

# **Wetlands and Other Waters Delineation Report**

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## 1.0 INTRODUCTION

Northern Divide Wind, LLC (Northern Divide Wind), a wholly owned, indirect subsidiary of NextEra Energy Resources, LLC, is proposing to construct the Northern Divide Wind Energy Center (Project). This report is in support of the Northern Divide Wind Energy Center Application to the North Dakota Public Service Commission for a Certificate of Site Compatibility (Case Number PU-19-376).

The Project consists of up to 74 turbines, four alternative turbine locations, access roads, underground electrical collection and communication systems, an Aircraft Detection Lighting System, a collection substation, an operations and maintenance building, one permanent meteorological evaluation tower, two temporary power performance meteorological evaluation towers, and temporary work spaces for a construction laydown area and a batch plant. The Project Area encompasses approximately 10,912 acres (17.05 square miles) in Burke County, North Dakota. The Project will have a nameplate capacity of approximately 200 MW.

AECOM delineated wetlands and other waters in support of the Project. Other waters can include, but are not limited to, streams, ponds, impoundments, prairie potholes, and lakes. Field surveys occurred from August to November 2019 within the survey corridor. The survey corridor is any location where potential Project infrastructure could be sited within the Project Area. Presented in this report are descriptions of the methodology, results, and conclusions of the delineations. Northern Divide Wind has committed to the North Dakota Game and Fish Department (NDGFD) and U.S. Fish and Wildlife Service (USFWS) to avoid all direct impacts to wetlands and other waters, regardless of their U.S. Army Corps of Engineers (USACE) jurisdictional status.

## 2.0 ENVIRONMENTAL ANALYSIS

### 2.1 Soils

AECOM acquired soils data from a United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) Web Soil Survey site-specific soil report (Soil Survey Staff 2020). There are 14 soil map units consisting primarily of loams, silty loams, and silty clay loams. Five soil map units have a hydric soil component based on their drainage class. The drainage classes are somewhat poorly drained, poorly drained, and very poorly drained. **Tables 2-1** and **2-2** describe drainage class and hydric characteristics, respectively.

**Table 2-1 Drainage Class Description**

Drainage Class	Drainage Class Description
Somewhat poorly drained	Water is removed slowly so that the soil is wet at a shallow depth for significant periods during the growing season. The occurrence of internal free water commonly is shallow to moderately deep and transitory to permanent. Wetness markedly restricts the growth of mesophytic crops, unless artificial drainage is provided. The soils commonly have one or more of the following characteristics: low or very low saturated hydraulic conductivity, a high-water table, additional water from seepage, or nearly continuous rainfall.
Poorly drained	Water is removed so slowly that the soil is wet at shallow depths periodically during the growing season or remains wet for long periods. The occurrence of internal free water is shallow or very shallow and common or persistent. Free water is commonly at or near the surface long enough during the growing season so that most mesophytic crops cannot be grown, unless the soil is artificially drained. The soil, however, is not continuously wet directly below plow-depth. Free water at shallow depth is usually present. This water table is commonly the result of low or very low saturated hydraulic conductivity of nearly continuous rainfall, or of a combination of these.
Very poorly drained	Water is removed from the soil so slowly that free water remains at or very near the ground surface during much of the growing season. The occurrence of internal free water is very shallow and persistent or permanent. Unless the soil is artificially drained, most mesophytic crops cannot be grown. The soils are commonly level or depressed and frequently ponded. If rainfall is high or nearly continuous, slope gradients may be greater.

Source: Soil Survey Division Staff (1993)

**Table 2-2 Hydric Soil Characteristics within the Project Area**

Map Unit Name	Area (acres)	Approximate Percent (%) of Project Area	Drainage Class
Hamerly-Tonka complex, 0 to 3 percent slopes	75.5	0.69%	Somewhat poorly drained
Vallers loam, moderately saline, 0 to 1 percent slopes	64.0	0.59%	Poorly drained
Vallers, moderately saline-Parnell complex, 0 to 1 percent slopes	55.9	0.51%	Poorly drained
Parnell silty clay loam, 0 to 1 percent slopes	346.9	3.18%	Very poorly drained
Southam silty clay loam, 0 to 1 percent slopes	437.5	4.01%	Very poorly drained

Source: Soil Survey Staff (2020)

## 2.2 Geography and Topography

The Project spans two Class IV ecoregions, which are more detailed ecoregions for state-level applications (Bryce et al. 1996): Northern Missouri Coteau and the Northern Dark Brown Prairie. The Northern Missouri Coteau lies in a transition zone to a more boreal climate to the north and a more arid climate to the west. Willow and aspen, southern outliers of aspen parkland to the north, may occur at wetland margins. Rough fescue, also a northern species, appears in grassland associations. Wetlands tend to dry out earlier in the summer than on the Missouri Coteau to the south and east. Mixed dryland agriculture is the major land use.

## 2.3 Hydrology

The USFWS National Wetlands Inventory (NWI) and U.S Geological Survey National Hydrography Dataset (NHD) were used to identify potential surface waters within the Project Area (USFWS 2020, USGS 2020, **Figure 2-2**). This data served as a precursor for field delineations. The Project is located within the Upper Souris Watershed (USGS Cataloging Unit: 09010001) and the Lake Sakakawea Watershed (USGS Cataloging Unit: 10110101), which are further divided into sub-watersheds (see **Table 2-3**) within the Missouri River major watershed (USGS 2020).

**Table 2-3 Sub-Watersheds within the Project Area**

Sub-Watershed Name	12-Digit Hydrologic Unit Code
Unnamed	090100060606
Unnamed	090100071101
City of Columbus	090100071102
Headwaters West Branch Short Creek	090100071103
Red Lake	101101011201
Headwaters White Earth Creek	101101011202
Smishek Lake	101101011301

Source: USGS (2020)

## 2.4 Vegetation and Land Use Cover

The Project is located in rural North Dakota in an area predominantly comprised of cultivated land, hayfields, pasturelands, and grasslands. This area is associated with mixed-grass prairie (Dyke et al. 2015). Vegetation of the mixed-grass prairie consists mainly of Western wheatgrass (*Pascopyrum smithii*), little bluestem (*Schizachyrium scoparium*), purple prairie clover (*Dalea purpurea*), and common yarrow (*Achillea millefolium*) with prairie cordgrass (*Spartina pectinata*) and reed canary grass (*Phalaris arundinacea*) occurring in low areas. As such, agriculture supporting both livestock grazing and crops is a major land use, and most of the native prairie has been converted to wheat, canola, and other commercial crops. Wooded areas are limited to shelterbelts between fields, windbreaks surrounding farmsteads, along drainages, and near wetlands.

A desktop land use classification was completed using current and historical Google Earth aerial imagery (Google Earth 2019) and North Dakota statewide historical imagery from 1957- 1962, 1995-1998, 2003-2006, 2009, 2010, 2012, and 2014-2018 (ND GIS Hub 2019). Parcels of land were classified based on features such as rock piles indicating extensive mechanized rock clearing; presence and amount of trees and shrubs; field edge changes; absence of scattered rocks; straight line features indicating plowing, disking, harvesting, or planting; or any other features indicating human disturbance. Land use was grouped into seven different categories and each category was defined as follows:

1. Cropland: parcels of land that are currently being used for agricultural crop production.

2. Broken Grassland: grassland where the soil has been historically disturbed by tilling, construction, or other mechanical methods.
3. Unbroken Grassland: grassland where the soil has not been disturbed by tilling, construction, or other mechanical methods. Native prairie is considered unbroken grassland. Areas used as pasture and hayland that have not been cultivated are also considered unbroken grassland (e.g., cultivated or extensive mechanized rock clearing) are also considered unbroken grassland.
4. Tree Row: deliberately planted tree rows.
5. Forest/Shrubland: native forested areas that were not deliberately planted and areas predominantly vegetated with shrubs.
6. Existing infrastructure: residences, farmsteads, oil well pads.
7. Wetland: wetlands and other waters.

Once land cover features were evaluated, Google Earth and geographic information system (GIS) mapping software were used to produce a digital data layer of polygons delineating the land use. See **Table 2-4** below for the land use within the Project Area. All of the 74 planned turbines and four alternative turbines locations are located in cropland. Wetlands and other land uses are presented in **Figure 2-3**.

**Table 2-4 Land Use Classification within the Project Area**

Land Cover	Acreage within Project Area <sup>1</sup>	Percentage of Project Area <sup>1</sup>	Acres Permanently Impacted by Project Infrastructure
Cropland	6,953	64%	53.5
Wetland	1,591	15%	0.0
Broken Grassland	1,066	10%	3.5
Unbroken Grassland	742	7%	0.0
Forest/Shrubland	427	4%	0.2
Tree Row	75	<1%	0.0
Existing Infrastructure	43	<1%	0.0

<sup>1</sup> Rounded to the nearest whole number.

## 2.5 Precipitation and Growing Season

The NRCS Climate Analysis for Wetlands (WETS) Tables provide historical data based on a 30-year average (1971-2000) of temperature and precipitation data from the Powers Lake 1N monitoring station (USDA 2019). The WETS table, which includes the records of 30 years of precipitation, estimates the growing season (days with an average temperature >32°F with a probability of 70 percent) to occur from May 19 through September 14. The average annual precipitation is 16.26 inches, with an average monthly precipitation exceeding two inches in May, June, and July. Field surveys were completed in August, September, October, and November, where monthly precipitation reached 2.2, 1.54, 1.22, and 0.71 inches, respectively. The average monthly precipitation during surveys in 2019 was consistent with the average for each month historically. Annual average snow fall is 39.1 inches.

## 3.0 REGULATORY SETTING

### 3.1 Federal Regulations

#### 3.1.1 Clean Water Act

All discharges of dredged or fill material into jurisdictional waters of the United States that result in permanent or temporary losses to “waters of the United States” (WOTUS), are regulated by the United States Army Corps of Engineers (USACE) under Section 404 of the Clean Water Act (CWA). Additionally, the USACE regulates projects in navigable waters under Section 10 of the Rivers and Harbors Act. As defined in 33 Code of Federal Regulations (CFR) Part 328(a), the WOTUS are:

1. All waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;
2. All interstate waters including interstate wetlands;
3. All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation or destruction of which could affect interstate or foreign commerce including any such waters:
  - i. Which are or could be used by interstate or foreign travelers for recreational or other purposes; or
  - ii. From which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or
  - iii. Which are used or could be used for industrial purpose by industries in interstate commerce;
4. All impoundments of waters otherwise defined as WOTUS under the definition;
5. Tributaries of waters identified in paragraphs (a)(1)-(4) of this section;
6. The territorial seas;
7. Wetlands adjacent to waters (other than waters that are themselves wetlands) identified in paragraphs (a)(1)-(6) of this section. Waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of CWA (other than cooling ponds as defined in 40 CFR § 123.11(m) which also meet the criteria of this definition) are not WOTUS.
8. WOTUS do not include prior converted cropland. Notwithstanding the determination of an area's status as prior converted cropland by any other federal agency, for the purposes of the CWA, the final authority regarding CWA jurisdiction remains with the United States Environmental Protection Agency (EPA).

Under USACE regulations, wetlands are defined as “those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas” (33 CFR § 328.3(c)(4)).

In the absence of wetlands in or adjacent to non-tidal waters, the lateral extent of USACE jurisdiction is determined by the ordinary high water mark (OHWM), which is defined as the “line on the shore established by the fluctuations of water and indicated by physical characteristics such as clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas” (33 CFR § 328.3(c)(6)).

The USACE Nationwide Permits (NWP) 12: Utility Line Activities and 14: Linear Transportation Projects, authorize the discharge of dredged or fill material into non-tidal WOTUS given that there is not a loss of greater than ½-acre of WOTUS for any “single and complete project” or that permanent access roads are not constructed above grade in WOTUS for a distance of more than 500 feet. “Single and complete project” refers to each discrete intersection between Project infrastructure and jurisdictional wetlands and other WOTUS. PCN to the USACE is required under both NWP if permanent impacts exceed the 0.10-acre threshold. However, for permanent impacts less than 0.10-acre, no PCN would be required. NWP 12 includes Section 10 authority, so that, should wetlands, WOTUS, or Section 10 waters be impacted, this permit will address all such impacts. If a NWP is used or authorized, even if below the PCN threshold, the project must comply with the Endangered Species Act and National Historic Preservation Act. The General and Regional Conditions of the applicable NWP are included in **Appendix A**.

### **3.1.2 United States Fish and Wildlife Service**

The USFWS manages lands including wetland easements within the Project Area (**Figure 3-1**). These easements are legal agreements between landowners and the USFWS to protect wetlands that are vital to wildlife habitat. The USFWS owns the perpetual rights to certain wetland basins within wetland easements which cannot be burned, drained, filled, or leveled without authorization under a Special Use Permit from the USFWS. The upland portions of wetland easements may be developed without a permit as long as the wetland basins are avoided. However, landowners are permitted to till and farm these areas when they are not wet.

USFWS easements were provided from the USFWS Crosby Wetland Management District for the Project Area. Within the Project Area there are approximately 611 acres of USFWS wetlands easements. All Project infrastructure is sited outside of USFWS easements.

## **3.2 State Regulations**

### **3.2.1 North Dakota Public Service Commission**

In accordance with N.D. Admin Code Section 69-06-08-01(3) Energy Conversion Facility Siting Criteria – Avoidance Areas, the geographical area of wetlands may not be approved as a site for an energy conversion facility unless the applicant shows that under the circumstances there is no reasonable alternative. In determining whether an avoidance area should be designated for a facility the North Dakota Public Service Commission may consider, among other things, the proposed management of adverse impacts, the orderly siting of facilities, system reliability and integrity, the efficient use of resources, and alternative sites. The area of avoidance must include a buffer zone of a reasonable width to protect the integrity of the area. The Project will avoid direct impacts to wetlands and other waters.

### **3.2.2 North Dakota Department of Environmental Quality**

North Dakota regulates wetlands through Section 401 water quality certification under the CWA. The North Dakota Department of Environmental Quality (NDDEQ) is the regulatory agency that issues the Section 401 certification. The NDDEQ does not have a permitting program specific to wetlands and defers to regulations under the CWA. Coverage under the NDDEQ National Pollution Discharge Elimination System (NPDES) general construction permit will be obtained prior to the start of construction.

If dewatering of excavations is necessary during construction and as long as the water is known to be uncontaminated, all water will be discharged according to items outlined in the Storm Water Pollution Prevention Plan (SWPPP). If discharge water is suspected to be contaminated, an application for a temporary discharge permit (NDG-070000) will be submitted to the NDDEQ.

### **3.2.3 North Dakota State Water Commission**

The North Dakota State Water Commission (NDSWC) is the regulatory body that permits water-related projects in the state of North Dakota. The NDSWC issues two types of permits relating to wetlands: a Drainage Permit and a Construction Permit. The Surface Drainage Permit is required according to N.D.C.C. 61-32-03 before draining a pond, slough, lake or sheetwater, or any series thereof, that has a watershed area (i.e., drainage area) of 80 acres or more. The Construction Permit is required according to N.D.C.C. 61-16.1-38 if a water control structure is constructed or modified and is capable of retaining, diverting, or obstructing more than 50 acre-feet of water for dikes, other devices, and low-hazard dams, or 25 acre-feet of water for medium-hazard and high-hazard dams. A conditional or temporary permit for water appropriation is required by the NDSWC if surface water or groundwater will be diverted for construction of the Project. The Project does not meet the criteria for any of the aforementioned NDSWC permits. If surface water or groundwater will be diverted for construction of the Project, a water permit will be required per N.D.C.C. 61-04-02.

## 4.0 WETLAND AND OTHER WATERS DELINEATION METHODS

### 4.1 Desktop Analyses

AECOM conducted a desktop analysis to identify probable locations of wetlands and other waters prior to field work as a preparation to the delineation field effort. The desktop analysis used publicly available online mapping tools, as described in this section below.

The USFWS online Wetlands Mapper tool depicts wetlands mapped as part of the NWI Program. The NWI dataset identified 1,072.3 acres of NWI wetlands as depicted in **Figure 2-2** and in **Table 4-1** (USFWS 2020).

**Table 4-1 NWI Wetlands within the Project Area**

NWI Wetland Type	Acreage within Project Area	Percentage of Project Area
Freshwater Emergent Wetland	909.90	8.34%
Freshwater Forested/Shrub Wetland	1.14	0.01%
Freshwater Pond	87.33	0.80%
Lake	63.90	0.59%
Riverine	10.07	0.09%

Source: USFWS 2020

The NHD was utilized to identify perennial and intermittent streams, ponds, and lakes. The online database NHD Viewer tool was queried and found 10 NHD features that crossed the Project Area as depicted in **Figure 2-2** (USGS 2020). The NHD types included intermittent stream/river and artificial path.

The NRCS is the source for hydric soils information, as shown in **Table 2-1** in Section 2.1 of this report. Data was obtained and was used to cross-check against field sites that were initially observed to exhibit wetland or surface water conditions. Hydric soils were identified associated with NWI and NHD mapped features (**Figure 2-1**) and the Web Soil Survey was queried for drainage class. A total of 8.9 percent of the Project Area is classified as somewhat poorly drained, poorly drained, and very poorly drained.

Due to the Project Area's rural location, no Federal Emergency Management Agency flood rating maps have been developed for the area (USDHS, FEMA 2018).

### 4.2 Wetland Delineations

AECOM conducted wetland delineations within the survey corridor from August to November 2019. The delineations were conducted in areas where Project infrastructure and survey corridors intersected wetlands. In order to provide flexibility for potential Project design changes, the survey corridor included on average and at a minimum: 600-foot diameter area around each turbine location, a 200-foot corridor around access roads, and a 50-foot corridor around collection lines.

Wetland delineations for the Project followed methodology from the USACE Wetlands Delineation Manual (Environmental Laboratory 1987) and the Regional Supplement to the USACE Wetland Delineation Manual: Great Plains Region (Version 2.0) (USACE 2010). The delineation process was utilized to document dominant vegetation, soils, and hydrology in areas of interest (i.e., areas with potential intersections between planned Project infrastructure and potential wetland ecosystems). For a site to be considered a wetland, there must be dominance by hydrophytic vegetation, presence of hydric soils, and characteristic wetland hydrology. Under normal conditions, if a sample plot lacks any of these three criteria, it is considered upland. To determine these three variables, the field team designated paired sample plots, placed at discrete (typically less than 20 feet) distances from one another, for each wetland. One sample

plot represented wetland conditions; the other sample plot represented upland conditions. Each sample plot featured a hand-dug soil pit averaging 16 inches in depth. The sample plot also included nested concentric sampling rings for vegetation cover and species identification, as follows:

- Herbaceous vegetation was identified within a 5-foot radius of the sample plot center;
- Sapling/shrub vegetation was identified within a 15-foot radius of the sample plot center; and,
- Trees and woody vines were documented within a 30-foot radius of the sample plot center.

A Wetland Determination Data Form, specific to the Great Plains Region, was completed for each paired wetland and upland sample plot. In cases where wetlands were assessed outside of the growing season, assessed during drought conditions, or when a wetland boundary was difficult to assess, AECOM conservatively mapped the wetland boundaries.

#### 4.2.1 Hydrophytic Vegetation Indicators

The dominant vegetation at each sample plot was identified to species level and each species was assigned a wetland indicator status (**Table 4-2**) using the State of North Dakota 2016 Wetland Plant Lists (Lichvar et al. 2016). The field team used Wetland Plants of the Northern Great Plains (Chadde 2012) and Weeds of the West (Whitson et al. 2009) as field references for identifying unknown plant species.

