



**E3 ENVIRONMENTAL™**  
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**North Dakota Public Service Commission**

**Certificate of Site Compatibility**

**Whiting Oil and Gas Company**

**Robinson Lake Oil Conditioning Facility**

**Expansion Project**

Prepared by:  
**E3 Environmental, LLC**

November 2019



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Exhibit 1 - Application for Certificate of Site Compatibility  
Whiting Oil and Gas Corporation

# **North Dakota Public Service Commission**

**Application for Certificate of Site Compatibility**

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**November 2019**



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<b>Authority</b>	<b>Description</b>	<b>Section(s)</b>
Chapter 49.22.1	Century Code-Title 49 Energy Conversion and Transmission Facilities	
49.22.1-06	Application for a certificate-Notice of filing- Amendment-Designation of a site or corridor.	
1.a.	Description of the size and type of facility	Introduction, Section 1
1.b.	Summary of studies completed to assess potential environmental impacts of the facility	Section 2
1.c.	Statement of facility need	Section 3
1.d.	Identification of location of preferred site for any gas or liquid energy conversion facility.	Section 4
1.e.	Identification of location of preferred corridor for any gas or liquid transmission facility.	N/A
1.f.	Analysis of merits and detriments of preferred facility location	Section 4
1.g.	Description of mitigative measures that will be taken to minimize all foreseen adverse impacts resulting from location, construction and operation of the proposed facility.	Section 5
1.h.	Evaluation of the proposed site or corridor with regard to the applicable considerations set out in section 49-22.1-09 and the criteria established pursuant to section 49- 22.1-03.	Section 4
1.i.	Other information the applicant considers relevant or the commission may require.	Section 4
49-22.1-09	Factors to be considered in evaluating applications and designation of sites, corridors and routes.	Section 6
1	Available research and investigations relating to the effects of the location, construction and operation of the proposed facility on public health and welfare, natural resources and the environment.	6.1
2	The effects of new gas or liquid energy conversion and gas or liquid transmission technologies and systems designed to minimize adverse environmental effects.	6.2
3	The potential for beneficial uses of waste energy from a proposed gas or liquid energy conversion facility.	6.3

<b>Authority</b>	<b>Description</b>	<b>Section(s)</b>
4	Adverse direct and indirect environmental effects that cannot be avoided should the proposed site or route be designated.	6.4
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10	The effect of the proposed site or route is a habitat for rare and endangered species.	6.10
11	Problems raised by federal agencies, other state agencies and local entities.	6.11
	Administrative Code-Article 69-06-04 Certificate of Site Compatibility	
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2.a.(6)(f)	Commencing commercial production	1.6.6
2.a.(6)(g)	Beginning any expansions or additions	1.6.7
2.b	Copies of evaluative studies or assessments of the environmental impact of the proposed facility submitted to any federal, regional, state or local agency.	Section 2, Appendices C, D, & E

<b>Authority</b>	<b>Description</b>	<b>Section(s)</b>
2.c	Analysis of the need for the proposed facility based on present and projected demand for the product or products to be produced by the proposed facility, including the most recent system studies supporting the analysis of the need.	3.1
2.d	Description of any feasible alternative methods of serving the need.	3.2
2.e	Study area that includes the proposed facility site, of sufficient size to enable the commission to evaluate the factors addressed in North Dakota Century Code section 49-22-09.	4.1
2.f	Discussion of the utility's policies and commitments to limit the environmental impact of its facilities, including copies of board resolutions and management directives.	6.12
2.g	A map identifying the criteria that provides the basis for the specific location of the proposed facility within the study area.	4.2, Appendix B
2.h	A discussion of the criteria evaluated within the study area, including exclusion areas, avoidance areas, selection criteria, policy criteria, design and construction limitations and economic considerations.	Section 4
2.i	A discussion of the mitigative measures that the applicant will take to minimize adverse impacts which result from the location, construction, and operation of the proposed facility.	Section 5.0
2.j	The qualifications of each person involved in the facility site location study.	Section 7.0
2.k	A map of the study area showing the location of the proposed facility and the criteria evaluated.	Appendix B
2.l	An eight and one-half by eleven-inch black and white map suitable for newspaper publication depicting the site area.	Digital Delivery/CD
2.m	Discussion of present and future natural resource development in the area.	6.13
2.n	Map and GIS requirements. Data meeting North Dakota Public Service Commission Requirements	Digital Delivery/CD
69-06-08-01	Energy Conversion Facility Siting Criteria	
1	Exclusion Areas	4.3

<b>Authority</b>	<b>Description</b>	<b>Section(s)</b>
1.a	Designated or registered national: parks; memorial parks; historic sites and landmarks; natural landmarks; historic districts; monument; wilderness areas; wildlife areas; wild, scenic, or recreational rivers; wildlife refuges; and grasslands.	4.3.1
1.b	Designated or registered state: parks; forests; forest management lands; historic sites; monuments; historical markers; archaeological sites; grasslands; wild, scenic, or recreational rivers; game refuges; game management areas; management areas; and nature preserves.	4.3.2
1.c	County parks and recreational areas; municipal parks; parks owned or administered by other governmental subdivisions; hardwood draws; and enrolled woodlands.	4.3.3
1.d	Areas critical to the life stages of threatened or endangered animal or plant species.	4.3.6 and 4.3.7
1.e	Areas where animal or plant species that are unique or rare to this state would be irreversibly damaged.	4.3.6 and 4.3.7
1.f	Areas within one thousand two hundred feet of the geographic center of an intercontinental ballistic missile (ICBM) launch or launch control facility.	4.3.8
2	Additional exclusion areas for wind energy conversion facilities	N/A
3	Avoidance Areas	4.4
3.a	Historical resources that are not designated as exclusion areas.	4.4.1
3.b	Areas within the city limits of a city or the boundaries of a military installation.	4.4.2
3.c	Areas within known floodplains as defined by the geographical boundaries of the hundred-year flood.	4.4.3
3.d	Areas that are geologically unstable.	4.4.4
3.e	Woodlands and wetlands.	4.4.5
3.f	Areas of recreational significance which are not designated as exclusion areas.	4.4.6
4	Additional avoidance areas for wind energy conversion facilities.	N/A
5	Selection Criteria	4.5
5.a	Impact upon agriculture:	4.5.1
5.a.(1)	Agricultural production	4.5.1
5.a.(2)	Family farms and ranches	4.5.1

<b>Authority</b>	<b>Description</b>	<b>Section(s)</b>
5.a.(3)	Land which the owner demonstrates has soil, topography, drainage, and an available water supply that cause the land to be economically suitable for irrigation.	4.5.1
5.a.(4)	Surface drainage patterns and ground water flow patterns.	4.5.1
5.a.(5)	Agricultural quality of the cropland.	4.5.1
5.b.	Impact upon the availability and adequacy of:	4.5.2
5.b.(1)	Law Enforcement	4.5.2
5.b.(2)	School systems and education programs	4.5.2
5.b.(3)	Governmental services and facilities	4.5.2
5.b.(4)	General and mental health care facilities	4.5.2
5.b.(5)	Recreational programs and facilities	4.5.2
5.b.(6)	Transportation facilities and networks	4.5.2
5.b.(7)	Retail service facilities	4.5.2
5.b.(8)	Utility services	4.5.2
5.c.	Impact upon:	4.5.2
5.c.(1)	Local institutions	4.5.2
5.c.(2)	Noise-sensitive land uses	4.5.2
5.c.(3)	Light-sensitive land uses	4.5.2
5.c.(4)	Rural residences and businesses	4.5.2
5.c.(5)	Aquifers	4.5.2
5.c.(6)	Human health and safety	4.5.2
5.c.(7)	Animal health and safety	4.5.2
5.c.(8)	Plant life	4.5.2
5.c.(9)	Temporary and permanent housing	4.5.2
5.c.(10)	Cumulative effects of the location of the facility in relation to existing and planned facilities and other industrial development.	4.5.2
6	Policy Criteria	4.7
6.a	Recycling of the conversion byproducts and effluents.	4.7.1
6.b	Energy conversion through location, process, and design.	4.7.2
6.c	Training and utilization of available labor in this state for the general and specialized skills required.	4.7.3
6.d	Use of a primary energy source or raw material located within the state.	4.7.4
6.e	Not relocating residents.	4.7.5
6.f	The dedication of an area adjacent to the facility to land uses such as recreation, agriculture, or wildlife management.	4.7.6
6.g	Economies of construction and operation.	4.7.7
6.h	Secondary uses of appropriate associated facilities for recreation and the enhancement of wildlife.	4.7.8

<b>Authority</b>	<b>Description</b>	<b>Section(s)</b>
6.i	Use of citizen coordinating committees.	4.7.9
6.j	A commitment of a portion of the energy produced for use in this state.	4.7.10
6.k	Labor relations.	4.7.11
6.l	The coordination of facilities.	4.7.12
6.m	Monitoring of impacts.	4.7.13
6.n	A commitment to install lighting mitigation technology for wind energy conversion facilities subject to commercial availability and federal aviation administration approval.	N/A

## **ACRONYMS**

bpd	barrels per day
Commission	North Dakota Public Service Commission
E3	E3 Environmental, LLC
ESA	Endangered Species Act
ICBM	Intercontinental Ballistic Missile
NDDTL	North Dakota Department of Trust Lands
NLEB	Northern long-eared bat
NRHP	National Register of Historic Places
NWI	National Wetland Inventory
Project	Robinson Lake Oil Conditioning Facility Expansion Project
Project Area/Site	Existing 5-acre parcel where existing Facility is located
PSC	North Dakota Public Service Commission
Study Area	1-mile area centered upon existing Facility
Survey Area	Undeveloped portions of existing Facility
US DOD	U.S. Department of Defense
USACE	U.S. Army Corps of Engineers
USDA	U.S. Department of Agriculture
USFWS	U.S. Fish and Wildlife Service
Whiting	Whiting Oil and Gas Corporation

## **INTRODUCTION**

Whiting Oil and Gas Corporation (Whiting), owns and operates crude oil gathering, and conditioning facilities in the Williston Basin area of North Dakota. Following gathering and conditioning, the oil is delivered to a third party where it is transported via pipeline to out of state markets.

Commodity prices have supported an increase in the crude production in the basin and in particular on wells and acreage dedicated to the Robinson Lake Oil Gathering system. Due to this increase, and in anticipation of future volume growth, the need has arisen for additional oil conditioning capacity on Whiting's system. Whiting plans to address this need by the expansion of the existing Robinson Lake Oil Conditioning Facility.

The existing Robinson Lake Oil Conditioning Facility (Facility) is located approximately 7.9 miles northeast of New Town in Mountrail County. Construction was initiated in August 2017 and the Facility was placed into service in December 2017. The existing Facility has an oil conditioning capacity of 45,000 barrels per day (bpd). As a part of the Robinson Lake Oil Conditioning Facility Expansion Project (Project), Whiting plans to increase the oil conditioning capacity of the existing Facility to 65,000 bpd. All work associated with this Project will occur within the previously developed facility footprint located on Whiting property. Construction is planned to begin in March of 2020 with operations at an increased capacity beginning in July 2020, pending all regulatory approvals.

Whiting submits to the North Dakota Public Service Commission (PSC) an application for a Certificate of Site Compatibility for its Robinson Lake Oil Conditioning Facility Expansion Project.

The application provides the requisite information as stipulated by:

- North Dakota Century Code Chapter 49-22.1, Energy Conversion and Transmission Facilities
- North Dakota Administrative Code Chapter 69-06-04, Certificate of Site Compatibility
- North Dakota Administrative Code Chapter 69-06-08-01, Energy Conversion Facility Siting Criteria

## **SECTION 1: DESCRIPTION**

### **1.1 TYPE OF ENERGY CONVERSION FACILITY**

Whiting's proposed Robinson Lake Oil Conditioning Facility Expansion Project (Project) will be located approximately 7.9-miles northeast of New Town in Mountrail County. The expansion would include the installation of additional heaters, pumps and control valves which would result in the addition of 20,000 bpd of oil conditioning capacity. A simplified block flow diagram depicting the facility's process and an overview plot plan drawing showing the layout of the proposed expansion activities are included in Appendix A.

The Facility processes crude oil delivered from Whiting's Robinson Lake Oil Gathering system. Once conditioned, the crude will be transported to out of state markets by pipeline. The oil conditioning expansion activities would occur within the current Facility fence line as depicted in the map in Appendix B.

### **1.2 GROSS DESIGN CAPACITY**

The current Facility has a nameplate or gross capacity of 45,000 bpd, expansion activities would result in a Facility with a nameplate capacity up to 65,000 bpd.

### **1.3 NET DESIGN CAPACITY**

The current Facility has a net design capacity of 45,000 bpd, expansion activities would result in a Facility with a net design up to 65,000 bpd.

### **1.4 ESTIMATED THERMAL EFFICIENCY OF THE ENERGY CONVERSION PROCESS AND THE ASSUMPTIONS UPON WHICH THE ESTIMATE IS BASED**

This is not applicable to this Project.

### **1.5 ACRES OF OCCUPANCY**

Expansion activities will occur within the existing Facility property that occupies approximately 5 acres of land.

### **1.6 ANTICIPATED SCHEDULE**

#### **1.6.1 OBTAINING CERTIFICATE OF SITE COMPATIBILITY**

Whiting would like to obtain a certificate of site compatibility by February 15, 2020.

#### **1.6.2 COMPLETING LAND ACQUISITION**

Land acquisition is complete; Whiting owns the entire 5-acre parcel where the current Facility and expansion activities will occur.

#### **1.6.3 STARTING CONSTRUCTION**

Construction would commence following the issuance of the Certificate of Site Compatibility.

#### **1.6.4 COMPLETING CONSTRUCTION**

Expansion activities would require approximately 90 days to complete.

#### **1.6.5 TESTING OPERATIONS**

Testing and/or commissioning operations would follow the completion of construction and are anticipated to last for approximately 15-days.

#### **1.6.6 COMMENCING COMMERCIAL PRODUCTION**

The additional conditioning capacity would be available by July of 2020. It is estimated that in the first year of operation the Facility would operate at a processing capacity of 55,000 bpd and reaching full net capacity by the end of 2021.

#### **1.6.7 EXPANSIONS OR ADDITIONS**

Whiting is not aware of additional plans to begin other expansions at the Facility.

#### **1.6.8 ESTIMATED TOTAL COST OF CONSTRUCTION**

The construction of the Facility expansion is estimated to cost \$1,200,000. The cost of the existing Facility's construction was approximately \$6,000,000.

**SECTION 2: STUDIES**

**2.1 STUDY AREA**

The Study Area utilized is a 1-mile diameter area centered upon the existing Facility property (Project Area or Site). The Project and Study Areas are depicted on the maps found in Appendix B.

**2.2 SITE**

The Project Area or Site is a 5-acre parcel as depicted in the maps found in Appendix B. Natural resource and cultural resource field surveys were conducted that encompassed the undeveloped portions of the Site (Survey Area).

**2.3 AGENCY CONSULTATIONS**

E3 Environment, LLC (E3) on behalf of Whiting initiated consultations with the federal, state and local agencies identified in the table below for the purpose of environmental resource assessment relative to the potential impacts associated with the siting and construction of the proposed Project. All letters were mailed on October 15, 2019. Please refer to Appendix C for copies of these consultations.

**Table 1: Agency Consultation Summary Table**

<b>Agency</b>	<b>Date of Delivery</b>	<b>Agency Response Rcvd.</b>	<b>Comments</b>
U.S. Fish and Wildlife Service North Dakota Field Office	10/21/19	11/7/19	Letter response received stating that the Project as planned does not involve any federally listed threatened or endangered species or their habitats.
USACE-Regulatory Office State Program Manager	10/22/19	10/28/19	Letter response received; no concerns or permitting requirements identified.
U.S. Department of Agriculture Natural Resources Conservation Service-Bismarck State Office	10/18/19	10/24/19	Letter response received, no concerns identified, as no impacts to wetlands will occur.
USDA Farm Service Agency North Dakota Farm Service Agency	10/17/19	Pending	
U.S. Department of Defense- Cable Affairs	10/18/19	10/22/19	Email received from Mr. Munos stating that the Minot AFB has no assets near the project area.

Agency	Date of Delivery	Agency Response Rcvd.	Comments
North Dakota Game and Fish Department Conservation & Communication Division	10/18/19	Pending	
North Dakota Department of Parks and Recreation	10/18/19	Pending	
North Dakota State Historic Preservation Office	10/17/19	10/23/19	Concurrence of “No Historic Properties Affected” letter received.
North Dakota Geological Survey	10/18/19	10/21/19	A letter response was provided documenting that there are no landslide areas or areas of concern related to slope stability are noted near or at the project location. Additionally no earthquakes have been reported or recorded in the area and no economically mineable coal deposits have been mapped.
North Dakota Department of Health Environmental Health Section	10/18/19	11/1/19	A letter response was received stating that the department believes the impacts from the proposed construction will be minor and can be controlled by proper construction methods. The letter details seven comments from the Agency identifying regulatory programs and best management practices to minimize project impacts.

Agency	Date of Delivery	Agency Response Rcvd.	Comments
North Dakota State Water Commission	10/18/19	11/13/19	A letter response was received documenting that the Project will not affect floodplains. The letter also states that if surface water or ground water will be diverted for construction or operation a permit may be required. Finally it documents the agency's request that if observation wells are encountered that the Water Appropriations Division be contacted.
North Dakota Department of Trust Lands-School Trust	10/18/19	10/22/19	Email response received stating that the North Dakota Department of Trust lands has no comments in regards to the consultation letter.
North Dakota Department of Trust Lands-Mineral Trust	10/18/19	10/21/19	Email response received stating that the NDDTL does have several mineral tracts within the 1-mile buffer; however none are located within the project area.
Western Area Water Supply Authority	10/18/19	Pending	
Mountrail County Planning & Zoning Department Code Enforcements	10/21/19	11/6/19	Email response received requesting contact information for the appropriate Whiting personnel who should be contacted to determine if a building permit is required.
Mountrail County Water Resources Board	10/21/19	Pending	
Mountrail County Weed Control Board	10/23/19	Pending	

## **2.4 ENVIRONMENTAL ANALYSIS**

### **2.4.1 NATURAL RESOURCE INVENTORY**

A natural resource survey of the Survey Area was completed on September 3, 2019. The survey included an inventory of the presence or absence of wetlands, waterbodies, tree/shrub, noxious weeds, protected species and critical habitat. A copy of the survey report can be found in Appendix D.

#### **2.4.1.1 NOXIOUS WEEDS**

During survey approximately 1.28 acres of Canada thistle, a noxious weed, was delineated. No other invasive or noxious weed species were observed. This area is located outside of the existing facility fence line and Whiting is planning to revegetate this area as a weed control measure.

#### **2.4.1.2 TREE/SAPLING/SHRUB INVENTORY**

The Survey Area is occupied by the existing Facility and its associated aboveground appurtenances. No trees, saplings, shrubs or woody vegetation were observed within the Survey Area.

#### **2.4.1.3 WETLAND AND WATERBODIES INVENTORY**

National Wetland Inventory (NWI) mapping for the area does not indicate the presence of wetlands or waterbodies within the Survey Area. Field inventory did not identify areas within the Survey Area with wetland indicators: presence of hydrophytic vegetation, wetland hydrology or hydric soils. As such, it was determined that no wetlands or waterbodies are present within the Survey Area. The results of the field studies including wetland and waterbodies survey can be found in its entirety in Appendix D.

#### **2.4.1.4 WILDLIFE INVENTORY**

Wildlife observed on the Survey Area are species commonly associated with agricultural communities. No Federal or state species of concern were observed within the Survey Area.

### **2.4.2 U.S. FISH AND WILDLIFE SERVICE**

#### **2.4.2.1 FEDERALLY PROTECTED SPECIES REVIEW**

Under authority of the Endangered Species Act (ESA), the USFWS and the Fisheries Service division of the National Oceanic and Atmospheric Administration have identified and maintained a list of species and critical habitats that have been afforded protection under the ESA. The ESA also provides a program for the conservation of threatened and endangered plants and animals and the habitats in which they live.

The following listed species were identified by the USFWS as federally threatened or endangered species that may occur within Mountrail County:

- Gray wolf (*Canis lupus*) – endangered
- Northern long-eared bat (*Myotis septentrionalis*) – threatened

- Interior least tern (*Sternula antillarum*) – endangered
- Piping plover (*Charadrius melodus*) – threatened
- Rufa red knot (*Calidris canutus rufa*) –threatened
- Whooping crane (*Grus americana*) – endangered
- Pallid sturgeon (*Scaphirhynchus albus*) – endangered
- Dakota skipper (*Hesperia dacotae*) –threatened, and designated critical habitat

On October 15, 2019 Project specific consultations were initiated with the Bismarck, North Dakota office of the USFWS. A formal response is was received on November 7, 2019 stating that the Project does not involve any federally listed threatened or endangered species or their habitat. See Appendix C for a copy of the correspondence.

E3 has reviewed the available data describing the life history, critical habitat, and conservation measures associated with each species as well as completed field studies to evaluate the potential effects of the Project on these resources, the results of these efforts are as follows. Appendix D contains the Natural Resource Survey Report.

**Gray wolf:** The gray wolf is a large carnivore that through conservation measures has experienced strong population recovery, particularly in the Great Lakes states of the upper Midwest. As populations rebound, individuals may break from packs to explore opportunities to establish packs in unoccupied territory. Roaming individuals can cover great distances without establishing viable breeding populations in previously unoccupied habitat(s). This species is not tolerant of human disturbance and will tend to avoid interaction with humans. The activities associated with this Project and the current Facility operation are likely to serve as a deterrent to this species, impacts are not anticipated.

