

Appendix C Wetland Delineation Report





November 15, 2024 Revised April 2, 2025

Western Minnesota Municipal Power Agency 3724 West Avera Drive PO Box 88920 Sioux Falls, SD 57109-8920

Attn: Mr. Tyler Fogelson

P: (605) 338-4042

E: <u>tyler.fogelson@mrenergy.com</u>

Re: Wetland Delineation Report

192nd Street and 479th Avenue Toronto, Deuel County, SD 57268 Terracon Project No. 05247286

Dear Mr. Fogelson:

Terracon is pleased to submit the wetland delineation report for the above-referenced project. Based on the results of the assessment, Terracon observed eight (8) confirmed wetlands, and various drainage features on the power plant site and route flexibility area. There are also several unconfirmed, but suspected wetlands along the project corridor based on an examination of aerial imagery, and a visual survey from public roads on parcels where right-of-entry was not provided.

A cover letter addressed to the U.S. Army Corps of Engineers (USACE) has been included with the enclosed report; however, a copy of this report has not been provided to USACE by Terracon. A copy of the wetland delineation report and attached letter should be submitted to USACE at the address below for review and concurrence:

SDRegulatoryMailbox@usace.armv.mil

Terracon appreciates the opportunity to have worked for you on this project. If you have any questions regarding the content of this report, please contact Noah Oswald at (402) 330-2202 or via email at noah.oswald@terracon.com.

Sincerely,

Terracon Consultants, Inc.

Noah Oswald Staff Scientist

Monk Opwafal

Scott E. West Group Manager

Wetland Delineation Report

WMMPA Toronto, SD 192nd Street and 479th Avenue Toronto, Deuel County, SD 57268

November 15, 2024 Revised April 2, 2025 | Project Number: 05247286





Nationwide Terracon.com

■ Facilities ■ Environment

Geotechnical

Materials



November 15, 2024, Revised April 2, 2025

US Army Corps of Engineers ATTN: Regulatory Branch 28563 Powerhouse Road Pierre, South Dakota 57501

Re: Wetland Delineation Report

WMMPA Toronto, SD

192nd Street and 479th Avenue Toronto, Deuel County, SD 57268 Terracon Project No. 05247286

Dear Regulatory Branch:

Terracon is pleased to submit the Wetland Delineation report prepared for Western Minnesota Municipal Power Agency for the above-mentioned project. This assessment describes the observations made during our site visit and other sources of information used to investigate the power plant site and route flexibility area for wetlands and other waterbodies.

Based on the results of the assessment, Terracon observed eight (8) confirmed wetlands. Several drainage features were also mapped on the power plant site and route flexibility area. Suspect wetlands were identified through aerial imagery, and a visual survey from public roads as the Terracon team did not have right-of-entry on the entire project. At this time, we are requesting that your office perform a review of the report in pursuit of a jurisdictional determination to determine if a permit will be required for any proposed activities.

If you have any questions concerning this report, please contact Noah Oswald at (402) 330-2202 or noah.oswald@terracon.com.

Sincerely,

Terracon Consultants, Inc.

Noah Oswald Staff Scientist Scott E. West Group Manager

CC: Mr. Tyler Fogelson

Western Minnesota Municipal Power Agency

3724 West Avera Drive

PO Box 88920

Sioux Falls, SD 57109-8920

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WETLAND DELINEATION REPORT

WMMPA Toronto, SD 192nd Street and 479th Avenue Toronto, Deuel County, SD 57268

Terracon Project No. 05247286 November 15, 2024 Revised April 2, 2025

1.0 INTRODUCTION

Terracon Consultants, Inc. (Terracon) was retained by Missouri River Energy Services (client) to perform a wetland delineation on behalf of Western Minnesota Municipal Power Agency (WMMPA) to determine if wetlands or other waters under the jurisdiction of the United States Army Corps of Engineers (USACE) or the South Dakota Game, Fish, and Parks (SDGF&P) and the South Dakota Department of Agriculture and Natural Resources (SDDA&NR) are present at the approximately 70-acre proposed power plant site, and the 500-foot-wide route flexibility area.

The power plant site and route flexibility area are located northeast of Toronto around 192nd Street and 479th Avenue in Deuel County, South Dakota. The power plant site and route flexibility area are located in the Brandt-Cobb Creek and Fish Lake subwatersheds (HUC 12: 070200030401 and 070200030104). The power plant site and route flexibility area locations are depicted on Exhibits 1 and 4, Appendix A.

The purpose of performing this wetland delineation of the power plant site and route flexibility area was to characterize the existing site conditions, observe the power plant site and route flexibility area for suspect waterbodies and wetlands and provide a recommendation regarding whether or not suspect waterbodies (if observed) would be considered jurisdictional with the USACE and/or the SDGF&P or SDDA&NR. It is important to note that the findings presented in this report represent Terracon's professional opinion, based upon field observations made during the site visit and our experience with current regulatory guidance under the Clean Water Act. In order to verify the delineation boundaries and jurisdictional classifications presented in this report, the USACE must review this report and make a jurisdictional determination.

Terracon evaluated online resources to identify potential wetlands and WOTUS within the new proposed revised route of the proposed transmission line entering the Astoria Substation on the southern end of the project. The revised transmission line route has not been field-delineated but were identified using publicly available aerial imagery dated May 3, 2023. The route revision is shown below and in the Appendix A Exhibits.

2.0 SCOPE OF SERVICES

Terracon performed the following scope of work:

2.1 Wetland Delineation

- Reviewed United States Geologic Survey (USGS) topographical maps, National Wetlands Inventory (NWI) maps, United States Department of Agriculture (USDA) National Resource Conservation Service (NRCS) Soil Survey Geographic Database (SSURGO) soil maps and surveys, Federal Emergency Management Agency (FEMA) Flood Hazard Zones (FHZ), and aerial imagery to assist with identifying suspect Waters of the United States (WOTUS) and wetland areas at the power plant site and route flexibility area.
- Mobilized to the power plant site and route flexibility area to conduct the preliminary site
- Prepared a map showing approximate locations of suspect waterbodies or wetland areas observed during the site visit, if any.
- Completed a wetland delineation report that included site characterization information, a discussion of applicable data, and recommendations for the power plant site and route flexibility area.
- Reviewed aerial photographs and a visual assessment from public roads for possible wetlands on portions of the route flexibility area that the field team did not have right-ofentry to.

3.0 PRELIMINARY DATA GATHERING AND ANALYSIS

Prior to performing the delineation, several map and aerial photograph resources were reviewed to assist with identifying potential wetland areas at the power plant site and route flexibility area. Each source of data is described in detail below.

3.1 Topographic Map

The United States Geologic Survey (USGS) Astoria, SD 7.5-Minute Topographic Quadrangle was reviewed to identify drainages or potential wetlands within the power plant site and route flexibility area. The power plant site and route flexibility area appear to generally slope moderately from northwest to southeast contouring around two stream features. Cobb Creek was identified west and north of the power plant site, with an unnamed intermittent tributary to Cobb Creek traversing the transmission corridor on the eastern portion of the site from northwest to southeast. Two unnamed intermittent streams are shown traversing the eastern half of the route flexibility area from west to east. The power plant site and route flexibility area have an approximate elevation ranging from 1,950 to 1,800 feet above mean sea level (asl). The topographic map is included as Exhibit 1, Appendix A.

3.2 National Wetlands Inventory Map

The NWI map of the power plant site and route flexibility area was reviewed to identify potential wetland areas. The map for the power plant site and route flexibility area was published by the

U.S. Department of the Interior's Fish and Wildlife Service (USFWS) and depicts probable wetland areas based on stereoscopic analysis of high-altitude aerial photographs and analysis of infrared bands from remotely-sensed imagery. The map displays multiple Freshwater Emergent Wetlands in the northeast and southeast portions of the plant site, and other wetland and riverine features distributed along both sides of the transmission line route. The NWI map is included as Exhibit 2, Appendix A.

3.3 Soil Survey

Data from the USDA NRCS (https://websoilsurvey.nrcs.usda.gov/) was reviewed to identify soil types, including hydric soils. Hydric soils information was gathered from the 'National Hydric Soils List' (USDA NRCS, https://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/ use/hydric/).

The following soil types were identified within the power plant site and route flexibility area boundaries on the soil survey map:

- Barnes-Buse lomas, coteau, 2 to 6 percent slopes (BcB): This soil map unit is classified as non-hydric.
- Barnes-Buse-Svea loams, 2 to 15 percent slopes (BgD): This soil map unit is classified as non-hydric.
- Barnes-Svea-Buse loams, 2 to 9 percent slopes (BmC): This soil map unit is classified as non-hydric.
- Barnes-Svea loams, 1 to 6 percent slopes (BkB): This soil map unit is classified as non-hydric.
- Hamerly-Badger complex, 0 to 2 percent slopes (Hm): This soil map unit is classified as non-hydric.
- <u>Lamoure-Rauville silty clay loams, channeled (Lr):</u> This soil map unit is classified as hydric.
- Lowe loam (Lw): This soil map unit is classified as hydric.
- Poinsett-Waubay silty clay loams, 0 to 2 percent slopes (PwA): This soil map unit is classified as non-hydric.
- Parnell silty clay loam (Pa): This soil map unit is classified as hydric.
- Singsaas-Waubay silty clay loams, 1 to 6 percent slopes (ShB): This soil map unit is classified as non-hydric.
- Lamoure silty clay loam, coteau, 0 to 1 percent slopes, occasionally flooded (Z152A): This soil map unit is classified as non-hydric.
- Arvilla-Sioux complex, 6 to 15 percent slopes (AvD): This soil map unit is classified as non-hydric.
- Estelline silt loam, coteau, 2 to 6 percent slopes (EsB): This soil map unit is classified as non-hydric.
- Kranzburg-Brookings silty clay loams, 1 to 6 percent slopes (KrB): This soil map unit is classified as non-hydric.

- Mckranz-Badger silty clay loams, 0 to 2 percent slopes (Mk): This soil map unit is classified as non-hydric.
- Orthents, gravelly (Ok): This soil map unit is classified as non-hydric.
- Southam silty clay loam, 0 to 1 percent slopes (So): This soil map unit is classified as hydric.
- Renshaw-Fordville loams, coteau, 2 to 6 percent slopes (Z171B): This soil map unit is classified as non-hydric.

The soil survey map is included as Exhibit 3, Appendix A.

3.4 Aerial Image

Recent aerial images (2006, 2012, 2018, and 2022) of the power plant site and route flexibility area were reviewed to evaluate land use and vegetative cover. The power plant site and route flexibility area predominantly consist of apparent row crop agricultural fields. Pasture area is evident near the southeastern portions of the route flexibility area, containing an apparent pond. The aerial image is included as Exhibit 4, Appendix A.

3.5 FFMA Flood Hazard Zone Data

FEMA FHZ data was reviewed to identify areas that may have elevated likelihoods of containing WOTUS. The FEMA FHZ data indicated that the power plant site and route flexibility area is not depicted in a flood hazard zone. The FEMA FHZ data is included as Exhibit 5, Appendix A.

4.0 FIELD TECHNIOUES

Terracon personnel, Noah Oswald and Reece Allen, conducted a reconnaissance of the power plant site and route flexibility area on September 30th and October 1st, 2024, to characterize the existing site conditions and observe for the presence of wetlands and potential jurisdictional waters. Characteristics of jurisdictional waters and wetland areas, if present, were assessed utilizing the criteria detailed in sections 4.1 and 4.2 of this report. The evaluation methods generally followed the routine on-site determination method referenced in the 1987 USACE Wetland Delineation Manual and 2010 (version 2.0) Midwest Regional Supplement.

4.1 Wetland Observations

Wetlands generally have three essential characteristics: hydrophytic (wetland) vegetation, hydric soils, and wetland hydrology. Based on NWI data, aerial imagery and topographical data, on-site areas were investigated for potential wetland properties. Additional areas were investigated, based on observations made during the site reconnaissance. Data regarding the three essential characteristics was gathered within observed suspect wetland areas to further delineate boundaries.

4.1.1 Plant Community Assessment

Suspect areas were visually observed to determine the species, when possible, and absolute percentage of ground cover for four stratum of plant community types. Herbs were generally observed within a five-foot radius, shrubs/saplings within a fifteen-foot radius, and trees and vines within a thirty-foot radius of the observation location.

For each species of vegetation observed, their wetland indicator status was evaluated. Indicator status was determined using the NRCS Plants Database. Indicator categories for vegetation are presented below:

- Obligate Wetland (OBL) occur almost always (estimated probability greater than 99%) under natural conditions in wetlands.
- Facultative Wetland (FACW) usually occur in wetlands (estimated probability 67% -99%) but occasionally found in non-wetlands.
- Facultative (FAC) equally likely to occur in wetlands or non-wetlands (estimated probability 34% 66%).
- Facultative Upland (FACU) usually occur in non-wetlands (estimated probability 67% -99%) but occasionally found in wetlands.
- Obligate Upland (UPL) rarely occur in wetlands but occur almost always (estimated probability greater than 99%) under natural conditions in non-wetlands.

The percent cover of each stratum was determined, and dominance was evaluated. Dominant species were the most abundant species that accounted for more than 20 percent of the absolute percent coverage of the stratum. The number of dominant species with an indicator status of OBL, FACW, and/or FAC was compared to the total number of dominant species across all strata.

Typically, when more than 50 percent of the dominant species had an indicator status of OBL, FACW, and/or FAC, hydrophytic vegetation was present. If the percentage of dominant species with an indicator status of OBL, FACW, and/or FAC was less than 50 percent, prevalence index and morphological adaptations may have been evaluated to confirm if hydrophytic vegetation was present or absent.

4.1.2 Hydric Soils Assessment

After Terracon evaluated wetland vegetation, subsurface soil samples were collected using a soil probe or similar method. The samples were collected to a depth of approximately 24 inches below ground surface and were visually compared to <u>Munsell Soil Color Charts</u> (Munsell, 2009), which aided in the evaluation of hydric soil characteristics. In cultivated areas, soil was probed to 40 inches below the ground surface to examine soil characteristics below the influence of cultivation.

The soil samples were further examined for hydric soil indicators including, but not limited to, histosol, thick dark surface, sandy gleyed matrix, sandy redox, loamy gleyed matrix, redox dark surface, and/or redox depressions. If these or other hydric soil indicators were observed in the subsurface soil sample, the observation location was considered to have hydric soil.

4.1.3 Wetland Hydrology Assessment

Visual indicators of wetland hydrology were evaluated. Examples of primary wetland hydrology indicators include, but are not limited to, surface water, high water table, soil saturation, water marks, sediment deposits, drift deposits, iron deposits, inundation visible on aerial imagery, sparsely vegetated concave surface, and water-stained leaves. If at least one primary or two secondary indicators were observed, the observation location was considered to have wetland hydrology.

4.1.4 Classification of Wetlands

Upon completion of the review of the three wetland criteria at each area, a wetland determination was made. Under normal circumstances, if one or more of the wetland criteria were not identified, the area was not considered to be a wetland. If all three wetland indicators were identified, the area was classified as wetland. Additional observations were made throughout the wetland area to define the wetland/non-wetland boundary. Vegetation, soil and hydrology assessment data from at least one location within the wetland and one upland location outside of the wetland were recorded on a USACE Wetland Determination Form (Data Sheet).

4.2 Other Waters Observations

Terracon also made observations of site features that may be considered a jurisdictional waterbody. If a potential jurisdictional waterbody was identified, observations regarding its characteristics were recorded. Potential jurisdictional waterbodies were evaluated based on the observation of the following characteristics:

Flow Characteristics:

• Perennial: contains water at all times except during extreme drought.

o Intermittent: carries water a considerable portion of the time but ceases to flow

occasionally or seasonally.

Ephemeral: carries water only during and immediately after periods of rainfall or

snowmelt.

Ordinary High-Water Mark:

• The limit line on the shore established by the fluctuation of the water surface. It is shown by such things as a clear line impressed on the bank, shelving, changes in soil character, destruction of terrestrial vegetation, the presence of litter and debris or other features influenced by the surrounding area.

Bank Shape Descriptions:

• Undercut: banks that overhang the stream channel.

Steep: bank slope of approximately greater than 30 degrees.

Gradual: bank slope of approximately 30 degrees or less.

Aquatic Habitat Descriptions:

Pool: deeper portion of a stream where water flows slower than in neighboring,

shallower portions, smooth surface, and finer substrate.

o Riffle: shallow area in a stream where water flows swiftly over gravel and rock

or other coarse substrate resulting in a rough flow and a turbulent

surface.

• Run: section of a stream with a low or high velocity and with little or no

turbulence on the surface of the water.

5.0 FIELD OBSERVATIONS RESULTS

On September 30th and October 1st, 2024, Terracon personnel, Noah Oswald and Reece Allen performed field observations at the power plant site and route flexibility area. The power plant site and route flexibility area predominantly consisted of agricultural row crop fields. Pasture was located in the southeastern portion of the route flexibility area. Additionally, eight confirmed wetlands with multiple suspect wetlands, and multiple drainage features were observed on the power plant site and route flexibility area.

Ground photographs, included in Appendix B, provide an indication of the physical characteristics observed during the site visit. Descriptions of the observed areas are listed in the following sections.

5.1 Plant Communities Found at Power Plant Site and Route Flexibility Area

5.1.1 Row Crop Agricultural Fields

The dominant plant species observed in the row crop agricultural fields were corn (*Zea mays*) and soybean (*Glycine max*).

5.1.2 Pasture

The dominant plant species observed in the pasture areas were smooth bromegrass (*Bromus inermis*) and reed canary grass (*Phalaris arundinacea*).

5.1.3 Emergent Wetlands

The dominant plant species observed in the emergent wetlands were reed canary grass and cattails (*Typha latifolia*).

5.1.4 Road Right-of-Way

The dominant plant species in the sections of the transmission corridor that were located near roadside ditches were reed canary grass, smooth brome and water sedge (*Carex aquatils*).

5.2 Water Features Found at Power Plant Site and Route Flexibility Area

5.2.1 Wetlands

The following table describes the wetlands that were observed at the power plant site and route flexibility area during the site reconnaissance.

Wetland	Location	Size (acres)	Cowardin Classification	Hydrology Sources	Potential WOTUS Jurisdictional Status
W1	Power Plant Site	2.31	PEMf	Precipitation, Overland Flow	No
W2	Power Plant Site	0.23	PEMf	Precipitation, Overland Flow	No
W3	Power Plant Site	0.49	PEMf	Precipitation, Overland Flow	No
W4	Power Plant Site	3.18	PEMf	Precipitation, Overland Flow	No
W5	Route Flexibility Area	0.31	PEMf	Precipitation, Overland Flow	Yes
W6	Route Flexibility Area	0.14	PEMA	Precipitation, Overland Flow	Yes
W7	Route Flexibility Area	1.06	PEMf	Precipitation, Overland Flow	No
W8	Route Flexibility Area	0.02	PEMA	Precipitation, Overland Flow	Yes

Jurisdictional Total	0.47
Non- Jurisdictional Total	7.27
Total Acres	7.74

Table 1. Wetland identification, acreage, Cowardin classification (PEM – Palustrine Emergent Wetland, PSS – Palustrine Shrub-Scrub Wetland, PFO – Palustrine Forest Wetland, PAB – Palustrine Aquatic Bed Wetland), hydrology sources, and potential WOTUS jurisdictional status.

W1: W1 is a farmed emergent wetland. W1 is located in Section 7 Township 113N Range 48W. Terracon considers W1 non-jurisdictional due to a lack of a continuous surface connection to another jurisdictional wetland or other aquatic feature.

W2: W2 is a farmed emergent wetland. W2 is located in Section 7 Township 113N Range 48W. Terracon considers W2 non-jurisdictional due to a lack of a continuous surface connection to another jurisdictional wetland or other aquatic feature.

W3: W3 is a farmed emergent wetland. W3 is located in Section 7 Township 113N Range 48W. Terracon considers W3 non-jurisdictional due to a lack of a continuous surface connection to another jurisdictional wetland or other aquatic feature.

W4: W4 is a farmed emergent wetland. W4 is located in Section 7 Township 113N Range 48W. Terracon considers W4 non-jurisdictional due to a lack of a continuous surface connection to another jurisdictional wetland or other aquatic feature.

W5: W5 is a farmed emergent wetland located in Section 8 Township 113N Range 48W. Terracon considers W5 jurisdictional due to an apparent continuous surface connection to an unnamed tributary to Cobb Creek south of the project boundary.

W6: W6 is a palustrine emergent wetland located in Section 16 Township 113N Range 48W. Terracon considers W6 jurisdictional due to a continuous surface connection to unnamed tributaries to Cobb Creek east and southwest of the proposed project boundary.

W7: W7 is a farmed emergent wetland located in Section 22 Township 113N Range 48W. Terracon considers W7 non-jurisdictional due to a lack of a continuous surface connection to another jurisdictional wetland or other aquatic feature.

W8: W8 is a palustrine emergent wetland located in Section 22 Township 113N Range 48W. Terracon considers W8 jurisdictional due to a continuous surface connection to unnamed tributaries to Cobb Creek east and west of the proposed project boundary.

5.2.2 Other Waters

An unnamed tributary was identified via online resources near the southern portion of the route flexibility corridor near 481st Avenue near the Astoria substation. The tributary has a continuous surface connection to Cobb Creek northeast of the project boundary.

5.2.3 Suspect Wetlands

Terracon evaluated online resources to identify potential wetlands and WOTUS within the Route Flexibility Area and conducted a visual survey from public roads as the Terracon team did not have right-of-entry on the entire project. The suspect wetlands are shown in the Appendix A Exhibits.

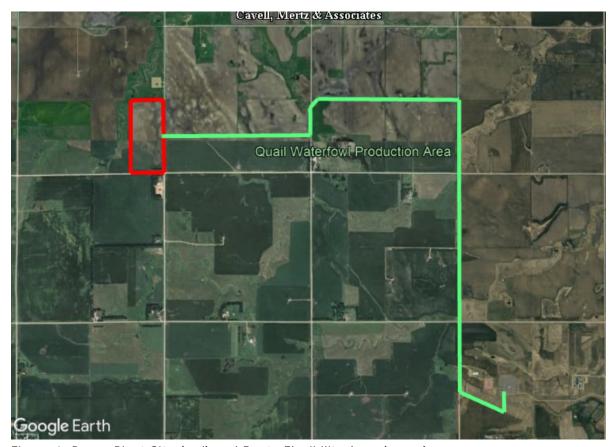


Figure 1. Power Plant Site (red) and Route Flexibility Area (green).

6.0 SUMMARY AND CONCLUSIONS OF FIELD OBSERVATIONS

A wetland delineation was conducted at an approximately 70-acre proposed power plant site, and the 500-foot-wide corridor along the proposed transmission line located near Toronto, Deuel County, South Dakota on September 30th and October 1st, 2024. A review of the power plant site and route flexibility area was conducted utilizing readily available information including, but not limited to, topographical, aerial, soils, floodplain, and wetland data.

In addition, a preliminary site visit was performed to characterize the existing site conditions and observe the power plant site and route flexibility area for suspect waterbodies and wetlands (if any). A summary of field observations and conclusions concerning jurisdictional status is outlined in the following sections.

6.1 Wetlands

Eight wetlands (W1, W2, W3, W4, W5, W6, W7, and W8) totaling 7.74 acres, were observed. W1, W2, W3, and W4 were observed on the power plant site, and W5, W6, W7, and W8 were observed

in the route flexibility area. Terracon considers W1, W2, W3, W4, and W7 non-jurisdictional and W5 jurisdictional due to its connection to an unnamed tributary to Cobb Creek to the south. Terracon considers W6 jurisdictional due to its connection to unnamed tributaries to Cobb Creek east and southwest. Terracon considers W8 jurisdictional due to its continuous surface connection to unnamed tributaries to Cobb Creek east and west.

6.2 Other Waters

No other waters were observed within the power plant site or the route flexibility area.

6.3 Suspect Wetlands

Terracon evaluated online resources to identify potential wetlands and WOTUS within the route flexibility area and conducted a visual survey from public roads as the Terracon team did not have right-of-entry on the entire project. The suspect wetlands are shown in the Appendix A Exhibits.

7.0 RECOMMENDATIONS

Wetlands/WOTUS

According to our preliminary site investigation, potential jurisdictional waters are present on the power plant site and route flexibility area. However, for all on-site areas, the USACE and EPA make the final determination on the jurisdictional status of waterbodies, and on the need for permit processing and compensatory mitigation. Additionally, non-jurisdictional wetlands, ponds, and streams may also be considered Waters of the State and could potentially be regulated by SDGF&P/SDDA&NR.

It is recommended that additional field data be obtained along the revised route during the growing season to map the boundaries of the aquatic features visible in the aerial imagery.

If MRES anticipates having to impact wetlands in order to construct the project, Terracon recommends a copy of this report be submitted to the USACE well in advance (at least 9 months) of construction for an approved jurisdictional determination of the findings of this delineation on the site. The USACE can be contacted at the following address:

US Army Corps of Engineers ATTN: Regulatory Branch 28563 Powerhouse Road Pierre, South Dakota 57501

Email: SDRegulatoryMailbox@usace.army.mil

8.0 GENERAL COMMENTS

This wetland delineation was conducted using the 1987 USACE Wetland Delineation Manual and the 2010 Midwest Supplement. The manuals provide assistance for delineating wetlands based on the three criteria discussed for sites that have natural conditions and other methods for sites

where the landscape is disturbed. However, the manual alone may not have provided enough information to document whether or not the three criteria were met. Various physical properties or other visual signs used to evaluate whether the three wetland criteria areas were satisfied may not be straightforward, especially in disturbed or problem areas. The manual also allows the user to visually estimate certain indicators such as the percentage of area covered by dominant species for the entire community. Terracon did not attempt to identify every possible plant species and did not classify soil type by laboratory methods. Due to seasonal changes and or site disturbances, Terracon cannot guarantee the area to exhibit or not to exhibit wetland characteristics at all times of the year. The limitations of this wetland delineation should be recognized.

Jurisdictional Determinations

On March 12. 2025, the U.S. Environmental Protection Agency and the USACE distributed a Memorandum to the Field concerning the proper implementation of "continuous surface connection" under the definition of Water of the United States under the Clean Water Act (Memorandum). Terracon used its best professional judgement in interpreting the Memorandum in the context of this project. The definition of what constitutes a jurisdictional wetland has been subject to several different interpretations over the past several years, and we have incorporated what we see as an accurate interpretation of the Memorandum in rendering our opinions on the jurisdictional status of each of the delineated wetlands discussed in this report. However, the USEPA and USACE are the final authorities on what aquatic resources are or are not subject to regulatory jurisdiction under the Clean Water Act. If authorization is to be sought for this project, Terracon recommends requesting the appropriate jurisdictional determinations and authorization (if applicable) from the USACE/USEPA prior to conducting any work that might result in disturbance to any of the aquatic areas described in this report.

This report has been prepared in accordance with generally accepted scientific and engineering evaluation practices. This report is for the exclusive use of the client for the project being discussed. No warranties, either express or implied, are intended or made.

APPENDIX A

EXHIBITS

Exhibit 1: Topographic Map

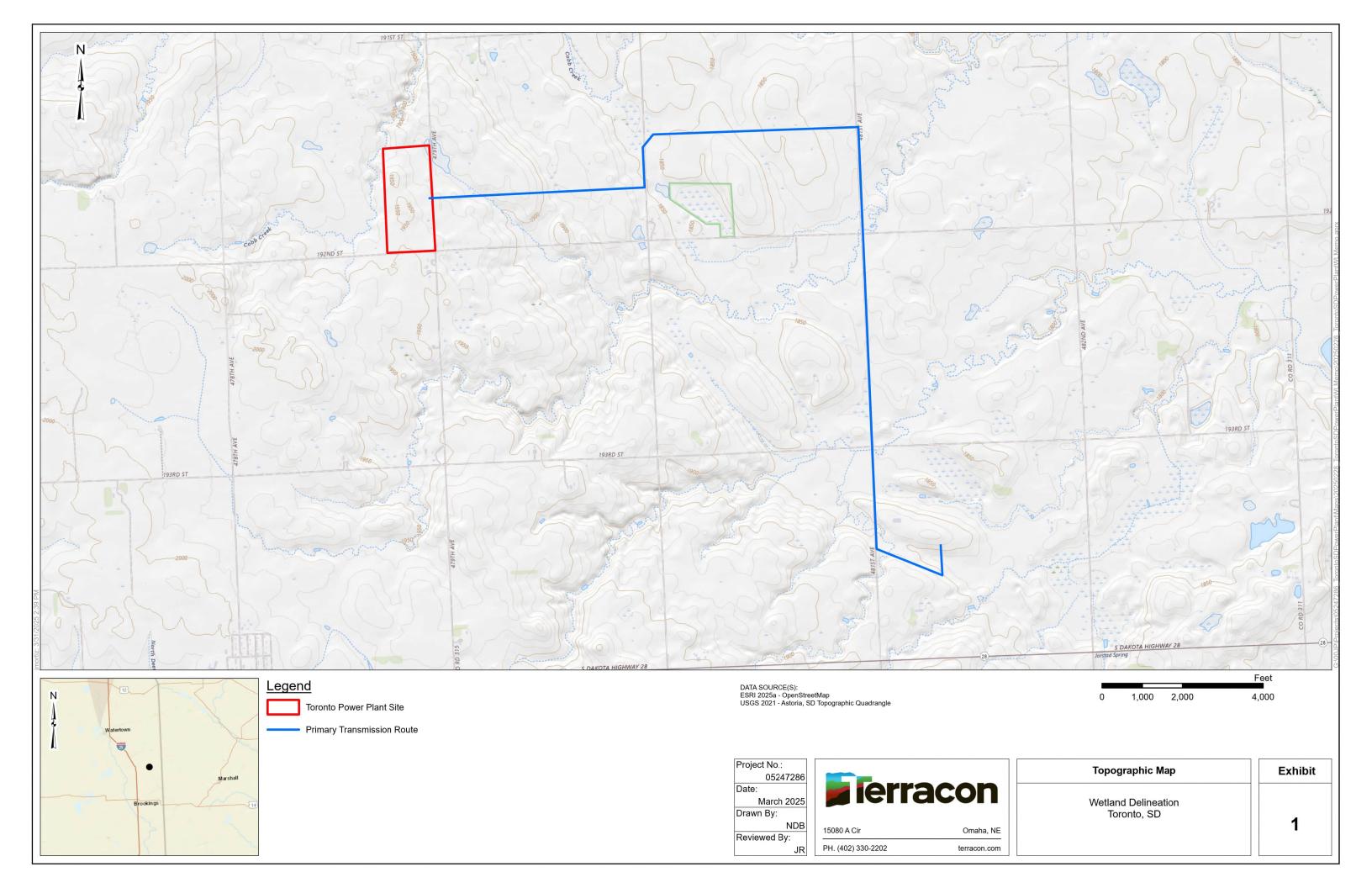
Exhibit 2: NWI Map

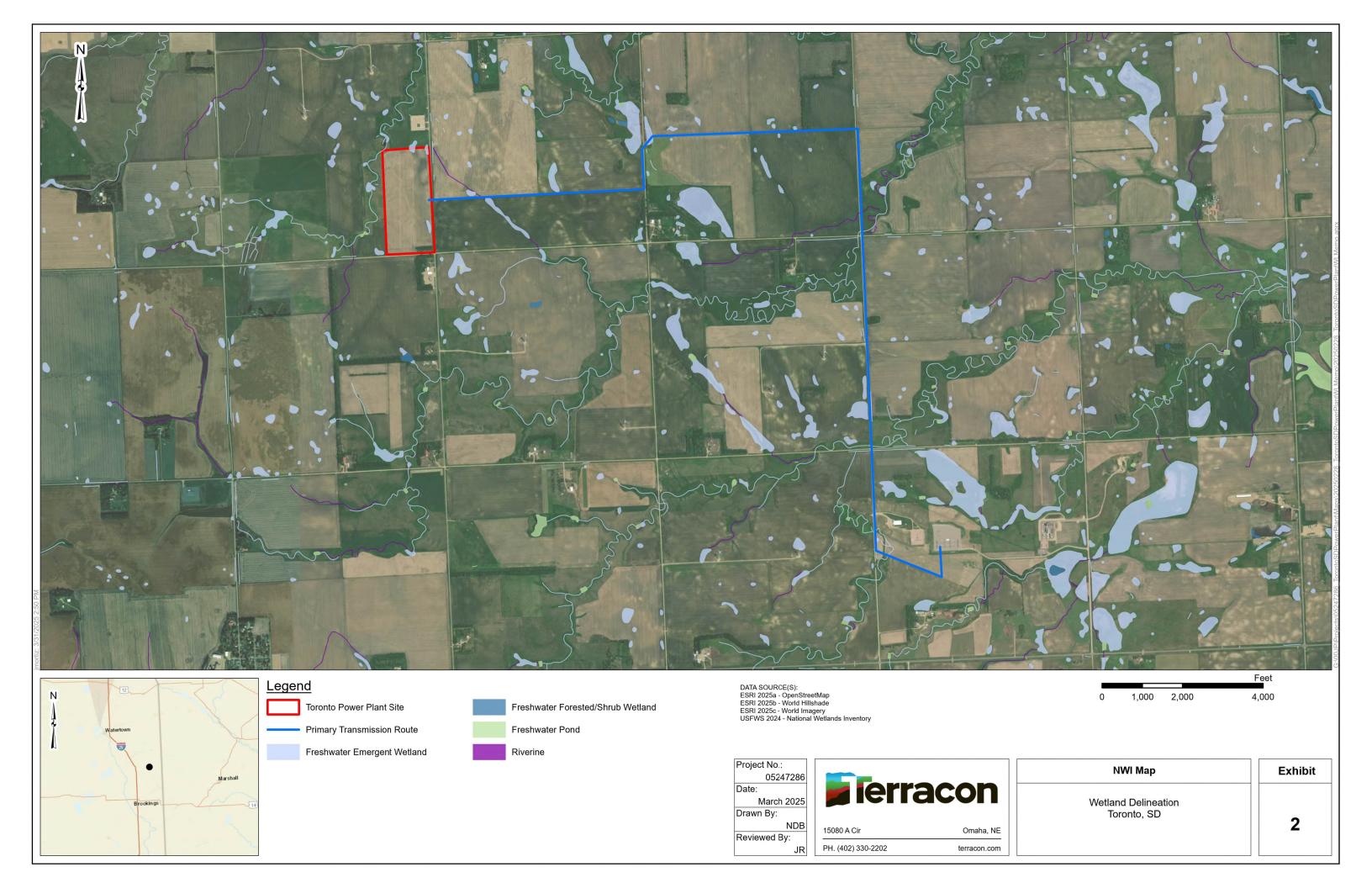
Exhibit 3: Soil Map

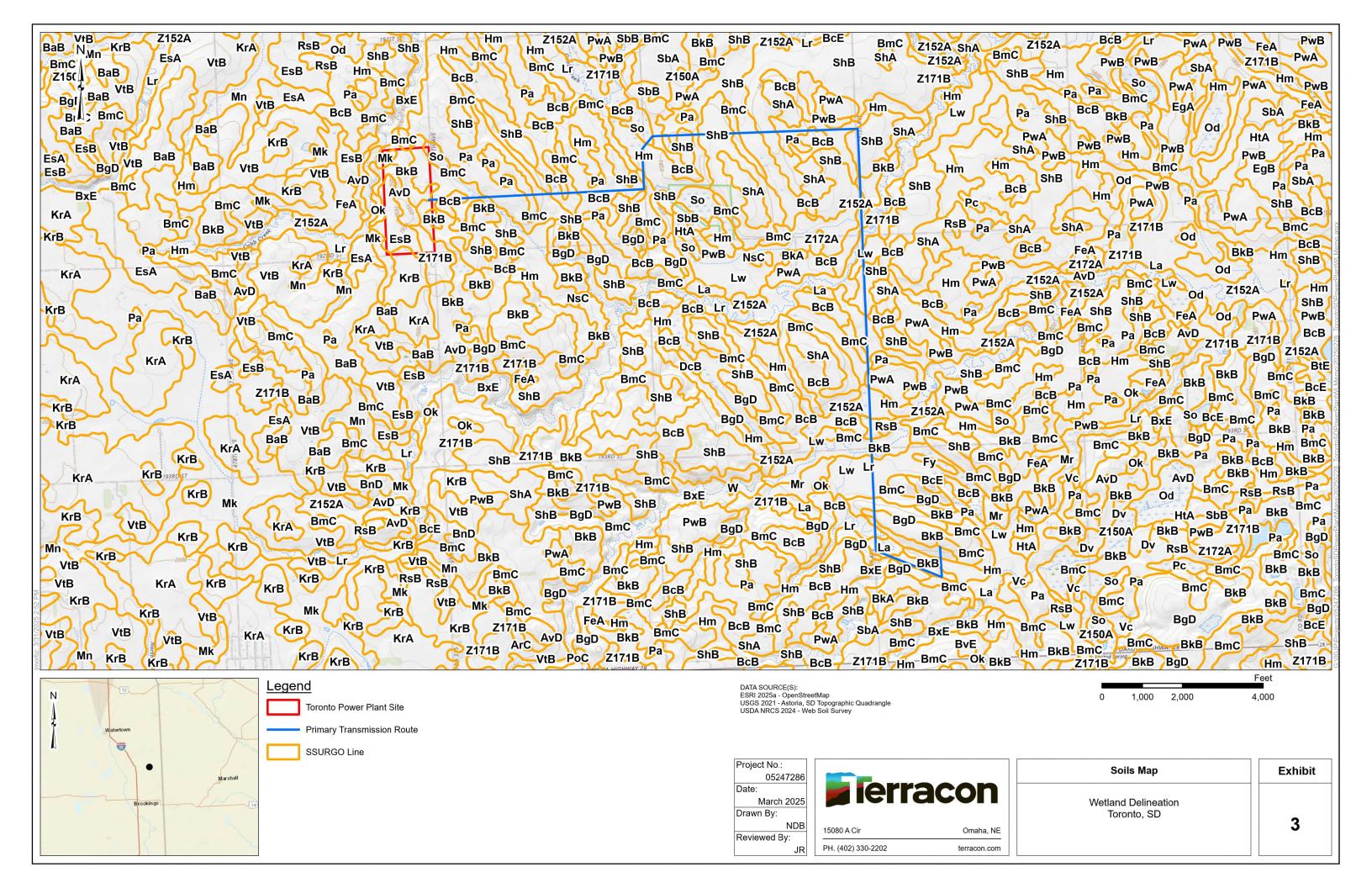
Exhibit 4A-4D: Aerial Images (2006, 2012, 2018, 2022)