Hydrophytic vegetation, or plants likely to occur in wetlands, include those species indicated as obligate, facultative wetland or facultative. Upland plants include all other indicators, including unlisted plants. As a general rule, for a sample plot to meet the wetland vegetation criteria, greater than 50 percent of the plants must be hydrophytes.

**Table 4-2 Wetland Indicator Status**

Indicator Status	Designation	Qualitative Description
Obligate	Hydrophyte	Almost always occur in wetlands under natural conditions (estimated probability >99%).
Facultative Wetland	Hydrophyte	Usually occur in wetlands (estimated probability 67%-99%), but occasionally found in non-wetlands (estimated probability 1%-33%).
Facultative	Hydrophyte	Equally likely to occur in wetlands or non-wetlands (estimated probability 34%- 66%).
Facultative Upland	Non-hydrophyte	Usually occur in non-wetlands (estimated probability 67%-99%), but occasionally found in wetlands (estimated probability 1%-33%).
Upland	Non-hydrophyte	Almost always occur in non-wetlands under natural conditions (estimated probability >99%).
Not Listed	Non-hydrophyte	Not listed plants are assumed to be upland as defined in the user notes for the 2016 Wetland Plant List.

Source: Cowardin et al. 1979

#### 4.2.2 Hydric Soils Indicators

Soil from each soil pit was evaluated for hue, value, and chroma in each observable horizon using Munsell Soil Color Charts (Gretag/Macbeth 2009). Each soil horizon was also checked for texture and for the presence of redoximorphic features, depleted matrix, saturation, and other specific criteria used to document hydric conditions.

#### 4.2.3 Wetland Hydrology Indicators

Each sample plot was evaluated for the presence of hydrology indicators, as defined by the utilized methodologies. One primary indicator is sufficient to conclude that wetland hydrology is present. In the

absence of a primary indicator, two or more secondary indicators are required to conclude that wetland hydrology is present. For each wetland, hydrology was analyzed for all primary and secondary wetland indicators. Once established, the soil pits were left open a sufficient amount of time to allow the apparent high-water table, if present, to stabilize. Depth to surface water, water table, and saturation were recorded when present.

#### **4.2.4 Wetland Mapping**

Wetland scientists mapped delineations with a Trimble Geo 7X Global Positioning System (GPS) by walking the outer limit of visibly identifiable wetland vegetation between the paired wetland and upland sample plots. The Trimble Geo 7X GPS unit provides sub-meter survey accuracy (post-processing). The field-collected data were plotted as a map layer using geographic information system (GIS) software. Additionally, the Trimble Geo 7X GPS was used to record the locations of the wetland and upland soil pits. Photographs of select wetlands are provided in the photographic log in **Appendix B**.

#### **4.3 Other Waters Delineations**

Since the USACE does not have a data form for other waters for the Great Plains Region, data for other waterbodies, such as streams and ponds, data was recorded on an AECOM Other Waters Data Form. The data form documented the waterbody features, flow characteristics, substrate, and vegetation features. A Trimble Geo 7X GPS was used to record the other waters boundary and delineate the OHWM as applicable.

## 5.0 WETLANDS AND OTHER WATERS RESULTS

### 5.1 Wetland Delineation Results

AECOM delineated a total of 138 wetlands within the survey corridor in support of the Project (**Table 5-1**). Delineated wetlands were either within the survey corridor but outside of the planned Project footprint, or were previously in the Project footprint but the layout was modified to avoid impacts. All collection lines that cross wetlands will be bored resulting in no temporary or permanent impacts to the wetlands, as Northern Divide Wind has modified the Project to avoid impacting all wetlands. Maps depicting the delineated wetlands are included in **Figure 3-1**.

**Table 5-1 Delineated Wetlands**

Wetland Identification	Approximate Location		Figure 3-1, Map	Temporary or Permanent Impacts (acres)	Bore Planned
	Latitude	Longitude			
ND-B01-WETLAND	48.766009	-102.76925	17	0.00	No
ND-B02-WETLAND	48.766081	-102.774271	17	0.00	No
ND-B03-WETLAND	48.766772	-102.772672	17	0.00	No
ND-B04-WETLAND	48.770195	-102.765295	17	0.00	No
ND-B65-WETLAND	48.772434	-102.782627	16 and 17	0.00	No
ND-B66-WETLAND	48.774158	-102.783919	16	0.00	No
ND-B67-WETLAND	48.793494	-102.780530	14 and 15	0.00	Yes
ND-B68-WETLAND	48.795002	-102.777740	14	0.00	No
ND-B69-WETLAND	48.783595	-102.811224	12	0.00	No
ND-B70-WETLAND	48.783149	-102.811223	12	0.00	No
ND-B71-WETLAND	48.780831	-102.814787	12	0.00	No
ND-B72-WETLAND	48.802539	-102.813184	13	0.00	No
ND-B73-WETLAND	48.794710	-102.820928	13	0.00	No
ND-B74-WETLAND	48.786635	-102.822124	12	0.00	No
ND-B75-WETLAND	48.780274	-102.824693	12	0.00	No
ND-B76-WETLAND	48.796196	-102.835842	10	0.00	No
ND-B77-WETLAND	48.795336	-102.840641	10	0.00	Yes
ND-B78-WETLAND	48.790763	-102.835755	11	0.00	No
ND-B79-WETLAND	48.790943	-102.841913	11	0.00	No
ND-B80-WETLAND	48.810203	-102.845299	9	0.00	No

Wetland Identification	Approximate Location		Figure 3-1, Map	Temporary or Permanent Impacts (acres)	Bore Planned
	Latitude	Longitude			
ND-B81-WETLAND	48.802602	-102.841730	10	0.00	No
ND-B82-WETLAND	48.801657	-102.839842	10	0.00	Yes
ND-B83-WETLAND	48.801285	-102.839781	10	0.00	Yes
ND-B84-WETLAND	48.801436	-102.835838	10	0.00	No
ND-B85-WETLAND	48.814159	-102.841370	9	0.00	No
ND-B86-WETLAND	48.817570	-102.845677	9	0.00	No
ND-B87-WETLAND	48.802256	-102.869342	8	0.00	Yes
ND-B88-WETLAND	48.810438	-102.858206	8 and 9	0.00	No
ND-B89-WETLAND	48.811925	-102.862527	8	0.00	No
ND-B90-WETLAND	48.812954	-102.861526	8	0.00	No
ND-B91-WETLAND	48.809201	-102.866589	8	0.00	No
ND-B92-WETLAND	48.809047	-102.899321	7	0.00	No
ND-B93-WETLAND	48.812635	-102.908161	3 and 7	0.00	No
ND-B94-WETLAND	48.816877	-102.890610	7	0.00	No
ND-B95-WETLAND	48.817903	-102.886109	7	0.00	No
ND-B96-WETLAND	48.797108	-102.778268	14	0.00	Yes
ND-B97-WETLAND	48.779447	-102.771962	15	0.00	No
ND-B98-WETLAND	48.778657	-102.778952	15	0.00	No
ND-B99-WETLAND	48.783900	-102.816337	12	0.00	No
ND-B100-WETLAND	48.784320	-102.822599	12	0.00	No
ND-B101-WETLAND	48.784360	-102.825680	12	0.00	No
ND-B102-WETLAND	48.781196	-102.822080	12	0.00	Yes
ND-B103-WETLAND	48.794803	-102.830281	10	0.00	No
ND-B104-WETLAND	48.793272	-102.841814	11	0.00	No
ND-B105-WETLAND	48.793150	-102.841320	11	0.00	No
ND-B106-WETLAND	48.791888	-102.840931	11	0.00	No
ND-B107-WETLAND	48.790013	-102.843218	11	0.00	No

Wetland Identification	Approximate Location		Figure 3-1, Map	Temporary or Permanent Impacts (acres)	Bore Planned
	Latitude	Longitude			
ND-B108-WETLAND	48.789364	-102.845870	11	0.00	No
ND-B109-WETLAND	48.827286	-102.894393	5 and 6	0.00	No
ND-B110-WETLAND	48.828577	-102.896078	5 and 6	0.00	No
ND-B113-WETLAND	48.800853	-102.832227	10	0.00	No
ND-B114-WETLAND	48.789273	-102.851781	11	0.00	No
ND-B115-WETLAND	48.789258	-102.849514	11	0.00	No
ND-B116-WETLAND	48.782362	-102.849654	11	0.00	No
ND-B117-WETLAND	48.782190	-102.846285	11	0.00	No
ND-B118-WETLAND	48.781900	-102.844118	11	0.00	No
ND-B119-WETLAND	48.783521	-102.845454	11	0.00	No
ND-B120-WETLAND	48.809193	-102.841899	9	0.00	No
ND-B121-WETLAND	48.811121	-102.842150	9	0.00	No
ND-B122-WETLAND	48.811808	-102.840008	9	0.00	No
ND-B123-WETLAND	48.833083	-102.910407	5	0.00	No
ND-C02-WETLAND	48.813700	-102.920276	3	0.00	Yes
ND-C03-WETLAND	48.807670	-102.921226	3	0.00	No
ND-C04-WETLAND	48.789509	-102.923976	1 and 2	0.00	No
ND-C05-WETLAND	48.789126	-102.929770	1 and 2	0.00	No
ND-C06-WETLAND	48.784166	-102.933721	1	0.00	Yes
ND-C08-WETLAND	48.780164	-102.921981	1	0.00	No
ND-C09-WETLAND	48.793924	-102.936488	2	0.00	No
ND-C10-WETLAND	48.831252	-102.896394	5 and 6	0.00	No
ND-C11-WETLAND	48.824305	-102.922235	4	0.00	Yes
ND-C12-WETLAND	48.822961	-102.924087	4	0.00	No
ND-C14a-WETLAND	48.823384	-102.935435	4	0.00	No
ND-C14b-WETLAND	48.822275	-102.933417	4	0.00	No
ND-C15-WETLAND	48.821754	-102.925880	4	0.00	No

Wetland Identification	Approximate Location		Figure 3-1, Map	Temporary or Permanent Impacts (acres)	Bore Planned
	Latitude	Longitude			
ND-C16-WETLAND	48.817504	-102.925970	3	0.00	Yes
ND-C17a-WETLAND	48.781808	-102.929332	1	0.00	No
ND-C17b-WETLAND	48.783076	-102.838508	11	0.00	Yes
ND-C18-WETLAND	48.824084	-102.903019	6	0.00	No
ND-C19-WETLAND	48.823821	-102.898050	6	0.00	No
ND-C20-WETLAND	48.823270	-102.897680	6	0.00	No
ND-C21-WETLAND	48.815166	-102.896549	7	0.00	No
ND-D01-WETLAND	48.816591	-102.917565	3	0.00	No
ND-D02-WETLAND	48.816652	-102.902221	3 and 7	0.00	No
ND-D03-WETLAND	48.814965	-102.909501	3	0.00	No
ND-D05-WETLAND	48.827688	-102.913836	4, 5 and 6	0.00	No
ND-D07-WETLAND	48.815745	-102.883231	7	0.00	No
ND-D08-WETLAND	48.818642	-102.886281	7	0.00	No
ND-D09-WETLAND	48.818221	-102.884590	7	0.00	No
ND-D10-WETLAND	48.835094	-102.909211	5	0.00	No
ND-D11-WETLAND	48.823544	-102.908008	6	0.00	No
ND-D12-WETLAND	48.823896	-102.912110	4 and 6	0.00	No
ND-D13-WETLAND	48.788082	-102.847120	11	0.00	No
ND-D14-WETLAND	48.806710	-102.848456	10	0.00	No
ND-D15-WETLAND	48.806307	-102.849074	10	0.00	No
ND-D16-WETLAND	48.805455	-102.846217	10	0.00	Yes
ND-D17-WETLAND	48.804486	-102.847005	10	0.00	No
ND-D18-WETLAND	48.805128	-102.847236	10	0.00	No
ND-D19-WETLAND	48.821012	-102.857536	9	0.00	No
ND-D20-WETLAND	48.811592	-102.865943	8	0.00	No
ND-D21-WETLAND	48.810675	-102.863486	8	0.00	Yes
ND-D22-WETLAND	48.810719	-102.867409	8	0.00	No

Wetland Identification	Approximate Location		Figure 3-1, Map	Temporary or Permanent Impacts (acres)	Bore Planned
	Latitude	Longitude			
ND-D23-WETLAND	48.810525	-102.861046	8	0.00	No
ND-D24-WETLAND	48.810441	-102.853351	8	0.00	Yes
ND-D25-WETLAND	48.816562	-102.857000	9	0.00	No
ND-D26-WETLAND	48.802063	-102.775421	14	0.00	No
ND-D28-WETLAND	48.825984	-102.896796	6	0.00	No
ND-D29-WETLAND	48.811704	-102.872404	8	0.00	No
ND-D30-WETLAND	48.810574	-102.872378	8	0.00	Yes
ND-D31-WETLAND	48.807688	-102.862744	8	0.00	No
ND-D32-WETLAND	48.809436	-102.855138	8 and 9	0.00	Yes
ND-D33-WETLAND	48.808074	-102.852677	8 and 9	0.00	Yes
ND-D34-WETLAND	48.807944	-102.851827	8 and 9	0.00	Yes
ND-D35-WETLAND	48.808228	-102.850687	9	0.00	No
ND-D36-WETLAND	48.802024	-102.781470	14	0.00	No
ND-D37-WETLAND	48.801168	-102.777204	14	0.00	Yes
ND-D38-WETLAND	48.801737	-102.776611	14	0.00	No
ND-E01-WETLAND	48.763248	-102.775769	17	0.00	Yes
ND-E02-WETLAND	48.765054	-102.776024	17	0.00	No
ND-E03-WETLAND	48.762047	-102.782458	16 and 17	0.00	Yes
ND-E04-WETLAND	48.762518	-102.786928	17	0.00	Yes
ND-E05-WETLAND	48.763726	-102.788254	16 and 17	0.00	Yes
ND-E06-WETLAND	48.766813	-102.788966	16 and 17	0.00	Yes
ND-E08-WETLAND	48.768992	-102.789283	16 and 17	0.00	No
ND-E09-WETLAND	48.767717	-102.789758	16 and 17	0.00	No
ND-E10-WETLAND	48.770807	-102.790648	16 and 17	0.00	Yes
ND-E11-WETLAND	48.774714	-102.803044	16	0.00	No
ND-E12-WETLAND	48.774396	-102.801487	16	0.00	No
ND-E13-WETLAND	48.773848	-102.799258	16	0.00	No

Wetland Identification	Approximate Location		Figure 3-1, Map	Temporary or Permanent Impacts (acres)	Bore Planned
	Latitude	Longitude			
ND-E14-WETLAND	48.772861	-102.798055	16	0.00	No
ND-E15-WETLAND	48.773648	-102.796552	16	0.00	No
ND-E16-WETLAND	48.773150	-102.796662	16	0.00	No
ND-E17-WETLAND	48.778423	-102.811211	12	0.00	No
ND-E18-WETLAND	48.779869	-102.810278	12	0.00	No
ND-E19-WETLAND	48.800605	-102.797952	13	0.00	No
ND-E20-WETLAND	48.798447	-102.797367	13	0.00	No
ND-E21-WETLAND	48.800393	-102.780970	14	0.00	No
ND-E22-WETLAND	48.794245	-102.785721	14	0.00	Yes
ND-E23-WETLAND	48.793851	-102.786411	14	0.00	No
ND-E24-WETLAND	48.786540	-102.779548	15	0.00	No
ND-E25-WETLAND	48.782021	-102.777872	15	0.00	No
ND-E26-WETLAND	48.806077	-102.864676	8	0.00	No

## 5.2 Other Waters Delineation Results

AECOM delineated a total of seven other waters within the survey corridor in support of the Project (**Table 5-2**). Delineated other waters were either within the survey corridor but outside of the planned Project footprint, or were previously in the Project footprint but the layout was modified to avoid impacts. All collection lines that cross other waters will be bored resulting in no temporary or permanent impacts to the other waters. Northern Divide Wind has modified the Project to avoid impacting all other waters. Maps depicting the delineated other waters are also included in **Figure 3-1**.

**Table 5-2 Delineated Other Waters**

Other Waters Identification	Approximate Location		Figure 3-1, Map	Temporary or Permanent Impacts (acres)	Bore Needed
	Latitude	Longitude			
ND-B01-STREAM	48.805225	-102.800858	13	0.00	No
ND-B02-STREAM	48.801461	-102.870459	8	0.00	No
ND-D01-STREAM	48.804231	-102.768592	14	0.00	Yes
ND-D04-STREAM	48.817641	-102.850900	9	0.00	Yes
ND-D05-STREAM	48.805872	-102.804219	13	0.00	Yes
ND-E01-STREAM	48.803128	-102.809233	13	0.00	Yes
ND-E02-STREAM	48.802947	-102.807590	13	0.00	Yes

## 6.0 CONCLUSION

Based on the Project design, AECOM delineated a total of 145 wetlands and other waters within the survey corridor from August to November 2019 in support of the Project. To the extent practicable, Northern Divide Wind will:

- Avoid direct impacts to wetlands and other waters, including temporary impacts, regardless of USACE jurisdictional status.
- Avoid direct impacts to USFWS wetland easements.
- Obtain coverage under the NDDEQ NPDES general construction permit prior to the start of construction.
- Maintain appropriate water and soil conservation practices during construction through the implementation of best management practices outlined in the SWPPP. These practices include silt fencing, temporary reseeding, permanent seeding, mulching, filter strips, erosion blankets, grassed waterways and sod stabilization.
- Delineate and flag wetlands in close proximity to Project features prior to construction.
- Allow stormwater runoff to flow unrestricted.
- Provide contractors with static constraint maps and ensure compliance through onsite environmental construction monitoring.

