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April 28, 2016

Hand Delivery

Mr. Darrell Nitschke
Executive Director
NORTH DAKOTA PUBLIC
SERVICE COMMISSION
600 E. Boulevard Avenue, Dept. 408
Bismarck, ND 58505-0480

In re: Oliver Wind III, LLC
Case Nos. PU-16-122 and PU-16-123
Our File No. 35-218-029

Dear Mr. Nitschke:

Please find enclosed for filing eleven copies of the wetlands report in the captioned cases.

Please let me know if you have any questions. Thank you.

Sincerely,

Wade Mann

Wade C. Mann

WCM/lh
enc.

cc: Sara Cardwell (via email)
Mitchell D. Armstrong (via email)
Brian Schmidt (via email)
Patrick J. Ward (via email)

36 PU-16-123 Filed 04/28/2016 Pages: 106
Wetlands Report
Oliver Wind III, LLC
Wade Mann, Crowley Fleck, PLLPv

36 PU-16-122 Filed 04/28/2016 Pages: 106
Wetlands Report
Oliver Wind III, LLC
Wade Mann, Crowley Fleck, PLLP

Oliver III Wind Energy Center—Morton and Oliver Counties, North Dakota

Wetlands and other Waters of the United States Determination Report

April 2016

Prepared for:

NEXTera ENERGY RESOURCES

Prepared by:

TETRA TECH

2001 Killebrew Drive, Suite 141, Bloomington, MN 55425

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1. Introduction

This report describes the results of determinations for wetlands and other waters of the United States (WoUS) performed in support of the Oliver III Wind Energy Center (proposed Project). Field surveys were completed November 2015 through March 2016. The Project includes the construction of wind turbines and an associated transmission line in Morton and Oliver counties, North Dakota.

Presented in this report are descriptions of the methodology, results, and conclusions of wetland and other WoUS determination surveys completed through March 31, 2016. Additional minor changes to facility design have been made since the last survey was completed on March 31, 2016, primarily to avoid wetlands and archaeological features. These areas will be surveyed prior to final project design. Because Oliver Wind III, LLC (Oliver Wind III) has committed to avoiding and minimizing impacts to potential jurisdictional features, if any additional features are delineated in the previously un-surveyed areas, the proposed Project design will be revised to avoid and minimize impacts to these features.

1.1 Project Description and Location

Oliver Wind III, a wholly-owned, indirect subsidiary of NextEra Energy Resources, LLC (NEER), is proposing to construct the proposed Project in northeastern Morton County and southeastern Oliver County, North Dakota (**Figure 1**). The Project area is the location within which Oliver Wind III has negotiated easements with landowners, and encompasses approximately 19,678 acres (30.7 square miles).

The Project will have a nameplate capacity of approximately 100 megawatts (MW), consisting of up to 48 wind turbines using both General Electric (GE) 2.1 MW and GE 1.79 MW Xle wind turbine generators. Additional facilities include access roads, underground electrical collection systems and cabling, a collection substation, an operation and maintenance (O&M) building, meteorological towers, and a construction laydown area (**Figure 2**). The Project also includes an approximately 4.5-mile, 230-kilovolt (kV) overhead transmission line and a switchyard to connect the Project to the Center to Mandan 230kV overhead transmission line, in Section 23 of Township 141 North, Range 83 West, approximately 22 miles northwest of the city of Bismarck and will transmit power into the Minnkota Power Cooperative (Minnkota) transmission system. The switchyard will include a control building, and eight new transmission poles to interconnect to Minnkota's existing Center to Mandan Transmission Line. Temporary crane paths will be used to transport construction cranes in the Project area to erect turbines during construction.

1.2 Ecoregional Setting

The proposed Project is located entirely in the Northwestern Great Plains Missouri Plateau Level III ecoregion of North Dakota (Chapman et al. 2001). Characteristic physiography in this region includes rolling plains with isolated sandstone buttes. Vegetation communities in this region are mainly composed of short prairie grasses with very few trees. The predominant land use in the proposed Project area consists of agricultural fields and pastureland. Tributary streams in the Project area drain east to the Missouri River and south to the Heart River.

1.3 Regulatory Setting

1.3.1 Federal Regulations

All discharges of dredged or fill material into jurisdictional WoUS, that result in permanent or temporary losses of WoUS, are regulated by the U.S. Army Corps of Engineers (USACE) under Section 404 of the Clean Water Act (CWA). The USACE regulates projects in navigable waters under Section 10 of the Rivers and Harbors Act.

Under USACE and U.S. Environmental Protection Agency (EPA) 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." In 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 Code of Federal Regulations [CFR] 328[e]).

Permanent impacts to jurisdictional features exceeding 0.1 acre would likely require a pre-construction notification (PCN) and an approved jurisdictional determination (JD) by the USACE. Oliver Wind III has committed to avoiding or minimizing impacts to potentially jurisdictional features to avoid the need for a PCN from the USACE. If impacts to jurisdictional waters cannot be avoided, the Project will require permitting under the CWA § 404 program administered by USACE. The North Dakota USACE office recommends consultation on wind farm projects that may exceed these thresholds to determine the need and/or type of permitting.

1.3.2 New CWA Rule

The State of North Dakota is currently involved in litigation concerning the new CWA rule that went into effect August 28, 2015. In lieu of the decision on the new rule, as it may be resolved in North Dakota, the USACE will default to the preexisting definition for "waters of the United States" under Section 404 of the CWA (33 CFR 328.3[a]), as follows:

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 waters of the United States 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.
8. Waters of the United States 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 U.S. Environmental Protection Agency. 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 waters of the United States.

A comparison of the CWA's old rule, proposed new rule, and final new rule is provided in **Table 1**.

With respect to the CWA and the types of jurisdictional wetlands and other WoUS defined in the existing old rule, proposed new rule, and final new rule (**Table 1**), Oliver Wind III is taking a conservative approach and will avoid, to the greatest extent practicable, permanently impacting potentially jurisdictional wetlands and other WoUS.

Table 1. Comparison of Old, Proposed New, and Final New CWA Rule

Subject	Old Rule	Proposed Rule	New Rule (Under Injunction)
Navigable Waters	Jurisdictional	Jurisdictional	Jurisdictional
Interstate Waters	Jurisdictional	Jurisdictional	Jurisdictional
Territorial Seas	Jurisdictional	Jurisdictional	Jurisdictional
Impoundments	Jurisdictional	Jurisdictional	Jurisdictional
Tributaries to Traditional Navigable Waters	Did not define tributary.	Defined tributary for the first time as water features with bed, banks and OHWM, and flow downstream.	Same as proposal except wetlands and open waters without beds, banks and OHWM marks will be evaluated for adjacency.
Adjacent Wetlands/Water	Included wetlands adjacent to traditional navigable waters, interstate waters, the territorial seas, impoundments, or tributaries.	Included all waters adjacent to jurisdictional waters, including waters in riparian area or floodplain or with surface or shallow subsurface connection to jurisdictional waters.	Includes waters adjacent to jurisdictional waters within a minimum of 100 feet and within the 100-year floodplain to a maximum of 1,500-feet of the OHWM.
Isolated or "Other" Waters	Included all other waters the use, degradation or destruction of which could affect interstate or foreign commerce.	Included "other waters" where there was a significant nexus to traditionally navigable water, interstate water or territorial sea.	Includes specific waters that are similarly situated: prairie potholes, Carolina and Delmarva bays, pocosins, western vernal pools in California, and Texas coastal prairie wetlands when they have a significant nexus. Includes waters with a significant nexus within the 100-year floodplain of a traditional navigable water, interstate water, or the territorial seas as well as waters with a significant nexus within 4,000 feet of jurisdictional waters.
Exclusions to the definition of "Waters of the US"	Excluded waste treatment systems and prior converted cropland.	Categorically excluded those in old rule and added two types of ditches, groundwater, gullies, rills and non-wetland swales.	Includes proposed rule exclusions, expands exclusion for ditches, and also excludes constructed components for Municipal Separate Storm Water Sewer System (MS4s) and water delivery/reuse and erosional features.

Source: EPA (2015)

1.3.3 U.S. Fish and Wildlife Service

The U.S. Fish and Wildlife Service (USFWS) Lake Ilo National Wildlife Refuge manages wetland and grassland easements on private lands west of the Missouri River in southwest North Dakota. The easements afford permanent protection to wetland basins and grasslands that provide important seasonal habitat to waterfowl, shorebird and grassland nesting species during the spring migration and nesting seasons.

Wetland easements do not allow the burning, leveling, filling, and/or draining of protected wetland basins without a permit from the USFWS. However, landowners are permitted to till and farm these areas when they are not wet. No permanent impacts to these basins are allowed from wind farm construction activities. Temporary impacts may be permitted, but the original elevation contours must be restored when construction is complete. No permanent or temporary impacts are permitted on grassland easements.

Tetra Tech requested review of the Project area from the USFWS to identify any wetland or grassland easements within the Project area. The USFWS responded on January 20, 2016 indicating that there are no USFWS easements or fee-title lands located within the Project area.

1.3.4 State Regulations

The North Dakota State Water Commission–Office of the State Engineer (Commission) is the regulatory body that permits actions in wetlands in the state of North Dakota. The Commission issues three types of permits: a *Drain Permit*, a *Wetland Restoration Permit*, and a *Wetland Creation Permit*. The state does not have a permit requirement for fill placed in a wetland.

A Drain Permit is issued for projects that drain ponds, sloughs, lakes, wetlands, or any similar series that has a watershed greater than 80 acres. A Wetland Restoration Permit is required for projects that restore wetlands less than the size of the original wetland. A Wetland Creation Permit is required for projects creating wetlands capable of storing more than 25 acre-feet of water.

The proposed Project does not meet the criteria for any of these three permits. Therefore, no state permit for wetlands is required for the proposed Project.

2. Wetland Determination Methods

The following sections briefly describe the methods used for this series of wetland determinations.

2.1 Desktop Methodology

Tetra Tech conducted a desktop analysis of the Project area to identify potential jurisdictional WoUS. Desktop analysis used the following sources of information, as described in this section.

The U.S. Fish and Wildlife Service online *Wetlands Mapper* tool (USFWS 2015) depicts mapped wetlands as part of the National Wetland Inventory (NWI) Program. The NWI dataset identified 135 wetlands in the Project area. These NWI wetland polygons situated in the Project area are depicted on **Figure 2**.

The U.S. Geological Survey produces the National Hydrography Dataset (NHD) that identifies perennial and intermittent streams, ponds, and lakes. The online database *NHD Viewer* tool

(USGS 2010) was queried for the Project area. The query found 276 NHD features In the Project area. Ninety-three of these features were identified as waterbodies (ponds, lakes, and impoundments), 121 were intermittent streams, and there were 62 artificial paths (man-made water ways) in the Project area. No perennial stream features were identified in the Project area. The USGS also is responsible for topographic mapping. The field team used topographic maps (USGS 2015) during the field work to enhance the ability to identify and determine probable surface water sites, including streams, ponds, and reservoirs, located near proposed Project infrastructure. Wetland scientists surveyed some wetlands and streams within the proposed Project area that were relatively far removed from (i.e., outside the current construction easement), but in the general vicinity of the proposed Project to provide flexibility for potential design changes in the location of Project infrastructure.

The U.S. Department of Agriculture Natural Resources Conservation Service is the source for hydric soils information. These data are available online via the *Web Soil Survey* tool (USDA-NRCS 2016). Data were obtained for the Project area and were used to cross-check against field sites that were initially observed to exhibit wetland or surface water conditions. Hydric soils were identified in the Project area associated with NWI- and NHD-mapped features. Additionally, the Web Soil Survey was queried for drainage class across the Study Area. Four soil series with a classification of poorly drained and one soils series with a classification of very poorly drained were documented for the Project area.

The U.S. Department of Agriculture-Farm Service Bureau (2015) produces current high-quality aerial photography through the National Agricultural Imagery Program. This aerial photography was used to further refine the field determinations for wetlands and other surface waterbodies within the Project area.

2.2 Desktop Results

The desktop analysis identified where the proposed locations of Project features (turbines, collector lines, service roads, or transmission line poles) intersected wetlands or other WoUS features. Remote sensing data are not precise, however, and Tetra Tech wetland scientists determined that a field reconnaissance was required to determine the precise locations and boundaries of wetlands and other WoUS located in the Project area.

2.3 Floodplains

A desktop analysis of mapped floodplains was conducted for the proposed Project. No floodplains were documented in the Project area. A 100-year floodplain is defined as the area that will be inundated by a flood event having a 1 percent chance of occurring in any given year.

2.4 Turbine Micrositing

Tetra Tech wetland scientists participated in a site visit with a Project team consisting of engineers, land surveyors, and cultural resource specialists to determine the optimal locations for wind turbines within the Project area. The objective of the micrositing was to identify areas that may have adverse impacts to sensitive environmental areas including wetlands and other WoUS. Where possible, wind turbines were re-located or eliminated during the micrositing process to avoid impacts to wetlands or other WoUS.

2.5 Wetland Determinations

Field determinations for the proposed Project were performed from November 2015 through March 2016. A discussion of wetland determination methodology is provided in the next subsection. The determinations were conducted in areas where proposed Project infrastructure intersected potential wetland areas identified during the desktop analysis. The surveyed areas included the construction easements associated with the proposed Project infrastructure and some additional areas outside the current construction easement to allow for flexibility in potentially relocating infrastructure. **Table 2** below provides the surveyed areas by infrastructure type.

Table 2. Proposed Project Impact Assumptions

Project Component	Temporary Disturbance (Construction)	Permanent Disturbance (Operation)
Wind Turbines [a]	4.5 acres per turbine	0.2 acre per turbine
Service Roads [b]	50 feet wide per linear foot of road	16 feet wide per linear foot of road
Collection Lines [c]	50 feet wide per linear foot	12 feet x 8 feet for each junction box
O&M Facility	5 acres	2 acres
Collection Substation	5 acres	2 acres
Construction Laydown Area [d]	15 acres	0 acres
Meteorological Towers [e]	1.25 acres per tower	5 sq. feet per tower
Fiber Optic Line	80 feet wide per linear foot	66 feet x 66 feet for the fiber optic demarcation
Temporary Crane Paths	80 feet wide per linear foot	0 acres
Transmission Line	0.5 acres per pole	38.5 sq. feet per pole
Switchyard	5 acres	2 acres

a Construction impacts assumed a 250-foot construction radius around the turbine, which equates to approximately 4.5 acres per turbine. Impacts during operation account for a 40-foot x 100-foot gravel pad with a 15-foot buffer, or 0.2 acres per turbine.

b Easement width necessary for construction based on turbine types. Temporary and permanent impacts represent a conservative estimate of disturbance. Roads required to support crane access to turbines during operation would remain up to 34 feet wide; other service roads may be built at 16 feet or reduced later to 16 feet. Service road impacts also assume all proposed roads are new service roads and do not consider improvements to existing roads separately.

c Where collection lines run parallel to service roads, the respective impact buffers generally do not overlap.

d Assumes one 15-acre laydown area.

e Area of impact is 1.25 acres per guyed tower during installation. Once installed, each tower has a 1 square-foot base plate and four 1-square-foot anchor points, or 5 square feet per tower.

