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Natural Resources and Wetland Delineation Report for the Cenex Prosper Terminal, Cass County, North Dakota

Prepared for
Cenex Pipeline LLC

Prepared by
SWCA Environmental Consultants

November 2015



**Natural Resources and Wetland Delineation Report
for the Cenex Prosper Terminal,
Cass County, North Dakota**

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SWCA Project No. 35556

November 18, 2015

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1.0 INTRODUCTION

1.1 BACKGROUND

Cenex Pipeline LLC (Cenex) proposes to construct an approximately 62-acre refined petroleum products terminal (the Cenex Fargo Terminal), located approximately 1.3 miles southeast of Prosper, North Dakota. The project is located entirely in Cass County, North Dakota, with the anticipated construction start date of May 2016. SWCA Environmental Consultants (SWCA) conducted natural resources field surveys to identify exclusion and avoidance areas as specified in North Dakota Administrative Code 69-06-08-02 for the proposed Cenex Fargo Terminal.

As proposed, the Cenex Fargo Terminal is approximately 62 acres in size, located on private lands in North Dakota (Appendix A). The project falls under the jurisdiction of the North Dakota Public Service Commission (NDPSC).

SWCA conducted field surveys of a 62-acre survey block on October 21, 2015, to determine the potential presence and extent of wetlands and waterbodies, including potentially jurisdictional waters of the U.S., within the proposed survey area. Concurrently with the wetland/waterbody determinations, SWCA conducted a wildlife survey, including threatened and endangered species, and habitat assessment; a tree, sapling, and shrub enumeration survey; and a noxious weed survey. Site layout map of the survey area and natural resource features identified during the field surveys are provided in Appendix A.

This report presents the methodology used by SWCA's ecologists to complete each of the aforementioned surveys. Additionally, this report presents the results of the completed field surveys and regulatory recommendations to facilitate compliance with the NDPSC.

1.2 REGULATORY BACKGROUND

1.2.1 Clean Water Act, Section 404

Section 404 of the Clean Water Act prohibits the discharge of dredge and fill material into waters of the U.S., including certain wetlands, without a permit from the USACE.

1.2.2 U.S. Army Corps of Engineers Regional Conditions

The USACE has published several regional conditions for projects operating under Nationwide Permits in North Dakota (USACE 2013). The regional conditions apply to wetlands classified as "fens," waters adjacent to natural springs, the Missouri River, historic properties, and fish spawning areas.

2.0 METHODS

2.1 SURVEY AREA

Overall, eastern North Dakota is characterized by a moderate to cool climate, with cold, dry winters and mild to warm summers. Mean annual precipitation for the area is 14 to 16 inches (Bryce et al. 1998).

The proposed project is located in the Great Plains (level I) ecoregion. Further, the proposed project is located in the Lake Agassiz Plain (level III) ecoregion. The Lake Agassiz Plain ecoregion was created approximately 10,000 years ago when the great continental glaciers of North America started to recede to the north. Blocked by large ice sheets, the melting ice formed many large glacial lakes. The last proglacial lake to fill the modern-day Red River Valley was Glacial Lake Agassiz. The primary land use within the project area is large-scale agriculture (Bryce et al. 1998). Figure 1 is an overview of the project area.

The inventoried area discussed herein is situated on the U.S. Geological Survey Rawson (1976) and Bear Butte (1976), North Dakota, quadrangles. The proposed project corridor that was surveyed on October 21, 2015, is located within the SE $\frac{1}{4}$ Section 9, Township 140 North, Range 50 West, Cass County, North Dakota.



Figure 1. Project area overview depicting general topography, facing east (photograph taken October 21, 2015).

2.2 WETLANDS

National Wetlands Inventory (NWI) mapping for the region did not indicate the presence of wetlands within the project area (U.S. Fish and Wildlife Service [USFWS] 2012). SWCA ecologists conducted wetland delineations within the survey area based on the principles and guidelines provided in the 1987 *Corps of Engineers Wetlands Determination Manual* (Manual) (Environmental Laboratory 1987) and the *Regional Supplement to the Corps of Engineers Wetlands Determination Manual: Great Plains Region Version 2.0* (Supplement) (USACE 2010). As requested, SWCA ecologists delineated wetland boundaries by recording indicators of hydrology and hydrophytic vegetation. The Supplement suggests that soils also be taken into account. No hydrophytic vegetation or wetland hydrology were found in the project area, therefore only upland soils were sampled.