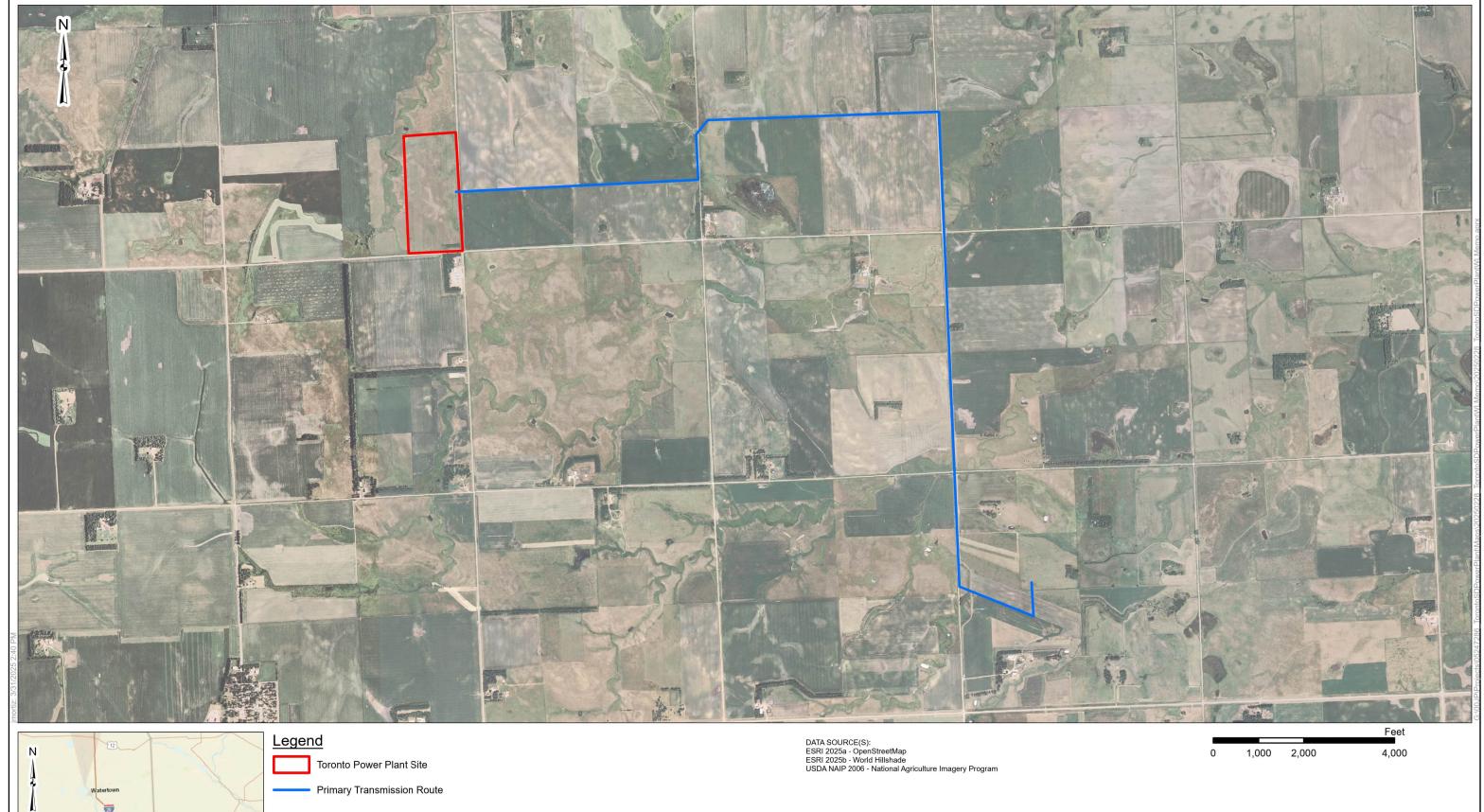
Exhibit 5: FEMA Map

Exhibit 6-6.2: Delineation Maps











Terracon 05247286 March 2025

Project No.:

Drawn By:

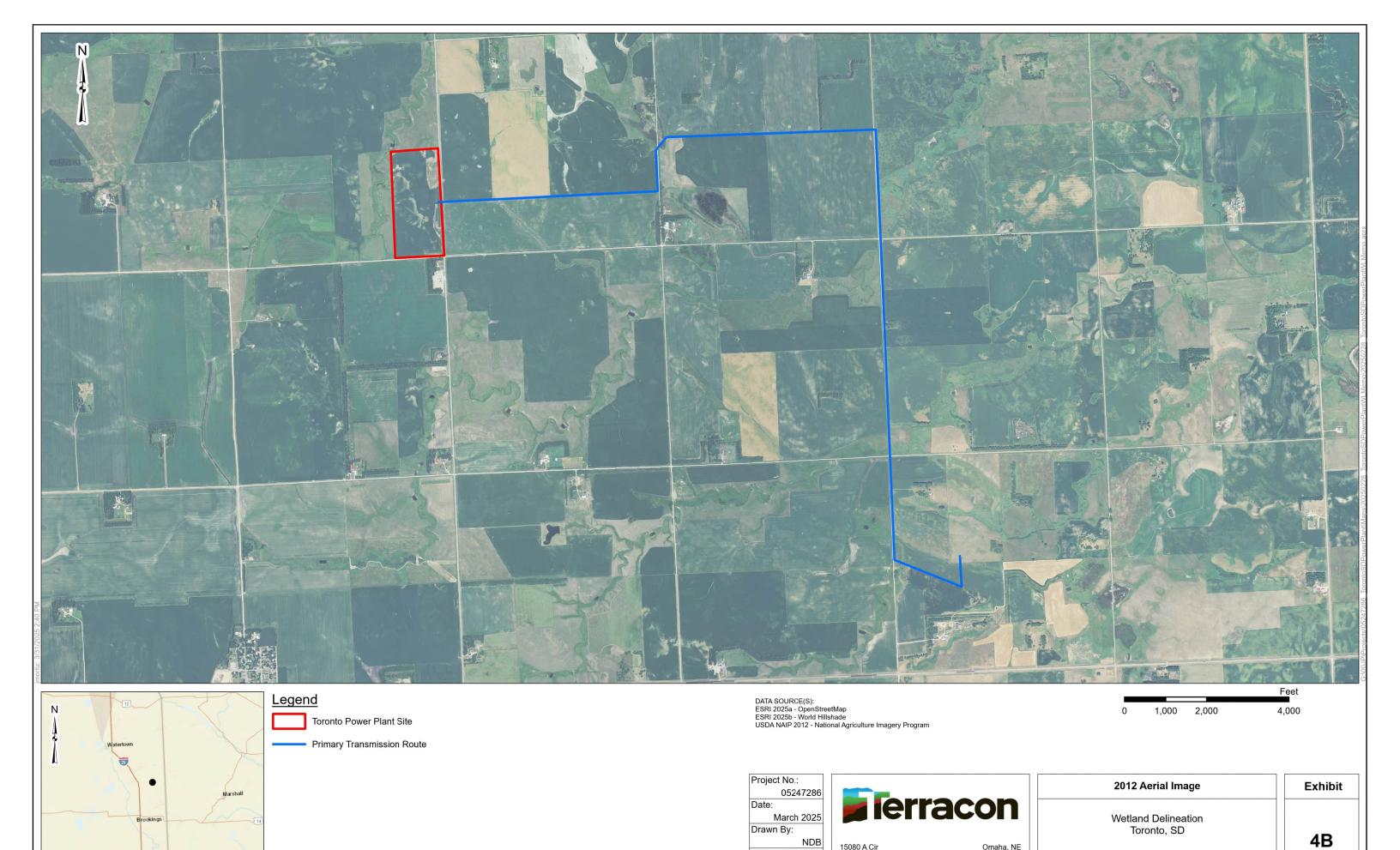
Reviewed By:

15080 A Cir Omaha, NE PH. (402) 330-2202 terracon.com 2006 Aerial Image

Wetland Delineation Toronto, SD

Exhibit

4A



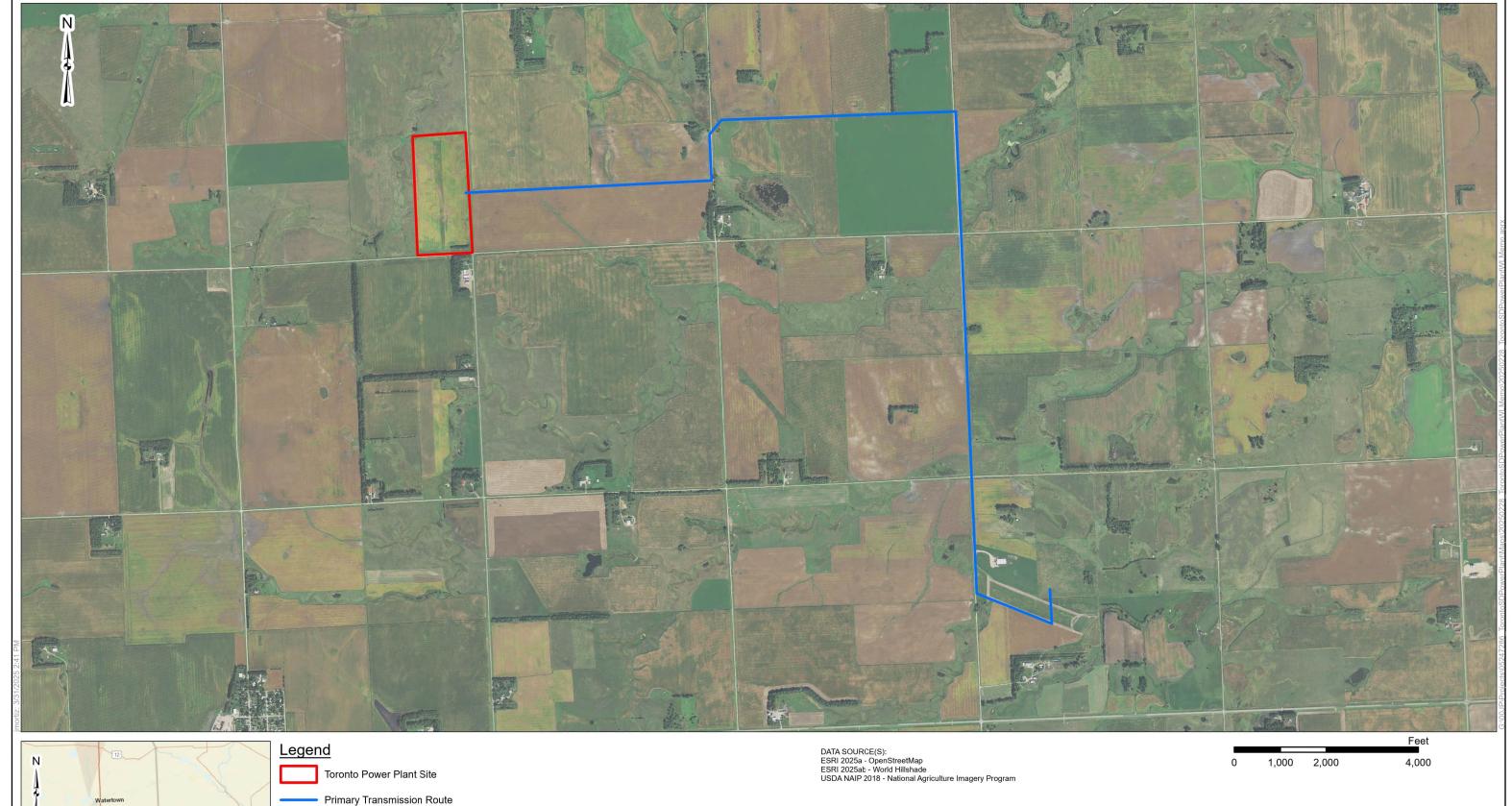
15080 A Cir

PH. (402) 330-2202

Reviewed By:

Omaha, NE

terracon.com





Project No.: 05247286 Date:

March 2025 Drawn By:

Reviewed By:



PH. (402) 330-2202

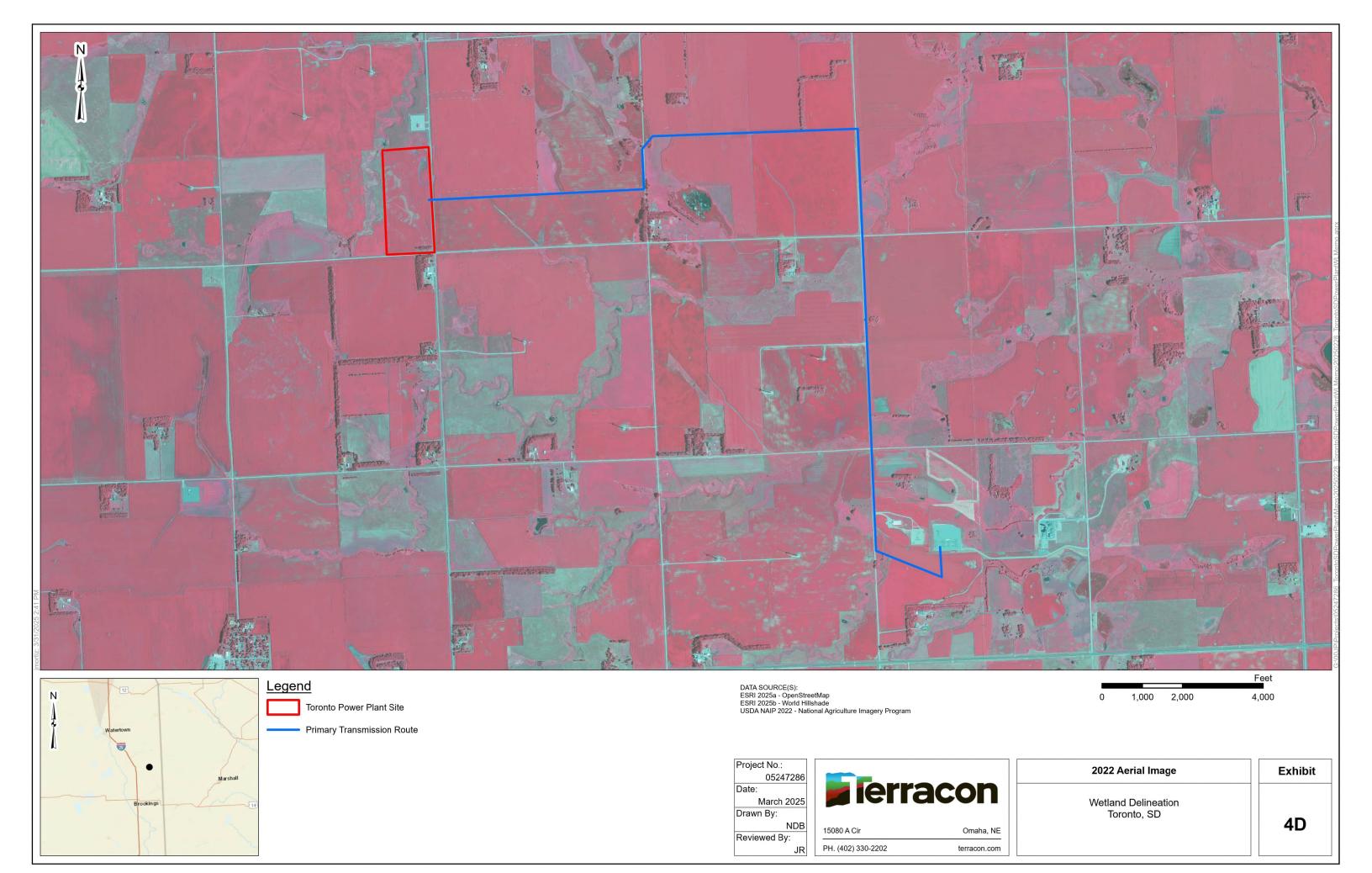
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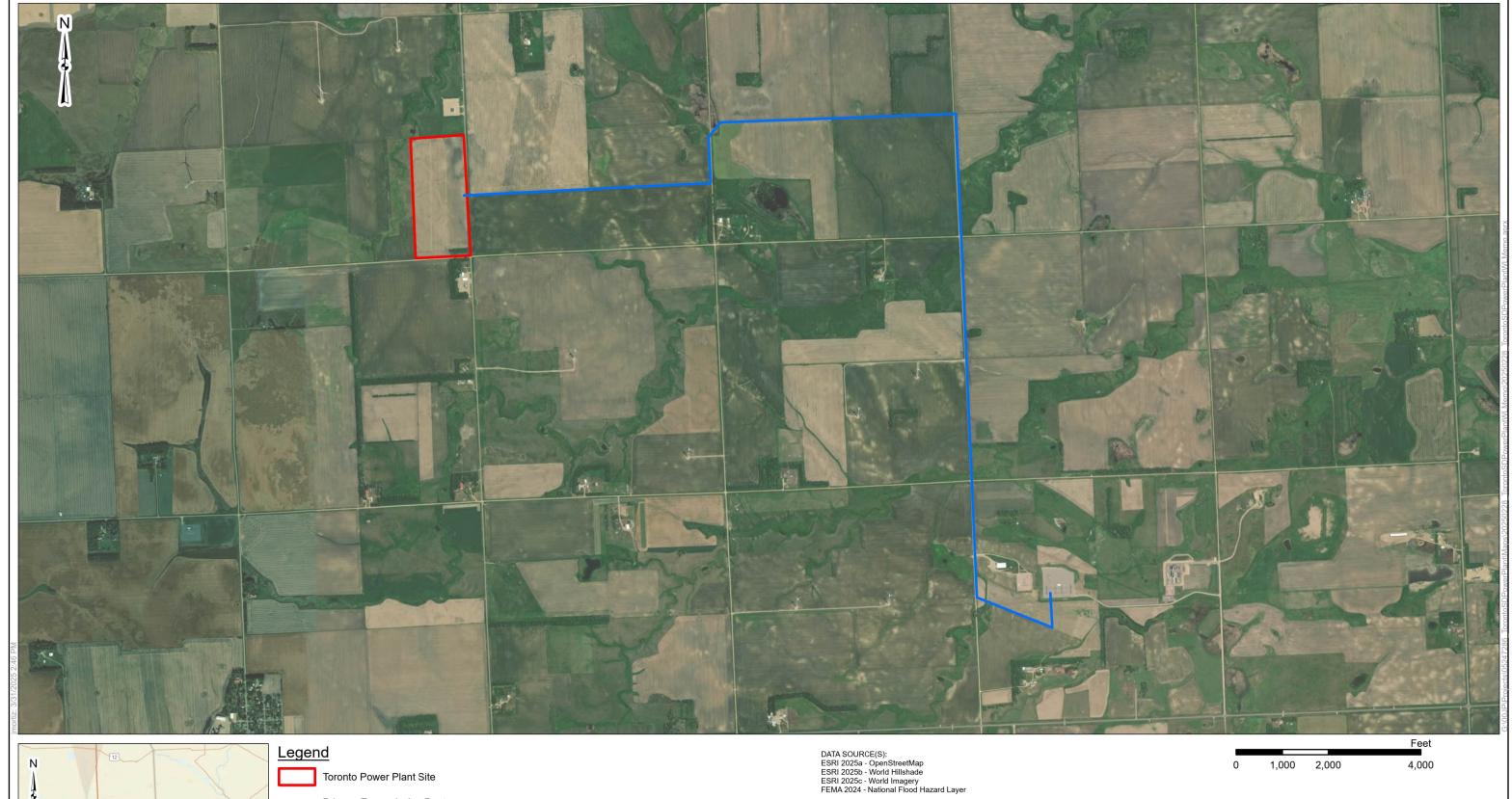
terracon.com

2018 Aerial Image

Wetland Delineation Toronto, SD **Exhibit**

4C







Primary Transmission Route

Flood Zone X

05247286 March 2025

NDB Reviewed By:

Project No.:

Drawn By:

Date:

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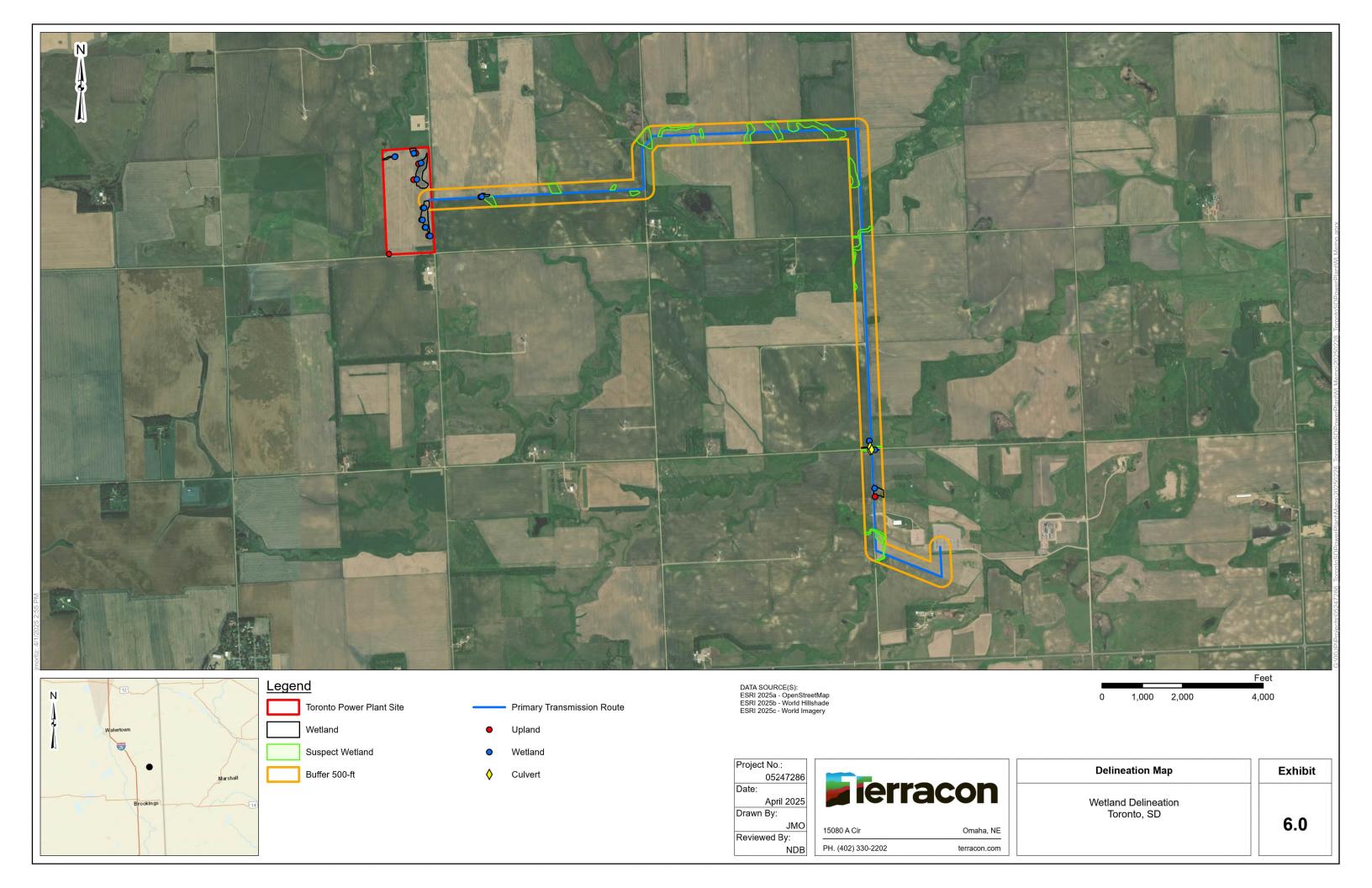
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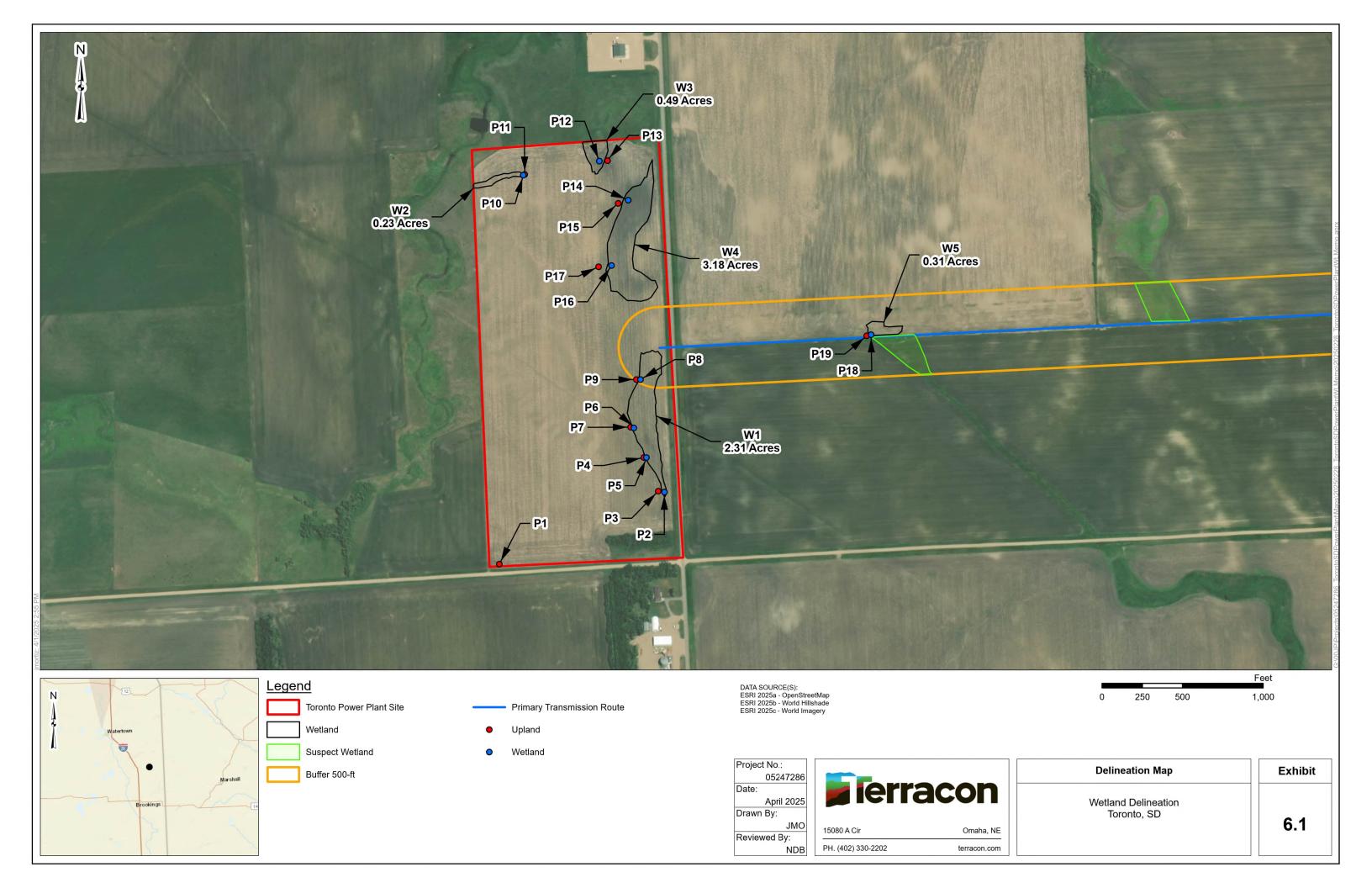
FEMA Map	
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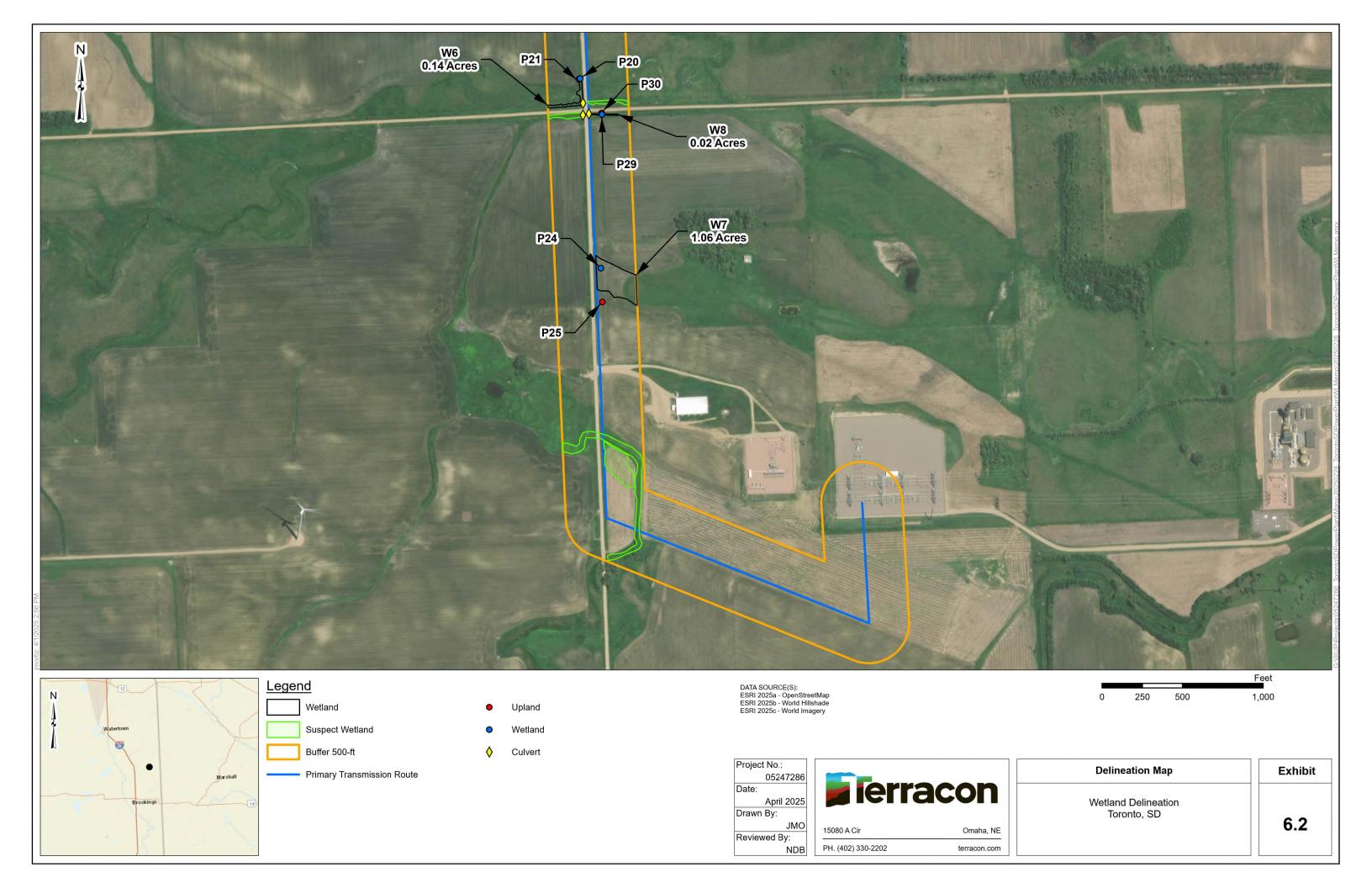
Wetland Delineation Toronto, SD

Exhibit

5







APPENDIX B GROUND PHOTOGRAPHS





Photo #1 View of upland P1 on the southwest corner of the power plant site.