2.5.1 Wetland Determination Methodology

Wetland determinations for the proposed Project follow the methodology contained in the USACE *Wetland Delineation Manual* (USACE 1987) and the *Regional Supplement to the USACE Wetland Delineation Manual: Great Plains Region (Version 2.0)* (USACE 2010) as closely as possible. Tetra Tech conservatively mapped the wetlands to ensure the proposed Project would remain below the PCN permitting thresholds. Since the surveys were conducted outside of the growing season limited vegetation was present. The surveyors relied on available vegetation, topography, and visible signs of hydric soils and hydrology when available. For a site to be considered a wetland, there must be positive indication of dominance by hydrophytic vegetation and characteristic wetland hydrology. Observations of vegetation and hydrology for each wetland identified during the survey were documented in a field notebook that is on record at the Tetra Tech office in Bloomington, Minnesota, but Wetland Determination Data Forms were not completed.

2.5.1.1 Hydrophytic Vegetation

When available, the dominant vegetation for each wetland was keyed to species level and each species was assigned a wetland indicator status using *The National Wetland Plant List* (Lichvar 2014). Hydrophytic vegetation, or plants that are indicators of wetlands, include those species designated obligate (OBL), facultative wetland (FACW), or facultative (FAC). As a general rule, hydrophytes dominate a sample plot when greater than 50 percent of the evaluated species are OBL, FACW, or FAC. Upland plants include those listed with facultative upland (FACU) or upland (UPL) status. **Table 3** provides descriptions of these indicators.

Table 3. Wetland Indicator Status

Indicator Status	Occurrence in Wetlands
OBL	Almost always occur in wetlands under natural conditions (estimated probability >99%).
FACW	Usually occur in wetlands (estimated probability 67%–99%), but occasionally found in non-wetlands (estimated probability 1%–33%).
FAC	Equally likely to occur in wetlands or non-wetlands (estimated probability 34%–66%).
FACU	Usually occur in non-wetlands (estimated probability 67%–99%), but occasionally found in wetlands (estimated probability 1%–33%).
UPL	Almost always occur in non-wetlands under natural conditions (estimated probability >99%).
Not Listed (NL)	Not Listed plants are assumed to be UPL as defined in the user notes for the 2014 Great Plains Regional Plant List.

Wetlands within the Project area were typically vegetated with a variety of wetland plants typical of the central North Dakota ecotone and comprised a variety of sedge, grass, forb, shrub, and tree species. The most common wetland species observed included: cattails (*Typha angustifolia*) (OBL), reed canary grass (*Phalaris arundinacea*) (FACW), fox-tail barley (*Hordeum jubatum*) (FACW), smartweeds (*Persicaria sp.*) (OBL or FACW), freshwater cord grass (*Spartina pectinata*) (FACW) and sedges (*Carex sp.*) (FAC, FACW or OBL).

2.5.1.2 Cowardin Classification

Wetlands were classified according to *Classification of Wetlands and Deepwater Habitats in the United States* (Cowardin et al. 1979) during the field survey. The classification system, also known as the Cowardin Classification, was developed as a tool to aid in distinguishing the different types of wetlands. Wetlands found in the Project area were all identified as palustrine (non-tidal) emergent wetlands. Emergent wetlands consist of erect and rooted wetland plants.

2.5.1.3 Wetland Hydrology

Hydrology was analyzed for primary and secondary wetland indicators. Primary wetland indicators included visible inundation, soil saturation, water marks, drift lines, sediment deposits, and drainage patterns in wetlands. Secondary wetland indicators of wetland hydrology included observable features such as oxidized root channels associated with living roots, water-stained leaves, soil cracks, and local soil survey data.

2.5.1.4 Wetland Mapping

Wetland scientists identified the transitional area between wetland and upland conditions. Wetland scientists accomplished the determinations by walking the outer limit of visibly identifiable wetland vegetation, hydrology and/or topography and recording the path with a Trimble Geo XH 6000 GPS. The Trimble Geo XH 6000 GPS unit provides sub-meter survey accuracy (post-processing). The field-collected data were plotted as a map layer using geographic information system software. Photographs of select wetlands are provided in the photo log included as **Appendix 2**.

2.6 Assessment of Other WoUS

Non-wetland WoUS are regulated under the CWA for the placement of dredged or fill materials. The desktop analysis and field surveys identified other WoUS including ephemeral, intermittent, and perennial streams and ponds.

2.6.1 Surface Water Assessment Methodology

Stream and pond features were mapped along their OHWMs. The USACE regulations define "ordinary high water mark" as:

> … that line on the shore established by the fluctuations of water and indicated by physical characteristics such as a 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.

Once the OHWM was observed in the field by the team, the Trimble Geo XH 6000 GPS unit was used to map this line where it would be crossed by planned elements of proposed Project infrastructure. Observations of channel features, flow characteristics, substrate description, and the presence of aquatic vegetation for streams, and observations of basin features, substrate description and the presence of aquatic vegetation for ponds, were documented in a field notebook that is on record at the Tetra Tech office in Bloomington, Minnesota.

3. Wetlands and Other WoUS Determination Results

3.1 Wetlands Impacted by Proposed Project Infrastructure

Forty-one wetlands were identified in the Project area. Of these wetlands, two would be temporarily impacted by currently planned project infrastructure. Oliver Wind III has proposed revisions to facility design that would eliminate impacts to these two wetlands, but these changes were not finalized as of the date of this report. Narratives for these wetlands are provided below. The remaining 39 wetlands would not be impacted but were surveyed to document their locations in case the Project design changes in the future. Wetlands that were surveyed, but which are currently not being impacted by the proposed Project are summarized in **Table 4**, including the likely jurisdictional status and the approximate acreage of each feature recorded within the survey area.

3.1.1 Wetland 43

Wetland 43 intersects a haul route turning radius southwest of the intersection of County Road 140 and 35th Avenue (**Figure 3**: T140N, R83W, Sec 18). An NHD mapped stream flows from this polygon to the northeast and into pastureland on the east side of 35th Avenue. No streams were noted to flow from the wetland; therefore, the wetland appears isolated and does not likely meet the definition of a jurisdictional WoUS and no PCN or permit would likely be required.

3.1.2 Wetland 44

Wetland 44 intersects a haul route turning radius southwest of 34th Street and County Road 83 (**Figure 3**: T140N, R83W, Sec 28). A NHD flowline is located approximately 400 feet east of Wetland 44 across County Road 83. This wetland may meet the definition of a jurisdictional WoUS because of its close proximity to a channel with a well-defined bed and bank that runs south and

eventually into the Heart River. Proposed Project impacts resulting from the development of the haul route turning radius include up to 0.085 acre of temporary impact.

3.2 Wetlands Currently not Impacted by Proposed Project Infrastructure

Wetlands that were mapped during different design phases of the project and are either no longer intersected by current infrastructure design or are not anticipated to have temporary or permanent impacts resulting from proposed Project construction are listed in **Table 4**. Narratives describing impact avoidance methods for electrical collection lines and crane paths are provided below.

3.2.1 Electrical Collection Lines

Based on the current layout, 10 wetlands intersect the temporary disturbance areas for electrical collection lines. The installation of electrical collection lines is typically considered a temporary disturbance. USACE recommends the installation of electrical collection lines using a direct bury technique. This process is not regulated by the USACE and is, therefore, not subject to permitting. If this technique is not available, installation of the electrical collection lines by trenching is regulated under the Section 404 permitting process because it causes the temporary placement of dredged material in jurisdictional features. Oliver Wind III has committed to boring under the wetlands where they intersect with collection lines. Boring under jurisdictional features is also not regulated by the USACE; therefore, no PCN or permit would likely be required.

3.2.2 Crane Paths

Based on the current layout, four wetlands intersect the temporary disturbance areas for crane paths. Crane paths may be considered a temporary disturbance if deep ruts or mechanical damage to soils results in alterations to the topography or functionality. Oliver Wind III has committed to utilizing matting to protect any jurisdictional feature prior to crossing. No PCN or permit would be required for crossing jurisdictional features if matting is employed and no impacts are created.

Table 4. Wetlands Currently not Impacted by Proposed Project Infrastructure

Wetland ID	Approximate Acres	Latitude	Longitude	Likely Jurisdictional Status[1]	Figure 2 Map Book Page	Project Infrastructure Surveyed Area
W-01	12.798	46.917203	-101.097951	Non-jurisdictional	T140N, R83W, Sec 25	Outside survey area; no impacts
W-02	1.164	46.937834	-101.152677	Non-jurisdictional	T140N, R83W, Sec 15	Outside survey area; no impacts
W-03	0.687	46.992247	-101.145939	Jurisdictional	T141N, R83W, Sec 36	In the transmission line construction easement; feature to be spanned; no impacts
W-05	0.582	46.967174	-101.145496	Jurisdictional	T140N, R83W, Sec 3	In the transmission line construction easement; feature to be spanned; no impacts

Wetland ID	Approximate Acres	Latitude	Longitude	Likely Jurisdictional Status[1]	Figure 2 Map Book Page	Project Infrastructure Surveyed Area
W-06	3.138	46.981039	-101.150629	Jurisdictional	T140N, R83W, Sec 3	Outside survey area; no impacts
W-07	0.883	46.947576	-101.181080	Non-jurisdictional	T140N, R83W, Sec 17	Outside survey area; no impacts
W-08	0.253	46.989682	-101.146307	Jurisdictional	T141N, R83W, Sec 36	In the transmission line construction easement; feature to be spanned; no impacts
W-09	6.701	46.984055	-101.147787	Jurisdictional	T141N, R83W, Sec 36	Collector line; feature to be bored; no impacts Also in the transmission line construction easement; feature to be spanned; no impacts
W-10	0.045	46.972362	-101.145658	Non-jurisdictional	T140N, R83W, Sec 3	Outside survey area; no impacts
W-11	0.503	46.997472	-101.146302	Jurisdictional	T141N, R83W, Sec 25	In the transmission line construction easement; feature to be spanned; no impacts
W-12	0.028	46.999175	-101.147194	Jurisdictional	T141N, R83W, Sec 25	In the transmission line construction easement; feature to be spanned; no impacts
W-13	1.121	47.000840	-101.148014	Jurisdictional	T141N, R83W, Sec 25	In the transmission line construction easement; feature to be spanned; no impacts
W-14	0.020	47.003335	-101.150540	Jurisdictional	T141N, R83W, Sec 25	Outside survey area; no impacts
W-15	0.185	47.003730	-101.150645	Jurisdictional	T141N, R83W, Sec 25	Outside survey area; no impacts
W-16	0.141	46.958870	-101.197148	Non-jurisdictional	T140N, R83W, Sec 8	Construction easement modified to avoid feature; no impacts
W-17	21.815	46.959031	-101.193378	Non-jurisdictional	T140N, R83W, Sec 8	Crane path; matting to be utilized; no impacts
W-18	0.384	46.973347	-101.223028	Non-jurisdictional	T140N, R84W, Sec 1	Crane path; matting to be utilized; no impacts
W-19	0.319	46.964230	-101.205425	Jurisdictional	T140N, R83W, Sec 6	Collector line; feature to be bored; no impacts
W-20	0.271	46.933297	-101.129541	Non-jurisdictional	T140N, R83W, Sec 23	Construction easement modified to avoid feature; exclusion fencing to be utilized; no impacts
W-21	4.937	46.949077	-101.184384	Non-jurisdictional	T140N, R83W, Sec 17	Outside survey area; no impacts
W-22	1.216	46.949749	-101.183246	Non-jurisdictional	T140N, R83W, Sec 8	Outside survey area; no impacts
W-23	0.842	46.963405	-101.233734	Jurisdictional	T140N, R84W, Sec 12	Crane path; matting to be utilized; no impacts
W-24	1.402	46.978555	-101.220436	Jurisdictional	T140N, R84W, Sec 1	Construction easement modified to avoid feature; exclusion

Wetland ID	Approximate Acres	Latitude	Longitude	Likely Jurisdictional Status[1]	Figure 2 Map Book Page	Project Infrastructure Surveyed Area
						fencing to be utilized; no impacts
W-25	1.797	46.977721	-101.218223	Jurisdictional	T140N, R83W, Sec 6	Outside survey area; no impacts
W-26	0.125	46.950861	-101.209273	Non-jurisdictional	T140N, R83W, Sec 7	Collector line; feature to be bored; no impacts Crane path; matting to be utilized; no impacts
W-27	6.638	46.962704	-101.157811	Non-jurisdictional	T140N, R83W, Sec 9	Outside survey area; no impacts
W-28	1.690	46.962138	-101.155592	Non-jurisdictional	T140N, R83W, Sec 10	Construction easement modified to avoid feature; exclusion fencing to be utilized; no impacts
W-30	0.430	46.937763	-101.149734	Non-jurisdictional	T140N, R83W, Sec 15	Construction easement modified to avoid feature; exclusion fencing to be utilized; no impacts
W-31	0.390	46.976070	-101.146901	Jurisdictional	T140N, R83W, Sec 3	Outside survey area; no impacts
W-32	0.077	46.921874	-101.128403	Jurisdictional	T140N, R83W, Sec 23	Collector line; feature to be bored; no impacts
W-33	1.031	46.949989	-101.158496	Jurisdictional	T140N, R83W, Sec 9	Collector line; feature to be bored; no impacts
W-34	0.788	46.949829	-101.176203	Non-jurisdictional	T140N, R83W, Sec 9	Collector line; feature to be bored; no impacts
W-35	0.481	46.949182	-101.176303	Non-jurisdictional	T140N, R83W, Sec 9	Outside survey area; no impacts
W-36	1.795	46.956817	-101.239726	Non-jurisdictional	T140N, R84W, Sec 12	Outside survey area; no impacts
W-37	2.278	46.956771	-101.240902	Non-jurisdictional	T140N, R84W, Sec 11	Collector line; feature to be bored; no impacts
W-38	1.133	46.941809	-101.225018	Jurisdictional	T140N, R84W, Sec 13	Collector line; feature to be bored; no impacts
W-39	1.482	46.941257	-101.227887	Jurisdictional	T140N, R84W, Sec 13	Collector line; feature to be bored; no impacts
W-40	1.397	46.943400	-101.230135	Jurisdictional	T140N, R84W, Sec 13	Outside survey area; no impacts
W-41	3.907	46.941849	-101.229925	Jurisdictional	T140N, R84W, Sec 13	Collector line; feature to be bored; no impacts

1 Note that only the USACE can render an approved JD. The likely jurisdictional status listed in Table 4 only reflect Tetra Tech's understanding of Jurisdictional WoUS. Without a USACE-rendered JD, impacts should be avoided to these wetlands.

