - 5cm Me 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 A) Prairie Redox (LRR K, L, M) ucky Peat of Peat urface (LRR K, L, M) ue Below Surface ark Surface (LRR K, L Manganese Masses nont Floodplain Soil arent Material Spodic (MLRA 144A, A) Shallow Dark Surfain in Remarks)	(e.g. clay, sand, loam) silt loam silt loam clay loam clay loam (LRR K, L, R) (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 8 10 17 NRCS Hydric	Bottom Depth 8 10 17 22 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 incent the incent the depth needed to document the incent the incent the depth needed to document the incent the incent the depth needed to document the incent the incent the incent the incent the depth needed to document the incent the	Color 10YR 10YR 10YR ere if indi	Matrix (Moist) 2/1 2/1 4/3 5/3 cators a	% 100 98 90 85	10YR 10YR 10YR esent calue Below Dark Surfan Chroma Ny Mucky M Ny Gleyed eted Matrix ex Dark Su eted Dark ex Dark Su eted Dark ex Depress	tion, D=Depletion, RM=Reduced Matrix, CRed Color (Moist) 2/2 5/6 6/8): w Surface (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix crface Surface Surface	cs=Covered/Coated Sand dox Features % 2 10 15 Indicator Indicator Indicator Indicators of disturbed of	Type C C C s for Proble A10 - 2 cm 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 (Explate of hydrophytic veget or problematic. Present?	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, 1 Shallow Dark Surface ain in Remarks) sation and wetland hydrology	(e.g. clay, sand, loam) silt loam clay loam clay loam (LRR K, L, R) (LRR K, L, R) (LRR K, L, R) (S (LRR K, L, R) (S (MLRA 149B)

Sample Point: P2



North Mendota Energy and Technology Park

Project/Site:

WETLAND DETERMINATION DATA FORM Northeast and Northcentral Region

Wetland ID: W-1

VEGETATION	(Species identified in all uppercase are non-na	ative spec	cies.)		
	ot size: 10 meter radius)	•	,		
	<u>Species Name</u>		<u>Dominant</u>	Ind.Status	Dominance Test Worksheet
1.	Quercus macrocarpa	40	Υ	FACU	
2.					Number of Dominant Species that are OBL, FACW, or FAC:(A)
3.					
4.					Total Number of Dominant Species Across All Strata:7(B)
5.					
6.					Percent of Dominant Species That Are OBL, FACW, or FAC: 29% (A/B)
7.					
8.					Prevalence Index Worksheet
9.	<u></u>				Total % Cover of: Multiply by:
10.					OBL spp. $0 x 1 = 0$
	Total Cover =	40			FACW spp. $3 x 2 = 6$
					FAC spp. $5 X 3 = 15$
	atum (Plot size: 5 meter radius)			= 1 0 1 1	FACU spp 60
1.	LONICERA X BELLA	15	Y	FACU	UPL spp. $_{2}$ $_{2}$ $_{3}$ $_{4}$ $_{5}$ $_{5}$ $_{6}$ $_{10}$
2.	Acer negundo	5	Υ	FAC	
3.					Total(A)(B)
4.					
5.					Prevalence Index = B/A = 3.871
6.					
7.					
8.					Hydrophytic Vegetation Indicators:
9.	<u></u>				☐ Yes ☑ No Rapid Test for Hydrophytic Vegetation
10.					☐ Yes ☑ No Dominance Test is > 50%
	Total Cover =	20			☐ Yes ☑ No Prevalence Index is ≤ 3.0 *
					☐ Yes ☑ No Morphological Adaptations (Explain) *
	t size: 2 meter radius)				☐ Yes ☑ No Problem Hydrophytic Vegetation (Explain) *
1.	ARCTIUM MINUS	3	Y	FACU	* Indicators of hydric soil and wetland hydrology must be
2.	PHALARIS ARUNDINACEA	3	Y	FACW	present, unless disturbed or problematic.
3.	Rubus occidentalis	2	Υ	UPL	
4.	TARAXACUM OFFICINALE	2	Υ	FACU	Definitions of Vegetation Strata:
5.					<u>_</u>
6					Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast
7.					height (DBH), regardless of height.
8.					BRU AND
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.					
14.					All mande distributions and the best to
15.					Woody Vines - All woody vines greater than 3.28 ft. in height.
	Total Cover =	10			
Woody Vine Strati	um (Plot size: 10 meter radius)				
1.					
2.					
3.					Hydrophytic Vegetation Present ☐ Yes ☑ No
4.					, , , , , , , , , , , , , , , , , , , ,
5.					
	Total Cover =	0			
Remarks:	Weedy field edge - not cropped.				
Additional Rer	narks:				



WETLAND DETERMINATION DATA FORM Northeast and Northcentral Region

Project/Site: Applicant: Investigator #1:	Ruedebuso	dota Energy and Te ch Development & 0	٠.	tion, Inc.	gator #2:		Stantec Project #:	193703573		Date: County: State:	04/17/15 Dane Wisconsin
Soil Unit: Landform: Slope (%):	Sable silty Toeslope 0-2	clay loam Latitude:	N/A		al Relief:	Linear	I/WWI Classification:	E1K Datum:	N/A	Wetland ID: Sample Point: Community ID:	W-1 P3 Wet Meadow
		ditions on the site ty	•			(If no, expla				Section:	22
•		or Hydrology ☐ sig	•				Are normal circumsta	•	t?	Township:	8N
		or Hydrology □ na	turally pr	oblemati	ic?			□No		Range:	9 Dir: E
SUMMARY OF		10		V/	NI.				D		
Hydrophytic Ve	_			☑ Yes				Hydric Soils		\\/:th::\\\/.atla.	☑ Yes ☐ No
Wetland Hydrol Remarks:			onditions	☑ Yes			of rain were received			Within A Wetlar	nd? ☑ Yes ■ No
Remarks.	Daseu on a		oriditions	were no	лпаі, 3. 4	Z IIICHES	or fairt were received	in the area in	om April 1	- April 17.	
HYDROLOGY											
	ماله میر ایم ماله	otono (Obook bono	:f:			4 - \-					
Wetland Hydro Primary:	• •	ators (Check here	if indicate	ors are n	ot preser	nt □):			Secondary:		
	A1 - Surface	Water		П	B9 - Wate	er-Stained	Leaves		Secondary:	B6 - Surface Soil	Cracks
	A2 - High Wa				B13 - Aqu					B10 - Drainage P	
	A3 - Saturation				B15 - Mar	•				B16 - Moss Trim	
	B1 - Water M				C1 - Hydro					C2 - Dry-Season	
l H	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	
	B5 - Iron Dep	oosits			C7 - Thin	Muck Surf	ace		<u> </u>	D2 - Geomorphic	
		on Visible on Aerial Im	0 ,		Other (Ex	plain in Re	marks)			D3 - Shallow Aqu	
	B8 - Sparsely	y Vegetated Concave S	Surface							D4 - Microtopogra D5 - FAC-Neutral	
Field Observed	·lana:										
Field Observat		- W N.	D		(in)						
Surface Water		☐ Yes ☑ No	Depth:		(in.)			Wetland Hy	drology Pr	resent? ☑	Yes □ No
Water Table Pro		☐ Yes ☑ No	Depth:		(in.)						
Saturation Pres		☐ Yes ☑ No	Depth:		(in.)						
Describe Record	led Data (str	eam gauge, monitori	ng well, a	aerial pho	otos, previ	ous inspe	ctions), if available:		Aerial Image	ery Review	
Damanlan											
Remarks:											
SOILS											
SOILS Map Unit Name		Sable silty clay loa				S	eries Drainage Class:	poorly			
SOILS Map Unit Name Taxonomy (Sub	group):	Typic Endoaquolls	3				•	•			
SOILS Map Unit Name Taxonomy (Sub	ogroup): otion (Describe to	Typic Endoaquolls	3				tion, D=Depletion, RM=Reduced Matrix, C	CS=Covered/Coated Sand		PL=Pore Lining, M=Matrix)	Tankana
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			tion, D=Depletion, RM=Reduced Matrix, C	CS=Covered/Coated Sand	1		Texture
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth	ogroup): otion (Describe to Bottom Depth	Typic Endoaquolls	dicator or confirmation of Color	Matrix (Moist)	%		tion, 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 14	Typic Endoaquolls the depth needed to document the in Horizon 1	dicator or confirmation of the color	Matrix (Moist) 2/1	% 100	pe: C=Concentra	tion, D=Depletion, RM=Reduced Matrix, C Red Color (Moist)	CS=Covered/Coated Sand dox Features %	Type 	Location 	(e.g. clay, sand, loam)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 14	pgroup): otion (Describe to Bottom Depth 14 18	Typic Endoaquolls the depth needed to document the in Horizon 1 2	dicator or confirmation Color 10YR 10YR	Matrix (Moist) 2/1 3/1	% 100 95	e: C=Concentra	tion, D=Depletion, RM=Reduced Matrix, C Red Color (Moist) 4/6	cs=Covered/Coated Sand dox Features % 5	Type C	Location M	(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 14	Typic Endoaquolls the depth needed to document the in Horizon 1	dicator or confirmation of the color	Matrix (Moist) 2/1	% 100	pe: C=Concentra	tion, D=Depletion, RM=Reduced Matrix, C Red Color (Moist)	CS=Covered/Coated Sand dox Features %	Type 	Location 	(e.g. clay, sand, loam)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 14	pgroup): otion (Describe to Bottom Depth 14 18	Typic Endoaquolls the depth needed to document the in Horizon 1 2	dicator or confirmation Color 10YR 10YR	Matrix (Moist) 2/1 3/1	% 100 95	e: C=Concentra	tion, D=Depletion, RM=Reduced Matrix, C Red Color (Moist) 4/6	cs=Covered/Coated Sand dox Features % 5	Type C	Location M	(e.g. clay, sand, loam) silt loam silty clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 14 18	pgroup): otion (Describe to Bottom Depth 14 18 28	Typic Endoaquolls the depth needed to document the in Horizon 1 2 3	Color 10YR 10YR 2.5Y	Matrix (Moist) 2/1 3/1 6/2	% 100 95 90	 10YR 10YR	tion, D=Depletion, RM=Reduced Matrix, C Red Color (Moist) 4/6 6/8	cs=Covered/Coated Sand dox Features % 5 10	Type C C	Location M M	(e.g. clay, sand, loam) silt loam silty clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 14 18	pgroup): otion (Describe to Bottom Depth 14 18 28	Typic Endoaquolls the depth needed to document the in Horizon 1 2 3	Color 10YR 10YR 2.5Y	Matrix (Moist) 2/1 3/1 6/2 	% 100 95 90 	 10YR 10YR	tion, D=Depletion, RM=Reduced Matrix, C Red Color (Moist) 4/6 6/8	cs=Covered/Coated Sand dox Features % 5 10	Type C C	Location 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 14 18	pgroup): Deption (Describe to Depth 14 18 28	Typic Endoaquolls the depth needed to document the in Horizon 1 2 3	Color 10YR 10YR 2.5Y	Matrix (Moist) 2/1 3/1 6/2 	% 100 95 90 	10YR 10YR	tion, D=Depletion, RM=Reduced Matrix, C Red Color (Moist) 4/6 6/8	dox Features % 5 10	Type C C	Location 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 14 18	pgroup): Dtion (Describe to Bottom Depth 14 18 28	Typic Endoaquolls the depth needed to document the in Horizon 1 2 3	Color 10YR 10YR 2.5Y	Matrix (Moist) 2/1 3/1 6/2	% 100 95 90 	10YR 10YR	tion, D=Depletion, RM=Reduced Matrix, CRecord Color (Moist) 4/6 6/8	dox Features % 5 10	Type C C	Location 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 14 18	pgroup): Dtion (Describe to Bottom Depth 14 18 28	Typic Endoaquolls the depth needed to document the in Horizon 1 2 3	Color 10YR 10YR 2.5Y	Matrix (Moist) 2/1 3/1 6/2 icators a	% 100 95 90 re not pre	10YR 10YR esent	tion, D=Depletion, RM=Reduced Matrix, CRedColor (Moist) 4/6 6/8):	cs=Covered/Coated Sand dox Features % 5 10 Indicator	Type C C s for Proble	Location 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 14 18 NRCS Hydric	pgroup): ption (Describe to Bottom Depth 14 18 28 Soil Field In A1- Histosol	Typic Endoaquolls the depth needed to document the in Horizon 1 2 3 ndicators (check he	Color 10YR 10YR 2.5Y	Matrix (Moist) 2/1 3/1 6/2 icators a	% 100 95 90 re not pre	10YR 10YR esent value Belov	tion, D=Depletion, RM=Reduced Matrix, CRed Color (Moist) 4/6 6/8 N: Surface (LRR R, MLRA 149B)	cs=Covered/Coated Sand dox Features % 5 10 Indicator	Type C C s for Proble A10 - 2 cm	Location 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 14 18 NRCS Hydric	pgroup): ption (Describe to Bottom Depth 14 18 28 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 2.5Y	Matrix (Moist) 2/1 3/1 6/2 icators a	% 100 95 90 re not pre S8 - Polyx S9 - Thin	10YR 10YR esent □ value Belov	tion, D=Depletion, RM=Reduced Matrix, CRedColor (Moist) 4/6 6/8 N: Surface (LRR R, MLRA 149B)	cs=Covered/Coated Sand dox Features % 5 10 Indicator	Type C C s for Proble A10 - 2 cm I A16 - Coast	Location M M matic Soils Muck (LRR K, L, MLRA 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 14 18 NRCS Hydric	pgroup): Dtion (Describe to Bottom Depth 14 18 28 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black History	Typic Endoaquolls the depth needed to document the in Horizon 1 2 3 ndicators (check here)	Color 10YR 10YR 2.5Y	Matrix (Moist) 2/1 3/1 6/2 icators a	% 100 95 90 re not pre S8 - Polyv S9 - Thin S11 - Higl	10YR 10YR esent value Belov Dark Surfa	tion, D=Depletion, RM=Reduced Matrix, CRed Color (Moist) 4/6 6/8): v Surface (LRR R, MLRA 149B) ace (LRR R, MLRA 149B) Sands	cs=Covered/Coated Sand dox Features % 5 10 Indicator	Type C C s for Proble A10 - 2 cm I A16 - Coast S3 - 5cm Mu	Location 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
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 14 18 NRCS Hydric	pgroup): ption (Describe to Bottom Depth 14 18 28 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black His A4 - Hydroge	Typic Endoaquolls the depth needed to document the in Horizon 1 2 3 ndicators (check here) pipedon istic en Sulfide	Color 10YR 10YR 2.5Y	Matrix (Moist) 2/1 3/1 6/2 icators a	% 100 95 90 re not pre S8 - Polyx S9 - Thin S11 - High F1 - Loam	10YR 10YR esent value Below Dark Surfan Chroma	tion, D=Depletion, RM=Reduced Matrix, CRed Color (Moist) 4/6 6/8): w Surface (LRR R, MLRA 149B) Sce (LRR R, MLRA 149B) Sands Mineral (LRR K, L)	CS=Covered/Coated Sand dox Features % 5 10 Indicator	Type C C s for Proble A10 - 2 cm I A16 - Coast S3 - 5cm Mt S7 - Dark St	Location M M matic Soils ¹ Muck (LRR K, L, MLRA ² Prairie Redox (LRR ucky Peat of Peat urface (LRR K, L, M)	(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 14 18 NRCS Hydric	Bottom Depth 14 18 28 Soil Field Ir A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified	Typic Endoaquolls the depth needed to document the in Horizon 1 2 3 ndicators (check here) pipedon istic en Sulfide	Color 10YR 10YR 2.5Y ere if ind	Matrix (Moist) 2/1 3/1 6/2 icators a	% 100 95 90 re not pre S8 - Polyv S9 - Thin S11 - Higl	10YR 10YR esent value Below Dark Surfa	tion, D=Depletion, RM=Reduced Matrix, CRed Color (Moist) 4/6 6/8): v Surface (LRR R, MLRA 149B) Sands dineral (LRR K, L) Matrix	CS=Covered/Coated Sand dox Features % 5 10 Indicator	Type C C s for Proble A10 - 2 cm I A16 - Coast S3 - 5cm Mt S7 - Dark St S8 - Polyval	Location 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 (LRR K, L, R) (LRR K, L)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 14 18 NRCS Hydric	Bottom Depth 14 18 28 Soil Field Ir A1- Histosol A2 - Histic Ep 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	Color 10YR 10YR 2.5Y ere if ind	Matrix (Moist) 2/1 3/1 6/2 icators a	% 100 95 90 re not pre S8 - Polyv S9 - Thin S11 - High F1 - Loam F2 - Loam F3 - Deple F6 - Redo	10YR 10YR	tion, D=Depletion, RM=Reduced Matrix, CRed Color (Moist) 4/6 6/8): v Surface (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix crface	CS=Covered/Coated Sand dox Features % 5 10 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 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	(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 14 18 NRCS Hydric	Depth 14 18 28 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 2.5Y ere if ind	Matrix (Moist) 2/1 3/1 6/2 icators a	% 100 95 90 re not pre S8 - Polyv S9 - Thin S11 - High F1 - Loam F2 - Loam F3 - Deple F6 - Redo F7 - Deple	10YR 10YR esent value Below Dark Surfan Chroma ny Mucky M ny Gleyed eted Matrix ex Dark Sur exted Dark	tion, D=Depletion, RM=Reduced Matrix, C Red Color (Moist) 4/6 6/8): v Surface (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix frace Surface	CS=Covered/Coated Sand dox Features % 5 10 Indicator	Type C C	Location 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 ant Floodplain Soi	(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 14 18 NRCS Hydric	Bottom Depth 14 18 28 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A12 - Thick E S1 - Sandy M S4 - 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 Gleyed Matrix	Color 10YR 10YR 2.5Y ere if ind	Matrix (Moist) 2/1 3/1 6/2 icators a	% 100 95 90 re not pre S8 - Polyv S9 - Thin S11 - High F1 - Loam F2 - Loam F3 - Deple F6 - Redo	10YR 10YR esent value Below Dark Surfan Chroma ny Mucky M ny Gleyed eted Matrix ex Dark Sur exted Dark	tion, D=Depletion, RM=Reduced Matrix, C Red Color (Moist) 4/6 6/8): v Surface (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix frace Surface	cs=Covered/Coated Sand dox Features % 5 10 Indicator	Type 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 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)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 14 18 NRCS Hydric	Bottom Depth 14 18 28 Soil Field Ir A1- Histosol A2 - Histic Ep A3 - Black Hi 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 ndicators (check he pipedon istic en Sulfide d Layers ed Below Dark Surface Dark Surface Muck Mineral Gleyed Matrix Redox	Color 10YR 10YR 2.5Y ere if ind	Matrix (Moist) 2/1 3/1 6/2 icators a	% 100 95 90 re not pre S8 - Polyv S9 - Thin S11 - High F1 - Loam F2 - Loam F3 - Deple F6 - Redo F7 - Deple	10YR 10YR esent value Below Dark Surfan Chroma ny Mucky M ny Gleyed eted Matrix ex Dark Su eted Dark	tion, D=Depletion, RM=Reduced Matrix, C Red Color (Moist) 4/6 6/8): v Surface (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix frace Surface	cs=Covered/Coated Sand dox Features % 5 10 Indicator	Type C C C s for Proble A10 - 2 cm I A16 - Coast S3 - 5cm Mo S7 - Dark So S8 - Polyval S9 - Thin Da F12 - Iron-M F19 - Piedm F21 - Red P TA6 - Mesic	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 ark Surface (LRR K, L langanese Masses ont Floodplain Soil arent Material Spodic (MLRA 144A, 1	(e.g. clay, sand, loam) silt loam silty clay loam silty clay loam (LRR K, L, R)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 14 18 NRCS Hydric	Bottom Depth 14 18 28 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 Gleyed Matrix Redox	Color 10YR 10YR 2.5Y ere if ind	Matrix (Moist) 2/1 3/1 6/2 icators a	% 100 95 90 re not pre S8 - Polyv S9 - Thin S11 - High F1 - Loam F2 - Loam F3 - Deple F6 - Redo F7 - Deple	10YR 10YR esent value Below Dark Surfan Chroma ny Mucky M ny Gleyed eted Matrix ex Dark Su eted Dark	tion, D=Depletion, RM=Reduced Matrix, C Red Color (Moist) 4/6 6/8): v Surface (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix frace Surface	cs=Covered/Coated Sand dox Features % 5 10 Indicator	Type C C	Location 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)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 14 18 NRCS Hydric	Bottom Depth 14 18 28 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 2.5Y ere if ind	Matrix (Moist) 2/1 3/1 6/2 icators a	% 100 95 90 re not pre S8 - Polyv S9 - Thin S11 - High F1 - Loam F2 - Loam F3 - Deple F6 - Redo F7 - Deple	10YR 10YR esent value Below Dark Surfan Chroma ny Mucky M ny Gleyed eted Matrix ex Dark Su eted Dark	tion, D=Depletion, RM=Reduced Matrix, C Red Color (Moist) 4/6 6/8): v Surface (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix frace Surface	CS=Covered/Coated Sand dox Features % 5 10 Indicator	Type C C C	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 ark Surface (LRR K, L langanese Masses ont Floodplain Soil arent Material Spodic (MLRA 144A, 1) Shallow Dark Surface	(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) ils (MLRA 149B) face
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 14 18 NRCS Hydric	Bottom Depth 14 18 28 Soil Field Ir A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A12 - Thick E S1 - Sandy N S4 - Sandy N S4 - Sandy N S5 - Sandy R 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 2.5Y ere if ind	Matrix (Moist) 2/1 3/1 6/2 icators a	% 100 95 90 re not pre S8 - Polyv S9 - Thin S11 - High F1 - Loam F2 - Loam F3 - Deple F6 - Redo F7 - Deple F8 - Redo	10YR 10YR esent value Below Dark Surfan Chroma ny Mucky M ny Gleyed eted Matrix ex Dark Su eted Dark	tion, D=Depletion, RM=Reduced Matrix, C Red Color (Moist) 4/6 6/8): v Surface (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix frace Surface	cs=Covered/Coated Sand dox Features % 5 10 Indicator Indicator Indic	Type 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 matic Soils Muck (LRR K, L, MLRA Prairie Redox (LRR urface (LRR K, L, M) ue Below Surface ark Surface (LRR K, L langanese Masses ont Floodplain Soil rarent Material Spodic (MLRA 144A, 1 Shallow Dark Surface ain in Remarks) ation and wetland hydrology	(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) ils (MLRA 149B) 145, 149B) face
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 14 18 NRCS Hydric	Bottom Depth 14 18 28 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 2.5Y ere if ind	Matrix (Moist) 2/1 3/1 6/2 icators a	% 100 95 90 re not pre S8 - Polyv S9 - Thin S11 - High F1 - Loam F2 - Loam F3 - Deple F6 - Redo F7 - Deple	10YR 10YR esent value Below Dark Surfan Chroma ny Mucky M ny Gleyed eted Matrix ex Dark Su eted Dark	tion, D=Depletion, RM=Reduced Matrix, C Red Color (Moist) 4/6 6/8): v Surface (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix frace Surface	CS=Covered/Coated Sand dox Features % 5 10 Indicator	Type 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 matic Soils Muck (LRR K, L, MLRA Prairie Redox (LRR Lucky Peat of Peat Lucky Peat of	(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) ils (MLRA 149B) face



WETLAND DETERMINATION DATA FORM Northeast and Northcentral Region

Project/Site: North Mendota Energy and Technology Park Wetland ID: W-1 Sample Point: P3

VEGETATION	(Species identified in all uppercase are non-na	ative spec	cies.)		
Tree Stratum (Pid	ot size: 10 meter radius) <u>Species Name</u>	% Cover	Dominant	Ind.Status	Dominance Test Worksheet
1.		<u> </u>		<u></u>	Dominance Test Worksheet
2.					Number of Dominant Species that are OBL, FACW, or FAC: 1 (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:100%_ (A/B)
7.					
8.					Prevalence Index Worksheet
9.					Total % Cover of: Multiply by:
10.					OBL spp. 0
	Total Cover =	0			FACW spp. 100 $x = 200$
Combiner/Observe Otro	otium (Diet cine). 5 meeter vedice)				FAC spp. $0 \times 3 = 0$
Sapiing/Shrub Stra	atum (Plot size: 5 meter radius)				FACU spp. $\begin{array}{c ccccccccccccccccccccccccccccccccccc$
2.					
3.					Total 102 (A) 208 (B)
4.					10tal 102 (X) 200 (B)
5.					Prevalence Index = B/A = 2.039
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) *
,	et size: 2 meter radius)	400		E 4 0) 4 /	☐ Yes ☑ No Problem Hydrophytic Vegetation (Explain) *
1.	PHALARIS ARUNDINACEA	100	Y	FACW	* Indicators of hydric soil and wetland hydrology must be
2.	ARCTIUM MINUS	2	N	FACU	present, unless disturbed or problematic.
3. 4.					Definitions of Vegetation Strata:
					Definitions of Vegetation Strata.
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 woody plants less than 3.28 ft. tall.
13.					woody plants less than 3.20 it. tall.
14.					
15.					Woody Vines - All woody vines greater than 3.28 ft. in height.
	Total Cover =	102			
Woody Vina Strati	um (Plot size: 10 meter radius)				
1					
2.					
3.					Hydrophytic Vegetation Present ☑ Yes ☐ No
4.					
5.					
	Total Cover =	0			
Remarks:					
Additional Rer	marks:				



WETLAND DETERMINATION DATA FORM Northeast and Northcentral Region

Investigator #1: K. Remus	Project/Site: Applicant:		dota Energy and Te					Stantec Project #:	193703573		Date: County:	04/17/15 Dane
Sold Dist. Sable sity day Joan Londinors Terrace Local Relief: Concreve Stopp (%): 0.2 Latitude: NA Londinote: NA			on Development & C	Jonstrac								
Landform Terrade			clay loam			<u> </u>		/I/WWI Classification:			1	
An ex- A					Loc	al Relief:					Sample Point:	P4
Are Vegetation Soil or Hydrology alignificantly disturbed? Are normal circumisances present? Township: 8N No ESUMMARY OF FINDINGS SUMMARY OF FINDINGS Hydrologist (Vegetation Present? Yes No No Hydrologist (Vegetation Present? Yes No No No Yes No No No No Yes No No No No No No No N	Slope (%):	0-2	Latitude:	N/A	Le	ongitude:	N/A		Datum:	N/A	•	Farmed Wetland
Are Vegetation Soil or Hydrology naturally problemate? Yes No Hydric Soils Present? Yes No State Sumpting Parising Within A Wetland Hydrology Present? Yes No No State Sumpting Parising Within A Wetland? Yes No No No No No No No N	• ` ` ` `	drologic con	ditions on the site ty	pical for	this time	of year?	(If no, expl	ain in remarks)	☑ Yes □	No	Section:	22
SUMMARY OF FINDINGS Yes No	Are Vegetation	□, Soil □,	or Hydrology □ sig	nificantly	y disturb	ed?		Are normal circumsta	ances presen	t?	Township:	8N
Hydric Soils Present? Yes No No STRIBS Agrillage Present? Yes No No STRIBS Agrillage Profit Within A Westland Yes No Yes No No STRIBS Agrillage Post Within A Westland Yes Yes No No No No No No No N	Are Vegetation	□, Soil □,	or Hydrology	turally pr	oblemat	ic?		☐ Yes	☑No		Range:	9 Dir: E
Wetland Hydrology Present? P vs No No S Tills Sampling Port Within A WetSand? P vs No S Alzenders of rain were received in the area from April 1 - April 17. Sample point located within active agricultural field at edge of uncropped welland.	SUMMARY OF	FINDINGS										
Remarks: Seased on a WETS analysis, conditions were normal, 3.42 inches of rain were received in the area from April 1 - April 17. Sample point located within active agricultural field at edge of uncropped wetland. Workland Hydrology Indicators (Check here if indicators are not present;): Private Al - Surface Water 89 - Water Staned Leaves 810 - Aputate Pains 810 - Aputate Pains	Hydrophytic Ve	egetation Pre	sent?		✓ Yes	□ No			Hydric Soils	Present?		
Active apricultural field at edge of uncropped wetland. Privation Privati	Wetland Hydro	logy Present	t?			□ No			Is This Samp	oling Point	Within A Wetla	nd? ☑ Yes ■ No
Wetland Hydrology Indicators (Check here if indicators are not present):	Remarks:						2 inches	of rain were received	in the area fr	om April 1	- April 17. Sam	ple point located within
Wetland Hydrology Indicators (Check here if indicators are not present[]);		active agric	cultural field at edge	e of uncre	opped w	etland.						
Al - Surface Water Table B3 - Water Stained Leaves B43 - Aquatic Stained Leaves B45 - Surface Soil Cracks B45 - Aquatic Fauna B45 - Man Papacity Stained Leaves B45 - Aquatic Fauna B45 - Man Papacity Stained Leaves B45 - Man Papa	HYDROLOGY											
A1 - Surface Water	Wetland Hydi	ology Indic	ators (Check here i	if indicate	ors are r	ot preser	nt □):					
A2 - High Water Table	Primary				_	50 11/	0			Secondary:		
A3 - Saturation B16 - Most Pirobants B17 - Most Pirobants B18 - Most Pirobants B1												
B1 - Water Marks C1 - Hydrogen Sulfide Odor C2 - Dry-Season Water Table C3 - Dry-Season Water Table C3 - Ondiged Rithzopheres on Living Roots C3 - Dry-Season Water Table C3 - Presence of Reduced Iron C3 - Saturation Visible on Aerial Imagery C7 - Thir Mark Surface C3 - Saturation Visible on Aerial Imagery C7 - Thir Mark Surface C3 - Saturation Visible on Aerial Imagery C7 - Thir Mark Surface C3 - Saturation Visible on Aerial Imagery C3 - Thir Mark Surface C3 - Saturation Visible on Aerial Imagery C3 - Thir Mark Surface C3 - Saturation Visible on Aerial Imagery C3 - Thir Mark Surface C3 - Saturation Visible on Aerial Imagery C3 - Thir Mark Surface C4 - Presence of Reduced Iron C4		_								H	•	
B3 - Drift Deposits		•				C1 - Hydr	ogen Sulfi	de Odor			C2 - Dry-Season	Water Table
B4 - Algal Mail or Crust C6 - Recent Iron Reduction in Tilled Soils D1 - Sturtled or Stressed Plants D2 C3-Commorphic Position D3 - Shallow Appliand D3 - Shallow Appliand D4 - Shallow			•								_	
B5 - Fran Deposits C7 - This Muck Surface D2 - Geomorphic Position D3 - Franch Position D4 - Microtopographic Related D4 - Microtopographic Related D5 - FAC-Neutral Test D6 - FAC-Neutral Test D7 - FAC-Neutral Test D7 - FAC-Neutral Test D8 - FAC-Neu			•		님							0 1
B3 - Shandwin Aquitard B4 - Shandwin Aquitard B5 - Shandwin Aquit		_			H							
Section Sect		B7 - Inundati	on Visible on Aerial Ima	0 ,		Other (Ex	plain in Re	emarks)			D3 - Shallow Aqu	iitard
Field Observations: Surface Water Present? Ves No Depth: (in.) Wetland Hydrology Present? Ves No Depth: (in.) Saturation Present? Ves No Depth: (in.) Wetland Hydrology Present? Ves No Depth: (in.) Describe Recorded Data (stream gauge, monitoring well, acrel photos, previous inspections), if available: Aerial Imagery Review Remarks: Evidence of saturation observed in review of historic aerial imagery. Soils Map Unit Name: Sable silly clay loam Series Drainage Class: poorly Taxonomy (Subgroup): Typic Endoaquolis Typic Endoaquolis Taxonomy (Subgroup): Typic Endoaquolis Taxonomy (Subgroup): Typic Endoaquolis Top Depth Horizon Matrix Redox Features Typic Endoaquolis Top Depth Horizon Color (Molist) Matrix Redox Features Typic Endoaquolis Texture Top Depth Horizon Color (Molist) Matrix Redox Features Typic Endoaquolis Top Depth Horizon Color (Molist) Matrix Redox Features Typic Endoaquolis Top Depth Horizon Color (Molist) Matrix Redox Features Typic Endoaquolis Top Depth Horizon Color (Molist) Matrix Redox Features Typic Endoaquolis Top Depth Horizon Color (Molist) Typic Endoaquolis Top Depth Top Depth Horizon Top Depth		B8 - Sparsel	y Vegetated Concave S	Surface								
Surface Water Present?		4									D5 - FAC-Neulia	
Wetland Hydrology Present?						(1)						
Saturation Present?			- -	•		<u>; </u>			Wetland Hy	drology P	resent? ☑	Yes □ No
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks: Evidence of saturation observed in review of historic aerial imagery. SOILS Map Unit Name: Sable sitty clay loam Series Drainage Class: poorly Taxonormy (Subgroup): Typic Endoaquells Profile Description				•		1. 1						
Remarks: Evidence of saturation observed in review of historic aerial imagery. Soil_S Map Unit Name:				•								
SOILS Map Unit Name: Sable sitty clay loam						<u>-</u>		·		Aerial Imag	ery Review	
Map Unit Name: Sable silty clay loam Series Drainage Class: poorly	Remarks:	Evidence c	of saturation observe	ed in rev	iew of hi	storic aer	ial image	ery.				
Map Unit Name: Sable silty clay loam Series Drainage Class: poorly												
Taxonomy (Subgroup): Typic Endoaquolls												
Profile Description Descr							5	eries Drainage Class:	poorly			
Top Bottom Depth Horizon Color (Moist) Wo Type Location (e.g. clay, sand, loam)		<u> </u>										
Depth Depth Horizon Color (Moist) % Color (Moist) % Type Location (e.g. clay, sand, loam)			the depth needed to document the in-	dicator or confin			pe: C=Concentr				PL=Pore Lining, M=Matrix)	Toytura
12	1		Horizon	Color							Location	
12 22 2 10YR 4/1 90 10YR 5/6 10 C M silty clay loam	•	· ·	1	+	, ,							, ,
NRCS Hydric Soil Field Indicators (check here if indicators are not present): NRCS Hydric Soil Field Indicators (check here if indicators are not present): A1- Histosol	_		2					5/6				
NRCS Hydric Soil Field Indicators (check here if indicators are not present):					-							
NRCS Hydric Soil Field Indicators (check here if indicators are not present): A1 - Histosol				1								
NRCS Hydric Soil Field Indicators (check here if indicators are not present): A1- Histosol												
NRCS Hydric Soil Field Indicators (check here if indicators are not present): A1- Histosol				+								
NRCS Hydric Soil Field Indicators (check here if indicators are not present): A1- Histosol												
NRCS Hydric Soil Field Indicators (check here if indicators are not present): A1- Histosol												
A1- Histosol			adicators (check he		icatore a							
A2 - Histic Epipedon S9 - Thin Dark Surface (LRR R, MLRA 149B) A16 - Coast Prairie Redox (LRR K, L, R) A3 - Black Histic S11 - High Chroma Sands S3 - 5cm Mucky Peat of Peat (LRR K, L, R) A4 - Hydrogen Sulfide F1 - Loamy Mucky Mineral (LRR K, L) S7 - Dark Surface (LRR K, L, R) A5 - Stratified Layers F2 - Loamy Gleyed Matrix S8 - Polyvalue Below Surface (LRR K, L) A11 - Depleted Below Dark Surface F3 - Depleted Matrix S9 - Thin Dark Surface (LRR K, L) A12 - Thick Dark Surface F6 - Redox Dark Surface F12 - Iron-Manganese Masses (LRR K, L, R) S1 - Sandy Muck Mineral F7 - Depleted Dark Surface F19 - Piedmont Floodplain Soils (MLRA 149B) S4 - Sandy Gleyed Matrix F8 - Redox Depressions F21 - Red Parent Material S5 - Sandy Redox T66 - Mesic Spodic (MLRA 144B) S6 - Stripped Matrix T66 - Mesic Spodic (MLRA 144B) S7 - Dark Surface (LRR R, MLRA 149B) T60 - Mesic Spodic (MLRA 144B) T60 - Mesic Spodic (MLRA 144	_		idicators (check ne			-		•				149R)
A4 - Hydrogen Sulfide			pipedon			•					,	•
A5 - Stratified Layers F2 - Loamy Gleyed Matrix S8 - Polyvalue Below Surface (LRR K, L) A11 - Depleted Below Dark Surface F3 - Depleted Matrix S9 - Thin Dark Surface (LRR K, L) A12 - Thick Dark Surface F6 - Redox Dark Surface F12 - Iron-Manganese Masses (LRR K, L, R) S1 - Sandy Muck Mineral F7 - Depleted Dark Surface F19 - Piedmont Floodplain Soils (MLRA 149B) S4 - Sandy Gleyed Matrix F8 - Redox Depressions F10 - Piedmont Floodplain Soils (MLRA 149B) S5 - Sandy Redox F10 - Piedmont Floodplain Soils (MLRA 149B) S6 - Stripped Matrix F8 - Redox Depressions F10 - Piedmont Floodplain Soils (MLRA 149B) T46 - Mesic Spodic (MLRA 144A, 145, 149B) T51 - Very Shallow Dark Surface Other (Explain in Remarks) Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (If Observed) Type: N/A Depth: N/A Hydric Soil Present?											•	(LRR K, L, R)
A11 - Depleted Below Dark Surface							-					
A12 - Thick Dark Surface F6 - Redox Dark Surface F12 - Iron-Manganese Masses (LRR K, L, R) S1 - Sandy Muck Mineral F7 - Depleted Dark Surface F19 - Piedmont Floodplain Soils (MLRA 149B) S4 - Sandy Gleyed Matrix F8 - Redox Depressions F21 - Red Parent Material S5 - Sandy Redox TA6 - Mesic Spodic (MLRA 144A, 145, 149B) S6 - Stripped Matrix TF12 - Very Shallow Dark Surface S7 - Dark Surface (LRR R, MLRA 149B) Other (Explain in Remarks) Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (If Observed) Type: N/A Depth: N/A Hydric Soil Present?			•	5						•		
S1 - Sandy Muck Mineral		•		•							•	,
S5 - Sandy Redox S6 - Stripped Matrix S7 - Dark Surface (LRR R, MLRA 149B) S7 - Dark Surface (LRR R, MLRA 149B) Other (Explain in Remarks) Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (If Observed)		S1 - Sandy N	/luck Mineral			F7 - Deple	eted Dark	Surface		F19 - Piedm	nont Floodplain So	
S6 - Stripped Matrix S7 - Dark Surface (LRR R, MLRA 149B) Restrictive Layer (If Observed) Type: N/A Depth: N/A TF12 - Very Shallow Dark Surface Capture (Explain in Remarks) Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Hydric Soil Present? Type: N/A Pyes N/A	<u> </u>	-				F8 - Redo	x Depres	sions				
□ S7 - Dark Surface (LRR R, MLRA 149B) □ Other (Explain in Remarks) □ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (If Observed)		•									•	•
Restrictive Layer (If Observed) Type: N/A Depth: N/A Depth: N/A Problematic. Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Hydric Soil Present?												IUUU
Restrictive Layer (If Observed) Type: N/A Depth: N/A Hydric Soil Present? Yes □ No	l									of hydrophytic vege	,	must be present, unless
(If Observed) Type: N/A Depth: N/A Hydric Soil Present? Yes No										nu much la ''		
Remarks:	Restrictive Laver					N1/2				·		· - · ·
	•	Type:	N/A		Depth:	N/A				·	U	Yes □ No

Sample Point: P4



Project/Site:

North Mendota Energy and Technology Park

WETLAND DETERMINATION DATA FORM

Wetland ID: W-1

Northeast and Northcentral Region

(Species identified in all uppercase are non-native species.) Tree Stratum (Plot size: 10 meter radius) **Dominance Test Worksheet** Species Name Ind.Status % Cover Dominant Number of Dominant Species that are OBL, FACW, or FAC: 2 (A) Total Number of Dominant Species Across All Strata: Percent of Dominant Species That Are OBL, FACW, or FAC: 100% **Prevalence Index Worksheet** Total % Cover of: Sapling/Shrub Stratum (Plot size: 5 meter radius) Prevalence Index = B/A = Hydrophytic Vegetation Indicators: Rapid Test for Hydrophytic Vegetation Dominance Test is > 50% Prevalence Index is ≤ 3.0 * Total Cover = Morphological Adaptations (Explain) * Herb Stratum (Plot size: 2 meter radius) Problem Hydrophytic Vegetation (Explain) PHALARIS ARUNDINACEA * Indicators of hydric soil and wetland hydrology must be AGROSTIS GIGANTEA present, unless disturbed or problematic. Definitions of Vegetation Strata: Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft. Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft. tall. Woody Vines - All woody vines greater than 3.28 ft. in height. Woody Vine Stratum (Plot size: 10 meter radius) Hydrophytic Vegetation Present

Yes
No Total Cover = Sample point located in active agricultural field planted to corn in 2014. Crop stress observed in the form of stunted corn stubble. Also, P. Remarks: arundinacea and A. gigantea remnants and some new growth observed, where weedy species are essentially absent in rest of field.

Additional Remarks:

Sample point located in active agricultural field on terrace/toeslope between edge of uncropped wetland area and upland knoll in ag field. Crop stress observed in the form of stunted corn stubble compared to stubble in non-wetland ag field; sample point location also correlates with area commonly exhibiting wetland signatures in an aerial imagery review.



WETLAND DETERMINATION DATA FORM Northeast and Northcentral Region

Project/Site:		dota Energy and Te	٠.				Stantec Project #:	193703573		Date:	04/17/15
Applicant:		ch Development & (Construc							County:	Dane
Investigator #1: Soil Unit:		clay loam		investi	gator #2:		I/WWI Classification:			State: Wetland ID:	Wisconsin W-1
Landform:	Sable silty Backslope	•		Loc	al Relief:		I/VV VVI Classification.			Sample Point:	P5
Slope (%):	0-2	Latitude:	N/A		ongitude:			Datum:	N/A	Community ID:	Ag Field
. , ,		ditions on the site ty					ain in remarks)	☑ Yes □		Section:	22
		or Hydrology □ sig					Are normal circumsta			Township:	8N
•		or Hydrology ☐ na	-				☐ Yes	☑No		Range:	9 Dir: E
SUMMARY OF	FINDINGS										
Hydrophytic Ve	_			☐ Yes	☑ No			Hydric Soils			☐ Yes ☑ No
Wetland Hydrol				☐ Yes						Within A Wetlar	
Remarks:			onditions	were no	ormal; 3.4	2 inches	of rain were received	in the area fr	om April 1	- April 17. Sam	ple point located within
	active agric	cultural field.									
HYDROLOGY											
1	•	ators (Check here	if indicate	ors are n	ot preser	nt ☑):					
<u>Primary:</u>	: A1 - Surface	Water			B9 - Wate	r-Stainad	Loavos		Secondary:	B6 - Surface Soil	Cracks
l	A2 - High Wa				B13 - Aqu					B10 - Drainage Pa	
	A3 - Saturation	on			B15 - Mar	I Deposits				B16 - Moss Trim	Lines
	B1 - Water M B2 - Sedimer				C1 - Hydr	-	de Odor spheres on Living Roots			C2 - Dry-Season C8 - Crayfish Burn	
	B3 - Drift De	•					educed Iron			_	isible on Aerial Imagery
	B4 - Algal Ma	at or Crust			C6 - Rece	ent Iron Re	duction in Tilled Soils			D1 - Stunted or S	tressed Plants
	B5 - Iron Dep	oosits on Visible on Aerial Im	ogory		C7 - Thin					D2 - Geomorphic D3 - Shallow Aqui	
l		y Vegetated Concave S	0 ,	Ц	Other (Ex	piaiii iii Ne	iliaiks)			D4 - Microtopogra	
_		,								D5 - FAC-Neutral	
Field Observat	ions:										
Surface Water	Present?	☐ Yes ☑ No	Depth:		(in.)			Wetland Hy	drology Pr	recent?	Yes ☑ No
Water Table Pr	esent?	☐ Yes ☑ No	Depth:		(in.)			welland ny	urology Fi	esent:	162 M INO
Saturation Pres	ent?	☐ Yes ☑ No	Depth:		(in.)						
Describe Record	led Data (str	eam gauge, monitori	ng well a	erial pho	otos previ	ous inspe	ctions) if available:		Aerial Image	ery Review	
		33.,	ng won, c	actial pric	rios, provi	odo mopo	olions), ii avallabic.		, torial irriage	ory recovery	
Remarks:		general general control of the contr	119 Woll, C	acriai prio	otoo, provi		otiono), ii availabie.		7 torial irriage	ory recover	
		gaage, memor	rig won, c	ional pric	nos, previ	очо торо	otions), ii available.		7 tonar image	ny Review	
SOILS				ional prio	noo, provi	·			7 tonar image	Sty Neview	
SOILS Map Unit Name		Sable silty clay loa	m	ional prio	noo, provi	·	eries Drainage Class:	poorly	, tenar image	Sty Neview	
SOILS Map Unit Name Taxonomy (Sub	group):	Sable silty clay load	m			S	eries Drainage Class:	•			
SOILS Map Unit Name Taxonomy (Sub	ogroup): otion (Describe to	Sable silty clay load	m	n the absence o	of indicators.) (Ty	S	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, C	CS=Covered/Coated Sand	d Grains; Location: F		Teyture
SOILS Map Unit Name Taxonomy (Sub Profile Descrip	ogroup): otion (Describe to Bottom	Sable silty clay load Typic Endoaquolls the depth needed to document the in	m dicator or confirm	n the absence o	of indicators.) (Ty	Sipe: C=Concentra	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, C Red	CS=Covered/Coated Sand	d Grains; Location: F	² L=Pore Lining, M=Matrix)	Texture (e.g. clav. sand. loam)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth	ogroup): otion (Describe to Bottom Depth	Sable silty clay load	m dicator or confirm	m the absence o Matrix (Moist)	of indicators.) (Ty	Sipe: C=Concentra	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, C	CS=Covered/Coated Sand	d Grains; Location: F		(e.g. clay, sand, loam)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	Depth	Sable silty clay load Typic Endoaquolls the depth needed to document the in Horizon	dicator or confirm	m the absence of Matrix (Moist) 3/2	of indicators.) (Type 100 % 100	Spe: C=Concentra	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, C Red Color (Moist)	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	ogroup): otion (Describe to Bottom Depth	Sable silty clay load Typic Endoaquolls the depth needed to document the in	m dicator or confirm	m the absence o Matrix (Moist)	of indicators.) (Ty	pe: C=Concentra	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, C Red Color (Moist) 4/2	cs=Covered/Coated Sand	d Grains; Location: F	PL=Pore Lining, M=Matrix) Location	(e.g. clay, sand, loam) loam silt loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 15	ogroup): otion (Describe to Bottom Depth 15 26	Sable silty clay load Typic Endoaquolls the depth needed to document the in Horizon 1 2	dicator or confirmation of the color of the	m the absence of Matrix (Moist) 3/2 2/1	% 100 95	Spe: C=Concentra	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, C Red Color (Moist)	cs=Covered/Coated Sand dox Features % 5	d Grains; Location: F Type D	PL=Pore Lining, M=Matrix) Location M	(e.g. clay, sand, loam)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 15 26	Bottom Depth 15 26 29	Sable silty clay load Typic Endoaquolls the depth needed to document the in Horizon 1 2 3	m dicator or confirm Color 10YR 10YR 10YR	m the absence of Matrix (Moist) 3/2 2/1 4/1	% 100 95 95	Spe: C=Concentra 10YR 10YR	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, C Red Color (Moist) 4/2 5/6	cs=Covered/Coated Sand dox Features % 5 5	Type D C	Location M M	(e.g. clay, sand, loam) loam silt loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 15 26	Degroup): Describe to Bottom Depth 15 26 29	Sable silty clay load Typic Endoaquolls the depth needed to document the in Horizon 1 2 3	dicator or confirmation of the confirmation of	m the absence of Matrix (Moist) 3/2 2/1 4/1	% 100 95 95	pe: C=Concentra 10YR 10YR	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, Class Red Color (Moist) 4/2 5/6	cs=Covered/Coated Sand dox Features % 5 5	Type D C	Location Location M M	(e.g. clay, sand, loam) loam silt loam silty clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 15 26	bgroup): btion (Describe to Bottom Depth 15 26 29	Sable silty clay load Typic Endoaquolls the depth needed to document the in Horizon 1 2 3	Color 10YR 10YR 10YR	m the absence of Matrix (Moist) 3/2 2/1 4/1	% 100 95 95	pe: C=Concentra 10YR 10YR	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, Class Red Color (Moist) 4/2 5/6	cs=Covered/Coated Sand dox Features % 5 5	Type Type C C	Location Location M M	(e.g. clay, sand, loam) loam silt loam silty clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 15 26	Bottom Depth 15 26 29	Sable silty clay load Typic Endoaquolls the depth needed to document the in Horizon 1 2 3	Color 10YR 10YR 10YR	m the absence of Matrix (Moist) 3/2 2/1 4/1	% 100 95 95	pe: C=Concentra 10YR 10YR	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, C Red Color (Moist) 4/2 5/6	cs=Covered/Coated Sand dox Features % 5	Type D C	Location M M	(e.g. clay, sand, loam) loam silt loam silty clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 15 26	bgroup): btion (Describe to Bottom Depth 15 26 29	Sable silty clay load Typic Endoaquolls the depth needed to document the in Horizon 1 2 3	Color 10YR 10YR 10YR	m the absence of Matrix (Moist) 3/2 2/1 4/1	% 100 95 95	10YR 10YR	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, Correct Reduced R	cs=Covered/Coated Sand dox Features % 5	Type D C	Location M M	(e.g. clay, sand, loam) loam silt loam silty clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 15 26 NRCS Hydric	Bottom Depth 15 26 29 Soil Field In	Sable silty clay load Typic Endoaquolls the depth needed to document the in Horizon 1 2 3 ndicators (check he	Color 10YR 10YR 10YR	m the absence of Matrix (Moist) 3/2 2/1 4/1 icators a	% 100 95 95 are not pre	Sope: C=Concentration 10YR 10YR esent value Below	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, Concept Reduced R	cs=Covered/Coated Sand dox Features % 5 Indicator	Type D C s for Proble	Location Location M M matic Soils ¹ Muck (LRR K, L, MLRA 1	(e.g. clay, sand, loam) loam silt loam silty clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 15 26 NRCS Hydric	Bottom Depth 15 26 29 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 he	Color 10YR 10YR 10YR	m the absence of Matrix (Moist) 3/2 2/1 4/1 icators a	% 100 95 95 sre not pre	spe: C=Concentra 10YR 10YR esent ☑ value Below	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, CRec Rec Color (Moist) 4/2 5/6 Surface (LRR R, MLRA 149B) ace (LRR R, MLRA 149B)	cs=Covered/Coated Sand dox Features % 5 5 Indicator	Type Type C C	Location Location M M matic Soils ¹ Vuck (LRR K, L, MLRA 1) Prairie Redox (LRR	(e.g. clay, sand, loam) loam silt loam silty clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 15 26 NRCS Hydric	Bottom Depth 15 26 29 Soil Field In	Sable silty clay load Typic Endoaquolls the depth needed to document the in Horizon 1 2 3 ndicators (check here) pipedon istic	Color 10YR 10YR 10YR	m the absence of Matrix (Moist) 3/2 2/1 4/1 icators a	% 100 95 95 sre not pre S8 - Polyv S9 - Thin S11 - Higl	Sope: C=Concentrate 10YR 10YR esent ☑ value Below Dark Surfate	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, CRec Rec Color (Moist) 4/2 5/6 Surface (LRR R, MLRA 149B) ace (LRR R, MLRA 149B)	cs=Covered/Coated Sand dox Features % 5 Indicator	Type Type C C	Location Location M M matic Soils ¹ Muck (LRR K, L, MLRA 1	(e.g. clay, sand, loam) loam silt loam silty clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 15 26 NRCS Hydric	Bottom Depth 15 26 29 Soil Field Ir A1- Histosol A2 - Histic Ep A3 - Black Histosol A5 - Stratified	Sable silty clay load 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	m the absence of Matrix (Moist) 3/2 2/1 4/1 icators a	% 100 95 95	seent value Below Dark Surfan Chromany Mucky May Gleyed	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, CRed Color (Moist) 4/2 5/6): w Surface (LRR R, MLRA 149B) ace (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix	cs=Covered/Coated Sand dox Features % 5 Indicator	Type Type C C	Location Location M M matic Soils Prairie Redox (LRR k, L, MLRA 1) Prairie Redox (LRR k, L, M) uck Below Surface	(e.g. clay, sand, loam) loam silt loam silty clay loam (149B) R K, L, R) (LRR K, L, R)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 15 26 NRCS Hydric	Bottom Depth 15 26 29 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) pipedon istic en Sulfide d Layers ed Below Dark Surface	Color 10YR 10YR 10YR ere if ind	m the absence of Matrix (Moist) 3/2 2/1 4/1 icators a	% 100 95 95 ser not presser Polyx S9 - Thin S11 - High F1 - Loam F2 - Loam F3 - Deple	spe: C=Concentra 10YR 10YR esent value Below Dark Surfa n Chroma ny Mucky M ny Gleyed eted Matrix	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, C Red Color (Moist) 4/2 5/6): w Surface (LRR R, MLRA 149B) Sace (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix	cs=Covered/Coated Sand dox Features % 5 Indicator	Type Type C C	Location Location M M matic Soils Prairie Redox (LRR k, L, MLRA 1) Prairie Redox (LRR ucky Peat of Peat (LRR k, L, M) ue Below Surface ark Surface (LRR k, L	(e.g. clay, sand, loam) loam silt loam silty clay loam (49B) k, L, R) (LRR K, L, R) (LRR K, L, R)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 15 26 NRCS Hydric	Bottom Depth 15 26 29 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A11 - Deplete A12 - Thick I	Sable silty clay load 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	Color 10YR 10YR 10YR ere if ind	m the absence of Matrix (Moist) 3/2 2/1 4/1 icators a	% 100 95 95	see C=Concentra 10YR 10YR	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, CRed Red Color (Moist) 4/2 5/6 Surface (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix Krface	CS=Covered/Coated Sand dox Features % 5 5 Indicator	Type Type C C S for Proble A10 - 2 cm I A16 - Coast S3 - 5 cm Mu S7 - Dark Su S8 - Polyval S9 - Thin Da F12 - Iron-M	Location Location M M matic Soils Muck (LRR K, L, MLRA 1) Prairie Redox (LRR ucky Peat of Peat (LRR K, L, M) ue Below Surface ark Surface (LRR K, L danganese Masses	(e.g. clay, sand, loam) loam silt loam silty clay loam (LRR K, L, R) (LRR K, L, R)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 15 26 NRCS Hydric	Bottom Depth 15 26 29 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	Sable silty clay load 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	Color 10YR 10YR 10YR ere if ind	m the absence of Matrix (Moist) 3/2 2/1 4/1 icators a	% 100 95 95 ser not presser Polyx S9 - Thin S11 - High F1 - Loam F2 - Loam F3 - Deple	Some: C=Concentrate 10YR 10YR 10YR esent ☑ value Below Dark Surfate Chroma ny Mucky M ny Gleyed eted Matrix ox Dark Sur eted Dark	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, Concord (Moist) 4/2 5/6	cs=Covered/Coated Sand dox Features % 5 Indicator	Type Type C C	Location Location M M matic Soils Prairie Redox (LRR k, L, MLRA 1) Prairie Redox (LRR ucky Peat of Peat (LRR k, L, M) ue Below Surface ark Surface (LRR k, L	(e.g. clay, sand, loam) loam silt loam silty clay loam (LRR K, L, R) (LRR K, L, R)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 15 26 NRCS Hydric	Bottom Depth 15 26 29 Soil Field Ir A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A12 - Thick E S1 - Sandy E S4 - Sandy E S5 - Sandy E	Sable silty clay load 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	m the absence of Matrix (Moist) 3/2 2/1 4/1 icators a	% 100 95 95 sre not pre S8 - Polyx S9 - Thin S11 - Higl F1 - Loam F2 - Loam F3 - Deple F6 - Redo	Some: C=Concentrate 10YR 10YR 10YR esent ☑ value Below Dark Surfate Chroma ny Mucky M ny Gleyed eted Matrix ox Dark Sur eted Dark	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, Concord (Moist) 4/2 5/6	cs=Covered/Coated Sand dox Features % 5 5 Indicator	Type Type C C	Location Location M M M matic Soils Muck (LRR K, L, MLRA 1 Prairie Redox (LRR Lucky Peat of Peat (Lurface (LRR K, L, M) ue Below Surface ark Surface (LRR K, L langanese Masses ont Floodplain Soi arent Material Spodic (MLRA 144A, 1	(e.g. clay, sand, loam) loam silt loam silty clay loam (49B) k K, L, R) (LRR K, L, R) (LRR K, L, R) (LRR K, L, R) (S (LRR K, L, R) (S (MLRA 149B)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 15 26 NRCS Hydric	Bottom Depth 15 26 29 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	Sable silty clay load 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	m the absence of Matrix (Moist) 3/2 2/1 4/1 icators a	% 100 95 95 sre not pre S8 - Polyx S9 - Thin S11 - Higl F1 - Loam F2 - Loam F3 - Deple F6 - Redo	Some: C=Concentrate 10YR 10YR 10YR esent ☑ value Below Dark Surfate Chroma ny Mucky M ny Gleyed eted Matrix ox Dark Sur eted Dark	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, Concord (Moist) 4/2 5/6	cs=Covered/Coated Sand dox Features % 5 5 Indicator	Type Type Type C C S for Proble A10 - 2 cm I A16 - Coast S3 - 5cm Mu S7 - Dark Si S8 - Polyval S9 - Thin Da F12 - Iron-M F19 - Piedm F21 - Red P TA6 - Mesic TF12 - Very	Location Location M M M matic Soils Prairie Redox (LRR ucky Peat of Peat ourface (LRR K, L, M) ue Below Surface ark Surface (LRR K, L) langanese Masses ont Floodplain Soi arent Material Spodic (MLRA 144A, 1) Shallow Dark Surf	(e.g. clay, sand, loam) loam silt loam silty clay loam (49B) k K, L, R) (LRR K, L, R) (LRR K, L, R) (LRR K, L, R) (S (LRR K, L, R) (S (MLRA 149B)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 15 26 NRCS Hydric	Bottom Depth 15 26 29 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	Sable silty clay load 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	m the absence of Matrix (Moist) 3/2 2/1 4/1 icators a	% 100 95 95 sre not pre S8 - Polyx S9 - Thin S11 - Higl F1 - Loam F2 - Loam F3 - Deple F6 - Redo	Some: C=Concentrate 10YR 10YR 10YR esent ☑ value Below Dark Surfate Chroma ny Mucky M ny Gleyed eted Matrix ox Dark Sur eted Dark	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, Concord (Moist) 4/2 5/6	cs=Covered/Coated Sand dox Features % 5 5 Indicator	Type Type 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-W F19 - Piedm F21 - Red P TA6 - Mesic TF12 - Very Other (Expla of hydrophytic veget	Location Location M M M matic Soils Muck (LRR K, L, MLRA 1 Prairie Redox (LRR Lucky Peat of Peat (Lurface (LRR K, L, M) ue Below Surface ark Surface (LRR K, L langanese Masses ont Floodplain Soi arent Material Spodic (MLRA 144A, 1	(e.g. clay, sand, loam) loam silt loam silty clay loam (LRR K, L, R)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 15 26 NRCS Hydric	Bottom Depth 15 26 29 Soil Field In 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 S7 - Dark Su	Sable silty clay load 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 Redox d Matrix Irface (LRR R, MLRA 149B)	Color 10YR 10YR 10YR ere if ind	m the absence of Matrix (Moist) 3/2 2/1 4/1 icators a	% 100 95 95	Some: C=Concentrate 10YR 10YR 10YR esent ☑ value Below Dark Surfate Chroma ny Mucky M ny Gleyed eted Matrix ox Dark Sur eted Dark	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, Concord (Moist) 4/2 5/6	cs=Covered/Coated Sand dox Features % 5 5 Indicator Indicator	Type Type Type C C S for Proble A10 - 2 cm I A16 - Coast S3 - 5cm Mu 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 Location M M M matic Soils Muck (LRR K, L, MLRA 1 Prairie Redox (LRR Lucky Peat of Peat (Lurface (LRR K, L, M) ue Below Surface ark Surface (LRR K, L langanese Masses ont Floodplain Soi arent Material Spodic (MLRA 144A, 1 Shallow Dark Surfain in Remarks) ation and wetland hydrology	(e.g. clay, sand, loam) loam silt loam silty clay loam (LRR K, L, R) (LRR K, L, R) (LRR K, L, R) (LRR K, L, R) (S (LRR K, L, R) (S (MLRA 149B) (45, 149B) face must be present, unless
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 15 26 NRCS Hydric	Bottom Depth 15 26 29 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	Sable silty clay load 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 Redox d Matrix Irface (LRR R, MLRA 149B)	Color 10YR 10YR 10YR ere if ind	m the absence of Matrix (Moist) 3/2 2/1 4/1 icators a	% 100 95 95 sre not pre S8 - Polyx S9 - Thin S11 - Higl F1 - Loam F2 - Loam F3 - Deple F6 - Redo	Some: C=Concentrate 10YR 10YR 10YR esent ☑ value Below Dark Surfate Chroma ny Mucky M ny Gleyed eted Matrix ox Dark Sur eted Dark	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, Concord (Moist) 4/2 5/6	cs=Covered/Coated Sand dox Features % 5 5 Indicator	Type Type Type C C S for Proble A10 - 2 cm I A16 - Coast S3 - 5cm Mu 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 Location M M M matic Soils Muck (LRR K, L, MLRA 1) Prairie Redox (LRR L, M) ue Below Surface ark Surface (LRR K, L, M) ue Below Surface ark Surface (LRR K, L, M) sont Floodplain Soil arent Material Spodic (MLRA 144A, 1) Shallow Dark Surfain in Remarks)	(e.g. clay, sand, loam) loam silt loam silty clay loam (LRR K, L, R)



WETLAND DETERMINATION DATA FORM

Northeast and Northcentral Region

Project/Site: North Mendota Energy and Technology Park Sample Point: P5 Wetland ID: W-1 **VEGETATION** (Species identified in all uppercase are non-native species.) Tree Stratum (Plot size: 10 meter radius) **Dominance Test Worksheet** Species Name Ind.Status % Cover Dominant 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 5. 6. Percent of Dominant Species That Are OBL, FACW, or FAC: 0% (A/B) 7. 8. **Prevalence Index Worksheet** 9. Total % Cover of: Multiply by: 10. x 1 =OBL spp. Total Cover = 0 x 2 =FACW spp. FAC spp. x 3 =0 x 4 =Sapling/Shrub Stratum (Plot size: 5 meter radius) FACU spp. 4 x = 51. UPL spp. 2. 3. --Total 1 (B) --4. 5. --Prevalence Index = B/A = 4.000 --6. 7. --8. **Hydrophytic Vegetation Indicators:** 9. ☐ Yes ✓ No Rapid Test for Hydrophytic Vegetation 10. ☐ Yes ☑ No Dominance Test is > 50% Total Cover = ☐ Yes ☑ No Prevalence Index is ≤ 3.0 * ☐ Yes ☑ No Morphological Adaptations (Explain) * Herb Stratum (Plot size: 2 meter radius) ☐ Yes ☑ No Problem Hydrophytic Vegetation (Explain) * TARAXACUM OFFICINALE **FACU** 1. * Indicators of hydric soil and wetland hydrology must be 2. present, unless disturbed or problematic. 3. **Definitions of Vegetation Strata:** 4. 5. Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast 6 height (DBH), regardless of height. 8. Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft. 9. 10. 11. --Herb - All herbaceous (non-woody) plants, regardless of size, and 12. woody plants less than 3.28 ft. tall. 13. --14. --Woody Vines - All woody vines greater than 3.28 ft. in height. 15. --Total Cover = Woody Vine Stratum (Plot size: 10 meter radius) 1. 2. 3. **Hydrophytic Vegetation Present** ☐ Yes ☑ No 4. 5. Total Cover = 0 Sample point located within ag field planted to corn in 2014. No stunted/stress indicators observed in corn stubble. Very minimal weedy species Remarks:

Additional Remarks:

Sample point located in active agricultural field upslope from P4, on backside of upland knoll. Corn stubble more robust/not stressed compared to P4. While this area correlated with potential wetland signatures in the aerial imagery review, the approximate 1 foot of depositional soil over native soils eliminates wetland hydrology impacts.