Photo #2 View of wetland P2 on the east side of the power plant site.



Photo #3 View of upland P3 on the east side of the power plant site.



Photo #4 View of upland P4 on the east side of the power plant site.



Photo #5 View of wetland P5 on the east side of the power plant site.



Photo #6 View of wetland P6 on the east side of the power plant site.





Photo #7 View of upland P7 on the east side of the power plant site.



Photo #8 View of wetland P8 on the east side of the power plant site.



Photo #9 View of upland P9 on the east side of the power plant site.



Photo #10 View of wetland P10 on the northwest side of the power plant site.



Photo #11 View of upland P11 on the northwest side of the power plant site.



Photo #12 View of wetland P12 on the north side of the power plant site.





Photo #13 View of upland P15 on the east side of the power plant site.



Photo #14 View of wetland P16 on the east side of the power plant site.



Photo #15 View of upland P17 on the east side of the power plant site.



Photo #16 View of mature trees in southeast corner of power plant site looking south.



Photo #17 View of mature trees in southeast corner of power plant site looking east.



Photo #18 View of upland area off south side of W Saltillo Road looking east from culvert and pond area.





Photo #19 View of treed area along the east side of 480th Avenue looking east.



Photo #20 View of treed area along east side of 480th Avenue looking northeast.



Photo #21 View of possible wetland area on the east side of 480th Avenue looking northeast.



Photo #22 View of possible wetland area on west side of 480th Avenue looking northwest.



Photo #23 View of mature grove of trees on west side of 480th Avenue looking northwest.



Photo #24 View of mature grove of trees on west side of 480th Avenue looking northwest.





Photo #25 View of possible wetland area on east side of 480th Avenue looking northeast.



Photo #26 View of mature grove of trees west of 480th Avenue looking west.



Photo #27 View of USFWS parcel with possible wetland west of 480th Avenue looking northwest.



Photo #28 View of possible wetland area east of 481st Avenue looking east.



Photo #29 View of proposed transmission line west of 481st Avenue looking south.



Photo #30 View of prairie area on west side of 481st Avenue looking southeast.





Photo #31 View of possible wetland area east of 481st Avenue looking east.



Photo #32 View of possible wetland and culvert on west side of 481st Avenue looking south.



Photo #33 View of possible wetland area on east side of 481st Avenue looking southeast.



Photo #34 View of possible wetland area west of 481st Avenue looking west.



Photo #35 View of possible wetland area west of 481st Avenue looking south.



Photo #36 View of possible wetland area and pastureland west of 481st Avenue looking west.





Photo #37 View of mature trees on east side of 481st Avenue looking southeast.



Photo #38 View of mature trees on east side of 481st Avenue looking east.



Photo #39 View of possible wetland area on west side of 481st Avenue looking northwest.



Photo #40 View of possible wetland area on east side of 481st Avenue looking east.



Photo #41 View of mature trees and possible wetland area on north side of 193rd Street looking north.



Photo #42 View of mature trees and possible wetland area on north side of 193rd Street looking north.





Photo #43 View of mature trees near proposed transmission line north of 193rd Street looking north.





Photo #45 View of tree line east of proposed transmission line looking northeast from 193rd Street.



Photo #46 View of proposed transmission line looking north from 192nd Street.



Photo #47 View of trees just east of proposed transmission line looking northeast from 192nd Street.



Photo #48 View of possible wetland area north of 192nd Street looking north.





Photo #49 View of possible wetland area near transmission line just south of 192nd Street.



Photo #50 View of proposed transmission line looking south from 192nd Street.



Photo #51 View of wetland P18 looking north.



Photo #52 View of upland P19 looking north.



Photo #53 View of wetland P20 looking east.



Photo #54 View of upland P21 looking east.





Photo #55 View of culvert area west of 481st Avenue and north of 193rd Street.



Photo #56 View of culvert area east of 481st Avenue and north of 193rd Street.



Photo #57 View of culvert area east of 481st Avenue and north of 193rd Street.



Photo #58 View of culvert area west of 481st Avenue and south of 193rd Street.



Photo #59 View of wetland area west of 481st Avenue and south of 193rd Street.



Photo #60 View of culvert areas on intersection of 193rd Street and 481st Avenue looking northeast.





Photo #61 View of culvert area south of 193rd Street and east of 481st Avenue looking east.



Photo #62 View of wetland P22 looking east.



Photo #63 View of natural gas pipeline running through project area looking west towards 481st Avenue.



Photo #64 View of possible wetland area with pipeline running through center.



Photo #65 View of possible wetland area with pipeline running through center.



Photo #66 View of possible wetland area with pipeline running through center.





Photo #67 View of wetland P24 looking south.





Photo #69 View of wetland P26 looking west.



Photo #70 View of wetland P27 looking east.



Photo #71 View of wetland and pond area looking east.



Photo #72 View of wetland area looking west from pond area.





Photo #73 View of wetland P28 looking west towards pond area.



Photo #74 View of wetland P29 looking southwest.



Photo #75 View of upland P30 looking south towards drainage feature.



Photo #76 View of wetland P31 looking west with cut down cattails.



Photo #77 View of upland P32 looking west.



Photo #78 View of wetland P33 looking southwest.





Photo #79 View of upland P34 looking west.

APPENDIX C
DATA SHEETS

Applicant/Comer: Missour River Energy Services State: Sto Sampling Point: P1	Project/Site: Toronto, SD MRES Wetland	City/County: Toronto	/Deuel	Sampling Date: 9/3	30/2024
Landform (hillside, terracs, etc.): Ag Field Long: 96 565774 Datum: 1984	Applicant/Owner: Missouri River Energy Services		State: SD	Sampling Point:	P1
Slope (%):	Investigator(s): N. Oswald	Section, Township, Ra	inge: S7 T113N R48W		
Soli Map Unit Name: MK	Landform (hillside, terrace, etc.): Ag Field	Local relief (c	concave, convex, none):	Concave	
Soli Map Unit Name: MK	Slope (%): 2-4 Lat: 44.601934	Long: 96.626774		Datum: 1984	
Are Vegetation	· · · · · · · · · · · · · · · · · · ·		NWI classif	fication: NA	
Soli	Are climatic / hydrologic conditions on the site typical for this time	e of year? Yes X	No (If no, exp	olain in Remarks.)	_
Soli	Are Vegetation Y , Soil Y , or Hydrology Y significantl	y disturbed? Are "Normal C	Circumstances" present?	Yes X No	
Summark	Are Vegetation, Soil, or Hydrology naturally p	roblematic? (If needed, ex	plain any answers in Re	marks.)	
Hydric Soil Present? Yes			ocations, transects	, important featur	es, etc.
Hydric Soil Present? Yes	Lludrophytic Vagetation Present? Vas * No	Is the Sampled A	roa		
Vestatum (Plot size:				No X	
Point taken in low area of soy bean field.				<u> </u>	
VEGETATION – Use scientific names of plants. Tree Stratum (Plot size:	Remarks:	L			
Absolute % Cover Species? Status Status Status Status Species Status Status Status Status Species Status Status Species Status Status Species Status Status Species Status Status	Point taken in low area of soy bean field.				
Absolute % Cover Species? Status Status Status Status Species Status Status Status Status Species Status Status Species Status Status Species Status Status Species Status Status					
Tree Stratum					
1.			Dominance Test wor	rkehoot.	
2.					
Total Number of Dominant Species	2.				(A)
4. Across All Strata: (B) 5. =Total Cover Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B) Prevalence Index worksheet:	l o				
Percent of Dominant Species That Are OBL, FACW, or FAC:					(B)
Sapling/Shrub Stratum					
1. Prevalence Index worksheet: 2. Total % Cover of: Multiply by: 3. OBL species x 1 = 4. FACW species x 2 = 5. FAC species x 4 = Herb Stratum (Plot size: 3) 1. UPL species x 5 = Column Totals: (A) (B) Prevalence Index = B/A = Hydrophytic Vegetation Indicators: 3. 1 - Rapid Test for Hydrophytic Vegetation 6. 2 - Dominance Test is >50% 7. 3 - Prevalence Index is ≤3.0¹ 8. 3 - Prevalence Index = B/A = 10. 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation¹ (Explain) ¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Hydrophytic Vegetation Vegetation Present? Yes _* No		_=Total Cover	Are OBL, FACW, or F	AC:	(A/B)
2. Total % Cover of: Multiply by: 3. A. OBL species x 1 = 4. FACW species x 2 = 5. FAC species x 3 = FACU species x 4 = UPL species x 5 = Column Totals: (A) (B) Prevalence Index = B/A = Hydrophytic Vegetation Indicators: 5. 1 - Rapid Test for Hydrophytic Vegetation 6. 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0¹ 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) 9. Problematic Hydrophytic Vegetation¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Hydrophytic Vegetation Present? Yes * No	\		Brouglongs Index we		
3.					
4.	2				
FAC species				x 2 =	
Herb Stratum (Plot size:3)	5.		· · · · · · · · · · · · · · · · · · ·	x 3 =	_
Herb Stratum		=Total Cover			
1	Herb Stratum (Plot size: 3)	_		_	
3.				(A)	(B)
4.	2.		Prevalence Index =	= B/A =	
1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0¹ 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation¹ (Explain) ———————————————————————————————————	3				
6					
7					n
8					
9. data in Remarks or on a separate sheet) 10. Problematic Hydrophytic Vegetation¹ (Explain) Woody Vine Stratum (Plot size: 3) 1. Hydrophytic 2. Hydrophytic Vegetation Present? Yes * No Remarks: (Include photo numbers here or on a separate sheet.)					cupporting
10=Total Cover	lα				
Total Cover Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Hydrophytic Vegetation Present? Yes * No No					•
Woody Vine Stratum 1. 2	10	=Total Cover		, ,	
1	Woody Vine Stratum (Plot size: 3)	_			gy musi
2					
=Total Cover Present? Yes * No Remarks: (Include photo numbers here or on a separate sheet.)	2.				
	<u> </u>	=Total Cover	_	* No	
	, , ,)			

Depth Matrix Redox Features (inches) Solor (mols) % Type Loc Texture Remarks	Profile Desc	ription: (Describe to	the dept	h needed to doc	ument t	ne indica	tor or o	confirm the	absence of i	ndicators.)		
Content Cont	Depth											
16-18 10YR 2/2 80 Loamy/Clayey 10YR 4/4 20% 19-22 10YR 4/4 90 Loamy/Clayey 10YR 2/2 10% 22-40 10YR 4/4 100 Loamy/Clayey 10YR 2/2 10% 22-40 10YR 4/4 100 Loamy/Clayey 22-40 10YR 4/4 100 Loamy/Clayey 22-40 10YR 4/4 100 Loamy/Clayey 23-40 10YR 2/2 10% 24-40 10YR 4/4 100 Loamy/Clayey 25-40 10YR 2/2 10% 25-40 10YR 2/2 10% Loamy/Clayey 27-40 10YR 2/2 10% 27-40 10YR 2/2 10% Loamy/Clayey 27-40 10YR 2/2 10% 27-40 10YR 2/2 10% Loamy/Clayey 27-40 10YR 2/2 10% Loamy/Clayey 28-40 10YR 2/2 10% Loamy/Clayed Matrix (St) Loamy/Clayed M	(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Text	ure		Remarks	
18-22	0-16	10YR 2/2	100					Loamy/0	Clayey			
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. Location: PL=Pore Lining, M=Matrix, MS=Masked Sand Grains. Location: Loca	16-18	10YR 2/2	80					Loamy/0	Clayey	10	YR 4/4 20%	%
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. Hydric Soil Indicators: Hydric Soil Indicators: Histosol (A1) Sandy Gleyed Matrix (S4) Histos (A2) Sandy Redox (S5) Histor Eppedon (A2) Sandy Redox (S5) Hydrogen Sulfide (A4) Dark Surface (S7) Hydrogen Sulfide (A4) Dark Surface (S7) Very Shallow Dark Surface (F2) Stratified Layers (A5) Loamy Mucky Mineral (F1) Depleted Matrix (F3) Thick Dark Surface (A11) Depleted Matrix (F3) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Depleted Matrix (F3) Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Som Mucky Peat or Peat (S3) Redox Depressione (F8) Wetland Hydrology Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type: Depth (inches): Hydric Soil Present? Wetland Hydrology Indicators: Hydric Soil Present? Wetland Hydrology Indicators (minimum of one is required; check all that apply) Surface Water (A1) Water Afale (A2) Aquatic Found (B13) Surface (B4) Hydrogen Sulfide Odor (C1) Surface Water (A1) Alga Mat or Crust (B4) Hydrogen Sulfide Odor (C1) Surface Water Table (A2) Alga Mat or Crust (B4) Fesence of Reduced fron (C4) Surface Soil Gracks (B6) Drainage Patterns (B10) Surface Water Table (C2) Crayfish Burrows (C8) Surface North Surface (F2) Surface North Surface (F2) Surface North Table (C2) Crayfish Burrows (C8) Surface North Surface (F2) Surface North Surface (F2) Surface North Table (F2) Again Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) Thin Muck Surface (C7) Surface Water Present? Yes No Depth (Inches): Wetland Hydrology Present? Yes No Depth (Inches): Surface Water Present? Yes No Depth (Inches): Wetland Hydrology Present? Yes No Surface Water Present? Yes No Depth (Inches): Surface Water Present? Yes No Depth (Inches): Wetland Hydrology Present? Yes No Evernable Surface (F2) Wetland Hydrolo	18-22	10YR 4/4	90					Loamy/0	Clayey	10	YR 2/2 10%	%
Hydric Soil Indicators: Histosol (A1)	22-40	10YR 4/4	100					Loamy/0	Clayey			
Hydric Soil Indicators: Histosol (A1)												
Hydric Soil Indicators: Histosol (A1)												
Hydric Soil Indicators: Histosol (A1)												
Hydric Soil Indicators: Histosol (A1)	¹ Type: C=Co	oncentration, D=Deple	etion. RM=	Reduced Matrix. I	MS=Mas	ked Sand	d Grains		² Location: P	I =Pore I ini	ng. M=Matr	ix.
Histic Epipedon (A2) Sandy Redox (S5) Inn-Manganese Massas (F2) Black Histic Epipedon (A2) Sandy Redox (S5) Inn-Manganese Massas (F2) Black Histic (A3) Shripped Matrix (S6) Red Parent Material (F21) Hydrogen Sutfide (A4) Dark Surface (S7) Very Shallow Dark Surface (F22) Stratified Layers (A5) Loarny Mucky Mineral (F1) Other (Explain in Remarks) 2 cm Muck (A10) Loarny Gleyed Matrix (F2) Depleted Below Dark Surface (A11) Depleted Matrix (F2) Depleted Below Dark Surface (A11) Depleted Matrix (F2) Sandy Mucky Mineral (S1) Depleted Dark Surface (F6) Pandicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type: Depth (inches): Hydric soils not observed. HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is required: check all that apply) Surface Water (A1) Water-Stained Leaves (B9) Surface (B6) Hydric Soils not observed. Saturation (A3) Tue Aquatic Pants (B14) Dorsiage Pathe (C2) Saturation (A3) Tue Aquatic Pants (B14) Dorsiage Pathe (C2) Sediment Deposits (B3) Presence of Reduced Iron (C4) Saturation Visible on Aerial Imagery (C9) Sediment Deposits (B3) Presence of Reduced Iron (C4) Saturation Visible on Aerial Imagery (C9) Innudation Visible on Aerial Imagery (B7) Gauge or Well Data (C1) Sparsacy Vegetated Concave Surface (B8) Other (Explain in Remarks) Field Observations: Surface Water Present? Yes No Depth (inches): Water Table Present? Yes No Depth (inches):			7.1.011, 11.111	Todaood Matrix, 1	no-mao	nou cum	- Craine	<i>.</i>				_
Histic Epipedon (A2)	Histosol	(A1)		Sandy Gle	yed Mat	rix (S4)					-	
Hydrogen Sulfide (A4)	Histic Ep	ipedon (A2)			-	, ,						
Stratified Layers (A5)						6)			Red Par	ent Material	(F21)	
2 cm Muck (A10)	Hydroge	n Sulfide (A4)		Dark Surfa	ace (S7)				Very Sh	allow Dark S	Surface (F22	2)
Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Redox Dark Surface (F6) Sandy Mucky Mineral (S1) Sediment (S3) Redox Depressions (F8) Restrictive Layer (if observed): Type: Depth (inches): Hydric Soil Present? Wetland Hydrology must be present, unless disturbed or problematic. Hydric Soil Present? Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply) Surface Water (A1) Surface Soil Cracks (B6) Surface Soil Cracks (B6) Sutration (A3) True Aquatic Plants (B14) Surface Soil Cracks (B6) Surface Soil Cracks	Stratified	Layers (A5)		Loamy Mu	icky Min	eral (F1)			Other (E	xplain in Re	marks)	
Thick Dark Surface (A12)	2 cm Mu	ck (A10)		Loamy Gle	eyed Ma	trix (F2)						
Sandy Mucky Mineral (S1) Depleted Dark Surface (F7)	Depleted	Below Dark Surface	(A11)	Depleted I	Matrix (F	3)						
S cm Mucky Peat or Peat (S3)	Thick Da	rk Surface (A12)				` '			³ Indicators o	f hydrophytic	c vegetatior	n and
Restrictive Layer (if observed): Type: Depth (inches): Hydric Soil Present? Wetland Hydrology Indicators: Primary Indicators (minimum of one is required: check all that apply) Surface Water (A1) High Water Table (A2) Aquatic Fauna (B13) Aquatic Fauna (B13) Agail Mat or Crust (B4) Algal Mat or Crust (B4) Algal Mat or Crust (B4) Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) Sparsely Vegetated Concave Surface (B5) Depth (inches): Surface Water (A1) Algal Mat or Crust (B4) Algal Mat or Crust (B5) Algal Mat or Crust (B4) Algal Mat or C						, ,			wetland	hydrology m	nust be pres	sent,
Type: Depth (inches):	5 cm Mu	cky Peat or Peat (S3)		Redox De	pression	s (F8)			unless d	listurbed or p	problematic	
Depth (inches):	Restrictive I	_ayer (if observed):										
HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply) Surface Water (A1) High Water Table (A2) High Water Table (A2) Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Sediment Deposits (B2) Driange Patterns (B10) Sediment Deposits (B3) Presence of Reduced Iron (C4) Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) Other (Explain in Remarks) Field Observations: Surface Water Present? Yes No Depth (inches): Surface Soil Cracks (B6) Secondary Indicators (minimum of two required) Surface Soil Cracks (B6) Driange Patterns (B10) Drainage Patterns (B10) Surface Water Present? Yes No Depth (inches): Wetland Hydrology Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): Wetland Hydrology Present? Yes No Depth (inches): Saturation Present? Yes No Saturation P	-			_								
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Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply) Secondary Indicators (minimum of two required) Surface Water (A1) Water-Stained Leaves (B9) Surface Soil Cracks (B6) High Water Table (A2) Aquatic Fauna (B13) Drainage Patterns (B10) Saturation (A3) True Aquatic Plants (B14) Dry-Season Water Table (C2) Water Marks (B1) Hydrogen Sulfide Odor (C1) Crayfish Burrows (C8) Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9) Drift Deposits (B3) Presence of Reduced Iron (C4) Stunted or Stressed Plants (D1) Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) X Geomorphic Position (D2) Iron Deposits (B5) Thin Muck Surface (C7) FAC-Neutral Test (D5) Inundation Visible on Aerial Imagery (B7) Gauge or Well Data (D9) Sparsely Vegetated Concave Surface (B8) Other (Explain in Remarks) Field Observations: Water Table Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): Water Table Present? Yes No Depth (inches): Wetland Hydrology Present? Yes No X No X (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: </td <td>Hydric soils r</td> <td>not observed.</td> <td></td>	Hydric soils r	not observed.										
Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply) Secondary Indicators (minimum of two required) Surface Water (A1) Water-Stained Leaves (B9) Surface Soil Cracks (B6) High Water Table (A2) Aquatic Fauna (B13) Drainage Patterns (B10) Saturation (A3) True Aquatic Plants (B14) Dry-Season Water Table (C2) Water Marks (B1) Hydrogen Sulfide Odor (C1) Crayfish Burrows (C8) Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9) Drift Deposits (B3) Presence of Reduced Iron (C4) Stunted or Stressed Plants (D1) Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) X Geomorphic Position (D2) Iron Deposits (B5) Thin Muck Surface (C7) FAC-Neutral Test (D5) Inundation Visible on Aerial Imagery (B7) Gauge or Well Data (D9) Sparsely Vegetated Concave Surface (B8) Other (Explain in Remarks) Field Observations: Water Table Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): Water Table Present? Yes No Depth (inches): Wetland Hydrology Present? Yes No X No X (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: </td <td></td>												
Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply) Secondary Indicators (minimum of two required) Surface Water (A1) Water-Stained Leaves (B9) Surface Soil Cracks (B6) High Water Table (A2) Aquatic Fauna (B13) Drainage Patterns (B10) Saturation (A3) True Aquatic Plants (B14) Dry-Season Water Table (C2) Water Marks (B1) Hydrogen Sulfide Odor (C1) Crayfish Burrows (C8) Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9) Drift Deposits (B3) Presence of Reduced Iron (C4) Stunted or Stressed Plants (D1) Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) X Geomorphic Position (D2) Iron Deposits (B5) Thin Muck Surface (C7) FAC-Neutral Test (D5) Inundation Visible on Aerial Imagery (B7) Gauge or Well Data (D9) Sparsely Vegetated Concave Surface (B8) Other (Explain in Remarks) Field Observations: Water Table Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): Water Table Present? Yes No Depth (inches): Wetland Hydrology Present? Yes No X No X (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: </td <td></td>												
Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply) Secondary Indicators (minimum of two required) Surface Water (A1) Water-Stained Leaves (B9) Surface Soil Cracks (B6) High Water Table (A2) Aquatic Fauna (B13) Drainage Patterns (B10) Saturation (A3) True Aquatic Plants (B14) Dry-Season Water Table (C2) Water Marks (B1) Hydrogen Sulfide Odor (C1) Crayfish Burrows (C8) Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9) Drift Deposits (B3) Presence of Reduced Iron (C4) Stunted or Stressed Plants (D1) Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) X Geomorphic Position (D2) Iron Deposits (B5) Thin Muck Surface (C7) FAC-Neutral Test (D5) Inundation Visible on Aerial Imagery (B7) Gauge or Well Data (D9) Sparsely Vegetated Concave Surface (B8) Other (Explain in Remarks) Field Observations: Water Table Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): Water Table Present? Yes No Depth (inches): Wetland Hydrology Present? Yes No X No X (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: </td <td>HYDROLO</td> <td>GY</td> <td></td>	HYDROLO	GY										
Primary Indicators (minimum of one is required; check all that apply) Surface Water (A1)	1											
Surface Water (A1)	_		a is requir	ad: chack all that	annly)				Secondary I	ndicators (m	inimum of t	wo required)
High Water Table (A2) Saturation (A3) True Aquatic Fauna (B13) Drainage Patterns (B10) Dry-Season Water Table (C2) Dry-Season Water Table (C2) Water Marks (B1) Hydrogen Sulfide Odor (C1) Sediment Deposits (B2) Drift Deposits (B3) Presence of Reduced Iron (C4) Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) Other (Explain in Remarks) Field Observations: Surface Water Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): Semarks: Remarks: Remarks:			ie is requir			WAS (RQ)			-	•		wo required)
Saturation (A3)		, ,				` ,					. ,	
Water Marks (B1)					•	,						
Sediment Deposits (B2) Drift Deposits (B3) Presence of Reduced Iron (C4) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) Other (Explain in Remarks) Field Observations: Surface Water Present? Yes No Depth (inches): Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) X Geomorphic Position (D2) FAC-Neutral Test (D5) FAC-Neutral Test (D5) Fac-Neutral Test (D5) Field Observations: Surface Water Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): Wetland Hydrology Present? Yes No X (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		` ')				, ,	
Drift Deposits (B3)						, ,		oots (C3)				gery (C9)
Iron Deposits (B5) Thin Muck Surface (C7) FAC-Neutral Test (D5) Inundation Visible on Aerial Imagery (B7) Gauge or Well Data (D9) Sparsely Vegetated Concave Surface (B8) Other (Explain in Remarks) Field Observations: Surface Water Present? Yes No Depth (inches): Water Table Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): Wetland Hydrology Present? Yes No X (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	Drift Dep	osits (B3)		Presence	of Redu	ced Iron ((C4)		Stunted	or Stressed	Plants (D1))
Inundation Visible on Aerial Imagery (B7)	Algal Ma	t or Crust (B4)		Recent Iro	n Reduc	tion in Ti	lled Soil	ls (C6)	X Geomor	phic Position	n (D2)	
Sparsely Vegetated Concave Surface (B8) Other (Explain in Remarks) Field Observations: Surface Water Present? Yes No Depth (inches): Water Table Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:	Iron Dep	osits (B5)		Thin Muck	Surface	(C7)			FAC-Ne	utral Test (D	05)	
Field Observations: Surface Water Present? Yes No Depth (inches): Water Table Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:	Inundatio	on Visible on Aerial Im	agery (B7)	Gauge or	Well Dat	a (D9)						
Surface Water Present? Yes No Depth (inches): Water Table Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): Wetland Hydrology Present? Yes No X (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:	Sparsely	Vegetated Concave	Surface (B	8)Other (Exp	olain in F	temarks)						
Water Table Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:	Field Obser	vations:										
Saturation Present? Yes No Depth (inches): Wetland Hydrology Present? Yes No X (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:	Surface Wat	er Present? Yes		No		_						
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:						_						
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:				No	Depth (i	nches): _		Wetland	l Hydrology l	Present?	Yes	No X
Remarks:				aitanina walla a si			- !	-ti\	·!labla.			
	Describe Ke	corded Data (Stream (yauge, moi	mornig well, aeria	ai pnotos	, previou	ь шѕрес	Juoris), it ava	anabie:			
	Remarks:											
		ary indicator observed	. Doesn't n	neet wetland hydi	ology.							

Project/Site: Toronto, SD MRES Wetland	City/County: Toronto/Deuel Sampling Date: 9/30/2024
Applicant/Owner: Missouri River Energy Services	State: SD Sampling Point: P2
Investigator(s): N. Oswald	Section, Township, Range: S7 T113N R48W
Landform (hillside, terrace, etc.): Ag Field	Local relief (concave, convex, none): Concave
Slope (%): 4-6 Lat: 44.603041	Long: 96.622781 Datum: 1984
Soil Map Unit Name: Hm	NWI classification: PEMA f
Are climatic / hydrologic conditions on the site typical for this time	of year? Yes X No (If no, explain in Remarks.)
Are Vegetation Y , Soil Y , or Hydrology Y significantly	disturbed? Are "Normal Circumstances" present? Yes X No
Are Vegetation, Soil, or Hydrologynaturally pro	blematic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map show	ng sampling point locations, transects, important features, etc
Hydrophytic Vegetation Present? Yes * No	Is the Sampled Area
Hydric Soil Present? Yes X No	within a Wetland? Yes X No
Wetland Hydrology Present? Yes X No No	
Remarks:	
Point taken in low area of soy bean field.	
VECETATION Lies esignific names of plants	
VEGETATION – Use scientific names of plants. Absolute	Dominant Indicator
Tree Stratum (Plot size: 30) % Cover	Species? Status Dominance Test worksheet:
1	
2	Are OBL, FACW, or FAC: (A)
3	Total Number of Dominant Species
4	
5	Percent of Dominant Species That are OBL, FACW, or FAC: (A/B)
Sapling/Shrub Stratum (Plot size: 10)	
1	Prevalence Index worksheet:
2.	
3	OBL species x 1 =
4	FACW species x 2 =
	FAC species x 3 =
Herb Stratum (Plot size: 3)	=Total Cover
1.	Column Totals: (A) (B)
2.	Prevalence Index = B/A =
3.	
4.	Hydrophytic Vegetation Indicators:
5.	1 - Rapid Test for Hydrophytic Vegetation
6	2 - Dominance Test is >50%
7	
8	4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
9	Problematic Hydrophytic Vegetation ¹ (Explain)
10	
Woody Vine Stratum (Plot size: 3)	=Total Cover Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1	·
2.	Hydrophytic Vegetation
	=Total Cover

Profile Desc	ription: (Describe t	o the dep	th needed to docu	ument tl	ne indica	ator or o	confirm the abser	nce of indicators.)	
Depth	Matrix		Redox	x Featur					
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks	
0-6	10YR 2/2	95	5YR 4/6	5	С	PL/M	Loamy/Clayey	Prominent redox concentrations	
6-15	10YR 2/2	90					Loamy/Clayey	10YR 4/310%	
15-20	10YR 4/3	80	5YR 4/6	5	С	PL/M	Loamy/Clayey	10YR 2/2 15%	
20-24	10YR 4/4	90	5YR 4/6	10	С	PL/M	Loamy/Clayey	Prominent redox concentrations	
24-30	10YR 4/4	80	5YR 4/6	5	С	PL/M	Loamy/Clayey	5/10Y 15%	
30-40	10YR 4/4	70	5YR 4/6	15	С	PL/M	Loamy/Clayey	5/10Y 15%	
¹ Type: C=Co	oncentration, D=Deple	etion, RM=	=Reduced Matrix, M	/IS=Mas	ked San	d Grains	s. ² Loca	tion: PL=Pore Lining, M=Matrix.	
Hydric Soil I	ndicators:						Indic	ators for Problematic Hydric Soils ³ :	
Histosol	(A1)		Sandy Gle	yed Mat	rix (S4)		c	Coast Prairie Redox (A16)	
Histic Ep	ipedon (A2)		Sandy Red	dox (S5)			Ir	on-Manganese Masses (F12)	
Black His	stic (A3)		Stripped M	latrix (S6	5)			Red Parent Material (F21)	
Hydroge	n Sulfide (A4)		Dark Surfa	ce (S7)			V	ery Shallow Dark Surface (F22)	
Stratified	Layers (A5)		Loamy Mu	cky Mine	eral (F1)		c	Other (Explain in Remarks)	
2 cm Mu	ck (A10)		Loamy Gle	yed Mat	rix (F2)				
Depleted	Below Dark Surface	(A11)	Depleted N						
	rk Surface (A12)		X Redox Dar					ators of hydrophytic vegetation and	
	ucky Mineral (S1)		Depleted D)		vetland hydrology must be present,	
5 cm Mu	cky Peat or Peat (S3))	Redox Dep	pression	s (F8)		u	nless disturbed or problematic.	
Restrictive I	_ayer (if observed):								
Type:			<u></u>						
Depth (in	iches):						Hydric Soil Pres	sent? Yes X No	
Remarks:									
Hydric soils of	observed.								
HYDROLO	GY								
_	drology Indicators: ators (minimum of or	na is raqui	red: check all that :	annly)			Seco	ndary Indicators (minimum of two required)	
	Water (A1)	ic is requi	Water-Stai		ves (B9)			Surface Soil Cracks (B6)	
	ter Table (A2)		Aquatic Fa					Prainage Patterns (B10)	
Saturatio	` '		True Aqua					Ory-Season Water Table (C2)	
Water Ma	` '		Hydrogen		` ')		Crayfish Burrows (C8)	
Sedimen	t Deposits (B2)		Oxidized R	hizosph	eres on l	Living R	oots (C3)	Saturation Visible on Aerial Imagery (C9)	
Drift Dep	osits (B3)		Presence of	of Reduc	ed Iron	(C4)	S	Stunted or Stressed Plants (D1)	
Algal Ma	t or Crust (B4)		Recent Iron	n Reduc	tion in Ti	lled Soil	Is (C6) X G	Geomorphic Position (D2)	
Iron Dep	osits (B5)		Thin Muck	Surface	(C7)		<u> </u>	AC-Neutral Test (D5)	
Inundation	on Visible on Aerial Im	nagery (B	7) Gauge or V	Well Dat	a (D9)				
Sparsely	Vegetated Concave	Surface (E	38) Other (Exp	lain in R	emarks)				
Field Observ	vations:								
Surface Water	er Present? Yes	s	No X	Depth (i	nches):				
Water Table	Water Table Present? Yes No X Depth (inches):								
Saturation Pr	resent? Yes	·	No X	Depth (i	nches): _		Wetland Hydr	ology Present? Yes X No	
(includes cap									
Describe Red	corded Data (stream	gauge, mo	onitoring well, aeria	l photos	, previou	s inspec	ctions), if available:		
D									
Remarks: Wetland hyd	rology observed.								
vvodana nyu	ology obscived.								