3.3 Other WoUS Results

3.3.1 Streams

Wetland scientists did not identify any streams within the surveyed areas of proposed Project infrastructure.

The flow regime of a stream describes how often it contains flowing water. Perennial streams contain flowing water throughout the year. Intermittent streams flow in response to both precipitation events and from spring sources; this flow is typically not year-long. Ephemeral streams flow only in response to precipitation events and, as such, they are more often dry than flowing.

3.3.2 Ponds

Three ponds were identified in the Project area. One of these ponds would be temporarily impacted by currently planned project infrastructure. Oliver Wind III has proposed revisions to facility design that would eliminate impacts to this pond, but these changes were not finalized as of the date of this report. A narrative for this pond is provided below. The two remaining ponds would not be impacted but were surveyed to document their locations in case the Project design changes in the future. Ponds that were surveyed, but which are currently not being impacted by the proposed Project are summarized in **Table 5**, including the likely jurisdictional status as determined based on connectivity to a stream feature that drains into a traditional navigable water.

3.3.3 Pond 42

Pond 42 intersects a haul route turning radius northeast of the intersection of County Road 140 and 36th Avenue (**Figure 3**: T140N, R83W, Sec 7). The pond intersects a NWI mapped wetland. No streams were identified in close proximity to the pond, and the pond is not located near NHD flowlines; and is therefore likely isolated. This pond does not likely meet the definition of a jurisdictional WoUS and no PCN or permit would likely be required.

Table 5. Ponds Currently not Impacted by Proposed Project Infrastructure

Pond ID	Acres	Latitude	Longitude	Likely Jurisdictional Status[1]	Figure 2 Map Book Page	Project Infrastructure Surveyed Area
W-04	1.395	46.967438	-101.146819	Jurisdictional	T140N, R83W, Sec 3	In the transmission line construction easement; no impacts
W-29	0.275	46.921320	-101.106863	Non-jurisdictional	T140N, R83W, Sec 24	Construction easement modified to avoid feature; no impacts

1 Note that only the USACE can render an approved JD. The likely jurisdictional status listed in Table 5 only reflect Tetra Tech's understanding of Jurisdictional WoUS. Without a USACE-rendered JD, impacts should be avoided to these ponds.

4. Conclusions and Recommendations

Forty-four surveyed features are shown on the maps included as **Appendix 1**, **Figure 2**. These 44 features include 41 wetlands and 3 ponds. Fifteen features were mapped in previous alignments and are now outside of the survey areas. There are 13 features that occur within the temporary disturbance areas for the electrical collection lines and crane paths identified in **Table 2** for which impacts will be avoided by the use of boring installation methods for electrical collection lines and utilizing temporary matting for crane paths. Additionally, there are 13 features that occur in the construction easement, but outside of the permanent and temporary disturbance areas listed in **Table 2**. Oliver Wind III has committed to flagging and avoiding wetlands and other WoUS that occur in construction easements. The three remaining features occur within the temporary disturbance areas for the haul route turning radii. These wetlands and WoUS features are discussed by infrastructure impacts below.

4.1 Haul Route Turning Radii

Three features are intersected by proposed haul route turning radii. Based on the current layout, two wetlands and one pond feature intersect the temporary disturbance areas for the haul route turning radii. The installation of haul route turning radii is typically considered a temporary disturbance. One wetland and one pond are recommended non-jurisdictional and would likely not require a PCN or permit. Oliver Wind III has proposed revisions to facility design that would eliminate impacts resulting from the haul route turning radii, but these changes were not finalized as of the date of this report.

4.2 USACE Permitting

Based on the estimated permanent and temporary impacts to wetlands and other WoUS from the proposed Project, a CWA Section 404 permit is not required. If no permit is required, but minor temporary impacts are necessary, the USACE would likely require the action follow the General and Regional Conditions of the applicable nationwide permits (NWP) included in **Appendix 3**. NWP #12—Utility Line Activities and NWP #14—Linear Transportation Activities are the two permits that likely may apply to the proposed Project. NWP 12 applies to projects that involve utilities activities; NWP 14 was established for linear transportation projects (e.g., roads). The USACE emphasizes the following measures to minimize impacts to wetlands or other WoUS:

- Use mats or other measures to minimize soil disturbance in jurisdictional areas.
- Ensure no temporary fills remain in the jurisdictional areas.
- Return any affected jurisdictional areas to pre-construction contours and revegetate the affected areas.

Tetra Tech also recommends Oliver Wind III follow best management practices (BMPs) included as **Appendix 4** during construction of the proposed Project to further avoid and minimize impacts to wetlands and other WoUS. The following bullet points summarize some of these BMPs that are specific to wetlands and other WoUS:

- BMP-6: avoid and/or minimize impacting drainage features such as ditches, culverts, levees, tiles, terraces.
- BMP-13: identify, avoid, and/or minimize adverse impacts to wetlands and waterbodies, including placing structure foundations below the OHWM of WoUS.
- BMP-16: service road construction should minimize impacting streams.
- BMP-22: all permanent or temporary crossings of waterbodies should be designed to maintain low flows for aquatic species movement and designed to function during high flows.
- BMP-25: work within WoUS should occur during periods of low flow or no flow.

5. References

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Appendix 1: Figures

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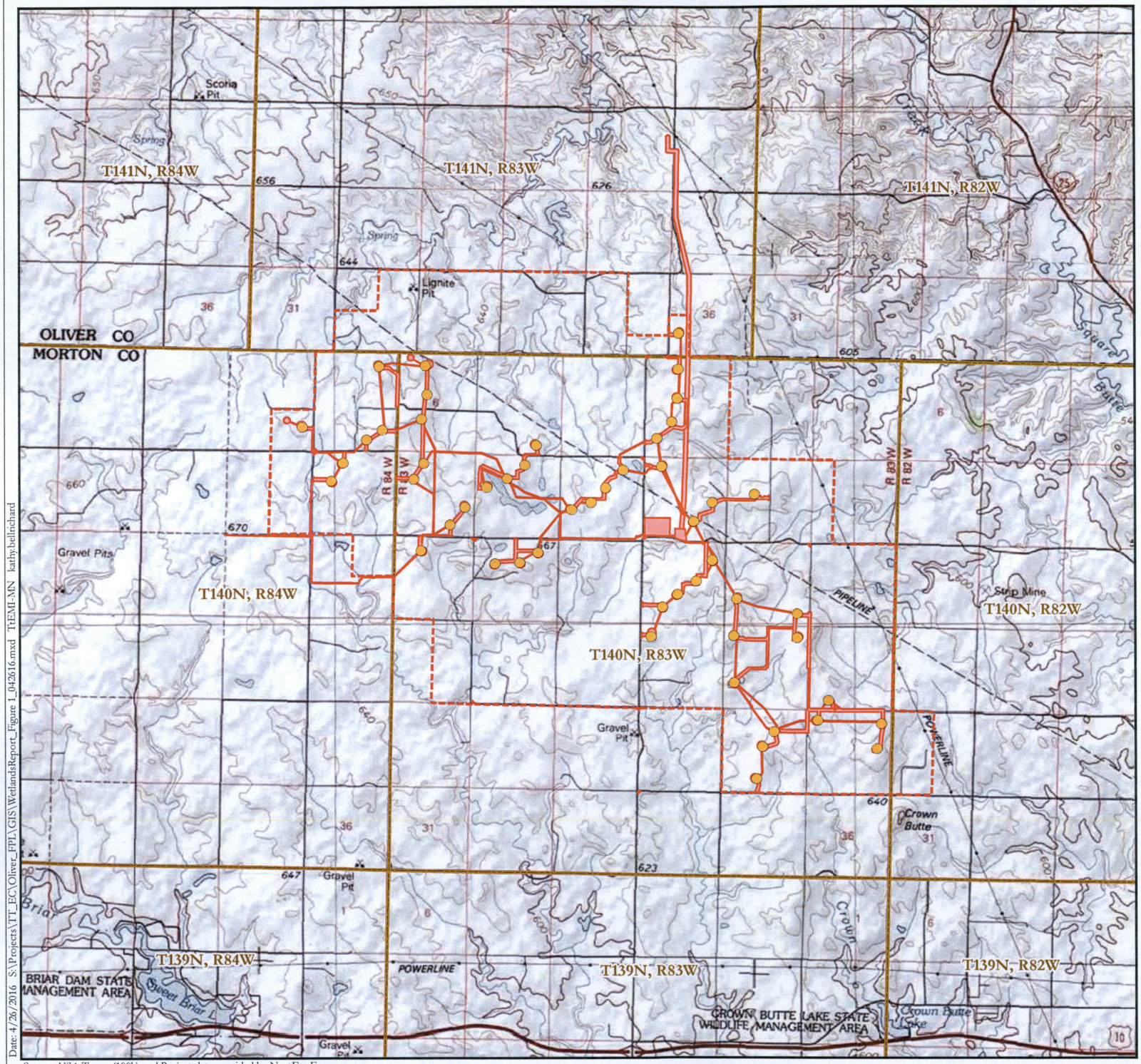

Facility Layout 4/5/2016

- Proposed Turbine Location
- Survey Area
- Project Area

0 0.5 1 1.5 2 Miles

N

Figure 1 - Project Vicinity
Oliver III Wind Energy Center
Morton and Oliver Counties
North Dakota

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Source: USA Topos (100k) and Project data provided by NextEra Energy

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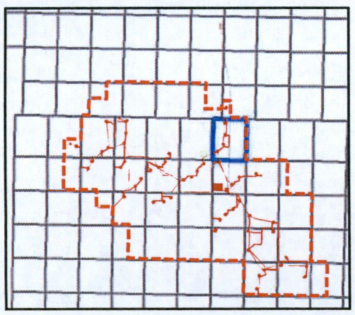

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- Fiber Optic Line (2/3/16)
- Substation (2/23/16)
- Laydown Area and O&M (11/17/15)
- Crane Path (1/21/16)
- Transmission Line Poles (4/25/16)
- Switchyard (2/23/16)
- Survey Corridor
- Project Area
- NHD
- NWI
- Roads

Surveyed Wetlands and WoUS

- USACE Non-Jurisdictional
- USACE Jurisdictional

0 500 1,000 1,500 2,000 Feet

N

T140N, R83W Sec 03

Figure 2 - Wetlands and WoUS Survey Results
Oliver III Wind Energy Center
Morton and Oliver Counties
North Dakota

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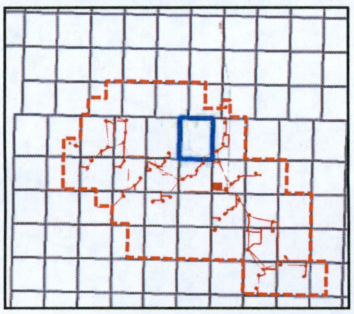

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- Survey Corridor
- Project Area
- NHD
- NWI
- Roads

Surveyed Wetlands and WoUS

- USACE Non-Jurisdictional
- USACE Jurisdictional

0 500 1,000 1,500 2,000 Feet

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T140N, R83W Sec 04

Figure 2 - Wetlands and WoUS Survey Results
Oliver III Wind Energy Center
Morton and Oliver Counties
North Dakota

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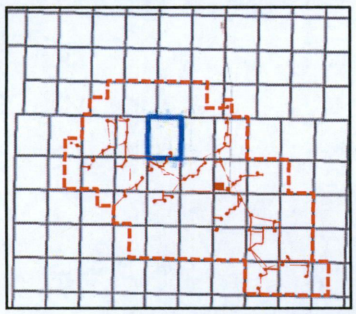

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- Crane Path (1/21/16)
- Transmission Line Poles (4/25/16)
- Switchyard (2/23/16)
- Survey Corridor
- Project Area
- NHD
- NWI
- Roads

Surveyed Wetlands and WoUS

- USACE Non-Jurisdictional
- USACE Jurisdictional

0 500 1,000 1,500 2,000 Feet

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T140N, R83W Sec 05

Figure 2 - Wetlands and WoUS Survey Results
Oliver III Wind Energy Center
Morton and Oliver Counties
North Dakota

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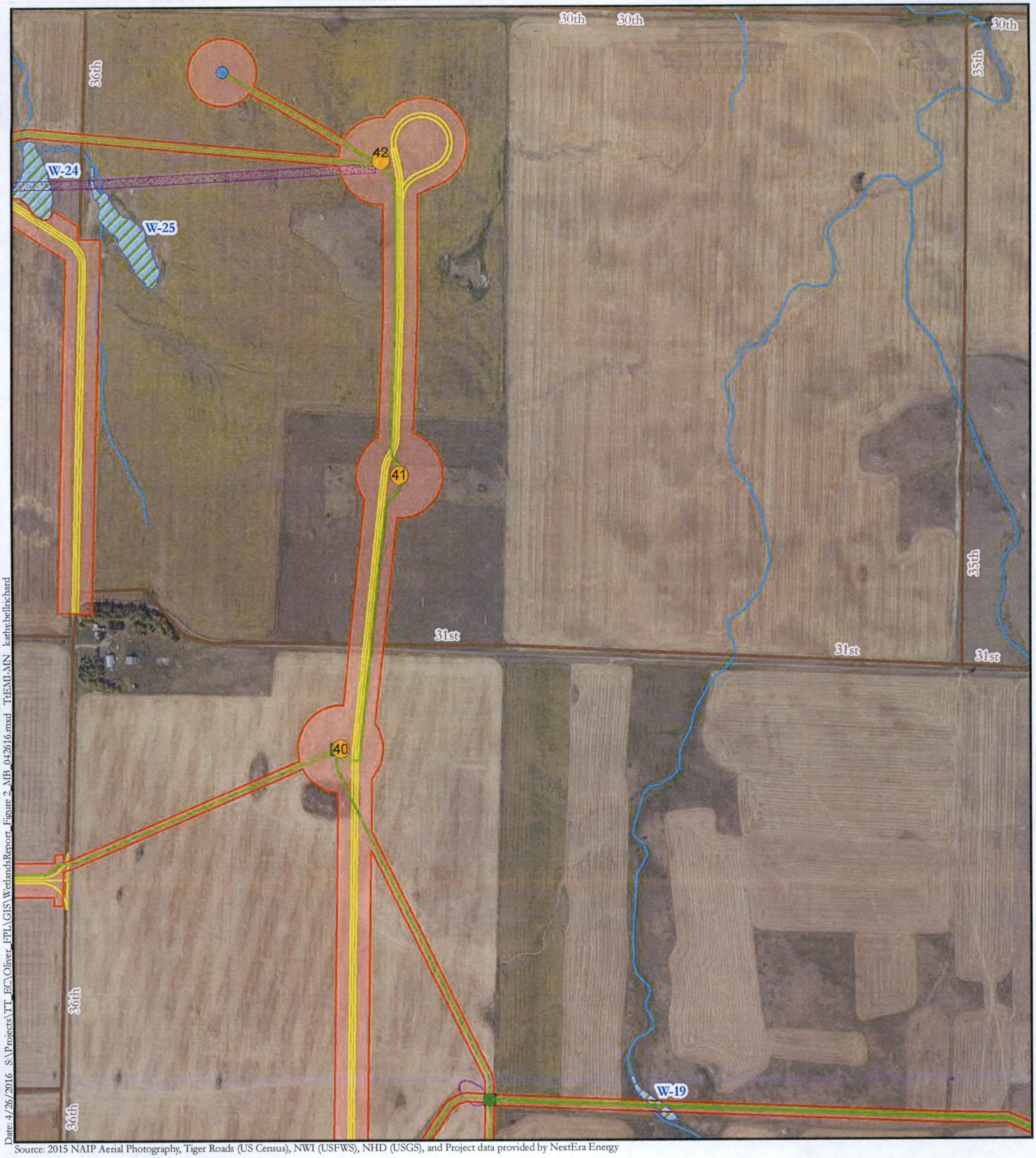