2.2.1 Hydrophytic Vegetation

Ecologists recorded all plants within the vegetative community based on the respective stratum each species occupied. A tree is defined by the Supplement to be a woody-stemmed plant with a trunk diameter at breast height (DBH) of equal to or greater than 3 inches, regardless of height. The sapling and shrub stratum is defined by the Supplement to be composed of woody-stemmed plants with a trunk DBH of less than 3 inches, regardless of height. The herbaceous stratum includes all non-woody-stemmed plants, regardless of height. Finally, the woody vine stratum includes all woody-stemmed vines, regardless of diameter.

SWCA recorded the binomial scientific name and percent cover of all plants within a 30-foot radius for the tree stratum, a 15-foot radius for the sapling/shrub stratum, a 5-foot radius for the herbaceous stratum, and a 30-foot radius for the woody vine stratum. SWCA ecologists noted each plant species' respective USFWS indicator status (i.e., upland [UPL], facultative upland [FACU], facultative [FAC], facultative wetland [FACW], and obligate [OBL]). In some instances, the size and shape of the vegetative sampling plot was manipulated to better encompass each wetland or upland area, though the overall area assessed remained unchanged. Vegetation communities met the hydrophytic vegetation criterion for wetlands if more than 50% of dominant species had an indicator status of FAC, FACW, or OBL. SWCA also noted and geospatially referenced all populations of North Dakota state- or county-listed noxious weeds identified within the survey area.

2.2.2 Wetland Hydrology

A wetland was determined to contain wetland hydrology if at least one primary indicator or at least two secondary indicators of wetland hydrology were present, as defined by the Manual and Supplement. Common hydrologic indicators include the presence of surface water, high water table, soil saturation, water marks on trees or other objects, sediment deposits, water-stained leaves, and oxidized rhizospheres on living roots.

2.3 WATERBODIES

Waterbodies (i.e., ponds, creeks, streams, rivers) were identified by the presence of an ordinary high water mark (OHWM). Common identifiable indicators of an OHWM include open water or evidence of a clear, natural line visible on the bank; shelving; changes in soil

characteristics; the destruction of terrestrial vegetation; the presence of litter and debris; and water marks on structures that are inundated during normal high water conditions. The OHWM typically represents the potential limits of the USACE jurisdiction. The USACE has full discretion in determining the jurisdictional status of referenced wetlands and waterbodies.

SWCA classified streams as perennial, intermittent, or ephemeral based on field observations. During a typical year, a perennial stream contains flowing water year-round and the water table is located above the stream bed. Groundwater is the primary water source for stream flow, whereas precipitation runoff is supplemental. Ecologists classified streams that showed significant flow during the field survey as perennial. Additionally, the U.S. Geological Survey topographic maps were used as reference.

An intermittent stream has flowing water for only portions of the year, when groundwater provides water for stream flow. During dry periods, intermittent streams may not have flowing water. Runoff from rainfall is a supplemental source of water for stream flow.

An ephemeral stream has flowing water only during, and for a short duration after, precipitation events in a typical year. Ephemeral stream beds are located above the water table year-round. Groundwater is not a source of water for the stream. Runoff from rainfall is the primary source of water for stream flow.

2.4 NOXIOUS WEED SURVEYS

SWCA conducted a noxious weed survey of all populations of North Dakota state- or county-listed noxious weeds within the project area.

2.5 TREE, SAPLING, AND SHRUB COUNT

SWCA ecologists determined the total number of trees, saplings, and shrubs present within the survey area using several different techniques, depending on the type of woody vegetation habitat (i.e., forested upland, shrubland, or shelterbelt) encountered, and the overall extent of each habitat within the project area. The boundary of all forested upland, shrubland, and shelterbelt habitat was geographically referenced using a Trimble GeoXT series handheld global positioning system (GPS) unit. In forested upland and shrubland habitat, SWCA counted or estimated the number of all woody-stemmed vegetation with a DBH of 1 inch or greater in diameter. In shelterbelt areas, all woody-stemmed vegetation, regardless of DBH, was inventoried via direct count. Ecologists taxonomically identified all recorded individuals to the species level within each habitat type.

2.6 WILDLIFE, INCLUDING THREATENED AND ENDANGERED SPECIES

Prior to conducting field surveys, SWCA reviewed information obtained from the USFWS list of threatened and endangered species by North Dakota county (USFWS 2015) regarding the presence of threatened or endangered species that may occur in the survey area. This document does not represent a comprehensive survey, but rather acknowledges the past and/or current presence of listed species. The lack of discovery of threatened or endangered species does not signify their non-existence within the area, only that no primary or secondary

indications of these species were recorded. SWCA completed a survey for all listed species and suitable habitat.