## 7.0 LITERATURE CITED

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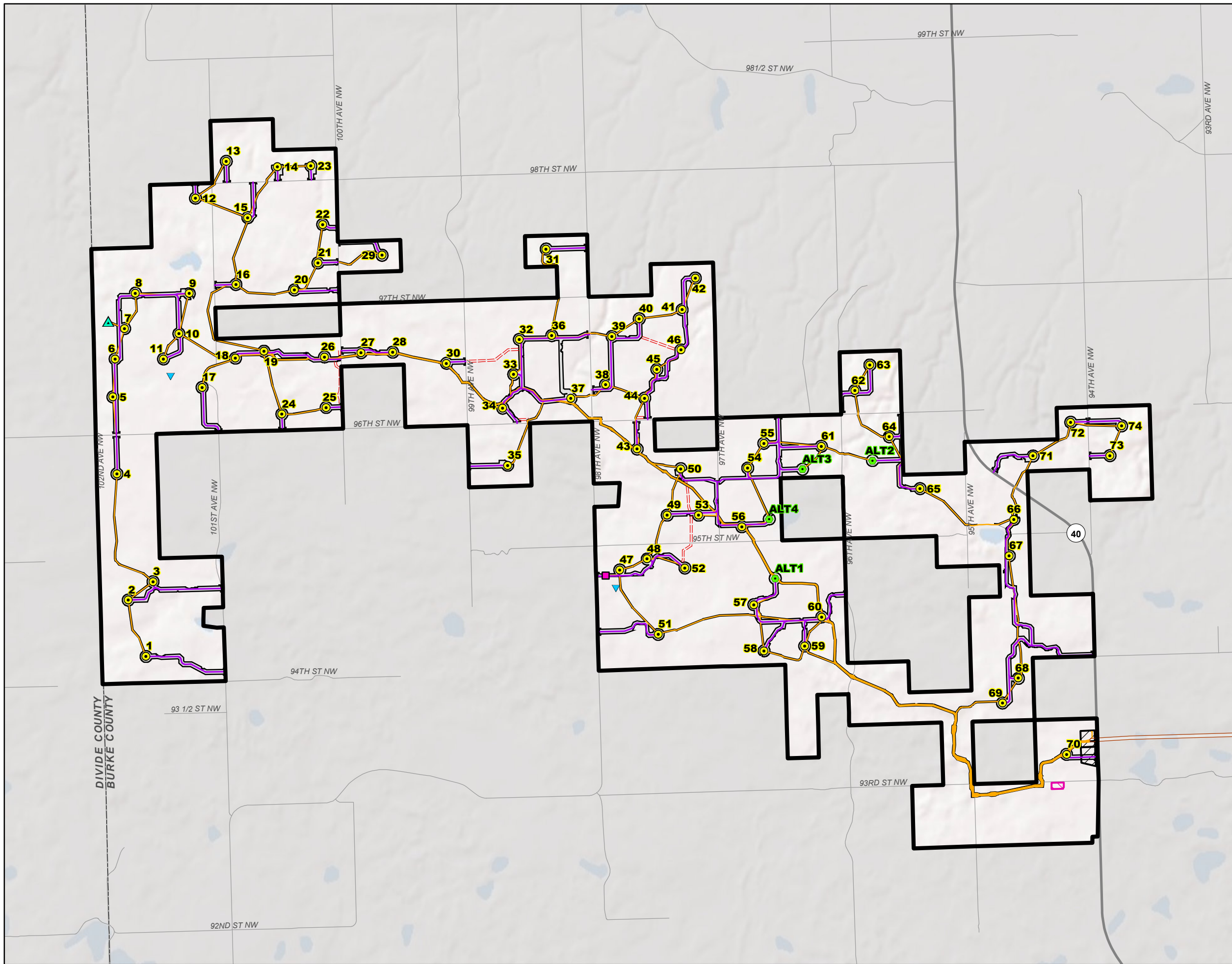
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## 8.0 ACRONYMS AND ABBREVIATIONS

CFR	Code of Federal Regulations
CWA	Clean Water Act
GIS	Geographic Information System
GPS	Global Positioning System
kV	kilovolt
N.D.C.C.	North Dakota Century Code
NDDEQ	North Dakota Department of Environmental Quality
NDSWC	North Dakota State Water Commission
NDGFD	North Dakota Game and Fish Department
NHD	National Hydrography Dataset
NPDES	National Pollution Discharge Elimination System
NRCS	Natural Resources Conservation Service
NWI	National Wetlands Inventory
NWP	Nationwide Permit
Northern Divide Wind	Northern Divide Wind, LLC
OHWM	ordinary high-water mark
PCN	Pre-Construction Notification
Project	Northern Divide Wind Energy Center
SWPPP	Storm Water Pollution Prevention Plan
TNWs	Traditional Navigable Waters
USACE	United States Army Corps of Engineers
USDA	United States Department of Agriculture
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
WETS	Climate Analysis for Wetlands
Wind Energy Center	Northern Divide Wind Energy Center
WOTUS	waters of the United States

## Figures

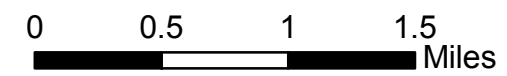


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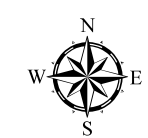
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- State/Federal Highway
- County Boundary

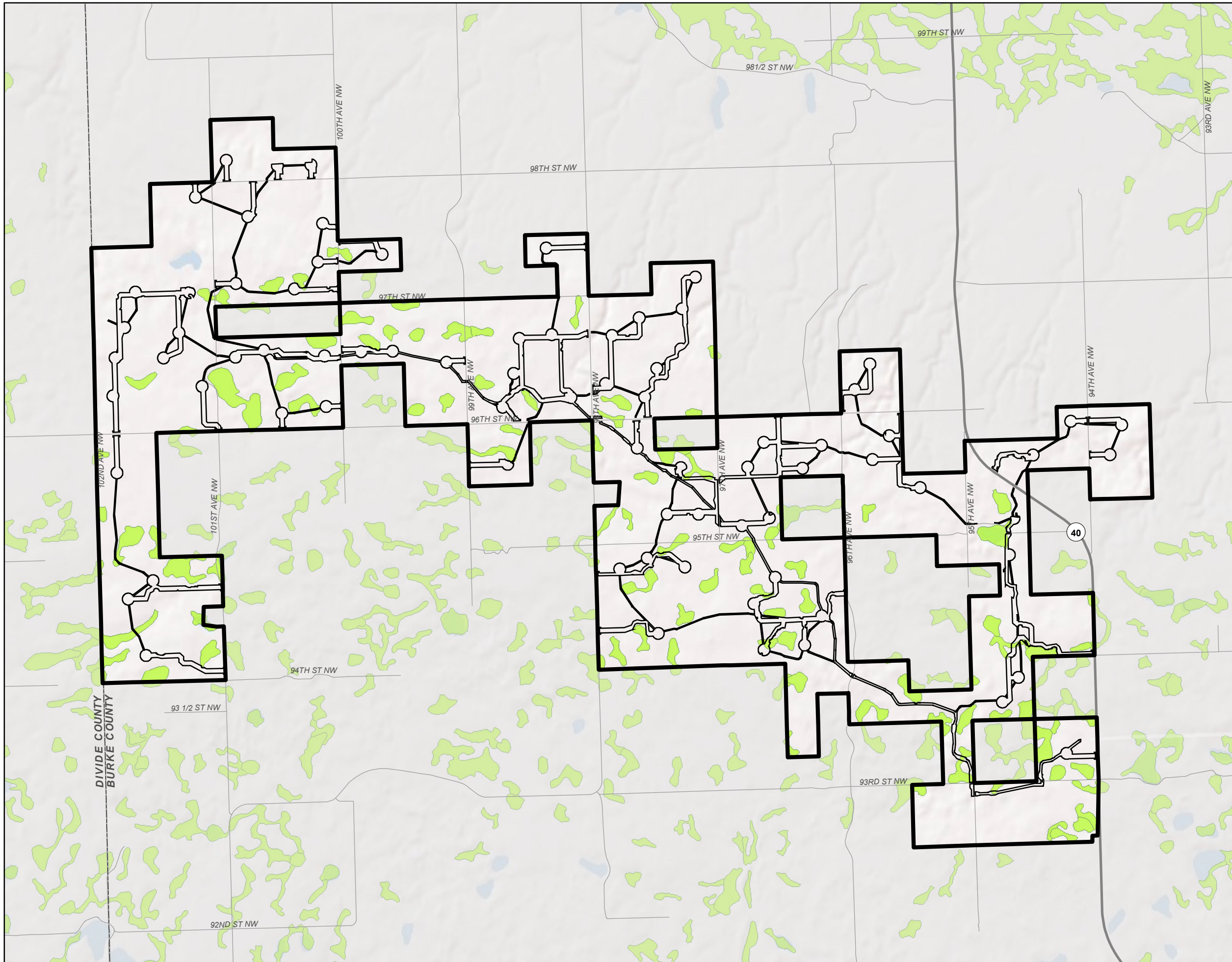
**Site Plan**

- Primary Turbine
- Alternative Turbine
- ▲ Permanent MET Tower
- ▼ Temporary MET Tower
- ADLS Radar Tower
- Access Road
- Collection Line
- - - Crane Path
- ▭ Construction Easement
- ▨ Batch Plant
- ▨ Laydown Yard, O&M Building & Substation
- ▭ Northern Divide 345-kV Transmission Line Right-of-Way
- ▭ Northern Divide Wind Energy Center Project Area



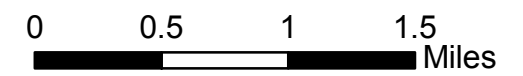
**Figure 1-1**  
**Project Location and**  
**Site Plan**  
**Northern Divide Wind Energy Center**  
**Burke County, ND**





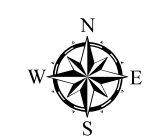
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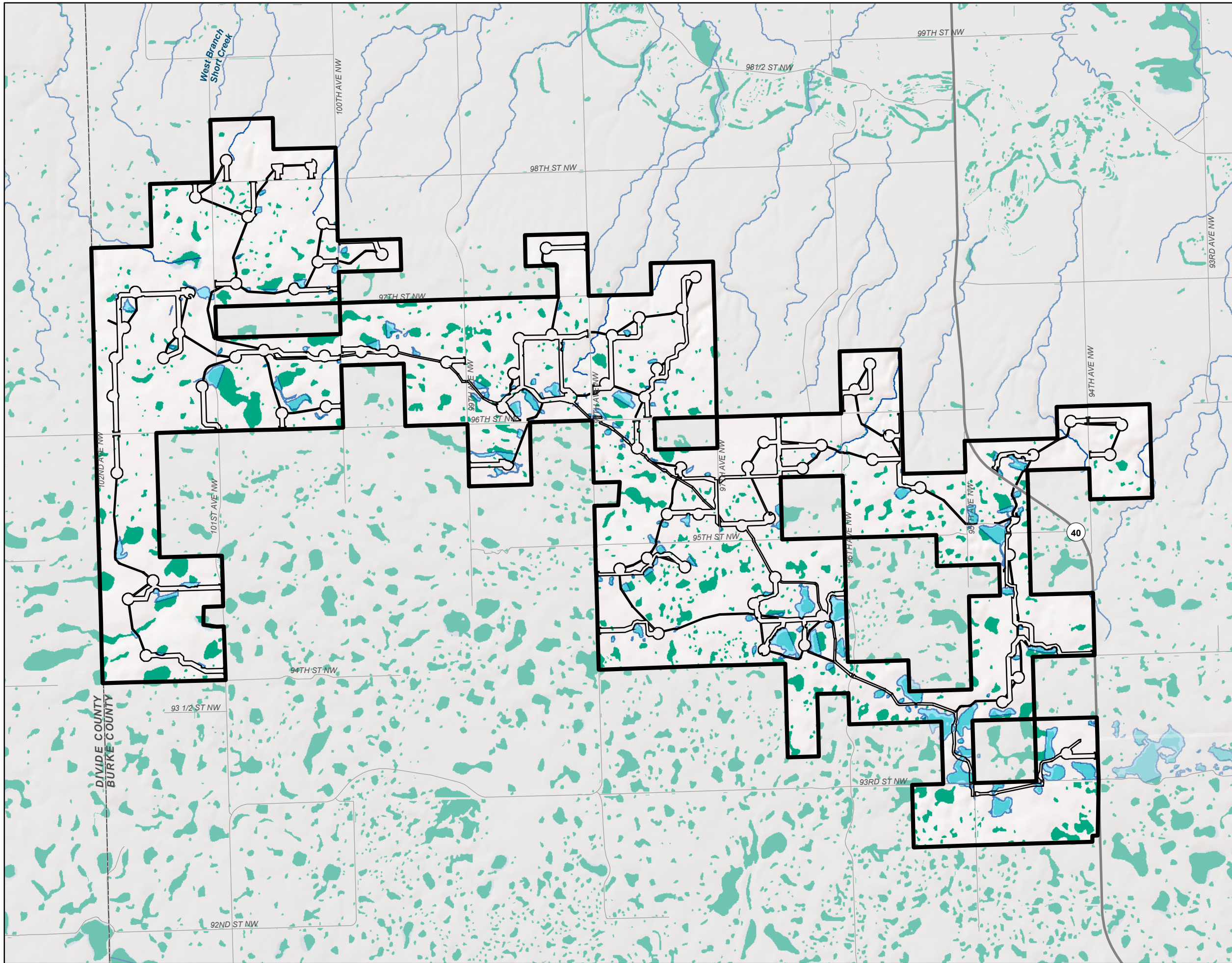
- County Road
  - State/Federal Highway
  - County Boundary
  - Hydric Soils
- Site Plan**
- ▭ Northern Divide Wind Energy Center Project Area
  - ▭ Construction Easement



**Figure 2-1  
Hydric Soils**

**Northern Divide Wind Energy Center  
Burke County, ND**



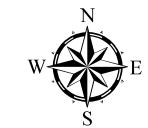
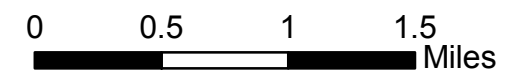


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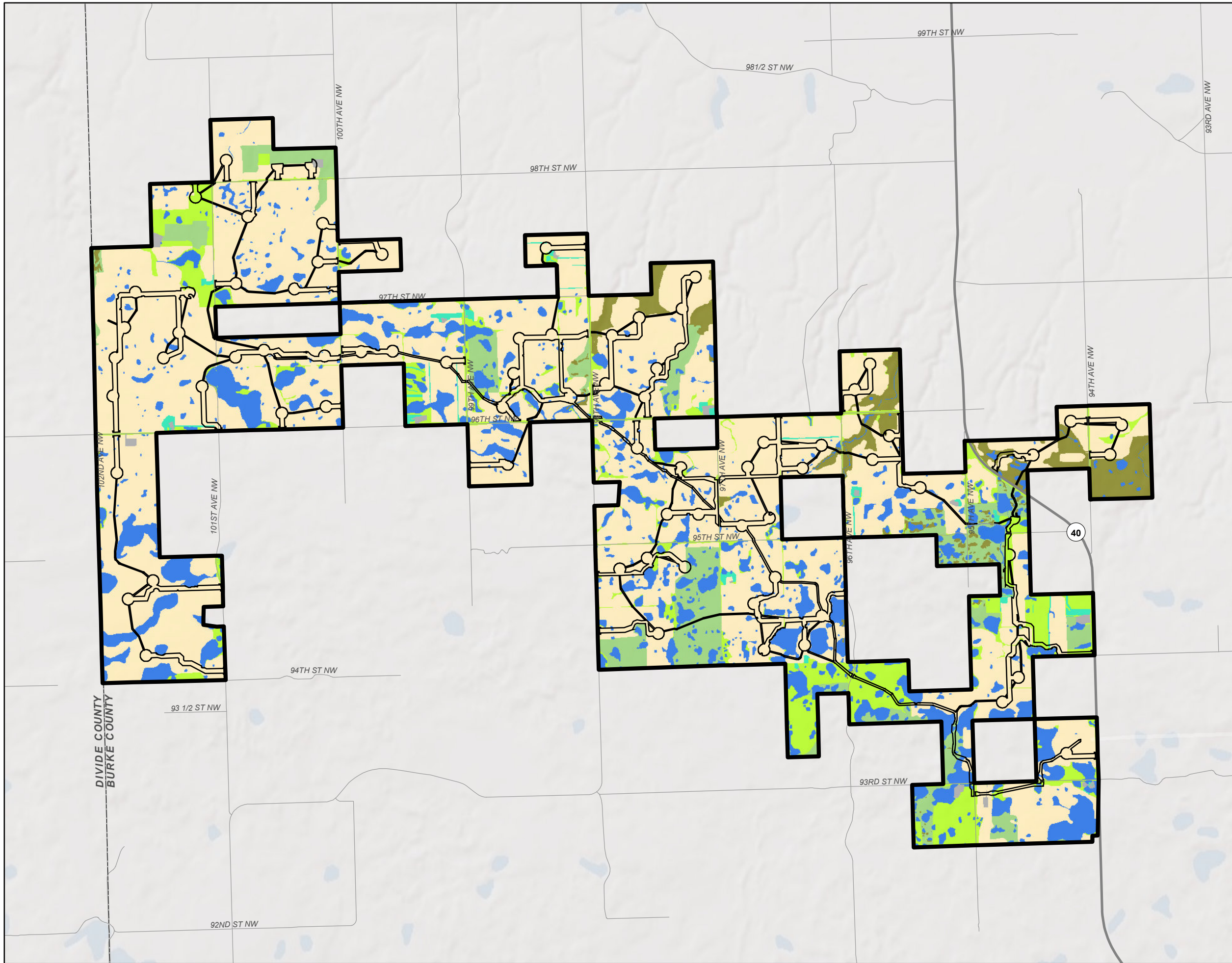
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- State/Federal Highway
- County Boundary
- National Hydrography Dataset (USGS 2019)
- National Wetlands Inventory (USFWS 2019)
- Delineated Wetland

**Site Plan**

- ▭ Northern Divide Wind Energy Center Project Area
- ▭ Construction Easement

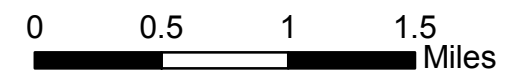


**Figure 2-2**  
**National Wetlands Inventory and Surface Waters**  
 Northern Divide Wind Energy Center  
 Burke County, ND



**Legend**

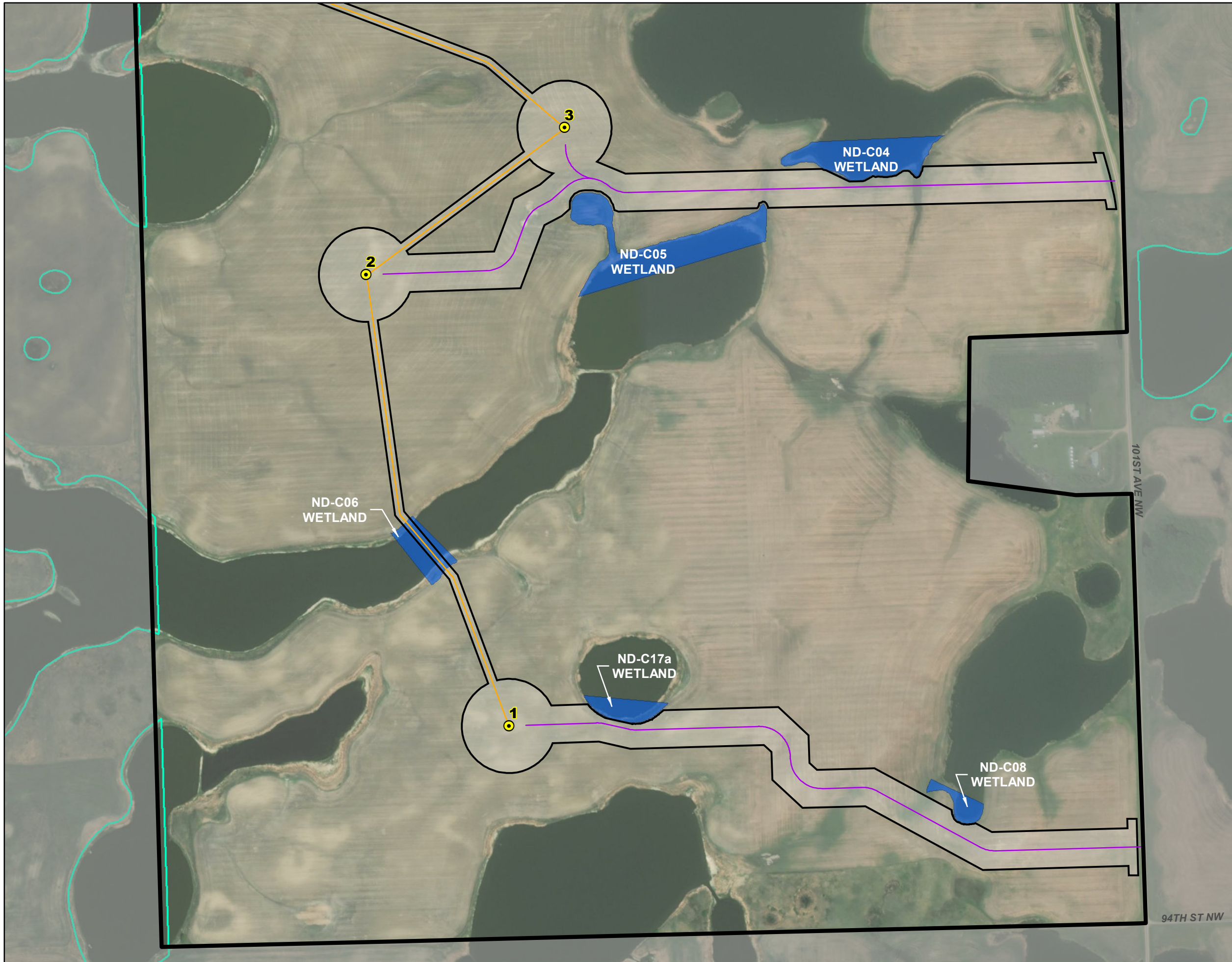
- County Road
  - State/Federal Highway
  - County Boundary
- Site Plan**
- ▭ Northern Divide Wind Energy Center Project Area
  - Construction Easement
- Land Cover Classifications**
- Cropland
  - Broken Grassland
  - Unbroken Grassland
  - Forest/Shrubland
  - Tree Row
  - Wetland
  - Existing Infrastructure