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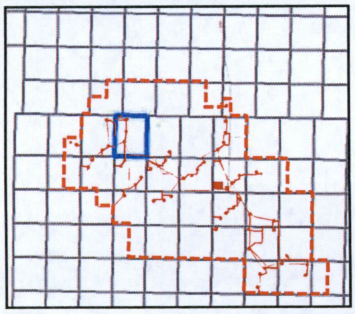

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- Switchyard (2/23/16)
- Survey Corridor
- Project Area
- NHD
- NWI
- Roads

Surveyed Wetlands and WoUS

- USACE Non-Jurisdictional
- USACE Jurisdictional

0 500 1,000 1,500 2,000 Feet

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T140N, R83W Sec 06

Figure 2 - Wetlands and WoUS Survey Results
Oliver III Wind Energy Center
Morton and Oliver Counties
North Dakota

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- Survey Corridor
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- NHD
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- Roads

Surveyed Wetlands and WoUS

- USACE Non-Jurisdictional
- USACE Jurisdictional

0 500 1,000 1,500 2,000 Feet

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T140N, R83W Sec 07

Figure 2 - Wetlands and WoUS Survey Results
Oliver III Wind Energy Center
Morton and Oliver Counties
North Dakota

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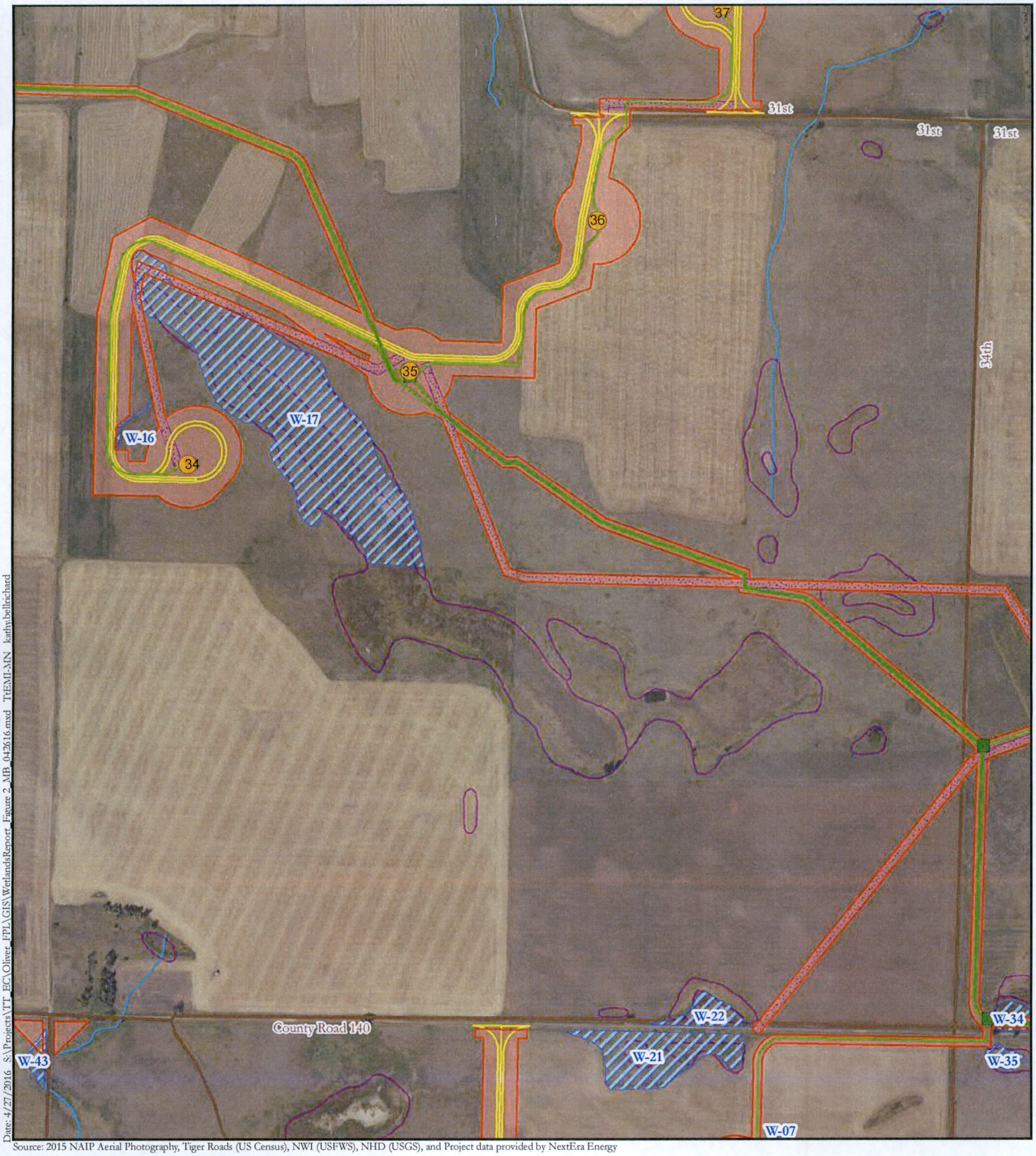

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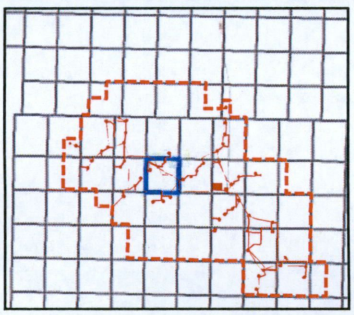

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- Roads

Surveyed Wetlands and WoUS

- USACE Non-Jurisdictional
- USACE Jurisdictional

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T140N, R83W Sec 08

Figure 2 - Wetlands and WoUS Survey Results
Oliver III Wind Energy Center
Morton and Oliver Counties
North Dakota

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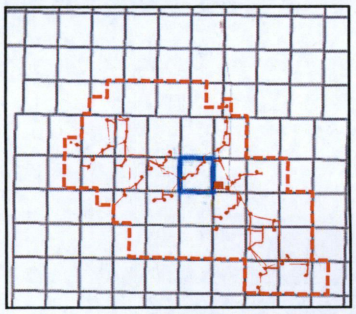

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- Roads

Surveyed Wetlands and WoUS

- USACE Non-Jurisdictional
- USACE Jurisdictional

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T140N, R83W Sec 09

Figure 2 - Wetlands and WoUS Survey Results
Oliver III Wind Energy Center
Morton and Oliver Counties
North Dakota

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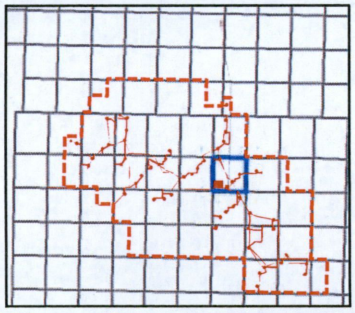

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- Project Area
- NHD
- NWI
- Roads

Surveyed Wetlands and WoUS

- USACE Non-Jurisdictional
- USACE Jurisdictional

0 500 1,000 1,500 2,000 Feet

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T140N, R83W Sec 10

Figure 2 - Wetlands and WoUS Survey Results
Oliver III Wind Energy Center
Morton and Oliver Counties
North Dakota

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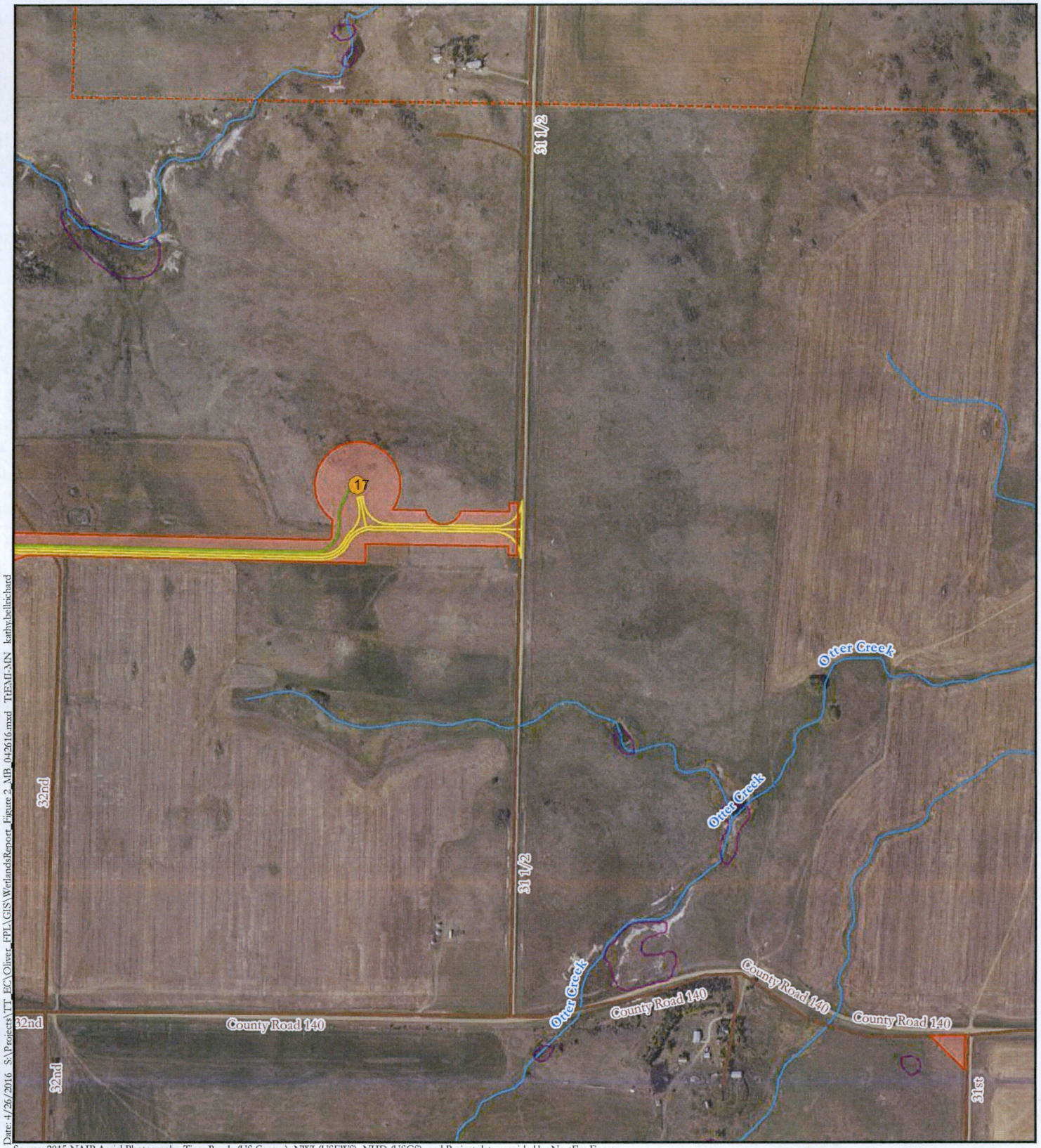

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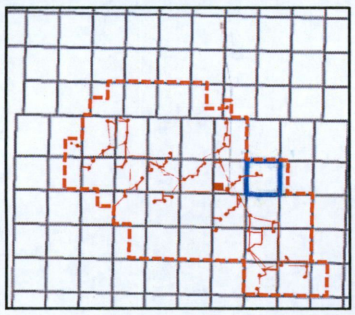

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- Transmission Line Poles (4/25/16)
- Switchyard (2/23/16)
- Survey Corridor
- Project Area
- NHD
- NWI
- Roads

Surveyed Wetlands and WoUS

- USACE Non-Jurisdictional
- USACE Jurisdictional

0 500 1,000 1,500 2,000 Feet

N

T140N, R83W Sec 11

Figure 2 - Wetlands and WoUS Survey Results
Oliver III Wind Energy Center
Morton and Oliver Counties
North Dakota

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Date: 4/26/2016 S:\Projects\TT_EC\Oliver_FPL\GIS\WetlandsReport_Figure 2_MB_042616.mxd TtEMI-MN kathy.bellrichard

32nd

32nd

31 1/2

County Road 140

County Road 140

County Road 140

County Road 140

Otter Creek

31st

31st

32nd

33rd

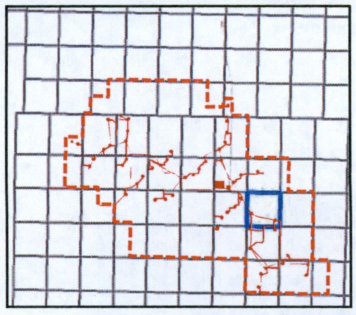
9

8

Alt3

W-20

Source: 2015 NAIP Aerial Photography, Tiger Roads (US Census), NWI (USFWS), NHD (USGS), and Project data provided by NextEra Energy