**Northern long-eared bat:** The northern long-eared bat (NLEB) roosts underneath bark, in cavities, or in crevices of both live and dead trees. Populations have also been found in cool environments such as caves and mines, and prefer to spend winter hibernating in locations with high humidity and no air currents. Field survey did not identify potential habitat or hibernacula within the Survey Area and no trees would be impacted by the Project thus; the Project would not impact this species.

**Interior least tern:** The interior populations of the least tern have historically been associated with large river systems for breeding and migratory habitats. Breeding birds are known to congregate in colonies, utilizing sandbar habitat common to larger rivers. Lake Sakakawea/Missouri River system is located approximately 6.5-miles from the Project. The least tern is found in North Dakota during the late spring and summer breeding season (mid-May through late August, with the peak of the nesting season occurring from mid-June to mid-July). Desktop analyses supported with field studies have concluded that no suitable habitat is present within the Survey Area; therefore, impacts to the least tern are not anticipated.

**Piping plover:** The piping plover is associated with shorelines along small alkaline lakes, large reservoir beaches, and river islands and adjacent sand pits. Breeding birds select wide beaches

with highly clumped vegetation covering less than 25 percent of the area. Breeding season in North Dakota occurs mid-April through August. Desktop analyses supported with field studies have concluded that no suitable habitat is present within the Survey Area; therefore, impacts to the Piping plover are not anticipated.

**Rufa red knot:** The rufa red knot migrates between breeding grounds in Canada and wintering grounds in South America. A significant factor threatening the rufa red knot is destruction and modification of its habitat due to beach erosion and shoreline protection and stabilization projects. Migratory behavior and habitat requirements of this species are poorly understood particularly for those populations occupying the midcontinent flyways. Inland stopovers include the Mississippi Valley, Great Lakes and Great Plains. Desktop analyses supported with field studies have concluded that no suitable habitat is present within the Survey Area; therefore, impacts to the rufa red knot are not anticipated.

**Whooping crane:** The whooping crane is a large bodied marsh species that breeds primarily in Canada and winters in the Gulf of Mexico. This species has been closely studied and monitored in recent years due to its small population. North Dakota provides migratory habitat for the species, providing roosting and feeding opportunities during migration. This species prefers larger wetland complexes for roosting habitat, typically using adjacent uplands for foraging opportunities. The Project is located within the fenced perimeter of an existing facility, a prominent feature within the existing landscape, which would serve as a deterrent to migrating cranes arriving in the vicinity of the Project; therefore, impacts to the whooping crane are not anticipated.

**Pallid sturgeon:** The pallid sturgeon's preferred habitat includes the benthic environment associated with swift waters of large turbid, free-flowing rivers with braided channels, dynamic flow patterns, periodic flooding of terrestrial habitats and requiring extensive microhabitat diversity. In North Dakota, reaches of the Missouri River have been cited as providing suitable habitat for the pallid sturgeon. Lake Sakakawea/the Missouri River system is located approximately 6.5-miles away and does not intersect with the Survey Area; therefore, impacts to the pallid sturgeon are not anticipated.

**Dakota skipper:** Dakota skippers require untilled, high-quality prairie. Habitat preferred by the skipper is wet-mesic prairie with little topographic relief on near-shore glacial lake deposits and in rolling native-prairie terrain over gravelly glacial moraine deposits. The closest designated critical habitat is located approximately 21-miles to the west of the Project. Larvae feed on grasses, favoring little bluestem (*Schizachyrium scoparium*). Adults commonly feed on nectar of flowering native forbs such as harebell (*Campanula rotundifolia*), wood lily (*Lilium philadelphicum*), and purple coneflower (*Echinacea angustifolia*). This species is not known to disperse widely and has low mobility, dispersing a maximum of 0.6-mile. The proposed Project site was primarily been used as cultivated cropland prior to its development into the existing Robinson Lake Oil Conditioning Facility. Desktop analysis supported by field studies show that no suitable habitat is present within the Survey Area; therefore, impacts to the Dakota skipper are not anticipated.

### **SECTION 3: NEED FOR FACILITY**

#### **3.1 ANALYSIS OF NEED BASED ON PRESENT AND PROJECTED DEMAND, INCLUDING SYSTEM STUDIES**

The NDIC reported in August of 2019 that oil production had increased from July to August. Additionally the NDIC reports that drilling rig count is rising and operators are shifting from running a minimum number of rigs with incremental increases throughout 2019.

Due to continued strength in the crude oil market, production of crude is expected to continue to increase in the Williston Basin. This results in the need to install additional conditioning capacity to keep up with oil production and to ensure the safe transportation of this commodity.

#### **3.2 DESCRIPTION OF FEASIBLE ALTERNATIVE METHODS OF SERVING THE NEED**

A thorough analysis of all reasonable alternatives was conducted. Various factors were considered by Whiting, including engineering, economic and environmental factors in multidisciplinary and iterative fashion. This process identified the following alternatives.

**No Action Alternative:** Regional production would continue to be constrained by oil conditioning capacity, resulting in the need for additional oil storage while awaiting conditioning so that it is safe for rail and pipeline transport to market. This alternative is not desirable.

**New Facility Siting:** Siting a new facility would have greater indirect impacts to area resources as each alternative site considered would require installation of additional infrastructure (*e.g.*; graded site location) and would potentially increase the distance from Whiting's existing gathering system which currently delivers product to the existing Facility. This alternative is not desirable.

**SECTION 4: LOCATION**

**4.1 SIZE OF STUDY AREA**

Whiting’s Study Area was a 1-mile area centered upon the Project Site as depicted on the maps in Appendix B. E3 completed a resource inventory of the Study Area that included agency consultations, GIS mapping, internet based research and desktop analysis. These efforts were augmented with natural and cultural resource surveys of the Site.

**4.2 MAPS IDENTIFYING CRITERIA**

The information presented in this section was developed to demonstrate conformation with the Commission’s siting criteria for Energy Conversion Facilities. Whiting has conducted a thorough inventory of the Study Area and Project Site and evaluated the resources that occur within each to assess the compatibility of the Facility with the state’s siting criteria. The following sections identify and discuss the presence or absence of siting criteria within the Study Area or Site. Where siting criteria is identified, its location is shown on the maps in Appendix B.

**4.3 EXCLUSION AREA INVENTORY AND ANALYSIS (SECTION 69-06-08-01(1), N.D. ADMIN. CODE)**

Exclusion areas are geographic areas that should be excluded from consideration when siting an energy conversion facility. The following table and text identify and discuss exclusion areas identified within the Study Area or Site.

**Table 2: Exclusion Areas**

Exclusion Area		Project Site	Within Study Area
<b>Federal</b>			
	National Parks or Memorial Parks	No	No
	Historic Sites, Districts, or Landmarks	No	No
	Natural Landmarks or Monuments	No	No
	Wilderness Areas or Wildlife Areas	No	No
	Wild, Scenic or Recreational Rivers	No	No
	Wildlife Refuges or Grasslands	No	No
<b>State</b>			
	Parks, Forest or Forest Management Lands	No	No
	Historic Sites, Monuments, or Historical Markers	No	No
	Archaeological Sites	No	No
	Grasslands	No	No
	Wild, Scenic or Recreational Rivers	No	No
	Game Refuges or Game Management Areas	No	No

Exclusion Area		Project Site	Within Study Area
	Management Areas	No	No
	Nature Preserves	No	No
<b>County</b>			
	Parks	No	No
	Recreation Areas	No	No
	Municipal Parks	No	No
	Parks Administered by other Governmental Subdivisions	No	No
	Hardwood Draws and Enrolled Woodlands	No	No
<b>Other</b>			
	Prime Farmland	No	No
	Irrigated Farmland	No	No
	Critical habitat for protected species	No	No
	Areas within one 1,200 feet of the geographic center of an ICBM launch or launch control facility.	No	No

**4.3.1 FEDERAL RESOURCE REVIEW**

Based upon a review of publicly available information, Whiting has concluded that there are no national parks, memorial parks, historic sites and landmarks, monuments, or wilderness areas within the Project Area or Site.

**4.3.2 STATE RESOURCE REVIEW**

Based upon a review of field surveys and publicly available information, Whiting has concluded that there are no state parks, monuments, historical sites, monuments or markers, and no nature preserves within the Study Area or Site.

**4.3.3 COUNTY RESOURCE REVIEW**

Based upon a review of publicly available information Whiting has concluded that there are no county parks, recreation areas, municipal parks, parks owned by other subdivisions of government bodies, hardwood draws or enrolled woodlands within the Study Area or Site.

**4.3.4 PRIME FARMLAND**

Whiting conducted a review of the U.S. Department of Agriculture Natural Resources Conservation Service Web Soil Survey. No prime farmland was found within the Study Area or Site.

**4.3.5 IRRIGATED FARMLAND**

Whiting’s investigation found no evidence of irrigation within the Study Area or Site.

**4.3.6 PROTECTED SPECIES RESOURCE REVIEW**

Whiting has conducted field surveys of the Site and reviewed published information. Based upon this effort it has been determined that there are no areas critical to the life stages of threatened or endangered animal or plant species within the Study Area or Site. Whiting has initiated consultations with agencies to confirm this conclusion. Refer to Appendix C for a record of these consultations.

**4.3.7 CRITICAL HABITAT FOR PROTECTED SPECIES**

Based upon consultations with agencies and surveys of the Site, Whiting has confirmed the absence of critical habitat within the Study Area and Site. Refer to Appendix C for a record of agency correspondence.

**4.3.8 AREAS WITHIN 1,200 FEET OF ICBM LAUNCH OR LAUNCH CONTROL FACILITY**

Whiting has confirmed via correspondence with the Minot Air Force Base that there are no areas within 1,200 feet of the geographic center of an Intercontinental Ballistic Missile (ICBM) launch or launch control facility located within the Study Area or Site.

**4.4 AVOIDANCE AREA INVENTORY AND ANALYSIS (SECTION 69-06-08-01(3), N.D. ADMIN. CODE)**

Avoidance areas are geographical areas, which may not be approved as a site for an energy conversion facility unless the applicant shows that under the circumstances there is no reasonable alternative. The following table and text identify and discuss avoidance areas identified within the Study Area or Site.

**Table 3: Avoidance Areas**

Avoidance Area		Project Site	Within Study Area
<b>Other</b>			
	Other Historic Resources not meeting Exclusion Areas criteria	No	Yes
	Areas within City Limits or Military Installation Boundaries	No	No
	Areas within Known 100-Year Floodplains	No	No
	Areas of Known Geologic Instability	No	No
	Woodlands and Wetlands	No	No
	Areas of Recreational Significance not categorized as Exclusion Areas	No	No

**4.4.1 OTHER HISTORICAL RESOURCES NOT MEETING EXCLUSION AREA CRITERIA**

Whiting conducted a Class I literature review and identified five previously recorded resources within the Study Area. Three of these have been determined to be not eligible for the National

Register of Historic Properties (NRHP), and two have been left “unevaluated” inclusion into the NRHP. No historical resources not meeting the exclusion area criteria were identified within the Site. Refer to Appendix E for additional information regarding these historic resources.

#### **4.4.2 AREAS WITHIN CITY LIMITS OR MILITARY INSTALLATION BOUNDARIES**

Whiting has confirmed that the Study Area and Site are not located within city limits or within the boundaries of military installations.

#### **4.4.3 AREAS WITHIN KNOWN 100-YEAR FLOODPLAINS**

E3 accessed the FEMA flood map service tool on October 26, 2019 and there are no special flood hazard areas mapped within the Study Area or Site, as such, no areas of the Project are within a known 100-year floodplain.

#### **4.4.4 AREAS OF KNOWN GEOLOGIC INSTABILITY**

There are no known areas of geological instability within the Study Area or Site.

#### **4.4.5 WOODLANDS AND WETLANDS**

Natural resource studies of the Site augmented GIS analysis were utilized to determine the presence/absence of wetland and woodland resources of the Study Area. No wetlands or woodlands were identified within the Site or Study Area.

#### **4.4.6 AREAS OF RECREATIONAL SIGNIFICANCE NOT CATEGORIZED AS EXCLUSION AREAS**

No areas of recreational significance occur within the Study Area or Site.

#### **4.5 SELECTION CRITERIA (SECTION 69-06-08-01(5), N.D. ADMIN. CODE)**

The selection criteria require a study of environmental impacts and changes in land use that may result from the siting of the proposed facility. Through this process, Whiting proposes that it has successfully avoided or minimized these effects to the maximum extent practicable, for Commission review and approval.

##### **4.5.1 AGRICULTURAL IMPACT ASSESSMENT**

**Agricultural Production:** The Project will not remove any tillable land from agricultural production, as the proposed expansion activities will occur within the existing Facility property.

**Family Farms and Ranches:** The property has been owned by Whiting since 2016. Based upon a review of aerial imagery it appears that the Site is located just over a mile southwest from the nearest occupied farm residence. No impacts to family farms or ranches are anticipated.

**Lands Suitable for Irrigation:** The Project will not impact irrigated lands.

**Surface Drainage:** As this is an expansion project, which is located at an existing developed facility, there will be no change in how surface drainage is managed. The existing Facility was constructed with a two-foot high earthen perimeter berm that surrounds the working surface

of the pad. This berm is used to contain and control releases of stormwater runoff. Whiting has a Dewatering Policy that is followed prior to discharging stormwater off location. The policy includes; obtaining approval from the landowner to discharge stormwater, completing a visual inspection of ponded stormwater to verify the water does not have a visible sheen; field testing the water for pH and Chlorides; and placing a filter sock on the end of the discharge hose to capture any sediment and reduce erosion. The volume of the water discharge is also recorded.

**Ground Water:** The aquifers that underlay North Dakota are typically associated with two types of geologic formations, specifically bedrock and glacial drift. Bedrock aquifers in the area are known to occur from 3,000 to 5,000 feet below the surface while glacial drift aquifers are known to occur at depths from a few feet to up to 500 feet below the surface. Ground excavation associated with the Project will generally be limited in depth and it is unlikely that the Project would have significant or permanent impact on groundwater resources.

**Agricultural Quality of the Cropland:** No agricultural land will be acquired for the Project. No land will be permanently removed from agricultural production. No impacts to agricultural land is anticipated.

**Impact Upon the Availability and Adequacy of Local Public Services:** The potential impacts to local public services including law enforcement, fire department, health care, public schools and recreational facilities are anticipated to be negligible as this is an expansion project associated with an existing Facility.

Construction activities are anticipated to occur over a 90-day period. During this period, there would be a small influx of employees ranging from laborers, skilled trades, technicians, engineering and environmental professionals. In total approximately 15 laborers would be utilized to complete the Project.

#### **4.5.2 THE IMPACTS UPON**

**Local Institutions:** Due to its proximity to the Project Site, New Town would likely see the greatest impact from the Project. Impacts from facility expansion construction would be temporary. Once expansion activities are complete, Whiting would continue to utilize their existing employees to operate the Facility. Generally, the impacts would be beneficial to the local economy during construction due to the addition of revenues from outside of the community being spent on goods and services locally.

**Noise-Sensitive Land Uses:** The Project has been sited approximately 7.9 miles from New Town in a rural setting, effectively isolating the Project from sensitive receptors. Local residents may experience additional motor vehicle volumes on area roadways, but the noise associated with vehicles would be similar to existing background levels and occur largely during normal business hours.

**Rural Residences and Businesses:** The Project is located approximately 7.9 miles from New Town. Residents may experience additional traffic and an increase in commerce in response to

the influx of temporary workers purchasing goods and services. The Facility would likely benefit the local economy for both the near and long term.

**Aquifers:** Water demands during and after construction are anticipated to be minimal and unchanged from current Facility operation.

**Human Health and Safety:** Whiting promotes a safe and healthy workplace during construction and operations of all its assets. Whiting implements a corporate policy that meets or exceeds federal and state laws, rules and regulations applicable to health, safety, and the environment. Their policy is enforced and adhered to by all regular and contract employees. Whiting governs operations and construction activities with various safe work procedures designed to protect property and personnel as well as to maintain regulatory compliance.

**Animal Health and Safety:** The wildlife currently inhabiting the Project Area are common and are generally mobile. The local wildlife inhabitants would not be displaced by the Project as all Project activities will occur at the existing Facility. No species of special concern are anticipated to experience direct impacts due to expansion activities or operation of the Facility.

**Plant Life:** The expansion activities will occur entirely within the existing Facility property. No loss of natural vegetation will occur as a result of the Project. No species of special concern will be impacted by the Project.

**Temporary and Permanent Housing:** The region has experienced decreased demand for permanent and temporary housing, resulting from the downturn in oil and gas development. The Project may introduce temporary workers to the area, and as a result, may have a positive effect on the temporary and permanent housing economy.

**Temporary and Permanent Skilled and Unskilled Labor:** Construction of the Project would require a work force of approximately 15 employees. The workforce would be comprised of both skilled and unskilled personnel. Skilled labor will include craft workers such as operating engineers, ironworkers, welders, electricians, carpenters and boilermakers. The unskilled workforce will be comprised of common laborers who work closely with the skilled trades.

Once the Project is complete and operational, it would utilize work force currently employed at the Facility. These personnel would be responsible for day-to-day operations, maintenance and support of local gathering assets that supply the Facility.

#### **4.6 CUMULATIVE EFFECTS OF THE LOCATION OF THE FACILITY IN RELATION TO EXISTING AND PLANNED FACILITIES AND OTHER INDUSTRIAL DEVELOPMENT**

As a result of the additional conditioning capacity, there may be development of additional take-away capacity to bring the product to market at some point in the future. Whiting does not anticipate any adverse cumulative impacts from increasing the conditioning capacity of the existing Facility.

#### **4.7 POLICY CRITERIA (SECTION 69-06-08-01(6), N.D. ADMIN. CODE)**

The Commission may give preference to an applicant that would maximize benefits that result from the adoption of the following policies and practices, and in a proper case may require the adoption of such policies and practices. The Commission may also give preference to an applicant that would maximize interstate benefits. The following sections address the benefits to be considered.

##### **4.7.1 RECYCLING OF THE CONVERSION BYPRODUCTS AND EFFLUENTS**

Not applicable to this type of project.

##### **4.7.2 ENERGY CONSERVATION THROUGH LOCATION, PROCESS AND DESIGN**

The Project would result in the increase of oil conditioning capacity at an existing Facility where infrastructure exists to delivery and take away pre and post conditioned oil. As such, the Project conserves energy that would be required to construct and operate a new oil conditioning facility.

##### **4.7.3 TRAINING AND UTILIZATION OF AVAILABLE LABOR IN THIS STATE FOR THE GENERAL AND SPECIALIZED SKILLS REQUIRED**

Facility construction is a specialized niche construction market and the labor force needed to construct the Project will be primarily comprised of a non-local workforce. The primary contractor will be a non-local contractor, supplying specialized skilled labor. Whiting will draw upon the local labor force to supply general laborers when possible. The workforce is anticipated to reach a peak of approximately 15 personnel.

##### **4.7.4 USE OF A PRIMARY ENERGY SOURCE OR RAW MATERIAL LOCATED WITHIN THE STATE**

The oil supplying the Facility is produced and processed entirely in State. The conditioned oil would be shipped to delivery points out of State.

##### **4.7.5 RELOCATION OF RESIDENTS**

As this Project is the expansion of an existing Facility, no residences shall be displaced or require relocation due to the Project.

##### **4.7.6 THE DEDICATION OF AN AREA ADJACENT TO THE FACILITY TO LAND USES SUCH AS RECREATION, AGRICULTURE, OR WILDLIFE MANAGEMENT**

Whiting does not own property adjacent to the Site suitable for recreation, agricultural, or wildlife management purposes. The current land use of properties adjacent to the Project is agricultural as well as industrial with the Robinson Lake Gas Plant to the south, and other oil production pads located to the east and west (see aerial map in Appendix B).

##### **4.7.7 ECONOMIES OF CONSTRUCTION AND OPERATION**

Whiting has designed the current Facility and expansion activities to take advantage of the Site's proximity to existing electrical supply and gathering system piping for its location. The Plant's location and design are clear examples of creating an economy of scale Project concept,

achieving additional production capacity in the most minimally intrusive and most efficient way possible, in terms of new infrastructure development.

#### **4.7.8 SECONDARY USES OF APPROPRIATE ASSOCIATED FACILITIES FOR RECREATION AND THE ENHANCEMENT OF WILDLIFE**

Construction of the Project will result in the expansion at an existing industrial facility and a setting not typically suitable for recreational or wildlife application.

#### **4.7.9 USE OF CITIZEN COORDINATING COMMITTEES**

Whiting has established and maintained a good relationship with the local residents through its presence while operating their gathering assets in the area. Through these relationships, Whiting has maintained several grass roots communication channels to inform local residents regarding the developments associated with the Facility.

#### **4.7.10 A COMMITMENT OF A PORTION OF THE TRANSMITTED PRODUCT FOR USE IN THIS STATE**

The oil supplying the Facility will be supplied and processed entirely in state. The conditioned crude would be transported to delivery or transfer points located out of state.

#### **4.7.11 LABOR RELATIONS**

Whiting does not anticipate encountering any adverse labor relations on this Project. The labor market in the Project area is supportive of the oil and gas industry.

#### **4.7.12 THE COORDINATION OF FACILITIES**

Whiting owns and operates the Robinson Lake Oil Conditioning Facility, all Project activities will occur on property owned by Whiting and the Facility currently conditions oil that is delivered via Whiting's oil gathering system.