**Figure 2-3  
Land Use Classification**

**Northern Divide Wind Energy Center  
Burke County, ND**

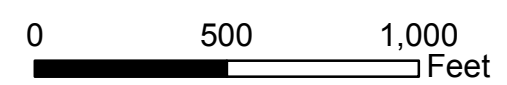
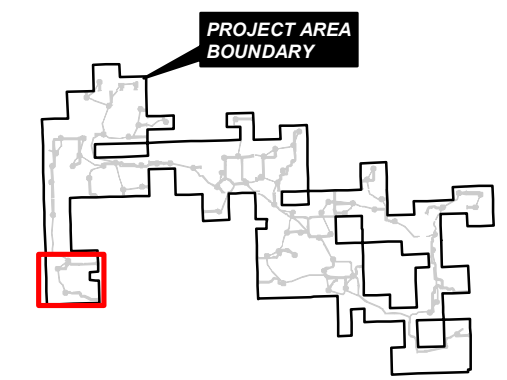




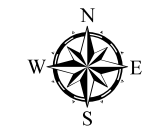
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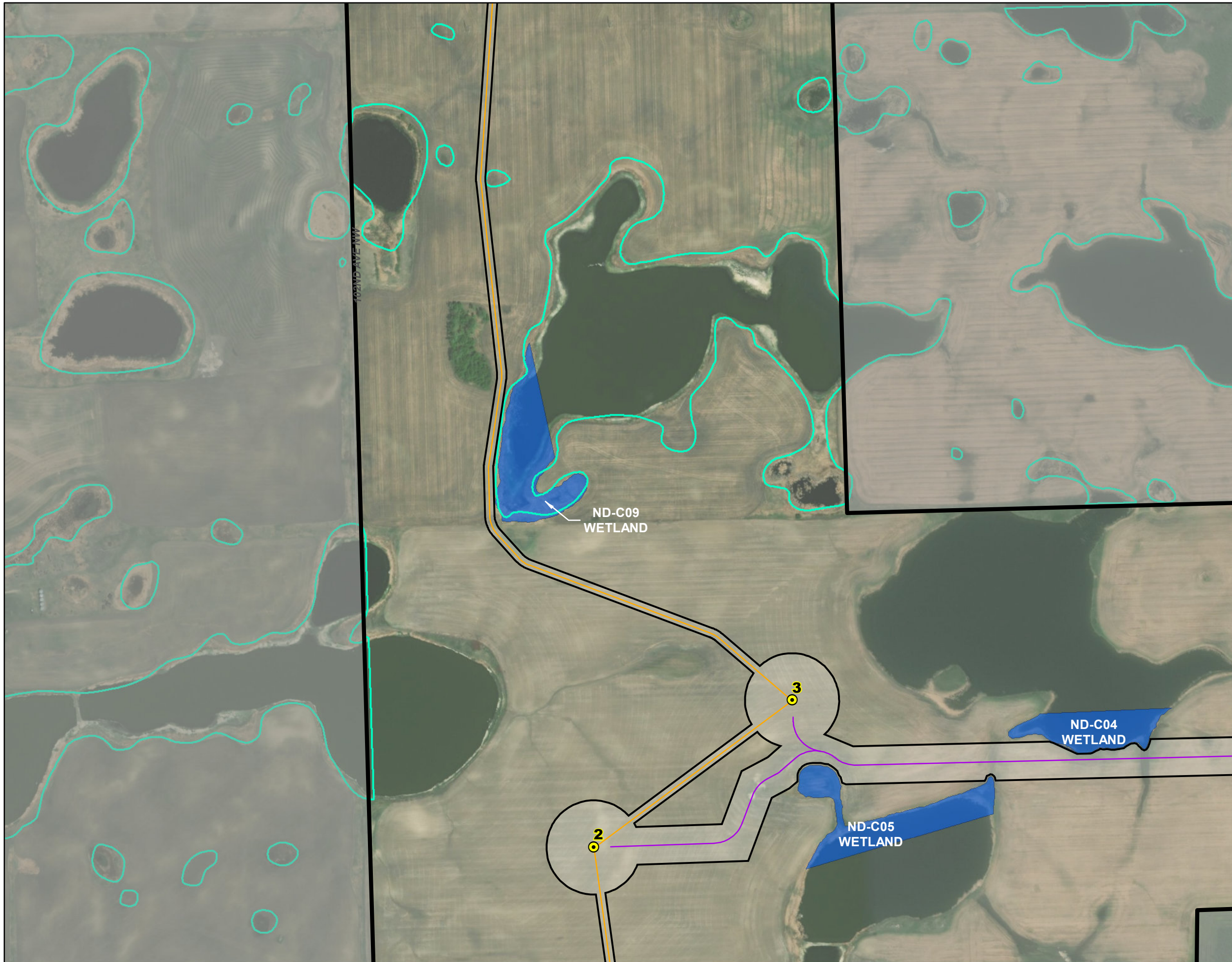
- Site Plan**
- Northern Divide Wind Energy Center Project Area
  - Primary Turbine
  - Access Road
  - Collection Line
  - Construction Easement
  - USFWS Wetland Easement
  - Delineated Wetland

*Contractor will bore collection lines crossing all wetlands and roads.*



**Figure 3-1**  
**Delineated Wetlands**  
 Map 1 of 17  
 Northern Divide Wind Energy Center  
 Burke County, ND

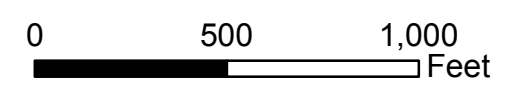
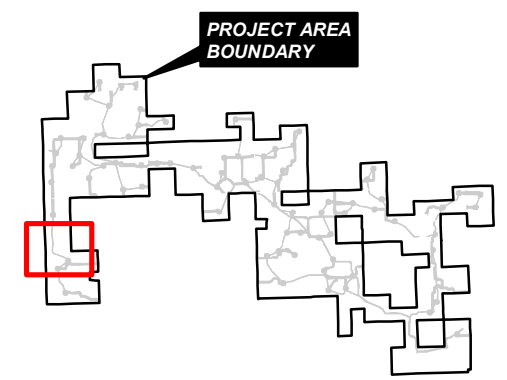




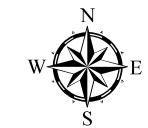
**Legend**

- Site Plan**
- Northern Divide Wind Energy Center Project Area
  - Primary Turbine
  - Access Road
  - Collection Line
  - Construction Easement
  - USFWS Wetland Easement
  - Delineated Wetland

*Contractor will bore collection lines crossing all wetlands and roads.*



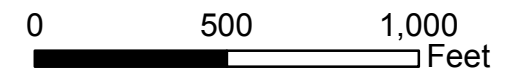
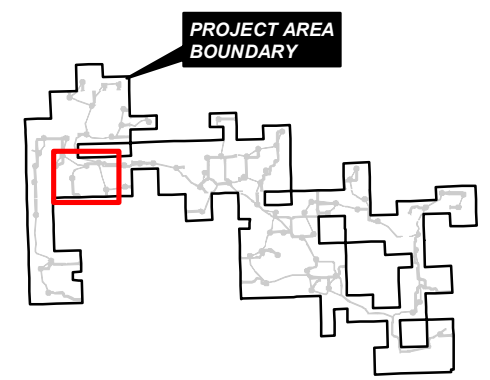
**Figure 3-1**  
**Delineated Wetlands**  
**Map 2 of 17**  
 Northern Divide Wind Energy Center  
 Burke County, ND





- Legend**
- Site Plan**
- Northern Divide Wind Energy Center Project Area
  - Primary Turbine
  - Temporary MET Tower
  - Access Road
  - Collection Line
  - Construction Easement
  - USFWS Wetland Easement
  - Delineated Wetland

*Contractor will bore collection lines crossing all wetlands and roads.*



**Figure 3-1**  
**Delineated Wetlands**  
 Map 3 of 17  
 Northern Divide Wind Energy Center  
 Burke County, ND

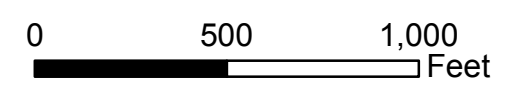
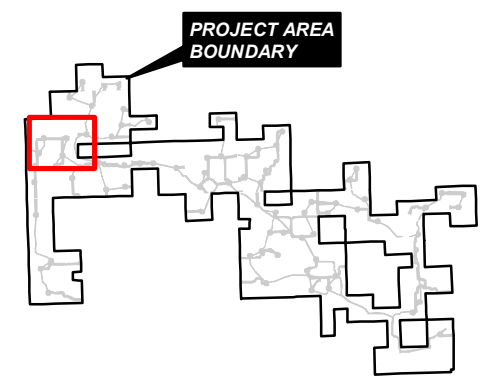




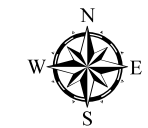
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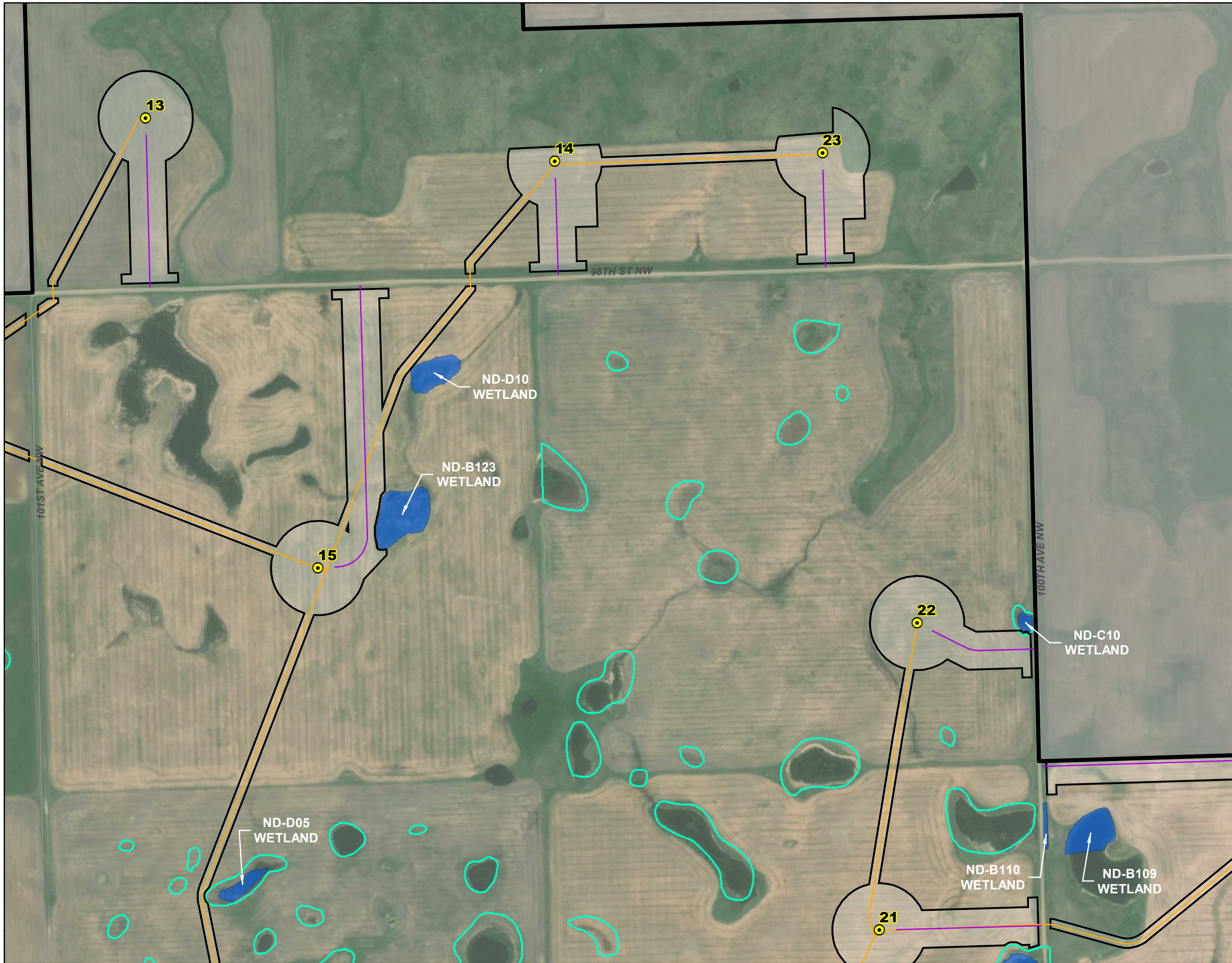
- Site Plan**
- Northern Divide Wind Energy Center Project Area
  - Primary Turbine
  - Permanent MET Tower
  - Access Road
  - Collection Line
  - Construction Easement
  - USFWS Wetland Easement
  - Delineated Wetland

*Contractor will bore collection lines crossing all wetlands and roads.*



**Figure 3-1**  
**Delineated Wetlands**  
**Map 4 of 17**  
**Northern Divide Wind Energy Center**  
**Burke County, ND**

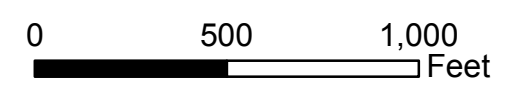
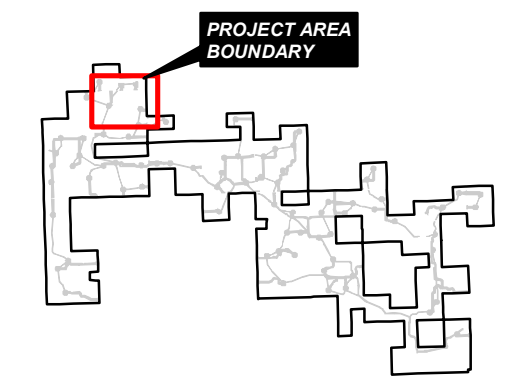




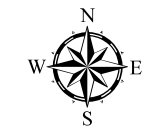
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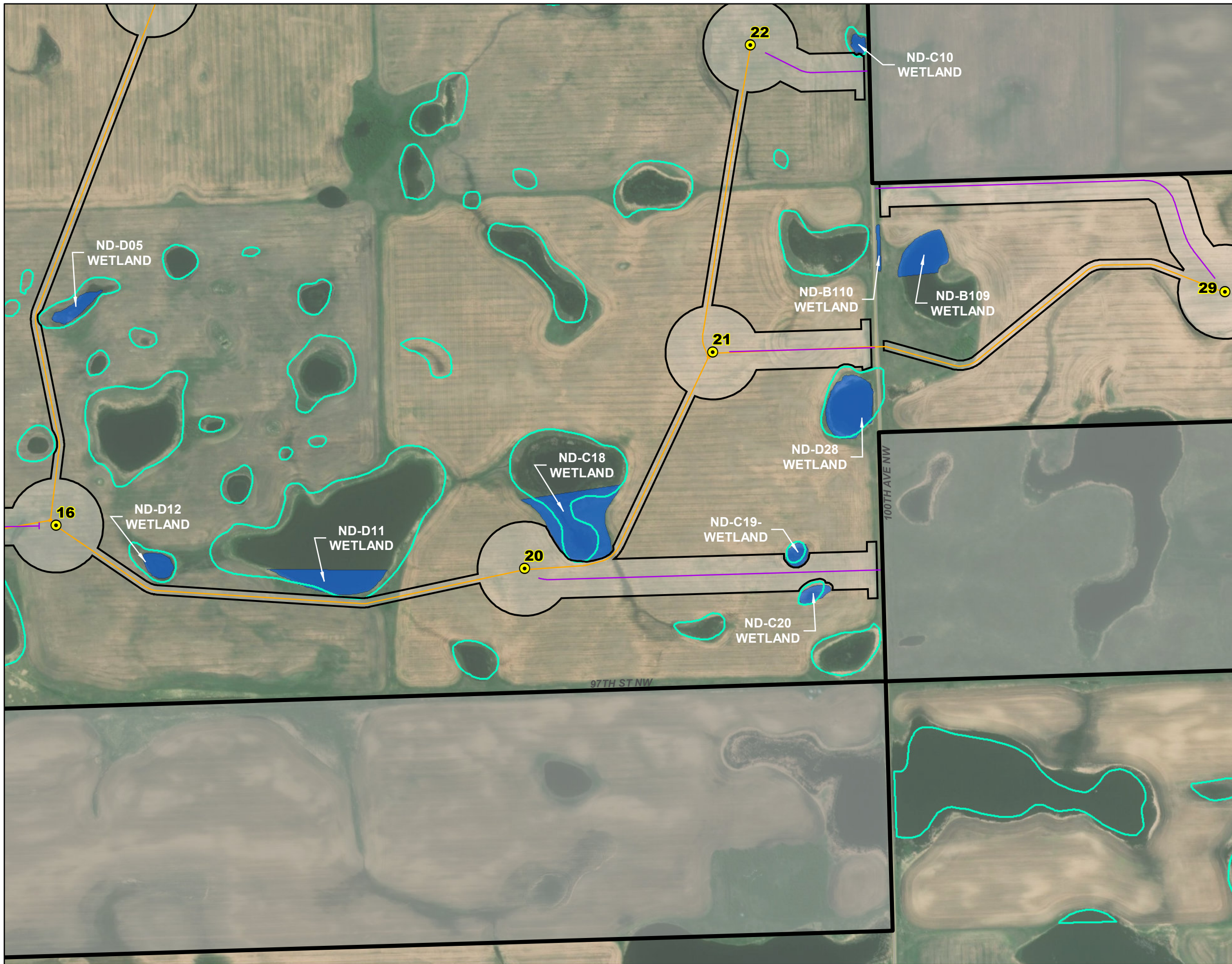
- Site Plan**
- Northern Divide Wind Energy Center Project Area
  - Primary Turbine
  - Access Road
  - Collection Line
  - Construction Easement
  - USFWS Wetland Easement
  - Delineated Wetland

*Contractor will bore collection lines crossing all wetlands and roads.*



**Figure 3-1**  
**Delineated Wetlands**  
**Map 5 of 17**  
**Northern Divide Wind Energy Center**  
**Burke County, ND**

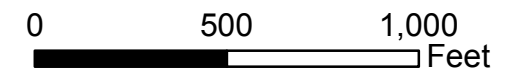
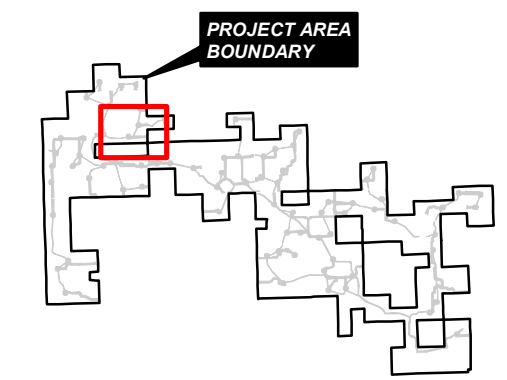




