

**ENVIRONMENTAL & STATISTICAL CONSULTANTS**

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TECHNICAL MEMORANDUM

Date: June 19, 2024

To: Andrew Krieger and Chris Farmer, Badger Wind, LLC

From: Kristen Chodachek and Wade Hammer; Western EcoSystems Technology, Inc.

Subject: Wetland and Waterbody Delineation Report – Badger Wind Project

INTRODUCTION

Badger Wind, LLC (Badger Wind), is proposing the development of the Badger Wind Project (Project), located approximately two miles west of Wishek, in Logan and McIntosh counties, North Dakota (Figure 1). Results of wetland and waterbody delineations and mapping previously completed within the permitted Project area are included in the Aquatic Resources Delineation Report (Atwell 2022) and Wetlands and Waterbodies Assessment Report (Chodachek and Welsch 2024). The objectives of the 2024 fieldwork documented in this report include completing a desktop review, field delineations of wetlands (i.e., land with presence of hydric soils, hydrology, and hydrophytic vegetation) and waterbodies (i.e., any type of perennial, intermittent, or ephemeral waterway or catch basin where water flows, or could flow, or is held), and assigning an informal jurisdictional determination (determination) to delineated features within the area containing newly proposed Project infrastructure footprints, or modifications of previously delineated infrastructure footprints, and their associated survey buffers (2024 Wetland Survey Area). The following technical memorandum describes the results of the wetland and waterbody delineations conducted for the Project in 2020, 2021, 2022 (Atwell 2022), and 2023 (Chodachek and Welsch 2024), and the methods and results for the fieldwork during 2024 to address changes/updates to the Project since spring of 2024.

SURVEY AREA

The 2024 Wetland Survey Area, within which delineations were completed, consisted of newly proposed Project infrastructure footprints, or modifications of previously delineated infrastructure footprints, and their associated survey buffers. The 2024 Wetland Survey Area encompassed 80.5 acres (ac) of the Project area, which is situated in the Northwestern Glaciated Plains Level III Ecoregion, an ecoregion mainly composed of mixed-grass prairie (US Environmental Protection Agency [USEPA] 2013). The Project will be sited entirely on private lands. Topography within the Project area ranges from relatively flat to rolling hills and elevations range from 2,020–2,200 feet (ft). Overall, the Project area drains to the southwest, into South Branch Beaver Creek, and to the northwest, into Beaver Creek, both of which are tributaries to the Missouri River. The Project area contains numerous unnamed drainages, a few of which may be intermittent or perennial

waterbodies or wetlands (Figures 2 and 3). Primary land uses in the Project area include agriculture and livestock grazing.

Waters of the US

Section 404 of the Clean Water Act (CWA) is the primary federal statute regulating impacts (dredge and fill) to wetlands and waterbodies. Wetlands and waterbodies that are subject to federal jurisdiction under the CWA are referred to as Waters of the US (WOTUS; USEPA 2023). Under the CWA, it is unlawful to discharge any pollutant into a WOTUS without a permit.

Waters that have consistently been considered jurisdictional WOTUS by the US Army Corps of Engineers (USACE) include traditional navigable waters (TNWs; Section 10 waters), interstate waters, territorial seas, and impoundments of these WOTUS. Jurisdictional status of tributaries to these categories of WOTUS and adjacent wetlands continue to be both challenged in courts and clarified by agencies. On August 29, 2023, the USEPA and USACE jointly released information announcing an amendment to the definition of WOTUS (USEPA 2023). Coordination with the USACE regarding jurisdictional status of wetlands and waterbodies documented in this report will be necessary to evaluate Section 404 permit requirements for the Project.

METHODS

Desktop Assessment

A desktop assessment of publicly available wetlands and waterbodies data in the 2024 Wetland Survey Area was completed using the US Department of Agriculture's (USDA's) National Agriculture Imagery Program (USDA Farm Production and Conservation Business Center 2023), US Fish and Wildlife Service's (USFWS's) National Wetlands Inventory (NWI) data (2024), and US Geological Survey's (USGS's) National Hydrography Dataset (NHD; 2022). Based on the desktop review, areas identified as potentially being wetlands or waterbodies within the 2024 Wetland Survey Area were targeted during the 2024 delineation effort, while also evaluating the remainder of the 2024 Wetland Survey Area.

Using these public data sources, potential wetlands and waterbodies located within the 2024 Wetland Survey Area were identified and mapped in the desktop assessment using geographic information systems mapping software. Wetland and waterbody types (i.e., freshwater emergent wetland, freshwater pond, riverine, lake, freshwater forested/shrub wetlands, and rivers and streams) identified in Figure 2 are based on wetland nomenclature used by the USFWS NWI (2023; based on Cowardin et al. 1979 and USGS [2022]).

Badger Wind Project Wetland and Waterbody Delineation

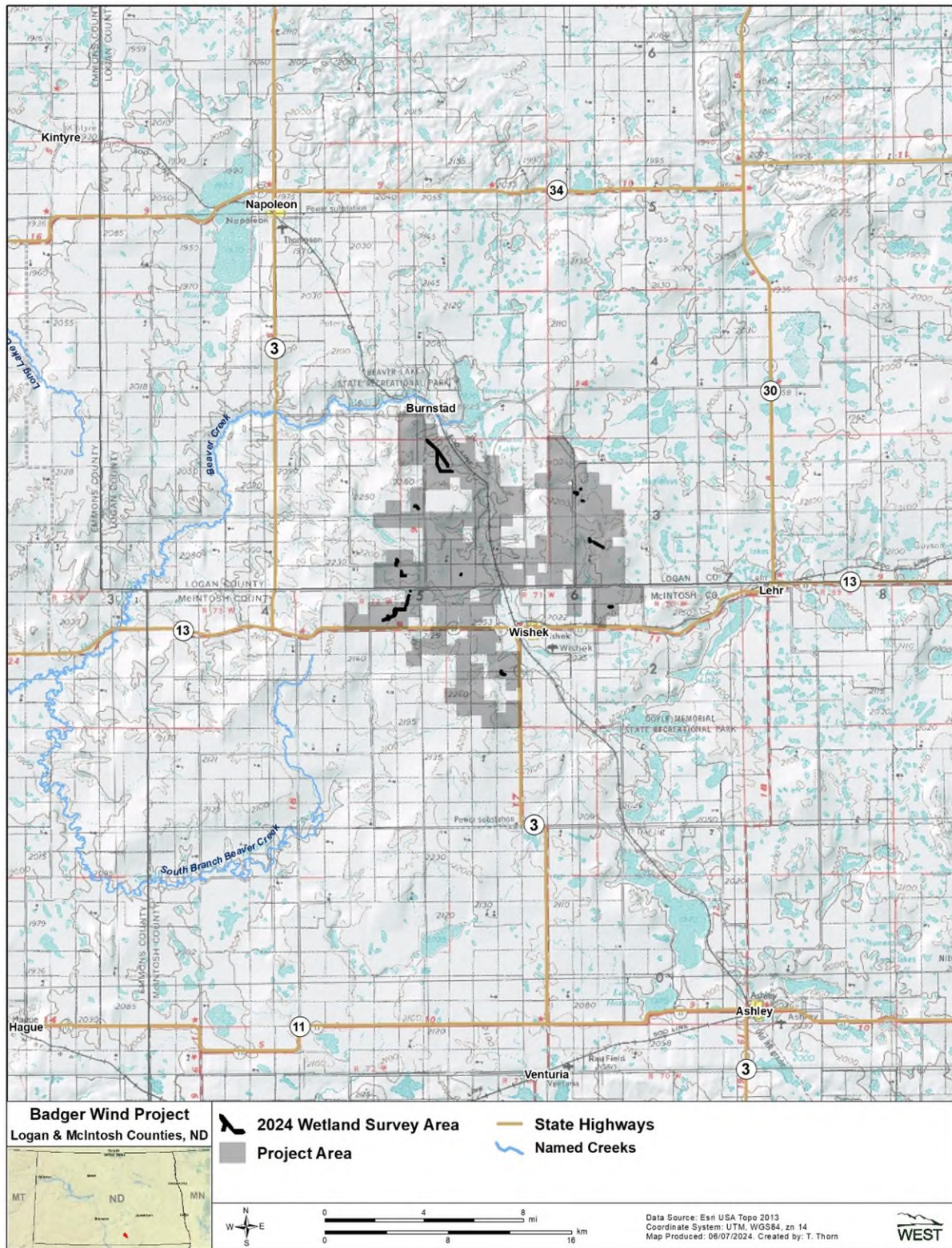


Figure 1. Location of the 2024 Wetland Survey Area of the Badger Wind Project in Logan and McIntosh counties, North Dakota.

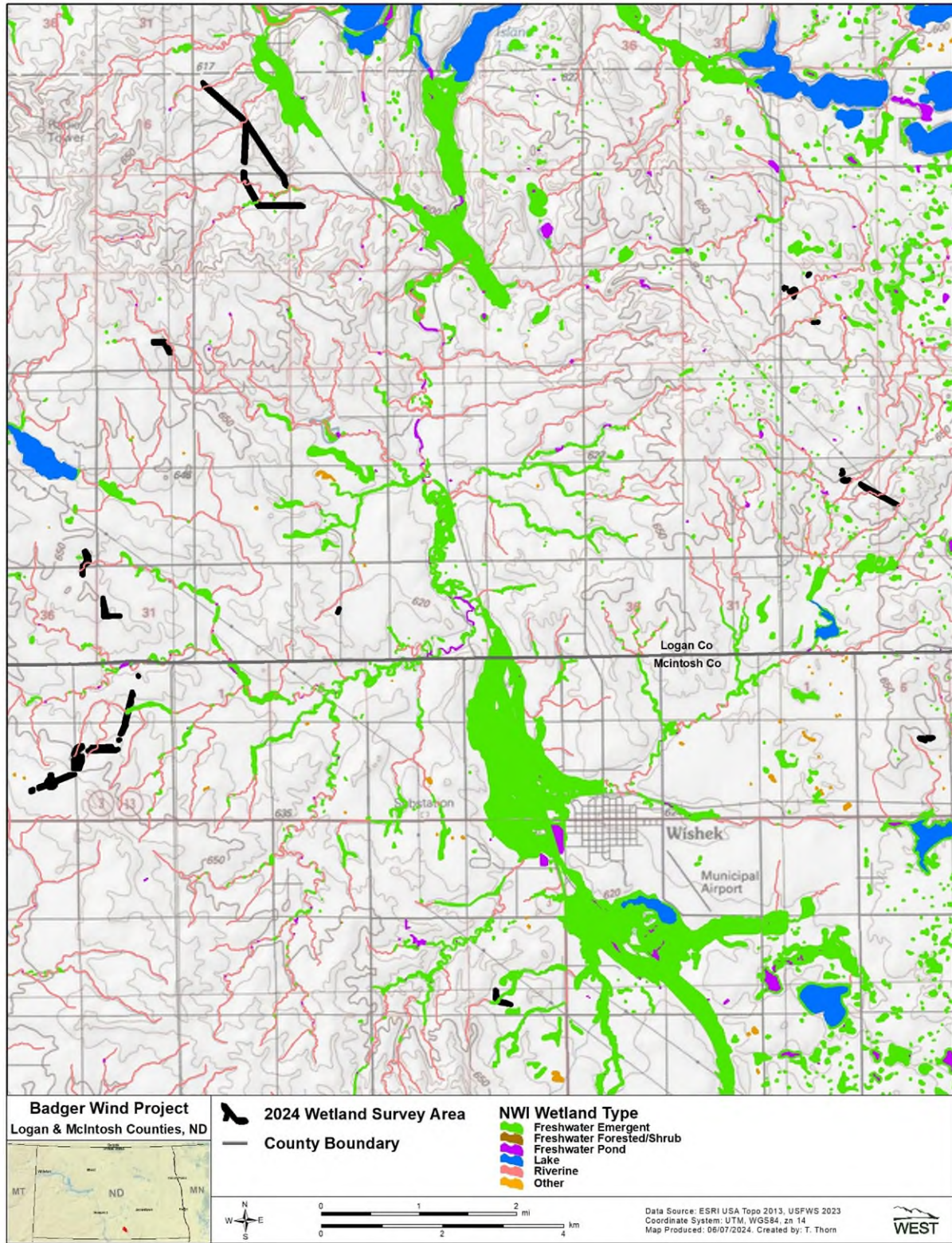


Figure 2. National Wetlands Inventory features within the 2024 Wetland Survey Area of the Badger Wind Project in Logan and McIntosh counties, North Dakota.

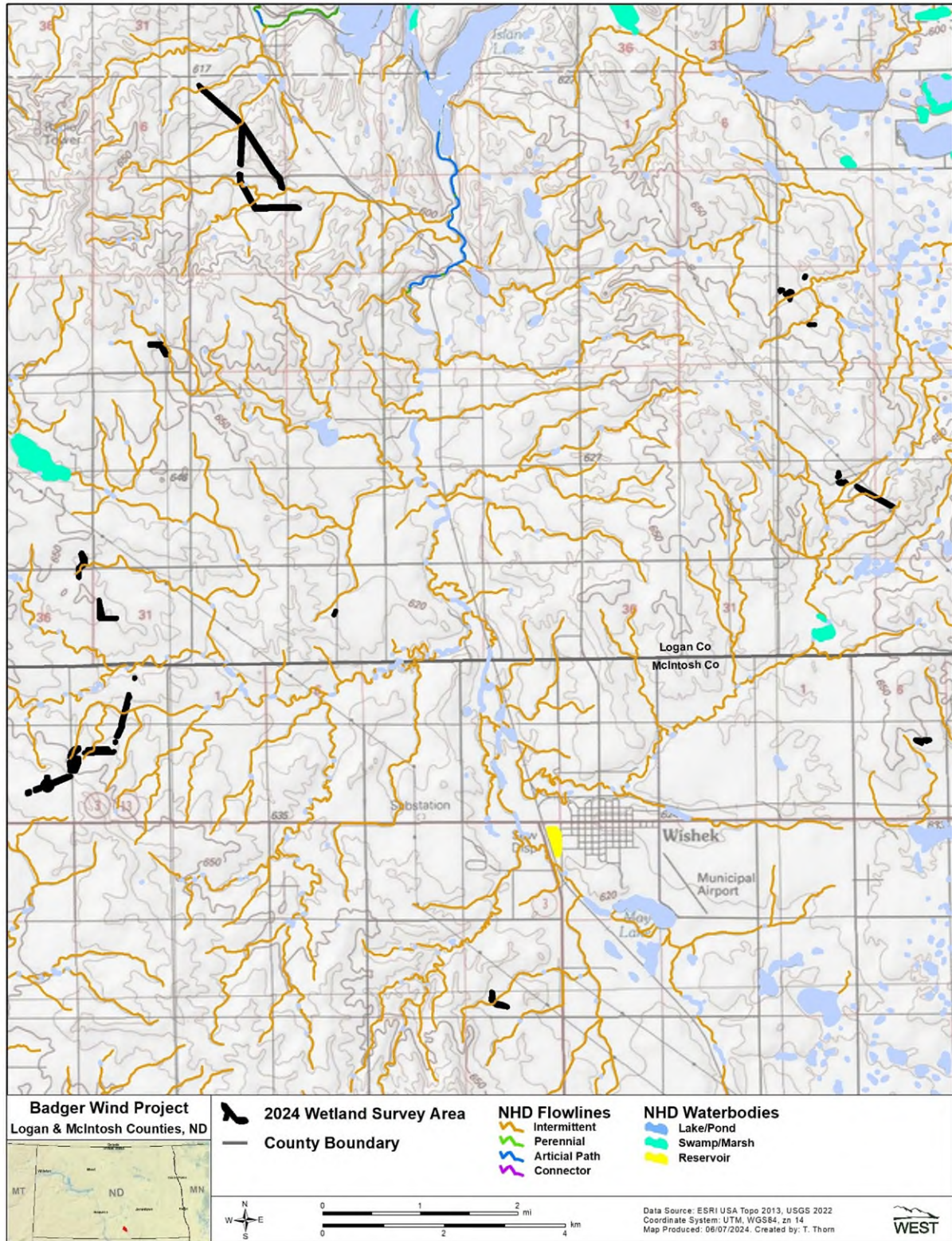


Figure 3. National Hydrography Dataset features within the 2024 Wetland Survey Area of the Badger Wind Project in Logan and McIntosh counties, North Dakota.

REGULATORY BACKGROUND

Wetland and Waterbody Delineation Fieldwork

Using results of the desktop assessment to identify where wetlands and waterbodies were likely to be present within the 2024 Wetland Survey Area, a field delineation was completed. Wetlands and waterbodies within the 2024 Wetland Survey Area that were observed during fieldwork but not identified during the initial desktop assessment were also mapped. Wetlands and waterbodies were mapped using a tablet with Collector for ArcGIS software (Esri 2024) coupled with an Arrow Lite Global Positioning System (GPS) receiver with submeter accuracy.

Proposed infrastructure survey corridors were provided by Badger Wind as a geospatial file in April 2024 and included:

- 250-ft radius centered around turbines
- 300-ft wide corridor for turbine access roads
- 100-ft wide corridor for underground collection lines
- 200-ft wide corridor for aircraft detection and lighting system tower, batch plant, crane walk paths, laydown yard, meteorological tower, operations and maintenance facility, marshaling yard, substation, transmission line, and turning radii locations

Shapefiles depicting the infrastructure footprint and associated buffers were loaded onto the tablet and used in the field to verify that boundaries of the 2024 Wetland Survey Area were accurately identified and that field delineations were completed. NWI and NHD features were also loaded onto the tablet to complete field-verification at each of these feature types, where present, within the 2024 Wetland Survey Area.

Photographs (photo) were recorded for wetlands identified within the 2024 Wetland Survey Area. Each delineated wetland was assigned a unique identification name consisting of an alphanumeric name in a series (e.g., WET1, WET2).

NWI or NHD features that intersected the 2024 Wetland Survey Area but clearly did not meet the definition of either a wetland or a waterbody were photo documented and a non-WOTUS point was collected on the tablet. These non-WOTUS points were identified with a sequential alphanumeric name (e.g., 101U, 102U).

Wetland Delineation

Wetland delineations were conducted May 9–10, 2024, in accordance with the 1987 *Corps of Engineers Wetlands Delineation Manual* (USACE 1987) and the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Great Plains* (Version 2.0; USACE 2010). The 1987 manual outlines a 3-parameter approach, which requires presence of hydrophytic plants, hydric soils, and wetland hydrology. Unless otherwise carefully documented based on

professional judgement, all three parameters must be present and meet the wetland criteria of each parameter for an area to be considered a wetland.

The delineated wetlands were classified according to the classification system outlined in *Classification of Wetlands and Deepwater Habitats of the United States* (Cowardin et al. 1979). Wetland plant indicator status was determined using the most recent version of the National Wetland Plant List (USACE 2020). Paired sample plots (wetland and upland) were established and USACE regional datasheets were completed for each potential wetland within the 2024 Wetland Survey Area. Wetland sample plots were located in areas that were representative of the wetland community that was present, utilizing an upland sample plot to characterize the adjoining upland community. A wetland boundary was then established between these points and the boundary was recorded based on the observations made at the paired sample points. Wetlands were typically categorized as one of three common types of wetlands, including:

- Palustrine emergent (PEM) wetlands are defined as inland freshwater areas dominated by hydrophytic vascular plants, such as rushes, sedges, forbs, and other herbaceous or grass-like plants.
- Palustrine scrub-shrub wetlands are defined as inland freshwater areas dominated by woody vegetation less than 20 ft tall, such as buttonbush, alders, and many kinds of woody saplings.
- Palustrine forested wetlands are defined as inland freshwater areas dominated by woody vegetation 20 ft or taller.

Waterbody Delineation

Flowing waterbodies and drainage features (e.g., streams, creeks, ditches) and other waterbodies (e.g., stock ponds) within the 2024 Wetland Survey Area, including those waterbodies identified in the NWI and NHD datasets (Figures 2 and 3), were examined to determine if each met the definition of a waterbody. The field assessment, used to determine the presence of a waterbody, was focused on the presence of a definable bed and bank, ordinary high water mark (OHWM), and evidence of flow. If present, the OHWM of each waterbody was recorded with a GPS. These features were mapped and documented in a similar manner as wetlands.

Informal Jurisdictional Determination

In addition to evaluating the 2024 Wetland Survey Area for features that met regulatory definitions of a wetland and waterbody, the professional judgment of the Western EcoSystems Technology, Inc. (WEST), delineator was used to make an informal determination. Certain features are jurisdictional based on regulation and do not require further assessments (e.g., territorial seas, TNWs, interstate waters, and impoundments of these features). As previously noted in the *Regulatory Background* section, there have recently been court decisions that have resulted in regulatory guidance changes that are influencing how the USACE determines jurisdiction of wetlands and waterbodies. WEST utilized the best available information, based on our team's experience, to make the determinations. However, the informal determinations in this report are

subject to change and require USACE review and final determination prior to utilizing the information determinations for permitting.

The WEST biologist that completed the field delineations assigned a likely, unlikely, or unknown jurisdictional status to the delineated wetlands and waterbodies documented during the 2024 fieldwork based on best professional judgement and experience in the region. Wetland and waterbody determinations included in this report are informal; only the USACE can make a formal determination.

RESULTS

2024 Wetland Delineations

Twelve wetlands, totaling 1.91 ac, were identified and delineated during the 2024 fieldwork (Table 1, Figure 4). Detailed maps of wetland locations are provided in Appendix A. Table 1 provides a summary of wetland classifications and acreages within the 2024 Wetland Survey Area. All 12 delineated wetlands were classified as PEM wetlands. Ten of the wetlands occurred in drainages, one in a seep, and one in a depression. Wetlands delineated during 2024 fieldwork appeared to have a downstream connection to WOTUS and were, therefore, considered potentially or likely jurisdictional (Table 1). Wetland determination datasheets, representative photographs of wetlands, and a summary of wetland and non-wetland waterbody points found within the 2024 Wetland Survey Area are provided in Appendices B, C, and D, respectively.

Table 1. Summary of field delineated wetlands within the 2024 Wetland Survey Area of the Badger Wind Project in Logan and McIntosh counties, North Dakota, May 9–10, 2024.¹

Feature Identification	Acres	Cowardin Classification²	Latitude/Longitude³	Landform	Informal Jurisdictional Determination⁴
WET1	0.11	PEM	46.23223/-99.58036	Drainage	Likely
WET2	0.06	PEM	46.27000/-99.66727	Seep	Likely
WET3	0.84	PEM	46.27620/-99.65919	Depression	Likely
WET4	0.13	PEM	46.29826/-99.66763	Drainage	Likely
WET5	0.04	PEM	46.30672/-99.49804	Drainage	Likely
WET6	0.17	PEM	46.35419/-99.63315	Drainage	Likely
WET7	0.09	PEM	46.35390/-99.63269	Drainage	Likely
WET8	0.07	PEM	46.36317/-99.63301	Drainage	Likely
WET9	0.19	PEM	46.35140/-99.63067	Drainage	Likely
WET10	0.08	PEM	46.35076/-99.62741	Drainage	Likely
WET11	0.12	PEM	46.36845/-99.64158	Drainage	Likely
WET12	0.01	PEM	46.36785/-99.64011	Drainage	Likely

¹ Wetlands delineated in 2021 and 2022 are present in Flaig (2022) and Atwell (2022) reports.
² PEM = Palustrine emergent wetland.
³ Location of wetland sample plot.
⁴ Determination based on Western EcoSystems Technology, Inc.'s professional judgement and subject to change based on US Army Corps of Engineers review.

Badger Wind Project Wetland and Waterbody Delineation

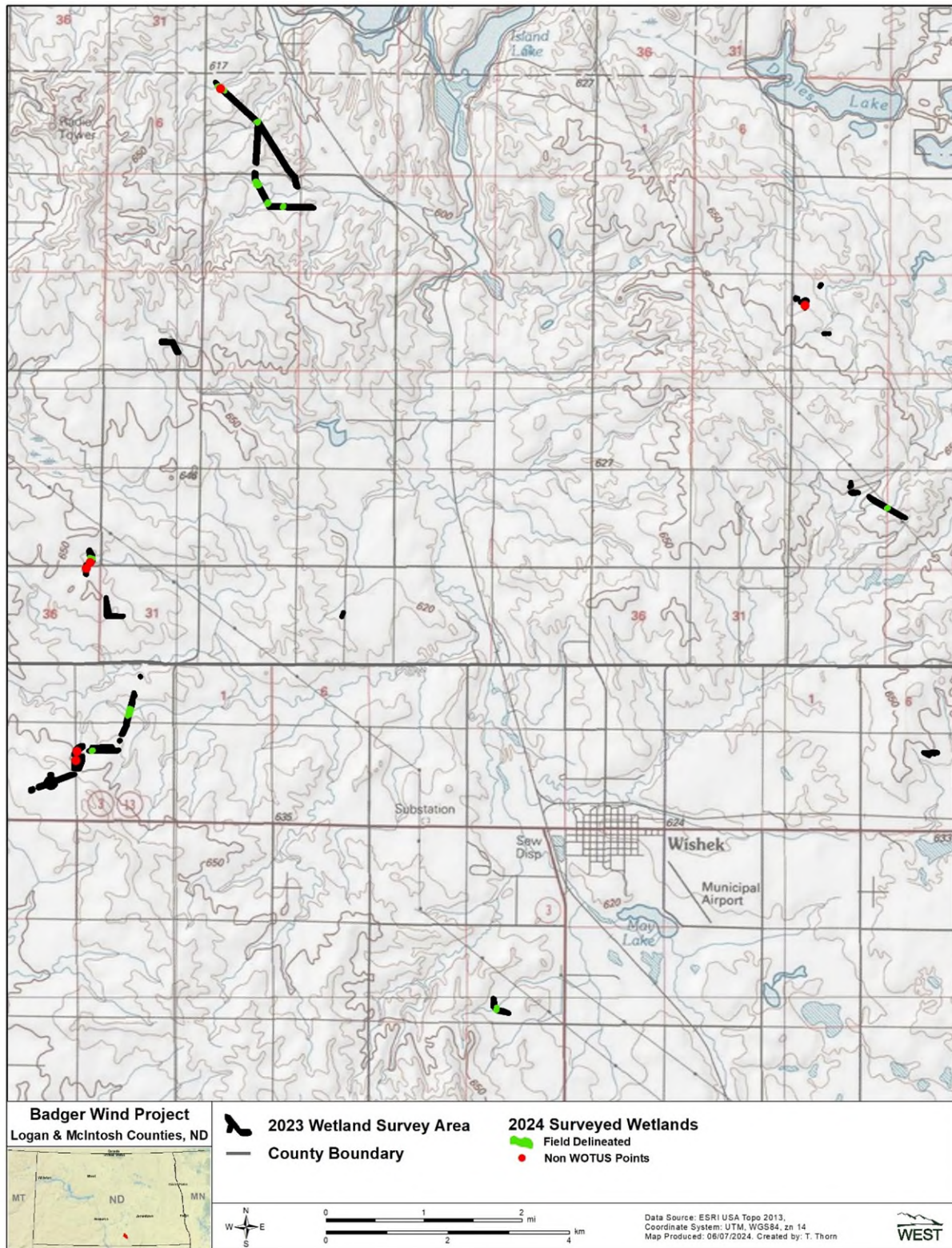


Figure 4. Field delineated wetlands and non-waters of the US points within the 2024 Wetland Survey Area of the Badger Wind Project in Logan and McIntosh counties, North Dakota, May 9–10, 2024.

Vegetation

The most common wetland species encountered in the 12 delineated wetlands within the 2024 Wetland Survey Area were cattail (*Typha* spp.), woolly sedge (*Carex pellita*), foxtail barley (*Hordeum jubatum*), and prairie cordgrass (*Spartina pectinata*).

Hydrology

Documented saturation, high water table, and inundation visible on aerial imagery were the primary hydrologic indicators present for wetlands. Other hydrology indicators noted during the field investigation were saturation visible on aerial imagery, geomorphic position, FAC-neutral test, and drainage patterns.

Soils

Soil colors were predominantly dark (e.g., 10 YR 2/2 and 3/1). The primary field hydric soil indicator used was redox dark surface, followed by depleted below dark surface. The majority of the soil was silt loam and loam.

CONCLUSION

Wetland and waterbody delineations and wetland mapping were completed for the Project in the months of September 2020, October 2020, September 2021, May 2022, October 2023, November 2023, and May 2024. Further details regarding delineations and mapping conducted prior to 2024 can be found in the Aquatic Resources Delineation Report (Atwell 2022) and the Wetlands and Waterbodies Assessment Report (Chodachek and Welsch 2024). Over these combined field efforts, 205 wetlands were identified through field delineation, comprising 217.21 ac, and 64 additional wetlands were mapped, totaling 30.50 ac (Figure 5). Four waterbody features were delineated, comprising 0.78 ac, and seven watercourses were identified, comprising a cumulative of 5.18 ac.

Badger Wind Project Wetland and Waterbody Delineation

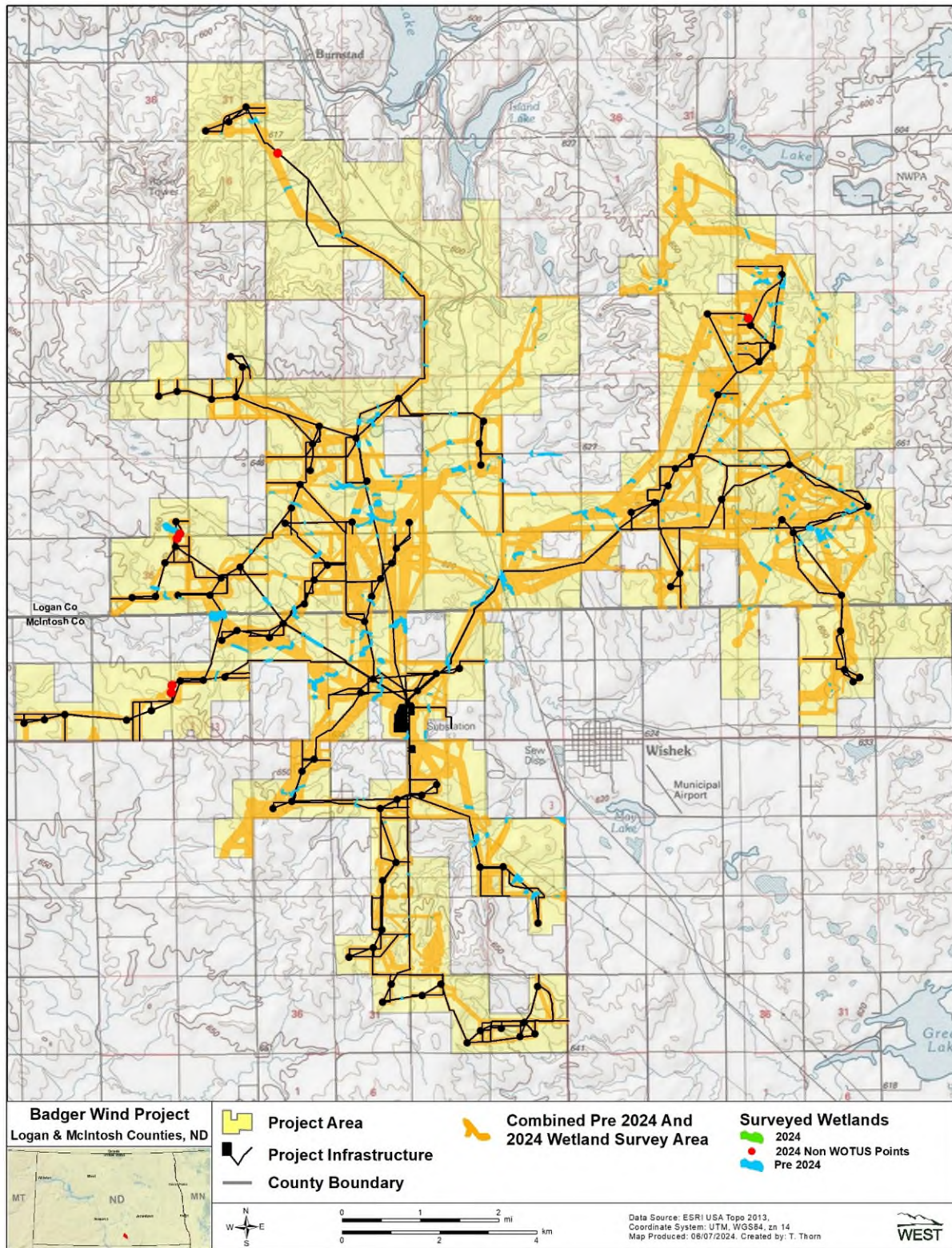


Figure 5. Wetland survey results for field surveys conducted in 2020, 2021, 2022, 2023, and 2024 at the Badger Wind Project in Logan and McIntosh counties, North Dakota.

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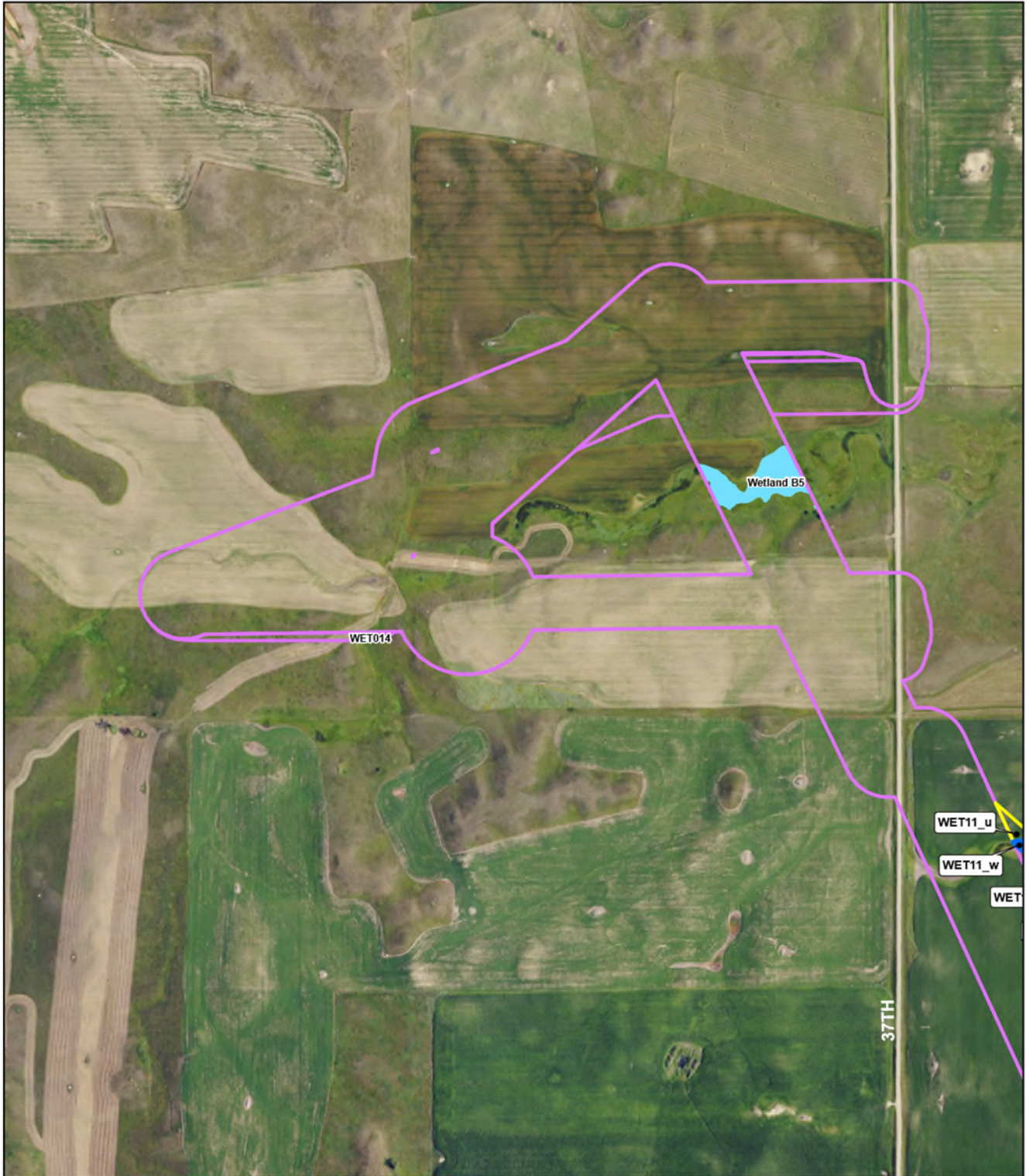
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Appendix A. Field Delineated Wetland Locations within the 2024 Wetland Survey Area of the Badger Wind Project in Logan and McIntosh Counties, North Dakota.

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Badger Wind Project
Logan & McIntosh Counties, ND



- 2024 Wetland Survey Area
- 2024 Delineated Wetlands
- 2024 Wetland/Upland Sample Points
- 2024 Non WOTUS Points
- Pre 2024 Wetland Survey Area
- Pre 2024 Surveyed Wetlands
- County Boundary
- State Highway



Data Source: NAIP 2023
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Map Produced: 08/10/2024. Created by: T. Thorn





Badger Wind Project
Logan & McIntosh Counties, ND

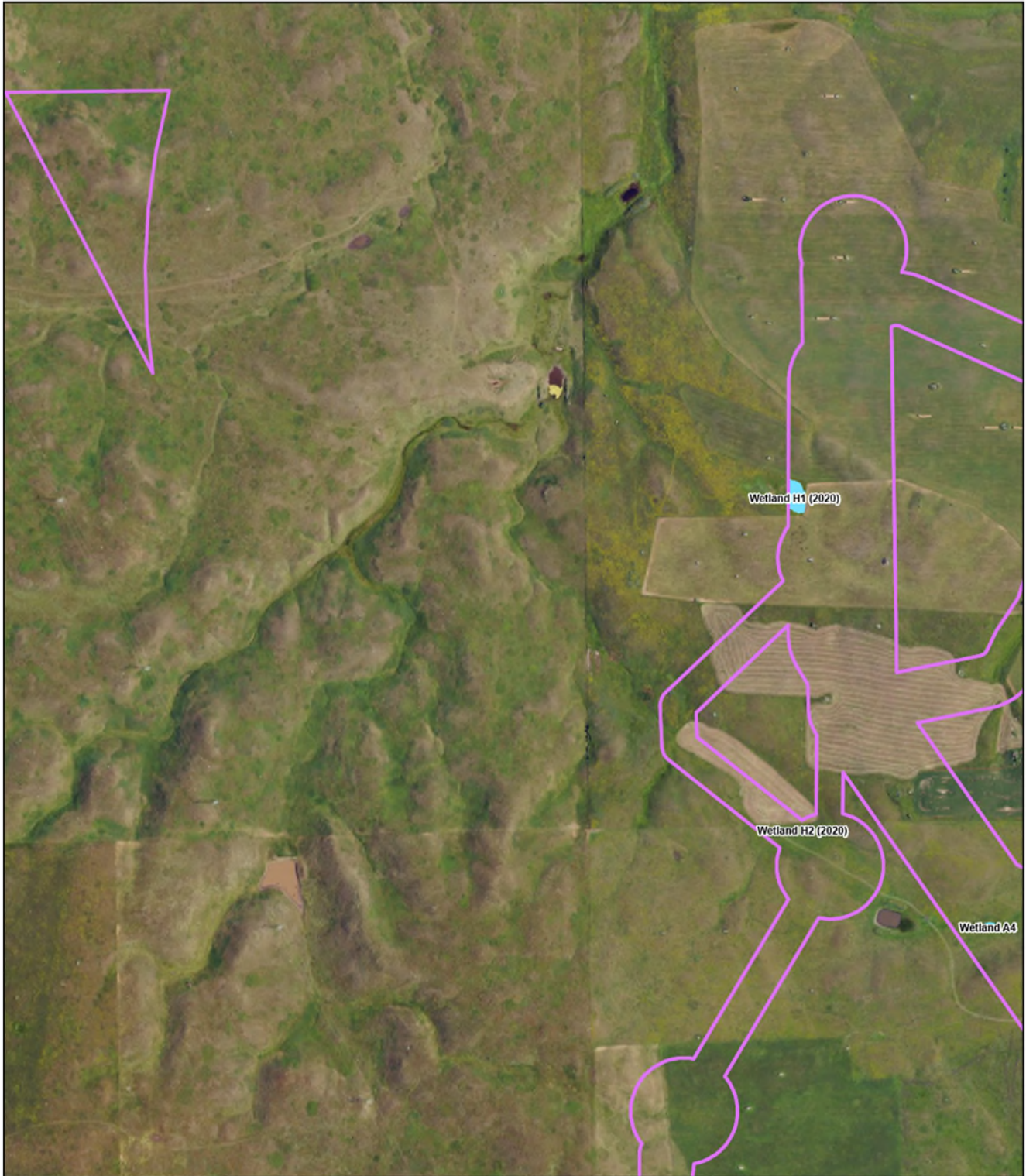


- ▭ 2024 Wetland Survey Area
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- 2024 Wetland/Upland Sample Points
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- ▭ Pre 2024 Surveyed Wetlands
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- State Highway



Data Source: NAIP 2023
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Map Produced: 08/10/2024, Created by: T. Thorn





Badger Wind Project
Logan & McIntosh Counties, ND

- 2024 Wetland Survey Area
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



Badger Wind Project
Logan & McIntosh Counties, ND



-  2024 Wetland Survey Area
-  2024 Delineated Wetlands
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-  2024 Non WOTUS Points

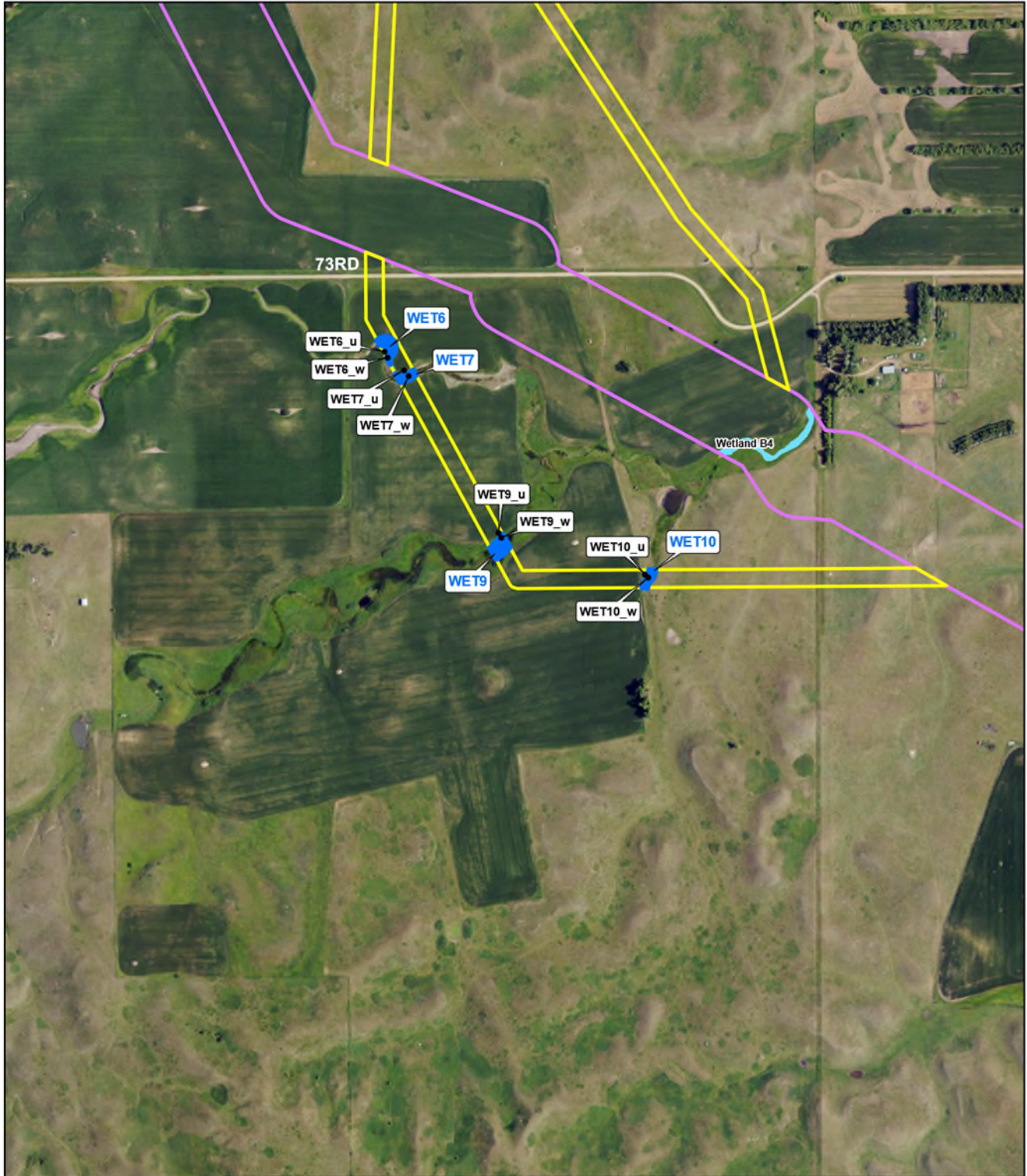
-  Pre 2024 Wetland Survey Area
-  Pre 2024 Surveyed Wetlands

-  County Boundary
-  State Highway



Data Source: NAIP 2023
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Badger Wind Project
Logan & McIntosh Counties, ND





- 2024 Wetland Survey Area
- 2024 Delineated Wetlands
- 2024 Wetland/Upland Sample Points
- 2024 Non WOTUS Points
- Pre 2024 Wetland Survey Area
- Pre 2024 Surveyed Wetlands
- County Boundary
- State Highway



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Data Source: NAIP 2023
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Badger Wind Project
Logan & McIntosh Counties, ND

-  2024 Wetland Survey Area
-  2024 Delineated Wetlands
-  2024 Wetland/Upland Sample Points
-  2024 Non WOTUS Points

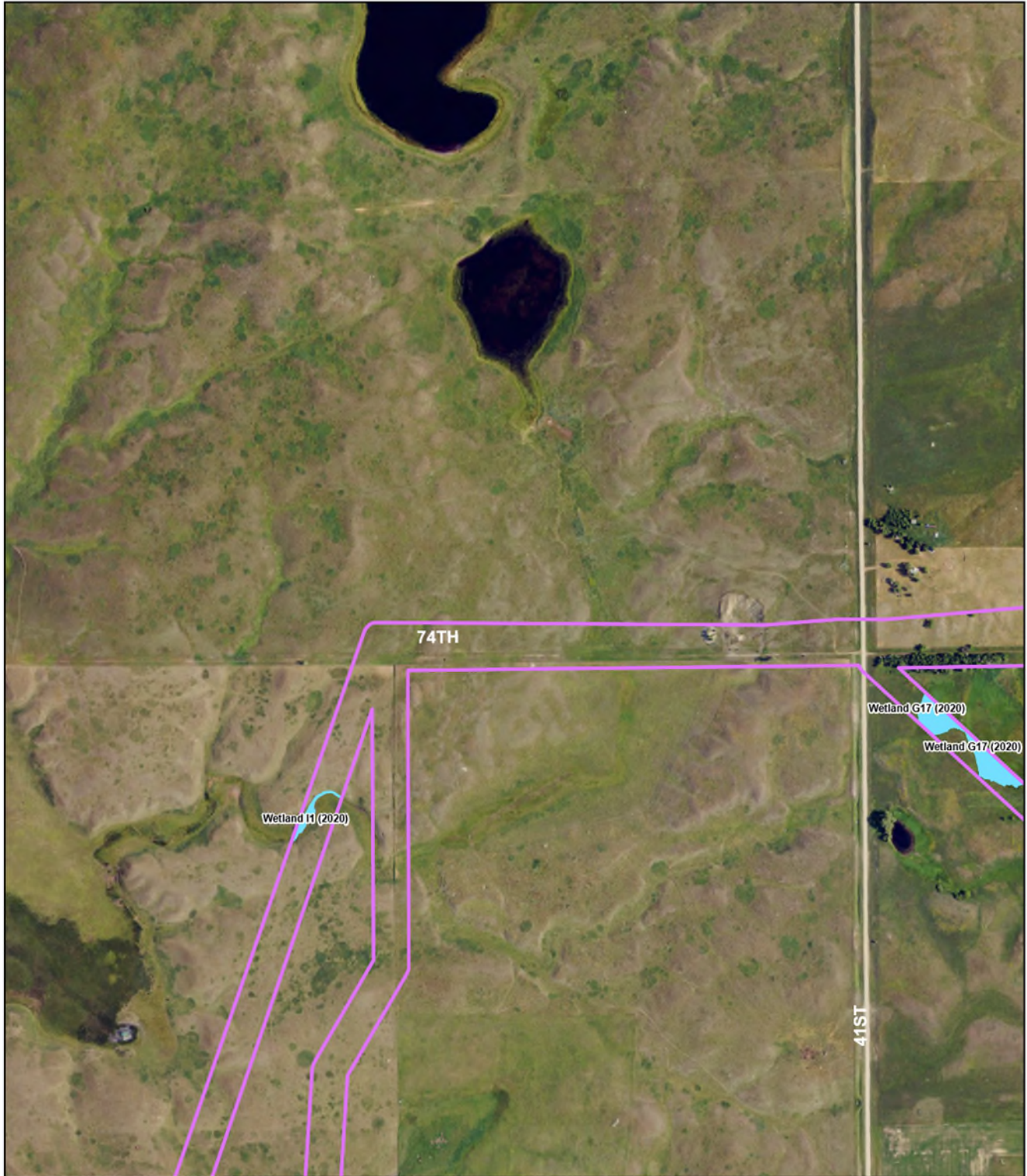
-  Pre 2024 Wetland Survey Area
-  Pre 2024 Surveyed Wetlands