WETLAND DETERMINATION DATA FORM Northeast and Northcentral Region

Project/Site:		dota Energy and Te	٠.				Stantec Project #:	193703573		Date:	04/17/15
Applicant:		ch Development & (Construc							County:	Dane
Investigator #1:				Investi	gator #2:		UMMANA Olegaitication			State:	Wisconsin
Soil Unit:	Virgil silt lo	am		Loo	al Paliafe		I/WWI Classification:			Wetland ID:	W-1 P6
Landform:	Toeslope 0-2	Latitude:	NI/A		al Relief:		,	Datum	NI/A	Sample Point:	Farmed Wetland
Slope (%):		ditions on the site ty			ongitude:		nin in romarks)	Datum: ☑ Yes □		Community ID: Section:	22
		or Hydrology □ sig				(II fio, expir	Are normal circumsta			Township:	8N
•		or Hydrology ⊟ sig or Hydrology ⊟ na	-				□ Yes	ances presem ☑No	ι:	Range:	9 Dir: E
SUMMARY OF		or riyarology _ na	tarany pr	obicinat	10:			<u> </u>		rtange.	J DII. L
Hydrophytic Ve		sent?		✓ Yes	□ No			Hydric Soils	Present?		
Wetland Hydrol	_			☑ Yes						Within A Wetlar	
Remarks:			onditions								ple point located within
		cultural field.			,				•		
HYDROLOGY											
	ology Indic	ators (Check here	if indicate	ore are n	not nreser	ot □ \•					
Primary:	•	ators (Check here	II IIIulcati	ois ale i	ioi presei	п 🗀)•			Secondary:		
<u>1 11111ary.</u>	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 B2 - Sedimer			님	C1 - Hydr C3 - Oxid	-	spheres on Living Roots			C2 - Dry-Season C8 - Crayfish Bur	
	B3 - Drift Dep	•					educed Iron			_	isible on Aerial Imagery
	B4 - Algal Ma			_			duction in Tilled Soils			D1 - Stunted or S	
	B5 - Iron Dep	oosits on Visible on Aerial Im	ogory		C7 - Thin				☑	D2 - Geomorphic D3 - Shallow Aqu	
l		Vegetated Concave S	0 ,	Ц	Other (Ex	piaiii iii Ke	marks)			D4 - Microtopogra	
		,								D5 - FAC-Neutral	
Field Observat	ions:										
Surface Water	Present?	☐ Yes ☑ No	Depth:		(in.)			M	lada B		V N.
Water Table Pr		☐ Yes ☑ No	Depth:		(in.)			Wetland Hy	arology Pr	resent?	Yes □ No
Saturation Pres	ent?	☐ Yes ☑ No	Depth:		(in.)						
Describe Record	led Data (str	eam gauge, monitori	ing well a	erial nho	ntos previ	ous inspe	ctions) if available:		Aerial Image	erv Review	
					,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				3		
I Remarks:											
Remarks:											
SOILS	:	Virgil silt loam				S	eries Drainage Class:	somewhat po	oorly		
SOILS Map Unit Name		Virgil silt loam Udollic Endoaqual	fs			S	eries Drainage Class:	somewhat po	oorly		
SOILS Map Unit Name Taxonomy (Sub	group):	Udollic Endoaqual		m the absence c	of indicators.) (Ty			•	•	PL=Pore Lining, M=Matrix)	
SOILS Map Unit Name Taxonomy (Sub	group):	Udollic Endoaqual		m the absence o			tion, D=Depletion, RM=Reduced Matrix, C	•	d Grains; Location: F	PL=Pore Lining, M=Matrix)	Texture
SOILS Map Unit Name Taxonomy (Sub	ogroup): otion (Describe to	Udollic Endoaqual	dicator or confir				tion, D=Depletion, RM=Reduced Matrix, C	CS=Covered/Coated Sanc	d Grains; Location: F	PL=Pore Lining, M=Matrix) Location	Texture (e.g. clay, sand, loam)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip	ogroup): otion (Describe to Bottom	Udollic Endoaqual the depth needed to document the in	dicator or confir	Matrix	_		tion, D=Depletion, RM=Reduced Matrix, C	CS=Covered/Coated Sand	d Grains; Location: F	.	_
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth	ogroup): otion (Describe to Bottom Depth	Udollic Endoaqual the depth needed to document the in	Color	Matrix (Moist)	%	pe: C=Concentra	tion, D=Depletion, RM=Reduced Matrix, C Red Color (Moist)	CS=Covered/Coated Sanc dox Features %	d Grains; Location: F	Location	(e.g. clay, sand, loam)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	ogroup): otion (Describe to Bottom Depth 14	Udollic Endoaqual the depth needed to document the in Horizon 1	Color	Matrix (Moist) 2/1	% 100	pe: C=Concentra	tion, D=Depletion, RM=Reduced Matrix, C Red Color (Moist)	cs=Covered/Coated Sand	d Grains; Location: F	Location 	(e.g. clay, sand, loam) silt loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 14	Bottom Depth 14 18	Udollic Endoaqual the depth needed to document the in Horizon 1 2	Color 10YR 10YR	Matrix (Moist) 2/1 4/2	% 100 93	pe: C=Concentra	tion, D=Depletion, RM=Reduced Matrix, C Rec Color (Moist) 5/6	dox Features % 7	Type C	Location M	(e.g. clay, sand, loam) silt loam silty clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 14	pgroup): Dition (Describe to Bottom Depth 14 18	Udollic Endoaqual the depth needed to document the in Horizon 1 2	Color 10YR 10YR	Matrix (Moist) 2/1 4/2 	% 100 93 	e: C=Concentra	tion, D=Depletion, RM=Reduced Matrix, C Red Color (Moist) 5/6	CS=Covered/Coated Sand dox Features % 7	Type C	Location M	(e.g. clay, sand, loam) silt loam silty clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 14	pgroup): otion (Describe to Bottom Depth 14 18	Udollic Endoaqual the depth needed to document the in Horizon 1 2	Color 10YR 10YR	Matrix (Moist) 2/1 4/2	% 100 93 	e: C=Concentra	tion, D=Depletion, RM=Reduced Matrix, C Red Color (Moist) 5/6	cs=Covered/Coated Sanc dox Features % 7	Type C	Location M	(e.g. clay, sand, loam) silt loam silty clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 14	pgroup): otion (Describe to Bottom Depth 14 18	Horizon 1 2	Color 10YR 10YR	Matrix (Moist) 2/1 4/2	% 100 93 	e: C=Concentra	tion, D=Depletion, RM=Reduced Matrix, C Red Color (Moist) 5/6	dox Features % 7	Type C	Location M	(e.g. clay, sand, loam) silt loam silty clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 14	pgroup): Describe to Bottom Depth 14 18	Horizon 1 2	Color 10YR 10YR	Matrix (Moist) 2/1 4/2	% 100 93 	e: C=Concentra	tion, D=Depletion, RM=Reduced Matrix, C Red Color (Moist) 5/6	CS=Covered/Coated Sance dox Features % 7	Type C	Location M	(e.g. clay, sand, loam) silt loam silty clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 14	pgroup): otion (Describe to Bottom Depth 14 18	Horizon 1 2	Color 10YR 10YR	Matrix (Moist) 2/1 4/2	% 100 93 	10YR	tion, D=Depletion, RM=Reduced Matrix, CRec	CS=Covered/Coated Sance dox Features % 7	Type C	Location M	(e.g. clay, sand, loam) silt loam silty clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 14 NRCS Hydric	bgroup): btion (Describe to Bottom) Depth 14 18 Soil Field In A1- Histosol	Horizon 1 2 ndicators (check here	Color 10YR 10YR	Matrix (Moist) 2/1 4/2 icators a	% 100 93 re not pre	10YR esent value Belov	tion, D=Depletion, RM=Reduced Matrix, CRed Color (Moist) 5/6	CS=Covered/Coated Sance dox Features % 7 Indicator	Type C s for Proble A10 - 2 cm	Location M matic Soils ¹ Muck (LRR K, L, MLRA	(e.g. clay, sand, loam) silt loam silty clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 14 NRCS Hydric	Bottom Depth 14 18 Soil Field In A2 - Histic Ep	Horizon 1 2 ndicators (check head	Color 10YR 10YR	Matrix (Moist) 2/1 4/2 icators a	% 100 93 re not pre S8 - Polys S9 - Thin	10YR esent □ value Belov	tion, D=Depletion, RM=Reduced Matrix, CRed Color (Moist) 5/6 N: Surface (LRR R, MLRA 149B)	CS=Covered/Coated Sand dox Features % 7 Indicator	Type C s for Proble A10 - 2 cm I	Location M matic Soils Muck (LRR K, L, MLRA Prairie Redox (LRR	(e.g. clay, sand, loam) silt loam silty clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 14 NRCS Hydric	Bottom Depth 14 18 Soil Field Ir A1- Histosol A2 - Histic Ep A3 - Black Hi	Horizon 1 2	Color 10YR 10YR	Matrix (Moist) 2/1 4/2 icators a	% 100 93 sre not pre S8 - Polys S9 - Thin S11 - High		tion, D=Depletion, RM=Reduced Matrix, CRed Color (Moist) 5/6): w Surface (LRR R, MLRA 149B) ace (LRR R, MLRA 149B) Sands	CS=Covered/Coated Sand dox Features % 7 Indicator	Type C s for Proble A10 - 2 cm I A16 - Coast S3 - 5cm Mu	Location 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
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 14 NRCS Hydric	Bottom Depth 14 18 Soil Field In A2 - Histic Ep	Horizon 1 2 ndicators (check horistic en Sulfide	Color 10YR 10YR	Matrix (Moist) 2/1 4/2 icators a	% 100 93 sre not pre S8 - Polys S9 - Thin S11 - High	10YR esent value Below Dark Surfan Chroma	tion, D=Depletion, RM=Reduced Matrix, CRed Color (Moist) 5/6): w Surface (LRR R, MLRA 149B) ace (LRR R, MLRA 149B) Sands Mineral (LRR K, L)	CS=Covered/Coated Sand dox Features % 7 Indicator	Type C s for Proble A10 - 2 cm I A16 - Coast S3 - 5cm Mt S7 - Dark St	Location M matic Soils Muck (LRR K, L, MLRA Prairie Redox (LRR	(e.g. clay, sand, loam) silt loam silty clay loam (LRR K, L, R)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 14 NRCS Hydric	Bottom Depth 14 18 Soil Field Ir A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A11 - Deplete	Horizon 1 2 ndicators (check horistic en Sulfide d Layers ed Below Dark Surface	Color 10YR 10YR ere if ind	Matrix (Moist) 2/1 4/2 icators a	% 100 93 se not pre S8 - Polyx S9 - Thin S11 - High F1 - Loam F2 - Loam F3 - Deple	10YR	tion, D=Depletion, RM=Reduced Matrix, C Red Color (Moist) 5/6): w Surface (LRR R, MLRA 149B) ace (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix	CS=Covered/Coated Sand dox Features % 7 Indicator	Type C s for Proble A10 - 2 cm I A16 - Coast S3 - 5cm Mt S7 - Dark St S8 - Polyval S9 - Thin Da	Location 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 149B) R K, L, R) (LRR K, L, R) (LRR K, L, R)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 14 NRCS Hydric	Bottom Depth 14 18 Soil Field Ir A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A11 - Deplete A12 - Thick I	Horizon 1 2	Color 10YR 10YR ere if ind	Matrix (Moist) 2/1 4/2 icators a	% 100 93	10YR	tion, D=Depletion, RM=Reduced Matrix, C Red Color (Moist) 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 % 7 Indicator	Type C s for Proble A10 - 2 cm I A16 - Coast S3 - 5cm Mu S7 - Dark S0 S8 - Polyval S9 - Thin Da F12 - Iron-M	Location 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	(e.g. clay, sand, loam) silt 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 14 NRCS Hydric	Bottom Depth 14 18 Soil Field Ir A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A11 - Deplete A12 - Thick E S1 - Sandy M	Horizon Horizon 1 2	Color 10YR 10YR ere if ind	Matrix (Moist) 2/1 4/2 icators a	% 100 93 ser not pressure not pressu	10YR esent yalue Below Dark Surfan Chroma ny Mucky N ny Gleyed eted Matrix ox Dark Sur eted Dark	tion, D=Depletion, RM=Reduced Matrix, C Red Color (Moist) 5/6): w Surface (LRR R, MLRA 149B) Sands Ace (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix crface Surface Surface	CS=Covered/Coated Sance dox Features % 7 Indicator	Type C s for Proble A10 - 2 cm I A16 - Coast S3 - 5cm Mu S7 - Dark S0 S8 - Polyval S9 - Thin Da F12 - Iron-M F19 - Piedm	Location 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 Soi	(e.g. clay, sand, loam) silt 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 14 NRCS Hydric	Bottom Depth 14 18 Soil Field Ir A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A11 - Deplete A12 - Thick I	Horizon Horizon 1 2 ndicators (check horistic en Sulfide d Layers ed Below Dark Surface Muck Mineral Gleyed Matrix	Color 10YR 10YR ere if ind	Matrix (Moist) 2/1 4/2 icators a	% 100 93	10YR esent yalue Below Dark Surfan Chroma ny Mucky N ny Gleyed eted Matrix ox Dark Sur eted Dark	tion, D=Depletion, RM=Reduced Matrix, C Red Color (Moist) 5/6): w Surface (LRR R, MLRA 149B) Sands Ace (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix crface Surface Surface	CS=Covered/Coated Sand dox Features % 7 Indicator	Type C s for Proble A10 - 2 cm I A16 - Coast S3 - 5cm Mu S7 - Dark Si S8 - Polyval S9 - Thin Da F12 - Iron-M F19 - Piedm F21 - Red P	Location 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	(e.g. clay, sand, loam) silt loam silty clay loam 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 14 NRCS Hydric	Bottom Depth 14 18 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 R S6 - Stripped	Horizon Horizon 1 2	Color 10YR 10YR ere if ind	Matrix (Moist) 2/1 4/2 icators a	% 100 93 ser not pressure not pressu	10YR esent yalue Below Dark Surfan Chroma ny Mucky N ny Gleyed eted Matrix ox Dark Sur eted Dark	tion, D=Depletion, RM=Reduced Matrix, C Red Color (Moist) 5/6): w Surface (LRR R, MLRA 149B) Sands Ace (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix crface Surface Surface	dox Features % 7 Indicator	Type 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	Location 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, 1) Shallow Dark Surface	(e.g. clay, sand, loam) silt loam silty clay loam 149B) R K, L, R) (LRR 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 14 NRCS Hydric	Bottom Depth 14 18 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 R S6 - Stripped	Horizon 1 2	Color 10YR 10YR ere if ind	Matrix (Moist) 2/1 4/2 icators a	% 100 93 ser not pressure not pressu	10YR esent yalue Below Dark Surfan Chroma ny Mucky N ny Gleyed eted Matrix ox Dark Sur eted Dark	tion, D=Depletion, RM=Reduced Matrix, C Red Color (Moist) 5/6): w Surface (LRR R, MLRA 149B) Sands Ace (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix crface Surface Surface	CS=Covered/Coated Sand dox Features % 7 Indicator	Type C s for Proble A10 - 2 cm I A16 - Coast S3 - 5cm Mu S7 - Dark Su S8 - Polyval S9 - Thin Da F12 - Iron-W F19 - Piedm F21 - Red P TA6 - Mesic TF12 - Very Other (Expla	Location 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, 1 Shallow Dark Surfain in Remarks)	(e.g. clay, sand, loam) silt loam silty 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 14 NRCS Hydric	Bottom Depth 14 18 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 R S6 - Stripped	Horizon Horizon 1 2	Color 10YR 10YR ere if ind	Matrix (Moist) 2/1 4/2 icators a	% 100 93 ser not pressure not pressu	10YR esent yalue Below Dark Surfan Chroma ny Mucky N ny Gleyed eted Matrix ox Dark Sur eted Dark	tion, D=Depletion, RM=Reduced Matrix, C Red Color (Moist) 5/6): w Surface (LRR R, MLRA 149B) Sands Ace (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix crface Surface Surface	CS=Covered/Coated Sand dox Features % 7 Indicator Indicator Indicator Indicator Indicator	Type C s for Proble A10 - 2 cm I A16 - Coast S3 - 5cm Mu S7 - Dark Su S8 - Polyval S9 - Thin Da F12 - Iron-W F19 - Piedm F21 - Red P TA6 - Mesic TF12 - Very Other (Expla	Location 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, 1) Shallow Dark Surface	(e.g. clay, sand, loam) silt loam silty 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 14 NRCS Hydric	Bottom Depth 14 18 Soil Field Ir A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A1- Deplete A12 - Thick E S1 - Sandy M S4 - Sandy M S4 - Sandy M S5 - Sandy R S6 - Stripped S7 - Dark Su	Horizon Horizon 1 2	Color 10YR 10YR ere if ind	Matrix (Moist) 2/1 4/2 icators a	% 100 93 se not pre S8 - Polyo S9 - Thin S11 - High F1 - Loam F2 - Loam F3 - Deple F6 - Redo F7 - Deple F8 - Redo	10YR esent yalue Below Dark Surfan Chroma ny Mucky N ny Gleyed eted Matrix ox Dark Sur eted Dark	tion, D=Depletion, RM=Reduced Matrix, C Red Color (Moist) 5/6): w Surface (LRR R, MLRA 149B) Sands Ace (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix crface Surface Surface	CS=Covered/Coated Sand dox Features % 7 Indicator Indicator	Type C s for Proble A10 - 2 cm I A16 - Coast S3 - 5cm Mu S7 - Dark Su S8 - Polyval S9 - Thin Da F12 - Iron-W F19 - Piedm F21 - Red P TA6 - Mesic TF12 - Very Other (Expla of hydrophytic veget or problematic.	Location M matic Soils Muck (LRR K, L, MLRA A Prairie Redox (LRR ucky Peat of Peat urface (LRR K, L, M) ue Below Surface ark Surface (LRR K, L danganese Masses ant Floodplain Soil arent Material Spodic (MLRA 144A, 14 Shallow Dark Surface ain in Remarks) station and wetland hydrology	(e.g. clay, sand, loam) silt loam silty clay loam 149B) R K, L, R) (LRR K, L, R) (LRR K, L, R) ils (MLRA 149B) face must be present, unless
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 14	Bottom Depth 14 18 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 R S6 - Stripped	Horizon Horizon 1 2	Color 10YR 10YR ere if ind	Matrix (Moist) 2/1 4/2 icators a	% 100 93 ser not presser Polyx S9 - Thin S11 - High F1 - Loam F2 - Loam F3 - Deple F6 - Redo	10YR esent yalue Below Dark Surfan Chroma ny Mucky N ny Gleyed eted Matrix ox Dark Sur eted Dark	tion, D=Depletion, RM=Reduced Matrix, C Red Color (Moist) 5/6): w Surface (LRR R, MLRA 149B) Sands Ace (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix crface Surface Surface	CS=Covered/Coated Sand dox Features % 7 Indicator Indicator Indicator Indicator Indicator	Type C s for Proble A10 - 2 cm I A16 - Coast S3 - 5cm Mu S7 - Dark Su S8 - Polyval S9 - Thin Da F12 - Iron-W F19 - Piedm F21 - Red P TA6 - Mesic TF12 - Very Other (Expla of hydrophytic veget or problematic.	Location 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, 1 Shallow Dark Surfain in Remarks)	(e.g. clay, sand, loam) silt loam silty 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

Northeast and Northcentral Region

Project/Site: North Mendota Energy and Technology Park Sample Point: P6 Wetland ID: W-1 **VEGETATION** (Species identified in all uppercase are non-native species.) Tree Stratum (Plot size: 10 meter radius) **Dominance Test Worksheet** Species Name Ind.Status % Cover Dominant 1. 2. Number of Dominant Species that are OBL, FACW, or FAC: 2 (A) 3. 4. Total Number of Dominant Species Across All Strata: 5. 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. x 1 =OBL spp. Total Cover = 0 x 2 =FACW spp. FAC spp. x 3 =0 x 4 =Sapling/Shrub Stratum (Plot size: 5 meter radius) FACU spp. 4 UPL spp. x = 51. 2. 3. --Total 13 (B) --4. 5. --Prevalence Index = B/A = 3.250 --6. --7. --8. **Hydrophytic Vegetation Indicators:** 9. ☐ Yes ✓ No Rapid Test for Hydrophytic Vegetation 10. ☐ Yes ☑ No Dominance Test is > 50% Total Cover = ☐ Yes ☑ No Prevalence Index is ≤ 3.0 * ☐ Yes ☑ No Morphological Adaptations (Explain) * Herb Stratum (Plot size: 2 meter radius) Yes ☐ No Problem Hydrophytic Vegetation (Explain) * DAUCUS CAROTA UPL Υ 1. * Indicators of hydric soil and wetland hydrology must be 2. PHALARIS ARUNDINACEA Υ **FACW** present, unless disturbed or problematic. 3. Salix interior Y **FACW** 1 TARAXACUM OFFICINALE **Definitions of Vegetation Strata:** 4. 1 **FACU** 5. Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast 6 height (DBH), regardless of height. 8. Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft. 9. 10. 11. --Herb - All herbaceous (non-woody) plants, regardless of size, and 12. woody plants less than 3.28 ft. tall. 13. --14. --**Woody Vines -** All woody vines greater than 3.28 ft. in height. 15. --Total Cover = 4 Woody Vine Stratum (Plot size: 10 meter radius) 1. 2. 3. **Hydrophytic Vegetation Present** ☑ Yes ☐ No 4. 5. Total Cover = 0 Sample point located in active agricultural field planted to corn in 2014. Corn stubble appeared stunted, more weedy species present compared to Remarks: adjacent upland

Additional Remarks:

Sample point located in active agricultural field on terrace/toeslope between edge of uncropped wetland area and upland knoll in ag field. Crop stress observed in the form of stunted corn stubble compared to stubble in non-wetland ag field; sample point location also correlates with area commonly exhibiting wetland signatures in an aerial imagery review.



WETLAND DETERMINATION DATA FORM Northeast and Northcentral Region

Project/Site:	North Meno	dota Energy and Te	chnology	/ Park			Stantec Project #:	193703573		Date:	04/17/15	
Applicant:	North Mendota Energy and Technology Park Ruedebusch Development & Construction, Inc.								County:	Dane		
Investigator #1:		•								State:	Wisconsin	
Soil Unit:		•					NWI/WWI Classification:			Wetland ID:	W-1	
Landform:	•	irgil silt loam									P7	
	Backslope Local Relief: I 0-2 Latitude: N/A Longitude: I							Dotum	NI/A	Sample Point:		
Slope (%):	0-2							Datum:		Community ID:	Ag Field	
		ditions on the site ty	•			(If no, expla	·	☑ Yes □	No	Section:	22	
_		or Hydrology □ sig	-				Are normal circumsta	•	t'?	Township:	8N	
		or Hydrology □ na	turally pr	oblemati	ic?		☐ Yes	☑No		Range:	9 Dir: E	
SUMMARY OF	FINDINGS											
Hydrophytic Ve	getation Pre	sent?		☐ Yes	☑ No			Hydric Soils	Present?		☐ Yes ☑ No	
Wetland Hydrol	ogy Present	?		☐ Yes	☑ No			Is This Samp	oling Point '	Within A Wetlar	nd? ■ Yes ☑ No	
Remarks:	Based on a	a WETS analysis, co	onditions	were no	ormal; 3.4	2 inches	of rain were received	in the area fr	om April 1	- April 17. Sam	ple point located in	
	active ag fi	eld.										
HYDROLOGY												
	ology Indic	ators (Check here	if indicate	ore are n	not procer	ot □ \•						
Primary:		ators (Check here)	ii iiiuicati	ois ai c i	ioi presei	ıı ⊘).			Socondary			
	A1 - Surface	Water			B9 - Wate	r-Stained	Leaves	Secondary:				
l H	A2 - High Wa			H	B13 - Aqu			□ B6 - Surface Soil Cracks□ B10 - Drainage Patterns				
	A3 - Saturation				B15 - Mar					B16 - Moss Trim		
	B1 - Water M				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	
ᅵ	B4 - Algal Ma B5 - Iron Der				C6 - Rece		duction in Tilled Soils		님	D1 - Stunted or S D2 - Geomorphic		
l H		on Visible on Aerial Ima	agery	H	Other (Ex				H	D3 - Shallow Aqu		
l		y Vegetated Concave S	•		Other (LX	piairiirike	marks)		ī	D4 - Microtopogra		
		, regerment contains								D5 - FAC-Neutral		
Field Observat	ions:											
Surface Water			Donth		(in)							
		☐ Yes ☑ No	Depth:		(in.)			Wetland Hy	drology Pr	resent?	Yes ☑ No	
Water Table Pro		☐ Yes ☑ No	Depth:		(in.)							
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:		Aerial Image	ery Review		
					•	•	, .			•		
Remarks:					<u> </u>	· ·	,,,					
Remarks:					·	·			-			
					·	·	,,					
SOILS	r:	Virgil silt loam				Ì	·	somewhat po	oorly			
SOILS Map Unit Name		Virgil silt loam Udollic Endoagual	fs			Ì	eries Drainage Class:	somewhat po	oorly			
SOILS Map Unit Name Taxonomy (Sub	group):	Udollic Endoaqual		m the absence c	of indicators.) (Ty	S	eries Drainage Class:	•	·	PL=Pore Lining, M=Matrix)		
SOILS Map Unit Name Taxonomy (Sub	ogroup): otion (Describe to	Udollic Endoaqual				S	eries Drainage Class:	CS=Covered/Coated Sano	d Grains; Location: F	PL=Pore Lining, M=Matrix)	Texture	
SOILS Map Unit Name Taxonomy (Sub Profile Descrip	ogroup): otion (Describe to Bottom	Udollic Endoaqual the depth needed to document the in	dicator or confire	Matrix		Sope: C=Concentra	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, C	CS=Covered/Coated Sand	d Grains; Location: F	<u> </u>	Texture (e.g. clay, sand, loam)	
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth	ogroup): otion (Describe to Bottom Depth	Udollic Endoaqual	dicator or confirm	Matrix (Moist)	%	Sope: C=Concentra	eries Drainage Class:	cS=Covered/Coated Sance	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	pgroup): otion (Describe to Bottom Depth 14	Udollic Endoaqual the depth needed to document the in Horizon 1	Color 10YR	Matrix (Moist) 3/1	% 100	Spe: C=Concentra	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, G Re Color (Moist)	CS=Covered/Coated Sand	Grains; Location: F	Location 	(e.g. clay, sand, loam) silt loam	
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 14	pgroup): otion (Describe to Bottom Depth 14 16	Udollic Endoaqual the depth needed to document the in Horizon 1 2	Color 10YR 10YR	Matrix (Moist) 3/1 4/2	% 100 97	pe: C=Concentra	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, G Re Color (Moist) 5/8	cs=Covered/Coated Sancedox Features % 3	Type C	Location M	(e.g. clay, sand, loam) silt loam silty clay loam	
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	pgroup): otion (Describe to Bottom Depth 14	Udollic Endoaqual the depth needed to document the in Horizon 1	Color 10YR	Matrix (Moist) 3/1	% 100	Spe: C=Concentra	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, G Re Color (Moist)	CS=Covered/Coated Sand	Grains; Location: F	Location 	(e.g. clay, sand, loam) silt loam	
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 14	pgroup): otion (Describe to Bottom Depth 14 16	Udollic Endoaqual the depth needed to document the in Horizon 1 2	Color 10YR 10YR	Matrix (Moist) 3/1 4/2	% 100 97	pe: C=Concentra	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, G Re Color (Moist) 5/8	cs=Covered/Coated Sancedox Features % 3	Type C	Location M	(e.g. clay, sand, loam) silt loam silty clay loam	
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 14	pgroup): otion (Describe to Bottom Depth 14 16 22	Udollic Endoaqual the depth needed to document the in Horizon 1 2	Color 10YR 10YR 10YR	Matrix (Moist) 3/1 4/2	% 100 97	Spe: C=Concentra 10YR 10YR	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, G Re Color (Moist) 5/8	CS=Covered/Coated Sance dox Features % 3 10	Type C	Location M	(e.g. clay, sand, loam) silt loam silty clay loam	
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 14	pgroup): otion (Describe to Bottom Depth 14 16 22	Udollic Endoaqual the depth needed to document the in Horizon 1 2	Color 10YR 10YR 10YR	Matrix (Moist) 3/1 4/2	% 100 97	Spe: C=Concentra 10YR 10YR	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, G Re Color (Moist) 5/8	cs=Covered/Coated Sanced Cox Features % 3 10	Type C	Location M	(e.g. clay, sand, loam) silt loam silty clay loam	
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 14	pgroup): otion (Describe to Bottom Depth 14 16 22	Udollic Endoaqual the depth needed to document the in Horizon 1 2	Color 10YR 10YR 10YR	Matrix (Moist) 3/1 4/2	% 100 97	pe: C=Concentra 10YR 10YR	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, G Re Color (Moist) 5/8	ccs=Covered/Coated Sance dox Features % 3 10	Type C C	Location M	(e.g. clay, sand, loam) silt loam silty clay loam	
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 14 16	pgroup): otion (Describe to Bottom Depth 14 16 22	Horizon 1 2 3	Color 10YR 10YR 10YR	Matrix (Moist) 3/1 4/2	% 100 97 90 	pe: C=Concentra 10YR 10YR	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, G Re Color (Moist) 5/8 6/6	cs=Covered/Coated Sance dox Features % 3 10	Type C C	Location M M	(e.g. clay, sand, loam) silt loam silty clay loam	
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 14 16	pgroup): otion (Describe to Bottom Depth 14 16 22	Horizon 1 2 3	Color 10YR 10YR 10YR	Matrix (Moist) 3/1 4/2 5/4	% 100 97 90 		eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, G Re Color (Moist) 5/8 6/6	cs=Covered/Coated Sance dox Features % 3 10	Type C C	Location 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 14 16 NRCS Hydric	pgroup): otion (Describe to Bottom Depth 14 16 22	Horizon 1 2 3	Color 10YR 10YR 10YR	Matrix (Moist) 3/1 4/2 5/4 icators a	% 100 97 90 re not pre	Sope: C=Concentration 10YR 10YR esent Solution	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, G Re Color (Moist) 5/8 6/6):	CS=Covered/Coated Sance dox Features % 3 10 Indicator	Type C C s for Proble	Location 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 14 16 NRCS Hydric	pgroup): otion (Describe to Bottom Depth 14 16 22 Soil Field In	Horizon 1 2 3 ndicators (check here	Color 10YR 10YR 10YR	Matrix (Moist) 3/1 4/2 5/4 icators a	% 100 97 90 re not pre	spe: C=Concentra 10YR 10YR esent ☑ value Belov	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, G Re Color (Moist) 5/8 6/6	cs=Covered/Coated Sance dox Features % 3 10 Indicator	Type C C s for Proble	Location 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 14 16 NRCS Hydric	pgroup): otion (Describe to Bottom Depth 14 16 22 Soil Field In A1- Histosol A2 - Histic E A3 - Black H	Horizon 1 2 3 ndicators (check here)	Color 10YR 10YR 10YR	Matrix (Moist) 3/1 4/2 5/4 icators a	% 100 97 90 sre not pre S8 - Polyv S9 - Thin S11 - High	Sope: C=Concentrate 10YR 10YR esent ☑ value Below Dark Surfate	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, Grain Re Color (Moist) 5/8 6/6 Surface (LRR R, MLRA 149B) ace (LRR R, MLRA 149B) Sands	cs=Covered/Coated Sance dox Features % 3 10 Indicator	Type C C s for Proble A10 - 2 cm I A16 - Coast S3 - 5cm Mu	Location M M matic Soils ¹ Muck (LRR K, L, MLRA A) Prairie Redox (LRR Lucky Peat of Peat	(e.g. clay, sand, loam) silt loam silty clay loam silty clay loam	
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 14 16 NRCS Hydric	pgroup): ption (Describe to Bottom Depth 14 16 22 Soil Field In A1- Histosol A2 - Histic E A3 - Black H A4 - Hydroge	Horizon 1 2 3 ndicators (check here)	Color 10YR 10YR 10YR	Matrix (Moist) 3/1 4/2 5/4 icators a	% 100 97 90 see not pre S8 - Polyv S9 - Thin S11 - High F1 - Loam	spe: C=Concentra 10YR 10YR esent ☑ value Below Dark Surfa th Chroma ny Mucky N	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, Green Record (Moist) 5/8 6/6): w Surface (LRR R, MLRA 149B) Sands Mineral (LRR K, L)	CS=Covered/Coated Sance dox Features % 3 10 Indicator	Type C C s for Proble A10 - 2 cm I A16 - Coast S3 - 5cm Mt S7 - Dark S6	Location M M matic Soils Muck (LRR K, L, MLRA Prairie Redox (LRR LICKY Peat of Peat urface (LRR K, L, M)	(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 14 16 NRCS Hydric	Bottom Depth 14 16 22 Soil Field Ir A1- Histosol A2 - Histic E A3 - Black H A4 - Hydroge A5 - Stratifie	Horizon 1 2 3 ndicators (check here) pipedon istic en Sulfide d Layers	Color 10YR 10YR 10YR ere if ind	Matrix (Moist) 3/1 4/2 5/4 icators a	% 100 97 90 sere not pre S8 - Polyv S9 - Thin S11 - High F1 - Loam F2 - Loam	10YR 10YR 10YR esent ☑ value Below Dark Surfa	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, (Color (Moist) 5/8 6/6 Surface (LRR R, MLRA 149B) ace (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix	CS=Covered/Coated Sance dox Features % 3 10 Indicator	Type C C s for Proble A10 - 2 cm I A16 - Coast S3 - 5cm Mt S7 - Dark St S8 - Polyval	Location 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) 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 14 16 NRCS Hydric	pgroup): ption (Describe to Bottom Depth 14 16 22 Soil Field In A1- Histosol A2 - Histic E A3 - Black H A4 - Hydroge A5 - Stratified A11 - Deplete	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 4/2 5/4 icators a	% 100 97 90 re not pre S8 - Polyx S9 - Thin S11 - High F1 - Loam F2 - Loam F3 - Deple	spe: C=Concentra 10YR 10YR esent value Below Dark Surfa n Chroma ny Mucky M ny Gleyed eted Matrix	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, GRe Color (Moist) 5/8 6/6): w Surface (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix (cs=Covered/Coated Sance dox Features % 3 10 Indicator	Type C C s for Proble A10 - 2 cm I A16 - Coast S3 - 5cm Mt S7 - Dark St S8 - Polyval S9 - Thin Da	Location M M matic Soils Muck (LRR K, L, MLRA A) Prairie Redox (LRR L) Lucky 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 14 16 NRCS Hydric	Bottom Depth 14 16 22 Soil Field Ir A1- Histosol A2 - Histic E A3 - Black H A4 - Hydroge A5 - Stratified A11 - Deplete A12 - Thick I	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 4/2 5/4 icators a	% 100 97 90 se not pre S8 - Polyv S9 - Thin S11 - High F1 - Loam F2 - Loam F3 - Deple F6 - Redo	se: C=Concentra 10YR 10YR	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, Grace Re Color (Moist) 5/8 6/6	CS=Covered/Coated Sance dox Features % 3 10 Indicator	Type C C s for Proble A10 - 2 cm I A16 - Coast S3 - 5cm Mu S7 - Dark S0 S8 - Polyval S9 - Thin Da F12 - Iron-M	Location M M 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	(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 14 16 NRCS Hydric	Bottom Depth 14 16 22 Soil Field In A1- Histosol A2 - Histic E A3 - Black H A4 - Hydroge A5 - Stratified A11 - Deplete A12 - Thick E S1 - Sandy N	Horizon Horizon 1 2 3 ndicators (check here) bipedon istic en Sulfide d Layers ed Below Dark Surface Dark Surface Muck Mineral	Color 10YR 10YR 10YR ere if ind	Matrix (Moist) 3/1 4/2 5/4 icators a	% 100 97 90 see not presserved see Polyv S9 - Thin S11 - High F1 - Loam F2 - Loam F3 - Deple F6 - Redo F7 - Deple	Some: C=Concentrate 10YR 10YR	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, Grace Re Color (Moist) 5/8 6/6 N: Surface (LRR R, MLRA 149B) Sace (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix Grace Surface Surface	cs=Covered/Coated Sance dox Features % 3 10 Indicator	Type C C s for Proble A10 - 2 cm I A16 - Coast S3 - 5cm Mu S7 - Dark S0 S8 - Polyval S9 - Thin Da F12 - Iron-M F19 - Piedm	Location M M matic Soils Muck (LRR K, L, MLRA A) Prairie Redox (LRR L) Lucky 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 14 16 NRCS Hydric	Bottom Depth 14 16 22 Soil Field In A1- Histosol A2 - Histic E A3 - Black H A4 - Hydroge A5 - Stratified A11 - Deplete A12 - Thick E S1 - Sandy N	Horizon Horizon 1 2 3 ndicators (check here) stic 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 4/2 5/4 icators a	% 100 97 90 se not pre S8 - Polyv S9 - Thin S11 - High F1 - Loam F2 - Loam F3 - Deple F6 - Redo	Some: C=Concentrate 10YR 10YR	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, Grace Re Color (Moist) 5/8 6/6 N: Surface (LRR R, MLRA 149B) Sace (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix Grace Surface Surface	cs=Covered/Coated Sance dox Features % 3 10 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 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 cont Floodplain Soil arent Material	(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) ils (MLRA 149B)	
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 14 16 NRCS Hydric	Bottom Depth 14 16 22 Soil Field In A1- Histosol A2 - Histic E A3 - Black H A4 - Hydroge A5 - Stratified A12 - Thick E S1 - Sandy N S4 - Sandy N	Horizon 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 4/2 5/4 icators a	% 100 97 90 see not presserved see Polyv S9 - Thin S11 - High F1 - Loam F2 - Loam F3 - Deple F6 - Redo F7 - Deple	Some: C=Concentrate 10YR 10YR	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, Grace Re Color (Moist) 5/8 6/6 N: Surface (LRR R, MLRA 149B) Sace (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix Grace Surface Surface	CS=Covered/Coated Sance dox Features % 3 10 Indicator	Type C C C s for Proble A10 - 2 cm I A16 - Coast S3 - 5cm Mu S7 - Dark Si S8 - Polyval S9 - Thin Da F12 - Iron-M F19 - Piedm F21 - Red P TA6 - Mesic	Location M M matic Soils ¹ Vuck (LRR K, L, MLRA A Prairie Redox (LRR Lucky Peat of Peat Lucky Peat of	(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) S (LRR K, L, R) ils (MLRA 149B)	
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 14 16 NRCS Hydric	Bottom Depth 14 16 22 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 S5 - Sandy R S6 - Stripped	Horizon 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 4/2 5/4 icators a	% 100 97 90 se not presserved for a polytom single for a polytom single for a polytom for a pol	Some: C=Concentrate 10YR 10YR	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, Grace Re Color (Moist) 5/8 6/6 N: Surface (LRR R, MLRA 149B) Sace (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix Grace Surface Surface	cs=Covered/Coated Sance dox Features % 3 10 Indicator	Type C C C s for Proble A10 - 2 cm I A16 - Coast S3 - 5cm Mu S7 - Dark Su S8 - Polyval S9 - Thin Da F12 - Iron-W F19 - Piedm F14 - Red P TA6 - Mesic TF12 - Very Other (Expla	Location M M 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 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 14 16 NRCS Hydric	Bottom Depth 14 16 22 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 S5 - Sandy R S6 - Stripped	Horizon Horizon 1 2 3 ndicators (check here) bipedon istic en Sulfide d Layers ed Below Dark Surface Dark Surface Muck Mineral Gleyed Matrix Redox H Matrix	Color 10YR 10YR 10YR ere if ind	Matrix (Moist) 3/1 4/2 5/4 icators a	% 100 97 90 se not presserved for a polytom single for a polytom single for a polytom for a pol	Some: C=Concentrate 10YR 10YR	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, Grace Re Color (Moist) 5/8 6/6 N: Surface (LRR R, MLRA 149B) Sace (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix Grace Surface Surface	CS=Covered/Coated Sance dox Features % 3 10 Indicator Indicator Indicator	Type C C C s for Proble A10 - 2 cm I A16 - Coast S3 - 5cm Mu S7 - Dark Su S8 - Polyval S9 - Thin Da F12 - Iron-W F19 - Piedm F14 - Red P TA6 - Mesic TF12 - Very Other (Expla	Location M M matic Soils Muck (LRR K, L, MLRA Prairie Redox (LRR Lucky Peat of Peat Lucky Peat Lucky Peat of Peat Lucky Peat Of Peat Lucky Peat Of Peat Luc	(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) ils (MLRA 149B) 145, 149B) face	
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 14 16 NRCS Hydric	Bottom Depth 14 16 22 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 S5 - Sandy R S6 - Stripped	Horizon 1 2 3	Color 10YR 10YR 10YR ere if ind	Matrix (Moist) 3/1 4/2 5/4 icators a	% 100 97 90 se not presserved for a polytom single for a polytom single for a polytom for a pol	Some: C=Concentrate 10YR 10YR	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, Grace Re Color (Moist) 5/8 6/6 N: Surface (LRR R, MLRA 149B) Sace (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix Grace Surface Surface	CS=Covered/Coated Sance dox Features % 3 10 Indicator Indicator Indicator	Type C C C s for Proble A10 - 2 cm I A16 - Coast S3 - 5cm Mu S7 - Dark S0 S8 - Polyval S9 - Thin Da F12 - Iron-W F19 - Piedm F21 - Red P TA6 - Mesic TF12 - Very Other (Expla of hydrophytic veget of problematic.	Location M M 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 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 14 16 NRCS Hydric	Bottom Depth 14 16 22 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 S5 - Sandy R S6 - Stripped S7 - Dark Su	Horizon 1 2 3	Color 10YR 10YR 10YR ere if ind	Matrix (Moist) 3/1 4/2 5/4 icators a	% 100 97 90 se not presser Polyv S9 - Thin S11 - High F1 - Loam F2 - Loam F3 - Deple F6 - Redo F7 - Deple F8 - Redo	Some: C=Concentrate 10YR 10YR	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, Grace Re Color (Moist) 5/8 6/6 N: Surface (LRR R, MLRA 149B) Sace (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix Grace Surface Surface	CS=Covered/Coated Sance dox Features % 3 10 Indicator Indicator Indicator Ind	Type C C C s for Proble A10 - 2 cm I A16 - Coast S3 - 5cm Mu S7 - Dark S0 S8 - Polyval S9 - Thin Da F12 - Iron-W F19 - Piedm F21 - Red P TA6 - Mesic TF12 - Very Other (Expla of hydrophytic veget of problematic.	Location M M	(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) ils (MLRA 149B) face y must be present, unless	



WETLAND DETERMINATION DATA FORM Northeast and Northcentral Region

Project/Site: North Mendota Energy and Technology Park Wetland ID: W-1 Sample Point: P7

VEGETATION	(Species identified in all uppercase are non-na	ative spec	cies.)		
	lot size: 10 meter radius)	ativo-ope	JICO.)		
	<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:(A)
3.					
4.					Total Number of Dominant Species Across All Strata: 0 (B)
5.					
6.					Percent of Dominant Species That Are OBL, FACW, or FAC:NA (A/B)
7.					
8.					Prevalence Index Worksheet
9.					Total % Cover of: Multiply by:
10.					OBL spp. $0 x 1 = 0$
	Total Cover =	0			FACW spp. $0 x 2 = 0$
~ (0. 1.0.					FAC spp.
	ratum (Plot size: 5 meter radius)				FACU spp. $0 x 4 = 0$
1.					UPL spp. $0 x 5 = 0$
2.					
3.					Total (A) (B)
4.					Double and Indian D/A
5.					Prevalence Index = B/A = NA
6.					
7.					Undersale tie Verstetien Indicators
8.					Hydrophytic Vegetation Indicators:
9.					☐ Yes ☐ No Rapid Test for Hydrophytic Vegetation
10.	Total Cover -				☐ Yes ☐ No Dominance Test is > 50%
	Total Cover =	0			☐ Yes ☑ No Prevalence Index is ≤ 3.0 *
Liants Ctrotum (Di	at almost O master and discal				☐ Yes ☐ No Morphological Adaptations (Explain) *
Herb Stratum (Pl	ot size: 2 meter radius)				☐ Yes ☑ No Problem Hydrophytic Vegetation (Explain) *
2.	_ 				* Indicators of hydric soil and wetland hydrology must be
3.					present, unless disturbed or problematic.
3. 4.					Definitions of Vegetation Strata:
4. 5.					Definitions of Vegetation Strata.
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.					
15.					Woody Vines - All woody vines greater than 3.28 ft. in height.
10.	Total Cover =	0			Troony Times
	10141 00101 -	O			
Woody Vine Stra	tum (Plot size: 10 meter radius)				
1.					
2.					
3.					Hydrophytic Vegetation Present ☐ Yes ☑ No
4.					Tiyarophytic vegetation i resemble 100 El 100
4. 5.					
J.	Total Cover =	0			
Remarks:			nlanted t	to corn in	2014. No stunted corn stubble observed; no weedy species observed.
rtomanto.	Campio point located in active agricult	ii ai iioia	plantoa		2011: 110 diantoa com diabble about voa, no weedy apolice about voa.

Additional Remarks:

Sample point located in ag field at slightly higher topography that P6. While associated with an area that appeared to exhibit wetland signatures, the lack of observable hydrology indicators, hydric soil, and hydrophytic weedy species supports the upland determination.