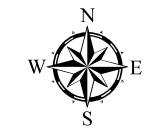
**Legend**

- Site Plan**
- Northern Divide Wind Energy Center Project Area
  - Primary Turbine
  - Access Road
  - Collection Line
  - Construction Easement
  - USFWS Wetland Easement
  - Delineated Wetland

*Contractor will bore collection lines crossing all wetlands and roads.*



**Figure 3-1**  
**Delineated Wetlands**  
**Map 6 of 17**  
**Northern Divide Wind Energy Center**  
**Burke County, ND**

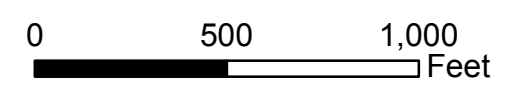
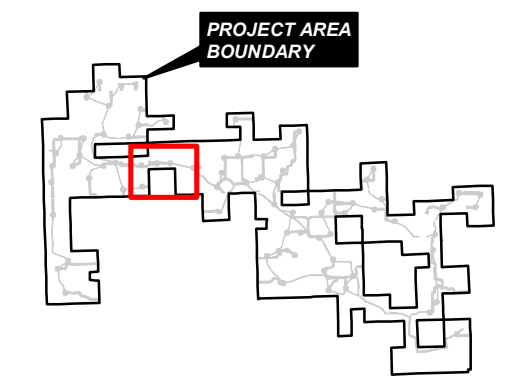




**Legend**

- Site Plan**
- Northern Divide Wind Energy Center Project Area
  - Primary Turbine
  - Access Road
  - Collection Line
  - Crane Path
  - Construction Easement
  - USFWS Wetland Easement
  - Delineated Wetland

*Contractor will bore collection lines crossing all wetlands and roads.*



**Figure 3-1**  
**Delineated Wetlands**  
 Map 7 of 17  
 Northern Divide Wind Energy Center  
 Burke County, ND

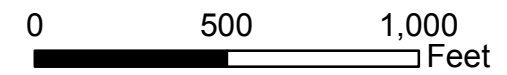
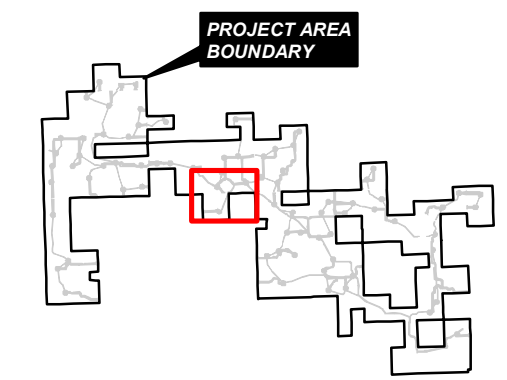




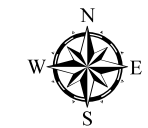
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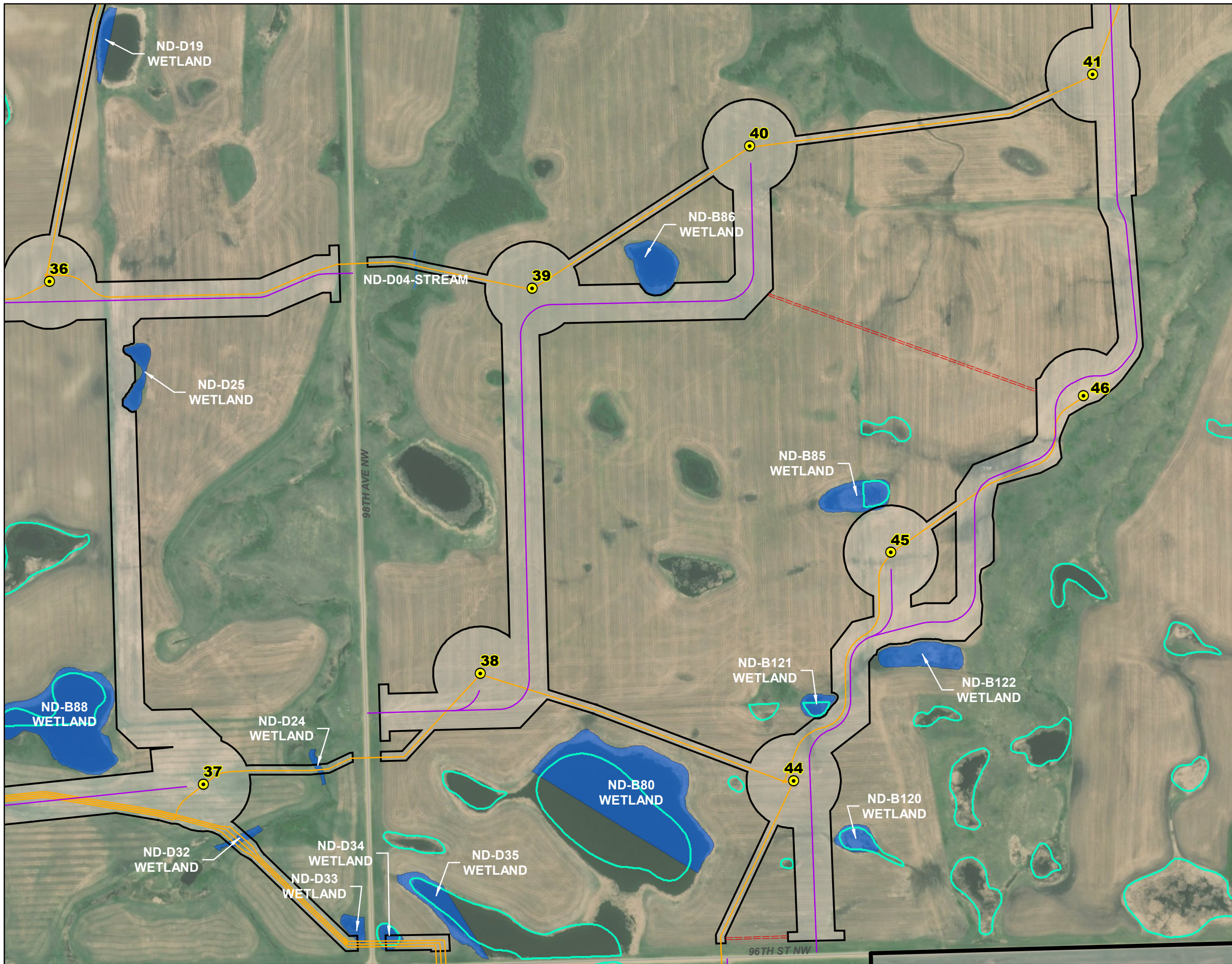
- Site Plan**
- Northern Divide Wind Energy Center Project Area
  - Primary Turbine
  - Access Road
  - Collection Line
  - Crane Path
  - Construction Easement
  - USFWS Wetland Easement
  - Delineated Wetland
  - Delineated Stream

*Contractor will bore collection lines crossing all wetlands and roads.*



**Figure 3-1**  
**Delineated Wetlands**  
 Map 8 of 17  
 Northern Divide Wind Energy Center  
 Burke County, ND

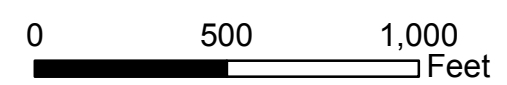
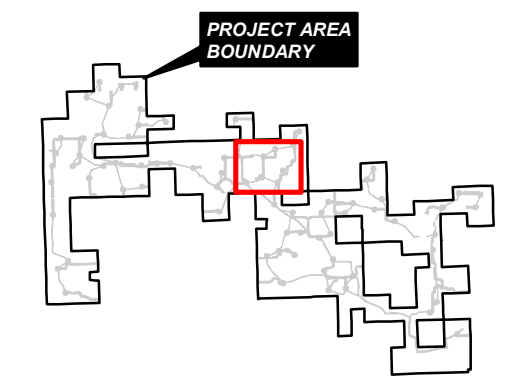




**Legend**

- Site Plan**
- Northern Divide Wind Energy Center Project Area
  - Primary Turbine
  - Access Road
  - Collection Line
  - Crane Path
  - Construction Easement
  - USFWS Wetland Easement
  - Delineated Wetland
  - Delineated Stream

*Contractor will bore collection lines crossing all wetlands and roads.*



**Figure 3-1**  
**Delineated Wetlands**  
**Map 9 of 17**  
**Northern Divide Wind Energy Center**  
**Burke County, ND**

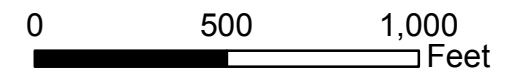
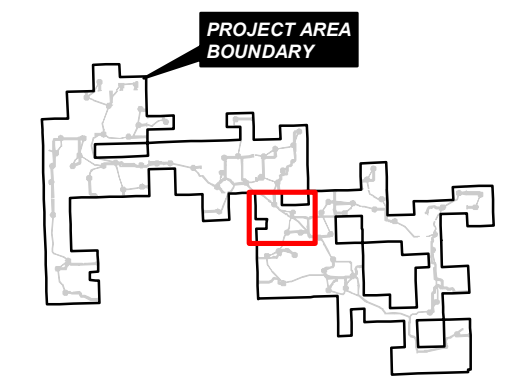




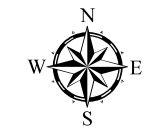
**Legend**

- Site Plan**
- Northern Divide Wind Energy Center Project Area
  - Primary Turbine
  - Access Road
  - Collection Line
  - Crane Path
  - Construction Easement
  - USFWS Wetland Easement
  - Delineated Wetland

*Contractor will bore collection lines crossing all wetlands and roads.*



**Figure 3-1**  
**Delineated Wetlands**  
 Map 10 of 17  
 Northern Divide Wind Energy Center  
 Burke County, ND

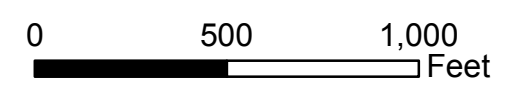
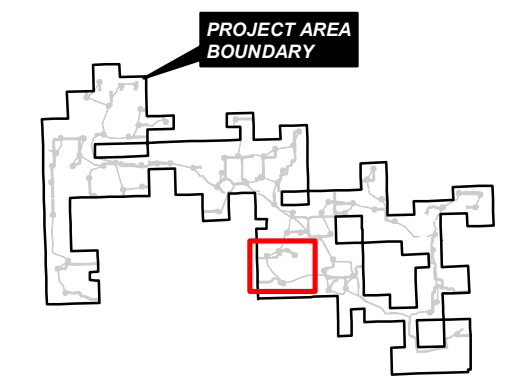




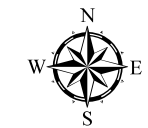
**Legend**

- Site Plan**
- Northern Divide Wind Energy Center Project Area
  - Primary Turbine
  - Temporary MET Tower
  - ADLS Radar Tower
  - Access Road
  - Collection Line
  - Crane Path
  - Construction Easement
  - USFWS Wetland Easement
  - Delineated Wetland

*Contractor will bore collection lines crossing all wetlands and roads.*



**Figure 3-1**  
**Delineated Wetlands**  
 Map 11 of 17  
 Northern Divide Wind Energy Center  
 Burke County, ND

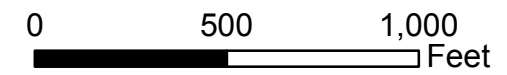
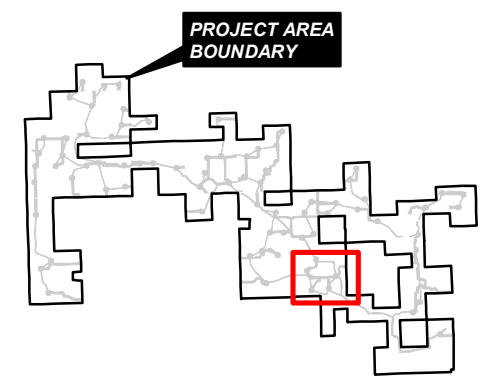




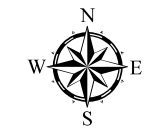
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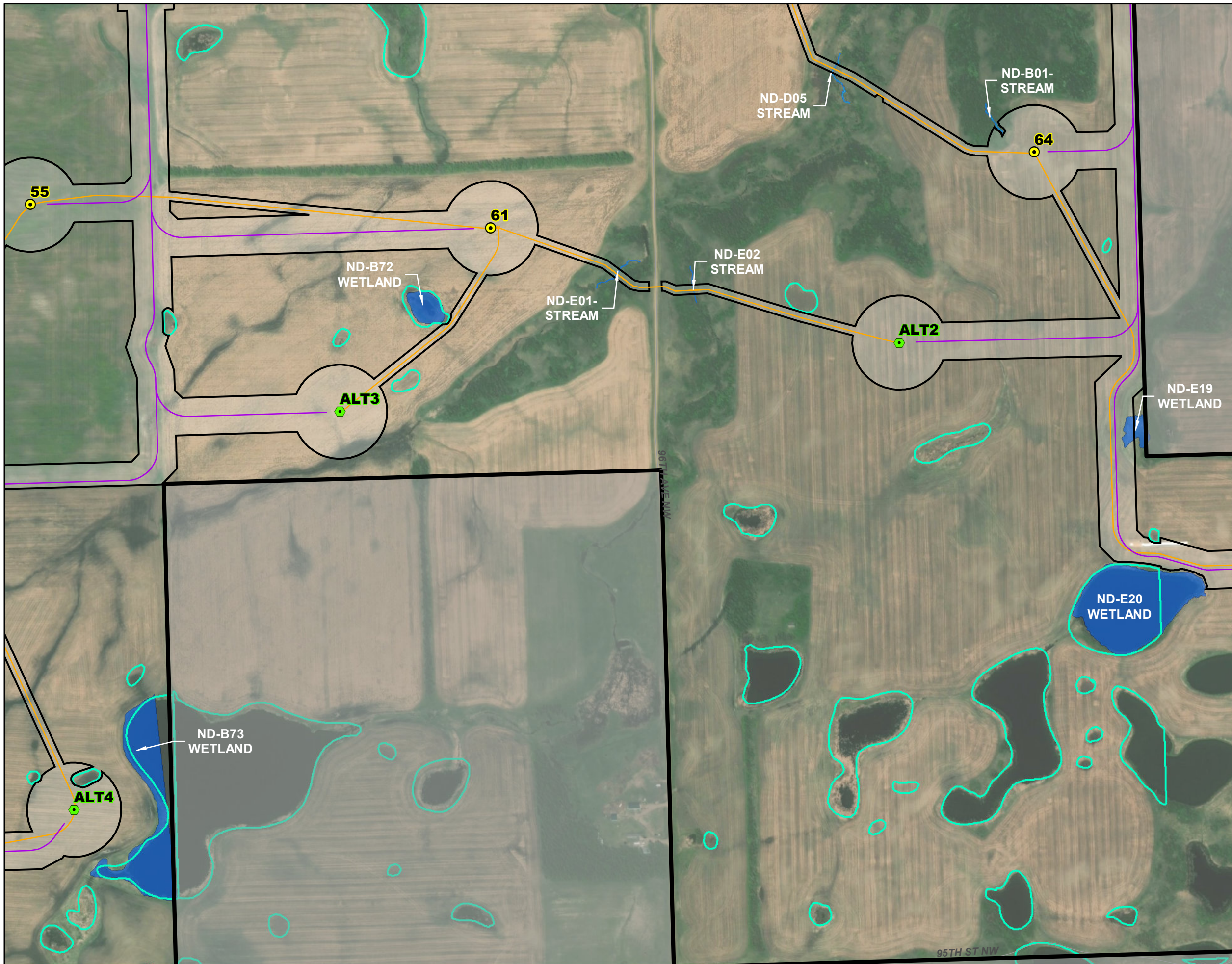
- Site Plan**
- Northern Divide Wind Energy Center Project Area
  - Primary Turbine
  - Alternative Turbine
  - Access Road
  - Collection Line
  - Construction Easement
  - USFWS Wetland Easement
  - Delineated Wetland

*Contractor will bore collection lines crossing all wetlands and roads.*



**Figure 3-1**  
**Delineated Wetlands**  
 Map 12 of 17  
 Northern Divide Wind Energy Center  
 Burke County, ND

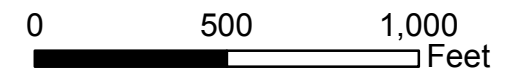
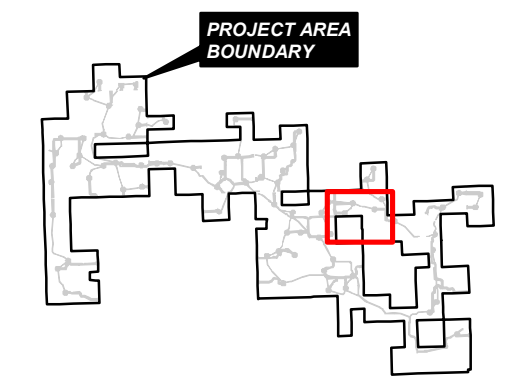




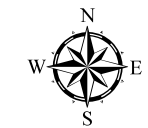
**Legend**

- Site Plan**
- Northern Divide Wind Energy Center Project Area
  - Primary Turbine
  - Alternative Turbine
  - Access Road
  - Collection Line
  - Construction Easement
  - USFWS Wetland Easement
  - Delineated Wetland
  - Delineated Stream

*Contractor will bore collection lines crossing all wetlands and roads.*



**Figure 3-1**  
**Delineated Wetlands**  
 Map 13 of 17  
 Northern Divide Wind Energy Center  
 Burke County, ND

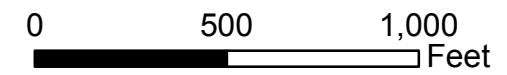
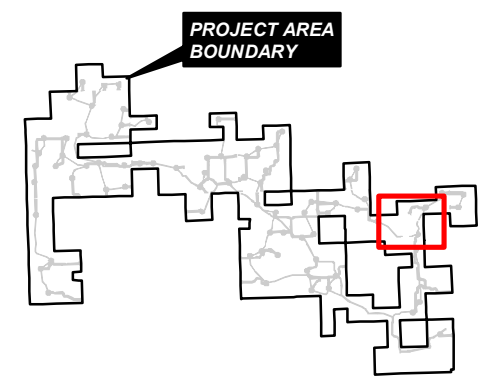




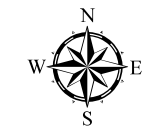
**Legend**

- Site Plan**
- Northern Divide Wind Energy Center Project Area
  - Primary Turbine
  - Access Road
  - Collection Line
  - Construction Easement
  - USFWS Wetland Easement
  - Delineated Wetland
  - Delineated Stream

*Contractor will bore collection lines crossing all wetlands and roads.*



**Figure 3-1**  
**Delineated Wetlands**  
 Map 14 of 17  
 Northern Divide Wind Energy Center  
 Burke County, ND

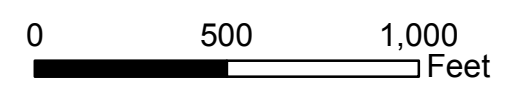
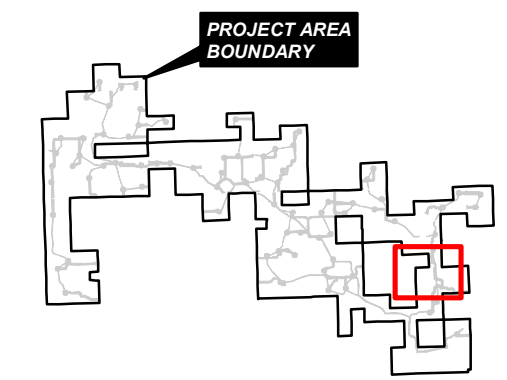