-  County Boundary
-  State Highway



Data Source: NAIP 2023
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Map Produced: 08/10/2024. Created by: T. Thorn





Badger Wind Project
Logan & McIntosh Counties, ND

- 2024 Wetland Survey Area
- 2024 Delineated Wetlands
- 2024 Wetland/Upland Sample Points
- 2024 Non WOTUS Points

- Pre 2024 Wetland Survey Area
- Pre 2024 Surveyed Wetlands

- County Boundary
- State Highway

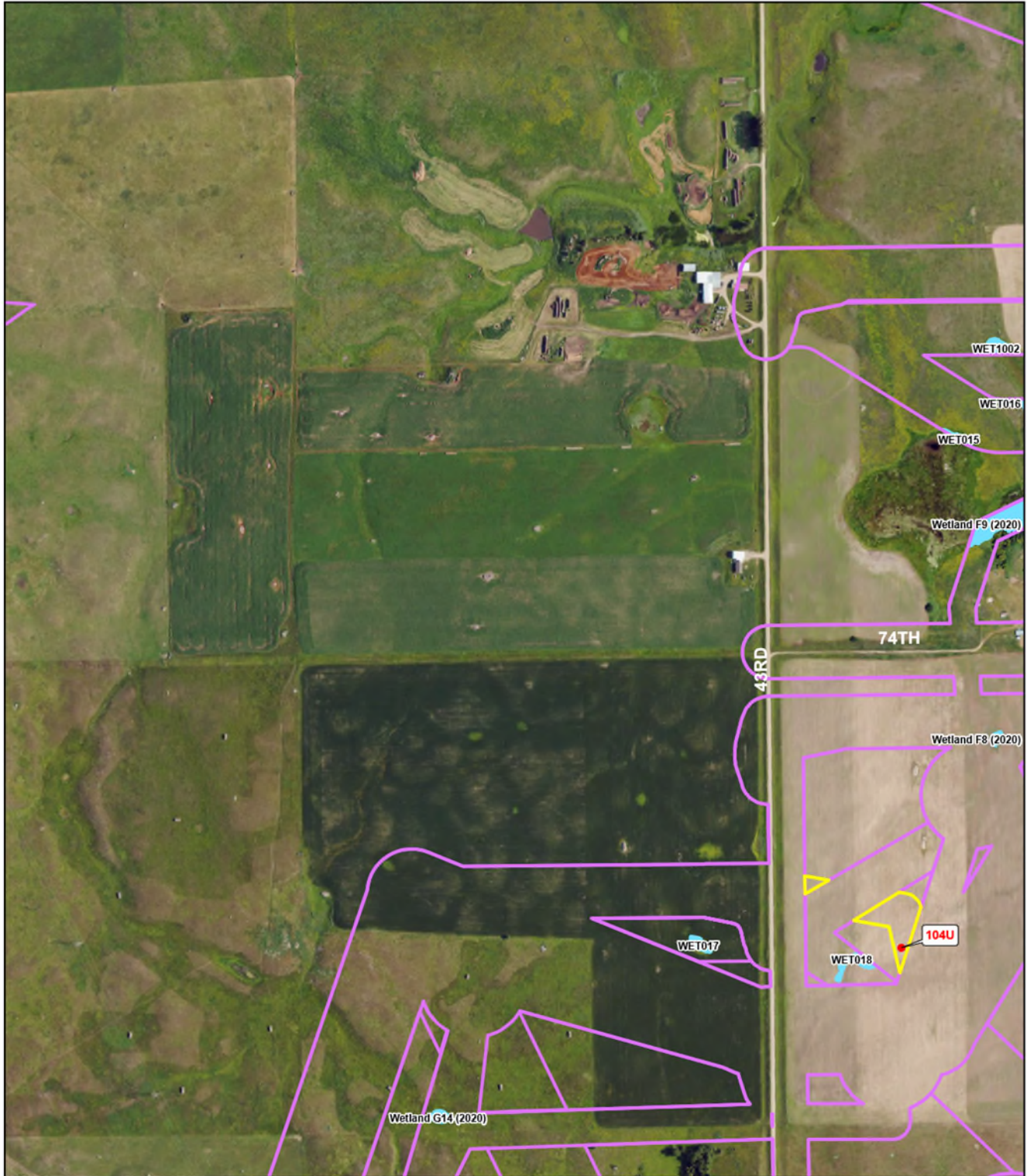


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<p>Badger Wind Project Logan & McIntosh Counties, ND</p>		<p> 2024 Wetland Survey Area</p> <p> 2024 Delineated Wetlands</p> <p> 2024 Wetland/Upland Sample Points</p> <p> 2024 Non WOTUS Points</p>	<p> Pre 2024 Wetland Survey Area</p> <p> Pre 2024 Surveyed Wetlands</p>	<p> County Boundary</p> <p> State Highway</p>
		<p>Scale: 0 to 0.2 miles / 0 to 0.4 kilometers</p> <p>North arrow</p>		<p>Page 8 of 75</p>
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Badger Wind Project
Logan & McIntosh Counties, ND

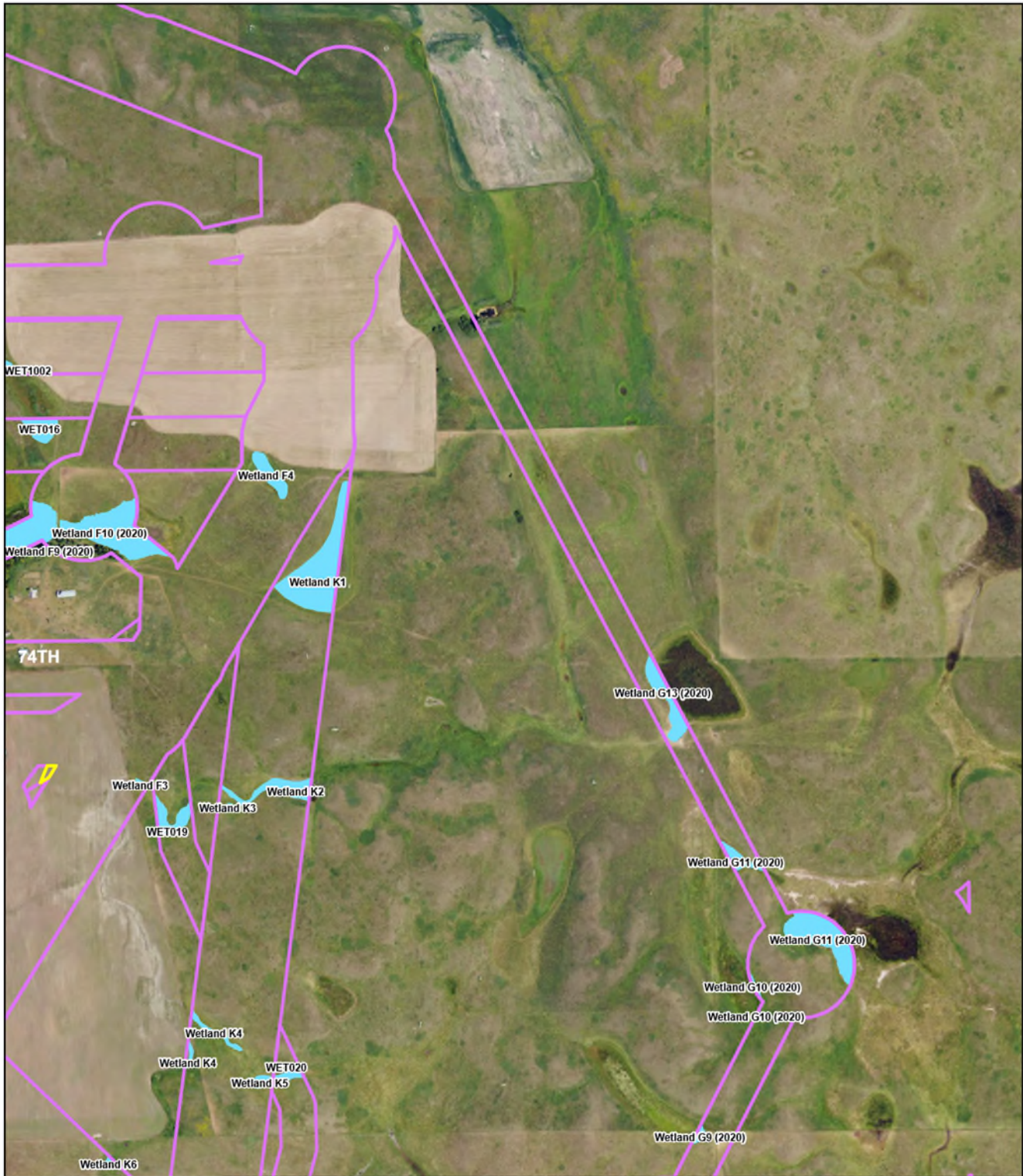
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- County Boundary
- State Highway



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Badger Wind Project
Logan & McIntosh Counties, ND

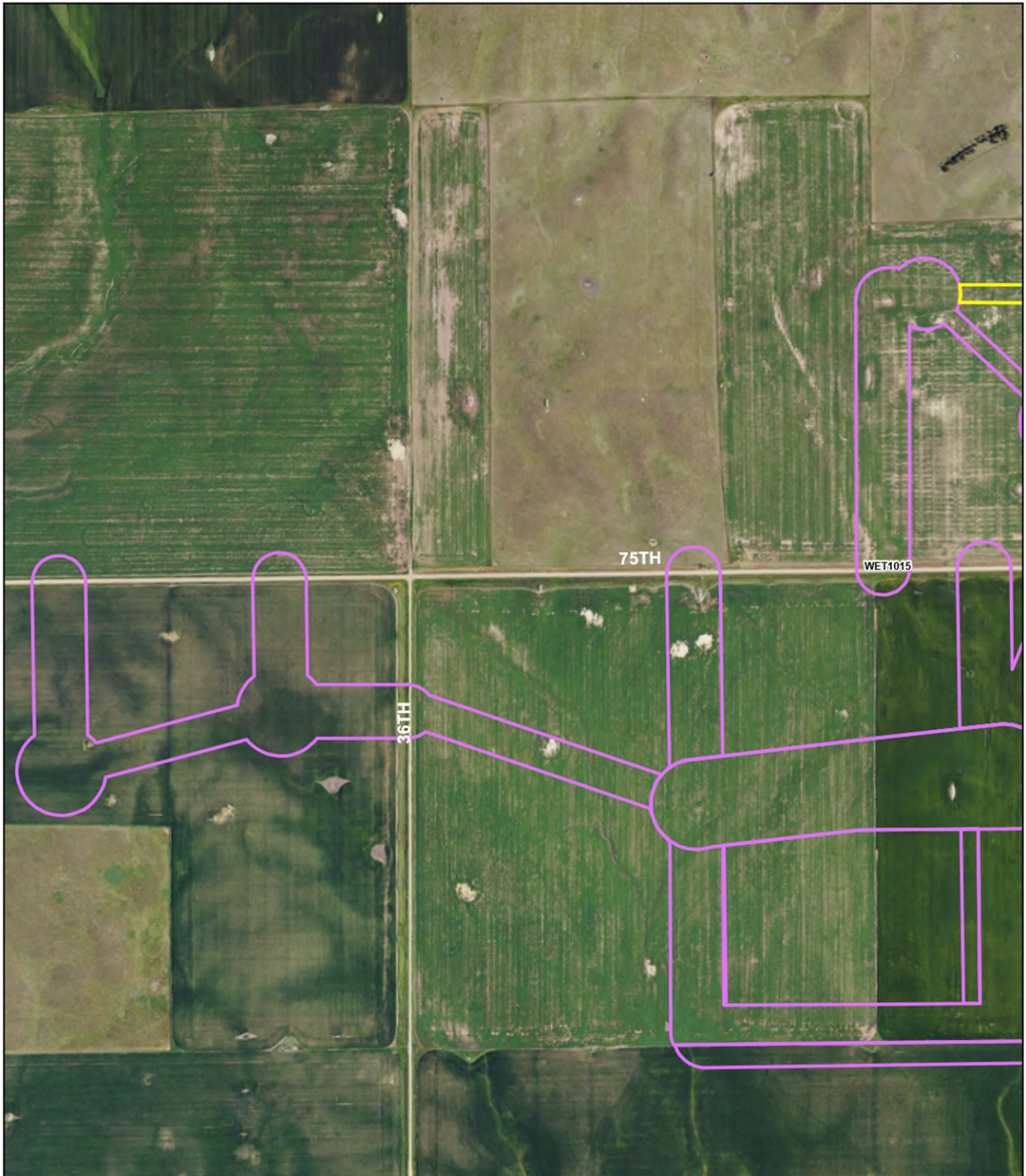
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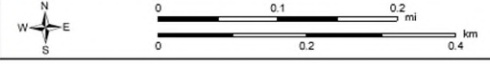




Badger Wind Project
Logan & McIntosh Counties, ND



	2024 Wetland Survey Area		Pre 2024 Wetland Survey Area		County Boundary
	2024 Delineated Wetlands		Pre 2024 Surveyed Wetlands		State Highway
	2024 Wetland/Upland Sample Points				
	2024 Non WOTUS Points				



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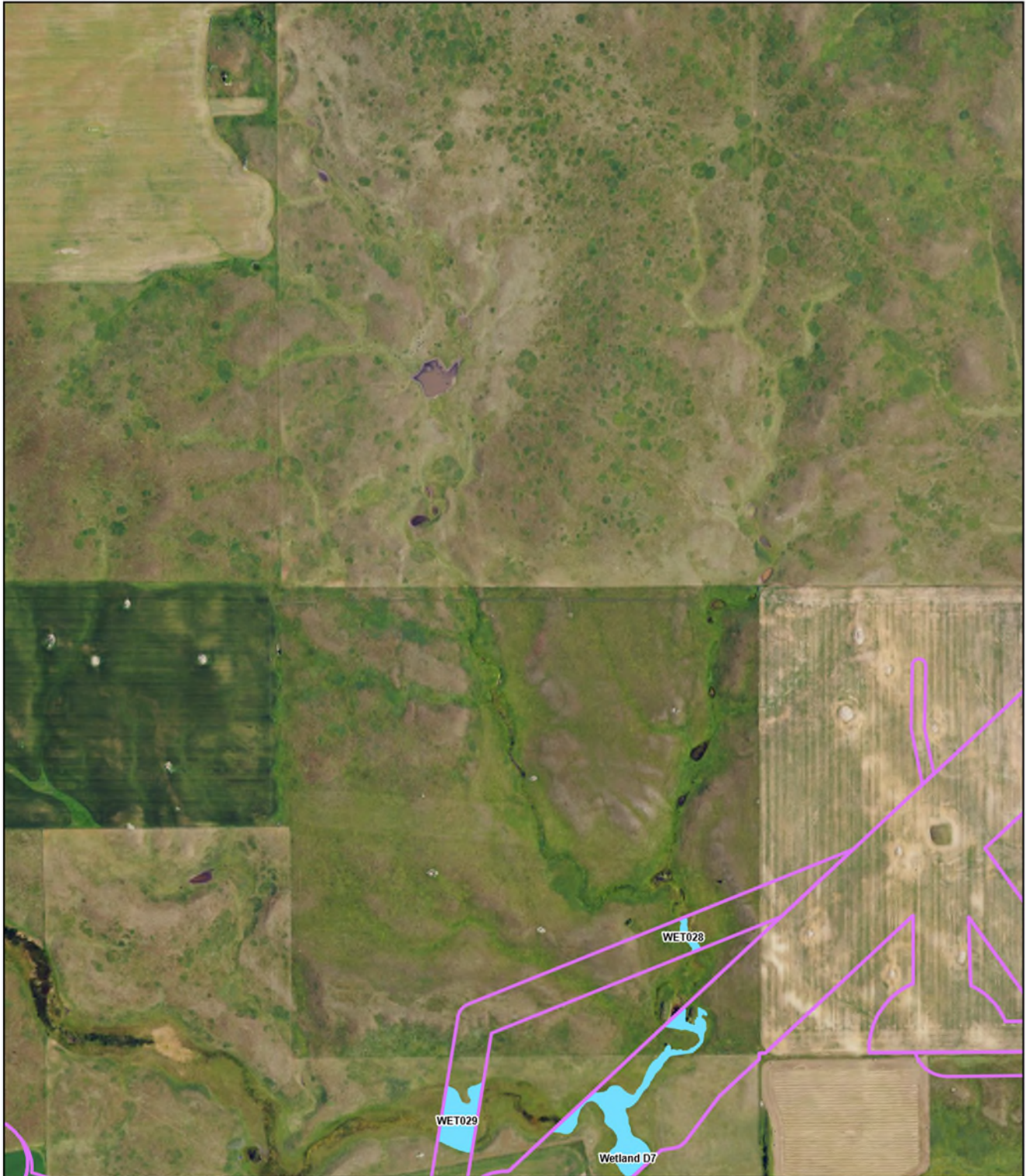
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Badger Wind Project
Logan & McIntosh Counties, ND

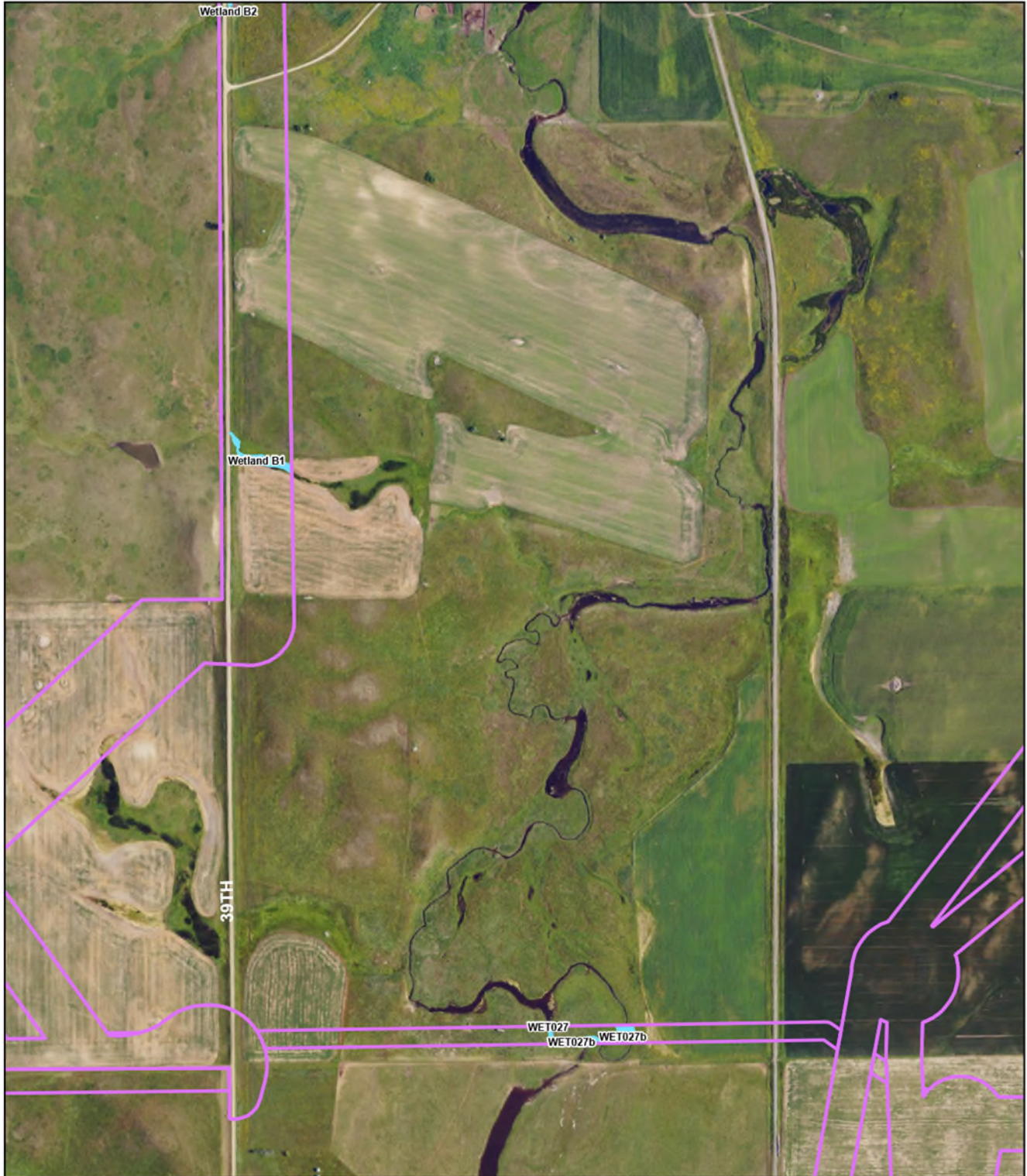


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- 2024 Non WOTUS Points
- Pre 2024 Wetland Survey Area
- Pre 2024 Surveyed Wetlands
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- State Highway



Data Source: NAIP 2023
Coordinate System: UTM, WGS84, zone 14
Map Produced: 08/10/2024, Created by: T. Thorn





Badger Wind Project
Logan & McIntosh Counties, ND

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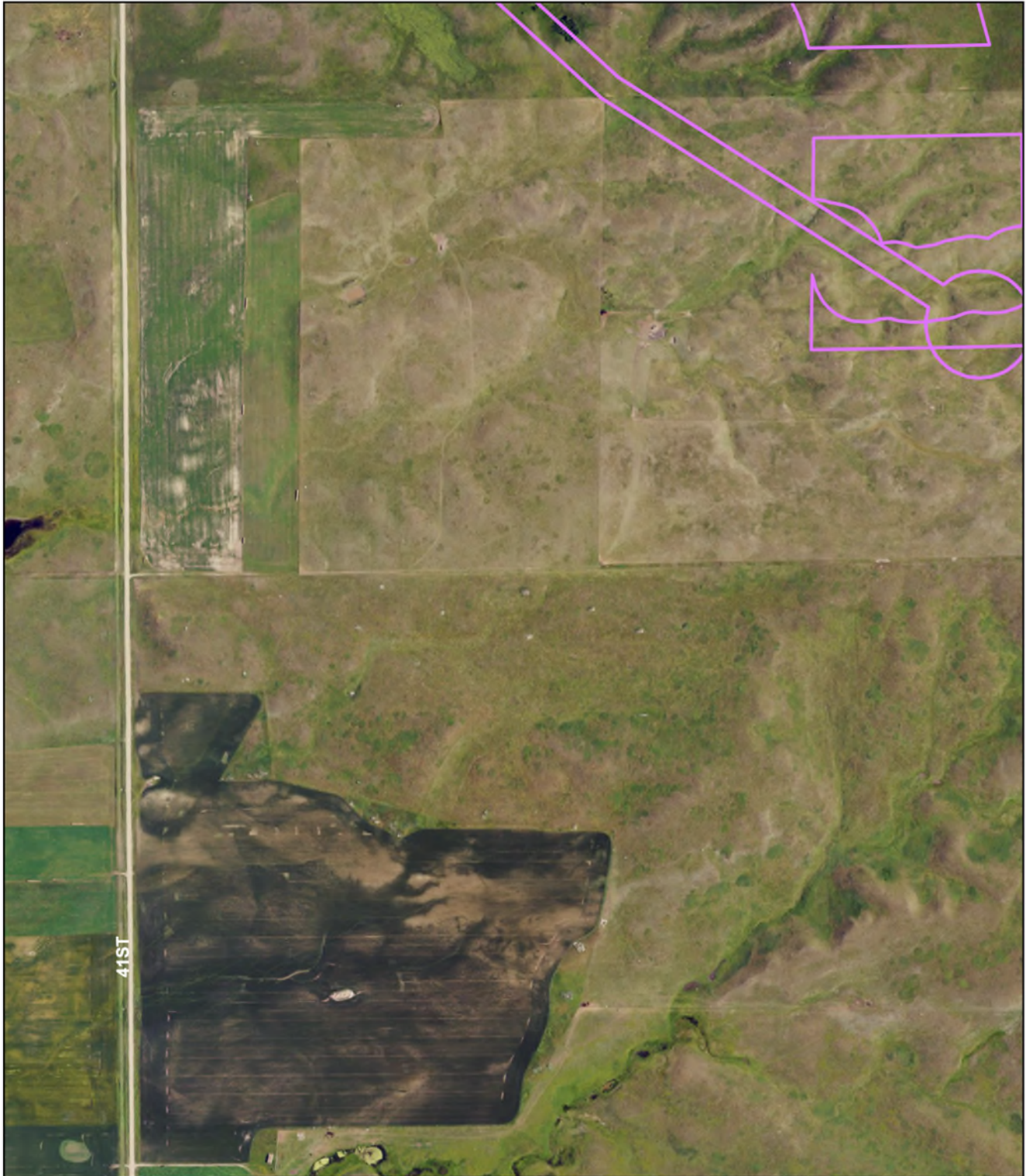
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


<p>Badger Wind Project Logan & McIntosh Counties, ND</p>		<p> 2024 Wetland Survey Area</p> <p> 2024 Delineated Wetlands</p> <p> 2024 Wetland/Upland Sample Points</p> <p> 2024 Non WOTUS Points</p>	<p> Pre 2024 Wetland Survey Area</p> <p> Pre 2024 Surveyed Wetlands</p>	<p> County Boundary</p> <p> State Highway</p>
		<p>Scale: 0 to 0.2 miles / 0 to 0.4 kilometers</p> <p>North arrow</p>		<p>Data Source: NAIP 2023 Coordinate System: UTM, WGS84, zone 14 Map Produced: 08/10/2024. Created by: T. Thorn</p>





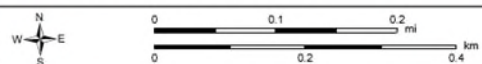


Badger Wind Project
Logan & McIntosh Counties, ND



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Badger Wind Project
Logan & McIntosh Counties, ND

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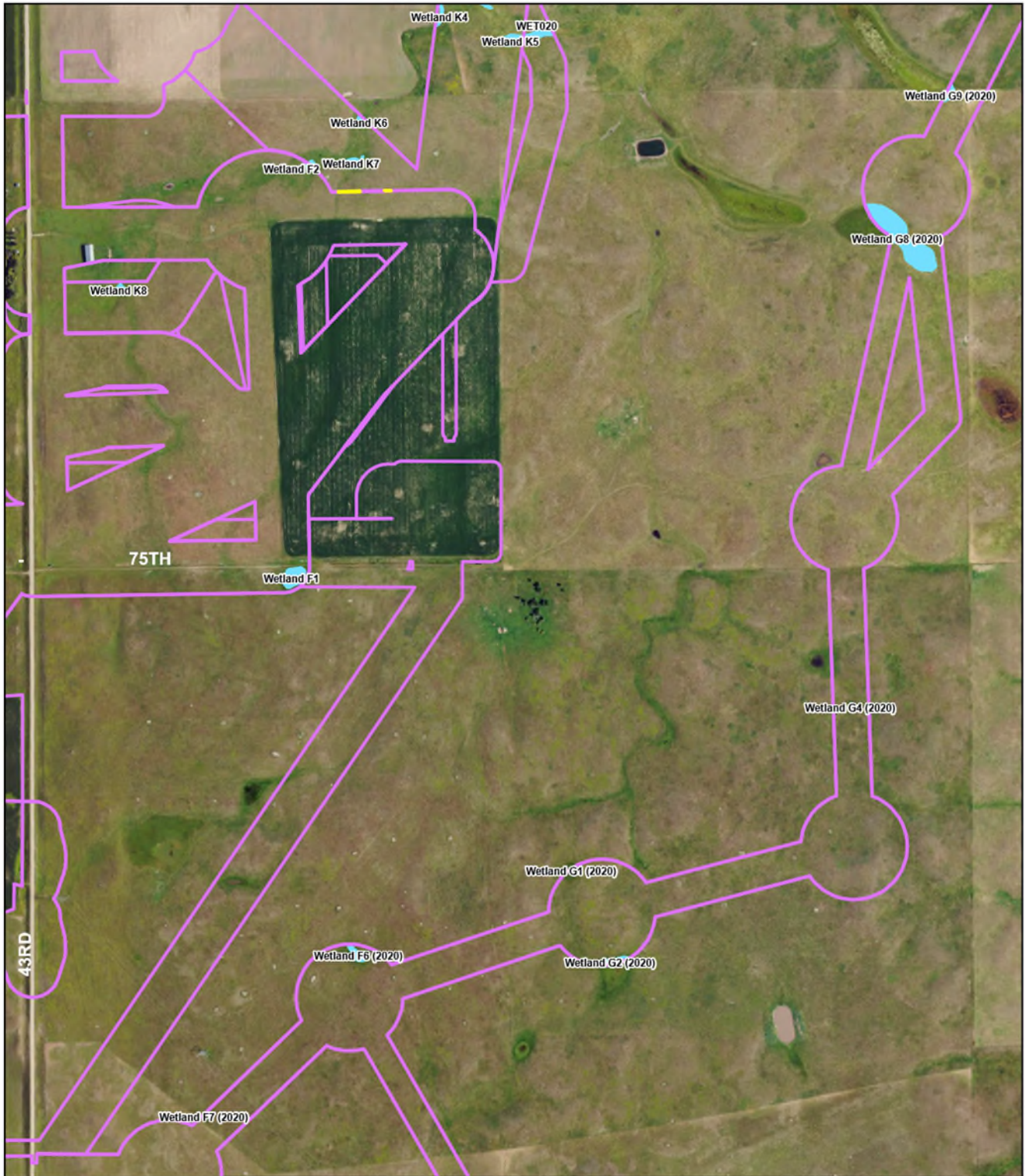
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Badger Wind Project
Logan & McIntosh Counties, ND

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	2024 Delineated Wetlands		Pre 2024 Surveyed Wetlands
	2024 Wetland/Upland Sample Points		County Boundary
	2024 Non WOTUS Points		State Highway

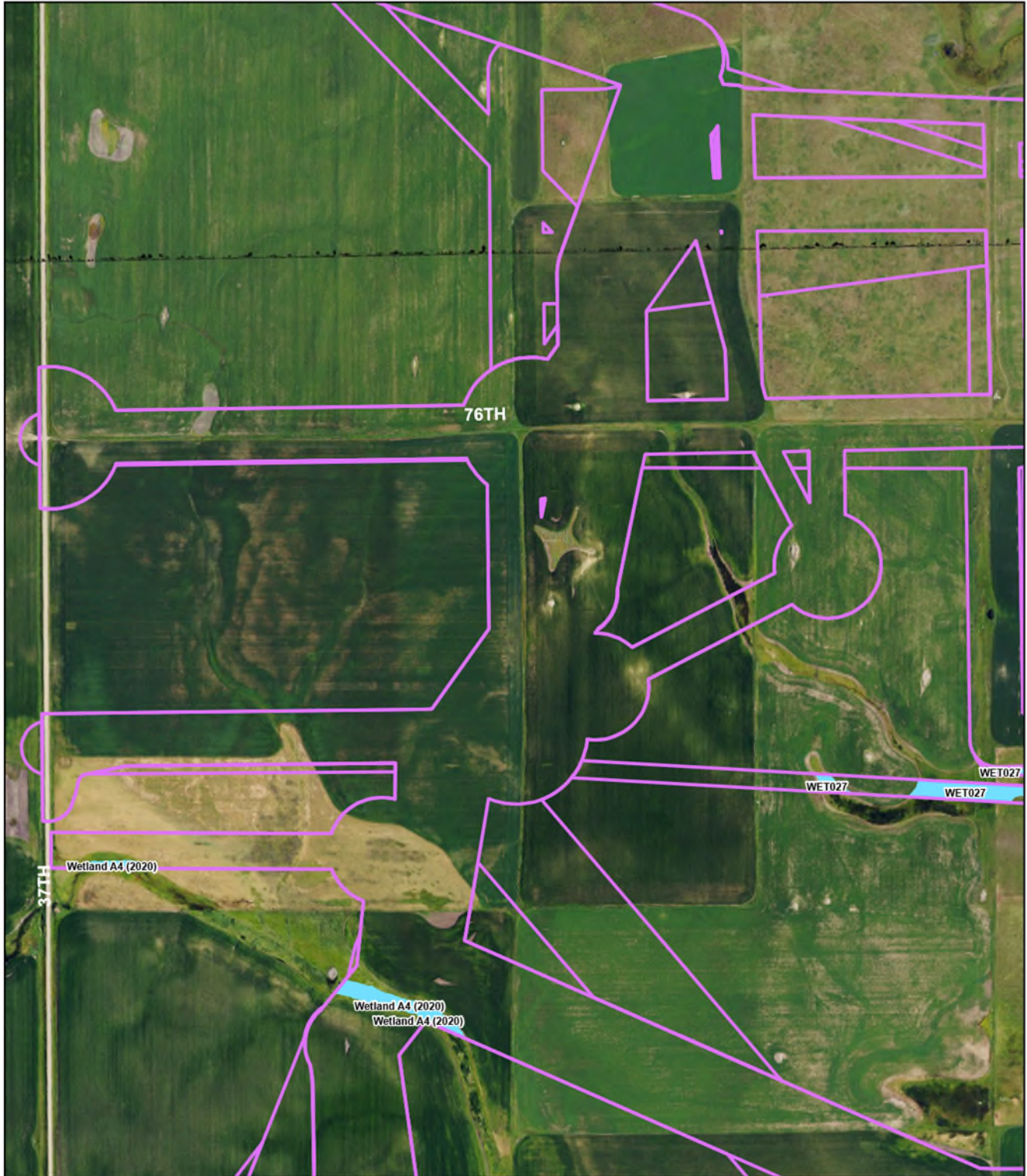
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<p>Badger Wind Project Logan & McIntosh Counties, ND</p>		<p> 2024 Wetland Survey Area</p> <p> 2024 Delineated Wetlands</p> <p> 2024 Wetland/Upland Sample Points</p> <p> 2024 Non WOTUS Points</p>	<p> Pre 2024 Wetland Survey Area</p> <p> Pre 2024 Surveyed Wetlands</p>	<p> County Boundary</p> <p> State Highway</p>
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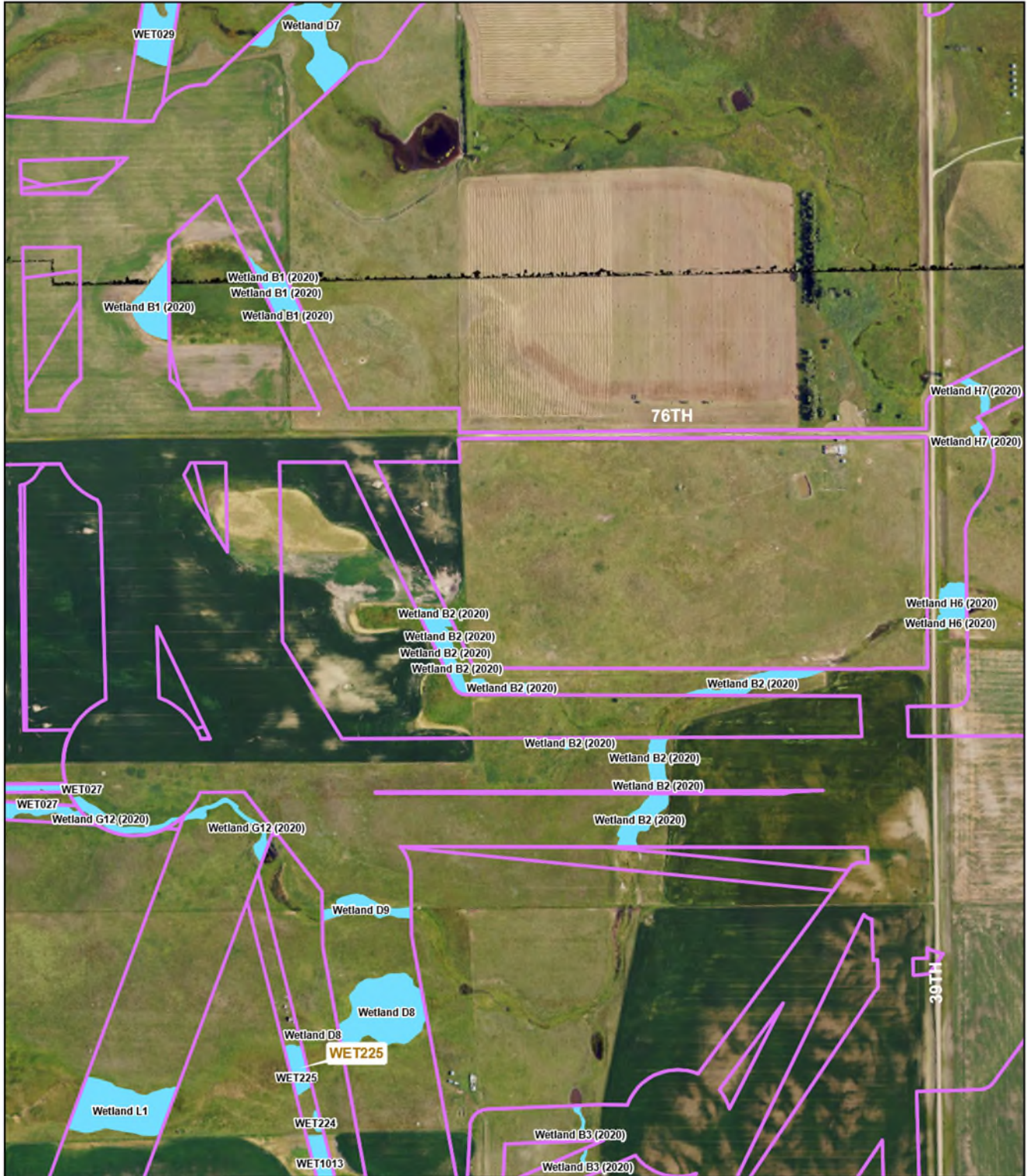
Badger Wind Project
Logan & McIntosh Counties, ND

2024 Wetland Survey Area	Pre 2024 Wetland Survey Area	County Boundary
2024 Delineated Wetlands	Pre 2024 Surveyed Wetlands	State Highway
2024 Wetland/Upland Sample Points		
2024 Non WOTUS Points		

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Data Source: NAIP 2023
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Badger Wind Project
Logan & McIntosh Counties, ND

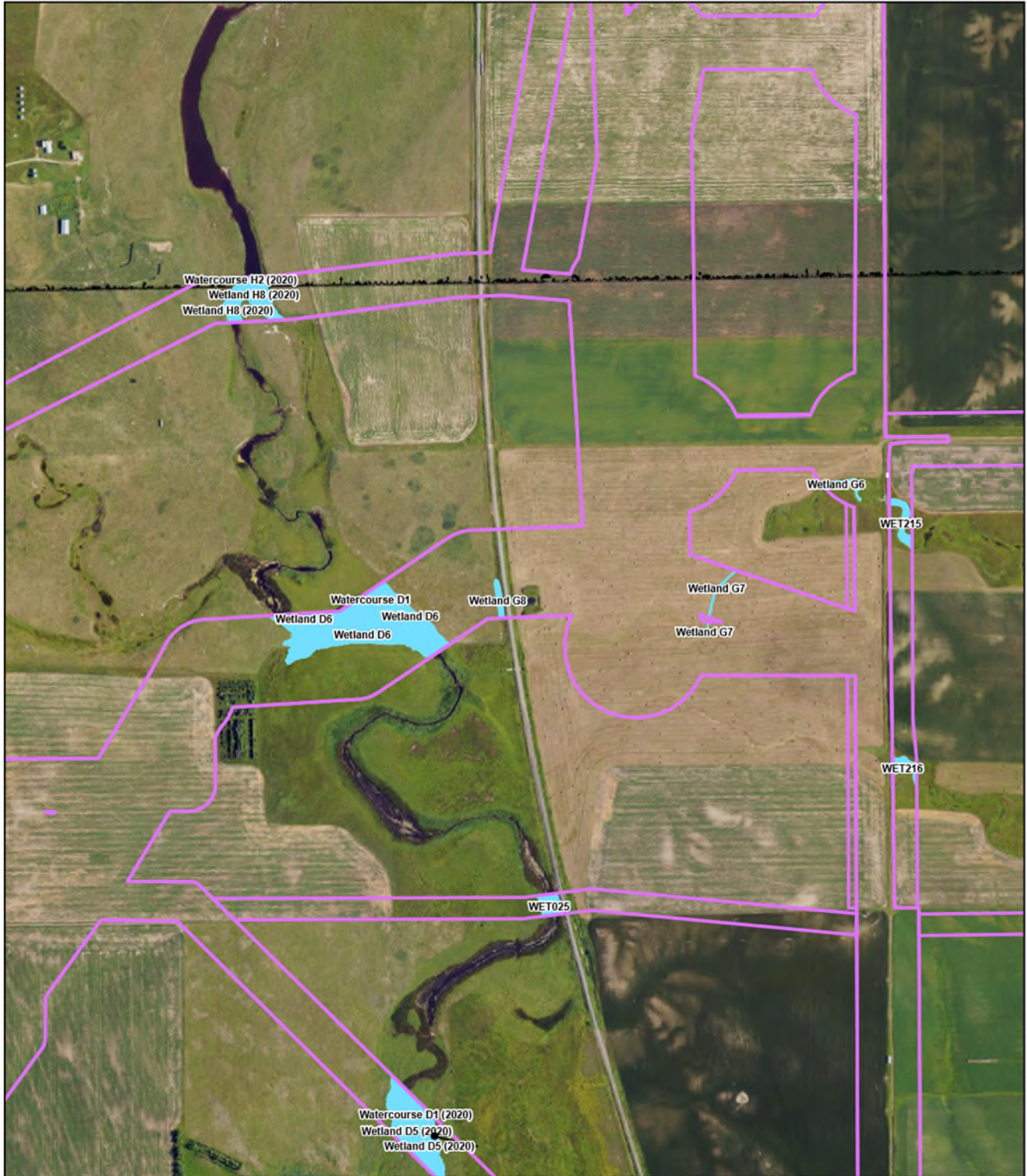
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Logan & McIntosh Counties, ND

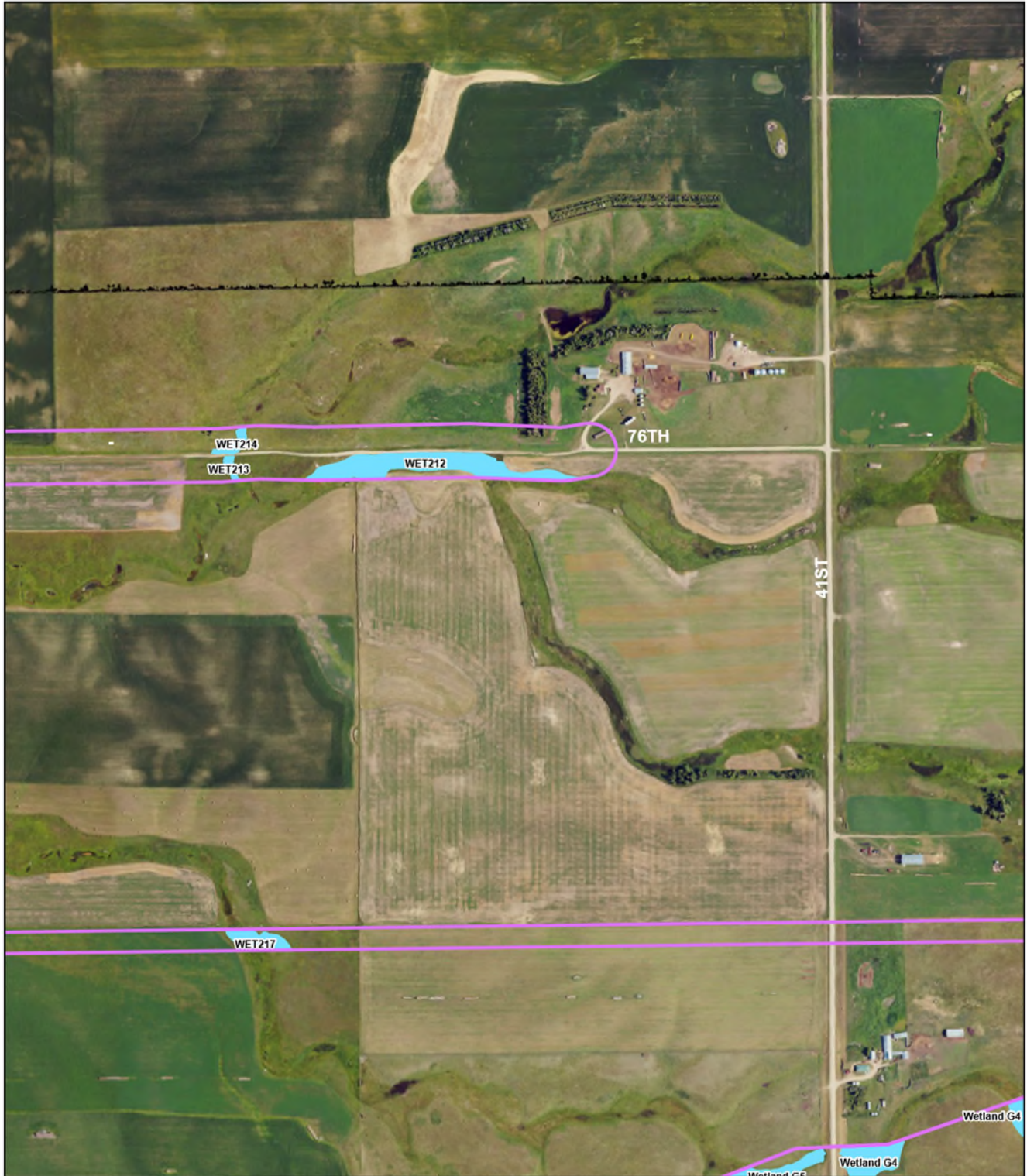


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Logan & McIntosh Counties, ND

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Badger Wind Project
Logan & McIntosh Counties, ND

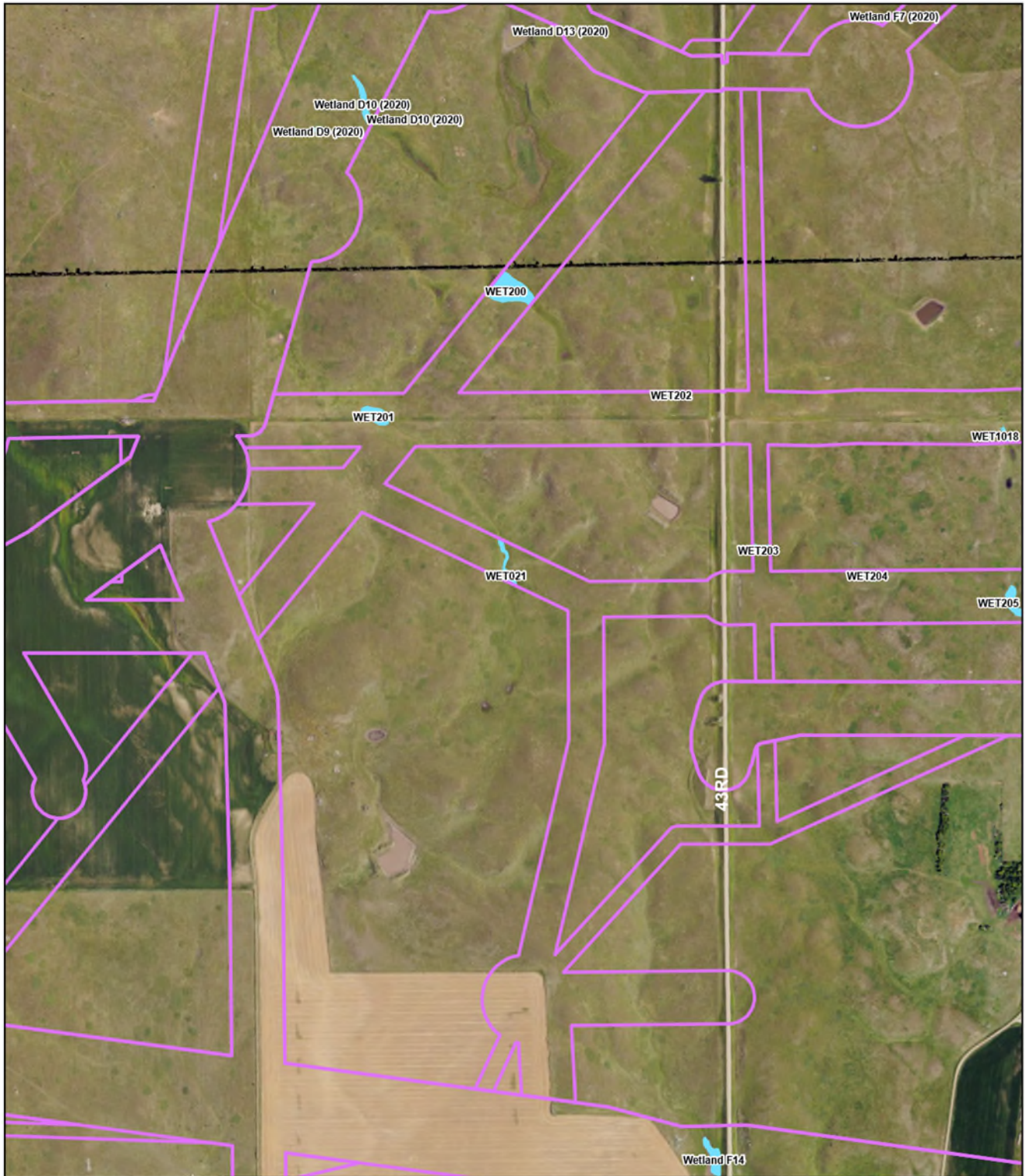
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Logan & McIntosh Counties, ND