Project/Site:	North Men	dota Energy and Te	chnology	/ Park			Stantec Project #:	193703573		Date:	04/17/15
Applicant:	Ruedebuso	ch Development & C	Construc	tion. Inc.			-			County:	Dane
Investigator #1:		<u>-</u>			gator #2:					State:	Wisconsin
				IIIVCSti	gator #2.		IMMAL Classifications				
Soil Unit:	Virgil silt lo						I/WWI Classification:			Wetland ID:	W-1
Landform:	Depression	า		Loc	al Relief:	Concave	9			Sample Point:	P8
Slope (%):	0-2	Latitude:	N/A	Lo	ongitude:	N/A		Datum:	N/A	Community ID:	Plowed Wet Meadow
. ,	Irologic cond	ditions on the site ty	pical for				ain in remarks)	☑ Yes □	No	Section:	22
		or Hydrology □ sig				(, 6,4,5,6	Are normal circumsta				8N
•			-					•	ι:	Township:	_
		or Hydrology	turally pr	obiemati	C?		☐ Yes	☑No		Range:	9 Dir: E
SUMMARY OF	FINDINGS										
Hydrophytic Veg	getation Pre	sent?			□ No			Hydric Soils	Present?		
Wetland Hydrol					_					Within A Wetlar	
			ana altici ana a			10 !					
Remarks:							of rain were received			•	nple point located in
	area not cr	opped in 2014, but	plowed ii	n fall of 2	2014. Soil	s disturb	ed from past installation	on of nearby	sewer infra	structure.	
HYDROLOGY											
Wetland Hydro	ology Indic	ators (Check here i	if indicate	ors are n	ot preser	nt □):					
Primary:									Secondary:		
	A1 - Surface	Water			B9 - Wate	r-Stained	Leaves			B6 - Surface Soil	Cracks
l ä	A2 - High Wa			ī	B13 - Aqu				ī	B10 - Drainage P	
l ä	A3 - Saturati			ī	B15 - Mar		•		ī	B16 - Moss Trim	
l H	B1 - Water M			H	C1 - Hydr	•	de Odor		H	C2 - Dry-Season	
					-	-					
I H	B2 - Sedime	•					spheres on Living Roots educed Iron			C8 - Crayfish Bur	
	B3 - Drift De	•							뇓		isible on Aerial Imagery
	B4 - Algal Ma			_			duction in Tilled Soils		닏	D1 - Stunted or S	
	B5 - Iron Dep				C7 - Thin				됟	D2 - Geomorphic	
		on Visible on Aerial Ima	0 ,		Other (Ex	plain in Re	marks)			D3 - Shallow Aqu	
	B8 - Sparsely	y Vegetated Concave S	Surface							D4 - Microtopogra	
									V	D5 - FAC-Neutral	l Test
Field Observat	ions:										
					<i>(</i> ;)						
Surface Water	Present?	☐ Yes ☑ No	Depth:		(in.)			Wetland Hy	drology Pr	esent?	Yes □ No
Water Table Pr	esent?	☐ Yes	Depth:		(in.)			Wolland Hy	arology i i		165 🗆 146
Saturation Pres	ent?	☐ Yes ☑ No	Depth:		(in.)						
Describe Record	ed Data (str	eam gauge, monitori	ng well, a	aerial pho	tos, previ	ous inspe	ctions), if available:		Aerial Image	ery Review	
				•	· •	•	•		_	•	
Remarks:			_	· · ·		<u> </u>				•	
Remarks:				<u> </u>		<u> </u>					
				·	· · ·	•	· ·			•	
Remarks: SOILS				·	, ,	·	,			•	
SOILS	÷	Virgil silt loam		·	, ,	·	eries Drainage Class:	somewhat po	oorly		
SOILS Map Unit Name		Virgil silt loam	fe	·	, ·	·	eries Drainage Class:	somewhat po	oorly		
SOILS Map Unit Name Taxonomy (Sub	group):	Udollic Endoaqual				S	•	·	•		
SOILS Map Unit Name Taxonomy (Sub	group):	Udollic Endoaqual				S	tion, D=Depletion, RM=Reduced Matrix, C	CS=Covered/Coated Sand	d Grains; Location: F		
SOILS Map Unit Name Taxonomy (Sub	group):	Udollic Endoaqual				S	tion, D=Depletion, RM=Reduced Matrix, C	·	d Grains; Location: F		Texture
SOILS Map Unit Name Taxonomy (Sub Profile Descrip	ogroup): otion (Describe to Bottom	Udollic Endoaqual the depth needed to document the in	dicator or confire	n the absence o	f indicators.) (Typ	Soe: C=Concentra	tion, D=Depletion, RM=Reduced Matrix, C	CS=Covered/Coated Sand	d Grains; Location: F	^p L=Pore Lining, M=Matrix)	
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth	group): otion (Describe to Bottom Depth	Udollic Endoaqual	dicator or confirm	m the absence o Matrix (Moist)	f indicators.) (Typ	Soe: C=Concentra	tion, D=Depletion, RM=Reduced Matrix, C Red Color (Moist)	CS=Covered/Coated Sand	d Grains; Location: F	PL=Pore Lining, M=Matrix) Location	(e.g. clay, sand, loam)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip	ogroup): otion (Describe to Bottom	Udollic Endoaqual the depth needed to document the in	dicator or confire	n the absence o	f indicators.) (Typ	See: C=Concentra	tion, D=Depletion, RM=Reduced Matrix, C Red Color (Moist) 4/2	cs=Covered/Coated Sand dox Features % 4	Type	PL=Pore Lining, M=Matrix) Location M	
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth	group): otion (Describe to Bottom Depth	Udollic Endoaqual the depth needed to document the in	dicator or confirm	m the absence o Matrix (Moist)	f indicators.) (Typ	Soe: C=Concentra	tion, D=Depletion, RM=Reduced Matrix, C Red Color (Moist)	CS=Covered/Coated Sand	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	group): otion (Describe to Bottom Depth 12	Horizon 1	Color 10YR	m the absence of Matrix (Moist) 2/1	f indicators.) (Type of the first of the fir	Some: C=Concentrate 10YR 5YR	tion, D=Depletion, RM=Reduced Matrix, C Red Color (Moist) 4/2 4/6	cs=Covered/Coated Sand dox Features % 4 2	Type D C	PL=Pore Lining, M=Matrix) Location M PL	(e.g. clay, sand, loam) sandy clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 12	group): otion (Describe to Bottom Depth 12 18	Horizon 1 2	Color 10YR 10YR	m the absence of Matrix (Moist) 2/1 4/2	f indicators.) (Type of the second of the se	Some: C=Concentrate 10YR 5YR 7.5YR	tion, D=Depletion, RM=Reduced Matrix, C Red Color (Moist) 4/2 4/6 4/6	cs=Covered/Coated Sand dox Features % 4 2 8	Type D C	Location M PL M	(e.g. clay, sand, loam)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	group): otion (Describe to Bottom Depth 12	Horizon 1	Color 10YR	m the absence of Matrix (Moist) 2/1	f indicators.) (Type of the first of the fir	Some: C=Concentrate 10YR 5YR	tion, D=Depletion, RM=Reduced Matrix, C Red Color (Moist) 4/2 4/6	cs=Covered/Coated Sand dox Features % 4 2	Type D C	PL=Pore Lining, M=Matrix) Location M PL	(e.g. clay, sand, loam) sandy clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 12	group): otion (Describe to Bottom Depth 12 18	Horizon 1 2	Color 10YR 10YR	m the absence of Matrix (Moist) 2/1 4/2	f indicators.) (Type of the second of the se	Some: C=Concentrate 10YR 5YR 7.5YR	tion, D=Depletion, RM=Reduced Matrix, C Red Color (Moist) 4/2 4/6 4/6	cs=Covered/Coated Sand dox Features % 4 2 8	Type D C	Location M PL M	(e.g. clay, sand, loam) sandy clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 12	pgroup): otion (Describe to Bottom Depth 12 18	Horizon 1 2	Color 10YR 10YR	m the absence of Matrix (Moist) 2/1 4/2	f indicators.) (Type	Some: C=Concentration 10YR 5YR 7.5YR	tion, D=Depletion, RM=Reduced Matrix, C Red Color (Moist) 4/2 4/6 4/6	cs=Covered/Coated Sand dox Features % 4 2 8	Type D C	Location M PL M	(e.g. clay, sand, loam) sandy clay loam sandy clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 12	pgroup): otion (Describe to Bottom Depth 12 18	Horizon 1 2	Color 10YR 10YR	m the absence of Matrix (Moist) 2/1 4/2	% 94 92	Some: C=Concentration 10YR 5YR 7.5YR	tion, D=Depletion, RM=Reduced Matrix, C Red Color (Moist) 4/2 4/6 4/6	dox Features % 4 2 8	Type D C C	LePore Lining, M=Matrix) Location M PL M	(e.g. clay, sand, loam) sandy clay loam sandy clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 12	pgroup): otion (Describe to Bottom Depth 12 18	Horizon 1 2	Color 10YR 10YR	m the absence of Matrix (Moist) 2/1 4/2	% 94 92	5 See: C=Concentral 10YR 5YR 7.5YR	tion, D=Depletion, RM=Reduced Matrix, CRed Color (Moist) 4/2 4/6 4/6 	CS=Covered/Coated Sand dox Features % 4 2 8	Type D C C	Location M PL M	(e.g. clay, sand, loam) sandy clay loam sandy clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 12	pgroup): otion (Describe to Bottom Depth 12 18	Horizon 1 2	Color 10YR 10YR	m the absence of Matrix (Moist) 2/1 4/2	% 94 92	5 Sobre: C=Concentrate 10YR 5YR 7.5YR	tion, D=Depletion, RM=Reduced Matrix, C Red Color (Moist) 4/2 4/6 4/6	dox Features % 4 2 8	Type D C C	LePore Lining, M=Matrix) Location M PL M	(e.g. clay, sand, loam) sandy clay loam sandy clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 12	pgroup): otion (Describe to Bottom Depth 12 18	Horizon 1 2	Color 10YR 10YR	m the absence of Matrix (Moist) 2/1 4/2	94 92 	10YR 5YR 7.5YR	tion, D=Depletion, RM=Reduced Matrix, CRecord Color (Moist) 4/2 4/6 4/6	CS=Covered/Coated Sand dox Features % 4 2 8	Type D C	Location M PL M	(e.g. clay, sand, loam) sandy clay loam sandy clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 12 NRCS Hydric	pgroup): otion (Describe to Bottom Depth 12 18 Soil Field In	Horizon 1 2 ndicators (check here	Color 10YR 10YR	m the absence of Matrix (Moist) 2/1 4/2 icators a	f indicators.) (Type of the second se	Some: C=Concentration 10YR 5YR 7.5YR esent self.	tion, D=Depletion, RM=Reduced Matrix, CRedColor (Moist) 4/2 4/6 4/6	cs=Covered/Coated Sand dox Features % 4 2 8 Indicator	Type D C C s for Proble	Location M PL M matic Soils 1	(e.g. clay, sand, loam) sandy clay loam sandy clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 12 NRCS Hydric	pgroup): tion (Describe to Bottom Depth 12 18 Soil Field In A1- Histosol	Horizon 1 2 ndicators (check here)	Color 10YR 10YR	m the absence of Matrix (Moist) 2/1 4/2 icators a	f indicators.) (Type % 94 92 re not pre S8 - Polyv	10YR 5YR 7.5YR esent ralue Below	tion, D=Depletion, RM=Reduced Matrix, CRed Color (Moist) 4/2 4/6 4/6): v Surface (LRR R, MLRA 149B)	CS=Covered/Coated Sand dox Features % 4 2 8 Indicator	Type D C C s for Proble	Location M PL M matic Soils ¹ Vuck (LRR K, L, MLRA	(e.g. clay, sand, loam) sandy clay loam sandy clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 12 NRCS Hydric	pgroup): otion (Describe to Bottom Depth 12 18 Soil Field In A1- Histosol A2 - Histic E	Horizon 1 2 ndicators (check he	Color 10YR 10YR	m the absence of Matrix (Moist) 2/1 4/2 icators a	f indicators.) (Type % 94 92 re not pre S8 - Polyv S9 - Thin	Some: C=Concentration 10YR 5YR 7.5YR esent □ value Below Dark Surfate	tion, D=Depletion, RM=Reduced Matrix, CRedColor (Moist) 4/2 4/6 4/6 Surface (LRR R, MLRA 149B) ace (LRR R, MLRA 149B)	CS=Covered/Coated Sand dox Features % 4 2 8 Indicator	Type D C C s for Proble A10 - 2 cm	Location M PL M matic Soils ¹ Muck (LRR K, L, MLRA A	(e.g. clay, sand, loam) sandy clay loam sandy clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 12 NRCS Hydric	pgroup): otion (Describe to Bottom Depth 12 18 Soil Field In A1- Histosol A2 - Histic E A3 - Black H	Horizon 1 2 ndicators (check here)	Color 10YR 10YR	m the absence of Matrix (Moist) 2/1 4/2 icators a	f indicators.) (Type % 94 92 re not presser S8 - Polyw S9 - Thin S11 - High	10YR 5YR 7.5YR esent value Below Dark Surfa	tion, D=Depletion, RM=Reduced Matrix, C Red Color (Moist) 4/2 4/6 4/6 Surface (LRR R, MLRA 149B) Sands	CS=Covered/Coated Sand dox Features % 4 2 8 Indicator	Type D C C s for Proble A10 - 2 cm A16 - Coast S3 - 5cm Mi	Location M PL M matic Soils Prairie Redox (LRF ucky Peat of Peat	(e.g. clay, sand, loam) sandy clay loam sandy clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 12 NRCS Hydric	Bottom Depth 12 18 Soil Field In A1- Histosol A2 - Histic E A3 - Black H A4 - Hydroge	Horizon Horizon 1 2 ndicators (check here)	Color 10YR 10YR	m the absence of Matrix (Moist) 2/1 4/2 icators a	f indicators.) (Type 1	10YR 5YR 7.5YR esent ralue Below Dark Surfan Chroma	tion, D=Depletion, RM=Reduced Matrix, CRed Color (Moist) 4/2 4/6 4/6 N Surface (LRR R, MLRA 149B) Sands Mineral (LRR K, L)	CS=Covered/Coated Sand dox Features % 4 2 8 Indicator	Type D C C s for Proble A10 - 2 cm M A16 - Coast S3 - 5cm M S7 - Dark S	Location M PL M matic Soils ¹ Vluck (LRR K, L, MLRA A Prairie Redox (LRR LCKY Peat of Peat urface (LRR K, L, M)	(e.g. clay, sand, loam) sandy clay loam sandy clay loam 149B) R K, L, R) (LRR K, L, R)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 12 NRCS Hydric	Bottom Depth 12 18 Soil Field In A1- Histosol A2 - Histic E A3 - Black H A4 - Hydroge A5 - Stratifie	Horizon Horizon 1 2 ndicators (check here) pipedon istic en Sulfide d Layers	Color 10YR 10YR ere if indi	m the absence of Matrix (Moist) 2/1 4/2 icators a	f indicators.) (Type % 94 92 re not pressent S8 - Polyw S9 - Thin S11 - High F1 - Loam F2 - Loam	10YR 5YR 7.5YR esent value Below Dark Surfa	tion, D=Depletion, RM=Reduced Matrix, C Red Color (Moist) 4/2 4/6 4/6): w Surface (LRR R, MLRA 149B) RCE (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix	CS=Covered/Coated Sand dox Features % 4 2 8 Indicator	Type D C C s for Proble A10 - 2 cm A16 - Coast S3 - 5cm Mi S7 - Dark S S8 - Polyval	Location M PL M matic Soils Prairie Redox (LRR LJCKY Peat of Peat curface (LRR K, L, M) ue Below Surface	(e.g. clay, sand, loam) sandy clay loam sandy clay loam 149B) R K, L, R) (LRR K, L, R)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 12 NRCS Hydric	Bottom Depth 12 18 Soil Field II A1- Histosol A2 - Histic E A3 - Black H A4 - Hydroge A5 - Stratified A11 - Deplete	Horizon Horizon 1 2 ndicators (check here) pipedon istic en Sulfide d Layers ed Below Dark Surface	Color 10YR 10YR ere if indi	m the absence of Matrix (Moist) 2/1 4/2 icators a	f indicators.) (Type 1	10YR 5YR 7.5YR esent ralue Below Dark Surfan Chroma by Mucky May Gleyed eted Matrix	tion, D=Depletion, RM=Reduced Matrix, C Red Color (Moist) 4/2 4/6 4/6): w Surface (LRR R, MLRA 149B) RCE (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix	CS=Covered/Coated Sand dox Features % 4 2 8 Indicator	Type D C C s for Proble A10 - 2 cm I A16 - Coast S3 - 5cm Mt S7 - Dark S S8 - Polyval S9 - Thin Da	Location M PL M matic Soils Prairie Redox (LRR K, L, MLRA Prairie Redox (LRR K, L, M) ue Below Surface ark Surface (LRR K, L, M)	(e.g. clay, sand, loam) sandy clay loam sandy 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 12 NRCS Hydric	Bottom Depth 12 18 Soil Field In A1- Histosol A2 - Histic E A3 - Black H A4 - Hydroge A5 - Stratified A11 - Deplete A12 - Thick I	Horizon Horizon 1 2 ndicators (check here) pipedon istic en Sulfide d Layers ed Below Dark Surface Dark Surface	Color 10YR 10YR ere if indi	m the absence of Matrix (Moist) 2/1 4/2 icators a	f indicators.) (Type 1	se: C=Concentra 10YR 5YR 7.5YR esent □ value Below Dark Surfa n Chroma ny Mucky M ny Gleyed eted Matrix x Dark Su	tion, D=Depletion, RM=Reduced Matrix, CRed Color (Moist) 4/2 4/6 4/6): v Surface (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix crface	CS=Covered/Coated Sand dox Features % 4 2 8 Indicator	Type D C C s for Proble A10 - 2 cm I A16 - Coast S3 - 5 cm Mi S7 - Dark Si S8 - Polyval S9 - Thin Da F12 - Iron-M	Location M PL M Muck (LRR K, L, MLRA A Prairie Redox (LRR Lucky Peat of Peat	(e.g. clay, sand, loam) sandy clay loam sandy 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 12 NRCS Hydric	Bottom Depth 12 18 Soil Field II A1- Histosol A2 - Histic E A3 - Black H A4 - Hydroge A5 - Stratified A11 - Deplete	Horizon Horizon 1 2 ndicators (check here) pipedon istic en Sulfide d Layers ed Below Dark Surface Dark Surface	Color 10YR 10YR ere if indi	m the absence of Matrix (Moist) 2/1 4/2 icators a	f indicators.) (Type 1	se: C=Concentra 10YR 5YR 7.5YR esent □ value Below Dark Surfa n Chroma ny Mucky M ny Gleyed eted Matrix x Dark Su	tion, D=Depletion, RM=Reduced Matrix, CRed Color (Moist) 4/2 4/6 4/6): v Surface (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix crface	CS=Covered/Coated Sand dox Features % 4 2 8 Indicator	Type D C C s for Proble A10 - 2 cm I A16 - Coast S3 - 5 cm Mi S7 - Dark Si S8 - Polyval S9 - Thin Da F12 - Iron-M	Location M PL M matic Soils Prairie Redox (LRR K, L, MLRA Prairie Redox (LRR K, L, M) ue Below Surface ark Surface (LRR K, L, M)	(e.g. clay, sand, loam) sandy clay loam sandy 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 12 NRCS Hydric	Bottom Depth 12 18 Soil Field Ir A1- Histosol A2 - Histic E A3 - Black H A4 - Hydroge A5 - Stratified A11 - Deplete A12 - Thick I S1 - Sandy N	Horizon Horizon 1 2 ndicators (check here) pipedon istic en Sulfide d Layers ed Below Dark Surface Dark Surface	Color 10YR 10YR ere if indi	m the absence of Matrix (Moist) 2/1 4/2 icators a	f indicators.) (Type 1	10YR 5YR 7.5YR esent esent on Chroma ny Mucky M ny Gleyed eted Matrix x Dark Sur eted Dark	tion, D=Depletion, RM=Reduced Matrix, C Red Color (Moist) 4/2 4/6 4/6): v Surface (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix crface Surface	CS=Covered/Coated Sand dox Features % 4 2 8 Indicator	Type D C C s for Proble A10 - 2 cm A16 - Coast S3 - 5cm Mi S7 - Dark Si S8 - Polyval S9 - Thin Da F12 - Iron-M	Location M PL M Muck (LRR K, L, MLRA A Prairie Redox (LRR Lucky Peat of Peat	(e.g. clay, sand, loam) sandy clay loam sandy 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 12 NRCS Hydric	Bottom Depth 12 18 Soil Field Ir A1- Histosol A2 - Histic E A3 - Black H A4 - Hydroge A5 - Stratified A11 - Deplete A12 - Thick I S1 - Sandy N	Horizon Horizon 1 2 ndicators (check here) pipedon istic en Sulfide d Layers ed Below Dark Surface Dark Surface Muck Mineral Gleyed Matrix	Color 10YR 10YR ere if indi	m the absence of Matrix (Moist) 2/1 4/2 icators a	f indicators.) (Type % 94 92 re not presser Polyw S9 - Thin S11 - High F1 - Loam F2 - Loam F3 - Deple F6 - Redo F7 - Deple F7 - Deple	10YR 5YR 7.5YR esent esent on Chroma ny Mucky M ny Gleyed eted Matrix x Dark Sur eted Dark	tion, D=Depletion, RM=Reduced Matrix, C Red Color (Moist) 4/2 4/6 4/6): v Surface (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix crface Surface	CS=Covered/Coated Sand dox Features % 4 2 8 Indicator	Type D 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 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 ont Floodplain Soi	(e.g. clay, sand, loam) sandy clay loam sandy clay loam 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 12 NRCS Hydric	Bottom Depth 12 18 Soil Field In A1- Histosol A2 - Histic E A3 - Black H A4 - Hydroge A5 - Stratified A12 - Thick I S1 - Sandy I S4 - Sandy I	Horizon 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 indi	m the absence of Matrix (Moist) 2/1 4/2 icators a	f indicators.) (Type % 94 92 re not presser Polyw S9 - Thin S11 - High F1 - Loam F2 - Loam F3 - Deple F6 - Redo F7 - Deple F7 - Deple	10YR 5YR 7.5YR esent esent on Chroma ny Mucky M ny Gleyed eted Matrix x Dark Sur eted Dark	tion, D=Depletion, RM=Reduced Matrix, C Red Color (Moist) 4/2 4/6 4/6): v Surface (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix crface Surface	cs=Covered/Coated Sand dox Features % 4 2 8 Indicator	Type D 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 F19 - Piedm F21 - Red P TA6 - Mesic	Location M PL M matic Soils Muck (LRR K, L, MLRA Prairie Redox (LRR Lucky Peat of Peat Lurface (LRR K, L, M) ue Below Surface Mark Surface (LRR K, L Langanese Masses Langanese Masses Langanese Material	(e.g. clay, sand, loam) sandy clay loam sandy clay loam 149B) R K, L, R) (LRR 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 12 NRCS Hydric	Bottom Depth 12 18 Soil Field II A1- Histosol A2 - Histic E A3 - Black H A4 - Hydroge A5 - Stratifiee A11 - Deplete A12 - Thick II S1 - Sandy II S4 - Sandy II S5 - Sandy II S6 - Stripped	Horizon Horizon 1 2 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 ere if indi	m the absence of Matrix (Moist) 2/1 4/2 icators a	f indicators.) (Type % 94 92 re not presser Polyw S9 - Thin S11 - High F1 - Loam F2 - Loam F3 - Deple F6 - Redo F7 - Deple F7 - Deple	10YR 5YR 7.5YR esent esent on Chroma ny Mucky M ny Gleyed eted Matrix x Dark Sur eted Dark	tion, D=Depletion, RM=Reduced Matrix, C Red Color (Moist) 4/2 4/6 4/6): v Surface (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix crface Surface	dox Features % 4 2 8 Indicator	Type D C C 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 PL M matic Soils M Vick (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 Soi arent Material Spodic (MLRA 144A, 4) Shallow Dark Sur	(e.g. clay, sand, loam) sandy clay loam sandy clay loam 149B) R K, L, R) (LRR 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 12 NRCS Hydric	Bottom Depth 12 18 Soil Field II A1- Histosol A2 - Histic E A3 - Black H A4 - Hydroge A5 - Stratifiee A11 - Deplete A12 - Thick II S1 - Sandy II S4 - Sandy II S5 - Sandy II S6 - Stripped	Horizon 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 indi	m the absence of Matrix (Moist) 2/1 4/2 icators a	f indicators.) (Type % 94 92 re not presser Polyw S9 - Thin S11 - High F1 - Loam F2 - Loam F3 - Deple F6 - Redo F7 - Deple F7 - Deple	10YR 5YR 7.5YR esent esent on Chroma ny Mucky M ny Gleyed eted Matrix x Dark Sur eted Dark	tion, D=Depletion, RM=Reduced Matrix, C Red Color (Moist) 4/2 4/6 4/6): v Surface (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix crface Surface	cs=Covered/Coated Sand dox Features % 4 2 8 Indicator	Type D C C C	Location M PL M matic Soils M Prairie Redox (LRR L, MLRA Prairie Redox (LRR K, L, MLRA Prairie Redox (LRR L) LR LA PRAIRIE REDOX (LRR K, L) LA	(e.g. clay, sand, loam) sandy clay loam sandy 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 12 NRCS Hydric	Bottom Depth 12 18 Soil Field II A1- Histosol A2 - Histic E A3 - Black H A4 - Hydroge A5 - Stratifiee A11 - Deplete A12 - Thick II S1 - Sandy II S4 - Sandy II S5 - Sandy II S6 - Stripped	Horizon Horizon 1 2 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 ere if indi	m the absence of Matrix (Moist) 2/1 4/2 icators a	f indicators.) (Type % 94 92 re not presser Polyw S9 - Thin S11 - High F1 - Loam F2 - Loam F3 - Deple F6 - Redo F7 - Deple F7 - Deple	10YR 5YR 7.5YR esent esent on Chroma ny Mucky M ny Gleyed eted Matrix x Dark Sur eted Dark	tion, D=Depletion, RM=Reduced Matrix, C Red Color (Moist) 4/2 4/6 4/6): v Surface (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix frace Surface Surface	cs=Covered/Coated Sand dox Features % 4 2 8 Indicator	Type D C C C	Location M PL M matic Soils Muck (LRR K, L, MLRA A) Prairie Redox (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 Suriain in Remarks)	(e.g. clay, sand, loam) sandy clay loam sandy 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 12 NRCS Hydric	Bottom Depth 12 18 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 S5 - Sandy I S6 - Stripped S7 - Dark Su	Horizon Horizon 1 2	Color 10YR 10YR ere if indi	m the absence of Matrix (Moist) 2/1 4/2 icators a	f indicators.) (Type 1	10YR 5YR 7.5YR esent esent on Chroma ny Mucky M ny Gleyed eted Matrix x Dark Sur eted Dark	tion, D=Depletion, RM=Reduced Matrix, C Red Color (Moist) 4/2 4/6 4/6): v Surface (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix frace Surface Surface	CS=Covered/Coated Sand dox Features % 4 2 8 Indicator Indicator	Type D C C C	Location M PL M Muck (LRR K, L, MLRA A 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 arent Material Spodic (MLRA 144A, A Shallow Dark Sur ain in Remarks) ation and wetland hydrology	(e.g. clay, sand, loam) sandy clay loam sandy clay loam 149B) R K, L, R) (LRR K, L, R) (LRR K, L, R) ils (MLRA 149B) face must be present, unless
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 12 NRCS Hydric	Bottom Depth 12 18 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 S5 - Sandy I S6 - Stripped S7 - Dark Su	Horizon Horizon 1 2 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 ere if indi	m the absence of Matrix (Moist) 2/1 4/2 icators a	f indicators.) (Type % 94 92 re not presser Polyw S9 - Thin S11 - High F1 - Loam F2 - Loam F3 - Deple F6 - Redo F7 - Deple	10YR 5YR 7.5YR esent esent on Chroma ny Mucky M ny Gleyed eted Matrix x Dark Sur eted Dark	tion, D=Depletion, RM=Reduced Matrix, C Red Color (Moist) 4/2 4/6 4/6): v Surface (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix frace Surface Surface	cs=Covered/Coated Sand dox Features % 4 2 8 Indicator	Type D C C C	Location M PL M matic Soils Muck (LRR K, L, MLRA A) Prairie Redox (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 Suriain in Remarks)	(e.g. clay, sand, loam) sandy clay loam sandy 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 12 NRCS Hydric	Bottom Depth 12 18 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	Horizon Horizon 1 2 ndicators (check here) pipedon istic en Sulfide d Layers ed Below Dark Surface Dark Surface Muck Mineral Gleyed Matrix Redox d Matrix urface (LRR R, MLRA 149B) Gravel	Color 10YR 10YR ere if indi	m the absence of Matrix (Moist) 2/1 4/2 icators a	f indicators.) (Type % 94 92 re not presser Polyton \$1 - High F1 - Loam F2 - Loam F3 - Deplete F6 - Redo F7 - Deplete F8 - Redo F7 - Deplete F8 - Redo F8 - Re	10YR 5YR 7.5YR esent esent calue Below Dark Surfan Chroma by Mucky M by Gleyed eted Matrix x Dark Su eted Dark x Dark Su eted Dark x Depress	tion, D=Depletion, RM=Reduced Matrix, C Red Color (Moist) 4/2 4/6 4/6): w Surface (LRR R, MLRA 149B) ACE (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Watrix frace Surface Surface ions	dox Features % 4 2 8 Indicator In	Type D C C C s for Proble A10 - 2 cm 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 Other (Explain of hydrophytic veget or problematic.	Location M 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 ont Floodplain Soil arent Material Spodic (MLRA 144A, A Shallow Dark Sur ain in Remarks) ation and wetland hydrology	(e.g. clay, sand, loam) sandy clay loam sandy clay loam 149B) R K, L, R) (LRR K, L, R) (LRR K, L, R) ils (MLRA 149B) face must be present, unless



WETLAND DETERMINATION DATA FORM

Northeast and Northcentral Region

Project/Site: North Mendota Energy and Technology Park Sample Point: P8 Wetland ID: W-1 **VEGETATION** (Species identified in all uppercase are non-native species.) Tree Stratum (Plot size: 10 meter radius) **Dominance Test Worksheet** Species Name Ind.Status % Cover Dominant 1. 2. Number of Dominant Species that are OBL, FACW, or FAC: 2 (A) 3. 4. Total Number of Dominant Species Across All Strata: 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. x 1 =OBL spp. 0 Total Cover = 0 x 2 =FACW spp. FAC spp. x 3 =63 x 4 =Sapling/Shrub Stratum (Plot size: 5 meter radius) 0 FACU spp. 0 1. x = 5UPL spp. 0 2. 3. 103 --Total (B) --4. 5. --Prevalence Index = B/A = 2.512 ----6. --7. --8. **Hydrophytic Vegetation Indicators:** 9. ☐ Yes ✓ No Rapid Test for Hydrophytic Vegetation 10. Yes □ No Dominance Test is > 50% Total Cover = Yes □ No Prevalence Index is ≤ 3.0 * ☐ Yes ☑ No Morphological Adaptations (Explain) * Herb Stratum (Plot size: 2 meter radius) ☐ Yes ☑ No Problem Hydrophytic Vegetation (Explain) * FAC 20 Υ 1. Juncus tenuis * Indicators of hydric soil and wetland hydrology must be 2. PHALARIS ARUNDINACEA 15 Υ **FACW** present, unless disturbed or problematic. 5 3. Salix interior Ν **FACW** RUMEX CRISPUS **Definitions of Vegetation Strata:** 4. 1 Ν FAC 5. Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast 6 height (DBH), regardless of height. 8. Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft. 9. 10. 11. Herb - All herbaceous (non-woody) plants, regardless of size, and 12. woody plants less than 3.28 ft. tall. 13. --14. Woody Vines - All woody vines greater than 3.28 ft. in height. 15. --Total Cover = 41 Woody Vine Stratum (Plot size: 10 meter radius) 1. 2. 3. **Hydrophytic Vegetation Present** ✓ Yes ☐ No 4. 5. Total Cover = 0 This portion of the field was not cropped in 2014. However, area appears to have been plowed under in the fall of 2014. Large clumps of plant Remarks:

Additional Remarks:

Sample point exhibits wetland characteristics despite recent disturbance/plowing of vegetation and disturbed/fill soil materials. Sample point location also correlates with area commonly exhibiting wetland signatures in an aerial imagery review.

materials visible in tilled soils, new spring growth also observed.



Project/Site:	North Mend	dota Energy and Te	chnology	/ Park			Stantec Project #:	193703573		Date:	04/17/15
Applicant:		ch Development & 0	Construc							County:	Dane
Investigator #1:				Investi	gator #2:		//////////////////////////////////////			State:	Wisconsin
Soil Unit:	Virgil silt lo	am			al Daliate		/I/WWI Classification:			Wetland ID:	W-1
Landform:	Backslope 0-2	Latitude:	NI/A		al Relief:			Datum:	NI/A	Sample Point:	P9
Slope (%):		ditions on the site ty			ongitude:		ain in romarke)	✓ Yes □		Community ID: Section:	Ag Field 22
		or Hydrology □ sig				(II IIO, expir	Are normal circumsta			Township:	8N
•		or Hydrology ☐ sig	-				□ Yes	ineee preeen ⊡No		Range:	9 Dir: E
SUMMARY OF		or right oragy in the								, tanger	
Hydrophytic Ve		sent?		☐ Yes	✓ No			Hydric Soils	Present?		☐ Yes ☑ No
Wetland Hydrol	~			☐ Yes				Is This Samp	pling Point	Within A Wetlar	
Remarks:	Based on a	WETS analysis, co	onditions	were no	ormal; 3.4	2 inches	of rain were received	in the area fr	om April 1	- April 17. Sam	ple point located in
	active ag fi	eld; soils disturbed	from pas	st sewer	infrastruc	ture inst	allation.				
HYDROLOGY											
Wetland Hydro	ology Indic	ators (Check here	if indicate	ors are r	ot preser	nt ☑):					
Primary:									Secondary:		
	A1 - Surface A2 - High Wa				B9 - Wate B13 - Aqu					B6 - Surface Soil B10 - Drainage Pa	
	A3 - Saturation				B15 - Aqu					B16 - Moss Trim	
	B1 - Water M				C1 - Hydr	ogen Sulfi	de Odor			C2 - Dry-Season	
	B2 - Sedimer	•					spheres on Living Roots educed Iron			C8 - Crayfish Bur	
l	B3 - Drift Dep B4 - Algal Ma						eduction in Tilled Soils			D1 - Stunted or S	isible on Aerial Imagery tressed Plants
	B5 - Iron Dep				C7 - Thin					D2 - Geomorphic	Position
		on Visible on Aerial Ima	0 ,		Other (Ex	plain in Re	emarks)			D3 - Shallow Aqui	
 	bo - Sparsely	/ Vegetated Concave S	Surface							D4 - Microtopogra D5 - FAC-Neutral	
Field Observat	ions:								_		
Surface Water		☐ Yes ☑ No	Depth:		(in.)						
Water Table Pr		☐ Yes ☑ No	Depth:		(in.)			Wetland Hy	drology Pr	resent?	Yes ☑ No
Saturation Pres		☐ Yes ☑ No	Depth:		(in.)						
Describe Record	led Data (str	eam gauge, monitori	na well a	erial nho		ous inspe	ctions) if available:		Aerial Image	ery Review	
Remarks:	ou Duta (ott	gaage, memer		201101 2110	, , , , , , , , , , , , , , , , , , ,		- available:			.,	
Remarks.											
SOILS Map Unit Name	y:	Virgil silt loam				S	eries Drainage Class:	somewhat po	oorly		
SOILS		Virgil silt loam Udollic Endoaqual	fs			S	eries Drainage Class:	somewhat po	oorly		
SOILS Map Unit Name Taxonomy (Sub	group):	Udollic Endoaqual		n the absence c	of indicators.) (Ty		eries Drainage Class: ation, D=Depletion, RM=Reduced Matrix, C	·	•	PL=Pore Lining, M=Matrix)	
SOILS Map Unit Name Taxonomy (Sub Profile Descrip	group):	Udollic Endoaqual the depth needed to document the in	dicator or confire	Matrix	_		ation, D=Depletion, RM=Reduced Matrix, C	CS=Covered/Coated Sand	d Grains; Location: F		Texture
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth	ogroup): otion (Describe to Bottom Depth	Udollic Endoaqual	dicator or confirm	Matrix (Moist)	%		ation, D=Depletion, RM=Reduced Matrix, C	CS=Covered/Coated Sand	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	ogroup): otion (Describe to Bottom Depth 8	Udollic Endoaqual the depth needed to document the in Horizon 1	Color 10YR	Matrix (Moist) 3/2	% 100		ation, D=Depletion, RM=Reduced Matrix, C	CS=Covered/Coated Sand	d Grains; Location: F		(e.g. clay, sand, loam) silt loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth	ogroup): otion (Describe to Bottom Depth	Udollic Endoaqual the depth needed to document the in	dicator or confirm	Matrix (Moist)	%	pe: C=Concentra	Reduced Matrix, C Red Color (Moist)	CS=Covered/Coated Sand	d Grains; Location: F	Location	(e.g. clay, sand, loam)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8	pgroup): Dition (Describe to Bottom Depth 8 19	Udollic Endoaqual the depth needed to document the in Horizon 1 2	Color 10YR 10YR	Matrix (Moist) 3/2 5/4 	% 100 100 	pe: C=Concentra	Color (Moist)	cs=Covered/Coated Sand	d Grains; Location: F	Location 	(e.g. clay, sand, loam) silt loam sandy clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8	pgroup): otion (Describe to Bottom Depth 8 19	Udollic Endoaqual the depth needed to document the in Horizon 1 2	Color 10YR 10YR	Matrix (Moist) 3/2 5/4 	% 100 100 	pe: C=Concentra	Color (Moist)	cs=Covered/Coated Sand	Type	Location	(e.g. clay, sand, loam) silt loam sandy clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8	pgroup): otion (Describe to Bottom Depth 8 19	Udollic Endoaqual the depth needed to document the in Horizon 1 2	Color 10YR 10YR	Matrix (Moist) 3/2 5/4 	% 100 100 	pe: C=Concentra	Color (Moist)	dox Features %	d Grains; Location: F	Location	(e.g. clay, sand, loam) silt loam sandy clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8	bgroup): otion (Describe to Bottom Depth 8 19	Horizon 1 2	Color 10YR 10YR	Matrix (Moist) 3/2 5/4 	% 100 100 	pe: C=Concentra	Color (Moist)	dox Features %	d Grains; Location: F	Location	(e.g. clay, sand, loam) silt loam sandy clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8	bgroup): otion (Describe to Bottom Depth 8 19	Udollic Endoaqual the depth needed to document the in Horizon 1 2	Color 10YR 10YR	Matrix (Moist) 3/2 5/4 	% 100 100 	e: C=Concentra	Color (Moist)	CS=Covered/Coated Sand	d Grains; Location: F	Location	(e.g. clay, sand, loam) silt loam sandy clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8	bgroup): otion (Describe to Bottom Depth 8 19	Horizon 1 2	Color 10YR 10YR	Matrix (Moist) 3/2 5/4	% 100 100 	pe: C=Concentra	Color (Moist)	CS=Covered/Coated Sand	d Grains; Location: F	Location	(e.g. clay, sand, loam) silt loam sandy clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 NRCS Hydric	Bottom Depth 8 19 Soil Field Ir	Horizon 1 2	Color 10YR 10YR	Matrix (Moist) 3/2 5/4 icators a	% 100 100 re not pre	e: C=Concentra	Color (Moist)	cs=Covered/Coated Sand dox Features % Indicator	d Grains; Location: F	Location	(e.g. clay, sand, loam) silt loam sandy clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 NRCS Hydric	Bottom Depth 8 19 Soil Field In A1- Histosol A2 - Histic Ep	Horizon 1 2 ndicators (check head	Color 10YR 10YR	Matrix (Moist) 3/2 5/4 icators a	% 100 100	e: C=Concentra	ation, D=Depletion, RM=Reduced Matrix, CRed Color (Moist)	CS=Covered/Coated Sand dox Features % Indicator	Type	Location	(e.g. clay, sand, loam) silt loam sandy clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 NRCS Hydric	Bottom Depth 8 19 Soil Field Ir A1- Histosol A2 - Histic Ep A3 - Black Hi	Horizon 1 2 ndicators (check here)	Color 10YR 10YR	Matrix (Moist) 3/2 5/4 icators a	% 100 100 sre not pre S8 - Polys S9 - Thin S11 - High	esent value Belo Dark Surfa	Color (Moist)	CS=Covered/Coated Sand dox Features % Indicator	Type	Location	(e.g. clay, sand, loam) silt loam sandy clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 NRCS Hydric	Bottom Depth 8 19 Soil Field Ir A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge	Horizon 1 2 ndicators (check here)	Color 10YR 10YR	Matrix (Moist) 3/2 5/4 icators a	% 100 100 se not pre S8 - Poly S9 - Thin S11 - High F1 - Loan	e: C=Concentra esent value Belo Dark Surfa n Chroma	ation, D=Depletion, RM=Reduced Matrix, C Red Color (Moist)	CS=Covered/Coated Sand dox Features % Indicator	Type	Location	(e.g. clay, sand, loam) silt loam sandy clay loam (LRR K, L, R)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 NRCS Hydric	Bottom Depth 8 19 Soil Field Ir A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified	Horizon 1 2 ndicators (check here)	Color 10YR 10YR ere if ind	Matrix (Moist) 3/2 5/4 icators a	% 100 100 sre not pre S8 - Polys S9 - Thin S11 - High	e: C=Concentra esent value Belo Dark Surfa n Chroma ny Mucky I	ation, D=Depletion, RM=Reduced Matrix, CRed Color (Moist)	CS=Covered/Coated Sand dox Features % Indicator	Type	Location	(e.g. clay, sand, loam) silt loam sandy 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 19 Soil Field Ir A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A11 - Deplete A12 - Thick I	Horizon 1 2	Color 10YR 10YR ere if ind	Matrix (Moist) 3/2 5/4 icators a	% 100 100	esent	ation, D=Depletion, RM=Reduced Matrix, C Red Color (Moist)	CS=Covered/Coated Sand dox Features % Indicator	Type	Location	(e.g. clay, sand, loam) silt loam sandy 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 19 Soil Field Ir A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A11 - Deplete A12 - Thick E S1 - Sandy M	Horizon 1 2 ndicators (check here) bipedon istic en Sulfide d Layers ed Below Dark Surface Dark Surface Muck Mineral	Color 10YR 10YR ere if ind	Matrix (Moist) 3/2 5/4 icators a	% 100 100	e: C=Concentra esent calue Belo Dark Surfa n Chroma ny Mucky I ny Gleyed eted Matrix ox Dark Su eted Dark	ation, D=Depletion, RM=Reduced Matrix, C Red Color (Moist)	CS=Covered/Coated Sand dox Features % Indicator	Type	Location	(e.g. clay, sand, loam) silt loam sandy 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 19 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A1- Deplete A12 - Thick E S1 - Sandy M S4 - Sandy M	Horizon 1 2	Color 10YR 10YR ere if ind	Matrix (Moist) 3/2 5/4 icators a	% 100 100	e: C=Concentra esent calue Belo Dark Surfa n Chroma ny Mucky I ny Gleyed eted Matrix ox Dark Su eted Dark	ation, D=Depletion, RM=Reduced Matrix, C Red Color (Moist)	cs=Covered/Coated Sand dox Features % Indicator	Type	Location	(e.g. clay, sand, loam) silt loam sandy clay loam (LRR K, L, R)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 NRCS Hydric	Bottom Depth 8 19 Soil Field Ir A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A11 - Deplete A12 - Thick E S1 - Sandy M	Horizon 1 2	Color 10YR 10YR ere if ind	Matrix (Moist) 3/2 5/4 icators a	% 100 100	e: C=Concentra esent calue Belo Dark Surfa n Chroma ny Mucky I ny Gleyed eted Matrix ox Dark Su eted Dark	ation, D=Depletion, RM=Reduced Matrix, C Red Color (Moist)	cs=Covered/Coated Sand dox Features % Indicator	Type	Location	(e.g. clay, sand, loam) silt loam sandy clay loam (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)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 NRCS Hydric	Bottom Depth 8 19 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 R S6 - Stripped	Horizon 1 2	Color 10YR 10YR ere if ind	Matrix (Moist) 3/2 5/4 icators a	% 100 100	e: C=Concentra esent calue Belo Dark Surfa n Chroma ny Mucky I ny Gleyed eted Matrix ox Dark Su eted Dark	ation, D=Depletion, RM=Reduced Matrix, C Red Color (Moist)	cs=Covered/Coated Sand dox Features % Indicator	Type	Location	(e.g. clay, sand, loam) silt loam sandy clay loam (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 NRCS Hydric	Bottom Depth 8 19 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 R S6 - Stripped	Horizon 1 2	Color 10YR 10YR ere if ind	Matrix (Moist) 3/2 5/4 icators a	% 100 100	e: C=Concentra esent calue Belo Dark Surfa n Chroma ny Mucky I ny Gleyed eted Matrix ox Dark Su eted Dark	ation, D=Depletion, RM=Reduced Matrix, C Red Color (Moist)	cs=Covered/Coated Sand dox Features % Indicator Indicator Indicator Indicator	Type	Location	(e.g. clay, sand, loam) silt loam sandy clay loam (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 NRCS Hydric	Bottom Depth 8 19 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 S4 - Sandy M S4 - Sandy M S5 - Sandy R S6 - Stripped S7 - Dark Su	Horizon 1 2	Color 10YR 10YR ere if ind	Matrix (Moist) 3/2 5/4 icators a	% 100 100	e: C=Concentra esent calue Belo Dark Surfa n Chroma ny Mucky I ny Gleyed eted Matrix ox Dark Su eted Dark	ation, D=Depletion, RM=Reduced Matrix, C Red Color (Moist)	cs=Covered/Coated Sand dox Features % Indicator Indicator Indicator Indicator	Type	Location	(e.g. clay, sand, loam) silt loam sandy clay loam (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	Bottom Depth 8 19 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 S4 - Sandy M S5 - Sandy R S6 - Stripped S7 - Dark Su	Horizon 1 2	Color 10YR 10YR ere if ind	Matrix (Moist) 3/2 5/4 icators a	% 100 100	e: C=Concentra	ation, D=Depletion, RM=Reduced Matrix, C Red Color (Moist)	dox Features % Indicator Ind	Type	Location	(e.g. clay, sand, loam) silt loam sandy clay loam 149B) R K, L, R) (LRR K, L, R) (LRR K, L, R) ils (MLRA 149B) face must be present, unless

Sample Point: P9



Project/Site:

North Mendota Energy and Technology Park

WETLAND DETERMINATION DATA FORM

Wetland ID: W-1

Northeast and Northcentral Region

(Species identified in all uppercase are non-native species.) Tree Stratum (Plot size: 10 meter radius) **Dominance Test Worksheet** Species Name Ind.Status % Cover Dominant Number of Dominant Species that are OBL, FACW, or FAC: 0 (A) Total Number of Dominant Species Across All Strata: Percent of Dominant Species That Are OBL, FACW, or FAC: 0% Prevalence Index Worksheet Total % Cover of: Sapling/Shrub Stratum (Plot size: 5 meter radius) Prevalence Index = B/A = Hydrophytic Vegetation Indicators: Rapid Test for Hydrophytic Vegetation Dominance Test is > 50% Prevalence Index is ≤ 3.0 * Total Cover = Morphological Adaptations (Explain) * Herb Stratum (Plot size: 2 meter radius) Problem Hydrophytic Vegetation (Explain) * Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Definitions of Vegetation Strata: Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft. Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft. tall. Woody Vines - All woody vines greater than 3.28 ft. in height. Woody Vine Stratum (Plot size: 10 meter radius) Total Cover = Sample point located in active ag field planted to corn in 2014 - no evidence of stunting/stress observed in stubble. Very few weedy species. Remarks:

Additional Remarks:

Sample point located in ag field at slightly higher topography that P8. While associated with an area that appeared to exhibit wetland signatures, the lack of observable hydrology indicators, hydric soil, and hydrophytic weedy species supports the upland determination.



Project/Site:	North Mend	dota Energy and Te	chnology	y Park			Stantec Project #:	193703573		Date:	04/17/15
Applicant:		ch Development & 0	Construc							County:	Dane
Investigator #1:				Investi	igator #2:					State:	Wisconsin
Soil Unit:	Virgil silt lo	am		امما	al Daliate		I/WWI Classification:			Wetland ID:	n/a
Landform:	Summit 2-4	Latitude:	NI/A		al Relief:			Datum:	NI/A	Sample Point:	P10
Slope (%):		ditions on the site ty			ongitude:		ain in romarke)	✓ Yes □		Community ID: Section:	Ag Field 22
		or Hydrology □ sig				(II IIO, EXPI	Are normal circumsta			Township:	8N
•		or Hydrology ☐ na	-				□ Yes	⊠No	•	Range:	9 Dir: E
SUMMARY OF		or right oregy in the	J. P.							, talliger	
Hydrophytic Ve		sent?		□ Yes	. ☑ No			Hydric Soils	Present?		☐ Yes ☑ No
Wetland Hydrol	_			☐ Yes						Within A Wetlar	
Remarks:	Based on a	a WETS analysis, c	onditions	were no	ormal; 3.4	2 inches	of rain were received	in the area fr	om April 1	- April 17. Sam	ple point located within
	active ag fi	eld.									
HYDROLOGY											
Wetland Hydro	ology Indic	ators (Check here	if indicat	ors are r	not preser	nt ☑):					
Primary:		,					_		Secondary:		
l ::	A1 - Surface A2 - High Wa				B9 - Wate B13 - Aqu					B6 - Surface Soil B10 - Drainage Pa	
	A3 - Saturation				B15 - Aqu					B16 - Moss Trim	
	B1 - Water M	Marks			C1 - Hydr	ogen Sulfi	de Odor			C2 - Dry-Season	Water Table
	B2 - Sedimer	•					spheres on Living Roots			C8 - Crayfish Bur	
l H	B3 - Drift De _l B4 - Algal Ma						educed Iron duction in Tilled Soils		H	D1 - Stunted or S	isible on Aerial Imagery tressed Plants
	B5 - Iron Dep			_	C7 - Thin					D2 - Geomorphic	
		on Visible on Aerial Im	0 ,		Other (Ex	plain in Re	marks)			D3 - Shallow Aqui	
	B8 - Sparsely	y Vegetated Concave S	Surface							D4 - Microtopogra D5 - FAC-Neutral	
Field Observed	liana.										
Field Observat		□ Vaa □ Na	Danth		(in)						
Surface Water Water Water Table Pr		☐ Yes ☑ No ☐ Yes ☑ No	Depth:		(in.)			Wetland Hy	drology Pr	resent?	Yes ☑ No
Saturation Pres		☐ Yes ☑ No	Depth: Depth:		(in.) (in.)						
			•				-('\'''\-\\		A saist lass sa	am a Davida o o	
		eam gauge, monitori			otos, previ	ous inspe	ctions), if available:		Aerial Image	ery Review	
Remarks:	Sample po	int located at top of	upland R	knoll.							
SOILS											
SOILS											
I Man I Init Name	7.	Virgil silt loam				9	arias Drainaga Class:	somewhat no	oorly		
Map Unit Name		Virgil silt loam Udollic Endoagual	fs			S	eries Drainage Class:	somewhat po	oorly		
Taxonomy (Sub	ogroup):	Udollic Endoaqual		m the absence o	of indicators.) (Ty		•	•	·	PL=Pore Lining, M=Matrix)	
Taxonomy (Sub Profile Descrip	ogroup):	Udollic Endoaqual		m the absence o			tion, D=Depletion, RM=Reduced Matrix, C	•	d Grains; Location: F	PL=Pore Lining, M=Matrix)	Texture
Taxonomy (Sub Profile Descrip Top	ogroup): otion (Describe to	Udollic Endoaqual	dicator or confin				tion, D=Depletion, RM=Reduced Matrix, C	CS=Covered/Coated Sand	d Grains; Location: F	PL=Pore Lining, M=Matrix) Location	
Taxonomy (Sub Profile Descrip	ogroup): otion (Describe to Bottom	Udollic Endoaqual the depth needed to document the in	dicator or confin	Matrix	_		tion, D=Depletion, RM=Reduced Matrix, C	CS=Covered/Coated Sand	d Grains; Location: F	<u> </u>	Texture (e.g. clay, sand, loam) silt loam
Taxonomy (Sub Profile Descrip Top Depth	ogroup): otion (Describe to Bottom Depth	Udollic Endoaqual the depth needed to document the in	dicator or confir	Matrix (Moist)	%	pe: C=Concentra	tion, D=Depletion, RM=Reduced Matrix, C Red Color (Moist)	CS=Covered/Coated Sand	Grains; Location: F	Location	(e.g. clay, sand, loam)
Taxonomy (Sub Profile Descrip Top Depth	ogroup): otion (Describe to Bottom Depth 10	Udollic Endoaqual the depth needed to document the in Horizon 1	Color 10YR	Matrix (Moist) 3/2	% 100	pe: C=Concentra	tion, D=Depletion, RM=Reduced Matrix, C Recolor (Moist)	cs=Covered/Coated Sand	Type	Location 	(e.g. clay, sand, loam) silt loam
Taxonomy (Sub Profile Descrip Top Depth 0 10	Bottom Depth 10 16	Udollic Endoaqual the depth needed to document the in Horizon 1 2	Color 10YR 7.5YR	Matrix (Moist) 3/2 4/4	% 100 100	pe: C=Concentra	tion, D=Depletion, RM=Reduced Matrix, C Recolor (Moist)	cs=Covered/Coated Sand	Type	Location 	(e.g. clay, sand, loam) silt loam
Taxonomy (Sub Profile Descrip Top Depth 0 10	Degroup): Describe to Bottom Depth 10 16	Udollic Endoaqual the depth needed to document the in Horizon 1 2	Color 10YR 7.5YR	Matrix (Moist) 3/2 4/4 	% 100 100 	pe: C=Concentra	tion, D=Depletion, RM=Reduced Matrix, C Red Color (Moist)	CS=Covered/Coated Sand	Type	Location 	(e.g. clay, sand, loam) silt loam sandy clay loam
Taxonomy (Sub Profile Descrip Top Depth 0 10	Degroup): Describe to Bottom Depth 10 16	Horizon 1 2	Color 10YR 7.5YR	Matrix (Moist) 3/2 4/4 	% 100 100 	pe: C=Concentra	tion, D=Depletion, RM=Reduced Matrix, C Red Color (Moist)	cs=Covered/Coated Sand	Type	Location	(e.g. clay, sand, loam) silt loam sandy clay loam
Taxonomy (Sub Profile Descripe Top Depth 0 10 	Depth 10 16	Horizon 1 2	Color 10YR 7.5YR	Matrix (Moist) 3/2 4/4 	% 100 100 	pe: C=Concentra	tion, D=Depletion, RM=Reduced Matrix, C Rec Color (Moist)	cs=Covered/Coated Sand	Type	Location	(e.g. clay, sand, loam) silt loam sandy clay loam
Taxonomy (Subprofile Descriped Top Depth 0 10	bgroup): btion (Describe to Bottom Depth 10 16	Horizon 1 2	Color 10YR 7.5YR	Matrix (Moist) 3/2 4/4	% 100 100 	pe: C=Concentra	tion, D=Depletion, RM=Reduced Matrix, CRecord (Moist)	CS=Covered/Coated Sand	Type	Location	(e.g. clay, sand, loam) silt loam sandy clay loam
Taxonomy (Subprofile Descriped Top Depth October 10 NRCS Hydric	Bottom Depth 10 16 Soil Field In	Horizon 1 2	Color 10YR 7.5YR	Matrix (Moist) 3/2 4/4 icators a	% 100 100 are not pre	pe: C=Concentra	tion, D=Depletion, RM=Reduced Matrix, CRecord Color (Moist)	CS=Covered/Coated Sand dox Features % Indicator	Type s for Proble	Location matic Soils ¹	(e.g. clay, sand, loam) silt loam sandy clay loam
Taxonomy (Subprofile Descriped Topen Depth October 10 NRCS Hydric	Bottom Depth 10 16 Soil Field In	Horizon 1 2 ndicators (check here	Color 10YR 7.5YR	Matrix (Moist) 3/2 4/4 icators a	% 100 100 sre not pre	esent value Belo	tion, D=Depletion, RM=Reduced Matrix, CRed Color (Moist)	CS=Covered/Coated Sand dox Features % Indicator	Type s for Proble A10 - 2 cm	Location matic Soils ¹ Muck (LRR K, L, MLRA 1	(e.g. clay, sand, loam) silt loam sandy clay loam
Taxonomy (Subprofile Descriped Top Depth October 10 NRCS Hydric	Bottom Depth 10 16 Soil Field In A1- Histosol A2 - Histic E	Horizon 1 2 ndicators (check here)	Color 10YR 7.5YR	Matrix (Moist) 3/2 4/4 icators a	% 100 100 sre not pre	esent v	tion, D=Depletion, RM=Reduced Matrix, CRed Color (Moist)	CS=Covered/Coated Sand dox Features % Indicator	Type s for Proble A10 - 2 cm I	Location Matic Soils ¹ Muck (LRR K, L, MLRA 1) Prairie Redox (LRR	(e.g. clay, sand, loam) silt loam sandy clay loam
Taxonomy (Subprofile Descriped Topen Depth October 10 NRCS Hydric	Bottom Depth 10 16 Soil Field In	Horizon 1 2 ndicators (check here)	Color 10YR 7.5YR	Matrix (Moist) 3/2 4/4 icators a	% 100 100 sre not pre S8 - Polys S9 - Thin S11 - High	esent control	tion, D=Depletion, RM=Reduced Matrix, CRed Color (Moist)	CS=Covered/Coated Sand dox Features % Indicator	Type s for Proble A10 - 2 cm I A16 - Coast S3 - 5cm Mt S7 - Dark St	Location matic Soils ¹ Muck (LRR K, L, MLRA 1 Prairie Redox (LRR ucky Peat of Peat (urface (LRR K, L, M)	(e.g. clay, sand, loam) silt loam sandy clay loam (149B) R K, L, R) (LRR K, L, R)
Taxonomy (Subprofile Descriped Topen Depth October 10	Bottom Depth 10 16 Soil Field Ir A1- Histosol A2 - Histic E A3 - Black Hi A4 - Hydroge A5 - Stratified	Horizon Horizon 1 2	Color 10YR 7.5YR ere if ind	Matrix (Moist) 3/2 4/4 icators a	% 100 100 sre not pre S8 - Polyo S9 - Thin S11 - High F1 - Loam F2 - Loam	e: C=Concentra esent value Belo Dark Surfa h Chroma ny Mucky I	tion, D=Depletion, RM=Reduced Matrix, CRed Color (Moist)	CS=Covered/Coated Sand dox Features % Indicator	Type s for Proble A10 - 2 cm I A16 - Coast S3 - 5cm Mt S7 - Dark St S8 - Polyval	Location matic Soils ¹ Muck (LRR K, L, MLRA 1 Prairie Redox (LRR ucky Peat of Peat (urface (LRR K, L, M) ue Below Surface	(e.g. clay, sand, loam) silt loam sandy clay loam (LRR K, L, R) (LRR K, L)
Taxonomy (Subprofile Descriped Topen Depth Output Topen Tope	Bottom Depth 10 16 Soil Field In A1- Histosol A2 - Histic E A3 - Black H A4 - Hydroge A5 - Stratified A11 - Deplete	Horizon Horizon 1 2 ndicators (check horistic en Sulfide d Layers ed Below Dark Surface	Color 10YR 7.5YR ere if ind	Matrix (Moist) 3/2 4/4 icators a	% 100 100	e: C=Concentra	tion, D=Depletion, RM=Reduced Matrix, C Red Color (Moist) N Surface (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix C	CS=Covered/Coated Sand dox Features % Indicator	Type s for Proble A10 - 2 cm I A16 - Coast S3 - 5cm Mt S7 - Dark St S8 - Polyval S9 - Thin Da	Location matic Soils ¹ Muck (LRR K, L, MLRA 1 Prairie Redox (LRR ucky Peat of Pe	(e.g. clay, sand, loam) silt loam sandy clay loam (LRR K, L, R) (LRR K, L)
Taxonomy (Subprofile Descriped Top Depth Output Top Depth	Bottom Depth 10 16 Soil Field In A1- Histosol A2 - Histic E A3 - Black H A4 - Hydroge A5 - Stratified A11 - Deplete A12 - Thick [Horizon Horizon 1 2	Color 10YR 7.5YR ere if ind	Matrix (Moist) 3/2 4/4 icators a	% 100 100	esent	tion, D=Depletion, RM=Reduced Matrix, C Red Color (Moist)	CS=Covered/Coated Sand dox Features % Indicator	Type s for Proble A10 - 2 cm I A16 - Coast S3 - 5cm Mu S7 - Dark S0 S8 - Polyval S9 - Thin Da F12 - Iron-M	Location matic Soils ¹ 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 langanese Masses	(e.g. clay, sand, loam) silt loam sandy clay loam (LRR K, L, R) (LRR K, L, R) (LRR K, L, R)
Taxonomy (Subprofile Descriped Topen Depth Output Topen Tope	Bottom Depth 10 16 Soil Field In A1- Histosol A2 - Histic E A3 - Black H A4 - Hydroge A5 - Stratified A11 - Deplete	Horizon Horizon 1 2	Color 10YR 7.5YR ere if ind	Matrix (Moist) 3/2 4/4 icators a	% 100 100	esent	tion, D=Depletion, RM=Reduced Matrix, C Red Color (Moist)	cs=Covered/Coated Sand dox Features % Indicator	Type s for Proble A10 - 2 cm I A16 - Coast S3 - 5cm Mu S7 - Dark S0 S8 - Polyval S9 - Thin Da F12 - Iron-M F19 - Piedm	Location matic Soils ¹ Muck (LRR K, L, MLRA 1 Prairie Redox (LRR ucky Peat of Pe	(e.g. clay, sand, loam) silt loam sandy clay loam (LRR K, L, R) (LRR K, L, R) (LRR K, L, R)
Taxonomy (Subprofile Descriped Topen Depth	Bottom Depth 10 16 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 E	Horizon Horizon 1 2	Color 10YR 7.5YR ere if ind	Matrix (Moist) 3/2 4/4 icators a	% 100 100	esent	tion, D=Depletion, RM=Reduced Matrix, C Red Color (Moist)	CS=Covered/Coated Sand dox Features % Indicator	Type s for Proble A10 - 2 cm I A16 - Coast S3 - 5cm Mu S7 - Dark Si S8 - Polyval S9 - Thin Da F12 - Iron-M F19 - Piedm F21 - Red P TA6 - Mesic	Location matic Soils 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 langanese Masses ont Floodplain Soil arent Material Spodic (MLRA 144A, 1	(e.g. clay, sand, loam) silt loam sandy clay loam (LRR K, L, R) (LRR K, L, R) (LRR K, L, R) (LRR K, L, R) (S (LRR K, L, R) (S (MLRA 149B)
Taxonomy (Subserving Profile Descripe Top Depth	Bottom Depth 10 16 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 S5 - Sandy R S6 - Stripped	Horizon Horizon 1 2	Color 10YR 7.5YR ere if ind	Matrix (Moist) 3/2 4/4 icators a	% 100 100	esent	tion, D=Depletion, RM=Reduced Matrix, C Red Color (Moist)	dox Features % Indicator	Type 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	Location 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 Surf	(e.g. clay, sand, loam) silt loam sandy clay loam (LRR K, L, R) (LRR K, L, R) (LRR K, L, R) (LRR K, L, R) (S (LRR K, L, R) (S (MLRA 149B)
Taxonomy (Subprofile Descriped Topen Depth	Bottom Depth 10 16 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 S5 - Sandy R S6 - Stripped	Horizon Horizon 1 2	Color 10YR 7.5YR ere if ind	Matrix (Moist) 3/2 4/4 icators a	% 100 100	esent	tion, D=Depletion, RM=Reduced Matrix, C Red Color (Moist)	cs=Covered/Coated Sand dox Features % Indicator Indicator	Type s for Proble A10 - 2 cm I A16 - Coast S3 - 5cm Mu S7 - Dark S0 S8 - Polyval S9 - Thin Da F12 - Iron-W F19 - Piedm F21 - Red P TA6 - Mesic TF12 - Very Other (Expla	Location matic Soils 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 langanese Masses ont Floodplain Soil arent Material Spodic (MLRA 144A, 1	(e.g. clay, sand, loam) silt loam sandy clay loam (LRR K, L, R) (LRR K, L, R) (LRR K, L, R) (LRR K, L, R) (S (LRR K, L, R) (S (MLRA 149B) (145, 149B) (face
Taxonomy (Subserving Profile Descripe Top Depth 0 10	Bottom Depth 10 16 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 S5 - Sandy R S6 - Stripped	Horizon Horizon 1 2	Color 10YR 7.5YR ere if ind	Matrix (Moist) 3/2 4/4 icators a	% 100 100	esent	tion, D=Depletion, RM=Reduced Matrix, C Red Color (Moist)	cs=Covered/Coated Sand dox Features % Indicator Indicator	Type s for Proble A10 - 2 cm I A16 - Coast S3 - 5cm Mu S7 - Dark Su S8 - Polyval S9 - Thin Da F12 - Iron-W F19 - Piedm F14 - Red P TA6 - Mesic TF12 - Very Other (Expla	Location	(e.g. clay, sand, loam) silt loam sandy clay loam (LRR K, L, R) (LRR K, L, R) (LRR K, L, R) (LRR K, L, R) (S (LRR K, L, R) (S (MLRA 149B) (145, 149B) (face
Taxonomy (Subserving Profile Descripe Top Depth	Bottom Depth 10 16 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 S5 - Sandy R S6 - Stripped	Horizon Horizon 1 2	Color 10YR 7.5YR ere if ind	Matrix (Moist) 3/2 4/4 icators a	% 100 100	esent	tion, D=Depletion, RM=Reduced Matrix, C Red Color (Moist)	CS=Covered/Coated Sand dox Features % Indicator Indicator	Type s for Proble A10 - 2 cm I A16 - Coast S3 - 5cm Mu S7 - Dark So S8 - Polyval S9 - Thin Da F12 - Iron-W F19 - Piedm F21 - Red P TA6 - Mesic TF12 - Very Other (Expla of hydrophytic veget of problematic.	Location	(e.g. clay, sand, loam) silt loam sandy clay loam (LRR K, L, R) (LRR K, L, R) (LRR K, L, R) (LRR K, L, R) (S (LRR K, L, R) (S (MLRA 149B) (145, 149B) (face
Taxonomy (Sub Profile Descrip Top Depth 0 10 NRCS Hydric	Bottom Depth 10 16 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	Horizon Horizon 1 2	Color 10YR 7.5YR ere if ind	Matrix (Moist) 3/2 4/4 icators a	% 100 100	esent	tion, D=Depletion, RM=Reduced Matrix, C Red Color (Moist)	CS=Covered/Coated Sand dox Features % Indicator Indicator Indicator I	Type s for Proble A10 - 2 cm I A16 - Coast S3 - 5cm Mu S7 - Dark So S8 - Polyval S9 - Thin Da F12 - Iron-W F19 - Piedm F21 - Red P TA6 - Mesic TF12 - Very Other (Expla of hydrophytic veget of problematic.	Location	(e.g. clay, sand, loam) silt loam sandy 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 must be present, unless