Project/Site: Toronto, SD MRES Wetland	City/County: Toronto/D)euel	Sampling Date: <u>9/30/2024</u>				
Applicant/Owner: Missouri River Energy Services		State: SD	Sampling Point: P3				
Investigator(s): N. Oswald	Section, Township, Range: S7 T113N R48W						
Landform (hillside, terrace, etc.): Ag field	Local relief (cor	ncave, convex, none): <u>C</u>	Concave				
Slope (%):5-7 Lat: _44.603060	Long: 96.622927		Datum: 1984				
Soil Map Unit Name: Z171B		NWI classific	cation: NA				
Are climatic / hydrologic conditions on the site typical for this time of year	ear? Yes X	No (If no, expla	ain in Remarks.)				
Are Vegetation Y , Soil Y , or Hydrology Y significantly dist	turbed? Are "Normal Cir	cumstances" present?	Yes No				
Are Vegetation , Soil , or Hydrology naturally probler		ain any answers in Rem					
SUMMARY OF FINDINGS – Attach site map showing	sampling point loc	ations, transects,	important features, etc.				
Hydrophytic Vegetation Present? Yes * No Hydric Soil Present? Yes No X Wetland Hydrology Present? Yes No X	Is the Sampled Area within a Wetland?	a Yes	No X				
Remarks: Upland point for P2.							
VEGETATION – Use scientific names of plants.	Service of Indicator						
	Dominant Indicator Species? Status	Dominance Test work	sheet:				
1		Number of Dominant S Are OBL, FACW, or FA	•				
3		Total Number of Domin Across All Strata:	· · · · · · · · · · · · · · · · · · ·				
5.		Percent of Dominant Sp	· · · · · · · · · · · · · · · · · · ·				
	otal Cover	Are OBL, FACW, or FA	•				
1		Prevalence Index wor	ksheet:				
2.		Total % Cover of:	Multiply by:				
3.		OBL species	x 1 =				
4		FACW species	x 2 =				
5		FAC species	x 3 =				
Herb Stratum (Plot size: 3)	otal Cover	FACU speciesUPL species	x 4 = x 5 =				
		Column Totals:	(A) (B)				
2.			B/A =				
4.		Hydrophytic Vegetation	on Indicators:				
5.		1 - Rapid Test for H	Hydrophytic Vegetation				
6		2 - Dominance Tes					
7		3 - Prevalence Inde					
8			Adaptations ¹ (Provide supporting s or on a separate sheet)				
10.			phytic Vegetation ¹ (Explain)				
	otal Cover		il and wetland hydrology must				
1		Hydrophytic	31000 0. p. 0				
2	otal Cover	Vegetation Present? Yes	* No				
Remarks: (Include photo numbers here or on a separate sheet.)							
Vegetation not considered due to farming practices.							

		to the dep				tor or o	confirm the absence of	of indicators.)	
Depth	Matrix			x Featur		. 2			
(inches)	Color (moist)	<u>%</u>	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks	S
0-5	10YR 2/2	100					Loamy/Clayey		
5-12	10YR 2/2	60					Loamy/Clayey	10YR 4/3 4	10%
12-30	10YR 4/3	90					Loamy/Clayey	10YR 2/2 1	0%
¹Type: C=C	oncentration, D=Dep	letion RM:	=Reduced Matrix N	 IS=Mas	ked Sand	Grains	2l ocation:	PL=Pore Lining, M=Ma	atrix
Hydric Soil			Troudoud mann, n					s for Problematic Hydr	
Histosol			Sandy Gle	yed Mat	rix (S4)			t Prairie Redox (A16)	
	pipedon (A2)		Sandy Red		` ,			Manganese Masses (F12	2)
Black Hi			Stripped M		5)			Parent Material (F21)	
Hydroge	n Sulfide (A4)		Dark Surfa	ce (S7)			Very :	Shallow Dark Surface (F	⁻ 22)
Stratified	Layers (A5)		Loamy Mu	cky Min	eral (F1)		Other	(Explain in Remarks)	
2 cm Mu	ck (A10)		Loamy Gle	yed Ma	trix (F2)				
Depleted	Below Dark Surface	e (A11)	Depleted N	/latrix (F	3)				
Thick Da	ark Surface (A12)		Redox Dar	k Surfac	e (F6)		³ Indicators	s of hydrophytic vegetat	ion and
	lucky Mineral (S1)		Depleted [nd hydrology must be p	
5 cm Mu	cky Peat or Peat (S3	3)	Redox Dep	ression	s (F8)		unles	s disturbed or problema	tic.
Restrictive	Layer (if observed):								
Type:									
Depth (ir	nches):						Hydric Soil Present	? Yes	NoX
HYDROLC	GY								
Wetland Hy	drology Indicators:								
	cators (minimum of o	ne is requ	ired; check all that	apply)			<u>Secondar</u>	y Indicators (minimum o	of two required)
	Water (A1)		Water-Sta		` '			ce Soil Cracks (B6)	
l —	ter Table (A2)		Aquatic Fa	,	,			age Patterns (B10)	
Saturatio	` '		True Aqua		` '			Season Water Table (C2)
	arks (B1)		Hydrogen Oxidized R		` '		 ′	ish Burrows (C8)	magan, (CO)
	nt Deposits (B2) posits (B3)		Presence			•	· · · —	ation Visible on Aerial Ir ed or Stressed Plants ([
	t or Crust (B4)		Recent Iro		,	,		norphic Position (D2)	51)
	osits (B5)		Thin Muck				· ·	Neutral Test (D5)	
	on Visible on Aerial I	magery (B			` '				
	Vegetated Concave								
Field Obser	vations:		<u> </u>						
Surface Wat		s	No X	Depth (i	nches):				
Water Table	Present? Ye	es		Depth (i	nches):				
Saturation P	resent? Ye	s		Depth (i	nches):		Wetland Hydrolog	y Present? Yes	No X
(includes cap	oillary fringe)				_				
Describe Re	corded Data (stream	gauge, m	onitoring well, aeria	l photos	, previou	s inspec	ctions), if available:		
_									
Remarks:	, observed								
No hydrology	y observeu.								

Project/Site: Toronto, SD MRES Wetland	City/County: Toronto/Deuel Sampling Date: 9/30						
Applicant/Owner: Missouri River Energy Services	State: SD Sampling Point: F						
Investigator(s): N. Oswald	Section, Township, Range: S7 T113N R48W						
Landform (hillside, terrace, etc.): Ag field	Local relief (co	ncave, convex, none): C	Concave				
Slope (%): 2-4 Lat: 44.603642	Long: 96.623236		Datum: 1984				
Soil Map Unit Name: AvD	<u> </u>	NWI classific	cation: NA				
Are climatic / hydrologic conditions on the site typical for this time of y	rear? Yes X	No (If no, expla	ain in Remarks.)				
Are Vegetation Y , Soil Y , or Hydrology Y significantly dist	turbed? Are "Normal Ci		Yes X No				
Are Vegetation , Soil , or Hydrology naturally problet		lain any answers in Rem	narks.)				
SUMMARY OF FINDINGS – Attach site map showing		-					
Hydrophytic Vegetation Present? Yes * No Hydric Soil Present? Yes No X Wetland Hydrology Present? Yes No X	Is the Sampled Are within a Wetland?	ea Yes	No X				
Remarks: Upland point for P5							
VEGETATION – Use scientific names of plants.	S. See and Markey I						
	Dominant Indicator Species? Status	Dominance Test work	rsheet:				
1		Number of Dominant S Are OBL, FACW, or FA	pecies That				
3. 4.		Total Number of Domin					
5	otal Cover	Percent of Dominant Sp Are OBL, FACW, or FA	pecies That				
Sapling/Shrub Stratum (Plot size: 10)							
1	[Prevalence Index wor					
2		Total % Cover of:					
3		OBL species	x 1 =				
4		FAC species	x 2 =				
5	otal Cover	FAC species FACU species	x 3 = x 4 =				
Herb Stratum (Plot size: 3)	oldi Covei	UPL species	x 4 = x 5 =				
1		Column Totals:	(A) (B)				
2		Prevalence Index =	B/A =				
4.		Hydrophytic Vegetation	on Indicators:				
5.		1 - Rapid Test for H	Hydrophytic Vegetation				
6		2 - Dominance Tes					
7		3 - Prevalence Inde					
8			Adaptations ¹ (Provide supporting s or on a separate sheet)				
9	—— — I		phytic Vegetation ¹ (Explain)				
10	otal Cover						
Woody Vine Stratum (Plot size: 3)	La cover	be present, unless distu	il and wetland hydrology must urbed or problematic.				
1		Hydrophytic Vegetation					
	otal Cover	Present? Yes _	<u>* No</u>				
Remarks: (Include photo numbers here or on a separate sheet.) Vegetation not considered due to farming practices.							

	ription: (Describe	to the dep				tor or o	confirm the absence of	of indicators.)	
Depth	Matrix			x Featur		. 2			
(inches)	Color (moist)	<u>%</u>	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks	S
0-20	10YR 2/1	100					Loamy/Clayey		
20-24	10YR 2/1	70					Loamy/Clayey	10YR 3/4 3	30%
24-30	10YR 3/4	60					Loamy/Clayey	10YR 2/1 4	10%
30-40	10YR 3/4	80					Loamy/Clayey	10YR 2/1 2	20%
¹ Type: C=Co	oncentration, D=Dep	letion. RM	=Reduced Matrix. N	/S=Mas	ked Sand	Grains	s. ² Location:	PL=Pore Lining, M=Ma	atrix.
Hydric Soil		,	,					s for Problematic Hydr	
Histosol			Sandy Gle	yed Mat	rix (S4)			t Prairie Redox (A16)	
	ipedon (A2)		Sandy Red	lox (S5)	` ,			Manganese Masses (F12	2)
Black His	stic (A3)		Stripped M		6)		Red F	Parent Material (F21)	
Hydroge	n Sulfide (A4)		Dark Surfa	ce (S7)			Very	Shallow Dark Surface (F	⁻ 22)
Stratified	Layers (A5)		Loamy Mu	cky Min	eral (F1)		Other	(Explain in Remarks)	
2 cm Mu	ck (A10)		Loamy Gle	yed Ma	trix (F2)				
Depleted	Below Dark Surface	e (A11)	Depleted N	/latrix (F	3)				
Thick Da	rk Surface (A12)		Redox Dar	k Surfac	e (F6)		³ Indicators	s of hydrophytic vegetat	ion and
Sandy M	ucky Mineral (S1)		Depleted D				wetlar	nd hydrology must be pi	resent,
5 cm Mu	cky Peat or Peat (S3	3)	Redox Dep	ression	s (F8)		unles	s disturbed or problema	tic.
Restrictive I	ayer (if observed):								
Type:									
Depth (ir	iches):						Hydric Soil Present	? Yes	No X
Tryulle 3013 1	not observed.								
HYDROLO	GY								
Wetland Hyd	drology Indicators:								
	cators (minimum of c	ne is requ	ired; check all that	apply)			Secondar	y Indicators (minimum c	of two required)
Surface	Water (A1)		Water-Stai	ned Lea	ives (B9)		Surfa	ce Soil Cracks (B6)	
High Wa	ter Table (A2)		Aquatic Fa	una (B1	3)		Draina	age Patterns (B10)	
Saturatio	n (A3)		True Aqua	tic Plant	s (B14)		Dry-S	Season Water Table (C2)
	arks (B1)		Hydrogen		` '		´	ish Burrows (C8)	
	t Deposits (B2)		Oxidized R			•	· · · —	ation Visible on Aerial Ir	
	osits (B3)		Presence of		,	,		ed or Stressed Plants (E	01)
	t or Crust (B4)		Recent Iro			lled Soil	· ·	norphic Position (D2)	
	osits (B5) on Visible on Aerial I	maganı (P	Thin Muck		` '		FAC-1	Neutral Test (D5)	
	Vegetated Concave								
		Sunace (Other (Exp	nann in i	erriarks)		T		
Field Obsert Surface Water			No. Y	Donth (i	nches):				
Water Table		es			nches):				
Saturation P					nches):		Wetland Hydrolog	y Present? Yes	No X
(includes cap			<u> </u>	Dopuii (i			Tronana riyarolog	<u></u>	<u></u>
	corded Data (stream	gauge, m	onitoring well, aeria	l photos	, previous	s inspec	ctions), if available:		
Remarks:									
Wetland hyd	rology not observed.								

Project/Site: Toronto, SD MRES Wetland	City/County: Toronto/	/Deuel	Sampling Date: 9/3	30/2024
Applicant/Owner: Missouri River Energy Services		State: SD	Sampling Point:	P5
Investigator(s): N. Oswald	Section, Township, Rar	nge: S7 T113N R48W		
Landform (hillside, terrace, etc.): Ag field	Local relief (co	concave, convex, none):	Concave	
Slope (%): 1-3 Lat: 44.603640	Long: <u>96.623175</u>	[Datum: 1984	
Soil Map Unit Name: Hm		NWI classif	ication: PEMA f	
Are climatic / hydrologic conditions on the site typical for this time of	of year? Yes X	No (If no, exp	lain in Remarks.)	
Are Vegetation Y , Soil Y , or Hydrology Y significantly	disturbed? Are "Normal C	Circumstances" present?	Yes X No	
Are Vegetation , Soil , or Hydrology naturally prol		plain any answers in Rer	marks.)	
SUMMARY OF FINDINGS – Attach site map showing	ng sampling point lo	cations, transects,	, important featur	es, etc.
Hydrophytic Vegetation Present? Yes * No Hydric Soil Present? Yes X No Wetland Hydrology Present? Yes X No	Is the Sampled Are within a Wetland?	rea		
Remarks: Point taken in low area of soy bean field.				
VEGETATION – Use scientific names of plants. Absolute	Dominant Indicator			
Tree Stratum (Plot size: 30) % Cover		Dominance Test wor	ksheet:	ļ
1		Number of Dominant S Are OBL, FACW, or FA		(A)
3		Total Number of Domi Across All Strata:		(B)
5.		Percent of Dominant S	Species That	` ′
Sapling/Shrub Stratum (Plot size: 10)	=Total Cover	Are OBL, FACW, or FA	•	(A/B)
1		Prevalence Index wo	rksheet:	
2.		Total % Cover of:		
3.		OBL species	x 1 =	<u> </u>
4		FACW species	x 2 =	_
5		FAC species	x 3 =	
	=Total Cover	FACU species		_
Herb Stratum (Plot size: 3		UPL species Column Totals:	x 5 =	(B)
1		Prevalence Index =		(D)
3				_
4.		Hydrophytic Vegetati	ion Indicators:	
5.		1 - Rapid Test for	Hydrophytic Vegetation	ı
6.		2 - Dominance Te		
7		3 - Prevalence Ind		
8			Adaptations ¹ (Provide s	
9			s or on a separate shee	•
10			ophytic Vegetation ¹ (Exp	. ,
Woody Vine Stratum (Plot size: 3)	=Total Cover	¹ Indicators of hydric so be present, unless dist	oil and wetland hydrolog turbed or problematic.	jy must
1		Hydrophytic		
2	=Total Cover	Vegetation Present? Yes	* No	
	=10tai Covei	Present? Yes_	No	
Remarks: (Include photo numbers here or on a separate sheet.) Vegetation not considered due to farming practices.				

Profile Desc	ription: (Describe to	the depti	h needed to doc	ument tl	ne indica	ator or o	confirm the	absence c	of indicators.	.)	
Depth	Matrix		Redo	x Featur	es						
(inches)	Color (moist)	Color (moist)	%	Type ¹	Loc ²	Text	ture		Remarks		
0-4	10YR 2/2	95	5YR 4/6	5	С	PL/M			Prominer	nt redox conce	entrations
4-20	10YR 2/1	95	5YR 4/6	5	С	PL/M					
20-25	10YR 2/2	90							1	10YR 3/4 10%	,
25-32	10YR 2/2	85	5YR 4/6	5	С	PL/M			1	10YR 3/4 10%	,
32-40	10YR 3/2	80	5YR 4/6	5	С	PL/M				I0YR 2/1 15%	,
1Type: C-C	oncentration, D=Deple	tion PM-	Poducod Matrix	MS_Mas	kod Sand			² Location:	DI -Poro I ir	ning, M=Matri	<u> </u>
Hydric Soil	•	tion, Kivi=i	Reduced Matrix,	IVIO=IVIAS	keu Sanc	Giailis	o.			natic Hydric	
Histosol			Sandy Gle	eved Mat	rix (S4)				Prairie Redo	-	OO113 .
	ipedon (A2)		Sandy Re	-	(0 1)				langanese M		
	Black Histic (A3) Stripped Matrix (S6)								Parent Materia	, ,	
	n Sulfide (A4)		Dark Surf	•	-,					Surface (F22	<u>'</u>)
	Layers (A5)		Loamy Mu		eral (F1)				(Explain in R		,
2 cm Mu			Loamy Gl	-					` '	,	
	Below Dark Surface	(A11)	Depleted								
Thick Da	rk Surface (A12)		X Redox Da	rk Surfac	e (F6)			³ Indicators	s of hydrophy	tic vegetation	and
Sandy M	ucky Mineral (S1)		Depleted	Dark Sur	face (F7)			wetlar	nd hydrology	must be pres	ent,
5 cm Mu	cky Peat or Peat (S3)		Redox De	pression	s (F8)			unless	s disturbed or	r problematic.	
Restrictive I	_ayer (if observed):										
Type:			_								
Depth (in	nches):		_				Hydric Sc	oil Present	?	Yes X	No
Remarks:											
Hydric soils of	observed.										
LIVERALA	· CV										
HYDROLO											
=	drology Indicators:										
-	cators (minimum of on	e is require			(DO)			-		minimum of to	wo required)
	Water (A1)		Water-Sta		` '				ce Soil Crack	- (- /	
Saturatio	ter Table (A2)		Aquatic Factorial Aquatic Fact	,	,				age Patterns eason Water		
	arks (B1)		Hydrogen			١			sh Burrows (. ,	
	t Deposits (B2)		Oxidized I				oots (C3)			on Aerial Ima	gery (C9)
	osits (B3)		Presence			_	(,			d Plants (D1)	
	t or Crust (B4)		Recent Iro				ls (C6)		orphic Position	, ,	
	osits (B5)		Thin Muck						Neutral Test (
Inundation	on Visible on Aerial Im	agery (B7)	Gauge or	Well Dat	a (D9)						
Sparsely	Vegetated Concave S	Surface (B	8) Other (Ex	plain in R	Remarks)						
Field Observ	vations:										
Surface Wat	er Present? Yes		No X	Depth (i	nches):						
Water Table Present? Yes No X Depth (inches):											
Saturation P	Saturation Present? Yes No _X Depth (inches): Wetland Hydrology Present? Yes _X No										
	(includes capillary fringe)										
Describe Re	Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:										
Pemarke:	Remarks:										
	Wetland hydrology observed.										
	. ,										

Project/Site: Toronto, SD MRES Wetland	City/County: Toronto/De	euel	Sampling Date: <u>9/30/2024</u>				
Applicant/Owner: Missouri River Energy Services		State: SD	Sampling Point: P6				
Investigator(s): N. Oswald	Section, Township, Range: S7 T113N R48W						
Landform (hillside, terrace, etc.): Ag field	Local relief (cor	ncave, convex, none): C	oncave				
Slope (%): <u>2-4</u> Lat: <u>44.604151</u>	Long: 96.623443	D	Oatum: 1984				
Soil Map Unit Name: Hm		NWI classific	cation: PEMAf				
Are climatic / hydrologic conditions on the site typical for this time of ye	ear? Yes X	No (If no, expla	ain in Remarks.)				
Are Vegetation Y , Soil Y , or Hydrology Y significantly dist	urbed? Are "Normal Circ	cumstances" present?	Yes X No				
Are Vegetation, Soil, or Hydrologynaturally problet		ain any answers in Rem	narks.)				
SUMMARY OF FINDINGS – Attach site map showing	sampling point loca	ations, transects,	important features, etc.				
Hydrophytic Vegetation Present? Yes * No	Is the Sampled Area within a Wetland?	a Yes <u>X</u>	No				
Remarks: Point taken in low area of soy bean field.							
VEGETATION – Use scientific names of plants.	- Indiana						
	Dominant Indicator Species? Status I	Dominance Test work	sheet:				
1		Number of Dominant Sp Are OBL, FACW, or FA	pecies That				
3. 4.		Total Number of Domin Across All Strata:					
5		Percent of Dominant Sp Are OBL, FACW, or FA	pecies That				
Sapling/Shrub Stratum (Plot size: 10)	L						
1		Prevalence Index wor					
2		Total % Cover of:					
3		OBL species	x 1 =				
4		FAC species	x 2 =				
5		FAC species FACU species	x 3 = x 4 =				
Herb Stratum (Plot size: 3)		UPL species	x 5 =				
1		Column Totals:	(A) (B)				
2		Prevalence Index =	B/A =				
4.		Hydrophytic Vegetatio	on Indicators: Hydrophytic Vegetation				
6.	—— -	2 - Dominance Tes					
7.		3 - Prevalence Inde					
8.		4 - Morphological A	Adaptations ¹ (Provide supporting				
9.		data in Remarks	or on a separate sheet)				
10		Problematic Hydrop	phytic Vegetation ¹ (Explain)				
Woody Vine Stratum (Plot size: 3)		¹ Indicators of hydric soil be present, unless distu	il and wetland hydrology must urbed or problematic.				
1		Hydrophytic Vegetation					
=T0	otal Cover	Present? Yes	* No				
Remarks: (Include photo numbers here or on a separate sheet.) Vegetation not considered due to farming practices.							

Profile Desc	ription: (Describe t	o the depth	needed to doc	ument tl	ne indica	ator or o	confirm the	absence	of indicators	.)	
Depth	Matrix		Redo	x Featur	es						
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Text	ture		Remarks	
0-8	10YR 3/2	95	5YR 4/6	5	С	PL/M	Loamy/	Clayey	Prominer	nt redox conce	entrations
8-28	10YR 2/1	95	5YR 4/6	5	С	PL/M	Loamy/	Clayey			
28-40	10YR 2/1	85	5YR 4/6	5	С	PL/M	Loamy/	Clayey		10YR 3/4 10%	,
									-		
				·							
1 _{Type} C C			Paduaad Matrix I	MS Mas	Lod Con			2l continu	. DL Doro Li	nina M Matri	
Hydric Soil	oncentration, D=Deple	elion, Rivi=R	teduced Matrix, i	vi5=ivias	keu Sand	Grains	· <u> </u>			ning, M=Matri matic Hydric	_
Histosol			Sandy Gle	aved Mat	riv (S4)				s for Froblei st Prairie Redo	-	JUIIS .
	ipedon (A2)		Sandy Re	-	IIX (34)				Manganese M		
Black His			Stripped N		3)				Parent Materi	` ,	
	n Sulfide (A4)		Dark Surfa	•))					Surface (F22	1
	Layers (A5)		Loamy Mu		eral (F1)				r (Explain in F		,
2 cm Mu			Loamy Gl	-					i (Explain iii i	(omano)	
	Below Dark Surface	(A11)	Depleted I								
	rk Surface (A12)	(/ ())	X Redox Da	,	,			³ Indicator	s of hydrophy	tic vegetation	and
	ucky Mineral (S1)		Depleted I		. ,					must be pres	
	cky Peat or Peat (S3))	Redox De							r problematic.	
_	_ayer (if observed):			<u> </u>						<u>'</u>	
Type:	-uyo. (o.boo. 10u).										
Depth (in	nches):		_				Hydric Sc	oil Present	i?	Yes X	No
Remarks:	· · ·		_								
Hydric soils	observed.										
•											
HYDROLO	GY										
Wetland Hyd	drology Indicators:										
Primary Indic	cators (minimum of or	ne is require	d; check all that	apply)				Seconda	ry Indicators (minimum of to	vo required)
Surface	Water (A1)		Water-Sta	ined Lea	ives (B9)			X Surfa	ice Soil Crack	(s (B6)	
High Wa	ter Table (A2)		Aquatic Fa	auna (B1	3)			Drain	age Patterns	(B10)	
Saturation	n (A3)		True Aqua	atic Plant	s (B14)			Dry-S	Season Water	Table (C2)	
Water M	arks (B1)		Hydrogen	Sulfide (Odor (C1)		Cray	fish Burrows ((C8)	
Sedimen	t Deposits (B2)		Oxidized F			_	oots (C3)	Satu	ration Visible	on Aerial Imag	gery (C9)
	osits (B3)		Presence							ed Plants (D1)	
	t or Crust (B4)		Recent Iro			lled Soil	s (C6)		norphic Positi		
	osits (B5)		Thin Muck		` '			FAC-	Neutral Test	(D5)	
	on Visible on Aerial Im		Gauge or								
	Vegetated Concave	Surface (B8)Other (Exp	plain in R	(emarks						
Field Obser			N. V				1				
	Surface Water Present? Yes No X Depth (inches):										
Water Table Present? Yes No X Depth (inches):								al I Ia I I	Du 10	Va - V	Ma
	Saturation Present? Yes No X Depth (inches): Wetland Hydrology Present? Yes X No (inches): Wetland Hydrology Present?										
	(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:										
Describe Mer	December Necessary Data (Stream gauge, monitoring well, actial priotes, previous inspections), it available.										
Remarks:											
	rology observed.										

Project/Site: Toronto, SD MRES Wetland	City/County: Toronto/	/Deuel	Sampling Date: 9/3	30/2024
Applicant/Owner: Missouri River Energy Services	State: SD	Sampling Point:	P7	
Investigator(s): N. Oswald	Section, Township, Rai	nge: S7 T113N R48W		
Landform (hillside, terrace, etc.): Ag Field	Local relief (c	concave, convex, none):	Concave	
Slope (%): <u>3-6</u> Lat: <u>44.604166</u>	Long: 96.623521		Datum: 1984	
Soil Map Unit Name: Hm		NWI classif	ication: NA	
Are climatic / hydrologic conditions on the site typical for this time	of year? Yes	No (If no, exp	olain in Remarks.)	_
Are Vegetation Y , Soil Y , or Hydrology Y significantly	disturbed? Are "Normal C	Circumstances" present?	Yes X No	
Are Vegetation, Soil, or Hydrologynaturally pro	oblematic? (If needed, exp	plain any answers in Rer	marks.)	
SUMMARY OF FINDINGS – Attach site map showi	ng sampling point lo	cations, transects	, important featur	es, etc.
Hydrophytic Vegetation Present? Yes * No	Is the Sampled Ar			
Hydric Soil Present? Yes No X	within a Wetland?		No X	
Wetland Hydrology Present? Yes No X				
Remarks:				
Upland point for P6.				
VEGETATION – Use scientific names of plants.				
Absolute Tree Stratum (Plot size: 30) % Cover	Dominant Indicator Species? Status	Dominance Test wor	ksheet:	
1		Number of Dominant S		
2.		Are OBL, FACW, or F		(A)
3.		Total Number of Domi	inant Species	
4		Across All Strata:		(B)
5	T-tal Carray	Percent of Dominant S		(A/D)
Sapling/Shrub Stratum (Plot size: 10)	_=Total Cover	Are OBL, FACW, or F	AC:	(A/B)
1		Prevalence Index wo	 orksheet:	
2.		Total % Cover of:		
3.		OBL species	x 1 =	
4.		FACW species	x 2 =	
5		FAC species	x 3 =	
<u> </u>	_=Total Cover	FACU species	x 4 =	
Herb Stratum (Plot size: 3		UPL species	x 5 =	— (5)
1		Column Totals:	(A)	(B)
2. 3.	·	Prevalence Index =	= B/A =	
	·	Hydrophytic Vegetati	ion Indicators:	
5.	·		Hydrophytic Vegetation	n
6.		2 - Dominance Te		
7.		3 - Prevalence Inc		
8.	·		Adaptations ¹ (Provide s	
9			s or on a separate she	•
10			ophytic Vegetation ¹ (Ex	
(Dist = 1-2)	=Total Cover		oil and wetland hydrolog	gy must
Woody Vine Stratum (Plot size: 3)	}	be present, unless dis	turbed or problematic.	
1	·	Hydrophytic		
2	=Total Cover	Vegetation Present? Yes	* No	
Describes (legalists where here or on a congrete sheet)	-			
Remarks: (Include photo numbers here or on a separate sheet.) Vegetation not considered due to farming practices.				

Profile Desc	ription: (Describe t	o the dep	th needed to docu	ument t	ne indica	ator or o	confirm the absence	of indicators.)	
Depth	Matrix		Redox	x Featur					
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remark	(S
0-12	10YR 3/2	100					Loamy/Clayey		
12-16	10YR 3/1	100					Loamy/Clayey		
16-20	10YR 3/1	95	5YR 4/6	5	C	PL/M	Loamy/Clayey		
20-26	10YR 2/2	100					Loamy/Clayey		
26-30	10YR 2/2	95	5YR 4/6	5	С	PL/M	Loamy/Clayey	Prominent redox co	oncentrations
30-40	10YR 3/2	100							
¹ Type: C=Co	oncentration, D=Depl	etion. RM	=Reduced Matrix. N	 ∕S=Mas	ked San	d Grains	Location 2	n: PL=Pore Lining, M=N	latrix.
Hydric Soil I		,	,					rs for Problematic Hyd	
Histosol			Sandy Gle	yed Mat	rix (S4)			st Prairie Redox (A16)	
	ipedon (A2)		Sandy Red		, ,			Manganese Masses (F1	2)
Black His	stic (A3)		Stripped M	latrix (Se	6)		Red	Parent Material (F21)	
Hydrogei	n Sulfide (A4)		Dark Surfa	ce (S7)			Very	Shallow Dark Surface (F22)
Stratified	Layers (A5)		Loamy Mu	cky Min	eral (F1)		Othe	er (Explain in Remarks)	
2 cm Mu	ck (A10)		Loamy Gle	yed Ma	trix (F2)				
Depleted	Below Dark Surface	(A11)	Depleted N	/latrix (F	3)				
	rk Surface (A12)		Redox Dar		, ,		³ Indicato	rs of hydrophytic vegeta	tion and
	ucky Mineral (S1)		Depleted D)		and hydrology must be p	
5 cm Mu	cky Peat or Peat (S3))	Redox Dep	ression	s (F8)		unle	ss disturbed or problema	atic.
	_ayer (if observed):								
Type:			<u> </u>						
Depth (in	nches):						Hydric Soil Presen	t? Yes	No X
Remarks:									
No hydric soi	ils observed.								
HYDROLO	GY								
	drology Indicators:								
_	cators (minimum of o	ne is reau	ired: check all that :	annly)			Seconda	ry Indicators (minimum	of two required)
	Water (A1)	10 10 10 44	Water-Stai		ves (B9)			ace Soil Cracks (B6)	or two rodanou,
	ter Table (A2)		Aquatic Fa					nage Patterns (B10)	
Saturatio	on (A3)		True Aqua					Season Water Table (Ca	2)
Water Ma	arks (B1)		Hydrogen :	Sulfide (Odor (C1)	Cray	fish Burrows (C8)	
Sedimen	t Deposits (B2)		Oxidized R	hizosph	eres on l	_iving R	oots (C3) Satu	ration Visible on Aerial I	magery (C9)
Drift Dep	osits (B3)		Presence of	of Reduc	ced Iron	(C4)	Stun	ted or Stressed Plants (D1)
Algal Ma	t or Crust (B4)		Recent Iron	n Reduc	tion in Ti	lled Soil	· · · —	morphic Position (D2)	
	osits (B5)		Thin Muck				FAC	-Neutral Test (D5)	
	on Visible on Aerial In								
Sparsely	Vegetated Concave	Surface (B8)Other (Exp	lain in F	(emarks		•		
Field Observ									
Surface Wate		·			nches): _				
Water Table		·—			nches): _		Wedler dilbered	D	NI- V
Saturation Pr		·	No X	∪epth (ı	nches):		Wetland Hydrolo	gy Present? Yes	No_X_
(includes cap	corded Data (stream	nauge m	onitoring well serie	l nhotos	nreviou	s insper	tions) if available:		
POSCING KE	oorded Data (Stiedill	gauge, III	ormorning well, aella	, priotos	, previou	o mapet	money, ir available.		
Remarks:									
No wetland h	ydrology observed.								

Project/Site: Toronto, SD MRES Wetland	City/County: Toronto/Deuel Sampling Date: 9/30/202	24
Applicant/Owner: Missouri River Energy Services	State: SD Sampling Point: P8	
Investigator(s): N. Oswald	Section, Township, Range: S7 T113N R48W	
Landform (hillside, terrace, etc.): Ag field	Local relief (concave, convex, none): Concave	
Slope (%): 3-5 Lat: 44.604968	Long: 96.623239 Datum: 1984	
Soil Map Unit Name: Hm	NWI classification: PEMAf	
Are climatic / hydrologic conditions on the site typical for this time	of year? Yes X No (If no, explain in Remarks.)	
Are Vegetation Y, Soil Y, or Hydrology Y significantly	disturbed? Are "Normal Circumstances" present? Yes X No	
Are Vegetation, Soil, or Hydrologynaturally pro	blematic? (If needed, explain any answers in Remarks.)	
SUMMARY OF FINDINGS – Attach site map showi	ng sampling point locations, transects, important features, e	etc.
Hydrophytic Vegetation Present? Yes * No	Is the Sampled Area	
Hydric Soil Present? Yes X No	within a Wetland? Yes X No	
Wetland Hydrology Present? Yes X No No		
Remarks:		
Point taken in low area of soy bean field.		
NEGETATION		
VEGETATION – Use scientific names of plants. Absolute	Dominant Indicator	
Tree Stratum (Plot size: 30) % Cover	Species? Status Dominance Test worksheet:	
1.	Number of Dominant Species That	
2	Are OBL, FACW, or FAC:(A	١)
3	Total Number of Dominant Species	
4	Across All Strata: (E	3)
5	Percent of Dominant Species That are OBL, FACW, or FAC: (A	\ /B\
Sapling/Shrub Stratum (Plot size: 10)	=Total Cover Are OBL, FACW, or FAC:(A	√B)
1	Prevalence Index worksheet:	
2.		
3.	ODI attaches	
4.	FACW species x 2 =	
5.	FAC species x 3 =	
	=Total Cover FACU species x 4 =	
Herb Stratum (Plot size: 3)	UPL species x 5 =	
1	Column Totals: (A) (E	3)
2	Prevalence Index = B/A =	
3		
4	Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation	
5	2 - Dominance Test is >50%	
7	3 Provolence Index is ≤3 0 ¹	
	4 - Morphological Adaptations ¹ (Provide suppo	orting
9.	data in Remarks or on a senarate sheet)	
10.	Problematic Hydrophytic Vegetation ¹ (Explain))
	=Total Cover ¹ Indicators of hydric soil and wetland hydrology mu	
Woody Vine Stratum (Plot size: 3)	be present, unless disturbed or problematic.	
1	Hydrophytic	
2	Vegetation	

Profile Desc	ription: (Describe to	the dept	needed to doc	ument tl	ne indica	ator or o	confirm the	absence o	of indicators	s.)	
Depth	Matrix		Redo	x Featur	es						
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Text	ure		Remarks	
0-8	10YR 3/2	95	5YR 4/6	5	С	PL/M	Loamy/	Clayey	Prominer	nt redox conce	entrations
8-14	10YR 3/2	80								10YR 4/3 20%	, 0
14-20	10YR 4/3	85					·	_		10YR 3/2 15%	,
20-32	10YR 4/3	95	5YR 4/6	5	С	PL/M			Prominer	nt redox conce	entrations
32-40	10YR 4/3	80	5YR 4/6	10	С	PL/M				5/10Y 10%	
¹ Type: C=Co	oncentration, D=Deple	tion RM-I	Reduced Matrix N	M-2N	ked Sand			² Location:	· PI –Pore Li	ning, M=Matri	<u> </u>
Hydric Soil I	•	,tion, rtivi=1	Codoca Matrix, I	VIO-IVIAS	nea Garie	J Grains				matic Hydric	
Histosol			Sandy Gle	ved Mat	rix (S4)				t Prairie Redo	-	
	ipedon (A2)		Sandy Red				Manganese M				
Black His			Stripped M		6)				Parent Materi	, ,	
Hydrogei	n Sulfide (A4)	Dark Surfa		Very	Shallow Dark	Surface (F22	2)				
Stratified	Layers (A5)		Loamy Mu	cky Mine	eral (F1)			Other	r (Explain in F	Remarks)	
2 cm Mu	ck (A10)		Loamy Gle	eyed Mat	rix (F2)						
Depleted	Below Dark Surface	(A11)	Depleted N	Matrix (F	3)						
Thick Da	rk Surface (A12)		X Redox Da		` '			³ Indicator	s of hydrophy	tic vegetation	and
	ucky Mineral (S1)		Depleted [must be pres	
	cky Peat or Peat (S3)		Redox De	oression	s (F8)			unles	s disturbed o	r problematic.	
	_ayer (if observed):										
Type:			_								
Depth (in	iches):		_				Hydric So	il Present	?	Yes X	No
Remarks:											
Hydric soils o	observed.										
HYDROLO	GY										
	drology Indicators:										
_	cators (minimum of on	e is require	ed: check all that	apply)				Secondar	v Indicators (minimum of ty	vo required)
-	Water (A1)		Water-Sta		ves (B9)				ce Soil Crack		
	ter Table (A2)		Aquatic Fa		` '			Drain	age Patterns	(B10)	
Saturatio	n (A3)		True Aqua	tic Plant	s (B14)			Dry-S	Season Water	r Table (C2)	
Water Ma	arks (B1)		Hydrogen	Sulfide (Odor (C1)		Crayf	ish Burrows ((C8)	
Sedimen	t Deposits (B2)		Oxidized F	Rhizosph	eres on l	_iving R	oots (C3)	Satur	ation Visible	on Aerial Imag	gery (C9)
Drift Dep	osits (B3)		Presence	of Reduc	ed Iron ((C4)		Stunt	ed or Stresse	ed Plants (D1)	
	t or Crust (B4)		Recent Iro			lled Soil	ls (C6)		norphic Positi		
	osits (B5)	·	Thin Muck		` '			FAC-	Neutral Test	(D5)	
	on Visible on Aerial Im										
	Vegetated Concave S	Surrace (Bo	B)Other (Exp	nain in K	emarks)						
Field Observ			No. V	Depth (i	nohoo\.						
Surface Water Table											
Saturation P				Depth (in Depth (in	_		Wetland	d Hydrolog	y Present?	Yes X	No
(includes cap			<u>/</u>	_ opui (ii				, 0.00	,,		
	corded Data (stream g	gauge, mor	nitoring well, aeria	l photos	, previou	s inspec	ctions), if ava	ailable:			
		<u> </u>				· .	<u> </u>				
Remarks:											
Wetland hyd	rology observed.										