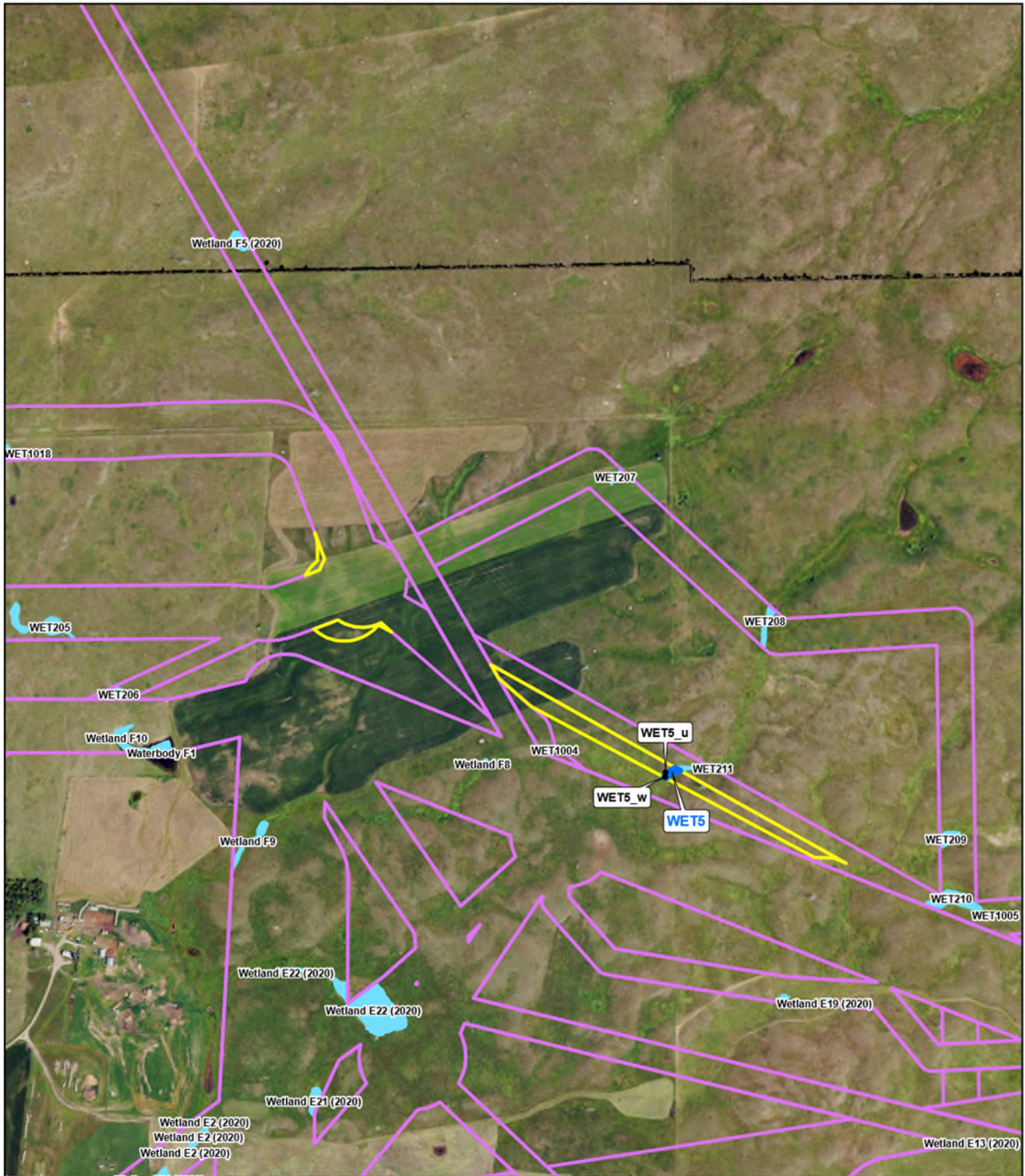
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Badger Wind Project
Logan & McIntosh Counties, ND

2024 Wetland Survey Area	Pre 2024 Wetland Survey Area	County Boundary
2024 Delineated Wetlands	Pre 2024 Surveyed Wetlands	State Highway
2024 Wetland/Upland Sample Points		
2024 Non WOTUS Points		

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Logan & McIntosh Counties, ND




	2024 Wetland Survey Area		Pre 2024 Wetland Survey Area		County Boundary
	2024 Delineated Wetlands		Pre 2024 Surveyed Wetlands		State Highway
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	2024 Non WOTUS Points				

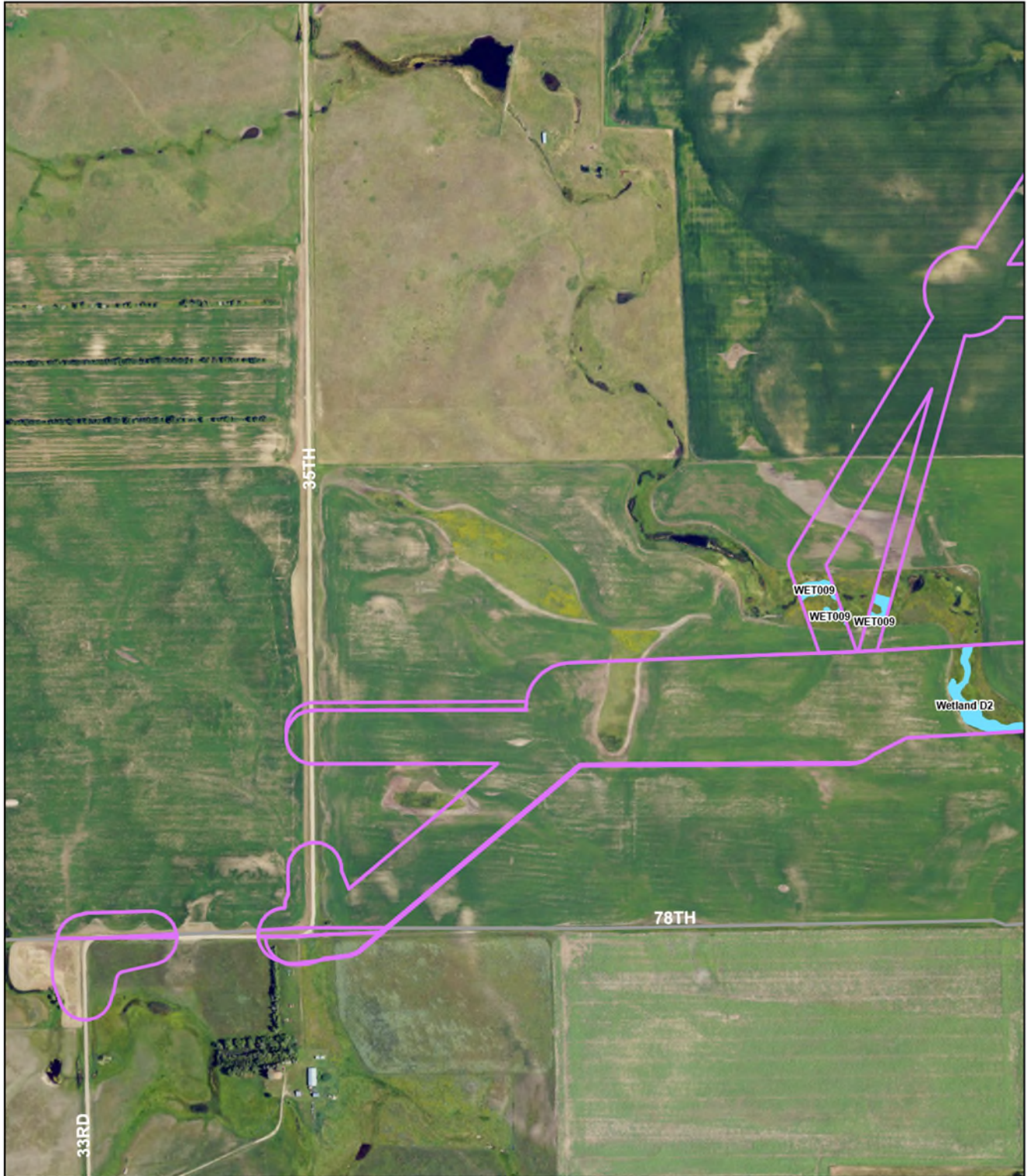
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0 0.1 0.2 mi
0 0.2 0.4 km

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Logan & McIntosh Counties, ND

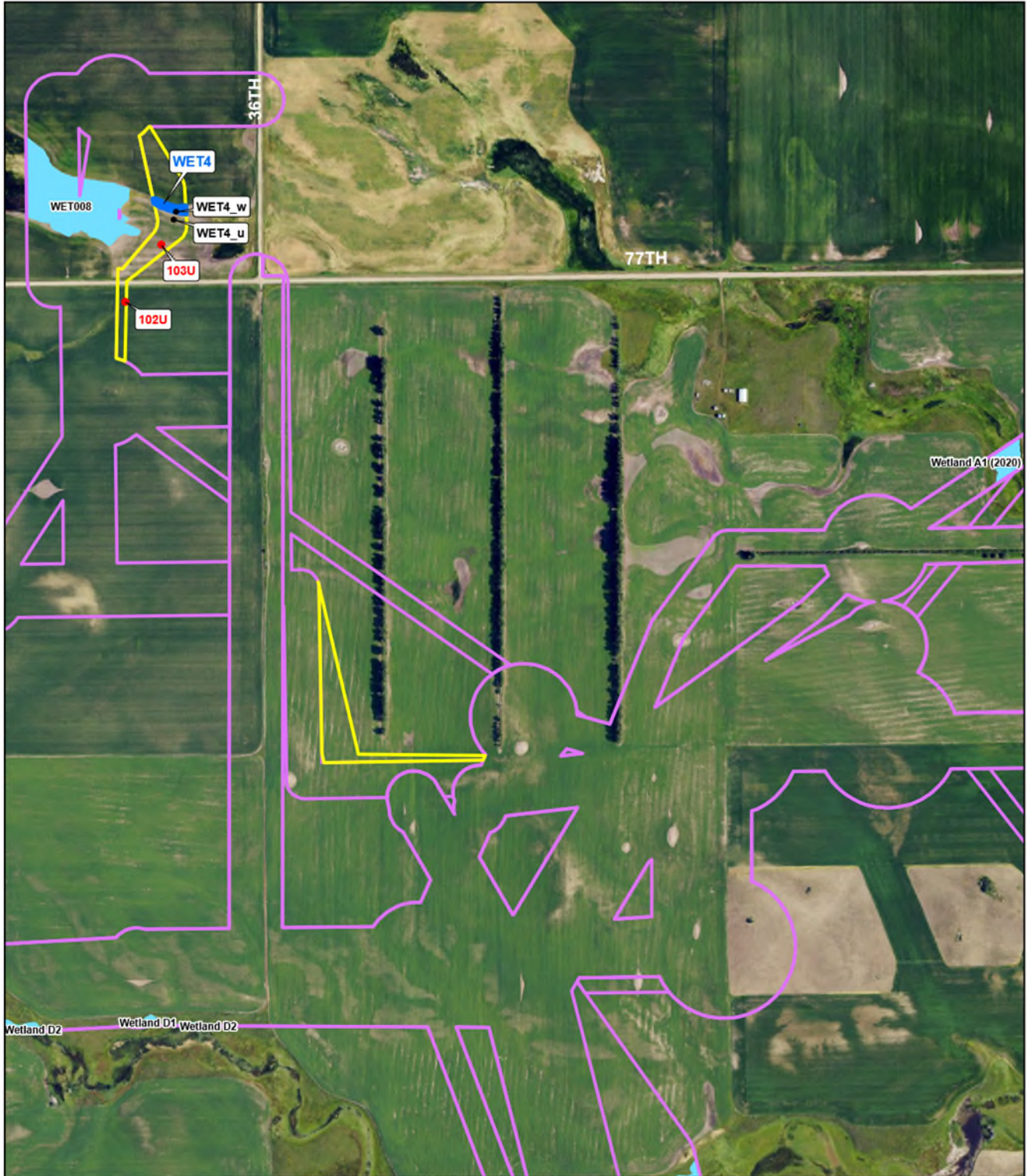


- 2024 Wetland Survey Area
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




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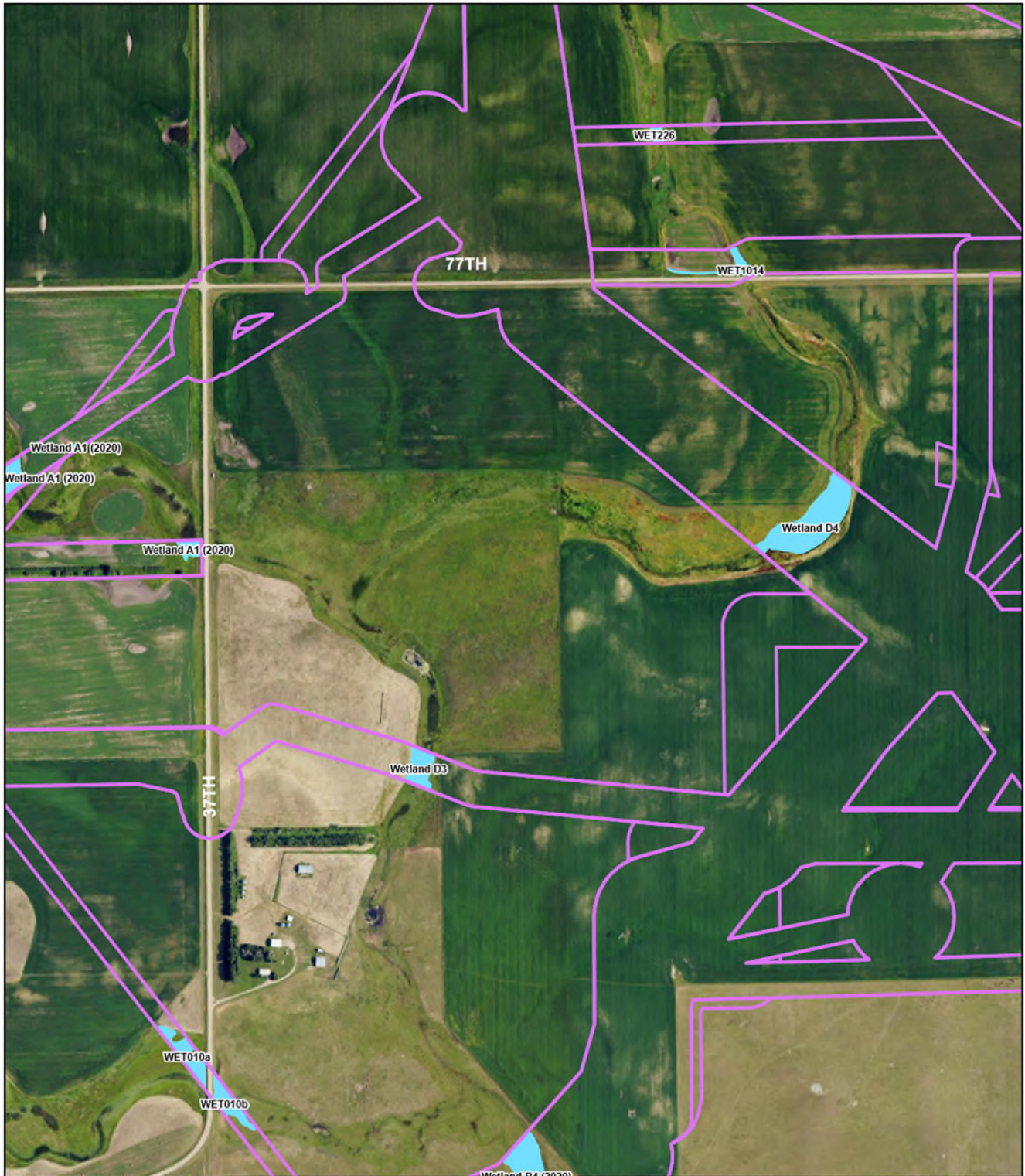
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Logan & McIntosh Counties, ND

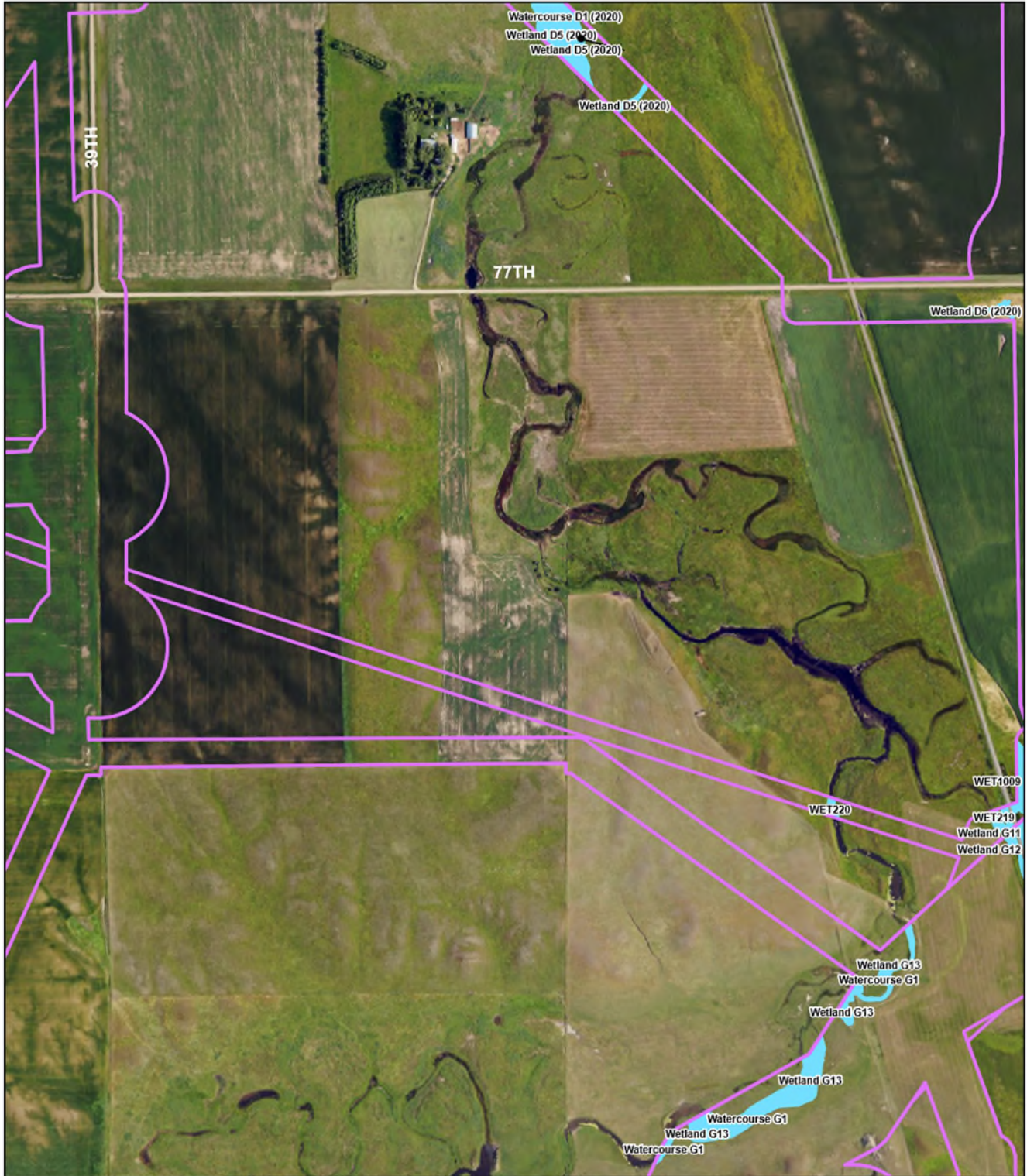


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Logan & McIntosh Counties, ND

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Badger Wind Project
Logan & McIntosh Counties, ND

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2024 Delineated Wetlands	Pre 2024 Surveyed Wetlands	State Highway
2024 Wetland/Upland Sample Points		
2024 Non WOTUS Points		

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Logan & McIntosh Counties, ND

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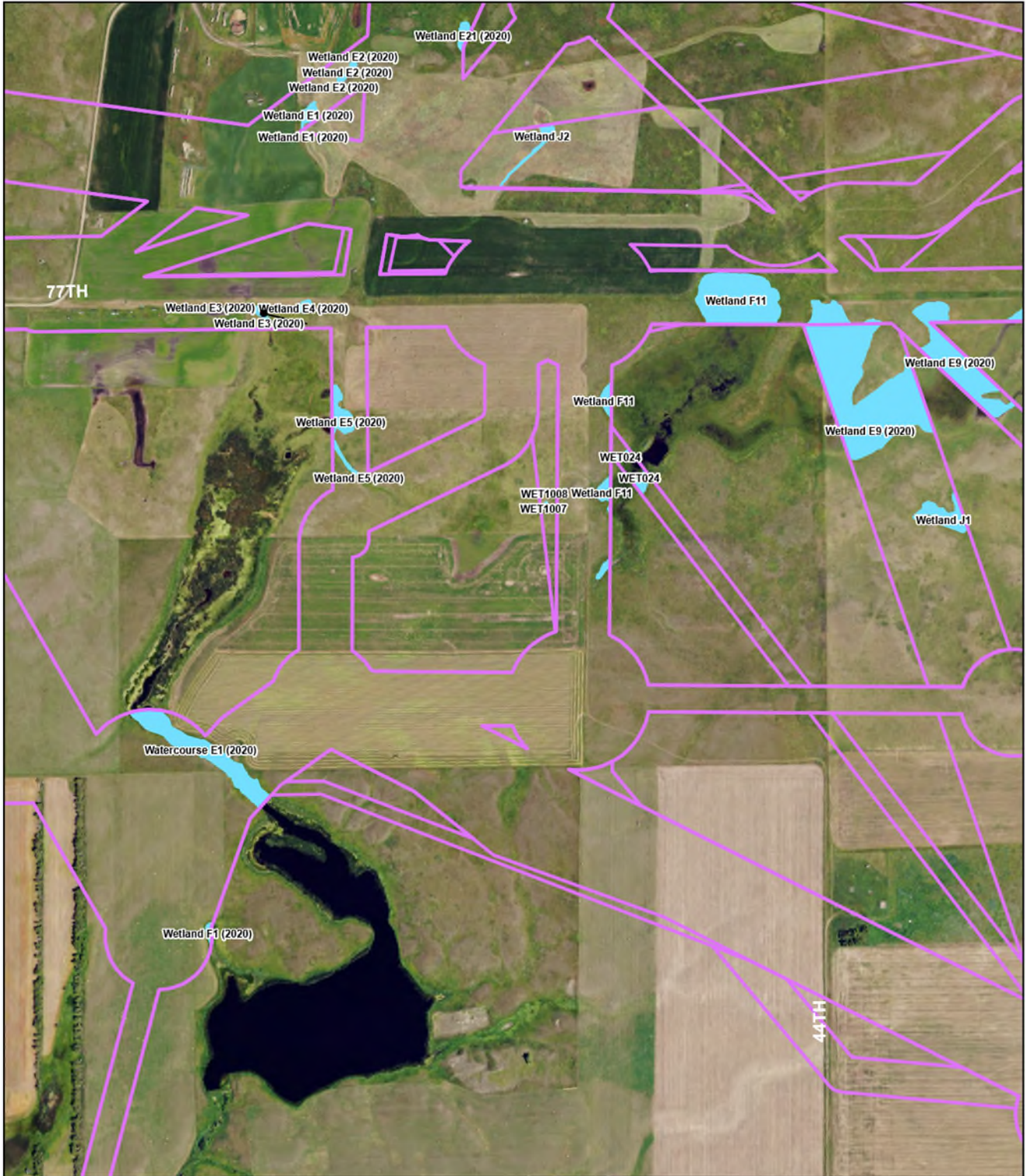
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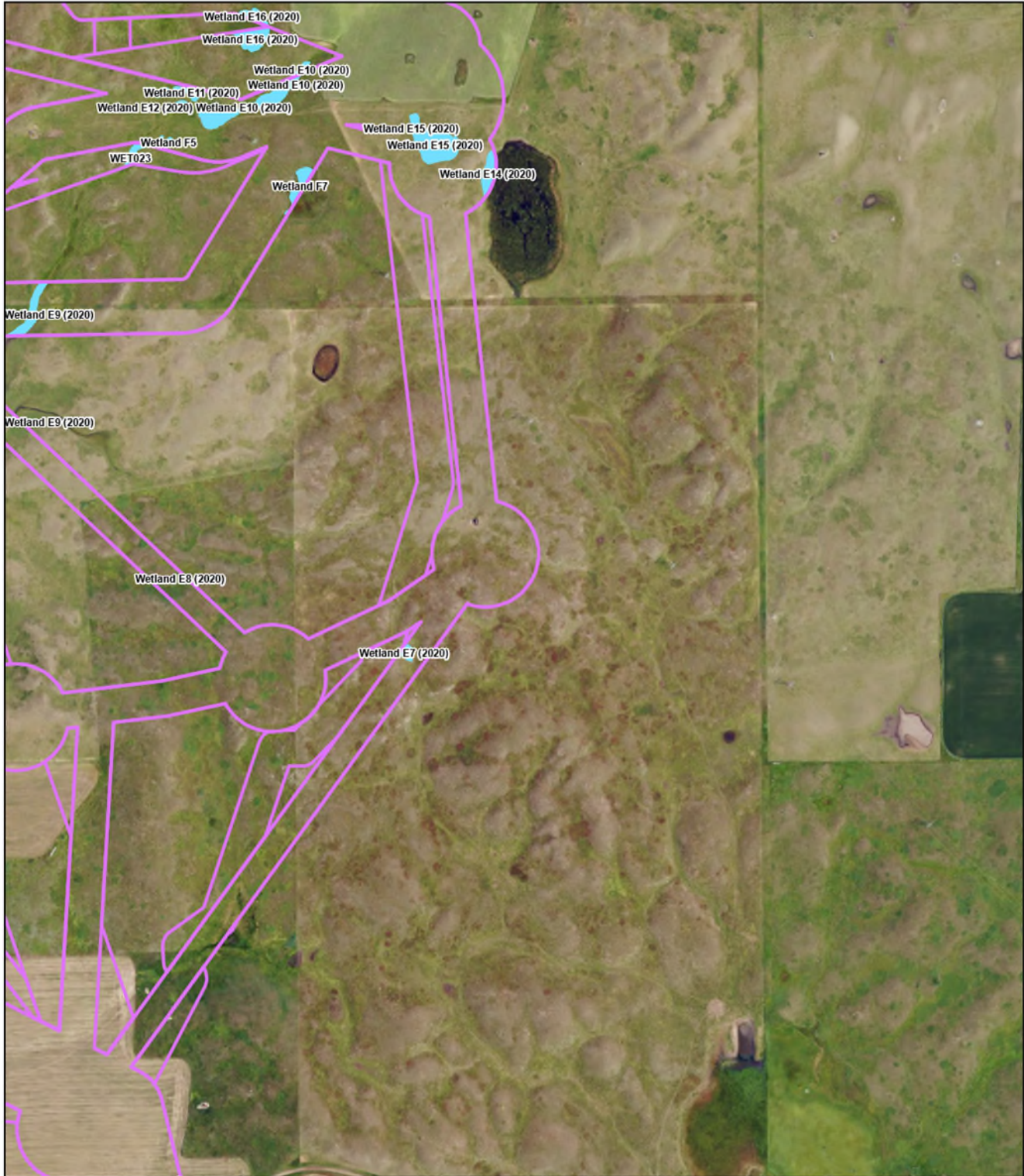


Badger Wind Project
Logan & McIntosh Counties, ND



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Logan & McIntosh Counties, ND

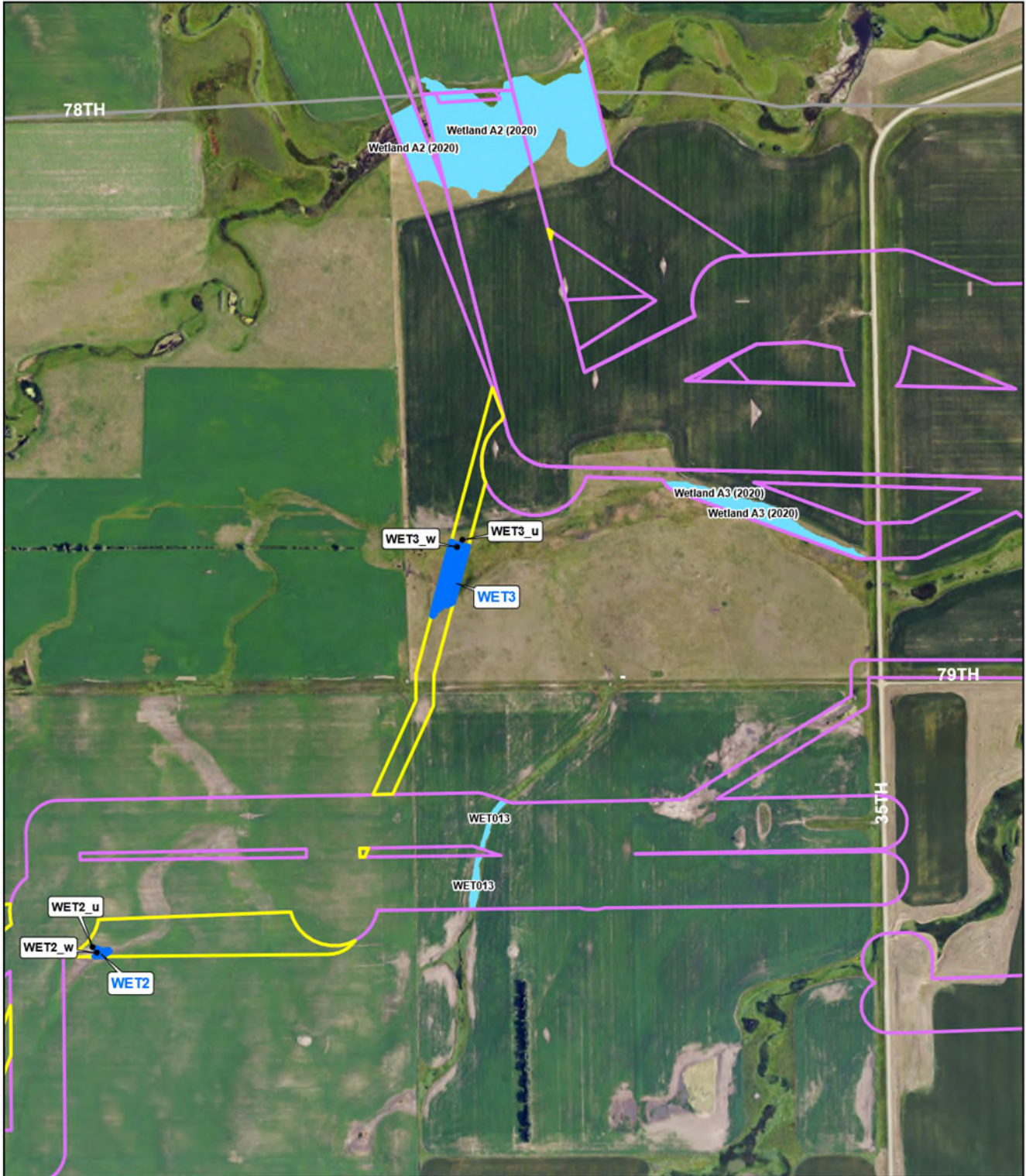
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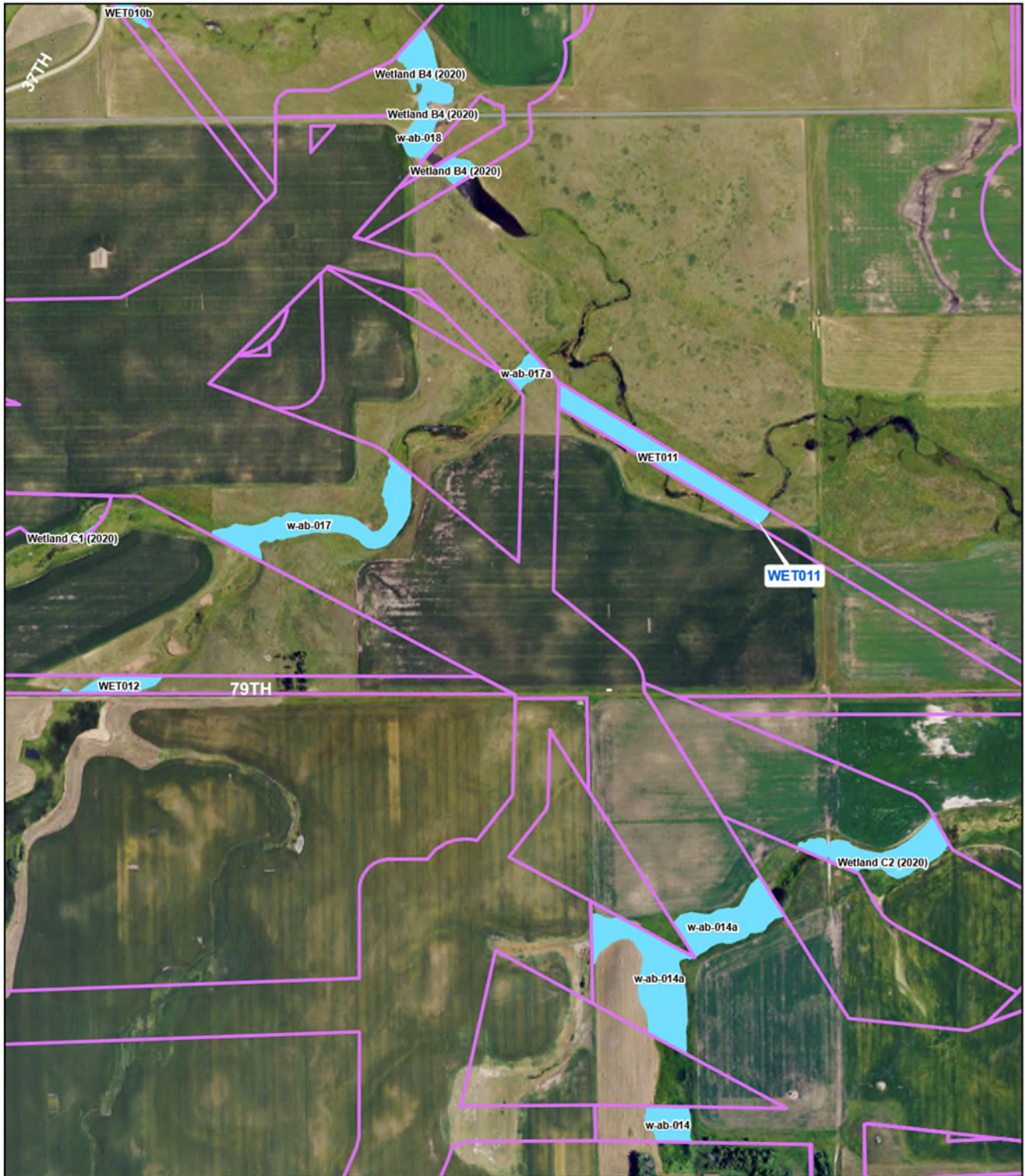
Badger Wind Project
Logan & McIntosh Counties, ND

2024 Wetland Survey Area	Pre 2024 Wetland Survey Area	County Boundary
2024 Delineated Wetlands	Pre 2024 Surveyed Wetlands	State Highway
2024 Wetland/Upland Sample Points		
2024 Non WOTUS Points		

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Badger Wind Project
Logan & McIntosh Counties, ND

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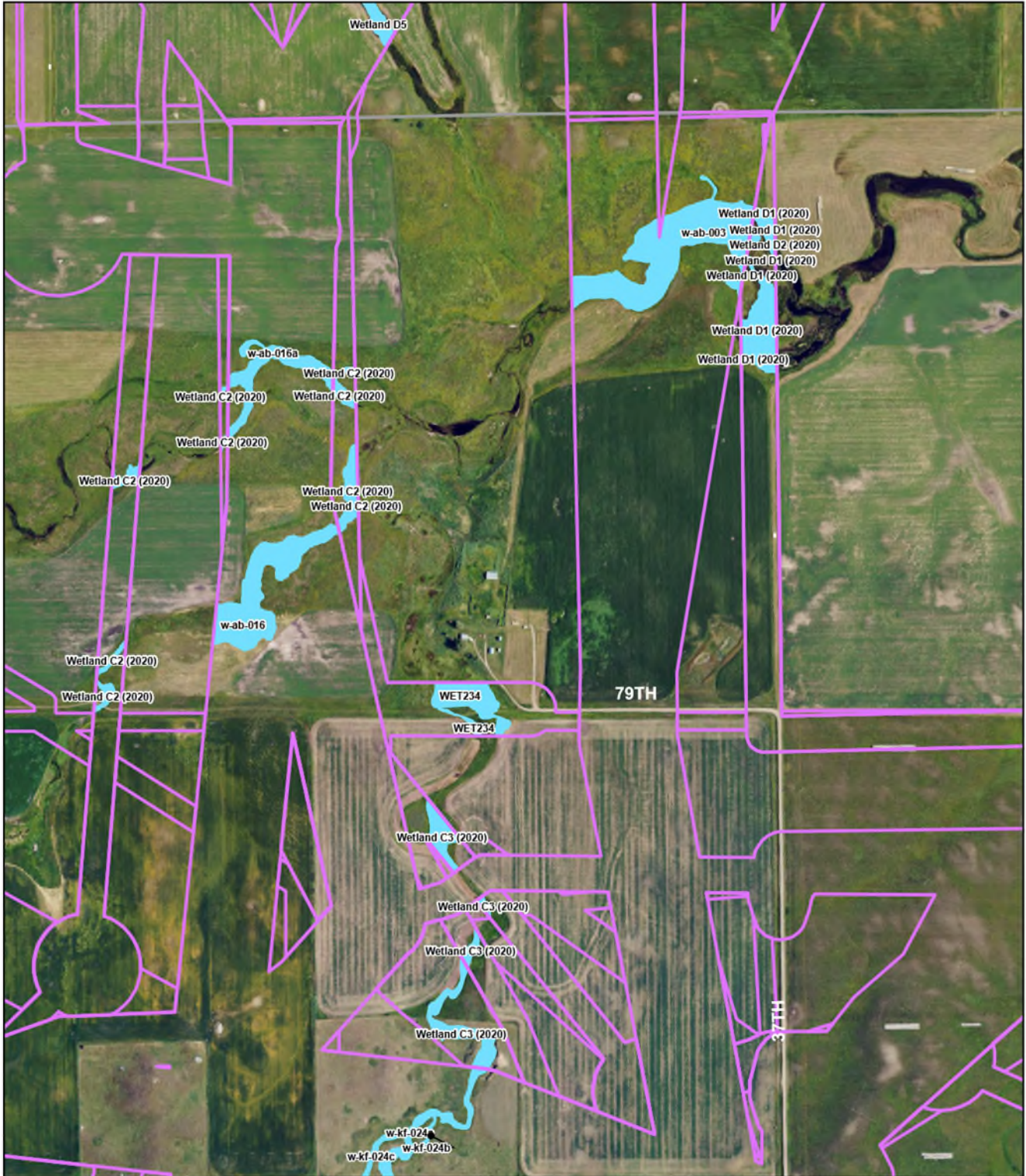
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Badger Wind Project
Logan & McIntosh Counties, ND



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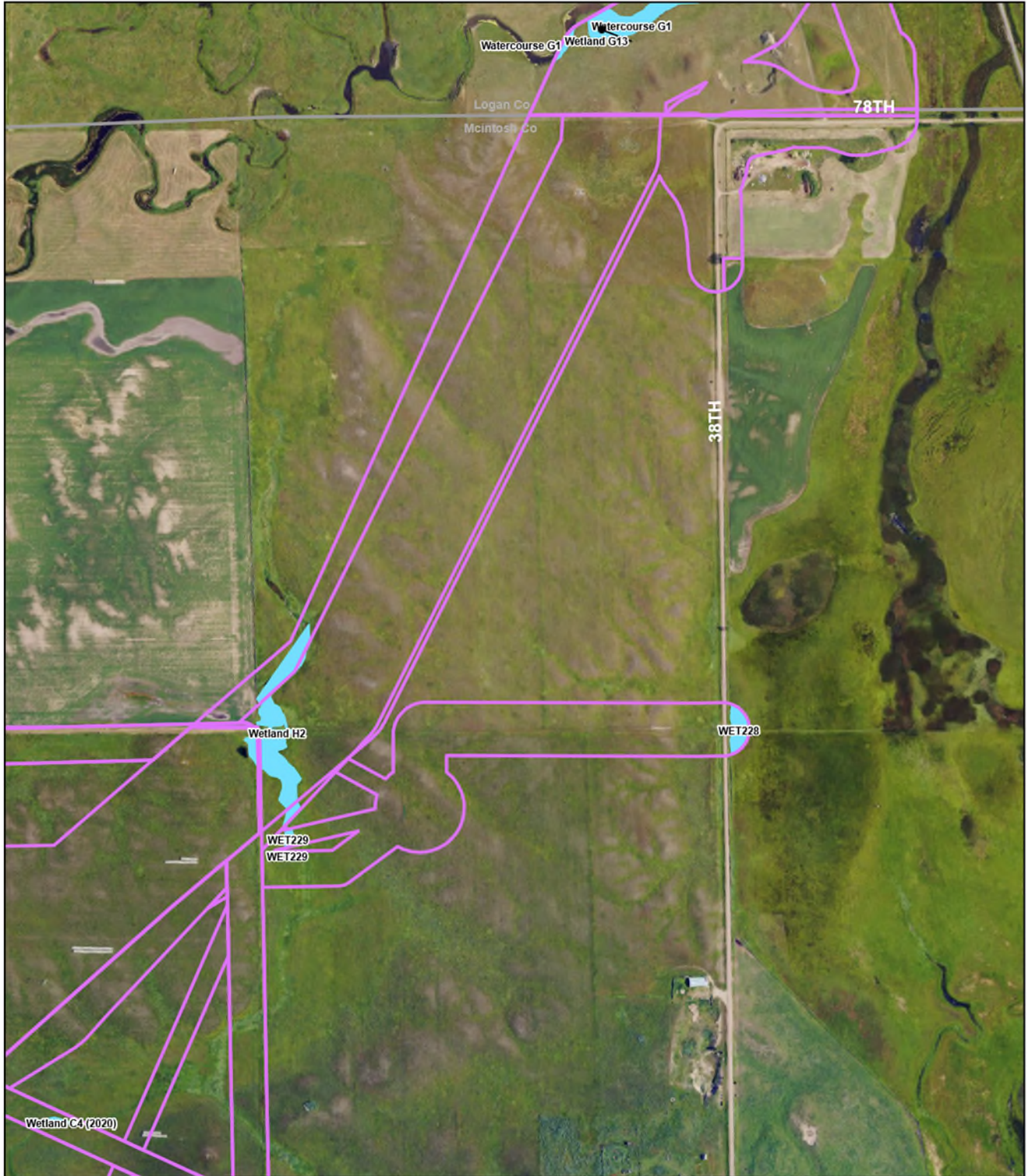
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Badger Wind Project
Logan & McIntosh Counties, ND

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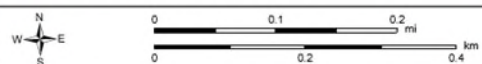


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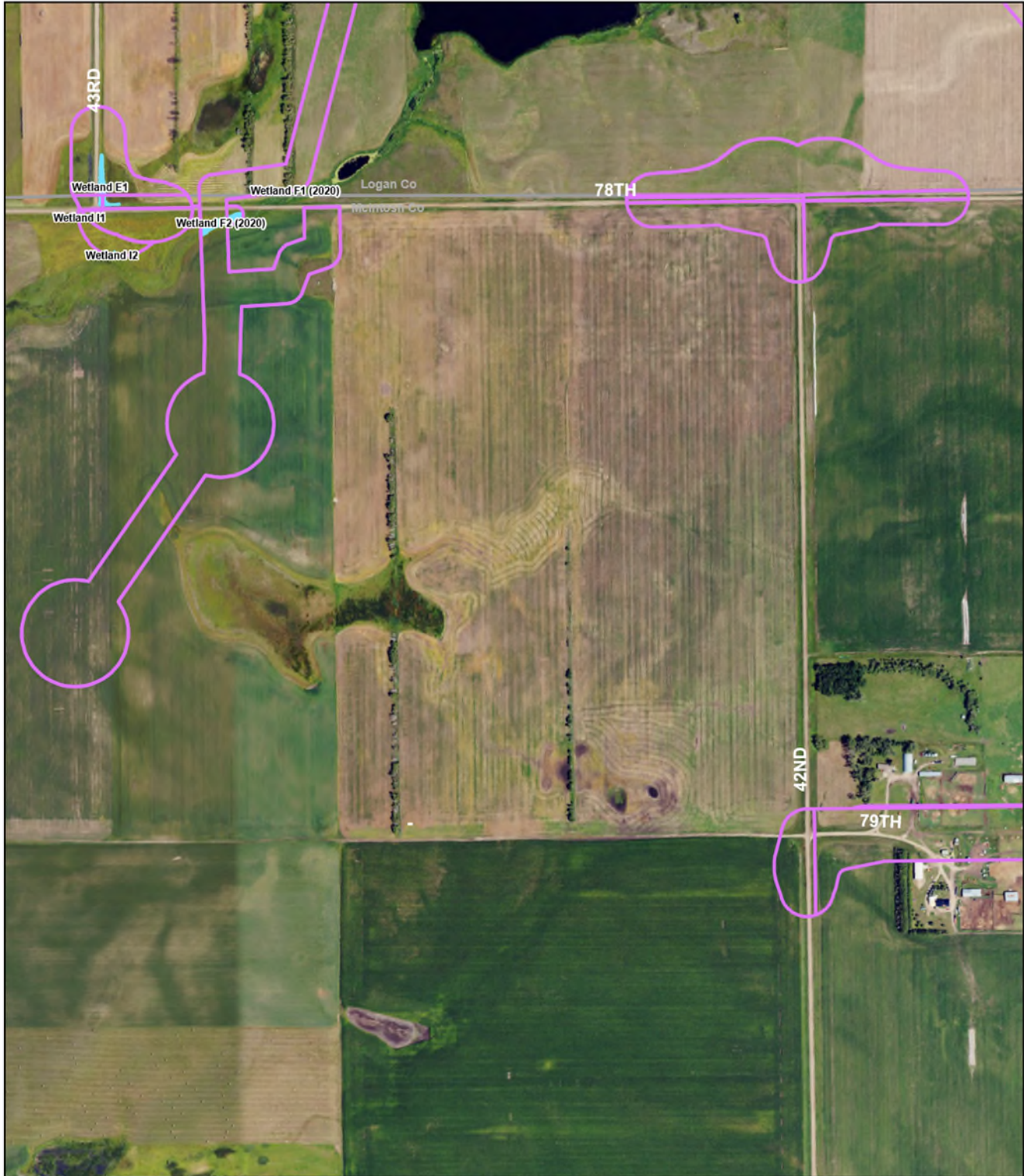
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Badger Wind Project
Logan & McIntosh Counties, ND