Project/Site: North Mendota Energy and Technology Park Wetland ID: n/a Sample Point: P10

VEGETATION	(Species identified in all uppercase are non-na	ative spec	cies.)		
Tree Stratum (Plo	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:(A)
3.					
4.					Total Number of Dominant Species Across All Strata:0(B)
5.					
6.					Percent of Dominant Species That Are OBL, FACW, or FAC: NA (A/B)
7.					
8.					Prevalence Index Worksheet
9.					Total % Cover of: Multiply by:
10.					OBL spp. $0 x 1 = 0$
	Total Cover =	0			FACW spp. $0 x 2 = 0$
					FAC spp. $0 x 3 = 0$
	atum (Plot size: 5 meter radius)				FACU spp. $0 x 4 = 0$
1.					UPL spp. $0 x 5 = 0$
2.					
3.					Total(A)(B)
4.					
5.					Prevalence Index = B/A = NA
6.					
7.					H. Land. C. Wardette de Partera
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.					* Indicators of hydric soil and wetland hydrology must be
2.					present, unless disturbed or problematic.
3.					
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.					moosy prame 1999 than all
14.					
15.					Woody Vines - All woody vines greater than 3.28 ft. in height.
	Total Cover =	0			
Woody Vine Strate	um (Plot size: 10 meter radius)				
1.					
2.					
3.					Hydrophytic Vegetation Present ☐ Yes ☑ No
4.					
5.					
	Total Cover =	0			
Remarks:	Sample point located within active ag fi	eld plan	ted to co	rn in 2014	1. No stunted/stressed crop observed in stubble; no weedy species observed.

Additional Remarks:

Sample point located at high point within ag field that was not associated with wetland signatures observed in aerial imagery review, but is within an area of mapped "somewhat poorly drained soils".



Project/Site: Applicant:		dota Energy and Te ch Development & 0	٠.	•			Stantec Project #:	193703573		Date: County:	04/17/15 Dane
Investigator #1:		n Bovolopmont a c	Jonoti do		gator #2:					State:	Wisconsin
Soil Unit:	Virgil silt lo	am			<u> </u>		I/WWI Classification:			Wetland ID:	n/a
Landform:	Summit			Loc	al Relief:	Convex				Sample Point:	P11
Slope (%):	NA	Latitude:	N/A	Lo	ongitude:	N/A		Datum:	N/A	Community ID:	Ag Field
Are climatic/hyd	drologic cond	ditions on the site ty	pical for	this time	of year?	(If no, expla	in in remarks)		No	Section:	22
Are Vegetation	☑, Soil □,	or Hydrology □ sig	nificantly	/ disturbe	ed?		Are normal circumsta	•	t?	Township:	8N
		or Hydrology 🛭 na	turally pr	oblemati	ic?		☐ Yes	☑No		Range:	9 Dir: E
SUMMARY OF	FINDINGS										
Hydrophytic Ve	_			□ Yes	_			Hydric Soils			☐ Yes ☑ No
Wetland Hydrol				☐ Yes						Within A Wetlar	
Remarks:	Based on a active ag fi		onditions	were no	ormal; 3.4	2 inches	of rain were received	in the area fr	om April 1	- April 17. Sam	ple point located within
HYDROLOGY	active ag in	ciu.									
HYDROLOGY		(0)			_						
	•	ators (Check here i	if indicate	ors are n	ot preser	nt ☑):			Cocondon.		
<u>Primary:</u> □	A1 - Surface	Water		П	B9 - Wate	er-Stained	eaves		Secondary:	B6 - Surface Soil	Cracks
	A2 - High Wa				B13 - Aqu					B10 - Drainage P	
	A3 - Saturation	on			B15 - Mar	•				B16 - Moss Trim	Lines
	B1 - Water M				C1 - Hydro	-				C2 - Dry-Season	
I H	B2 - Sedimer B3 - Drift Der	•					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	G ,
	B5 - Iron Dep				C7 - Thin					D2 - Geomorphic	
		on Visible on Aerial Ima	0 ,		Other (Ex	plain in Re	marks)			D3 - Shallow Aqu	
"	bo - Sparsery	y Vegetated Concave S	Surrace							D4 - Microtopogra D5 - FAC-Neutral	
Field Observat	ione:										
Surface Water		☐ Yes ☑ No	Depth:		(in.)						
Water Table Pr		☐ Yes ☑ No	Depth:		(in.)			Wetland Hy	drology Pr	resent?	Yes ☑ No
Saturation Pres		☐ Yes ☑ No	Depth:		(in.)						
			•				otiona) if available.		A a wied land a we	am / Davieur	
		eam gauge, monitori					·		Aerial Image	ery Review	
Remarks:	Sample po	int located downsio _l	pe from (upiand K	noii (PTO)	, but riig	ner in topography thar	1 VV-1.			
	Sample po	int located downslo	pe from (upiand k	noii (P10)	r, but flig	iei in topograpny than	1 VV-1.			
SOILS			pe from (upiand k	noii (P10)				oorly		
SOILS Map Unit Name): :	Virgil silt loam		upiand k	noii (P10,		eries Drainage Class:		oorly		
SOILS Map Unit Name Taxonomy (Sub	e: ogroup):	Virgil silt loam Udollic Endoaqual	fs			S	eries Drainage Class:	somewhat po	•	PI =Pore Lining M=Matrix)	
SOILS Map Unit Name Taxonomy (Sub	e: ogroup): otion (Describe to	Virgil silt loam Udollic Endoaqual	fs	n the absence o	of indicators.) (Typ	S	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, C	somewhat po	d Grains; Location: F	PL=Pore Lining, M=Matrix)	Texture
SOILS Map Unit Name Taxonomy (Sub Profile Descrip	e: ogroup): otion (Describe to Bottom	Virgil silt loam Udollic Endoaqual the depth needed to document the in	fs dicator or confire	m the absence o	of indicators.) (Typ	Soe: C=Concentra	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, C Re	somewhat po	d Grains; Location: F	r	Texture (e.g. clay, sand, loam)
SOILS Map Unit Name Taxonomy (Sub	e: ogroup): otion (Describe to Bottom Depth	Virgil silt loam Udollic Endoaqual	fs dicator or confirm	m the absence o Matrix (Moist)	of indicators.) (Type	Soe: C=Concentra	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, C	somewhat po	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 16	Virgil silt loam Udollic Endoaqual the depth needed to document the in	fs dicator or confirm Color 10YR	m the absence of Matrix (Moist)	of indicators.) (Type 100 % 100	Spe: C=Concentra	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, C Rec Color (Moist)	somewhat po	d Grains; Location: F	Location	(e.g. clay, sand, loam) silty clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 16	e: ogroup): otion (Describe to Bottom Depth 16 19	Virgil silt loam Udollic Endoaqual the depth needed to document the in Horizon 1 2	fs dicator or confirm Color 10YR 10YR	m the absence of Matrix (Moist) 2/1 4/2	% 100 97	See: C=Concentrate	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, C Rec Color (Moist) 5/4	somewhat po	Type C	Location M	(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 16	Virgil silt loam Udollic Endoaqual the depth needed to document the in Horizon	fs dicator or confirm Color 10YR	m the absence of Matrix (Moist)	of indicators.) (Type 100 % 100	Spe: C=Concentra	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, C Rec Color (Moist)	somewhat po	d Grains; Location: F	Location 	(e.g. clay, sand, loam) silty clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 16 19	e: pgroup): Dtion (Describe to Bottom Depth 16 19 24	Virgil silt loam Udollic Endoaqual the depth needed to document the in Horizon 1 2 3	fs dicator or confirm Color 10YR 10YR 2.5Y	m the absence of Matrix (Moist) 2/1 4/2 5/3	% 100 97 95	Spe: C=Concentration 2.5Y 10YR	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, C Red Color (Moist) 5/4 6/8	somewhat po	Type C	Location M M	(e.g. clay, sand, loam) silty clay loam silty clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 16 19	Bottom Depth 16 19 24	Virgil silt loam Udollic Endoaqual the depth needed to document the in Horizon 1 2 3	color 10YR 10YR 2.5Y	m the absence of Matrix (Moist) 2/1 4/2 5/3	% 100 97 95	De: C=Concentration 2.5Y 10YR	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, C Rec Color (Moist) 5/4 6/8	somewhat po	Type C C	Location M M	(e.g. clay, sand, loam) silty clay loam silty clay loam clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 16 19	pgroup): ption (Describe to Bottom Depth 16 19 24	Virgil silt loam Udollic Endoaqual the depth needed to document the in Horizon 1 2 3	fs dicator or confirm Color 10YR 10YR 2.5Y	m the absence of Matrix (Moist) 2/1 4/2 5/3	% 100 97 95	Soe: C=Concentra 2.5Y 10YR	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, Color (Moist) 5/4 6/8	somewhat possible services and control of the contr	Type C C	Location M M	(e.g. clay, sand, loam) silty clay loam silty clay loam clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 16 19	pgroup): Deption (Describe to Depth 16 19 24	Virgil silt loam Udollic Endoaqual the depth needed to document the in Horizon 1 2 3	fs dicator or confirm Color 10YR 10YR 2.5Y	m the absence of Matrix (Moist) 2/1 4/2 5/3	% 100 97 95	 2.5Y 10YR 	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, C Red Color (Moist) 5/4 6/8	somewhat possible same dox Features % 3 5	Type C C	Location M M	(e.g. clay, sand, loam) silty clay loam silty clay loam clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 16 19	pgroup): ption (Describe to Bottom Depth 16 19 24	Virgil silt loam Udollic Endoaqual the depth needed to document the in Horizon 1 2 3	fs dicator or confirm Color 10YR 10YR 2.5Y	m the absence of Matrix (Moist) 2/1 4/2 5/3	% 100 97 95	2.5Y 10YR	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, Correct Reduced R	somewhat po	Type C C	Location M M	(e.g. clay, sand, loam) silty clay loam silty clay loam clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 16 19 NRCS Hydric	pgroup): Dtion (Describe to Depth 16 19 24 Soil Field In	Virgil silt loam Udollic Endoaqual the depth needed to document the in Horizon 1 2 3 ndicators (check he	fs dicator or confirm Color 10YR 10YR 2.5Y	m the absence of Matrix (Moist) 2/1 4/2 5/3 icators a	% 100 97 95 re not pre	Soe: C=Concentra 2.5Y 10YR esent ☑ value Belov	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, Correct Reduced R	somewhat possible same dox Features % 3 5 Indicator	Type C C s for Proble	Location M M matic Soils ¹ Muck (LRR K, L, MLRA 1	(e.g. clay, sand, loam) silty clay loam silty clay loam clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 16 19 NRCS Hydric	pgroup): Dion (Describe to Bottom Depth 16 19 24 Soil Field Ir A1- Histosol A2 - Histic Ep	Virgil silt loam Udollic Endoaqual the depth needed to document the in Horizon 1 2 3 ndicators (check here)	fs dicator or confirm Color 10YR 10YR 2.5Y	m the absence of Matrix (Moist) 2/1 4/2 5/3 icators a	% 100 97 95 re not pre S8 - Polyv S9 - Thin	se: C=Concentra 2.5Y 10YR esent ☑ value Belov Dark Surfa	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, C Red Color (Moist) 5/4 6/8): v Surface (LRR R, MLRA 149B) ace (LRR R, MLRA 149B)	somewhat possible same dox Features % 3 5 Indicator	Type C C s for Proble A10 - 2 cm I	Location M M matic Soils ¹ Muck (LRR K, L, MLRA 1) Prairie Redox (LRR	(e.g. clay, sand, loam) silty clay loam silty clay loam clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 16 19 NRCS Hydric	pgroup): Dtion (Describe to Depth 16 19 24	Virgil silt loam Udollic Endoaqual the depth needed to document the in Horizon 1 2 3 ndicators (check here)	fs dicator or confirm Color 10YR 10YR 2.5Y	m the absence of Matrix (Moist) 2/1 4/2 5/3 icators a	% 100 97 95 re not pre S8 - Polyv S9 - Thin S11 - Higl	Socie: C=Concentra 2.5Y 10YR esent ☑ value Below Dark Surfa	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, CRecord (Moist) 5/4 6/8 Surface (LRR R, MLRA 149B) RCE (LRR R, MLRA 149B) Sands	somewhat possible same dox Features % 3 5 Indicator	Type C C s for Proble A10 - 2 cm I A16 - Coast S3 - 5cm Mu	Location M M matic Soils Muck (LRR K, L, MLRA 1) Prairie Redox (LRR ucky Peat of Peat 1)	(e.g. clay, sand, loam) silty clay loam silty clay loam clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 16 19 NRCS Hydric	pgroup): Dion (Describe to Bottom Depth 16 19 24 Soil Field Ir A1- Histosol A2 - Histic Ep	Virgil silt loam Udollic Endoaqual the depth needed to document the in Horizon 1 2 3 ndicators (check here) sitic en Sulfide	fs dicator or confirm Color 10YR 10YR 2.5Y	m the absence of Matrix (Moist) 2/1 4/2 5/3 icators a	% 100 97 95 re not pre S8 - Polyv S9 - Thin S11 - Higl	2.5Y 10YR esent value Below Dark Surfan Chroma	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, CRef Color (Moist) 5/4 6/8): v Surface (LRR R, MLRA 149B) ICE (LRR R, MLRA 149B) Sands Mineral (LRR K, L)	somewhat poor CS=Covered/Coated Sanction CS=Cove	Type C C s for Proble A10 - 2 cm I A16 - Coast S3 - 5cm Mt S7 - Dark St	Location M M matic Soils ¹ Muck (LRR K, L, MLRA 1) Prairie Redox (LRR	(e.g. clay, sand, loam) silty clay 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 16 19 NRCS Hydric	Bottom Depth 16 19 24 Soil Field Ir A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A11 - Deplete	Virgil silt loam Udollic Endoaqual the depth needed to document the in Horizon 1 2 3 ndicators (check here) cipedon istic en Sulfide d Layers ed Below Dark Surface	fs dicator or confirm Color 10YR 10YR 2.5Y ere if ind	m the absence of Matrix (Moist) 2/1 4/2 5/3 icators a	% 100 97 95 re not pre S8 - Polyx S9 - Thin S11 - High F1 - Loam F2 - Loam F3 - Deple	Some: C=Concentrate 2.5Y 10YR esent ☑ value Below Dark Surfate Chromate by Mucky May Gleyed eted Matrix	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, CRef Color (Moist) 5/4 6/8 V Surface (LRR R, MLRA 149B) RCE (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix	somewhat poor CS=Covered/Coated Sand dox Features % 3 5 Indicator	Type C C s for Proble A10 - 2 cm I A16 - Coast S3 - 5cm Mt S7 - Dark St S8 - Polyval S9 - Thin Da	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 ark Surface (LRR K, L	(e.g. clay, sand, loam) silty clay loam silty clay loam clay loam (LRR K, L, R) (LRR K, L)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 16 19 NRCS Hydric	Bottom Depth 16 19 24 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A12 - Thick E	Virgil silt loam Udollic Endoaqual 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	fs dicator or confirm Color 10YR 10YR 2.5Y ere if ind	m the absence of Matrix (Moist) 2/1 4/2 5/3 icators a	% 100 97 95 re not pre S8 - Polyv S9 - Thin S11 - High F1 - Loam F2 - Loam F3 - Deple F6 - Redo	Some: C=Concentrate 2.5Y 10YR esent ☑ value Below Dark Surfate Chroma by Mucky May Gleyed eted Matrix ox Dark Sur	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, CRe Color (Moist) 5/4 6/8 V Surface (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix frace	somewhat poor cared/Coated Sance dox Features % 3 5 Indicator	Type C C s for Proble A10 - 2 cm I A16 - Coast S3 - 5cm Mu S7 - Dark S0 S8 - Polyval S9 - Thin Da F12 - Iron-M	Location M M 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) 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 16 19 NRCS Hydric	Bottom Depth 16 19 24 Soil Field Ir A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A11 - Deplete A12 - Thick E S1 - Sandy M	Virgil silt loam Udollic Endoaqual 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	fs dicator or confirm Color 10YR 10YR 2.5Y ere if ind	m the absence of Matrix (Moist) 2/1 4/2 5/3 icators a	% 100 97 95 re not pre S8 - Polyv S9 - Thin S11 - High F1 - Loam F2 - Loam F3 - Deple F6 - Redo F7 - Deple	Socie: C=Concentral 2.5Y 10YR esent ☑ value Below Dark Surfan Chroma ny Mucky M ny Gleyed eted Matrix ox Dark Sur eted Dark	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, CRed Color (Moist) 5/4 6/8 N: Surface (LRR R, MLRA 149B) RCe (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix fface Surface	somewhat possible same dox Features % 3 5 Indicator	Type C C s for Proble A10 - 2 cm I A16 - Coast S3 - 5cm Mu S7 - Dark S0 S8 - Polyval S9 - Thin Da F12 - Iron-M F19 - Piedm	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 ark Surface (LRR K, L langanese Masses ont Floodplain Soi	(e.g. clay, sand, 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 16 19 NRCS Hydric	Bottom Depth 16 19 24 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A12 - Thick E	Virgil silt loam Udollic Endoaqual 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	fs dicator or confirm Color 10YR 10YR 2.5Y ere if ind	m the absence of Matrix (Moist) 2/1 4/2 5/3 icators a	% 100 97 95 re not pre S8 - Polyv S9 - Thin S11 - High F1 - Loam F2 - Loam F3 - Deple F6 - Redo	Socie: C=Concentral 2.5Y 10YR esent ☑ value Below Dark Surfan Chroma ny Mucky M ny Gleyed eted Matrix ox Dark Sur eted Dark	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, CRed Color (Moist) 5/4 6/8 N: Surface (LRR R, MLRA 149B) RCe (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix fface Surface	somewhat poor content sand dox Features % 3 5 Indicator	Type C C C s for Proble A10 - 2 cm I A16 - Coast S3 - 5cm Mu S7 - Dark Si S8 - Polyval S9 - Thin Da F12 - Iron-M F19 - Piedm F21 - Red P	Location M M 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) silty clay loam silty clay loam clay loam (LRR K, L, R)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 16 19 NRCS Hydric	Bottom Depth 16 19 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	Virgil silt loam Udollic Endoaqual 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	fs dicator or confirm Color 10YR 10YR 2.5Y ere if ind	m the absence of Matrix (Moist) 2/1 4/2 5/3 icators a	% 100 97 95 re not pre S8 - Polyv S9 - Thin S11 - High F1 - Loam F2 - Loam F3 - Deple F6 - Redo F7 - Deple	Socie: C=Concentral 2.5Y 10YR esent ☑ value Below Dark Surfan Chroma ny Mucky M ny Gleyed eted Matrix ox Dark Sur eted Dark	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, CRed Color (Moist) 5/4 6/8 N: Surface (LRR R, MLRA 149B) RCe (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix fface Surface	somewhat poor CS=Covered/Coated Sance dox Features % 3 5 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	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 ark Surface (LRR K, L langanese Masses ont Floodplain Soil arent Material Spodic (MLRA 144A, 1) Shallow Dark Surface	(e.g. clay, sand, loam) silty clay loam clay loam (LRR K, L, R) (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 16 19 NRCS Hydric	Bottom Depth 16 19 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	Virgil silt loam Udollic Endoaqual 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	fs dicator or confirm Color 10YR 10YR 2.5Y ere if ind	m the absence of Matrix (Moist) 2/1 4/2 5/3 icators a	% 100 97 95 re not pre S8 - Polyv S9 - Thin S11 - High F1 - Loam F2 - Loam F3 - Deple F6 - Redo F7 - Deple	Socie: C=Concentral 2.5Y 10YR esent ☑ value Below Dark Surfan Chroma ny Mucky M ny Gleyed eted Matrix ox Dark Sur eted Dark	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, CRed Color (Moist) 5/4 6/8 N: Surface (LRR R, MLRA 149B) RCe (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix fface Surface	somewhat poor cared Sance dox Features % 3 5 Indicator	Type C C C s for Proble A10 - 2 cm I A16 - Coast S3 - 5cm Mu S7 - Dark Su S8 - Polyval S9 - Thin Da F12 - Iron-W F19 - Piedm F21 - Red P TA6 - Mesic TF12 - Very Other (Expla	Location M M matic Soils Muck (LRR K, L, MLRA 1) Prairie Redox (LRR k, L, M) ucky Peat of Peat aurface (LRR K, L, M) ue Below Surface (LRR K, L) ark Surface (LRR K, L) langanese Masses cont Floodplain Soil arent Material Spodic (MLRA 144A, 1) Shallow Dark Surface ain in Remarks)	(e.g. clay, sand, 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 16 19 NRCS Hydric	Bottom Depth 16 19 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	Virgil silt loam Udollic Endoaqual 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	fs dicator or confirm Color 10YR 10YR 2.5Y ere if ind	m the absence of Matrix (Moist) 2/1 4/2 5/3 icators a	% 100 97 95 re not pre S8 - Polyv S9 - Thin S11 - High F1 - Loam F2 - Loam F3 - Deple F6 - Redo F7 - Deple	Socie: C=Concentral 2.5Y 10YR esent ☑ value Below Dark Surfan Chroma ny Mucky M ny Gleyed eted Matrix ox Dark Sur eted Dark	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, CRed Color (Moist) 5/4 6/8 N: Surface (LRR R, MLRA 149B) RCe (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix fface Surface	somewhat poor and a second content of the content o	Type C C C s for Proble A10 - 2 cm I A16 - Coast S3 - 5cm Mu S7 - Dark Su S8 - Polyval S9 - Thin Da F12 - Iron-W F19 - Piedm F21 - Red P TA6 - Mesic TF12 - Very Other (Expla	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 ark Surface (LRR K, L langanese Masses ont Floodplain Soil arent Material Spodic (MLRA 144A, 1) Shallow Dark Surface	(e.g. clay, sand, 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 16 19 NRCS Hydric	Bottom Depth 16 19 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	Virgil silt loam Udollic Endoaqual 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)	fs dicator or confirm Color 10YR 10YR 2.5Y ere if ind	m the absence of Matrix (Moist) 2/1 4/2 5/3 icators a	% 100 97 95 re not pre S8 - Polyv S9 - Thin S11 - High F1 - Loam F2 - Loam F3 - Deple F6 - Redo F7 - Deple	Socie: C=Concentral 2.5Y 10YR esent ☑ value Below Dark Surfan Chroma ny Mucky M ny Gleyed eted Matrix ox Dark Sur eted Dark	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, CRed Color (Moist) 5/4 6/8 N: Surface (LRR R, MLRA 149B) RCe (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix fface Surface	somewhat poor and a second content of the content o	Type C C C s for Proble A10 - 2 cm I A16 - Coast S3 - 5cm Mu S7 - Dark Su S8 - Polyval S9 - Thin Da F12 - Iron-W F19 - Piedm F21 - Red P TA6 - Mesic TF12 - Very Other (Expla of hydrophytic veget or problematic.	Location M M matic Soils Muck (LRR K, L, MLRA 1) Prairie Redox (LRR k, L, M) ucky Peat of Peat aurface (LRR K, L, M) ue Below Surface (LRR K, L) ark Surface (LRR K, L) langanese Masses cont Floodplain Soil arent Material Spodic (MLRA 144A, 1) Shallow Dark Surface ain in Remarks)	(e.g. clay, sand, 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 16 19 NRCS Hydric	Bottom Depth 16 19 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 S4 - Sandy N S5 - Sandy R S6 - Stripped S7 - Dark Su	Virgil silt loam Udollic Endoaqual 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)	fs dicator or confirm Color 10YR 10YR 2.5Y ere if ind	m the absence of Matrix (Moist) 2/1 4/2 5/3 icators a	% 100 97 95 re not pre S8 - Polyv S9 - Thin S11 - High F1 - Loam F2 - Loam F3 - Deple F6 - Redo F7 - Deple F8 - Redo	Socie: C=Concentral 2.5Y 10YR esent ☑ value Below Dark Surfan Chroma ny Mucky M ny Gleyed eted Matrix ox Dark Sur eted Dark	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, CRed Color (Moist) 5/4 6/8 N: Surface (LRR R, MLRA 149B) RCe (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix fface Surface	somewhat posts and dox Features % 3 5 Indicator Indicators disturbed of	Type C C C s for Proble A10 - 2 cm I A16 - Coast S3 - 5cm Mu S7 - Dark Su S8 - Polyval S9 - Thin Da F12 - Iron-W F19 - Piedm F21 - Red P TA6 - Mesic TF12 - Very Other (Expla of hydrophytic veget or problematic.	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 ark Surface (LRR K, L langanese Masses ant Floodplain Soil earent Material Spodic (MLRA 144A, 1 Shallow Dark Surface ain in Remarks) eation and wetland hydrology	(e.g. clay, sand, 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

Northeast and Northcentral Region

Project/Site: North Mendota Energy and Technology Park Sample Point: P11 Wetland ID: n/a **VEGETATION** (Species identified in all uppercase are non-native species.) Tree Stratum (Plot size: 10 meter radius) **Dominance Test Worksheet** Species Name % Cover Dominant Ind.Status 1. 2. Number of Dominant Species that are OBL, FACW, or FAC: $\mathbf{0}$ (A) 3. 4. Total Number of Dominant Species Across All Strata: 5. 6. Percent of Dominant Species That Are OBL, FACW, or FAC: **NA** (A/B) 7. 8. **Prevalence Index Worksheet** 9. Total % Cover of: Multiply by: x 1 =10. OBL spp. Total Cover = 0 x 2 =FACW spp. FAC spp. x 3 =0 x 4 =Sapling/Shrub Stratum (Plot size: 5 meter radius) FACU spp. 0 0 UPL spp. x = 51. 2. 3. --Total (B) --4. 5. --Prevalence Index = B/A = NA --6. --7. --8. **Hydrophytic Vegetation Indicators:** 9. ☐ Yes ☑ No Rapid Test for Hydrophytic Vegetation 10. ☐ Yes ☑ No Dominance Test is > 50% Total Cover = ☐ Yes ☑ No Prevalence Index is ≤ 3.0 * ☐ Yes ☑ No Morphological Adaptations (Explain) * Herb Stratum (Plot size: 2 meter radius) ☐ Yes ☑ No Problem Hydrophytic Vegetation (Explain) * 1. * Indicators of hydric soil and wetland hydrology must be 2. present, unless disturbed or problematic. 3. **Definitions of Vegetation Strata:** 4. 5. --Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast 6 height (DBH), regardless of height. 8. Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft. 9. 10. 11. ----Herb - All herbaceous (non-woody) plants, regardless of size, and 12. woody plants less than 3.28 ft. tall. 13. ------14. --Woody Vines - All woody vines greater than 3.28 ft. in height. 15. ----Total Cover = 0 Woody Vine Stratum (Plot size: 10 meter radius) 1. 2. 3. **Hydrophytic Vegetation Present** ☐ Yes ☑ No --4. --5. Total Cover = 0 Sample point located within active ag field planted to corn in 2014. No stunted/stressed crop observed in stubble; no weedy species observed. Remarks:

Additional Remarks:

P11 is located topographically lower than adjacent upland knoll (represented by P10) and soils are mapped "somewhat poorly drained". This area exhibits darker tones in the aerial imagery review that were interpreted in the field not to be wetland signatures due to a lack of: 1) observable hydrology indicators, 2) hydric soil indicators, 3) hydrophytic weed species, and 4) stunted corn stubble. Furthermore, the area represented by P11 has an overall higher landscape position compared to W-1, further supporting an upland determination.



Project/Site: Applicant:		dota Energy and Te ch Development & 0	٠.				Stantec Project #:	193703573		Date: County:	04/23/15 Dane
Investigator #1:					gator #2:					State:	Wisconsin
Soil Unit:	St. Charles	s silt loam					I/WWI Classification:			Wetland ID:	W-2
Landform:	Toeslope				al Relief:		Э	_		Sample Point:	P12
Slope (%):	0-2	Latitude:			ongitude:			Datum:		Community ID:	Wet Meadow
		ditions on the site ty	•			(If no, expla		☑ Yes □		Section:	22
•		or Hydrology □ sig	-				Are normal circumsta ☑ Yes	ances preseni □No	ι?	Township:	8N 9 Dir: E
SUMMARY OF		or Hydrology □ na	lurally pr	oblemati	iC !		<u> </u>			Range:	9 DII. E
Hydrophytic Ve		sent?		✓ Yes	□ No			Hydric Soils	Present?		
Wetland Hydrol	•			☑ Yes						Within A Wetlar	
Remarks:	Based on a		onditions				of rain were received				
HYDROLOGY	ougo or gre	account way.									
	alaev India	etere (Chaolahara	if indicat		ot proces	· t \ -					
Primary:		ators (Check here	ir indicati	ors are n	ot preser	ιτ 📙):			Secondary:		
<u>- 11111ary.</u>	A1 - Surface	Water			B9 - Wate	er-Stained	Leaves			B6 - Surface Soil	Cracks
	A2 - High Wa				B13 - Aqu					B10 - Drainage Pa	
	A3 - Saturation B1 - Water M				B15 - Mar C1 - Hydr	•				B16 - Moss Trim C2 - Dry-Season	
	B2 - Sedimer				-	-	spheres on Living Roots			C8 - Crayfish Buri	
	B3 - Drift Dep	posits			C4 - Pres	ence of Re	educed Iron		V	C9 - Saturation Vi	sible on Aerial Imagery
	B4 - Algal Ma			_			duction in Tilled Soils			D1 - Stunted or S	
I H	B5 - Iron Dep B7 - Inundation	ออรแร on Visible on Aerial Ima	agerv		C7 - Thin Other (Ex				☑	D2 - Geomorphic D3 - Shallow Aqui	
		y Vegetated Concave S	0 ,	_	0 (2)	p. 6	,			D4 - Microtopogra	
									V	D5 - FAC-Neutral	Test
Field Observat	tions:										
Surface Water		☐ Yes ☐ No	Depth:		(in.)			Wetland Hy	drology Pr	esent?	Yes □ No
Water Table Pr		☐ Yes ☐ No	Depth:		(in.)				0.0 9, 1 1		
Saturation Pres	sent?	☐ Yes ☐ No	Depth:		(in.)						
Describe Record	led Data (str	eam gauge, monitori	ng well, a	aerial pho	otos, previ	ous inspe	ctions), if available:		Aerial Image	ery Review	
			<u> </u>		, p. c						
Remarks:					, p					•	
			3 , ,		, p					•	
SOILS					, , , , , , , , , , , , , , , , , , , ,	·				•	
SOILS Map Unit Name		St. Charles silt loar				·	eries Drainage Class:			•	
SOILS Map Unit Name Taxonomy (Sub	group):	Typic Hapludalfs	m			S	eries Drainage Class:	moderately v	vell to well		
SOILS Map Unit Name Taxonomy (Sub	ogroup): otion (Describe to	Typic Hapludalfs	m	n the absence o	of indicators.) (Typ	S	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, C	moderately v	vell to well		Texture
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SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth	ogroup): otion (Describe to Bottom Depth	Typic Hapludalfs	ndicator or confirmation Color	m the absence of Matrix (Moist)	of indicators.) (Type	S De: C=Concentra	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, C Red Color (Moist)	moderately v CS=Covered/Coated Sanc dox Features %	vell to well 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	ogroup): otion (Describe to Bottom Depth 10	Typic Hapludalfs the depth needed to document the in Horizon 1	m dicator or confirm Color 10YR	m the absence of Matrix (Moist) 3/1	of indicators.) (Type of the second s	Se: C=Concentra	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, C Red Color (Moist) 3/4	moderately v CS=Covered/Coated Sanc dox Features % 5	vell to well d Grains; Location: F	PL=Pore Lining, M=Matrix) Location M	(e.g. clay, sand, loam)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth	ogroup): otion (Describe to Bottom Depth	Typic Hapludalfs the depth needed to document the in	m dicator or confirm Color 10YR 10YR	m the absence of Matrix (Moist)	of indicators.) (Type	S De: C=Concentra	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, C Red Color (Moist)	moderately v CS=Covered/Coated Sanc dox Features %	vell to well d Grains; Location: F	PL=Pore Lining, M=Matrix) Location	(e.g. clay, sand, loam) silt loam silty clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 10	ogroup): otion (Describe to Bottom Depth 10 20	Typic Hapludalfs the depth needed to document the in Horizon 1 2	m dicator or confirm Color 10YR	m the absence of Matrix (Moist) 3/1 2/1	% 95 95	Societ C=Concentra 7.5YR 10YR	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, Class Red Color (Moist) 3/4 3/4	moderately was a constant of the constant of t	vell to well d Grains; Location: F	Location M M	(e.g. clay, sand, loam)
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SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 10 20	pgroup): Diffusion (Describe to Bottom Depth 10 20 22	Typic Hapludalfs the depth needed to document the in Horizon 1 2 3	Color 10YR 10YR 2.5Y	m the absence of Matrix (Moist) 3/1 2/1 4/1	% 95 95 95	7.5YR 10YR 10YR	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, Class Red Color (Moist) 3/4 3/4 4/6	moderately v	vell to well d Grains; Location: F	LePore Lining, M=Matrix) Location M M M	(e.g. clay, sand, loam) silt loam silty clay loam silty clay loam
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SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 10 20	bgroup): btion (Describe to Bottom Depth 10 20 22	Typic Hapludalfs the depth needed to document the in Horizon 1 2 3	Color 10YR 10YR 2.5Y	m the absence of Matrix (Moist) 3/1 2/1 4/1	% 95 95 95	7.5YR 10YR	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, Correct Reduced R	moderately v	vell to well d Grains; Location: F	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 20	bgroup): btion (Describe to Bottom Depth 10 20 22	Typic Hapludalfs the depth needed to document the in Horizon 1 2 3	Color 10YR 10YR 2.5Y	m the absence of Matrix (Moist) 3/1 2/1 4/1	% 95 95 95	7.5YR 10YR	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, Control (Moist) 3/4 3/4 4/6	moderately v	Vell to well d Grains; Location: F	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 20 NRCS Hydric	Bottom Depth 10 20 22 Soil Field In	Typic Hapludalfs the depth needed to document the in Horizon 1 2 3 ndicators (check he	Color 10YR 10YR 2.5Y	m the absence of Matrix (Moist) 3/1 2/1 4/1 icators a	% 95 95 95	7.5YR 10YR 10YR esent value Belov	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, Correct Red Color (Moist) 3/4 3/4 4/6): w Surface (LRR R, MLRA 149B)	moderately v CS=Covered/Coated Sance dox Features % 5 5 Indicator	Type C C C s for Proble	Location M M M matic Soils ¹ Muck (LRR K, L, MLRA 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 20 NRCS Hydric	Bottom Depth 10 20 22 Soil Field In A1- Histosol A2 - Histic Ep	Typic Hapludalfs the depth needed to document the in Horizon 1 2 3 ndicators (check he	Color 10YR 10YR 2.5Y	m the absence of Matrix (Moist) 3/1 2/1 4/1 icators a	% 95 95 95 sre not pre	7.5YR 10YR 10YR esent value Belov	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, Control (Moist) 3/4 3/4 4/6 Surface (LRR R, MLRA 149B) ace (LRR R, MLRA 149B)	moderately v	Vell to well Grains; Location: F Type C C C s for Proble A10 - 2 cm I A16 - Coast	LePore Lining, M=Matrix) Location M M matic Soils ¹ Muck (LRR K, L, MLRA 1) 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 20 NRCS Hydric	Bottom Depth 10 20 22 Soil Field In	Typic Hapludalfs the depth needed to document the in Horizon 1 2 3 ndicators (check here)	Color 10YR 10YR 2.5Y	m the absence of Matrix (Moist) 3/1 2/1 4/1 icators a	% 95 95 95 sre not pre S8 - Polyv S9 - Thin S11 - High	7.5YR 10YR 10YR esent value Belov Dark Surfa	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, Control (Moist) 3/4 3/4 4/6 Surface (LRR R, MLRA 149B) ace (LRR R, MLRA 149B)	moderately v	Type C C C s for Proble A10 - 2 cm I A16 - Coast S3 - 5 cm Mu	Location M M M matic Soils ¹ Muck (LRR K, L, MLRA 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 20 NRCS Hydric	Bottom Depth 10 20 22 Soil Field Ir A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified	Typic Hapludalfs the depth needed to document the in Horizon 1 2 3 ndicators (check here) pipedon istic en Sulfide d Layers	Color 10YR 10YR 2.5Y ere if ind	m the absence of Matrix (Moist) 3/1 2/1 4/1 icators a	% 95 95 95	7.5YR 10YR 10YR esent value Below Dark Surfan Chroma by Mucky May Gleyed	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, CRed Color (Moist) 3/4 3/4 4/6 Surface (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix	moderately v	Type C C C s for Proble A10 - 2 cm I A16 - Coast S3 - 5cm Mt S7 - Dark St S8 - Polyval	Location M 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	(e.g. clay, sand, loam) silt loam silty clay loam silty clay loam (LRR K, L, R)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 10 20 NRCS Hydric	Bottom Depth 10 20 22 Soil Field Ir A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A11 - Deplete	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	Color 10YR 10YR 2.5Y ere if ind	m the absence of Matrix (Moist) 3/1 2/1 4/1 icators a	% 95 95 95	7.5YR 10YR 10YR esent value Below Dark Surfan Chroma ny Mucky N	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, CRec Rec Color (Moist) 3/4 4/6): w Surface (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix (moderately v	Vell to well Grains; Location: F Type C C C s for Proble A10 - 2 cm I A16 - Coast S3 - 5cm Mu S7 - Dark Si S8 - Polyval S9 - Thin Da	Location M M M matic Soils ¹ Vluck (LRR K, L, MLRA 1) Prairie Redox (LRR ucky Peat of Peat (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 (49B) k, L, R) (LRR K, L, R)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 10 20 NRCS Hydric	Bottom Depth 10 20 22 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A11 - Deplete A12 - Thick I	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	Color 10YR 10YR 2.5Y ere if ind	m the absence of Matrix (Moist) 3/1 2/1 4/1 icators a	% 95 95 95	7.5YR 10YR 10YR esent yalue Below Dark Surfan Chroma ny Mucky M ny Gleyed eted Matrix x Dark Su	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, Class Red Color (Moist) 3/4 3/4 4/6 Surface (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix Crface	moderately vectors of the control of	Vell to well Type C C C s for Proble A10 - 2 cm I A16 - Coast S3 - 5 cm Mu S7 - Dark Su S8 - Polyval S9 - Thin Da F12 - Iron-M	Location M M M matic Soils Muck (LRR K, L, MLRA 1) Prairie Redox (LRR Lucky Peat of Peat (LRR K, L, M) ue Below Surface (LRR K, L) ark Surface (LRR K, L) langanese Masses	(e.g. clay, sand, loam) silt loam silty clay loam silty clay loam (49B) c. K, L, R) (LRR K, L, R) (LRR K, L, R)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 10 20 NRCS Hydric	Bottom Depth 10 20 22 Soil Field Ir A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A11 - Deplete	Typic Hapludalfs 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 2.5Y ere if ind	m the absence of Matrix (Moist) 3/1 2/1 4/1 icators a	% 95 95 95	7.5YR 10YR 10YR esent esent yalue Belov Dark Surfan Chroma ny Mucky M ny Gleyed eted Matrix ox Dark Su eted Dark	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, Concord (Moist) 3/4 3/4 4/6 N Surface (LRR R, MLRA 149B) Sands Aineral (LRR K, L) Matrix Corface Surface Surface	moderately v	Type C C C C s for Proble A10 - 2 cm I A16 - Coast S3 - 5 cm Mu S7 - Dark S0 S8 - Polyval S9 - Thin Da F12 - Iron-M F19 - Piedm	Location M M M matic Soils ¹ Vluck (LRR K, L, MLRA 1) Prairie Redox (LRR ucky Peat of Peat (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 (49B) c. K, L, R) (LRR K, L, R) (LRR K, L, R)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 10 20 NRCS Hydric	Bottom Depth 10 20 22 Soil Field Ir A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A12 - Thick E S1 - Sandy E S5 - Sandy E	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	Color 10YR 10YR 2.5Y ere if ind	m the absence of Matrix (Moist) 3/1 2/1 4/1 icators a	% 95 95 95 see not presserved for the presserved for th	7.5YR 10YR 10YR esent esent yalue Belov Dark Surfan Chroma ny Mucky M ny Gleyed eted Matrix ox Dark Su eted Dark	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, Concord (Moist) 3/4 3/4 4/6 N Surface (LRR R, MLRA 149B) Sands Aineral (LRR K, L) Matrix Corface Surface Surface	moderately v	Type C C C C s for Proble A10 - 2 cm I A16 - Coast S3 - 5 cm Mu S7 - Dark Su S8 - Polyval S9 - Thin Da F12 - Iron-M F19 - Piedm F21 - Red P TA6 - Mesic	Location M M M M matic Soils Muck (LRR K, L, MLRA 1 Prairie Redox (LRR Lucky Peat of Peat (Lurface (LRR K, L, M) ue Below Surface ark Surface (LRR K, L langanese Masses ont Floodplain Soi arent Material Spodic (MLRA 144A, 1	(e.g. clay, sand, loam) silt loam silty clay loam silty 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)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 10 20 NRCS Hydric	Bottom Depth 10 20 22 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 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 H Matrix	Color 10YR 10YR 2.5Y ere if ind	m the absence of Matrix (Moist) 3/1 2/1 4/1 icators a	% 95 95 95 see not presserved for the presserved for th	7.5YR 10YR 10YR esent esent yalue Belov Dark Surfan Chroma ny Mucky M ny Gleyed eted Matrix ox Dark Su eted Dark	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, Concord (Moist) 3/4 3/4 4/6 N Surface (LRR R, MLRA 149B) Sands Aineral (LRR K, L) Matrix Corface Surface Surface	moderately values CS=Covered/Coated Sance dox Features 5 5 Indicator	Type C C C C C Sfor Proble A10 - 2 cm I A16 - Coast S3 - 5cm Mu 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 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 Soi arent Material Spodic (MLRA 144A, 1 Shallow Dark Surf	(e.g. clay, sand, loam) silt loam silty clay loam silty 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)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 10 20 NRCS Hydric	Bottom Depth 10 20 22 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 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	Color 10YR 10YR 2.5Y ere if ind	m the absence of Matrix (Moist) 3/1 2/1 4/1 icators a	% 95 95 95 see not presserved for the presserved for th	7.5YR 10YR 10YR esent esent yalue Belov Dark Surfan Chroma ny Mucky M ny Gleyed eted Matrix ox Dark Su eted Dark	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, Concord (Moist) 3/4 3/4 4/6 N Surface (LRR R, MLRA 149B) Sands Aineral (LRR K, L) Matrix Corface Surface Surface	moderately v	Type C C C 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 F19 - Piedm F21 - Red P TA6 - Mesic TF12 - Very Other (Expla	Location M M M M matic Soils Muck (LRR K, L, MLRA 1 Prairie Redox (LRR Lucky Peat of Peat (Lurface (LRR K, L, M) ue Below Surface ark Surface (LRR K, L langanese Masses ont Floodplain Soi arent Material Spodic (MLRA 144A, 1	(e.g. clay, sand, loam) silt loam silty clay loam silty clay loam 49B) k, L, R) (LRR K, L, R) (LRR K, L, R) (LRR K, L, R) Is (MLRA 149B) 45, 149B) face
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 10 20 NRCS Hydric	Bottom Depth 10 20 22 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	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 Eleyed Matrix Redox d Matrix Inface (LRR R, MLRA 149B)	Color 10YR 10YR 2.5Y ere if ind	m the absence of Matrix (Moist) 3/1 2/1 4/1 icators a	% 95 95 95	7.5YR 10YR 10YR esent esent yalue Belov Dark Surfan Chroma ny Mucky M ny Gleyed eted Matrix ox Dark Su eted Dark	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, Concord (Moist) 3/4 3/4 4/6 N Surface (LRR R, MLRA 149B) Sands Aineral (LRR K, L) Matrix Corface Surface Surface	moderately values CS=Covered/Coated Sance dox Features % 5 5 Indicator	Type C C C C 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 F19 - Piedm F19 - Piedm F11 - 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 ark Surface (LRR K, L) langanese Masses ont Floodplain Soi arent Material Spodic (MLRA 144A, 1 Shallow Dark Surfain in Remarks)	(e.g. clay, sand, loam) silt loam silty clay loam silty clay loam 49B) c, K, L, R) (LRR K, L, R) (LRR K, L, R) (LRR K, L, R) ds (MLRA 149B) face must be present, unless
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 10 20 NRCS Hydric	Bottom Depth 10 20 22 Soil Field Ir A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A12 - Thick E S1 - Sandy N S4 - Sandy N S4 - Sandy N S5 - Sandy R S6 - Stripped S7 - Dark Su	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 Irface (LRR R, MLRA 149B)	Color 10YR 2.5Y ere if ind	m the absence of Matrix (Moist) 3/1 2/1 4/1 icators a	of indicators.) (Type	7.5YR 10YR 10YR esent esent	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, Concord (Moist) 3/4 3/4 4/6 N Surface (LRR R, MLRA 149B) Sands Aineral (LRR K, L) Matrix Corface Surface Surface	moderately v CS=Covered/Coated Sance dox Features % 5 5 Indicator Indicator disturbed of Hydric Soil	Type C C C C C C Sfor Proble A10 - 2 cm I A16 - Coast S3 - 5 cm Mu S7 - Dark S0 S8 - Polyval S9 - Thin Da F12 - Iron-M F19 - Piedm F21 - Red P TA6 - Mesic TF12 - Very Other (Expla of hydrophytic veget or problematic. Present?	Location M M M M matic Soils Muck (LRR K, L, MLRA 1 Prairie Redox (LRR k, L, M) ue Below Surface ark Surface (LRR K, L) langanese Masses ont Floodplain Soi arent Material Spodic (MLRA 144A, 1 Shallow Dark Surfain in Remarks)	(e.g. clay, sand, loam) silt loam silty clay loam silty clay loam 49B) k, L, R) (LRR K, L, R) (LRR K, L, R) (LRR K, L, R) Is (MLRA 149B) 45, 149B) face



Project/Site: North Mendota Energy and Technology Park Wetland ID: W-2 Sample Point: P12

VEGETATION	(Species identified in all uppercase are non-na	ative spec	cies.)		
Tree Stratum (Plo	ot size: 10 meter radius)				
4	<u>Species Name</u>	% Cover	<u>Dominant</u>	Ind.Status	Dominance Test Worksheet
1. 2.					Number of Deminant Species that are ORL EACW or EAC:
3.	_ 				Number of Dominant Species that are OBL, FACW, or FAC:1(A)
3. 4.	_ 				Total Number of Dominant Species Across All Strata: 1 (B)
5.					Total Number of Bornillant Species Across All Strata(B)
6.					Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)
7.					(742)
8.					Prevalence Index Worksheet
9.					Total % Cover of: Multiply by:
10.					$ \begin{array}{ccc} \hline & OBL spp. & 0 & x & 1 = & 0 \end{array} $
	Total Cover =	0			FACW spp. 100 $\times 2 = 200$
					FAC spp. $0 x 3 = 0$
Sapling/Shrub Stra	atum (Plot size: 5 meter radius)				FACU spp. $0 x 4 = 0$
1.					UPL spp. $0 x 5 = 0$
2.					
3.					Total 100 (A) 200 (B)
4.					
5.					Prevalence Index = B/A = 2.000
6.					
7.					Hadronbado Vanetation Indicators
8.					Hydrophytic Vegetation Indicators:
9.					✓ Yes ☐ No Rapid Test for Hydrophytic Vegetation
10.	Total Cover =	0			✓ Yes ☐ No Dominance Test is > 50%✓ Yes ☐ No Prevalence Index is ≤ 3.0 *
	Total Cover =	U			
Herb Stratum (Plo	t size: 2 meter radius)				☐ Yes☑ NoMorphological Adaptations (Explain) *☐ Yes☑ NoProblem Hydrophytic Vegetation (Explain) *
1.	PHALARIS ARUNDINACEA	100	Υ	FACW	Tes Envo Problem Hydrophytic Vegetation (Explain)
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.					, ·
14.					Managha Winga All woody vince greater than 2.20 ft in height
15.					Woody Vines - All woody vines greater than 3.28 ft. in height.
	Total Cover =	100			
Woody Vina Chart	um (Plot cizo: 40 motor rodina)				
1	um (Plot size: 10 meter radius)				
2.					
3.	_ 				Hydrophytic Vegetation Present ☑ Yes ☐ No
4.					injunction to gottation in 1000 in the
5.					
	Total Cover =	0			
Remarks:	, , , , , , , , , , , , , , , , , , ,				
Additional Ren	marks:				