Project/Site: Toronto, SD MRES Wetland	City/County: Toronto/E	Deuel	Sampling Date: 9/30	/2024
Applicant/Owner: Missouri River Energy Services	<u>-</u>	State: SD	Sampling Point:	P9
Investigator(s): N. Oswald	Section, Township, Rang	ge: S7 T113N R48W		
Landform (hillside, terrace, etc.): Ag field	Local relief (co	ncave, convex, none):	Concave	
Slope (%): 2-4 Lat: 44.604970	Long: 96.623336		Datum: 1984	
Soil Map Unit Name: Hm		NWI classifi	cation: NA	
Are climatic / hydrologic conditions on the site typical for this time of y	vear? Yes X	No (If no, expl	ain in Remarks.)	
Are Vegetation Y , Soil Y , or Hydrology Y significantly dis	turbed? Are "Normal Ci	rcumstances" present?	Yes X No	_
Are Vegetation, Soil, or Hydrology naturally proble	matic? (If needed, expl	lain any answers in Ren	narks.)	_
SUMMARY OF FINDINGS – Attach site map showing	sampling point loc	ations, transects,	important features	s, etc.
Hydrophytic Vegetation Present? Yes * No Hydric Soil Present? Yes No X Wetland Hydrology Present? Yes No X	Is the Sampled Are within a Wetland?	Yes	No X	
Remarks: Upland point for P8.				
VEGETATION – Use scientific names of plants.	Deminant Indicator			
	Dominant Indicator Species? Status	Dominance Test work	ksheet:	
1		Number of Dominant S Are OBL, FACW, or FA	•	(A)
3. 4.		Total Number of Domir Across All Strata:		(B)
5	otal Cover	Percent of Dominant S Are OBL, FACW, or FA		(A/B)
Sapling/Shrub Stratum (Plot size: 10)		<u> </u>	<u>-</u>	_` _
1		Prevalence Index wo		
2		Total % Cover of:		_
3	—— — I	OBL species FACW species	x 1 =	
5.		FAC species	x 2 = x 3 =	
	otal Cover	FACU species	x 4 =	_
Herb Stratum (Plot size: 3)		UPL species	x 5 =	-
1		Column Totals: Prevalence Index =	(A) B/A =	(B)
3		Hydrophytic Vegetation 1 - Rapid Test for log 2 - Dominance Test 3 - Prevalence Ind	Hydrophytic Vegetation st is >50%	
7. 8. 9.		4 - Morphological	Adaptations ¹ (Provide sus or on a separate sheet)	
10.			phytic Vegetation ¹ (Expl	
=T=T	otal Cover	¹ Indicators of hydric so be present, unless dist	il and wetland hydrology urbed or problematic.	must
1. 2.	otal Cover	Hydrophytic Vegetation Present? Yes	* No	
	otal Cover	Present? Yes_	<u>* No</u>	
Remarks: (Include photo numbers here or on a separate sheet.) Vegetation not considered due to farming practices.				

		to the dep				ator or o	confirm the absence of	of indicators.)			
Depth	Matrix			x Featur		. 2					
(inches)	Color (moist)		Color (moist)	%	Type ¹	Loc ²	Texture	Remark	S		
0-10	10YR 2/2	100					Loamy/Clayey				
10-18	10YR 2/2	60					Loamy/Clayey	10YR 4/4 4	10%		
18-40	10YR 4/4	60	5YR 4/6	10	С	PL/M	Loamy/Clayey	oamy/Clayey 10YR 2/2 40%			
							_				
¹ Type: C=Ce	oncentration, D=Dep	letion. RM	=Reduced Matrix. N	//S=Mas	ked Sand	d Grains	Location:	: PL=Pore Lining, M=M	atrix.		
Hydric Soil		,	,					s for Problematic Hyd			
Histosol			Sandy Gle	yed Mat	rix (S4)			t Prairie Redox (A16)			
	pipedon (A2)		Sandy Red	dox (S5)				Manganese Masses (F1	2)		
Black Hi	stic (A3)		Stripped M	latrix (Se	6)		Red F	Parent Material (F21)			
Hydroge	n Sulfide (A4)		Dark Surfa	ace (S7)			Very	Shallow Dark Surface (F	F22)		
Stratified	l Layers (A5)		Loamy Mu	icky Min	eral (F1)		Other	(Explain in Remarks)			
2 cm Mu	ick (A10)		Loamy Gle	eyed Ma	trix (F2)						
Depleted	d Below Dark Surface	e (A11)	Depleted N	Иatrix (F	3)						
Thick Da	ark Surface (A12)		Redox Da	rk Surfac	e (F6)		³ Indicators	s of hydrophytic vegetat	tion and		
	lucky Mineral (S1)			nd hydrology must be p							
5 cm Mu	icky Peat or Peat (S	3)	Redox Dep	unles	s disturbed or problema	itic.					
	Layer (if observed):										
Type:			<u></u>								
Depth (ir	nches):						Hydric Soil Present	? Yes	No_X		
No hydric so											
HYDROLO	GY										
Wetland Hy	drology Indicators:										
Primary India	cators (minimum of o	one is requi	red; check all that	apply)			Secondar	y Indicators (minimum o	of two required)		
Surface	Water (A1)		Water-Sta	ined Lea	ives (B9)		Surfa	ce Soil Cracks (B6)			
I —	iter Table (A2)		Aquatic Fa	,			Drainage Patterns (B10)				
Saturation	` '		True Aqua				Dry-Season Water Table (C2)				
	arks (B1)		Hydrogen		,	,		ish Burrows (C8)	(00)		
	nt Deposits (B2)		Oxidized F			_	· · ·	ation Visible on Aerial II			
	oosits (B3) at or Crust (B4)		Presence Recent Iro			` '		ed or Stressed Plants (I norphic Position (D2)	(اد		
	osits (B5)		Thin Muck			ileu Suil		Neutral Test (D5)			
	on Visible on Aerial I	magery (B7			` '			reduction rest (De)			
	Vegetated Concave										
Field Obser		(1				
Surface Wat		es	No X	Depth (i	nches):						
Water Table		es			nches):						
Saturation P				Depth (i	_		Wetland Hydrolog	y Present? Yes	No X		
(includes car					_						
Describe Re	corded Data (stream	gauge, mo	onitoring well, aeria	l photos	, previou	s inspec	ctions), if available:				
Remarks:	do-la .										
ino wetland h	nydrology observed.										

Project/Site: Toronto	o, SD MRES Wet	and		City/Cou	inty: Toronto	o/Deuel	Sampling Date:	9/30/2024
Applicant/Owner:	Missouri River E	nergy Service	es			State: SD	Sampling Point:	P10
Investigator(s): N. Os	swald			Section,	Township, Ra	ange: S7 T113N R	48W	
Landform (hillside, te	errace, etc.): Ag f	ield			Local relief (concave, convex, no	one): Concave	
Slope (%): 2-4	Lat: 44.608520)		Long: 9	96.625819		Datum: 1984	
Soil Map Unit Name:	: MK					NWI c	lassification: PEMAf	
Are climatic / hydrolo	ogic conditions or	the site typic	al for this time o	of year?	Yes X	No (If no	o, explain in Remarks.)	
Are Vegetation Y	, Soil Y , or	Hydrology Y	significantly	disturbed? /	Are "Normal (Circumstances" pres	sent? Yes X N	lo
Are Vegetation	, Soil , or	Hydrology	naturally prol	blematic? ((If needed, ex	kplain any answers i	n Remarks.)	
		·			ng point lo	ocations, transe	ects, important fea	atures, etc.
Hydrophytic Vegeta Hydric Soil Present Wetland Hydrology	? `	res * res X res X	No No No		e Sampled A n a Wetland		X No	
Remarks:			<u> </u>					
Point taken in low a	rea of soy bean f	ield.						
VEGETATION -	Use scientific	names of	plants.					
Troc Stratum	(Diet eizer	20 \	Absolute	Dominant	Indicator	Deminence Tee	t wastabaat.	
Tree Stratum 1.	(Plot size:		% Cover	Species?	Status	Dominance Tes		
_						Are OBL, FACW	nant Species That , or FAC:	(A)
0						Total Number of	Dominant Species	
4						Across All Strata	: <u> </u>	(B)
5							nant Species That	(A (D)
Sapling/Shrub Strat	tum (Plot si	ize: 10	\	=Total Cover		Are OBL, FACW	, or FAC:	(A/B)
1.	(1 101 5	10	<u></u> '			Prevalence Inde	ex worksheet:	
						Total % Cov		y by:
2						OBL species	x 1 =	
4						FACW species	x 2 =	
5						FAC species	x 3 =	
				=Total Cover		FACU species	x 4 =	
Herb Stratum	(Plot size:	3)				UPL species	x 5 =	
•						Column Totals:	`` ′	(B)
2. 3.						Prevalence Inc	dex = B/A =	
						Hydrophytic Ver	getation Indicators:	
							st for Hydrophytic Vege	tation
6							ce Test is >50%	
7							ce Index is ≤3.0 ¹	
0						4 - Morpholo	gical Adaptations ¹ (Pro	vide supporting
0						data in Re	emarks or on a separate	sheet)
10.						Problematic	Hydrophytic Vegetation	¹ (Explain)
				=Total Cover			dric soil and wetland hyd	
Woody Vine Stratu		ze: 3				be present, unles	ss disturbed or problem	atic.
1						Hydrophytic		
2				Total O		Vegetation	Vao * N-	
				=Total Cover		Present?	Yes <u>*</u> No	_
Remarks: (Include Vegetation not cons								

Profile Desc	ription: (Describe	to the dep	th needed to doc	ument tl	ne indica	ator or o	confirm the absence	of indicators.)			
Depth	Matrix		Redo	x Featur							
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks			
0-12	10YR 2/2	95	5YR 4/6	5	С	PL/M	Loamy/Clayey	Prominent redox concentrations			
12-14	10YR 2/1	100					Loamy/Clayey				
14-24	10YR 3/2	90					Loamy/Clayey	10YR 4/2 10%			
24-40	10YR 4/2	85	_		·		Loamy/Clayey	10YR 3/2 15%			
								-			
1- 0.0			<u> </u>				21	BL B. III MAN			
	oncentration, D=Dep	etion, Rivi=	Reduced Matrix, N	/IS=IVIas	ked Sand	Grains		: PL=Pore Lining, M=Matrix. rs for Problematic Hydric Soils ³ :			
Hydric Soil I			Sandy Cla	vad Mat	riv (C1)			st Prairie Redox (A16)			
Histosol	ipedon (A2)		Sandy Gle Sandy Red	•	IIX (34)			Manganese Masses (F12)			
Black His			Stripped M		3)			Parent Material (F21)			
	n Sulfide (A4)		Dark Surfa	,	<i>,</i>			Shallow Dark Surface (F22)			
	Layers (A5)		Loamy Mu	` '	eral (F1)			r (Explain in Remarks)			
2 cm Mu			Loamy Gle	-			<u>—</u>	(=			
	Below Dark Surface	e (A11)	Depleted N	•	, ,						
	rk Surface (A12)	,	X Redox Dar				³ Indicator	s of hydrophytic vegetation and			
Sandy M	ucky Mineral (S1)		Depleted [Dark Sur	face (F7))	wetla	and hydrology must be present,			
5 cm Mucky Peat or Peat (S3) Redox Depressions (F8)							unless disturbed or problematic.				
Restrictive Layer (if observed):											
Type:											
Depth (in	iches):						Hydric Soil Present	t? Yes X No			
Remarks:											
Hydric soils o	bserved.										
HYDROLO	GY										
Wetland Hyd	drology Indicators:										
Primary Indic	cators (minimum of c	ne is requi	red; check all that	apply)			<u>Seconda</u>	ry Indicators (minimum of two required)			
Surface \	Water (A1)		Water-Sta	ined Lea	ives (B9)		X Surfa	ace Soil Cracks (B6)			
I —	ter Table (A2)		Aquatic Fa	•	,			nage Patterns (B10)			
Saturatio	` '		True Aqua		. ,			Season Water Table (C2)			
	arks (B1)		Hydrogen		,	,	<u> </u>	fish Burrows (C8)			
	t Deposits (B2)		Oxidized F			_	` ' 	ration Visible on Aerial Imagery (C9)			
	osits (B3) t or Crust (B4)		Presence Recent Iro			` '		ted or Stressed Plants (D1) norphic Position (D2)			
	osits (B5)		Thin Muck			ileu Suil	· · · —	Neutral Test (D5)			
	on Visible on Aerial II	magery (B7			, ,			1100110111001			
	Vegetated Concave										
Field Observ			<u> </u>				1				
Surface Water		s	No X	Depth (i	nches):						
Water Table		s			nches):						
Saturation Pr				Depth (i	_		Wetland Hydrolog	gy Present? Yes X No			
(includes cap					_						
Describe Red	corded Data (stream	gauge, mo	onitoring well, aeria	l photos	, previou	s inspec	ctions), if available:				
Remarks:											
Wetland hydi	rology observed.										

Project/Site: Toronto, SD MRES Wetland	City/County: Toronto/De	euel	Sampling Date: 9/30/2	2024
Applicant/Owner: Missouri River Energy Services		State: SD	Sampling Point: P	P11
Investigator(s): N. Oswald	Section, Township, Range	e: S7 T113N R48W		
Landform (hillside, terrace, etc.): Ag field	Local relief (con-	cave, convex, none): C	Concave	
Slope (%): 2-4 Lat: 44.608531	Long: 96.625786	D	Oatum: 1984	
Soil Map Unit Name: MK		NWI classific	cation: NA	
Are climatic / hydrologic conditions on the site typical for this time of ye	ear? Yes X I	No (If no, expla	ain in Remarks.)	
Are Vegetation Y , Soil Y , or Hydrology Y significantly distu	urbed? Are "Normal Circ	:umstances" present?	Yes X No	
Are Vegetation, Soil, or Hydrology naturally problem	natic? (If needed, explain	in any answers in Rem	narks.)	,
SUMMARY OF FINDINGS – Attach site map showing		tions, transects,	important features	, etc.
Hydrophytic Vegetation Present? Yes * No Hydric Soil Present? Yes No X Wetland Hydrology Present? Yes No X	Is the Sampled Area within a Wetland?	Yes	No X	
Remarks: Upland point for P10				
VEGETATION – Use scientific names of plants. Absolute D	ominant Indicator			
		Dominance Test work	sheet:	
1		Number of Dominant Sp Are OBL, FACW, or FA	•	(A)
3. 4.		Total Number of Domin Across All Strata:	nant Species	(B)
5.		Percent of Dominant Sp Are OBL, FACW, or FA	pecies That	(A/B)
Sapling/Shrub Stratum (Plot size: 10)		· · · · · · · · · · · · · · · · · · ·		, ` _
1	F	Prevalence Index wor	ksheet:	
2	,	Total % Cover of:	Multiply by:	
3		OBL species FACW species	x 1 =	_
5.		FACW species FAC species	x 2 = x 3 =	
		FACU species	x 4 =	•
Herb Stratum (Plot size: 3)		UPL species	x 5 =	-
1		Column Totals: Prevalence Index =		(B)
3		Hydrophytic Vegetatic 1 - Rapid Test for F 2 - Dominance Tes 3 - Prevalence Inde	Hydrophytic Vegetation st is >50%	
8. 9.			Adaptations ¹ (Provide sup s or on a separate sheet)	porting
10		Problematic Hydror	phytic Vegetation ¹ (Expla	in)
Woody Vine Stratum (Plot size: 3)		Indicators of hydric soi	il and wetland hydrology r urbed or problematic.	must
1	\	Hydrophytic Vegetation Present? Yes	*_ No	
Remarks: (Include photo numbers here or on a separate sheet.)				
Vegetation not considered due to farming practices.				

Profile Desc	ription: (Describe	to the dep	oth needed to doc	ument t	he indica	ator or c	confirm the absence	of indicators.)		
Depth	Matrix		Redo	x Featur						
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Rem	arks	
0-18	10YR 3/1	100					Loamy/Clayey	1		
18-24	10YR 3/1	90					Loamy/Clayey	10YR 4	/2 10%	
24-28	10YR 3/2	80					Loamy/Clayey	10YR 4	/2 20%	
28-36	10YR 4/3	85					Loamy/Clayey 10YR 3/2 15%			
36-40	10YR 4/3	95	5YR 4/6	5 C PL/M Loamy/Clayey Prominent redox concentr						
¹ Type: C=Co	ncentration, D=Dep	letion, RM	=Reduced Matrix, N	/IS=Mas	ked Sand	d Grains	. ² Location	: PL=Pore Lining, M	l=Matrix.	
Hydric Soil I	ndicators:						Indicator	s for Problematic H	lydric Soils³:	
Histosol	(A1)		Sandy Gle	•	. ,			t Prairie Redox (A16		
Histic Ep	ipedon (A2)		Sandy Red					Manganese Masses		
Black His	` ,		Stripped M	,	6)			Parent Material (F21		
	n Sulfide (A4)		Dark Surfa	` '				Shallow Dark Surface	` '	
	Layers (A5)		Loamy Mu	-			Othe	r (Explain in Remark	s)	
2 cm Mu	,		Loamy Gle	•	, ,					
	Below Dark Surface	e (A11)	Depleted N				3			
	rk Surface (A12)		Redox Dar		` '			s of hydrophytic veg		
	ucky Mineral (S1)	.,	Depleted [ind hydrology must b		
5 cm Mucky Peat or Peat (S3)Redox Depressions (F8)							unles	ss disturbed or proble	ematic.	
	.ayer (if observed):									
Type:										
Depth (in	ches):						Hydric Soil Present	t? Yes	No X	
Remarks:										
No hydric soi	ls observed.									
HYDROLO	GY									
Wetland Hyd	Irology Indicators:									
_	ators (minimum of c	ne is requ	ired; check all that	apply)			Seconda	ry Indicators (minimu	ım of two required	
Surface \	Water (A1)		Water-Sta	ned Lea	aves (B9)		X Surfa	ice Soil Cracks (B6)		
High Wa	ter Table (A2)		Aquatic Fa	una (B1	3)		Drain	age Patterns (B10)		
Saturatio	n (A3)		True Aqua	tic Plant	s (B14)		Dry-S	Season Water Table	(C2)	
Water Ma	arks (B1)		Hydrogen	Sulfide (Odor (C1)	Cray	fish Burrows (C8)		
Sedimen	t Deposits (B2)		Oxidized R	hizosph	eres on l	_iving R	oots (C3) Satur	ration Visible on Aeri	al Imagery (C9)	
	osits (B3)		Presence of			,		ted or Stressed Plan		
	t or Crust (B4)		Recent Iro			lled Soil		norphic Position (D2)	
Iron Depo			Thin Muck				FAC-	Neutral Test (D5)		
	n Visible on Aerial I									
Sparsely	Vegetated Concave	Surface (B8)Other (Exp	lain in F	Remarks)		_			
Field Observ										
Surface Water		s			nches):					
Water Table		s			nches):					
Saturation Pr		s	No X	Depth (i	nches):		Wetland Hydrolog	gy Present? Yes	No X	
(includes cap		a oue = ==	onitoring well acres	l nh -+	n roude :	o loc	tions) if overlights			
Describe Red	corded Data (stream	gauge, m	onitoring well, aeria	i priotos	, previou	s mspec	aions), ii avallable:			
Remarks:										
	ary indicator. No wet	land hydro	logy.							
	-	•	- -							

Project/Site: Toronto	o, SD MRES We	etland		City/Co	ounty: Toronto	o/Deuel	Sampling Date:	9/30/2024
Applicant/Owner:	Missouri River	Energy Servi	ces			State: SD	Sampling Point:	P12
Investigator(s): N. Os	swald			Section	, Township, Ra	ange: S7 T113N R4	8W	
Landform (hillside, te	errace, etc.): Ag	j field			Local relief (concave, convex, nor	ne): Concave	
Slope (%): 2-4	Lat: 44.60870	05		Long	96.623999		Datum: 1984	
Soil Map Unit Name:	: Hm					NWI cla	assification: PEMAf	
Are climatic / hydrolo	ogic conditions of	on the site typ	ical for this tim	e of year?	Yes X	No (If no,	explain in Remarks.)	
Are Vegetation Y	, Soil Y , o	r Hydrology	Y significant	ly disturbed?	Are "Normal	Circumstances" prese	ent? Yes X No	0
Are Vegetation	, Soil , o	r Hydrology	naturally p	roblematic?	(If needed, e.	xplain any answers in	Remarks.)	
·					ing point le	ocations, transe	cts, important fea	itures, etc.
Hydrophytic Vegeta	ation Present?	Yes *	No	ls t	he Sampled A	Area		
Hydric Soil Present	?	Yes X	No	witl	hin a Wetland	l? Yes	No	
Wetland Hydrology	Present?	Yes X	No					
Remarks:								
Point taken in low a	area of soy bean	i field.						
./=======								
VEGETATION –	· Use scientif	ic names o	-	. D'	La d'antan	Ī		
Tree Stratum	(Plot size:	30)	Absolut % Cove			Dominance Test	worksheet:	
4	` <u> </u>					Number of Domina	ant Species That	
2.						Are OBL, FACW,	•	(A)
3						Total Number of D	ominant Species	
						Across All Strata:		(B)
5				=Total Cove		Percent of Domina	•	(A/D)
Sapling/Shrub Strat	tum (Plot	size: 10	, ——	=10tal Cove	51	Are OBL, FACW,		(A/B)
1.	(1101	0.20.				Prevalence Index	worksheet:	
2.						Total % Cove	er of: Multiply	/ by:
2						OBL species	x 1 =	
4				_		FACW species	x 2 =	
5				_		FAC species	x 3 =	
	(D) ()	•		=Total Cove	er	FACU species	x 4 =	
Herb Stratum	(Plot size:	3)				UPL species	x 5 =	(D)
1. 2.				_		Column Totals: Prevalence Inde	``	(B)
3.						Prevalence mu	ex = b/A =	
						Hydrophytic Veg	etation Indicators:	
				_			t for Hydrophytic Veget	tation
6							e Test is >50%	
7							e Index is ≤3.0 ¹	
0			<u> </u>			4 - Morpholog	ical Adaptations ¹ (Prov	ide supporting
0			<u> </u>			data in Ren	narks or on a separate	sheet)
10.				_		Problematic H	lydrophytic Vegetation	¹ (Explain)
				=Total Cove	er		ic soil and wetland hyd	
Woody Vine Stratu		size: 3				be present, unless	disturbed or problema	atic.
1.						Hydrophytic		
2				=Total Cove		Vegetation	os * No	
					21	Present? Y	es_*_ No	
Remarks: (Include Vegetation not cons				.)				

	cription: (Describe	to the dep				ator or o	confirm the absenc	e of indicators	s.)		
Depth	Matrix			x Featur		. 2	_				
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture		Remarks		
0-10	10YR 2/2	95	5YR 4/6	5	С	PL/M	Loamy/Clayey	Promine	nt redox conc	entrations	
10-24	10YR 2/1	100					Loamy/Clayey	_			
24-40	10YR 3/1	95		Loamy/Clayey 10YR 4/2 5%)	
								_			
			_		·			_			
							-				
1Type: C=C	oncentration, D=Dep	letion RM-	Reduced Matrix N	 2SM-2N	ked Sand		² l ocatio	on: PL=Pore L	ining M-Matr	iv	
Hydric Soil		ietion, ixivi–	reduced Matrix, I	vio–ivias	keu San	J Grains		ors for Proble		_	
Histosol			Sandy Gle	ved Mat	rix (S4)			ast Prairie Red	-	oons .	
	pipedon (A2)		Sandy Red	•	11X (O-1)			n-Manganese N			
Black His			Stripped M		5)			d Parent Mater			
	n Sulfide (A4)		Dark Surfa	•	-,			ry Shallow Darl	, ,	2)	
I — ' '	Layers (A5)		Loamy Mu	` ,	eral (F1)			ner (Explain in l	,	,	
2 cm Mu			Loamy Gle						,		
Depleted	Below Dark Surface	(A11)	Depleted N	Иatrix (F	3)						
Thick Da	rk Surface (A12)		X Redox Dai	rk Surfac	e (F6)		³ Indicat	ors of hydroph	ytic vegetation	n and	
Sandy Mucky Mineral (S1) Depleted Dark Surface (F7)							wetland hydrology must be present,				
5 cm Mucky Peat or Peat (S3) Redox Depressions (F8)							unl	ess disturbed o	or problematic	-	
Restrictive I	Layer (if observed):										
Type:											
Depth (ir	nches):						Hydric Soil Prese	nt?	Yes X	No	
Remarks:											
Hydric soils	observed.										
HYDROLO	GY										
Wetland Hy	drology Indicators:										
Primary India	cators (minimum of c	ne is requii	ed; check all that	apply)			<u>Second</u>	lary Indicators	(minimum of t	wo required)	
Surface	Water (A1)		Water-Sta	ined Lea	ives (B9)		X Su	rface Soil Crac	ks (B6)		
I —	ter Table (A2)		Aquatic Fa	,	,			ainage Patterns	` '		
Saturation	` '		True Aqua		. ,			/-Season Wate	. ,		
	arks (B1)		Hydrogen		,	,		ayfish Burrows	` ,	(0.0)	
	t Deposits (B2)		Oxidized R			•	· · · —	turation Visible			
	osits (B3)		Presence			,		inted or Stress	, ,	1	
	t or Crust (B4) osits (B5)		Recent Iro Thin Muck			ileu Soii		omorphic Posit C-Neutral Test			
	on Visible on Aerial II	magery (B7			, ,		'	C-Neutral Test	(D3)		
	Vegetated Concave										
Field Obser		(2									
Surface Wat		S	No X	Denth (i	nches):						
Water Table		s			nches):						
Saturation P				Depth (i	_		Wetland Hydrol	oav Present?	Yes X	No	
(includes cap				(-	_			- 5,			
<u> </u>	corded Data (stream	gauge, mo	nitoring well, aeria	l photos	, previou	s inspec	ctions), if available:				
	· 	= '					·				
Remarks:										·	
Wetland hyd	rology observed.										

Project/Site: Toronto, SD MRES Wetland	City/County: Toronto/Deuel Sampling Date: 9/30/2024
Applicant/Owner: Missouri River Energy Services	State: SD Sampling Point: P13
Investigator(s): N. Oswald	Section, Township, Range: S7 T113N R48W
Landform (hillside, terrace, etc.): Ag field	Local relief (concave, convex, none): Concave
Slope (%): Lat: _44.608706	Long: 96.623803 Datum: 1984
Soil Map Unit Name: Hm	NWI classification: NA
Are climatic / hydrologic conditions on the site typical for this time	of year? Yes X No (If no, explain in Remarks.)
Are Vegetation Y, Soil Y, or Hydrology Y significantle	y disturbed? Are "Normal Circumstances" present? Yes X No
Are Vegetation, Soil, or Hydrologynaturally p	oblematic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map show	ing sampling point locations, transects, important features, etc
Hydrophytic Vegetation Present? Yes * No	Is the Sampled Area
Hydric Soil Present? Yes No X	within a Wetland? Yes No X
Wetland Hydrology Present? Yes No X	
Remarks:	•
Upland point for P12.	
VEGETATION – Use scientific names of plants.	
Absolute	
Tree Stratum (Plot size: 30) % Cove	
1	
3.	·
4.	Agrana All Ctrata:
5.	Percent of Dominant Species That
	_=Total Cover Are OBL, FACW, or FAC:(A/B)
Sapling/Shrub Stratum (Plot size: 10) 1.	Prevalence Index worksheet:
2	OBI stration
4.	FACW species x 2 =
5.	FAC species x 3 =
	=Total Cover FACU species x 4 =
Herb Stratum (Plot size: 3	UPL species x 5 =
1	Column Totals: (A) (B)
2	Prevalence Index = B/A =
3	Hydrophytic Vegetation Indicators:
5.	
6.	2 - Dominance Test is >50%
7	3 Provolence Index is <3.0 ¹
8.	4 - Morphological Adaptations ¹ (Provide supporting
9.	data in Remarks or on a senarate sheet)
10.	Problematic Hydrophytic Vegetation ¹ (Explain)
	=Total Cover ¹ Indicators of hydric soil and wetland hydrology must
Woody Vine Stratum (Plot size: 3	be present, unless disturbed or problematic.
1	
2	
1	

	-	to the dep				ator or o	confirm the absence o	f indicators.)		
Depth	Matrix	 .		k Featur		. 2		_		
(inches)	Color (moist)	<u>%</u>	Color (moist)	<u>%</u>	Type ¹	Loc ²	Texture	Remarks	3	
0-12	10YR 3/1	100					Loamy/Clayey			
12-18	10YR 3/1	85					Loamy/Clayey	10YR 4/3 1	5%	
18-24	10YR 4/3	75					Loamy/Clayey	10YR 3/1 2	5%	
24-40	10YR 4/3	100					Loamy/Clayey			
					·					
		<u> </u>			· <u></u>					
¹ Type: C=Co	oncentration, D=Dep	letion, RM	=Reduced Matrix. N	 IS=Mas	ked Sand	d Grains	² l ocation:	PL=Pore Lining, M=Ma	atrix.	
Hydric Soil I			. toddood mann, n					for Problematic Hydr		
Histosol			Sandy Gle	ved Mat	rix (S4)		Coast Prairie Redox (A16)			
	ipedon (A2)		Sandy Red		` ,		Iron-Manganese Masses (F12)			
Black His			Stripped M		5)		Red Parent Material (F21)			
Hydrogei	n Sulfide (A4)		Dark Surfa	ce (S7)			Very Shallow Dark Surface (F22)			
Stratified	Layers (A5)		Loamy Mu	cky Mine	eral (F1)		Other (Explain in Remarks)			
2 cm Mu	ck (A10)		Loamy Gle	yed Mat	trix (F2)		<u> </u>			
Depleted	Below Dark Surface	e (A11)	Depleted N	/latrix (F	3)					
Thick Da	rk Surface (A12)		Redox Dar	k Surfac	e (F6)		³ Indicators of hydrophytic vegetation and			
	ucky Mineral (S1)		Depleted D				wetland hydrology must be present,			
5 cm Mu	5 cm Mucky Peat or Peat (S3) Redox Depressions (F8)					unless disturbed or problematic.				
Restrictive I	_ayer (if observed):									
Type:										
Depth (in	iches):		<u></u>				Hydric Soil Present?	Yes	No_X_	
Remarks:										
No hydric soi	ls observed.									
HYDROLO	GY									
	drology Indicators:									
	cators (minimum of c		ired: check all that :	apply)			Secondary	Indicators (minimum c	of two required)	
	Water (A1)	7110 10 10 qu	Water-Stai		ves (B9)		Surface Soil Cracks (B6)			
	ter Table (A2)		Aquatic Fa		` '		Drainage Patterns (B10)			
Saturatio	n (A3)		True Aqua	tic Plant	s (B14)		Dry-Se	eason Water Table (C2)	
Water Ma	arks (B1)		Hydrogen	Sulfide (Odor (C1))	Crayfis	sh Burrows (C8)		
Sediment Deposits (B2) Oxidized Rhizospheres on Living Ro					oots (C3) Satura	ition Visible on Aerial Ir	nagery (C9)			
Drift Dep	osits (B3)		Presence of	of Reduc	ced Iron ((C4)	Stunte	ed or Stressed Plants (D	01)	
Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils					s (C6) Geom	orphic Position (D2)				
Iron Deposits (B5)Thin Muck Surface (C7)					FAC-N	leutral Test (D5)				
Inundation Visible on Aerial Imagery (B7) Gauge or Well Data (D9)										
Sparsely	Vegetated Concave	Surface (B8)Other (Exp	lain in R	temarks)					
Field Observ										
Surface Wate		es			nches): _					
Water Table Present? Yes No X Depth (inches):										
Saturation P		es	No X	Depth (i	nches):		Wetland Hydrology	y Present? Yes	No_X_	
(includes cap				ll t			(Const. Works Table)			
Describe Red	corded Data (stream	gauge, m	onitoring well, aeria	i pnotos	, previous	s inspec	cuons), ir avallable:			
Remarks:										
	ydrology observed.									