A line-of-sight binocular survey for raptor species was also conducted for a distance of approximately 0.5 mile. SWCA ecologists noted all wildlife observed during the field survey. Wildlife sightings can involve primary observations (i.e., actual sighting of an animal) or secondary observations (i.e., observation of scat, tracks, or fur deposits).

2.7 MAPPING

The boundaries of each wetland, waterbody, woody vegetation habitat, and noxious weed assemblage were geographically recorded using a Trimble GeoXT GPS unit. The aforementioned GPS unit is capable of recording geographic data with sub-meter accuracy. SWCA used Universal Transverse Mercator Zone 13 North as the projected coordinate system and North American Datum 1983 as the datum. ESRI ArcGIS 10.0 software was used to analyze recorded features, calculate areas, and generate the maps provided in Appendix A and Appendix B. All data collected using the GPS unit, and displayed on the attached maps, are for review purposes only, and do not represent a professional civil survey.

3.0 RESULTS

3.1 VEGETATION

During the field survey, SWCA ecologists identified cropland as the only vegetative community within the survey area. Photographs of the survey area are provided in Appendix C.

3.1.1 Cropland

The cropland community identified consisted of a plowed agricultural field.

3.2 HYDROLOGY

SWCA did not identify any wetland communities during the delineation effort, as defined by the Manual and Supplement. Upland communities either failed to display hydrologic indicators or failed to meet the hydrophytic vegetation criterion, as defined by the Manual and Supplement. Common indicators of wetland hydrology include Surface Water (A1), Drift Deposits (B3), Inundation Visible on Aerial Imagery (B7), Drainage Patterns (B10 Saturation Visible on Aerial Imagery (C9), and Geomorphic Position (D2).

According to National Weather Service preliminary climatological data for Fargo, North Dakota (approximately 8.5 miles southeast from the project area), 5.39 inches of precipitation were recorded from July 1 through October 21, 2015 (Table 1). This amount is 4.13 inches below normal for this time period.

**Table 1. Monthly Recorded Rainfall at National Weather Service Station in Fargo,
North Dakota**

Month	Recorded Precipitation (inches)	Normal Precipitation (inches)	Difference (inches)
July 2015	2.78	2.79	-0.01
August 2015	1.29	2.56	-1.27
September 2015	1.23	2.57	-1.34
October 1–21, 2015	0.09	1.60	-1.51
Total	5.39	9.52	-4.13

Source: National Oceanic and Atmospheric Administration (2015).

3.3 WETLANDS

SWCA did not record any palustrine emergent wetlands during the field survey.

3.4 WATERBODIES

SWCA did not identify any waterbodies during the field survey.

3.5 SOILS

Based on Natural Resources Conservation Service (NRCS) mapping (NRCS 2014), three soil types are present in the project construction corridor (Appendix B). The project area analyzed for soils covers the 62-acre project area. Table 2 lists all soil units within the project area. The following soil component description represents the most prevalent soil series found within the survey area (NRCS 2014).

Table 2. NRCS Derived Soil Series within the Project Area

Soil Types	Slopes (%)	Acres within Project Area	Percent (%) within Map Unit
Fargo silty clay loam	0 to 1	51.72	83.15
Fargo silty clay	0 to 1	9.80	15.76
Bearden-Kindred silty clay loams	0 to 2	0.68	1.09
Total		62.20	100.00

Source: Natural Resources Conservation Service (2014).

3.5.1 Fargo

The Fargo series consists of very deep, poorly drained, slowly permeable soils found on glacial lake plains, floodplains, and gently sloping side slopes of streams within glacial lake plains. The soil slopes range between 0% and 2%. The mean annual precipitation found throughout the spatial extent of this soil type is approximately 16 inches, and mean annual air temperature is approximately 41 degrees Fahrenheit. Soils are cropped to corn (*Zea mays*), small grains, soybeans (*Glycine max*), and sugar beets (*Beta vulgaris*). The most common native vegetation species found on this soil type are western wheatgrass (*Pascopyrum smithii*), Kentucky bluegrass (*Poa pratensis*), and a variety of forbs (NRCS 2014).

3.6 TREE, SAPLING, AND SHRUB COUNT

SWCA did not encounter any trees or shrubs while conducting the field survey. The survey area is within a plowed agricultural field.