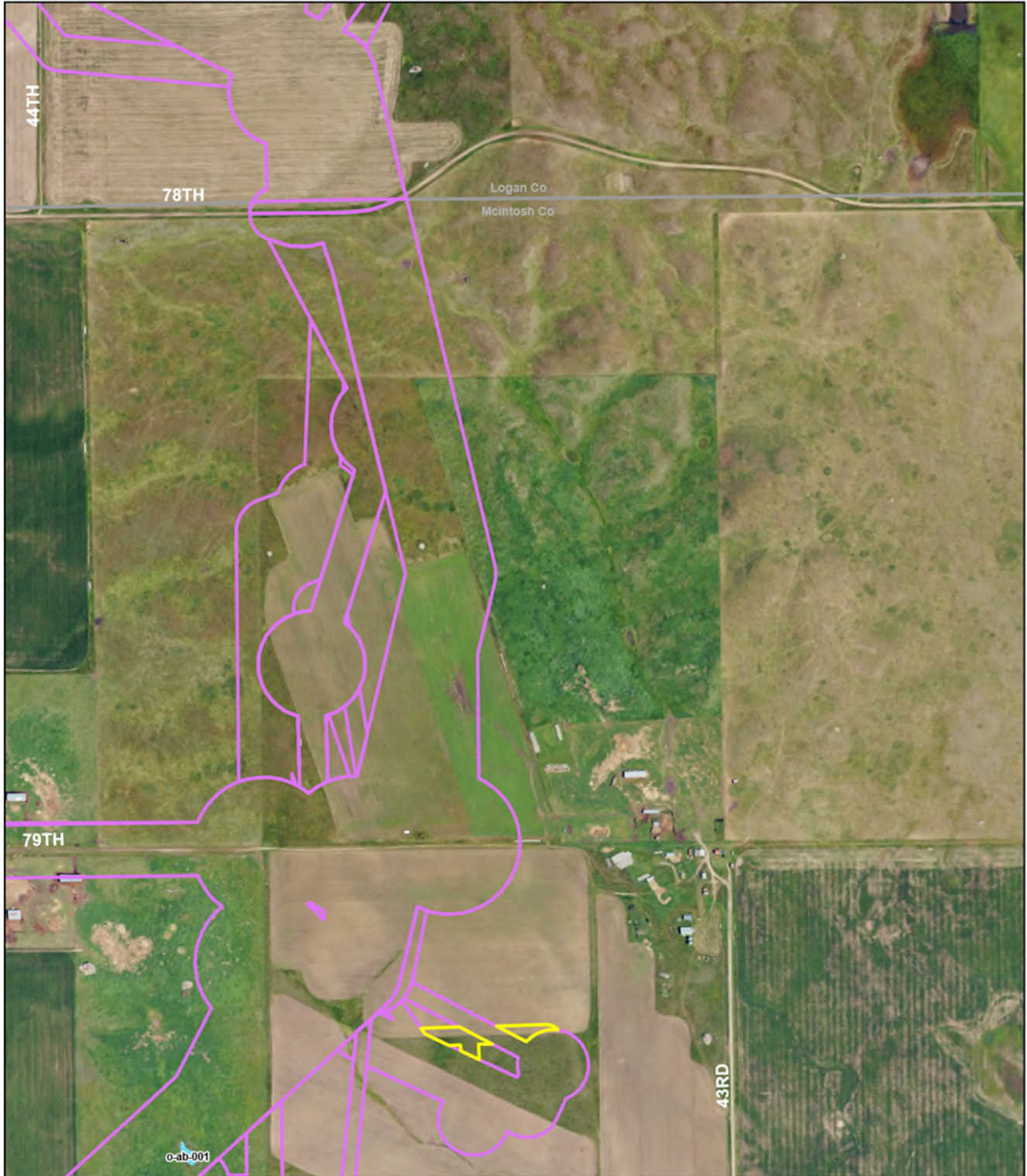
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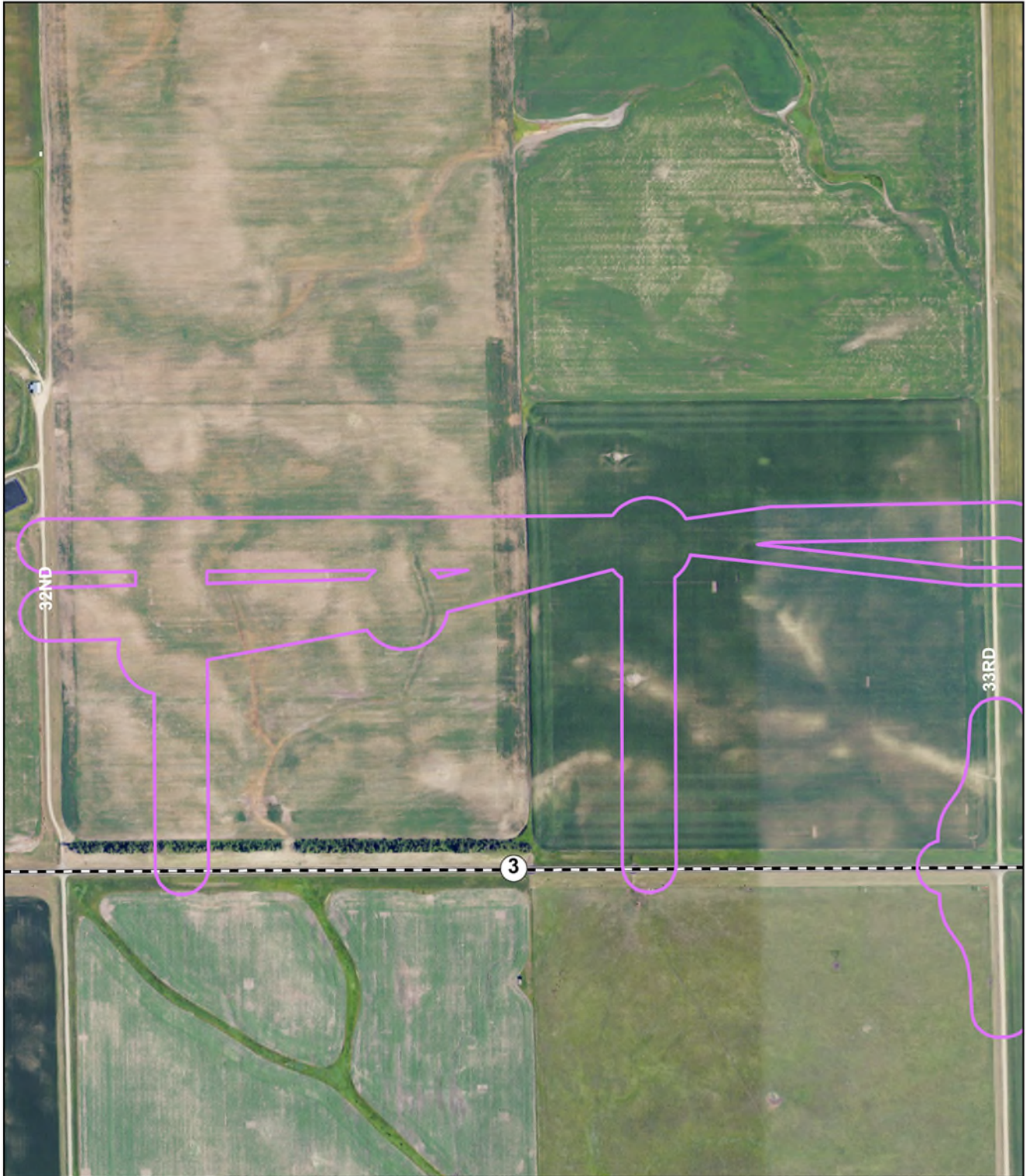
Badger Wind Project
Logan & McIntosh Counties, ND

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







Badger Wind Project
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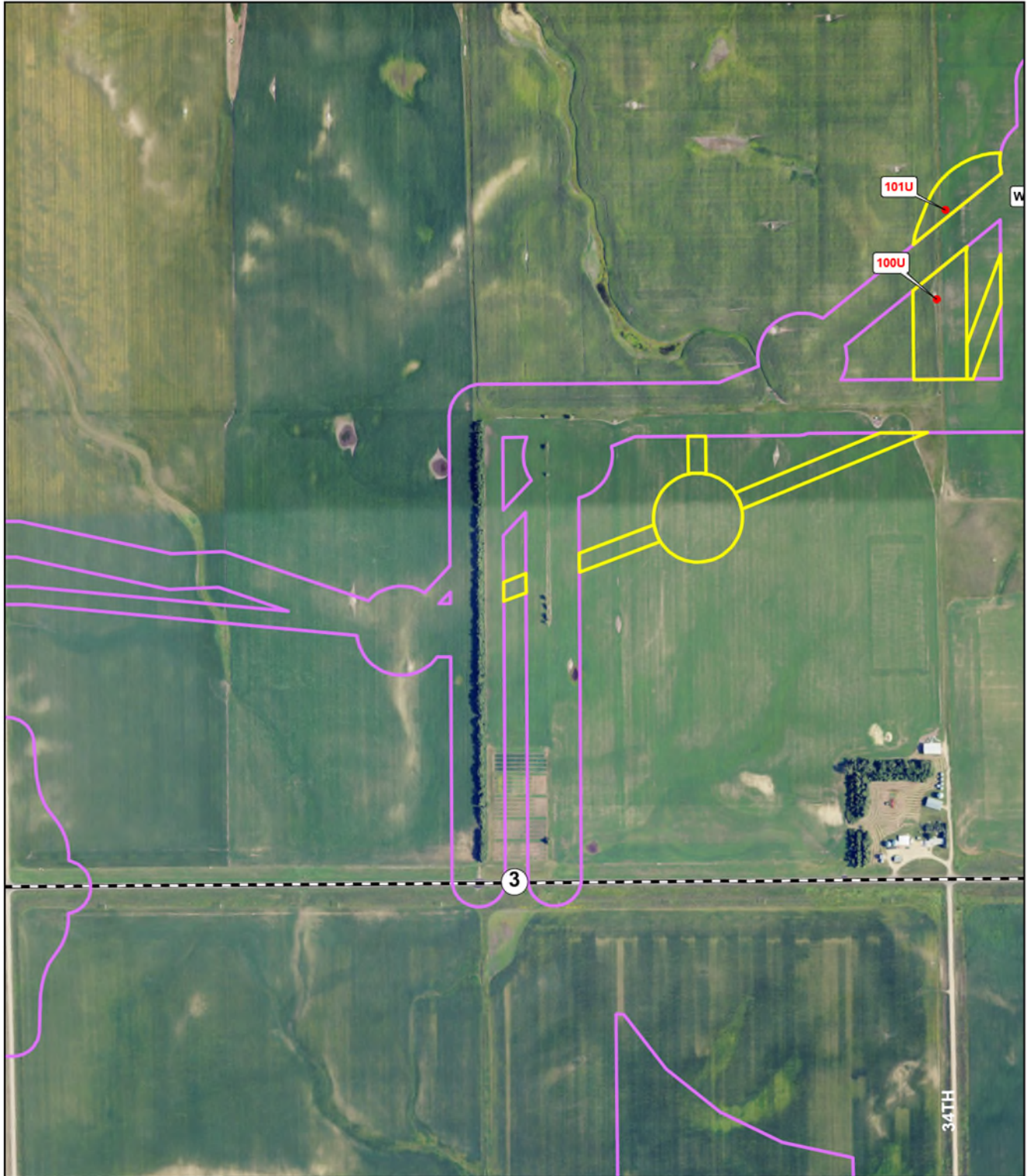
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Badger Wind Project
Logan & McIntosh Counties, ND



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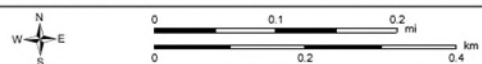


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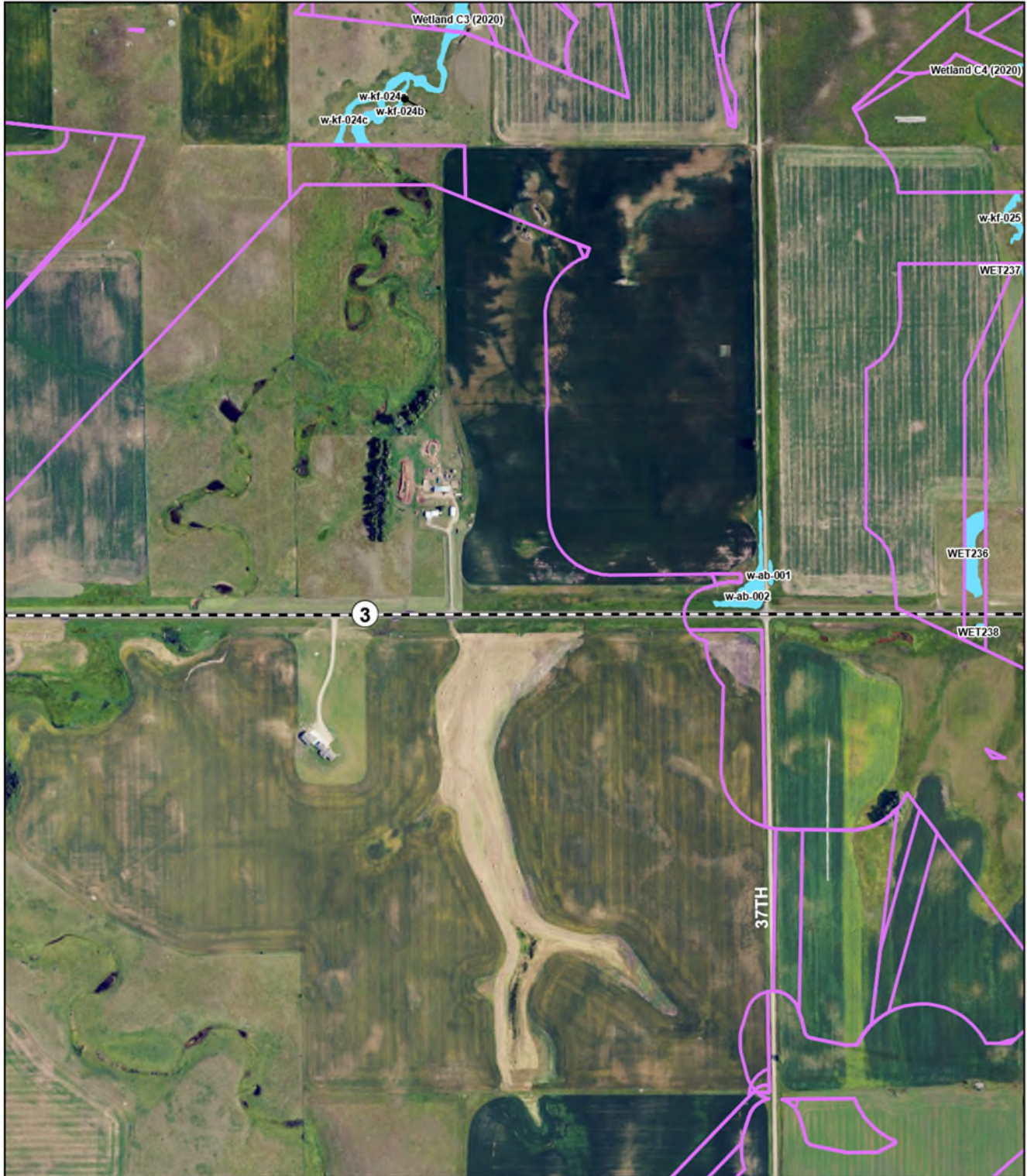
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Logan & McIntosh Counties, ND

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	2024 Wetland/Upland Sample Points		County Boundary
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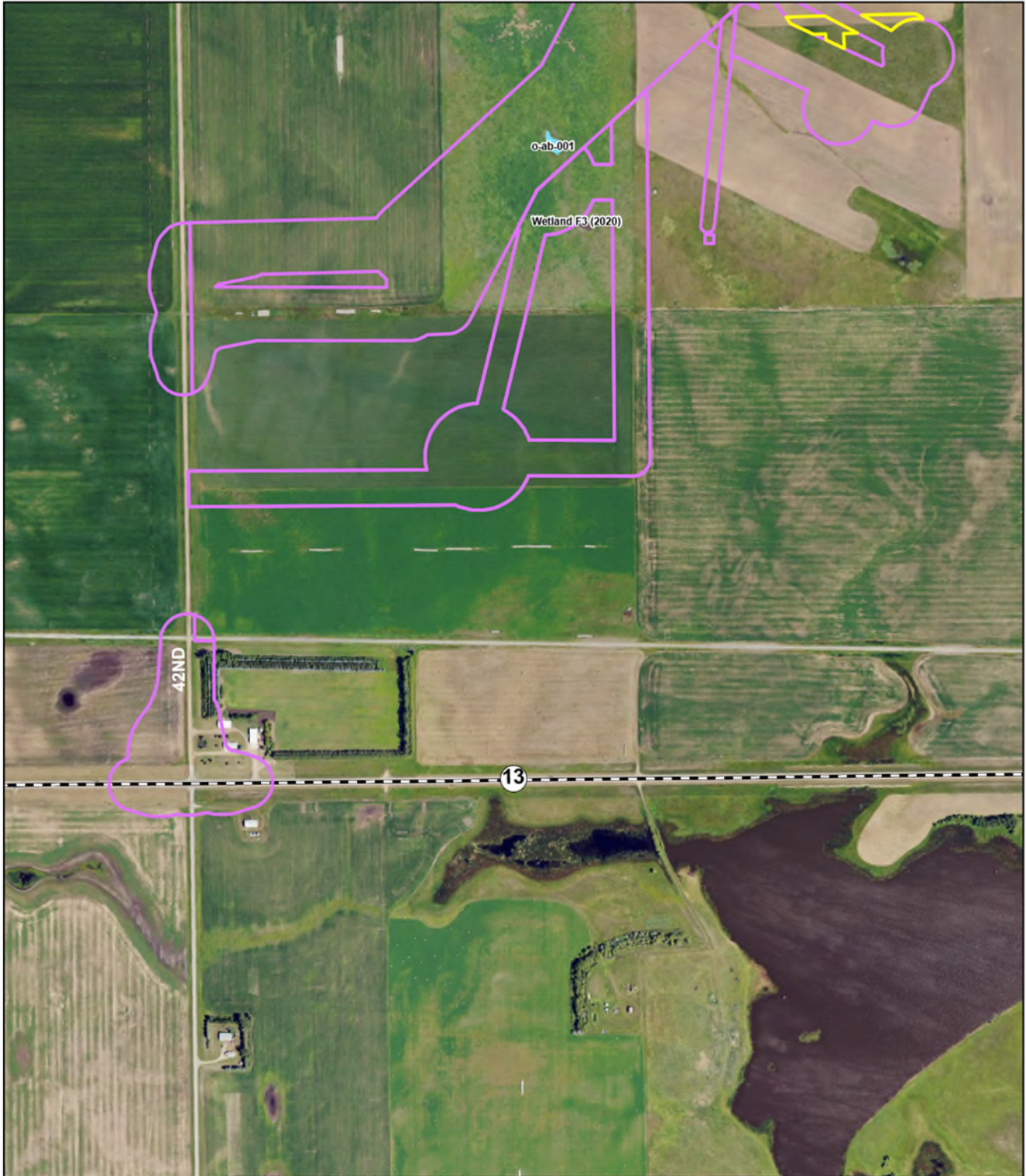


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Badger Wind Project
Logan & McIntosh Counties, ND

-  2024 Wetland Survey Area
-  2024 Delineated Wetlands
-  2024 Wetland/Upland Sample Points
-  2024 Non WOTUS Points

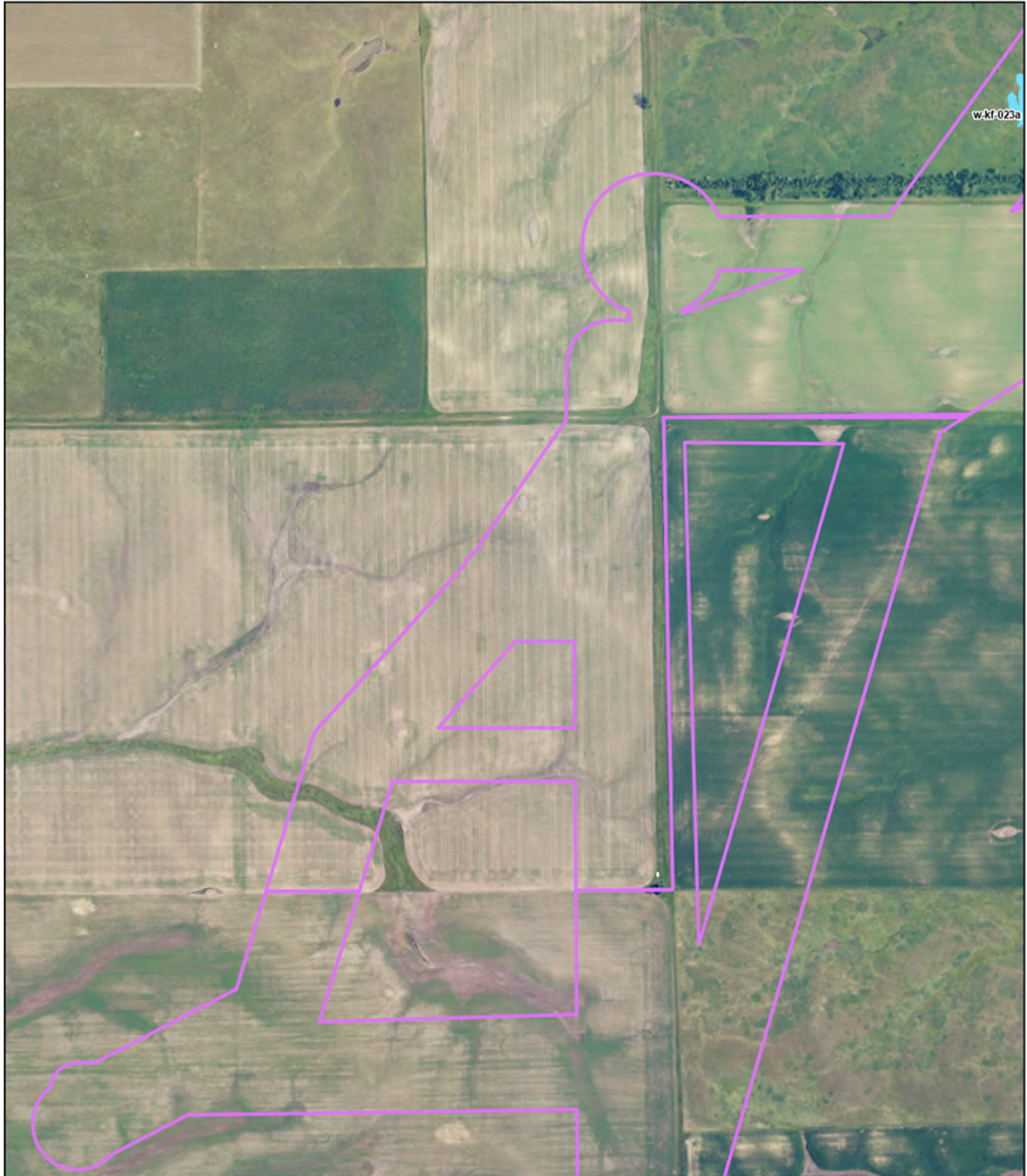
-  Pre 2024 Wetland Survey Area
-  Pre 2024 Surveyed Wetlands

-  County Boundary
-  State Highway









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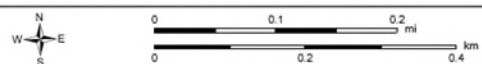


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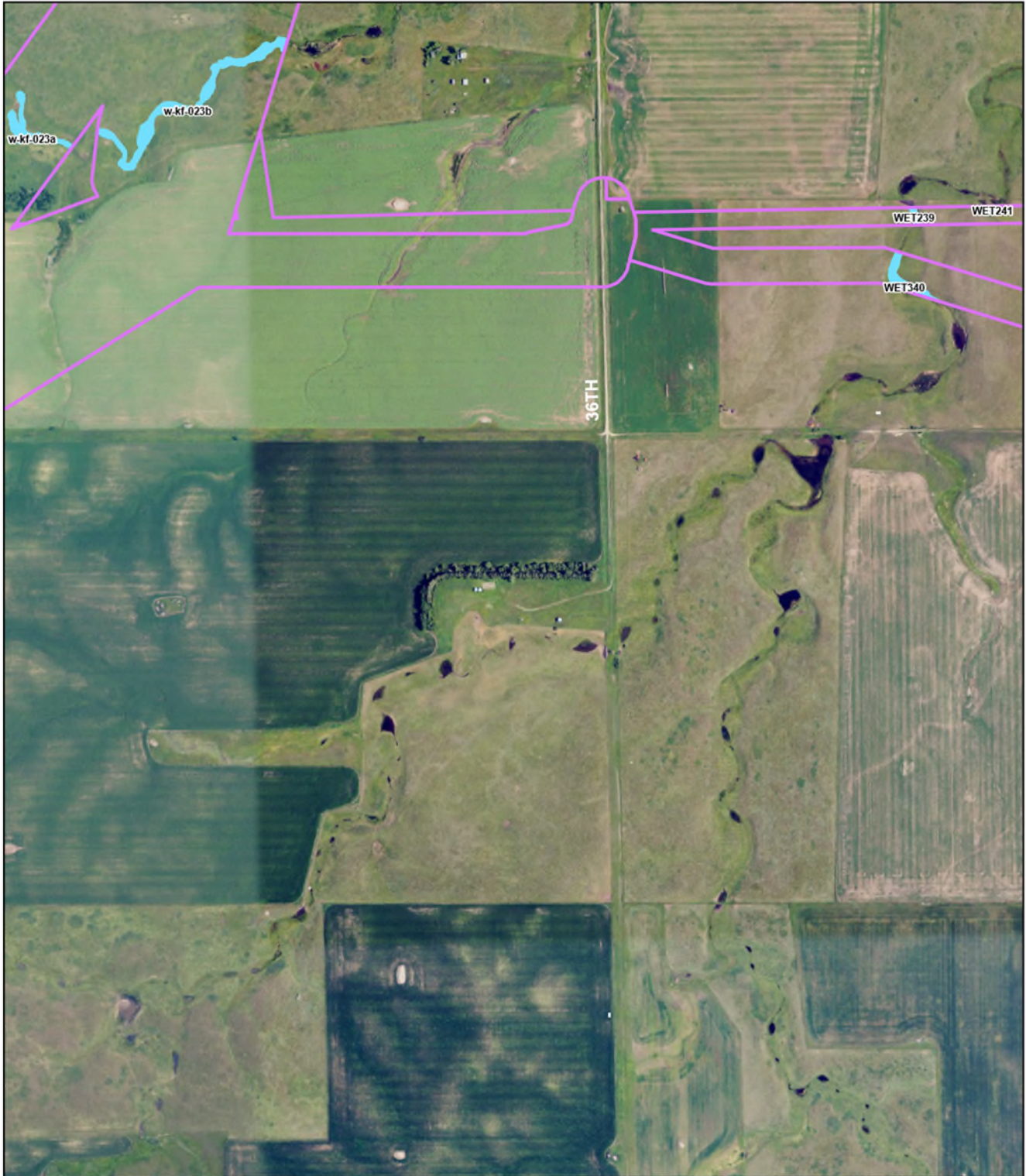
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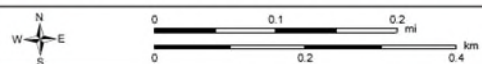




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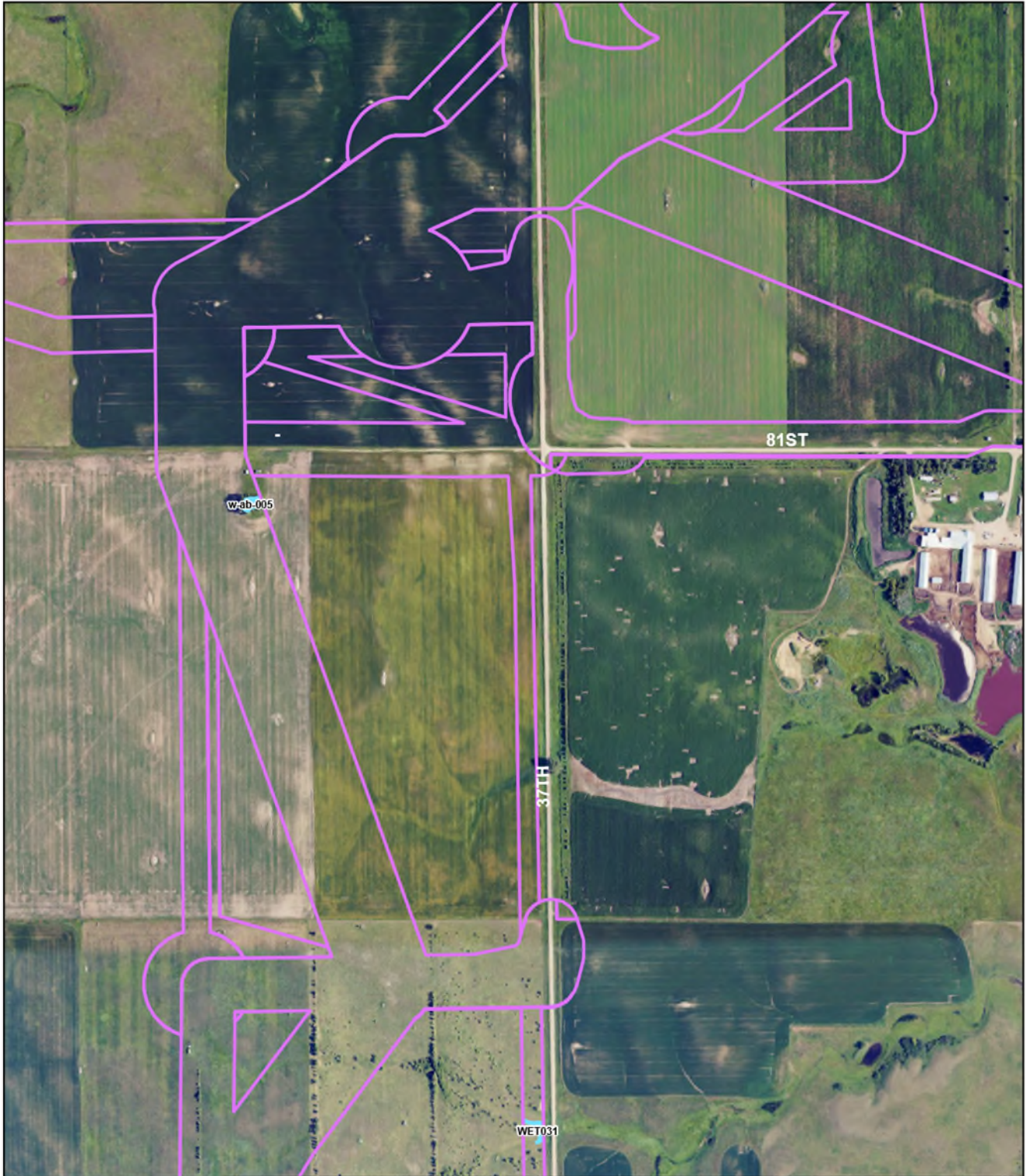


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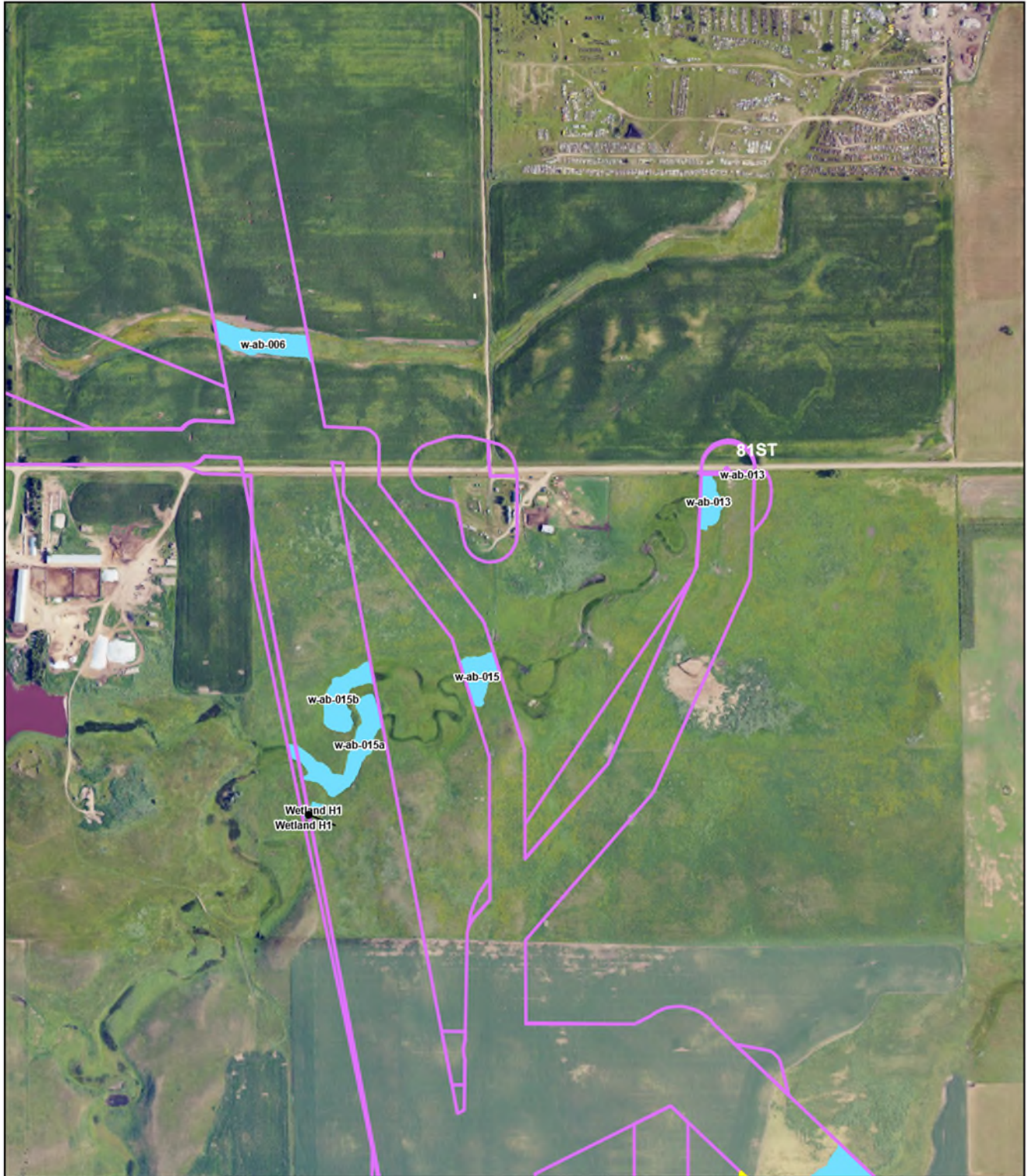


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Badger Wind Project
Logan & McIntosh Counties, ND













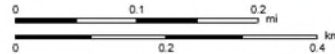

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Logan & McIntosh Counties, ND

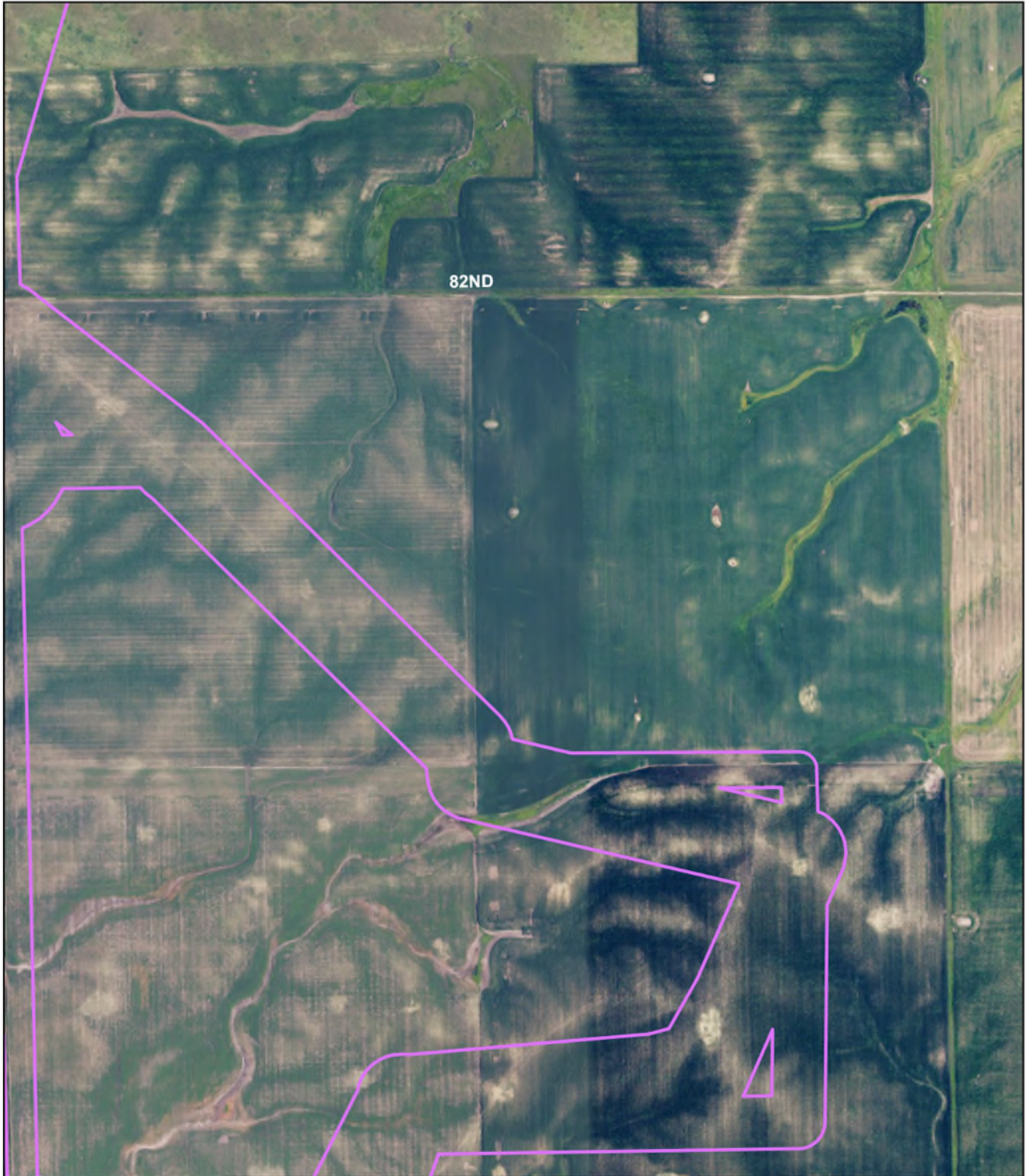


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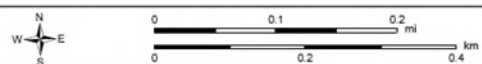




Badger Wind Project
Logan & McIntosh Counties, ND

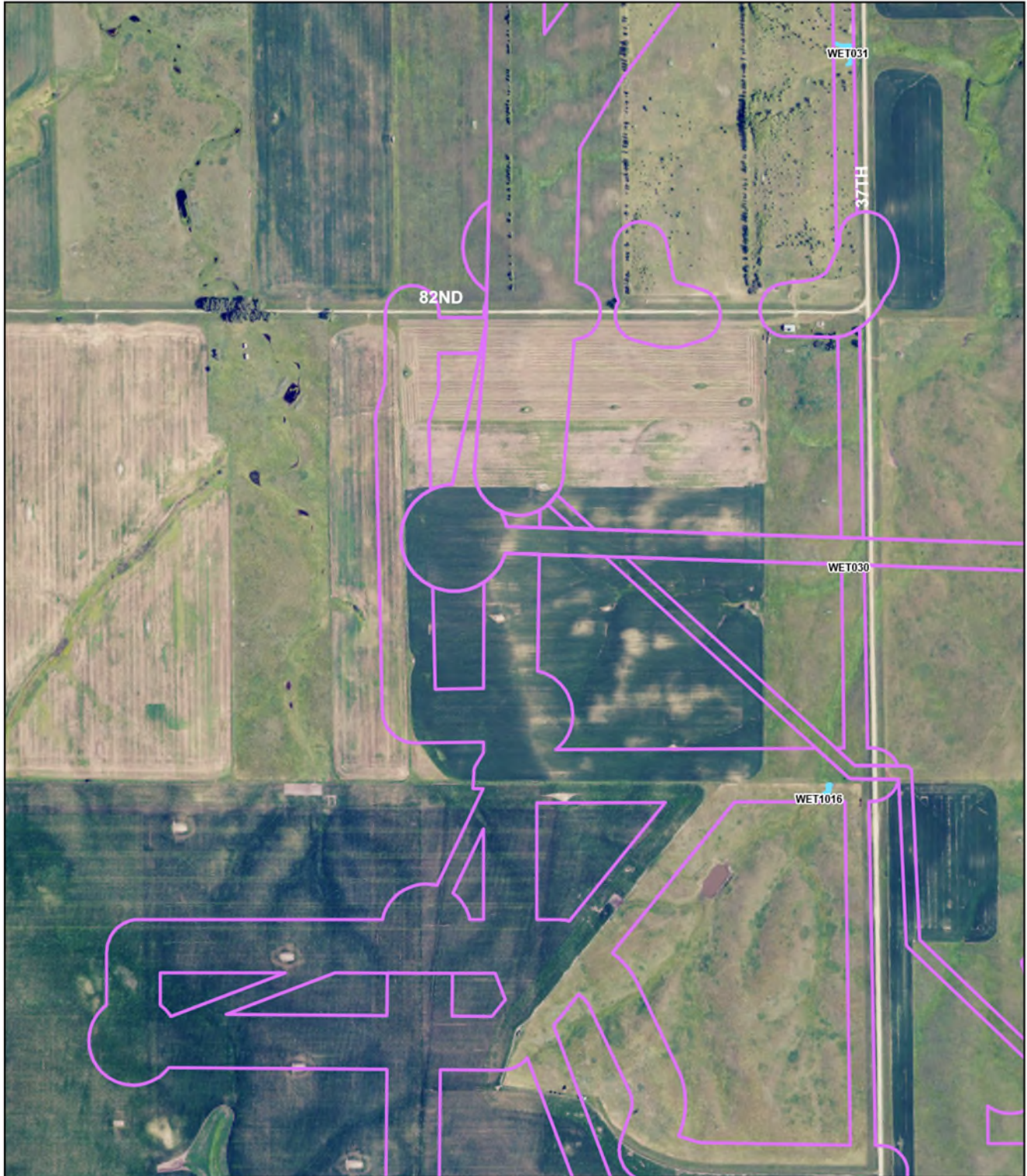
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Badger Wind Project
Logan & McIntosh Counties, ND




 2024 Wetland Survey Area	 Pre 2024 Wetland Survey Area	 County Boundary
 2024 Delineated Wetlands	 Pre 2024 Surveyed Wetlands	 State Highway
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 2024 Non WOTUS Points		

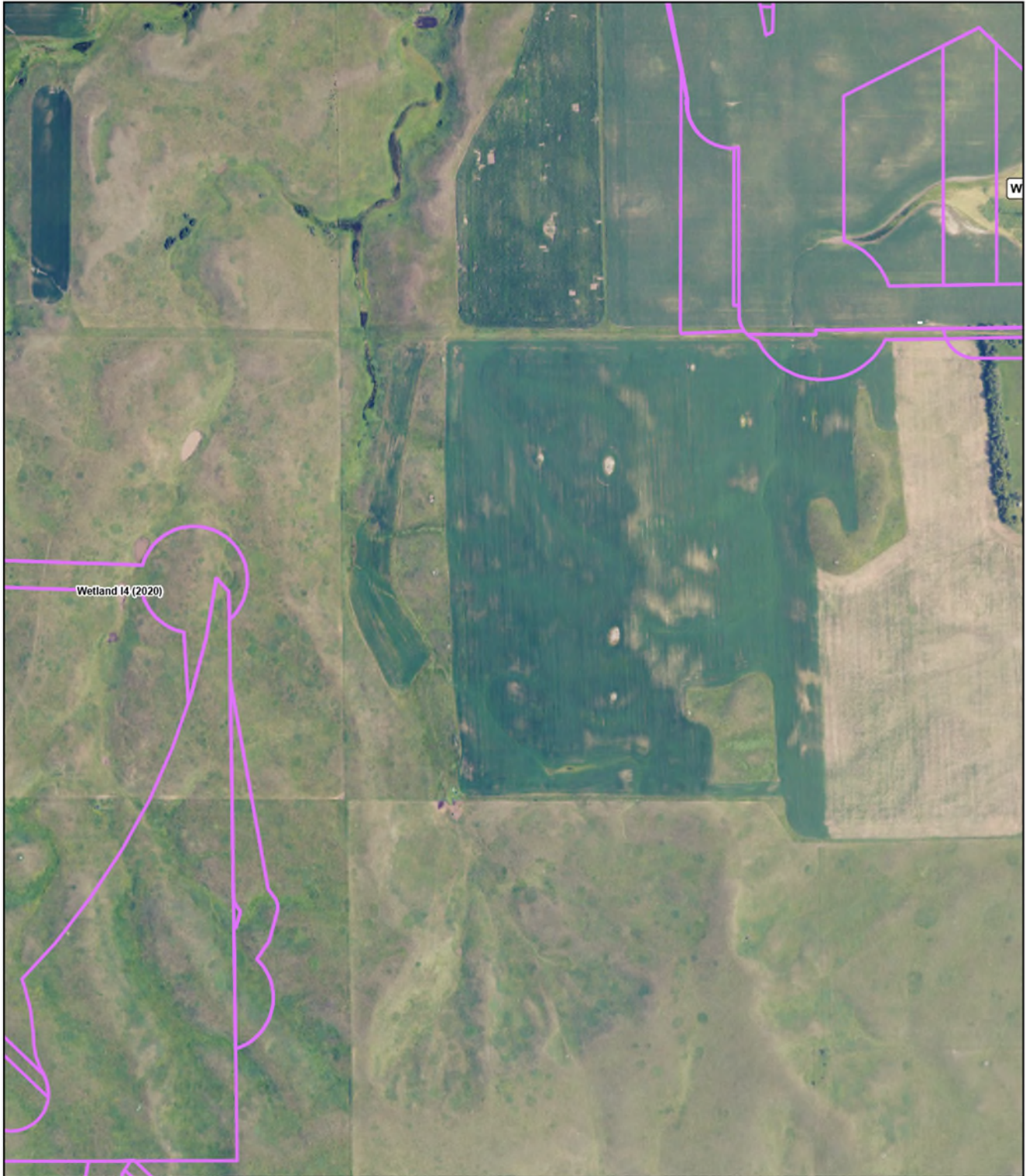
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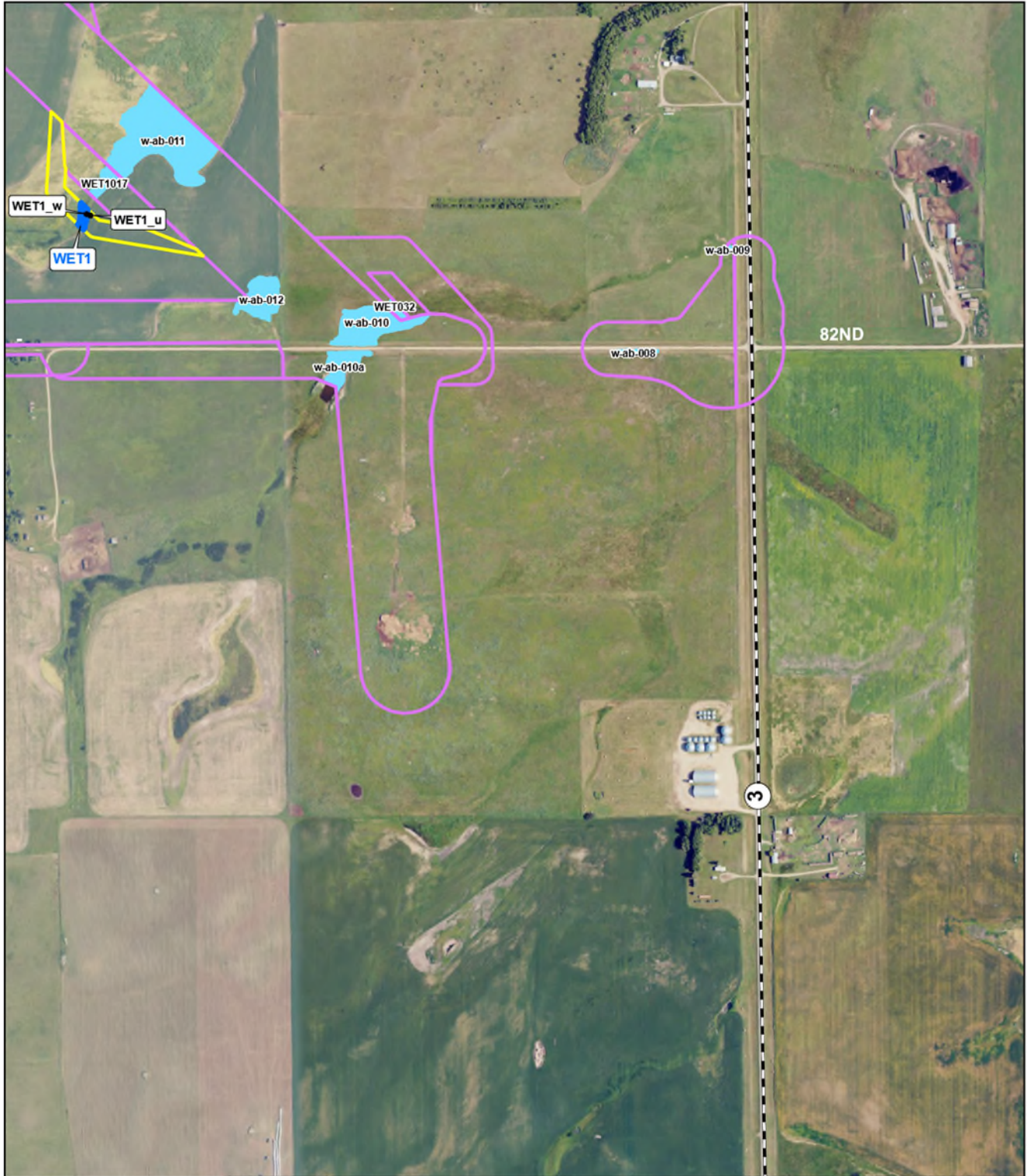
Badger Wind Project
Logan & McIntosh Counties, ND

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	2024 Delineated Wetlands		Pre 2024 Surveyed Wetlands
	2024 Wetland/Upland Sample Points		
	2024 Non WOTUS Points		

	County Boundary
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Logan & McIntosh Counties, ND