#### **4.7.13 MONITORING OF IMPACTS**

Whiting will coordinate with its primary contractor regarding the oversight responsibilities for construction activities at the Site. Environmental responsibilities shall be coordinated in the same manner. Whiting will monitor community concerns and will respond to all reasonable concerns brought to attention by community leaders.

## **SECTION 5: MITIGATIVE MEASURES**

Whiting's commitment to minimize environmental impacts and to comply with permits and associated permit conditions/stipulations are key mitigation elements. The utilization of an existing facility through the redesign of existing equipment and the addition of key pieces of equipment all within an existing developed facility will maximize efficiencies while minimizing impacts to the environment. This combination of actions effectively mitigates the impacts of the Project.

**SECTION 6: FACTORS TO BE CONSIDERED IN EVALUATING APPLICATIONS AND DESIGNATION OF SITES, CORRIDORS AND ROUTES (SECTION 49-22.1-09, N.D.C.C. AND SECTIONS 69-06-01.2.F AND .M, N.D. ADMIN. CODE)**

**6.1 AVAILABLE RESEARCH AND INVESTIGATIONS RELATING TO THE EFFECTS ON THE LOCATION, CONSTRUCTION AND OPERATION OF THE PROPOSED FACILITY ON PUBLIC HEALTH AND WELFARE, NATURAL RESOURCES AND THE ENVIRONMENT**

The potential effects of the Project on the public health and welfare, natural resources and the environment are discussed in Sections 2 and 4 of this application.

**6.2 THE EFFECTS OF NEW GAS OR LIQUID ENERGY CONVERSION AND GAS OR LIQUID TECHNOLOGIES AND SYSTEMS DESIGNED TO MINIMIZE ADVERSE ENVIRONMENTAL EFFECTS**

Not applicable to this Project.

**6.3 THE POTENTIAL FOR BENEFICIAL USES OF WASTE ENERGY FROM A PROPOSED GAS OR LIQUID ENERGY CONVERSION FACILITY**

Not applicable to this Project.

**6.4 ADVERSE DIRECT AND INDIRECT ENVIRONMENTAL EFFECTS THAT CANNOT BE AVOIDED SHOULD THE PROPOSED SITE OR ROUTE BE DESIGNATED**

Project impacts to the environment as described in Sections 2 and 4 are expected to be minimal as all expansion activities will occur within the existing, previously disturbed area of the existing Facility.

**6.5 ALTERNATIVES TO THE PROPOSED SITE, CORRIDOR OR ROUTE THAT ARE DEVELOPED DURING THE HEARING PROCESS AND WHICH MINIMIZE ADVERSE EFFECTS**

To minimize adverse effects Whiting chose to locate the Project at the site of the existing Robinson Lake Oil Conditioning Facility. Alternatives are discussed in Section 3 of this application.

**6.6 IRREVERSIBLE AND IRRETRIEVABLE COMMITMENTS OF NATURAL RESOURCES SHOULD THE PROPOSED SITE, CORRIDOR OR ROUTE BE DESIGNATED**

The Project will result in the conditioning, transport and ultimately sale and beneficial use of oil within the basin. No other natural resources would be significantly affected, as the Project will occur at an existing facility.

**6.7 THE DIRECT AND INDIRECT ECONOMIC IMPACTS OF THE PROPOSED FACILITY**

Refer to Section 4 for a review and discussion regarding the potential direct and indirect economic impacts of the proposed Project.

**6.8 EXISTING PLANS OF THE STATE, LOCAL GOVERNMENT AND/OR PRIVATE ENTITIES FOR OTHER DEVELOPMENT AT OR IN THE VICINITY OF THE PROPOSED SITE, CORRIDOR OR ROUTE**

At the time of this application, Whiting is not aware of other plans or projects for development at or in the vicinity of the proposed site.

**6.9 THE EFFECT OF THE PROPOSED SITE OR ROUTE ON EXISTING SCENIC AREAS, HISTORIC SITES AND STRUCTURES AND PALEONTOLOGICAL OR ARCHAEOLOGICAL SITES**

Refer to Sections 2 and 4 for discussion regarding the Project's potential impacts to scenic areas, historic sites and/or structures and paleontological or archaeological sites.

**6.10 THE EFFECT OF THE PROPOSED SITE OR ROUTE ON AREAS THAT ARE UNIQUE BECAUSE OF BIOLOGICAL WEALTH OR BECAUSE THE SITE OR ROUTE IS HABITAT FOR RARE AND ENDANGERED SPECIES**

Refer to Sections 2 and 4 for discussion regarding the Project's potential impacts on areas of unique biological wealth and/or areas of habitat for rare and endangered species.

**6.11 PROBLEMS RAISED BY FEDERAL AGENCIES, OTHER STATE AGENCIES AND LOCAL ENTITIES**

Project specific Project consultation letters were provided to various federal, state and local agencies; refer to Section 2 and Appendix C of this application for a complete discussion.

**6.12 UTILITY'S POLICIES AND COMMITMENTS TO LIMIT THE ENVIRONMENTAL IMPACT OF ITS FACILITIES**

Whiting is committed to being a good corporate citizen and conducting themselves in an ethical and responsible manner. Whiting is committed to integrity management and maintenance programs to ensure Whiting assets are operated safely and in a manner that protects the public, employees, contractors and the environment.

**6.13 PRESENT AND FUTURE NATURAL RESOURCE DEVELOPMENT IN THE AREA**

Refer to Introduction and Section 3 of this application for a discussion of present and future natural resource development in the area.

## **SECTION 7: LIST OF PREPARERS**

### **William McCarthy, C.W.B.**

Senior Environmental Compliance Analyst  
E3 Environmental, LLC, 871 Jefferson Avenue, St. Paul, MN 55102

M.S. Wildlife Biology, University of Minnesota – Twin Cities; and B.S. Wildlife Biology, Michigan State University. Mr. McCarthy is an environmental compliance analyst with over 20 years of environmental consulting experience working with various energy assets and regulatory agencies. As a compliance analyst, he has managed the environmental requirements for facility siting, pipeline routing, federal licensing and various federal, state and local permits. Mr. McCarthy is a certified wildlife biologist, and in this role conducts and coordinates field studies, agency consultations, mitigation and avoidance plans.

### **Katie Schmidt, EIT**

Environmental Engineer and Senior Consultant  
E3 Environmental, LLC, 871 West Jefferson Avenue, St. Paul, MN 55102

B.S. Civil Engineering with an emphasis in Environmental Engineering-Iowa State University. Ms. Schmidt is a Senior Environmental Consultant with 13 years of experience working with various energy assets and regulatory agencies. As a consultant, she has managed multiple pipeline projects supporting clients through the construction permitting and siting processes, which included coordination with various federal, state and local agencies.

### **Phillip Archer, PE**

Facilities Engineering Advisor  
Whiting Oil and Gas Corporation, 1700 Lincoln Street, Denver CO 80203

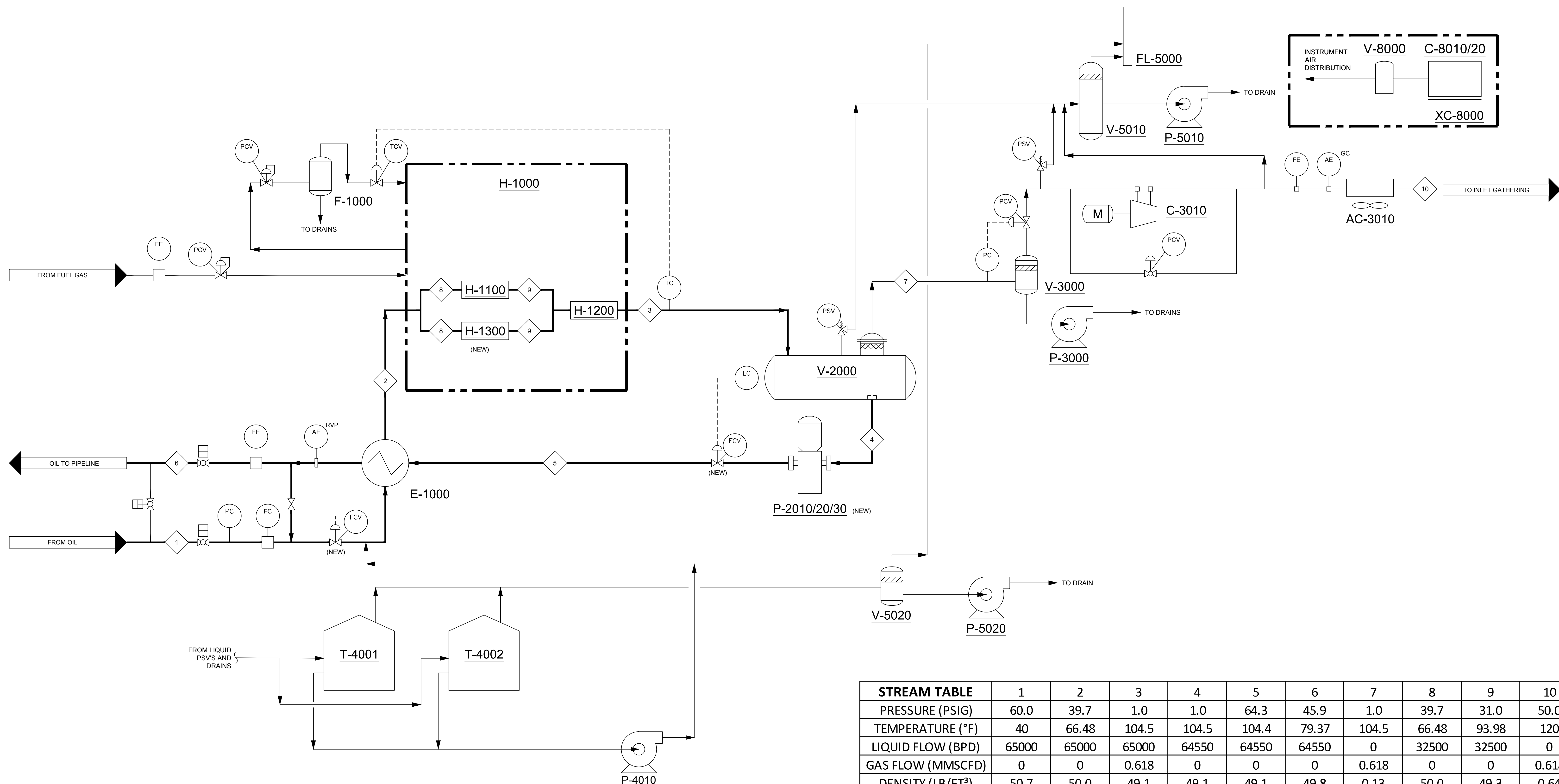
B.S. Mechanical Engineering, Oklahoma State University and M.B.A. University of Utah. Registered Professional Engineer in the state of Colorado. Mr Archer is a midstream oil and gas specialist with 31 years of experience in the engineering, operations, design, commercial development, construction and management of midstream assets. He has been responsible for the deployment of \$1.4B in midstream oil and gas infrastructure, including 100,000 horsepower of gas compression.

# **Appendix A**

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## Engineering Documents

**F-1000** FUEL GAS FILTER   
**T-4001/2** STORAGE TANKS   
**E-1000** OIL/OIL EXCHANGER   
**H-1100/1200/1300** (NEW) LINE HEATER   
**P-4010** TANK PUMPS   
**V-5020** FLARE KO POT   
**P-2010/20/30** (NEW) PIPELINE PUMPS   
**V-2000** FLASH VESSEL   
**V-3000** SUCTION SCRUBBER   
**P-5020** FLARE KO DRAIN PUMP   
**P-5010** FLARE KO DRAIN PUMP   
**P-3000** VRU DRAIN PUMP   
**V-3010** FLARE KO POT   
**FL-3000** MPL/P FLARE   
**C-3010** FLASH GAS COMPRESSOR   
**V-8000** 1000 GAL. RECEIVER   
**C-8010/20** AIR COMPRESSOR DRYER/FILTERS   
**XC-8000** INSTRUMENT AIR SKID   
**AC-3020** COOLER



STREAM TABLE	1	2	3	4	5	6	7	8	9	10
PRESSURE (PSIG)	60.0	39.7	1.0	1.0	64.3	45.9	1.0	39.7	31.0	50.0
TEMPERATURE (°F)	40	66.48	104.5	104.5	104.4	79.37	104.5	66.48	93.98	120
LIQUID FLOW (BPD)	65000	65000	65000	64550	64550	64550	0	32500	32500	0
GAS FLOW (MMSCFD)	0	0	0.618	0	0	0	0.618	0	0	0.618
DENSITY (LB/FT³)	50.7	50.0	49.1	49.1	49.1	49.8	0.13	50.0	49.3	0.64
MW	138.3	138.3	139.4	139.4	139.4	139.4	52.9	138.3	138.3	52.9



BALTIMORE, MD | BISMARCK, ND | DENVER, CO  
 DOUGLASSVILLE, PA | HOUSTON, TX  
 PITTSBURGH, PA | WILLIAMSPORT, PA

REFERENCE DRAWINGS	No	REVISIONS	BY	CHKD	PM	DATE

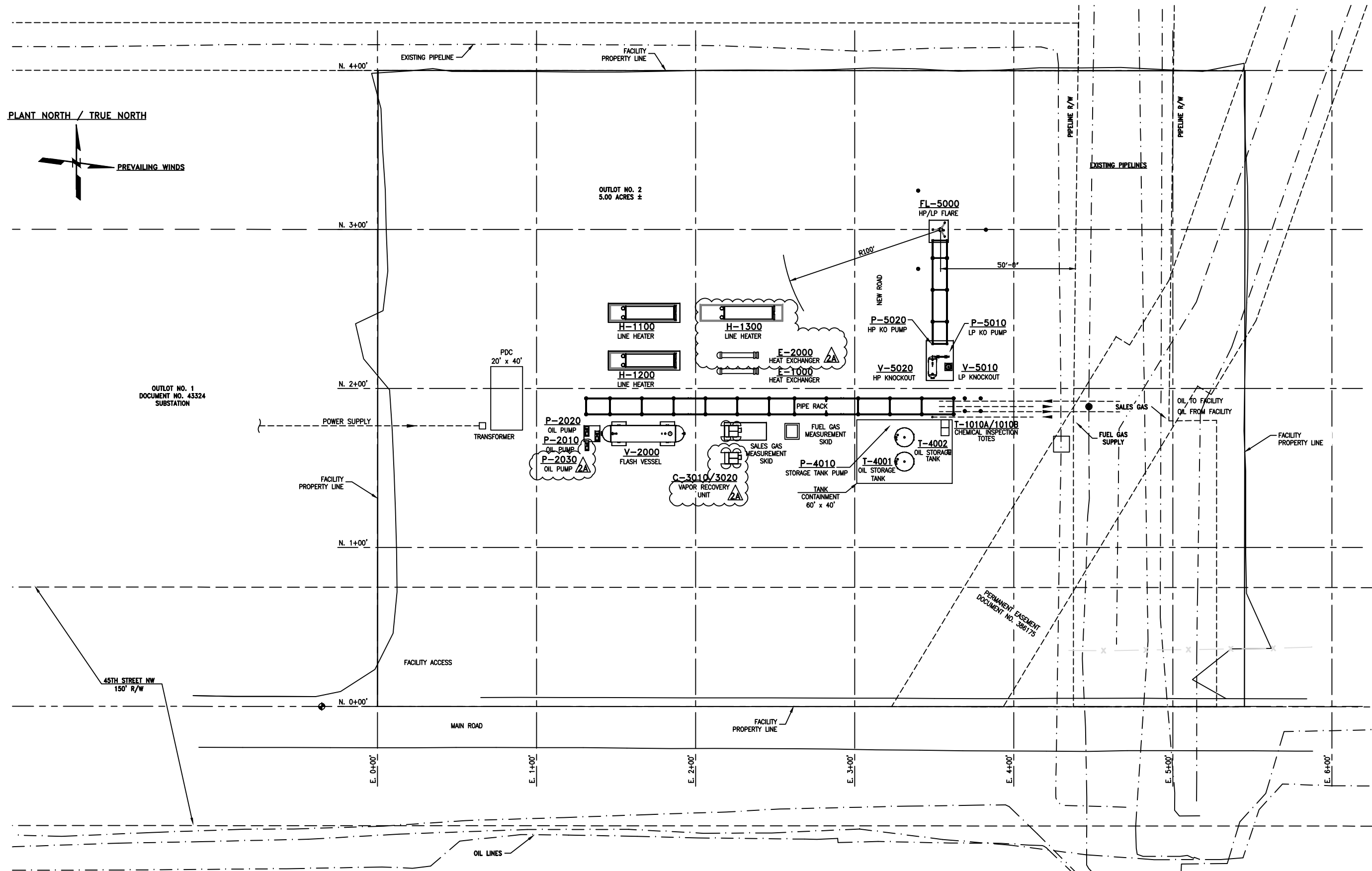


ROBINSON LAKE OIL STABILIZATION  
 PROCESS FLOW SKETCH  
 65,000 BPD CASE

PROJECT NUMBER	DRAWING NUMBER	SCALE	REVISION
3820296	WP-RL-SK-65BPD	NONE	A

I:\Projects\3820296\0001190\_CAD Models and Sheets\12\_D\_Process\FD\WP-RL-SK-65BPD.dwg, 9/27/2019 12:54:14 PM, DWG To PDF.pc3

PLANT NORTH / TRUE NORTH



DRAWING NO.	TITLE
	REFERENCE DRAWINGS

REV	DATE	DESCRIPTION	DRWN	CHKD	APVD
2A	11/06/19	ISSUED FOR REVIEW	MAA	PDR	PDR
1	07/18/19	AS-BUILT	DMZ	MW	PR
0	11/10/17	REVISED PER REDLINES FROM PHIL ARCHER	JDG	PA	PA

**GENERAL ARRANGEMENT  
RL OIL CONDITIONING  
FACILITY**

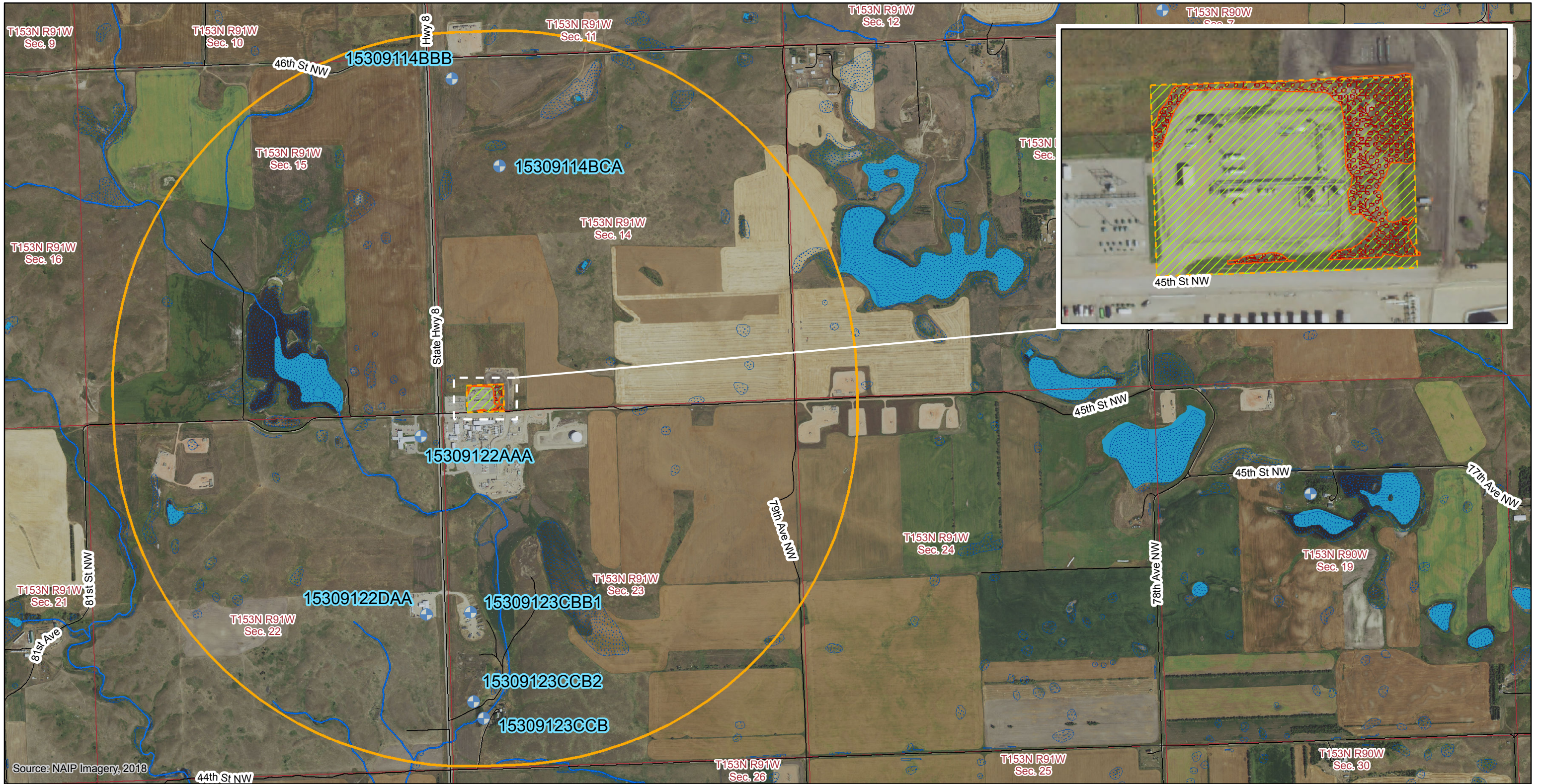
WHITING PETROLEUM  
ROBINSON LAKE  
OIL CONDITIONING FACILITY  
MOUNTRAIL COUNTY, ND