- Turbine (4/5/16)
- Meteorological Tower (1/25/16)
- Junction Box (4/22/16)
- Service Road (4/5/16)
- Collection Line (4/22/16)
- Fiber Optic Line (2/3/16)
- Substation (2/23/16)
- Laydown Area and O&M (11/17/15)
- Crane Path (1/21/16)
- Transmission Line Poles (4/25/16)
- Switchyard (2/23/16)
- Survey Corridor
- Project Area
- NHD
- NWI
- Roads

Surveyed Wetlands and WoUS

- USACE Non-Jurisdictional
- USACE Jurisdictional

0 500 1,000 1,500 2,000 Feet

N

T140N, R83W Sec 14

Figure 2 - Wetlands and WoUS Survey Results

Oliver III Wind Energy Center

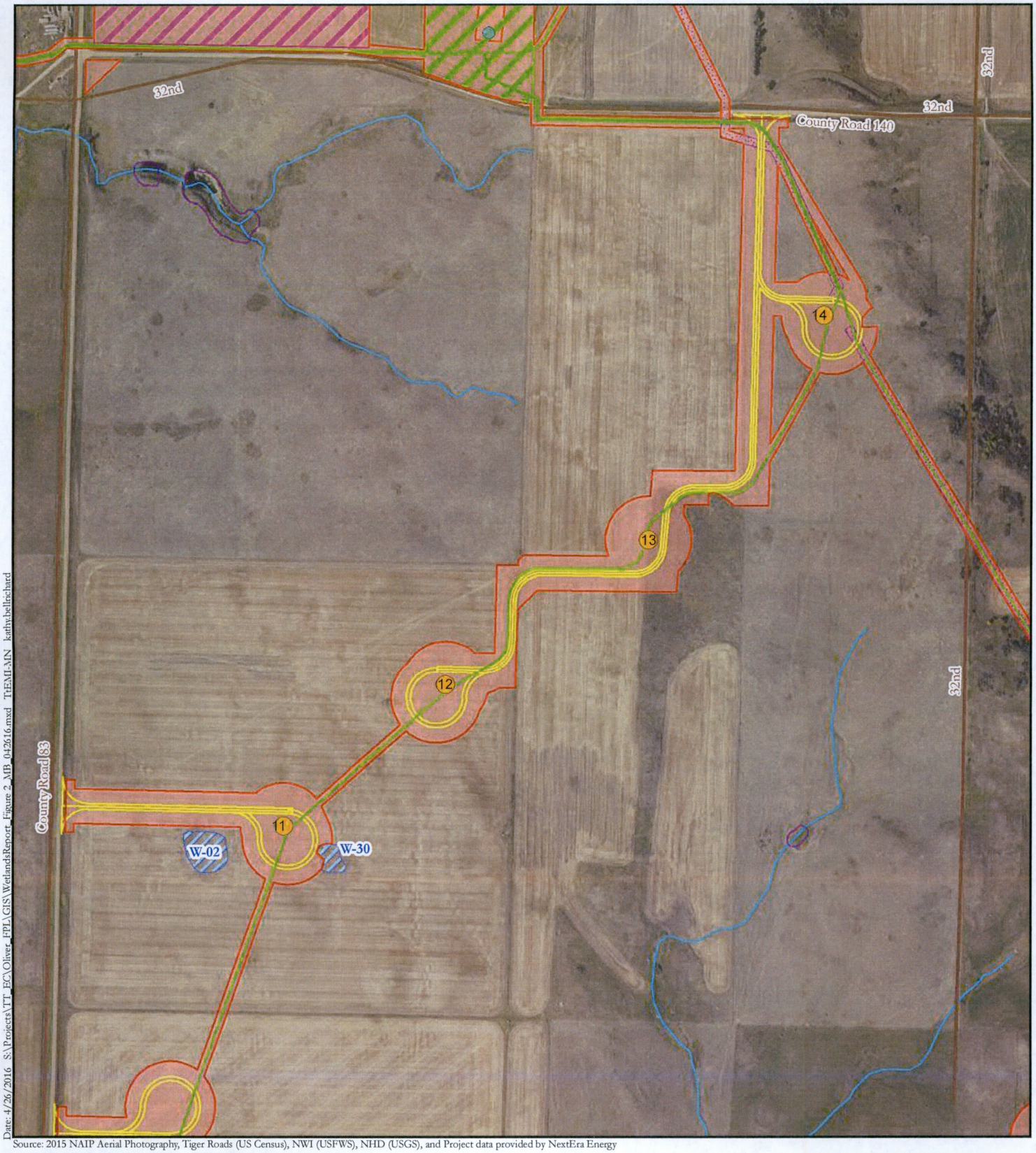
Morton and Oliver Counties

North Dakota

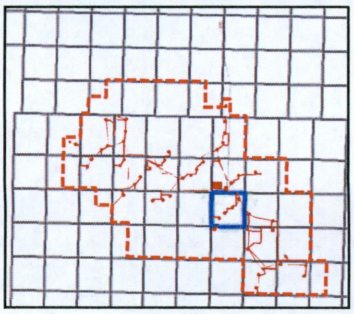
TETRA TECH

NEXTera ENERGY RESOURCES

Date: 4/26/2016 S:\Projects\TT_EC\Oliver_FPL\GIS\WetlandsReport_Figure 2_MB_042616.mxd TtEMI-MN kathy.bellrichard



Source: 2015 NAIP Aerial Photography, Tiger Roads (US Census), NWI (USFWS), NHD (USGS), and Project data provided by NextEra Energy



- Turbine (4/5/16)
- Meteorological Tower (1/25/16)
- Junction Box (4/22/16)
- Service Road (4/5/16)
- Collection Line (4/22/16)
- Fiber Optic Line (2/3/16)
- Substation (2/23/16)
- Laydown Area and O&M (11/17/15)
- Crane Path (1/21/16)
- Transmission Line Poles (4/25/16)
- Switchyard (2/23/16)
- Survey Corridor
- Project Area
- NHD
- NWI
- Roads

Surveyed Wetlands and WoUS

- USACE Non-Jurisdictional
- USACE Jurisdictional

0 500 1,000 1,500 2,000 Feet

N

T140N, R83W Sec 15

Figure 2 - Wetlands and WoUS Survey Results
Oliver III Wind Energy Center
Morton and Oliver Counties
North Dakota

TETRA TECH

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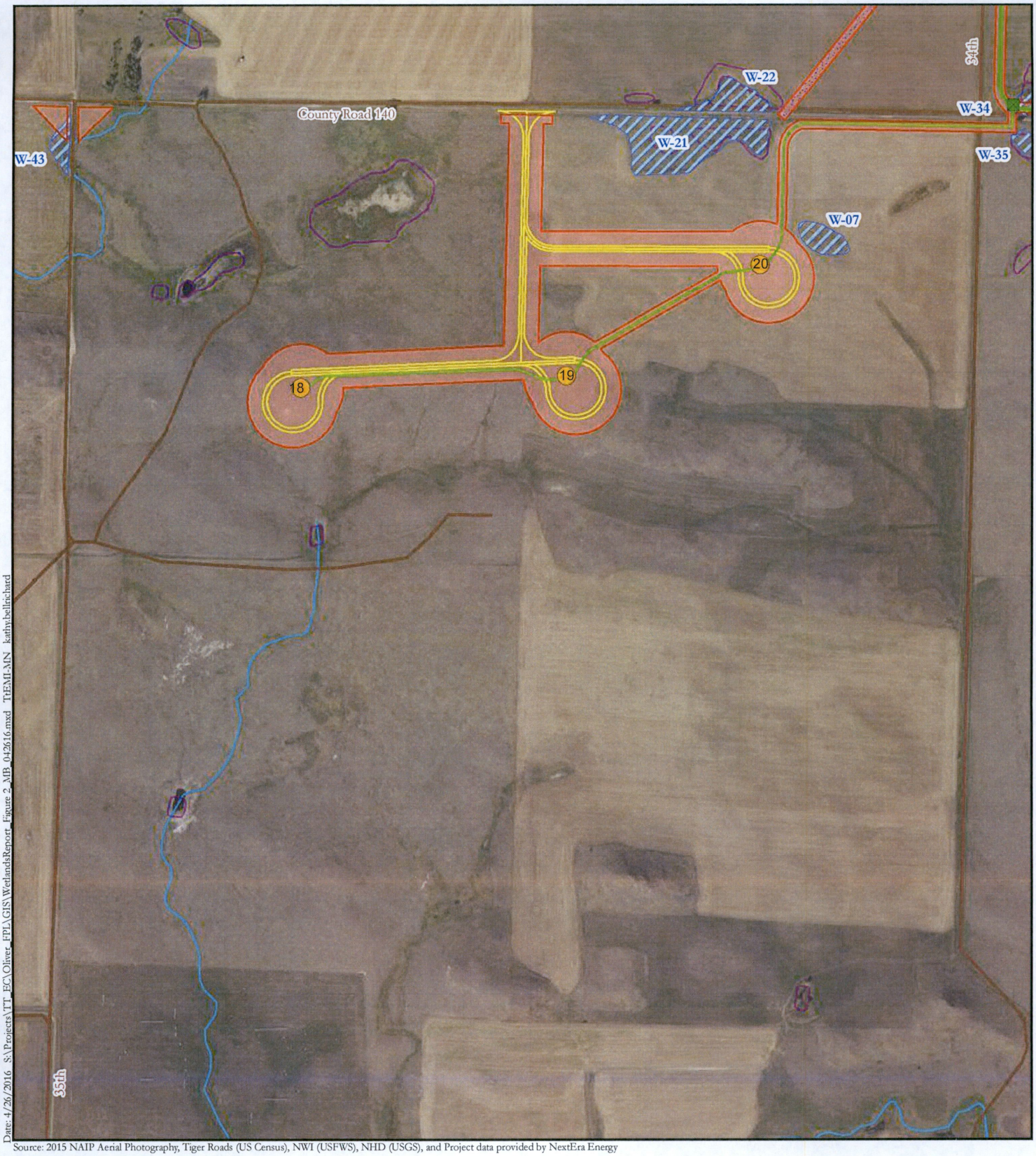
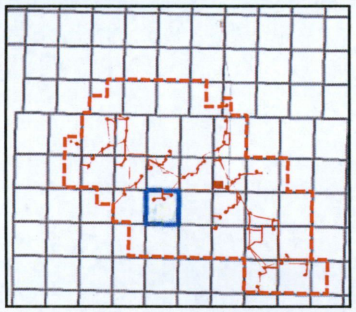


Date: 4/26/2016 S:\Projects\TT_EC\Oliver_FPL\GIS\WetlandsReport_Figure 2_MB_042616.mxd TtEMI-MN kathy.bellichard

Source: 2015 NAIP Aerial Photography, Tiger Roads (US Census), NWI (USFWS), NHD (USGS), and Project data provided by NextEra Energy



- Turbine (4/5/16)
- Meteorological Tower (1/25/16)
- Junction Box (4/22/16)
- Service Road (4/5/16)
- Collection Line (4/22/16)
- Fiber Optic Line (2/3/16)
- Substation (2/23/16)
- Laydown Area and O&M (11/17/15)
- Crane Path (1/21/16)
- Transmission Line Poles (4/25/16)
- Switchyard (2/23/16)
- Survey Corridor
- Project Area
- NHD
- NWI
- Roads

Surveyed Wetlands and WoUS

- USACE Non-Jurisdictional
- USACE Jurisdictional

0 500 1,000 1,500 2,000 Feet

N

T140N, R83W Sec 17

Figure 2 - Wetlands and WoUS Survey Results
Oliver III Wind Energy Center
Morton and Oliver Counties
North Dakota

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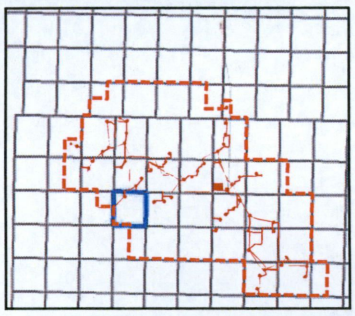
Date: 4/26/2016 S:\Projects\TT_EC\Oliver_FPL\GIS\WetlandsReport_Figure 2_MB_042616.mxd TtEMI-MN kathy.bellrichard

Source: 2015 NAIP Aerial Photography, Tiger Roads (US Census), NWI (USFWS), NHD (USGS), and Project data provided by NextEra Energy



- Turbine (4/5/16)
- Meteorological Tower (1/25/16)
- Junction Box (4/22/16)
- Service Road (4/5/16)
- Collection Line (4/22/16)
- Fiber Optic Line (2/3/16)
- Substation (2/23/16)
- Laydown Area and O&M (11/17/15)
- Crane Path (1/21/16)
- Transmission Line Poles (4/25/16)
- Switchyard (2/23/16)
- Survey Corridor
- Project Area
- NHD
- NWI
- Roads

Surveyed Wetlands and WoUS

- USACE Non-Jurisdictional
- USACE Jurisdictional

0 500 1,000 1,500 2,000 Feet

N

T140N, R83W Sec 18

Figure 2 - Wetlands and WoUS Survey Results
Oliver III Wind Energy Center
Morton and Oliver Counties
North Dakota

TETRA TECH

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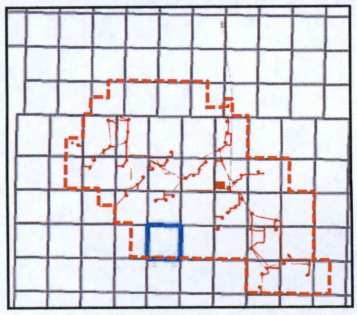
Date: 4/26/2016 S:\Projects\TT_EC\Oliver_FPL\GIS\WetlandsReport_Figure 2_MB_042616.mxd TtEMI-MN kathyballachard

Source: 2015 NAIP Aerial Photography, Tiger Roads (US Census), NWI (USFWS), NHD (USGS), and Project data provided by NextEra Energy



- Turbine (4/5/16)
- Meteorological Tower (1/25/16)
- Junction Box (4/22/16)
- Service Road (4/5/16)
- Collection Line (4/22/16)
- Fiber Optic Line (2/3/16)
- Substation (2/23/16)
- Laydown Area and O&M (11/17/15)
- Crane Path (1/21/16)
- Transmission Line Poles (4/25/16)
- Switchyard (2/23/16)
- Survey Corridor
- Project Area
- NHD
- NWI
- Roads