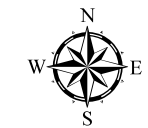
**Legend**

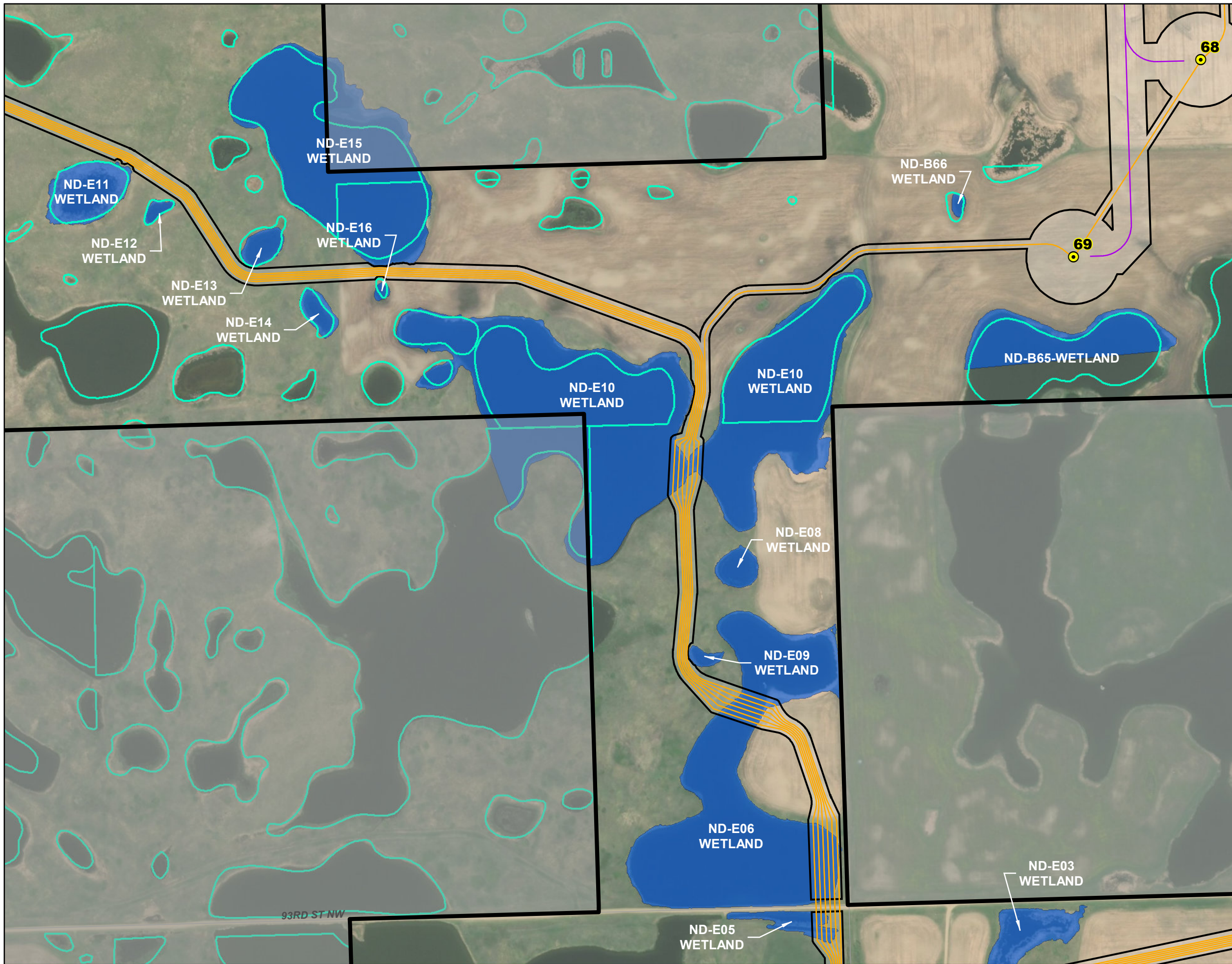
- Site Plan**
- Northern Divide Wind Energy Center Project Area
  - Primary Turbine
  - Access Road
  - Collection Line
  - Construction Easement
  - USFWS Wetland Easement
  - Delineated Wetland

*Contractor will bore collection lines crossing all wetlands and roads.*



**Figure 3-1**  
**Delineated Wetlands**  
 Map 15 of 17  
 Northern Divide Wind Energy Center  
 Burke County, ND

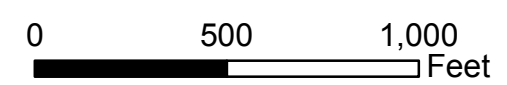
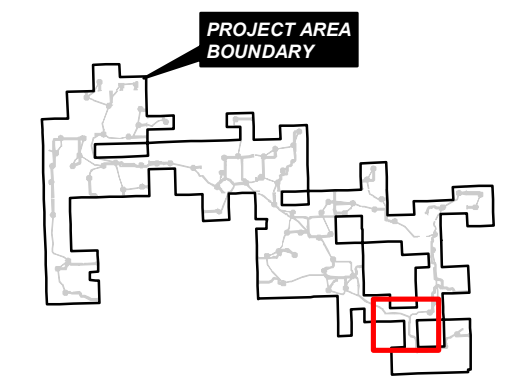




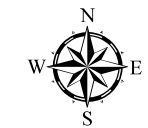
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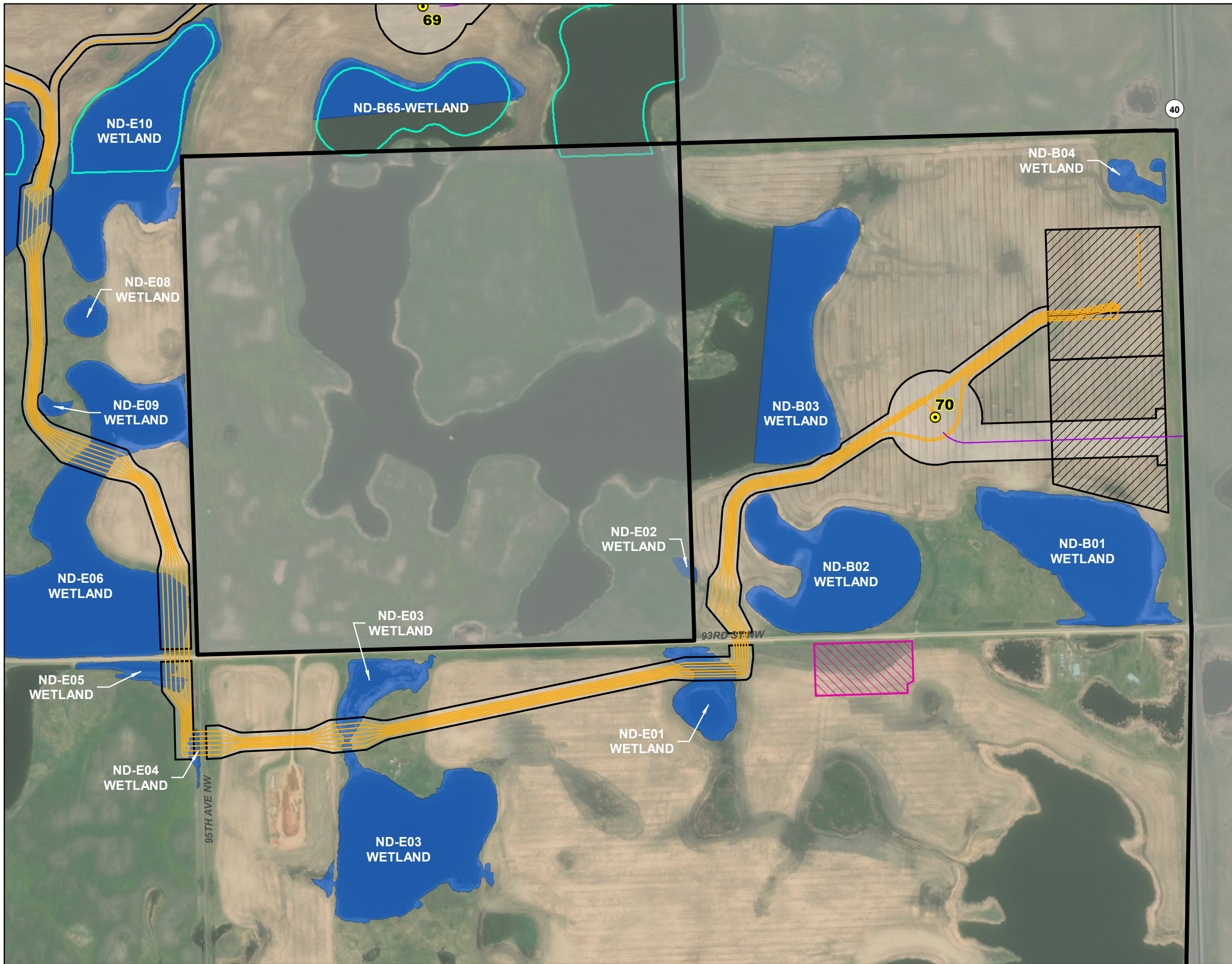
- Site Plan**
- Northern Divide Wind Energy Center Project Area
  - Primary Turbine
  - Access Road
  - Collection Line
  - Construction Easement
  - USFWS Wetland Easement
  - Delineated Wetland

*Contractor will bore collection lines crossing all wetlands and roads.*



**Figure 3-1**  
**Delineated Wetlands**  
 Map 16 of 17  
 Northern Divide Wind Energy Center  
 Burke County, ND

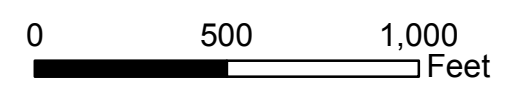
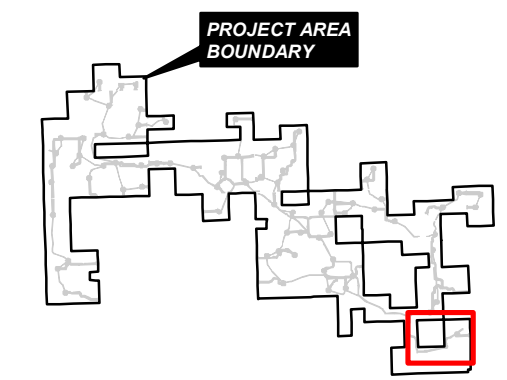




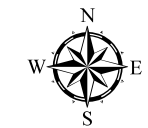
**Legend**

- Site Plan**
- Northern Divide Wind Energy Center Project Area
  - Primary Turbine
  - Access Road
  - Collection Line
  - Batch Plant
  - Laydown Yard, O&M Building & Substation
  - Construction Easement
  - USFWS Wetland Easement
  - Delineated Wetland

*Contractor will bore collection lines crossing all wetlands and roads.*



**Figure 3-1**  
**Delineated Wetlands**  
 Map 17 of 17  
 Northern Divide Wind Energy Center  
 Burke County, ND



**Appendix A**  
**USACE Nationwide Permits General and Regional Conditions**

## **Nationwide Permit General Conditions**

Note: To qualify for NWP authorization, the prospective permittee must comply with the following general conditions, as applicable, in addition to any regional or case-specific conditions imposed by the division engineer or district engineer. Prospective permittees should contact the appropriate Corps district office to determine if regional conditions have been imposed on an NWP. Prospective permittees should also contact the appropriate Corps district office to determine the status of Clean Water Act Section 401 water quality certification and/or Coastal Zone Management Act consistency for an NWP. Every person who may wish to obtain permit authorization under one or more NWPs, or who is currently relying on an existing or prior permit authorization under one or more NWPs, has been and is on notice that all of the provisions of 33 CFR 330.1 through 330.6 apply to every NWP authorization.

Note especially 33 CFR 330.5 relating to the modification, suspension, or revocation of any NWP authorization.

1. Navigation. (a) No activity may cause more than a minimal adverse effect on navigation.

(b) Any safety lights and signals prescribed by the U.S. Coast Guard, through regulations or otherwise, must be installed and maintained at the permittee's expense on authorized facilities in navigable waters of the United States.

(c) The permittee understands and agrees that, if future operations by the United States require the removal, relocation, or other alteration, of the structure or work herein authorized, or if, in the opinion of the Secretary of the Army or his authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, the permittee will be required, upon due notice from the Corps of Engineers, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the United States. No claim shall be made against the United States on account of any such removal or alteration.

2. Aquatic Life Movements. No activity may substantially disrupt the necessary life cycle movements of those species of aquatic life indigenous to the waterbody, including those species that normally migrate through the area, unless the activity's primary purpose is to impound water. All permanent and temporary crossings of waterbodies shall be suitably culverted, bridged, or otherwise designed and constructed to maintain low flows to sustain the movement of those aquatic species. If a bottomless culvert cannot be used, then the crossing should be designed and constructed to minimize adverse effects to aquatic life movements.

3. Spawning Areas. Activities in spawning areas during spawning seasons must be avoided to the maximum extent practicable. Activities that result in the physical destruction (e.g., through excavation, fill, or downstream smothering by substantial turbidity) of an important spawning area are not authorized.

4. Migratory Bird Breeding Areas. Activities in waters of the United States that serve as breeding areas for migratory birds must be avoided to the maximum extent practicable.

5. Shellfish Beds. No activity may occur in areas of concentrated shellfish populations, unless the activity is directly related to a shellfish harvesting activity authorized by NWPs 4 and 48, or

is a shellfish seeding or habitat restoration activity authorized by NWP 27.

6. Suitable Material. No activity may use unsuitable material (e.g., trash, debris, car bodies, asphalt, etc.). Material used for construction or discharged must be free from toxic pollutants in toxic amounts (see section 307 of the Clean Water Act).

7. Water Supply Intakes. No activity may occur in the proximity of a public water supply intake, except where the activity is for the repair or improvement of public water supply intake structures or adjacent bank stabilization.

8. Adverse Effects From Impoundments. If the activity creates an impoundment of water, adverse effects to the aquatic system due to accelerating the passage of water, and/or restricting its flow must be minimized to the maximum extent practicable.

9. Management of Water Flows. To the maximum extent practicable, the pre- construction course, condition, capacity, and location of open waters must be maintained for each activity, including stream channelization, storm water management activities, and temporary and permanent road crossings, except as provided below. The activity must be constructed to withstand expected high flows. The activity must not restrict or impede the passage of normal or high flows, unless the primary purpose of the activity is to impound water or manage high flows. The activity may alter the pre-construction course, condition, capacity, and location of open waters if it benefits the aquatic environment (e.g., stream restoration or relocation activities).

10. Fills Within 100-Year Floodplains. The activity must comply with applicable FEMA-approved state or local floodplain management requirements.

11. Equipment. Heavy equipment working in wetlands or mudflats must be placed on mats, or other measures must be taken to minimize soil disturbance.

12. Soil Erosion and Sediment Controls. Appropriate soil erosion and sediment controls must be used and maintained in effective operating condition during construction, and all exposed soil and other fills, as well as any work below the ordinary high water mark or high tide line, must be permanently stabilized at the earliest practicable date. Permittees are encouraged to perform work within waters of the United States during periods of low-flow or no-flow, or during low tides.

13. Removal of Temporary Fills. Temporary fills must be removed in their entirety and the affected areas returned to pre-construction elevations. The affected areas must be revegetated, as appropriate.

14. Proper Maintenance. Any authorized structure or fill shall be properly maintained, including maintenance to ensure public safety and compliance with applicable NWP general conditions, as well as any activity-specific conditions added by the district engineer to an NWP authorization.

15. Single and Complete Project. The activity must be a single and complete project. The same NWP cannot be used more than once for the same single and complete project.

16. Wild and Scenic Rivers. (a) No NWP activity may occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a “study river” for possible inclusion in the system while the river is in an official study status, unless the appropriate Federal agency with direct management responsibility for such river, has determined in writing that the proposed activity will not adversely affect the Wild and Scenic River designation or study status.

(b) If a proposed NWP activity will occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a “study river” for possible inclusion in the system while the river is in an official study status, the permittee must submit a pre-construction notification (see general condition 32). The district engineer will coordinate the PCN with the Federal agency with direct management responsibility for that river. The permittee shall not begin the NWP activity until notified by the district engineer that the Federal agency with direct management responsibility for that river has determined in writing that the proposed NWP activity will not adversely affect the Wild and Scenic River designation or study status.

(c) Information on Wild and Scenic Rivers may be obtained from the appropriate Federal land management agency responsible for the designated Wild and Scenic River or Study River (e.g., National Park Service, U.S. Forest Service, Bureau of Land Management, U.S. Fish and Wildlife Service). Information on these rivers is also available at: <http://www.rivers.gov/>.

17. Tribal Rights. No NWP activity may cause more than minimal adverse effects on tribal rights (including treaty rights), protected tribal resources, or tribal lands.

18. Endangered Species. (a) No activity is authorized under any NWP which is likely to directly or indirectly jeopardize the continued existence of a threatened or endangered species or a species proposed for such designation, as identified under the Federal Endangered Species Act (ESA), or which will directly or indirectly destroy or adversely modify the critical habitat of such species. No activity is authorized under any NWP which “may affect” a listed species or critical habitat, unless ESA section 7 consultation addressing the effects of the proposed activity has been completed. Direct effects are the immediate effects on listed species and critical habitat caused by the NWP activity. Indirect effects are those effects on listed species and critical habitat that are caused by the NWP activity and are later in time, but still are reasonably certain to occur.

(b) Federal agencies should follow their own procedures for complying with the requirements of the ESA. If pre-construction notification is required for the proposed activity, the Federal permittee must provide the district engineer with the appropriate documentation to demonstrate compliance with those requirements. The district engineer will verify that the appropriate documentation has been submitted. If the appropriate documentation has not been submitted, additional ESA section 7 consultation may be necessary for the activity and the respective federal agency would be responsible for fulfilling its obligation under section 7 of the ESA.

(c) Non-federal permittees must submit a pre-construction notification to the district engineer if any listed species or designated critical habitat might be affected or is in the vicinity of the activity, or if the activity is located in designated critical habitat, and shall not begin work on the activity until notified by the district engineer that the requirements of the ESA have been satisfied and that the activity is authorized. For activities that might affect Federally-listed endangered or threatened species or designated critical habitat, the pre-construction notification must include the name(s) of the endangered or threatened species that might be affected by the

proposed activity or that utilize the designated critical habitat that might be affected by the proposed activity. The district engineer will determine whether the proposed activity “may affect” or will have “no effect” to listed species and designated critical habitat and will notify the non-Federal applicant of the Corps’ determination within 45 days of receipt of a complete pre-construction notification. In cases where the non-Federal applicant has identified listed species or critical habitat that might be affected or is in the vicinity of the activity, and has so notified the Corps, the applicant shall not begin work until the Corps has provided notification that the proposed activity will have “no effect” on listed species or critical habitat, or until ESA section 7 consultation has been completed. If the non-Federal applicant has not heard back from the Corps within 45 days, the applicant must still wait for notification from the Corps. As a result of formal or informal consultation with the FWS or NMFS the district engineer may add species-specific permit conditions to the NWP.

(d) Authorization of an activity by an NWP does not authorize the “take” of a threatened or endangered species as defined under the ESA. In the absence of separate authorization (e.g., an ESA Section 10 Permit, a Biological Opinion with “incidental take” provisions, etc.) from the FWS or the NMFS, the Endangered Species Act prohibits any person subject to the jurisdiction of the United States to take a listed species, where “take” means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct. The word “harm” in the definition of “take” means an act which actually kills or injures wildlife. Such an act may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering.