DESIGNED BY: S. STANFIELD	SCALE: 1"=30'-0"
CREATED BY: S. STANFIELD	CREATION DATE: 01/19/2016
PROJECT ENGINEER/MANAGER: J. BORTZ	PROJECT NUMBER: 10-150354
DRAWING NUMBER: RLOC-GA-1000	REVISION: 2A

## **Appendix B**

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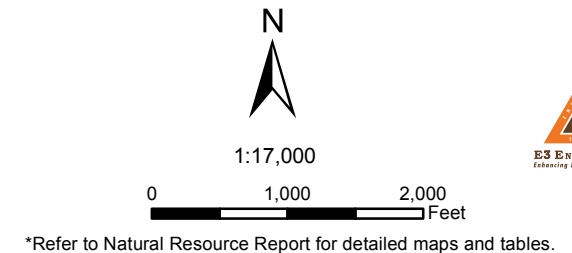
### Project Maps



Source: NAIP Imagery, 2018



- |                 |                |                               |
|-----------------|----------------|-------------------------------|
| Project Area    | NWI Wetland    | Noxious Weeds: Canada Thistle |
| Survey Area     | NHD Waterbody  | Woody Vegetation              |
| One Mile Buffer | NHD Flowline   |                               |
| Road            | Water Well     |                               |
| Section         | Abandoned Mine |                               |



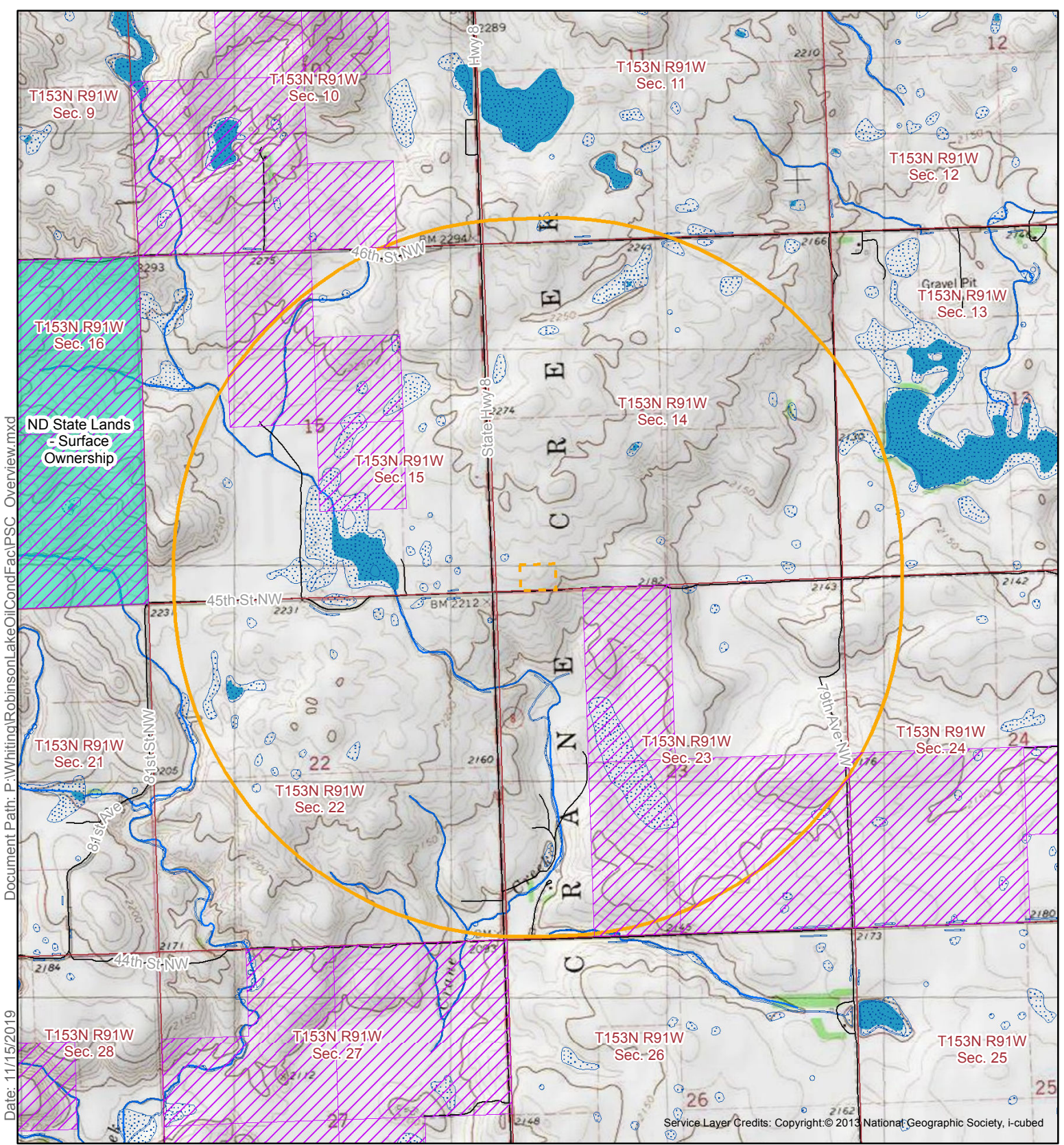
**Whiting Oil & Gas Corporation**

Robinson Lake  
Oil Conditioning Facility

Aerial Map

Mountrail County, ND





Document Path: P:\Whiting\RobinsonLakeOilCondFac\PSC\_Overview.mxd  
 Date: 11/15/2019

Service Layer Credits: Copyright © 2013 National Geographic Society, I-cubed



Author: tschreiner

Project Area	NWI Wetland	<b>Land Ownership</b>
One Mile Buffer	NHD Waterbody	Federal
Landslide Deposits	NHD Flowline	State
Mineral Trust Lands	Section	
Road		

1:24,000

0 1,000 2,000 Feet

\*Refer to Natural Resource Report for detailed maps and tables.



**Whiting Oil & Gas Corporation**  
 Robinson Lake  
 Oil Conditioning Facility  
  
 Overview Map  
  
 Mountrail County, ND

## **Appendix C**

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### Agency Consultations

Agency	Mailing Date	Date of Delivery	Agency Response Rcvd.	Comments
U.S.Fish and Wildlife Service North Dakota Field Office Attn: Scott Larson	10/15/2019	10/21/2019	11/7/2019	Letter response received stating that the Project as planned does not involve any federally listed threatened or endangered species or their habitats.
USACE-Regulatory Office State Program Manager Attn: Patricia McQueary	10/15/2019	10/22/2019	10/28/2019	Letter response received; no concerns or permitting requirements identified.
U.S. Department of Agriculture Natural Resources Conservation Service-Bismarck State Office Attn: Wade D. Bott, State Soil Scientist	10/15/2019	10/18/2019	10/24/2019	Letter response received, no concerns identified as no impacts to wetlands will occur.
USDA Farm Service Agency North Dakota Farm Service Agency Brad Thykeson, State Executive Director	10/15/2019	10/17/2019	Pending	
U.S. Department of Defense- Cable Affairs Attn: Cy Munos, Chief	10/15/2019	10/18/2019	10/22/2019	Email received from Mr. Munos stating that the Minot AFG has no assets near the project area.
North Dakota Game and Fish Department Conservation & Communication Division Attn: Greg Link, Chief	10/15/2019	10/18/2019	Pending	
North Dakota Department of Parks and Recreation Attn: Kathy Duttenhefner	10/15/2019	10/18/2019	Pending	

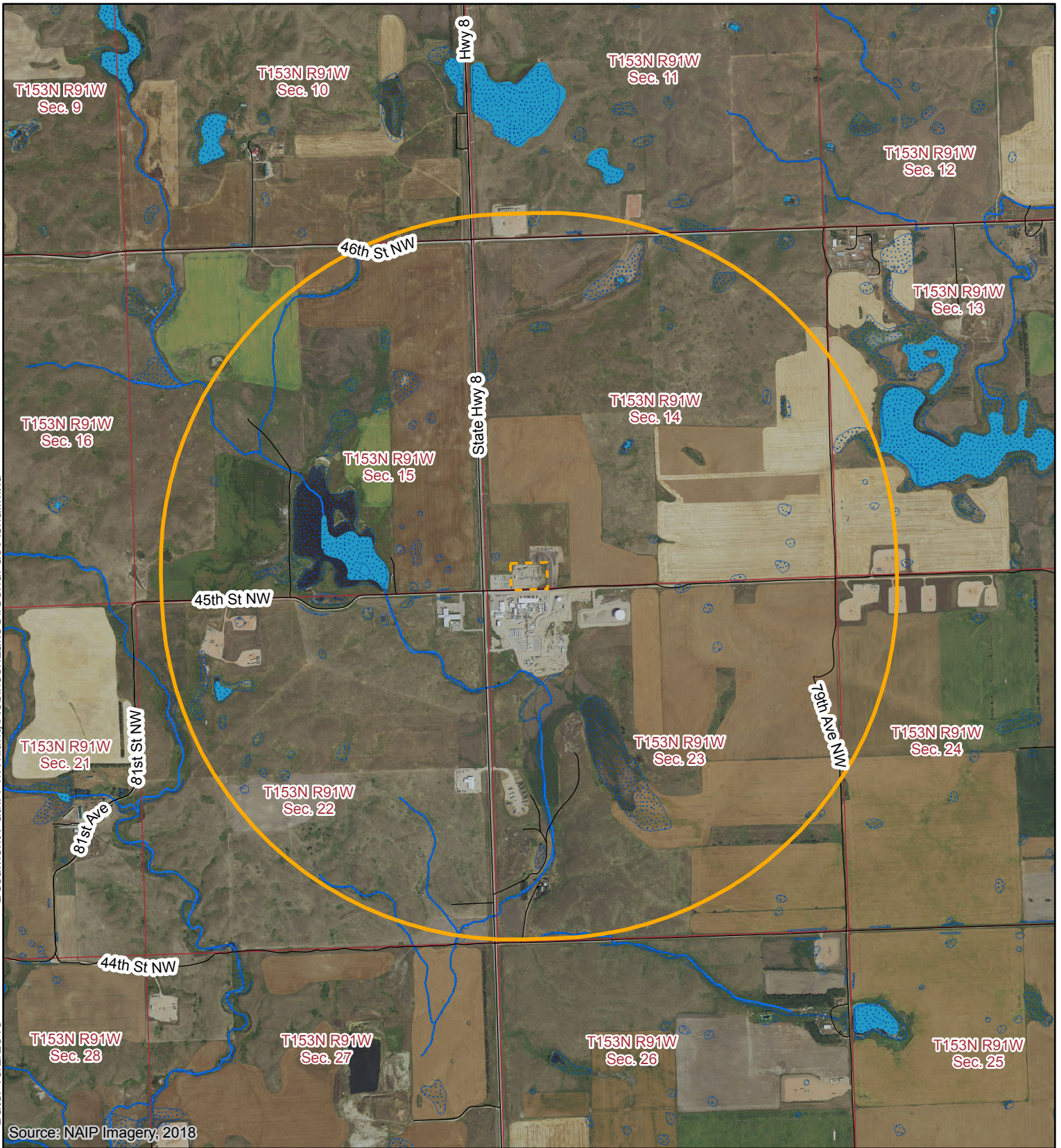
Agency	Mailing Date	Date of Delivery	Agency Response Rcvd.	Comments
North Dakota State Historic Preservation Office Attn: Susan Quinnell, Review and Compliance Coordinator	10/15/2019	10/17/2019	10/23/2019	Concurrence of “No Historic Properties Affected” letter received.
North Dakota Geological Survey Attn: Fred Anderson, Geologist	10/15/2019	10/18/2019	10/21/2019	A letter response was provided documenting that there are no landslide areas or areas of concern related to slope stability are noted near or at the project location. Additionally no earthquakes have been reported or recorded in the area and no economically mineable coal deposits have been mapped.
North Dakota Department of Health Environmental Health Section Attn: L. David Glatt, PE, Chief	10/15/2019	10/18/2019	11/01/2019	A letter response was received stating that the department believes the impacts from the proposed construction will be minor and can be controlled by proper construction methods. The letter details seven comments from the Agency identifying regulatory programs and best management practices to minimize project impacts.
North Dakota State Water Commission Attn: John Paczkowski	10/15/2019	10/18/2019	11/13/2019	A letter response was received documenting that the Project will not affect floodplains. The letter also states that if surface water or ground water will be diverted for construction or operation a permit may be required. Finally it documents the agency’s request that if observation wells are encountered that the Water Appropriations Division be contacted.
North Dakota Department of Trust Lands-School Trust Attn: Kayla-Spangelo, Land Management Specialist	10/15/2019	10/18/2019	10/22/2019	Email response received stating that the North Dakota Department of Trust lands has no comments in regards to the consultation letter.
North Dakota Department of Trust Lands-Mineral Trust Attn: Allisen Nagel, RPL	10/15/2019	10/18/2019	10/21/2019	Email response received stating that the NDDTL does have several mineral tracts within the 1-mile

Agency	Mailing Date	Date of Delivery	Agency Response Rcvd.	Comments
				buffer; however none are located within the project area.
Western Area Water Supply Authority Attn: Mark Owan, Chair	10/15/2019	10/18/2019	Pending	
Mountrail County Planning & Zoning Department Code Enforcements Attn: Heidi Kory, Assistant Planner	10/15/2019	10/21/2019	11/6/2019	Email response received requesting contact information for the appropriate Whiting personnel who should be contacted to determine if a building permit is required.
Mountrail County Water Resources Board Attn: Eric Enerson, Chairman	10/15/2019	10/21/19	Pending	
Mountrail County Weed Control Board Attn: Jim Hennessy, Officer	10/15/2019	10/23/19	Pending	

# Consultation Maps

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Maps utilized for all Agency Consultations



Source: NAIP Imagery, 2018



Project Area	NWI Wetland
One Mile Buffer	NHD Waterbody
Road	NHD Flowline
Section	

1:24,000

0      1,000      2,000  
Feet

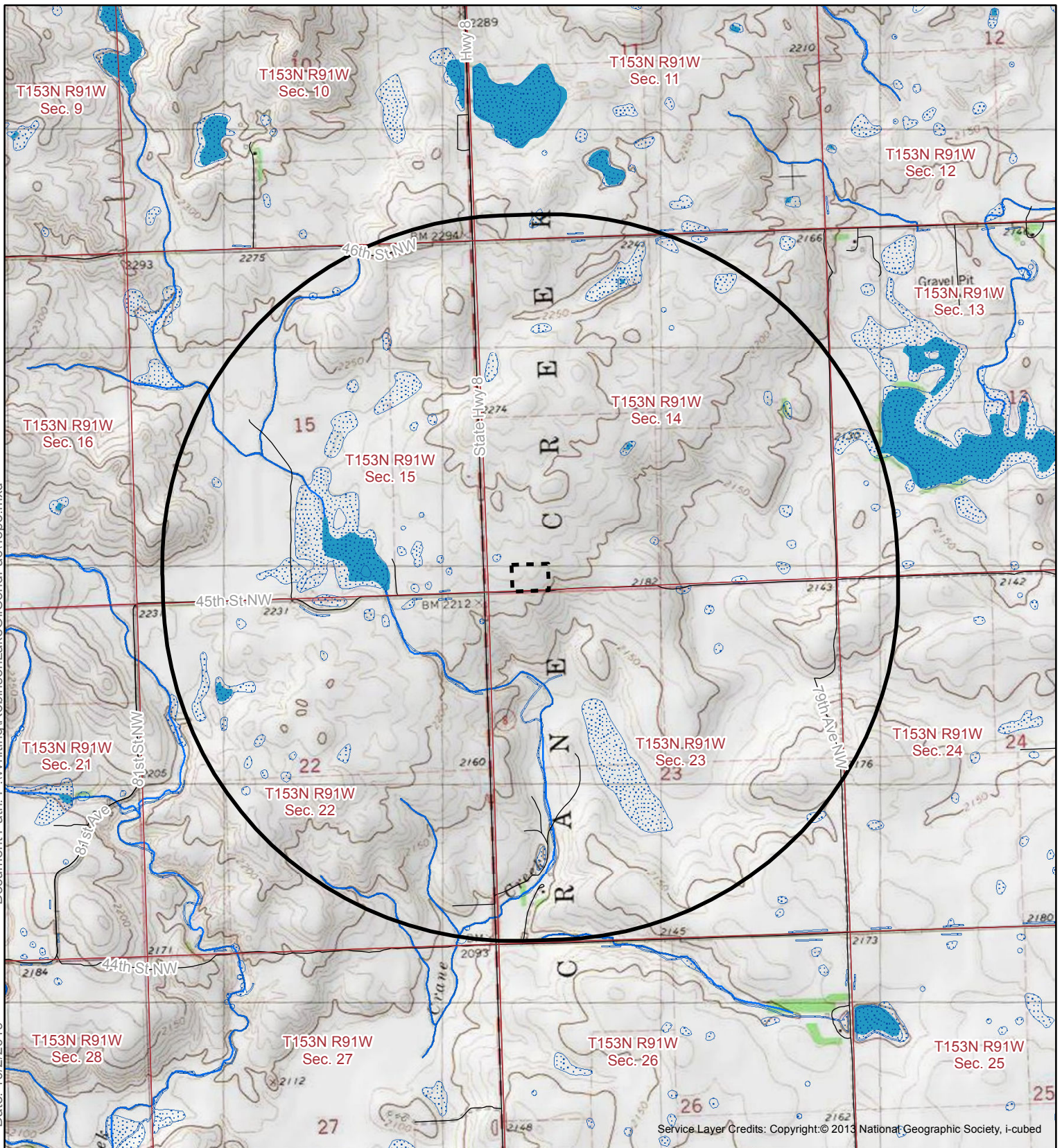
\*Refer to Natural Resource Report for detailed maps and tables.



**Whiting Oil & Gas Corporation**  
 Robinson Lake Oil Conditioning Facility

Aerial Map

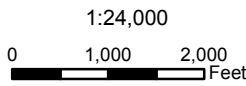
Mountrail County, ND



Service Layer Credits: Copyright © 2013 National Geographic Society, I-cubed



- Project Area
- One Mile Buffer
- Section
- Road
- NWI Wetland
- NHD Waterbody
- NHD Flowline



\*Refer to Natural Resource Report for detailed maps and tables.



**Whiting Oil & Gas Corporation**  
 Robinson Lake  
 Oil Conditioning Facility

Topo Map

Mountrail County, ND

U.S. Fish and Wildlife Service  
Consultation



# United States Department of the Interior



FISH AND WILDLIFE SERVICE  
North Dakota Ecological Services Field Office  
3425 Miriam Avenue  
Bismarck, North Dakota 58501

IN REPLY REFER TO:  
06E14000-2020-CPA-0026  
Whiting Robinson Lake

November 7, 2019

Mr. William F. McCarthy  
E3 Environmental, LLC.  
871 Jefferson Avenue  
St. Paul, Minnesota 55102

Dear Mr. McCarthy:

This is response to your letter of October 15, 2019, requesting comments from the Service on the Whiting Oil & Gas Corporation Robinson Lake Oil Conditioning Facility Expansion (Project) in Mountrail County, North Dakota submitted by E3 Environmental of St. Paul, Minnesota. The proposed project would include expansion of the existing oil conditioning facility and additional equipment within the existing overall site footprint. The Project would be located in the SW1/4 of the SW1/4 of Section 14, Township 153N, Range 91W in Mountrail County, North Dakota.

In accordance with section 7(c) of the Endangered Species Act, as amended, 16 USC 1531 et seq., we have determined that the project, as currently planned, does not involve any federally listed threatened or endangered species or their habitats. If changes are made in the project plans or operating criteria, or if additional information becomes available, we must be informed so that the above determinations can be reconsidered.

The Service appreciates the opportunity to comment on this project proposal. If you have any questions on these comments, please contact Jerry Reinisch of this office at (701) 333-0267 or me at (701) 355-8512.

Sincerely,

Drew Becker  
Deputy Field Supervisor  
North and South Dakota Field Offices

cc: Greg Link, Division Chief, North Dakota Game and Fish Department



October 15, 2019

Scott Larson  
U.S. Fish and Wildlife Service  
North Dakota Ecological Services-Field Office  
3425 Miriam Ave.  
Bismarck, ND 58501-7926

RE: Whiting Oil and Gas Corporation:  
Robinson Lake Oil Conditioning Facility Expansion Project  
Project Notification Letter and Review Request

Mr. Larson,

Whiting Oil and Gas Corporation (Whiting), is planning the Robinson Lake Oil Conditioning Facility Expansion Project (Project). The Project may result in the expansion of the existing oil conditioning facility to include additional equipment within the existing overall site footprint. The Project will be located within Mountrail County North Dakota in the southwest quarter of the southwest quarter of Section 14, Township 153N and Range 91W. The planned operating conditions of the Facility will exceed the North Dakota Public Service Commission's (Commission's) siting threshold. As a result, the Project may fall under the Commission's jurisdiction. Expansion activities are scheduled to begin as early as March of 2020 with Facility commissioning potentially as early as July 2020. The Project site and a 1-mile wide corridor (Study Area) are depicted on the attached maps.