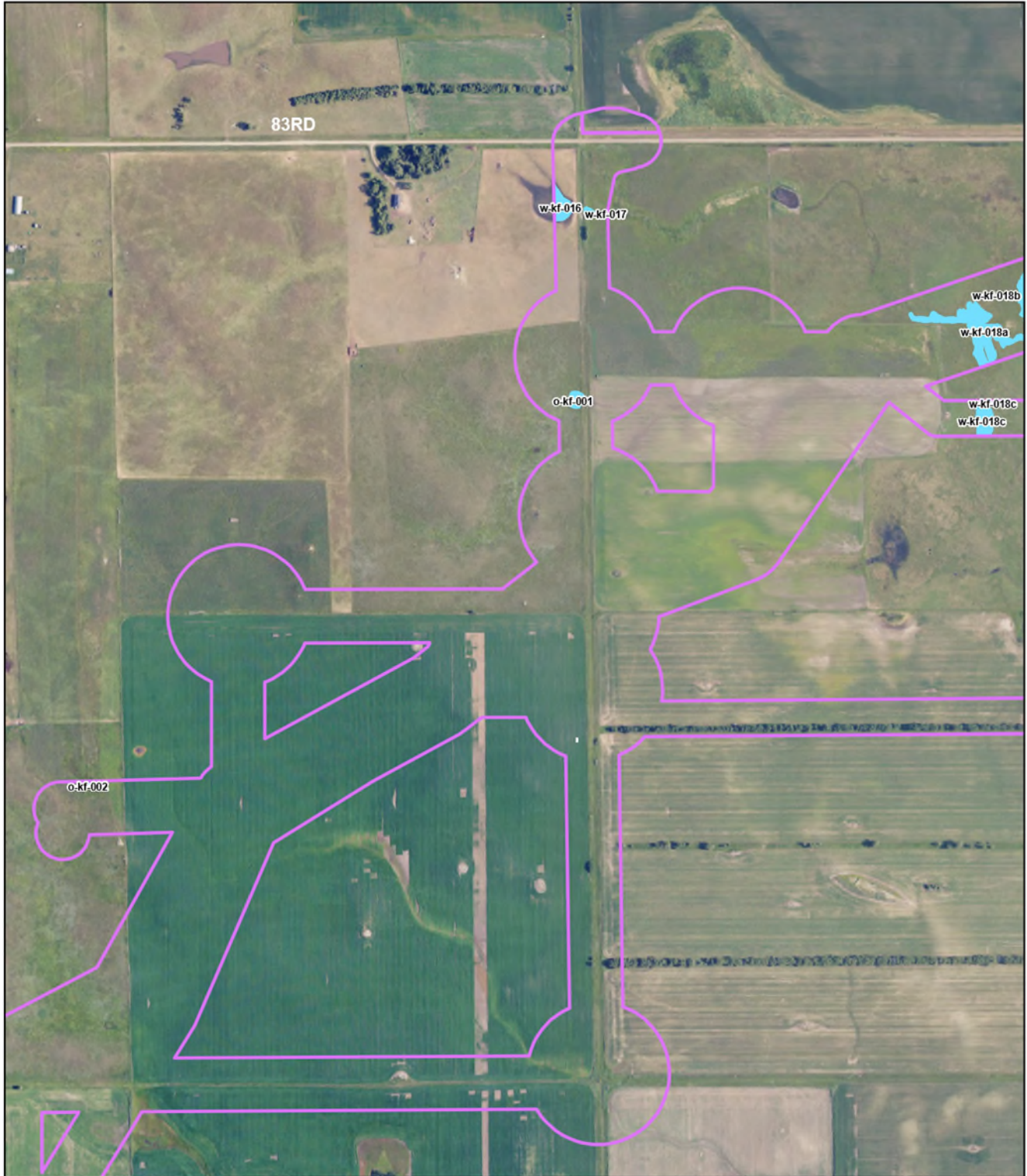
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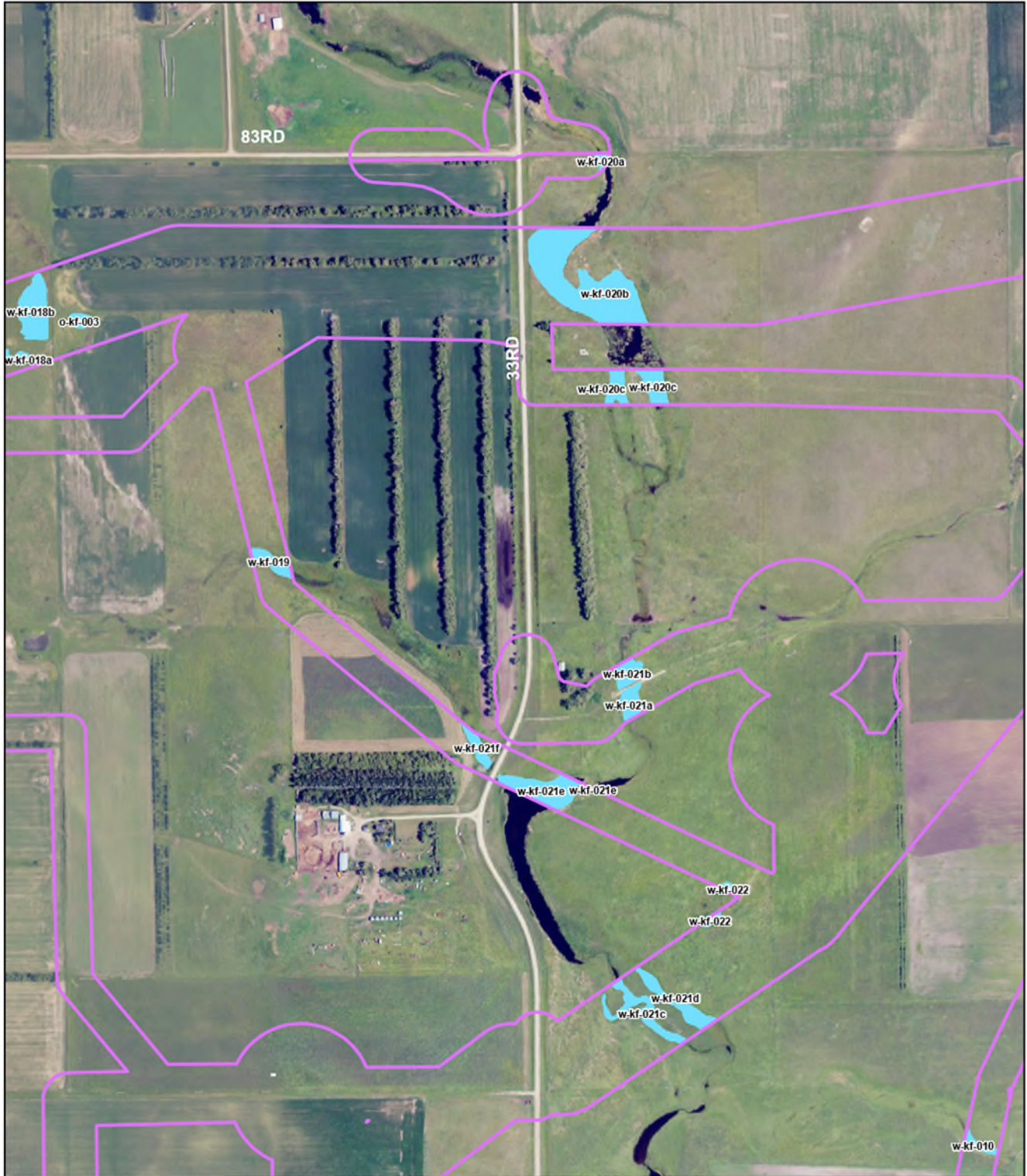
Badger Wind Project
Logan & McIntosh Counties, ND

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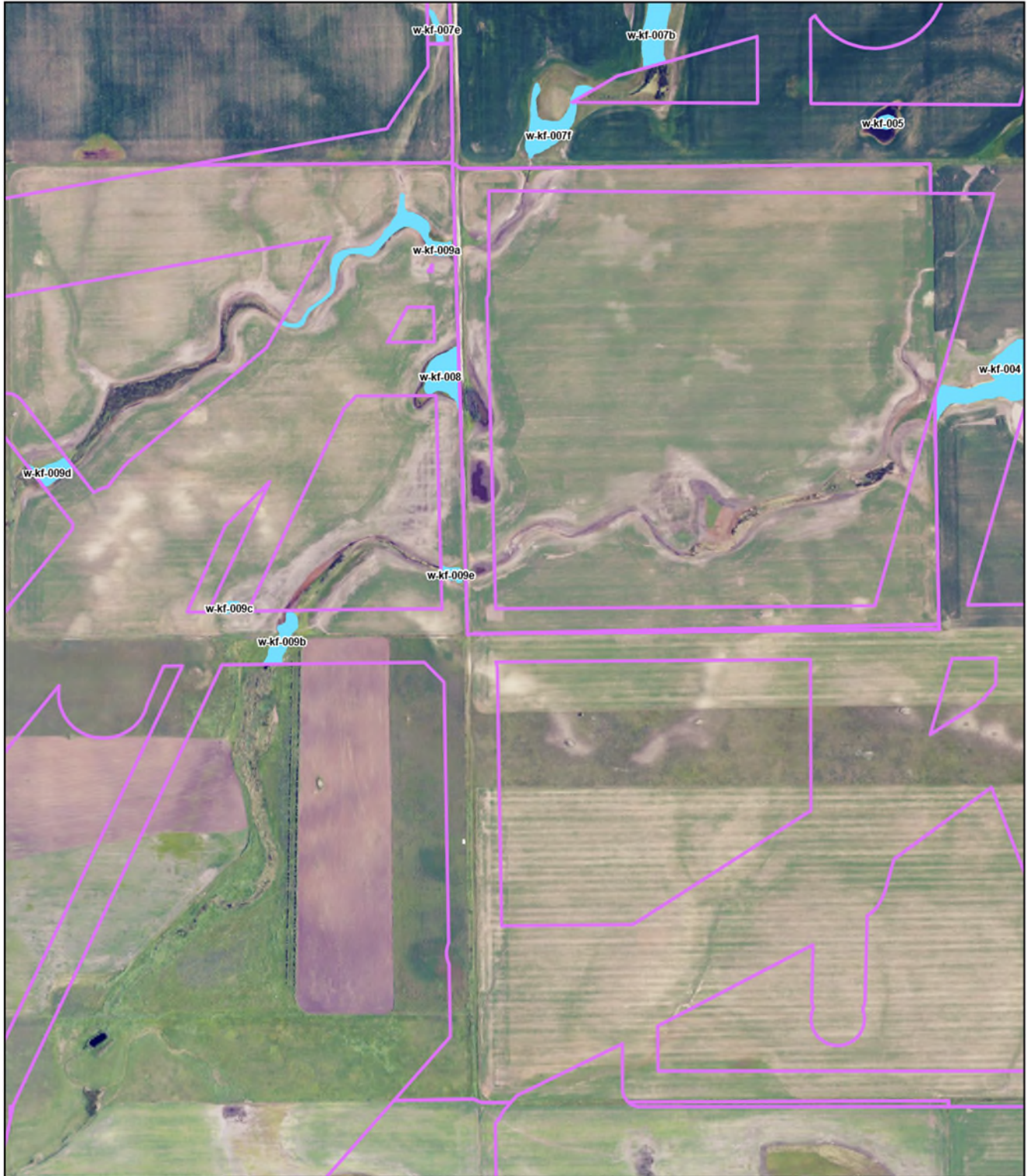
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Logan & McIntosh Counties, ND

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2024 Wetland/Upland Sample Points		
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Logan & McIntosh Counties, ND

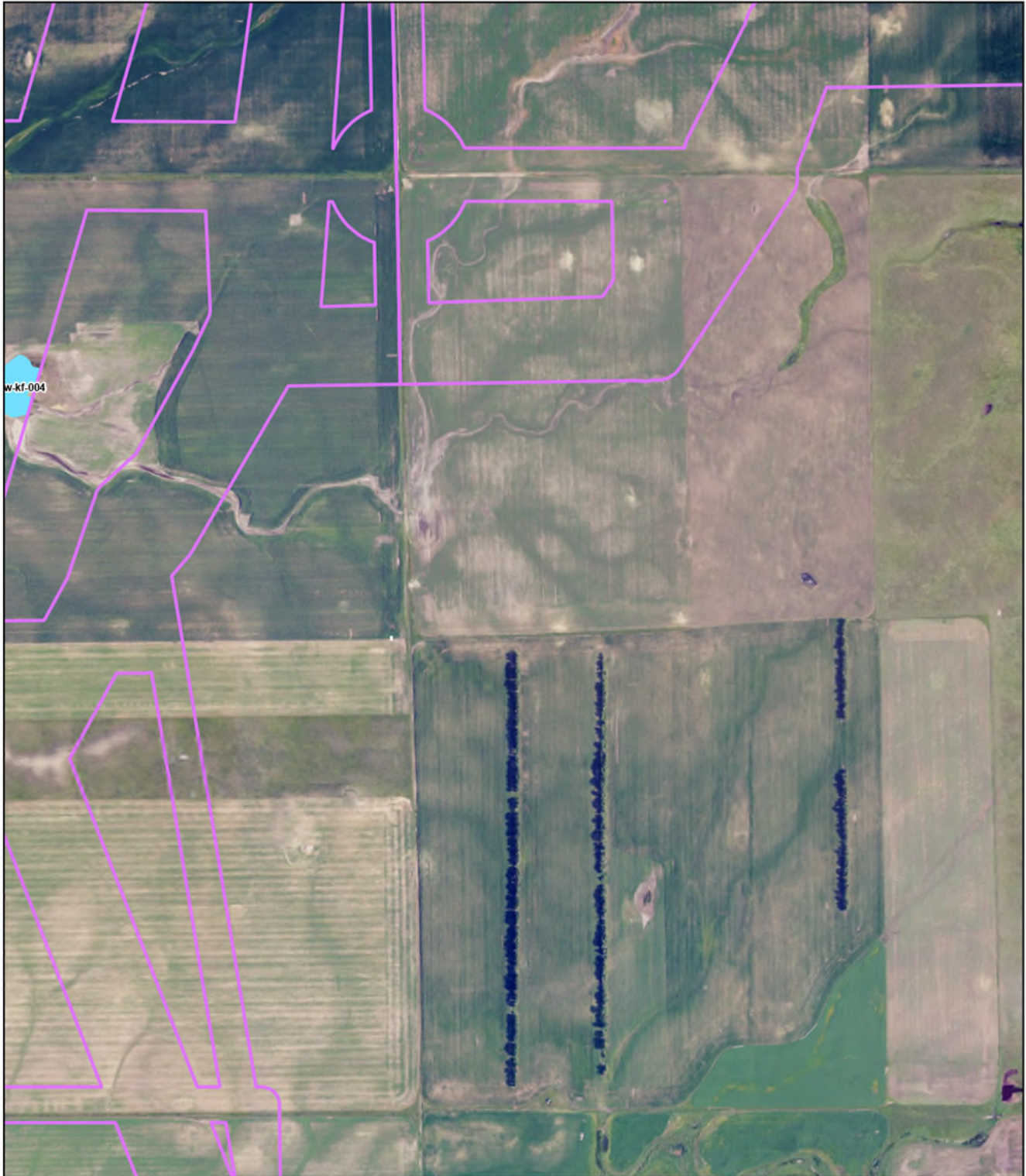
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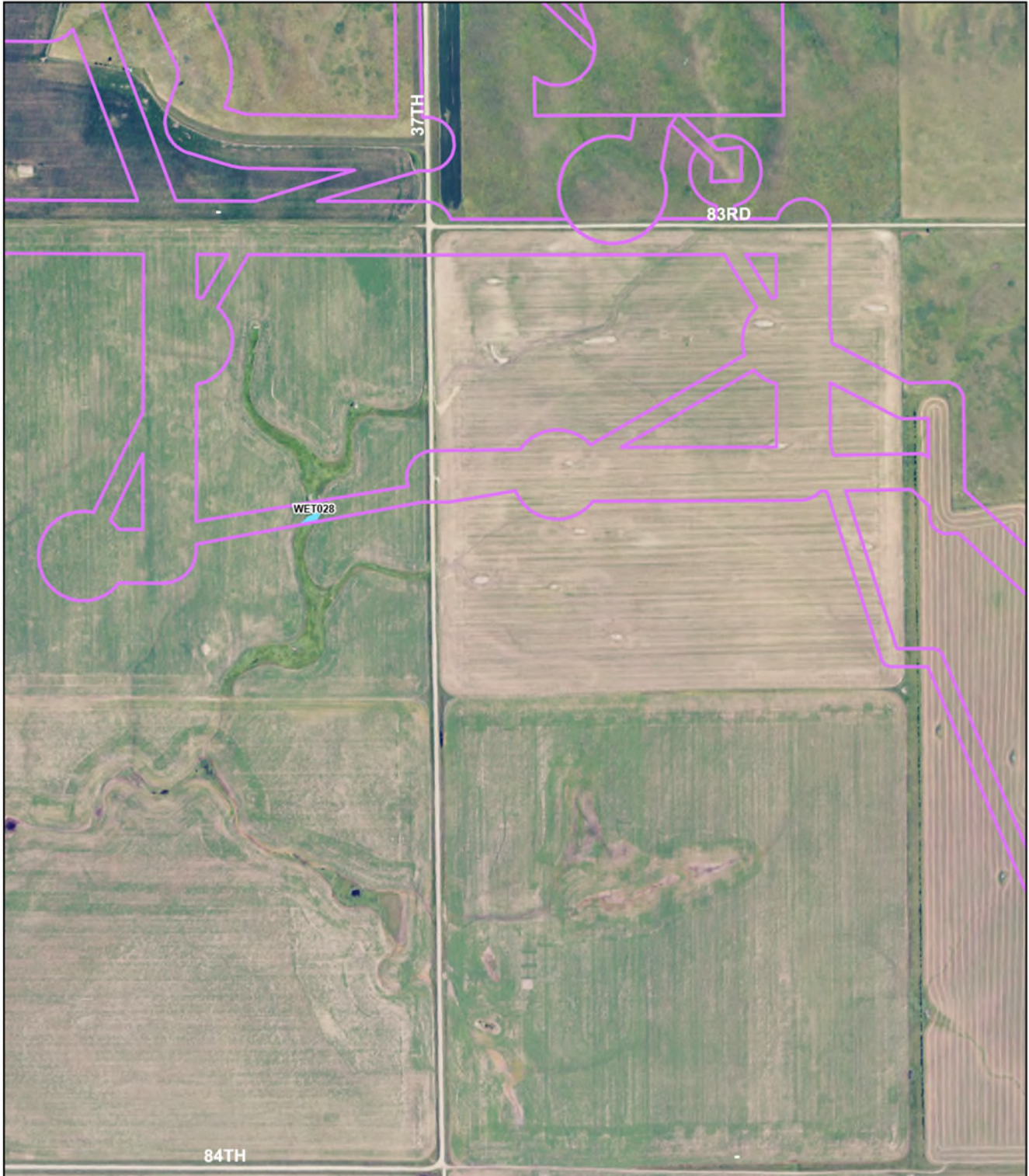
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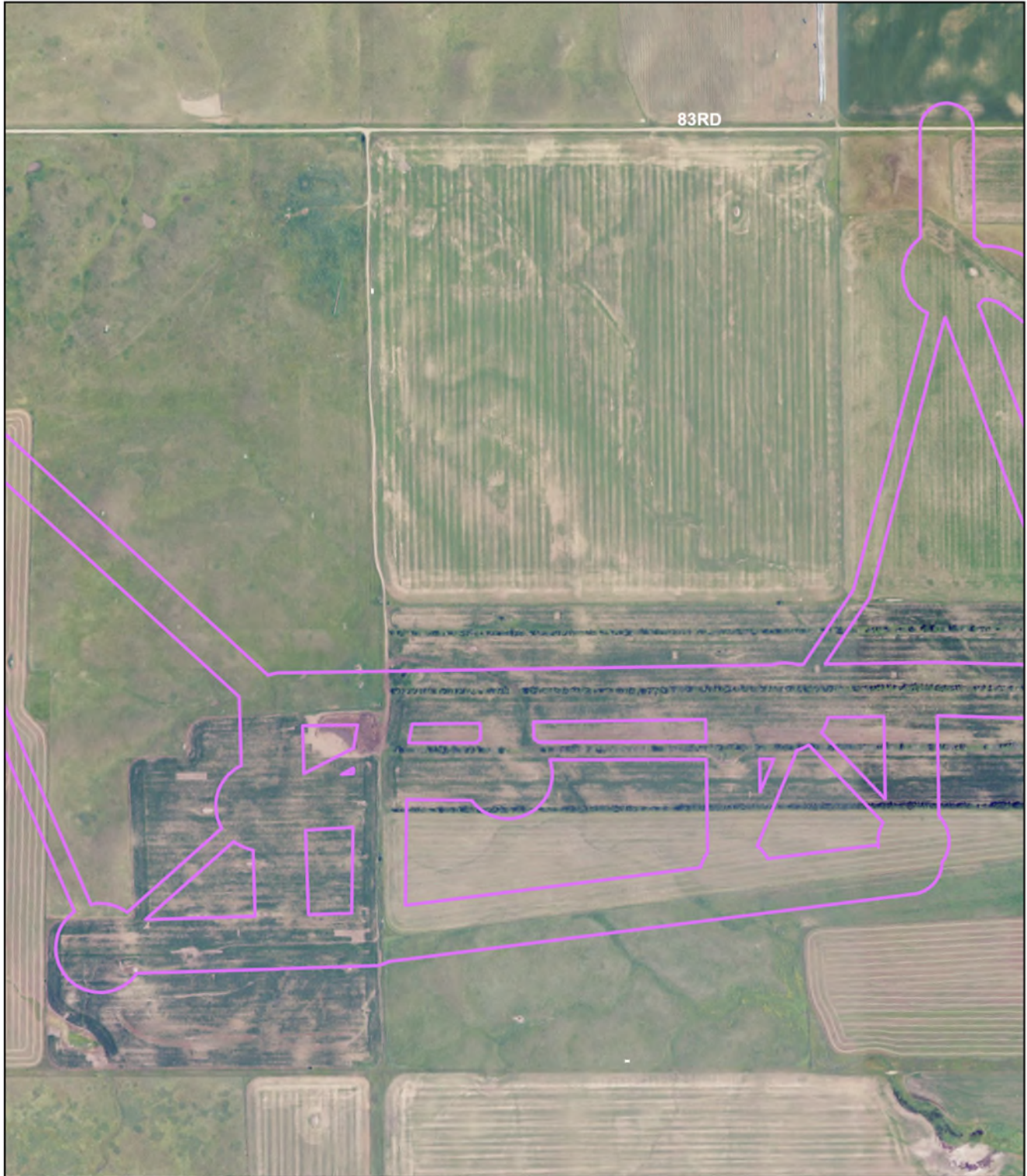
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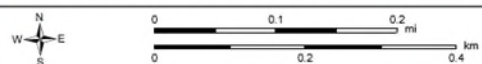


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





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



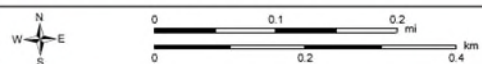


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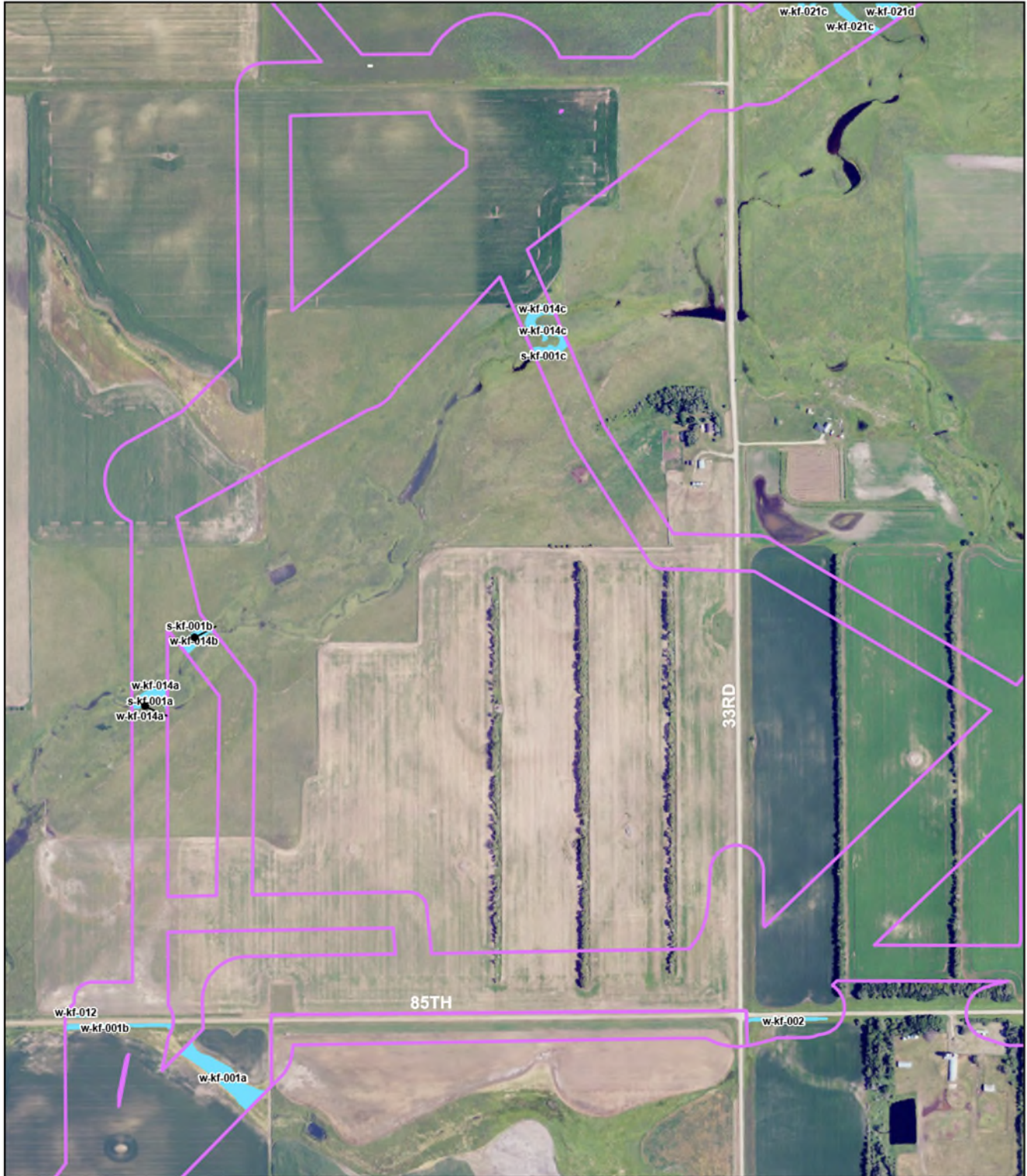
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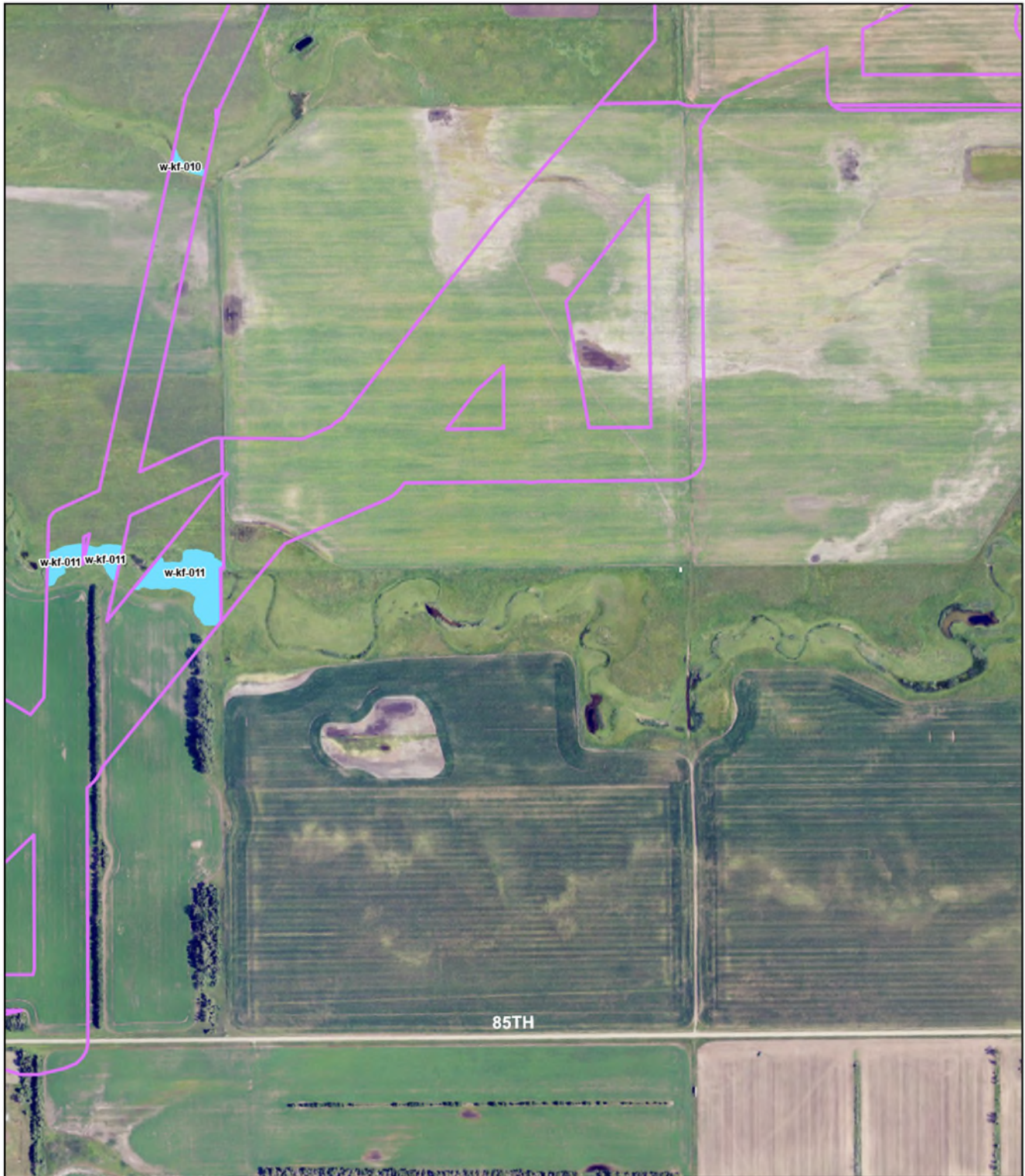
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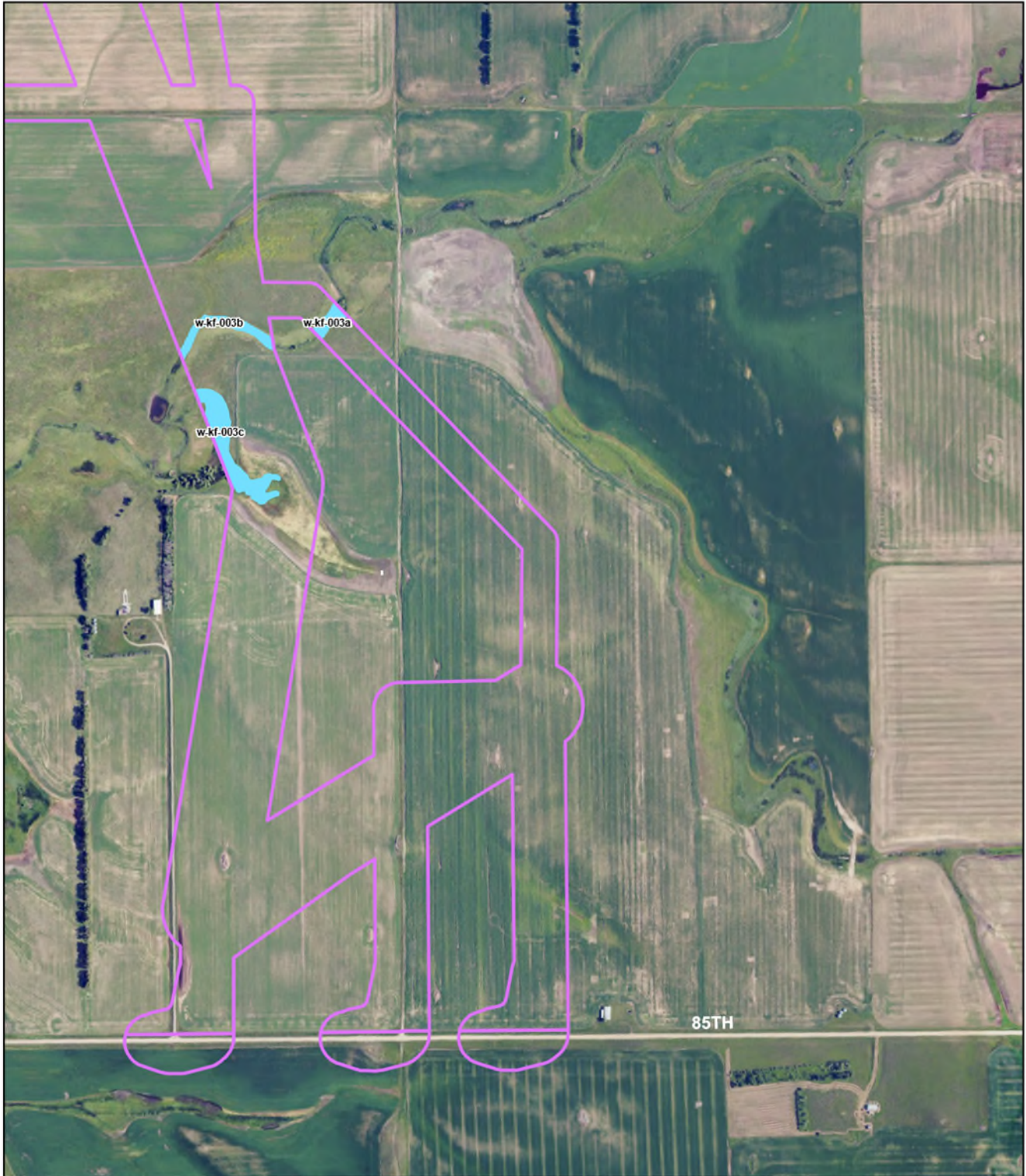
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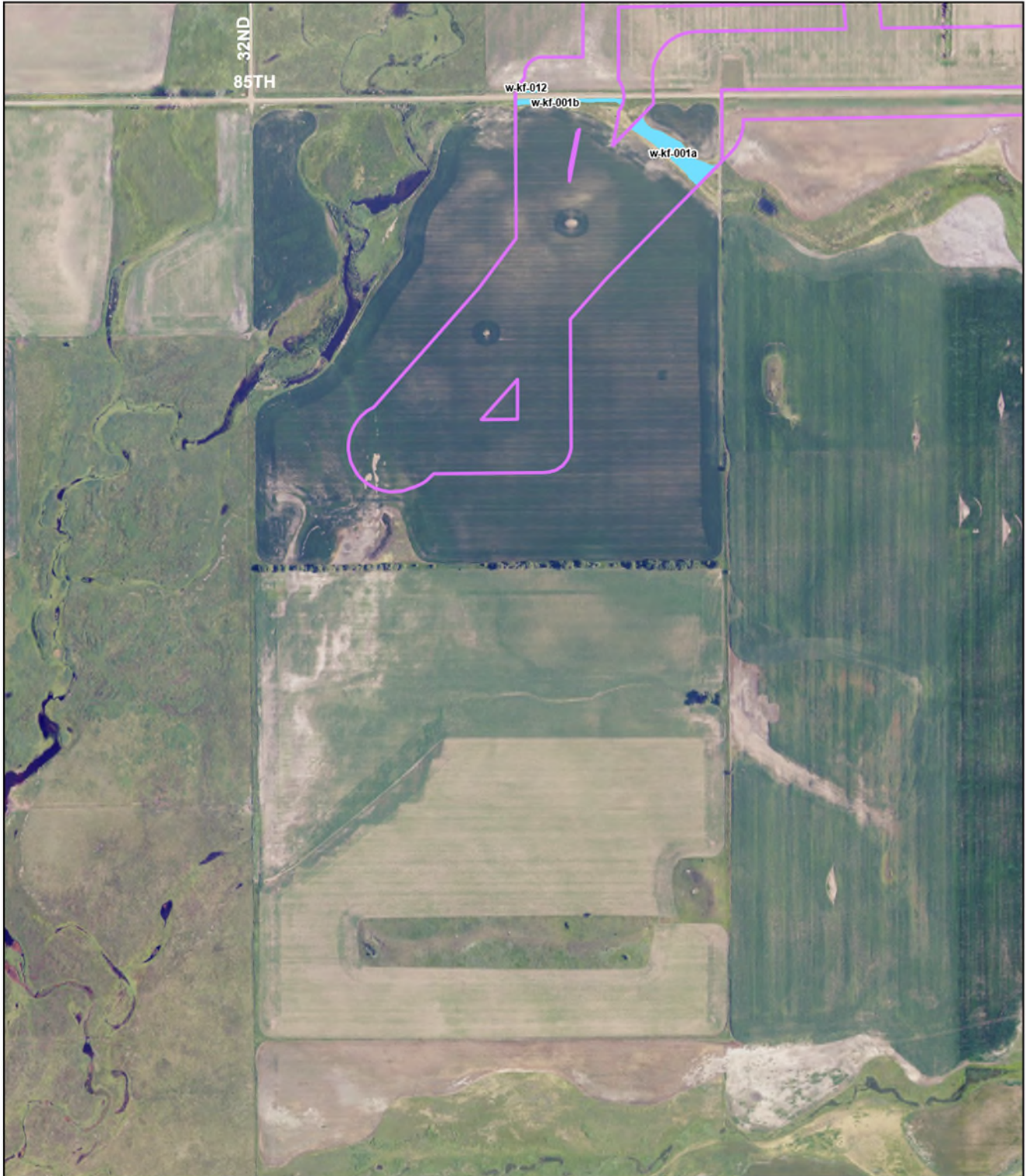
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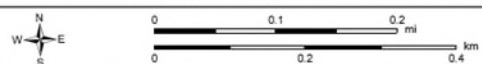
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Appendix B. US Army Corps of Engineers Great Plains Regional Datasheets for Wetland Delineation within the 2024 Wetland Survey Area of the Badger Wind Project in Logan and McIntosh Counties, North Dakota.

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WETLAND DETERMINATION DATA FORM - Great Plains Region

Project/Site: Badger Wind Farm County: McIntosh Sampling Date: May 8, 2024
 Applicant/Owner: Badger Wind, LLC State: ND Sampling Point: 1W
 Investigator(s): M. Fettes and N/A Section, Township, Range: Sec. 21, T132N - R71W
 Landform (hillslope, terrace, etc.): Drainage Local relief (concave, convex, none): Concave Slope (%): 0-1%
 Subregion (LRR): LRRF Lat: 46.23223 Long: -99.58036 Datum: NAD83
 Soil Map Unit Name: C524A - Daglum-Belfield complex, 0 to 2% slopes NWI Classification: PEMC
 Are climatic / hydrologic conditions on the site typical for this time of year? (Yes / No) Yes (if no, explain in Remarks.)
 Are Vegetation NO, Soil NO, or Hydrology NO significantly disturbed? Are "Normal Circumstances" present? Yes X No _____
 Are Vegetation NO, Soil NO, or Hydrology NO naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <u>X</u> No _____	Is the Sampled Area within a Wetland? Yes <u>X</u> No _____
Hydric Soil Present?	Yes <u>X</u> No _____	
Wetland Hydrology Present?	Yes <u>X</u> No _____	

Remarks:

This point was determined to be within a wetland due to the presence of all 3 wetland criteria.

VEGETATION - Use scientific names of plants.

	Absolute % cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
Tree Stratum (Plot size: 30 ft.)				Number of Dominant Species That Are OBL, FACW, or FAC <u>2</u> (A)
1. <u>None Observed</u>				Total Number of Dominant Species Across All Strata: <u>2</u> (B)
2. _____				Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100%</u> (A/B)
3. _____				Prevalence Index Worksheet:
4. _____				
_____ = Total Cover				OBL species <u>55</u> x 1 = <u>55</u>
Sapling/Shrub Stratum (Plot size: 15 ft.)				FACW species <u>30</u> x 2 = <u>60</u>
1. <u>None Observed</u>				FAC species <u>5</u> x 3 = <u>15</u>
2. _____				FACU species <u>10</u> x 4 = <u>40</u>
3. _____				UPL species _____ x 5 = _____
4. _____				Column Totals: <u>100</u> (A) <u>170</u> (B)
5. _____				Prevalence Index = B/A = <u>1.70</u>
_____ = Total Cover				Hydrophytic Vegetation Indicators:
Herb Stratum (Plot size: 5 ft.)				
1. <u>Typha latifolia</u>	55	yes	OBL	<u>X</u> 2 - Dominance Test is >50%
2. <u>Hordeum jubatum</u>	30	yes	FACW	<u>X</u> 3 - Prevalence Index is ≤ 3.0 ¹
3. <u>Melilotus officinalis</u>	10	no	FACU	____ 4 - Morphological Adaptations ¹ (Explain)
4. <u>Rumex crispus</u>	5	no	FAC	____ Problematic Hydrophytic Vegetation ¹ (Explain)
5. _____				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Provide supporting data in Remarks.
6. _____				Hydrophytic Vegetation Present? Yes <u>X</u> No _____
7. _____				
8. _____				
9. _____				
10. _____				
_____ = Total Cover				
Woody Vine Stratum (Plot size: 30 ft.)				
1. <u>None Observed</u>				
2. _____				
_____ = Total Cover				
% Bare Ground in Herb Stratum <u>0</u>				

Remarks: (if observed, list morphological adaptations below).

A positive indication of hydrophytic vegetation was observed (>50% of dominant species indexed as OBL, FACW, or FAC).

A positive indication of hydrophytic vegetation was observed (Prevalence Index is ≤ 3.00).

Sampling Point: 1W

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-7	10YR 3/1	90	7.5YR 4/6	10	C	M	Loam	
7-12	10YR 2/1	95	7.5YR 4/6	5	C	M	Loam	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soils Indicators: (Applicable to all LRRs, unless otherwise noted.)

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Gleyed Matrix (S4)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Sandy Redox (S5)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Stripped Matrix (S6)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Mucky Mineral (F1)
<input type="checkbox"/> Stratified Layers (A5) (LRR F)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)
<input type="checkbox"/> 1 cm Muck (A9) (LRR F, G, H)	<input type="checkbox"/> Depleted Matrix (F3)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input checked="" type="checkbox"/> Redox Dark Surface (F6)
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Depleted Dark Surface (F7)
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Redox Depressions (F8)
<input type="checkbox"/> 2.5 cm Mucky Peat or Peat (S2) (LRR G, H)	<input type="checkbox"/> High Plains Depressions (F16)
<input type="checkbox"/> 5 cm Mucky Peat or Peat (S3) (LRR F)	(MLRA 72 & 73 of LRR H)

Indicators for Problematic Hydric Soils³:

<input type="checkbox"/> 1 cm Muck (A9) (LRR I, J)
<input type="checkbox"/> Coast Prairie Redox (A16) (LRR F, G, H)
<input type="checkbox"/> Dark Surface (S7) (LRR G)
<input type="checkbox"/> High Plains Depressions (F16)
(LRR H outside of MLRA 72 & 73)
<input type="checkbox"/> Reduced Vertic (F18)
<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Very Shallow Dark Surface (TF12)
<input type="checkbox"/> Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: <u>N/A</u>	
Depth (inches): <u>N/A</u>	

Hydric Soil Present? Yes No

Remarks:

A positive indication of hydric soil was observed.

HYDROLOGY

Wetland hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)	Secondary Indicators (minimum of two required)
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Salt Crust (B11)
<input checked="" type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Invertebrates (B13)
<input checked="" type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)
<input type="checkbox"/> Drift Deposits (B3)	(where not tilled)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Presence of Reduced Iron (C4)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)
<input checked="" type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Water-Stained Leaves (B9)	
	<input type="checkbox"/> Surface Soil Cracks (B6)
	<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)
	<input checked="" type="checkbox"/> Drainage Patterns (B10)
	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)
	(where tilled)
	<input type="checkbox"/> Crayfish Burrows (C8)
	<input checked="" type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
	<input checked="" type="checkbox"/> Geomorphic Position (D2)
	<input checked="" type="checkbox"/> FAC-Neutral Test (D5)
	<input type="checkbox"/> Frost-Heave Hummocks (D7) (LRR F)

Field Observations:

Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches): <u> </u>
Water Table Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Depth (inches): <u>10-12"</u>
Saturation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Depth (inches): <u>0-12"</u>
(includes capillary fringe)	

Wetland Hydrology Present? Yes No

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

Remarks:

A positive indication of wetland hydrology was observed (at least one primary indicator).

A positive indication of wetland hydrology was observed (at least two secondary indicators).

WETLAND DETERMINATION DATA FORM - Great Plains Region

Project/Site: Badger Wind Farm County: McIntosh Sampling Date: May 8, 2024
 Applicant/Owner: Badger Wind, LLC State: ND Sampling Point: 1U
 Investigator(s): M. Fettes and N/A Section, Township, Range: Sec. 21, T132N - R71W
 Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Convex Slope (%): 1-2%
 Subregion (LRR): LRRF Lat: 46.23225 Long: -99.58046 Datum: NAD83
 Soil Map Unit Name: C524A - Daglum-Belfield complex, 0 to 2% slopes NWI Classification: N/A
 Are climatic / hydrologic conditions on the site typical for this time of year? (Yes / No) Yes (if no, explain in Remarks.)
 Are Vegetation YES, Soil NO, or Hydrology NO significantly disturbed? Are "Normal Circumstances" present? Yes X No
 Are Vegetation NO, Soil NO, or Hydrology NO naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <u> </u> No <u>X</u>	Is the Sampled Area within a Wetland?	Yes <u> </u> No <u>X</u>
Hydric Soil Present?	Yes <u> </u> No <u>X</u>		
Wetland Hydrology Present?	Yes <u> </u> No <u>X</u>		

Remarks:
 This point was determined not to be within a wetland due to the lack of all three wetland criteria.
 Within Agricultural field

VEGETATION - Use scientific names of plants.

	Absolute % cover	Dominant Species?	Indicator Status	Dominance Test worksheet:	
Tree Stratum (Plot size: 30 ft.)				Number of Dominant Species That Are OBL, FACW, or FAC <u> </u> (A)	
1. <u>None Observed</u>				Total Number of Dominant Species Across All Strata: <u>1</u> (B)	
2. <u> </u>					
3. <u> </u>					
4. <u> </u>					
	<u> </u> = Total Cover			Percent of Dominant Species That Are OBL, FACW, or FAC: <u> </u> (A/B)	
Sapling/Shrub Stratum (Plot size: 15 ft.)				Prevalence Index Worksheet:	
1. <u>None Observed</u>					Total % Cover of: <u> </u> Multiply by:
2. <u> </u>					OBL species <u> </u> x 1 = <u> </u>
3. <u> </u>					FACW species <u> </u> x 2 = <u> </u>
4. <u> </u>					FAC species <u> </u> x 3 = <u> </u>
5. <u> </u>				FACU species <u> </u> x 4 = <u> </u>	
	<u> </u> = Total Cover			UPL species <u>50</u> x 5 = <u>250</u>	
Herb Stratum (Plot size: 5 ft.)				Column Totals: <u>50</u> (A) <u>250</u> (B)	
1. <u>Corn</u>	<u>50</u>	<u>yes</u>	<u>UPL</u>	Prevalence Index = B/A = <u>5.00</u>	
2. <u> </u>				Hydrophytic Vegetation Indicators:	
3. <u> </u>					<u> </u> 1 - Rapid Test for Hydrophytic Vegetation
4. <u> </u>					<u> </u> 2 - Dominance Test is >50%
5. <u> </u>					<u> </u> 3 - Prevalence Index is ≤ 3.0 ¹
6. <u> </u>					<u> </u> 4 - Morphological Adaptations ¹ (Explain)
7. <u> </u>					<u> </u> Problematic Hydrophytic Vegetation ¹ (Explain)
8. <u> </u>					¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Provide supporting data in Remarks.
9. <u> </u>					Hydrophytic Vegetation Present? Yes <u> </u> No <u>X</u>
10. <u> </u>					
	<u>50</u> = Total Cover				
Woody Vine Stratum (Plot size: 30 ft.)					
1. <u>None Observed</u>					
2. <u> </u>					
	<u> </u> = Total Cover				
% Bare Ground in Herb Stratum <u>50</u>					

Remarks: (if observed, list morphological adaptations below).
 No positive indication of hydrophytic vegetation was observed (≥50% of dominant species indexed as FAC- or drier).

Sampling Point: 2W

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix			Redox Features				Texture	Remarks
	Color (moist)		%	Color (moist)	%	Type ¹	Loc ²		
0-4	2.5Y	3/1	100					Loam	
4-12	2.5Y	3/1	60	7.5YR	4/6	5	C	M	Loam
4-12	2.5Y	5/2	35					Loam	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soils Indicators: (Applicable to all LRRs, unless otherwise noted.)

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Gleyed Matrix (S4)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Sandy Redox (S5)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Stripped Matrix (S6)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Mucky Mineral (F1)
<input type="checkbox"/> Stratified Layers (A5) (LRR F)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)
<input type="checkbox"/> 1 cm Muck (A9) (LRR F, G, H)	<input type="checkbox"/> Depleted Matrix (F3)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input checked="" type="checkbox"/> Redox Dark Surface (F6)
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Depleted Dark Surface (F7)
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Redox Depressions (F8)
<input type="checkbox"/> 2.5 cm Mucky Peat or Peat (S2) (LRR G, H)	<input type="checkbox"/> High Plains Depressions (F16)
<input type="checkbox"/> 5 cm Mucky Peat or Peat (S3) (LRR F)	(MLRA 72 & 73 of LRR H)

Indicators for Problematic Hydric Soils³:

<input type="checkbox"/> 1 cm Muck (A9) (LRR I, J)
<input type="checkbox"/> Coast Prairie Redox (A16) (LRR F, G, H)
<input type="checkbox"/> Dark Surface (S7) (LRR G)
<input type="checkbox"/> High Plains Depressions (F16)
(LRR H outside of MLRA 72 & 73)
<input type="checkbox"/> Reduced Vertic (F18)
<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Very Shallow Dark Surface (TF12)
<input type="checkbox"/> Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____	N/A
Depth (inches): _____	N/A

Hydric Soil Present? Yes No _____

Remarks:

A positive indication of hydric soil was observed.