Surveyed Wetlands and WoUS

- USACE Non-Jurisdictional
- USACE Jurisdictional

0 500 1,000 1,500 2,000 Feet

N

T140N, R83W Sec 20

Figure 2 - Wetlands and WoUS Survey Results

Oliver III Wind Energy Center

Morton and Oliver Counties

North Dakota

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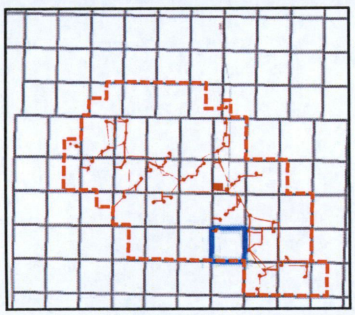
Source: 2015 NAIP Aerial Photography, Tiger Roads (US Census), NWI (USFWS), NHD (USGS), and Project data provided by NextEra Energy



- Turbine (4/5/16)
- Meteorological Tower (1/25/16)
- Junction Box (4/22/16)
- Service Road (4/5/16)
- Collection Line (4/22/16)
- Fiber Optic Line (2/3/16)
- Substation (2/23/16)
- Laydown Area and O&M (11/17/15)
- Crane Path (1/21/16)
- Transmission Line Poles (4/25/16)
- Switchyard (2/23/16)
- Survey Corridor
- Project Area
- NHD
- NWI
- Roads

Surveyed Wetlands and WoUS

- USACE Non-Jurisdictional
- USACE Jurisdictional

0 500 1,000 1,500 2,000 Feet

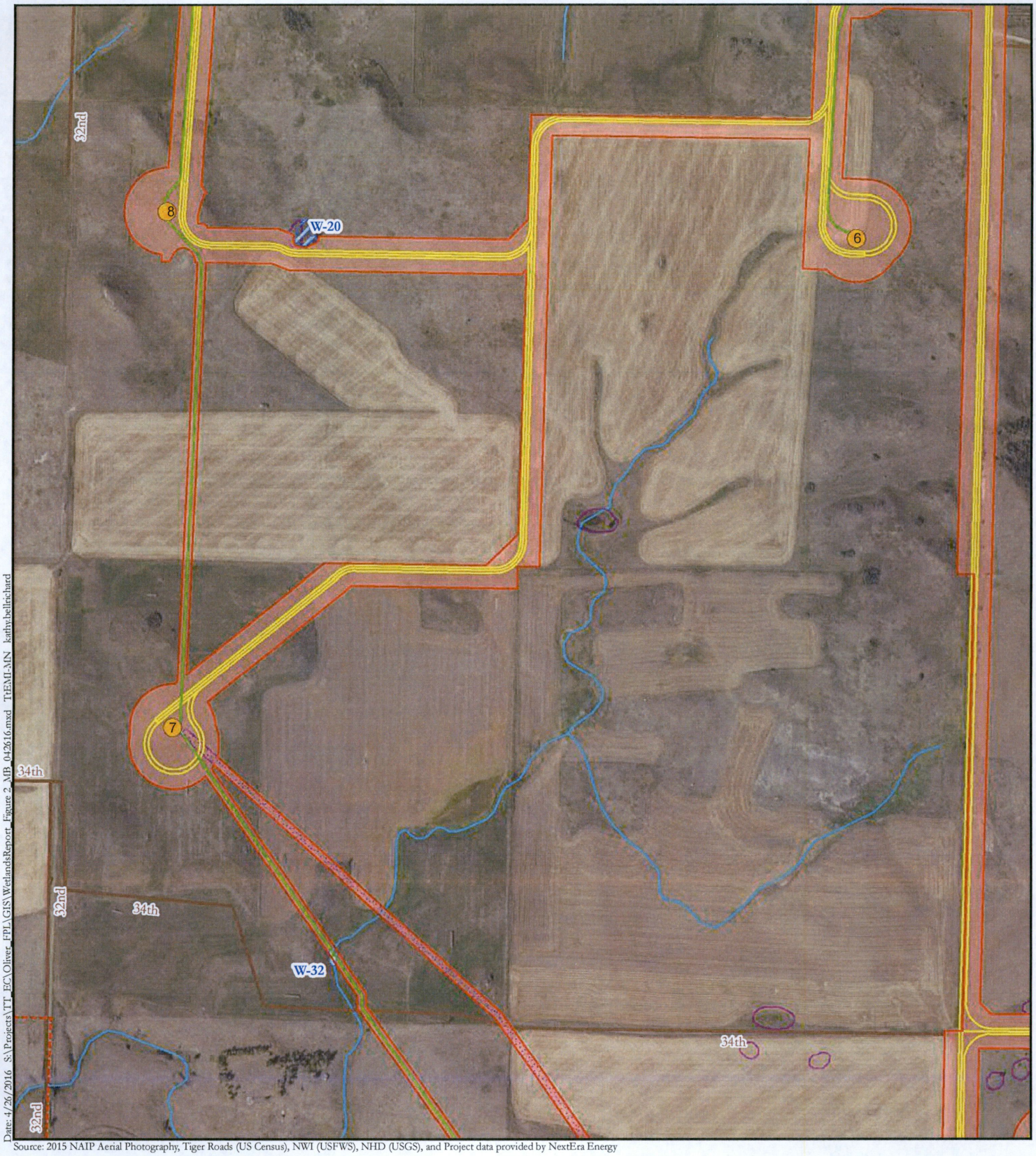
N

T140N, R83W Sec 22

Figure 2 - Wetlands and WoUS Survey Results
Oliver III Wind Energy Center
Morton and Oliver Counties
North Dakota

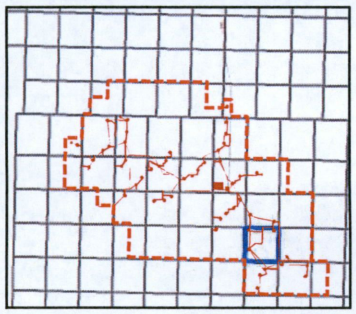
TETRA TECH

NEXTera ENERGY RESOURCES



Date: 4/26/2016 S:\Projects\TT_EC\Oliver_FPL\GIS\WetlandsReport_Figure 2_MB_042616.mxd TtEMI-MN kathrybellrichard

Source: 2015 NAIP Aerial Photography, Tiger Roads (US Census), NWI (USFWS), NHD (USGS), and Project data provided by NextEra Energy



- Turbine (4/5/16)
- Meteorological Tower (1/25/16)
- Junction Box (4/22/16)
- Service Road (4/5/16)
- Collection Line (4/22/16)
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- Substation (2/23/16)
- Laydown Area and O&M (11/17/15)
- Crane Path (1/21/16)
- Transmission Line Poles (4/25/16)
- Switchyard (2/23/16)
- Survey Corridor
- Project Area
- NHD
- NWI
- Roads

Surveyed Wetlands and WoUS

- USACE Non-Jurisdictional
- USACE Jurisdictional

0 500 1,000 1,500 2,000 Feet

N

T140N, R83W Sec 23

Figure 2 - Wetlands and WoUS Survey Results
Oliver III Wind Energy Center
Morton and Oliver Counties
North Dakota

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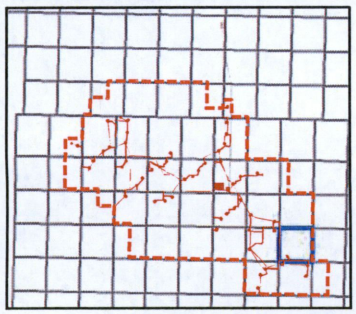
Date: 4/26/2016 S:\Projects\TT_EC\Oliver_FPL\GIS\WetlandsReport_Figure 2_MB_042616.mxd TtEMI-MN kathy.bellrichard

Source: 2015 NAIP Aerial Photography, Tiger Roads (US Census), NWI (USFWS), NHD (USGS), and Project data provided by NextEra Energy



- Turbine (4/5/16)
- Meteorological Tower (1/25/16)
- Junction Box (4/22/16)
- Service Road (4/5/16)
- Collection Line (4/22/16)
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- Crane Path (1/21/16)
- Transmission Line Poles (4/25/16)
- Switchyard (2/23/16)
- Survey Corridor
- Project Area
- NHD
- NWI
- Roads

Surveyed Wetlands and WoUS

- USACE Non-Jurisdictional
- USACE Jurisdictional

0 500 1,000 1,500 2,000 Feet

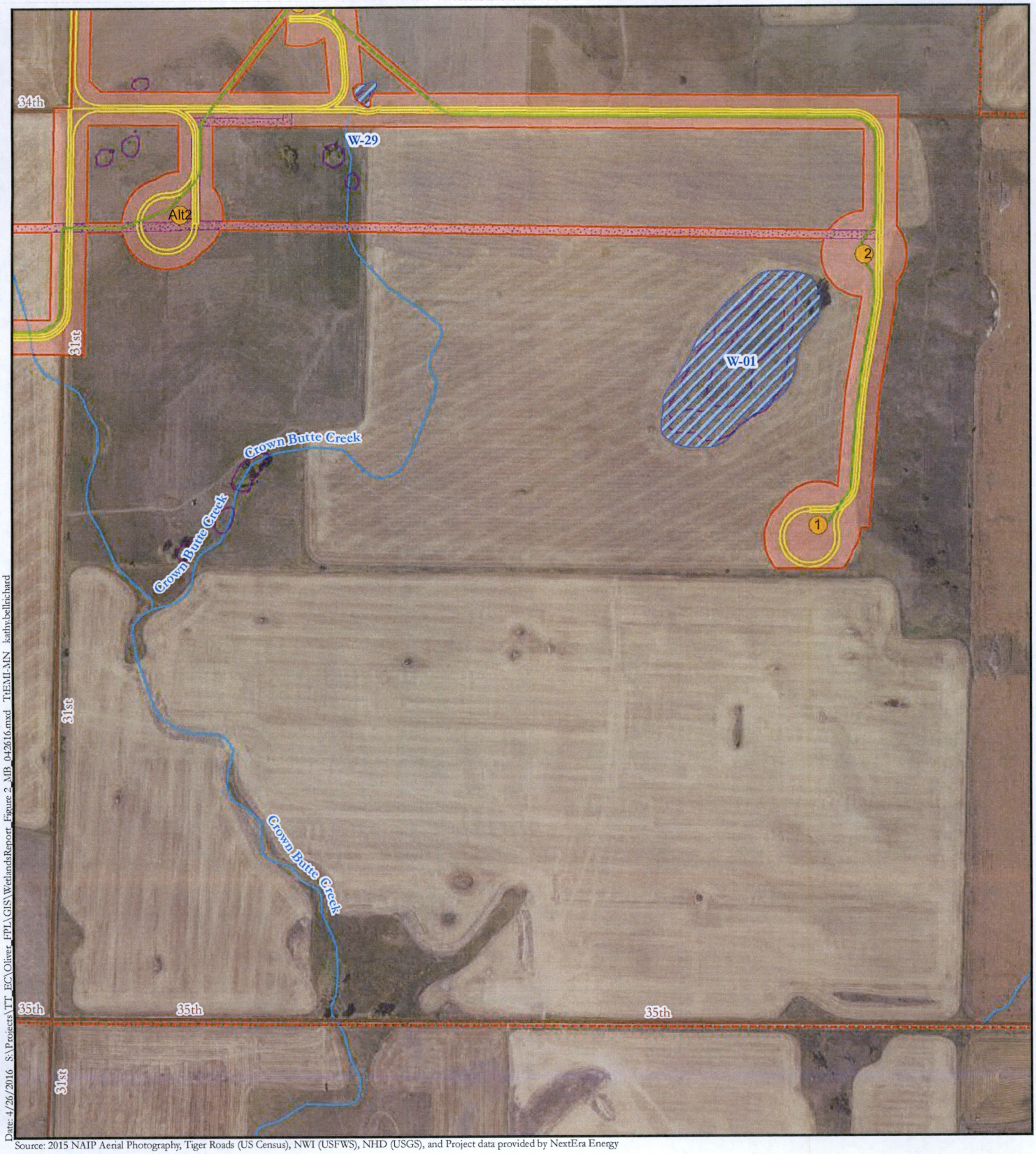
N

T140N, R83W Sec 24

Figure 2 - Wetlands and WoUS Survey Results
Oliver III Wind Energy Center
Morton and Oliver Counties
North Dakota

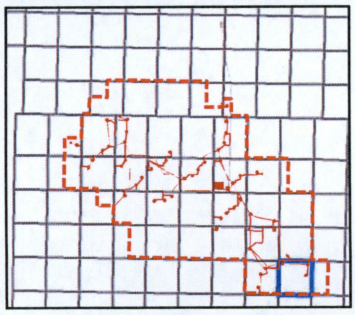
TETRA TECH

NEXTera ENERGY RESOURCES



Date: 4/26/2016 S:\Projects\TT_EC\Oliver_FPL\GIS\WetlandsReport_Figure 2_MB_042616.mxd TtEMI-MN kathy.bellrichard

Source: 2015 NAIP Aerial Photography, Tiger Roads (US Census), NWI (USFWS), NHD (USGS), and Project data provided by NextEra Energy



- Turbine (4/5/16)
- Meteorological Tower (1/25/16)
- Junction Box (4/22/16)
- Service Road (4/5/16)
- Collection Line (4/22/16)
- Fiber Optic Line (2/3/16)
- Substation (2/23/16)
- Laydown Area and O&M (11/17/15)
- Crane Path (1/21/16)
- Transmission Line Poles (4/25/16)
- Switchyard (2/23/16)
- Survey Corridor
- Project Area
- NHD
- NWI
- Roads

Surveyed Wetlands and WoUS

- USACE Non-Jurisdictional
- USACE Jurisdictional

0 500 1,000 1,500 2,000 Feet

N

T140N, R83W Sec 25

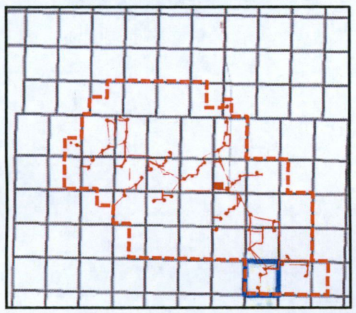
Figure 2 - Wetlands and WoUS Survey Results
Oliver III Wind Energy Center
Morton and Oliver Counties
North Dakota

TETRA TECH

NEXTera ENERGY RESOURCES

Date: 4/26/2016 S:\Projects\TT_EC\Oliver_FPL\GIS\WetlandsReport_Figure 2_MB_042616.mxd TtEMI-MN kathy.bellrichard

Source: 2015 NAIP Aerial Photography, Tiger Roads (US Census), NWI (USFWS), NHD (USGS), and Project data provided by NextEra Energy