The purpose of this request is to provide the U.S. Fish and Wildlife Service (USFWS) with notification of the proposed Project and to share Whiting's analysis of the environmental topics relevant to the Commission's siting requirements. The siting process allows agencies to participate in the regulatory process should you choose to comment on the Project or the analysis contained herein.

On October 15, 2019 E3 conducted a web-based consultation using USFWS's IPaC system. This analysis is based upon results of the project specific query of the IPaC system.

**Federally Listed Species Analysis:**

The results of the search of the USFWS's IPaC system on October 15, 2019 found the following:

- Northern long-eared bat (*Myotis septentrionalis*) – threatened
- Least tern (*Sternula antillarum*) – endangered
- Piping plover (*Charadrius melodus*) – threatened
- Red knot (*Calidris canutus rufa*) –threatened
- Whooping crane (*Grus americana*) – endangered
- Pallid sturgeon (*Scaphirhynchus albus*) – endangered
- Dakota skipper (*Hesperia dacotae*) –threatened

**Northern long-eared bat:**

The northern long-eared bat (NLEB) roosts underneath bark, in cavities, or in crevices of both live and dead trees. Populations have also been found in cool environments such as caves and

mines, and prefer to spend winter hibernating in locations with high humidity and no air currents. Breeding occurs in late summer or early fall in maternity colonies where females give birth around the same time, which may occur anywhere from late May to late July. The Final 4(d) rule exempts incidental take of the NLEB from all activities occurring in areas that have not been affected by white-nose syndrome. The Study Area occurs outside of the USFWS white-nose syndrome buffer zone; as such, there are no restrictions for Project activities. The project will not result in the clearing of trees suitable for NLEB roosting. On this basis, we conclude that the Project will have **no effect** on the NLEB.

#### Least Tern

The interior populations of the Least Tern have historically been associated with large river systems such as the Missouri River and Lake Sakakawea which is located approximately 7 miles to the south, for breeding and migratory habitats. Breeding birds are known to congregate in colonies, utilizing sandbar habitat common to larger rivers. The Least Tern is found in North Dakota during the late spring and summer breeding season (mid-May through late August, with the peak of the nesting season occurring from mid-June to mid-July). Desktop analysis supported with field studies have concluded that no suitable habitat is present within the Project area. On this basis we conclude that the Project will have **no effect** on the Least Tern.

#### Piping plover

The Piping plover is associated with shorelines along small alkaline lakes, large reservoir beaches, and river islands and adjacent sand pits. Breeding birds select wide beaches with highly clumped vegetation covering less than 25 percent of the area. Breeding season in North Dakota occurs mid-April through August. The Missouri River and Lake Sakakawea, approximately 7 miles south of the site at its nearest point, are the closest designated critical habitats for the piping plover. Desktop analysis supported with field studies have concluded that no suitable habitat is present within the Project area. On this basis we conclude that the Project will have **no effect** on the piping plover.

#### Red knot

The red knot migrates between breeding grounds in Canada and wintering grounds in South America. A significant factor threatening the red knot is destruction and modification of its habitat due to beach erosion and shoreline protection and stabilization projects. Migratory behavior and habitat requirements of this species are poorly understood particularly for those populations utilizing the midcontinent flyways. Inland stopovers include the Mississippi Valley, Great Lakes, and Great Plains. Desktop analysis supported with field studies have concluded that no suitable habitat is present within the Project area; on this basis we conclude that the Project will have **no effect** on the red knot.

#### Whooping crane

The whooping crane is a large bodied marsh species that breeds primarily in Canada and winters in the Gulf of Mexico. This species has been closely studied and monitored in recent years due to its limited population. North Dakota is located within the migratory route for the species, providing roosting and feeding opportunities during migration. This species prefers larger wetland complexes for roosting habitat, typically using adjacent uplands for foraging opportunities.

Precautionary measures will be implemented if whooping cranes are sighted in or near the Project area. Whiting will voluntarily suspend all heavy equipment operation activities and notify the USFWS should a whooping crane be spotted within 0.5 mile of the Project area. Heavy equipment activities will resume upon the departure of the individual(s). The Project under consideration is an expansion of an existing facility and as such would not result in a loss of crane habitat. Construction activities would likely serve as a deterrent and once constructed the proposed facility would present a fairly prominent feature to be avoided relative to its surrounding landscape. Provided the mitigation measures are fully implemented, we concluded that the Project will have **no effect** on the whooping crane.

#### Pallid Sturgeon

The pallid sturgeon's preferred habitat includes the benthic environment associated with swift waters of large turbid, free-flowing rivers with braided channels, dynamic flow patterns, periodic flooding of terrestrial habitats, and requiring extensive micro habitat diversity. The species inhabits the Missouri and Mississippi Rivers from Montana to Louisiana. In North Dakota, reaches of the Missouri River have been cited as providing suitable habitat for the pallid sturgeon. However, there is no suitable sturgeon habitat in the Project area as the Missouri River/Lake Sakakawea is approximately 7 miles south of the project area; as such, impacts to the pallid sturgeon are not anticipated. Because of the lack of suitable habitat within the Project area coupled with the distance between the Project and suitable habitat we conclude that the Project will have **no effect** on the pallid sturgeon.

#### Dakota skipper

Dakota skippers require untilled, high-quality prairie. Habitat preferred by the skipper is wet-mesic prairie with little topographic relief on near-shore glacial lake deposits and in rolling native-prairie terrain over gravelly glacial moraine deposits. Larvae feed on grasses, favoring little bluestem (*Schizachyrium scoparium*). Adults commonly feed on nectar of flowering native forbs such as harebell (*Campanula rotundifolia*), wood lily (*Lilium philadelphicum*), and purple coneflower (*Echinacea angustifolia*). This species is not known to disperse widely and has low mobility, dispersing a maximum of 0.6-mile. The species is threatened by conversion of native prairie to cultivated agriculture or shrublands, over-grazing, invasive species, gravel mining, and inbreeding. Desktop analysis supported that no suitable habitat is present within the Project area; therefore, impacts to the Dakota skipper are not anticipated. Because this is an expansion of an existing facility and that there would be no suitable habitat impacted by the Project, we conclude that the Project will have **no effect** on the Dakota skipper.

#### **USFWS Managed Lands:**

Conservation programs such as Waterfowl Production Areas and wetland and grassland easements represent an important tool used by USFWS to identify and manage high quality wildlife habitat. A review of public records failed to identify any of these USFWS managed lands in the Project study area. Whiting requests that USFWS notify Whiting of any USFWS managed lands located within the proposed study area.

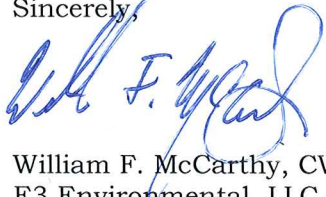
#### **Migratory Bird Consultation:**

USFWS administers various wildlife related mandates of national concern including the Migratory Bird Treaty Act (MBTA). Whiting understands that unlike the Endangered Species Act, the MBTA has no provisions for the allowance of a take and therefore compliance may best be achieved by avoiding or minimizing the potential to interact with migratory species during the

active breeding season. Whiting also understands that in North Dakota, the breeding season is typically defined as occurring annually from February 1 through July 15. The Project is an expansion of an existing facility and the proposed Project would not impact suitable breeding habitat for migratory birds.

E3 Environmental (E3) has been retained by Whiting to provide environmental consulting support for this Project. Should you have any questions or require additional information, please contact me at 651-282-0650 or [wmccarthy@go2e3.com](mailto:wmccarthy@go2e3.com). In closing, upon your review of this Project, should you choose to comment, a timely response is respectfully requested.

Sincerely,



William F. McCarthy, CWB  
E3 Environmental, LLC

Attachment: Project Maps

cc: Whiting Project Files

U.S. Army Corps of Engineers  
Consultation



**DEPARTMENT OF THE ARMY**  
CORPS OF ENGINEERS, OMAHA DISTRICT  
NORTH DAKOTA REGULATORY OFFICE  
3319 UNIVERSITY DRIVE  
BISMARCK, NORTH DAKOTA 58504-7565

October 28, 2019

NWO-2019-01834-BIS

E3 Environmental LLC  
Attn: Ms. Katie Schmidt  
871 Jefferson Avenue  
St. Paul, Minnesota 55102

Dear Ms. Schmidt:

The U.S. Army Corps of Engineers (Corps) has reviewed the information you provided for the Whiting Oil and Gas Corporation, Robinson Lake Oil Conditioning Facility Expansion project. This information was received by our office on October 22, 2019. The project is located in the SW quarter of Section 14, Township 153 North, Range 91 West, Mountrail County, North Dakota.

Specifically, the proposed work involves the expansion of the existing oil conditioning facility to include additional equipment installation within the existing overall site footprint.

The Corps is responsible for administering federal laws that regulate certain activities in the waters of the United States (WOUS). The authority applicable to this responsibility is Section 404 of the Clean Water Act (CWA) (33 U.S.C. 1344), which prohibits the discharge of dredged or fill material into waters of the United States without authorization in the form of a Department of the Army (DA) permit.

Based on the information provided, the project will not involve a regulated discharge of dredged or fill material under Section 404 of CWA. Therefore, the activity is not subject to DA regulatory authorities and no permit pursuant to Section 404 is required from the Corps. However, a DA permit authorization may be required should changes be made in your project that result in a regulated discharge of dredged or fill material into waters of the U.S.

We would appreciate your feedback on this permit action including your interaction with our staff. At your earliest convenience, please tell us how we are doing by completing the Corps' Regulatory Program national customer service survey found on our website at [http://corpsmapu.usace.army.mil/cm\\_apex/f?p=regulatory\\_survey](http://corpsmapu.usace.army.mil/cm_apex/f?p=regulatory_survey).

Please refer to identification number NWO-2019-01834-BIS in any correspondence concerning this project. If you have any questions, please contact Jeremy Nygard at U.S. Army Corps of Engineers, North Dakota Regulatory Office, 3319 University Drive, Bismarck, North Dakota 58504-7565, by email at [Jeremy.S.Nygard@usace.army.mil](mailto:Jeremy.S.Nygard@usace.army.mil), or telephone at (701) 255-0015 X 2006.

Sincerely,

MCQUEARY.PAT  
RICIA.L.1369971  
936

Digitally signed by  
MCQUEARY.PATRICIA.L.136  
9971936  
Date: 2019.10.28 13:12:14  
-05'00'

Patricia L. McQueary  
State Program Manager  
North Dakota



October 15, 2019

Patricia McQueary  
State Program Manager  
U.S. Army Corps of Engineers-Omaha District  
3319 University Street  
Bismarck, ND 58504

RE: Whiting Oil and Gas Corporation:  
Robinson Lake Oil Conditioning Facility Expansion Project  
Project Notification Letter and Review Request

Ms. McQueary,

Whiting Oil and Gas Corporation (Whiting), is planning the Robinson Lake Oil Conditioning Facility Expansion Project (Project). The Project may result in the expansion of the existing oil conditioning facility to include additional equipment within the existing overall site footprint. The Project will be located within Mountrail County North Dakota in the southwest quarter of the southwest quarter of Section 14, Township 153N and Range 91W. The planned operating conditions of the Facility will exceed the North Dakota Public Service Commission's (Commission's) siting threshold. As a result, the Project may fall under the Commission's jurisdiction. Expansion activities are scheduled to begin as early as March of 2020 with Facility commissioning potentially as early as July 2020. The Project site and a 1-mile wide corridor (Study Area) are depicted on the attached maps.

The purpose of this letter is to provide notification of the proposed Project; and advise you that your agency has the opportunity to participate in the regulatory process should you choose to comment on the Project.

E3 Environmental has been retained by Whiting to provide environmental consulting support for this Project. Should you have any questions or require additional information, please contact me at 651-282-0652 or [kschmidt@go2e3.com](mailto:kschmidt@go2e3.com). In closing, upon your review of this Project, should you choose to comment, a timely response is respectfully requested.

Sincerely,

A handwritten signature in blue ink that reads 'Katie Schmidt'.

Katie Schmidt, Senior Consultant  
E3 Environmental, LLC

Attachment: Project Maps

cc: Whiting Project Files

USDA-Bismarck State Office  

---

Consultation



Natural Resources  
Conservation Service

Bismarck State Office  
PO Box 1458  
Bismarck, ND  
58502-1458

Voice 701.530.2000  
Fax 855-813-7556

October 24, 2019

E3 Environmental  
Attn: Katie Schmidt, Senior Consultant  
871 Jefferson Ave.  
St. Paul, MN 55102

RE: Robinson Lake Oil Conditioning Facility Expansion Project

Dear Ms. Schmidt:

The Natural Resources Conservation Service (NRCS) has reviewed your letter dated October 15, 2019, regarding the Robinson Lake Oil Conditioning Facility Expansion Project.

Farmland Protection Policy Act

NRCS has a major responsibility with the FPPA in documenting conversion of farmland (i.e., prime, statewide importance and local importance) to non-agriculture use. It appears your proposed project is not supported by federal funding; therefore, FPPA does not apply and no further action is needed.

Wetlands

The Wetland Conservation Provisions of the 1985 Food Security Act, as amended, provide that if a USDA participant converts a wetland for the purpose, or to have the effect of making agricultural production possible, loss of USDA benefits could occur. NRCS has developed the following guidelines to help avoid impacts to wetlands and possible loss of USDA benefits for producers. If these guidelines are followed, the impacts to the wetland will be considered minimal allowing USDA participants to continue to receive USDA benefits. Following are the requirements:

- ▶ Disturbance to the wetland must be temporary.
- ▶ No drainage of wetland is allowed (temporary or permanent).
- ▶ Mechanized landscaping necessary for installation is kept to a minimum and preconstruction contours are maintained.
- ▶ Temporary side cast material must be placed in such a manner not to be dispersed in the wetland.
- ▶ All trenches in a wetland must be backfilled to the original elevation.

(More)

*Helping People Help the Land*

An Equal Opportunity Provider, Employer, and Lender

Ms. Schmidt  
Page 2

NRCS recommends that impacts to wetland be avoided.

If you have additional questions pertaining to FPPA, please contact me at (701) 530-2021 or by email at [wade.bott@usda.gov](mailto:wade.bott@usda.gov). Thank you.

Sincerely,

A handwritten signature in black ink, appearing to read 'Wade D. Bott', written in a cursive style.

WADE D. BOTT  
State Soil Scientist



October 15, 2019

Wade D. Bott  
State Soil Scientist  
USDA-Natural Resources Conservation Service  
Bismarck State Office  
PO Box 1458  
Bismarck, ND 58502-1458

RE: Whiting Oil and Gas Corporation:  
Robinson Lake Oil Conditioning Facility Expansion Project  
Project Notification Letter and Review Request

Mr. Bott,

Whiting Oil and Gas Corporation (Whiting), is planning the Robinson Lake Oil Conditioning Facility Expansion Project (Project). The Project may result in the expansion of the existing oil conditioning facility to include additional equipment within the existing overall site footprint. The Project will be located within Mountrail County North Dakota in the southwest quarter of the southwest quarter of Section 14, Township 153N and Range 91W. The planned operating conditions of the Facility will exceed the North Dakota Public Service Commission's (Commission's) siting threshold. As a result, the Project may fall under the Commission's jurisdiction. Expansion activities are scheduled to begin as early as March of 2020 with Facility commissioning potentially as early as July 2020. The Project site and a 1-mile wide corridor (Study Area) are depicted on the attached maps.

The purpose of this letter is to provide notification of the proposed Project; and advise you that your agency has the opportunity to participate in the regulatory process should you choose to comment on the Project.

E3 Environmental has been retained by Whiting to provide environmental consulting support for this Project. Should you have any questions or require additional information, please contact me at 651-282-0652 or [kschmidt@go2e3.com](mailto:kschmidt@go2e3.com). In closing, upon your review of this Project, should you choose to comment, a timely response is respectfully requested.

Sincerely,

Katie Schmidt, Senior Consultant  
E3 Environmental, LLC

Attachment: Project Maps

cc: Whiting Project Files

USDA-Farm Service Agency  

---

Consultation



October 15, 2019

Brad Thykeson  
State Executive Director  
USDA-North Dakota Farm Service Agency  
1025 28<sup>th</sup> St. South  
Fargo, ND 58103

RE: Whiting Oil and Gas Corporation:  
Robinson Lake Oil Conditioning Facility Expansion Project  
Project Notification Letter and Review Request

Mr. Thykeson,

Whiting Oil and Gas Corporation (Whiting), is planning the Robinson Lake Oil Conditioning Facility Expansion Project (Project). The Project may result in the expansion of the existing oil conditioning facility to include additional equipment within the existing overall site footprint. The Project will be located within Mountrail County North Dakota in the southwest quarter of the southwest quarter of Section 14, Township 153N and Range 91W. The planned operating conditions of the Facility will exceed the North Dakota Public Service Commission's (Commission's) siting threshold. As a result, the Project may fall under the Commission's jurisdiction. Expansion activities are scheduled to begin as early as March of 2020 with Facility commissioning potentially as early as July 2020. The Project site and a 1-mile wide corridor (Study Area) are depicted on the attached maps.

The purpose of this letter is to provide notification of the proposed Project; and advise you that your agency has the opportunity to participate in the regulatory process should you choose to comment on the Project.

E3 Environmental has been retained by Whiting to provide environmental consulting support for this Project. Should you have any questions or require additional information, please contact me at 651-282-0652 or [kschmidt@go2e3.com](mailto:kschmidt@go2e3.com). In closing, upon your review of this Project, should you choose to comment, a timely response is respectfully requested.

Sincerely,

A handwritten signature in blue ink that reads "Katie Schmidt".

Katie Schmidt, Senior Consultant  
E3 Environmental, LLC

Attachment: Project Maps

cc: Whiting Project Files

US DOD Cable Affairs  

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Consultation

## Katie Schmidt

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**From:** MUNOS, CY I GS-11 USAF AFGSC 91 MMXS/MMXSFK <cy.munos@us.af.mil>  
**Sent:** Tuesday, October 22, 2019 3:33 PM  
**To:** Katie Schmidt  
**Subject:** Whiting Oil and Gas

**Follow Up Flag:** Follow up  
**Flag Status:** Flagged

Katie,

I received your Project Notification Letter for the Robinson Lake Oil Conditioning Facility Expansion Project. The Minot AFB has no assets near the project area.

Thanks,

Cy Munos  
Chief, Cable Affairs  
91 MMXS/MMXSFK  
Minot AFB, ND  
DSN: 453-6053  
COMM.: 701-723-6053  
CELL: 701-720-8274



October 15, 2019

Cy Munos, Chief  
U.S. Department of Defense-Cable Affairs  
Minot Air Force Base  
91 MMXS/MMXSFK  
DSN: 453-6053  
Minot, ND 58705

RE: Whiting Oil and Gas Corporation:  
Robinson Lake Oil Conditioning Facility Expansion Project  
Project Notification Letter and Review Request

Mr. Munos,

Whiting Oil and Gas Corporation (Whiting), is planning the Robinson Lake Oil Conditioning Facility Expansion Project (Project). The Project may result in the expansion of the existing oil conditioning facility to include additional equipment within the existing overall site footprint. The Project will be located within Mountrail County North Dakota in the southwest quarter of the southwest quarter of Section 14, Township 153N and Range 91W. The planned operating conditions of the Facility will exceed the North Dakota Public Service Commission's (Commission's) siting threshold. As a result, the Project may fall under the Commission's jurisdiction. Expansion activities are scheduled to begin as early as March of 2020 with Facility commissioning potentially as early as July 2020. The Project site and a 1-mile wide corridor (Study Area) are depicted on the attached maps.

The purpose of this letter is to provide notification of the proposed Project; and to identify the location of intercontinental ballistic missiles and launch facilities within the Project Study Area, should they occur.

E3 Environmental has been retained by Whiting to provide environmental consulting support for this Project. Should you have any questions or require additional information, please contact me at 651-282-0652 or [kschmidt@go2e3.com](mailto:kschmidt@go2e3.com). In closing, upon your review of this Project, should you choose to comment, a timely response is respectfully requested.

Sincerely,

Katie Schmidt, Senior Consultant  
E3 Environmental, LLC

Attachment: Project Maps

cc: Whiting Project Files

ND Game and Fish  
Consultation

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October 15, 2019

Greg Link, Chief  
North Dakota Game and Fish Department  
Conservation & Communication Division  
100 North Bismarck Expressway  
Bismarck, ND 58501-5095

RE: Whiting Oil and Gas Corporation:  
Robinson Lake Oil Conditioning Facility Expansion Project  
Project Notification Letter and Review Request

Mr. Link,

Whiting Oil and Gas Corporation (Whiting), is planning the Robinson Lake Oil Conditioning Facility Expansion Project (Project). The Project may result in the expansion of the existing oil conditioning facility to include additional equipment within the existing overall site footprint. The Project will be located within Mountrail County North Dakota in the southwest quarter of the southwest quarter of Section 14, Township 153N and Range 91W. The planned operating conditions of the Facility will exceed the North Dakota Public Service Commission's (Commission's) siting threshold. As a result, the Project may fall under the Commission's jurisdiction. Expansion activities are scheduled to begin as early as March of 2020 with Facility commissioning potentially as early as July 2020. The Project site and a 1-mile wide corridor (Study Area) are depicted on the attached maps.

The purpose of this letter is to provide notification of the proposed Project; and advise you that your agency has the opportunity to participate in the regulatory process should you choose to comment on the Project.