HYDROLOGY

Wetland hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)	Secondary Indicators (minimum of two required)
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Salt Crust (B11)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Invertebrates (B13)
<input checked="" type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)
<input type="checkbox"/> Drift Deposits (B3)	(where not tilled)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Presence of Reduced Iron (C4)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Water-Stained Leaves (B9)	
	<input type="checkbox"/> Surface Soil Cracks (B6)
	<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)
	<input type="checkbox"/> Drainage Patterns (B10)
	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)
	(where tilled)
	<input type="checkbox"/> Crayfish Burrows (C8)
	<input checked="" type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
	<input checked="" type="checkbox"/> Geomorphic Position (D2)
	<input checked="" type="checkbox"/> FAC-Neutral Test (D5)
	<input type="checkbox"/> Frost-Heave Hummocks (D7) (LRR F)

Field Observations:

Surface Water Present? Yes _____ No <input checked="" type="checkbox"/>	Depth (inches): _____
Water Table Present? Yes _____ No <input checked="" type="checkbox"/>	Depth (inches): _____
Saturation Present? Yes <input checked="" type="checkbox"/> No _____	Depth (inches): <u>0-12"</u>

Wetland Hydrology Present? Yes No _____

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

Remarks:

A positive indication of wetland hydrology was observed (at least one primary indicator).

A positive indication of wetland hydrology was observed (at least two secondary indicators).

WETLAND DETERMINATION DATA FORM - Great Plains Region

Project/Site: Badger Wind Farm County: McIntosh Sampling Date: May 8, 2024
 Applicant/Owner: Badger Wind, LLC State: ND Sampling Point: 2U
 Investigator(s): M. Fettes and N/A Section, Township, Range: Sec. 11, T132N - R72W
 Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Concave Slope (%): 2-3%
 Subregion (LRR): LRRF Lat: 46.27009 Long: -99.66735 Datum: NAD83
 Soil Map Unit Name: C817B - Lehr-Bowdle loams, 2 to 6% slopes NWI Classification: N/A
 Are climatic / hydrologic conditions on the site typical for this time of year? (Yes / No) Yes (if no, explain in Remarks.)
 Are Vegetation YES, Soil NO, or Hydrology NO significantly disturbed? Are "Normal Circumstances" present? Yes X No
 Are Vegetation NO, Soil NO, or Hydrology NO naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <u> </u> No <u>X</u>	Is the Sampled Area within a Wetland?	Yes <u> </u> No <u>X</u>
Hydric Soil Present? Yes <u> </u> No <u>X</u>		
Wetland Hydrology Present? Yes <u> </u> No <u>X</u>		

Remarks:
 This point was determined not to be within a wetland due to the lack of all three wetland criteria.
 Within Agricultural field

VEGETATION - Use scientific names of plants.

	Absolute % cover	Dominant Species?	Indicator Status	
Tree Stratum (Plot size: 30 ft.)				
1. <u>None Observed</u>				
2. _____				
3. _____				
4. _____				
				= Total Cover
Sapling/Shrub Stratum (Plot size: 15 ft.)				
1. <u>None Observed</u>				
2. _____				
3. _____				
4. _____				
5. _____				
				= Total Cover
Herb Stratum (Plot size: 5 ft.)				
1. <u>Soy beans</u>	<u>50</u>	<u>yes</u>	<u>UPL</u>	
2. _____				
3. _____				
4. _____				
5. _____				
6. _____				
7. _____				
8. _____				
9. _____				
10. _____				
				= Total Cover
Woody Vine Stratum (Plot size: 30 ft.)				
1. <u>None Observed</u>				
2. _____				
				= Total Cover
% Bare Ground in Herb Stratum <u>50</u>				

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC _____ (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: _____ (A/B)

Prevalence Index Worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species <u>50</u>	x 5 = <u>250</u>
Column Totals: <u>50</u> (A)	<u>250</u> (B)
Prevalence Index = B/A = <u>5.00</u>	

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤ 3.0¹

___ 4 - Morphological Adaptations¹ (Explain)

___ Problematic Hydrophytic Vegetation¹ (Explain)

¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Provide supporting data in Remarks.

Hydrophytic Vegetation Present? Yes No X

Remarks: (if observed, list morphological adaptations below).
 No positive indication of hydrophytic vegetation was observed (≥50% of dominant species indexed as FAC- or drier).

WETLAND DETERMINATION DATA FORM - Great Plains Region

Project/Site: Badger Wind Farm County: McIntosh Sampling Date: May 8, 2024
 Applicant/Owner: Badger Wind, LLC State: ND Sampling Point: 3W
 Investigator(s): M. Fettes and N/A Section, Township, Range: Sec. 2, T132N - R72W
 Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): Concave Slope (%): 0-1%
 Subregion (LRR): LRRF Lat: 46.27620 Long: -99.65919 Datum: NAD83
 Soil Map Unit Name: C54A - Lowe loam, 0 to 2% slopes, occasionally flooded NWI Classification: PEMF
 Are climatic / hydrologic conditions on the site typical for this time of year? (Yes / No) Yes (if no, explain in Remarks.)
 Are Vegetation NO, Soil NO, or Hydrology NO significantly disturbed? Are "Normal Circumstances" present? Yes X No _____
 Are Vegetation NO, Soil NO, or Hydrology NO naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <u>X</u> No _____	Is the Sampled Area within a Wetland? Yes <u>X</u> No _____
Hydric Soil Present?	Yes <u>X</u> No _____	
Wetland Hydrology Present?	Yes <u>X</u> No _____	

Remarks:
 This point was determined to be within a wetland due to the presence of all 3 wetland criteria.

VEGETATION - Use scientific names of plants.

	Absolute % cover	Dominant Species?	Indicator Status	Dominance Test worksheet:		
Tree Stratum (Plot size: 30 ft.)				Number of Dominant Species That Are OBL, FACW, or FAC <u>2</u> (A)		
1. <u>None Observed</u>				Total Number of Dominant Species Across All Strata: <u>2</u> (B)		
2. _____				Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100%</u> (A/B)		
3. _____				Prevalence Index Worksheet:		
4. _____					Total % Cover of: <u>50</u> x 1 = <u>50</u>	
_____ = Total Cover				FACW species <u>60</u> x 2 = <u>120</u>		
Sapling/Shrub Stratum (Plot size: 15 ft.)				FAC species _____ x 3 = _____		
1. <u>None Observed</u>				FACU species _____ x 4 = _____		
2. _____				UPL species _____ x 5 = _____		
3. _____				Column Totals: <u>110</u> (A) <u>170</u> (B)		
4. _____				Prevalence Index = B/A = <u>1.55</u>		
5. _____				Hydrophytic Vegetation Indicators:		
_____ = Total Cover					<u>X</u> 1 - Rapid Test for Hydrophytic Vegetation	
Herb Stratum (Plot size: 5 ft.)					<u>X</u> 2 - Dominance Test is >50%	
1. <u>Spartina pectinata</u>	50	yes	FACW		<u>X</u> 3 - Prevalence Index is ≤ 3.0 ¹	
2. <u>Carex pellita</u>	50	yes	OBL		____ 4 - Morphological Adaptations ¹ (Explain)	
3. <u>Hordeum jubatum</u>	10	no	FACW		____ Problematic Hydrophytic Vegetation ¹ (Explain)	
4. _____					¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Provide supporting data in Remarks.	
5. _____					Hydrophytic Vegetation Present? Yes <u>X</u> No _____	
6. _____						
7. _____						
8. _____						
9. _____						
10. _____						
_____ = Total Cover						
Woody Vine Stratum (Plot size: 30 ft.)						
1. <u>None Observed</u>						
2. _____						
_____ = Total Cover						
% Bare Ground in Herb Stratum <u>0</u>						

Remarks: (if observed, list morphological adaptations below).
 A positive indication of hydrophytic vegetation was observed (>50% of dominant species indexed as OBL, FACW, or FAC).
 A positive indication of hydrophytic vegetation was observed (Prevalence Index is ≤ 3.00).

Sampling Point: 3W

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-6	2.5Y 3/1	90	7.5YR 4/6	10	C	M	Silt Loam	
6-12	2.5Y 5/2	95	7.5YR 4/6	5	C	M	Silt Loam	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soils Indicators: (Applicable to all LRRs, unless otherwise noted.)

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Gleyed Matrix (S4)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Sandy Redox (S5)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Stripped Matrix (S6)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Mucky Mineral (F1)
<input type="checkbox"/> Stratified Layers (A5) (LRR F)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)
<input type="checkbox"/> 1 cm Muck (A9) (LRR F, G, H)	<input type="checkbox"/> Depleted Matrix (F3)
<input checked="" type="checkbox"/> Depleted Below Dark Surface (A11)	<input checked="" type="checkbox"/> Redox Dark Surface (F6)
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Depleted Dark Surface (F7)
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Redox Depressions (F8)
<input type="checkbox"/> 2.5 cm Mucky Peat or Peat (S2) (LRR G, H)	<input type="checkbox"/> High Plains Depressions (F16)
<input type="checkbox"/> 5 cm Mucky Peat or Peat (S3) (LRR F)	(MLRA 72 & 73 of LRR H)

Indicators for Problematic Hydric Soils³:

<input type="checkbox"/> 1 cm Muck (A9) (LRR I, J)
<input type="checkbox"/> Coast Prairie Redox (A16) (LRR F, G, H)
<input type="checkbox"/> Dark Surface (S7) (LRR G)
<input type="checkbox"/> High Plains Depressions (F16)
(LRR H outside of MLRA 72 & 73)
<input type="checkbox"/> Reduced Vertic (F18)
<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Very Shallow Dark Surface (TF12)
<input type="checkbox"/> Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____	N/A
Depth (inches): _____	N/A

Hydric Soil Present? Yes No

Remarks:

A positive indication of hydric soil was observed.

HYDROLOGY

Wetland hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (minimum of two required)
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Surface Soil Cracks (B6)
<input checked="" type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)
<input checked="" type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input checked="" type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Dry-Season Water Table (C2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	(where tilled)
<input type="checkbox"/> Drift Deposits (B3)	(where not tilled)	<input type="checkbox"/> Crayfish Burrows (C8)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input checked="" type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)	<input checked="" type="checkbox"/> Geomorphic Position (D2)
<input checked="" type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)	<input checked="" type="checkbox"/> FAC-Neutral Test (D5)
<input type="checkbox"/> Water-Stained Leaves (B9)		<input type="checkbox"/> Frost-Heave Hummocks (D7) (LRR F)

Field Observations:

Surface Water Present? Yes _____ No <input checked="" type="checkbox"/>	Depth (inches): _____
Water Table Present? Yes <input checked="" type="checkbox"/> No _____	Depth (inches): <u>2-12"</u>
Saturation Present? Yes <input checked="" type="checkbox"/> No _____	Depth (inches): <u>0-12"</u>
(includes capillary fringe)	

Wetland Hydrology Present? Yes No

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

Remarks:

A positive indication of wetland hydrology was observed (at least one primary indicator).

A positive indication of wetland hydrology was observed (at least two secondary indicators).

WETLAND DETERMINATION DATA FORM - Great Plains Region

Project/Site: Badger Wind Farm County: McIntosh Sampling Date: May 8, 2024
 Applicant/Owner: Badger Wind, LLC State: ND Sampling Point: 3U
 Investigator(s): M. Fettes and N/A Section, Township, Range: Sec. 2, T132N - R72W
 Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Concave Slope (%): 1-2%
 Subregion (LRR): LRRF Lat: 46.27631 Long: -99.65906 Datum: NAD83
 Soil Map Unit Name: C54A - Lowe loam, 0 to 2% slopes, occasionally flooded NWI Classification: N/A
 Are climatic / hydrologic conditions on the site typical for this time of year? (Yes / No) Yes (if no, explain in Remarks.)
 Are Vegetation NO, Soil NO, or Hydrology NO significantly disturbed? Are "Normal Circumstances" present? Yes X No
 Are Vegetation NO, Soil NO, or Hydrology NO naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <u> </u> No <u>X</u>	Is the Sampled Area within a Wetland? Yes <u> </u> No <u>X</u>
Hydric Soil Present?	Yes <u> </u> No <u>X</u>	
Wetland Hydrology Present?	Yes <u> </u> No <u>X</u>	

Remarks:
 This point was determined not to be within a wetland due to the lack of all three wetland criteria.

VEGETATION - Use scientific names of plants.

	Absolute % cover	Dominant Species?	Indicator Status	Dominance Test worksheet:	
Tree Stratum (Plot size: 30 ft.)				Number of Dominant Species That Are OBL, FACW, or FAC <u> </u> (A)	
1. <u>None Observed</u>				Total Number of Dominant Species Across All Strata: <u>3</u> (B)	
2. <u> </u>					
3. <u> </u>					
4. <u> </u>					
	<u> </u> = Total Cover			Percent of Dominant Species That Are OBL, FACW, or FAC: <u> </u> (A/B)	
Sapling/Shrub Stratum (Plot size: 15 ft.)				Prevalence Index Worksheet:	
1. <u>Symphoricarpos occidentalis</u>	10	yes	UPL		Total % Cover of: <u> </u> Multiply by:
2. <u> </u>					OBL species <u> </u> x 1 = <u> </u>
3. <u> </u>					FACW species <u> </u> x 2 = <u> </u>
4. <u> </u>					FAC species <u> </u> x 3 = <u> </u>
5. <u> </u>					FACU species <u>90</u> x 4 = <u>360</u>
	<u>10</u> = Total Cover			UPL species <u>20</u> x 5 = <u>100</u>	
				Column Totals: <u>110</u> (A) <u>460</u> (B)	
Herb Stratum (Plot size: 5 ft.)				Prevalence Index = B/A = <u>4.18</u>	
1. <u>Poa pratensis</u>	65	yes	FACU	Hydrophytic Vegetation Indicators:	
2. <u>Taraxacum officinale</u>	25	yes	FACU		<u> </u> 1 - Rapid Test for Hydrophytic Vegetation
3. <u>Bromus inermis</u>	10	no	UPL		<u> </u> 2 - Dominance Test is >50%
4. <u> </u>					<u> </u> 3 - Prevalence Index is ≤ 3.0 ¹
5. <u> </u>					<u> </u> 4 - Morphological Adaptations ¹ (Explain)
6. <u> </u>					<u> </u> Problematic Hydrophytic Vegetation ¹ (Explain)
7. <u> </u>					¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Provide supporting data in Remarks.
8. <u> </u>					Hydrophytic Vegetation Present? Yes <u> </u> No <u>X</u>
9. <u> </u>					
10. <u> </u>					
	<u>100</u> = Total Cover				
Woody Vine Stratum (Plot size: 30 ft.)					
1. <u>None Observed</u>					
2. <u> </u>					
	<u> </u> = Total Cover				
% Bare Ground in Herb Stratum <u>0</u>					

Remarks: (if observed, list morphological adaptations below).
 No positive indication of hydrophytic vegetation was observed (≥50% of dominant species indexed as FAC- or drier).

WETLAND DETERMINATION DATA FORM - Great Plains Region

Project/Site: Badger Wind Farm County: Logan Sampling Date: May 8, 2024
 Applicant/Owner: Badger Wind, LLC State: ND Sampling Point: 4W
 Investigator(s): M. Fettes and N/A Section, Township, Range: Sec. 25, T133N - R72W
 Landform (hillslope, terrace, etc.): Drainage Local relief (concave, convex, none): Concave Slope (%): 0-1%
 Subregion (LRR): LRRF Lat: 46.29826 Long: -99.66763 Datum: NAD83
 Soil Map Unit Name: C451B - Arnegard loam, 2 to 6% slopes NWI Classification: PEMC
 Are climatic / hydrologic conditions on the site typical for this time of year? (Yes / No) Yes (if no, explain in Remarks.)
 Are Vegetation NO, Soil NO, or Hydrology NO significantly disturbed? Are "Normal Circumstances" present? Yes X No
 Are Vegetation NO, Soil NO, or Hydrology NO naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <u>X</u> No <u> </u>	Is the Sampled Area within a Wetland? Yes <u>X</u> No <u> </u>
Hydric Soil Present?	Yes <u>X</u> No <u> </u>	
Wetland Hydrology Present?	Yes <u>X</u> No <u> </u>	

Remarks:
 This point was determined to be within a wetland due to the presence of all 3 wetland criteria.

VEGETATION - Use scientific names of plants.

	Absolute % cover	Dominant Species?	Indicator Status	Dominance Test worksheet:	
Tree Stratum (Plot size: 30 ft.)				Number of Dominant Species That Are OBL, FACW, or FAC <u>1</u> (A)	
1. <u>None Observed</u>				Total Number of Dominant Species Across All Strata: <u>1</u> (B)	
2. _____				Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100%</u> (A/B)	
3. _____				Prevalence Index Worksheet:	
4. _____					Total % Cover of: _____ Multiply by: _____
_____ = Total Cover				OBL species _____ x 1 = _____	
Sapling/Shrub Stratum (Plot size: 15 ft.)				FACW species <u>85</u> x 2 = <u>170</u>	
1. <u>None Observed</u>				FAC species _____ x 3 = _____	
2. _____				FACU species _____ x 4 = _____	
3. _____				UPL species _____ x 5 = _____	
4. _____				Column Totals: <u>85</u> (A) <u>170</u> (B)	
5. _____				Prevalence Index = B/A = <u>2.00</u>	
_____ = Total Cover				Hydrophytic Vegetation Indicators: <input checked="" type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation <input checked="" type="checkbox"/> 2 - Dominance Test is >50% <input checked="" type="checkbox"/> 3 - Prevalence Index is ≤ 3.0 ¹ <input type="checkbox"/> 4 - Morphological Adaptations ¹ (Explain) <input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Provide supporting data in Remarks.	
Herb Stratum (Plot size: 5 ft.)					Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u>
1. <u>Hordeum jubatum</u>	85	yes	FACW		
2. _____					
3. _____					
4. _____					
5. _____					
6. _____					
7. _____					
8. _____					
9. _____					
10. _____					
_____ = Total Cover					
Woody Vine Stratum (Plot size: 30 ft.)					
1. <u>None Observed</u>					
2. _____					
_____ = Total Cover					
% Bare Ground in Herb Stratum <u>15</u>					

Remarks: (if observed, list morphological adaptations below).
 A positive indication of hydrophytic vegetation was observed (>50% of dominant species indexed as OBL, FACW, or FAC).
 A positive indication of hydrophytic vegetation was observed (Prevalence Index is ≤ 3.00).

Sampling Point: 4W

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-2	10YR 3/1	100	NONE				Loam	
2-10	10YR 3/1	95	7.5YR 4/6	5	C	M	Loam	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soils Indicators: (Applicable to all LRRs, unless otherwise noted.)

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Gleyed Matrix (S4)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Sandy Redox (S5)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Stripped Matrix (S6)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Mucky Mineral (F1)
<input type="checkbox"/> Stratified Layers (A5) (LRR F)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)
<input type="checkbox"/> 1 cm Muck (A9) (LRR F, G, H)	<input type="checkbox"/> Depleted Matrix (F3)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input checked="" type="checkbox"/> Redox Dark Surface (F6)
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Depleted Dark Surface (F7)
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Redox Depressions (F8)
<input type="checkbox"/> 2.5 cm Mucky Peat or Peat (S2) (LRR G, H)	<input type="checkbox"/> High Plains Depressions (F16)
<input type="checkbox"/> 5 cm Mucky Peat or Peat (S3) (LRR F)	(MLRA 72 & 73 of LRR H)

Indicators for Problematic Hydric Soils³:

<input type="checkbox"/> 1 cm Muck (A9) (LRR I, J)
<input type="checkbox"/> Coast Prairie Redox (A16) (LRR F, G, H)
<input type="checkbox"/> Dark Surface (S7) (LRR G)
<input type="checkbox"/> High Plains Depressions (F16)
(LRR H outside of MLRA 72 & 73)
<input type="checkbox"/> Reduced Vertic (F18)
<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Very Shallow Dark Surface (TF12)
<input type="checkbox"/> Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: <u>N/A</u>	Hydric Soil Present? Yes <u>X</u> No <u> </u>
Depth (inches): <u>N/A</u>	

Remarks:

A positive indication of hydric soil was observed.

HYDROLOGY

Wetland hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (minimum of two required)
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Surface Soil Cracks (B6)
<input checked="" type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)
<input checked="" type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input checked="" type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Dry-Season Water Table (C2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> (where tilled)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> (where not tilled)	<input type="checkbox"/> Crayfish Burrows (C8)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input checked="" type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)	<input checked="" type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)	<input checked="" type="checkbox"/> FAC-Neutral Test (D5)
<input type="checkbox"/> Water-Stained Leaves (B9)		<input type="checkbox"/> Frost-Heave Hummocks (D7) (LRR F)

Field Observations:

Surface Water Present? Yes <u> </u> No <u>X</u>	Depth (inches): <u> </u>	Wetland Hydrology Present? Yes <u>X</u> No <u> </u>
Water Table Present? Yes <u>X</u> No <u> </u>	Depth (inches): <u>0-10"</u>	
Saturation Present? Yes <u>X</u> No <u> </u>	Depth (inches): <u>0-10"</u>	

(includes capillary fringe)

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

Remarks:

A positive indication of wetland hydrology was observed (at least one primary indicator).

A positive indication of wetland hydrology was observed (at least two secondary indicators).

WETLAND DETERMINATION DATA FORM - Great Plains Region

Project/Site: Badger Wind Farm County: Logan Sampling Date: May 8, 2024
 Applicant/Owner: Badger Wind, LLC State: ND Sampling Point: 4U
 Investigator(s): M. Fettes and N/A Section, Township, Range: Sec. 25, T133N - R72W
 Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Convex Slope (%): 1-2%
 Subregion (LRR): LRRF Lat: 46.29839 Long: -99.66757 Datum: NAD83
 Soil Map Unit Name: C915B - Reeder-Arnegard loams, 3 to 6% slopes NWI Classification: N/A
 Are climatic / hydrologic conditions on the site typical for this time of year? (Yes / No) Yes (if no, explain in Remarks.)
 Are Vegetation YES, Soil NO, or Hydrology NO significantly disturbed? Are "Normal Circumstances" present? Yes X No _____
 Are Vegetation NO, Soil NO, or Hydrology NO naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____ No <u>X</u>	Is the Sampled Area within a Wetland?	Yes _____ No <u>X</u>
Hydric Soil Present?	Yes _____ No <u>X</u>		
Wetland Hydrology Present?	Yes _____ No <u>X</u>		

Remarks:
 This point was determined not to be within a wetland due to the lack of all three wetland criteria.
 Within Agricultural field

VEGETATION - Use scientific names of plants.

	Absolute % cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
Tree Stratum (Plot size: 30 ft.)				Number of Dominant Species That Are OBL, FACW, or FAC _____ (A)
1. <u>None Observed</u>				Total Number of Dominant Species Across All Strata: <u>1</u> (B)
2. _____				Percent of Dominant Species That Are OBL, FACW, or FAC: _____ (A/B)
3. _____				Prevalence Index Worksheet:
4. _____				
_____ = Total Cover				OBL species _____ x 1 = _____
Sapling/Shrub Stratum (Plot size: 15 ft.)				FACW species _____ x 2 = _____
1. <u>None Observed</u>				FAC species _____ x 3 = _____
2. _____				FACU species _____ x 4 = _____
3. _____				UPL species <u>50</u> x 5 = <u>250</u>
4. _____				Column Totals: <u>50</u> (A) <u>250</u> (B)
5. _____				Prevalence Index = B/A = <u>5.00</u>
_____ = Total Cover				Hydrophytic Vegetation Indicators:
Herb Stratum (Plot size: 5 ft.)				
1. <u>Soy beans</u>	<u>50</u>	<u>yes</u>	<u>UPL</u>	____ 2 - Dominance Test is >50%
2. _____				____ 3 - Prevalence Index is ≤ 3.0 ¹
3. _____				____ 4 - Morphological Adaptations ¹ (Explain)
4. _____				____ Problematic Hydrophytic Vegetation ¹ (Explain)
5. _____				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Provide supporting data in Remarks.
6. _____				Hydrophytic Vegetation Present? Yes _____ No <u>X</u>
7. _____				
8. _____				
9. _____				
10. _____				
_____ = Total Cover				
Woody Vine Stratum (Plot size: 30 ft.)				
1. <u>None Observed</u>				
2. _____				
_____ = Total Cover				
% Bare Ground in Herb Stratum <u>50</u>				

Remarks: (if observed, list morphological adaptations below).
 No positive indication of hydrophytic vegetation was observed (≥50% of dominant species indexed as FAC- or drier).

WETLAND DETERMINATION DATA FORM - Great Plains Region

Project/Site: Badger Wind Farm County: Logan Sampling Date: May 8, 2024
 Applicant/Owner: Badger Wind, LLC State: ND Sampling Point: 5W
 Investigator(s): M. Fettes and N/A Section, Township, Range: Sec. 29, T133N - R70W
 Landform (hillslope, terrace, etc.): Drainage Local relief (concave, convex, none): Concave Slope (%): 1-2%
 Subregion (LRR): LRRF Lat: 46.30672 Long: -99.49804 Datum: NAD83
 Soil Map Unit Name: C162F - Max-Zahl-Arnegard complex, 9 to 35% slopes, very stony NWI Classification: PEMA
 Are climatic / hydrologic conditions on the site typical for this time of year? (Yes / No) Yes (if no, explain in Remarks.)
 Are Vegetation NO, Soil NO, or Hydrology NO significantly disturbed? Are "Normal Circumstances" present? Yes X No
 Are Vegetation NO, Soil NO, or Hydrology NO naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u>	Is the Sampled Area within a Wetland? Yes <u>X</u> No <u> </u>
Hydric Soil Present? Yes <u>X</u> No <u> </u>	
Wetland Hydrology Present? Yes <u>X</u> No <u> </u>	

Remarks:
 This point was determined to be within a wetland due to the presence of all 3 wetland criteria.

VEGETATION - Use scientific names of plants.

	Absolute % cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
Tree Stratum (Plot size: 30 ft.)				Number of Dominant Species That Are OBL, FACW, or FAC <u>2</u> (A)
1. <u>None Observed</u>				Total Number of Dominant Species Across All Strata: <u>2</u> (B)
2. _____				Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100%</u> (A/B)
3. _____				Prevalence Index Worksheet: Total % Cover of: Multiply by: OBL species <u>25</u> x 1 = <u>25</u> FACW species <u>60</u> x 2 = <u>120</u> FAC species x 3 = _____ FACU species x 4 = _____ UPL species <u>15</u> x 5 = <u>75</u> Column Totals: <u>100</u> (A) <u>220</u> (B) Prevalence Index = B/A = <u>2.20</u>
4. _____				
_____ = Total Cover				
Sapling/Shrub Stratum (Plot size: 15 ft.)				
1. <u>None Observed</u>				
2. _____				
3. _____				
4. _____				
5. _____				
_____ = Total Cover				
Herb Stratum (Plot size: 5 ft.)				Hydrophytic Vegetation Indicators: <u>X</u> 1 - Rapid Test for Hydrophytic Vegetation <u>X</u> 2 - Dominance Test is >50% <u>X</u> 3 - Prevalence Index is ≤ 3.0 ¹ _____ 4 - Morphological Adaptations ¹ (Explain) _____ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Provide supporting data in Remarks.
1. <u>Spartina pectinata</u>	<u>60</u>	<u>yes</u>	<u>FACW</u>	
2. <u>Carex pellita</u>	<u>25</u>	<u>yes</u>	<u>OBL</u>	
3. <u>Bromus inermis</u>	<u>15</u>	<u>no</u>	<u>UPL</u>	
4. _____				
5. _____				
6. _____				
7. _____				
8. _____				
9. _____				
10. _____				
_____ = Total Cover				
Woody Vine Stratum (Plot size: 30 ft.)				Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u>
1. <u>None Observed</u>				
2. _____				
_____ = Total Cover				
% Bare Ground in Herb Stratum <u>0</u>				

Remarks: (if observed, list morphological adaptations below).
 A positive indication of hydrophytic vegetation was observed (>50% of dominant species indexed as OBL, FACW, or FAC).
 A positive indication of hydrophytic vegetation was observed (Prevalence Index is ≤ 3.00).

Sampling Point: 5W

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-8	10YR 2/2	95	7.5YR 4/6	5	C	M	Loam	
8-12	10YR 3/2	85	7.5YR 4/6	15	C	M	Loam	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soils Indicators: (Applicable to all LRRs, unless otherwise noted.)

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Gleyed Matrix (S4)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Sandy Redox (S5)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Stripped Matrix (S6)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Mucky Mineral (F1)
<input type="checkbox"/> Stratified Layers (A5) (LRR F)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)
<input type="checkbox"/> 1 cm Muck (A9) (LRR F, G, H)	<input type="checkbox"/> Depleted Matrix (F3)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input checked="" type="checkbox"/> Redox Dark Surface (F6)
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Depleted Dark Surface (F7)
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Redox Depressions (F8)
<input type="checkbox"/> 2.5 cm Mucky Peat or Peat (S2) (LRR G, H)	<input type="checkbox"/> High Plains Depressions (F16)
<input type="checkbox"/> 5 cm Mucky Peat or Peat (S3) (LRR F)	(MLRA 72 & 73 of LRR H)

Indicators for Problematic Hydric Soils³:

<input type="checkbox"/> 1 cm Muck (A9) (LRR I, J)
<input type="checkbox"/> Coast Prairie Redox (A16) (LRR F, G, H)
<input type="checkbox"/> Dark Surface (S7) (LRR G)
<input type="checkbox"/> High Plains Depressions (F16)
(LRR H outside of MLRA 72 & 73)
<input type="checkbox"/> Reduced Vertic (F18)
<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Very Shallow Dark Surface (TF12)
<input type="checkbox"/> Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____	N/A
Depth (inches): _____	N/A

Hydric Soil Present? Yes No _____

Remarks:

A positive indication of hydric soil was observed.

HYDROLOGY

Wetland hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)	Secondary Indicators (minimum of two required)
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Salt Crust (B11)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Invertebrates (B13)
<input checked="" type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)
<input type="checkbox"/> Drift Deposits (B3)	(where not tilled)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Presence of Reduced Iron (C4)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Water-Stained Leaves (B9)	
	<input type="checkbox"/> Surface Soil Cracks (B6)
	<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)
	<input checked="" type="checkbox"/> Drainage Patterns (B10)
	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)
	(where tilled)
	<input type="checkbox"/> Crayfish Burrows (C8)
	<input checked="" type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
	<input checked="" type="checkbox"/> Geomorphic Position (D2)
	<input checked="" type="checkbox"/> FAC-Neutral Test (D5)
	<input type="checkbox"/> Frost-Heave Hummocks (D7) (LRR F)

Field Observations:

Surface Water Present? Yes _____ No <input checked="" type="checkbox"/>	Depth (inches): _____
Water Table Present? Yes _____ No <input checked="" type="checkbox"/>	Depth (inches): _____
Saturation Present? Yes <input checked="" type="checkbox"/> No _____	Depth (inches): <u>0-10"</u>
(includes capillary fringe)	

Wetland Hydrology Present? Yes No _____

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

Remarks:

A positive indication of wetland hydrology was observed (at least one primary indicator).

A positive indication of wetland hydrology was observed (at least two secondary indicators).

WETLAND DETERMINATION DATA FORM - Great Plains Region

Project/Site: Badger Wind Farm County: Logan Sampling Date: May 8, 2024
 Applicant/Owner: Badger Wind, LLC State: ND Sampling Point: 5U
 Investigator(s): M. Fettes and N/A Section, Township, Range: Sec. 29, T133N - R70W
 Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Convex Slope (%): 4-5%
 Subregion (LRR): LRRF Lat: 46.30679 Long: -99.49803 Datum: NAD83
 Soil Map Unit Name: C162F - Max-Zahl-Arnegard complex, 9 to 35% slopes, very stony NWI Classification: N/A
 Are climatic / hydrologic conditions on the site typical for this time of year? (Yes / No) Yes (if no, explain in Remarks.)
 Are Vegetation NO, Soil NO, or Hydrology NO significantly disturbed? Are "Normal Circumstances" present? Yes X No
 Are Vegetation NO, Soil NO, or Hydrology NO naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <u> </u> No <u>X</u>	Is the Sampled Area within a Wetland? Yes <u> </u> No <u>X</u>
Hydric Soil Present?	Yes <u> </u> No <u>X</u>	
Wetland Hydrology Present?	Yes <u> </u> No <u>X</u>	

Remarks:
 This point was determined not to be within a wetland due to the lack of all three wetland criteria.

VEGETATION - Use scientific names of plants.

	Absolute % cover	Dominant Species?	Indicator Status	Dominance Test worksheet:	
Tree Stratum (Plot size: 30 ft.)				Number of Dominant Species That Are OBL, FACW, or FAC <u> </u> (A)	
1. <u>None Observed</u>				Total Number of Dominant Species Across All Strata: <u>2</u> (B)	
2. <u> </u>					
3. <u> </u>					
4. <u> </u>					
	= Total Cover			Percent of Dominant Species That Are OBL, FACW, or FAC: <u> </u> (A/B)	
Sapling/Shrub Stratum (Plot size: 15 ft.)				Prevalence Index Worksheet:	
1. <u>None Observed</u>					Total % Cover of: <u> </u> Multiply by:
2. <u> </u>					OBL species <u> </u> x 1 = <u> </u>
3. <u> </u>					FACW species <u> </u> x 2 = <u> </u>
4. <u> </u>					FAC species <u> </u> x 3 = <u> </u>
5. <u> </u>				FACU species <u>35</u> x 4 = <u>140</u>	
	= Total Cover			UPL species <u>65</u> x 5 = <u>325</u>	
				Column Totals: <u>100</u> (A) <u>465</u> (B)	
				Prevalence Index = B/A = <u>4.65</u>	
Herb Stratum (Plot size: 5 ft.)				Hydrophytic Vegetation Indicators:	
1. <u>Bromus inermis</u>	55	yes	UPL		<u> </u> 1 - Rapid Test for Hydrophytic Vegetation
2. <u>Poa pratensis</u>	35	yes	FACU		<u> </u> 2 - Dominance Test is >50%
3. <u>Hesperostipa comata</u>	10	no	UPL		<u> </u> 3 - Prevalence Index is ≤ 3.0 ¹
4. <u> </u>					<u> </u> 4 - Morphological Adaptations ¹ (Explain)
5. <u> </u>					<u> </u> Problematic Hydrophytic Vegetation ¹ (Explain)
6. <u> </u>					¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Provide supporting data in Remarks.
7. <u> </u>					
8. <u> </u>					
9. <u> </u>					
10. <u> </u>					
	100 = Total Cover				
Woody Vine Stratum (Plot size: 30 ft.)					
1. <u>None Observed</u>					
2. <u> </u>					
	= Total Cover				
% Bare Ground in Herb Stratum <u>0</u>					

Remarks: (if observed, list morphological adaptations below).
 No positive indication of hydrophytic vegetation was observed (≥50% of dominant species indexed as FAC- or drier).

Sampling Point: 5U

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix			Redox Features				Texture	Remarks
	Color (moist)		%	Color (moist)	%	Type ¹	Loc ²		
0-5	10YR 2/2		100	NONE				Loam	
5-10	10YR 3/3		75	NONE				Sandy Loam	
	10YR 2/2		25						

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soils Indicators: (Applicable to all LRRs, unless otherwise noted.)

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Gleyed Matrix (S4)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Sandy Redox (S5)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Stripped Matrix (S6)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Mucky Mineral (F1)
<input type="checkbox"/> Stratified Layers (A5) (LRR F)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)
<input type="checkbox"/> 1 cm Muck (A9) (LRR F, G, H)	<input type="checkbox"/> Depleted Matrix (F3)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Redox Dark Surface (F6)
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Depleted Dark Surface (F7)
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Redox Depressions (F8)
<input type="checkbox"/> 2.5 cm Mucky Peat or Peat (S2) (LRR G, H)	<input type="checkbox"/> High Plains Depressions (F16)
<input type="checkbox"/> 5 cm Mucky Peat or Peat (S3) (LRR F)	(MLRA 72 & 73 of LRR H)

Indicators for Problematic Hydric Soils³:

<input type="checkbox"/> 1 cm Muck (A9) (LRR I, J)
<input type="checkbox"/> Coast Prairie Redox (A16) (LRR F, G, H)
<input type="checkbox"/> Dark Surface (S7) (LRR G)
<input type="checkbox"/> High Plains Depressions (F16)
(LRR H outside of MLRA 72 & 73)
<input type="checkbox"/> Reduced Vertic (F18)
<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Very Shallow Dark Surface (TF12)
<input type="checkbox"/> Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____	N/A
Depth (inches): _____	N/A

Hydric Soil Present? Yes _____ No X

Remarks:

No positive indication of hydric soils was observed.

HYDROLOGY

Wetland hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)	Secondary Indicators (minimum of two required)
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Salt Crust (B11)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Invertebrates (B13)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)
<input type="checkbox"/> Drift Deposits (B3)	(where not tilled)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Presence of Reduced Iron (C4)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Water-Stained Leaves (B9)	
	<input type="checkbox"/> Surface Soil Cracks (B6)
	<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)
	<input type="checkbox"/> Drainage Patterns (B10)
	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)
	(where tilled)
	<input type="checkbox"/> Crayfish Burrows (C8)
	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
	<input type="checkbox"/> Geomorphic Position (D2)
	<input type="checkbox"/> FAC-Neutral Test (D5)
	<input type="checkbox"/> Frost-Heave Hummocks (D7) (LRR F)

Field Observations:

Surface Water Present? Yes _____ No <u>X</u>	Depth (inches): _____
Water Table Present? Yes _____ No <u>X</u>	Depth (inches): _____
Saturation Present? Yes _____ No <u>X</u>	Depth (inches): _____
(includes capillary fringe)	

Wetland Hydrology Present? Yes _____ No X

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

Remarks:

No positive indication of wetland hydrology was observed.

WETLAND DETERMINATION DATA FORM - Great Plains Region

Project/Site: Badger Wind Farm County: Logan Sampling Date: May 9, 2024
 Applicant/Owner: Badger Wind, LLC State: ND Sampling Point: 6W
 Investigator(s): M. Fettes and N/A Section, Township, Range: Sec. 8, T133N - R71W
 Landform (hillslope, terrace, etc.): Drainage Local relief (concave, convex, none): Concave Slope (%): 0-1%
 Subregion (LRR): LRRF Lat: 46.35419 Long: -99.63315 Datum: NAD83
 Soil Map Unit Name: E2819B - Reeder-Farnuf loams, 3 to 6% slopes NWI Classification: PEMC
 Are climatic / hydrologic conditions on the site typical for this time of year? (Yes / No) Yes (if no, explain in Remarks.)
 Are Vegetation NO, Soil NO, or Hydrology NO significantly disturbed? Are "Normal Circumstances" present? Yes X No _____
 Are Vegetation NO, Soil NO, or Hydrology NO naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <u>X</u> No _____	Is the Sampled Area within a Wetland? Yes <u>X</u> No _____
Hydric Soil Present?	Yes <u>X</u> No _____	
Wetland Hydrology Present?	Yes <u>X</u> No _____	

Remarks:
 This point was determined to be within a wetland due to the presence of all 3 wetland criteria.

VEGETATION - Use scientific names of plants.

	Absolute % cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
Tree Stratum (Plot size: 30 ft.)				Number of Dominant Species That Are OBL, FACW, or FAC <u>2</u> (A)
1. <u>None Observed</u>				Total Number of Dominant Species Across All Strata: <u>2</u> (B)
2. _____				Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100%</u> (A/B)
3. _____				Prevalence Index Worksheet:
4. _____				
_____ = Total Cover				OBL species <u>55</u> x 1 = <u>55</u>
Sapling/Shrub Stratum (Plot size: 15 ft.)				FACW species <u>20</u> x 2 = <u>40</u>
1. <u>None Observed</u>				FAC species _____ x 3 = _____
2. _____				FACU species _____ x 4 = _____
3. _____				UPL species _____ x 5 = _____
4. _____				Column Totals: <u>75</u> (A) <u>95</u> (B)
5. _____				Prevalence Index = B/A = <u>1.27</u>
_____ = Total Cover				Hydrophytic Vegetation Indicators:
Herb Stratum (Plot size: 5 ft.)				
1. <u>Typha latifolia</u>	<u>55</u>	<u>yes</u>	<u>OBL</u>	<u>X</u> 2 - Dominance Test is >50%
2. <u>Rumex maritimus</u>	<u>15</u>	<u>yes</u>	<u>FACW</u>	<u>X</u> 3 - Prevalence Index is ≤ 3.0 ¹
3. <u>Hordeum jubatum</u>	<u>5</u>	<u>no</u>	<u>FACW</u>	____ 4 - Morphological Adaptations ¹ (Explain)
4. _____				____ Problematic Hydrophytic Vegetation ¹ (Explain)
5. _____				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Provide supporting data in Remarks.
6. _____				Hydrophytic Vegetation Present? Yes <u>X</u> No _____
7. _____				
8. _____				
9. _____				
10. _____				
_____ = Total Cover				
Woody Vine Stratum (Plot size: 30 ft.)				
1. <u>None Observed</u>				
2. _____				
_____ = Total Cover				
% Bare Ground in Herb Stratum <u>25</u>				

Remarks: (if observed, list morphological adaptations below).
 A positive indication of hydrophytic vegetation was observed (>50% of dominant species indexed as OBL, FACW, or FAC).
 A positive indication of hydrophytic vegetation was observed (Prevalence Index is ≤ 3.00).

Sampling Point: 6W

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-4	10YR 2/2	100	NONE				Silt Loam	
4-12	10YR 2/2	95	7.5YR 4/6	5	C	M	Silt Loam	Rocky substrate

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soils Indicators: (Applicable to all LRRs, unless otherwise noted.)

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Gleyed Matrix (S4)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Sandy Redox (S5)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Stripped Matrix (S6)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Mucky Mineral (F1)
<input type="checkbox"/> Stratified Layers (A5) (LRR F)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)
<input type="checkbox"/> 1 cm Muck (A9) (LRR F, G, H)	<input type="checkbox"/> Depleted Matrix (F3)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input checked="" type="checkbox"/> Redox Dark Surface (F6)
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Depleted Dark Surface (F7)
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Redox Depressions (F8)
<input type="checkbox"/> 2.5 cm Mucky Peat or Peat (S2) (LRR G, H)	<input type="checkbox"/> High Plains Depressions (F16)
<input type="checkbox"/> 5 cm Mucky Peat or Peat (S3) (LRR F)	(MLRA 72 & 73 of LRR H)

Indicators for Problematic Hydric Soils³:

<input type="checkbox"/> 1 cm Muck (A9) (LRR I, J)
<input type="checkbox"/> Coast Prairie Redox (A16) (LRR F, G, H)
<input type="checkbox"/> Dark Surface (S7) (LRR G)
<input type="checkbox"/> High Plains Depressions (F16)
(LRR H outside of MLRA 72 & 73)
<input type="checkbox"/> Reduced Vertic (F18)
<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Very Shallow Dark Surface (TF12)
<input type="checkbox"/> Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____ N/A
Depth (inches): _____ N/A

Hydric Soil Present? Yes No _____

Remarks:

A positive indication of hydric soil was observed.

HYDROLOGY

Wetland hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (minimum of two required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Surface Soil Cracks (B6)	
<input checked="" type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	
<input checked="" type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input checked="" type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Dry-Season Water Table (C2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> (where tilled)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> (where not tilled)	<input type="checkbox"/> Crayfish Burrows (C8)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input checked="" type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)	<input checked="" type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)	<input checked="" type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Water-Stained Leaves (B9)		<input type="checkbox"/> Frost-Heave Hummocks (D7) (LRR F)	

Field Observations:

Surface Water Present? Yes _____ No Depth (inches): _____
Water Table Present? Yes No _____ Depth (inches): 5-12"
Saturation Present? Yes No _____ Depth (inches): 0-12"
(includes capillary fringe)

Wetland Hydrology Present? Yes No _____

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

Remarks:

A positive indication of wetland hydrology was observed (at least one primary indicator).

A positive indication of wetland hydrology was observed (at least two secondary indicators).

WETLAND DETERMINATION DATA FORM - Great Plains Region

Project/Site: Badger Wind Farm County: Logan Sampling Date: May 9, 2024
 Applicant/Owner: Badger Wind, LLC State: ND Sampling Point: 6U
 Investigator(s): M. Fettes and N/A Section, Township, Range: Sec. 8, T133N - R71W
 Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Convex Slope (%): 2-3%
 Subregion (LRR): LRRF Lat: 46.35428 Long: -99.63322 Datum: NAD83
 Soil Map Unit Name: E2819B - Reeder-Farnuf loams, 3 to 6% slopes NWI Classification: N/A
 Are climatic / hydrologic conditions on the site typical for this time of year? (Yes / No) Yes (if no, explain in Remarks.)
 Are Vegetation YES, Soil NO, or Hydrology NO significantly disturbed? Are "Normal Circumstances" present? Yes X No
 Are Vegetation NO, Soil NO, or Hydrology NO naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <u> </u> No <u>X</u>	Is the Sampled Area within a Wetland? Yes <u> </u> No <u>X</u>
Hydric Soil Present?	Yes <u> </u> No <u>X</u>	
Wetland Hydrology Present?	Yes <u> </u> No <u>X</u>	

Remarks:
 This point was determined not to be within a wetland due to the lack of all three wetland criteria.
 Within Agricultural field

VEGETATION - Use scientific names of plants.

	Absolute % cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
Tree Stratum (Plot size: 30 ft.)				Number of Dominant Species That Are OBL, FACW, or FAC <u> </u> (A)
1. <u>None Observed</u>				Total Number of Dominant Species Across All Strata: <u>1</u> (B)
2. <u> </u>				Percent of Dominant Species That Are OBL, FACW, or FAC: <u> </u> (A/B)
3. <u> </u>				
4. <u> </u>				
<u> </u> = Total Cover				
Sapling/Shrub Stratum (Plot size: 15 ft.)				
1. <u>None Observed</u>				
2. <u> </u>				
3. <u> </u>				
4. <u> </u>				
5. <u> </u>				
<u> </u> = Total Cover				
Herb Stratum (Plot size: 5 ft.)				
1. <u>Wheat</u>	50	yes	UPL	
2. <u> </u>				
3. <u> </u>				
4. <u> </u>				
5. <u> </u>				
6. <u> </u>				
7. <u> </u>				
8. <u> </u>				
9. <u> </u>				
10. <u> </u>				
<u> </u> = Total Cover				
Woody Vine Stratum (Plot size: 30 ft.)				
1. <u>None Observed</u>				
2. <u> </u>				
<u> </u> = Total Cover				
% Bare Ground in Herb Stratum <u>50</u>				

Prevalence Index Worksheet:

Total % Cover of:	Multiply by:
OBL species <u> </u>	x 1 = <u> </u>
FACW species <u> </u>	x 2 = <u> </u>
FAC species <u> </u>	x 3 = <u> </u>
FACU species <u> </u>	x 4 = <u> </u>
UPL species <u>50</u>	x 5 = <u>250</u>
Column Totals: <u>50</u> (A)	<u>250</u> (B)
Prevalence Index = B/A = <u>5.00</u>	

Hydrophytic Vegetation Indicators:

 1 - Rapid Test for Hydrophytic Vegetation

 2 - Dominance Test is >50%

 3 - Prevalence Index is ≤ 3.0¹

 4 - Morphological Adaptations¹ (Explain)

 Problematic Hydrophytic Vegetation¹ (Explain)

¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Provide supporting data in Remarks.

Hydrophytic Vegetation Present? Yes No X

Remarks: (if observed, list morphological adaptations below).
 No positive indication of hydrophytic vegetation was observed (≥50% of dominant species indexed as FAC- or drier).

Sampling Point: 6U

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix			Redox Features				Texture	Remarks
	Color (moist)		%	Color (moist)	%	Type ¹	Loc ²		
0-8	10YR	2/2	100	NONE				Silt Loam	
8-14	10YR	3/2	100	NONE				Silt Loam	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soils Indicators: (Applicable to all LRRs, unless otherwise noted.)

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Gleyed Matrix (S4)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Sandy Redox (S5)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Stripped Matrix (S6)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Mucky Mineral (F1)
<input type="checkbox"/> Stratified Layers (A5) (LRR F)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)
<input type="checkbox"/> 1 cm Muck (A9) (LRR F, G, H)	<input type="checkbox"/> Depleted Matrix (F3)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Redox Dark Surface (F6)
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Depleted Dark Surface (F7)
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Redox Depressions (F8)
<input type="checkbox"/> 2.5 cm Mucky Peat or Peat (S2) (LRR G, H)	<input type="checkbox"/> High Plains Depressions (F16)
<input type="checkbox"/> 5 cm Mucky Peat or Peat (S3) (LRR F)	(MLRA 72 & 73 of LRR H)

Indicators for Problematic Hydric Soils³:

<input type="checkbox"/> 1 cm Muck (A9) (LRR I, J)
<input type="checkbox"/> Coast Prairie Redox (A16) (LRR F, G, H)
<input type="checkbox"/> Dark Surface (S7) (LRR G)
<input type="checkbox"/> High Plains Depressions (F16)
(LRR H outside of MLRA 72 & 73)
<input type="checkbox"/> Reduced Vertic (F18)
<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Very Shallow Dark Surface (TF12)
<input type="checkbox"/> Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____	N/A
Depth (inches): _____	N/A

Hydric Soil Present? Yes _____ No X

Remarks:

No positive indication of hydric soils was observed.