- Turbine (4/5/16)
- Meteorological Tower (1/25/16)
- Junction Box (4/22/16)
- Service Road (4/5/16)
- Collection Line (4/22/16)
- Fiber Optic Line (2/3/16)
- Substation (2/23/16)
- Laydown Area and O&M (11/17/15)
- Crane Path (1/21/16)
- Transmission Line Poles (4/25/16)
- Switchyard (2/23/16)
- Survey Corridor
- Project Area
- NHD
- NWI
- Roads

Surveyed Wetlands and WoUS

- USACE Non-Jurisdictional
- USACE Jurisdictional

0 500 1,000 1,500 2,000 Feet

N

T140N, R83W Sec 26

Figure 2 - Wetlands and WoUS Survey Results

Oliver III Wind Energy Center

Morton and Oliver Counties

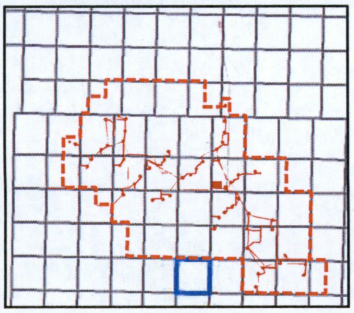
North Dakota

TETRA TECH

NEXTera ENERGY RESOURCES

Date: 4/26/2016 S:\Projects\TT_EC\Oliver_FPL\GIS\WetlandsReport_Figure 2_MB_042616.mxd TtEMI-MN kathy.bellerchard

Source: 2015 NAIP Aerial Photography, Tiger Roads (US Census), NWI (USFWS), NHD (USGS), and Project data provided by NextEra Energy



- Turbine (4/5/16)
- Meteorological Tower (1/25/16)
- Junction Box (4/22/16)
- Service Road (4/5/16)
- Collection Line (4/22/16)
- Fiber Optic Line (2/3/16)
- Substation (2/23/16)
- Laydown Area and O&M (11/17/15)
- Crane Path (1/21/16)
- Transmission Line Poles (4/25/16)
- Switchyard (2/23/16)
- Survey Corridor
- Project Area
- NHD
- NWI
- Roads

Surveyed Wetlands and WoUS

- USACE Non-Jurisdictional
- USACE Jurisdictional

0 500 1,000 1,500 2,000 Feet

N

T140N, R83W Sec 28

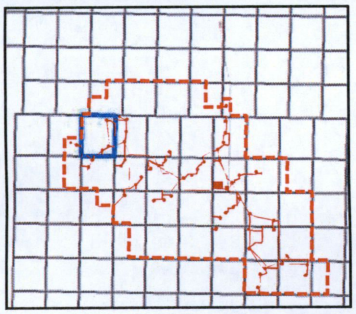
Figure 2 - Wetlands and WoUS Survey Results
Oliver III Wind Energy Center
Morton and Oliver Counties
North Dakota

TETRA TECH

NEXTera ENERGY RESOURCES

Date: 4/26/2016 S:\Projects\TT_EC\Oliver_FPL\GIS\WetlandsReport_Figure 2_MB_042616.mxd TtEMI-MN kathyebellrichard

Source: 2015 NAIP Aerial Photography, Tiger Roads (US Census), NWI (USFWS), NHD (USGS), and Project data provided by NextEra Energy



- Turbine (4/5/16)
- Meteorological Tower (1/25/16)
- Junction Box (4/22/16)
- Service Road (4/5/16)
- Collection Line (4/22/16)
- Fiber Optic Line (2/3/16)
- Substation (2/23/16)
- Laydown Area and O&M (11/17/15)
- Crane Path (1/21/16)
- Transmission Line Poles (4/25/16)
- Switchyard (2/23/16)
- Survey Corridor
- Project Area
- NHD
- NWI
- Roads

Surveyed Wetlands and WoUS

- USACE Non-Jurisdictional
- USACE Jurisdictional

0 500 1,000 1,500 2,000 Feet

N

T140N, R84W Sec 01

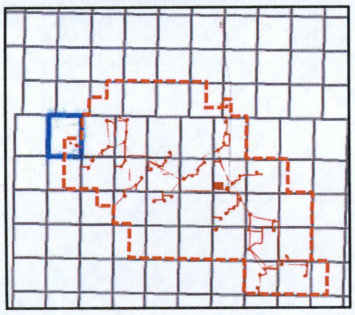
Figure 2 - Wetlands and WoUS Survey Results
Oliver III Wind Energy Center
Morton and Oliver Counties
North Dakota

TETRA TECH

NEXTera ENERGY RESOURCES

Date: 4/26/2016 S:\Projects\TTE_EC\Oliver_FPL\GIS\WetlandsReport_Figure 2_MB_042616.mxd TtEMI-MN kathy.bellrichard

Source: 2015 NAIP Aerial Photography, Tiger Roads (US Census), NWI (USFWS), NHD (USGS), and Project data provided by NextEra Energy



- Turbine (4/5/16)
- Meteorological Tower (1/25/16)
- Junction Box (4/22/16)
- Service Road (4/5/16)
- Collection Line (4/22/16)
- Fiber Optic Line (2/3/16)
- Substation (2/23/16)
- Laydown Area and O&M (11/17/15)
- Crane Path (1/21/16)
- Transmission Line Poles (4/25/16)
- Switchyard (2/23/16)
- Survey Corridor
- Project Area
- NHD
- NWI
- Roads

Surveyed Wetlands and WoUS

- USACE Non-Jurisdictional
- USACE Jurisdictional

0 500 1,000 1,500 2,000 Feet

N

T140N, R84W Sec 02

Figure 2 - Wetlands and WoUS Survey Results
Oliver III Wind Energy Center
Morton and Oliver Counties
North Dakota

TETRA TECH

NEXTera ENERGY RESOURCES

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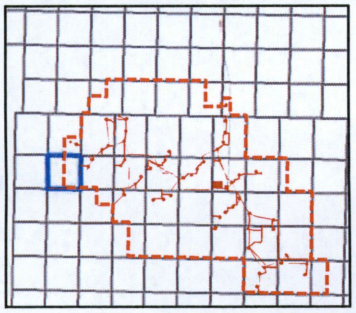
Source: 2015 NAIP Aerial Photography, Tiger Roads (US Census), NWI (USFWS), NHD (USGS), and Project data provided by NextEra Energy



- Turbine (4/5/16)
- Meteorological Tower (1/25/16)
- Junction Box (4/22/16)
- Service Road (4/5/16)
- Collection Line (4/22/16)
- Fiber Optic Line (2/3/16)
- Substation (2/23/16)
- Laydown Area and O&M (11/17/15)
- Crane Path (1/21/16)
- Transmission Line Poles (4/25/16)
- Switchyard (2/23/16)
- Survey Corridor
- Project Area
- NHD
- NWI
- Roads

Surveyed Wetlands and WoUS

- USACE Non-Jurisdictional
- USACE Jurisdictional

0 500 1,000 1,500 2,000 Feet

N

T140N, R84W Sec 11

Figure 2 - Wetlands and WoUS Survey Results

Oliver III Wind Energy Center

Morton and Oliver Counties

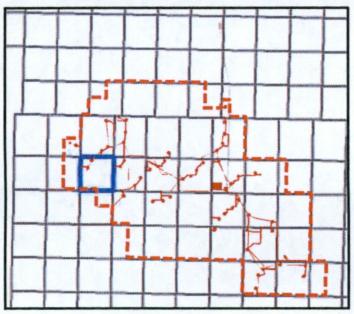
North Dakota

TETRA TECH

NEXTera ENERGY RESOURCES

Date: 4/27/2016 S:\Projects\TT_EC\Oliver_FPL\GIS\WetlandsReport_Figure 2_MB_042616.mxd TtEMI-MN kathy.bellicichard

Source: 2015 NAIP Aerial Photography, Tiger Roads (US Census), NWI (USFWS), NHD (USGS), and Project data provided by NextEra Energy



- Turbine (4/5/16)
- Meteorological Tower (1/25/16)
- Junction Box (4/22/16)
- Service Road (4/5/16)
- Collection Line (4/22/16)
- Fiber Optic Line (2/3/16)
- Substation (2/23/16)
- Laydown Area and O&M (11/17/15)
- Crane Path (1/21/16)
- Transmission Line Poles (4/25/16)
- Switchyard (2/23/16)
- Survey Corridor
- Project Area
- NHD
- NWI
- Roads

Surveyed Wetlands and WoUS

- USACE Non-Jurisdictional
- USACE Jurisdictional

0 500 1,000 1,500 2,000 Feet

N

T140N, R84W Sec 12

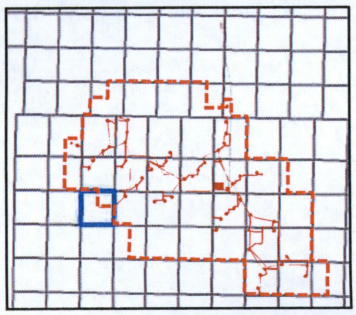
Figure 2 - Wetlands and WoUS Survey Results
Oliver III Wind Energy Center
Morton and Oliver Counties
North Dakota

TETRA TECH

NEXTera ENERGY RESOURCES

Date: 4/26/2016 S:\Projects\TT_EC\Oliver_FPL\GIS\WetlandsReport_Figure 2_MB_042616.mxd TtEMI-MN kathy.bellechard

Source: 2015 NAIP Aerial Photography, Tiger Roads (US Census), NWI (USFWS), NHD (USGS), and Project data provided by NextEra Energy



- Turbine (4/5/16)
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- Crane Path (1/21/16)
- Transmission Line Poles (4/25/16)
- Switchyard (2/23/16)
- Survey Corridor
- Project Area
- NHD
- NWI
- Roads

Surveyed Wetlands and WoUS

- USACE Non-Jurisdictional
- USACE Jurisdictional

0 500 1,000 1,500 2,000 Feet

N

T140N, R84W Sec 13

Figure 2 - Wetlands and WoUS Survey Results

Oliver III Wind Energy Center

Morton and Oliver Counties

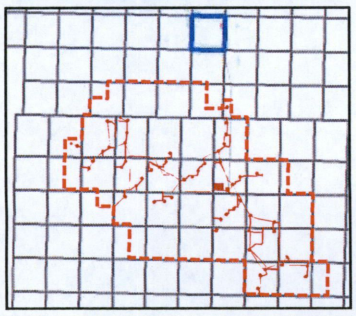
North Dakota

TETRA TECH

NEXTera ENERGY RESOURCES

Date: 4/26/2016 S:\Projects\TT_EC\Oliver_FPL\GIS\WetlandsReport_Figure 2_MB_042616.mxd TtEMI-MN kathy.bellrichard

Source: 2015 NAIP Aerial Photography, Tiger Roads (US Census), NWI (USFWS), NHD (USGS), and Project data provided by NextEra Energy



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- Transmission Line Poles (4/25/16)
- Switchyard (2/23/16)
- Survey Corridor
- Project Area
- NHD
- NWI
- Roads

Surveyed Wetlands and WoUS

- USACE Non-Jurisdictional
- USACE Jurisdictional

0 500 1,000 1,500 2,000 Feet

N

T141N, R83W Sec 23

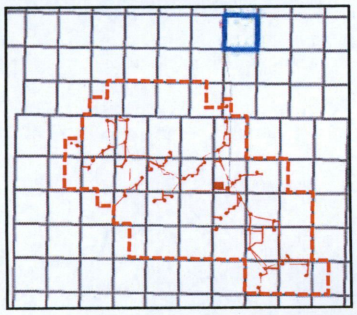
Figure 2 - Wetlands and WoUS Survey Results
Oliver III Wind Energy Center
Morton and Oliver Counties
North Dakota

TETRA TECH

NEXTera ENERGY RESOURCES

Date: 4/26/2016 S:\Projects\TT_EC\Oliver_FPL\GIS\WetlandsReport_Figure 2_MB_042616.mxd TtEMI-MN kathy.belliehard

Source: 2015 NAIP Aerial Photography, Tiger Roads (US Census), NWI (USFWS), NHD (USGS), and Project data provided by NextEra Energy



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- Switchyard (2/23/16)
- Survey Corridor
- Project Area
- NHD
- NWI
- Roads

Surveyed Wetlands and WoUS

- USACE Non-Jurisdictional
- USACE Jurisdictional

0 500 1,000 1,500 2,000 Feet

N

T141N, R83W Sec 24

Figure 2 - Wetlands and WoUS Survey Results

Oliver III Wind Energy Center

Morton and Oliver Counties

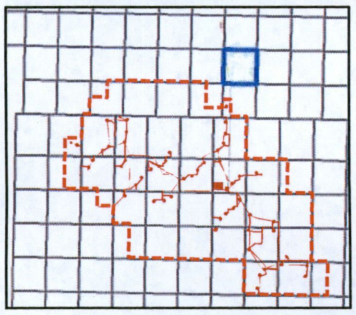
North Dakota

TETRA TECH

NEXTera ENERGY RESOURCES

Date: 4/26/2016 S:\Projects\TT_EC\Oliver_FPL\GIS\WetlandsReport_Figure 2_MB_042616.mxd TtEMI-MN kathyebellichard

Source: 2015 NAIP Aerial Photography, Tiger Roads (US Census), NWI (USFWS), NHD (USGS), and Project data provided by NextEra Energy



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- Transmission Line Poles (4/25/16)
- Switchyard (2/23/16)
- Survey Corridor
- Project Area
- NHD
- NWI
- Roads

Surveyed Wetlands and WoUS

- USACE Non-Jurisdictional
- USACE Jurisdictional

0 500 1,000 1,500 2,000 Feet

N

T141N, R83W Sec 25

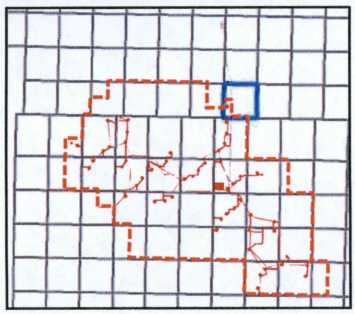
Figure 2 - Wetlands and WoUS Survey Results
Oliver III Wind Energy Center
Morton and Oliver Counties
North Dakota

TETRA TECH

NEXTera ENERGY RESOURCES

Date: 4/26/2016 S:\Projects\TT_EC\Oliver_FPL\GIS\WetlandsReport_Figure 2_MB_042616.mxd TtEMI-MN kathy.bellrichard

Source: 2015 NAIP Aerial Photography, Tiger Roads (US Census), NWI (USFWS), NHD (USGS), and Project data provided by NextEra Energy



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- Switchyard (2/23/16)
- Survey Corridor
- Project Area
- NHD
- NWI
- Roads

Surveyed Wetlands and WoUS

- USACE Non-Jurisdictional
- USACE Jurisdictional

0 500 1,000 1,500 2,000 Feet

N

T141N, R83W Sec 36

Figure 2 - Wetlands and WoUS Survey Results
Oliver III Wind Energy Center
Morton and Oliver Counties
North Dakota

TETRA TECH

NEXTera ENERGY RESOURCES

Appendix 2: Representative Photos

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Wetland W-3 overview looking to the west.