E3 Environmental has been retained by Whiting to provide environmental consulting support for this Project. Should you have any questions or require additional information, please contact me at 651-282-0652 or [kschmidt@go2e3.com](mailto:kschmidt@go2e3.com). In closing, upon your review of this Project, should you choose to comment, a timely response is respectfully requested.

Sincerely,

A handwritten signature in blue ink that reads "Katie Schmidt".

Katie Schmidt, Senior Consultant  
E3 Environmental, LLC

Attachment: Project Maps

cc: Whiting Project Files

ND Department of Parks and Recreation  

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Consultation



October 15, 2019

Kathy Duttenhefner  
North Dakota Dept. of Parks and Recreation  
1600 East Century Ave.  
Suite 3  
Bismarck, ND 58503-0649

RE: Whiting Oil and Gas Corporation:  
Robinson Lake Oil Conditioning Facility Expansion Project  
Project Notification Letter and Review Request

Ms. Duttenhefner,

Whiting Oil and Gas Corporation (Whiting), is planning the Robinson Lake Oil Conditioning Facility Expansion Project (Project). The Project may result in the expansion of the existing oil conditioning facility to include additional equipment within the existing overall site footprint. The Project will be located within Mountrail County North Dakota in the southwest quarter of the southwest quarter of Section 14, Township 153N and Range 91W. The planned operating conditions of the Facility will exceed the North Dakota Public Service Commission's (Commission's) siting threshold. As a result, the Project may fall under the Commission's jurisdiction. Expansion activities are scheduled to begin as early as March of 2020 with Facility commissioning potentially as early as July 2020. The Project site and a 1-mile wide corridor (Study Area) are depicted on the attached maps.

The purpose of this letter is to provide notification of the proposed Project; and advise you that your agency has the opportunity to participate in the regulatory process should you choose to comment on the Project.

E3 Environmental has been retained by Whiting to provide environmental consulting support for this Project. Should you have any questions or require additional information, please contact me at 651-282-0652 or [kschmidt@go2e3.com](mailto:kschmidt@go2e3.com). In closing, upon your review of this Project, should you choose to comment, a timely response is respectfully requested.

Sincerely,

A handwritten signature in blue ink that reads 'Katie Schmidt'.

Katie Schmidt, Senior Consultant  
E3 Environmental, LLC

Attachment: Project Maps

cc: Whiting Project Files

ND State Historic Preservation Office  

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Consultation



October 23, 2019

Mr. William McCarthy  
E3 Environmental LLC  
871 W. Jefferson Ave  
St. Paul, MN 55102

**ND SHPO Ref.: 20-5098 "Whiting Petroleum Corporation's Robinson Lake Oil Conditioning Project; A Class I and Class III Cultural Resource Inventory in Mountrail County, North Dakota" in portions of [T153N R91W Section 14]**

Dear Mr. McCarthy,

We reviewed ND SHPO Ref.: 20-5098 "Whiting Petroleum Corporation's Robinson Lake Oil Conditioning Project; A Class I and Class III Cultural Resource Inventory in Mountrail County, North Dakota" in portions of [T153N R91W Section 14] and find the report by Benjamin W. Schweer & Daniel Salas acceptable. We concur with a determination of "No Historic Properties Affected" for this project provided it takes place in the location and in the manner described in the documentation and provided all borrow comes from an approved source.

Thank you for the opportunity to review this project. Please include the ND SHPO Reference number listed above in further correspondence for this specific project. If you have any questions please contact Lisa Steckler, Historic Preservation Specialist at (701) 328-3577 or [lsteckler@nd.gov](mailto:lsteckler@nd.gov)

Sincerely,

for Claudia J. Berg  
State Historic Preservation Officer  
(North Dakota)

20-5098



October 15, 2019

Susan Quinnell  
Review and Compliance Coordinator  
ND State Historic Preservation Office  
State Historic Society of North Dakota  
North Dakota Heritage Center  
612 East Boulevard Avenue  
Bismarck, ND 58505-0830

**RE: Whiting Oil and Gas Corporation  
Robinson Lake Oil Conditioning Facility Expansion Project  
Class I and Class III Cultural Resource Inventory in Mountrail County, North Dakota**

Dear Ms. Quinnell,

E3 Environmental, LLC (E3) on behalf of Whiting Oil and Gas Corporation commissioned archaeological studies for the proposed Robinson Lake Oil Conditioning Facility Expansion Project (RLOC or Project). These studies were conducted to comply with North Dakota Public Service Commission siting requirements. All work was conducted on privately owned lands.

E3 contracted In Situ Archaeological Consulting, LLC (In Situ) to conduct the archaeological studies described herein and as detailed in the attached report. In summary, a Class I Literature Review was conducted by In Situ on August 7, 2019. The Class III Cultural Resource Inventory took place on September 3, 2019. The Project is comprised of an open area with an existing oil pad and an existing oil conditioning facility. The Project's area of potential effect (APE) or survey corridor consists of approximate 550 ft. (167.6 m) x 380 ft. (115.8 m). In total, the Project's APE encompasses approximately 4.8 acres in total.

No cultural resources were observed during this inventory of the proposed Project. In Situ recommends a finding of *No Historic Properties Affected*. Pending concurrence with these findings, then a recommendation of *No Further Work* is considered appropriate. Please find the enclosed Class I and Class III cultural resource inventory detailing survey and study findings.

Whiting – RLOC Project  
ND SHPO Consultation  
October 15, 2019



On behalf of the Project, the enclosed report is submitted for your review and consideration. Please contact me with any questions or comments, as needed.

Sincerely,



William McCarthy, CWB  
Project Manager  
E3 Environmental, LLC  
871 W Jefferson Ave  
St Paul, MN 55102  
Direct: (651) 282-0650  
[wmccarthy@go2e3.com](mailto:wmccarthy@go2e3.com)

Enclosure:

*Whiting Petroleum Corporation's Robinson Lake Oil Conditioning Project: A Class I and Class III Cultural Resource Inventory in Mountrail County, North Dakota.*

cc: Whiting project file  
In Situ project file

ND Geological Survey  

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Consultation



October 21, 2019

Katie Schmidt  
E3 Environmental, LLC  
871 Jefferson Avenue  
St. Paul, MN 55102

Re: Whiting Oil & Gas Corporation – Robinson Lake Oil Conditioning Facility Expansion

The North Dakota Geological Survey (NDGS) appreciates the notification and opportunity to review and provide comment on this proposed oil and gas infrastructure development project. The October 15, 2019 comment solicitation letter sent to our office was reviewed on October 21, 2019.

Available geologic mapping and drilling records suggest that the project area may be underlain by as much as 80 feet of glacial sediments of the Coleharbor Formation (clayey till and clay) which mantles sedimentary bedrock of the Sentinel Butte Formation. The Sentinel Butte Formation consists dominantly of interbedded sandstones, siltstones, and claystone. No landslide areas or areas of concern related to slope stability are noted near or at the project location. Additionally, no earthquakes have been reported or recorded in this area, which is considered to be seismically inactive, and no economically mineable coal deposits have been mapped.

Please feel free to contact me at (701) 328-8000 or via email at [fjanderson@nd.gov](mailto:fjanderson@nd.gov) at any time if there are any additional questions or comments.

Sincerely,

North Dakota Geological Survey:

A handwritten signature in blue ink that reads "Fred J. Anderson".

Fred J. Anderson  
Geologist

FJA\



October 15, 2019

Fred Anderson, Geologist  
North Dakota Geological Survey  
600 E. Boulevard, Dept. 405  
Bismarck, ND 58505

RE: Whiting Oil and Gas Corporation:  
Robinson Lake Oil Conditioning Facility Expansion Project  
Project Notification Letter and Review Request

Mr. Anderson,

Whiting Oil and Gas Corporation (Whiting), is planning the Robinson Lake Oil Conditioning Facility Expansion Project (Project). The Project may result in the expansion of the existing oil conditioning facility to include additional equipment within the existing overall site footprint. The Project will be located within Mountrail County North Dakota in the southwest quarter of the southwest quarter of Section 14, Township 153N and Range 91W. The planned operating conditions of the Facility will exceed the North Dakota Public Service Commission's (Commission's) siting threshold. As a result, the Project may fall under the Commission's jurisdiction. Expansion activities are scheduled to begin as early as March of 2020 with Facility commissioning potentially as early as July 2020. The Project site and a 1-mile wide corridor (Study Area) are depicted on the attached maps.

The purpose of this letter is to provide notification of the proposed Project; and advise you that your agency has the opportunity to participate in the regulatory process should you choose to comment on the Project.

E3 Environmental has been retained by Whiting to provide environmental consulting support for this Project. Should you have any questions or require additional information, please contact me at 651-282-0652 or [kschmidt@go2e3.com](mailto:kschmidt@go2e3.com). In closing, upon your review of this Project, should you choose to comment, a timely response is respectfully requested.

Sincerely,

Katie Schmidt, Senior Consultant  
E3 Environmental, LLC

Attachment: Project Maps

cc: Whiting Project Files

ND Department of Health  

---

Consultation

November 1, 2019

Katie Schmidt  
Senior Consultant  
E3 Environmental, LLC  
871 Jefferson Avenue  
St. Paul, MN 55102

Re: Whiting Oil and Gas Robinson Lake Oil Conditioning Expansion in Mountrail County

Dear Ms. Schmidt:

The North Dakota Department of Environmental Quality has reviewed the information concerning the above-referenced project received at the department on October 18, 2019, with respect to possible environmental impacts.

This department believes that environmental impacts from the proposed construction will be minor and can be controlled by proper construction methods. With respect to construction, we have the following comments:

1. Development of the production facilities and any access roads, well pads or pipelines should have a minimal effect on air quality provided measures are taken to minimize fugitive dust. However, operation of the wells has the potential to release air contaminants capable of causing or contributing to air pollution. We encourage the development and operation of the wells in a manner that is consistent with good air pollution control practices for minimizing emissions. Emission control requirements are specified in 40 CFR 49.140 through 49.147 and other applicable Federal regulations.

Any questions about air pollution control or permitting requirements should be addressed to the U.S. Environmental Protection Agency, Region 8. They can be reached at (303) 312-6312 or [r8eisc@epa.gov](mailto:r8eisc@epa.gov).

2. Care is to be taken during construction activity near any water of the state to minimize adverse effects on a water body. This includes minimal disturbance of stream beds and banks to prevent excess siltation, and the replacement and revegetation of any disturbed area as soon as possible after work has been completed. Caution must also be taken to prevent spills of oil and grease that may reach the receiving water from equipment maintenance, and/or the handling of fuels on the site. **Guidelines for minimizing degradation to waterways during construction are attached.**
3. Oil and gas projects disturbing one or more acres are required to obtain a permit to discharge storm water if runoff from the project will carry eroded material to a water of the state. A permit is not required for oil and gas projects if runoff from the project will not carry eroded material to a water of the state. A permit also is not required for routine construction activity that does not change the original line and grade, hydraulic capacity, or original purpose of the facility. Further information on the storm water permit may be obtained from the department's website or by calling the Division of Water Quality (701-328-5210). In addition, cities or counties may impose additional requirements and/or specific best management practices for construction affecting their storm drainage system.

Check with the local officials to be sure any local storm water management considerations are addressed.

4. The proposed construction project does not directly overlie a defined glacial drift aquifer; however, it is located within an active, non-community wellhead protection area. Care should be taken to avoid spills of any materials that may have an adverse effect on groundwater quality. All spills must be immediately reported to this department and appropriate remedial actions performed.
5. The proposed project appears to have the potential to be a source of emissions to the air capable of causing or contributing to air pollution and may be required to have an Air Pollution Control Permit to Construct/Operate as required by Chapter 33.1-15-14 of the North Dakota Air Pollution Control Rules. The applicant should contact the department's Air Pollution Control Program at 701-328-5188 prior to commencing construction.
6. All solid waste materials must be managed and transported in accordance with the state's solid and hazardous waste rules. Appropriate efforts to reduce, reuse and/or recycle waste materials are strongly encouraged. As appropriate, segregation of inert waste from non-inert waste can generally reduce the cost of waste management. Further information on waste management and recycling is available from the department's Division of Waste Management at (701) 328-5166.
7. Projects that involve construction of pipelines should select locations that minimize the potential for impacts to human health and the environment during and after construction by avoiding, when possible, source water protection areas and sensitive surface and groundwater environments. Additionally, when possible, pipeline routes should select areas with natural barriers to both surface and ground waters. Human health and the environment should be further protected by developing a spill response plan that emphasizes rapid deployment of prepositioned assets necessary to contain spills and subsequent cleanup. Proper surveillance and monitoring for early detection of leaks should be required.

These comments are based on the information provided about the project in the above-referenced submittal. The U.S. Army Corps of Engineers may require a water quality certification from this department for the project if the project is subject to their Section 404 permitting process. Any additional information which may be required by the U.S. Army Corps of Engineers under the process will be considered by this department in our determination regarding the issuance of such a certification.

The department owns no land in or adjacent to the proposed improvements, nor does it have any projects scheduled in the area. In addition, we believe the proposed activities are consistent with the State Implementation Plan for the Control of Air Pollution for the State of North Dakota.

If you have any questions regarding our comments, please feel free to contact this office.

Sincerely,



L. David Glatt, P.E., Director  
North Dakota Department of Environmental Quality

LDG:dlp  
Attach.

## Construction and Environmental Disturbance Requirements

The following are the minimum requirements of the North Dakota Department of Environmental Quality for projects that involve construction or environmental disturbance in or near waters of the State of North Dakota. They ensure that minimal environmental degradation occurs as a result of construction or related work which has the potential to affect waters of the state. All projects must be constructed to minimize the loss of soil, vegetative cover, and pollutants (chemical or biological) from a site.

### **Soils**

Prevent the erosion of soil and sediment loss using erosion and sediment controls. Fragile and sensitive areas such as wetlands, riparian zones, delicate flora, and land resources must be protected against compaction, vegetation loss, and unnecessary damage.

### **Surface Waters**

All construction must be managed to minimize impacts to aquatic systems. Follow safe storage and handling procedures to prevent the contamination of water from fuel spills, lubricants, and chemicals. Stream bank and stream bed disturbances must be controlled to minimize silt movement, nutrient upsurges, plant dislocations, and any physical, chemical, or biological disruption. The use of pesticides or herbicides in or near surface waters is allowed under the department's pesticide application permit with notification to the department.

### **Fill Material**

Any fill material placed below the ordinary high-water mark must be free of topsoil, decomposable materials, and persistent synthetic organic compounds; including, but not limited to, asphalt, tires, treated lumber, and construction debris. The department may require testing of fill materials. All temporary fill must be removed. Debris and solid wastes must be properly disposed or recycled. Impacted areas must be restored to near original condition.



October 15, 2019

David L. Glatt, PE, Chief  
ND Department of Health  
Environmental Health Section  
Gold Seal Center  
918 E. Divide Ave.  
Bismarck, ND 58501-1947

RE: Whiting Oil and Gas Corporation:  
Robinson Lake Oil Conditioning Facility Expansion Project  
Project Notification Letter and Review Request

Mr. Glatt,

Whiting Oil and Gas Corporation (Whiting), is planning the Robinson Lake Oil Conditioning Facility Expansion Project (Project). The Project may result in the expansion of the existing oil conditioning facility to include additional equipment within the existing overall site footprint. The Project will be located within Mountrail County North Dakota in the southwest quarter of the southwest quarter of Section 14, Township 153N and Range 91W. The planned operating conditions of the Facility will exceed the North Dakota Public Service Commission's (Commission's) siting threshold. As a result, the Project may fall under the Commission's jurisdiction. Expansion activities are scheduled to begin as early as March of 2020 with Facility commissioning potentially as early as July 2020. The Project site and a 1-mile wide corridor (Study Area) are depicted on the attached maps.

The purpose of this letter is to provide notification of the proposed Project; and advise you that your agency has the opportunity to participate in the regulatory process should you choose to comment on the Project.

E3 Environmental has been retained by Whiting to provide environmental consulting support for this Project. Should you have any questions or require additional information, please contact me at 651-282-0652 or [kschmidt@go2e3.com](mailto:kschmidt@go2e3.com). In closing, upon your review of this Project, should you choose to comment, a timely response is respectfully requested.

Sincerely,

Katie Schmidt, Senior Consultant  
E3 Environmental, LLC

Attachment: Project Maps

cc: Whiting Project Files

ND State Water Commission  

---

Consultation

November 13, 2019

Katie Schmidt  
E3 Environmental  
871 Jefferson Avenue  
St. Paul, MN 55102

Dear Ms. Schmidt:

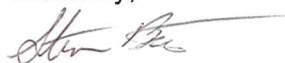
This is in response to your request for a review of the environmental impacts associated with the Whiting Oil and Gas Corporation: Robinson Lake Oil Conditioning Facility Expansion Project located in Mountrail County, ND.

The proposed project has been reviewed by State Water Commission staff, and the following comments are provided:

- There are no floodplains identified and/or mapped where this proposed project is to take place. No permits relative to the NFIP are required based on the current effective FIRM and State minimum standards.
- Initial review indicates the project does not require a conditional or temporary permit for water appropriation. However, if surface water or groundwater will be diverted for construction and operation of the project, a water permit will be required per North Dakota Century Code § 61-04-02. Please consult with the Water Appropriations Division of the Office of the State Engineer if you have any questions at (701) 328-2754 or [waterpermits@nd.gov](mailto:waterpermits@nd.gov).
- The State Water Commission maintains a network of observation wells across the state for monitoring the water levels and quality in glacial and bedrock aquifers. These wells are often installed in road and highway rights-of-way to limit inconvenience to the adjacent landowners. State Water Commission observation wells have a yellow protective casing extending between 1 and 3 feet above ground surface, and their locations are marked with a stake. If an observation well is encountered during project activities and must be removed, please contact the Water Appropriations Division. The State Water Commission hopes to keep all observation wells, but otherwise will ensure the well is properly abandoned.

Thank you for the opportunity to provide review comments. Should you have further questions, please contact me at 701-328-4970 or [stevebest@nd.gov](mailto:stevebest@nd.gov).

Sincerely,



Steven Best  
Planner III

SB:dm/1570



October 15, 2019

John Paczkowski  
ND State Water Commission  
900 East Boulevard  
Bismarck, ND 58505

RE: Whiting Oil and Gas Corporation:  
Robinson Lake Oil Conditioning Facility Expansion Project  
Project Notification Letter and Review Request

Mr. Paczkowski,

Whiting Oil and Gas Corporation (Whiting), is planning the Robinson Lake Oil Conditioning Facility Expansion Project (Project). The Project may result in the expansion of the existing oil conditioning facility to include additional equipment within the existing overall site footprint. The Project will be located within Mountrail County North Dakota in the southwest quarter of the southwest quarter of Section 14, Township 153N and Range 91W. The planned operating conditions of the Facility will exceed the North Dakota Public Service Commission's (Commission's) siting threshold. As a result, the Project may fall under the Commission's jurisdiction. Expansion activities are scheduled to begin as early as March of 2020 with Facility commissioning potentially as early as July 2020. The Project site and a 1-mile wide corridor (Study Area) are depicted on the attached maps.

The purpose of this letter is to provide notification of the proposed Project; and advise you that your agency has the opportunity to participate in the regulatory process should you choose to comment on the Project.

E3 Environmental has been retained by Whiting to provide environmental consulting support for this Project. Should you have any questions or require additional information, please contact me at 651-282-0652 or [kschmidt@go2e3.com](mailto:kschmidt@go2e3.com). In closing, upon your review of this Project, should you choose to comment, a timely response is respectfully requested.

Sincerely,

Katie Schmidt, Senior Consultant  
E3 Environmental, LLC

Attachment: Project Maps

cc: Whiting Project Files

ND DTL-School Trust Lands  

---

Consultation

## Katie Schmidt

---

**From:** Spangelo, Kayla <kspangelo@nd.gov>  
**Sent:** Tuesday, October 22, 2019 1:45 PM  
**To:** Katie Schmidt  
**Subject:** NDDTL contact information / Whiting Oil and Gas Corporation: Robinson Lake Oil Conditioning Facility Expansion Project

**Follow Up Flag:** Follow up  
**Flag Status:** Flagged

Good afternoon Katie,

Please see the below for updated contact information for the North Dakota Department of Trust Lands.

NDDTL has no comments in regards to the letter dated 10-15-2019 for the Whiting Oil and Gas Corporation: Robinson Lake Oil Conditioning Facility Expansion Project.

Thank you,

Kayla Spangelo

*Natural Resources Professional (Rights of Ways)*

701.328.1916 • kspangelo@nd.gov • land.nd.gov • 1707 N 9<sup>th</sup> St • Bismarck, ND 58501





October 15, 2019

Kayla Graber, Land Management Specialist  
ND Department of Trust Lands  
School Trust Lands  
1707 North 9<sup>th</sup> Street  
Bismarck, ND 58501

RE: Whiting Oil and Gas Corporation:  
Robinson Lake Oil Conditioning Facility Expansion Project  
Project Notification Letter and Review Request

Ms. Graber,

Whiting Oil and Gas Corporation (Whiting), is planning the Robinson Lake Oil Conditioning Facility Expansion Project (Project). The Project may result in the expansion of the existing oil conditioning facility to include additional equipment within the existing overall site footprint. The Project will be located within Mountrail County North Dakota in the southwest quarter of the southwest quarter of Section 14, Township 153N and Range 91W. The planned operating conditions of the Facility will exceed the North Dakota Public Service Commission's (Commission's) siting threshold. As a result, the Project may fall under the Commission's jurisdiction. Expansion activities are scheduled to begin as early as March of 2020 with Facility commissioning potentially as early as July 2020. The Project site and a 1-mile wide corridor (Study Area) are depicted on the attached maps.