Project/Site: Toronto, SD MRES Wetland	City/County: Toronto/Deuel	Sampling Date: 9/30/2024
Applicant/Owner: Missouri River Energy Services	Star	te: SD Sampling Point: P14
Investigator(s): N. Oswald	Section, Township, Range: S7	T113N R48W
Landform (hillside, terrace, etc.): Ag field	Local relief (concave, c	convex, none): Concave
Slope (%):1-3	Long: <u>96.623351</u>	Datum: <u>1984</u>
Soil Map Unit Name: Hm		NWI classification: PEMAf
Are climatic / hydrologic conditions on the site typical for this time	of year? Yes X No	(If no, explain in Remarks.)
Are Vegetation Y, Soil Y, or Hydrology Y significantly	disturbed? Are "Normal Circumstar	nces" present? Yes No
Are Vegetation, Soil, or Hydrologynaturally pr	oblematic? (If needed, explain any a	
SUMMARY OF FINDINGS – Attach site map show	ng sampling point locations	, transects, important features, etc.
Hydrophytic Vegetation Present? Yes * No	Is the Sampled Area	
Hydric Soil Present? Yes X No	within a Wetland?	Yes X No
Wetland Hydrology Present? Yes X No		
Remarks:		
Point taken in low area of soy bean field.		
VEGETATION – Use scientific names of plants.	Disciplinate Indicator	
Absolute <u>Tree Stratum</u> (Plot size: 30) % Cover	Dominant Indicator Species? Status Domina	ance Test worksheet:
1	· 	r of Dominant Species That
2.		L, FACW, or FAC: (A)
3	Total No	umber of Dominant Species
4	٨٥٣٥٥٥	All Strata: (B)
5		t of Dominant Species That
Sapling/Shrub Stratum (Plot size: 10)	=Total Cover Are OBI	L, FACW, or FAC: (A/B)
1	Prevale	ence Index worksheet:
2.		otal % Cover of: Multiply by:
3.	ODI	pecies x 1 =
4.	EACIA!	species x 2 =
5	FAC sp	pecies x 3 =
		x 4 =
Herb Stratum (Plot size: 3)		vecies x 5 = (A)
1		n Totals: (A) (B) alence Index = B/A =
2		alefice fluex = D/A =
3 4.		hytic Vegetation Indicators:
5.		Rapid Test for Hydrophytic Vegetation
6.	. — — — — —	Dominance Test is >50%
7.		Prevalence Index is ≤3.0 ¹
8.	4 -	Morphological Adaptations ¹ (Provide supporting
9.		data in Remarks or on a separate sheet)
10		oblematic Hydrophytic Vegetation ¹ (Explain)
		ors of hydric soil and wetland hydrology must
Woody Vine Stratum (Plot size: 3)	· · · · · · · · · · · · · · · · · · ·	ent, unless disturbed or problematic.
1		
Z	Vegetat	
	=Total Cover Present	t? Yes * No

Depth							confirm the absence o	•
	Matrix			x Featur		. 2	_	
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-12	10YR 3/1	95	5YR 4/6	5	С	PL/M	Loamy/Clayey	Prominent redox concentrations
12-24	10YR 2/1	100					Loamy/Clayey	
24-40	10YR 2/1	90					Loamy/Clayey	10YR 4/2 10%
¹Type: C=Co	oncentration, D=Dep	letion RM=	Reduced Matrix N	/S=Mas	ked Sand	Grains	² l ocation:	PL=Pore Lining, M=Matrix.
Hydric Soil I			. roadood mann, n					s for Problematic Hydric Soils ³ :
Histosol			Sandy Gle	ved Mat	rix (S4)			Prairie Redox (A16)
	ipedon (A2)		Sandy Red	•	, ,			langanese Masses (F12)
Black His			Stripped M		6)			arent Material (F21)
Hydroger	n Sulfide (A4)		Dark Surfa	ce (S7)			Very S	Shallow Dark Surface (F22)
Stratified	Layers (A5)		Loamy Mu	cky Mine	eral (F1)		Other	(Explain in Remarks)
2 cm Mu	ck (A10)		Loamy Gle	eyed Mat	rix (F2)			
Depleted	Below Dark Surface	e (A11)	Depleted N	Matrix (F	3)			
Thick Da	rk Surface (A12)		X Redox Dai	k Surfac	e (F6)		³ Indicators	of hydrophytic vegetation and
	ucky Mineral (S1)		Depleted [d hydrology must be present,
5 cm Mu	cky Peat or Peat (S3	3)	Redox Dep	pression	s (F8)		unless	disturbed or problematic.
Restrictive L	Layer (if observed):							
Type:								
Depth (in	nches):		<u>—</u>				Hydric Soil Present?	Yes X No No
Remarks:								
Hydric soils o	observed.							
HYDROLO	ic.							
-	drology Indicators:	na ia raavir						
	•						Canadan	u la disada na (asisisan na af tuna na suina di
Surface \		nie is requii	ed; check all that		vos (BO)			/ Indicators (minimum of two required)
High Wat	Water (A1) ter Table (A2)	nie is requii	Water-Sta	ined Lea	` '		X Surfac	ce Soil Cracks (B6)
I —	ter Table (A2)	nie is requii	Water-Sta Aquatic Fa	ined Lea una (B1	3)		X Surface Draina	ce Soil Cracks (B6) age Patterns (B10)
Saturatio	ter Table (A2) on (A3)	nie is requii	Water-Sta Aquatic Fa True Aqua	ined Lea iuna (B1 tic Plant	3) s (B14)		X Surface Draina Dry-Se	ce Soil Cracks (B6) age Patterns (B10) eason Water Table (C2)
Saturatio Water Ma	ter Table (A2) on (A3) arks (B1)	ine is requi	Water-Sta Aquatic Fa True Aqua Hydrogen	ined Lea una (B1 tic Plant Sulfide (3) s (B14) Odor (C1)		X Surface Draina Dry-Sc Crayfi	ce Soil Cracks (B6) age Patterns (B10) eason Water Table (C2) sh Burrows (C8)
Saturatio Water Ma	ter Table (A2) on (A3)	ine is requi	Water-Sta Aquatic Fa True Aqua	ined Lea una (B1 tic Plant Sulfide (Rhizosph	3) s (B14) Odor (C1) eres on l	_iving R	X Surface Draina Dry-Si Crayfi Satura	ce Soil Cracks (B6) age Patterns (B10) eason Water Table (C2)
Saturatio Water Ma Sedimen Drift Dep	ter Table (A2) on (A3) arks (B1) it Deposits (B2)	vie is requi	Water-Sta Aquatic Fa True Aqua Hydrogen Oxidized F	ined Lea auna (B1 tic Plant Sulfide (Rhizosph of Reduc	3) s (B14) Ddor (C1) eres on l ced Iron (Living Ro	X Surface Draina Dry-Sc Crayfice Satura Stuntes St	ce Soil Cracks (B6) age Patterns (B10) eason Water Table (C2) sh Burrows (C8) ation Visible on Aerial Imagery (C9)
Saturatio Water Ma Sedimen Drift Dep Algal Ma	ter Table (A2) on (A3) arks (B1) ot Deposits (B2) osits (B3)	ine is requir	Water-Sta Aquatic Fa True Aqua Hydrogen Oxidized F	ined Lea auna (B1 tic Plant Sulfide (Rhizosph of Reduc n Reduc	3) s (B14) Odor (C1) eres on L ced Iron (Living Ro	X Surface Draina Dry-Sc Crayfice Stunte Stunt	ce Soil Cracks (B6) age Patterns (B10) eason Water Table (C2) sh Burrows (C8) ation Visible on Aerial Imagery (C9) and or Stressed Plants (D1)
Saturatio Water Ma Sedimen Drift Dep Algal Mat	ter Table (A2) on (A3) arks (B1) ot Deposits (B2) oosits (B3) t or Crust (B4)		Water-Sta Aquatic Fa True Aqua Hydrogen Oxidized F Presence Recent Iro Thin Muck	ined Lea auna (B1 tic Plant Sulfide (Rhizosph of Reduc n Reduc Surface	3) s (B14) Odor (C1) eres on Led Iron (tion in Ti	Living Ro	X Surface Draina Dry-Sc Crayfice Stunte Stunt	ce Soil Cracks (B6) age Patterns (B10) eason Water Table (C2) sh Burrows (C8) ation Visible on Aerial Imagery (C9) ed or Stressed Plants (D1) orphic Position (D2)
Saturatio Water Ma Sedimen Drift Dep Algal Mat Iron Depo	ter Table (A2) on (A3) arks (B1) ot Deposits (B2) osits (B3) t or Crust (B4) osits (B5)	magery (B7	Water-Sta Aquatic Fa True Aqua Hydrogen Oxidized F Presence Recent Iro Thin Muck Gauge or V	ined Lea auna (B1 tic Plant Sulfide (Rhizosph of Reduc n Reduc Surface Well Dat	3) s (B14) Odor (C1) eres on L ced Iron (tion in Ti (C7) a (D9)	Living Ro	X Surface Draina Dry-Sc Crayfice Stunte Stunt	ce Soil Cracks (B6) age Patterns (B10) eason Water Table (C2) sh Burrows (C8) ation Visible on Aerial Imagery (C9) ed or Stressed Plants (D1) orphic Position (D2)
Saturatio Water Ma Sedimen Drift Dep Algal Mat Iron Depo	ter Table (A2) on (A3) arks (B1) ot Deposits (B2) osits (B3) t or Crust (B4) osits (B5) on Visible on Aerial In	magery (B7	Water-Sta Aquatic Fa True Aqua Hydrogen Oxidized F Presence Recent Iro Thin Muck Gauge or V	ined Lea auna (B1 tic Plant Sulfide (Rhizosph of Reduc n Reduc Surface Well Dat	3) s (B14) Odor (C1) eres on L ced Iron (tion in Ti (C7) a (D9)	Living Ro	X Surface Draina Dry-Sc Crayfice Stunte Stunt	ce Soil Cracks (B6) age Patterns (B10) eason Water Table (C2) sh Burrows (C8) ation Visible on Aerial Imagery (C9) ed or Stressed Plants (D1) orphic Position (D2)
Saturatio Water Ma Sedimen Drift Dep Algal Mai Iron Depo Inundatio Sparsely	ter Table (A2) on (A3) arks (B1) ot Deposits (B2) osits (B3) ot or Crust (B4) osits (B5) on Visible on Aerial In Vegetated Concave	magery (B7	Water-Sta Aquatic Fa True Aqua Hydrogen Oxidized F Presence Recent Iro Thin Muck Gauge or V 8) Other (Exp	ined Lea auna (B1 tic Plant Sulfide (Rhizosph of Reduc n Reduc Surface Well Dat blain in R	3) s (B14) Odor (C1) eres on L ced Iron (tion in Ti (C7) a (D9)	Living Ro C4) Iled Soil	X Surface Draina Dry-Sc Crayfice Stunte Stunt	ce Soil Cracks (B6) age Patterns (B10) eason Water Table (C2) sh Burrows (C8) ation Visible on Aerial Imagery (C9) ed or Stressed Plants (D1) orphic Position (D2)
Saturatio Water Ma Sedimen Drift Dep Algal Mat Iron Depo Inundatio Sparsely Field Observ Surface Water Water Table	ter Table (A2) on (A3) arks (B1) ot Deposits (B2) osits (B3) ot or Crust (B4) osits (B5) on Visible on Aerial In Vegetated Concave vations: er Present? Yee	magery (B7 s Surface (B	Water-Sta Aquatic Fa True Aqua Hydrogen Oxidized F Presence Recent Iro Thin Muck Gauge or V 8) Other (Exp	ined Lea tuna (B1 tic Plant Sulfide (Rhizosph of Reduc n Reduc Surface Well Dat Depth (ii Depth (ii	3) s (B14) Ddor (C1) eres on L ced Iron (tion in Ti (C7) a (D9) emarks) nches): _ nches): _	Living Ro	X Surfac Draina Dry-Si Crayfii oots (C3) Satura Stunte s (C6) X Geom FAC-N	ce Soil Cracks (B6) age Patterns (B10) ceason Water Table (C2) ch Burrows (C8) ation Visible on Aerial Imagery (C9) cd or Stressed Plants (D1) orphic Position (D2) Neutral Test (D5)
Saturatio Water Ma Sedimen Drift Depo Algal Mat Iron Depo Inundatio Sparsely Field Observ Surface Water Water Table Saturation Pr	ter Table (A2) on (A3) arks (B1) ot Deposits (B2) osits (B3) ot or Crust (B4) osits (B5) on Visible on Aerial In Vegetated Concave vations: er Present? Present? Ye resent? Ye	magery (B7 Surface (B	Water-Sta Aquatic Fa True Aqua Hydrogen Oxidized F Presence Recent Iro Thin Muck Gauge or V 8) Other (Exp	ined Lea auna (B1 tic Plant Sulfide (Rhizosph of Reduc n Reduc Surface Well Dat blain in R	3) s (B14) Ddor (C1) eres on L ced Iron (tion in Ti (C7) a (D9) emarks) nches): _ nches): _	Living Ro	X Surface Draina Dry-Sc Crayfice Stunte Stunt	ce Soil Cracks (B6) age Patterns (B10) ceason Water Table (C2) ch Burrows (C8) ation Visible on Aerial Imagery (C9) cd or Stressed Plants (D1) orphic Position (D2) Neutral Test (D5)
Saturatio Water Ma Sedimen Drift Dep Algal Mai Iron Depo Inundatio Sparsely Field Observ Surface Water Water Table Saturation Pr (includes cap	ter Table (A2) on (A3) arks (B1) ot Deposits (B2) osits (B3) ot or Crust (B4) osits (B5) on Visible on Aerial II Vegetated Concave vations: er Present? Present? Ye resent? Ye oillary fringe)	magery (B7 e Surface (B es es	Water-Sta Aquatic Fa True Aqua Hydrogen Oxidized Fa Presence Recent Iro Thin Muck Gauge or V 8) Other (Exp No X No X No X	ined Lea auna (B1 tic Plant Sulfide (Rhizosph of Reduc n Reduc Surface Well Dat blain in R Depth (ii Depth (ii	3) s (B14) Ddor (C1) eres on L ced Iron (tion in Ti (C7) a (D9) demarks) nches): _ nches): _ nches): _	Living Ro	X Surface Draina Dry-Seconds (C3) Satura Stunte S (C6) X Geom FAC-N Wetland Hydrolog	ce Soil Cracks (B6) age Patterns (B10) ceason Water Table (C2) ch Burrows (C8) ation Visible on Aerial Imagery (C9) cd or Stressed Plants (D1) orphic Position (D2) Neutral Test (D5)
Saturatio Water Ma Sedimen Drift Dep Algal Mai Iron Depo Inundatio Sparsely Field Observ Surface Water Water Table Saturation Pr (includes cap	ter Table (A2) on (A3) arks (B1) ot Deposits (B2) osits (B3) ot or Crust (B4) osits (B5) on Visible on Aerial In Vegetated Concave vations: er Present? Present? Ye resent? Ye	magery (B7 e Surface (B es es	Water-Sta Aquatic Fa True Aqua Hydrogen Oxidized Fa Presence Recent Iro Thin Muck Gauge or V 8) Other (Exp No X No X No X	ined Lea auna (B1 tic Plant Sulfide (Rhizosph of Reduc n Reduc Surface Well Dat blain in R Depth (ii Depth (ii	3) s (B14) Ddor (C1) eres on L ced Iron (tion in Ti (C7) a (D9) demarks) nches): _ nches): _ nches): _	Living Ro	X Surface Draina Dry-Seconds (C3) Satura Stunte S (C6) X Geom FAC-N Wetland Hydrolog	ce Soil Cracks (B6) age Patterns (B10) ceason Water Table (C2) ch Burrows (C8) ation Visible on Aerial Imagery (C9) cd or Stressed Plants (D1) orphic Position (D2) Neutral Test (D5)
Saturatio Water Ma Sediment Drift Dep Algal Mat Iron Depo Inundatio Sparsely Field Observ Surface Water Water Table Saturation Pr (includes cap Describe Rec	ter Table (A2) on (A3) arks (B1) ot Deposits (B2) osits (B3) ot or Crust (B4) osits (B5) on Visible on Aerial II Vegetated Concave vations: er Present? Present? Ye resent? Ye oillary fringe)	magery (B7 e Surface (B es es	Water-Sta Aquatic Fa True Aqua Hydrogen Oxidized Fa Presence Recent Iro Thin Muck Gauge or V 8) Other (Exp No X No X No X	ined Lea auna (B1 tic Plant Sulfide (Rhizosph of Reduc n Reduc Surface Well Dat blain in R Depth (ii Depth (ii	3) s (B14) Ddor (C1) eres on L ced Iron (tion in Ti (C7) a (D9) demarks) nches): _ nches): _ nches): _	Living Ro	X Surface Draina Dry-Seconds (C3) Satura Stunte S (C6) X Geom FAC-N Wetland Hydrolog	ce Soil Cracks (B6) age Patterns (B10) ceason Water Table (C2) ch Burrows (C8) ation Visible on Aerial Imagery (C9) cd or Stressed Plants (D1) orphic Position (D2) Neutral Test (D5)
Saturatio Water Ma Sedimen Drift Dep Algal Mat Iron Depo Inundatio Sparsely Field Observ Surface Water Water Table Saturation Pr (includes cap Describe Rec	ter Table (A2) on (A3) arks (B1) ot Deposits (B2) osits (B3) ot or Crust (B4) osits (B5) on Visible on Aerial II Vegetated Concave vations: er Present? Present? Ye resent? Ye oillary fringe)	magery (B7 e Surface (B es es	Water-Sta Aquatic Fa True Aqua Hydrogen Oxidized Fa Presence Recent Iro Thin Muck Gauge or V 8) Other (Exp No X No X No X	ined Lea auna (B1 tic Plant Sulfide (Rhizosph of Reduc n Reduc Surface Well Dat blain in R Depth (ii Depth (ii	3) s (B14) Ddor (C1) eres on L ced Iron (tion in Ti (C7) a (D9) demarks) nches): _ nches): _ nches): _	Living Ro	X Surface Draina Dry-Seconds (C3) Satura Stunte S (C6) X Geom FAC-N Wetland Hydrolog	ce Soil Cracks (B6) age Patterns (B10) ceason Water Table (C2) ch Burrows (C8) ation Visible on Aerial Imagery (C9) cd or Stressed Plants (D1) orphic Position (D2) Neutral Test (D5)

Project/Site: Toronto, SD MRES Wetland	City/County: Toronto/	/Deuel	Sampling Date: 9/30/	2024
Applicant/Owner: Missouri River Energy Services	<u> </u>	State: SD	Sampling Point:	P15
Investigator(s): N. Oswald	Section, Township, Rai	nge: S7 T113N R48W		
Landform (hillside, terrace, etc.): Ag field	Local relief (c	oncave, convex, none): (Concave	
Slope (%): 4-5 Lat: 44.607974	Long: 96.623593	1	Datum: 1984	
Soil Map Unit Name: Hm		NWI classifi	cation: NA	
Are climatic / hydrologic conditions on the site typical for this time of y	ear? Yes X	No (If no, exp	lain in Remarks.)	
Are Vegetation Y , Soil Y , or Hydrology Y significantly dist	turbed? Are "Normal C	ircumstances" present?	Yes X No	
Are Vegetation, Soil, or Hydrologynaturally proble		olain any answers in Rer		-
SUMMARY OF FINDINGS – Attach site map showing		cations, transects,	important features	s, etc.
Hydrophytic Vegetation Present? Yes * No Hydric Soil Present? Yes X No Wetland Hydrology Present? Yes No X	Is the Sampled Ar within a Wetland?		No X	
Remarks: Upland point for P14.				
VEGETATION – Use scientific names of plants.				
	Dominant Indicator Species? Status	Dominance Test wor	ksheet:	
1		Number of Dominant S Are OBL, FACW, or FA	•	(A)
3. 4.		Total Number of Domi Across All Strata:		(B)
5	otal Cover	Percent of Dominant S Are OBL, FACW, or FA		(A/B)
Sapling/Shrub Stratum (Plot size: 10)				
1		Prevalence Index wo		
2		Total % Cover of:		_
3		OBL species	x 1 =	
5.		FACW species FAC species	x 2 = x 3 =	_
	otal Cover	FACU species	x 4 =	-
Herb Stratum (Plot size: 3)	star Covo.	UPL species	x 5 =	-
1		Column Totals:	(A)	(B)
2. 3.		Prevalence Index =		-
4		Hydrophytic Vegetati 1 - Rapid Test for 2 - Dominance Te 3 - Prevalence Ind	Hydrophytic Vegetation st is >50%	
7			Adaptations ¹ (Provide sup	porting
9.			s or on a separate sheet)	
10		Problematic Hydro	phytic Vegetation ¹ (Expla	ain)
Woody Vine Stratum (Plot size: 3)	otal Cover	¹ Indicators of hydric so be present, unless dist	oil and wetland hydrology curbed or problematic.	must
1		Hydrophytic Vegetation		
=T-	otal Cover	Present? Yes_	* No	
Remarks: (Include photo numbers here or on a separate sheet.) Vegetation not considered due to farming practices.				

Profile Desc	ription: (Describe	to the dep	th needed to doc	ument tl	ne indica	ator or o	confirm the absenc	e of indicators	.)	
Depth	Matrix		Redo	x Featur						
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	_	Remarks	
0-8	10YR 3/2	95	5YR 4/6	5	С	PL/M	Loamy/Clayey	Prominer	nt redox conc	entrations
8-16	10YR 3/2	100					Loamy/Clayey			
16-28	10YR 3/2	85					Loamy/Clayey		10YR 4/3 15%	%
28-40	10YR 4/3	80					Loamy/Clayey		10YR 3/2 20%	%
							1	_		
l ———							-	_		
1- 0.0			B 1 111 11 1				21			
	oncentration, D=Dep	ietion, Rivi=	Reduced Matrix, N	vi5=ivias	ked Sand	Grains		on: PL=Pore Li		
Hydric Soil I Histosol			Sandy Gle	wod Mat	riv (S1)			ast Prairie Redo	-	Solis :
	ipedon (A2)		Sandy Red	-	IIX (34)			ast Frame Redt n-Manganese M		
Black His			Stripped M		3)			d Parent Materia		
	n Sulfide (A4)		Dark Surfa	,	<i>,</i>			ry Shallow Dark	` ,	2)
	Layers (A5)		Loamy Mu	` '	eral (F1)			ner (Explain in R	,	-/
2 cm Mu			Loamy Gle					(=-4	,	
	Below Dark Surface	e (A11)	Depleted N	•	, ,					
I —	rk Surface (A12)	,	X Redox Dai				³ Indicat	ors of hydrophy	tic vegetation	n and
Sandy M	ucky Mineral (S1)		Depleted [Dark Sur	face (F7))	we	tland hydrology	must be pres	sent,
5 cm Mu	cky Peat or Peat (S3	3)	Redox Dep	oression	s (F8)		unl	ess disturbed o	r problematic	
Restrictive I	_ayer (if observed):									
Type:										
Depth (in	nches):						Hydric Soil Prese	ent?	Yes X	No
Remarks:										
Hydric soils o	observed.									
HYDROLO	GY									
Wetland Hyd	drology Indicators:									
Primary Indic	cators (minimum of c	ne is requi	red; check all that	apply)			Second	dary Indicators (minimum of t	wo required)
Surface \	Water (A1)		Water-Sta	ined Lea	ives (B9)		Su	rface Soil Crack	s (B6)	
High Wa	ter Table (A2)		Aquatic Fa	auna (B1	3)		Dra	ainage Patterns	(B10)	
Saturatio	` '		True Aqua	tic Plant	s (B14)			/-Season Water	` '	
	arks (B1)		Hydrogen		,	,		ayfish Burrows (,	
	t Deposits (B2)		Oxidized F	•		_	` ' —	turation Visible		
	osits (B3)		Presence			` '		inted or Stresse	, ,)
	t or Crust (B4)		Recent Iro Thin Muck			ilea Soil		omorphic Positi		
	osits (B5) on Visible on Aerial I	magen/ (R7			, ,		FA	C-Neutral Test ((D3)	
	Vegetated Concave									
Field Observ		Carrace (E	Other (EXP	, , , , , , , , , , , , , , , , , , ,	- Ciriarito)		<u> </u>			
Surface Water		S	No X	Denth (i	nches):					
Water Table		s			nches):					
Saturation Pr				Depth (i	_		Wetland Hydrol	ogy Present?	Yes	No X
(includes cap		<u> </u>	<u></u>	_ op (.						
	corded Data (stream	gauge, mo	onitoring well, aeria	l photos	, previou	s inspec	ctions), if available:			
	<u> </u>			<u>. </u>			<u> </u>			
Remarks:										
No wetland h	ydrology obseved.									

Project/Site: Toronto, SD MRES Wetland	City/County: Toronto/Deuel Sampling Date: 9/30/202
Applicant/Owner: Missouri River Energy Services	State: SD Sampling Point: P16
Investigator(s): N. Oswald	Section, Township, Range: S7 T113N R48W
Landform (hillside, terrace, etc.): Ag field	Local relief (concave, convex, none): Concave
Slope (%): 0-2 Lat: 44.606924	Long: 96.623813 Datum: 1984
Soil Map Unit Name: Hm	NWI classification: PEMAf
Are climatic / hydrologic conditions on the site typical for this time	of year? Yes X No (If no, explain in Remarks.)
Are Vegetation Y, Soil Y, or Hydrology Y significantly	disturbed? Are "Normal Circumstances" present? Yes X No
Are Vegetation, Soil, or Hydrologynaturally pro	blematic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map show	ng sampling point locations, transects, important features, e
Hydrophytic Vegetation Present? Yes * No	Is the Sampled Area
Hydric Soil Present? Yes X No	within a Wetland? Yes X No
Wetland Hydrology Present? Yes X No No	
Remarks:	
Point taken in low area of soy bean field.	
VECETATION Lies esignific names of plants	
VEGETATION – Use scientific names of plants. Absolute	Dominant Indicator
Tree Stratum (Plot size: 30) % Cover	Species? Status Dominance Test worksheet:
1.	Number of Dominant Species That
2	Are OBL, FACW, or FAC:(A)
3	Total Number of Dominant Species
4	
5	Percent of Dominant Species That are OBL, FACW, or FAC: (A/
Sapling/Shrub Stratum (Plot size: 10)	=10tal COVE1
1	Prevalence Index worksheet:
2.	
3.	OBL species x 1 =
4	
5	FAC species x 3 =
Herb Stratum (Plot size: 3)	=Total Cover FACU species x 4 =
Herb Stratum (Plot size: 3) 1.	UPL species x 5 = Column Totals: (A) (B)
	Prevalence Index = B/A =
2. 3.	·
	Hydrophytic Vegetation Indicators:
5.	· · · · · · · · · · · · · · · · · · ·
6.	2 - Dominance Test is >50%
7.	3 - Prevalence Index is ≤3.0 ¹
8.	4 - Morphological Adaptations ¹ (Provide suppor
9.	
10	Problematic Hydrophytic Vegetation ¹ (Explain)
	=Total Cover ¹ Indicators of hydric soil and wetland hydrology mus
Woody Vine Stratum (Plot size: 3	be present, unless disturbed or problematic.
1	
2	Vegetation
1	=Total Cover

Profile Desc	ription: (Describe	to the dep	th needed to doc	ument tl	ne indica	ator or o	confirm the absence	of indicators.)
Depth	Matrix		Redo	x Featur				
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-6	10YR 3/1	95	5YR 4/6	5	С	PL/M	Loamy/Clayey	Prominent redox concentrations
6-18	10YR 2/1	95	5YR 4/6	5	С	PL/M	Loamy/Clayey	
18-24	10YR 2/1	100					Loamy/Clayey	
24-40	10YR 3/1	100					Loamy/Clayey	
	-							
1Type: C=C	oncentration, D=Dep	letion RM-	Reduced Matrix N	 2cM_2L	ked Sand		² Location	n: PL=Pore Lining, M=Matrix.
Hydric Soil I		ietion, ixivi–	reduced Matrix, I	vio–ivias	keu Sanc	Olailis		rs for Problematic Hydric Soils ³ :
Histosol			Sandy Gle	ved Mat	rix (S4)			st Prairie Redox (A16)
	ipedon (A2)		Sandy Red	•	(O I)			Manganese Masses (F12)
Black His			Stripped M		3)			Parent Material (F21)
	n Sulfide (A4)		Dark Surfa	,	,			Shallow Dark Surface (F22)
	Layers (A5)		Loamy Mu	` '	eral (F1)		 ′	er (Explain in Remarks)
2 cm Mu			Loamy Gle					,
Depleted	Below Dark Surface	(A11)	Depleted N	∕latrix (F	3)			
	rk Surface (A12)		X Redox Da	rk Surfac	e (F6)		³ Indicato	rs of hydrophytic vegetation and
Sandy M	ucky Mineral (S1)		Depleted [Dark Sur	face (F7)		wetla	and hydrology must be present,
5 cm Mu	cky Peat or Peat (S3	3)	Redox De	oression	s (F8)		unle	ss disturbed or problematic.
Restrictive I	ayer (if observed):							
Type:								
Depth (in	iches):						Hydric Soil Presen	t? Yes <u>X</u> No
Remarks:								
Hydric soils of	bserved.							
HYDROLO	GY							
Wetland Hyd	drology Indicators:							
Primary Indic	cators (minimum of c	ne is requi	ed; check all that	apply)			<u>Seconda</u>	ry Indicators (minimum of two required)
Surface \	Water (A1)		Water-Sta	ined Lea	ves (B9)		X Surfa	ace Soil Cracks (B6)
I —	ter Table (A2)		Aquatic Fa	•				nage Patterns (B10)
Saturatio	` '		True Aqua		, ,			Season Water Table (C2)
	arks (B1)		Hydrogen		` '	,	 '	fish Burrows (C8)
	t Deposits (B2)		Oxidized F	•		•	· · · —	ration Visible on Aerial Imagery (C9)
	osits (B3)		Presence			,		ted or Stressed Plants (D1)
	t or Crust (B4)		Recent Iro			ilea Soil	` '	morphic Position (D2)
	osits (B5) on Visible on Aerial I	maganı (P7	Thin Muck		, ,		FAC	-Neutral Test (D5)
	Vegetated Concave							
Field Observ		- Currace (E	Otrici (EX	naiii iii i	cinarks)			
Surface Water		S	No. Y	Denth (i	nches):			
Water Table		s			nches):			
Saturation P				Depth (i	_		Wetland Hydrolo	gy Present? Yes X No
(includes cap		~	<u> </u>	Dopui (i			Trottana riyaroto	g)
	corded Data (stream	gauge, mo	nitoring well, aeria	l photos	, previou	s inspec	tions), if available:	
	(5 5 , 10	J ,				,.	
Remarks:								
Wetland hyd	rology observed.							

Project/Site: Toronto	o, SD MRES Wetland		City/Cour	nty: Toronto	/Deuel	Sampling Date:	9/30/2024
Applicant/Owner:	Missouri River Energy Servic	es			State: SD	Sampling Point:	P17
Investigator(s): N. Os	swald		Section, T	ownship, Ra	nge: S7 T113N R48W	1	
Landform (hillside, te	errace, etc.): Ag field		l	_ocal relief (c	concave, convex, none):	: Concave	
Slope (%): 3-5	Lat: 44.606911		Long: 9	6.624122		Datum: 1984	
Soil Map Unit Name:	: <u>Hm</u>				NWI class	ification: NA	
Are climatic / hydrolo	ogic conditions on the site typic	cal for this time o	f year?	Yes X	No (If no, ex	plain in Remarks.)	
Are Vegetation Y	, Soil Y , or Hydrology	Y _significantly of	disturbed? A	re "Normal C	Circumstances" present	? Yes X No	
Are Vegetation	, Soil , or Hydrology	naturally prob	olematic? (I	f needed, ex	plain any answers in Re	emarks.)	
·	FINDINGS – Attach site	<u></u>		g point lo	cations, transects	s, important feat	ures, etc.
Hydrophytic Vegeta	ation Present? Yes *	No	Is the	Sampled Ar	rea		
Hydric Soil Present		No X		n a Wetland?		No X	
Wetland Hydrology	Present? Yes	No X				· <u>—</u>	
Remarks: Upland point for P1	6.		•				
VEGETATION -	- Use scientific names of	plants.					
Tree Stratum	(Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test wo	arkshoot:	
	(Plot size)			Status	Number of Dominant		
					Are OBL, FACW, or	•	(A)
					Total Number of Don	-	,
1					Across All Strata:		(B)
_					Percent of Dominant	•	
0 " (O) ask O(ask	(5)	·=	=Total Cover		Are OBL, FACW, or	FAC:	(A/B)
Sapling/Shrub Strat 1.	· · · · · · · · · · · · · · · · · · ·)		}	Prevalence Index w	erkehoot:	
-					Total % Cover o		hv:
					OBL species	x 1 =	
					FACW species	x 2 =	
5.					FAC species	x 3 =	
		=	=Total Cover		FACU species	x 4 =	
Herb Stratum	(Plot size:)	-			UPL species	x 5 =	
1					Column Totals:	`	(B)
2					Prevalence Index	= B/A =	
3					No. 1 - inherita Manata		
4.					Hydrophytic Vegeta		-1!an
5. 6.					1 - Rapid Test to 2 - Dominance T	or Hydrophytic Vegeta	ition
7		-			3 - Prevalence In		
						ldex is ≤3.0 Il Adaptations¹ (Provid	de supportino
•						rks or on a separate s	
10.					Problematic Hyd	Irophytic Vegetation ¹	(Explain)
			=Total Cover		Indicators of hydric s		
Woody Vine Stratur	m (Plot size: 3)			be present, unless di		
1					Hydrophytic		
2					Vegetation		
		=	=Total Cover		Present? Yes	* No	-
· ·	photo numbers here or on a s						
Vegetation not cons	sidered due to farming practice	∋s.					