Photograph taken November 20, 2015

Wetland W-4 overview looking to the east-southeast.

Photograph taken November 17, 2015

Wetland W-5 overview looking to the east.

Photograph taken November 17, 2015

Wetland W-8 overview looking to the north.

Photograph taken November 20, 2015

Wetland W-9 overview looking to the west.

Photograph taken November 20, 2015

Wetland W-10 overview looking to the southeast.

Photograph taken November 20, 2015

Wetland W-11 overview looking to the north.

Photograph taken November 20, 2015

Wetland W-12 overview looking to the east.

Photograph taken November 20, 2015

Wetland W-13 overview looking to the east.

Photograph taken November 20, 2015

Wetland W-16 overview looking to the southwest.

Photograph taken March 5, 2016

Wetland W-17 overview looking to the northwest.

Photograph taken March 5, 2016

Wetland W-18 overview looking to the southwest.

Photograph taken March 5, 2016

Wetland W-19 overview looking to the southeast.

Photograph taken March 5, 2016

Wetland W-20 overview looking to the northeast.

Photograph taken March 4, 2016

Wetland W-23 overview looking to the southwest.

Photograph taken March 4, 2016

Wetland W-24 overview looking to the west.

Photograph taken March 4, 2016

Wetland W-26 overview looking to the west-northwest.

Photograph taken March 5, 2016

Wetland W-27 overview looking to the northwest.

Photograph taken March 4, 2016

Wetland W-28 overview looking to the south.

Photograph taken March 4, 2016

Pond W-29 overview looking to the northeast.

Photograph taken March 4, 2016

Wetland W-30 overview looking to the east.

Photograph taken November 17, 2015

Wetland W-32 overview looking to the southwest.

Photograph taken March 30, 2016

Wetland W-33 overview looking to the east-northeast.

Photograph taken March 30, 2016

Wetland W-34 overview looking to the northwest.

Photograph taken March 30, 2016

Wetland W-35 overview looking to the southeast.

Photograph taken March 30, 2016

Wetland W-37 overview looking to the north.

Photograph taken March 30, 2016

Wetland W-38 overview looking to the east.

Photograph taken March 30, 2016

Wetland W-39 overview looking to the south-southwest.

Photograph taken March 30, 2016

Wetland W-41 overview looking to the west.

Photograph taken March 30, 2016

Appendix 3:
USACE Nationwide Permits General and Regional Conditions

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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.

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 and storm water management activities, 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.

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.* No 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. 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).

17. *Tribal Rights.* No activity or its operation may impair reserved tribal rights, including, but not limited to, reserved water rights and treaty fishing and hunting rights.

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 Section 7 consultation addressing the effects of the proposed activity has been completed.

(b) Federal agencies should follow their own procedures for complying with the requirements of the ESA. Federal permittees must provide the district engineer with the appropriate documentation to demonstrate compliance with those requirements. The district engineer will review the documentation and determine whether it is sufficient to address ESA compliance for the NWP activity, or whether additional ESA consultation is necessary.

(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 project, or if the project 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 work or that utilize the designated critical habitat that might be affected by the proposed work. 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 project, and has so notified the Corps, the applicant shall not begin work until the Corps has provided notification the proposed activities will have "no effect" on listed species or critical habitat, or until 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.

(d) As a result of formal or informal consultation with the FWS or NMFS the district engineer may add species-specific regional endangered species conditions to the NWPs.

(e) Authorization of an activity by a 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 U.S. 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.

(f) Information on the location of threatened and endangered species and their critical habitat can be obtained directly from the offices of the U.S. FWS and NMFS or their world wide web pages at *http://www.fws.gov/* or *http://www.fws.gov/ipac* and *http://www.noaa.gov/fisheries.html* respectively.

19. *Migratory Birds and Bald and Golden Eagles.* The permittee is responsible for obtaining any "take" permits required under the U.S. Fish and Wildlife Service's regulations governing compliance with the Migratory Bird Treaty Act or the Bald and Golden Eagle Protection Act. The permittee should contact the appropriate local office of the U.S. Fish and Wildlife Service to determine if such "take" permits are required for a particular activity.

20. *Historic Properties.* (a) In cases where the district engineer determines that the activity may affect 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. Federal permittees must provide the district engineer with the appropriate documentation to demonstrate compliance with those requirements. The district engineer will review the documentation and determine whether it is sufficient to address section 106 compliance for the NWP activity, or whether additional section 106 consultation is necessary.

(c) Non-federal permittees must submit a pre-construction notification to the district engineer if the authorized activity may 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 may be affected by the proposed work 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 resources can be sought from the State Historic Preservation Officer or Tribal Historic Preservation Officer, 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 and these efforts, the district engineer shall determine whether the proposed activity has the potential to cause an effect on the historic properties. Where the non-Federal applicant has identified historic properties on which the activity may 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 or that consultation under Section 106 of the NHPA has been completed.

(d) 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. Section 106 consultation is not required when the Corps determines that the activity does not have the potential to cause effects on historic properties (see 36 CFR 800.3(a)). If NHPA section 106 consultation is required and will occur, the district engineer will notify the non-Federal applicant that he or she cannot begin work 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 (16 U.S.C. 470h-2(k)) 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 NWPs 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 NWPs 3, 8, 10, 13, 15, 18, 19, 22, 23, 25, 27, 28, 30, 33, 34, 36, 37, and 38, notification is required in accordance with general condition 31, 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 adverse effects on the aquatic environment are 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 adverse effects to the aquatic environment are minimal.

(c) Compensatory mitigation at a minimum one-for-one ratio will be required for all wetland losses that exceed1/10-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 effects of the proposed activity are minimal, and provides a project-specific waiver of this requirement. For wetland losses of1/10-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 minimal adverse effects on the aquatic environment. 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 minimal adverse effects on the aquatic environment.

(2) Since the likelihood of success is greater and the impacts to potentially valuable uplands are reduced, wetland restoration should be the first compensatory mitigation option considered.

(3) 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)-(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)).

(4) 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.

(5) 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.

(d) For losses of streams or other open waters that require pre-construction notification, the district engineer may require compensatory mitigation, such as stream rehabilitation, enhancement, or preservation, to ensure that the activity results in minimal adverse effects on the aquatic environment.

(e) 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 of1/2-acre, it cannot be used to authorize any project resulting in the loss of greater than1/2-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 a project already meeting the established acreage limits also satisfies the minimal impact requirement associated with the NWPs.

(f) Compensatory mitigation plans for projects in or near streams or other open waters will normally include a requirement for the restoration or establishment, maintenance, and legal protection (e.g., conservation easements) of riparian areas next to open waters. In some cases, riparian areas may be the only compensatory mitigation required. 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 establish a riparian area

on both sides of a stream, or if the waterbody is a lake or coastal waters, then restoring or establishing 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 compensatory mitigation, the district engineer may waive or reduce the requirement to provide wetland compensatory mitigation for wetland losses.

(g) Permittees may propose the use of mitigation banks, in-lieu fee programs, or separate permittee-responsible mitigation. For activities resulting in the loss of marine or estuarine resources, permittee-responsible compensatory 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.

(h) Where certain functions and services of waters of the United States are permanently adversely affected, such as the conversion of 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 effects of the project to the 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 exceed1/3-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 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 work 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(l)(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 work and mitigation.

31. *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 in the vicinity of the project, or to notify the Corps pursuant to general condition 20 that the activity may 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 (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 project;

(3) A description of the proposed project; the project's purpose; direct and indirect adverse environmental effects the project would cause, including the anticipated amount of loss of water of the United States expected to result from the NWP activity, in acres, linear feet, or other appropriate unit of measure; 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. The description should be sufficiently detailed to allow the district engineer to determine that the adverse effects of the project will be minimal and to determine the need for

compensatory mitigation. Sketches should be provided when necessary to show that the activity complies with the terms of the NWP. (Sketches usually clarify the project 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);

(4) 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 waters of the United States. Furthermore, the 45 day period will not start until the delineation has been submitted to or completed by the Corps, as appropriate;

(5) If the proposed activity will result in the loss of greater than1/10-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 effects are minimal and why compensatory mitigation should not be required. As an alternative, the prospective permittee may submit a conceptual or detailed mitigation plan.

(6) If any listed species or designated critical habitat might be affected or is in the vicinity of the project, or if the project is located in designated critical habitat, for non-Federal applicants the PCN must include the name(s) of those endangered or threatened species that might be affected by the proposed work or utilize the designated critical habitat that may be affected by the proposed work. Federal applicants must provide documentation demonstrating compliance with the Endangered Species Act; and

(7) For an activity that may affect a historic property listed on, determined to be eligible for listing on, or potentially eligible for listing on, the National Register of Historic Places, for non-Federal applicants the PCN must state which historic property may be affected by the proposed work or include a vicinity map indicating the location of the historic property. Federal applicants must provide documentation demonstrating compliance with Section 106 of the National Historic Preservation Act.

(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 a PCN and must include all of the information required in paragraphs (b)(1) through (7) of this general condition. A letter containing the required information may also be used.

(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 project's adverse environmental effects to a minimal level.

(2) For all NWP activities that require pre-construction notification and result in the loss of greater than1/2-acre of waters of the United States, for 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 intermittent and ephemeral stream bed, and for all NWP 48 activities that require pre-construction notification, the district engineer will immediately provide (e.g., via email, facsimile transmission, overnight mail, or other expeditious manner) a copy of the complete PCN to the appropriate Federal or state offices (U.S. FWS, state natural resource or water quality agency, EPA, State Historic Preservation Officer (SHPO) or Tribal Historic Preservation Office (THPO), 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 telephone or fax the district engineer notice that they intend to provide substantive, site-specific comments. The comments must explain why the agency believes the adverse 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 to the aquatic environment of the proposed activity are 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.

(3) 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.

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

Appendix 4:
Best Management Practices

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Best Management Practices – Oliver III Wind Energy Center

Reference Number	Measure
BMP-1	Minimize clearing vegetation within the ROW, consistent with applicable federal, state, and local regulations.
BMP-2	Vegetation removed during clearing should be disposed of according to federal, state, and local regulations.
BMP-3	Any herbicides used during construction and operations and maintenance should be applied according to label instructions and any federal, state, and local regulations.
BMP-4	Restrict vehicular travel to the ROW and other established areas within the construction, access, or maintenance easement(s).
BMP-5	Roads not otherwise needed for maintenance and operations should be restored to preconstruction conditions. Restoration practices may include decompacting, recontouring, and re-seeding. Roads needed for maintenance and operations should be retained.
BMP-6	Avoid and/or minimize damage to drainage features and other improvements such as ditches, culverts, levees, tiles, and terraces; however, if these features or improvements are inadvertently damaged, they should be repaired and or restored.
BMP-7	Emergency and spill response equipment should be kept on hand during construction.
BMP-8	Restrict the refueling and maintenance of vehicles and the storage of fuels and hazardous chemicals within at least 100 feet from wetlands, surface waterbodies, and groundwater wells, or as otherwise required by federal, state, or local regulations.
BMP-9	Minimize compaction of soils and rutting through appropriate use of construction equipment (e.g., low ground pressure equipment and temporary equipment mats).
BMP-10	Provide sanitary toilets convenient to construction; these should be located greater than 100 feet from any stream or tributary or to any wetland. These facilities should be regularly serviced and maintained; waste disposal should be properly manifested. Employees should be notified of sanitation regulations and should be required to use sanitary facilities.
BMP-11	Identify environmentally sensitive vegetation (e.g., wetlands, protected plant species, riparian areas, and large contiguous tracts of native prairie) and avoid and/or minimize impacts to these areas.

BMP-12	Identify and implement measures to control and minimize the spread of non-native invasive species and noxious weeds.
BMP-13	Identify, avoid, and/or minimize adverse effects to wetlands and waterbodies. Do not place structure foundations within the Ordinary High Water Mark (OHWM) of Waters of the United States (wetlands or streams).
BMP-14	Establish streamside management zones within 50 feet of both sides of intermittent and perennial streams and along margins of bodies of open water where removal of low-lying vegetation is minimized.
BMP-15	Selectively apply herbicides within streamside management zones.
BMP-16	Construct access roads to minimize disruption of natural drainage patterns including perennial, intermittent, and ephemeral streams.
BMP-17	Locate spoil piles from foundation excavations and electrical collection line trenches outside of streamside management zones.
BMP-18	Dewatering should be conducted in a manner designed to prevent soil erosion (e.g., through discharge of water to vegetated areas and/or the use of flow control devices).
BMP-19	Design infrastructure to avoid adverse changes to the base flood elevation within the 100-year floodplain.
BMP-20	Minimize fill for access roads and structure foundations within 100-year floodplains to avoid adverse changes to the base flood elevation.
BMP-21	Excavated trenches that are to be backfilled should separate the upper 12 inches of topsoil from the rest of the excavated material. The topsoil should be used as the final backfill.
BMP-22	All permanent and temporary crossings of waterbodies should be suitably culverted, bridged, or otherwise designed and constructed to maintain low flows to sustain the movement of aquatic species. The crossings would also be constructed to withstand expected high flows. The crossings would not restrict or impede the passage of normal or high flows. Permanent structure placement within a Water of the United States will require permitting from the US Army Corps of Engineers.
BMP-23	Where tree removal is necessary in the ROW, this removal should be accomplished at ground level leaving root wads in place to aid in the stabilization of soils.

BMP-24	Appropriate sediment and erosion controls should be used to prevent erosion and to minimize the release of sediment from the project area to Waters of the U.S. These sediment and erosion controls should be installed prior to any land disturbance associated with construction and should be regularly inspected and maintained in effective operating condition for the duration of the construction phase. Additional erosion and sediment control measures should be further addressed in a Stormwater Management Plan.
BMP-25	To the extent practicable, work within Waters of the U.S. should occur during periods of low or no flow.
BMP-26	The movement of crews and equipment should be limited to the project area or construction easement, including access routes.
BMP-27	Construction staging and laydown areas should be located and arranged in a manner to avoid trees and vegetation and to minimize visual impacts to the extent practicable.