Project/Site:		dota Energy and Te	٠.	•			Stantec Project #:	193703573		Date:	04/23/15
Applicant:		ch Development & C	Construc							County:	Dane
Investigator #1:		-961		Investi	igator #2:		1/4//4/1 () : : : : : : : :			State:	Wisconsin
Soil Unit: Landform:	St. Charles	s siit ioam		Loc	al Relief:		I/WWI Classification:			Wetland ID:	W-2 P13
Slope (%):	Toeslope 0-2	Latitude:	ΝΙ/Δ		ongitude:			Datum:	Ν/Δ	Sample Point: Community ID:	Ag Field
. , ,		ditions on the site ty					nin in remarks)	✓ Yes □		Section:	22
		or Hydrology □ sig				(II TIO, CXPIC	Are normal circumsta			Township:	8N
•		or Hydrology □ na	-				□ Yes	☑No		Range:	9 Dir: E
SUMMARY OF		, 5, 5, 6	,							3	
Hydrophytic Ve	getation Pre	sent?		□ Yes	. ☑ No			Hydric Soils	Present?		☐ Yes ☑ No
Wetland Hydrol	ogy Present	:?		☐ Yes				Is This Samp	oling Point \	Within A Wetlar	nd? ■ Yes ☑ No
Remarks:			onditions	were no	ormal; 4.1	4 inches	of rain were received	in the area fr	om April 1	- April 23. Sam	ple point located within
	active ag fi	eid.									
HYDROLOGY											
_	• •	ators (Check here	if indicate	ors are r	not preser	nt □):					
<u>Primary:</u>	A1 - Surface	Water			B9 - Wate	or-Stainad	Logyos		Secondary:	B6 - Surface Soil	Cracks
l	A2 - High Wa				B13 - Aqu				_	B10 - Drainage Pa	
	A3 - Saturation	on			B15 - Mar	I Deposits				B16 - Moss Trim	Lines
	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
	B4 - Algal Ma						duction in Tilled Soils			D1 - Stunted or S	
□	B5 - Iron Dep				C7 - Thin					D2 - Geomorphic	
		on Visible on Aerial Ima	0 ,		Other (Ex	plain in Re	marks)			D3 - Shallow Aqui	
	Do - Sparser	y Vegetated Concave S	burrace							D4 - Microtopogra D5 - FAC-Neutral	
Field Observat	ions:										
Surface Water		☐ Yes ☑ No	Depth:		(in.)						
Water Table Pr		☑ Yes ☐ No	Depth:		(in.)			Wetland Hy	drology Pr	esent?	Yes ☑ No
Saturation Pres		☑ Yes ☐ No	Depth:		(in.)						
		eam gauge, monitori	•		. ,	ous inche	otions) if available:		Aerial Image	ory Poviow	
				aenai pric	nos, previ	ous mspe	clions), ii avaliable.		Aeriai iiriage	ery ixeview	
Damarkei		hut higher in landee	and than	D12							
Remarks:	roesiope, i	but higher in landsc	ape than	P12.							
	roesiope, i	out higher in landsc	ape than	P12.							
SOILS				P12.		S	eries Drainage Class:	moderately v	well to well		
SOILS Map Unit Name):	out higher in landsc St. Charles silt loar Typic Hapludalfs		P12.		S	eries Drainage Class:	moderately v	well to well		
SOILS Map Unit Name Taxonomy (Sub	e: ogroup):	St. Charles silt loar Typic Hapludalfs	n		of indicators.) (Ty		•	•		PL=Pore Lining, M=Matrix)	
SOILS Map Unit Name Taxonomy (Sub	e: ogroup):	St. Charles silt loar Typic Hapludalfs	n				tion, D=Depletion, RM=Reduced Matrix, C	•	d Grains; Location: F	PL=Pore Lining, M=Matrix)	Texture
SOILS Map Unit Name Taxonomy (Sub	e: ogroup): otion (Describe to	St. Charles silt loar Typic Hapludalfs	n dicator or confirm	m the absence o		pe: C=Concentra	tion, D=Depletion, RM=Reduced Matrix, C	CS=Covered/Coated Sand	d Grains; Location: F	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	St. Charles silt loar Typic Hapludalfs the depth needed to document the in	n dicator or confirm	m the absence o	_	pe: C=Concentra	tion, D=Depletion, RM=Reduced Matrix, C	CS=Covered/Coated Sand	d Grains; Location: P		_
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth	e: ogroup): otion (Describe to Bottom Depth	St. Charles silt loar Typic Hapludalfs the depth needed to document the in	n dicator or confirm	m the absence of Matrix (Moist)	%	pe: C=Concentra	tion, D=Depletion, RM=Reduced Matrix, C Red Color (Moist)	CS=Covered/Coated Sand	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	St. Charles silt loar Typic Hapludalfs the depth needed to document the in Horizon 1	dicator or confirm	m the absence of Matrix (Moist) 3/1	% 100	pe: C=Concentra	tion, D=Depletion, RM=Reduced Matrix, C Rec Color (Moist)	CS=Covered/Coated Sand dox Features %	d Grains; Location: P	Location 	(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 11	St. Charles silt loar Typic Hapludalfs the depth needed to document the in Horizon 1 2	n dicator or confirm Color 10YR 10YR	Matrix (Moist) 3/1 2/1	% 100 100	pe: C=Concentra	tion, D=Depletion, RM=Reduced Matrix, C Red Color (Moist)	CS=Covered/Coated Sand dox Features %	d Grains; Location: F	Location 	(e.g. clay, sand, loam) silt loam silt loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 11	e: pgroup): ption (Describe to Bottom Depth 8 11 26	St. Charles silt loar Typic Hapludalfs the depth needed to document the in Horizon 1 2 3	Color 10YR 10YR 10YR	Matrix (Moist) 3/1 2/1 2/1	% 100 100 97	pe: C=Concentra	tion, D=Depletion, RM=Reduced Matrix, C Red Color (Moist) 3/4	cs=Covered/Coated Sand dox Features % 3	Type C	Location M	(e.g. clay, sand, loam) silt loam silt loam silty clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 11	e: ogroup): otion (Describe to Bottom Depth 8 11 26 30	St. Charles silt loar Typic Hapludalfs the depth needed to document the in Horizon 1 2 3 4	Color 10YR 10YR 10YR 10YR	m the absence of Matrix (Moist) 3/1 2/1 2/1 4/1	% 100 100 97 80	 7.5YR 10YR	Color (Moist) 3/4 3/6	dox Features % 3 10	Type C C	Location M M	(e.g. clay, sand, loam) silt loam silt loam silty clay loam silty clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 11 26	Bottom Depth 8 11 26 30	St. Charles silt loar Typic Hapludalfs the depth needed to document the in Horizon 1 2 3 4	Color 10YR 10YR 10YR 10YR 10YR	m the absence of Matrix (Moist) 3/1 2/1 2/1 4/1 2/1	% 100 100 97 80 10	 7.5YR 10YR	tion, D=Depletion, RM=Reduced Matrix, C Red Color (Moist) 3/4 3/6	cs=Covered/Coated Sand dox Features % 3 10	Type C C	Location M M	(e.g. clay, sand, loam) silt loam silt loam silty clay loam silty clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 11 26	e: ogroup): otion (Describe to Bottom Depth 8 11 26 30	St. Charles silt loar Typic Hapludalfs the depth needed to document the in Horizon 1 2 3 4	Color 10YR 10YR 10YR 10YR	m the absence of Matrix (Moist) 3/1 2/1 2/1 4/1 2/1	% 100 100 97 80 10 	 7.5YR 10YR 	tion, D=Depletion, RM=Reduced Matrix, CRecord Color (Moist) 3/4 3/6	CS=Covered/Coated Sand dox Features % 3 10	Type C C	Location M M	(e.g. clay, sand, loam) silt loam silt loam silty clay loam silty clay loam silty clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 11 26 NRCS Hydric	pgroup): ption (Describe to Bottom Depth 8 11 26 30 Soil Field In	St. Charles silt loar Typic Hapludalfs the depth needed to document the in Horizon 1 2 3 4	Color 10YR 10YR 10YR 10YR	m the absence of Matrix (Moist) 3/1 2/1 2/1 4/1 2/1 icators a	% 100 100 97 80 10 	re: C=Concentra 7.5YR 10YR esent	tion, D=Depletion, RM=Reduced Matrix, CRedColor (Moist) 3/4 3/6	CS=Covered/Coated Sand dox Features % 3 10 Indicator	Type	Location M M matic Soils ¹	(e.g. clay, sand, loam) silt loam silt loam silty clay loam silty clay loam silty clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 11 26 NRCS Hydric	Bottom Depth 8 11 26 30 Soil Field In	St. Charles silt loar Typic Hapludalfs the depth needed to document the in Horizon 1 2 3 4 ndicators (check he	Color 10YR 10YR 10YR 10YR	m the absence of Matrix (Moist) 3/1 2/1 2/1 4/1 2/1 icators a	% 100 100 97 80 10 are not pre	7.5YR 10YR esent //alue Belov	tion, D=Depletion, RM=Reduced Matrix, CRed Color (Moist) 3/4 3/6): v Surface (LRR R, MLRA 149B)	CS=Covered/Coated Sand dox Features % 3 10 Indicator	Type C C	Location M M matic Soils ¹ Vuck (LRR K, L, MLRA 1	(e.g. clay, sand, loam) silt loam silt loam silty clay loam silty clay loam silty clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 11 26 NRCS Hydric	e: ogroup): otion (Describe to Bottom Depth 8 11 26 30 Soil Field In A1- Histosol A2 - Histic Ep	St. Charles silt loar Typic Hapludalfs the depth needed to document the in Horizon 1 2 3 4 ndicators (check here)	Color 10YR 10YR 10YR 10YR	m the absence of Matrix (Moist) 3/1 2/1 2/1 4/1 2/1 icators a	% 100 100 97 80 10 are not pre	7.5YR 10YR sent ☑ /alue Belov	tion, D=Depletion, RM=Reduced Matrix, CRedColor (Moist) 3/4 3/6 N Surface (LRR R, MLRA 149B) ace (LRR R, MLRA 149B)	CS=Covered/Coated Sand dox Features % 3 10 Indicator	Type C C C	Location M M matic Soils ¹ Vuck (LRR K, L, MLRA 1) Prairie Redox (LRR	(e.g. clay, sand, loam) silt loam silt loam silty clay loam silty clay loam silty clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 11 26 NRCS Hydric	Bottom Depth 8 11 26 30 Soil Field In	St. Charles silt loar Typic Hapludalfs the depth needed to document the in Horizon 1 2 3 4 ndicators (check here) pipedon istic	Color 10YR 10YR 10YR 10YR	m the absence of Matrix (Moist) 3/1 2/1 2/1 4/1 2/1 icators a	% 100 100 97 80 10 sre not pre S8 - Polys S9 - Thin S11 - High	7.5YR 10YR esent ☑ /alue Below	tion, D=Depletion, RM=Reduced Matrix, CRedColor (Moist) 3/4 3/6 N Surface (LRR R, MLRA 149B) ace (LRR R, MLRA 149B)	CS=Covered/Coated Sand dox Features % 3 10 Indicator	Type C C C s for Proble A10 - 2 cm I A16 - Coast S3 - 5cm Mu S7 - Dark S0	Location M M matic Soils ¹ Vuck (LRR K, L, MLRA 1) Prairie Redox (LRR ucky Peat of Peat (urface (LRR K, L, M)	(e.g. clay, sand, loam) silt loam silt loam silty clay 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 8 11 26 NRCS Hydric	Bottom Depth 8 11 26 30 Soil Field Ir A1- Histosol A2 - Histic Ep A3 - Black Histosol A4 - Hydroge A5 - Stratified	St. Charles silt loar Typic Hapludalfs the depth needed to document the in Horizon 1 2 3 4 ndicators (check here) pipedon istic en Sulfide d Layers	color Color 10YR 10YR 10YR 10YR ere if indi	m the absence of Matrix (Moist) 3/1 2/1 2/1 4/1 2/1 icators a	% 100 100 97 80 10	7.5YR 10YR esent /alue Below Dark Surfa	tion, D=Depletion, RM=Reduced Matrix, CRed Color (Moist) 3/4 3/6): w Surface (LRR R, MLRA 149B) RCE (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix	CS=Covered/Coated Sand dox Features % 3 10 Indicator	Type	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	(e.g. clay, sand, loam) silt loam silt loam silty clay loam silty clay loam silty clay loam (LAPB) R K, L, R) (LRR K, L, R)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 11 26 NRCS Hydric	Bottom Depth 8 11 26 30 Soil Field Ir A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A11 - Deplete	St. Charles silt loar Typic Hapludalfs the depth needed to document the in Horizon 1 2 3 4 ndicators (check here) pipedon istic en Sulfide d Layers ed Below Dark Surface	color Color 10YR 10YR 10YR 10YR ere if indi	m the absence of Matrix (Moist) 3/1 2/1 2/1 4/1 2/1 icators a	% 100 100 97 80 10 sre not pre S8 - Poly S9 - Thin S11 - High F1 - Loam F2 - Loam F3 - Deple	7.5YR 10YR esent value Below Dark Surfa h Chroma ny Mucky M ny Gleyed eted Matrix	tion, D=Depletion, RM=Reduced Matrix, CRed Color (Moist) 3/4 3/6): w Surface (LRR R, MLRA 149B) ace (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix	CS=Covered/Coated Sand dox Features % 3 10 Indicator	Type	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 ark Surface (LRR K, L	(e.g. clay, sand, loam) silt loam silt loam silty clay 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 8 11 26 NRCS Hydric	Bottom Depth 8 11 26 30 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A11 - Deplete A12 - Thick I	St. Charles silt loar Typic Hapludalfs the depth needed to document the in Horizon 1 2 3 4 ndicators (check here) pipedon istic en Sulfide d Layers ed Below Dark Surface Dark Surface	color Color 10YR 10YR 10YR 10YR ere if indi	m the absence of Matrix (Moist) 3/1 2/1 2/1 4/1 2/1 icators a	% 100 100 97 80 10	7.5YR 10YR esent value Below Dark Surfa h Chroma ny Mucky M ny Gleyed eted Matrix ox Dark Su	tion, D=Depletion, RM=Reduced Matrix, CRed Color (Moist) 3/4 3/6): v Surface (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix frace	CS=Covered/Coated Sand dox Features % 3 10 Indicator	Type	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 ark Surface (LRR K, L langanese Masses	(e.g. clay, sand, loam) silt loam silt loam silty clay loam silty clay loam silty clay loam (149B) 8 K, L, R) (LRR K, L, R) (LRR K, L, R)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 11 26 NRCS Hydric	Bottom Depth 8 11 26 30 Soil Field Ir A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A11 - Deplete	St. Charles silt loar Typic Hapludalfs the depth needed to document the in Horizon 1 2 3 4 ndicators (check here) pipedon istic en Sulfide d Layers ed Below Dark Surface Dark Surface Muck Mineral	color Color 10YR 10YR 10YR 10YR ere if indi	m the absence of Matrix (Moist) 3/1 2/1 2/1 4/1 icators a	% 100 100 97 80 10 sre not pre S8 - Poly S9 - Thin S11 - High F1 - Loam F2 - Loam F3 - Deple	7.5YR 10YR esent value Below Dark Surfa h Chroma ny Mucky M ny Gleyed eted Matrix ox Dark Su eted Dark	tion, D=Depletion, RM=Reduced Matrix, CRed Color (Moist) 3/4 3/6): v Surface (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix frace Surface	dox Features % 3 10 Indicator	Type C C C s for Proble A10 - 2 cm I A16 - Coast S3 - 5cm Mu S7 - Dark S0 S8 - Polyval S9 - Thin Da F12 - Iron-M F19 - Piedm	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 ark Surface (LRR K, L	(e.g. clay, sand, loam) silt loam silt loam silty clay loam silty clay loam silty clay loam (149B) 8 K, L, R) (LRR K, L, R) (LRR K, L, R)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 11 26 NRCS Hydric	Bottom Depth 8 11 26 30 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	St. Charles silt loar Typic Hapludalfs the depth needed to document the in Horizon 1 2 3 4 ndicators (check here) pipedon istic en Sulfide d Layers ed Below Dark Surface Muck Mineral Gleyed Matrix Redox	color Color 10YR 10YR 10YR 10YR ere if indi	m the absence of Matrix (Moist) 3/1 2/1 2/1 4/1 icators a	% 100 100 97 80 10	7.5YR 10YR esent value Below Dark Surfa h Chroma ny Mucky M ny Gleyed eted Matrix ox Dark Su eted Dark	tion, D=Depletion, RM=Reduced Matrix, CRed Color (Moist) 3/4 3/6): v Surface (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix frace Surface	CS=Covered/Coated Sand dox Features % 3 10 Indicator	Type	Location M M M matic Soils Muck (LRR K, L, MLRA 1 Prairie Redox (LRR Lucky Peat of Peat (LRR K, L, M) Lucky Peat of Peat (LRR K, L) Lurface (LRR K, L, M) Lue Below Surface Lurface (LRR K, L, M) Lurface (LRR K,	(e.g. clay, sand, loam) silt loam silt loam silty clay loam silty clay loam silty clay loam (LRR K, L, R)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 11 26 NRCS Hydric	Bottom Depth 8 11 26 30 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	St. Charles silt loar Typic Hapludalfs the depth needed to document the in Horizon 1 2 3 4 ndicators (check here) pipedon istic en Sulfide d Layers ed Below Dark Surface Dark Surface Muck Mineral Gleyed Matrix Redox H Matrix	color Color 10YR 10YR 10YR 10YR ere if indi	m the absence of Matrix (Moist) 3/1 2/1 2/1 4/1 icators a	% 100 100 97 80 10	7.5YR 10YR esent value Below Dark Surfa h Chroma ny Mucky M ny Gleyed eted Matrix ox Dark Su eted Dark	tion, D=Depletion, RM=Reduced Matrix, CRed Color (Moist) 3/4 3/6): v Surface (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix frace Surface	dox Features % 3 10 Indicator	Type	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 langanese Masses ont Floodplain Soi arent Material Spodic (MLRA 144A, 1 Shallow Dark Surf	(e.g. clay, sand, loam) silt loam silt loam silty clay loam silty clay loam silty clay loam (LRR K, L, R)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 11 26 NRCS Hydric	Bottom Depth 8 11 26 30 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	St. Charles silt loar Typic Hapludalfs the depth needed to document the in Horizon 1 2 3 4 ndicators (check here) pipedon istic en Sulfide d Layers ed Below Dark Surface Muck Mineral Gleyed Matrix Redox	color Color 10YR 10YR 10YR 10YR ere if indi	m the absence of Matrix (Moist) 3/1 2/1 2/1 4/1 icators a	% 100 100 97 80 10	7.5YR 10YR esent value Below Dark Surfa h Chroma ny Mucky M ny Gleyed eted Matrix ox Dark Su eted Dark	tion, D=Depletion, RM=Reduced Matrix, CRed Color (Moist) 3/4 3/6): v Surface (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix frace Surface	dox Features % 3 10 Indicator	Type	Location M M M matic Soils Muck (LRR K, L, MLRA 1 Prairie Redox (LRR Lucky Peat of Peat (LRR K, L, M) Lucky Peat of Peat (LRR K, L) Lurface (LRR K, L, M) Lue Below Surface Lurface (LRR K, L, M) Lurface (LRR K,	(e.g. clay, sand, loam) silt loam silt loam silty clay loam silty clay loam silty clay loam (LRR K, L, R) (LRR K, L, R) (LRR K, L, R) (LRR K, L, R) (S (LRR K, L, R) (LRR K, L, R) (LRR K, L, R) (LRR K, L)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 11 26 NRCS Hydric	Bottom Depth 8 11 26 30 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	St. Charles silt loar Typic Hapludalfs the depth needed to document the in Horizon 1 2 3 4 ndicators (check here) pipedon istic en Sulfide d Layers ed Below Dark Surface Dark Surface Muck Mineral Gleyed Matrix Redox H Matrix	color Color 10YR 10YR 10YR 10YR ere if indi	m the absence of Matrix (Moist) 3/1 2/1 2/1 4/1 icators a	% 100 100 97 80 10	7.5YR 10YR esent value Below Dark Surfa h Chroma ny Mucky M ny Gleyed eted Matrix ox Dark Su eted Dark	tion, D=Depletion, RM=Reduced Matrix, CRed Color (Moist) 3/4 3/6): v Surface (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix frace Surface	dox Features % 3 10 Indicator	Type	Location M M M matic Soils Muck (LRR K, L, MLRA 1) Prairie Redox (LRR k, L, M) ucky Peat of Peat (LRR K, L, M) ue Below Surface ark Surface (LRR K, L M)	(e.g. clay, sand, loam) silt loam silt loam silty clay loam silty clay loam silty clay loam (LRR K, L, R) (LRR K, L, R) (LRR K, L, R) (LRR K, L, R) (S (LRR K, L, R) (LRR K, L, R) (LRR K, L, R) (LRR K, L)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 11 26 NRCS Hydric	Bottom Depth 8 11 26 30 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	St. Charles silt loar Typic Hapludalfs the depth needed to document the in Horizon 1 2 3 4 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 Color 10YR 10YR 10YR 10YR ere if indi	m the absence of Matrix (Moist) 3/1 2/1 2/1 4/1 icators a	% 100 100 97 80 10	7.5YR 10YR esent value Below Dark Surfa h Chroma ny Mucky M ny Gleyed eted Matrix ox Dark Su eted Dark	tion, D=Depletion, RM=Reduced Matrix, CRed Color (Moist) 3/4 3/6): v Surface (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix frace Surface	dox Features % 3 10 Indicator	Type	Location M M M matic Soils Muck (LRR K, L, MLRA 1) Prairie Redox (LRR k, L, M) ucky Peat of Peat (LRR K, L, M) ue Below Surface ark Surface (LRR K, L M)	(e.g. clay, sand, loam) silt loam silt loam silty clay loam silty clay loam silty clay loam (LRR K, L, R) (LRR K, L, R) (LRR K, L, R) (LRR K, L, R) (S (LRR K, L, R) (LRR K, L, R) (LRR K, L, R) (LRR K, L)

Sample Point: P13



Project/Site:

North Mendota Energy and Technology Park

WETLAND DETERMINATION DATA FORM

Wetland ID: W-2

Northeast and Northcentral Region

(Species identified in all uppercase are non-native species.) Tree Stratum (Plot size: 10 meter radius) **Dominance Test Worksheet** Species Name Ind.Status % Cover Dominant Number of Dominant Species that are OBL, FACW, or FAC: 0 (A) Total Number of Dominant Species Across All Strata: Percent of Dominant Species That Are OBL, FACW, or FAC: 0% Prevalence Index Worksheet Total % Cover of: Sapling/Shrub Stratum (Plot size: 5 meter radius) Prevalence Index = B/A = Hydrophytic Vegetation Indicators: Rapid Test for Hydrophytic Vegetation Dominance Test is > 50% Prevalence Index is ≤ 3.0 * Total Cover = Morphological Adaptations (Explain) * Herb Stratum (Plot size: 2 meter radius) Problem Hydrophytic Vegetation (Explain) Ambrosia artemisiifolia * Indicators of hydric soil and wetland hydrology must be PLANTAGO MAJOR present, unless disturbed or problematic. POA PRATENSIS Definitions of Vegetation Strata: Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft. Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft. tall. Woody Vines - All woody vines greater than 3.28 ft. in height. Woody Vine Stratum (Plot size: 10 meter radius) Total Cover = Sample point located within active ag field planted to corn in 2014; no evidence of crop stress observed in stubble. Few weedy species. Remarks:

Additional Remarks:

Sample point located in ag field at slightly higher topography that P12. While associated with an area that appeared to exhibit wetland signatures, the lack of observable hydrology indicators, hydric soil, stunted crop stubble, and hydrophytic weedy species supports the upland determination.



Project/Site: Applicant:		dota Energy and Te					Stantec Project #:	193703573		Date: County:	04/23/15 Dane
Investigator #1		on Development & C	JOHSHUCI		gator #2:					State:	Wisconsin
Soil Unit:	Virgil silt lo	am			ga.c.		VI/WWI Classification:			Wetland ID:	W-2
Landform:	Talf			Loc	al Relief:					Sample Point:	P14
Slope (%):	0-2	Latitude:	N/A		ongitude:			Datum:	N/A	Community ID:	Ag Field
• ` ` `	drologic con	ditions on the site ty	pical for				ain in remarks)	☑ Yes □	No	Section:	22
Are Vegetation	ı ☑, Soil □,	or Hydrology □ sig	nificantly	disturbe	ed?		Are normal circumsta	ances presen	t?	Township:	8N
Are Vegetation	n □, Soil □,	or Hydrology □ na	turally pro	oblemati	ic?		☐ Yes	☑No		Range:	9 Dir: E
SUMMARY OF	FINDINGS										
Hydrophytic Ve	egetation Pre	sent?			□ No			Hydric Soils	Present?		☐ Yes ☑ No
Wetland Hydro				☐ Yes						Within A Wetla	
Remarks:	Based on a active ag fi		onditions	were no	ormal; 4.1	4 inches	s of rain were received	in the area fr	om April 1	- April 23. Sam	ple point located within
HYDROLOGY											
	rology Indic	ators (Check here	if indicate	ore are n	ot preser	o+ □ \•					
Primary	• • •	ators (Check here	II IIIulcall	JIS ale II	iot presei	и <u></u> /-			Secondary:		
] A1 - Surface	Water			B9 - Wate	er-Stained	Leaves			B6 - Surface Soil	Cracks
	A2 - High Wa				B13 - Aqu					B10 - Drainage P	
] A3 - Saturati] B1 - Water N				B15 - Mai C1 - Hydr					B16 - Moss Trim C2 - Dry-Season	
	B2 - Sedime				•	•	ospheres on Living Roots			C8 - Crayfish Bur	
	B3 - Drift De	posits			C4 - Pres	ence of R	educed Iron			C9 - Saturation V	isible on Aerial Imagery
	B4 - Algal Ma						eduction in Tilled Soils			D1 - Stunted or S	
l] B5 - Iron De _l] B7 - Inundati	oosits on Visible on Aerial Ima	agery		C7 - Thin Other (Ex					D2 - Geomorphic D3 - Shallow Aqu	
		y Vegetated Concave S	0 ,		0 11.01 (27	piam m	omano,			D4 - Microtopogra	
										D5 - FAC-Neutra	l Test
Field Observa	itions:										
Surface Water	Present?	☐ Yes ☑ No	Depth:		(in.)			Wetland Hy	drology P	resent?	Yes ☑ No
Water Table P	resent?	☐ Yes ☑ No	Depth:		(in.)			vvetiana my	arology P		163 M 140
Saturation Pre	sent?	☐ Yes ☑ No	Depth:		(in.)						
Describe Recor	ded Data (str	eam gauge, monitori	ing well, a	erial pho	tos, previ	ous inspe	ections), if available:		Aerial Imag	ery Review	
Remarks:											
SOILS											
Map Unit Nam	e:	Virgil silt loam				S	Series Drainage Class:	somewhat po	oorly		
Taxonomy (Su	<u> </u>	Udollic Endoaqual									
Profile Descri	ption (Describe to	the depth needed to document the in	dicator or confirm	n the absence o	of indicators.) (Ty	pe: C=Concenti	ration, D=Depletion, RM=Reduced Matrix, C	CS=Covered/Coated San	d Grains; Location: I	PL=Pore Lining, M=Matrix)	
Тор	Bottom			Matrix				dox Features	1	•	Texture
Depth	Depth	Horizon	1	(Moist)	%		Color (Moist)	%	Туре	Location	(e.g. clay, sand, loam)
0	10	1	10YR	3/2	100						silty clay loam
10	18	2	10YR	5/4	60						silty clay loam
			10YR	6/5	40						silty clay loam
										1	
_		ndicators (check he	ere if indi		•		•			ematic Soils 1	
	A1- Histosol A2 - Histic E	ninadan			-		w Surface (LRR R, MLRA 149B) ace (LRR R, MLRA 149B)			Muck (LRR K, L, MLRA t Prairie Redox (LRF	·
	A2 - Histic L A3 - Black H	• •		H	S11 - Hig		•	H		ucky Peat of Peat	
	A4 - Hydroge						Mineral (LRR K, L)		S7 - Dark S	urface (LRR K, L, M)	
	A5 - Stratifie	•			F2 - Loan				•	lue Below Surface	
] A11 - Deplet] A12 - Thick [ed Below Dark Surface Dark Surface	;		F3 - Deple					ark Surface (LRR K, I Manganese Masse:	,
	S1 - Sandy N				F7 - Depl					nont Floodplain So	
		Sleyed Matrix			F8 - Redo				F21 - Red F	Parent Material	
		Redox								Spodic (MLRA 144A,	•
	S5 - Sandy F									, Spallow Hark Sur	£
	S6 - Stripped	d Matrix						님		∕ Shallow Dark Sur ain in Remarks)	face
	S6 - Stripped								Other (Explant of hydrophytic vege	ain in Remarks) tation and wetland hydrology	
Pactriotive Lover	S6 - Stripped S7 - Dark Su	d Matrix Irface (LRR R, MLRA 149B)						disturbed of	Other (Explant of hydrophytic vege or problematic.	ain in Remarks)	v must be present, unless
Restrictive Layer (If Observed)	S6 - Stripped	d Matrix Irface (LRR R, MLRA 149B)		Depth:	N/A				Other (Explant of hydrophytic vege or problematic.	ain in Remarks)	
-	S6 - Stripped S7 - Dark Su	d Matrix Irface (LRR R, MLRA 149B)		Depth:	N/A			disturbed of	Other (Explant of hydrophytic vege or problematic.	ain in Remarks)	v must be present, unless

Sample Point: P14



Project/Site:

North Mendota Energy and Technology Park

WETLAND DETERMINATION DATA FORM

Wetland ID: W-2

Northeast and Northcentral Region

(Species identified in all uppercase are non-native species.) Tree Stratum (Plot size: 10 meter radius) **Dominance Test Worksheet** Species Name Ind.Status % Cover Dominant Number of Dominant Species that are OBL, FACW, or FAC: 2 (A) Total Number of Dominant Species Across All Strata: Percent of Dominant Species That Are OBL, FACW, or FAC: 100% Prevalence Index Worksheet Total % Cover of: Sapling/Shrub Stratum (Plot size: 5 meter radius) Prevalence Index = B/A = Hydrophytic Vegetation Indicators: Rapid Test for Hydrophytic Vegetation Dominance Test is > 50% Prevalence Index is ≤ 3.0 * Total Cover = Morphological Adaptations (Explain) * Herb Stratum (Plot size: 2 meter radius) Problem Hydrophytic Vegetation (Explain) * Indicators of hydric soil and wetland hydrology must be RUMEX CRISPUS present, unless disturbed or problematic. Definitions of Vegetation Strata: Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft. Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft. tall. Woody Vines - All woody vines greater than 3.28 ft. in height. Woody Vine Stratum (Plot size: 10 meter radius) Hydrophytic Vegetation Present

Yes
No Total Cover = Sample point located within active ag field planted to corn in 2014; no evidence of crop stress observed in stubble. Few weedy species. Remarks:

Additional Remarks:

Sample point within an area that did not exhibit wetland signatures. While hydrophytic weedy species are present, coverage was minimal and the lack of observable hydrology indicators and hydric soils supports the upland determination.



Project/Site:		dota Energy and Te	٠.				Stantec Project #:	193703573		Date:	04/23/15
Applicant:		ch Development & C	Construc							County:	Dane
Investigator #1:				Investi	gator #2:		///////// Ola a a if a a fi a a fi a a fi			State:	Wisconsin
Soil Unit: Landform:	Virgil silt lo	am		Loo	al Relief:		/I/WWI Classification:			Wetland ID:	W-2 P15
Slope (%):	0-2	Latitude:	NI/A		ongitude:			Datum:	NI/A	Sample Point: Community ID:	Riparian Corridor
. ,		ditions on the site ty					ain in remarks)	✓ Yes □		Section:	22
		or Hydrology □ sig				(п по, схра	Are normal circumsta			Township:	8N
•		or Hydrology ☐ na	-				□ Yes	☑No	•	Range:	9 Dir: E
SUMMARY OF		,	, in the second of the second							a canage a	
Hydrophytic Ve	getation Pre	sent?		✓ Yes	□ No			Hydric Soils	Present?		☐ Yes ☑ No
Wetland Hydrol	ogy Present	?		☐ Yes	☑ No			Is This Samp	oling Point	Within A Wetlar	nd? □ Yes ☑ No
Remarks:		· · · · · · · · · · · · · · · · · · ·				4 inches	of rain were received	in the area fr	om April 1	- April 23. Sam	ple point located along
	drainage sv	wale. Soils appeare	ed mixed	/disturbe	ed.						
HYDROLOGY											
Wetland Hydro	ology Indic	ators (Check here	if indicate	ors are r	not preser	nt □):					
Primary:		·			·				Secondary:		-
	A1 - Surface A2 - High Wa				B9 - Wate B13 - Aqu					B6 - Surface Soil B10 - Drainage Pa	
l	A3 - Saturation			H	B15 - Aqu					B16 - Moss Trim	
	B1 - Water M				C1 - Hydr	ogen Sulfi	de Odor			C2 - Dry-Season	Water Table
	B2 - Sedimer	•					spheres on Living Roots			C8 - Crayfish Buri	
	B3 - Drift Dep B4 - Algal Ma						educed Iron eduction in Tilled Soils			D1 - Saturation Vi	isible on Aerial Imagery
	B5 - Iron Dep			_	C7 - Thin					D2 - Geomorphic	
		on Visible on Aerial Ima	0 ,		Other (Ex	plain in Re	emarks)			D3 - Shallow Aqui	
	B8 - Sparsely	/ Vegetated Concave S	Surface							D4 - Microtopogra D5 - FAC-Neutral	
Fig. 1. Oliver at										D5 - FAC-Neutral	
Field Observat			5		(! \						
Surface Water		☐ Yes ☑ No	Depth:		(in.)			Wetland Hy	drology Pr	resent?	Yes ☑ No
Water Table Pro		☐ Yes ☑ No	Depth:		(in.)			_			
		☐ Yes ☑ No	Depth:		(in.)						
	led Data (str	eam gauge, monitori	ng well, a	aerial pho	otos, previ	ous inspe	ections), if available:		Aerial Image	ery Review	
Remarks:											
2011.0											
SOILS Man Unit Name		Virgil oilt loom				C	orica Drainaga Class	a om o what no	oorly.		
Map Unit Name		Virgil silt loam	fe			S	eries Drainage Class:	somewhat po	oorly		
Map Unit Name Taxonomy (Sub	group):	Udollic Endoaqual		m the absence o	of indicators) (Tv			•	•	PL=Pore Lining M=Matrix)	
Map Unit Name Taxonomy (Sub Profile Descrip	ogroup): otion (Describe to	Udollic Endoaqual					ation, D=Depletion, RM=Reduced Matrix, C	CS=Covered/Coated Sand	d Grains; Location: F	PL=Pore Lining, M=Matrix)	Texture
Map Unit Name Taxonomy (Sub Profile Descrip Top	ogroup): otion (Describe to Bottom	Udollic Endoaqual the depth needed to document the in	dicator or confin	Matrix	_		ation, D=Depletion, RM=Reduced Matrix, C	CS=Covered/Coated Sand	d Grains; Location: F		Texture (e.g. clay, sand, loam)
Map Unit Name Taxonomy (Sub Profile Descrip	ogroup): otion (Describe to Bottom Depth	Udollic Endoaqual	dicator or confire		%		ation, D=Depletion, RM=Reduced Matrix, C	CS=Covered/Coated Sand	d Grains; Location: F	PL=Pore Lining, M=Matrix) Location	(e.g. clay, sand, loam)
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth	ogroup): otion (Describe to Bottom	Udollic Endoaqual the depth needed to document the in	dicator or confin	Matrix (Moist)	_	pe: C=Concentra	Reduced Matrix, C Red Color (Moist)	CS=Covered/Coated Sanc dox Features %	d Grains; Location: F	Location	(e.g. clay, sand, loam) silt loam
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	ogroup): otion (Describe to Bottom Depth 27	Udollic Endoaqual the depth needed to document the in Horizon 1	Color 10YR	Matrix (Moist) 3/1	% 80	pe: C=Concentra	Reduced Matrix, C Red Color (Moist)	CS=Covered/Coated Sand	d Grains; Location: F	Location 	(e.g. clay, sand, loam)
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	Bottom Depth 27	Udollic Endoaqual the depth needed to document the in Horizon 1	Color 10YR 10YR	Matrix (Moist) 3/1 5/6	% 80 10	pe: C=Concentra	Reduced Matrix, C Red Color (Moist)	dox Features %	Type	Location 	(e.g. clay, sand, loam) silt loam sandy clay silty clay loam
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	ogroup): otion (Describe to Bottom Depth 27	Udollic Endoaqual the depth needed to document the in Horizon 1	Color 10YR 10YR 10YR	Matrix (Moist) 3/1 5/6 5/3	% 80 10 5	pe: C=Concentra	Color (Moist)	CS=Covered/Coated Sand	Type	Location	(e.g. clay, sand, loam) silt loam sandy clay
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	pgroup): Dificial (Describe to Bottom) Depth 27	Udollic Endoaqual the depth needed to document the in Horizon 1	Color 10YR 10YR 10YR 10YR	Matrix (Moist) 3/1 5/6 5/3 5/6	% 80 10 5	pe: C=Concentra	Color (Moist)	cs=Covered/Coated Sanc	Type	Location	(e.g. clay, sand, loam) silt loam sandy clay silty clay loam
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	bgroup): Dtion (Describe to Bottom Depth 27	Udollic Endoaqual the depth needed to document the in Horizon 1	Color 10YR 10YR 10YR 10YR	Matrix (Moist) 3/1 5/6 5/3 5/6	% 80 10 5 5	pe: C=Concentra	Color (Moist)	dox Features %	Type	Location	(e.g. clay, sand, loam) silt loam sandy clay silty clay loam silty clay loam
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	bgroup): Dtion (Describe to Bottom Depth 27	Horizon 1	Color 10YR 10YR 10YR 10YR	Matrix (Moist) 3/1 5/6 5/3 5/6 	% 80 10 5 5 	pe: C=Concentra	Color (Moist)	dox Features %	Type	Location	(e.g. clay, sand, loam) silt loam sandy clay silty clay loam silty clay loam
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	bgroup): btion (Describe to Bottom Depth 27	Horizon 1	Color 10YR 10YR 10YR 10YR	Matrix (Moist) 3/1 5/6 5/3 5/6	% 80 10 5 5 	pe: C=Concentra	Color (Moist)	CS=Covered/Coated Sance dox Features %	Type	Location	(e.g. clay, sand, loam) silt loam sandy clay silty clay loam silty clay loam
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 NRCS Hydric	bgroup): btion (Describe to Bottom Depth 27	Horizon 1	Color 10YR 10YR 10YR 10YR	Matrix (Moist) 3/1 5/6 5/3 5/6 icators a	% 80 10 5 5 are not pre	e: C=Concentra	Color (Moist)	CS=Covered/Coated Sance dox Features % Indicator	Type	Location	(e.g. clay, sand, loam) silt loam sandy clay silty clay loam silty clay loam
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 NRCS Hydric	Bottom Depth 27 Soil Field In A1- Histosol A2 - Histic Ep	Horizon 1	Color 10YR 10YR 10YR 10YR	Matrix (Moist) 3/1 5/6 5/3 5/6 icators a	% 80 10 5 5 are not pre \$8 - Polyo \$9 - Thin	e: C=Concentrate esent ☑ value Belo Dark Surfa	ation, D=Depletion, RM=Reduced Matrix, CRed Color (Moist)	CS=Covered/Coated Sand dox Features % Indicator	Type	Location Matic Soils ¹ Vuck (LRR K, L, MLRA 1	(e.g. clay, sand, loam) silt loam sandy clay silty clay loam silty clay loam
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 NRCS Hydric	Bottom Depth 27 Soil Field Ir A1- Histosol A2 - Histic Ep A3 - Black Hi	Horizon 1	Color 10YR 10YR 10YR 10YR	Matrix (Moist) 3/1 5/6 5/3 5/6 icators a	% 80 10 5 5 sre not presser Polyones S8 - Polyones S9 - Thin S11 - High	esent value Belo Dark Surfa	Color (Moist)	CS=Covered/Coated Sand dox Features % Indicator	Type	Location Muck (LRR K, L, MLRA 1 Prairie Redox (LRR ucky Peat of Peat ((e.g. clay, sand, loam) silt loam sandy clay silty clay loam silty clay loam
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 NRCS Hydric	Bottom Depth 27 Soil Field In A1- Histosol A2 - Histic Ep	Horizon 1 ndicators (check here)	Color 10YR 10YR 10YR 10YR	Matrix (Moist) 3/1 5/6 5/3 5/6 icators a	% 80 10 5 5 sre not presser Polyones S8 - Polyones S9 - Thin S11 - High	e: C=Concentration	ation, D=Depletion, RM=Reduced Matrix, C Red Color (Moist)	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 (urface (LRR K, L, M)	(e.g. clay, sand, loam) silt loam sandy clay silty clay loam silty clay loam (149B) R.K., L, R) (LRR K, L, R)
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 NRCS Hydric	Bottom Depth 27 Soil Field Ir A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A11 - Deplete	Horizon 1 ndicators (check here) stic en Sulfide d Layers ed Below Dark Surface	Color 10YR 10YR 10YR 10YR ere if ind	Matrix (Moist) 3/1 5/6 5/3 5/6 icators a	% 80 10 5 5	e: C=Concentra	ation, D=Depletion, RM=Reduced Matrix, C Red Color (Moist)): w Surface (LRR R, MLRA 149B) ace (LRR R, MLRA 149B) Sands Wineral (LRR K, L) Matrix K	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 (urface (LRR K, L, M) ue Below Surface (LRR K, L)	(e.g. clay, sand, loam) silt loam sandy clay silty clay loam silty clay loam (149B) R K, L, R) (LRR K, L, R)
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 NRCS Hydric	Bottom Depth 27 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A11 - Deplete A12 - Thick I	Horizon 1	Color 10YR 10YR 10YR 10YR ere if ind	Matrix (Moist) 3/1 5/6 5/3 5/6 icators a	% 80 10 5 5 se not pre S8 - Polyo S9 - Thin S11 - High F1 - Loan F2 - Loan F3 - Deple F6 - Redo	esent	ation, D=Depletion, RM=Reduced Matrix, C Red Color (Moist)	CS=Covered/Coated Sand dox Features % Indicator	Type	Location matic Soils ¹ Muck (LRR K, L, MLRA 1 Prairie Redox (LRR ucky Peat of Peat (urface (LRR K, L, M) ue Below Surface (LRR K, L) ark Surface (LRR K, L) langanese Masses	(e.g. clay, sand, loam) silt loam sandy clay silty clay loam silty clay loam (149B) 8 K, L, R) (LRR K, L, R) (LRR K, L, R)
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 NRCS Hydric	Bottom Depth 27 Soil Field Ir A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A11 - Deplete A12 - Thick E S1 - Sandy M	Horizon Horizon 1 ndicators (check here) bipedon istic en Sulfide d Layers ed Below Dark Surface Dark Surface Muck Mineral	Color 10YR 10YR 10YR 10YR ere if ind	Matrix (Moist) 3/1 5/6 5/3 5/6 icators a	% 80 10 5 5	e: C=Concentra esent esent yalue Belo Dark Surfa n Chroma ny Mucky I ny Gleyed eted Matrix ox Dark Su eted Dark	ation, D=Depletion, RM=Reduced Matrix, C Red Color (Moist)	CS=Covered/Coated Sance dox Features % Indicator	Type	Location	(e.g. clay, sand, loam) silt loam sandy clay silty clay loam silty clay loam (149B) 8 K, L, R) (LRR K, L, R) (LRR K, L, R)
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 NRCS Hydric	Bottom Depth 27 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A11 - Deplete A12 - Thick I	Horizon Horizon 1	Color 10YR 10YR 10YR 10YR ere if ind	Matrix (Moist) 3/1 5/6 5/3 5/6 icators a	% 80 10 5 5 se not pre S8 - Polyo S9 - Thin S11 - High F1 - Loan F2 - Loan F3 - Deple F6 - Redo	e: C=Concentra esent esent yalue Belo Dark Surfa n Chroma ny Mucky I ny Gleyed eted Matrix ox Dark Su eted Dark	ation, D=Depletion, RM=Reduced Matrix, C Red Color (Moist)	CS=Covered/Coated Sand dox Features % Indicator	Type	Location	(e.g. clay, sand, loam) silt loam sandy clay silty clay loam silty clay loam (LAPB) R K, L, R) (LRR K, L, R)
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 NRCS Hydric	Bottom Depth 27 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 R S6 - Stripped	Horizon Horizon 1 ndicators (check here) stic en Sulfide d Layers ed Below Dark Surface Dark Surface Muck Mineral Gleyed Matrix Redox I Matrix	Color 10YR 10YR 10YR 10YR ere if ind	Matrix (Moist) 3/1 5/6 5/3 5/6 icators a	% 80 10 5 5	e: C=Concentra esent esent yalue Belo Dark Surfa n Chroma ny Mucky I ny Gleyed eted Matrix ox Dark Su eted Dark	ation, D=Depletion, RM=Reduced Matrix, C Red Color (Moist)	dox Features % Indicator	Type	Location matic Soils ¹ Muck (LRR K, L, MLRA 1 Prairie Redox (LRR ucky Peat of Peat (urface (LRR K, L, M) ue Below Surface (LRR K, L) langanese Masses ark Surface (LRR K, L) langanese Masses ark Surface (MLRA 144A, 1 Shallow Dark Surf	(e.g. clay, sand, loam) silt loam sandy clay silty clay loam silty clay loam (LAPB) (LRR K, L, R)
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 NRCS Hydric	Bottom Depth 27 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 R S6 - Stripped	Horizon Horizon 1 ndicators (check here) pipedon stic en Sulfide d Layers ed Below Dark Surface Dark Surface Muck Mineral Gleyed Matrix sedox	Color 10YR 10YR 10YR 10YR ere if ind	Matrix (Moist) 3/1 5/6 5/3 5/6 icators a	% 80 10 5 5	e: C=Concentra esent esent yalue Belo Dark Surfa n Chroma ny Mucky I ny Gleyed eted Matrix ox Dark Su eted Dark	ation, D=Depletion, RM=Reduced Matrix, C Red Color (Moist)	CS=Covered/Coated Sand dox Features % Indicator	Type	Location	(e.g. clay, sand, loam) silt loam sandy clay silty clay loam silty clay loam (LRR K, L, R)
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 NRCS Hydric	Bottom Depth 27 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 R S6 - Stripped	Horizon Horizon 1 ndicators (check here) stic en Sulfide d Layers ed Below Dark Surface Dark Surface Muck Mineral Gleyed Matrix Redox I Matrix	Color 10YR 10YR 10YR 10YR ere if ind	Matrix (Moist) 3/1 5/6 5/3 5/6 icators a	% 80 10 5 5	e: C=Concentra esent esent yalue Belo Dark Surfa n Chroma ny Mucky I ny Gleyed eted Matrix ox Dark Su eted Dark	ation, D=Depletion, RM=Reduced Matrix, C Red Color (Moist)	CS=Covered/Coated Sand dox Features % Indicator Indicator Indicator Indicator Indicator	Type	Location matic Soils ¹ Muck (LRR K, L, MLRA 1 Prairie Redox (LRR ucky Peat of Peat (urface (LRR K, L, M) ue Below Surface (LRR K, L) langanese Masses ark Surface (LRR K, L) langanese Masses ark Surface (MLRA 144A, 1 Shallow Dark Surf	(e.g. clay, sand, loam) silt loam sandy clay silty clay loam silty clay loam (LRR K, L, R)
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 NRCS Hydric	Bottom Depth 27 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 R S6 - Stripped	Horizon Horizon 1	Color 10YR 10YR 10YR 10YR ere if ind	Matrix (Moist) 3/1 5/6 5/3 5/6 icators a	% 80 10 5 5	e: C=Concentra esent esent yalue Belo Dark Surfa n Chroma ny Mucky I ny Gleyed eted Matrix ox Dark Su eted Dark	ation, D=Depletion, RM=Reduced Matrix, C Red Color (Moist)	CS=Covered/Coated Sand dox Features % Indicator Indicator Indicator	Type	Location	(e.g. clay, sand, loam) silt loam sandy clay silty clay loam silty clay loam (LAPB) R K, L, R) (LRR K, L, R) (LRR K, L, R) (LRR K, L, R) Is (MLRA 149B) (MLRA 149B) (Mathematical State of Company of C
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 NRCS Hydric	Bottom Depth 27	Horizon Horizon 1	Color 10YR 10YR 10YR ere if ind	Matrix (Moist) 3/1 5/6 5/3 5/6 icators a	% 80 10 5 5	e: C=Concentral	ation, D=Depletion, RM=Reduced Matrix, C Red Color (Moist)	dox Features % Indicator Indicator Indicator Indicators Indicators	Type	Location	(e.g. clay, sand, loam) silt loam sandy clay silty clay loam silty clay loam (LAPB) R K, L, R) (LRR K, L, R) (LRR K, L, R) (LRR K, L, R) Is (MLRA 149B) (MLRA 149B) (Mathematical State of Company of C



WETLAND DETERMINATION DATA FORM

Northeast and Northcentral Region

Project/Site: North Mendota Energy and Technology Park Sample Point: P15 Wetland ID: W-2 **VEGETATION** (Species identified in all uppercase are non-native species.) Tree Stratum (Plot size: 10 meter radius) Species Name **Dominance Test Worksheet** Ind.Status % Cover Dominant 1. Number of Dominant Species that are OBL, FACW, or FAC: 1 (A) 2. 3. 4. Total Number of Dominant Species Across All Strata: 1 (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. x 1 =OBL spp. 0 Total Cover = 0 x 2 =FACW spp. 140 FAC spp. x 3 =9 Sapling/Shrub Stratum (Plot size: 5 meter radius) x 4 =FACU spp. 28 1. x = 5UPL spp. 25 2. 3. 202 --Total (B) --4. 5. --Prevalence Index = B/A = 2.376 ----6. --7. --8. **Hydrophytic Vegetation Indicators:** 9. Yes ☐ No Rapid Test for Hydrophytic Vegetation 10. Yes □ No Dominance Test is > 50% Total Cover = Yes □ No Prevalence Index is ≤ 3.0 * ☐ Yes ☑ No Morphological Adaptations (Explain) * Herb Stratum (Plot size: 2 meter radius) ☐ Yes ☑ No Problem Hydrophytic Vegetation (Explain) * PHALARIS ARUNDINACEA 70 Υ **FACW** 1. * Indicators of hydric soil and wetland hydrology must be 5 2. DAUCUS CAROTA UPL Ν present, unless disturbed or problematic. 3. PLANTAGO MAJOR 3 Ν **FACU Definitions of Vegetation Strata:** 4. **RUMEX CRISPUS** 3 Ν FAC 5. TARAXACUM OFFICINALE 2 Ν **FACU** Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast 6 TRIFOLIUM PRATENSE 2 Ν **FACU** height (DBH), regardless of height. 7. 8. Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft. 9. 10. 11. Herb - All herbaceous (non-woody) plants, regardless of size, and 12. woody plants less than 3.28 ft. tall. 13. --14. --Woody Vines - All woody vines greater than 3.28 ft. in height. 15. --Total Cover = 85 Woody Vine Stratum (Plot size: 10 meter radius) 1. 2. 3. **Hydrophytic Vegetation Present** ✓ Yes ☐ No 4. 5. Total Cover = 0 Sample point located within area disturbed for municipal sewer/well/sump pump maintenance. Remarks:

Additional Remarks:

Sample point adjacent to waterway, municipal sewer line, and sump pump and tanks associated with draintile network. Presence of reed canary grass likely due to disturbance and presences of species in seed bank and not because of established wetland conditions.