HYDROLOGY

Wetland hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)	Secondary Indicators (minimum of two required)
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Salt Crust (B11)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Invertebrates (B13)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)
<input type="checkbox"/> Drift Deposits (B3)	(where not tilled)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Presence of Reduced Iron (C4)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Water-Stained Leaves (B9)	
	<input type="checkbox"/> Surface Soil Cracks (B6)
	<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)
	<input type="checkbox"/> Drainage Patterns (B10)
	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)
	(where tilled)
	<input type="checkbox"/> Crayfish Burrows (C8)
	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
	<input type="checkbox"/> Geomorphic Position (D2)
	<input type="checkbox"/> FAC-Neutral Test (D5)
	<input type="checkbox"/> Frost-Heave Hummocks (D7) (LRR F)

Field Observations:

Surface Water Present? Yes _____ No <u>X</u>	Depth (inches): _____
Water Table Present? Yes _____ No <u>X</u>	Depth (inches): _____
Saturation Present? Yes _____ No <u>X</u>	Depth (inches): _____
(includes capillary fringe)	

Wetland Hydrology Present? Yes _____ No X

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

Remarks:

No positive indication of wetland hydrology was observed.

WETLAND DETERMINATION DATA FORM - Great Plains Region

Project/Site: Badger Wind Farm County: Logan Sampling Date: May 9, 2024
 Applicant/Owner: Badger Wind, LLC State: ND Sampling Point: 7W
 Investigator(s): M. Fettes and N/A Section, Township, Range: Sec. 8, T133N - R71W
 Landform (hillslope, terrace, etc.): Drainage Local relief (concave, convex, none): Concave Slope (%): 1-2%
 Subregion (LRR): LRRF Lat: 46.35390 Long: -99.63269 Datum: NAD83
 Soil Map Unit Name: E2819B - Reeder-Farnuf loams, 3 to 6% slopes NWI Classification: PEMC
 Are climatic / hydrologic conditions on the site typical for this time of year? (Yes / No) Yes (if no, explain in Remarks.)
 Are Vegetation NO, Soil NO, or Hydrology NO significantly disturbed? Are "Normal Circumstances" present? Yes X No _____
 Are Vegetation NO, Soil NO, or Hydrology NO naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <u>X</u> No _____	Is the Sampled Area within a Wetland?	Yes <u>X</u> No _____
Hydric Soil Present? Yes <u>X</u> No _____		
Wetland Hydrology Present? Yes <u>X</u> No _____		

Remarks:
 This point was determined to be within a wetland due to the presence of all 3 wetland criteria.

VEGETATION - Use scientific names of plants.

	Absolute % cover	Dominant Species?	Indicator Status	Dominance Test worksheet:	
Tree Stratum (Plot size: 30 ft.)				Number of Dominant Species That Are OBL, FACW, or FAC <u>2</u> (A)	
1. <u>None Observed</u>				Total Number of Dominant Species Across All Strata: <u>2</u> (B)	
2. _____				Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100%</u> (A/B)	
3. _____				Prevalence Index Worksheet:	
4. _____					Total % Cover of: _____ Multiply by: _____
_____ = Total Cover					OBL species <u>60</u> x 1 = <u>60</u>
Sapling/Shrub Stratum (Plot size: 15 ft.)					FACW species _____ x 2 = _____
1. <u>None Observed</u>					FAC species <u>35</u> x 3 = <u>105</u>
2. _____				FACU species _____ x 4 = _____	
3. _____				UPL species _____ x 5 = _____	
4. _____				Column Totals: <u>95</u> (A) <u>165</u> (B)	
5. _____				Prevalence Index = B/A = <u>1.74</u>	
_____ = Total Cover				Hydrophytic Vegetation Indicators:	
Herb Stratum (Plot size: 5 ft.)					<u>X</u> 1 - Rapid Test for Hydrophytic Vegetation
1. <u>Typha latifolia</u>	60	yes	OBL		<u>X</u> 2 - Dominance Test is >50%
2. <u>Equisetum laevigatum</u>	35	yes	FAC		<u>X</u> 3 - Prevalence Index is ≤ 3.0 ¹
3. _____					____ 4 - Morphological Adaptations ¹ (Explain)
4. _____					____ Problematic Hydrophytic Vegetation ¹ (Explain)
5. _____					¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Provide supporting data in Remarks.
6. _____					Hydrophytic Vegetation Present? Yes <u>X</u> No _____
7. _____					
8. _____					
9. _____					
10. _____					
_____ = Total Cover					
Woody Vine Stratum (Plot size: 30 ft.)					
1. <u>None Observed</u>					
2. _____					
_____ = Total Cover					
% Bare Ground in Herb Stratum <u>5</u>					

Remarks: (if observed, list morphological adaptations below).
 A positive indication of hydrophytic vegetation was observed (>50% of dominant species indexed as OBL, FACW, or FAC).
 A positive indication of hydrophytic vegetation was observed (Prevalence Index is ≤ 3.00).

Sampling Point: 7W

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-4	10YR 2/2	95	7.5YR 4/6	5	C	M	Silt Loam	
4-10	10YR 2/2	80	7.5YR 4/6	20	C	M	Silt Loam	Rocky substrate

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soils Indicators: (Applicable to all LRRs, unless otherwise noted.)

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Gleyed Matrix (S4)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Sandy Redox (S5)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Stripped Matrix (S6)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Mucky Mineral (F1)
<input type="checkbox"/> Stratified Layers (A5) (LRR F)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)
<input type="checkbox"/> 1 cm Muck (A9) (LRR F, G, H)	<input type="checkbox"/> Depleted Matrix (F3)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input checked="" type="checkbox"/> Redox Dark Surface (F6)
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Depleted Dark Surface (F7)
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Redox Depressions (F8)
<input type="checkbox"/> 2.5 cm Mucky Peat or Peat (S2) (LRR G, H)	<input type="checkbox"/> High Plains Depressions (F16)
<input type="checkbox"/> 5 cm Mucky Peat or Peat (S3) (LRR F)	(MLRA 72 & 73 of LRR H)

Indicators for Problematic Hydric Soils³:

<input type="checkbox"/> 1 cm Muck (A9) (LRR I, J)
<input type="checkbox"/> Coast Prairie Redox (A16) (LRR F, G, H)
<input type="checkbox"/> Dark Surface (S7) (LRR G)
<input type="checkbox"/> High Plains Depressions (F16)
(LRR H outside of MLRA 72 & 73)
<input type="checkbox"/> Reduced Vertic (F18)
<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Very Shallow Dark Surface (TF12)
<input type="checkbox"/> Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: <u>N/A</u>	Hydric Soil Present? Yes <u>X</u> No <u> </u>
Depth (inches): <u>N/A</u>	

Remarks:

A positive indication of hydric soil was observed.

HYDROLOGY

Wetland hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)	Secondary Indicators (minimum of two required)
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Surface Soil Cracks (B6)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)
<input checked="" type="checkbox"/> Saturation (A3)	<input checked="" type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> (where tilled)
<input checked="" type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Crayfish Burrows (C8)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input checked="" type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Iron Deposits (B5)	<input checked="" type="checkbox"/> Geomorphic Position (D2)
<input checked="" type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input checked="" type="checkbox"/> FAC-Neutral Test (D5)
<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Frost-Heave Hummocks (D7) (LRR F)

Field Observations:

Surface Water Present? Yes <u> </u> No <input checked="" type="checkbox"/>	Depth (inches): <u> </u>	Wetland Hydrology Present? Yes <u>X</u> No <u> </u>
Water Table Present? Yes <u> </u> No <input checked="" type="checkbox"/>	Depth (inches): <u> </u>	
Saturation Present? Yes <input checked="" type="checkbox"/> No <u> </u>	Depth (inches): <u>0-10"</u>	

(includes capillary fringe)

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

Remarks:

A positive indication of wetland hydrology was observed (at least one primary indicator).

A positive indication of wetland hydrology was observed (at least two secondary indicators).

WETLAND DETERMINATION DATA FORM - Great Plains Region

Project/Site: Badger Wind Farm County: Logan Sampling Date: May 9, 2024
 Applicant/Owner: Badger Wind, LLC State: ND Sampling Point: 7U
 Investigator(s): M. Fettes and N/A Section, Township, Range: Sec. 8, T133N - R71W
 Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Convex Slope (%): 3-4%
 Subregion (LRR): LRRF Lat: 46.35399 Long: -99.63280 Datum: NAD83
 Soil Map Unit Name: E2819B - Reeder-Farnuf loams, 3 to 6% slopes NWI Classification: N/A
 Are climatic / hydrologic conditions on the site typical for this time of year? (Yes / No) Yes (if no, explain in Remarks.)
 Are Vegetation YES, Soil NO, or Hydrology NO significantly disturbed? Are "Normal Circumstances" present? Yes X No
 Are Vegetation NO, Soil NO, or Hydrology NO naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <u> </u> No <u>X</u>	Is the Sampled Area within a Wetland? Yes <u> </u> No <u>X</u>
Hydric Soil Present?	Yes <u> </u> No <u>X</u>	
Wetland Hydrology Present?	Yes <u> </u> No <u>X</u>	

Remarks:
 This point was determined not to be within a wetland due to the lack of all three wetland criteria.
 Within Agricultural field

VEGETATION - Use scientific names of plants.

	Absolute % cover	Dominant Species?	Indicator Status																	
Tree Stratum (Plot size: 30 ft.)																				
1. <u>None Observed</u>				Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC <u> </u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u> </u> (A/B)																
2. <u> </u>																				
3. <u> </u>																				
4. <u> </u>																				
Sapling/Shrub Stratum (Plot size: 15 ft.)																				
1. <u>None Observed</u>				Prevalence Index Worksheet: <table border="0" style="width: 100%;"> <tr> <td style="text-align: right;">Total % Cover of:</td> <td style="text-align: right;">Multiply by:</td> </tr> <tr> <td>OBL species <u> </u></td> <td>x 1 = <u> </u></td> </tr> <tr> <td>FACW species <u> </u></td> <td>x 2 = <u> </u></td> </tr> <tr> <td>FAC species <u> </u></td> <td>x 3 = <u> </u></td> </tr> <tr> <td>FACU species <u> </u></td> <td>x 4 = <u> </u></td> </tr> <tr> <td>UPL species <u>50</u></td> <td>x 5 = <u>250</u></td> </tr> <tr> <td>Column Totals: <u>50</u></td> <td>(A) <u>250</u> (B)</td> </tr> <tr> <td>Prevalence Index = B/A = <u>5.00</u></td> <td></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u> </u>	x 1 = <u> </u>	FACW species <u> </u>	x 2 = <u> </u>	FAC species <u> </u>	x 3 = <u> </u>	FACU species <u> </u>	x 4 = <u> </u>	UPL species <u>50</u>	x 5 = <u>250</u>	Column Totals: <u>50</u>	(A) <u>250</u> (B)	Prevalence Index = B/A = <u>5.00</u>	
Total % Cover of:	Multiply by:																			
OBL species <u> </u>	x 1 = <u> </u>																			
FACW species <u> </u>	x 2 = <u> </u>																			
FAC species <u> </u>	x 3 = <u> </u>																			
FACU species <u> </u>	x 4 = <u> </u>																			
UPL species <u>50</u>	x 5 = <u>250</u>																			
Column Totals: <u>50</u>	(A) <u>250</u> (B)																			
Prevalence Index = B/A = <u>5.00</u>																				
2. <u> </u>																				
3. <u> </u>																				
4. <u> </u>																				
5. <u> </u>																				
Herb Stratum (Plot size: 5 ft.)																				
1. <u>Wheat</u>	50	yes	UPL	Hydrophytic Vegetation Indicators: ___ 1 - Rapid Test for Hydrophytic Vegetation ___ 2 - Dominance Test is >50% ___ 3 - Prevalence Index is ≤ 3.0 ¹ ___ 4 - Morphological Adaptations ¹ (Explain) ___ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Provide supporting data in Remarks. Hydrophytic Vegetation Present? Yes <u> </u> No <u>X</u>																
2. <u> </u>																				
3. <u> </u>																				
4. <u> </u>																				
5. <u> </u>																				
6. <u> </u>																				
7. <u> </u>																				
8. <u> </u>																				
9. <u> </u>																				
10. <u> </u>																				
Woody Vine Stratum (Plot size: 30 ft.)																				
1. <u>None Observed</u>																				
2. <u> </u>																				
% Bare Ground in Herb Stratum <u>50</u>																				

Remarks: (if observed, list morphological adaptations below).
 No positive indication of hydrophytic vegetation was observed (≥50% of dominant species indexed as FAC- or drier).

Sampling Point: 7U

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix			Redox Features				Texture	Remarks
	Color (moist)		%	Color (moist)	%	Type ¹	Loc ²		
0-6	10YR 2/2		100	NONE				Silt Loam	
6-10	10YR 2/2		70	NONE				Silt Loam	
	10YR 3/3		30	NONE					
10-14	10YR 3/3		100	NONE				Silt Loam	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soils Indicators: (Applicable to all LRRs, unless otherwise noted.)

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> 1 cm Muck (A9) (LRR I, J)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> Coast Prairie Redox (A16) (LRR F, G, H)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Dark Surface (S7) (LRR G)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Mucky Mineral (F1)	<input type="checkbox"/> High Plains Depressions (F16)
<input type="checkbox"/> Stratified Layers (A5) (LRR F)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	(LRR H outside of MLRA 72 & 73)
<input type="checkbox"/> 1 cm Muck (A9) (LRR F, G, H)	<input type="checkbox"/> Depleted Matrix (F3)	<input type="checkbox"/> Reduced Vertic (F18)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Redox Dark Surface (F6)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Depleted Dark Surface (F7)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Redox Depressions (F8)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> 2.5 cm Mucky Peat or Peat (S2) (LRR G, H)	<input type="checkbox"/> High Plains Depressions (F16)	³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
<input type="checkbox"/> 5 cm Mucky Peat or Peat (S3) (LRR F)	(MLRA 72 & 73 of LRR H)	

Restrictive Layer (if observed):

Type: _____ N/A
 Depth (inches): _____ N/A

Hydric Soil Present? Yes _____ No X

Remarks:

No positive indication of hydric soils was observed.

HYDROLOGY

Wetland hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)	Secondary Indicators (minimum of two required)
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Salt Crust (B11)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Invertebrates (B13)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)
<input type="checkbox"/> Drift Deposits (B3)	(where not tilled)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Presence of Reduced Iron (C4)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Water-Stained Leaves (B9)	
	<input type="checkbox"/> Surface Soil Cracks (B6)
	<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)
	<input type="checkbox"/> Drainage Patterns (B10)
	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)
	(where tilled)
	<input type="checkbox"/> Crayfish Burrows (C8)
	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
	<input type="checkbox"/> Geomorphic Position (D2)
	<input type="checkbox"/> FAC-Neutral Test (D5)
	<input type="checkbox"/> Frost-Heave Hummocks (D7) (LRR F)

Field Observations:

Surface Water Present? Yes _____ No X Depth (inches): _____
 Water Table Present? Yes _____ No X Depth (inches): _____
 Saturation Present? Yes _____ No X Depth (inches): _____
 (includes capillary fringe)

Wetland Hydrology Present? Yes _____ No X

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

Remarks:

No positive indication of wetland hydrology was observed.

WETLAND DETERMINATION DATA FORM - Great Plains Region

Project/Site: Badger Wind Farm County: Logan Sampling Date: May 9, 2024
 Applicant/Owner: Badger Wind, LLC State: ND Sampling Point: 8W
 Investigator(s): M. Fettes and N/A Section, Township, Range: Sec. 5, T133N - R71W
 Landform (hillslope, terrace, etc.): Drainage Local relief (concave, convex, none): Concave Slope (%): 1-2%
 Subregion (LRR): LRRF Lat: 46.36317 Long: -99.63301 Datum: NAD83
 Soil Map Unit Name: C877B - Wabek-Lehr complex, 2 to 6% slopes NWI Classification: PEMA
 Are climatic / hydrologic conditions on the site typical for this time of year? (Yes / No) Yes (if no, explain in Remarks.)
 Are Vegetation NO, Soil NO, or Hydrology NO significantly disturbed? Are "Normal Circumstances" present? Yes X No _____
 Are Vegetation NO, Soil NO, or Hydrology NO naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <u>X</u> No _____	Is the Sampled Area within a Wetland? Yes <u>X</u> No _____
Hydric Soil Present? Yes <u>X</u> No _____	
Wetland Hydrology Present? Yes <u>X</u> No _____	

Remarks:
 This point was determined to be within a wetland due to the presence of all 3 wetland criteria.

VEGETATION - Use scientific names of plants.

	Absolute % cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
Tree Stratum (Plot size: 30 ft.)				Number of Dominant Species That Are OBL, FACW, or FAC <u>1</u> (A)
1. <u>None Observed</u>				Total Number of Dominant Species Across All Strata: <u>1</u> (B)
2. _____				Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100%</u> (A/B)
3. _____				Prevalence Index Worksheet: Total % Cover of: _____ Multiply by: OBL species _____ x 1 = _____ FACW species <u>85</u> x 2 = <u>170</u> FAC species <u>10</u> x 3 = <u>30</u> FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: <u>95</u> (A) <u>200</u> (B) Prevalence Index = B/A = <u>2.11</u>
4. _____				
_____ = Total Cover				
Sapling/Shrub Stratum (Plot size: 15 ft.)				
1. <u>None Observed</u>				
2. _____				
3. _____				
4. _____				
5. _____				
_____ = Total Cover				
Herb Stratum (Plot size: 5 ft.)				Hydrophytic Vegetation Indicators: <input checked="" type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation <input checked="" type="checkbox"/> 2 - Dominance Test is >50% <input checked="" type="checkbox"/> 3 - Prevalence Index is ≤ 3.0 ¹ _____ 4 - Morphological Adaptations ¹ (Explain) _____ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Provide supporting data in Remarks.
1. <u>Alopecurus arundinaceus</u>	<u>85</u>	<u>yes</u>	<u>FACW</u>	
2. <u>Equisetum laevigatum</u>	<u>10</u>	<u>no</u>	<u>FAC</u>	
3. _____				
4. _____				
5. _____				
6. _____				
7. _____				
8. _____				
9. _____				
10. _____				
_____ = Total Cover				
Woody Vine Stratum (Plot size: 30 ft.)				Hydrophytic Vegetation Present? Yes <u>X</u> No _____
1. <u>None Observed</u>				
2. _____				
_____ = Total Cover				
% Bare Ground in Herb Stratum <u>5</u>				

Remarks: (if observed, list morphological adaptations below).
 A positive indication of hydrophytic vegetation was observed (>50% of dominant species indexed as OBL, FACW, or FAC).
 A positive indication of hydrophytic vegetation was observed (Prevalence Index is ≤ 3.00).

Sampling Point: 8W

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix			Redox Features				Texture	Remarks
	Color (moist)		%	Color (moist)	%	Type ¹	Loc ²		
0-6	10YR 3/2		100	NONE				Loam	
6-10	10YR 2/2		98	7.5YR 4/6	2	C	M	Loam	
10-14	10YR 4/2		90	7.5YR 4/6	10	C	M	Loam	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soils Indicators: (Applicable to all LRRs, unless otherwise noted.)

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Gleyed Matrix (S4)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Sandy Redox (S5)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Stripped Matrix (S6)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Mucky Mineral (F1)
<input type="checkbox"/> Stratified Layers (A5) (LRR F)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)
<input type="checkbox"/> 1 cm Muck (A9) (LRR F, G, H)	<input type="checkbox"/> Depleted Matrix (F3)
<input checked="" type="checkbox"/> Depleted Below Dark Surface (A11)	<input checked="" type="checkbox"/> Redox Dark Surface (F6)
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Depleted Dark Surface (F7)
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Redox Depressions (F8)
<input type="checkbox"/> 2.5 cm Mucky Peat or Peat (S2) (LRR G, H)	<input type="checkbox"/> High Plains Depressions (F16)
<input type="checkbox"/> 5 cm Mucky Peat or Peat (S3) (LRR F)	(MLRA 72 & 73 of LRR H)

Indicators for Problematic Hydric Soils³:

<input type="checkbox"/> 1 cm Muck (A9) (LRR I, J)
<input type="checkbox"/> Coast Prairie Redox (A16) (LRR F, G, H)
<input type="checkbox"/> Dark Surface (S7) (LRR G)
<input type="checkbox"/> High Plains Depressions (F16)
(LRR H outside of MLRA 72 & 73)
<input type="checkbox"/> Reduced Vertic (F18)
<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Very Shallow Dark Surface (TF12)
<input type="checkbox"/> Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____	N/A
Depth (inches): _____	N/A

Hydric Soil Present? Yes No _____

Remarks:

A positive indication of hydric soil was observed.

HYDROLOGY

Wetland hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)	Secondary Indicators (minimum of two required)
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Salt Crust (B11)
<input checked="" type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Invertebrates (B13)
<input checked="" type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)
<input type="checkbox"/> Drift Deposits (B3)	(where not tilled)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Presence of Reduced Iron (C4)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Water-Stained Leaves (B9)	
	<input type="checkbox"/> Surface Soil Cracks (B6)
	<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)
	<input checked="" type="checkbox"/> Drainage Patterns (B10)
	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)
	(where tilled)
	<input type="checkbox"/> Crayfish Burrows (C8)
	<input checked="" type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
	<input checked="" type="checkbox"/> Geomorphic Position (D2)
	<input checked="" type="checkbox"/> FAC-Neutral Test (D5)
	<input type="checkbox"/> Frost-Heave Hummocks (D7) (LRR F)

Field Observations:

Surface Water Present? Yes _____ No <input checked="" type="checkbox"/>	Depth (inches): _____
Water Table Present? Yes <input checked="" type="checkbox"/> No _____	Depth (inches): <u>0-14"</u>
Saturation Present? Yes <input checked="" type="checkbox"/> No _____	Depth (inches): <u>0-14"</u>
(includes capillary fringe)	

Wetland Hydrology Present? Yes No _____

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

Remarks:

A positive indication of wetland hydrology was observed (at least one primary indicator).

A positive indication of wetland hydrology was observed (at least two secondary indicators).

WETLAND DETERMINATION DATA FORM - Great Plains Region

Project/Site: Badger Wind Farm County: Logan Sampling Date: May 9, 2024
 Applicant/Owner: Badger Wind, LLC State: ND Sampling Point: 8U
 Investigator(s): M. Fettes and N/A Section, Township, Range: Sec. 5, T133N - R71W
 Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Concave Slope (%): 4-5%
 Subregion (LRR): LRRF Lat: 46.36318 Long: -99.63291 Datum: NAD83
 Soil Map Unit Name: C877B - Wabek-Lehr complex, 2 to 6% slopes NWI Classification: N/A
 Are climatic / hydrologic conditions on the site typical for this time of year? (Yes / No) Yes (if no, explain in Remarks.)
 Are Vegetation NO, Soil NO, or Hydrology NO significantly disturbed? Are "Normal Circumstances" present? Yes X No
 Are Vegetation NO, Soil NO, or Hydrology NO naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <u> </u> No <u>X</u>	Is the Sampled Area within a Wetland? Yes <u> </u> No <u>X</u>
Hydric Soil Present?	Yes <u> </u> No <u>X</u>	
Wetland Hydrology Present?	Yes <u> </u> No <u>X</u>	

Remarks:
 This point was determined not to be within a wetland due to the lack of all three wetland criteria.

VEGETATION - Use scientific names of plants.

	Absolute % cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
Tree Stratum (Plot size: 30 ft.)				Number of Dominant Species That Are OBL, FACW, or FAC <u> </u> (A)
1. <u>None Observed</u>				Total Number of Dominant Species Across All Strata: <u>3</u> (B)
2. <u> </u>				Percent of Dominant Species That Are OBL, FACW, or FAC: <u> </u> (A/B)
3. <u> </u>				Prevalence Index Worksheet:
4. <u> </u>				
<u> </u> = Total Cover				OBL species <u> </u> x 1 = <u> </u>
Sapling/Shrub Stratum (Plot size: 15 ft.)				FACW species <u> </u> x 2 = <u> </u>
1. <u>None Observed</u>				FAC species <u> </u> x 3 = <u> </u>
2. <u> </u>				FACU species <u>30</u> x 4 = <u>120</u>
3. <u> </u>				UPL species <u>70</u> x 5 = <u>350</u>
4. <u> </u>				Column Totals: <u>100</u> (A) <u>470</u> (B)
5. <u> </u>				Prevalence Index = B/A = <u>4.70</u>
<u> </u> = Total Cover				Hydrophytic Vegetation Indicators:
Herb Stratum (Plot size: 5 ft.)				
1. <u>Bromus inermis</u>	50	yes	UPL	<u> </u> 2 - Dominance Test is >50%
2. <u>Poa pratensis</u>	25	yes	FACU	<u> </u> 3 - Prevalence Index is ≤ 3.0 ¹
3. <u>Agropyron cristatum</u>	20	yes	UPL	<u> </u> 4 - Morphological Adaptations ¹ (Explain)
4. <u>Artemisia ludoviciana</u>	5	no	FACU	<u> </u> Problematic Hydrophytic Vegetation ¹ (Explain)
5. <u> </u>				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Provide supporting data in Remarks.
6. <u> </u>				Hydrophytic Vegetation Present? Yes <u> </u> No <u>X</u>
7. <u> </u>				
8. <u> </u>				
9. <u> </u>				
10. <u> </u>				
<u> </u> = Total Cover				
Woody Vine Stratum (Plot size: 30 ft.)				
1. <u>None Observed</u>				
2. <u> </u>				
<u> </u> = Total Cover				
% Bare Ground in Herb Stratum <u>0</u>				

Remarks: (if observed, list morphological adaptations below).
 No positive indication of hydrophytic vegetation was observed (≥50% of dominant species indexed as FAC- or drier).

Sampling Point: 8U

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix			Redox Features				Texture	Remarks
	Color (moist)		%	Color (moist)	%	Type ¹	Loc ²		
0-5	10YR	3/1	100	NONE				Loam	
5-12	10YR	3/3	100	NONE				Silt Loam	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soils Indicators: (Applicable to all LRRs, unless otherwise noted.)

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> 1 cm Muck (A9) (LRR I, J)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> Coast Prairie Redox (A16) (LRR F, G, H)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Dark Surface (S7) (LRR G)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Mucky Mineral (F1)	<input type="checkbox"/> High Plains Depressions (F16)
<input type="checkbox"/> Stratified Layers (A5) (LRR F)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	(LRR H outside of MLRA 72 & 73)
<input type="checkbox"/> 1 cm Muck (A9) (LRR F, G, H)	<input type="checkbox"/> Depleted Matrix (F3)	<input type="checkbox"/> Reduced Vertic (F18)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Redox Dark Surface (F6)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Depleted Dark Surface (F7)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Redox Depressions (F8)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> 2.5 cm Mucky Peat or Peat (S2) (LRR G, H)	<input type="checkbox"/> High Plains Depressions (F16)	³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
<input type="checkbox"/> 5 cm Mucky Peat or Peat (S3) (LRR F)	(MLRA 72 & 73 of LRR H)	

Restrictive Layer (if observed):

Type: <u>N/A</u>	Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Depth (inches): <u>N/A</u>	

Remarks:

No positive indication of hydric soils was observed.

HYDROLOGY

Wetland hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)	Secondary Indicators (minimum of two required)
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Surface Soil Cracks (B6)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> (where tilled)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Crayfish Burrows (C8)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> FAC-Neutral Test (D5)
<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Frost-Heave Hummocks (D7) (LRR F)
<input type="checkbox"/> Salt Crust (B11)	
<input type="checkbox"/> Aquatic Invertebrates (B13)	
<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	
<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	
<input type="checkbox"/> (where not tilled)	
<input type="checkbox"/> Presence of Reduced Iron (C4)	
<input type="checkbox"/> Thin Muck Surface (C7)	
<input type="checkbox"/> Other (Explain in Remarks)	

Field Observations:

Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches): <u> </u>	Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches): <u> </u>	
Saturation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches): <u> </u>	
(includes capillary fringe)		

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

Remarks:

No positive indication of wetland hydrology was observed.

WETLAND DETERMINATION DATA FORM - Great Plains Region

Project/Site: Badger Wind Farm County: Logan Sampling Date: May 9, 2024
 Applicant/Owner: Badger Wind, LLC State: ND Sampling Point: 9W
 Investigator(s): M. Fettes and N/A Section, Township, Range: Sec. 8, T133N - R71W
 Landform (hillslope, terrace, etc.): Drainage Local relief (concave, convex, none): Concave Slope (%): 1-2%
 Subregion (LRR): LRRF Lat: 46.35140 Long: -99.63067 Datum: NAD83
 Soil Map Unit Name: E2607D - Amor-Werner loams, 9 to 15% slopes NWI Classification: PEMF
 Are climatic / hydrologic conditions on the site typical for this time of year? (Yes / No) Yes (if no, explain in Remarks.)
 Are Vegetation NO, Soil NO, or Hydrology NO significantly disturbed? Are "Normal Circumstances" present? Yes X No _____
 Are Vegetation NO, Soil NO, or Hydrology NO naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <u>X</u> No _____	Is the Sampled Area within a Wetland? Yes <u>X</u> No _____
Hydric Soil Present? Yes <u>X</u> No _____	
Wetland Hydrology Present? Yes <u>X</u> No _____	

Remarks:
 This point was determined to be within a wetland due to the presence of all 3 wetland criteria.

VEGETATION - Use scientific names of plants.

	Absolute % cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
Tree Stratum (Plot size: 30 ft.)				Number of Dominant Species That Are OBL, FACW, or FAC <u>1</u> (A)
1. <u>None Observed</u>				Total Number of Dominant Species Across All Strata: <u>1</u> (B)
2. _____				Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100%</u> (A/B)
3. _____				Prevalence Index Worksheet: Total % Cover of: Multiply by: OBL species <u>100</u> x 1 = <u>100</u> FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: <u>100</u> (A) <u>100</u> (B) Prevalence Index = B/A = <u>1.00</u>
4. _____				
_____ = Total Cover				
Sapling/Shrub Stratum (Plot size: 15 ft.)				
1. <u>None Observed</u>				
2. _____				
3. _____				
4. _____				
5. _____				
_____ = Total Cover				
Herb Stratum (Plot size: 5 ft.)				Hydrophytic Vegetation Indicators: <input checked="" type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation <input checked="" type="checkbox"/> 2 - Dominance Test is >50% <input checked="" type="checkbox"/> 3 - Prevalence Index is ≤ 3.0 ¹ _____ 4 - Morphological Adaptations ¹ (Explain) _____ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Provide supporting data in Remarks.
1. <u>Carex pellita</u>	<u>100</u>	<u>yes</u>	<u>OBL</u>	
2. _____				
3. _____				
4. _____				
5. _____				
6. _____				
7. _____				
8. _____				
9. _____				
10. _____				
_____ = Total Cover				
Woody Vine Stratum (Plot size: 30 ft.)				Hydrophytic Vegetation Present? Yes <u>X</u> No _____
1. <u>None Observed</u>				
2. _____				
_____ = Total Cover				
% Bare Ground in Herb Stratum <u>0</u>				

Remarks: (if observed, list morphological adaptations below).
 A positive indication of hydrophytic vegetation was observed (>50% of dominant species indexed as OBL, FACW, or FAC).
 A positive indication of hydrophytic vegetation was observed (Prevalence Index is ≤ 3.00).

Sampling Point: 9W

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix			Redox Features				Texture	Remarks
	Color (moist)		%	Color (moist)	%	Type ¹	Loc ²		
0-3	10YR 2/2		100	NONE				Loam	
3-8	2.5Y 2/2		90	7.5YR 4/6	10	C	M	Silt Loam	
8-14	2.5Y 5/2		90	7.5YR 4/6	10	C	M	Silt Loam	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soils Indicators: (Applicable to all LRRs, unless otherwise noted.)

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Gleyed Matrix (S4)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Sandy Redox (S5)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Stripped Matrix (S6)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Mucky Mineral (F1)
<input type="checkbox"/> Stratified Layers (A5) (LRR F)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)
<input type="checkbox"/> 1 cm Muck (A9) (LRR F, G, H)	<input type="checkbox"/> Depleted Matrix (F3)
<input checked="" type="checkbox"/> Depleted Below Dark Surface (A11)	<input checked="" type="checkbox"/> Redox Dark Surface (F6)
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Depleted Dark Surface (F7)
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Redox Depressions (F8)
<input type="checkbox"/> 2.5 cm Mucky Peat or Peat (S2) (LRR G, H)	<input type="checkbox"/> High Plains Depressions (F16)
<input type="checkbox"/> 5 cm Mucky Peat or Peat (S3) (LRR F)	(MLRA 72 & 73 of LRR H)

Indicators for Problematic Hydric Soils³:

<input type="checkbox"/> 1 cm Muck (A9) (LRR I, J)
<input type="checkbox"/> Coast Prairie Redox (A16) (LRR F, G, H)
<input type="checkbox"/> Dark Surface (S7) (LRR G)
<input type="checkbox"/> High Plains Depressions (F16)
(LRR H outside of MLRA 72 & 73)
<input type="checkbox"/> Reduced Vertic (F18)
<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Very Shallow Dark Surface (TF12)
<input type="checkbox"/> Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____	N/A
Depth (inches): _____	N/A

Hydric Soil Present? Yes No

Remarks:

A positive indication of hydric soil was observed.

HYDROLOGY

Wetland hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)	Secondary Indicators (minimum of two required)
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Salt Crust (B11)
<input checked="" type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Invertebrates (B13)
<input checked="" type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)
<input type="checkbox"/> Drift Deposits (B3)	(where not tilled)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Presence of Reduced Iron (C4)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)
<input checked="" type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Water-Stained Leaves (B9)	
	<input type="checkbox"/> Surface Soil Cracks (B6)
	<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)
	<input checked="" type="checkbox"/> Drainage Patterns (B10)
	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)
	(where tilled)
	<input type="checkbox"/> Crayfish Burrows (C8)
	<input checked="" type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
	<input checked="" type="checkbox"/> Geomorphic Position (D2)
	<input checked="" type="checkbox"/> FAC-Neutral Test (D5)
	<input type="checkbox"/> Frost-Heave Hummocks (D7) (LRR F)

Field Observations:

Surface Water Present? Yes _____ No <input checked="" type="checkbox"/>	Depth (inches): _____
Water Table Present? Yes <input checked="" type="checkbox"/> No _____	Depth (inches): 4-14"
Saturation Present? Yes <input checked="" type="checkbox"/> No _____	Depth (inches): 0-14"
(includes capillary fringe)	

Wetland Hydrology Present? Yes No

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

Remarks:

A positive indication of wetland hydrology was observed (at least one primary indicator).

A positive indication of wetland hydrology was observed (at least two secondary indicators).

WETLAND DETERMINATION DATA FORM - Great Plains Region

Project/Site: Badger Wind Farm County: Logan Sampling Date: May 9, 2024
 Applicant/Owner: Badger Wind, LLC State: ND Sampling Point: 9U
 Investigator(s): M. Fettes and N/A Section, Township, Range: Sec. 8, T133N - R71W
 Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Convex Slope (%): 2-3%
 Subregion (LRR): LRRF Lat: 46.35148 Long: -99.63073 Datum: NAD83
 Soil Map Unit Name: E2607D - Amor-Werner loams, 9 to 15% slopes NWI Classification: N/A
 Are climatic / hydrologic conditions on the site typical for this time of year? (Yes / No) Yes (if no, explain in Remarks.)
 Are Vegetation YES, Soil NO, or Hydrology NO significantly disturbed? Are "Normal Circumstances" present? Yes X No _____
 Are Vegetation NO, Soil NO, or Hydrology NO naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____ No <u>X</u>	Is the Sampled Area within a Wetland? Yes _____ No <u>X</u>
Hydric Soil Present?	Yes _____ No <u>X</u>	
Wetland Hydrology Present?	Yes _____ No <u>X</u>	

Remarks:
 This point was determined not to be within a wetland due to the lack of all three wetland criteria.
 Within Agricultural field

VEGETATION - Use scientific names of plants.

	Absolute % cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
Tree Stratum (Plot size: 30 ft.)				Number of Dominant Species That Are OBL, FACW, or FAC _____ (A)
1. <u>None Observed</u>				Total Number of Dominant Species Across All Strata: <u>1</u> (B)
2. _____				Percent of Dominant Species That Are OBL, FACW, or FAC: _____ (A/B)
3. _____				Prevalence Index Worksheet:
4. _____				
_____ = Total Cover				OBL species _____ x 1 = _____
Sapling/Shrub Stratum (Plot size: 15 ft.)				FACW species _____ x 2 = _____
1. <u>None Observed</u>				FAC species _____ x 3 = _____
2. _____				FACU species _____ x 4 = _____
3. _____				UPL species <u>50</u> x 5 = <u>250</u>
4. _____				Column Totals: <u>50</u> (A) <u>250</u> (B)
5. _____				Prevalence Index = B/A = <u>5.00</u>
_____ = Total Cover				Hydrophytic Vegetation Indicators:
Herb Stratum (Plot size: 5 ft.)				
1. <u>Wheat</u>	<u>50</u>	<u>yes</u>	<u>UPL</u>	_____ 2 - Dominance Test is >50%
2. _____				_____ 3 - Prevalence Index is ≤ 3.0 ¹
3. _____				_____ 4 - Morphological Adaptations ¹ (Explain)
4. _____				_____ Problematic Hydrophytic Vegetation ¹ (Explain)
5. _____				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Provide supporting data in Remarks.
6. _____				Hydrophytic Vegetation Present? Yes _____ No <u>X</u>
7. _____				
8. _____				
9. _____				
10. _____				
_____ = Total Cover				
Woody Vine Stratum (Plot size: 30 ft.)				
1. <u>None Observed</u>				
2. _____				
_____ = Total Cover				
% Bare Ground in Herb Stratum <u>50</u>				

Remarks: (if observed, list morphological adaptations below).
 No positive indication of hydrophytic vegetation was observed (≥50% of dominant species indexed as FAC- or drier).

Sampling Point: 9U

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-7	10YR 3/2	100	NONE				Silt Loam	
7-12	2.5Y 2/2	100	NONE				Silt Loam	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soils Indicators: (Applicable to all LRRs, unless otherwise noted.)

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Gleyed Matrix (S4)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Sandy Redox (S5)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Stripped Matrix (S6)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Mucky Mineral (F1)
<input type="checkbox"/> Stratified Layers (A5) (LRR F)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)
<input type="checkbox"/> 1 cm Muck (A9) (LRR F, G, H)	<input type="checkbox"/> Depleted Matrix (F3)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Redox Dark Surface (F6)
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Depleted Dark Surface (F7)
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Redox Depressions (F8)
<input type="checkbox"/> 2.5 cm Mucky Peat or Peat (S2) (LRR G, H)	<input type="checkbox"/> High Plains Depressions (F16)
<input type="checkbox"/> 5 cm Mucky Peat or Peat (S3) (LRR F)	(MLRA 72 & 73 of LRR H)

Indicators for Problematic Hydric Soils³:

<input type="checkbox"/> 1 cm Muck (A9) (LRR I, J)
<input type="checkbox"/> Coast Prairie Redox (A16) (LRR F, G, H)
<input type="checkbox"/> Dark Surface (S7) (LRR G)
<input type="checkbox"/> High Plains Depressions (F16)
(LRR H outside of MLRA 72 & 73)
<input type="checkbox"/> Reduced Vertic (F18)
<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Very Shallow Dark Surface (TF12)
<input type="checkbox"/> Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: <u>N/A</u>	Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Depth (inches): <u>N/A</u>	

Remarks:

No positive indication of hydric soils was observed.

HYDROLOGY

Wetland hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)	Secondary Indicators (minimum of two required)
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Surface Soil Cracks (B6)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> (where tilled)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Crayfish Burrows (C8)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> FAC-Neutral Test (D5)
<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Frost-Heave Hummocks (D7) (LRR F)
<input type="checkbox"/> Salt Crust (B11)	
<input type="checkbox"/> Aquatic Invertebrates (B13)	
<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	
<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	
<input type="checkbox"/> (where not tilled)	
<input type="checkbox"/> Presence of Reduced Iron (C4)	
<input type="checkbox"/> Thin Muck Surface (C7)	
<input type="checkbox"/> Other (Explain in Remarks)	

Field Observations:

Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches): <u> </u>	Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches): <u> </u>	
Saturation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches): <u> </u>	
(includes capillary fringe)		

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

Remarks:

No positive indication of wetland hydrology was observed.

WETLAND DETERMINATION DATA FORM - Great Plains Region

Project/Site: Badger Wind Farm County: Logan Sampling Date: May 9, 2024
 Applicant/Owner: Badger Wind, LLC State: ND Sampling Point: 10W
 Investigator(s): M. Fettes and N/A Section, Township, Range: Sec. 8, T133N - R71W
 Landform (hillslope, terrace, etc.): Drainage Local relief (concave, convex, none): Concave Slope (%): 1-2%
 Subregion (LRR): LRRF Lat: 46.35076 Long: -99.62741 Datum: NAD83
 Soil Map Unit Name: E2819B - Reeder-Farnuf loams, 3 to 6% slopes NWI Classification: PEMC
 Are climatic / hydrologic conditions on the site typical for this time of year? (Yes / No) Yes (if no, explain in Remarks.)
 Are Vegetation NO, Soil NO, or Hydrology NO significantly disturbed? Are "Normal Circumstances" present? Yes X No _____
 Are Vegetation NO, Soil NO, or Hydrology NO naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <u>X</u> No _____	Is the Sampled Area within a Wetland? Yes <u>X</u> No _____
Hydric Soil Present?	Yes <u>X</u> No _____	
Wetland Hydrology Present?	Yes <u>X</u> No _____	

Remarks:
 This point was determined to be within a wetland due to the presence of all 3 wetland criteria.

VEGETATION - Use scientific names of plants.

	Absolute % cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
Tree Stratum (Plot size: 30 ft.)				Number of Dominant Species That Are OBL, FACW, or FAC <u>1</u> (A)
1. <u>None Observed</u>				Total Number of Dominant Species Across All Strata: <u>2</u> (B)
2. _____				Percent of Dominant Species That Are OBL, FACW, or FAC: <u>50%</u> (A/B)
3. _____				Prevalence Index Worksheet:
4. _____				
_____ = Total Cover				OBL species _____ x 1 = _____
Sapling/Shrub Stratum (Plot size: 15 ft.)				FACW species <u>40</u> x 2 = <u>80</u>
1. <u>None Observed</u>				FAC species <u>5</u> x 3 = <u>15</u>
2. _____				FACU species <u>25</u> x 4 = <u>100</u>
3. _____				UPL species _____ x 5 = _____
4. _____				Column Totals: <u>70</u> (A) <u>195</u> (B)
5. _____				Prevalence Index = B/A = <u>2.79</u>
_____ = Total Cover				Hydrophytic Vegetation Indicators:
Herb Stratum (Plot size: 5 ft.)				
1. <u>Hordeum jubatum</u>	40	yes	FACW	_____ 2 - Dominance Test is >50%
2. <u>Poa pratensis</u>	20	yes	FACU	<u>X</u> 3 - Prevalence Index is ≤ 3.0 ¹
3. <u>Rumex crispus</u>	5	no	FAC	_____ 4 - Morphological Adaptations ¹ (Explain)
4. <u>Taraxacum officinale</u>	5	no	FACU	_____ Problematic Hydrophytic Vegetation ¹ (Explain)
5. _____				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Provide supporting data in Remarks.
6. _____				Hydrophytic Vegetation Present? Yes <u>X</u> No _____
7. _____				
8. _____				
9. _____				
10. _____				
_____ = Total Cover				
Woody Vine Stratum (Plot size: 30 ft.)				
1. <u>None Observed</u>				
2. _____				
_____ = Total Cover				
% Bare Ground in Herb Stratum <u>30</u>				

Remarks: (if observed, list morphological adaptations below).
 A positive indication of hydrophytic vegetation was observed (Prevalence Index is ≤ 3.00).

Sampling Point: 10W

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix			Redox Features				Texture	Remarks
	Color (moist)		%	Color (moist)	%	Type ¹	Loc ²		
0-4	2.5Y 2/2		100	NONE				Silt Loam	
4-10	2.5Y 4/2		90	7.5YR 4/6	10	C	M	Silt Loam	
10-12	2.5Y 5/2		90	7.5YR 4/6	10	C	M	Silt Loam	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soils Indicators: (Applicable to all LRRs, unless otherwise noted.)

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Gleyed Matrix (S4)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Sandy Redox (S5)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Stripped Matrix (S6)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Mucky Mineral (F1)
<input type="checkbox"/> Stratified Layers (A5) (LRR F)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)
<input type="checkbox"/> 1 cm Muck (A9) (LRR F, G, H)	<input type="checkbox"/> Depleted Matrix (F3)
<input checked="" type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Redox Dark Surface (F6)
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Depleted Dark Surface (F7)
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Redox Depressions (F8)
<input type="checkbox"/> 2.5 cm Mucky Peat or Peat (S2) (LRR G, H)	<input type="checkbox"/> High Plains Depressions (F16)
<input type="checkbox"/> 5 cm Mucky Peat or Peat (S3) (LRR F)	(MLRA 72 & 73 of LRR H)

Indicators for Problematic Hydric Soils³:

<input type="checkbox"/> 1 cm Muck (A9) (LRR I, J)
<input type="checkbox"/> Coast Prairie Redox (A16) (LRR F, G, H)
<input type="checkbox"/> Dark Surface (S7) (LRR G)
<input type="checkbox"/> High Plains Depressions (F16)
(LRR H outside of MLRA 72 & 73)
<input type="checkbox"/> Reduced Vertic (F18)
<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Very Shallow Dark Surface (TF12)
<input type="checkbox"/> Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____	N/A
Depth (inches): _____	N/A

Hydric Soil Present? Yes No _____

Remarks:

A positive indication of hydric soil was observed.

HYDROLOGY

Wetland hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)	Secondary Indicators (minimum of two required)
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Salt Crust (B11)
<input checked="" type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Invertebrates (B13)
<input checked="" type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)
<input checked="" type="checkbox"/> Drift Deposits (B3)	(where not tilled)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Presence of Reduced Iron (C4)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)
<input checked="" type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Water-Stained Leaves (B9)	
	<input type="checkbox"/> Surface Soil Cracks (B6)
	<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)
	<input checked="" type="checkbox"/> Drainage Patterns (B10)
	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)
	(where tilled)
	<input type="checkbox"/> Crayfish Burrows (C8)
	<input checked="" type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
	<input checked="" type="checkbox"/> Geomorphic Position (D2)
	<input type="checkbox"/> FAC-Neutral Test (D5)
	<input type="checkbox"/> Frost-Heave Hummocks (D7) (LRR F)

Field Observations:

Surface Water Present? Yes _____ No <input checked="" type="checkbox"/>	Depth (inches): _____
Water Table Present? Yes <input checked="" type="checkbox"/> No _____	Depth (inches): <u>2-12"</u>
Saturation Present? Yes <input checked="" type="checkbox"/> No _____	Depth (inches): <u>0-12"</u>
(includes capillary fringe)	

Wetland Hydrology Present? Yes No _____

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

Remarks:

A positive indication of wetland hydrology was observed (at least one primary indicator).

A positive indication of wetland hydrology was observed (at least two secondary indicators).

WETLAND DETERMINATION DATA FORM - Great Plains Region

Project/Site: Badger Wind Farm County: Logan Sampling Date: May 9, 2024
 Applicant/Owner: Badger Wind, LLC State: ND Sampling Point: 10U
 Investigator(s): M. Fettes and N/A Section, Township, Range: Sec. 8, T133N - R71W
 Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Convex Slope (%): 3-4%
 Subregion (LRR): LRRF Lat: 46.35081 Long: -99.62748 Datum: NAD83
 Soil Map Unit Name: E2819B - Reeder-Farnuf loams, 3 to 6% slopes NWI Classification: N/A
 Are climatic / hydrologic conditions on the site typical for this time of year? (Yes / No) Yes (if no, explain in Remarks.)
 Are Vegetation NO, Soil NO, or Hydrology NO significantly disturbed? Are "Normal Circumstances" present? Yes X No
 Are Vegetation NO, Soil NO, or Hydrology NO naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <u> </u> No <u>X</u>	Is the Sampled Area within a Wetland? Yes <u> </u> No <u>X</u>
Hydric Soil Present?	Yes <u> </u> No <u>X</u>	
Wetland Hydrology Present?	Yes <u> </u> No <u>X</u>	

Remarks:
 This point was determined not to be within a wetland due to the lack of all three wetland criteria.

VEGETATION - Use scientific names of plants.

	Absolute % cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
Tree Stratum (Plot size: 30 ft.)				Number of Dominant Species That Are OBL, FACW, or FAC <u> </u> (A)
1. <u>None Observed</u>				Total Number of Dominant Species Across All Strata: <u>3</u> (B)
2. <u> </u>				
3. <u> </u>				
4. <u> </u>				
	<u> </u> = Total Cover			Percent of Dominant Species That Are OBL, FACW, or FAC: <u> </u> (A/B)
Sapling/Shrub Stratum (Plot size: 15 ft.)				Prevalence Index Worksheet: Total % Cover of: <u> </u> Multiply by: OBL species <u> </u> x 1 = <u> </u> FACW species <u> </u> x 2 = <u> </u> FAC species <u> </u> x 3 = <u> </u> FACU species <u>95</u> x 4 = <u>380</u> UPL species <u>15</u> x 5 = <u>75</u> Column Totals: <u>110</u> (A) <u>455</u> (B) Prevalence Index = B/A = <u>4.14</u>
1. <u>Symphoricarpos occidentalis</u>	10	yes	UPL	
2. <u> </u>				
3. <u> </u>				
4. <u> </u>				
5. <u> </u>				
	<u>10</u> = Total Cover			
Herb Stratum (Plot size: 5 ft.)				Hydrophytic Vegetation Indicators: ___ 1 - Rapid Test for Hydrophytic Vegetation ___ 2 - Dominance Test is >50% ___ 3 - Prevalence Index is ≤ 3.0 ¹ ___ 4 - Morphological Adaptations ¹ (Explain) ___ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Provide supporting data in Remarks. Hydrophytic Vegetation Present? Yes <u> </u> No <u>X</u>
1. <u>Poa pratensis</u>	60	yes	FACU	
2. <u>Taraxacum officinale</u>	30	yes	FACU	
3. <u>Bromus inermis</u>	5	no	UPL	
4. <u>Achillea millefolium</u>	5	no	FACU	
5. <u> </u>				
6. <u> </u>				
7. <u> </u>				
8. <u> </u>				
9. <u> </u>				
10. <u> </u>				
	<u>100</u> = Total Cover			
Woody Vine Stratum (Plot size: 30 ft.)				
1. <u>None Observed</u>				
2. <u> </u>				
	<u> </u> = Total Cover			
% Bare Ground in Herb Stratum <u>0</u>				

Remarks: (if observed, list morphological adaptations below).
 No positive indication of hydrophytic vegetation was observed (≥50% of dominant species indexed as FAC- or drier).