3.7 NOXIOUS WEEDS

“Noxious weeds” is a general term used to describe plant species that are not native to a given area, spread rapidly, and have adverse ecological and economic impacts. These species may have high reproduction rates and are usually adapted to occupy a diverse range of habitats otherwise occupied by native species. These species may subsequently out-compete native plant species for resources, causing a reduction in native plant populations.

Noxious weeds have the potential to detrimentally affect public health, ecological stability, and agricultural practices. North Dakota Century Code (Chapter 63-01.1) and the North Dakota Department of Agriculture recognize 11 species as noxious, as shown in Table 3 (North Dakota Department of Agriculture 2014). Each county has the authority to add additional species to their list of noxious weeds. Cass County has listed black henbane (*Hyoscyamus niger*), common burdock (*Arctium minus*), houndstongue (*Cynoglossum officinale*), halogeton (*Halogeton glomeratus*), and baby’s breath (*Gypsophila paniculata*) in addition to the 11 state-listed noxious weeds. In 2014, five state noxious weed species were found on 9,250 acres in Cass County.

Table 3. Documented Noxious Weed Occupied Area in Cass County, North Dakota

Common Name	Scientific Name	Cass County (acres)
Absinth wormwood	<i>Artemisia absinthium</i>	109
Canada thistle	<i>Cirsium arvense</i>	5,478
Diffuse knapweed	<i>Centaurea diffusa</i>	0
Leafy spurge	<i>Euphorbia esula</i>	3,652
Musk thistle	<i>Carduus nutans</i>	0
Purple loosestrife	<i>Lythrum salicaria</i>	1
Russian knapweed	<i>Acroptilon repens</i>	0
Spotted knapweed	<i>Centaurea stoebe</i>	0
Yellow toadflax	<i>Linaria vulgaris</i>	10
Dalmatian toadflax	<i>Linaria dalmatica</i>	0
Salt cedar	<i>Tamarix ramosissima</i>	0

Source: North Dakota Department of Agriculture (2014).

No noxious weeds were noted during the survey for the proposed Cenex Prosper Terminal.

3.8 WILDLIFE

Several wildlife species that may exist in Cass County are listed as threatened or endangered under the Endangered Species Act (ESA) (16 United States Code 1531 et seq.). According to the USFWS, listed species in Cass County include the northern long-eared bat (*Myotis septentrionalis*), gray wolf (*Canis lupus*), and whooping crane (*Grus americana*). SWCA

conducted a threatened and endangered species survey concurrently with the wetland determination. Ecologists did not observe any primary (i.e., actual sighting) or secondary (i.e., tracks, scat, fur) indication of the presence of threatened or endangered species.

3.8.1 Gray Wolf

Federal Status: Endangered

Effects Determination: No unauthorized take anticipated

The gray wolf, listed as endangered in the United States in 1978, was believed extirpated from North Dakota in the 1920s and 1930s, with only sporadic reports from the 1930s to present (Licht and Huffman 1996; USFWS 1978). The presence of wolves in most of North Dakota consists of occasional dispersing animals from Minnesota and Manitoba (Licht and Fritts 1994; Licht and Huffman 1996). Most documented gray wolf sightings within western North Dakota are believed to be young males seeking to establish territory (Hagen et al. 2005). The Turtle Mountain region of north-central North Dakota provides marginal habitat that may be able to support a very small population of wolves. The closest known pack of wolves is the Minnesota population approximately 17 miles (28 kilometers [km]) from the northeast corner of North Dakota.

The gray wolf uses a variety of habitats that support a large prey base, including montane and low-elevation forests, grasslands, and desert scrub (USFWS 2013a). Due to a lack of forested habitat and distance from Minnesota and Manitoba populations, as well as the troubled relationship between humans and wolves and their vulnerability to being shot in open habitats (Licht and Huffman 1996), re-establishment of gray wolf populations in North Dakota is unlikely. Additionally, habitat fragmentation may further act as a barrier against wolf recolonization in western North Dakota. Therefore, **no unauthorized take is anticipated.**

3.8.2 Whooping Crane

Federal Status: Endangered

Effects Determination: No unauthorized take anticipated

The whooping crane was listed as endangered in 1970 in the United States by the USFWS and in 1978 in Canada. Historically, population declines were caused by shooting and destruction of nesting habitat in the prairies from agricultural development. Current threats to the species include habitat destruction, especially suitable wetland habitats that support breeding and nesting, as well as feeding and roosting during their fall and spring migration (Canadian Wildlife Service and USFWS 2007).