Project/Site:		dota Energy and Te	٠.				Stantec Project #:	193703573		Date:	04/23/15
Applicant:		ch Development & C	Construc							County:	Dane
Investigator #1:				Investi	gator #2:		1/4/14/1 () : : : : : : : :			State:	Wisconsin
Soil Unit: Landform:	Virgil silt lo			Loo	al Paliafe		I/WWI Classification:			Wetland ID:	W-2 P16
Slope (%):	Depression 0-2	Latitude:	N/A		al Relief: ongitude:		;	Datum:	ΝΙ/Δ	Sample Point: Community ID:	Wet Meadow
		ditions on the site ty					in in remarks)	✓ Yes □	No	Section:	22
		or Hydrology □ sig				(II TIO, OXPIC	Are normal circumsta			Township:	8N
•		or Hydrology ☐ na	-					□No		Range:	9 Dir: E
SUMMARY OF		, , , , , , , , , , , , , , , , , , , ,	<i>y</i> 1							3	
Hydrophytic Veg	getation Pre	sent?		✓ Yes	□ No			Hydric Soils	Present?		
Wetland Hydrol	ogy Present	?			□ No			Is This Samp	oling Point \	Within A Wetlar	nd? ☑ Yes ■ No
Remarks:	Based on a	a WETS analysis, co	onditions	were no	ormal; 4.1	4 inches	of rain were received	in the area fr	om April 1	- April 23. Sam	ple point located within
	drainage sv	wale at edge of wate	erway ch	annel.							
HYDROLOGY											
Wetland Hydro	ology Indic	ators (Check here	if indicate	ors are r	not preser	nt □):					
Primary:									Secondary:		
	A1 - Surface A2 - High Wa				B9 - Wate B13 - Aqu					B6 - Surface Soil B10 - Drainage Pa	
l H	A3 - Saturation			H	B15 - Aqu		l e e e e e e e e e e e e e e e e e e e			B16 - Moss Trim	
	B1 - Water M				C1 - Hydr	•	de Odor			C2 - Dry-Season	
	B2 - Sedimer	•					spheres on Living Roots			C8 - Crayfish Burn	
	B3 - Drift Dep B4 - Algal Ma			님			educed Iron duction in Tilled Soils			D1 - Saturation VI	isible on Aerial Imagery
	B5 - Iron Dep			_	C7 - Thin					D2 - Geomorphic	
	B7 - Inundation	on Visible on Aerial Ima	0 ,		Other (Ex	plain in Re	marks)			D3 - Shallow Aqui	
	B8 - Sparsely	y Vegetated Concave S	Surface							D4 - Microtopogra D5 - FAC-Neutral	
5	•									D5 - FAC-Neutral	
Field Observat			5		(! \						
Surface Water		☐ Yes ☑ No	Depth:		(in.)			Wetland Hy	drology Pr	esent?	Yes □ No
Water Table Pro		☑ Yes ☐ No	Depth:		(in.)						
		☑ Yes □ No	Depth:		(in.)						
	led Data (str	eam gauge, monitori	ng well, a	aerial pho	otos, previ	ous inspe	ctions), if available:		Aerial Image	ery Review	
D = 100 = 11 = 1											
Remarks:											
SOILS		Virgil gilt loom				C	orica Drainaga Class	a om o what no	o o vilv		
SOILS Map Unit Name		Virgil silt loam	fe			S	eries Drainage Class:	somewhat po	oorly		
SOILS Map Unit Name Taxonomy (Sub	group):	Udollic Endoaqual		m the absence o	of indicators) (Tvi		•	•	·	PI =Pore Lining M=Matrix)	
SOILS Map Unit Name Taxonomy (Sub	ogroup): otion (Describe to	Udollic Endoaqual					tion, D=Depletion, RM=Reduced Matrix, C	CS=Covered/Coated Sand	d Grains; Location: F	L=Pore Lining, M=Matrix)	Texture
SOILS Map Unit Name Taxonomy (Sub Profile Descrip	ogroup): otion (Describe to Bottom	Udollic Endoaqual the depth needed to document the in	dicator or confin	Matrix			tion, D=Depletion, RM=Reduced Matrix, C	CS=Covered/Coated Sand	d Grains; Location: F		Texture (e.g. clay, sand, loam)
SOILS Map Unit Name Taxonomy (Sub	ogroup): otion (Describe to Bottom Depth	Udollic Endoaqual	dicator or confire	Matrix (Moist)	%	pe: C=Concentra	tion, D=Depletion, RM=Reduced Matrix, C Red Color (Moist)	CS=Covered/Coated Sand	Grains; Location: F	Location	(e.g. clay, sand, loam)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	ogroup): otion (Describe to Bottom Depth 22	Udollic Endoaqual the depth needed to document the in	Color 10YR	Matrix (Moist) 2/1	% 95	pe: C=Concentra	tion, D=Depletion, RM=Reduced Matrix, C Red Color (Moist) 3/4	CS=Covered/Coated Sand	Type	Location	(e.g. clay, sand, loam)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth	ogroup): otion (Describe to Bottom Depth	Udollic Endoaqual the depth needed to document the in Horizon 1	dicator or confire	Matrix (Moist)	%	pe: C=Concentra	tion, D=Depletion, RM=Reduced Matrix, C Red Color (Moist)	CS=Covered/Coated Sanc dox Features % 5	Grains; Location: F	Location M	(e.g. clay, sand, loam)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 22	bgroup): otion (Describe to Bottom Depth 22 27	Udollic Endoaqual the depth needed to document the in Horizon 1 2	Color 10YR 2.5Y	Matrix (Moist) 2/1 5/1	% 95 93	10YR	tion, D=Depletion, RM=Reduced Matrix, CR Reduced Ma	cs=Covered/Coated Sanc dox Features % 5 7	Type C	Location M M	(e.g. clay, sand, loam)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 22	pgroup): otion (Describe to Bottom Depth 22 27	Udollic Endoaqual the depth needed to document the in Horizon 1 2	Color 10YR 2.5Y	Matrix (Moist) 2/1 5/1 	% 95 93 	10YR 10YR	tion, D=Depletion, RM=Reduced Matrix, C Red Color (Moist) 3/4 5/6	cs=Covered/Coated Sand dox Features % 5 7	Type C C	Location M M	(e.g. clay, sand, loam) silt loam silty clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 22	pgroup): otion (Describe to Bottom Depth 22 27	Udollic Endoaqual the depth needed to document the in Horizon 1 2	Color 10YR 2.5Y	Matrix (Moist) 2/1 5/1	% 95 93 	10YR 10YR 	Color (Moist) 3/4 5/6	cs=Covered/Coated Sanc dox Features % 5 7	Type C C	Location M M	(e.g. clay, sand, loam) silt loam silty clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 22	pgroup): otion (Describe to Bottom Depth 22 27	Horizon 1 2	Color 10YR 2.5Y	Matrix (Moist) 2/1 5/1	% 95 93 	10YR 10YR 	Color (Moist) 3/4 5/6	cs=Covered/Coated Sanc dox Features % 5 7 	Type C C	Location M M	(e.g. clay, sand, loam) silt loam silty clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 22	bgroup): otion (Describe to Bottom Depth 22 27	Horizon 1 2	Color 10YR 2.5Y	Matrix (Moist) 2/1 5/1	% 95 93 	10YR 10YR 	Color (Moist) 3/4 5/6	CS=Covered/Coated Sance dox Features % 5 7	Type C C	Location M M	(e.g. clay, sand, loam) silt loam silty clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 22	pgroup): otion (Describe to Bottom Depth 22 27	Horizon 1 2	Color 10YR 2.5Y	Matrix (Moist) 2/1 5/1	% 95 93 	10YR 10YR 	tion, D=Depletion, RM=Reduced Matrix, CRed Color (Moist) 3/4 5/6	CS=Covered/Coated Sance dox Features % 5 7	Type C C	Location M M	(e.g. clay, sand, loam) silt loam silty clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 22 NRCS Hydric	pgroup): otion (Describe to Bottom Depth 22 27	Horizon 1 2	Color 10YR 2.5Y	Matrix (Moist) 2/1 5/1 icators a	% 95 93 re not pre	10YR 10YR esent	tion, D=Depletion, RM=Reduced Matrix, CRed Color (Moist) 3/4 5/6	CS=Covered/Coated Sance dox Features % 5 7 Indicator	Type C C s for Proble	Location M M	(e.g. clay, sand, loam) silt loam silty clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 22 NRCS Hydric	pgroup): ption (Describe to Bottom) Depth 22 27 Soil Field In A1- Histosol A2 - Histic Ep	Horizon 1 2 ndicators (check head	Color 10YR 2.5Y	Matrix (Moist) 2/1 5/1 icators a	% 95 93 sre not pre S8 - Polys S9 - Thin	10YR 10YR esent value Belov	tion, D=Depletion, RM=Reduced Matrix, Color (Moist) 3/4 5/6 V Surface (LRR R, MLRA 149B) ICC (LRR R, MLRA 149B)	CS=Covered/Coated Sand dox Features % 5 7 Indicator	Type C C s for Proble A10 - 2 cm I	Location M M matic Soils ¹ Vuck (LRR K, L, MLRA 1) Prairie Redox (LRR	(e.g. clay, sand, loam) silt loam silty clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 22 NRCS Hydric	pgroup): otion (Describe to Bottom Depth 22 27 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi	Horizon 1 2 andicators (check here)	Color 10YR 2.5Y	Matrix (Moist) 2/1 5/1 icators a	% 95 93 sre not pre S8 - Polys S9 - Thin S11 - High	10YR 10YR esent value Belov Dark Surfa	tion, D=Depletion, RM=Reduced Matrix, C Red Color (Moist) 3/4 5/6 N: Surface (LRR R, MLRA 149B) RCE (LRR R, MLRA 149B) Sands	CS=Covered/Coated Sand dox Features % 5 7 Indicator	Type C C s for Proble A10 - 2 cm I A16 - Coast S3 - 5 cm Mu	Location M M matic Soils Muck (LRR K, L, MLRA 1) Prairie Redox (LRR Lucky Peat of Peat ((e.g. clay, sand, loam) silt loam silty clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 22 NRCS Hydric	pgroup): ption (Describe to Bottom) Depth 22 27 Soil Field In A1- Histosol A2 - Histic Ep	Horizon 1 2 ndicators (check here)	Color 10YR 2.5Y	Matrix (Moist) 2/1 5/1 icators a	% 95 93 see not pre S8 - Polys S9 - Thin S11 - Higl F1 - Loam	10YR 10YR esent value Below Dark Surfan Chroma	tion, D=Depletion, RM=Reduced Matrix, C Red Color (Moist) 3/4 5/6 N Surface (LRR R, MLRA 149B) Sands Mineral (LRR K, L)	CS=Covered/Coated Sand dox Features % 5 7 Indicator	Type C C s for Proble A10 - 2 cm I A16 - Coast S3 - 5cm Mt S7 - Dark St	Location M M matic Soils Prairie Redox (LRR ucky Peat of Peat ourface (LRR k, L, M)	(e.g. clay, sand, loam) silt loam silty clay loam (149B) R K, L, R) (LRR K, L, R)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 22 NRCS Hydric	pgroup): ption (Describe to Bottom) Depth 22 27 Soil Field Ir A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A11 - Deplete	Horizon 1 2 ndicators (check here) sitic en Sulfide d Layers ed Below Dark Surface	Color 10YR 2.5Y ere if ind	Matrix (Moist) 2/1 5/1 icators a	% 95 93 see not presser Polyx S9 - Thin S11 - High F1 - Loam F2 - Loam F3 - Deple	10YR 10YR	tion, D=Depletion, RM=Reduced Matrix, C Red Color (Moist) 3/4 5/6): v Surface (LRR R, MLRA 149B) ICE (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix	CS=Covered/Coated Sand dox Features % 5 7 Indicator	Type C C s for Proble A10 - 2 cm I A16 - Coast S3 - 5cm Mt S7 - Dark St S8 - Polyval S9 - Thin Da	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	(e.g. clay, sand, loam) silt loam silty clay loam (LRR K, L, R) (LRR K, L)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 22 NRCS Hydric	Bottom Depth 22 27 Soil Field Ir A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A11 - Deplete A12 - Thick I	Horizon 1 2	Color 10YR 2.5Y ere if ind	Matrix (Moist) 2/1 5/1 icators a	% 95 93 se not pre S8 - Polyv S9 - Thin S11 - High F1 - Loam F2 - Loam F3 - Deple F6 - Redo	10YR 10YR	tion, D=Depletion, RM=Reduced Matrix, Color (Moist) 3/4 5/6 N Surface (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix frace	CS=Covered/Coated Sand dox Features % 5 7 Indicator	Type C C s for Proble A10 - 2 cm I A16 - Coast S3 - 5cm Mu S7 - Dark S0 S8 - Polyval S9 - Thin Da F12 - Iron-M	Location M M 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) silt 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 22 NRCS Hydric	Bottom Depth 22 27 Soil Field Ir A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A11 - Deplete A12 - Thick E S1 - Sandy M	Horizon 1 2	Color 10YR 2.5Y ere if ind	Matrix (Moist) 2/1 5/1 icators a	% 95 93 see not pres S8 - Polyx S9 - Thin S11 - High F1 - Loam F2 - Loam F3 - Deple F6 - Redo F7 - Deple	10YR 10YR 10YR esent esent calue Below Dark Surfan Chroma ny Mucky M ny Gleyed eted Matrix ex Dark Su eted Dark	tion, D=Depletion, RM=Reduced Matrix, C Red Color (Moist) 3/4 5/6): v Surface (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix fface Surface	cs=Covered/Coated Sance dox Features % 5 7 Indicator	Type C C C s for Proble A10 - 2 cm I A16 - Coast S3 - 5cm Mu S7 - Dark S0 S8 - Polyval S9 - Thin Da F12 - Iron-M F19 - Piedm	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 ark Surface (LRR K, L langanese Masses ont Floodplain Soi	(e.g. clay, sand, loam) silt 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 22 NRCS Hydric	Bottom Depth 22 27 Soil Field Ir A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A11 - Deplete A12 - Thick I	Horizon 1 2	Color 10YR 2.5Y ere if ind	Matrix (Moist) 2/1 5/1 icators a	% 95 93 se not pre S8 - Polyv S9 - Thin S11 - High F1 - Loam F2 - Loam F3 - Deple F6 - Redo	10YR 10YR 10YR esent esent calue Below Dark Surfan Chroma ny Mucky M ny Gleyed eted Matrix ex Dark Su eted Dark	tion, D=Depletion, RM=Reduced Matrix, C Red Color (Moist) 3/4 5/6): v Surface (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix fface Surface	CS=Covered/Coated Sand dox Features % 5 7 Indicator	Type C 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 F19 - Piedm F21 - Red P	Location M M 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) silt loam silty clay loam (LRR K, L, R)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 22 NRCS Hydric	Bottom Depth 22 27 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 R S6 - Stripped	Horizon Horizon 1 2	Color 10YR 2.5Y ere if ind	Matrix (Moist) 2/1 5/1 icators a	% 95 93 see not pres S8 - Polyx S9 - Thin S11 - High F1 - Loam F2 - Loam F3 - Deple F6 - Redo F7 - Deple	10YR 10YR 10YR esent esent calue Below Dark Surfan Chroma ny Mucky M ny Gleyed eted Matrix ex Dark Su eted Dark	tion, D=Depletion, RM=Reduced Matrix, C Red Color (Moist) 3/4 5/6): v Surface (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix fface Surface	dox Features % 5 7 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	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 langanese Masses ont Floodplain Soi arent Material Spodic (MLRA 144A, 1 Shallow Dark Surf	(e.g. clay, sand, loam) silt loam silty clay loam (LRR K, L, R) (LRR K, L, R) (LRR K, L, R) (LRR K, L, R) (S (LRR K, L, R) (S (MLRA 149B)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 22 NRCS Hydric	Bottom Depth 22 27 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 R S6 - Stripped	Horizon 1 2	Color 10YR 2.5Y ere if ind	Matrix (Moist) 2/1 5/1 icators a	% 95 93 see not pres S8 - Polyx S9 - Thin S11 - High F1 - Loam F2 - Loam F3 - Deple F6 - Redo F7 - Deple	10YR 10YR 10YR esent esent calue Below Dark Surfan Chroma ny Mucky M ny Gleyed eted Matrix ex Dark Su eted Dark	tion, D=Depletion, RM=Reduced Matrix, C Red Color (Moist) 3/4 5/6): v Surface (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix fface Surface	CS=Covered/Coated Sand dox Features % 5 7 Indicator	Type C 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 F19 - Piedm F19 - Piedm F11 - Red P TA6 - Mesic TF12 - Very Other (Expla	Location M M matic Soils Muck (LRR K, L, MLRA 1) Prairie Redox (LRR K, L, M) ucky Peat of Peat (LRR K, L, M) ue Below Surface ark Surface (LRR K, L M)	(e.g. clay, sand, loam) silt 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) (S (MLRA 149B) (S (MLRA 149B)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 22 NRCS Hydric	Bottom Depth 22 27 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 R S6 - Stripped	Horizon Horizon 1 2	Color 10YR 2.5Y ere if ind	Matrix (Moist) 2/1 5/1 icators a	% 95 93 see not pres S8 - Polyx S9 - Thin S11 - High F1 - Loam F2 - Loam F3 - Deple F6 - Redo F7 - Deple	10YR 10YR 10YR esent esent calue Below Dark Surfan Chroma ny Mucky M ny Gleyed eted Matrix ex Dark Su eted Dark	tion, D=Depletion, RM=Reduced Matrix, C Red Color (Moist) 3/4 5/6): v Surface (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix fface Surface	CS=Covered/Coated Sand dox Features % 5 7 Indicator Indicator Indicator Indicator Indicator	Type C 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 F19 - Piedm F19 - Piedm F11 - Red P TA6 - Mesic TF12 - Very Other (Expla	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 langanese Masses ont Floodplain Soi arent Material Spodic (MLRA 144A, 1 Shallow Dark Surf	(e.g. clay, sand, loam) silt 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) (S (MLRA 149B) (S (MLRA 149B)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 22 NRCS Hydric	Bottom Depth 22 27 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 R S6 - Stripped	Horizon 1 2	Color 10YR 2.5Y ere if ind	Matrix (Moist) 2/1 5/1 icators a	% 95 93 see not pres S8 - Polyx S9 - Thin S11 - High F1 - Loam F2 - Loam F3 - Deple F6 - Redo F7 - Deple	10YR 10YR 10YR esent esent calue Below Dark Surfan Chroma ny Mucky M ny Gleyed eted Matrix ex Dark Su eted Dark	tion, D=Depletion, RM=Reduced Matrix, C Red Color (Moist) 3/4 5/6): v Surface (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix fface Surface	CS=Covered/Coated Sand dox Features % 5 7 Indicator Indicator Indicator Indicator Indicator	Type C C C s for Proble A10 - 2 cm I A16 - Coast S3 - 5 cm Mu S7 - Dark Su S8 - Polyval S9 - Thin Da F12 - Iron-M F19 - Piedm F19 - Piedm F10 - Red P TA6 - Mesic TF12 - Very Other (Expla of hydrophytic veget of problematic.	Location M M matic Soils Muck (LRR K, L, MLRA 1) Prairie Redox (LRR K, L, M) ucky Peat of Peat (LRR K, L, M) ue Below Surface ark Surface (LRR K, L M)	(e.g. clay, sand, loam) silt 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) (S (MLRA 149B) (S (MLRA 149B)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 22 NRCS Hydric	Bottom Depth 22 27 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A1- Deplete A12 - Thick E S1 - Sandy M S4 - Sandy M S4 - Sandy M S4 - Sandy M S5 - Sandy R S6 - Stripped S7 - Dark Su	Horizon 1 2	Color 10YR 2.5Y ere if ind	Matrix (Moist) 2/1 5/1 icators a	% 95 93 se not pre S8 - Polyv S9 - Thin S11 - High F1 - Loam F2 - Loam F3 - Deple F6 - Redo F7 - Deple F8 - Redo	10YR 10YR 10YR esent esent calue Below Dark Surfan Chroma ny Mucky M ny Gleyed eted Matrix ex Dark Su eted Dark	tion, D=Depletion, RM=Reduced Matrix, C Red Color (Moist) 3/4 5/6): v Surface (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix fface Surface	CS=Covered/Coated Sand dox Features % 5 7 Indicator Indicator Indicator Indicator Indicator Indicator Indicator Indicator Indicator Indicator Indicator Indicator Indicator Indicator	Type C C C s for Proble A10 - 2 cm I A16 - Coast S3 - 5 cm Mu S7 - Dark Su S8 - Polyval S9 - Thin Da F12 - Iron-M F19 - Piedm F19 - Piedm F10 - Red P TA6 - Mesic TF12 - Very Other (Expla of hydrophytic veget of problematic.	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 ont Floodplain Soi arent Material Spodic (MLRA 144A, 1 Shallow Dark Surfain in Remarks) ation and wetland hydrology	(e.g. clay, sand, loam) silt loam silty clay loam

Sample Point: P16



North Mendota Energy and Technology Park

Project/Site:

WETLAND DETERMINATION DATA FORM Northeast and Northcentral Region

Wetland ID: W-2

VEGETATION	(Species identified in all uppercase are non-na	tive spec	ries)		
	t size: 10 meter radius)	ilive spec	JICS.)		
Troo Gratam (Fie	Species Name	% Cover	Dominant	Ind.Status	Dominance Test Worksheet
1.		70 0010.			
2.					Number of Dominant Species that are OBL, FACW, or FAC: 1 (A)
3.					(7 ty
4.					Total Number of Dominant Species Across All Strata: 1 (B)
5.					Total Number of Borninant Species Across All Strata(D)
					Develop to the Deminerat Chapter That Are ORL FACIAL or FAC: 1009/ (A/R)
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 =	0			FACW spp. $X 2 = 200$
					FAC spp. $0 x 3 = 0$
Sapling/Shrub Stra	tum (Plot size: 5 meter radius)				FACU spp 0
1.					UPL spp 0
2.					
3.					Total 100 (A) 200 (B)
4.					· · · · · · · · · · · · · · · · · · ·
5.					Prevalence Index = $B/A = 2.000$
6.					
7.					
8.					Hydrophytic Vegetation Indicators:
9.					☑ Yes ☐ No Rapid Test for Hydrophytic Vegetation ☐ Yes ☐ No Rapid Test for Hydrophytic Vegetation
10.					☑ Yes □ No Dominance Test is > 50%
	Total Cover =	0			
					☐ Yes ☑ No Morphological Adaptations (Explain) *
Herb Stratum (Plot	size: 2 meter radius)				☐ Yes ☑ No Problem Hydrophytic Vegetation (Explain) *
1.	PHALARIS ARUNDINACEA	100	Υ	FACW	* Indicators of hydric soil and wetland hydrology must be
2.					present, unless disturbed or problematic.
3.					present, aniess distarsed of presiematic.
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.
10.					tall.
11.					Herb - All herbaceous (non-woody) plants, regardless of size, and
12.					woody plants less than 3.28 ft. tall.
13.					
14.	<u></u>				
15.					Woody Vines - All woody vines greater than 3.28 ft. in height.
	Total Cover =	100			
Woody Vine Stratu	ım (Plot size: 10 meter radius)				
1.					
2.					
3.					Hydrophytic Vegetation Present ☑ Yes ☐ No
4.					
5.					
-	Total Cover =	0			
Remarks:	No other weedy species observed.				
10111011101					
A al alitia! D	a autor				
Additional Ren	пагкs:				



Project/Site:		dota Energy and Te	٠.				Stantec Project #:	193703573		Date:	04/23/15
Applicant:		ch Development & 0	Construc							County:	Dane
Investigator #1:				Investi	gator #2:		// / / / / / / / / / / / / / / / / / /			State:	Wisconsin
Soil Unit: Landform:	Virgil silt lo	am		Loo	al Relief:		/I/WWI Classification:			Wetland ID:	W-2 P17
Slope (%):	Toeslope 0-2	Latitude:	Ν/Δ		ongitude:			Datum:	ΝΙ/Δ	Sample Point: Community ID:	Ag Field
		ditions on the site ty					ain in remarks)	✓ Yes □	No	Section:	22
		or Hydrology □ sig				(II TIO, CXPII	Are normal circumsta			Township:	8N
•		or Hydrology ☐ na	-				□ Yes	☑No		Range:	9 Dir: E
SUMMARY OF		, J	,							3	
Hydrophytic Ve	getation Pre	sent?		☐ Yes	☑ No			Hydric Soils	Present?		☐ Yes ☑ No
Wetland Hydrol	ogy Present	:?		☐ Yes				Is This Samp	oling Point \	Within A Wetlar	nd? ■ Yes ☑ No
Remarks:			onditions	were no	ormal; 4.1	4 inches	of rain were received	in the area fr	om April 1	- April 23. Sam	ple point located within
	active ag fi	eld.									
HYDROLOGY											
	•	ators (Check here	if indicate	ors are n	ot preser	nt ☑):					
<u>Primary:</u>	A1 - Surface	Water			B9 - Wate	vr_Stainad	Logvos		Secondary:	B6 - Surface Soil	Cracks
l	A2 - High Wa				B13 - Aqu				_	B10 - Drainage Pa	
	A3 - Saturation	on			B15 - Mar	l Deposits				B16 - Moss Trim I	Lines
	B1 - Water M				C1 - Hydr	-				C2 - Dry-Season	
	B2 - Sedimer B3 - Drift Dep	•					spheres on Living Roots educed Iron			C8 - Crayfish Burn	ows sible on Aerial Imagery
lä	B4 - Algal Ma	•					eduction in Tilled Soils			D1 - Stunted or St	. .
	B5 - Iron Dep	oosits			C7 - Thin	Muck Surf	face			D2 - Geomorphic	
		on Visible on Aerial Ima	0 ,		Other (Ex	plain in Re	emarks)			D3 - Shallow Aqui	
	Bo - Sparsely	y Vegetated Concave S	Surrace							D4 - Microtopogra D5 - FAC-Neutral	
Field Observat	ione:								_		
Surface Water		☐ Yes ☑ No	Depth:		(in.)						
Water Table Pr		☐ Yes ☑ No	Depth:		(in.)			Wetland Hy	drology Pr	esent?	Yes ☑ No
Saturation Pres		☐ Yes ☑ No	Depth:		(in.)						
							ations) if available.		Aerial Image	om Poviou	
Describe Record	ied Data (Sti	eam gauge, monitori	na wen. a	aenai piic	Mos. Dievi	ous msbe	echons), li avallable.		AEHAI IIIIAGE	IV REVIEW	
Damarka					, ,		, o , ,		7 torial irriage	ny rtoviou	
Remarks:			<u> </u>		,,				7 tonar image	ay none	
			g		,,				7 ona mage	ay none.	
SOILS	·	Virgil silt loam		,		·					
SOILS Map Unit Name		Virgil silt loam Udollic Endoagual				·	eries Drainage Class:				
SOILS Map Unit Name Taxonomy (Sub	group):	Udollic Endoaqual	fs			S	eries Drainage Class:	somewhat po	oorly		
SOILS Map Unit Name Taxonomy (Sub	group):	Udollic Endoaqual	fs		of indicators.) (Ty	S	eries Drainage Class: ation, D=Depletion, RM=Reduced Matrix, C	somewhat po	O Orly d Grains; Location: P		Texture
SOILS Map Unit Name Taxonomy (Sub Profile Descrip	ogroup): otion (Describe to	Udollic Endoaqual	fs dicator or confin	n the absence o	of indicators.) (Ty	S	eries Drainage Class: ation, D=Depletion, RM=Reduced Matrix, C	somewhat po	OORIY d Grains; Location: P		Texture (e.g. clay, sand, loam)
SOILS Map Unit Name Taxonomy (Sub	ogroup): otion (Describe to Bottom	Udollic Endoaqual the depth needed to document the in	fs dicator or confin	n the absence o	of indicators.) (Ty	S	eries Drainage Class: ation, D=Depletion, RM=Reduced Matrix, C	somewhat po CS=Covered/Coated Sand dox Features	O Orly d Grains; Location: P	L=Pore Lining, M=Matrix)	
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth	ogroup): otion (Describe to Bottom Depth	Udollic Endoaqual the depth needed to document the in	fs dicator or confin	m the absence of Matrix	of indicators.) (Ty	S De: C=Concentra	eries Drainage Class: ation, D=Depletion, RM=Reduced Matrix, C Red Color (Moist)	somewhat po CS=Covered/Coated Sand dox Features %	Oorly Grains; Location: P	L=Pore Lining, M=Matrix)	(e.g. clay, sand, loam)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	bgroup): otion (Describe to Bottom Depth 13	Udollic Endoaqual the depth needed to document the in Horizon 1	fs dicator or confirm Color 10YR	m the absence of Matrix (Moist) 3/2	of indicators.) (Ty	Se: C=Concentra	eries Drainage Class: ation, D=Depletion, RM=Reduced Matrix, C Red Color (Moist)	somewhat possessessessessessessessessessessessesse	Oorly Grains; Location: P Type	Location	(e.g. clay, sand, loam) silt loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 13	pgroup): otion (Describe to Bottom Depth 13 28	Udollic Endoaqual the depth needed to document the in Horizon 1 2	fs dicator or confine Color 10YR 10YR	m the absence of Matrix (Moist) 3/2 2/1	% 100 100	Se: C=Concentra	eries Drainage Class: ation, D=Depletion, RM=Reduced Matrix, C Red Color (Moist)	somewhat possesses of the second content of	Oorly Grains; Location: P Type	LePore Lining, M=Matrix) Location	(e.g. clay, sand, loam) silt loam silty clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 13 28	pgroup): Dition (Describe to Bottom Depth 13 28 32	Udollic Endoaqual the depth needed to document the in Horizon 1 2 3	fs dicator or confirm Color 10YR 10YR 10YR	m the absence of Matrix (Moist) 3/2 2/1 4/1	% 100 100 100	See: C=Concentra	eries Drainage Class: ation, D=Depletion, RM=Reduced Matrix, C Red Color (Moist)	somewhat po	Type	LePore Lining, M=Matrix) Location	(e.g. clay, sand, loam) silt loam silty clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 13 28	pgroup): otion (Describe to Bottom Depth 13 28 32	Horizon 1 2 3	fs dicator or confirm Color 10YR 10YR 10YR	m the absence of Matrix (Moist) 3/2 2/1 4/1	% 100 100 100	Se: C=Concentra	eries Drainage Class: ation, D=Depletion, RM=Reduced Matrix, C Red Color (Moist)	somewhat po	Type	L=Pore Lining, M=Matrix) Location	(e.g. clay, sand, loam) silt loam silty clay loam silty clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 13 28	bgroup): btion (Describe to Bottom Depth 13 28 32	Horizon 1 2 3	fs dicator or confine Color 10YR 10YR 10YR	m the absence of Matrix (Moist) 3/2 2/1 4/1	% 100 100 100	Se: C=Concentra	eries Drainage Class: ation, D=Depletion, RM=Reduced Matrix, C Red Color (Moist)	somewhat possible same dox Features %	Type	LePore Lining, M=Matrix) Location	(e.g. clay, sand, loam) silt loam silty clay loam silty clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 13 28	bgroup): btion (Describe to Bottom Depth 13 28 32	Horizon 1 2 3	fs dicator or confirm Color 10YR 10YR	m the absence of Matrix (Moist) 3/2 2/1 4/1	% 100 100	See: C=Concentra	eries Drainage Class: ation, D=Depletion, RM=Reduced Matrix, C Red Color (Moist)	somewhat possible same dox Features %	Type	LePore Lining, M=Matrix) Location	(e.g. clay, sand, loam) silt loam silty clay loam silty clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 13 28 NRCS Hydric	Bottom Depth 13 28 32 Soil Field Ir	Horizon 1 2 3	fs dicator or confine Color 10YR 10YR	m the absence of Matrix (Moist) 3/2 2/1 4/1 icators a	% 100 100 are not pre	See: C=Concentra	eries Drainage Class: ation, D=Depletion, RM=Reduced Matrix, CRed Color (Moist)	somewhat possible same dox Features % Indicator	Type s for Proble	LePore Lining, M=Matrix) Location 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 13 28 NRCS Hydric	bgroup): btion (Describe to Bottom) Depth 13 28 32 Soil Field In A1- Histosol	Horizon 1 2 3 ndicators (check here	fs dicator or confine Color 10YR 10YR	m the absence of Matrix (Moist) 3/2 2/1 4/1 icators a	% 100 100 100 are not pre	se: C=Concentra	eries Drainage Class: ation, D=Depletion, RM=Reduced Matrix, CRec Color (Moist)	somewhat possible same dox Features % Indicator	Type s for Proble A10 - 2 cm	Location Loc	(e.g. clay, sand, loam) silt loam silty clay loam silty clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 13 28 NRCS Hydric	Bottom Depth 13 28 32 Soil Field In A1- Histosol A2 - Histic Ep	Horizon 1 2 3 ndicators (check here)	fs dicator or confine Color 10YR 10YR	m the absence of Matrix (Moist) 3/2 2/1 4/1 icators a	% 100 100 sere not pressere services - Polynom S9 - Thin	se: C=Concentra	eries Drainage Class: ation, D=Depletion, RM=Reduced Matrix, CRec Color (Moist)	somewhat po	Type s for Proble A10 - 2 cm N	L=Pore Lining, M=Matrix) Location Muck (LRR K, L, MLRA 1 Prairie Redox (LRR	(e.g. clay, sand, loam) silt loam silty clay loam silty clay loam 49B) K, L, R)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 13 28 NRCS Hydric	Bottom Depth 13 28 32 Soil Field Ir A1- Histosol A2 - Histic Ep A3 - Black Hi	Horizon 1 2 3 ndicators (check here)	fs dicator or confine Color 10YR 10YR	m the absence of Matrix (Moist) 3/2 2/1 4/1 icators a	% 100 100 100 sre not pre S8 - Polys S9 - Thin S11 - High	se: C=Concentra esent ☑ value Belov Dark Surfa	eries Drainage Class: ation, D=Depletion, RM=Reduced Matrix, Correct Reduced Reduced Matrix, Correct Reduced	somewhat possible same dox Features %	Type s for Proble A10 - 2 cm N A16 - Coast S3 - 5 cm Mu	Location Loc	(e.g. clay, sand, loam) silt loam silty clay loam silty clay loam 49B) K, L, R)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 13 28 NRCS Hydric	Bottom Depth 13 28 32 Soil Field Ir A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified	Horizon Horizon 1 2 3 ndicators (check here) pipedon istic en Sulfide d Layers	fs dicator or confirm Color 10YR 10YR ere if ind	m the absence of Matrix (Moist) 3/2 2/1 4/1 icators a	% 100 100 100 sre not pre S8 - Polys S9 - Thin S11 - High	se: C=Concentra	eries Drainage Class: ation, D=Depletion, RM=Reduced Matrix, CRec Color (Moist)	somewhat posts and dox Features % Indicator	Type Type s for Proble A10 - 2 cm May S3 - 5 cm May S7 - Dark Sa	Location Loc	(e.g. clay, sand, loam) silt loam silty clay loam silty clay loam LRR K, L, R)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 13 28 NRCS Hydric	Bottom Depth 13 28 32 Soil Field Ir A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A11 - Deplete	Horizon Horizon 1 2 3 ndicators (check horizon) istic en Sulfide d Layers ed Below Dark Surface	fs dicator or confirm Color 10YR 10YR ere if ind	m the absence of Matrix (Moist) 3/2 2/1 4/1 icators a	% 100 100 100	e: C=Concentra	eries Drainage Class: ation, D=Depletion, RM=Reduced Matrix, C Rec Color (Moist)	somewhat poor cared Sance dox Features % Indicator	Type Type s for Proble A10 - 2 cm M A16 - Coast S3 - 5cm M S7 - Dark St S8 - Polyvalt S9 - Thin Da	Location Location Location Location Location Muck (Location Location	(e.g. clay, sand, loam) silt loam silty clay loam silty clay loam 49B) K, L, R) LRR K, L, R)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 13 28 NRCS Hydric	Bottom Depth 13 28 32 Soil Field Ir A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A11 - Deplete A12 - Thick I	Horizon Horizon 1 2 3 ndicators (check horizon) sistic en Sulfide d Layers ed Below Dark Surface Dark Surface	fs dicator or confirm Color 10YR 10YR ere if ind	m the absence of Matrix (Moist) 3/2 2/1 4/1 icators a	% 100 100 100	esent and Chroma any Mucky May Gleyed eted Matrix x Dark Sur	eries Drainage Class: ation, D=Depletion, RM=Reduced Matrix, CRec Color (Moist)	somewhat poor	Type Type s for Proble A10 - 2 cm M A16 - Coast S3 - 5 cm Mu S7 - Dark Su S8 - Polyvalu S9 - Thin Da F12 - Iron-M	L=Pore Lining, M=Matrix) Location 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)	(e.g. clay, sand, loam) silt loam silty clay loam silty clay loam 49B) K, L, R) CLRR K, L, R) (LRR K, L, R)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 13 28 NRCS Hydric	Bottom Depth 13 28 32 Soil Field Ir A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A11 - Deplete A12 - Thick E S1 - Sandy M	Horizon Horizon 1 2 3 ndicators (check here) pipedon istic en Sulfide d Layers ed Below Dark Surface Dark Surface Muck Mineral	fs dicator or confirm Color 10YR 10YR ere if ind	m the absence of Matrix (Moist) 3/2 2/1 4/1 icators a	% 100 100 100	esent	eries Drainage Class: ation, D=Depletion, RM=Reduced Matrix, C Red Color (Moist)	somewhat poor cared Sance dox Features % Indicator	Type Type s for Proble A10 - 2 cm N A16 - Coast S3 - 5 cm Mu S7 - Dark Su S8 - Polyvalu S9 - Thin Da F12 - Iron-M F19 - Piedm	Location Loc	(e.g. clay, sand, loam) silt loam silty clay loam silty clay loam 49B) K, L, R) CLRR K, L, R) (LRR K, L, R)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 13 28 NRCS Hydric	Bottom Depth 13 28 32 Soil Field Ir A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A11 - Deplete A12 - Thick I	Horizon Horizon 1 2 3 ndicators (check horizon) stic en Sulfide d Layers ed Below Dark Surface Dark Surface Muck Mineral Gleyed Matrix	fs dicator or confirm Color 10YR 10YR ere if ind	m the absence of Matrix (Moist) 3/2 2/1 4/1 icators a	% 100 100 100	esent	eries Drainage Class: ation, D=Depletion, RM=Reduced Matrix, C Red Color (Moist)	somewhat poor cared Sance dox Features % Indicator	Type Type	L=Pore Lining, M=Matrix) Location 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)	(e.g. clay, sand, loam) silt loam silty clay loam silty 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)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 13 28 NRCS Hydric	Bottom Depth 13 28 32 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 R S6 - Stripped	Horizon Horizon 1 2 3 ndicators (check horistic en Sulfide d Layers ed Below Dark Surface Muck Mineral Gleyed Matrix Redox H Matrix	fs dicator or confirm Color 10YR 10YR ere if ind	m the absence of Matrix (Moist) 3/2 2/1 4/1 icators a	% 100 100 100	esent	eries Drainage Class: ation, D=Depletion, RM=Reduced Matrix, C Red Color (Moist)	somewhat poor cared Sance dox Features % Indicator	Type Type	Location Locati	(e.g. clay, sand, loam) silt loam silty clay loam silty 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)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 13 28 NRCS Hydric	Bottom Depth 13 28 32 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 R S6 - Stripped	Horizon Horizon 1 2 3 ndicators (check horizon check horizon) by pipedon istic check horizon check horizon check horizon check surface check Surface Muck Mineral Gleyed Matrix Redox	fs dicator or confirm Color 10YR 10YR ere if ind	m the absence of Matrix (Moist) 3/2 2/1 4/1 icators a	% 100 100 100	esent	eries Drainage Class: ation, D=Depletion, RM=Reduced Matrix, C Red Color (Moist)	somewhat poor cared sand dox Features % Indicator	Type Type	LePore Lining, M=Matrix) Location	(e.g. clay, sand, loam) silt loam silty clay loam silty 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) 45, 149B) face
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 13 28 NRCS Hydric	Bottom Depth 13 28 32 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 R S6 - Stripped	Horizon Horizon 1 2 3 ndicators (check horistic en Sulfide d Layers ed Below Dark Surface Muck Mineral Gleyed Matrix Redox H Matrix	fs dicator or confirm Color 10YR 10YR ere if ind	m the absence of Matrix (Moist) 3/2 2/1 4/1 icators a	% 100 100 100	esent	eries Drainage Class: ation, D=Depletion, RM=Reduced Matrix, C Red Color (Moist)	somewhat poor and a second content of the content o	Type Type	Location Locati	(e.g. clay, sand, loam) silt loam silty clay loam silty 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) 45, 149B) face
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 13 28 NRCS Hydric	Bottom Depth 13 28 32 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 R S6 - Stripped	Horizon Horizon 1 2 3 ndicators (check horizon (check horizon) bistic en Sulfide d Layers ed Below Dark Surface Muck Mineral Eleyed Matrix (Redox d Matrix (Redox d Matrix (Redox d Matrix (Redox d Matrix (LRR R, MLRA 149B))	fs dicator or confirm Color 10YR 10YR ere if ind	m the absence of Matrix (Moist) 3/2 2/1 4/1 icators a	% 100 100 100	esent	eries Drainage Class: ation, D=Depletion, RM=Reduced Matrix, C Red Color (Moist)	somewhat poor and a second content of the content o	Type Type	LePore Lining, M=Matrix) Location	(e.g. clay, sand, loam) silt loam silty clay loam silty 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) 45, 149B) face



WETLAND DETERMINATION DATA FORM

Northeast and Northcentral Region

Project/Site:	North Mendota Energy and Technology	Park			Wetland ID: W-2 Sample Point: P17
VEGETATION	(Species identified in all uppercase are non-na	ative speci	es.)		
Tree Stratum (Pl	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: 0 (B)
5.					
6.					Percent of Dominant Species That Are OBL, FACW, or FAC: NA (A/B)
7.					(742)
8.					Prevalence Index Worksheet
					
9.					Total % Cover of: Multiply by:
10.					OBL spp. 0
	Total Cover =	0			FACW spp. $0 x 2 = 0$
					FAC spp. $0 x 3 = 0$
Sapling/Shrub Str	ratum (Plot size: 5 meter radius)				FACU spp. $0 x 4 = 0$
1.					UPL spp. $\underline{\qquad}$ $x = \underline{\qquad}$ $\underline{\qquad}$
2.					
3.					Total(A)(B)
4.					
5.					Prevalence Index = $B/A = NA$
6.					
7.					
8.					Hydrophytic Vegetation Indicators:
9.					☐ Yes ☑ No Rapid Test for Hydrophytic Vegetation
10.					
10.	Total Cover				☐ Yes ☑ No Dominance Test is > 50%
	Total Cover =	0			☐ Yes ☐ No Prevalence Index is ≤ 3.0 *
					☐ Yes ☑ No Morphological Adaptations (Explain) *
4	ot size: 2 meter radius)				☐ Yes ☑ No Problem Hydrophytic Vegetation (Explain) *
1.					* Indicators of hydric soil and wetland hydrology must be
2.					present, unless disturbed or problematic.
3.					
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.
10.					tall.
11.					
12.					Herb - All herbaceous (non-woody) plants, regardless of size, and
13.					woody plants less than 3.28 ft. tall.
14.					Woody Vines - All woody vines greater than 3.28 ft. in height.
15.					VVOOdy Villes - All Woody Villes greater than 5.25 it. in height.
	Total Cover =	0			
	tum (Plot size: 10 meter radius)				
1.					
2.					
3.					Hydrophytic Vegetation Present ☐ Yes ☑ No
4.					
5.					
	Total Cover =	0			
Remarks:			ed to cor	n in 2014	I. No evidence of stress/stunting observed in corn stubble; no weedy species
	observed.			_	S
Additional Da	marke:				
Additional Re	iliai K5.				



Project/Site:		dota Energy and Te ch Development & (٠.	•			Stantec Project #:	193703573		Date: County:	04/23/15 Dane
Applicant: Investigator #1:		on Development & C			gator #2:					State:	Wisconsin
Soil Unit:	Virgil silt lo	am		11170011	gato: "2:		I/WWI Classification:			Wetland ID:	W-2
Landform:	Toeslope			Loc	al Relief:					Sample Point:	P18
Slope (%):	0-2	Latitude:	N/A		ongitude:			Datum:	N/A	Community ID:	Farmed Wetland
/	drologic cond	ditions on the site ty	pical for				nin in remarks)	☑ Yes □		Section:	22
		or Hydrology □ sig					Are normal circumsta	ances present	t?	Township:	8N
•		or Hydrology □ na	-				☐ Yes	☑No		Range:	9 Dir: E
SUMMARY OF	FINDINGS										
Hydrophytic Ve	getation Pre	sent?			□ No			Hydric Soils	Present?		
Wetland Hydrol	ogy Present	:?		Yes	□ No			Is This Samp	oling Point \	Within A Wetlar	nd? ☑ Yes ■ No
Remarks:	Based on a active ag fi		onditions	were no	ormal; 4.1	4 inches	of rain were received	in the area fr	om April 1	- April 23. Sam	ple point located within
HYDROLOGY	0										
	ology India	ators (Chack hara	if indicate	ore ore n	ot procor	· · ·					
Primary:	•	ators (Check here	ii indicat	ors are r	ioi presei	ıı (☑):			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	
	B1 - Water M				C1 - Hydr	-				C2 - Dry-Season	
l	B2 - Sedimer B3 - Drift Dep	•		님			spheres on Living Roots educed Iron			C8 - Crayfish Buri	isible on Aerial Imagery
	B4 - Algal Ma						duction in Tilled Soils			D1 - Stunted or St	
	B5 - Iron Dep				C7 - Thin				V	D2 - Geomorphic	
<u> </u>		on Visible on Aerial Ima	0 ,		Other (Ex	plain in Re	marks)			D3 - Shallow Aqui	
	B8 - Sparsely	y Vegetated Concave S	surrace							D4 - Microtopogra D5 - FAC-Neutral	
Field Observat	ione								_		
		□ Vaa □ Na	Donth		(in)						
Surface Water Water Table Pr		☐ Yes ☑ No	Depth:		(in.)			Wetland Hyd	drology Pr	resent?	Yes □ No
Saturation Pres		☐ Yes ☑ No ☐ Yes ☑ No	Depth:		(in.)						
			Depth:		(in.)						
	led Data (str	eam gauge, monitori	ng well, a	aerial pho	otos, previ	ous inspe	ctions), if available:		Aerial Image	ery Review	
Remarks:											
itemarks.											
SOILS											
SOILS Map Unit Name		Virgil silt loam	t -			S	eries Drainage Class:	somewhat po	oorly		
SOILS Map Unit Name Taxonomy (Sub	group):	Udollic Endoaqual					•	•	·		
SOILS Map Unit Name Taxonomy (Sub	ogroup): otion (Describe to	Udollic Endoaqual					tion, D=Depletion, RM=Reduced Matrix, C	CS=Covered/Coated Sand	d Grains; Location: F	PL=Pore Lining, M=Matrix)	Toyturo
SOILS Map Unit Name Taxonomy (Sub Profile Descrip	ogroup): otion (Describe to Bottom	Udollic Endoaqual the depth needed to document the in	dicator or confire	Matrix		pe: C=Concentra	tion, D=Depletion, RM=Reduced Matrix, C	CS=Covered/Coated Sand	d Grains; Location: P		Texture
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth	ogroup): otion (Describe to Bottom Depth	Udollic Endoaqual	dicator or confirm	Matrix (Moist)	%	pe: C=Concentra	tion, D=Depletion, RM=Reduced Matrix, C Red Color (Moist)	CS=Covered/Coated Sand	d Grains; Location: F	Location	(e.g. clay, sand, loam)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	ogroup): otion (Describe to Bottom Depth 8	Udollic Endoaqual the depth needed to document the in Horizon 1	Color 10YR	Matrix (Moist) 3/1	% 97	pe: C=Concentra	tion, D=Depletion, RM=Reduced Matrix, C Red Color (Moist) 3/3	cs=Covered/Coated Sand	Type	Location M	(e.g. clay, sand, loam) silt loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8	ogroup): otion (Describe to Bottom Depth 8 21	Udollic Endoaqual the depth needed to document the in Horizon 1 2	Color 10YR 10YR	Matrix (Moist) 3/1 2/1	% 97 97	7.5YR	tion, D=Depletion, RM=Reduced Matrix, C Red Color (Moist) 3/3 3/3	cs=Covered/Coated Sanc dox Features % 3	Type C	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 21	pgroup): otion (Describe to Bottom Depth 8 21 25	Udollic Endoaqual the depth needed to document the in Horizon 1 2 3	Color 10YR 10YR 10YR	Matrix (Moist) 3/1 2/1 4/1	% 97 97 97	7.5YR 7.5YR 7.5YR	tion, D=Depletion, RM=Reduced Matrix, C Red Color (Moist) 3/3 3/3 5/8	cs=Covered/Coated Sand dox Features % 3 3 3	Type C C C	Location M M M	(e.g. clay, sand, loam) silt loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8	ogroup): otion (Describe to Bottom Depth 8 21	Udollic Endoaqual the depth needed to document the in Horizon 1 2	Color 10YR 10YR	Matrix (Moist) 3/1 2/1	% 97 97	7.5YR	tion, D=Depletion, RM=Reduced Matrix, C Red Color (Moist) 3/3 3/3	cs=Covered/Coated Sanc dox Features % 3	Type C	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 21	pgroup): otion (Describe to Bottom Depth 8 21 25	Udollic Endoaqual the depth needed to document the in Horizon 1 2 3	Color 10YR 10YR 10YR	Matrix (Moist) 3/1 2/1 4/1	% 97 97 97	7.5YR 7.5YR 7.5YR 7.5YR	tion, D=Depletion, RM=Reduced Matrix, C Red Color (Moist) 3/3 3/3 5/8	dox Features % 3 3 3	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 8 21	pgroup): Dificial (Describe to Bottom) Depth 8 21 25	Horizon 1 2 3	Color 10YR 10YR 10YR	Matrix (Moist) 3/1 2/1 4/1 	% 97 97 97 	7.5YR 7.5YR 7.5YR 7.5YR	tion, D=Depletion, RM=Reduced Matrix, C Red Color (Moist) 3/3 3/3 5/8	dox Features % 3 3 3	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 8 21	pgroup): Dtion (Describe to Bottom Depth 8 21 25	Horizon 1 2 3	Color 10YR 10YR	Matrix (Moist) 3/1 2/1 4/1	% 97 97 97 	7.5YR 7.5YR 7.5YR	tion, D=Depletion, RM=Reduced Matrix, CRed Color (Moist) 3/3 3/3 5/8 	CS=Covered/Coated Sance dox Features % 3 3	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 8 21	pgroup): otion (Describe to Bottom) Depth 8 21 25	Horizon 1 2 3	Color 10YR 10YR 10YR	Matrix (Moist) 3/1 2/1 4/1	% 97 97 97 	7.5YR 7.5YR 7.5YR	tion, D=Depletion, RM=Reduced Matrix, CRecord Color (Moist) 3/3 3/3 5/8	CS=Covered/Coated Sance dox Features % 3 3	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 8 21 NRCS Hydric	Bottom Depth 8 21 25 Soil Field Ir	Horizon 1 2 3	Color 10YR 10YR 10YR	Matrix (Moist) 3/1 2/1 4/1 icators a	% 97 97 97 are not pre	7.5YR 7.5YR 7.5YR esent pe: C=Concentra	tion, D=Depletion, RM=Reduced Matrix, CRedColor (Moist) 3/3 3/3 5/8	CS=Covered/Coated Sance dox Features % 3 3 Indicator	Type C C C s for Proble	Location 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 8 21 NRCS Hydric	bgroup): otion (Describe to Bottom) Depth 8 21 25 Soil Field In A1- Histosol	Horizon 1 2 3 ndicators (check here	Color 10YR 10YR 10YR	Matrix (Moist) 3/1 2/1 4/1 icators a	% 97 97 97 are not pre	7.5YR 7.5YR 7.5YR esent value Belov	tion, D=Depletion, RM=Reduced Matrix, CRed Color (Moist) 3/3 3/3 5/8 N Surface (LRR R, MLRA 149B)	CS=Covered/Coated Sance dox Features % 3 3 Indicator	Type C C C s for Proble	Location M M M matic Soils ¹ Vuck (LRR K, L, MLRA 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 8 21 NRCS Hydric	Bottom Depth 8 21 25 Soil Field In A1- Histosol A2 - Histic Ep	Horizon 1 2 3 ndicators (check head	Color 10YR 10YR 10YR	Matrix (Moist) 3/1 2/1 4/1 icators a	% 97 97 97 see not pre	7.5YR 7.5YR 7.5YR 7.5YR esent □ value Belov Dark Surfa	tion, D=Depletion, RM=Reduced Matrix, CRedColor (Moist) 3/3 3/3 5/8 Surface (LRR R, MLRA 149B) ace (LRR R, MLRA 149B)	CS=Covered/Coated Sand dox Features % 3 3 Indicator	Type C C C s for Proble A10 - 2 cm I	Location M M M matic Soils ¹ Vuck (LRR K, L, MLRA 1) 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 8 21 NRCS Hydric	Bottom Depth 8 21 25 Soil Field Ir A1- Histosol A2 - Histic Ep A3 - Black Hi	Horizon 1 2 3 ndicators (check here)	Color 10YR 10YR 10YR	Matrix (Moist) 3/1 2/1 4/1 icators a	% 97 97 97 sre not pre S8 - Polys S9 - Thin S11 - High	7.5YR 7.5YR 7.5YR 7.5YR esent value Below Dark Surfa	tion, D=Depletion, RM=Reduced Matrix, C Red Color (Moist) 3/3 3/3 5/8): v Surface (LRR R, MLRA 149B) ace (LRR R, MLRA 149B) Sands	CS=Covered/Coated Sand dox Features % 3 3 Indicator	Type C C C s for Proble A10 - 2 cm I A16 - Coast S3 - 5cm Mu	Location M M M matic Soils ¹ Vuck (LRR K, L, MLRA 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 8 21 NRCS Hydric	Bottom Depth 8 21 25 Soil Field Ir A1- Histosol A2 - Histic Ep A3 - Black Histosol A4 - Hydroge A5 - Stratified	Horizon Horizon 1 2 3 ndicators (check horizon) stic en Sulfide d Layers	Color 10YR 10YR 10YR ere if ind	Matrix (Moist) 3/1 2/1 4/1 icators a	% 97 97 97 sre not pre S8 - Polyo S9 - Thin S11 - High F1 - Loam F2 - Loam	7.5YR 7.5YR 7.5YR 7.5YR esent esent calue Below Dark Surfa	tion, D=Depletion, RM=Reduced Matrix, C Red Color (Moist) 3/3 3/3 5/8): v Surface (LRR R, MLRA 149B) RCE (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix	CS=Covered/Coated Sance dox Features % 3 3 Indicator	Type C C C s for Proble A10 - 2 cm I A16 - Coast S3 - 5cm Mt S7 - Dark St S8 - Polyval	Location M M M matic Soils Muck (LRR K, L, MLRA 1 Prairie Redox (LRR Lucky Peat of Peat (urface (LRR K, L, M) ue Below Surface	(e.g. clay, sand, loam) silt loam silty clay loam silty clay loam (LRR K, L, R) (LRR K, L)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 21 NRCS Hydric	Bottom Depth 8 21 25 Soil Field Ir A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A11 - Deplete	Horizon Horizon 1 2 3 ndicators (check horizon) istic en Sulfide d Layers ed Below Dark Surface	Color 10YR 10YR 10YR ere if ind	Matrix (Moist) 3/1 2/1 4/1 icators a	% 97 97 97 see not presser Polyx S9 - Thin S11 - High F1 - Loam F2 - Loam F3 - Deple	7.5YR 7.5YR 7.5YR 7.5YR esent value Below Dark Surfa th Chroma ny Mucky M ny Gleyed eted Matrix	tion, D=Depletion, RM=Reduced Matrix, C Red Color (Moist) 3/3 3/3 5/8): w Surface (LRR R, MLRA 149B) ace (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix	CS=Covered/Coated Sand dox Features % 3 3 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	Location M M M matic Soils Vuck (LRR K, L, MLRA 1 Prairie Redox (LRR ucky Peat of Peat (urface (LRR K, L, M) ue Below 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)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 21 NRCS Hydric	Bottom Depth 8 21 25 Soil Field Ir A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A11 - Deplete A12 - Thick I	Horizon Horizon 1 2 3 ndicators (check horizon check horizon) bipedon istic en Sulfide d Layers ed Below Dark Surface Dark Surface	Color 10YR 10YR 10YR ere if ind	Matrix (Moist) 3/1 2/1 4/1 icators a	% 97 97 97 se not pre S8 - Polyv S9 - Thin S11 - High F1 - Loam F2 - Loam F3 - Deple F6 - Redo	7.5YR 7.5YR 7.5YR 7.5YR esent value Below Dark Surfant Chroma ny Mucky May Gleyed eted Matrix ox Dark Sur	tion, D=Depletion, RM=Reduced Matrix, C Red Color (Moist) 3/3 3/3 5/8): v Surface (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix crface	CS=Covered/Coated Sand dox Features % 3 3 Indicator	Type C C C s for Proble A10 - 2 cm I A16 - Coast S3 - 5cm Mu S7 - Dark S0 S8 - Polyval S9 - Thin Da F12 - Iron-M	Location M 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 (LRR K, L) ark Surface (LRR K, L)	(e.g. clay, sand, loam) silt loam silty clay loam silty clay loam (149B) 8 K, L, R) (LRR K, L, R) (LRR K, L, R)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 21 NRCS Hydric	Bottom Depth 8 21 25 Soil Field Ir A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A11 - Deplete A12 - Thick E S1 - Sandy M	Horizon Horizon 1 2 3 ndicators (check here) cipedon istic en Sulfide d Layers ed Below Dark Surface Dark Surface Muck Mineral	Color 10YR 10YR 10YR ere if ind	Matrix (Moist) 3/1 2/1 4/1 icators a	% 97 97 97 see not presser Polyx S9 - Thin S11 - High F1 - Loam F2 - Loam F3 - Deple F6 - Redo F7 - Deple	7.5YR 7.5YR 7.5YR 7.5YR esent value Below Dark Surfa n Chroma ny Mucky M ny Gleyed eted Matrix ox Dark Sur eted Dark	tion, D=Depletion, RM=Reduced Matrix, C Red Color (Moist) 3/3 3/3 5/8): v Surface (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix frace Surface	dox Features % 3 3 Indicator	Type C C C C s for Proble A10 - 2 cm I A16 - Coast S3 - 5cm Mu S7 - Dark S0 S8 - Polyval S9 - Thin Da F12 - Iron-M F19 - Piedm	Location M 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 (ark Surface (LRR K, L) langanese Masses ont Floodplain Soil	(e.g. clay, sand, loam) silt loam silty clay loam silty clay loam (149B) 8 K, L, R) (LRR K, L, R) (LRR K, L, R)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 21 NRCS Hydric	Bottom Depth 8 21 25 Soil Field Ir A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A11 - Deplete A12 - Thick I	Horizon Horizon 1 2 3 ndicators (check horizon check horizon) stic 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 2/1 4/1 icators a	% 97 97 97 se not pre S8 - Polyv S9 - Thin S11 - High F1 - Loam F2 - Loam F3 - Deple F6 - Redo	7.5YR 7.5YR 7.5YR 7.5YR esent value Below Dark Surfa n Chroma ny Mucky M ny Gleyed eted Matrix ox Dark Sur eted Dark	tion, D=Depletion, RM=Reduced Matrix, C Red Color (Moist) 3/3 3/3 5/8): v Surface (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix frace Surface	CS=Covered/Coated Sand dox Features % 3 3 Indicator	Type C C 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 F19 - Piedm F21 - Red P	Location M M M matic Soils Muck (LRR K, L, MLRA 1) Prairie Redox (LRR ucky Peat of Peat (LRR K, L, M) ue Below Surface (LRR K, L, M) ue Below Surface (LRR K, L) ark Surface (LRR K, L) langanese Masses ont Floodplain Soil arent Material	(e.g. clay, sand, loam) silt loam silty clay loam silty clay loam (LRR K, L, R)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 21 NRCS Hydric	Bottom Depth 8 21 25 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A1- Deplete A12 - Thick E S1 - Sandy M S4 - Sandy M	Horizon Horizon 1 2 3 ndicators (check horizon stic 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 2/1 4/1 icators a	% 97 97 97 see not presser Polyx S9 - Thin S11 - High F1 - Loam F2 - Loam F3 - Deple F6 - Redo F7 - Deple	7.5YR 7.5YR 7.5YR 7.5YR esent value Below Dark Surfa n Chroma ny Mucky M ny Gleyed eted Matrix ox Dark Sur eted Dark	tion, D=Depletion, RM=Reduced Matrix, C Red Color (Moist) 3/3 3/3 5/8): v Surface (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix frace Surface	CS=Covered/Coated Sand dox Features % 3 3 Indicator	Type C C C C s for Proble A10 - 2 cm I A16 - Coast S3 - 5cm Mu S7 - Dark S0 S8 - Polyval S9 - Thin Da F12 - Iron-M F19 - Piedm F21 - Red P TA6 - Mesic	Location M 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 (ark Surface (LRR K, L) langanese Masses ont Floodplain Soil	(e.g. clay, sand, loam) silt loam silty clay loam silty clay loam (LRR K, L, R)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 21 NRCS Hydric	Bottom Depth 8 21 25 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	Horizon Horizon 1 2 3 ndicators (check horizon stic 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 2/1 4/1 icators a	% 97 97 97 see not presser Polyx S9 - Thin S11 - High F1 - Loam F2 - Loam F3 - Deple F6 - Redo F7 - Deple	7.5YR 7.5YR 7.5YR 7.5YR esent value Below Dark Surfa n Chroma ny Mucky M ny Gleyed eted Matrix ox Dark Sur eted Dark	tion, D=Depletion, RM=Reduced Matrix, C Red Color (Moist) 3/3 3/3 5/8): v Surface (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix frace Surface	cs=Covered/Coated Sand dox Features % 3 3 3 Indicator	Type C C 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 F19 - Piedm F21 - Red P TA6 - Mesic TF12 - Very Other (Expla	Location M M M matic Soils Muck (LRR K, L, MLRA 1 Prairie Redox (LRR LUCKY Peat of Peat (LUCKY Peat of P	(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) (LRR K, L, R) (S (LRR K, L, R)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 21 NRCS Hydric	Bottom Depth 8 21 25 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	Horizon Horizon 1 2 3 ndicators (check horistic en Sulfide d Layers ed Below Dark Surface Muck Mineral Gleyed Matrix Redox H Matrix	Color 10YR 10YR 10YR ere if ind	Matrix (Moist) 3/1 2/1 4/1 icators a	% 97 97 97 see not presser Polyx S9 - Thin S11 - High F1 - Loam F2 - Loam F3 - Deple F6 - Redo F7 - Deple	7.5YR 7.5YR 7.5YR 7.5YR esent value Below Dark Surfa n Chroma ny Mucky M ny Gleyed eted Matrix ox Dark Sur eted Dark	tion, D=Depletion, RM=Reduced Matrix, C Red Color (Moist) 3/3 3/3 5/8): v Surface (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix frace Surface	CS=Covered/Coated Sand dox Features % 3 3 3 Indicator Indicator Indicator Indicator	Type C C 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 F19 - Piedm F21 - Red P TA6 - Mesic TF12 - Very Other (Expla	Location M 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 (LRR K, L) langanese Masses ark Surface (LRR K, L) langanese Masses ark Surface (MLRA 144A, 1 Shallow Dark Surf	(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) (LRR K, L, R) (S (LRR K, L, R)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 21 NRCS Hydric	Bottom Depth 8 21 25 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	Horizon Horizon 1 2 3 ndicators (check horizon (check horizon) bipedon (check horizon) can Sulfide (check horizon) dicators (check horizon) dicators (check horizon) can Sulfide (check horizon) dicators (check hori	Color 10YR 10YR 10YR ere if ind	Matrix (Moist) 3/1 2/1 4/1 icators a	% 97 97 97 see not presser Polyx S9 - Thin S11 - High F1 - Loam F2 - Loam F3 - Deple F6 - Redo F7 - Deple	7.5YR 7.5YR 7.5YR 7.5YR esent value Below Dark Surfa n Chroma ny Mucky M ny Gleyed eted Matrix ox Dark Sur eted Dark	tion, D=Depletion, RM=Reduced Matrix, C Red Color (Moist) 3/3 3/3 5/8): v Surface (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix frace Surface	CS=Covered/Coated Sand dox Features % 3 3 3 Indicator Indicator Indicator Indicator	Type C C C 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 F19 - Piedm F21 - Red P TA6 - Mesic TF12 - Very Other (Expla of hydrophytic veget or problematic.	Location M M M matic Soils Muck (LRR K, L, MLRA 1 Prairie Redox (LRR LUCKY Peat of Peat (LUCKY Peat of P	(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) (LRR K, L, R) (S (LRR K, L, R)



Project/Site: North Mendota Energy and Technology Park Wetland ID: W-2 Sample Point: P18

VEGETATION	(Species identified in all uppercase are non-na	ative spe	cies.)		
	lot 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:(A)
3.					
4.					Total Number of Dominant Species Across All Strata: 2 (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
	Total Cover =	0			FACW spp. $2 x 2 = 4$
					FAC spp. $\frac{1}{}$ $\times 3 = \frac{3}{}$
Sapling/Shrub St	ratum (Plot size: 5 meter radius)				FACU spp.
1.					UPL spp. $0 x 5 = 0$
2.					
3.					Total 3 (A) 7 (B)
4.					
5.					Prevalence Index = $B/A =$ 2.333
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 Morphological Adaptations (Explain) *
Herb Stratum (P	ot size: 2 meter radius)				☐ Yes ☑ No Problem Hydrophytic Vegetation (Explain) *
1.	PHALARIS ARUNDINACEA	2	Υ	FACW	
2.	Plantago rugelii	1	Υ	FAC	* 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.
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 =	3			·
	rotal cover	· ·			
Woody Vine Stra	tum (Plot size: 10 meter radius)				
1.					
2.					
3.					Hydrophytic Vegetation Present ☑ Yes ☐ No
4.					,, ,,,
5.					
	Total Cover =	0			
Remarks:			nted to co	rn in 2014	No observable evidence of stress/stunting observed in corn stubble, but
					n - coverage based on 2015 spring growth.