WETLAND DETERMINATION DATA FORM - Great Plains Region

Project/Site: Badger Wind Farm County: Logan Sampling Date: May 9, 2024
 Applicant/Owner: Badger Wind, LLC State: ND Sampling Point: 11W
 Investigator(s): M. Fettes and N/A Section, Township, Range: Sec. 5, T133N - R71W
 Landform (hillslope, terrace, etc.): Drainage Local relief (concave, convex, none): Concave Slope (%): 1-2%
 Subregion (LRR): LRRF Lat: 46.36845 Long: -99.64158 Datum: NAD83
 Soil Map Unit Name: C817B - Lehr-Bowdle loams, 2 to 6% slopes NWI Classification: PEMC
 Are climatic / hydrologic conditions on the site typical for this time of year? (Yes / No) Yes (if no, explain in Remarks.)
 Are Vegetation NO, Soil NO, or Hydrology NO significantly disturbed? Are "Normal Circumstances" present? Yes X No
 Are Vegetation NO, Soil NO, or Hydrology NO naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <u>X</u> No <u> </u>	Is the Sampled Area within a Wetland? Yes <u>X</u> No <u> </u>
Hydric Soil Present?	Yes <u>X</u> No <u> </u>	
Wetland Hydrology Present?	Yes <u>X</u> No <u> </u>	

Remarks:
 This point was determined to be within a wetland due to the presence of all 3 wetland criteria.

VEGETATION - Use scientific names of plants.

	Absolute % cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
Tree Stratum (Plot size: 30 ft.)				Number of Dominant Species That Are OBL, FACW, or FAC <u>2</u> (A)
1. <u>None Observed</u>				Total Number of Dominant Species Across All Strata: <u>2</u> (B)
2. _____				Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100%</u> (A/B)
3. _____				Prevalence Index Worksheet:
4. _____				
_____ = Total Cover				OBL species <u>60</u> x 1 = <u>60</u>
Sapling/Shrub Stratum (Plot size: 15 ft.)				FACW species <u>15</u> x 2 = <u>30</u>
1. <u>None Observed</u>				FAC species _____ x 3 = _____
2. _____				FACU species <u>5</u> x 4 = <u>20</u>
3. _____				UPL species _____ x 5 = _____
4. _____				Column Totals: <u>80</u> (A) <u>110</u> (B)
5. _____				Prevalence Index = B/A = <u>1.38</u>
_____ = Total Cover				Hydrophytic Vegetation Indicators:
Herb Stratum (Plot size: 5 ft.)				
1. <u>Typha latifolia</u>	40	yes	OBL	<u>X</u> 2 - Dominance Test is >50%
2. <u>Carex pellita</u>	20	yes	OBL	<u>X</u> 3 - Prevalence Index is ≤ 3.0 ¹
3. <u>Hordeum jubatum</u>	15	no	FACW	____ 4 - Morphological Adaptations ¹ (Explain)
4. <u>Taraxacum officinale</u>	5	no	FACU	____ Problematic Hydrophytic Vegetation ¹ (Explain)
5. _____				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Provide supporting data in Remarks.
6. _____				Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u>
7. _____				
8. _____				
9. _____				
10. _____				
_____ = Total Cover				
Woody Vine Stratum (Plot size: 30 ft.)				
1. <u>None Observed</u>				
2. _____				
_____ = Total Cover				
% Bare Ground in Herb Stratum <u>20</u>				

Remarks: (if observed, list morphological adaptations below).
 A positive indication of hydrophytic vegetation was observed (>50% of dominant species indexed as OBL, FACW, or FAC).
 A positive indication of hydrophytic vegetation was observed (Prevalence Index is ≤ 3.00).

Sampling Point: 11W

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-6	10YR 2/2	95	7.5YR 4/6	5	C	M	Silt Loam	
6-12	2.5Y 4/2	90	7.5YR 4/6	10	C	M	Silt Loam	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soils Indicators: (Applicable to all LRRs, unless otherwise noted.)

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Gleyed Matrix (S4)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Sandy Redox (S5)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Stripped Matrix (S6)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Mucky Mineral (F1)
<input type="checkbox"/> Stratified Layers (A5) (LRR F)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)
<input type="checkbox"/> 1 cm Muck (A9) (LRR F, G, H)	<input type="checkbox"/> Depleted Matrix (F3)
<input checked="" type="checkbox"/> Depleted Below Dark Surface (A11)	<input checked="" type="checkbox"/> Redox Dark Surface (F6)
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Depleted Dark Surface (F7)
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Redox Depressions (F8)
<input type="checkbox"/> 2.5 cm Mucky Peat or Peat (S2) (LRR G, H)	<input type="checkbox"/> High Plains Depressions (F16)
<input type="checkbox"/> 5 cm Mucky Peat or Peat (S3) (LRR F)	(MLRA 72 & 73 of LRR H)

Indicators for Problematic Hydric Soils³:

<input type="checkbox"/> 1 cm Muck (A9) (LRR I, J)
<input type="checkbox"/> Coast Prairie Redox (A16) (LRR F, G, H)
<input type="checkbox"/> Dark Surface (S7) (LRR G)
<input type="checkbox"/> High Plains Depressions (F16)
(LRR H outside of MLRA 72 & 73)
<input type="checkbox"/> Reduced Vertic (F18)
<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Very Shallow Dark Surface (TF12)
<input type="checkbox"/> Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: N/A

Depth (inches): N/A

Hydric Soil Present? Yes No

Remarks:

A positive indication of hydric soil was observed.

HYDROLOGY

Wetland hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)	Secondary Indicators (minimum of two required)
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Salt Crust (B11)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Invertebrates (B13)
<input checked="" type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)
<input type="checkbox"/> Drift Deposits (B3)	(where not tilled)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Presence of Reduced Iron (C4)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)
<input checked="" type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Water-Stained Leaves (B9)	
	<input type="checkbox"/> Surface Soil Cracks (B6)
	<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)
	<input type="checkbox"/> Drainage Patterns (B10)
	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)
	(where tilled)
	<input type="checkbox"/> Crayfish Burrows (C8)
	<input checked="" type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
	<input checked="" type="checkbox"/> Geomorphic Position (D2)
	<input checked="" type="checkbox"/> FAC-Neutral Test (D5)
	<input type="checkbox"/> Frost-Heave Hummocks (D7) (LRR F)

Field Observations:

Surface Water Present? Yes No Depth (inches):

Water Table Present? Yes No Depth (inches):

Saturation Present? Yes No Depth (inches): 0-12"
(includes capillary fringe)

Wetland Hydrology Present? Yes No

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

Remarks:

A positive indication of wetland hydrology was observed (at least one primary indicator).

A positive indication of wetland hydrology was observed (at least two secondary indicators).

WETLAND DETERMINATION DATA FORM - Great Plains Region

Project/Site: Badger Wind Farm County: Logan Sampling Date: May 9, 2024
 Applicant/Owner: Badger Wind, LLC State: ND Sampling Point: 11U
 Investigator(s): M. Fettes and N/A Section, Township, Range: Sec. 5, T133N - R71W
 Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Concave Slope (%): 2-3%
 Subregion (LRR): LRRF Lat: 46.36862 Long: -99.64163 Datum: NAD83
 Soil Map Unit Name: C817B - Lehr-Bowdle loams, 2 to 6% slopes NWI Classification: N/A
 Are climatic / hydrologic conditions on the site typical for this time of year? (Yes / No) Yes (if no, explain in Remarks.)
 Are Vegetation YES, Soil NO, or Hydrology NO significantly disturbed? Are "Normal Circumstances" present? Yes X No _____
 Are Vegetation NO, Soil NO, or Hydrology NO naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____ No <u>X</u>	Is the Sampled Area within a Wetland? Yes _____ No <u>X</u>
Hydric Soil Present?	Yes _____ No <u>X</u>	
Wetland Hydrology Present?	Yes _____ No <u>X</u>	

Remarks:
 This point was determined not to be within a wetland due to the lack of all three wetland criteria.
 Within Agricultural field

VEGETATION - Use scientific names of plants.

	Absolute % cover	Dominant Species?	Indicator Status	Dominance Test worksheet:	
Tree Stratum (Plot size: 30 ft.)				Number of Dominant Species That Are OBL, FACW, or FAC _____ (A)	
1. <u>None Observed</u>				Total Number of Dominant Species Across All Strata: <u>1</u> (B)	
2. _____					
3. _____					
4. _____					
_____ = Total Cover				Percent of Dominant Species That Are OBL, FACW, or FAC: _____ (A/B)	
Sapling/Shrub Stratum (Plot size: 15 ft.)				Prevalence Index Worksheet:	
1. <u>None Observed</u>					Total % Cover of: _____ Multiply by: _____
2. _____					OBL species _____ x 1 = _____
3. _____					FACW species _____ x 2 = _____
4. _____					FAC species _____ x 3 = _____
5. _____				FACU species _____ x 4 = _____	
_____ = Total Cover				UPL species <u>50</u> x 5 = <u>250</u>	
Herb Stratum (Plot size: 5 ft.)				Column Totals: <u>50</u> (A) <u>250</u> (B)	
1. <u>Corn</u>	<u>50</u>	<u>yes</u>	<u>UPL</u>	Prevalence Index = B/A = <u>5.00</u>	
2. _____				Hydrophytic Vegetation Indicators:	
3. _____					___ 1 - Rapid Test for Hydrophytic Vegetation
4. _____					___ 2 - Dominance Test is >50%
5. _____					___ 3 - Prevalence Index is ≤ 3.0 ¹
6. _____					___ 4 - Morphological Adaptations ¹ (Explain)
7. _____					___ Problematic Hydrophytic Vegetation ¹ (Explain)
8. _____					¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Provide supporting data in Remarks.
9. _____					Hydrophytic Vegetation Present? Yes _____ No <u>X</u>
10. _____					
_____ = Total Cover					
Woody Vine Stratum (Plot size: 30 ft.)					
1. <u>None Observed</u>					
2. _____					
_____ = Total Cover					
% Bare Ground in Herb Stratum <u>50</u>					

Remarks: (if observed, list morphological adaptations below).
 No positive indication of hydrophytic vegetation was observed (≥50% of dominant species indexed as FAC- or drier).

WETLAND DETERMINATION DATA FORM - Great Plains Region

Project/Site: Badger Wind Farm County: Logan Sampling Date: May 9, 2024
 Applicant/Owner: Badger Wind, LLC State: ND Sampling Point: 12W
 Investigator(s): M. Fettes and N/A Section, Township, Range: Sec. 5, T133N - R71W
 Landform (hillslope, terrace, etc.): Drainage Local relief (concave, convex, none): Concave Slope (%): 1-2%
 Subregion (LRR): LRRF Lat: 46.36785 Long: -99.64011 Datum: NAD83
 Soil Map Unit Name: E2819B - Reeder-Farnuf loams, 3 to 6% slopes NWI Classification: PEMC
 Are climatic / hydrologic conditions on the site typical for this time of year? (Yes / No) Yes (if no, explain in Remarks.)
 Are Vegetation YES, Soil NO, or Hydrology NO significantly disturbed? Are "Normal Circumstances" present? Yes X No _____
 Are Vegetation NO, Soil NO, or Hydrology NO naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <u>X</u> No _____	Is the Sampled Area within a Wetland? Yes <u>X</u> No _____
Hydric Soil Present? Yes <u>X</u> No _____	
Wetland Hydrology Present? Yes <u>X</u> No _____	

Remarks:
 This point was determined to be within a wetland due to the presence of all 3 wetland criteria.

VEGETATION - Use scientific names of plants.

	Absolute % cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
Tree Stratum (Plot size: 30 ft.)				Number of Dominant Species That Are OBL, FACW, or FAC <u>2</u> (A)
1. <u>None Observed</u>				Total Number of Dominant Species Across All Strata: <u>2</u> (B)
2. _____				Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100%</u> (A/B)
3. _____				Prevalence Index Worksheet: Total % Cover of: Multiply by: OBL species <u>20</u> x 1 = <u>20</u> FACW species <u>5</u> x 2 = <u>10</u> FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: <u>25</u> (A) <u>30</u> (B) Prevalence Index = B/A = <u>1.20</u>
4. _____				
_____ = Total Cover				
Sapling/Shrub Stratum (Plot size: 15 ft.)				
1. <u>None Observed</u>				
2. _____				
3. _____				
4. _____				
5. _____				
_____ = Total Cover				
Herb Stratum (Plot size: 5 ft.)				Hydrophytic Vegetation Indicators: <input checked="" type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation <input checked="" type="checkbox"/> 2 - Dominance Test is >50% <input checked="" type="checkbox"/> 3 - Prevalence Index is ≤ 3.0 ¹ _____ 4 - Morphological Adaptations ¹ (Explain) _____ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Provide supporting data in Remarks.
1. <u>Typha latifolia</u>	<u>20</u>	<u>yes</u>	<u>OBL</u>	
2. <u>Rumex maritimus</u>	<u>5</u>	<u>yes</u>	<u>FACW</u>	
3. _____				
4. _____				
5. _____				
6. _____				
7. _____				
8. _____				
9. _____				
10. _____				
_____ = Total Cover				
Woody Vine Stratum (Plot size: 30 ft.)				Hydrophytic Vegetation Present? Yes <u>X</u> No _____
1. <u>None Observed</u>				
2. _____				
_____ = Total Cover				
% Bare Ground in Herb Stratum <u>75</u>				

Remarks: (if observed, list morphological adaptations below).
 A positive indication of hydrophytic vegetation was observed (>50% of dominant species indexed as OBL, FACW, or FAC).
 A positive indication of hydrophytic vegetation was observed (Prevalence Index is ≤ 3.00).

Sampling Point: 12W

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-7	10YR 3/1	100					Silt Loam	
7-14	2.5Y 4/2	90	7.5YR 4/6	10	C	M	Silt Loam	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soils Indicators: (Applicable to all LRRs, unless otherwise noted.)

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Gleyed Matrix (S4)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Sandy Redox (S5)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Stripped Matrix (S6)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Mucky Mineral (F1)
<input type="checkbox"/> Stratified Layers (A5) (LRR F)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)
<input type="checkbox"/> 1 cm Muck (A9) (LRR F, G, H)	<input type="checkbox"/> Depleted Matrix (F3)
<input checked="" type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Redox Dark Surface (F6)
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Depleted Dark Surface (F7)
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Redox Depressions (F8)
<input type="checkbox"/> 2.5 cm Mucky Peat or Peat (S2) (LRR G, H)	<input type="checkbox"/> High Plains Depressions (F16)
<input type="checkbox"/> 5 cm Mucky Peat or Peat (S3) (LRR F)	(MLRA 72 & 73 of LRR H)

Indicators for Problematic Hydric Soils³:

<input type="checkbox"/> 1 cm Muck (A9) (LRR I, J)
<input type="checkbox"/> Coast Prairie Redox (A16) (LRR F, G, H)
<input type="checkbox"/> Dark Surface (S7) (LRR G)
<input type="checkbox"/> High Plains Depressions (F16)
(LRR H outside of MLRA 72 & 73)
<input type="checkbox"/> Reduced Vertic (F18)
<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Very Shallow Dark Surface (TF12)
<input type="checkbox"/> Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: N/A

Depth (inches): N/A

Hydric Soil Present? Yes No

Remarks:

A positive indication of hydric soil was observed.

HYDROLOGY

Wetland hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (minimum of two required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Surface Soil Cracks (B6)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	
<input checked="" type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Dry-Season Water Table (C2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	(where tilled)	
<input type="checkbox"/> Drift Deposits (B3)	(where not tilled)	<input type="checkbox"/> Crayfish Burrows (C8)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input checked="" type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)	<input checked="" type="checkbox"/> Geomorphic Position (D2)	
<input checked="" type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)	<input checked="" type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Water-Stained Leaves (B9)		<input type="checkbox"/> Frost-Heave Hummocks (D7) (LRR F)	

Field Observations:

Surface Water Present? Yes No Depth (inches):

Water Table Present? Yes No Depth (inches):

Saturation Present? Yes No Depth (inches): 0-14"
(includes capillary fringe)

Wetland Hydrology Present? Yes No

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

Remarks:

A positive indication of wetland hydrology was observed (at least one primary indicator).

A positive indication of wetland hydrology was observed (at least two secondary indicators).

WETLAND DETERMINATION DATA FORM - Great Plains Region

Project/Site: Badger Wind Farm County: Logan Sampling Date: May 9, 2024
 Applicant/Owner: Badger Wind, LLC State: ND Sampling Point: 12U
 Investigator(s): M. Fettes and N/A Section, Township, Range: Sec. 5, T133N - R71W
 Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Concave Slope (%): 2-3%
 Subregion (LRR): LRRF Lat: 46.36789 Long: -99.64028 Datum: NAD83
 Soil Map Unit Name: E2819B - Reeder-Farnuf loams, 3 to 6% slopes NWI Classification: N/A
 Are climatic / hydrologic conditions on the site typical for this time of year? (Yes / No) Yes (if no, explain in Remarks.)
 Are Vegetation YES, Soil NO, or Hydrology NO significantly disturbed? Are "Normal Circumstances" present? Yes X No _____
 Are Vegetation NO, Soil NO, or Hydrology NO naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____ No <u>X</u>	Is the Sampled Area within a Wetland?	Yes _____ No <u>X</u>
Hydric Soil Present?	Yes _____ No <u>X</u>		
Wetland Hydrology Present?	Yes _____ No <u>X</u>		

Remarks:
 This point was determined not to be within a wetland due to the lack of all three wetland criteria.
 Within Agricultural field

VEGETATION - Use scientific names of plants.

	Absolute % cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
Tree Stratum (Plot size: 30 ft.)				Number of Dominant Species That Are OBL, FACW, or FAC _____ (A)
1. <u>None Observed</u>				Total Number of Dominant Species Across All Strata: <u>1</u> (B)
2. _____				
3. _____				
4. _____				
_____ = Total Cover				Percent of Dominant Species That Are OBL, FACW, or FAC: _____ (A/B)
Sapling/Shrub Stratum (Plot size: 15 ft.)				Prevalence Index Worksheet:
1. <u>None Observed</u>				
2. _____				
3. _____				
4. _____				
_____ = Total Cover				Total % Cover of: _____ Multiply by: _____
Herb Stratum (Plot size: 5 ft.)				OBL species _____ x 1 = _____
1. <u>Corn</u>	<u>50</u>	<u>yes</u>	<u>UPL</u>	FACW species _____ x 2 = _____
2. _____				FAC species _____ x 3 = _____
3. _____				FACU species _____ x 4 = _____
4. _____				UPL species <u>50</u> x 5 = <u>250</u>
5. _____				Column Totals: <u>50</u> (A) <u>250</u> (B)
6. _____				Prevalence Index = B/A = <u>5.00</u>
7. _____				Hydrophytic Vegetation Indicators:
8. _____				
9. _____				
10. _____				
_____ = Total Cover				____ 1 - Rapid Test for Hydrophytic Vegetation
Woody Vine Stratum (Plot size: 30 ft.)				____ 2 - Dominance Test is >50%
1. <u>None Observed</u>				____ 3 - Prevalence Index is ≤ 3.0 ¹
2. _____				____ 4 - Morphological Adaptations ¹ (Explain)
_____ = Total Cover				____ Problematic Hydrophytic Vegetation ¹ (Explain)
% Bare Ground in Herb Stratum <u>50</u>				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Provide supporting data in Remarks.

Remarks: (if observed, list morphological adaptations below).
 No positive indication of hydrophytic vegetation was observed (≥50% of dominant species indexed as FAC- or drier).

WETLAND DETERMINATION DATA FORM - Great Plains Region

Project/Site: Badger Wind Farm County: McIntosh Sampling Date: May 8, 2024
 Applicant/Owner: Badger Wind, LLC State: ND Sampling Point: 100U
 Investigator(s): M. Fettes and N/A Section, Township, Range: Sec. 10, T132N - R72W
 Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Convex Slope (%): 2-3%
 Subregion (LRR): LRRF Lat: 46.26852 Long: -99.67062 Datum: NAD83
 Soil Map Unit Name: C903D - Amor-Werner loams, 9 to 15% slopes NWI Classification: N/A
 Are climatic / hydrologic conditions on the site typical for this time of year? (Yes / No) Yes (if no, explain in Remarks.)
 Are Vegetation NO, Soil NO, or Hydrology NO significantly disturbed? Are "Normal Circumstances" present? Yes X No
 Are Vegetation NO, Soil NO, or Hydrology NO naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <u> </u> No <u>X</u>	Is the Sampled Area within a Wetland? Yes <u> </u> No <u>X</u>
Hydric Soil Present?	Yes <u> </u> No <u>X</u>	
Wetland Hydrology Present?	Yes <u> </u> No <u>X</u>	

Remarks:
 This point was determined not to be within a wetland due to the lack of all three wetland criteria.
 Along rock pile

VEGETATION - Use scientific names of plants.

	Absolute % cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
Tree Stratum (Plot size: 30 ft.)				Number of Dominant Species That Are OBL, FACW, or FAC <u> </u> (A)
1. <u>None Observed</u>				Total Number of Dominant Species Across All Strata: <u>1</u> (B)
2. <u> </u>				Percent of Dominant Species That Are OBL, FACW, or FAC: <u> </u> (A/B)
3. <u> </u>				Prevalence Index Worksheet:
4. <u> </u>				
<u> </u> = Total Cover				OBL species <u> </u> x 1 = <u> </u>
Sapling/Shrub Stratum (Plot size: 15 ft.)				FACW species <u> </u> x 2 = <u> </u>
1. <u>None Observed</u>				FAC species <u> </u> x 3 = <u> </u>
2. <u> </u>				FACU species <u> </u> x 4 = <u> </u>
3. <u> </u>				UPL species <u>100</u> x 5 = <u>500</u>
4. <u> </u>				Column Totals: <u>100</u> (A) <u>500</u> (B)
5. <u> </u>				Prevalence Index = B/A = <u>5.00</u>
<u> </u> = Total Cover				Hydrophytic Vegetation Indicators:
Herb Stratum (Plot size: 5 ft.)				
1. <u>Bromus inermis</u>	100	yes	UPL	<u> </u> 2 - Dominance Test is >50%
2. <u> </u>				<u> </u> 3 - Prevalence Index is ≤ 3.0 ¹
3. <u> </u>				<u> </u> 4 - Morphological Adaptations ¹ (Explain)
4. <u> </u>				<u> </u> Problematic Hydrophytic Vegetation ¹ (Explain)
5. <u> </u>				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Provide supporting data in Remarks.
6. <u> </u>				Hydrophytic Vegetation Present? Yes <u> </u> No <u>X</u>
7. <u> </u>				
8. <u> </u>				
9. <u> </u>				
10. <u> </u>				
<u> </u> = Total Cover				
Woody Vine Stratum (Plot size: 30 ft.)				
1. <u>None Observed</u>				
2. <u> </u>				
<u> </u> = Total Cover				
% Bare Ground in Herb Stratum <u>0</u>				

Remarks: (if observed, list morphological adaptations below).
 No positive indication of hydrophytic vegetation was observed (≥50% of dominant species indexed as FAC- or drier).

Sampling Point: 100U

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix			Redox Features				Texture	Remarks
	Color (moist)		%	Color (moist)	%	Type ¹	Loc ²		
0-8	10YR 3/2		100	NONE				Loam	
8-13	2.5Y 4/3		100	NONE				Silt Loam	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soils Indicators: (Applicable to all LRRs, unless otherwise noted.)

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Gleyed Matrix (S4)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Sandy Redox (S5)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Stripped Matrix (S6)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Mucky Mineral (F1)
<input type="checkbox"/> Stratified Layers (A5) (LRR F)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)
<input type="checkbox"/> 1 cm Muck (A9) (LRR F, G, H)	<input type="checkbox"/> Depleted Matrix (F3)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Redox Dark Surface (F6)
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Depleted Dark Surface (F7)
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Redox Depressions (F8)
<input type="checkbox"/> 2.5 cm Mucky Peat or Peat (S2) (LRR G, H)	<input type="checkbox"/> High Plains Depressions (F16)
<input type="checkbox"/> 5 cm Mucky Peat or Peat (S3) (LRR F)	(MLRA 72 & 73 of LRR H)

Indicators for Problematic Hydric Soils³:

<input type="checkbox"/> 1 cm Muck (A9) (LRR I, J)
<input type="checkbox"/> Coast Prairie Redox (A16) (LRR F, G, H)
<input type="checkbox"/> Dark Surface (S7) (LRR G)
<input type="checkbox"/> High Plains Depressions (F16)
(LRR H outside of MLRA 72 & 73)
<input type="checkbox"/> Reduced Vertic (F18)
<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Very Shallow Dark Surface (TF12)
<input type="checkbox"/> Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____	N/A
Depth (inches): _____	N/A

Hydric Soil Present? Yes _____ No X

Remarks:

No positive indication of hydric soils was observed.

HYDROLOGY

Wetland hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)	Secondary Indicators (minimum of two required)
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Salt Crust (B11)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Invertebrates (B13)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)
<input type="checkbox"/> Drift Deposits (B3)	(where not tilled)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Presence of Reduced Iron (C4)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Water-Stained Leaves (B9)	
	<input type="checkbox"/> Surface Soil Cracks (B6)
	<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)
	<input type="checkbox"/> Drainage Patterns (B10)
	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)
	(where tilled)
	<input type="checkbox"/> Crayfish Burrows (C8)
	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
	<input type="checkbox"/> Geomorphic Position (D2)
	<input type="checkbox"/> FAC-Neutral Test (D5)
	<input type="checkbox"/> Frost-Heave Hummocks (D7) (LRR F)

Field Observations:

Surface Water Present? Yes _____ No <u>X</u>	Depth (inches): _____
Water Table Present? Yes _____ No <u>X</u>	Depth (inches): _____
Saturation Present? Yes _____ No <u>X</u>	Depth (inches): _____
(includes capillary fringe)	

Wetland Hydrology Present? Yes _____ No X

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

Remarks:

No positive indication of wetland hydrology was observed.

WETLAND DETERMINATION DATA FORM - Great Plains Region

Project/Site: Badger Wind Farm County: McIntosh Sampling Date: May 8, 2024
 Applicant/Owner: Badger Wind, LLC State: ND Sampling Point: 101U
 Investigator(s): M. Fettes and N/A Section, Township, Range: Sec. 11, T132N - R72W
 Landform (hillslope, terrace, etc.): Swale Local relief (concave, convex, none): Concave Slope (%): 2-3%
 Subregion (LRR): LRRF Lat: 46.26989 Long: -99.67040 Datum: NAD83
 Soil Map Unit Name: C451B - Arnegard loam, 2 to 6% slopes NWI Classification: N/A
 Are climatic / hydrologic conditions on the site typical for this time of year? (Yes / No) Yes (if no, explain in Remarks.)
 Are Vegetation YES, Soil NO, or Hydrology NO significantly disturbed? Are "Normal Circumstances" present? Yes X No
 Are Vegetation NO, Soil NO, or Hydrology NO naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <u> </u> No <u>X</u>	Is the Sampled Area within a Wetland?	Yes <u> </u> No <u>X</u>
Hydric Soil Present?	Yes <u> </u> No <u>X</u>		
Wetland Hydrology Present?	Yes <u> </u> No <u>X</u>		

Remarks:
 This point was determined not to be within a wetland due to the lack of all three wetland criteria.
 Within Agricultural field

VEGETATION - Use scientific names of plants.

	Absolute % cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
Tree Stratum (Plot size: 30 ft.)				Number of Dominant Species That Are OBL, FACW, or FAC <u> </u> (A)
1. <u>None Observed</u>				Total Number of Dominant Species Across All Strata: <u>1</u> (B)
2. <u> </u>				Percent of Dominant Species That Are OBL, FACW, or FAC: <u> </u> (A/B)
3. <u> </u>				Prevalence Index Worksheet:
4. <u> </u>				
<u> </u> = Total Cover				OBL species <u> </u> x 1 = <u> </u>
Sapling/Shrub Stratum (Plot size: 15 ft.)				FACW species <u> </u> x 2 = <u> </u>
1. <u>None Observed</u>				FAC species <u> </u> x 3 = <u> </u>
2. <u> </u>				FACU species <u> </u> x 4 = <u> </u>
3. <u> </u>				UPL species <u>50</u> x 5 = <u>250</u>
4. <u> </u>				Column Totals: <u>50</u> (A) <u>250</u> (B)
5. <u> </u>				Prevalence Index = B/A = <u>5.00</u>
<u> </u> = Total Cover				Hydrophytic Vegetation Indicators:
Herb Stratum (Plot size: 5 ft.)				
1. <u>Soy beans</u>	50	yes	UPL	<u> </u> 2 - Dominance Test is >50%
2. <u> </u>				<u> </u> 3 - Prevalence Index is ≤ 3.0 ¹
3. <u> </u>				<u> </u> 4 - Morphological Adaptations ¹ (Explain)
4. <u> </u>				<u> </u> Problematic Hydrophytic Vegetation ¹ (Explain)
5. <u> </u>				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Provide supporting data in Remarks.
6. <u> </u>				Hydrophytic Vegetation Present? Yes <u> </u> No <u>X</u>
7. <u> </u>				
8. <u> </u>				
9. <u> </u>				
10. <u> </u>				
<u> </u> = Total Cover				
Woody Vine Stratum (Plot size: 30 ft.)				
1. <u>None Observed</u>				
2. <u> </u>				
<u> </u> = Total Cover				
% Bare Ground in Herb Stratum <u>50</u>				

Remarks: (if observed, list morphological adaptations below).
 No positive indication of hydrophytic vegetation was observed (≥50% of dominant species indexed as FAC- or drier).

WETLAND DETERMINATION DATA FORM - Great Plains Region

Project/Site: Badger Wind Farm County: Logan Sampling Date: May 8, 2024
 Applicant/Owner: Badger Wind, LLC State: ND Sampling Point: 102U
 Investigator(s): M. Fettes and N/A Section, Township, Range: Sec. 36, T133N - R72W
 Landform (hillslope, terrace, etc.): Swale Local relief (concave, convex, none): Concave Slope (%): 1-2%
 Subregion (LRR): LRRF Lat: 46.29700 Long: -99.66872 Datum: NAD83
 Soil Map Unit Name: C451B - Arnegard loam, 2 to 6% slopes NWI Classification: N/A
 Are climatic / hydrologic conditions on the site typical for this time of year? (Yes / No) Yes (if no, explain in Remarks.)
 Are Vegetation YES, Soil NO, or Hydrology NO significantly disturbed? Are "Normal Circumstances" present? Yes X No
 Are Vegetation NO, Soil NO, or Hydrology NO naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <u> </u> No <u>X</u>	Is the Sampled Area within a Wetland?	Yes <u> </u> No <u>X</u>
Hydric Soil Present?	Yes <u> </u> No <u>X</u>		
Wetland Hydrology Present?	Yes <u> </u> No <u>X</u>		

Remarks:
 This point was determined not to be within a wetland due to the lack of all three wetland criteria.
 Within Agricultural field

VEGETATION - Use scientific names of plants.

	Absolute % cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
Tree Stratum (Plot size: 30 ft.)				Number of Dominant Species That Are OBL, FACW, or FAC <u> </u> (A)
1. <u>None Observed</u>				Total Number of Dominant Species Across All Strata: <u>1</u> (B)
2. <u> </u>				Percent of Dominant Species That Are OBL, FACW, or FAC: <u> </u> (A/B)
3. <u> </u>				Prevalence Index Worksheet:
4. <u> </u>				
<u> </u> = Total Cover				OBL species <u> </u> x 1 = <u> </u>
Sapling/Shrub Stratum (Plot size: 15 ft.)				FACW species <u> </u> x 2 = <u> </u>
1. <u>None Observed</u>				FAC species <u> </u> x 3 = <u> </u>
2. <u> </u>				FACU species <u> </u> x 4 = <u> </u>
3. <u> </u>				UPL species <u>50</u> x 5 = <u>250</u>
4. <u> </u>				Column Totals: <u>50</u> (A) <u>250</u> (B)
5. <u> </u>				Prevalence Index = B/A = <u>5.00</u>
<u> </u> = Total Cover				Hydrophytic Vegetation Indicators:
Herb Stratum (Plot size: 5 ft.)				
1. <u>Corn</u>	50	yes	UPL	<u> </u> 2 - Dominance Test is >50%
2. <u> </u>				<u> </u> 3 - Prevalence Index is ≤ 3.0 ¹
3. <u> </u>				<u> </u> 4 - Morphological Adaptations ¹ (Explain)
4. <u> </u>				<u> </u> Problematic Hydrophytic Vegetation ¹ (Explain)
5. <u> </u>				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Provide supporting data in Remarks.
6. <u> </u>				Hydrophytic Vegetation Present? Yes <u> </u> No <u>X</u>
7. <u> </u>				
8. <u> </u>				
9. <u> </u>				
10. <u> </u>				
<u> </u> = Total Cover				
Woody Vine Stratum (Plot size: 30 ft.)				
1. <u>None Observed</u>				
2. <u> </u>				
<u> </u> = Total Cover				
% Bare Ground in Herb Stratum <u>50</u>				

Remarks: (if observed, list morphological adaptations below).
 No positive indication of hydrophytic vegetation was observed (≥50% of dominant species indexed as FAC- or drier).

WETLAND DETERMINATION DATA FORM - Great Plains Region

Project/Site: Badger Wind Farm County: Logan Sampling Date: May 8, 2024
 Applicant/Owner: Badger Wind, LLC State: ND Sampling Point: 103U
 Investigator(s): M. Fettes and N/A Section, Township, Range: Sec. 25, T133N - R72W
 Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Convex Slope (%): 1-2%
 Subregion (LRR): LRRF Lat: 46.29787 Long: -99.66791 Datum: NAD83
 Soil Map Unit Name: C451B - Arnegard loam, 2 to 6% slopes NWI Classification: N/A
 Are climatic / hydrologic conditions on the site typical for this time of year? (Yes / No) Yes (if no, explain in Remarks.)
 Are Vegetation YES, Soil NO, or Hydrology NO significantly disturbed? Are "Normal Circumstances" present? Yes X No
 Are Vegetation NO, Soil NO, or Hydrology NO naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <u> </u> No <u>X</u>	Is the Sampled Area within a Wetland?	Yes <u> </u> No <u>X</u>
Hydric Soil Present?	Yes <u> </u> No <u>X</u>		
Wetland Hydrology Present?	Yes <u> </u> No <u>X</u>		

Remarks:
 This point was determined not to be within a wetland due to the lack of all three wetland criteria.
 Within Agricultural field

VEGETATION - Use scientific names of plants.

	Absolute % cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
Tree Stratum (Plot size: 30 ft.)				Number of Dominant Species That Are OBL, FACW, or FAC <u> </u> (A)
1. <u>None Observed</u>				Total Number of Dominant Species Across All Strata: <u>1</u> (B)
2. <u> </u>				Percent of Dominant Species That Are OBL, FACW, or FAC: <u> </u> (A/B)
3. <u> </u>				Prevalence Index Worksheet:
4. <u> </u>				
<u> </u> = Total Cover				OBL species <u> </u> x 1 = <u> </u>
Sapling/Shrub Stratum (Plot size: 15 ft.)				FACW species <u> </u> x 2 = <u> </u>
1. <u>None Observed</u>				FAC species <u> </u> x 3 = <u> </u>
2. <u> </u>				FACU species <u> </u> x 4 = <u> </u>
3. <u> </u>				UPL species <u>50</u> x 5 = <u>250</u>
4. <u> </u>				Column Totals: <u>50</u> (A) <u>250</u> (B)
5. <u> </u>				Prevalence Index = B/A = <u>5.00</u>
<u> </u> = Total Cover				Hydrophytic Vegetation Indicators:
Herb Stratum (Plot size: 5 ft.)				
1. <u>Soy beans</u>	50	yes	UPL	<u> </u> 2 - Dominance Test is >50%
2. <u> </u>				<u> </u> 3 - Prevalence Index is ≤ 3.0 ¹
3. <u> </u>				<u> </u> 4 - Morphological Adaptations ¹ (Explain)
4. <u> </u>				<u> </u> Problematic Hydrophytic Vegetation ¹ (Explain)
5. <u> </u>				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Provide supporting data in Remarks.
6. <u> </u>				Hydrophytic Vegetation Present? Yes <u> </u> No <u>X</u>
7. <u> </u>				
8. <u> </u>				
9. <u> </u>				
10. <u> </u>				
<u> </u> = Total Cover				
Woody Vine Stratum (Plot size: 30 ft.)				
1. <u>None Observed</u>				
2. <u> </u>				
<u> </u> = Total Cover				
% Bare Ground in Herb Stratum <u>50</u>				

Remarks: (if observed, list morphological adaptations below).
 No positive indication of hydrophytic vegetation was observed (≥50% of dominant species indexed as FAC- or drier).

WETLAND DETERMINATION DATA FORM - Great Plains Region

Project/Site: Badger Wind Farm County: Logan Sampling Date: May 9, 2024
 Applicant/Owner: Badger Wind, LLC State: ND Sampling Point: 104U
 Investigator(s): M. Fettes and N/A Section, Township, Range: Sec. 17, T133N - R70W
 Landform (hillslope, terrace, etc.): Swale Local relief (concave, convex, none): Concave Slope (%): 1-2%
 Subregion (LRR): LRRF Lat: 46.33670 Long: -99.51571 Datum: NAD83
 Soil Map Unit Name: C135C - Zahl-Williams-Zahill complex, 6 to 9% slopes NWI Classification: N/A
 Are climatic / hydrologic conditions on the site typical for this time of year? (Yes / No) Yes (if no, explain in Remarks.)
 Are Vegetation YES, Soil NO, or Hydrology NO significantly disturbed? Are "Normal Circumstances" present? Yes X No _____
 Are Vegetation NO, Soil NO, or Hydrology NO naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____ No <u>X</u>	Is the Sampled Area within a Wetland? Yes _____ No <u>X</u>
Hydric Soil Present?	Yes _____ No <u>X</u>	
Wetland Hydrology Present?	Yes _____ No <u>X</u>	

Remarks:
 This point was determined not to be within a wetland due to the lack of all three wetland criteria.
 Within Agricultural field

VEGETATION - Use scientific names of plants.

	Absolute % cover	Dominant Species?	Indicator Status	Dominance Test worksheet:																
Tree Stratum (Plot size: 30 ft.)				Number of Dominant Species That Are OBL, FACW, or FAC _____ (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: _____ (A/B)																
1. <u>None Observed</u>																				
2. _____																				
3. _____																				
4. _____																				
_____ = Total Cover																				
Sapling/Shrub Stratum (Plot size: 15 ft.)				Prevalence Index Worksheet: <table border="0" style="width: 100%;"> <tr> <td style="text-align: right;">Total % Cover of:</td> <td style="text-align: right;">Multiply by:</td> </tr> <tr> <td>OBL species _____</td> <td>x 1 = _____</td> </tr> <tr> <td>FACW species _____</td> <td>x 2 = _____</td> </tr> <tr> <td>FAC species _____</td> <td>x 3 = _____</td> </tr> <tr> <td>FACU species _____</td> <td>x 4 = _____</td> </tr> <tr> <td>UPL species <u>50</u></td> <td>x 5 = <u>250</u></td> </tr> <tr> <td>Column Totals: <u>50</u> (A)</td> <td><u>250</u> (B)</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A = <u>5.00</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species _____	x 1 = _____	FACW species _____	x 2 = _____	FAC species _____	x 3 = _____	FACU species _____	x 4 = _____	UPL species <u>50</u>	x 5 = <u>250</u>	Column Totals: <u>50</u> (A)	<u>250</u> (B)	Prevalence Index = B/A = <u>5.00</u>	
Total % Cover of:	Multiply by:																			
OBL species _____	x 1 = _____																			
FACW species _____	x 2 = _____																			
FAC species _____	x 3 = _____																			
FACU species _____	x 4 = _____																			
UPL species <u>50</u>	x 5 = <u>250</u>																			
Column Totals: <u>50</u> (A)	<u>250</u> (B)																			
Prevalence Index = B/A = <u>5.00</u>																				
1. <u>None Observed</u>																				
2. _____																				
3. _____																				
4. _____																				
5. _____																				
_____ = Total Cover																				
Herb Stratum (Plot size: 5 ft.)				Hydrophytic Vegetation Indicators: _____ 1 - Rapid Test for Hydrophytic Vegetation _____ 2 - Dominance Test is >50% _____ 3 - Prevalence Index is ≤ 3.0 ¹ _____ 4 - Morphological Adaptations ¹ (Explain) _____ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Provide supporting data in Remarks. Hydrophytic Vegetation Present? Yes _____ No <u>X</u>																
1. <u>Soy beans</u>	50	yes	UPL																	
2. _____																				
3. _____																				
4. _____																				
5. _____																				
6. _____																				
7. _____																				
8. _____																				
9. _____																				
10. _____																				
50 = Total Cover																				
Woody Vine Stratum (Plot size: 30 ft.)																				
1. <u>None Observed</u>																				
2. _____																				
_____ = Total Cover																				
% Bare Ground in Herb Stratum <u>50</u>																				

Remarks: (if observed, list morphological adaptations below).
 No positive indication of hydrophytic vegetation was observed (≥50% of dominant species indexed as FAC- or drier).

Sampling Point: 104U

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix			Redox Features				Texture	Remarks
	Color (moist)		%	Color (moist)	%	Type ¹	Loc ²		
0-9	10YR	3/1	100	NONE				Silt Loam	
9-15	10YR	3/3	100	NONE				Silt Loam	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soils Indicators: (Applicable to all LRRs, unless otherwise noted.)

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Gleyed Matrix (S4)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Sandy Redox (S5)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Stripped Matrix (S6)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Mucky Mineral (F1)
<input type="checkbox"/> Stratified Layers (A5) (LRR F)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)
<input type="checkbox"/> 1 cm Muck (A9) (LRR F, G, H)	<input type="checkbox"/> Depleted Matrix (F3)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Redox Dark Surface (F6)
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Depleted Dark Surface (F7)
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Redox Depressions (F8)
<input type="checkbox"/> 2.5 cm Mucky Peat or Peat (S2) (LRR G, H)	<input type="checkbox"/> High Plains Depressions (F16)
<input type="checkbox"/> 5 cm Mucky Peat or Peat (S3) (LRR F)	(MLRA 72 & 73 of LRR H)

Indicators for Problematic Hydric Soils³:

<input type="checkbox"/> 1 cm Muck (A9) (LRR I, J)
<input type="checkbox"/> Coast Prairie Redox (A16) (LRR F, G, H)
<input type="checkbox"/> Dark Surface (S7) (LRR G)
<input type="checkbox"/> High Plains Depressions (F16)
(LRR H outside of MLRA 72 & 73)
<input type="checkbox"/> Reduced Vertic (F18)
<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Very Shallow Dark Surface (TF12)
<input type="checkbox"/> Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____	N/A
Depth (inches): _____	N/A

Hydric Soil Present? Yes _____ No X

Remarks:

No positive indication of hydric soils was observed.

HYDROLOGY

Wetland hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)	Secondary Indicators (minimum of two required)
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Salt Crust (B11)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Invertebrates (B13)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)
<input type="checkbox"/> Drift Deposits (B3)	(where not tilled)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Presence of Reduced Iron (C4)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Water-Stained Leaves (B9)	
	<input type="checkbox"/> Surface Soil Cracks (B6)
	<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)
	<input type="checkbox"/> Drainage Patterns (B10)
	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)
	(where tilled)
	<input type="checkbox"/> Crayfish Burrows (C8)
	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
	<input type="checkbox"/> Geomorphic Position (D2)
	<input type="checkbox"/> FAC-Neutral Test (D5)
	<input type="checkbox"/> Frost-Heave Hummocks (D7) (LRR F)

Field Observations:

Surface Water Present? Yes _____ No <u>X</u>	Depth (inches): _____
Water Table Present? Yes _____ No <u>X</u>	Depth (inches): _____
Saturation Present? Yes _____ No <u>X</u>	Depth (inches): _____
(includes capillary fringe)	

Wetland Hydrology Present? Yes _____ No X

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

Remarks:

No positive indication of wetland hydrology was observed.

WETLAND DETERMINATION DATA FORM - Great Plains Region

Project/Site: Badger Wind Farm County: Logan Sampling Date: May 9, 2024
 Applicant/Owner: Badger Wind, LLC State: ND Sampling Point: 105U
 Investigator(s): M. Fettes and N/A Section, Township, Range: Sec. 5, T133N - R71W
 Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Convex Slope (%): 2-3%
 Subregion (LRR): LRRF Lat: 46.36812 Long: -99.64089 Datum: NAD83
 Soil Map Unit Name: E2609C - Amor-Werner-Farnuf loams, 6 to 9% slopes NWI Classification: N/A
 Are climatic / hydrologic conditions on the site typical for this time of year? (Yes / No) Yes (if no, explain in Remarks.)
 Are Vegetation YES, Soil NO, or Hydrology NO significantly disturbed? Are "Normal Circumstances" present? Yes X No _____
 Are Vegetation NO, Soil NO, or Hydrology NO naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes _____ No <u>X</u>	Is the Sampled Area within a Wetland? Yes _____ No <u>X</u>
Hydric Soil Present? Yes _____ No <u>X</u>	
Wetland Hydrology Present? Yes _____ No <u>X</u>	

Remarks:
 This point was determined not to be within a wetland due to the lack of all three wetland criteria.
 Within Agricultural field along rock pile

VEGETATION - Use scientific names of plants.

	Absolute % cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
Tree Stratum (Plot size: 30 ft.)				Number of Dominant Species That Are OBL, FACW, or FAC _____ (A)
1. <u>None Observed</u>				Total Number of Dominant Species Across All Strata: <u>1</u> (B)
2. _____				Percent of Dominant Species That Are OBL, FACW, or FAC: _____ (A/B)
3. _____				Prevalence Index Worksheet:
4. _____				
_____ = Total Cover				OBL species _____ x 1 = _____
Sapling/Shrub Stratum (Plot size: 15 ft.)				FACW species _____ x 2 = _____
1. <u>None Observed</u>				FAC species _____ x 3 = _____
2. _____				FACU species _____ x 4 = _____
3. _____				UPL species <u>50</u> x 5 = <u>250</u>
4. _____				Column Totals: <u>50</u> (A) <u>250</u> (B)
5. _____				Prevalence Index = B/A = <u>5.00</u>
_____ = Total Cover				Hydrophytic Vegetation Indicators:
Herb Stratum (Plot size: 5 ft.)				
1. <u>Corn</u>	<u>50</u>	<u>yes</u>	<u>UPL</u>	____ 2 - Dominance Test is >50%
2. _____				____ 3 - Prevalence Index is ≤ 3.0 ¹
3. _____				____ 4 - Morphological Adaptations ¹ (Explain)
4. _____				____ Problematic Hydrophytic Vegetation ¹ (Explain)
5. _____				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Provide supporting data in Remarks.
6. _____				Hydrophytic Vegetation Present? Yes _____ No <u>X</u>
7. _____				
8. _____				
9. _____				
10. _____				
_____ = Total Cover				
Woody Vine Stratum (Plot size: 30 ft.)				
1. <u>None Observed</u>				
2. _____				
_____ = Total Cover				
% Bare Ground in Herb Stratum <u>50</u>				

Remarks: (if observed, list morphological adaptations below).
 No positive indication of hydrophytic vegetation was observed (≥50% of dominant species indexed as FAC- or drier).

**Appendix C. Select Wetland, Waterbody, and Non-waters of the US Wetlands
Photographs within the 2024 Wetland Survey Area of the Badger Wind Project in Logan
and McIntosh Counties, North Dakota.**

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Appendix C1. Wetland WET1 facing southwest.



Appendix C2. Wetland WET5 facing southwest.



Appendix C3. Upland point 101U facing north.



Appendix C4. Upland point 104U facing east.

Appendix D. Summary of Non-wetland and Non-waterbody Points Recorded May 9–10, 2024, within the 2024 Wetland Survey Area of the Badger Wind Project in Logan and McIntosh Counties, North Dakota.

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Appendix D. Summary of non-waters of the US points recorded within the 2024 Wetland Survey Area of the Badger Wind Project in Logan and McIntosh counties, North Dakota, May 9–10, 2024.¹

Non-wetland Identification	Type	Latitude	Longitude
100U	non-wetland	46.26852	-99.67062
101U	non-wetland	46.26989	-99.67040
102U	non-wetland	46.29700	-99.66872
103U	non-wetland	46.29787	-99.66791
104U	non-wetland	46.33670	-99.51571
105U	non-wetland	46.36812	-99.64089

¹ Wetlands delineated in 2020, 2021, and 2022 are presented in Atwell (2022), Flaig (2022), and Chodachek and Welsch (2024) reports.

“Non-WOTUS” (“no”) points that lacked wetland or waterbody characteristics and were composed of upland vegetation.

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