(e) If the non-federal permittee has a valid ESA section 10(a)(1)(B) incidental take permit with an approved Habitat Conservation Plan for a project or a group of projects that includes the proposed NWP activity, the non-federal applicant should provide a copy of that ESA section 10(a)(1)(B) permit with the PCN required by paragraph (c) of this general condition. The district engineer will coordinate with the agency that issued the ESA section 10(a)(1)(B) permit to determine whether the proposed NWP activity and the associated incidental take were considered in the internal ESA section 7 consultation conducted for the ESA section 10(a)(1)(B) permit. If that coordination results in concurrence from the agency that the proposed NWP activity and the associated incidental take were considered in the internal ESA section 7 consultation for the ESA section 10(a)(1)(B) permit, the district engineer does not need to conduct a separate ESA section 7 consultation for the proposed NWP activity. The district engineer will notify the non-federal applicant within 45 days of receipt of a complete pre-construction notification whether the ESA section 10(a)(1)(B) permit covers the proposed NWP activity or whether additional ESA section 7 consultation is required.

(f) Information on the location of threatened and endangered species and their critical habitat can be obtained directly from the offices of the FWS and NMFS or their world wide web pages at <http://www.fws.gov/> or <http://www.fws.gov/ipac> and <http://www.nmfs.noaa.gov/pr/species/esa/> respectively.

**19. Migratory Birds and Bald and Golden Eagles.** The permittee is responsible for ensuring their action complies with the Migratory Bird Treaty Act and the Bald and Golden Eagle Protection Act. The permittee is responsible for contacting appropriate local office of the U.S. Fish and Wildlife Service to determine applicable measures to reduce impacts to migratory birds or eagles, including whether “incidental take” permits are necessary and available under the

Migratory Bird Treaty Act or Bald and Golden Eagle Protection Act for a particular activity.

20. Historic Properties. (a) In cases where the district engineer determines that the activity may have the potential to cause effects to properties listed, or eligible for listing, in the National Register of Historic Places, the activity is not authorized, until the requirements of Section 106 of the National Historic Preservation Act (NHPA) have been satisfied.

(b) Federal permittees should follow their own procedures for complying with the requirements of section 106 of the National Historic Preservation Act. If pre-construction notification is required for the proposed NWP activity, the Federal permittee must provide the district engineer with the appropriate documentation to demonstrate compliance with those requirements. The district engineer will verify that the appropriate documentation has been submitted. If the appropriate documentation is not submitted, then additional consultation under section 106 may be necessary. The respective federal agency is responsible for fulfilling its obligation to comply with section 106.

(c) Non-federal permittees must submit a pre-construction notification to the district engineer if the NWP activity might have the potential to cause effects to any historic properties listed on, determined to be eligible for listing on, or potentially eligible for listing on the National Register of Historic Places, including previously unidentified properties. For such activities, the pre-construction notification must state which historic properties might have the potential to be affected by the proposed NWP activity or include a vicinity map indicating the location of the historic properties or the potential for the presence of historic properties. Assistance regarding information on the location of, or potential for, the presence of historic properties can be sought from the State Historic Preservation Officer, Tribal Historic Preservation Officer, or designated tribal representative, as appropriate, and the National Register of Historic Places (see 33 CFR 330.4(g)). When reviewing pre-construction notifications, district engineers will comply with the current procedures for addressing the requirements of section 106 of the National Historic Preservation Act. The district engineer shall make a reasonable and good faith effort to carry out appropriate identification efforts, which may include background research, consultation, oral history interviews, sample field investigation, and field survey. Based on the information submitted in the PCN and these identification efforts, the district engineer shall determine whether the proposed NWP activity has the potential to cause effects on the historic properties. Section 106 consultation is not required when the district engineer determines that the activity does not have the potential to cause effects on historic properties (see 36 CFR 800.3(a)). Section 106 consultation is required when the district engineer determines that the activity has the potential to cause effects on historic properties. The district engineer will conduct consultation with consulting parties identified under 36 CFR 800.2(c) when he or she makes any of the following effect determinations for the purposes of section 106 of the NHPA: no historic properties affected, no adverse effect, or adverse effect. Where the non-Federal applicant has identified historic properties on which the activity might have the potential to cause effects and so notified the Corps, the non-Federal applicant shall not begin the activity until notified by the district engineer either that the activity has no potential to cause effects to historic properties or that NHPA section 106 consultation has been completed.

(d) For non-federal permittees, the district engineer will notify the prospective permittee within 45 days of receipt of a complete pre-construction notification whether NHPA section 106 consultation is required. If NHPA section 106 consultation is required, the district engineer will notify the non-Federal applicant that he or she cannot begin the activity until section 106

consultation is completed. If the non-Federal applicant has not heard back from the Corps within 45 days, the applicant must still wait for notification from the Corps.

(e) Prospective permittees should be aware that section 110k of the NHPA (54 U.S.C. 306113) prevents the Corps from granting a permit or other assistance to an applicant who, with intent to avoid the requirements of section 106 of the NHPA, has intentionally significantly adversely affected a historic property to which the permit would relate, or having legal power to prevent it, allowed such significant adverse effect to occur, unless the Corps, after consultation with the Advisory Council on Historic Preservation (ACHP), determines that circumstances justify granting such assistance despite the adverse effect created or permitted by the applicant. If circumstances justify granting the assistance, the Corps is required to notify the ACHP and provide documentation specifying the circumstances, the degree of damage to the integrity of any historic properties affected, and proposed mitigation. This documentation must include any views obtained from the applicant, SHPO/THPO, appropriate Indian tribes if the undertaking occurs on or affects historic properties on tribal lands or affects properties of interest to those tribes, and other parties known to have a legitimate interest in the impacts to the permitted activity on historic properties.

21. Discovery of Previously Unknown Remains and Artifacts. If you discover any previously unknown historic, cultural or archeological remains and artifacts while accomplishing the activity authorized by this permit, you must immediately notify the district engineer of what you have found, and to the maximum extent practicable, avoid construction activities that may affect the remains and artifacts until the required coordination has been completed. The district engineer will initiate the Federal, Tribal, and state coordination required to determine if the items or remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.

22. Designated Critical Resource Waters. Critical resource waters include, NOAA-managed marine sanctuaries and marine monuments, and National Estuarine Research Reserves. The district engineer may designate, after notice and opportunity for public comment, additional waters officially designated by a state as having particular environmental or ecological significance, such as outstanding national resource waters or state natural heritage sites. The district engineer may also designate additional critical resource waters after notice and opportunity for public comment.

(a) Discharges of dredged or fill material into waters of the United States are not authorized by NWP 7, 12, 14, 16, 17, 21, 29, 31, 35, 39, 40, 42, 43, 44, 49, 50, 51, and 52 for any activity within, or directly affecting, critical resource waters, including wetlands adjacent to such waters.

(b) For NWP 3, 8, 10, 13, 15, 18, 19, 22, 23, 25, 27, 28, 30, 33, 34, 36, 37, 38, and 54, notification is required in accordance with general condition 32, for any activity proposed in the designated critical resource waters including wetlands adjacent to those waters. The district engineer may authorize activities under these NWPs only after it is determined that the impacts to the critical resource waters will be no more than minimal.

23. Mitigation. The district engineer will consider the following factors when determining appropriate and practicable mitigation necessary to ensure that the individual and cumulative adverse environmental effects are no more than minimal:

(a) The activity must be designed and constructed to avoid and minimize adverse effects,

both temporary and permanent, to waters of the United States to the maximum extent practicable at the project site (i.e., on site).

(b) Mitigation in all its forms (avoiding, minimizing, rectifying, reducing, or compensating for resource losses) will be required to the extent necessary to ensure that the individual and cumulative adverse environmental effects are no more than minimal.

(c) Compensatory mitigation at a minimum one-for-one ratio will be required for all wetland losses that exceed 1/10-acre and require pre-construction notification, unless the district engineer determines in writing that either some other form of mitigation would be more environmentally appropriate or the adverse environmental effects of the proposed activity are no more than minimal, and provides an activity-specific waiver of this requirement. For wetland losses of 1/10-acre or less that require pre-construction notification, the district engineer may determine on a case-by-case basis that compensatory mitigation is required to ensure that the activity results in only minimal adverse environmental effects.

(d) For losses of streams or other open waters that require pre-construction notification, the district engineer may require compensatory mitigation to ensure that the activity results in no more than minimal adverse environmental effects. Compensatory mitigation for losses of streams should be provided, if practicable, through stream rehabilitation, enhancement, or preservation, since streams are difficult-to-replace resources (see 33 CFR 332.3(e)(3)).

(e) Compensatory mitigation plans for NWP activities in or near streams or other open waters will normally include a requirement for the restoration or enhancement, maintenance, and legal protection (e.g., conservation easements) of riparian areas next to open waters. In some cases, the restoration or maintenance/protection of riparian areas may be the only compensatory mitigation required. Restored riparian areas should consist of native species. The width of the required riparian area will address documented water quality or aquatic habitat loss concerns. Normally, the riparian area will be 25 to 50 feet wide on each side of the stream, but the district engineer may require slightly wider riparian areas to address documented water quality or habitat loss concerns. If it is not possible to restore or maintain/protect a riparian area on both sides of a stream, or if the waterbody is a lake or coastal waters, then restoring or maintaining/protecting a riparian area along a single bank or shoreline may be sufficient. Where both wetlands and open waters exist on the project site, the district engineer will determine the appropriate compensatory mitigation (e.g., riparian areas and/or wetlands compensation) based on what is best for the aquatic environment on a watershed basis. In cases where riparian areas are determined to be the most appropriate form of minimization or compensatory mitigation, the district engineer may waive or reduce the requirement to provide wetland compensatory mitigation for wetland losses.

(f) Compensatory mitigation projects provided to offset losses of aquatic resources must comply with the applicable provisions of 33 CFR part 332.

(1) The prospective permittee is responsible for proposing an appropriate compensatory mitigation option if compensatory mitigation is necessary to ensure that the activity results in no more than minimal adverse environmental effects. For the NWPs, the preferred mechanism for providing compensatory mitigation is mitigation bank credits or in-lieu fee program credits (see 33 CFR 332.3(b)(2) and (3)). However, if an appropriate number and type of mitigation bank or in-lieu credits are not available at the time the PCN is submitted to the district engineer, the district engineer may approve the use of permittee-responsible mitigation.

(2) The amount of compensatory mitigation required by the district engineer must be sufficient to ensure that the authorized activity results in no more than minimal individual and cumulative adverse environmental effects (see 33 CFR 330.1(e)(3)). (See also 33 CFR 332.3(f)).

(3) Since the likelihood of success is greater and the impacts to potentially valuable uplands are reduced, aquatic resource restoration should be the first compensatory mitigation option considered for permittee-responsible mitigation.

(4) If permittee-responsible mitigation is the proposed option, the prospective permittee is responsible for submitting a mitigation plan. A conceptual or detailed mitigation plan may be used by the district engineer to make the decision on the NWP verification request, but a final mitigation plan that addresses the applicable requirements of 33 CFR 332.4(c)(2) through (14) must be approved by the district engineer before the permittee begins work in waters of the United States, unless the district engineer determines that prior approval of the final mitigation plan is not practicable or not necessary to ensure timely completion of the required compensatory mitigation (see 33 CFR 332.3(k)(3)).

(5) If mitigation bank or in-lieu fee program credits are the proposed option, the mitigation plan only needs to address the baseline conditions at the impact site and the number of credits to be provided.

(6) Compensatory mitigation requirements (e.g., resource type and amount to be provided as compensatory mitigation, site protection, ecological performance standards, monitoring requirements) may be addressed through conditions added to the NWP authorization, instead of components of a compensatory mitigation plan (see 33 CFR 332.4(c)(1)(ii)).

(g) Compensatory mitigation will not be used to increase the acreage losses allowed by the acreage limits of the NWPs. For example, if an NWP has an acreage limit of 1/2-acre, it cannot be used to authorize any NWP activity resulting in the loss of greater than 1/2-acre of waters of the United States, even if compensatory mitigation is provided that replaces or restores some of the lost waters. However, compensatory mitigation can and should be used, as necessary, to ensure that an NWP activity already meeting the established acreage limits also satisfies the no more than minimal impact requirement for the NWPs.

(h) Permittees may propose the use of mitigation banks, in-lieu fee programs, or permittee-responsible mitigation. When developing a compensatory mitigation proposal, the permittee must consider appropriate and practicable options consistent with the framework at 33 CFR 332.3(b). For activities resulting in the loss of marine or estuarine resources, permittee-responsible mitigation may be environmentally preferable if there are no mitigation banks or in-lieu fee programs in the area that have marine or estuarine credits available for sale or transfer to the permittee. For permittee-responsible mitigation, the special conditions of the NWP verification must clearly indicate the party or parties responsible for the implementation and performance of the compensatory mitigation project, and, if required, its long-term management.

(i) Where certain functions and services of waters of the United States are permanently adversely affected by a regulated activity, such as discharges of dredged or fill material into waters of the United States that will convert a forested or scrub-shrub wetland to a herbaceous wetland in a permanently maintained utility line right-of-way, mitigation may be required to reduce the adverse environmental effects of the activity to the no more than minimal level.

**24. Safety of Impoundment Structures.** To ensure that all impoundment structures are safely designed, the district engineer may require non-Federal applicants to demonstrate that the structures comply with established state dam safety criteria or have been designed by qualified persons. The district engineer may also require documentation that the design has been independently reviewed by similarly qualified persons, and appropriate modifications made to ensure safety.

25. Water Quality. Where States and authorized Tribes, or EPA where applicable, have not previously certified compliance of an NWP with CWA section 401, individual 401 Water Quality Certification must be obtained or waived (see 33 CFR 330.4(c)). The district engineer or State or Tribe may require additional water quality management measures to ensure that the authorized activity does not result in more than minimal degradation of water quality.

26. Coastal Zone Management. In coastal states where an NWP has not previously received a state coastal zone management consistency concurrence, an individual state coastal zone management consistency concurrence must be obtained, or a presumption of concurrence must occur (see 33 CFR 330.4(d)). The district engineer or a State may require additional measures to ensure that the authorized activity is consistent with state coastal zone management requirements.

27. Regional and Case-By-Case Conditions. The activity must comply with any regional conditions that may have been added by the Division Engineer (see 33 CFR 330.4(e)) and with any case specific conditions added by the Corps or by the state, Indian Tribe, or U.S. EPA in its section 401 Water Quality Certification, or by the state in its Coastal Zone Management Act consistency determination.

28. Use of Multiple Nationwide Permits. The use of more than one NWP for a single and complete project is prohibited, except when the acreage loss of waters of the United States authorized by the NWPs does not exceed the acreage limit of the NWP with the highest specified acreage limit. For example, if a road crossing over tidal waters is constructed under NWP 14, with associated bank stabilization authorized by NWP 13, the maximum acreage loss of waters of the United States for the total project cannot exceed 1/3-acre.

29. Transfer of Nationwide Permit Verifications. If the permittee sells the property associated with a nationwide permit verification, the permittee may transfer the nationwide permit verification to the new owner by submitting a letter to the appropriate Corps district office to validate the transfer. A copy of the nationwide permit verification must be attached to the letter, and the letter must contain the following statement and signature:  
“When the structures or work authorized by this nationwide permit are still in existence at the time the property is transferred, the terms and conditions of this nationwide permit, including any special conditions, will continue to be binding on the new owner(s) of the property. To validate the transfer of this nationwide permit and the associated liabilities associated with compliance with its terms and conditions, have the transferee sign and date below.”

\_\_\_\_\_  
(Transferee)

\_\_\_\_\_  
(Date)

30. Compliance Certification. Each permittee who receives an NWP verification letter from the Corps must provide a signed certification documenting completion of the authorized activity and

implementation of any required compensatory mitigation. The success of any required permittee-responsible mitigation, including the achievement of ecological performance standards, will be addressed separately by the district engineer. The Corps will provide the permittee the certification document with the NWP verification letter. The certification document will include:

- (a) A statement that the authorized activity was done in accordance with the NWP authorization, including any general, regional, or activity-specific conditions;
- (b) A statement that the implementation of any required compensatory mitigation was completed in accordance with the permit conditions. If credits from a mitigation bank or in-lieu fee program are used to satisfy the compensatory mitigation requirements, the certification must include the documentation required by 33 CFR 332.3(1)(3) to confirm that the permittee secured the appropriate number and resource type of credits; and
- (c) The signature of the permittee certifying the completion of the activity and mitigation.

The completed certification document must be submitted to the district engineer within 30 days of completion of the authorized activity or the implementation of any required compensatory mitigation, whichever occurs later.

31. Activities Affecting Structures or Works Built by the United States. If an NWP activity also requires permission from the Corps pursuant to 33 U.S.C. 408 because it will alter or temporarily or permanently occupy or use a U.S. Army Corps of Engineers (USACE) federally authorized Civil Works project (a “USACE project”), the prospective permittee must submit a pre-construction notification. See paragraph (b)(10) of general condition 32. An activity that requires section 408 permission is not authorized by NWP until the appropriate Corps office issues the section 408 permission to alter, occupy, or use the USACE project, and the district engineer issues a written NWP verification.

32. Pre-Construction Notification. (a) Timing. Where required by the terms of the NWP, the prospective permittee must notify the district engineer by submitting a pre-construction notification (PCN) as early as possible. The district engineer must determine if the PCN is complete within 30 calendar days of the date of receipt and, if the PCN is determined to be incomplete, notify the prospective permittee within that 30 day period to request the additional information necessary to make the PCN complete. The request must specify the information needed to make the PCN complete. As a general rule, district engineers will request additional information necessary to make the PCN complete only once. However, if the prospective permittee does not provide all of the requested information, then the district engineer will notify the prospective permittee that the PCN is still incomplete and the PCN review process will not commence until all of the requested information has been received by the district engineer. The prospective permittee shall not begin the activity until either:

- (1) He or she is notified in writing by the district engineer that the activity may proceed under the NWP with any special conditions imposed by the district or division engineer; or
- (2) 45 calendar days have passed from the district engineer’s receipt of the complete PCN and the prospective permittee has not received written notice from the district or division engineer. However, if the permittee was required to notify the Corps pursuant to general condition 18 that listed species or critical habitat might be affected or are in the vicinity of the activity, or to notify the Corps pursuant to general condition 20 that the activity might have the

potential to cause effects to historic properties, the permittee cannot begin the activity until receiving written notification from the Corps that there is “no effect” on listed species or “no potential to cause effects” on historic properties, or that any consultation required under Section 7 of the Endangered Species Act (see 33 CFR 330.4(f)) and/or section 106 of the National Historic Preservation Act (see 33 CFR 330.4(g)) has been completed. Also, work cannot begin under NWPs 21, 49, or 50 until the permittee has received written approval from the Corps. If the proposed activity requires a written waiver to exceed specified limits of an NWP, the permittee may not begin the activity until the district engineer issues the waiver. If the district or division engineer notifies the permittee in writing that an individual permit is required within 45 calendar days of receipt of a complete PCN, the permittee cannot begin the activity until an individual permit has been obtained. Subsequently, the permittee’s right to proceed under the NWP may be modified, suspended, or revoked only in accordance with the procedure set forth in 33 CFR 330.5(d)(2).