Depth	Matrix					2					
inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Text	ure		Remarks	
0-30	10YR 3/2	100									
Type: C=Co	ncentration, D=Deple	etion RM-	-Reduced Matrix	MS-Mas	ked San	d Grains		² Location:	PI =Pore I ir	ning, M=Mati	iy
ydric Soil II		J. 1011, 11111-	-reduced Matrix,	WO-Was	nca can	a Oranio	•			natic Hydric	
Histosol (Sandy Gl	leyed Mat	riy (S4)				Prairie Redo	-	cons .
	pedon (A2)		Sandy Re	•	IIX (O4)					asses (F12)	
Black His				Matrix (S6	3)				rent Materia		
))					` ,	2)
	Sulfide (A4)		Dark Surf		oral (F1)					Surface (F2	<u> </u>
	Layers (A5)			lucky Mine	` '			Other (Explain in R	ternarks)	
2 cm Muc	` '	(444)		leyed Mat							
	Below Dark Surface	(A11)		Matrix (F				31	. (
	k Surface (A12)			ark Surfac	` '					tic vegetation	
	ucky Mineral (S1)			Dark Sur)				must be pre	
5 cm Muc	cky Peat or Peat (S3)		Redox De	epression	s (F8)			unless	disturbed or	r problematio	
estrictive L	ayer (if observed):										
	.,										
Type:											
Depth (inc		alayer. Hy	dric soils were no	ot observe	d.		Hydric So	oil Present?		Yes	No
Depth (ind Remarks: Hole terminat	ches): ed at 30" due to rock	layer. Hy	dric soils were no	ot observe	d.		Hydric Sc	oil Present?		Yes	No
Depth (inc	ches): ed at 30" due to rock	t layer. Hy	dric soils were no	ot observe	d.		Hydric Sc	oil Present?		Yes	. No
Depth (independent of the property of the prop	ches): ed at 30" due to rock	t layer. Hy	dric soils were no	ot observe	d.		Hydric Sc	oil Present?		Yes	No_
Depth (ind Remarks: Hole terminate YDROLOG Vetland Hyd	ches): ed at 30" due to rock				d.		Hydric Sc		Indicators (r	Yes	
Depth (indicated property of the control of the con	ches): ed at 30" due to rock GY rology Indicators:		red; check all tha				Hydric Sc	Secondary	Indicators (r	minimum of	
Depth (indicated) Pemarks: Itole terminate YDROLOG Vetland Hyd rimary Indicate Surface V	ches): ed at 30" due to rock GY rology Indicators: ators (minimum of or		red; check all tha	t apply)	ves (B9)		Hydric Sc	Secondary Surface		minimum of	
Depth (indicated) Pemarks: Itole terminate YDROLOG Vetland Hyd rimary Indicate Surface V	ed at 30" due to rock GY rology Indicators: ators (minimum of or Vater (A1) er Table (A2)		red; check all tha Water-St Aquatic F	t apply) ained Lea	ves (B9)		Hydric Sc	Secondary Surface Drainag	Soil Crack	minimum of s s (B6) (B10)	
Depth (included in the control of th	ed at 30" due to rock GY rology Indicators: ators (minimum of or Vater (A1) er Table (A2) n (A3)		red; check all tha Water-St Aquatic F True Aqu	t apply) ained Lea Fauna (B1	ives (B9) 3) s (B14)		Hydric Sc	Secondary Surface Drainag Dry-Se	Soil Crack ge Patterns	minimum of s (B6) (B10) Table (C2)	
Depth (indexember) Property Property Indicates Surface Version Water Market Indicates Surface Version Water Market Indicates I	ed at 30" due to rock GY rology Indicators: ators (minimum of or Vater (A1) er Table (A2) n (A3)		red; check all tha Water-St: Aquatic F True Aqu Hydroger	t apply) ained Lea Fauna (B1 atic Plant	ves (B9) 3) s (B14) Ddor (C1)		Secondary Surface Drainaç Dry-Sea Crayfisl	e Soil Crack ge Patterns ason Water n Burrows (0	minimum of s (B6) (B10) Table (C2)	wo requir
Depth (indexember) Permarks: Itole terminate Primary Indicate Surface V High Wate Saturation Water Ma	ed at 30" due to rock GY rology Indicators: ators (minimum of or Vater (A1) er Table (A2) n (A3) arks (B1) Deposits (B2)		red; check all that Water-St. Aquatic F True Aqu Hydroger Oxidized	t apply) ained Lea Fauna (B1 atic Plant	ves (B9) 3) s (B14) Odor (C1 eres on) Living R		Secondary Surface Drainag Dry-Sea Crayfisl Saturat	e Soil Crack ge Patterns ason Water n Burrows (G	minimum of s s (B6) (B10) Table (C2)	wo requir
Popth (incomplete property of the complete pro	ed at 30" due to rock GY rology Indicators: ators (minimum of or Vater (A1) er Table (A2) n (A3) arks (B1) Deposits (B2)		red; check all that Water-St: Aquatic F True Aqu Hydroger Oxidized Presence	t apply) ained Lea Fauna (B1 latic Plant n Sulfide (Rhizosph	oves (B9) 3) s (B14) Odor (C1 eres on ced Iron) Living R (C4)	oots (C3)	Secondary Surface Drainag Dry-See Crayfisl Saturat Stunted	e Soil Crack ge Patterns ason Water n Burrows (G	minimum of s s (B6) (B10) Table (C2) C8) on Aerial Ima d Plants (D1	wo requir
Popth (incomplete property of the complete pro	ches): ed at 30" due to rock rology Indicators: ators (minimum of or Vater (A1) er Table (A2) n (A3) arks (B1) Deposits (B2) posits (B3) or Crust (B4)		red; check all that Water-St: Aquatic F True Aqu Hydroger Oxidized Presence Recent Ir	t apply) ained Lea Fauna (B1 atic Plant n Sulfide (Rhizosph	oves (B9) 3) s (B14) Odor (C1 eres on ced Iron ction in T) Living R (C4)	oots (C3)	Secondary Surface Drainag Dry-Sea Crayfisl Saturat Stunted Geomo	Soil Crack ge Patterns ason Water n Burrows (fion Visible of l or Stresse	minimum of s (B6) (B10) Table (C2) C8) on Aerial Imade Plants (D1) on (D2)	wo requir
Pepth (included in the control of th	ches): ed at 30" due to rock rology Indicators: ators (minimum of or Vater (A1) er Table (A2) n (A3) arks (B1) Deposits (B2) posits (B3) or Crust (B4)	ne is requi	red; check all that Water-St. Aquatic F True Aqu Hydroger Oxidized Presence Recent Ir Thin Muc	t apply) ained Lea Fauna (B1 latic Plant n Sulfide (Rhizosph e of Reduc	oves (B9) 3) s (B14) Odor (C1 eres on ced Iron ction in T) Living R (C4)	oots (C3)	Secondary Surface Drainag Dry-Sea Crayfisl Saturat Stunted Geomo	e Soil Crack ge Patterns ason Water n Burrows (fion Visible of I or Stresse rphic Position	minimum of s (B6) (B10) Table (C2) C8) on Aerial Imade Plants (D1) on (D2)	wo requir
Pepth (included in the control of th	ches): ed at 30" due to rock rology Indicators: ators (minimum of or Vater (A1) er Table (A2) n (A3) urks (B1) Deposits (B2) posits (B3) or Crust (B4) posits (B5)	ne is requi	red; check all that Water-St: Aquatic F True Aqu Hydroger Oxidized Presence Recent Ir Thin Muc Gauge or	t apply) ained Lea Fauna (B1 atic Plant a Sulfide (Rhizosph of Reduc	oves (B9) 3) s (B14) Ddor (C1 eres on ced Iron tition in T t (C7) a (D9)) Living R (C4) illed Soil	oots (C3)	Secondary Surface Drainag Dry-Sea Crayfisl Saturat Stunted Geomo	e Soil Crack ge Patterns ason Water n Burrows (fion Visible of I or Stresse rphic Position	minimum of s (B6) (B10) Table (C2) C8) on Aerial Imade Plants (D1) on (D2)	wo requir
Popth (incomplete in the complete in the compl	ed at 30" due to rock GY rology Indicators: ators (minimum of or Vater (A1) er Table (A2) n (A3) arks (B1) Deposits (B2) osits (B3) or Crust (B4) osits (B5) n Visible on Aerial Im Vegetated Concave	ne is requi	red; check all that Water-St: Aquatic F True Aqu Hydroger Oxidized Presence Recent Ir Thin Muc Gauge or	t apply) ained Lea fauna (B1 atic Plant a Sulfide (Rhizosph e of Reduc on Reduc	oves (B9) 3) s (B14) Ddor (C1 eres on ced Iron tition in T t (C7) a (D9)) Living R (C4) illed Soil	oots (C3)	Secondary Surface Drainag Dry-Sea Crayfisl Saturat Stunted Geomo	e Soil Crack ge Patterns ason Water n Burrows (fion Visible of I or Stresse rphic Position	minimum of s (B6) (B10) Table (C2) C8) on Aerial Imade Plants (D1) on (D2)	wo requir
Popth (incomplete in the complete in the compl	ches): ed at 30" due to rock rology Indicators: ators (minimum of or Vater (A1) er Table (A2) n (A3) arks (B1) Deposits (B2) osits (B3) or Crust (B4) osits (B5) n Visible on Aerial Im Vegetated Concave rations:	ne is requi nagery (B7 Surface (E	red; check all that Water-St: Aquatic F True Aqu Hydroger Oxidized Presence Recent Ir Thin Muc Gauge or	t apply) ained Lea fauna (B1 atic Plant a Sulfide (Rhizosph e of Reduc on Reduc	oves (B9) 3) s (B14) Odor (C1 eres on ced Iron tion in T c (C7) a (D9)) Living R (C4) illed Soil	oots (C3)	Secondary Surface Drainag Dry-Sea Crayfisl Saturat Stunted Geomo	e Soil Crack ge Patterns ason Water n Burrows (fion Visible of I or Stresse rphic Position	minimum of s (B6) (B10) Table (C2) C8) on Aerial Imade Plants (D1) on (D2)	wo requir
Property (incomplete in the control of the control	ches): ed at 30" due to rock gy rology Indicators: ators (minimum of or Vater (A1) er Table (A2) n (A3) urks (B1) Deposits (B2) posits (B3) or Crust (B4) posits (B5) n Visible on Aerial Im Vegetated Concave ations: er Present? Yes	ne is requir nagery (B7 Surface (E	red; check all that Water-St. Aquatic F True Aqu Hydroger Oxidized Presence Recent Ir Thin Muc Gauge or Other (Ex	t apply) ained Lea Fauna (B1 atic Plant a Sulfide (Rhizosph e of Reduc on Reduc k Surface r Well Dat	aves (B9) 3) s (B14) Odor (C1 eres on ced Iron ition in T c (C7) a (D9) demarks)) Living R (C4) illed Soil	oots (C3)	Secondary Surface Drainag Dry-Sea Crayfisl Saturat Stunted Geomo	e Soil Crack ge Patterns ason Water n Burrows (fion Visible of I or Stresse rphic Position	minimum of s (B6) (B10) Table (C2) C8) on Aerial Imade Plants (D1) on (D2)	wo requir
Property (incomplete in the complete in the co	ches): ed at 30" due to rock GY rology Indicators: ators (minimum of or Vater (A1) er Table (A2) n (A3) arks (B1) Deposits (B2) posits (B3) or Crust (B4) posits (B5) n Visible on Aerial Im Vegetated Concave rations: ar Present? Yes Present? Yes	ne is requir nagery (B7 Surface (E	red; check all that Water-St: Aquatic F True Aqu Hydroger Oxidized Presence Recent Ir Thin Muc 7) Gauge or 38) Other (Ex	t apply) ained Lea Fauna (B1 atic Plant a Sulfide (Rhizosph of Reduct on Re	aves (B9) 3) s (B14) Ddor (C1 eres on ced Iron tion in T (C7) a (D9) emarks) nches): _nches):) Living R (C4) illed Soil	oots (C3) s (C6)	Secondary Surface Drainag Dry-Sea Crayfisl Saturat Stunted Geomo	e Soil Crack ge Patterns ason Water n Burrows (fion Visible of d or Stresse rphic Positio eutral Test (minimum of s (B6) (B10) Table (C2) C8) on Aerial Imade Plants (D1) on (D2)	wo requii
Primary Indication Staturation Water Ma Sediment Drift Depo Algal Mat Iron Depo Inundation	ches): ed at 30" due to rock GY rology Indicators: ators (minimum of or Vater (A1) er Table (A2) n (A3) arks (B1) Deposits (B2) posits (B3) or Crust (B4) posits (B5) n Visible on Aerial Im Vegetated Concave rations: er Present? Yes esent? Yes esent? Yes	ne is requir nagery (B7 Surface (E	red; check all that Water-St: Aquatic F True Aqu Hydroger Oxidized Presence Recent Ir Thin Muc 7) Gauge or 38) Other (Ex No X No X	t apply) ained Lea fauna (B1 atic Plant a Sulfide (Rhizosph e of Reduce on Reduce on Reduce well Dat collain in R Depth (ii	aves (B9) 3) s (B14) Ddor (C1 eres on ced Iron tion in T (C7) a (D9) emarks) nches): _nches):) Living R (C4) illed Soil	oots (C3) s (C6)	Secondary Surface Drainag Dry-Sea Crayfisl Saturat Stunted Geomo FAC-Ne	e Soil Crack ge Patterns ason Water n Burrows (fion Visible of d or Stresse rphic Positio eutral Test (minimum of s s (B6) (B10) Table (C2) C8) on Aerial Ima d Plants (D1 on (D2)	wo requi
Popth (incomplete Control of the Con	ches): ed at 30" due to rock GY rology Indicators: ators (minimum of or Vater (A1) er Table (A2) n (A3) arks (B1) Deposits (B2) posits (B3) or Crust (B4) posits (B5) n Visible on Aerial Im Vegetated Concave rations: er Present? Yes esent? Yes esent? Yes	ne is requi	red; check all that Water-St: Aquatic F True Aqu Hydroger Oxidized Presence Recent Ir Thin Muc Gauge or Other (Ex No X No X No X	t apply) ained Lea Fauna (B1 latic Plant in Sulfide (Cook) con Reduct ick Surface ick Surface ick Well Dat ickplain in R Depth (ii ick Depth (iii)	oves (B9) 3) s (B14) Ddor (C1 eres on ced Iron tion in T c (C7) a (D9) elemarks) nches): nches):) Living R (C4) illed Soil	oots (C3) s (C6)	Secondary Surface Drainag Dry-See Crayfisl Saturat Stunted Geomo FAC-Ne	e Soil Crack ge Patterns ason Water n Burrows (fion Visible of d or Stresse rphic Positio eutral Test (minimum of s s (B6) (B10) Table (C2) C8) on Aerial Ima d Plants (D1 on (D2)	wo requir
Depth (includes capi	ches): ed at 30" due to rock gy rology Indicators: ators (minimum of or Vater (A1) er Table (A2) n (A3) arks (B1) Deposits (B2) Dists (B3) or Crust (B4) Dists (B5) n Visible on Aerial Im Vegetated Concave rations: ar Present? Present? Yes esent? Yes esent? Yes esent? Yes esent? Yes esent?	ne is requi	red; check all that Water-St: Aquatic F True Aqu Hydroger Oxidized Presence Recent Ir Thin Muc Gauge or Other (Ex No X No X No X	t apply) ained Lea Fauna (B1 latic Plant in Sulfide (Cook) con Reduct ick Surface ick Surface ick Well Dat ickplain in R Depth (ii ick Depth (iii)	oves (B9) 3) s (B14) Ddor (C1 eres on ced Iron tion in T c (C7) a (D9) elemarks) nches): nches):) Living R (C4) illed Soil	oots (C3) s (C6)	Secondary Surface Drainag Dry-See Crayfisl Saturat Stunted Geomo FAC-Ne	e Soil Crack ge Patterns ason Water n Burrows (fion Visible of d or Stresse rphic Positio eutral Test (minimum of s s (B6) (B10) Table (C2) C8) on Aerial Ima d Plants (D1 on (D2)	wo requir
Popth (incomplete Control of the Con	ches): ed at 30" due to rock gy rology Indicators: ators (minimum of or Vater (A1) er Table (A2) n (A3) arks (B1) Deposits (B2) Dists (B3) or Crust (B4) Dists (B5) n Visible on Aerial Im Vegetated Concave rations: ar Present? Present? Yes esent? Yes esent? Yes esent? Yes esent? Yes esent?	ne is requi	red; check all that Water-St: Aquatic F True Aqu Hydroger Oxidized Presence Recent Ir Thin Muc Gauge or Other (Ex No X No X No X	t apply) ained Lea Fauna (B1 latic Plant in Sulfide (Cook) con Reduct ick Surface ick Surface ick Well Dat ickplain in R Depth (ii ick Depth (iii)	oves (B9) 3) s (B14) Ddor (C1 eres on ced Iron tion in T c (C7) a (D9) elemarks) nches): nches):) Living R (C4) illed Soil	oots (C3) s (C6)	Secondary Surface Drainag Dry-See Crayfisl Saturat Stunted Geomo FAC-Ne	e Soil Crack ge Patterns ason Water n Burrows (fion Visible of d or Stresse rphic Positio eutral Test (minimum of s s (B6) (B10) Table (C2) C8) on Aerial Ima d Plants (D1 on (D2)	wo requir

Project/Site: Toronto	o, SD MRES Wetland		City/Co	ounty: Toronto	o/Deuel	Sampling Date:	9/30/2024
Applicant/Owner:	Missouri River Energy S	Services			State: SD	Sampling Point:	P18
Investigator(s): N. O	swald		Section	, Township, Ra	ange: S8 T113N R48V	V	
Landform (hillside, to	errace, etc.): Ag field			Local relief (concave, convex, none): Concave	
Slope (%): 3-6	Lat: 44.605565		Long:	96.617708		Datum: 1984	
Soil Map Unit Name	: Hm				NWI class	sification: PEMAf	
Are climatic / hydrole	ogic conditions on the sit	e typical for this tir	ne of year?	Yes X	No (If no, e	xplain in Remarks.)	
Are Vegetation Y	, Soil Y , or Hydrold	ogy Y significar	ntly disturbed?	Are "Normal	Circumstances" presen	t? Yes X No	
Are Vegetation	, Soil, or Hydrold	ogy naturally	problematic?	(If needed, ex	xplain any answers in R	emarks.)	
	- FINDINGS – Attach			ing point lo	ocations, transect	s, important feat	tures, etc.
Hydrophytic Vegeta Hydric Soil Present Wetland Hydrology		(No		he Sampled A nin a Wetland		No	
Remarks: Point taken in low a	area of corn field.						
VEGETATION							
VEGETATION -	- Use scientific name	es of plants. Absolu	ute Dominant	Indicator	1		
Tree Stratum	(Plot size: 30) % Cov			Dominance Test w	orksheet:	
_					Number of Dominan	•	(4)
_					Are OBL, FACW, or		(A)
					Total Number of Doi Across All Strata:	minant Species	(B)
E					Percent of Dominan	t Species That	
			=Total Cove	er	Are OBL, FACW, or	FAC:	(A/B)
Sapling/Shrub Stra	tum (Plot size:	10)					
1. 2.					Prevalence Index v		by:
					OBL species	x 1 =	
4					FACW species		
5.					FAC species	x 3 =	
			=Total Cove	er	FACU species	x 4 =	
Herb Stratum	(Plot size: 3)			UPL species	x 5 =	
					Column Totals: Prevalence Index	``	(B)
3.					Frevalence index	. = b/A =	
					Hydrophytic Vegeta	ation Indicators:	
_						or Hydrophytic Vegeta	ation
6					2 - Dominance	Test is >50%	
7					3 - Prevalence I		
8						al Adaptations ¹ (Provi	
						irks or on a separate s	,
10			Tatal Caus		<u> </u>	drophytic Vegetation ¹	
Woody Vine Stratu	m (Plot sizo:	3 \	=Total Cove	er		soil and wetland hydr listurbed or problemat	
	m (Plot size:					iisturbed or problemai	il.
2.					Hydrophytic Vegetation		
			=Total Cove	er		s*_ No	_
Remarks: (Include	photo numbers here or o	on a separate shee	 et.)		ı		
Vegetation not con-	sidered due to farming p	ractices.					

Profile Desc	ription: (Describe t	o the dep	th needed to doc	ument t	he indica	ator or o	confirm the absence	of indicators.)
Depth	Matrix		Redo	x Featur				
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-12	10YR 2/2	95	5YR 4/6	5	С	PL/M	Loamy/Clayey	Prominent redox concentrations
12-16	10YR 2/2	90						10YR 3/4 10%
16-24	10YR 2/2	80	5YR 4/6	5	С	PL/M		10YR 3/4 15%
24-32	10YR 2/1	90						10YR 3/4 10%
32-40	10YR 2/1	85	5YR 4/6	5	С	PL/M		10YR 3/4 10%
¹ Type: C=Co	oncentration, D=Depl	etion, RM=	Reduced Matrix, N	/IS=Mas	ked San	d Grains	s. ² Location	n: PL=Pore Lining, M=Matrix.
Hydric Soil I	Indicators:						Indicato	rs for Problematic Hydric Soils ³ :
Histosol	(A1)		Sandy Gle	yed Mat	rix (S4)		Coa	st Prairie Redox (A16)
Histic Ep	ipedon (A2)		Sandy Red	dox (S5)			Iron-	Manganese Masses (F12)
Black His	stic (A3)		Stripped M	latrix (Se	6)		Red	Parent Material (F21)
Hydrogei	n Sulfide (A4)		Dark Surfa	ice (S7)			Very	Shallow Dark Surface (F22)
Stratified	Layers (A5)		Loamy Mu	cky Min	eral (F1)		Othe	er (Explain in Remarks)
2 cm Mu	ck (A10)		Loamy Gle	yed Ma	trix (F2)			
Depleted	Below Dark Surface	(A11)	Depleted N	Лatrix (F	3)			
Thick Da	rk Surface (A12)		X Redox Dar	k Surfac	e (F6)		³ Indicato	rs of hydrophytic vegetation and
Sandy M	ucky Mineral (S1)		Depleted D	Dark Sur	face (F7))	wetla	and hydrology must be present,
5 cm Mu	cky Peat or Peat (S3))	Redox Dep	oression	s (F8)		unle	ss disturbed or problematic.
Restrictive L	_ayer (if observed):							
Type:								
Depth (in	nches):						Hydric Soil Presen	t? Yes X No
Remarks:								
Hydric soils o	observed.							
HYDROLO	GY							
_	drology Indicators:							
	cators (minimum of or	ne is requi						ry Indicators (minimum of two required)
	Water (A1)		Water-Sta		` '	1		ace Soil Cracks (B6)
<u> </u>	ter Table (A2)		Aquatic Fa					nage Patterns (B10)
Saturatio	()		True Aqua		` ,			Season Water Table (C2)
Water Ma	, ,		Hydrogen		,	,	 ′	fish Burrows (C8)
	t Deposits (B2)		Oxidized R			_	· · · —	ration Visible on Aerial Imagery (C9)
	osits (B3)		Presence			` '		ated or Stressed Plants (D1)
	t or Crust (B4)		Recent Iro			lilea Soli	· · ·	morphic Position (D2)
	osits (B5)	/D.7	Thin Muck				FAC	-Neutral Test (D5)
	on Visible on Aerial In							
	Vegetated Concave	Surface (E	38) Other (Exp	nain in r	terriarks)			
Field Observ			No. V	Donth /	nahaa).			
Surface Water		<u> </u>			nches): _			
Water Table		<u>. </u>			nches): _		Wetlend Undrele	av Bracent2 Vec V No
Saturation Proceed (includes cape		·—	No X	epin (I	nches):		Wetland Hydrolo	gy Present? Yes X No
	corded Data (stream	naline mo	nitoring well acris	Inhotos	nreviou	e inenec	rtions) if available:	
Describe (46)	onded Data (Stredill	gaug e , mc	milloring well, aella	i priotos	, previou	o mopet	ononoj, ii avaliabie.	
Remarks:								
	rology observed.							

Project/Site: Toronto, SD MRES Wetland	City/County: Toronto/D	euel	Sampling Date: 9/30/2	024
Applicant/Owner: Missouri River Energy Services		State: SD	Sampling Point: P1	19
Investigator(s): N. Oswald	Section, Township, Rang	ge: S8 T113N R48W		
Landform (hillside, terrace, etc.): Ag field	Local relief (cor	ncave, convex, none): C	Concave	
Slope (%): 5-6 Lat: 44.605551	Long: 96.617814		Datum: 1984	
Soil Map Unit Name: Hm		NWI classific	cation: NA	
Are climatic / hydrologic conditions on the site typical for this time of year	ear? Yes X	No (If no, expl	ain in Remarks.)	
Are Vegetation Y , Soil Y , or Hydrology Y significantly dist				
Are Vegetation , Soil , or Hydrology naturally probler		ain any answers in Rem		
SUMMARY OF FINDINGS – Attach site map showing		-		etc.
Hydrophytic Vegetation Present? Yes * No	Is the Sampled Area within a Wetland?	a Yes	No X	
Remarks: Upland point for P18.				
VEGETATION – Use scientific names of plants.	Assissed Indicator			
	Oominant Indicator Species? Status	Dominance Test work	sheet:	
1		Number of Dominant S Are OBL, FACW, or FA	•	(A)
3. 4.		Total Number of Domir Across All Strata:	nant Species	(B)
5.		Percent of Dominant S Are OBL, FACW, or FA	pecies That	(A/B)
Sapling/Shrub Stratum (Plot size: 10)	7.Car 33.73.	7110 052,		(,,,_,
1.		Prevalence Index wor	ksheet:	
2		Total % Cover of:		
3		OBL species	x 1 =	
4		FAC species		
5		FAC species FACU species	x 3 = x 4 =	
Herb Stratum (Plot size: 3)		UPL species	x 5 =	
1		Column Totals:		(B)
2		Prevalence Index =		
4		1 - Rapid Test for h 2 - Dominance Tes 3 - Prevalence Inde	Hydrophytic Vegetation st is >50%	
8			Adaptations ¹ (Provide supp s or on a separate sheet)	oorting
9			phytic Vegetation ¹ (Explain	n)
			il and wetland hydrology m	•
1		Hydrophytic	urboa or problemate.	
2		Vegetation Present? Yes	* No	
Remarks: (Include photo numbers here or on a separate sheet.)				
Vegetation not considered due to farming practices.				

Profile Desc	ription: (Describe	to the dep	oth needed to doc	ument t	he indica	ator or o	confirm the absence of	of indicators.)	
Depth	Matrix		Redo	x Featur					
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remark	s
0-6	10YR 3/1	100					Loamy/Clayey		
6-9	10YR 3/1	98	5YR 4/6	2	С	PL/M	Loamy/Clayey		
9-20	10YR 2/2	100					Loamy/Clayey		
20-34	10YR 2/2	90					Loamy/Clayey	10YR 4/2	10%
34-40	10YR 4/3	80	5YR 4/6	5	С	PL/M	Loamy/Clayey	10YR 2/2	15%
¹ Type: C=Co	oncentration, D=Dep	letion, RM	=Reduced Matrix, N	иS=Mas	ked Sand	d Grains	. ² Location:	PL=Pore Lining, M=M	atrix.
Hydric Soil I	Indicators:						Indicator	s for Problematic Hyd	ric Soils³:
Histosol	(A1)		Sandy Gle	yed Mat	rix (S4)		Coast	Prairie Redox (A16)	
Histic Ep	ipedon (A2)		Sandy Red	dox (S5)			Iron-N	/langanese Masses (F1	2)
Black His	stic (A3)		Stripped M	latrix (Se	3)		Red F	Parent Material (F21)	
Hydroger	n Sulfide (A4)		Dark Surfa	ace (S7)			Very	Shallow Dark Surface (I	=22)
Stratified	Layers (A5)		Loamy Mu	icky Min	eral (F1)		Other	(Explain in Remarks)	
2 cm Mu	ck (A10)		Loamy Gle	eyed Ma	trix (F2)				
Depleted	Below Dark Surface	e (A11)	Depleted I	Matrix (F	3)				
Thick Da	rk Surface (A12)		Redox Da	rk Surfac	e (F6)		³ Indicators	s of hydrophytic vegetat	ion and
Sandy M	ucky Mineral (S1)		Depleted [Dark Sur	face (F7))	wetlar	nd hydrology must be p	resent,
5 cm Mu	cky Peat or Peat (S	3)	Redox De	pression	s (F8)		unles	s disturbed or problema	itic.
Restrictive L	_ayer (if observed):								
Type:									
Depth (in	nches):						Hydric Soil Present	? Yes	No X
Remarks:						-			
No hydric soi	ils observed.								
HYDROLO	GY								
Wetland Hyd	drology Indicators:								
Primary Indic	cators (minimum of c	ne is requ	ired; check all that	apply)			<u>Secondar</u>	y Indicators (minimum o	of two required)
	Water (A1)		Water-Sta		` '			ce Soil Cracks (B6)	
I —	ter Table (A2)		Aquatic Fa	•	,			age Patterns (B10)	
Saturatio	` '		True Aqua		, ,			eason Water Table (C2	2)
	arks (B1)		Hydrogen		,	,		sh Burrows (C8)	
	t Deposits (B2)		Oxidized F	•		_	· · ·	ation Visible on Aerial I	
	osits (B3)		Presence			` '		ed or Stressed Plants (I	J1)
	t or Crust (B4)		Recent Iro			ilea Soil		norphic Position (D2)	
	osits (B5)	· /D	Thin Muck		` '		FAC-I	Neutral Test (D5)	
	on Visible on Aerial I								
	Vegetated Concave	Surface (B8) Other (Exp	Diain in R	ternarks)		1		
Field Observ		_	Na V	Danth (
Surface Water		s	No X		nches): _				
Water Table Saturation Pr		es	No X No X		nches): _		Wetland Hydrolog	W Brocont? Voc	No. Y
(includes cap		··s	NO X	Depth (i	1101165).		Wetland Hydrolog	y Present? Yes	NoX
<u> </u>	corded Data (stream	gauge, m	onitoring well, aeria	al photos	. previou	s inspec	ctions), if available:		
	2000 (0000000	J 250, 111		, _F 5100	,		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		
Remarks:									
No wetland h	ydrology observed.								
I									

Project/Site: Toronto, SD MRES Wetland	(City/County: Toronto	o/Deuel	Sampling Date:	9/30/2024
Applicant/Owner: Missouri River Energy Services			State: SD	Sampling Point:	P20
Investigator(s): N. Oswald	S	ection, Township, Ra	ange: S16 T113N R48W	I	
Landform (hillside, terrace, etc.): Roadside Ditch		Local relief ((concave, convex, none):	Concave	
Slope (%): 0-2 Lat: 44.587878	<u> </u>	Long: 96.581838		Datum: 1984	<u> </u>
Soil Map Unit Name: Lr			NWI classif	ication: PEMA	
Are climatic / hydrologic conditions on the site typical for	this time of year	r? Yes X	No (If no, exp	olain in Remarks.)	
Are Vegetation N , Soil N , or Hydrology N sig	gnificantly disturf	ped? Are "Normal	Circumstances" present?	Yes X_ No)
Are Vegetation N , Soil N , or Hydrology N na			explain any answers in Rer		
SUMMARY OF FINDINGS – Attach site map			ocations, transects	, important fea	tures, etc.
Hydrophytic Vegetation Present? Yes X No Hydric Soil Present? Yes X No Wetland Hydrology Present? Yes X No		Is the Sampled A within a Wetland		No	
Remarks: Point taken in roadside ditch with hydrophytic vegetation	n.				
VEGETATION – Use scientific names of plan	its.				
		minant Indicator	Daminana Teet wee		
		ecies? Status	Dominance Test wor		
1			Number of Dominant S Are OBL, FACW, or F.	•	1 (A)
3.			Total Number of Domi		` '
4.			Across All Strata:	•	1 (B)
5			Percent of Dominant S	•	(4.45)
Continue/Charab Chrotum (Diet cize: 10)	=Tota	l Cover	Are OBL, FACW, or F	AC: 100	0.0% (A/B)
Sapling/Shrub Stratum (Plot size: 10) 1.			Prevalence Index wo	rksheet:	
2.			Total % Cover of:		by:
3.			OBL species 90		90
4.			FACW species 10	0 x 2 = 2	20
5.			FAC species 0	x 3 =	0
<u> </u>	=Tota	l Cover	FACU species 10		40
Herb Stratum (Plot size: 3	,		UPL species 0		0 (5)
1. Carex aquatilis		Yes OBL	Column Totals: 11		(B)
2. Phragmites australis		No FACU	Prevalence Index =	= B/A = <u>1.36</u>	
Asclepias syriaca Cirsium vulgare		No FACU No FACU	Hydrophytic Vegetati	ion Indicators:	
	<u> </u>	NO TAGO		Hydrophytic Vegeta	ation
			X 2 - Dominance Te		ation
7.			X 3 - Prevalence Inc		
8.				Adaptations ¹ (Provi	ide supporting
9.				s or on a separate	
10.			Problematic Hydro	ophytic Vegetation ¹	(Explain)
Woody Vine Stratum (Plot size: 3)	110 =Tota	l Cover	¹ Indicators of hydric so be present, unless dis		
1	<u> </u>		Hydrophytic	•	<u></u>
2.			Vegetation		
		l Cover	_	X No	_
Remarks: (Include photo numbers here or on a separat Mixed vegetation hydrophytic dominant.	te sheet.)		•		

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	cription: (Describe	to the dep				ator or o	confirm the absence of	indicators.)		
Depth	Matrix			x Featur		. 2				
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks		
0-8	10YR 2/1	100					Loamy/Clayey			
8-18	10YR 2/1	95	5YR 4/6	5	С	PL/M	Loamy/Clayey			
18-24	10YR 2/1	90	5YR 4/6	10	С	PL/M	Loamy/Clayey			
1Tupo: C-C	oncentration, D=Dep	lotion DM-	- Paduaad Matrix N		kod Son	- Croine	² l coation:	PL=Pore Lining, M=Matrix.		
Hydric Soil		ietion, Kivi=	Reduced Matrix, I	vio=ivias	keu Sanc	Joianis		for Problematic Hydric Soils ³ :		
Histosol			Sandy Gle	ved Mat	riy (S4)			Prairie Redox (A16)		
	pipedon (A2)		Sandy Red	•	IIX (O4)			anganese Masses (F12)		
Black Hi			Stripped M		3)			arent Material (F21)		
	n Sulfide (A4)		Dark Surfa	•	-,			hallow Dark Surface (F22)		
	Layers (A5)		Loamy Mu	` ,	eral (F1)		 ′	Explain in Remarks)		
2 cm Mu			Loamy Gle	-				•		
Depleted	Below Dark Surface	e (A11)	Depleted N	Matrix (F	3)					
Thick Da	ark Surface (A12)		X Redox Da	rk Surfac	e (F6)		³ Indicators	of hydrophytic vegetation and		
Sandy M	lucky Mineral (S1)		Depleted [Dark Sur	face (F7))	wetland	d hydrology must be present,		
5 cm Mu	cky Peat or Peat (S3	3)	Redox De	pression	s (F8)		unless disturbed or problematic.			
Restrictive	Layer (if observed):									
Type:										
Depth (ir	nches):						Hydric Soil Present?	Yes X No		
Remarks:						•				
Hydric soils	observed.									
HYDROLC	GY									
-	drology Indicators:									
	cators (minimum of o	ne is requi						Indicators (minimum of two required)		
	Water (A1)		Water-Sta		` '			e Soil Cracks (B6)		
I —	ter Table (A2)		Aquatic Fa	•	,		 `	ge Patterns (B10)		
Saturatio	arks (B1)		True Aqua Hydrogen		, ,	١		ason Water Table (C2) h Burrows (C8)		
	at Deposits (B2)		Oxidized F		` '	,	 ′	ion Visible on Aerial Imagery (C9)		
	oosits (B3)		Presence			-		d or Stressed Plants (D1)		
	it or Crust (B4)		Recent Iro			` '		orphic Position (D2)		
	osits (B5)		Thin Muck				` ' ——	eutral Test (D5)		
	on Visible on Aerial I	magery (B7			` '			,		
	Vegetated Concave		· —							
Field Obser	vations:		<u> </u>							
Surface Wat		s	No X	Depth (i	nches):					
Water Table		s			nches):					
Saturation P				Depth (i	_		Wetland Hydrology	Present? Yes X No No		
(includes cap	oillary fringe)	_ _	 _]			
Describe Re	corded Data (stream	gauge, mo	onitoring well, aeria	l photos	, previou	s inspec	ctions), if available:			
Remarks:	rology observed.									
vvelianu nyo	rology observed.									