The purpose of this letter is to provide notification of the proposed Project; advise you that your agency has the opportunity to participate in the regulatory process should you choose to comment on the Project, and to identify if school trust lands are present within the Project Study Area.

E3 Environmental has been retained by Whiting to provide environmental consulting support for this Project. Should you have any questions or require additional information, please contact me at 651-282-0652 or [kschmidt@go2e3.com](mailto:kschmidt@go2e3.com). In closing, upon your review of this Project, should you choose to comment, a timely response is respectfully requested.

Sincerely,

A handwritten signature in blue ink that reads "Katie Schmidt".

Katie Schmidt, Senior Consultant  
E3 Environmental, LLC

Attachment: Project Maps

cc: Whiting Project Files

ND DTL-Mineral Trust Lands  
Consultation

## Katie Schmidt

---

**From:** Nagel, Allie C. <allie.nagel@nd.gov>  
**Sent:** Monday, October 21, 2019 9:43 AM  
**To:** Katie Schmidt  
**Subject:** Whiting Oil and Gas Robinson Lake Oil Conditioning Facility

**Follow Up Flag:** Follow up  
**Flag Status:** Flagged

Katie,

We agree that the data provided represents the approximate location of the Robinson Lake Oil Conditioning Facility Expansion Project. Several mineral tracts managed by this office fall within the one-mile buffer; however, are not located within the project area.

Thank you,

Allie Nagel, CPL  
*Land Professional*

701.328.1952 • [allie.nagel@nd.gov](mailto:allie.nagel@nd.gov) • [land.nd.gov](http://land.nd.gov)





October 15, 2019

Allisen Nagel, RPL  
ND Department of Trust Lands  
Mineral Management  
1707 North 9<sup>th</sup> Street  
Bismarck, ND 58501

RE: Whiting Oil and Gas Corporation:  
Robinson Lake Oil Conditioning Facility Expansion Project  
Project Notification Letter and Review Request

Ms. Nagel,

Whiting Oil and Gas Corporation (Whiting), is planning the Robinson Lake Oil Conditioning Facility Expansion Project (Project). The Project may result in the expansion of the existing oil conditioning facility to include additional equipment within the existing overall site footprint. The Project will be located within Mountrail County North Dakota in the southwest quarter of the southwest quarter of Section 14, Township 153N and Range 91W. The planned operating conditions of the Facility will exceed the North Dakota Public Service Commission's (Commission's) siting threshold. As a result, the Project may fall under the Commission's jurisdiction. Expansion activities are scheduled to begin as early as March of 2020 with Facility commissioning potentially as early as July 2020. The Project site and a 1-mile wide corridor (Study Area) are depicted on the attached maps.

The purpose of this letter is to provide notification of the proposed Project; advise you that your agency has the opportunity to participate in the regulatory process should you choose to comment on the Project, and to identify if mineral trust lands are present within the Project Study Area.

E3 Environmental has been retained by Whiting to provide environmental consulting support for this Project. Should you have any questions or require additional information, please contact me at 651-282-0652 or [kschmidt@go2e3.com](mailto:kschmidt@go2e3.com). In closing, upon your review of this Project, should you choose to comment, a timely response is respectfully requested.

Sincerely,

A handwritten signature in blue ink that reads "Katie Schmidt".

Katie Schmidt, Senior Consultant  
E3 Environmental, LLC

Attachment: Project Maps

cc: Whiting Project Files

Western Area Water Supply Authority  
Consultation



October 15, 2019

Mark Owan, Chair  
Western Area Water Supply Authority  
117 East Broadway  
PO Box 2343  
Williston, ND 58802

RE: Whiting Oil and Gas Corporation:  
Robinson Lake Oil Conditioning Facility Expansion Project  
Project Notification Letter and Review Request

Mr. Owan,

Whiting Oil and Gas Corporation (Whiting), is planning the Robinson Lake Oil Conditioning Facility Expansion Project (Project). The Project may result in the expansion of the existing oil conditioning facility to include additional equipment within the existing overall site footprint. The Project will be located within Mountrail County North Dakota in the southwest quarter of the southwest quarter of Section 14, Township 153N and Range 91W. The planned operating conditions of the Facility will exceed the North Dakota Public Service Commission's (Commission's) siting threshold. As a result, the Project may fall under the Commission's jurisdiction. Expansion activities are scheduled to begin as early as March of 2020 with Facility commissioning potentially as early as July 2020. The Project site and a 1-mile wide corridor (Study Area) are depicted on the attached maps.

The purpose of this letter is to provide notification of the proposed Project; advise you that your agency has the opportunity to participate in the regulatory process should you choose to comment on the Project.

E3 Environmental has been retained by Whiting to provide environmental consulting support for this Project. Should you have any questions or require additional information, please contact me at 651-282-0652 or [kschmidt@go2e3.com](mailto:kschmidt@go2e3.com). In closing, upon your review of this Project, should you choose to comment, a timely response is respectfully requested.

Sincerely,

A handwritten signature in blue ink that reads "Katie Schmidt".

Katie Schmidt, Senior Consultant  
E3 Environmental, LLC

Attachment: Project Maps

cc: Whiting Project Files

Mountrail County Planning & Zoning  
Consultation

## Katie Schmidt

---

**From:** Heidi Kory <heidik@co.mountrail.nd.us>  
**Sent:** Wednesday, November 6, 2019 10:34 AM  
**To:** Katie Schmidt  
**Subject:** Robinson Lake Oil Conditioning Facility Expansion Project

**Follow Up Flag:** Follow up  
**Flag Status:** Flagged

Hello Katie,

I have reviewed your letter regarding the expansion, would you happen to have a contact number for someone with Whiting? They will need to obtain a building permit through the county and that would then have to be approved by our Planning & Zoning board. Appreciate your help.

Thank you,

*Heidi Kory*

Assistant Administrator  
Code Enforcement  
Mountrail County, North Dakota  
Email: [heidik@co.mountrail.nd.us](mailto:heidik@co.mountrail.nd.us)  
Website: <http://www.co.mountrail.nd.us/planning>  
8103 61<sup>st</sup> St. NW  
P.O. Box 248  
Stanley, ND 58784-0248  
Office phone: 701-628-2909



October 15, 2019

Heidi Kory, Assistant Planner  
Mountrail County Planning & Zoning  
Code Enforcement  
PO Box 248  
Stanley, ND 58784-0248

RE: Whiting Oil and Gas Corporation:  
Robinson Lake Oil Conditioning Facility Expansion Project  
Project Notification Letter and Review Request

Ms. Kory,

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Sincerely,

Katie Schmidt, Senior Consultant  
E3 Environmental, LLC

Attachment: Project Maps

cc: Whiting Project Files

Mountrail County Water Resources Board  
Consultation



October 15, 2019

Eric Enerson, Chairman  
Mountrail County Water Resources Board  
7279 83<sup>rd</sup> Ave NW  
Stanley, ND 58784

RE: Whiting Oil and Gas Corporation:  
Robinson Lake Oil Conditioning Facility Expansion Project  
Project Notification Letter and Review Request

Mr. Enerson,

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Sincerely,

Katie Schmidt, Senior Consultant  
E3 Environmental, LLC

Attachment: Project Maps

cc: Whiting Project Files

Mountrail County Weed Control Board  
Consultation



October 15, 2019

Jim Hennessy  
Mountrail County Weed Control Officer  
PO Box 40  
Stanley, ND 58784

RE: Whiting Oil and Gas Corporation:  
Robinson Lake Oil Conditioning Facility Expansion Project  
Project Notification Letter and Review Request

Mr. Hennessy,

Whiting Oil and Gas Corporation (Whiting), is planning the Robinson Lake Oil Conditioning Facility Expansion Project (Project). The Project may result in the expansion of the existing oil conditioning facility to include additional equipment within the existing overall site footprint. The Project will be located within Mountrail County North Dakota in the southwest quarter of the southwest quarter of Section 14, Township 153N and Range 91W. The planned operating conditions of the Facility will exceed the North Dakota Public Service Commission's (Commission's) siting threshold. As a result, the Project may fall under the Commission's jurisdiction. Expansion activities are scheduled to begin as early as March of 2020 with Facility commissioning potentially as early as July 2020. The Project site and a 1-mile wide corridor (Study Area) are depicted on the attached maps.

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Sincerely,

Katie Schmidt, Senior Consultant  
E3 Environmental, LLC

Attachment: Project Maps

cc: Whiting Project Files

## **Appendix D**

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### Natural Resources Report

## NATURAL RESOURCES REPORT

Robinson Lake Oil Conditioning Project  
Mountrail County, North Dakota  
*Carlson McCain Project #8331*

*Prepared for:*

E3 Environmental, LLC  
871 West Jefferson Avenue  
St. Paul, MN 55102

*September 6, 2019*



3831 Lockport Street, Suite C

Bismarck, ND 58503

Tel 701-255-1475

Fax 701-255-1477

ENVIRONMENTAL • ENGINEERING • LAND SURVEYING

# Robinson Lake Oil Conditioning Project

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## **1.0 SCOPE OF WORK**

Carlson McCain, Inc. (Carlson McCain) was contracted to locate and map noxious weeds, delineate wetland and waterbody features, document raptor nests, assess habitat for threatened and endangered species, and record trees and shrubs within the boundaries of Whiting Petroleum Corporation's Robinson Lake Oil Conditioning Project (Project) located in Mountrail County, North Dakota. The Project's Survey Area is 378 feet by 545 feet, containing approximately 4.78 acres. The Project is located in the SW1/4 SW1/4 of Section 14, Township (T) 153 North (N), Range (R) 153 West (W).

## 2.0 PROCEDURES

Natural resource surveys were conducted by Carlson McCain biologist, Chad Tucker, on September 3, 2019. Geospatial field data was collected using a Sony Xperia Android Tablet paired with an EOS ARROW Lite global positioning system capable of sub-meter accuracy.

### 2.1 Wetland/Waterbody Field Delineation

Wetland delineations were conducted in accordance with the U.S. Army Corps of Engineers (USACE) *1987 Wetland Delineation Manual* and the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Great Plains Region (Version 2.0)* (Manual).

Prior to field work, existing resource information was used to aid in identifying and delineating wetlands and drainage features within the Project Area. These resources included: Mountrail County National Agriculture Imagery Program (NAIP) aerial photographs; U.S. Fish and Wildlife Service (USFWS) National Wetland Inventory (USFWS 2018a); digital web soil survey of Mountrail County; and the U.S. Geological Survey National Hydrography Dataset (NHD) (USGS 2007).

A description of the wetland type and documentation of the vegetation, hydrology, and hydric soils were recorded on the associated USACE Wetland Determination Data Forms of the Great Plains Manual. Delineated wetlands were given Cowardin classification descriptions. Wetlands were documented with paired upland and wetland observation points.

Existing vegetation was classified using hydrophytic criteria as outlined in the Manual and the *National Wetland Plant List* (Lichvar et al. 2016). Hydric soil indicators were determined using the *Field Indicators of Hydric Soils in the United States; Guide for Identifying and Delineating Hydric Soils, Version 7.0* (USDA-NRCS, 2010). Hydrology was determined on-site by observation of hydrologic indicators.

Hydrological indicators used for wetland identification were determined on-site based on soils, topographic position, and presence of hydric vegetation. Waterbodies were defined using USACE Ordinary High Water Mark (OHWM) criteria and definitions provided by the U.S. Environmental Protection Agency (USEPA) in *Draft Guidance on Identifying Waters Protected by the Clean Water Act*. Wetlands and waterbodies were field classified in accordance with guidelines set forth in the *Classification of Wetlands and Deepwater Habitats of the United States* by the Federal Geographic Data Committee (FGDC).

Rainfall data from the North Dakota Agricultural Weather Network (NDAWN) was gathered for a three-month period (June, July, August, Sept 1 - 3) prior to the field survey to determine moisture conditions against historic monthly averages. Table 1 shows monthly rainfall data and monthly historic rainfall averages from Ross 4E Weather Station. The Ross 4E weather station is located approximately 18 miles north of the Project. Rainfall levels were 10.39 inches above normal for the three-month period.

**Table 1. Pre-survey Rainfall Levels**

NDAWN Station	June Rainfall		July Rainfall		August Rainfall		Sept 1-3 Rainfall		Change from Average
	Actual	Average	Actual	Average	Actual	Average	Actual	Average	
Ross 4E (Ross, North Dakota)	8.2	3.64	5.36	3.03	2.89	2.12	1.76	0.18	+10.37

North Dakota Agricultural Weather Network (NDAWN 2019)

## 2.2 Federally Listed Wildlife Species Survey

Assessments for federally listed threatened and endangered species were conducted by evaluating historic and present occurrences and by determining if potential habitat exists within the Survey Area. Background data was collected for preliminary review and to aid in the field inventory of the biological resources. Data included the USFWS list of federally listed species for North Dakota, USFWS Designated Critical Habitat for Threatened and Endangered Species Geospatial Data, and North Dakota Game and Fish Department (NDGF) Geospatial Data along with known range and habitat requirements for each species.

**Table 2. Federally Listed Threatened and Endangered Species for Mountrail County**

Federally Listed Threatened and Endangered Species		
Common Name	Scientific Name	Status
Northern long-eared bat	<i>Myotis septentrionalis</i>	Threatened
Gray wolf	<i>Canis lupus</i>	Endangered
Whooping crane	<i>Grus americana</i>	Endangered
Pallid sturgeon	<i>Scaphirhynchus albus</i>	Endangered
Least tern	<i>Sterna antillarum</i>	Endangered, Critical Habitat Designated
Dakota skipper	<i>Hesperia dacotae</i>	Threatened, Critical Habitat Designated
Piping plover	<i>Charadrius melodus</i>	Threatened, Critical Habitat Designated
Red knot	<i>Calidris canutus rufa</i>	Threatened

(USFWS 2019)

**2.3 Noxious and Invasive Weed Survey**

North Dakota has 13 state-listed noxious weeds. The Mountrail County Weed Control District lists one additional species as invasive (NDDA 2019). Table 3 provides a list of noxious and/or invasive weed species.

**Table 3. North Dakota State and McKenzie County Listed Noxious and Invasive Weeds.**

North Dakota State Listed Noxious Weeds		Mountrail County, ND Invasive Weeds	
Common Name	Scientific Name	Common Name	Scientific Name
Absinth wormwood	<i>Artemisia absinthium</i>	Common Tansy	<i>Tanacetum vulgare</i>
Canada thistle	<i>Cirsium arvense</i>		
Dalmatian toadflax	<i>Linaria genistifolia</i>		
Diffuse knapweed	<i>Centaurea diffusa</i>		
Houndstongue	<i>Cynoglossum officinale</i>		
Leafy spurge	<i>Euphorbia esula</i>		
Musk thistle	<i>Carduus nutans</i>		
Palmer amaranth	<i>Amaranthus palmeri</i>		
Purple loosestrife	<i>Lythrum salicaria</i>		
Russian knapweed	<i>Acroptilon repens</i>		
Saltcedar	<i>Tamarix chinensis</i>		
Spotted knapweed	<i>Centaurea maculosa</i>		
Yellow toadflax	<i>Linaria vulgaris</i>		

**2.4 Raptor Nest Survey and Migratory Bird Nesting Habitat Survey**

A pedestrian survey for raptor nests located within ½-mile line-of-sight of the Survey Area was conducted.

**2.5 Tree and Shrub Inventory**

A tree and shrub inventory was conducted for the Project’s Survey Area in accordance to the North Dakota Public Service Commission’s standards.

### 3.0 RESULTS

#### 3.1 Wetlands

No wetlands were observed during the field survey. The area has been previously disturbed and the NWI Layer does not predict any wetland to be have been present

#### 3.2 Waterbodies.

No waterbodies were observed during the field survey.

#### 3.3 Federally Listed Threatened and Endangered Species

Threatened and endangered species that have been documented and/or have the potential to occur within the Survey Area are listed in Table 3 along with designated critical habitat (USFWS 2019). A review of USFWS and NDGF GIS species information datasets along with habitat data gathered from the on-site field surveys was conducted for the proposed Project. Threatened and endangered species information gathered from the review is documented below in the species discussions.

During the field surveys, no state or federally listed species were observed. During the field surveys.

##### 3.3.1 Northern long-eared bat (*Myotis septentrionalis*): Threatened

The northern long-eared bat is a forest dwelling bat. The home range of the northern long-eared bat is approximately 150 acres (60.7 ha) including a summer and winter habitat. In the summer, northern long-eared bats roost under bark or in crevices of trees, preferring to roost in tall trees and under the exfoliating bark of dead or dying trees. In the winter, northern long-eared bats hibernate in caves and mines. The northern long-eared bat prefers foraging in edge habitats and forests comprised of trees with a diversity of life stages. The primary threats to the northern long-eared bat are white-nose syndrome (WNS), alteration/loss of habitat, and wind energy (USFWS 2014a). The northern long-eared bat is federally listed statewide in North Dakota.

The USFWS announced that starting May 4, 2015, the northern long-eared bat will be listed as threatened. Western North Dakota is included in the current extent of WNS. The USFWS final 4(d) ruling prohibits incidental take from areas affected by WNS if take occurs within a hibernaculum or take occurs as the result of tree removal within 0.25 miles of a hibernaculum. The ruling also prohibits incidental take by cutting trees within a 150-foot radius from a maternity roost tree during the pup season from June 1 through July 31.

No potential roost trees or hibernaculum were documented within the Survey Area. Direct surveys for bats were not conducted.

##### 3.3.2 Whooping crane (*Grus americana*): Endangered

The primary nesting area for the whooping crane is in Canada's Wood Buffalo National Park. Aransas National Wildlife Refuge in Texas is the primary wintering area for whooping cranes. In the spring and fall, the cranes migrate primarily along the Central Flyway. During the migration, cranes make numerous stops, roosting in large shallow marshes and feeding and loafing in harvested grain fields. The primary threats to whooping cranes are power lines, illegal hunting, and habitat loss (Texas Parks and Wildlife 2006).

The whooping crane is federally listed in all counties of North Dakota. The USFWS Database (USFWS 2018) shows Mountrail County has had 43 verified whooping crane sightings. The closest confirmed sighting to the Project was of two adults and one juvenile whooping crane in 2004, approximately 3.5 miles northwest of the Project in Section 5, T153N, R101W. The sighting locations are depicted in Appendix A, Figure 2.

### **3.3.3 Gray wolf (*Canis lupus*): Endangered**

Rural areas throughout the State of North Dakota function as dispersal corridors for wolves representing the Western Great Lakes (east of the Missouri River and US Highway 83) and Wyoming portion of the Northern Rocky Mountain distinct population segments (DPS). Wolves representing the Western Great Lakes DPS were relisted under the Endangered Species Act as threatened, effective December 19, 2014. Wolves representing the Wyoming portion of the Northern Rocky Mountain distinct population segment (west of the Missouri River and US 83) were delisted in 2011. However, gray wolves representing a formerly listed DPS could disperse through North Dakota at any time of the year. Wolf habitat within North Dakota occurs statewide and is considered dispersal habitat. Dispersal habitat may be important for maintaining gene flow between DPSs but is not thought to be a limiting factor for the recovery of the species.

To reflect this possibility, the USFWS has classified wolves dispersing through North Dakota as endangered in all counties. The nearest verified sighting to the Project occurred in 2003, approximately 10.5 miles North of the Project in Section 27, T155N, R91W (NDGF 2019) (Appendix A, Figure 2).

### **3.3.4 Pallid sturgeon (*Scaphirhynchus albus*): Endangered**

Pallid sturgeon are found in the Mississippi, Missouri, and Yellowstone River systems and are adapted for living close to the bottom of large, shallow rivers with sand and gravel bars. Pallid sturgeon populations in North Dakota have decreased since the 1960s (Grondahl and Martin, no date). Weighing up to 85 pounds, pallid sturgeons are long-lived with individuals possibly reaching 50 years of age.

A known pallid sturgeon population occurs from the Missouri River below Fort Peck Dam to the headwaters of Lake Sakakawea and the Lower Yellowstone River up the confluence of the Tongue River, Montana (USFWS 2007). Factors leading to the decline of the pallid sturgeon and a listing as an endangered species by the USFWS in 1990 include the alteration of habitat through river channelization; creation of impoundments; and alteration of water flow regimes (USFWS 1990). The effect from these alterations within the Missouri River have reduced food sources by lowering productivity, destroying spawning habitat, altered flow conditions which can delay spawning cues, and blocked movements to spawning, feeding, and rearing areas (USFWS 2007).

The Project is approximately 6.5 miles from the Lake Sakakawea/Missouri River System. Due to the nature of the Project, no impacts to Lake Sakakawea are anticipated during construction and/or operation.

### **3.3.5 Least tern (*Sterna antillarum*) and Critical Habitat: Endangered**

The interior least tern, a shorebird, is known to nest on midstream sandbars along the Yellowstone and Missouri River systems in North Dakota. The species constructs bowl-shaped depression nests on sparsely vegetated sandbars and sandy beaches during the nesting period, which occurs between mid-May and mid-August. Nesting adults have been documented to travel 7.5 miles or more from their nest sites to forage in wetlands or riverine habitat (Thompson et al. 1997). Habitat loss due to man-made changes to watersheds and river systems along with low nesting success from predation and human disturbance has caused a decline in least tern populations.

No individuals were observed in the area during the field surveys. Suitable shoreline habitat for breeding and nesting terns does not occur within the Survey Corridor. The Project is located approximately 6.5 miles from the Lake Sakakawea/Missouri River System. Migrating and foraging least terns could visit wetlands near the Project ROW; however, due to the lack of suitable nesting habitat and the presence of heavy grass and shrub cover, the interior least tern would likely not utilize such conditions.