The July 2010 total wild population was estimated at 383 (USFWS 2013b). There is only one self-sustaining wild population, the Aransas-Wood Buffalo National Park population, which nests in Wood Buffalo National Park and adjacent areas in Canada, where approximately 83% of the wild nesting sites occur (Canadian Wildlife Service and USFWS 2007; USFWS 2013b). Cass County, including the project area, is outside the primary migratory flyway of whooping cranes.

Whooping cranes probe the soil subsurface with their bills for foods on the soil or vegetation substrate (Canadian Wildlife Service and USFWS 2007). Whooping cranes are omnivores,

and foods typically include agricultural grains, as well as insects, frogs, rodents, small birds, minnows, berries, and plant tubers. The largest amount of time during migration is spent feeding in harvested grain fields (Canadian Wildlife Service and USFWS 2007). Studies indicate that whooping cranes use a variety of habitats during migration, in addition to cultivated croplands, and generally roost in small palustrine (marshy) wetlands within 0.6 mile (1 km) of suitable feeding areas (Howe 1987, 1989). Whooping cranes have been recorded in riverine habitats during their migration, with eight sightings along the Missouri River in North Dakota (Canadian Wildlife Service and USFWS 2007:18). In these cases, they roost on submerged sandbars in wide, unobstructed channels that are isolated from human disturbance (Armbruster 1990).

Suitable whooping crane foraging habitat (i.e., cultivated cropland and wetlands >0.04 hectare) was observed within the survey area. In addition, the project area is located outside the delineated 95% migration corridor for the whooping crane, making the possibility of cranes using the area less than 5%. The nearest verified sighting occurred approximately 26.70 miles southwest of the proposed project area (unpublished data, M. Tacha, USFWS); thus, it is unlikely that the species would occur in the project area. SWCA recommends that if whooping cranes are sited within 1.0 mile of the project area, Cenex will stop construction until the whooping cranes have left the area and contact the USFWS. Therefore, **no unauthorized take is anticipated.**

3.8.3 Northern Long-eared Bat

Federal Status: Threatened

Effects Determination: No unauthorized take anticipated

On May 4, 2015, the USFWS listed the northern-long eared bat as threatened under the ESA (USFWS 2015). The USFWS also issued an interim rule pursuant to ESA Section 4(d) in conjunction with the final rule to list the species as threatened, which also took effect on May 4, 2015. For areas of the country not affected by whitenose syndrome (i.e., areas outside the 150-mile white-nose syndrome buffer zone), including all of North Dakota, the interim 4(d) rule exempts incidental take from certain activities. This medium-sized bat ranges across the eastern and north-central United States and all of the Canadian provinces (USFWS 2013c). Throughout most of this species' range, populations are patchily distributed. They emerge at dusk to fly through the understory of forested hillsides and ridges, feeding on moths, flies, leafhoppers, caddisflies, and beetles.

Most records of northern long-eared bats are from winter hibernacula surveys, with more than 780 hibernacula identified in the United States. No known hibernacula are located in North Dakota, due either to a lack of suitable hibernacula present or to a lack of survey efforts (USFWS 2013d). This bat species occupies a wide range of rocky and forested habitats. Suitable winter habitat contains large caves and mines (USFWS 2013c). Summer day roosts include abandoned buildings, bridges, hollow trees, stumps, under loose bark, and rock fissures (Jones and Choate 1978).

Northern long-eared bats are not known to occur in the project area, although species-specific surveys have not been conducted. Suitable winter habitat for northern long-eared bats does not occur in the project area. Nearby trees can act as suitable summer day roosts. SWCA did

not identify any trees or shrubs with a DBH of 1 inch or greater within the project area. The project is located outside the 150-mile white-nose syndrome buffer zone. Incidental take of northern long-eared bats is exempt throughout North Dakota. Therefore, **no unauthorized take is anticipated.**

3.8.4 Migratory Birds

Status: Protected under the Migratory Bird Treaty Act

Effects of Project: No incidental take anticipated

Suitable habitat for migratory birds exists in the entire project area. Specifically, grassland nesting birds have the potential to occur and nest in the project area, especially during the migratory bird breeding season. Options for Cenex to avoid all incidental take during construction of the project include the following:

- Complete all construction outside of the migratory bird breeding season, which occurs generally between February 1 and July 15.
- Clear and grub or mow the project area prior to the bird breeding season and/or maintain vegetation in a degraded state within the project construction area during the breeding season to deter migratory birds from nesting in the project area until construction is completed.
- If project construction commences during the bird breeding season, have a qualified avian biologist conduct a survey of breeding birds in the project area no more than 5 days before construction begins, and if active nests are discovered, notify the USFWS for further direction.
- If nests are identified in the construction area, they will be taxonomically identified by a qualified avian biologist to determine if the species are considered migratory. If the species are migratory, the project area will be marked by placing wooden laths on each side of the project area, then stringing caution tape across the project area between laths. A 100-foot setback from active nests will be maintained. Per general guidance and recommendation of the USFWS, no ground clearing may commence within an avoidance area, including mowing, until the identified nest ceases to be active.