(b) Contents of Pre-Construction Notification: The PCN must be in writing and include the following information:

- (1) Name, address and telephone numbers of the prospective permittee;
- (2) Location of the proposed activity;
- (3) Identify the specific NWP or NWP(s) the prospective permittee wants to use to authorize the proposed activity;
- (4) A description of the proposed activity; the activity’s purpose; direct and indirect adverse environmental effects the activity would cause, including the anticipated amount of loss of wetlands, other special aquatic sites, and other waters expected to result from the NWP activity, in acres, linear feet, or other appropriate unit of measure; a description of any proposed mitigation measures intended to reduce the adverse environmental effects caused by the proposed activity; and any other NWP(s), regional general permit(s), or individual permit(s) used or intended to be used to authorize any part of the proposed project or any related activity, including other separate and distant crossings for linear projects that require Department of the Army authorization but do not require pre-construction notification. The description of the proposed activity and any proposed mitigation measures should be sufficiently detailed to allow the district engineer to determine that the adverse environmental effects of the activity will be no more than minimal and to determine the need for compensatory mitigation or other mitigation measures. For single and complete linear projects, the PCN must include the quantity of anticipated losses of wetlands, other special aquatic sites, and other waters for each single and complete crossing of those wetlands, other special aquatic sites, and other waters. Sketches should be provided when necessary to show that the activity complies with the terms of the NWP. (Sketches usually clarify the activity and when provided results in a quicker decision. Sketches should contain sufficient detail to provide an illustrative description of the proposed activity (e.g., a conceptual plan), but do not need to be detailed engineering plans);
- (5) The PCN must include a delineation of wetlands, other special aquatic sites, and other waters, such as lakes and ponds, and perennial, intermittent, and ephemeral streams, on the project site. Wetland delineations must be prepared in accordance with the current method required by the Corps. The permittee may ask the Corps to delineate the special aquatic sites and other waters on the project site, but there may be a delay if the Corps does the delineation, especially if the project site is large or contains many wetlands, other special aquatic sites, and other waters. Furthermore, the 45-day period will not start until the delineation has been submitted to or completed by the Corps, as appropriate;

(6) If the proposed activity will result in the loss of greater than 1/10-acre of wetlands and a PCN is required, the prospective permittee must submit a statement describing how the mitigation requirement will be satisfied, or explaining why the adverse environmental effects are no more than minimal and why compensatory mitigation should not be required. As an alternative, the prospective permittee may submit a conceptual or detailed mitigation plan.

(7) For non-Federal permittees, if any listed species or designated critical habitat might be affected or is in the vicinity of the activity, or if the activity is located in designated critical habitat, the PCN must include the name(s) of those endangered or threatened species that might be affected by the proposed activity or utilize the designated critical habitat that might be affected by the proposed activity. For NWP activities that require pre-construction notification, Federal permittees must provide documentation demonstrating compliance with the Endangered Species Act;

(8) For non-Federal permittees, if the NWP activity might have the potential to cause effects to a historic property listed on, determined to be eligible for listing on, or potentially eligible for listing on, the National Register of Historic Places, the PCN must state which historic property might have the potential to be affected by the proposed activity or include a vicinity map indicating the location of the historic property. For NWP activities that require pre-construction notification, Federal permittees must provide documentation demonstrating compliance with section 106 of the National Historic Preservation Act;

(9) For an activity that will occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a “study river” for possible inclusion in the system while the river is in an official study status, the PCN must identify the Wild and Scenic River or the “study river” (see general condition 16); and

(10) For an activity that requires permission from the Corps pursuant to 33 U.S.C. 408 because it will alter or temporarily or permanently occupy or use a U.S. Army Corps of Engineers federally authorized civil works project, the pre-construction notification must include a statement confirming that the project proponent has submitted a written request for section 408 permission from the Corps office having jurisdiction over that USACE project.

(c) Form of Pre-Construction Notification: The standard individual permit application form (Form ENG 4345) may be used, but the completed application form must clearly indicate that it is an NWP PCN and must include all of the applicable information required in paragraphs (b)(1) through (10) of this general condition. A letter containing the required information may also be used. Applicants may provide electronic files of PCNs and supporting materials if the district engineer has established tools and procedures for electronic submittals.

(d) Agency Coordination:

(1) The district engineer will consider any comments from Federal and state agencies concerning the proposed activity’s compliance with the terms and conditions of the NWPs and the need for mitigation to reduce the activity’s adverse environmental effects so that they are no more than minimal.

(2) Agency coordination is required for: (i) all NWP activities that require pre-construction notification and result in the loss of greater than 1/2-acre of waters of the United States; (ii) NWP 21, 29, 39, 40, 42, 43, 44, 50, 51, and 52 activities that require pre-construction notification and will result in the loss of greater than 300 linear feet of stream bed; (iii) NWP 13 activities in excess of 500 linear feet, fills greater than one cubic yard per running foot, or involve discharges of dredged or fill material into special aquatic sites; and (iv) NWP 54 activities in excess of 500 linear feet, or that extend into the waterbody more than 30 feet from

the mean low water line in tidal waters or the ordinary high water mark in the Great Lakes.

(3) When agency coordination is required, the district engineer will immediately provide (e.g., via e-mail, facsimile transmission, overnight mail, or other expeditious manner) a copy of the complete PCN to the appropriate Federal or state offices (FWS, state natural resource or water quality agency, EPA, and, if appropriate, the NMFS). With the exception of NWP 37, these agencies will have 10 calendar days from the date the material is transmitted to notify the district engineer via telephone, facsimile transmission, or e-mail that they intend to provide substantive, site-specific comments. The comments must explain why the agency believes the adverse environmental effects will be more than minimal. If so contacted by an agency, the district engineer will wait an additional 15 calendar days before making a decision on the pre-construction notification. The district engineer will fully consider agency comments received within the specified time frame concerning the proposed activity's compliance with the terms and conditions of the NWPs, including the need for mitigation to ensure the net adverse environmental effects of the proposed activity are no more than minimal. The district engineer will provide no response to the resource agency, except as provided below. The district engineer will indicate in the administrative record associated with each pre-construction notification that the resource agencies' concerns were considered. For NWP 37, the emergency watershed protection and rehabilitation activity may proceed immediately in cases where there is an unacceptable hazard to life or a significant loss of property or economic hardship will occur. The district engineer will consider any comments received to decide whether the NWP 37 authorization should be modified, suspended, or revoked in accordance with the procedures at 33 CFR 330.5.

(4) In cases of where the prospective permittee is not a Federal agency, the district engineer will provide a response to NMFS within 30 calendar days of receipt of any Essential Fish Habitat conservation recommendations, as required by section 305(b)(4)(B) of the Magnuson-Stevens Fishery Conservation and Management Act.

(5) Applicants are encouraged to provide the Corps with either electronic files or multiple copies of pre-construction notifications to expedite agency coordination.

### **District Engineer's Decision**

In reviewing the PCN for the proposed activity, the district engineer will determine whether the activity authorized by the NWP will result in more than minimal individual or cumulative adverse environmental effects or may be contrary to the public interest. If a project proponent requests authorization by a specific NWP, the district engineer should issue the NWP verification for that activity if it meets the terms and conditions of that NWP, unless he or she determines, after considering mitigation, that the proposed activity will result in more than minimal individual and cumulative adverse effects on the aquatic environment and other aspects of the public interest and exercises discretionary authority to require an individual permit for the proposed activity. For a linear project, this determination will include an evaluation of the individual crossings of waters of the United States to determine whether they individually satisfy the terms and conditions of the NWP(s), as well as the cumulative effects caused by all of the crossings authorized by NWP. If an applicant requests a waiver of the 300 linear foot limit on impacts to streams or of an otherwise applicable limit, as provided for in NWPs 13, 21, 29, 36, 39, 40, 42, 43, 44, 50, 51, 52, or 54, the district engineer will only grant the waiver upon a written determination that the NWP activity will result in only minimal individual and

cumulative adverse environmental effects. For those NWP's that have a waivable 300 linear foot limit for losses of intermittent and ephemeral stream bed and a 1/2-acre limit (i.e., NWP's 21, 29, 39, 40, 42, 43, 44, 50, 51, and 52), the loss of intermittent and ephemeral stream bed, plus any other losses of jurisdictional waters and wetlands, cannot exceed 1/2-acre.

1. When making minimal adverse environmental effects determinations the district engineer will consider the direct and indirect effects caused by the NWP activity. He or she will also consider the cumulative adverse environmental effects caused by activities authorized by NWP and whether those cumulative adverse environmental effects are no more than minimal. The district engineer will also consider site specific factors, such as the environmental setting in the vicinity of the NWP activity, the type of resource that will be affected by the NWP activity, the functions provided by the aquatic resources that will be affected by the NWP activity, the degree or magnitude to which the aquatic resources perform those functions, the extent that aquatic resource functions will be lost as a result of the NWP activity (e.g., partial or complete loss), the duration of the adverse effects (temporary or permanent), the importance of the aquatic resource functions to the region (e.g., watershed or ecoregion), and mitigation required by the district engineer. If an appropriate functional or condition assessment method is available and practicable to use, that assessment method may be used by the district engineer to assist in the minimal adverse environmental effects determination. The district engineer may add case-specific special conditions to the NWP authorization to address site-specific environmental concerns.

2. If the proposed activity requires a PCN and will result in a loss of greater than 1/10-acre of wetlands, the prospective permittee should submit a mitigation proposal with the PCN. Applicants may also propose compensatory mitigation for NWP activities with smaller impacts, or for impacts to other types of waters (e.g., streams). The district engineer will consider any proposed compensatory mitigation or other mitigation measures the applicant has included in the proposal in determining whether the net adverse environmental effects of the proposed activity are no more than minimal. The compensatory mitigation proposal may be either conceptual or detailed. If the district engineer determines that the activity complies with the terms and conditions of the NWP and that the adverse environmental effects are no more than minimal, after considering mitigation, the district engineer will notify the permittee and include any activity-specific conditions in the NWP verification the district engineer deems necessary. Conditions for compensatory mitigation requirements must comply with the appropriate provisions at 33 CFR 332.3(k). The district engineer must approve the final mitigation plan before the permittee commences work in waters of the United States, unless the district engineer determines that prior approval of the final mitigation plan is not practicable or not necessary to ensure timely completion of the required compensatory mitigation. If the prospective permittee elects to submit a compensatory mitigation plan with the PCN, the district engineer will expeditiously review the proposed compensatory mitigation plan. The district engineer must review the proposed compensatory mitigation plan within 45 calendar days of receiving a complete PCN and determine whether the proposed mitigation would ensure the NWP activity results in no more than minimal adverse environmental effects. If the net adverse environmental effects of the NWP activity (after consideration of the mitigation proposal) are determined by the district engineer to be no more than minimal, the district engineer will provide a timely written response to the applicant. The response will state that the NWP activity can proceed under the terms and conditions of the NWP, including any activity-specific conditions added to the NWP authorization by the district engineer.

3. If the district engineer determines that the adverse environmental effects of the proposed activity are more than minimal, then the district engineer will notify the applicant either: (a) that the activity does not qualify for authorization under the NWP and instruct the applicant on the procedures to seek authorization under an individual permit; (b) that the activity is authorized under the NWP subject to the applicant's submission of a mitigation plan that would reduce the adverse environmental effects so that they are no more than minimal; or (c) that the activity is authorized under the NWP with specific modifications or conditions. Where the district engineer determines that mitigation is required to ensure no more than minimal adverse environmental effects, the activity will be authorized within the 45-day PCN period (unless additional time is required to comply with general conditions 18, 20, and/or 31, or to evaluate PCNs for activities authorized by NWPs 21, 49, and 50), with activity-specific conditions that state the mitigation requirements. The authorization will include the necessary conceptual or detailed mitigation plan or a requirement that the applicant submit a mitigation plan that would reduce the adverse environmental effects so that they are no more than minimal. When compensatory mitigation is required, no work in waters of the United States may occur until the district engineer has approved a specific mitigation plan or has determined that prior approval of a final mitigation plan is not practicable or not necessary to ensure timely completion of the required compensatory mitigation.

### **Further Information**

1. District Engineers have authority to determine if an activity complies with the terms and conditions of an NWP.
2. NWPs do not obviate the need to obtain other federal, state, or local permits, approvals, or authorizations required by law.
3. NWPs do not grant any property rights or exclusive privileges.
4. NWPs do not authorize any injury to the property or rights of others.
5. NWPs do not authorize interference with any existing or proposed Federal project (see general condition 31)

**2017 Nationwide Permits  
Regional Conditions  
Omaha District  
State of North Dakota**

**1. Wetlands Classified as Peatlands – Revoked for use**

All NWPs, with the exception of 3, 5, 20, 32, 38 and 45, are revoked for use in peatlands. Peatlands are permanently or seasonally saturated and inundated wetlands where conditions inhibit organic matter decomposition and allow for the accumulation of peat. Under cool, anaerobic, and acidic conditions, the rate of organic matter accumulation exceeds organic decay.

**2. Wetlands Classified as Peatlands – Preconstruction Notification Requirement**

For NWPs 3, 5, 20, 32, 38 and 45 permittees must notify the Corps in accordance with General Condition 32 (PCN) prior to initiating any regulated activity impacting peatlands.

**3. Waters Adjacent to Natural Springs – Preconstruction Notification Requirement**

For all NWPs permittees must notify the Corps in accordance with General Condition No. 32 (PCN) for regulated activities located within 100 feet of the water source in natural spring areas. For purposes of this condition, a spring source is defined as any location where there is flow emanating from a distinct point at any time during the growing season. Springs do not include seeps and other groundwater discharge areas where there is no distinct point source.

**4. Missouri River, including Lake Sakakawea and Lake Oahe – PCN Requirement**

For all NWPs permittees must notify the Corps in accordance with General Condition No. 32 (PCN) prior to initiating any regulated activity occurring in or under the Missouri River, including Lake Sakakawea and Lake Oahe. In addition, any activity occurring in an off channel area (marinas, bays, etc.) of any of these waterbodies, a preconstruction notification is required.

**5. Spawning Areas**

Spawning restrictions and important fish habitat areas, if applicable, can be accessed on the North Dakota Game & Fish Department's website at:

<http://gf.nd.gov/gnf/conservation/docs/spawning-restriction-exclusions.pdf>

No regulated activity within the Red River of the North shall occur between 15 April and 1 July.

Spawning season restrictions do not apply to projects involving dredging or other discharges of less than 25 cubic yards of material in any jurisdictional water.

**6. Counter-Sinking Culverts and Associated Riprap – All NWPs**

In streams with intermittent or perennial flow and a stable stream bed, culvert stream crossings shall be installed with the culvert invert set below the natural streambed according to the table below. This regional condition does not apply in instances where the lowering of the culvert invert would allow a headcut to migrate upstream of the project into an unaffected stream reach or result in lowering the elevation of the stream reach.

Riprap inlet and outlet protection shall be placed to match the height of the culvert invert.

Culvert Type	Drainage Area	Minimum Distance Culvert Invert Shall Be Lowered Below Stream Flow Line
All culvert types	< 100 acres	Not required
Pipe diameter <8.0 ft	100 to 640 acres	0.5 ft
Pipe diameter <8.0 ft	>640 acres	1.0 ft
Pipe diameter ≥ 8.0 ft	All drainage sizes	1.0 ft
Box culvert	All drainage sizes	1.0 ft

## REGIONAL CONDITIONS APPLICABLE TO SPECIFIC NATIONWIDE PERMITS

### NWP 7 – Outfall Structures and Associated Intake Structures and NWP 12 – Utility Line Activities.

**Intake Structures** – Intake screens with a maximum mesh opening of ¼-inch must be provided, inspected annually, and maintained. Wire, Johnson-like, screens must have a maximum distance between wires of 1/8-inch. Water velocity at the intake screen shall not exceed ½-foot per second.

Pumping plant sound levels will not exceed 75 dB at 50 feet.

Intakes located in Lake Sakakawea, above river mile 1519, and on the Yellowstone River, are subject to the following conditions:

- The intakes shall be floating.
- At the beginning of the pumping season, the intake shall be placed over water with a minimum depth of 20 feet.
- If the 20-foot depth is not attainable, then the intake shall be located over the deepest water available.
- If the water depth falls below six feet, the intake shall be moved to deeper water or the maximum intake velocity shall be limited to ¼ foot per second.

Intakes located in Lake Sakakawea, below river mile 1519, and the Missouri River below Garrison Dam are subject to the following conditions:

- The intakes shall be submerged.
- At the beginning of the pumping season, the intake will be placed at least 20 vertical feet below the existing water level.
- The intake shall be elevated 2 to 4 feet off the bottom of the river or reservoir bed.
- If the 20-foot depth is not attainable, then the intake velocity shall be limited to ¼-foot per second with intake placed at the maximum practicable attainable depth.

Intakes and associated utility lines that are proposed to cross sandbars in areas designated as piping plover critical habitat are prohibited.

### **Utility Lines**

- Any temporary open trench associated with utility lines are to be closed within 30 days of excavation. This time limit may be extended by notifying the North Dakota Regulatory Office and receiving a written response that the extension is acceptable.

## **NWP 11 – Temporary Recreational Structures – Boat Docks**

To ensure that the work or structure shall not cause unreasonable obstruction to the free navigation of the navigable waters, the following conditions are required:

- No boat dock shall be located on a sandbar or barren sand feature. The farthest point riverward of a dock shall not exceed a total length of 30 feet from the ordinary high watermark. Information Note: Issuance of this permit does not supersede authorization required by the North Dakota State Engineer's Office.
- Any boat dock shall be anchored to the top of the high bank.
- Any boat dock located within an excavated bay or marina that is off the main river channel may be anchored to the bay or marina bottom with spuds.

Section 10 Waters located in the State of North Dakota are:

Bois de Sioux River  
James River  
Missouri River  
Red River of the North  
Upper Des Lacs Lake  
Yellowstone River

## **NWP 13 – Bank Stabilization**

Permittees must notify the Corps in accordance with General Condition No. 32 (PCN) prior to initiating any regulated activity. The notification must also include photo evidence of erosion in the area. Prohibited materials found at

<http://www.nwo.usace.army.mil/Media/FactSheets/FactSheetArticleView/tabid/2034/Article/487696/prohibited-restricted-materials.aspx> cannot be used in waters of the U.S.

## **NWP 23 – Approved Categorical Exclusions**

Permittees must notify the Corps in accordance with General Condition No. 32 (PCN) prior to initiating any regulated activity. In addition to information required by General Condition 32 (PCN), permittees must identify the approved categorical exclusion that applies and provide documentation that the project fits the categorical exclusion.

### **GENERAL CONDITIONS (REGIONAL ADDITIONS)**

#### **General Condition 32 Notification– PCN**

Prospective permittees should be aware that a field aquatic resources delineation may be required for applications where notification is required in accordance with General Condition 32 (PCN) and/or mitigation may be required. Specific guidelines outlining the aquatic resources delineation process in the State of North Dakota and the Corps 1987 Wetland Delineation Manual and applicable Regional supplements to the Manual can be accessed on the North Dakota Regulatory Office's website at:

<http://www.nwo.usace.army.mil/Missions/RegulatoryProgram/NorthDakota.aspx>

**Appendix B**  
**Photographic Log**

# Northern Divide Wind Energy Center

Photo No.: 1  
Date: 09/09/2019

Description:  
**ND-C02-WETLAND**  
Overview photo facing south. Photo shows the wetland vegetation marking the edge of the wetland.



Photo No.: 2  
Date: 09/09/2019

Description:  
**ND-C03-WETLAND**  
Soil pit test of wetland soil. Soil shows significant amount of gleying, indicating hydric soil.



# Northern Divide Wind Energy Center

Photo No.: 3  
Date: 09/10/2019

Description:  
**ND-C17-WETLAND**  
Overview photo facing west. Photo shows wetland surface water surrounded by obligate vegetation.



Photo No.: 4  
Date: 09/10/2019

Description:  
**ND-C17-WETLAND**  
Soil pit test of wetland soil. Soil shows signs of redoximorphic concentrations in the soil matrix.



## Northern Divide Wind Energy Center

Photo No.: 5  
Date: 09/22/2019

Description:  
**ND-B93-WETLAND**  
Overview photo facing south. Photo shows wetland surface water surrounded by obligate vegetation.



Photo No.: 6  
Date: 09/22/2019

Description:  
**ND-B93-WETLAND**  
Soil pit test of wetland soil. Soil shows signs of redoximorphic concentrations in the soil matrix.