### **3.3.6 Dakota skipper (*Hesperia dacotae*) and Critical Habitat: Threatened**

The Dakota skipper, a prairie obligate species, requires nectar producing native flowers and native grasses. Historically, Dakota skippers have been associated with low, wet, prairie dominated high quality tall grass prairie habitat. Researchers have found that Dakota skippers also use upland mixed grass prairie that is relatively dry and includes ridges and hillsides. These often have small inclusions of areas with species more commonly typified with tall grass prairie. Royer and others (Royer et al. 2008) classified these into Type A and Type B habitats. Type B habitat i.e. upland mixed prairie is the most common type in western North Dakota. Larvae require grass components of mixed-grass prairie that include bluestem grasses and needlegrasses, while adults require nectar sources; therefore, suitable prairie must include nectar-producing forbs. These may include purple coneflower, blue bells, or also called harebell (*Campanula rotundifolia*), blanket flower (*Gaillardia aristata*), wood lily (*Lilium philadelphicum*), or other species that are in bloom during the adult life cycle of the Dakota skipper. Mountrail County does not have designated critical habitat for the Dakota skipper. The nearest critical habitat is located approximately 21 miles to the west, in McKenzie County.

The Survey Area has been previously disturbed. The central portion is covered with rock and is free of vegetation. The perimeter of the Survey Area is dominated by Canada thistle (*Cirsium arvense*), Intermediate wheatgrass (*Thinopyrum intermedium*), Smooth brome (*Bromus inermis*), and Kentucky bluegrass (*Poa pratensis*). The Survey Area does not contain habitat for the Dakota skipper.

### **3.3.7 Piping plover (*Charadrius melodus*) and Critical Habitat: Threatened**

The piping plover is a migratory shorebird that breeds in North Dakota. Suitable nesting habitat for piping plovers in the Missouri River system is characterized as sparsely vegetated channel sandbars, sand and gravel beaches on islands, temporary pools on sandbars and islands, and island margins that interface with the river channel. The piping plover feeds on worms, insects, and mollusks. Degradation of habitat related to the channelization river systems, nest predation, and human disturbance has led to the decline of piping plover populations.

The Survey Area is predominantly cropland, and contains wetlands and waterbodies that are well vegetated and do not provide bare ground suitable for nesting habitat.

Critical habitat for the Northern Great Plains piping plover has been designated on alkali lakes and wetlands, the Yellowstone River, and Missouri River in North Dakota. The physical and biological features that are essential to the conservation of the species, referred to as the primary constituent elements, require special consideration for protection. In riverine habitat, these include sparsely vegetated channel sandbars, sand and gravel beaches on islands, temporary pools on sandbars and islands, and island margins that interface with the river channel, all protected from disturbance. This Project is located approximately 6.5 miles north of the nearest critical habitat, which is the Lake Sakakawea/Missouri River System. (Appendix A, Figure 2) (USFWS 2015). There is no suitable or critical piping plover habitat within the Survey Area.

### **3.3.8 Red knot (*Calidris canutus rufa*): Threatened**

The red knot is a shorebird that breeds in the central Canadian Arctic, with primary breeding grounds in Nunavut Territory, but some potential breeding habitat extending into the Northwest Territories (FR 2013a). The rufa red knot winters along the Atlantic coasts of Argentina and Chile (particularly the island of Tierra del Fuego), the north coast of Brazil, and further north into Mexico and the southeast United States (USFWS 2014b). During migration, the rufa red knot primarily follows the Atlantic coastline to and from breeding and wintering grounds. However, geolocator results from red knots wintering in Texas showed that some birds

migrate using a central flyway across the Midwestern U.S. and may have a northern Great Plains stopover (FR 2013). Rufa red knots spend 2 to 3 months at breeding sites in northern Canada.

Red knots are specialized molluscivores, feeding primarily on hard-shelled mollusks in soft wet sand/sediment (USFWS 2014b). In addition to mollusks, red knots may feed upon shrimp, crabs, marine worms, and horseshoe crab eggs and other similar invertebrates. On the breeding ground, rufa red knots feed mostly on terrestrial invertebrates and grass shoots/seeds (FR 2013).

The shoreline of the Missouri River provides stopover habitat for the red knot. Although some individuals may stopover in North Dakota during annual migrations, the species is rare and is not reported in North Dakota in every year. Reported historical sightings since 1900 (Igl 2015), are primarily one or a few birds; however, larger flocks have been reported. The majority of these sightings have been made in the prairie pothole region during the spring migration in late April through May. An increase in future sightings may result from an increase in public awareness.

The red knot migrates annually from its breeding grounds in the Arctic to wintering habitat in southern climates. It does not nest in North Dakota but may use areas along the Missouri River as stopover habitat. The Project is located approximately 6.5 miles north of the Lake Sakakawea/Missouri River System and the Survey Area does not have suitable shoreline stopover habitat for the red knot.

### **3.4 Noxious and Invasive Weeds**

During the survey, 1.28 acres of Canada thistle was delineated. No other noxious or invasive weed species were observed.

### **3.5 Raptor Nests**

No raptor nests were observed within ½-mile line-of-sight of the Survey Area. The NDGF eagle nest database does not contain any nests locations within 10 miles of the Project.

### **3.6 Trees and Shrubs**

No Trees or shrubs were documented within the Project's Survey Area.

## REFERENCES

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- FR (Federal Register). 2015. Endangered and Threatened Wildlife and Plants; Designation of Critical Habitat for the Dakota Skipper and Poweshiek Skipperling; Final Rule. Federal Register / Vol. 80, No. 190 / Thursday, October 1, 2015 / Rules and Regulations. U.S. Fish and Wildlife Service. Department of Interior.
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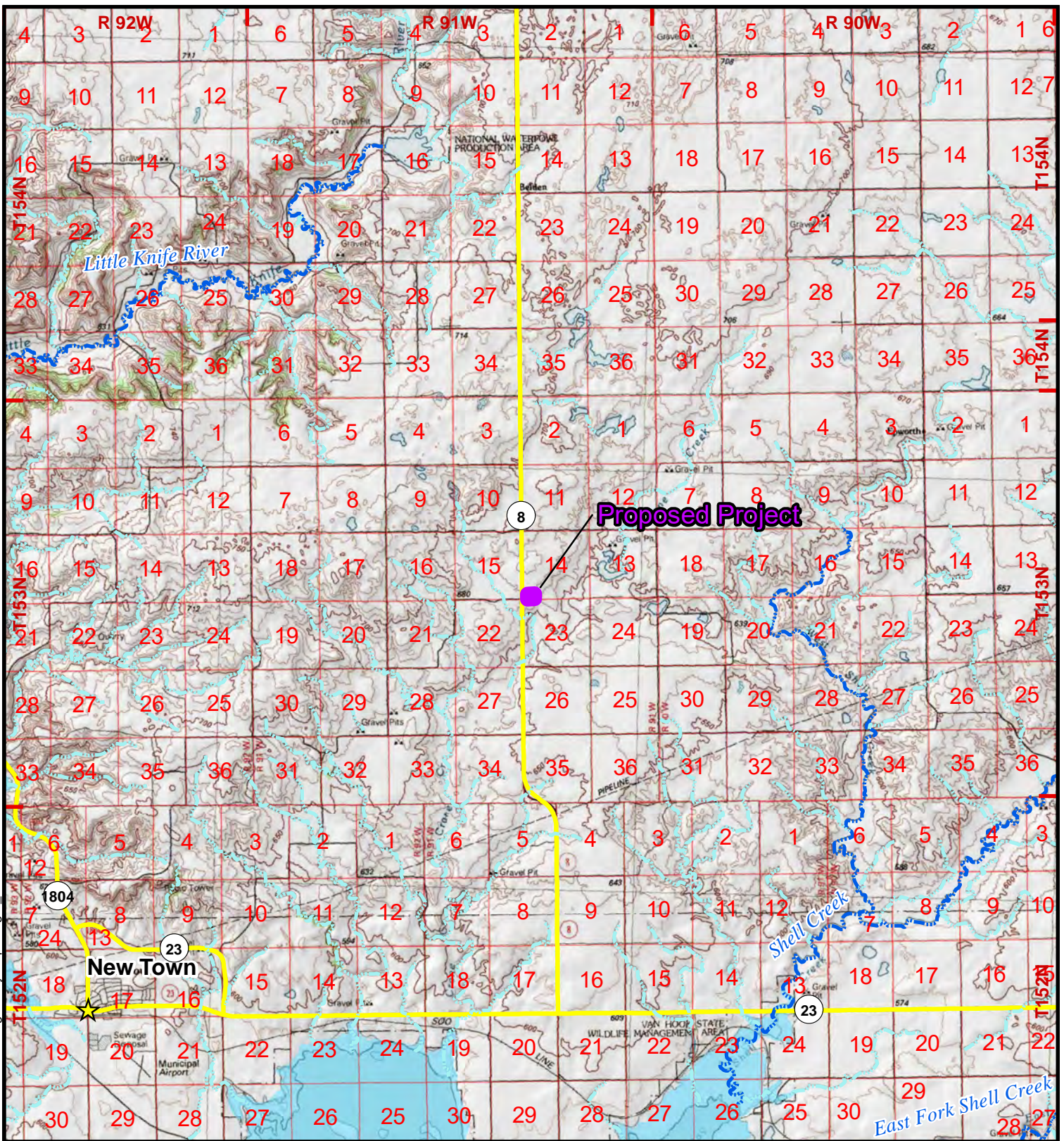
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*Appendix A*

*Figures*

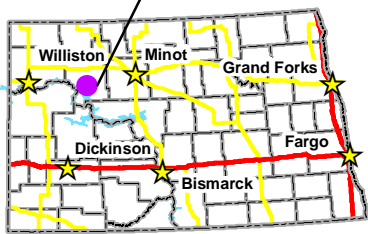
R:\projects\8000-8000\8331 - oil conditioning facility\Report\fig 1 - General Location.mxd  
September 2019



**Proposed Project**

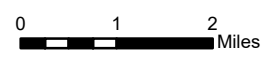
**New Town**

**Project Location**



- Legend**
- Proposed Project
  - PLSS Section
  - County Boundary
  - Missouri River / Lake Sakakawea
  - Intermittent Stream
  - Perennial Stream
  - Highway

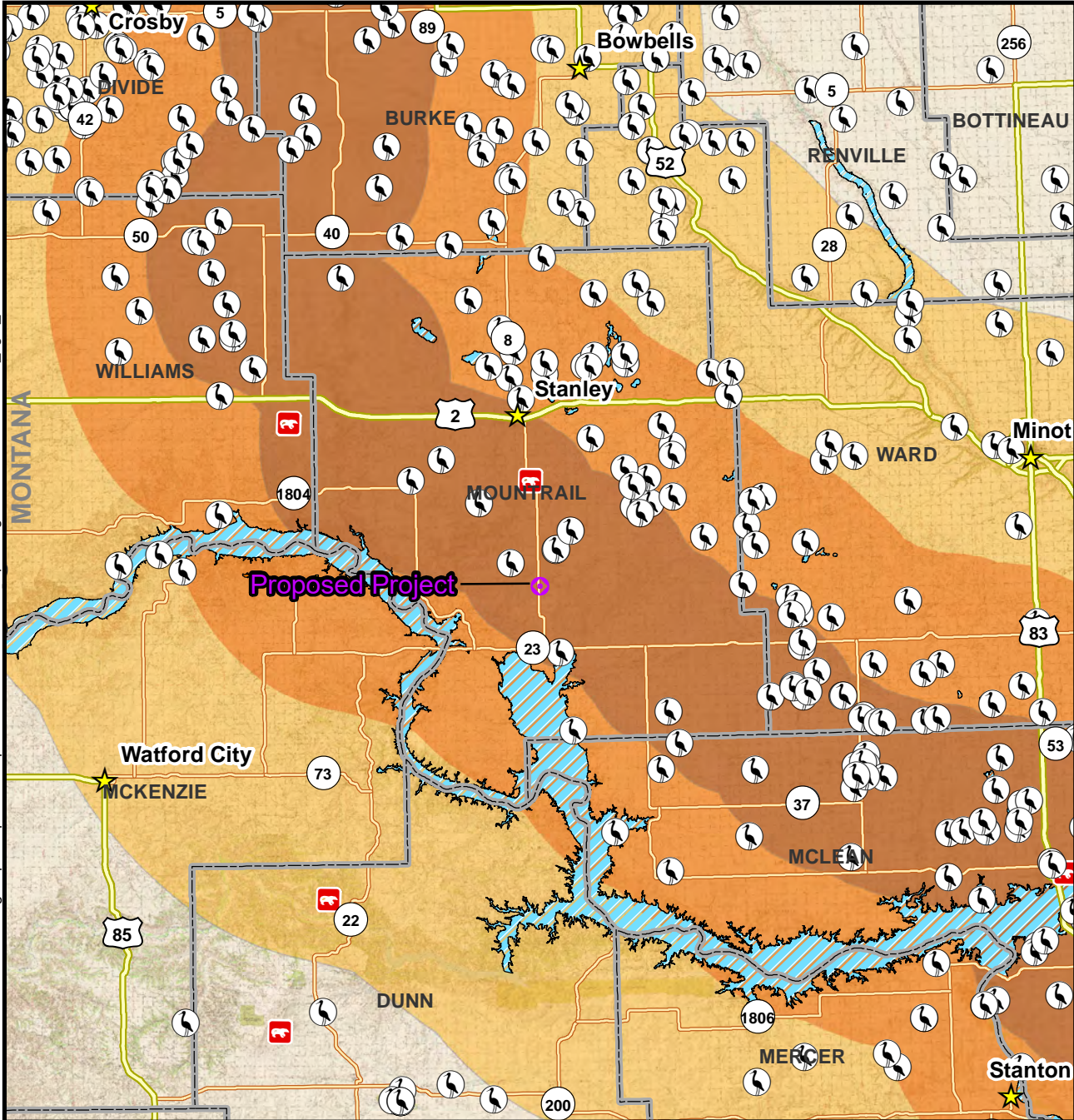
**Figure 1**  
**General Location**  
**Robinson Lake Oil Conditioning Project**



1:126,720



Basemap: ND GIS Hub\AI\_Elevation\Topomap Shaded Relief 100k



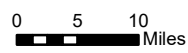
**Legend**

- Proposed Project
- County Boundary
- U.S. Highway
- State Highway
- ★ City
- 🦩 Whooping Crane Sighting
- 🐺 Wolf Sighting

- Piping Plover Critical Habitat
- Dakota Skipper
- Whooping Crane Migration Corridor**
- 25% of Migration corridor
- 50% of Migration Flyway
- 75% of Migration Flyway
- 98% of Migration Flyway

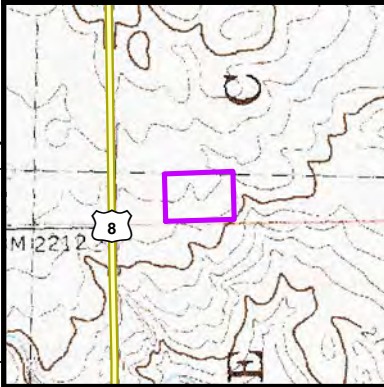
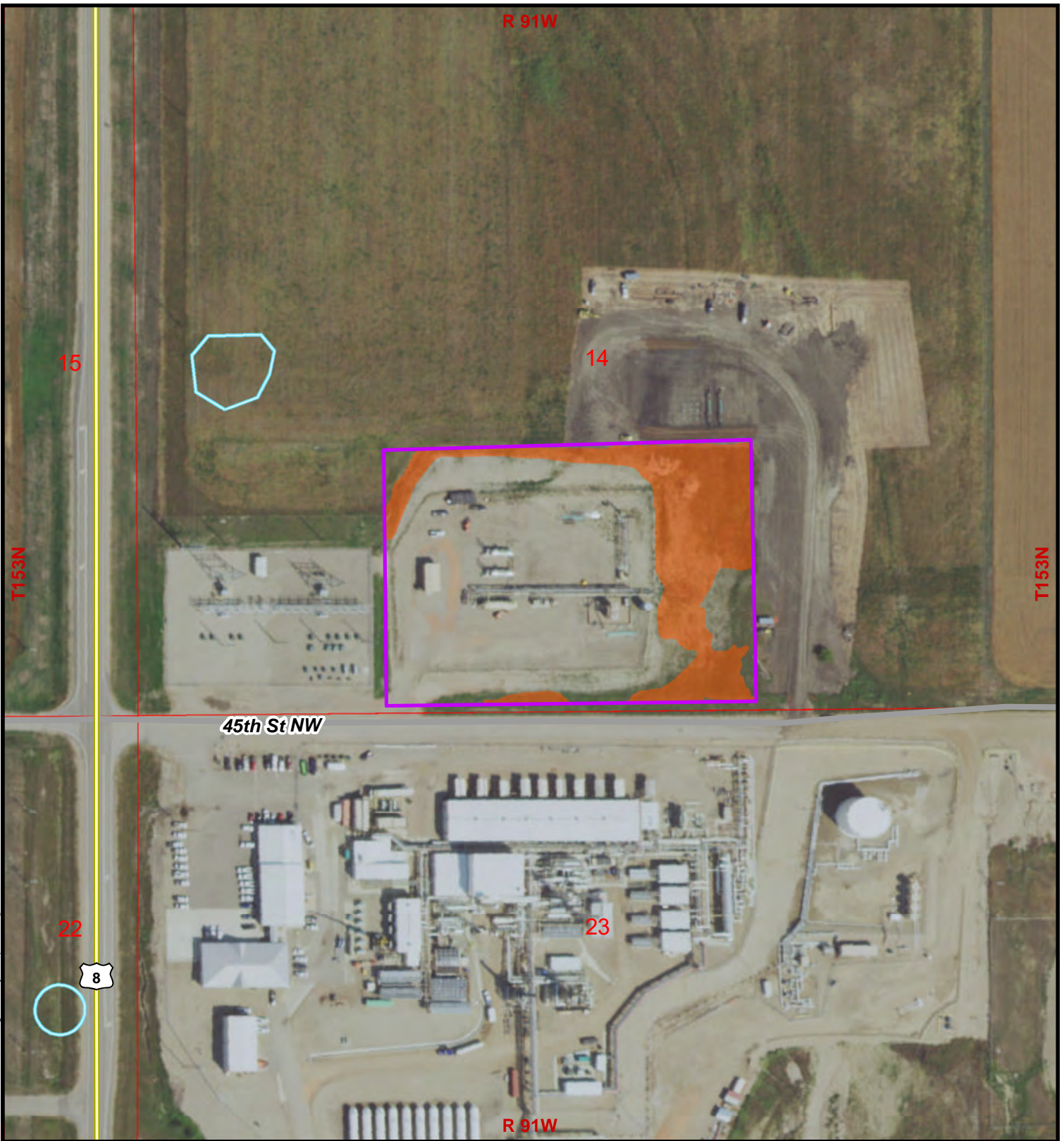


**Figure 2  
Wildlife Species of Concern  
Robinson Lake Oil Conditioning  
Project**



1:1,000,000



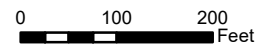


**Legend**

-  Survey Area
-  Noxious Weeds (Canada Thistle)
-  National Wetland Inventory Signature
-  PLSS Section



**Figure 3**  
**Field Survey**  
**Robinson Lake Oil Conditioning**  
**Project**



1:2,400



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Basemap: 2018 Aerial Imagery

*Appendix B*

*Project Photographs*



Photograph 1. View looking north from the entrance to the Robinson Lake Oil Conditioning Facility. The entrance is located at the southwest corner of the Survey Area.



Photograph 2. View looking east from the Facility entrance. Nearly 2 inches of rain fell the night before the survey, resulting in the ponding of water on the pad.



Photograph 3. Canada thistle was present in the road ditch along the southern boundary of the Survey Area.



Photograph 4. View looking south from the northwest corner of the Survey Area. Canada thistle was also present in this area.



Photograph 5. View looking east from the northwest corner of the Survey Area.



Photograph 6. View looking south from the northwest corner of the Survey Area.

# **Appendix E**

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## Cultural Resources Report



October 23, 2019

Mr. William McCarthy  
E3 Environmental LLC  
871 W. Jefferson Ave  
St. Paul, MN 55102

**ND SHPO Ref.: 20-5098 "Whiting Petroleum Corporation's Robinson Lake Oil Conditioning Project; A Class I and Class III Cultural Resource Inventory in Mountrail County, North Dakota" in portions of [T153N R91W Section 14]**

Dear Mr. McCarthy,

We reviewed ND SHPO Ref.: 20-5098 "Whiting Petroleum Corporation's Robinson Lake Oil Conditioning Project; A Class I and Class III Cultural Resource Inventory in Mountrail County, North Dakota" in portions of [T153N R91W Section 14] and find the report by Benjamin W. Schweer & Daniel Salas acceptable. We concur with a determination of "No Historic Properties Affected" for this project provided it takes place in the location and in the manner described in the documentation and provided all borrow comes from an approved source.

Thank you for the opportunity to review this project. Please include the ND SHPO Reference number listed above in further correspondence for this specific project. If you have any questions please contact Lisa Steckler, Historic Preservation Specialist at (701) 328-3577 or [lsteckler@nd.gov](mailto:lsteckler@nd.gov)

Sincerely,

for Claudia J. Berg  
State Historic Preservation Officer  
(North Dakota)

20-5098