Project/Site: Toronto, SD MRES Wetland	City/County: Toronto/	/Deuel	Sampling Date:	9/30/2024
Applicant/Owner: Missouri River Energy Services		State: SD	Sampling Point:	P21
Investigator(s): N. Oswald	Section, Township, Rar	nge: S16 T113N R48W	,	
Landform (hillside, terrace, etc.): Ditch hillside	Local relief (c	concave, convex, none):	Concave	
Slope (%): 6-8 Lat: 44.587868	Long: 96.581865	1	Datum: 1984	
Soil Map Unit Name: Lr		NWI classifi	ication: NA	
Are climatic / hydrologic conditions on the site typical for th	his time of year? Yes X	No (If no, exp	lain in Remarks.)	
Are Vegetation N , Soil N , or Hydrology N sign	nificantly disturbed? Are "Normal C	Circumstances" present?	Yes X No	<u></u>
Are Vegetation N , Soil N , or Hydrology N natu	urally problematic? (If needed, ex	plain any answers in Ren	narks.)	
SUMMARY OF FINDINGS – Attach site map	showing sampling point lo	cations, transects,	important feat	ures, etc.
	T		-	
Hydrophytic Vegetation Present? Yes No 2			No X	
Wetland Hydrology Present? Yes No			<u> </u>	
Remarks:				
Upland point for P20.				
VEGETATION – Use scientific names of plants				
	Absolute Dominant Indicator 6 Cover Species? Status	Dominance Test work	ksheet:	
1	JOOVER OPPOSITE CIALLES	Number of Dominant S		
2.		Are OBL, FACW, or FA		(A)
3.		Total Number of Domi	nant Species	
4.		Across All Strata:	1	(B)
5	Tatal Cover	Percent of Dominant S	•	νον (Δ/D)
Sapling/Shrub Stratum (Plot size: 10)	=Total Cover	Are OBL, FACW, or FA	AC: 0.0	0% (A/B)
1		Prevalence Index wo	rksheet:	
2.		Total % Cover of:		oy: _
3.		OBL species 0	x 1 =0)
4		FACW species 0		
5	=Total Cover	FACIL species 0		
Herb Stratum (Plot size: 3)	=10tai Covei	FACU species 109 UPL species 0		
1. Bromus inermis	100 Yes FACU	Column Totals: 10		
2. Heliopsis helianthoides	5 No FACU	Prevalence Index =	` '	`
3.				
4		Hydrophytic Vegetati		
5			Hydrophytic Vegetat	tion
6		2 - Dominance Tes 3 - Prevalence Ind		
8			Adaptations ¹ (Provid	le supporting
9.	<u> </u>		s or on a separate s	
10.		Problematic Hydro	ophytic Vegetation ¹ (Explain)
	105 =Total Cover	¹ Indicators of hydric so		
Woody Vine Stratum (Plot size: 3		be present, unless dist	turbed or problemation	C.
1		Hydrophytic		
	=Total Cover	Vegetation Present? Yes_	No X	
Remarks: (Include photo numbers here or on a separate		11030111		
Upland plants dominant.	sneet.)			

		to the dep				ator or o	confirm the absence	of indicators	i.)		
Depth	Matrix			k Featur		. 2	_				
(inches)	Color (moist)	<u>%</u>	Color (moist)	%	Type ¹	Loc ²	Texture		Remarks		
0-12	10YR 3/2	100					Loamy/Clayey				_
12-16	10YR 2/2	100					Loamy/Clayey				
16-24	10YR 2/2	90					Loamy/Clayey		10YR 3/4 10 ^o	%	
¹ Type: C=Co	oncentration, D=Depl	etion, RM=	Reduced Matrix, M	1S=Mas	ked Sand	d Grains	. ² Locatio	n: PL=Pore Li	ning, M=Mat	rix.	_
Hydric Soil		· · ·	•					ors for Proble			
Histosol	(A1)		Sandy Gle	yed Mat	rix (S4)		Coa	ast Prairie Redo	ox (A16)		
Histic Ep	ipedon (A2)		Sandy Red	lox (S5)			Iron	n-Manganese M	lasses (F12)		
Black His	stic (A3)		Stripped M	atrix (Se	3)		Red	d Parent Materi	al (F21)		
Hydroge	n Sulfide (A4)		Dark Surfa	ce (S7)			Ver	y Shallow Dark	Surface (F2	2)	
Stratified	Layers (A5)		Loamy Mu	cky Min	eral (F1)		Oth	er (Explain in F	Remarks)		
2 cm Mu	ck (A10)		Loamy Gle	yed Ma	trix (F2)						
Depleted	Below Dark Surface	(A11)	Depleted M	/latrix (F	3)		_				
Thick Da	rk Surface (A12)		Redox Dar		, ,		³ Indicate	ors of hydrophy	tic vegetatio	n and	
			Depleted D				wetland hydrology must be present,				
5 cm Mucky Peat or Peat (S3)Redox Depressions (F8)						unle	ess disturbed o	r problemation) .		
Restrictive I	Layer (if observed):										
Type:											
Depth (ir	nches):						Hydric Soil Prese	nt?	Yes	X	
Remarks:											
No redox obs	served - not hydric.										
HYDROLO	GY.										
1	drology Indicators:										
_	cators (minimum of o	ne is reauii	red: check all that a	annly)			Second	ary Indicators (minimum of	two require	رل.
	Water (A1)	no lo roquii	Water-Stai		ves (B9)			face Soil Crack		two roquiro	<u>u,</u>
	ter Table (A2)		Aquatic Fa					inage Patterns	` '		
Saturation	on (A3)		True Aqua					-Season Water			
Water M	arks (B1)		Hydrogen S	Sulfide (Odor (C1))		yfish Burrows (, ,		
Sedimen	t Deposits (B2)		Oxidized R	hizosph	eres on l	_iving R	oots (C3) Sat	uration Visible	on Aerial Ima	agery (C9)	
Drift Dep	osits (B3)		Presence of	of Redu	ced Iron ((C4)	Stu	nted or Stresse	ed Plants (D1)	
Algal Ma	t or Crust (B4)		Recent Iron	n Reduc	tion in Ti	lled Soil	s (C6) Geo	omorphic Positi	ion (D2)		
	osits (B5)		Thin Muck	Surface	e (C7)		FA0	C-Neutral Test	(D5)		
	on Visible on Aerial Ir			Well Dat	a (D9)						
Sparsely	Vegetated Concave	Surface (B	88)Other (Exp	lain in F	Remarks)						
Field Obser											
Surface Wat		s			nches):						
Water Table		s			nches): _		 ,, ,,, .				,
Saturation P		s	No X	Depth (i	nches):		Wetland Hydrol	ogy Present?	Yes	No X	_
(includes cap		aallaa ma	unitaring wall assist	l photos	provious	e inence	tions) if available:				
Describe Ke	corded Data (stream	yauge, mo	milioning well, aefla	ı priotos	, previou	ь шърес	aions), ii avallable:				
Remarks:											
	ydrology observed.										

Project/Site: Toronto, SD MRES Wetland	City/County: Toronto/Deuel Sampling Date: 10/01/2024
Applicant/Owner: Missouri River Energy Services	State: SD Sampling Point: P24
Investigator(s): N. Oswald	Section, Township, Range: S22 T113N R48W
Landform (hillside, terrace, etc.): Ag field	Local relief (concave, convex, none): Concave
Slope (%): 0-3 Lat: 44.584645	Long: 96.581535 Datum: 1984
Soil Map Unit Name: Lw	NWI classification: PEMAf
Are climatic / hydrologic conditions on the site typical	this time of year? Yes X No (If no, explain in Remarks.)
Are Vegetation Y , Soil Y , or Hydrology Y	nificantly disturbed? Are "Normal Circumstances" present? Yes X No
Are Vegetation, Soil, or Hydrology	turally problematic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site m	showing sampling point locations, transects, important features, etc
Hydrophytic Vegetation Present? Yes * N	Is the Sampled Area
Hydric Soil Present? Yes X N	within a Wetland? Yes X No
Wetland Hydrology Present? Yes X	
Remarks:	
Point taken in ag field (corn remnants)	
VEGETATION – Use scientific names of pla	
	Absolute Dominant Indicator
Tree Stratum (Plot size: 30)	% Cover Species? Status Dominance Test worksheet:
1. 2.	
3. 4.	Across All Ctroto. (D)
5.	
	=Total Cover Are OBL, FACW, or FAC: (A/B)
Sapling/Shrub Stratum (Plot size: 10	
1.	
2.	ODI amarica
3.	
5.	FACW species x 2 = FAC species x 3 =
J	=Total Cover FACU species x 4 =
Herb Stratum (Plot size: 3)	UPL species x 5 =
1	Column Totals: (A) (B)
2.	Prevalence Index = B/A =
3.	
4.	Hydrophytic Vegetation Indicators:
5	
6.	2 - Dominance Test is >50%
7.	3 - Prevalence Index is ≤3.0 ¹ 4 - Morphological Adaptations ¹ (Provide supportin
9.	data in Remarks or on a senarate sheet)
9. 10.	Problematic Hydrophytic Vegetation ¹ (Explain)
10	=Total Cover 1 Indicators of hydric soil and wetland hydrology must
Woody Vine Stratum (Plot size: 3	be present, unless disturbed or problematic.
1.	·
2.	Vegetation
	
	=Total Cover

Profile Desc	ription: (Describe	to the dep	oth needed to doc	ument t	he indica	ator or c	confirm the absence of	of indicators.)	
Depth	Matrix		Redo	x Featur	es				
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks	
0-10	10YR 2/2	95	5YR 4/6	5	С	PL/M	Loamy/Clayey	Prominent redox conce	entrations
10-14	10YR 2/2	80	5YR 4/6	5	С	PL/M		10YR 4/2 15%	, 0
14-20	10YR 4/2	80	5YR 4/6	5	С	PL/M		10YR 4/2 15%	, 0
20-36	10YR 4/2	100							
36-40	10YR 4/2	95	5YR 4/6	5	С	PL/M		Prominent redox conce	entrations
¹ Type: C=Co	oncentration, D=Dep	etion, RM	=Reduced Matrix, I	иS=Mas	ked Sand	d Grains	. ² Location:	PL=Pore Lining, M=Matri	X.
Hydric Soil I	ndicators:						Indicators	s for Problematic Hydric	Soils ³ :
Histosol	(A1)		Sandy Gle	yed Mat	rix (S4)		Coast	Prairie Redox (A16)	
Histic Ep	ipedon (A2)		Sandy Re	dox (S5)			Iron-N	Manganese Masses (F12)	
Black His	stic (A3)		Stripped N	latrix (Se	5)		Red F	Parent Material (F21)	
Hydroger	n Sulfide (A4)		Dark Surfa	ace (S7)			Very S	Shallow Dark Surface (F22	2)
Stratified	Layers (A5)		Loamy Mu	icky Mine	eral (F1)		Other	(Explain in Remarks)	
2 cm Mu	ck (A10)		Loamy Gle	eyed Ma	trix (F2)				
Depleted	Below Dark Surface	(A11)	Depleted I	Matrix (F	3)				
Thick Da	rk Surface (A12)		X Redox Da	rk Surfac	e (F6)		³ Indicators	s of hydrophytic vegetation	and
Sandy Mucky Mineral (S1) Depleted Dark Surface (F7)					wetland hydrology must be present,				
5 cm Mucky Peat or Peat (S3) Redox Depressions (F8)						unless disturbed or problematic.			
Restrictive L	ayer (if observed):								
Type:									
Depth (in	ches):						Hydric Soil Present	? Yes X	No
Remarks:									
Hydric soils o	bserved.								
HYDROLO	GY								
_	drology Indicators:								
-	ators (minimum of o	ne is requ						y Indicators (minimum of ty	wo required)
	Water (A1)		Water-Sta		` '			ce Soil Cracks (B6)	
I —	ter Table (A2)		Aquatic Fa	•				age Patterns (B10)	
Saturatio	` '		True Aqua		, ,			eason Water Table (C2)	
Water Ma			Hydrogen		,	,	<u> </u>	sh Burrows (C8)	(00)
	t Deposits (B2)		Oxidized F	•		-	· · · —	ation Visible on Aerial Imag	
	osits (B3)		Presence			,		ed or Stressed Plants (D1)	
	t or Crust (B4)		Recent Iro			lied Soll	· · · —	orphic Position (D2)	
Iron Depo	osits (B5) on Visible on Aerial Ir	200 m / (D:	Thin Muck		` '		FAC-1	Neutral Test (D5)	
	Vegetated Concave								
		Surface (Other (Ex	Jiaiii iii r	terriarks)		1		
Field Observ Surface Wate		•	No. V	Donth (i	nahaa):				
Water Table		s	No X No X		nches): _ nches):				
Saturation Pr		s	No X		_		Wotland Hydrolog	y Procent? Vec Y	No
(includes cap			NO	Depth (i			Wetland Hydrolog	y Present? Yes X	No
h ·	corded Data (stream	gauge m	onitoring well aeria	al photos	previou	s inspec	tions), if available		
200011001100	Julia Sula (Suladili	gaago, III	otorning won, acris	p.10103	, proviou	opco	,, available.		
Remarks:									
Wetland hyd	rology observed.								

Landform (hillside, terrace, etc.): Ag field	State: SD Sampling Point: P25 tion, Township, Range: S22 T113N R48W Local relief (concave, convex, none): Concave
Landform (hillside, terrace, etc.): Ag field Slope (%): 3-6 Lat: 44.5807- Soil Map Unit Name: Lw	Local relief (concave, convex, none): Concave
Slope (%): 3-6 Lat: 44.5807- Soil Map Unit Name: Lw	
Soil Map Unit Name: Lw	
•	ong: 96.581533 Datum: 1984
Are climatic / hydrologic conditions on the site typical for this time of year	NWI classification: NA
	Yes X No (If no, explain in Remarks.)
Are Vegetation Y , Soil Y , or Hydrology Y significantly disturb	d? Are "Normal Circumstances" present? Yes X No
Are Vegetation, Soil, or Hydrologynaturally problemat	? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing sa	npling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes * No	Is the Sampled Area
Hydric Soil Present? Yes No X	within a Wetland? Yes No X
Wetland Hydrology Present? Yes No X	
Remarks:	
Point taken in ag field (corn remnants).	
VEGETATION – Use scientific names of plants.	
Absolute Dom	nant Indicator
Tree Stratum (Plot size: 30) % Cover Spec	_
1	
2	
3	Across All Ctrots. (D)
5.	Percent of Dominant Species That
=Total	· · · · · · · · · · · · · · · · · · ·
Sapling/Shrub Stratum (Plot size: 10)	
1	
2	
3	OBL species x 1 =
4	FACW species x 2 = FAC species x 3 =
=Total	
Herb Stratum (Plot size: 3)	UPL species x 5 =
1	Column Totals: (A) (B)
2.	Prevalence Index = B/A =
3.	
4	Hydrophytic Vegetation Indicators:
5	1 - Rapid Test for Hydrophytic Vegetation
6	2 - Dominance Test is >50%
7	3 - Prevalence Index is ≤3.0 ¹ 4 - Morphological Adaptations ¹ (Provide supporting
8	data in Remarks or on a separate sheet)
9. 10.	Problematic Hydrophytic Vegetation ¹ (Explain)
=Total	
Woody Vine Stratum (Plot size: 3)	be present, unless disturbed or problematic.
1	
2.	Vegetation
=Total	Cover Present? Yes * No No
Remarks: (Include photo numbers here or on a separate sheet.)	•

Profile Desc	cription: (Describe	to the dep	th needed to docu	ument t	he indica	ator or o	confirm the absence	of indicators.))	
Depth	Matrix			x Featur		2				
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture		Remarks	
0-12	10YR 3/2	100					Loamy/Clayey			
12-14	10YR 3/2	90					Loamy/Clayey	1	0YR 4/2 109	%
14-24	10YR 2/2	100					Loamy/Clayey			
24-32	10YR 2/2	85					Loamy/Clayey	1	0YR 4/2 159	%
32-40	10YR 2/2	55	5YR 4/6	5	С	PL/M	Loamy/Clayey	1	0YR 4/2 409	%
¹ Type: C=Co	oncentration, D=Depl	etion, RM	=Reduced Matrix, N	/IS=Mas	ked San	d Grains	s. ² Locatio	n: PL=Pore Lin	ing, M=Matr	ix.
Hydric Soil	Indicators:						Indicate	ors for Problem	natic Hydric	Soils ³ :
Histosol	(A1)		Sandy Gle	yed Mat	rix (S4)		Coa	ast Prairie Redox	x (A16)	
Histic Ep	ipedon (A2)		Sandy Red	dox (S5)			Iron	-Manganese Ma	asses (F12)	
Black His	stic (A3)		Stripped M	latrix (Se	3)		Red	d Parent Materia	ıl (F21)	
Hydroge	n Sulfide (A4)		Dark Surfa	ce (S7)			Ver	y Shallow Dark	Surface (F2:	2)
Stratified	Layers (A5)		Loamy Mu	cky Min	eral (F1)		Oth	er (Explain in Re	emarks)	
2 cm Mu	ck (A10)		Loamy Gle	yed Ma	trix (F2)					
Depleted	l Below Dark Surface	(A11)	Depleted N	/latrix (F	3)					
Thick Da	rk Surface (A12)		Redox Dar	k Surfac	ce (F6)		³ Indicate	ors of hydrophyt	ic vegetation	n and
Sandy Mucky Mineral (S1) Depleted Dark Surface (F7))	wetland hydrology must be present,					
5 cm Mucky Peat or Peat (S3) Redox Depressions (F8)						unle	ess disturbed or	problematic	·-	
Restrictive I	Layer (if observed):									
Type:										
Depth (in	nches):		<u> </u>				Hydric Soil Prese	nt?	Yes	No X
Remarks:										
No hyrdic so	ils observed. Redox t	oo deep.								
	-01/									
HYDROLO										
-	drology Indicators:									
	cators (minimum of o	ne is requ						ary Indicators (n		.wo required)
	Water (A1)		Water-Stai			1		face Soil Cracks	` ,	
<u> </u>	ter Table (A2)		Aquatic Fa					inage Patterns (
Saturatio	` ,		True Aqua		` ,	,		-Season Water	, ,	
Water M	` '		Hydrogen :		`	,		yfish Burrows (C	,	(00)
	t Deposits (B2)		Oxidized R			_	· · · —	uration Visible o		• • • •
	osits (B3)		Presence of			` '		nted or Stressed	,)
	t or Crust (B4)		Recent Iro			illea Soli	` '	omorphic Positio	. ,	
	osits (B5)		Thin Muck				FAC	C-Neutral Test (I	J5)	
	on Visible on Aerial Ir Vegetated Concave									
		Surface (Other (Exp	nani iii r	(emarks)					
Field Observ Surface Water		•	No. V	Donth (i	noboo):					
Water Table		s			nches):					
Saturation P		s			nches): _ nches):		Watland Hydrol	agy Procent?	Voc	No. Y
(includes cap			NO	<u> ⊳e</u> hαι (I			Wetland Hydrolo	yy i reselli:	Yes	No X
	corded Data (stream	gauge m	onitoring well aeria	l photos	previou	s inspec	 ctions), if available:			
		J. 490, 111		. p. 10100	, p. 0 1 10 u	opoc	, ii availabio.			
Remarks:										
No wetland h	nydrology observed.									

Project/Site: Toronto, SD MRES Wetland	Ci	ty/County: Toronto/	Deuel	Sampling Date:	10/01/2024
Applicant/Owner: Missouri River Energy Services			State: SD	Sampling Point:	P29
Investigator(s): N. Oswald	Ser	ction, Township, Rar	nge: S22 T113N R48W	V	
Landform (hillside, terrace, etc.): Roadside ditch		Local relief (c	oncave, convex, none):	Concave	
Slope (%): 0-3 Lat: 44.587254	[ong: <u>96.581356</u>		Datum: 1984	
Soil Map Unit Name: Lr			NWI classif	fication: NA	
Are climatic / hydrologic conditions on the site typical for the	his time of year?	Yes X	No (If no, exp	olain in Remarks.)	
Are Vegetation N , Soil N , or Hydrology N sign	nificantly disturbe	ed? Are "Normal C	ircumstances" present?	Yes X N	o
Are Vegetation N , Soil N , or Hydrology N natu	urally problemati	c? (If needed, exp	olain any answers in Rer	marks.)	
SUMMARY OF FINDINGS – Attach site map	showing sa	mpling point lo	cations, transects	, important fea	atures, etc.
Hydrophytic Vegetation Present? Yes X No Hydric Soil Present? Yes X No Wetland Hydrology Present? Yes X No Remarks:	_	Is the Sampled Arwithin a Wetland?	ea	-	
Point taken in roadside ditch.					
VEGETATION – Use scientific names of plants					
	Absolute Domi % Cover Spec	inant Indicator cies? Status	Dominance Test wor	rksheet	
1	00000		Number of Dominant S Are OBL, FACW, or F	Species That	1 (A)
3.			Total Number of Domi	-	<u> </u>
4.			Across All Strata:		1 (B)
5.			Percent of Dominant S	•	_
Sapling/Shrub Stratum (Plot size: 10)	=Total (Cover	Are OBL, FACW, or F	AC: 10	00.0% (A/B)
1.			Prevalence Index wo	orksheet:	
2		[Total % Cover of		
3			OBL species 0		0
4		<u> </u>	FACW species 95		190
5	=Total (Cover	FAC species 5 FACU species 0		15 0
Herb Stratum (Plot size: 3)	= 1 0161 1	Cover	UPL species 0		0
1. Phalaris arundinacea	80 Ye	es FACW	Column Totals: 10		205 (B)
Persicaria pensylvanica	15 N		Prevalence Index =	` ′	
3. Panicum virgatum	5 N				
4.			Hydrophytic Vegetat	ion Indicators:	
5.			1 - Rapid Test for	Hydrophytic Veget	tation
6			X 2 - Dominance Te		
7		[X 3 - Prevalence Inc		
8				Adaptations ¹ (Proves or on a separate	
9.		<u> </u>		•	
10	100 =Total	Cover		ophytic Vegetation	` ' '
Woody Vine Stratum (Plot size: 3)		Covei	¹ Indicators of hydric so be present, unless dis		
1		}	•	turbou or problems	шо.
2.			Hydrophytic Vegetation		
	=Total	Cover		X No	
Remarks: (Include photo numbers here or on a separate Bareground 10%	sheet.)				_

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	ription: (Describe t	o the depth				ator or c	confirm the abso	ence of indicators	s.)	
Depth	Matrix			Featur		. 2				
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture		Remarks	
0-14	10YR 2/1	95	5YR 4/6	5	С	PL/M	Loamy/Claye	ey Promine	nt redox conce	entrations
							-			
							<u>-</u>			
							'			
							-			
							-			
1- 0.0							21			
	oncentration, D=Depl	etion, RIVI=R	deduced Matrix, IV	S=Mas	ked San	d Grains		cation: PL=Pore L icators for Proble		
Hydric Soil			Sandy Clay	rad Mat	riv (C1)		ina	Coast Prairie Red	-	Solis":
Histosol			Sandy Gley Sandy Red		IIX (S4)			Iron-Manganese N		
Black His	ipedon (A2)		Stripped M		3)			Red Parent Mater		
	n Sulfide (A4)		Dark Surfa))			Very Shallow Dark	, ,	١
	Layers (A5)		Loamy Muc	` ,	aral (F1)			Other (Explain in I		,
2 cm Mu			Loamy Gle	•	, ,			Other (Explain in I	(Ciriains)	
	Below Dark Surface	(A11)	Depleted M							
	rk Surface (A12)	(,)	X Redox Darl				³ Ind	licators of hydrophy	vtic vegetation	and
	ucky Mineral (S1)		Depleted D)		wetland hydrology	-	
5 cm Mucky Peat or Peat (S3) Redox Depres						,		unless disturbed of		- ',
	_ayer (if observed):	•							•	
Type:										
Depth (in	iches):		<u>—</u>				Hydric Soil Pr	esent?	Yes X	No
Remarks:			_				•			
	ted at 14" due to wat	er washout.	Hvdric soils obse	rved be	fore term	ination.				
			,							
HYDROLO	GY									
Wetland Hyd	drology Indicators:									
Primary India	ators (minimum of o	ne is require	d; check all that a	pply)			Sec	condary Indicators	(minimum of tw	vo required)
Surface \	Water (A1)		Water-Stair	ned Lea	ives (B9)			Surface Soil Crac	ks (B6)	
X High Wa	ter Table (A2)		Aquatic Fa	una (B1	3)			Drainage Patterns	s (B10)	
X Saturation	n (A3)		True Aquat	ic Plant	s (B14)			Dry-Season Wate	. ,	
Water M	` ,		Hydrogen S		,	,		Crayfish Burrows	` '	
	t Deposits (B2)		Oxidized R			-	oots (C3)	Saturation Visible		gery (C9)
	osits (B3)		Presence of			` '	(00)	Stunted or Stress	, ,	
	t or Crust (B4)		Recent Iron			illed Soil	` '	Geomorphic Posit	` '	
	osits (B5)	· · (DZ)	Thin Muck				<u> </u>	FAC-Neutral Test	(D5)	
	on Visible on Aerial In		Gauge or V							
	Vegetated Concave	Surface (Do	Other (Exp	allilli	terriarks)		1			
Field Observ			No V	Jonth /:	nobos):					
Surface Wat Water Table					nches): _ nches):	2				
Saturation P		S X			nches): _ nches):		Wetland Hy	drology Present?	Yes X	No
(includes cap			No	zebiii (I			**etianu flyt	urology Freselit?	169	HU
	corded Data (stream	gauge, mon	itoring well, aerial	photos	. previou	s inspec	ctions), if availabl	le:		
3 3 3 3 3 1 1 0 1	22.200 2 0.00	J-490, 111011		٥تر	, p. 5 115 u	.	,, avanabi	· - ·		
Remarks:										
	rology observed.									

Project/Site: Toronto, SD MRES Wetland	City/County: Toronto/Deuel Sampling Date: 10/01/202						
Applicant/Owner: Missouri River Energy Services				State: SD	Sampling Point:	P30	
Investigator(s): N. Oswald	<u> </u>	Section, To	ownship, Ran	ige: S22 T113N R48W	/	<u>-</u>	
Landform (hillside, terrace, etc.): Ditch hillside		L	ocal relief (cc	oncave, convex, none):	Concave		
Slope (%): 8-10 Lat: 44.587278		Long: 96	6.581363		Datum: 1984		
Soil Map Unit Name: Lr				NWI classif	ication:		
Are climatic / hydrologic conditions on the site typical for	this time o	f year?	Yes X	No (If no, exp	olain in Remarks.)		
Are Vegetation N , Soil N , or Hydrology No sig	gnificantly c	disturbed? A	re "Normal Ci	rcumstances" present?	Yes X No)	
Are Vegetation N , Soil N , or Hydrology No na	turally prob	olematic? (If	f needed, exp	lain any answers in Rei	marks.)		
SUMMARY OF FINDINGS – Attach site map	showin	ig samplin	g point loc	cations, transects	, important fea	tures, etc.	
Hydrophytic Vegetation Present? Yes No	Х	Is the	Sampled Are	 ea			
Hydric Soil Present? Yes No	X	within	a Wetland?	Yes	No X		
Wetland Hydrology Present? Yes No	X						
Remarks:							
Upland point for P29.							
VECETATION Line exigntific names of plans	10						
VEGETATION – Use scientific names of plant	Absolute	Dominant	Indicator				
	% Cover	Species?	Status	Dominance Test wor	ksheet:		
1				Number of Dominant	•		
2.				Are OBL, FACW, or F	AC:	0 (A)	
3			<u> </u>	Total Number of Domi	inant Species	4 (D)	
4 5.			 [Across All Strata:		1 (B)	
J	 -	=Total Cover	 [Percent of Dominant S Are OBL, FACW, or F	•	.0% (A/B)	
Sapling/Shrub Stratum (Plot size: 10)		-1010. 21	L			(- ,	
1.			[Prevalence Index wo	orksheet:		
2.				Total % Cover of	: Multiply	by:	
3			I	OBL species 15		15	
4			<u> </u>	FACW species 20		40	
5		=Total Cover		FAC species 0 FACU species 75		<u>0</u> 300	
Herb Stratum (Plot size: 3)		= I Otal Gover		UPL species 0		0	
1. Bromus inermis	75	Yes	FACU	Column Totals: 11		355 (B)	
2. Carex aquatilis	15	No	OBL	Prevalence Index =	= B/A = 3.23	``	
3. Phalaris arundinacea	15	No	FACW				
4. Persicaria pensylvanica	5	No	FACW	Hydrophytic Vegetat		_	
5					Hydrophytic Veget	ation	
6				2 - Dominance Te			
7				3 - Prevalence Inc	dex is ≤3.0¹ Adaptations¹ (Prov	ido cupportina	
8. 9.			 [s or on a separate		
10.			<u> </u>		ophytic Vegetation ¹		
10	110 =	=Total Cover		¹ Indicators of hydric so		` ' '	
Woody Vine Stratum (Plot size: 3)			L	be present, unless dis			
1.			[Hydrophytic			
2.				Vegetation			
<u> </u>		=Total Cover		Present? Yes	No X	<u> </u>	
Remarks: (Include photo numbers here or on a separat	te sheet.)						
Upland plants dominant.							

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Depth	cription: (Describe Matrix	to the dept		ument ti x Featur		ator or o	confirm the a	ibsence of indicate	ors.)	
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Textu	re	Remarks	
0-24	10YR 3/2	100	Color (molot)		. , , , ,		TOXIO		Remarks	
0-24	1011/3/2	100								
<u></u>										
				<u> </u>						
¹ Type: C=C	oncentration, D=Dep	letion RM-	Reduced Matrix I	MS-Mas	ked Sand		,	Location: PL=Pore	Lining M-Ma	triv
Hydric Soil		iction, reivi–	teadeca Matrix, i	vio-ivias	Red Garie	J Grains		Indicators for Prob		
Histosol			Sandy Gle	wed Mat	riy (S4)		'	Coast Prairie R	-	c cons .
	pipedon (A2)		Sandy Re		11X (O-1)		-	Iron-Manganes)
Black Hi			Stripped N		3)		-	Red Parent Ma		,
	n Sulfide (A4)		Dark Surfa	`	3,		-	Very Shallow D	, ,	22)
	Layers (A5)		Loamy Mu	` '	eral (F1)		-	Other (Explain	•	/
2 cm Mu			Loamy Gle				-		,	
	Below Dark Surface	e (A11)	Depleted I	•						
	ark Surface (A12)	,	Redox Da	•	,		3	Indicators of hydro	phytic vegetation	on and
Sandy M	lucky Mineral (S1)		Depleted I	Dark Sur	face (F7)			wetland hydrolo		
5 cm Mucky Peat or Peat (S3) Redox Depressions (F8)						unless disturbed or problematic.				
Restrictive	Layer (if observed):									
Type:	, ,									
Depth (ir	nches):		_				Hydric Soi	Present?	Yes	No X
Remarks:	!									
HYDROLC	GY									
_	drology Indicators:									
	cators (minimum of o	ne is require						Secondary Indicato	•	two required)
	Water (A1)		Water-Sta		` '		-	Surface Soil Cr	` '	
I — ·	ter Table (A2)		Aquatic Fa	•	,		=	Drainage Patte	` ,	
Saturation	` '		True Aqua Hydrogen		, ,	١	-	Dry-Season Wa Crayfish Burrov	, ,	
	arks (B1) nt Deposits (B2)		Oxidized F		,	<i>'</i>	oots (C3)	Saturation Visit	` ,	ageny (CQ)
	oosits (B3)		Presence			•	.0013 (03)	Stunted or Stre		
	it or Crust (B4)		Recent Iro			,	ls (C6)	Geomorphic Po	,	1)
	osits (B5)		Thin Muck				_	FAC-Neutral Te		
	on Visible on Aerial I	magery (B7)			` '		-		, ,	
	Vegetated Concave									
Field Obser	vations:									
Surface Wat		s	No X	Depth (i	nches):					
Water Table	Present? Ye	es	No X	Depth (i	nches):					
Saturation P			No X	Depth (i	nches):		Wetland	Hydrology Presen	t? Yes	No X
(includes ca	oillary fringe)				_					
Describe Re	corded Data (stream	gauge, moi	nitoring well, aeria	al photos	, previou	s inspec	ctions), if avai	lable:		
Remarks:										
No hydrolog	y observed.									