Additional Remarks:

Sample point located in active agricultural field on toeslope between edge of uncropped drainage swale and upland knoll in ag field. Sample point location correlates with area commonly exhibiting wetland signatures in an aerial imagery review and significant amount of hydrophytic weed species present.



	North Men	dota Energy and Te	chnology	/ Park			Stantec Project #:	193703573		Date:	04/23/15
Project/Site: Applicant:		ch Development & C	٠.				,			County:	Dane
Investigator #1:					gator #2:					State:	Wisconsin
Soil Unit:	Virgil silt lo	am			9		/I/WWI Classification:			Wetland ID:	W-2
Landform:	Backslope			Loc	al Relief:		", " T T T G I G G G I I G G I G G I G I G I			Sample Point:	P19
Slope (%):	0-2	Latitude:	Ν/Δ		ongitude:			Datum:	ΝΙ/Δ	Community ID:	Ag Field
		ditions on the site ty					ain in romarka)	✓ Yes □	No	Section:	22
			•			(II IIO, expir	Are normal circumsta			i	
_		or Hydrology ☐ sig	-				☐ Yes	ances presen ☑No	ι:	Township:	8N
		or Hydrology □ na	turally pr	obiemai	IC?		□ 162	⊴NO		Range:	9 Dir: E
SUMMARY OF											
Hydrophytic Ve	_			☐ Yes	_			Hydric Soils			☐ Yes ☑ No
Wetland Hydrol				☐ Yes						Within A Wetlar	
Remarks:							of rain were received	in the area fr	om April 1	 April 23. Sam 	ple point located within
	active ag fi	eld; soils mixed fill r	material ^r	from adj	acent sev	ver line.					
HYDROLOGY											
	ology Indic	ators (Chack hara	if indicate	ore ore r	ot procor	ı+ □ \•					
Primary:		ators (Check here	ii iiiuicati	ois ale i	ioi presei	п 🗀)•			Secondary:		
	A1 - Surface	Water			B9 - Wate	r-Stained	Leaves		Secondary.	B6 - Surface Soil	Cracks
l H	A2 - High Wa			H	B13 - Aqu				H	B10 - Drainage P	
l	A3 - Saturation				B15 - Mar				ī	B16 - Moss Trim	
	B1 - Water M	⁄larks			C1 - Hydr	•				C2 - Dry-Season	Water Table
	B2 - Sedime				C3 - Oxidi	zed Rhizo	spheres on Living Roots			C8 - Crayfish Bur	rows
	B3 - Drift De	•					educed Iron		V		isible on Aerial Imagery
	B4 - Algal Ma						duction in Tilled Soils			D1 - Stunted or S	
ᅵ	B5 - Iron Dep			닏	C7 - Thin				님	D2 - Geomorphic	
		on Visible on Aerial Ima y Vegetated Concave S	0 ,	Ц	Other (Ex	piain in Re	emarks)			D3 - Shallow Aqu D4 - Microtopogra	
	Bo - Sparser	y vegetated Concave C	burrace							D5 - FAC-Neutral	
Fig. 1.01	•										
Field Observat											
Surface Water	Present?	☐ Yes ☑ No	Depth:		(in.)			Wetland Hy	drology Pr	resent?	Yes ☑ No
Water Table Pr	esent?	☐ Yes ☑ No	Depth:		(in.)			Wetland my	arciogy i i	cociit.	100 🖪 140
Saturation Pres	ent?	☐ Yes	Depth:		(in.)						
Describe Record	led Data (str	eam gauge, monitori	na well s	acrial nho	otos previ	ous inspe	ctions) if available:		Aerial Image	ery Review	
	ed Bata (Sti	- gaage, monitori	ng won, c	acriai pric	rios, provi	odo mope	otions), ii availabic.		7 torial irriage	ory recorder	
Remarks:											
SOILS											
):	Virgil silt loam				S	eries Drainage Class:	somewhat po	oorly		
SOILS		Virgil silt loam Udollic Endoaqual	fs			S	eries Drainage Class:	somewhat po	oorly		
SOILS Map Unit Name Taxonomy (Sub	group):	Udollic Endoaqual		m the absence o	of indicators.) (Ty			•	•	PL=Pore Lining, M=Matrix)	
SOILS Map Unit Name Taxonomy (Sub	group):	Udollic Endoaqual		m the absence o			ation, D=Depletion, RM=Reduced Matrix, C	CS=Covered/Coated Sand	d Grains; Location: F	PL=Pore Lining, M=Matrix)	Texture
SOILS Map Unit Name Taxonomy (Sub Profile Descrip	ogroup): otion (Describe to Bottom	Udollic Endoaqual the depth needed to document the in	dicator or confire	Matrix	T		ntion, D=Depletion, RM=Reduced Matrix, C	CS=Covered/Coated Sand	d Grains; Location: F	T	
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth	ogroup): otion (Describe to Bottom Depth	Udollic Endoaqual	dicator or confirm	Matrix (Moist)	%		ation, D=Depletion, RM=Reduced Matrix, C	cs=Covered/Coated Sand	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	pgroup): otion (Describe to Bottom Depth 14	the depth needed to document the in Horizon 1	Color 10YR	Matrix (Moist) 3/2	% 100	pe: C=Concentra	ntion, D=Depletion, RM=Reduced Matrix, C	cs=Covered/Coated Sand	d Grains; Location: F	Location 	(e.g. clay, sand, loam) silt loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth	ogroup): otion (Describe to Bottom Depth	Udollic Endoaqual the depth needed to document the in	Color 10YR 10YR	Matrix (Moist) 3/2 3/2	% 100 75		ntion, D=Depletion, RM=Reduced Matrix, C	cs=Covered/Coated Sand	d Grains; Location: F	T	(e.g. clay, sand, loam) silt loam silt loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	pgroup): otion (Describe to Bottom Depth 14	the depth needed to document the in Horizon 1	Color 10YR 10YR 2.5Y	Matrix (Moist) 3/2 3/2 5/3	% 100 75 20	pe: C=Concentra	ntion, D=Depletion, RM=Reduced Matrix, C	cs=Covered/Coated Sand	d Grains; Location: F	Location 	(e.g. clay, sand, loam) silt loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	pgroup): otion (Describe to Bottom Depth 14 22	the depth needed to document the in Horizon 1	Color 10YR 10YR	Matrix (Moist) 3/2 3/2	% 100 75	pe: C=Concentra	Recolor (Moist)	cs=Covered/Coated Sand	Type	Location 	(e.g. clay, sand, loam) silt loam silt loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	pgroup): otion (Describe to Bottom Depth 14 22	the depth needed to document the in Horizon 1	Color 10YR 10YR 2.5Y	Matrix (Moist) 3/2 3/2 5/3	% 100 75 20	ee: C=Concentra	Recolor (Moist)	CS=Covered/Coated Sand	d Grains; Location: F	Location 	(e.g. clay, sand, loam) silt loam silt loam silty clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	pgroup): otion (Describe to Bottom Depth 14 22	the depth needed to document the in Horizon 1	Color 10YR 10YR 2.5Y 10YR	Matrix (Moist) 3/2 3/2 5/3	% 100 75 20	ee: C=Concentra	Recolor (Moist)	cs=Covered/Coated Sand	Type	Location 	(e.g. clay, sand, loam) silt loam silt loam silty clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	pgroup): otion (Describe to Bottom Depth 14 22	the depth needed to document the in Horizon 1	Color 10YR 10YR 2.5Y 10YR	Matrix (Moist) 3/2 3/2 5/3	% 100 75 20	ee: C=Concentra	Recolor (Moist)	cs=Covered/Coated Sand	Type	Location 	(e.g. clay, sand, loam) silt loam silt loam silty clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 14	pgroup): Dificial (Describe to Bottom Depth 14 22	Horizon 1 2	Color 10YR 10YR 2.5Y 10YR	Matrix (Moist) 3/2 3/2 5/3	% 100 75 20 5 	ee: C=Concentra	Color (Moist)	cs=Covered/Coated Sand	Type	Location	(e.g. clay, sand, loam) silt loam silt loam silty clay loam sandy clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 14	pgroup): otion (Describe to Bottom Depth 14 22	Horizon 1 2	Color 10YR 10YR 2.5Y 10YR	Matrix (Moist) 3/2 3/2 5/3 5/6	% 100 75 20 5	e: C=Concentra	Color (Moist)	CS=Covered/Coated Sand	Type	Location	(e.g. clay, sand, loam) silt loam silt loam silty clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 14 NRCS Hydric	pgroup): ption (Describe to Bottom Depth 14 22 Soil Field In	Horizon 1 2 ndicators (check here	Color 10YR 10YR 2.5Y 10YR	Matrix (Moist) 3/2 3/2 5/3 5/6 icators a	% 100 75 20 5 are not pre	e: C=Concentra	Color (Moist)	CS=Covered/Coated Sand dox Features % Indicator	Type	Location matic Soils 1	(e.g. clay, sand, loam) silt loam silty clay loam sandy clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 14 NRCS Hydric	pgroup): ption (Describe to Bottom Depth 14 22 Soil Field In A1- Histosol	Horizon 1 2 ndicators (check here	Color 10YR 10YR 2.5Y 10YR	Matrix (Moist) 3/2 3/2 5/3 5/6 icators a	% 100 75 20 5 are not pre	esent value Belov	Color (Moist)	CS=Covered/Coated Sand dox Features % Indicator	Type	Location matic Soils 1 Muck (LRR K, L, MLRA	(e.g. clay, sand, loam) silt loam silt loam silty clay loam sandy clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 14 NRCS Hydric	pgroup): ption (Describe to Bottom Depth 14 22 Soil Field In A1- Histosol A2 - Histic E	Horizon 1 2 ndicators (check he	Color 10YR 10YR 2.5Y 10YR	Matrix (Moist) 3/2 3/2 5/3 5/6 icators a	% 100 75 20 5 are not pre \$8 - Polyx \$9 - Thin	e: C=Concentra	Color (Moist)	CS=Covered/Coated Sand dox Features % Indicator	Type	Location Muck (LRR K, L, MLRA A) Prairie Redox (LRR	(e.g. clay, sand, loam) silt loam silt loam silty clay loam sandy clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 14 NRCS Hydric	pgroup): btion (Describe to Bottom Depth 14 22 Soil Field In A1- Histosol A2 - Histic E A3 - Black H	Horizon 1 2 ndicators (check here)	Color 10YR 10YR 2.5Y 10YR	Matrix (Moist) 3/2 3/2 5/3 5/6 icators a	% 100 75 20 5 sre not pre S8 - Polyx S9 - Thin S11 - High	esent value Belov Dark Surfa	Re Color (Moist)	CS=Covered/Coated Sand dox Features % Indicator	Type	Location matic Soils Muck (LRR K, L, MLRA Prairie Redox (LRR ucky Peat of Peat	(e.g. clay, sand, loam) silt loam silt loam silty clay loam sandy clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 14 NRCS Hydric	pgroup): ption (Describe to Bottom Depth 14 22 Soil Field In A1- Histosol A2 - Histic E	Horizon Horizon 1 2 ndicators (check here)	Color 10YR 10YR 2.5Y 10YR	Matrix (Moist) 3/2 3/2 5/3 5/6 icators a	% 100 75 20 5 sre not pre S8 - Polyx S9 - Thin S11 - High	e: C=Concentra	Ation, D=Depletion, RM=Reduced Matrix, Color (Moist)	CS=Covered/Coated Sand dox Features % Indicator	Type	Location Muck (LRR K, L, MLRA A) Prairie Redox (LRR	(e.g. clay, sand, loam) silt loam silty clay loam sandy clay loam (149B) R K, L, R) (LRR K, L, R)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 14 NRCS Hydric	Bottom Depth 14 22 Soil Field Ir A1- Histosol A2 - Histic E A3 - Black H A4 - Hydroge A5 - Stratified	Horizon Horizon 1 2	Color 10YR 10YR 2.5Y 10YR ere if ind	Matrix (Moist) 3/2 3/2 5/3 5/6 icators a	% 100 75 20 5	e: C=Concentra esent value Below Dark Surfa n Chroma ny Mucky N	tion, D=Depletion, RM=Reduced Matrix, CRe Color (Moist)	CS=Covered/Coated Sand dox Features % Indicator	Type	Location matic Soils Muck (LRR K, L, MLRA A Prairie Redox (LRR ucky Peat of Peat urface (LRR K, L, M)	(e.g. clay, sand, loam) silt loam silty clay loam sandy clay loam (LRR K, L, R) (LRR K, L)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 14 NRCS Hydric	Bottom Depth 14 22 Soil Field Ir A1- Histosol A2 - Histic E A3 - Black H A4 - Hydroge A5 - Stratified	Horizon Horizon 1 2 ndicators (check here) pipedon istic en Sulfide d Layers ed Below Dark Surface	Color 10YR 10YR 2.5Y 10YR ere if ind	Matrix (Moist) 3/2 3/2 5/3 5/6 icators a	% 100 75 20 5 sere not pre S8 - Polyo S9 - Thin S11 - High F1 - Loam F2 - Loam	e: C=Concentra	Recolor (Moist)	CS=Covered/Coated Sand dox Features % Indicator	Type	Location Muck (LRR K, L, MLRA A) Prairie Redox (LRR K) ucky Peat of Peat urface (LRR K, L, M) ue Below Surface ark Surface (LRR K, L) langanese Masses	(e.g. clay, sand, loam) silt loam silt loam silty clay loam sandy 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 14 NRCS Hydric	pgroup): ption (Describe to Bottom Depth 14 22 Soil Field In A1- Histosol A2 - Histic E A3 - Black H A4 - Hydroge A5 - Stratified A11 - Deplete	Horizon Horizon 1 2	Color 10YR 10YR 2.5Y 10YR ere if ind	Matrix (Moist) 3/2 3/2 5/3 5/6 icators a	% 100 75 20 5	esent	cation, D=Depletion, RM=Reduced Matrix, Color (Moist)	CS=Covered/Coated Sand dox Features % Indicator	Type	Location 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 danganese Masses ont Floodplain Soi	(e.g. clay, sand, loam) silt loam silt loam silty clay loam sandy 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 14 NRCS Hydric	Bottom Depth 14 22 Soil Field In A1- Histosol A2 - Histic E A3 - Black H A4 - Hydroge A5 - Stratified A12 - Thick E S1 - Sandy N S4 - Sandy N	Horizon Horizon 1 2 hdicators (check here) pipedon istic en Sulfide d Layers ed Below Dark Surface Dark Surface Muck Mineral Gleyed Matrix	Color 10YR 10YR 2.5Y 10YR ere if ind	Matrix (Moist) 3/2 3/2 5/3 5/6 icators a	% 100 75 20 5	e: C=Concentra esent calue Below Dark Surfa n Chroma ny Mucky M ny Gleyed eted Matrix x Dark Su eted Dark	rition, D=Depletion, RM=Reduced Matrix, C Re Color (Moist)	CS=Covered/Coated Sand dox Features % Indicator	Type	Location matic Soils Muck (LRR K, L, MLRA A 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) silt loam silt loam silty clay loam sandy clay loam (LRR K, L, R)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 14 NRCS Hydric	Bottom Depth 14 22 Soil Field Ir 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	Horizon Horizon 1 2	Color 10YR 10YR 2.5Y 10YR ere if ind	Matrix (Moist) 3/2 3/2 5/3 5/6 icators a	% 100 75 20 5	e: C=Concentra esent calue Below Dark Surfa n Chroma ny Mucky M ny Gleyed eted Matrix x Dark Su eted Dark	rition, D=Depletion, RM=Reduced Matrix, C Re Color (Moist)	cs=Covered/Coated Sand dox Features % Indicator	Type	Location 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, 1	(e.g. clay, sand, loam) silt loam silty clay loam sandy clay loam (LRR K, L, R) (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 14 NRCS Hydric	Bottom Depth 14 22 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 S5 - Sandy R S6 - Stripped	Horizon Horizon 1 2	Color 10YR 10YR 2.5Y 10YR ere if ind	Matrix (Moist) 3/2 3/2 5/3 5/6 icators a	% 100 75 20 5	e: C=Concentra esent calue Below Dark Surfa n Chroma ny Mucky N ny Gleyed eted Matrix x Dark Su eted Dark	rition, D=Depletion, RM=Reduced Matrix, C Re Color (Moist)	dox Features % Indicator	Type	Location 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, 1) Shallow Dark Surface	(e.g. clay, sand, loam) silt loam silty clay loam sandy clay loam (LRR K, L, R) (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 14 NRCS Hydric	Bottom Depth 14 22 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 S5 - Sandy R S6 - Stripped	Horizon Horizon 1 2	Color 10YR 10YR 2.5Y 10YR ere if ind	Matrix (Moist) 3/2 3/2 5/3 5/6 icators a	% 100 75 20 5	e: C=Concentra esent calue Below Dark Surfa n Chroma ny Mucky N ny Gleyed eted Matrix x Dark Su eted Dark	rition, D=Depletion, RM=Reduced Matrix, C Re Color (Moist)	cs=Covered/Coated Sand dox Features % Indicator	Type	Location	(e.g. clay, sand, loam) silt loam silt loam silty clay loam sandy clay loam (LRR 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 14 NRCS Hydric	Bottom Depth 14 22 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 S5 - Sandy R S6 - Stripped	Horizon Horizon 1 2	Color 10YR 10YR 2.5Y 10YR ere if ind	Matrix (Moist) 3/2 3/2 5/3 5/6 icators a	% 100 75 20 5	e: C=Concentra esent calue Below Dark Surfa n Chroma ny Mucky N ny Gleyed eted Matrix x Dark Su eted Dark	rition, D=Depletion, RM=Reduced Matrix, C Re Color (Moist)	dox Features % Indicator	Type	Location 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, 1) Shallow Dark Surface	(e.g. clay, sand, loam) silt loam silt loam silty clay loam sandy clay loam (LRR 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 14 NRCS Hydric	Bottom Depth 14 22 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 S5 - Sandy R S6 - Stripped	Horizon Horizon 1 2	Color 10YR 10YR 2.5Y 10YR ere if ind	Matrix (Moist) 3/2 3/2 5/3 5/6 icators a	% 100 75 20 5	e: C=Concentra esent calue Below Dark Surfa n Chroma ny Mucky N ny Gleyed eted Matrix x Dark Su eted Dark	rition, D=Depletion, RM=Reduced Matrix, C Re Color (Moist)	dox Features % Indicator	Type	Location	(e.g. clay, sand, loam) silt loam silt loam silty clay loam sandy clay loam (LRR K, L, R) (LRR K, L, R) (LRR K, L, R) ils (MLRA 149B) face



WETLAND DETERMINATION DATA FORM

Northeast and Northcentral Region

Project/Site: North Mendota Energy and Technology Park Sample Point: P19 Wetland ID: W-2 **VEGETATION** (Species identified in all uppercase are non-native species.) Tree Stratum (Plot size: 10 meter radius) Species Name **Dominance Test Worksheet** % Cover Dominant Ind.Status 1. 2. Number of Dominant Species that are OBL, FACW, or FAC: 1 (A) 3. 4. Total Number of Dominant Species Across All Strata: 2 5. 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. x 1 =OBL spp. Total Cover = 0 x 2 =FACW spp. FAC spp. x 3 =0 x 4 =Sapling/Shrub Stratum (Plot size: 5 meter radius) FACU spp. 4 1. x = 5UPL spp. 2. 3. --Total (B) --4. 5. --Prevalence Index = B/A = 3.000 --6. --7. --8. **Hydrophytic Vegetation Indicators:** 9. ☐ Yes ✓ No Rapid Test for Hydrophytic Vegetation 10. ☐ Yes ☑ No Dominance Test is > 50% Total Cover = Yes □ No Prevalence Index is ≤ 3.0 * ☐ Yes ☑ No Morphological Adaptations (Explain) * Herb Stratum (Plot size: 2 meter radius) ☐ Yes ☑ No Problem Hydrophytic Vegetation (Explain) * PHALARIS ARUNDINACEA Υ **FACW** 1. 1 * Indicators of hydric soil and wetland hydrology must be 2. TARAXACUM OFFICINALE Υ **FACU** present, unless disturbed or problematic. 3. **Definitions of Vegetation Strata:** 4. 5. --Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast 6 height (DBH), regardless of height. 8. Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft. 9. 10. 11. ----Herb - All herbaceous (non-woody) plants, regardless of size, and 12. woody plants less than 3.28 ft. tall. 13. --14. --Woody Vines - All woody vines greater than 3.28 ft. in height. 15. --Total Cover = 2 Woody Vine Stratum (Plot size: 10 meter radius) 1. 2. 3. **Hydrophytic Vegetation Present** ☐ Yes ☑ No 4. 5. Total Cover = 0

Additional Remarks:

species.

Remarks:

Sample point located in ag field at slightly higher topography that P20. While associated with an area that appeared to exhibit wetland signatures, the lack of observable hydrology indicators, hydric soil, and hydrophytic weedy species supports the upland determination.

Sample point located within active ag field planted to corn in 2014. No observable evidence of stress/stunting observed in corn stubble; few weedy



Project/Site:	North Mend	dota Energy and Te	chnology	/ Park			Stantec Project #:	193703573		Date:	04/23/15
Applicant:	Ruedebuso	ch Development & C	Construct	tion, Inc.						County:	Dane
Investigator #1:				Investi	gator #2:					State:	Wisconsin
Soil Unit:	Virgil silt lo						I/WWI Classification:			Wetland ID:	W-2
Landform:	Backslope				al Relief:					Sample Point:	P20
Slope (%):	0-2	Latitude:			ongitude:			Datum:		Community ID:	Wet Meadow
		ditions on the site ty	-			(If no, expla		☑ Yes □	No No	Section:	22
_		or Hydrology ☐ sig	•				Are normal circumsta	•	ť?	Township:	8N
		or Hydrology □ nat	turally pr	oblemat	IC?		☐ Yes	⊡No		Range:	9 Dir: E
SUMMARY OF					NI				D		– V – N.
Hydrophytic Ve	•			☑ Yes				Hydric Soils		\	✓ Yes □ No
Wetland Hydro Remarks:			onditions	☑ Yes		4 inches	of rain ware received			Within A Wetlar	
Remarks.		a wers analysis, co assed waterway; soi					of rain were received	i iii tiie area ii	oni Aprii 1	- April 23. Sam	ipie poirit iocated at
LIVEROLOGY	eage or gre	dosed waterway, sor	iis iilikeu	IIII IIIate		adjacent	Sewer line.				
HYDROLOGY											
_	• •	ators (Check here i	if indicate	ors are r	ot preser	nt □):			0		
<u>Primary</u> □	<u>:</u>	Water			B9 - Wate	er-Stained	eaves		Secondary:	B6 - Surface Soil	Cracks
	A2 - High Wa				B13 - Aqu					B10 - Drainage P	
	A3 - Saturation				B15 - Mar	Deposits				B16 - Moss Trim	
	B1 - Water M				C1 - Hydro	-				C2 - Dry-Season	
	B2 - Sedimer B3 - Drift De	•					spheres on Living Roots educed Iron			C8 - Crayfish Bur C9 - Saturation V	isible on Aerial Imagery
	B4 - Algal Ma	•					duction in Tilled Soils			D1 - Stunted or S	0 ,
<u> </u>	B5 - Iron Dep				C7 - Thin				☑	D2 - Geomorphic	
		on Visible on Aerial Ima y Vegetated Concave S			Other (Ex	plain in Re	marks)			D3 - Shallow Aqu D4 - Microtopogra	
	Do - Oparser	y vegetated concave c	Juliace							D5 - FAC-Neutral	
Field Observa	tions:										
Surface Water		☐ Yes ☑ No	Depth:		(in.)						
Water Table Pr		☐ Yes ☑ No	Depth:		(in.)			Wetland Hy	drology Pi	resent?	Yes □ No
Saturation Pres		☐ Yes ☑ No	Depth:		(in.)						
Describe Pecore	lad Data (etr	eam gauge, monitori	<u> </u>	acrial pho		oue inene	ctions) if available:		Aerial Image	ary Review	
Describe record	ica Data (Sti	carri gauge, monitori	ng won, c	aciiai piic	AUS, PIUVI	ous mispe	chons, ii avallabic.		/ torial irriagi	CI y I COVICAV	
Remarks:				<u> </u>	· •	•	· ·			•	
Remarks:				· ·		·					
				·	, ,		,			•	
SOILS	e:	Virgil silt loam		·	, ·		·	somewhat po			
SOILS Map Unit Name		Virgil silt loam Udollic Endoaqual					eries Drainage Class:	somewhat po			
SOILS Map Unit Name Taxonomy (Sub	ogroup):	Udollic Endoaqual	fs			So	eries Drainage Class:	•	oorly	PL=Pore Lining, M=Matrix)	
SOILS Map Unit Name Taxonomy (Sub	ogroup):	Udollic Endoaqual	fs		of indicators.) (Typ	So	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, 0	•	OORIY d Grains; Location: F	PL=Pore Lining, M=Matrix)	Texture
SOILS Map Unit Name Taxonomy (Sub	ogroup): otion (Describe to	Udollic Endoaqual	fs dicator or confirm	n the absence c	of indicators.) (Typ	Se: C=Concentra	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, 0	CS=Covered/Coated Sand	OORIY d Grains; Location: F	PL=Pore Lining, M=Matrix) Location	Texture (e.g. clay, sand, loam)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip	ogroup): otion (Describe to Bottom	Udollic Endoaqual the depth needed to document the in	fs dicator or confirm	m the absence o	of indicators.) (Typ	Se: C=Concentra	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, G Re	CS=Covered/Coated Sand	OORIY d Grains; Location: F	1	
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth	ogroup): otion (Describe to Bottom Depth	Udollic Endoaqual the depth needed to document the in	fs dicator or confirm	m the absence of Matrix	of indicators.) (Type	Se: C=Concentra	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, Grant Re Color (Moist)	cs=Covered/Coated Sand	oorly d Grains; Location: F	Location	(e.g. clay, sand, loam)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	Depth	the depth needed to document the infinite Horizon	fs dicator or confirm Color 10YR	m the absence of Matrix (Moist)	of indicators.) (Type of the second of the s	Secondary Second	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, Grant Re Color (Moist) 3/3	cs=Covered/Coated Sand edox Features % 5	Oorly d Grains; Location: F	Location M	(e.g. clay, sand, loam) silty clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 12	Bottom Depth 12 18	the depth needed to document the infinite Horizon	fs dicator or confirm Color 10YR 10YR	m the absence of Matrix (Moist) 2/1 2/1	% 95 60	See: C=Concentra 7.5YR 7.5YR	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, Grant Re Color (Moist) 3/3	cs=Covered/Coated Sand edox Features % 5	Type C C	Location M	(e.g. clay, sand, loam) silty clay loam silty clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 12	Bottom Depth 12 18	the depth needed to document the infinite Horizon	fs dicator or confirm Color 10YR 10YR 7.5YR	m the absence of Matrix (Moist) 2/1 2/1 3/4	% 95 60 30	Secondary Second	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, Grant Re Color (Moist) 3/3	cS=Covered/Coated Sand edox Features % 5 5	Type C C	Location M	(e.g. clay, sand, loam) silty clay loam silty clay loam loamy sand
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 12	Bottom Depth 12 18	Horizon 1 2	Color 10YR 10YR 7.5YR 10YR	m the absence of Matrix (Moist) 2/1 2/1 3/4	% 95 60 30	7.5YR 7.5YR	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, Grant Re Color (Moist) 3/3	cS=Covered/Coated Sand edox Features % 5 5	Type C C	Location M	(e.g. clay, sand, loam) silty clay loam silty clay loam loamy sand
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 12	Bottom Depth 12 18	Horizon 1 2	Color 10YR 10YR 7.5YR 10YR	m the absence of Matrix (Moist) 2/1 2/1 3/4	% 95 60 30	7.5YR 7.5YR	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, Grant Re Color (Moist) 3/3 3/2	cs=Covered/Coated Sand edox Features % 5 5	Type C C	Location M M	(e.g. clay, sand, loam) silty clay loam silty clay loam loamy sand silty clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 12	Bottom Depth 12 18	Horizon 1 2	Color 10YR 10YR 7.5YR 10YR	m the absence of Matrix (Moist) 2/1 2/1 3/4	% 95 60 30 5	7.5YR 7.5YR	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, Grant Re Color (Moist) 3/3 3/2	ccs=Covered/Coated Sance edox Features % 5 5 	Type C C	Location M M	(e.g. clay, sand, loam) silty clay loam silty clay loam loamy sand silty clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 12	Depth 12 18	Horizon 1 2	Color 10YR 10YR 7.5YR 10YR	m the absence of Matrix (Moist) 2/1 2/1 3/4 5/2	% 95 60 30 5	7.5YR 7.5YR	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, Re Color (Moist) 3/3 3/2	cs=Covered/Coated Sand edox Features % 5 5 	Type C C	Location M M	(e.g. clay, sand, loam) silty clay loam silty clay loam loamy sand silty clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 12 NRCS Hydric	Bottom Depth 12 18 Soil Field In	Horizon 1 2 ndicators (check he	Color 10YR 10YR 7.5YR 10YR	m the absence of Matrix (Moist) 2/1 2/1 3/4 5/2 icators a	% 95 60 30 5 re not pre	7.5YR 7.5YR esent value Belov	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, Re Color (Moist) 3/3 3/2 Surface (LRR R, MLRA 149B)	CS=Covered/Coated Sandedox Features % 5 Indicator	Type C C s for Proble	Location M M matic Soils ¹ Muck (LRR K, L, MLRA	(e.g. clay, sand, loam) silty clay loam silty clay loam loamy sand silty clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 12 NRCS Hydric	Bottom Depth 12 18 Soil Field In A1- Histosol A2 - Histic E	Horizon 1 2 ndicators (check he	Color 10YR 10YR 7.5YR 10YR	m the absence of Matrix (Moist) 2/1 2/1 3/4 5/2 icators a	% 95 60 30 5 re not pre S8 - Polyv S9 - Thin	7.5YR 7.5YR esent value Belov Dark Surfa	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, Re Color (Moist) 3/3 3/2 Surface (LRR R, MLRA 149B) ace (LRR R, MLRA 149B)	CS=Covered/Coated Sand edox Features % 5 Indicator	Type C C s for Proble A10 - 2 cm A16 - Coast	Location M M matic Soils ¹ Muck (LRR K, L, MLRA A	(e.g. clay, sand, loam) silty clay loam silty clay loam loamy sand silty clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 12 NRCS Hydric	Bottom Depth 12 18 Soil Field In A1- Histosol A2 - Histic E A3 - Black H	Horizon 1 2 ndicators (check he	Color 10YR 10YR 7.5YR 10YR	m the absence of Matrix (Moist) 2/1 2/1 3/4 5/2 icators a	% 95 60 30 5 re not pre S8 - Polyv S9 - Thin S11 - Higl	7.5YR 7.5YR esent value Below Dark Surfa	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, (Re Color (Moist) 3/3 3/2 Surface (LRR R, MLRA 149B) RCE (LRR R, MLRA 149B) Sands	cs=Covered/Coated Sand edox Features % 5 5 Indicator	Type C C s for Proble A10 - 2 cm A16 - Coast S3 - 5 cm Mi	Location M M matic Soils Muck (LRR K, L, MLRA A Prairie Redox (LRR ucky Peat of Peat	(e.g. clay, sand, loam) silty clay loam silty clay loam loamy sand silty clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 12 NRCS Hydric	Bottom Depth 12 18 Soil Field In A1- Histosol A2 - Histic E	Horizon 1 2 ndicators (check here)	Color 10YR 10YR 7.5YR 10YR	m the absence of Matrix (Moist) 2/1 2/1 3/4 5/2 icators a	% 95 60 30 5 re not pre S8 - Polyv S9 - Thin S11 - Higl	7.5YR 7.5YR 7.5YR esent value Below Dark Surfanch Chroma	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, Grant Re Color (Moist) 3/3 3/2 Surface (LRR R, MLRA 149B) RCE (LRR R, MLRA 149B) Sands Mineral (LRR K, L)	cs=Covered/Coated Sand edox Features % 5 5 Indicator	Type C C s for Proble A10 - 2 cm A16 - Coast S3 - 5cm Mi S7 - Dark S	Location M M matic Soils ¹ Muck (LRR K, L, MLRA A	(e.g. clay, sand, loam) silty clay loam silty clay loam loamy sand silty clay loam (149B) R K, L, R) (LRR K, L, R)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 12 NRCS Hydric	Bottom Depth 12 18 Soil Field In A1- Histosol A2 - Histic E A3 - Black H A4 - Hydroge A5 - Stratified A11 - Deplete	Horizon 1 2 ndicators (check here) pipedon istic en Sulfide d Layers ed Below Dark Surface	Color 10YR 10YR 7.5YR 10YR ere if indi	m the absence of Matrix (Moist) 2/1 2/1 3/4 5/2 icators a	% 95 60 30 5 re not pre S8 - Polyx S9 - Thin S11 - High F1 - Loam F2 - Loam F3 - Deple	7.5YR 7.5YR 7.5YR esent value Below Dark Surfa n Chroma ny Mucky N ny Gleyed I eted Matrix	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, Re Color (Moist) 3/3 3/2 Surface (LRR R, MLRA 149B) RCE (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix	cs=Covered/Coated Sand edox Features % 5 5 Indicator	Type C C s for Proble A10 - 2 cm A16 - Coast S3 - 5cm Mi S7 - Dark S S8 - Polyval S9 - Thin Da	Location M M matic Soils Muck (LRR K, L, MLRA A) Prairie Redox (LRR Ucky Peat of Peat urface (LRR K, L, M) Use Below Surface ark Surface (LRR K, L	(e.g. clay, sand, loam) silty clay loam silty clay loam loamy sand 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 12 NRCS Hydric	Bottom Depth 12 18 Soil Field In A1- Histosol A2 - Histic E A3 - Black H A4 - Hydroge A5 - Stratified A11 - Deplete A12 - Thick I	Horizon 1 2	Color 10YR 10YR 7.5YR 10YR ere if indi	m the absence of Matrix (Moist) 2/1 2/1 3/4 5/2 icators a	% 95 60 30 5 re not pre S8 - Polyv S9 - Thin S11 - High F1 - Loam F2 - Loam F3 - Deple F6 - Redo	7.5YR 7.5YR 7.5YR	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, Re Color (Moist) 3/3 3/2 Surface (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix fface	CS=Covered/Coated Sand edox Features % 5 5 Indicator	Type C C C s for Proble A10 - 2 cm A16 - Coast S3 - 5 cm Mi S7 - Dark S S8 - Polyval S9 - Thin Da F12 - Iron-M	Location M M matic Soils Muck (LRR K, L, MLRA A Prairie Redox (LRR ucky Peat of Peat urface (LRR K, L, M) lue Below Surface ark Surface (LRR K, L) Manganese Masses	(e.g. clay, sand, loam) silty clay loam loamy sand silty clay loam (LRR K, L, R) (LRR K, L, R)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 12 NRCS Hydric	Bottom Depth 12 18 Soil Field Ir A1- Histosol A2 - Histic E A3 - Black H A4 - Hydroge A5 - Stratified A11 - Deplete A12 - Thick I S1 - Sandy I	Horizon Horizon 1 2 ndicators (check here) pipedon istic en Sulfide d Layers ed Below Dark Surface Dark Surface Muck Mineral	Color 10YR 10YR 7.5YR 10YR ere if indi	m the absence of Matrix (Moist) 2/1 2/1 3/4 5/2 icators a	re not presser Polyving Sar - Polyving Sar - Loam Far - Loam Far - Deplet Far - Dep	7.5YR 7.5YR 7.5YR esent esent on Chroma ny Mucky M ny Gleyed I eted Matrix ox Dark Su eted Dark Su	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, Re Color (Moist) 3/3 3/2 N Surface (LRR R, MLRA 149B) RCe (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix fface Surface Surface	cs=Covered/Coated Sand edox Features % 5 5 Indicator	Type C C C s for Proble A10 - 2 cm A16 - Coast S3 - 5cm M S7 - Dark S S8 - Polyval S9 - Thin Da F12 - Iron-M F19 - Piedm	Location M M matic Soils Muck (LRR K, L, MLRA A) Prairie Redox (LRR Ucky Peat of Peat urface (LRR K, L, M) Use Below Surface ark Surface (LRR K, L	(e.g. clay, sand, loam) silty clay loam loamy sand silty clay loam (LRR K, L, R) (LRR K, L, R)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 12 NRCS Hydric	Bottom Depth 12 18 Soil Field In A1- Histosol A2 - Histic E A3 - Black H A4 - Hydroge A5 - Stratified A11 - Deplete A12 - Thick I	Horizon Horizon 1 2 ndicators (check here) pipedon istic en Sulfide d Layers ed Below Dark Surface Dark Surface Muck Mineral Gleyed Matrix	Color 10YR 10YR 7.5YR 10YR ere if indi	m the absence of Matrix (Moist) 2/1 2/1 3/4 5/2 icators a	% 95 60 30 5 re not pre S8 - Polyv S9 - Thin S11 - High F1 - Loam F2 - Loam F3 - Deple F6 - Redo	7.5YR 7.5YR 7.5YR esent esent on Chroma ny Mucky M ny Gleyed I eted Matrix ox Dark Su eted Dark Su	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, Re Color (Moist) 3/3 3/2 N Surface (LRR R, MLRA 149B) RCe (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix fface Surface Surface	CS=Covered/Coated Sand edox Features % 5 5 Indicator	Type 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	Location M M	(e.g. clay, sand, loam) silty clay loam silty clay loam loamy sand silty clay loam (LRR K, L, R)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 12 NRCS Hydric	Bottom Depth 12 18 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 S4 - Sandy N S5 - Sandy R S6 - Stripped	Horizon Horizon 1 2 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 7.5YR 10YR ere if indi	m the absence of Matrix (Moist) 2/1 2/1 3/4 5/2 icators a	re not presser Polyving Sar - Polyving Sar - Loam Far - Loam Far - Deplet Far - Dep	7.5YR 7.5YR 7.5YR esent esent on Chroma ny Mucky M ny Gleyed I eted Matrix ox Dark Su eted Dark Su	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, Re Color (Moist) 3/3 3/2 N Surface (LRR R, MLRA 149B) RCe (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix fface Surface Surface	cs=Covered/Coated Sand edox Features % 5 5 Indicator	Type 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 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 Manganese Masses nont Floodplain Soil arent Material Spodic (MLRA 144A, A) Shallow Dark Surface	(e.g. clay, sand, loam) silty clay loam loamy sand silty clay loam (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 12 NRCS Hydric	Bottom Depth 12 18 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 S4 - Sandy N S5 - Sandy R S6 - Stripped	Horizon Horizon 1 2	Color 10YR 10YR 7.5YR 10YR ere if indi	m the absence of Matrix (Moist) 2/1 2/1 3/4 5/2 icators a	re not presser Polyword Sa - Polyword Sa - Polyword Sa - Loam Fa - Loam Fa - Deplement Fa - Depl	7.5YR 7.5YR 7.5YR esent esent on Chroma ny Mucky M ny Gleyed I eted Matrix ox Dark Su eted Dark Su	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, Re Color (Moist) 3/3 3/2 N Surface (LRR R, MLRA 149B) RCe (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix fface Surface Surface	CS=Covered/Coated Sand edox Features % 5 5 Indicator	Type C C C s for Proble A10 - 2 cm A16 - Coast S3 - 5cm M S7 - Dark S S8 - Polyval S9 - Thin Da F12 - Iron-M F19 - Piedm F21 - Red F TA6 - Mesic TF12 - Very Other (Expla	Location M M	(e.g. clay, sand, loam) silty clay loam loamy sand silty clay loam (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 12	Bottom Depth 12 18 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 S4 - Sandy N S5 - Sandy R S6 - Stripped	Horizon Horizon 1 2 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 7.5YR 10YR ere if indi	m the absence of Matrix (Moist) 2/1 2/1 3/4 5/2 icators a	re not presser Polyword Sa - Polyword Sa - Polyword Sa - Loam Fa - Loam Fa - Deplement Fa - Depl	7.5YR 7.5YR 7.5YR esent esent on Chroma ny Mucky M ny Gleyed I eted Matrix ox Dark Su eted Dark Su	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, Re Color (Moist) 3/3 3/2 N Surface (LRR R, MLRA 149B) RCe (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix fface Surface Surface	CS=Covered/Coated Sand edox Features % 5 5 Indicator	Type C C C s for Proble A10 - 2 cm A16 - Coast S3 - 5cm M S7 - Dark S S8 - Polyval S9 - Thin Da F12 - Iron-M F19 - Piedm F21 - Red F TA6 - Mesic TF12 - Very Other (Expla	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 ark Surface (LRR K, L Manganese Masses nont Floodplain Soil arent Material Spodic (MLRA 144A, A) Shallow Dark Surface	(e.g. clay, sand, loam) silty clay loam loamy sand silty clay loam (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 12 NRCS Hydric	Bottom Depth 12 18 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 S4 - Sandy N S5 - Sandy R S6 - Stripped	Horizon Horizon 1 2	Color 10YR 10YR 10YR 10YR ere if indi	m the absence of Matrix (Moist) 2/1 2/1 3/4 5/2 icators a	re not presser Polyword Sa - Polyword Sa - Polyword Sa - Loam Fa - Loam Fa - Deplement Fa - Depl	7.5YR 7.5YR 7.5YR esent esent on Chroma ny Mucky M ny Gleyed I eted Matrix ox Dark Su eted Dark Su	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, Re Color (Moist) 3/3 3/2 N Surface (LRR R, MLRA 149B) RCe (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix fface Surface Surface	CS=Covered/Coated Sand edox Features % 5 5 Indicator	Type C C C s for Proble A10 - 2 cm A16 - Coast S3 - 5cm M S7 - Dark S S8 - Polyval S9 - Thin Da F12 - Iron-N F19 - Piedm F21 - Red P TA6 - Mesic TF12 - Very Other (Expla of hydrophytic veget or problematic.	Location M M	(e.g. clay, sand, loam) silty clay loam loamy sand silty clay loam (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 12	Bottom Depth 12 18 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 S5 - Sandy R S6 - Stripped S7 - Dark Su	Horizon Horizon 1 2 ndicators (check here) pipedon istic en Sulfide d Layers ed Below Dark Surface Dark Surface Muck Mineral Gleyed Matrix Redox d Matrix urface (LRR R, MLRA 149B)	Color 10YR 10YR 10YR 10YR ere if indi	m the absence of Matrix (Moist) 2/1 2/1 3/4 5/2 icators a	service of indicators.) (Type of indicators.	7.5YR 7.5YR 7.5YR esent esent cyalue Below Dark Surfan Chroma ny Mucky M ny Gleyed I eted Matrix ox Dark Su eted Dark Su	eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, Re Color (Moist) 3/3 3/2 N Surface (LRR R, MLRA 149B) RCe (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix fface Surface Surface ions	CS=Covered/Coated Sand edox Features % 5 5 Indicator Indicator Hydric Soil	Type C C C s for Proble A10 - 2 cm A16 - Coast S3 - 5cm M 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. Present?	Location M M	(e.g. clay, sand, loam) silty clay loam loamy sand silty clay loam



Project/Site: North Mendota Energy and Technology Park Wetland ID: W-2 Sample Point: P20

VEGETATION	(Species identified in all uppercase are non-na	tive spec	ies.)		
Tree Stratum (Plo	ot size: 10 meter radius)				Development Teet Weekshoot
1.	<u>Species Name</u>	% Cover	<u>Dominant</u>	Ind.Status	Dominance Test Worksheet
2.	_ 				Number of Deminant Species that are OBL_EACW, or EAC: 1 (A)
3.	_ 				Number of Dominant Species that are OBL, FACW, or FAC:(A)
4.					Total Number of Dominant Species Across All Strata: 1 (B)
5.					Total Number of Bornmant Opedies Across All Citata(B)
6.					Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)
7.					(A/B)
8.					Prevalence Index Worksheet
9.					Total % Cover of: Multiply by:
10.					OBL spp 0 x 1 = 0
	Total Cover =	0			FACW spp. $\frac{100}{100}$ $\frac{100}{100}$ $\frac{100}{100}$ $\frac{100}{100}$
	10101 00101	Ü			FAC spp. $\begin{array}{cccc} & & & & & & & & & & & & & & & & & $
Sapling/Shrub Stra	atum (Plot size: 5 meter radius)				FACU spp. $\frac{0}{0}$ \times $4 = \frac{0}{0}$
1.					UPL spp. $0 \times 5 = 0$
2.					
3.					Total 100 (A) 200 (B)
4.					
5.					Prevalence Index = B/A = 2.000
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 Morphological Adaptations (Explain) *
Herb Stratum (Plo	t size: 2 meter radius)				☐ Yes ☑ No Problem Hydrophytic Vegetation (Explain) *
1.	PHALARIS ARUNDINACEA	100	Υ	FACW	
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.
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 =	100			
Woody Vine Stratu	um (Plot size: 10 meter radius)				
1.					
2.					
3.					Hydrophytic Vegetation Present ☑ Yes ☐ No
4.					
5.					
	Total Cover =	0			
Remarks:	Sample point located at edge of grasse	d water	way		
Additional Ren	marks:				

Additional Remarks:



Project/Site:		dota Energy and Te	٠.				Stantec Project #:	193703573		Date:	04/23/15
Applicant:		ch Development & (Construc							County:	Dane
Investigator #1: Soil Unit:		clay loam		investi	gator #2:		/I/WWI Classification:			State: Wetland ID:	Wisconsin n/a
Landform:	Sable silty Talf	Clay Idaili		Loc	al Relief:		/ I/ VV VV I Classification.			Sample Point:	P21
Slope (%):	0-2	Latitude:	N/A		ongitude:			Datum:	N/A	Community ID:	Road ROW
. ,		ditions on the site ty					ain in remarks)	☑ Yes □		Section:	22
		or Hydrology □ sig					Are normal circumsta			Township:	8N
•		or Hydrology ☐ na	-				☐ Yes	☑No		Range:	9 Dir: E
SUMMARY OF	FINDINGS										
Hydrophytic Ve	getation Pre	sent?		☐ Yes	☑ No			Hydric Soils	Present?		☐ Yes ☑ No
Wetland Hydrol				☐ Yes						Within A Wetlar	
Remarks:			onditions	were no	ormal; 4.1	4 inches	of rain were received	in the area fr	om April 1	- April 23. Sam	ple point located within
	maintained	I road ROW.									
HYDROLOGY											
_	• •	ators (Check here	if indicate	ors are n	ot preser	nt ☑):					
<u>Primary:</u>	A1 - Surface	Water			B9 - Wate	vr_Stainad	Loavos		Secondary:	B6 - Surface Soil	Cracks
l	A2 - High Wa				B13 - Aqu					B10 - Drainage P	
	A3 - Saturation	on			B15 - Mar	l Deposits	;			B16 - Moss Trim	Lines
<u> </u>	B1 - Water M B2 - Sedimer				C1 - Hydr	-	de Odor espheres on Living Roots			C2 - Dry-Season C8 - Crayfish Bur	
l	B3 - Drift De	•					educed Iron				isible on Aerial Imagery
	B4 - Algal Ma	at or Crust			C6 - Rece	ent Iron Re	eduction in Tilled Soils			D1 - Stunted or S	tressed Plants
	B5 - Iron Dep	oosits on Visible on Aerial Im	ogory		C7 - Thin					D2 - Geomorphic D3 - Shallow Aqu	
l H		y Vegetated Concave S	0 ,		Other (Ex	piaii iii ixe	anarks)			D4 - Microtopogra	
		,								D5 - FAC-Neutral	
Field Observat	ions:										
Surface Water	Present?	☐ Yes ☑ No	Depth:		(in.)			Wetland Hy	drology Pr	recent?	Voc. 🗔 No
Water Table Pr	esent?	☐ Yes ☑ No	Depth:		(in.)			wetiand ny	arology Fr	esent:	Yes ☑ No
Saturation Pres	ent?	☐ Yes ☑ No	Depth:		(in.)						
Describe Record	led Data (str	eam gauge, monitori	ng well, a	aerial pho	otos, previ	ous inspe	ections), if available:		Aerial Image	ery Review	
			9		, I	•	, ,		•		
Remarks:		<u> </u>	<u> </u>		, ,	<u>'</u>				,	
			3 , ,	,	, ,	•	,			•	
SOILS					,,	·				•	
SOILS Map Unit Name		Sable silty clay loa	m		, ,	·	eries Drainage Class:	poorly			
SOILS Map Unit Name Taxonomy (Sub	group):	Typic Endoaquolls	m			S	eries Drainage Class:	•			
SOILS Map Unit Name Taxonomy (Sub	ogroup): otion (Describe to	Typic Endoaquolls	m	n the absence o	of indicators.) (Ty	S	eries Drainage Class: ation, D=Depletion, RM=Reduced Matrix, C	CS=Covered/Coated Sand	d Grains; Location: F		Teyture
SOILS Map Unit Name Taxonomy (Sub Profile Descrip	ogroup): otion (Describe to Bottom	Typic Endoaquolls the depth needed to document the in	m dicator or confirm	m the absence o	of indicators.) (Ty	S	eries Drainage Class: ation, D=Depletion, RM=Reduced Matrix, C	CS=Covered/Coated Sand	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	ogroup): otion (Describe to Bottom Depth	Typic Endoaquolls	m dicator or confirm	m the absence of Matrix	of indicators.) (Ty	S	eries Drainage Class: ation, D=Depletion, RM=Reduced Matrix, C	CS=Covered/Coated Sand	d Grains; Location: F		(e.g. clay, sand, loam)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip	ogroup): otion (Describe to Bottom	Typic Endoaquolls the depth needed to document the in	m dicator or confirm	m the absence o	of indicators.) (Ty	S De: C=Concentra	eries Drainage Class: ation, D=Depletion, RM=Reduced Matrix, C Recolor (Moist)	CS=Covered/Coated Sand	d Grains; Location: F	PL=Pore Lining, M=Matrix) Location	
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	ogroup): otion (Describe to Bottom Depth 14	Typic Endoaquolls the depth needed to document the in Horizon	m dicator or confirm Color	m the absence of Matrix (Moist) 3/2	of indicators.) (Type 100 100 100 100 100 100 100 100 100 10	Se: C=Concentra	eries Drainage Class: ation, D=Depletion, RM=Reduced Matrix, C Rec Color (Moist)	CS=Covered/Coated Sand	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	pgroup): otion (Describe to Bottom Depth 14	Typic Endoaquolls the depth needed to document the in Horizon 1	m dicator or confirm Color 10YR	m the absence of Matrix (Moist) 3/2	of indicators.) (Type 100	Se: C=Concentra	eries Drainage Class: ation, D=Depletion, RM=Reduced Matrix, C Red Color (Moist)	cs=Covered/Coated Sand	d Grains; Location: F	PL=Pore Lining, M=Matrix) Location	(e.g. clay, sand, loam) sandy clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	pgroup): otion (Describe to Bottom Depth 14	Typic Endoaquolls the depth needed to document the in Horizon 1	m dicator or confirm Color 10YR	m the absence of Matrix (Moist) 3/2	of indicators.) (Type 100	See: C=Concentra	eries Drainage Class: ation, D=Depletion, RM=Reduced Matrix, C Rec Color (Moist)	CS=Covered/Coated Sand	Type	PL=Pore Lining, M=Matrix) Location	(e.g. clay, sand, loam) sandy clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	pgroup): otion (Describe to Bottom Depth 14	Typic Endoaquolls the depth needed to document the in Horizon 1	dicator or confirm	m the absence of Matrix (Moist) 3/2	% 100	Se: C=Concentra	eries Drainage Class: ation, D=Depletion, RM=Reduced Matrix, C Recolor (Moist)	cs=Covered/Coated Sand	Type	PL=Pore Lining, M=Matrix) Location	(e.g. clay, sand, loam) sandy clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	pgroup): Diffusion (Describe to Bottom Depth 14	Typic Endoaquolls the depth needed to document the in Horizon 1	Color 10YR	m the absence of Matrix (Moist) 3/2	% 100	Se: C=Concentra	eries Drainage Class: ation, D=Depletion, RM=Reduced Matrix, C Recolor (Moist)	cs=Covered/Coated Sand	Type	PL=Pore Lining, M=Matrix) Location	(e.g. clay, sand, loam) sandy clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	pgroup): Dion (Describe to Bottom Depth 14	Typic Endoaquolls the depth needed to document the in Horizon 1	Color 10YR	m the absence of Matrix (Moist) 3/2	% 100	See: C=Concentra	eries Drainage Class: ation, D=Depletion, RM=Reduced Matrix, C Rec Color (Moist)	dox Features %	Type	PL=Pore Lining, M=Matrix) Location	(e.g. clay, sand, loam) sandy clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	pgroup): Dtion (Describe to Bottom Depth 14	Typic Endoaquolls the depth needed to document the in Horizon 1	Color 10YR	m the absence of Matrix (Moist) 3/2	% 100	Se: C=Concentra	eries Drainage Class: ation, D=Depletion, RM=Reduced Matrix, CRecord (Moist)	CS=Covered/Coated Sand	Type	PL=Pore Lining, M=Matrix) Location	(e.g. clay, sand, loam) sandy clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 NRCS Hydric	pgroup): ption (Describe to Bottom Depth 14 Soil Field In A1- Histosol	Typic Endoaquolls the depth needed to document the in Horizon 1	Color 10YR	m the absence of Matrix (Moist) 3/2 icators a	% 100	Se: C=Concentra	eries Drainage Class: ation, D=Depletion, RM=Reduced Matrix, CRecord (Moist)	CS=Covered/Coated Sand dox Features % Indicator	Type	Location Location matic Soils ¹ Vuck (LRR K, L, MLRA 1	(e.g. clay, sand, loam) sandy clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 NRCS Hydric	pgroup): ption (Describe to Bottom Depth 14	Typic Endoaquolls the depth needed to document the in Horizon 1 ndicators (check he	Color 10YR	m the absence of Matrix (Moist) 3/2 icators a	% 100 see not pre	se: C=Concentra	eries Drainage Class: ation, D=Depletion, RM=Reduced Matrix, CRef Color (Moist)	CS=Covered/Coated Sand dox Features % Indicator	Type	Location Loc	(e.g. clay, sand, loam) sandy clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 NRCS Hydric	pgroup): Dtion (Describe to Bottom Depth 14	Typic Endoaquolls the depth needed to document the in Horizon 1 ndicators (check here)	Color 10YR	m the absence of Matrix (Moist) 3/2 icators a	% 100 sre not pre S8 - Polyv S9 - Thin S11 - Higl	se: C=Concentra esent ☑ value Belov Dark Surfa	eries Drainage Class: ation, D=Depletion, RM=Reduced Matrix, CRecolor (Moist)	CS=Covered/Coated Sand dox Features % Indicator	Type	Location Location matic Soils ¹ Vuck (LRR K, L, MLRA 1	(e.g. clay, sand, loam) sandy clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 NRCS Hydric	Bottom Depth 14 Soil Field Ir A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified	Typic Endoaquolls the depth needed to document the in Horizon 1	m dicator or confine Color 10YR ere if ind	m the absence of Matrix (Moist) 3/2 icators a	% 100	See: C=Concentrate	eries Drainage Class: ation, D=Depletion, RM=Reduced Matrix, CRecolor (Moist)	CS=Covered/Coated Sand dox Features % Indicator	Type	Location Location Location Location Location Muck (Location Location	(e.g. clay, sand, loam) sandy clay loam (49B) k.K. L, R) (LRR K, L, R)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 NRCS Hydric	pgroup): ption (Describe to Bottom Depth 14	Typic Endoaquolls the depth needed to document the in Horizon 1 ndicators (check he pipedon istic en Sulfide d Layers ed Below Dark Surface	m dicator or confine Color 10YR ere if ind	m the absence of Matrix (Moist) 3/2 icators a	% 100	e: C=Concentra esent yalue Belo Dark Surfa n Chroma ny Mucky I ny Gleyed eted Matrix	eries Drainage Class: ation, D=Depletion, RM=Reduced Matrix, CRef Color (Moist)	CS=Covered/Coated Sand dox Features % Indicator	Type	Location Loc	(e.g. clay, sand, loam) sandy clay loam (49B) s. K, L, R) (LRR K, L, R) (LRR K, L, R)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 NRCS Hydric	Bottom Depth 14 Soil Field Ir A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A11 - Deplete A12 - Thick I	Typic Endoaquolls the depth needed to document the in Horizon 1 ndicators (check he pipedon istic en Sulfide d Layers ed Below Dark Surface Dark Surface	m dicator or confine Color 10YR ere if ind	m the absence of Matrix (Moist) 3/2 icators a	% 100	esent and Chroma by Mucky I by Gleyed eted Matrix cx Dark Su	eries Drainage Class: ation, D=Depletion, RM=Reduced Matrix, CRef Color (Moist)	CS=Covered/Coated Sand dox Features % Indicator	Type Type	Location Loc	(e.g. clay, sand, loam) sandy 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 NRCS Hydric	pgroup): ption (Describe to Bottom Depth 14	Typic Endoaquolls the depth needed to document the in Horizon 1	m dicator or confine Color 10YR ere if ind	m the absence of Matrix (Moist) 3/2 icators a	% 100	esent	eries Drainage Class: ation, D=Depletion, RM=Reduced Matrix, CRed Color (Moist)	CS=Covered/Coated Sand dox Features % Indicator	Type Type	Location Loc	(e.g. clay, sand, loam) sandy 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 NRCS Hydric	Bottom Depth 14 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 R	Typic Endoaquolls the depth needed to document the in Horizon 1	m dicator or confine Color 10YR ere if ind	m the absence of Matrix (Moist) 3/2 icators a	% 100	esent	eries Drainage Class: ation, D=Depletion, RM=Reduced Matrix, CRed Color (Moist)	CS=Covered/Coated Sand dox Features % Indicator	Type	Location Locati	(e.g. clay, sand, loam) sandy clay loam (49B) 8 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 NRCS Hydric	Bottom Depth 14 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 ndicators (check he pipedon istic en Sulfide d Layers ed Below Dark Surface Dark Surface Muck Mineral Gleyed Matrix Redox d Matrix	m dicator or confine Color 10YR ere if ind	m the absence of Matrix (Moist) 3/2 icators a	% 100	esent	eries Drainage Class: ation, D=Depletion, RM=Reduced Matrix, CRed Color (Moist)	cs=Covered/Coated Sand dox Features % Indicator	Type Type s for Proble A10 - 2 cm May A16 - Coast S3 - 5cm May S7 - Dark S7 - Thin Dark S9 - Thin Dark S12 - Iron-May S12 - Iron-May S14 - Red P7 TA6 - Mesic TF12 - Very	Location Location Location Location Location Location Muck (Location Location	(e.g. clay, sand, loam) sandy clay loam (49B) 8 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 NRCS Hydric	Bottom Depth 14 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	m dicator or confine Color 10YR ere if ind	m the absence of Matrix (Moist) 3/2 icators a	% 100	esent	eries Drainage Class: ation, D=Depletion, RM=Reduced Matrix, CRed Color (Moist)	CS=Covered/Coated Sand dox Features % Indicator Indicator Indicator	Type Type	Location Locati	(e.g. clay, sand, loam) sandy clay loam (LRR K, L, R) (LRR K, L, R) (LRR K, L, R) (LRR K, L, R) (S (LRR K, L, R) (LRR K, L)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 NRCS Hydric	Bottom Depth 14	Typic Endoaquolls the depth needed to document the in Horizon 1	m dicator or confine Color 10YR ere if ind	m the absence of Matrix (Moist) 3/2 icators a	% 100	esent	eries Drainage Class: ation, D=Depletion, RM=Reduced Matrix, CRed Color (Moist)	CS=Covered/Coated Sand dox Features % Indicator Indicator Indicator I	Type Type	Location Locati	(e.g. clay, sand, loam) sandy clay loam (LRR K, L, R) (LRR K, L, R) (LRR K, L, R) (LRR K, L, R) (S (LRR K, L, R) (LRR K, L)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 NRCS Hydric	Bottom Depth 14	Typic Endoaquolls the depth needed to document the in Horizon 1 ndicators (check he pipedon istic en Sulfide d Layers ed Below Dark Surface Dark Surface Muck Mineral Gleyed Matrix Redox d Matrix	m dicator or confine Color 10YR ere if ind	m the absence of Matrix (Moist) 3/2 icators a	% 100	esent	eries Drainage Class: ation, D=Depletion, RM=Reduced Matrix, CRed Color (Moist)	CS=Covered/Coated Sand dox Features % Indicator Indicator Indicator	Type Type	Location Locati	(e.g. clay, sand, loam) sandy clay loam (LRR K, L, R) (LRR K, L, R) (LRR K, L, R) (LRR K, L, R) (S (LRR K, L, R) (LRR K, L)



Project/Site: North Mendota Energy and Technology Park Wetland ID: n/a Sample Point: P21

VEGETATION	(Species identified in all uppercase are non-na	tive spec	cies.)		
Tree Stratum (Plo	t size: 10 meter radius)			ı	
4	<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:(A)
3.					
4.	<u></u>				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.					OBL spp. $0 x 1 = 0$
	Total Cover =	0			FACW spp. $0 X 2 = 0$
					FAC spp. $\underline{\qquad}$ $\mathbf{x} \ 3 = \underline{\qquad}$ $\underline{\qquad}$
Sapling/Shrub Stra	tum (Plot size: 5 meter radius)				FACU spp. $x 4 = 320$
1.					UPL spp. $0 x 5 = 0$
2.					
3.					Total <u>80</u> (A) <u>320</u> (B)
4.					
5.					Prevalence Index = B/A = 4.000
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	size: 2 meter radius)				☐ Yes ☑ No Problem Hydrophytic Vegetation (Explain) *
1.	POA PRATENSIS	65	Υ	FACU	
2.	TRIFOLIUM PRATENSE	10	N	FACU	 * Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
3.	PLANTAGO MAJOR	5	N	FACU	present, unless disturbed of 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.
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 Vine Strati	m (Plot size: 10 meter radius)				
1.					
2.					
3.					Hydrophytic Vegetation Present ☐ Yes ☑ No
4.					11, 110 p.1., 110 p.1., 110 p.1.
5.					
<u> </u>	Total Cover =	0			
Remarks:	Maintained road ROW; gravel/compact		omprising	remaind	er of "coverage".
			1, 1, 2, 1, 9		

Additional Remarks:

No wetland signatures observed at this location, but poorly drained/predominantly hydric soil mapped in this location.



Project/Site:		dota Energy and Te	0.				Stantec Project #:	193703573		Date:	04/23/15
Applicant:		ch Development & C	Construc							County:	Dane
Investigator #1:		olov loom		Investi	gator #2:		//////// Classification:			State:	Wisconsin
Soil Unit: Landform:	Sable silty Toeslope	ciay ioani		Loc	al Relief:		/I/WWI Classification:			Wetland ID: Sample Point:	n/a P22
Slope (%):	0-2	Latitude:	N/A		ongitude:			Datum:	N/A	Community ID:	Ag Field
/		ditions on the site ty					ain in remarks)	☑ Yes □		Section:	22
		or Hydrology □ sig					Are normal circumsta	ances presen	t?	Township:	8N
Are Vegetation	□, Soil □,	or Hydrology □ na	turally pr	oblemat	ic?		☐ Yes	⊡No		Range:	9 Dir: E
SUMMARY OF	FINDINGS										
Hydrophytic Ve	_			□ Yes	_		1	Hydric Soils		\A(\dagger) \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	☐ Yes ☑ No
Wetland Hydrol			onditions	☐ Yes						Within A Wetlar	
Remarks:		disturbed from adja			•			in the area in	om April 1	- April 23. Sam	ple point located in ag
HYDROLOGY	noid, dollo	aiotarboa from aaja			na carvor	timaoti	actaro.				
	ology India	otoro (Chaok hara	f indicate		ot proces	·+ \•					
Primary:	• •	ators (Check here	maicat	ors are r	iot preser	ıı (√):			Secondary:		
<u>- 11111an y.</u>	A1 - Surface	Water			B9 - Wate	er-Stained	Leaves			B6 - Surface Soil	Cracks
	A2 - High Wa				B13 - Aqu					B10 - Drainage P	
	A3 - Saturation B1 - Water M			H	B15 - Mar C1 - Hydr	•			H	B16 - Moss Trim C2 - Dry-Season	
	B2 - Sedimer				-	-	spheres on Living Roots			C8 - Crayfish Bur	
	B3 - Drift Dep						educed Iron				isible on Aerial Imagery
	B4 - Algal Ma B5 - Iron Dep			_	Co - Rece		eduction in Tilled Soils			D1 - Stunted or S D2 - Geomorphic	
	B7 - Inundati	on Visible on Aerial Ima	0 ,		Other (Ex					D3 - Shallow Aqui	itard
	B8 - Sparsely	y Vegetated Concave S	Surface							D4 - Microtopogra D5 - FAC-Neutral	
Field Observet	·lana:									D3 - 1 AC-Neutral	1631
Field Observat Surface Water		□ Vaa □ Na	Donth		(in)						
Water Table Pr		☐ Yes ☑ No ☐ Yes ☑ No	Depth: Depth:		(in.) (in.)			Wetland Hy	drology Pr	resent?	Yes ☑ No
Saturation Pres		☐ Yes ☑ No	Depth:		(in.)						
		eam gauge, monitori				ous inspe	ctions) if available:		Aerial Image	ery Review	
Describe Record	ca bata (str	carri gaago, momon									
Remarks:			,		, , ,		, , , , , , , , , , , , , , , , , , , ,				
Remarks:			g , .		, ,						
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SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 14 NRCS Hydric	Bottom Depth 14 18 Soil Field Ir A1- Histosol A2 - Histic Ep A3 - Black Hi 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 ndicators (check here) cipedon istic en Sulfide d Layers ed Below Dark Surface Dark Surface Muck Mineral Gleyed Matrix Redox	Color 10YR 10YR 2.5Y 10YR ere if indi	m the absence of Matrix (Moist) 3/2 3/2 5/3 5/6 icators a	% 100 70 20 10 re not pre S8 - Polyx S9 - Thin S11 - Higl F1 - Loam F2 - Loam F3 - Deple F6 - Redo F7 - Deple	esent	eries Drainage Class: ation, D=Depletion, RM=Reduced Matrix, C Red Color (Moist)	cs=Covered/Coated Sand dox Features % Indicator	Type	Location Locati	(e.g. clay, sand, loam) silt loam silt loam silty clay loam sandy clay loam (49B) 8 K, L, R) (LRR K, L, R) (LRR K, L, R) (LRR K, L, R) IS (MLRA 149B)
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Sample Point: P22



Project/Site:

North Mendota Energy and Technology Park

WETLAND DETERMINATION DATA FORM

Wetland ID: n/a

Northeast and Northcentral Region

(Species identified in all uppercase are non-native species.) Tree Stratum (Plot size: 10 meter radius) **Dominance Test Worksheet** Species Name Ind.Status % Cover Dominant Number of Dominant Species that are OBL, FACW, or FAC: 1 (A) Total Number of Dominant Species Across All Strata: Percent of Dominant Species That Are OBL, FACW, or FAC: 25% Prevalence Index Worksheet Total % Cover of: Sapling/Shrub Stratum (Plot size: 5 meter radius) Prevalence Index = B/A = Hydrophytic Vegetation Indicators: Rapid Test for Hydrophytic Vegetation Dominance Test is > 50% Prevalence Index is ≤ 3.0 * Total Cover = Morphological Adaptations (Explain) * Herb Stratum (Plot size: 2 meter radius) Problem Hydrophytic Vegetation (Explain) ABUTILON THEOPHRASTI * Indicators of hydric soil and wetland hydrology must be BROMUS INERMIS present, unless disturbed or problematic. PHALARIS ARUNDINACEA TARAXACUM OFFICINALE Definitions of Vegetation Strata: Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft. Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft. tall. Woody Vines - All woody vines greater than 3.28 ft. in height. Woody Vine Stratum (Plot size: 10 meter radius) Total Cover = Sample point located within active ag field planted to corn in 2014; predominantly non-hydrophytic weedy species observed. Remarks:

Additional Remarks:

Sample point within area mapped as poorly drained/predominatly hydric soils. The area also appeared to exhibit wetland signatures, but the lack of observable hydrology indicators, hydric soil, and hydrophytic weedy species supports the upland determination.

WETLAND DELINEATION REPORT

North Mendota Energy and Technology Park Appendix C– Site Photographs May 18, 2015

Appendix C - Site Photographs





North Mendota Energy & Technology Park Ruedebusch Development & Construction Photos taken April 17 and 23, 2015



Photo 1. Sample Point P1; View south



Photo 3. Sample Point P3 and north end of W-1, view east



Photo 5. Sample Point P5, view southeast towards P4

Wetland Delineation Report Town of Westport, Dane County, Wisconsin Stantec Project #: 1937003573



Photo 2. Sample Point P2; view east



Photo 4. Sample Point P4; view northwest



Photo 6. Representative photo of stunted corn stubble (right two stalks) observed within farmed wetland areas vs. healthy corn stubble (left stalk)

Photos taken April 17 and 23, 2015

Wetland Delineation Report Town of Westport, Dane County, Wisconsin Stantec Project #: 1937003573



Photo 7. Sample point P6; view east



Photo 8. Sample point P7; view east



Photo 9. Sample Point P8 with sewer manhole (blue) visible in background; view east



Photo 10. Sample point P9 looking towards P8; view east



Photo 11. Sample Point P10 – corn stubble appeared non-stressed; view west



Photo 12. Sample Pont P11 looking towards P10 – corn stubble appeared non-stressed; view southeast



Photo 13. Sample Point P12; view east



Photo 15. Sample Point P14; view east



Photo 17. Sample Point P16 with sewer outfall to S3 in the background; view northeast



Photo 14. Sample Point P13; view south



Photo 16. Sample Point P15; view northeast



Photo 18. Sample Point P17; view west

North Mendota Energy & Technology Park Ruedebusch Development & Construction Photos taken April 17 and 23, 2015



Photo 19. Sample point P18; view southeast



Photo 21. Sample Point P20; view southeast



Photo 23. Sample Point P22; view north

Wetland Delineation Report Town of Westport, Dane County, Wisconsin Stantec Project #: 1937003573



Photo 20. Sample point P19; view south



Photo 22. Sample point P21 within road ROW; view northeast



Photo 24. Representative photo of W-1 at southern boundary; view east



Photo 25. Representative photo of waterway \$1; view south



Photo 27. View of culvert at east boundary and beginning of S2; view east



Photo 29. Representative photo of waterway \$3 near north boundary; view south



Photo 26. View of culvert at south boundary and end of \$1; view west



Photo 28. Representative photo of waterway S2; view northeast



Photo 30. Representative view of S3 near southwestern boundary; view northeast



North Mendota Energy & Technology Park Ruedebusch Development & Construction Photos taken April 17 and 23, 2015



Photo 31. Overview of W-1 from near P10; view southeast



Photo 33. View of W-2 and S3 looking towards southwestern boundary; view southwest



Photo 35. Overview of eastern field with W-1 in the distance; view east

Wetland Delineation Report Town of Westport, Dane County, Wisconsin Stantec Project #: 1937003573



Photo 32. View of W-1 from near P6; view southeast



Photo 34. View of W-2 and S3 looking towards northern boundary; view northwest

WETLAND DELINEATION REPORT

North Mendota Energy and Technology Park Appendix D- WETS Analysis May 18, 2015

Appendix D – WETS Analysis



WETS Analysis Worksheet

Project Name: North Mendota Energy and Technology Park

Project Number: 193703573 Period of interest: February - April

Station: Madison Dane County Regional Airport (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:	April ¹	1.95	2.57	3.00					
2nd month prior:	March	1.22	2.28	2.78					
3rd month prior:	February	0.66	1.28	1.56					
		C	0.40						

Sum = 6.13 Sum =

Site determination

	Site	Condition	Condition**	Month	
	Rainfall (in)	Dry/Normal*/Wet	Value	Weight	Product
	4.14	Wet	3	3	9
	0.76	Dry	1	2	2
	0.54	Dry	1	1	1
=	5.44			Sum*** =	12

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: 2015 data: Midwest Regional Climate Center - http://mrcc.isws.illinois.edu/CLIMATE; Long-term data: USDA Field Office Climate Data -

http://agacis.rcc-acis.org/55025/wets/results

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.

^{1.} Long-term precipitation for April is pro-rated by 0.767 (23/30) to account for April 2015 precipitation and field work dates. At the time of field observations, 3.42 inches of rain had fallen from April - 17, and 4.14 from April 1 - 23. Average precipitation for April is 3.35 inches.

Monthly Data between Specific Months MADISON DANE RGNL AP (WI) USW00014837

Monthly Sum/Averages

	Monthly Sam Aver
	Precipitation
Date	(in)
Jan-2015	0.66
Feb-2015	0.54
Mar-2015	0.76
Sum:	1.96
Count:	3
Average:	0.65
Median:	0.66
Low Value:	0.54
High Value:	0.76

M = Missing

T = Trace

Midwestern Regional Climate Center

cli-MATE: MRCC Application Tools Environment Generated at: 4/22/2015 3:28:11 PM CDT

Daily Data Between Two Dates MADISON DANE RGNL AP (WI) USW00014837

Date	Precipitation (in)
2015-04-01	0.00
2015-04-02	0.02
2015-04-03	0.00
2015-04-04	0.00
2015-04-05	0.00
2015-04-06	0.17
2015-04-07	0.82
2015-04-08	0.40
2015-04-09	1.80
2015-04-10	0.10
2015-04-11	0.00
2015-04-12	Т
2015-04-13	0.11
2015-04-14	0.00
2015-04-15	0.00
2015-04-16	0.00
2015-04-17	0.00
Sum:	3.42
Count:	17
Average:	0.20
Median:	0.00
Low Value:	0.00
High Value:	1.80

M = Missing T = Trace

Time of observation may vary by station, date, and/or variable

Midwestern Regional Climate Center

cli-MATE: MRCC Application Tools Environment Generated at: 4/22/2015 3:31:14 PM CDT

Daily Data Between Two Dates MADISON DANE RGNL AP (WI) USW00014837

Date	Precipitation (in)
2015-04-01	0.00
2015-04-02	0.02
2015-04-03	0.00
2015-04-04	0.00
2015-04-05	0.00
2015-04-06	0.17
2015-04-07	0.82
2015-04-08	0.40
2015-04-09	1.80
2015-04-10	0.10
2015-04-11	0.00
2015-04-12	T
2015-04-13	0.11
2015-04-14	0.00
2015-04-15	0.00
2015-04-16	0.00
2015-04-17	0.00
2015-04-18	0.00
2015-04-19	0.32
2015-04-20	0.37
2015-04-21	0.02
2015-04-22	0.01
2015-04-23	0.00
Sum:	4.14
Count:	23
Average:	0.18
Median:	Т
Low Value:	0.00
High Value:	1.80

 $\mathsf{M} = \mathsf{Missing}$

T = Trace

Time of observation may vary by station, date, and/or variable

Midwestern Regional Climate Center

cli-MATE: MRCC Application Tools Environment Generated at: 4/24/2015 10:52:38 AM CDT

USDA Field Office Climate Data

WETS Station: MADISON DANE RGNL AP, WI837 Creation Date: Clatitude: 4308 Longitude: 08921 Elevation: 00866 State FIPS/County(FIPS): 55025 County Name: Dane Creation Date: 03/16/2015

Start yr. - 1971 End yr. - 2000

		Temperatu Degrees		Precipitation (Inches)					
					30% ch	nance have	avg # of days	avg total	
Month	avg daily max	avg daily min	avg	avg	less than	more than	w/.1 or more	snow fall	
January February March April May June July August September October November December	25.2 30.8 42.8 56.6 69.4 78.3 82.1 79.4 71.4 59.6 43.3 30.2	9.3 14.3 24.6 35.2 46.0 55.7 61.0 58.7 49.9 38.9 27.7 15.8	17.3 22.6 33.7 45.9 57.7 67.0 71.6 69.1 60.7 49.3 35.5 23.0	1.25 1.28 2.28 3.35 3.25 4.05 3.93 4.33 3.08 2.18 2.31 1.66	0.78 0.66 1.22 2.54 2.05 2.36 2.88 3.07 1.58 1.33 1.40 0.89	1.51 1.56 2.78 3.91 3.92 4.92 4.62 5.12 3.77 2.64 2.80 2.02	4 4 5 7 7 6 7 6 5 4	13.0 8.6 7.1 3.5 0.1 0.0 0.0 0.0 0.4 4.5 12.5	
 Average	55.8	36.4	46.1						
Average	 	 	 	32.95 	 	 	66 	49.7	

GROWING SEASON DATES

	Temperature						
Probability	24 F or higher	28 F or higher	32 F or higher				
		inning and Ending I cowing Season Lengt					
50 percent *	4/14 to 10/25 193 days	4/24 to 10/ 9 167 days	5/ 9 to 9/30 143 days				
70 percent *	4/10 to 10/29 202 days	4/19 to 10/14 177 days	5/ 5 to 10/ 4 151 days				

^{*} Percent chance of the growing season occurring between the Beginning and Ending dates.

total 1939-2015 prcp

Station : WI837, MADISON DANE RGNL AP

Unit = inches

yr	jan	feb	mar	apr	may	jun	jul	aug	sep	oct	nov	dec	annl
39 40 41 42 43 44	0.91 2.72 1.16 2.15 1.40 0.31	0.76 0.78 0.50 0.76 1.69 1.40 0.88	1.07 1.82 1.46 2.48 2.46 1.40 2.88	2.40 1.93 0.81 0.99 3.74 2.89	2.70 3.03 4.49 2.88 2.33 5.27 2.14	5.04 3.42 4.26 2.33 3.42 2.81 2.81	2.88 2.93 3.58 1.54 2.77 2.65 0.95	6.76 1.29 4.14 2.31 1.54 4.07	0.81 9.87 3.43 0.37 3.05 6.27	1.67 2.39 2.86 2.44 0.83 0.29 0.78 1.79	0.24 2.49 0.93 3.27 3.15 1.54 2.34 2.08	0.29 1.21 1.29 2.55 0.99 1.14 1.47	2.20 29.42 32.87 32.09 20.78 25.37 31.66
47	2.26 0.49	0.88 0.29 2.13	1.73 2.85	3.68 2.97	4.35 2.90	3.98 2.55	2.17 2.55	1.58 0.70	6.03 1.87	1.79 1.85 1.29	2.08 2.82 3.56	1.72	32.46 25.61

Product generated by ACIS - NOAA Regional Climate Centers.

WETLAND DELINEATION REPORT

North Mendota Energy and Technology Park Appendix E- Off-Site Aerial Imagery Analysis May 18, 2015

Appendix E– Off-Site Aerial Imagery Analysis



Off-Site Aerial Photography Review¹

North Mendota Energy and Technology Park - Town of Westport

Project Location: Section 22, Township 08N, Range 09E, Dane County County

April 1.52 2.46 2.65 1.69	3.35 3.90 0.92	3.06 1.17	Relative Wetness Normal	Cropped ³ ?	Wetness Signature ^{4,5} ?	Interpretation No wetland sinatures observed. Drainage swale evident in westernmost field; fields appear uniform.
1.52 2.46 2.65	3.35 3.90 0.92	3.06		CR		
2.65	0.92		Dry			
		2.06		CR	N	No wetland sinatures observed. Drainage swale evident in westernmost field; fields appear uniform.
1.69		2.06	Dry	CR	Y-; 6a	Area of dark green vegetation near center of main ag field; drainage swale evident in westernmost ag field
	1.72	1.67	Dry	CR	N	No wetness signatures apparent - fields uniform.
1.90	5.35	4.88	Normal	CR	Y+; 6d	Area of dark soils near center of main ag field; drainage swale evident in western ag field. Crop appears uniform.
4.89	2.20	3.75	Normal	CR	Y-; 6a	Greener veg associated with area of dark soils seen in 1990 slide
3.17	1.12	1.53	Dry	CR	N	No wetland sinatures observed. Drainage swale evident in westernmost field; fields appear uniform.
5.33	3.81	6.67	Wet	CR	Y+; 4, 6a, 6d	Drainage swale evident in westernmost field with potential drwoned crop; no readily apparent wetness signature in main ag field
2.57	1.33	5.66	Normal	CR	Y-; 6d	Area of dark soils near center of main ag field; drainage swale evident in western ag field. Crop appears uniform.
4.14	3.92	1.22	Normal	CR	N	No wetland sinatures observed. Drainage swale evident in westernmost field; fields appear uniform.
2.50	1.94	5.23	Normal	CR	N	No wetland sinatures observed. Drainage swale evident in westernmost field; fields appear uniform.
4.10	4.58	7.46	Wet	CR	Y-; 6a, 6d	Dark green veg along drainage swale in westernmost ag field; area of darker brown soils near center of main ag field
6.91	3.72	5.57	Wet	CR	Y-; 6a	Greener veg associated with area of dark soils seen in 1998 slide; drainage swale evident
3.18	9.63	8.63	Wet	CR	N	Drainage swale evident in westernmost ag field; no readily apparent wetness signature in main ag field
3.07	4.16	5.40	Wet	CR	Y-; 6d	Area of dark soils near center of main ag field; drainage swale evident in western ag field. Crop appears uniform.
3.45	2.92	3.70	Normal	CR	Y-; 6d	Area of dark soils near center of main ag field; drainage swale evident in western ag field. Crop appears uniform.
1.68	3.96	1.65	Normal	CR	N	Drainage swale evident in westernmost ag field; no readily apparent wetness signature in main ag field
5.04	4.61	2.29	Normal	CR	N	Drainage swale evident in westernmost ag field; no readily apparent wetness signature in main ag field
6.43	2.55	10.93	Wet	CR	N	Drainage swale evident in westernmost ag field; no readily apparent wetness signature in main ag field
3.65	3.79	8.38	Wet	CR	N	Drainage swale evident in westernmost ag field; no readily apparent wetness signature in main ag field
5.83	6.57	10.86	Wet	CR	Y-; 3, 6a, 6b	Drainage swale evident in westernmost ag field with areas of bare/saturated soil and crop stress bordering drainage swale; areas of crop stress randomly in main ag field with area of bare/saturated soil near south boundary at east edge of non-cropped wetland area
2.54	2.05	2.36				
3.35	3.25	4.05				
3.91	3.92	4.92				
	1.89 3.17 3.33 2.57 1.14 2.50 1.10 3.18 3.07 3.45 3.68 3.65 3.65	1.89 2.20 3.17 1.12 5.33 3.81 2.57 1.33 1.14 3.92 2.50 1.94 1.10 4.58 3.91 3.72 3.18 9.63 3.07 4.16 3.45 2.92 1.68 3.96 5.04 4.61 3.43 2.55 3.65 3.79 5.83 6.57	1.89 2.20 3.75 3.17 1.12 1.53 3.33 3.81 6.67 2.57 1.33 5.66 1.14 3.92 1.22 2.50 1.94 5.23 1.10 4.58 7.46 3.91 3.72 5.57 3.18 9.63 8.63 3.07 4.16 5.40 3.45 2.92 3.70 1.68 3.96 1.65 5.04 4.61 2.29 3.43 2.55 10.93 3.65 3.79 8.38 5.83 6.57 10.86 2.54 2.05 2.36 3.35 3.25 4.05	1.89 2.20 3.75 Normal 3.17 1.12 1.53 Dry 3.33 3.81 6.67 Wet 2.57 1.33 5.66 Normal 3.14 3.92 1.22 Normal 3.14 3.92 1.22 Normal 3.10 4.58 7.46 Wet 3.91 3.72 5.57 Wet 3.18 9.63 8.63 Wet 3.45 2.92 3.70 Normal 3.68 3.96 1.65 Normal 3.63 2.55 10.93 Wet 3.65 3.79 8.38 Wet 3.65 3.79 8.38 Wet 3.65 3.25 4.05	1.89 2.20 3.75 Normal CR 3.17 1.12 1.53 Dry CR 3.33 3.81 6.67 Wet CR 2.57 1.33 5.66 Normal CR 3.14 3.92 1.22 Normal CR 3.14 3.92 1.22 Normal CR 3.10 4.58 7.46 Wet CR 3.91 3.72 5.57 Wet CR 3.18 9.63 8.63 Wet CR 3.45 2.92 3.70 Normal CR 3.45 2.92 3.70 Normal CR 3.68 3.96 1.65 Normal CR 3.43 2.55 10.93 Wet CR 3.65 3.79 8.38 Wet CR 3.83 6.57 10.86 Wet CR 3.35 3.25 4.05	1.89 2.20 3.75 Normal CR Y-; 6a 3.17 1.12 1.53 Dry CR N 5.33 3.81 6.67 Wet CR Y+; 4, 6a, 6d 2.57 1.33 5.66 Normal CR Y-; 6d 3.14 3.92 1.22 Normal CR N 2.50 1.94 5.23 Normal CR N 3.50 1.94 5.23 Normal CR N 3.10 4.58 7.46 Wet CR Y-; 6a, 6d 3.91 3.72 5.57 Wet CR Y-; 6a 3.18 9.63 8.63 Wet CR N 3.07 4.16 5.40 Wet CR Y-; 6d 3.45 2.92 3.70 Normal CR N 3.43 2.55 10.93 Wet CR N 3.43 2.55 10.93 Wet CR N 3.83 6.57 10.86 Wet CR

Does slide/aerial photo analysis indicate the farmed areas contain wetland? Wetlands may be present within farmed areas along exsiting wetland areas and drainage swale.

4 out of 9 most the recent "normal" precipitation years had wetland signatures present.

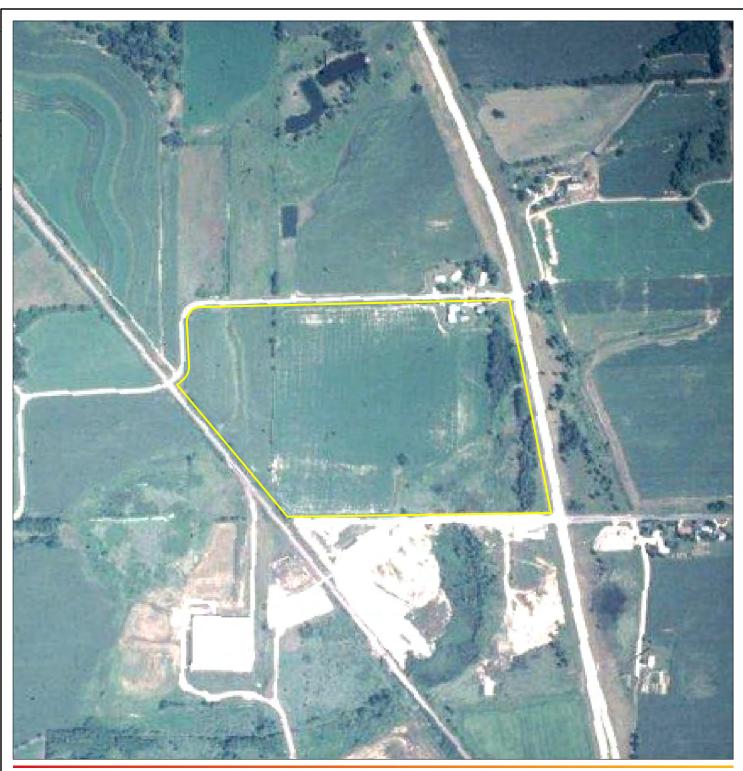
DRY NORMAL WET

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 months prior to July.

 $^{^2}$ Precipitation data from NWS weather station #WI837 - Dane County Regional Airpoty, 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, 7c=filled, 7d=tree/brush removal, 8=plowed/tilled; Other: write explanation as needed





<u>Legend</u>

Approximate Project Boundary

NAD 1983 StatePlane Wisconsin South FPS 4803 Feet 2. Data Sources Include: Stantec, WDNR, and WisDOT 3. Orthophotography: USDA

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Figure No.



DRAFT

Title

Historic Orthophotography 1985 FSA

Client/Project
North Mendota Energy and Technology Park
Ruedebusch Development & Construction, Inc.

Project Location T08N, R09E, S22 T. of Westport Dane Co., WI

193703573 Prepared by KAS on 2015-03-09 Technical Review by XXX on 2015-XX-XX Independent Review by XXX on 2015-XX-XX









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<u>Legend</u>

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Approximate Project Boundary

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Historic Orthophotography 1991 FSA

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<u>Legend</u>

Approximate Project Boundary

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Historic Orthophotography 1993 FSA

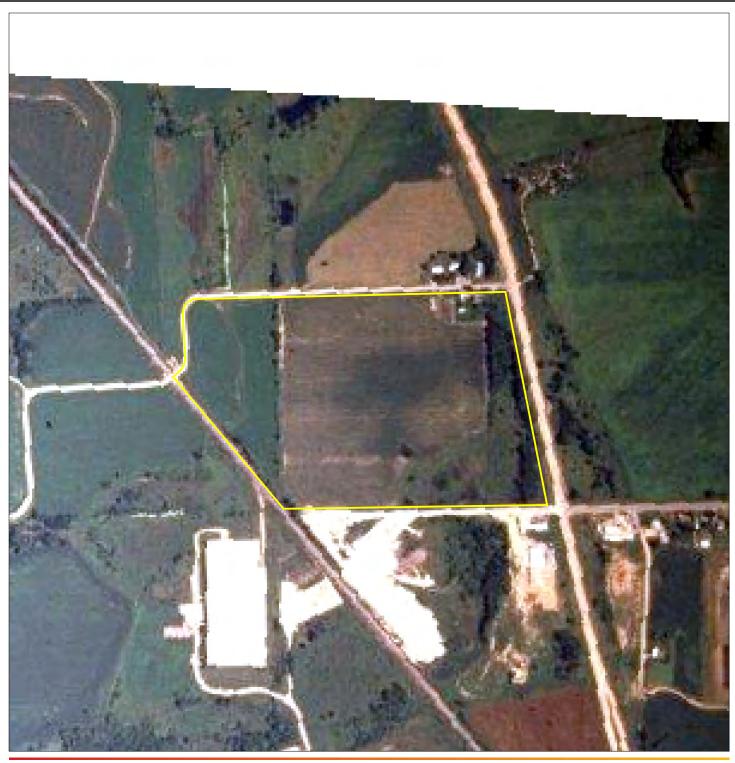
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Historic Orthophotography 1994 FSA

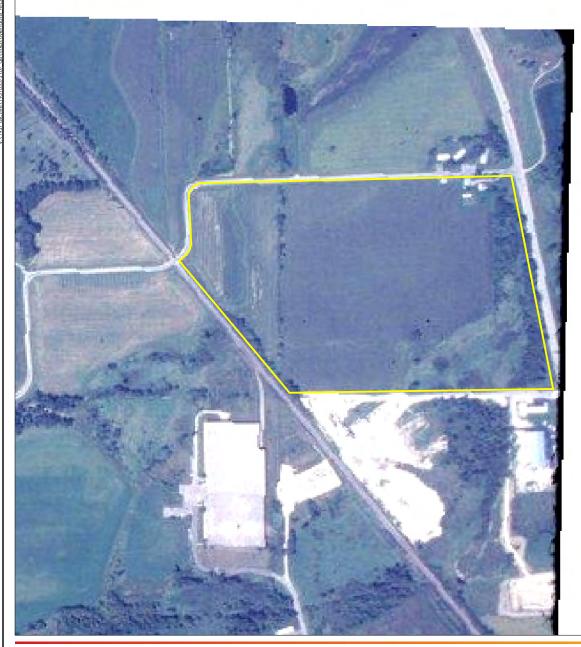
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Historic Orthophotography 1997 FSA

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Historic Orthophotography 2000 FSA

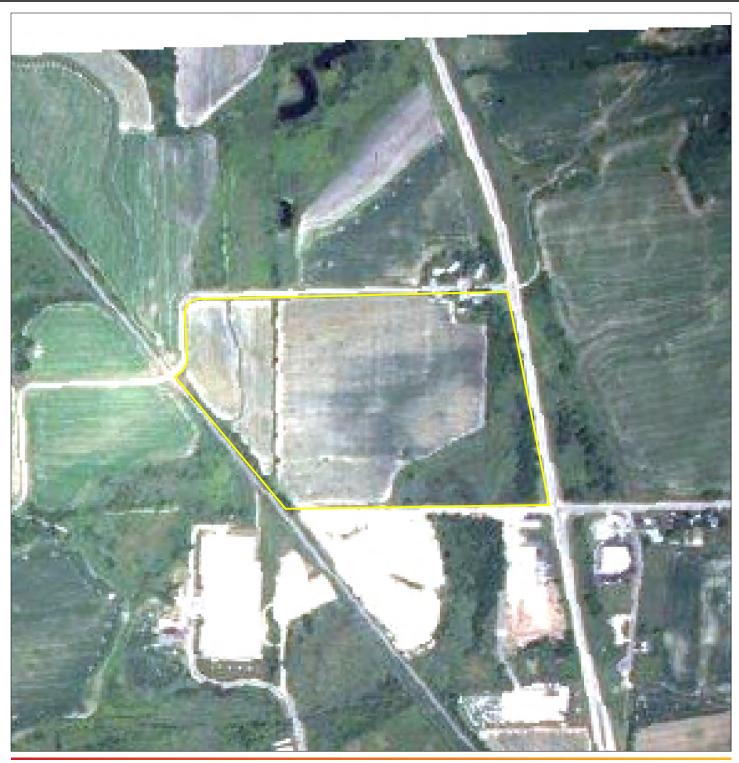
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Historic Orthophotography 2001 FSA

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Historic Orthophotography 2002 FSA

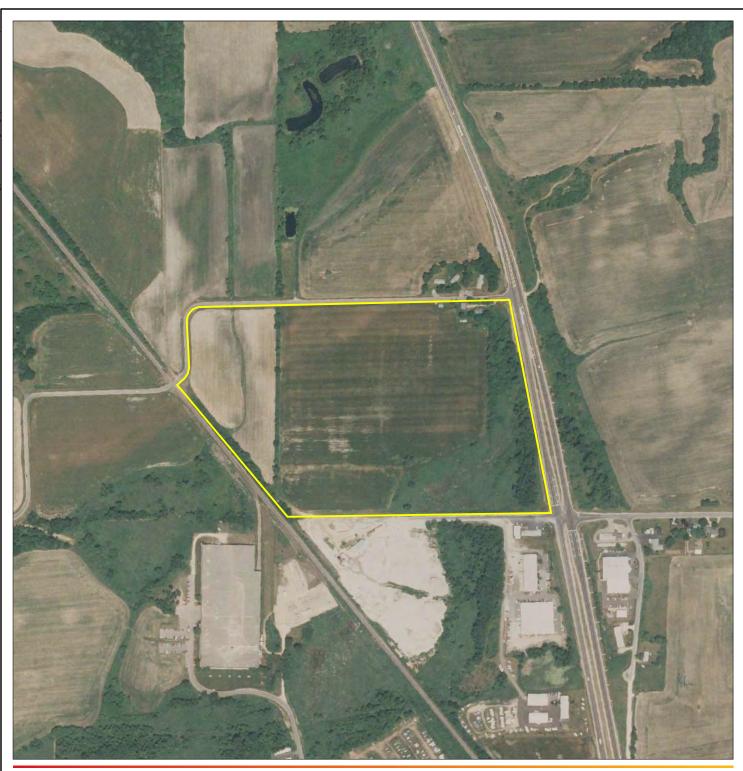
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Historic Orthophotography 2005 NAIP

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Title

Historic Orthophotography 2006 NAIP

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Ruedebusch Development & Construction, Inc.

Project Location T08N, R09E, S22 T. of Westport Dane Co., WI

193703573 Prepared by KAS on 2015-03-09 Technical Review by XXX on 2015-XX-XX Independent Review by XXX on 2015-XX-XX









NAD 1983 StatePlane Wisconsin South FPS 4803 Feet 2. Data Sources Include: Stantec, WDNR, and WisDOT 3. Orthophotography: USDA

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Figure No.



DRAFT

Title

Historic Orthophotography 2008 NAIP

Client/Project
North Mendota Energy and Technology Park
Ruedebusch Development & Construction, Inc.

Project Location T08N, R09E, S22 T. of Westport Dane Co., WI

193703573 Prepared by KAS on 2015-03-09 Technical Review by XXX on 2015-XX-XX Independent Review by XXX on 2015-XX-XX









NAD 1983 StatePlane Wisconsin South FPS 4803 Feet 2. Data Sources Include: Stantec, WDNR, and WisDOT 3. Orthophotography: USDA

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Figure No.



DRAFT

Historic Orthophotography 2010 NAIP

Client/Project
North Mendota Energy and Technology Park
Ruedebusch Development & Construction, Inc.

Project Location T08N, R09E, S22 T. of Westport Dane Co., WI

193703573 Prepared by KAS on 2015-03-09 Technical Review by XXX on 2015-XX-XX Independent Review by XXX on 2015-XX-XX









NAD 1983 StatePlane Wisconsin South FPS 4803 Feet 2. Data Sources Include: Stantec, WDNR, and WisDOT 3. Orthophotography: USDA

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Figure No.



DRAFT

Historic Orthophotography 2013 NAIP

Client/Project
North Mendota Energy and Technology Park
Ruedebusch Development & Construction, Inc.

Project Location T08N, R09E, S22 T. of Westport Dane Co., WI

193703573 Prepared by KAS on 2015-03-09 Technical Review by XXX on 2015-XX-XX Independent Review by XXX on 2015-XX-XX





WETLAND DELINEATION REPORT

North Mendota Energy and Technology Park Appendix F– Delineator Qualifications May 18, 2015

Appendix F– Delineator Qualifications



Kate Remus

Environmental Scientist



Ms. Remus is a project environmental scientist, with a background in wetlands and biological inventory work. Kate's experience includes wetland delineations, habitat assessments, flora and fauna surveys, endangered resources reviews, watershed assessments, invasive species inventory and management, ecological restoration, NEPA/Section 106 compliance documentation, and GIS data manipulation. She has experience working with a variety of clients across the private, government, and tribal sectors on multiple projects from small scale to major, linear utility projects.

EDUCATION

Master of Science, Water Resource Management, University of Wisconsin, Madison, Wisconsin, 2010

Bachelor of Science, Forestry Major (Ecosystem Restoration & Management), Soil Science Minor, University of Wisconsin, Stevens Point, Wisconsin, 2006

Critical Methods in Wetland Delineation, UW-La Crosse Extension, Madison, Wisconsin, 2014

Sedges: Identification and Ecology, UW-Milwaukee Field Station, Cedarburg, Wisconsin, 2014

Advanced Wetland Delineation, UW-La Crosse Extension, La Crosse, Wisconsin, 2012

Karner Blue Butterfly HCP Monitoring, Department of Natural Resources, Wisconsin, 2011

Wetland Plant Identification, Wetland Training Institute, Wisconsin, 2011

NHPA Section 106, National Preservation Institute, Wisconsin, 2011

NHI Endangered Resources Reviewer, Wisconsin Department of Natural Resources, Wisconsin, 2011

Wetland Delineation Training, Wetland Training Institute, Wisconsin, 2010

Certified \$130/\$190 Wildland Fire, Stevens Point, Wisconsin, 2006

PROJECT EXPERIENCE

Environmental Assessments

We Energies, Various Locations, Wisconsin

Perform environmental management services for small-scale utility projects and larger utility expansions. Conduct review of project areas/corridors for environmentally sensitive natural features, perform field assessments to identify and map sensitive natural features, and track projects in WE STORMS database.

Gogebic Taconite, LLC, Gogebic Taconite Proposed Iron Mine, Ashland and Iron Counties, Wisconsin

Conducted landscape-scale waterway and wetland determination and delineation surveys for proposed mining site and conducted preliminary threatened and endangered species resources review.

WisDOT STH 23 Corridor Preservation Plan, Sheboygan County, Wisconsin

Led wetland and waterway determination and delineation survey, and limited studies for wetland mitigation sites and potential T&E species habitat to identify natural resource impacts considered likely to result from alternative long-term transportation improvements along a 12.6 mile stretch of STH 23. Reviewed field collected data and prepared technical memorandum.

Metra Rail Wetland Investigation, Cook and Kane Counties, Illinois

Conducted two wetland determination and delineation surveys in support of proposed embankment stabilization and bridge repairs at two separate rail line properties. Led the data collection and survey of the wetland boundaries and sample points, including the review of GIS representation and preparation of the final report.

Kate Remus

Environmental Scientist

Confidential Client, Wetland Investigation, Jackson County, Wisconsin

Assisted in the completion of a wetland delineation survey for a proposed sand mine on a 178 acre parcel, including a wetland field-review and mapping based on readily visible wetland indicators on an adjacent secondary area of interest. Led one of two teams in the data collection and survey of the wetland boundaries present within the project area and prepared the final report.

WisDOT I-39 Central Segment Design: CTH O to Rock County Line, Rock County, Wisconsin

Completed wetland and waterway delineation and floristic T/E species surveys along a 13 mile stretch of Interstate 39. Led the data collection and survey of the wetland and waterway boundaries present within the project area and prepared the final report.

Alliant Energy/WPL, Friesland Gas Main Extension, Columbia County, Wisconsin

Led wetland and waterway determination and delineation survey and GPS-based survey of environmental features along a three mile stretch of county road through the Village of Friesland. Led the data collection and survey of the wetland boundaries and waterways present within the project area and prepared the final report.

Wetland and Waterway Investigation, AllEnergy, Trempealeau County, Wisconsin

Conducted wetland delineation survey for proposed frac sand mine railroad spur and associated facilities and utilized GPS to map identified features. Also conducted visual assessment of wetlands and waterways within proposed mine footprint to identify potential resources under USACE jurisdiction. Assisted with preparation of final report.

Wetland Investigation, John's Disposal, Jefferson County, Wisconsin

Conducted wetland delineation within agricultural lands for proposed expansion of waste disposal facilities. This investigation included Farm Service Agency aerial slide review and GPS-based survey of environmental features. Prepared the final report.

Telecommunications Compliance Assessments*, Various locations across Wisconsin, Minnesota, and Michigan

Facilitated NEPA/Section 106 compliance for over 500 telecommunications projects, including a large scale 4G LTE antenna upgrade for the primary client. Performed wetland delineations and determinations with accompanying reports, utilizing the Corps of Engineers Midwest and Northeast/Northcentral Regional supplements. Coordinated investigations and completed reliable reports for NEPA/Section 106 compliance submittals, based on consultation with various state historic preservation offices, Native tribes, US Fish and Wildlife Service, state natural resource departments, and local governments and newspapers for a variety of clients.

US Hwy 151 Wetland Investigation, Columbia, Dane, and Dodge Counties, Wisconsin

Led wetland determination and delineation survey and GPS-based survey of environmental features within a 30-mile stretch of US Hwy 151 at eight locations requiring guardrail repair and maintenance. Reviewed field collected data and prepared final report.

Door Creek Watershed Assessment*, Madison, Wisconsin

Developed land management strategies for water quality improvement for the larger Yahara Lakes Watershed through analysis of land use and water quality within the Door Creek Watershed. Collected water quality samples in accordance with Wisconsin State Lab of Hygiene procedures in order to identify and assess nutrient concentrations. Compiled research and written analysis of urban and construction site runoff regulations and management practices to develop sound recommendations for watershed scale water quality improvement. Performed project management for groups of 2-4 people to coordinate writing and editing of major chapters for project report. Presented final recommendations and conclusions of study in both public and academic forums.

^{*} denotes projects completed with other firms

Kate Remus

Environmental Scientist

Pipeline Services & Management

Enbridge – Southern Access Expansion Pipeline*, Douglas to Rock Counties, Wisconsin

Conducted post-construction wetland and waterway restoration monitoring, including vegetation surveys, wetland boundary determinations, and evaluation of disturbance areas along the 340+ miles of pipeline corridor. Assisted in office review of field collected data, including data analysis, compilation, QA/QC, and preparation of final report.

Enbridge, Sandpiper Pipeline, Cass, Crow Wing, and Aitkin Counties, Minnesota

Led wetland and waterway investigations and GPS-based survey of environmental features along a proposed new pipeline corridor in sensitive resource region of northern Minnesota. Assisted with QA/QC efforts of wetland delineation data and GIS mapping.

Power Transmission & Distribution

Re-build projects, American Transmission Company, Various Counties, Wisconsin

Led wetland and waterway determination and delineation surveys and GPS-based survey of environmental features along multiple existing transmission line ROWs and within potential construction laydown yards for transmission line rebuild projects. Identified and assessed adjacent land use, habitats, and invasive species presence. Assisted with preparation of, or prepared, final wetland report for Wisconsin CPCN application.

American Transmission Company, Bay Lake, Delta, and Menomonee Counties, Michigan

Conducted wetland and waterway determination and delineation surveys along portions of an existing 33-mile 138kV transmission line ROW. Identified and assessed adjacent land use, habitats, and invasive species presence, as well of extent of wetlands off-ROW for proposed new transmission ROW.

American Transmission Company Waukesha-Concord-St. Lawrence Rebuild, Multiple Counties, Wisconsin

Led wetland and waterway determination and delineation surveys and GPS-based mapping if environmental features along existing transmission line. Identified and assessed adjacent land use, habitats, and invasive species presence. Prepared final wetland report for Wisconsin CPCN application.

American Transmission Company, Badger-Coulee, Dane to La Crosse Counties, Wisconsin

Conducted wetland and waterway determination and delineation surveys within, and adjacent to, Interstate 39/90/94 right-of-way. Identified and assessed adjacent land use, habitats, and invasive species presence. Provided support for wetland, waterway, and upland habitat assessments for Wisconsin CPCN application and led QA/QC efforts of wetland delineation data.

^{*} denotes projects completed with other firms