With one of the proposed options listed above followed by Cenex, the proposed project is **unlikely to cause unauthorized take of any migratory birds or active nests.**

3.8.5 Bald Eagle

Federal Status: Delisted in 2007; protected under the Migratory Bird Treaty Act and the Bald and Golden Eagle Protection Act

Effects of Project: No unauthorized take anticipated

The bald eagle (*Haliaeetus leucocephalus*) feeds on fish and carrion, and typically roosts in large trees near a water source. Bald eagle nesting habitat typically consists of any mature stands of conifer or cottonwood trees in association with rivers, streams, reservoirs, lakes, or any significant body of water. Bald eagles in eastern North Dakota are usually observed along the Red River and Sheyenne River. The nearest known bald eagle nest is approximately 4.2 miles east (North Dakota Game and Fish Department 2015). Bald eagles frequently migrate

through the grassland habitats; however, no bald eagles or nests were observed during the field surveys. Therefore, **no unauthorized take is anticipated** for the bald eagle.

3.8.6 Golden Eagle

Federal Status: Unlisted; protected under the Migratory Bird Treaty Act and the Bald and Golden Eagle Protection Act

Effects of Project: No unauthorized take anticipated

The golden eagle (*Aquila chrysaetos*) prefers habitat characterized by open prairie, plains, and forested areas. Usually, golden eagles in North Dakota can be found in proximity to badland cliffs, which provide suitable nesting habitat. Golden eagles are unlikely to occur within or near the survey area due to the survey area being located outside the primary nesting range. The closest known golden eagle nest is approximately 249.1 miles from the project area. Therefore, **no unauthorized take is anticipated** for the golden eagle.

3.8.7 Wildlife Observed

SWCA did not observe any wildlife species during the field survey.

4.0 CONCLUSIONS AND RECOMMENDATIONS

1. SWCA ecologists did not record any wetlands within the survey area.
2. No threatened or endangered species were observed during the field survey. The project area is outside the delineated 95% migration corridor for the whooping crane. SWCA recommends that if construction occurs within whooping crane spring and fall migration periods, and a whooping crane is observed within 1 mile of the project, to stop construction until the whooping crane has left the area and notify the USFWS. The whooping crane has the potential to occur in the project area as a migrant. However, due to the low probability of occurrence, and only temporary disturbance during construction, there is no expectation of incidental take of the endangered whooping crane from the project. Due to a lack of suitable habitat, the proposed project is not expected to result in incidental take of the gray wolf. The northern long-eared bat has the potential to occur in the project area, due to possible suitable habitat. However, due to the relatively minor impact to the area's woody vegetation, there is expected to be no incidental take of the northern long-eared bat. Also, under an ESA Section 4(d) interim rule, incidental take of this species is exempt in North Dakota.
3. The project construction plans do not include removal of woody vegetation. SWCA identified no trees and shrubs with a DBH of 1 inch or greater within the project area.
4. A 0.5-mile line-of-sight survey for raptor nests was conducted throughout the survey area. No raptor nests were observed during the survey.

In order to avoid unauthorized take of migratory birds, SWCA recommends conducting all construction outside the migratory bird breeding season. If construction occurs during the bird breeding season, SWCA recommends to either mow, maintain in a degraded state, or completely remove vegetation within the project construction area, or conduct an avian survey of the project area no more than 5 days before construction begins. If active nests are discovered, SWCA recommends either notifying the USFWS for further direction or having a qualified avian biologist taxonomically identify the nests to determine if the species are considered migratory. If the species are migratory, SWCA recommends that a 100-foot setback from active nests be maintained. Per general guidance and recommendation of the USFWS, no ground clearing may commence within an avoidance area, including mowing, until the identified nest ceases to be active.

5. No areas of noxious weeds were identified in the survey area. If noxious weeds are confirmed during construction activities, actions should be taken to reduce the potential to spread any state-listed noxious weed species, especially to native areas.

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APPENDIX A
Vicinity and Site Layout Map

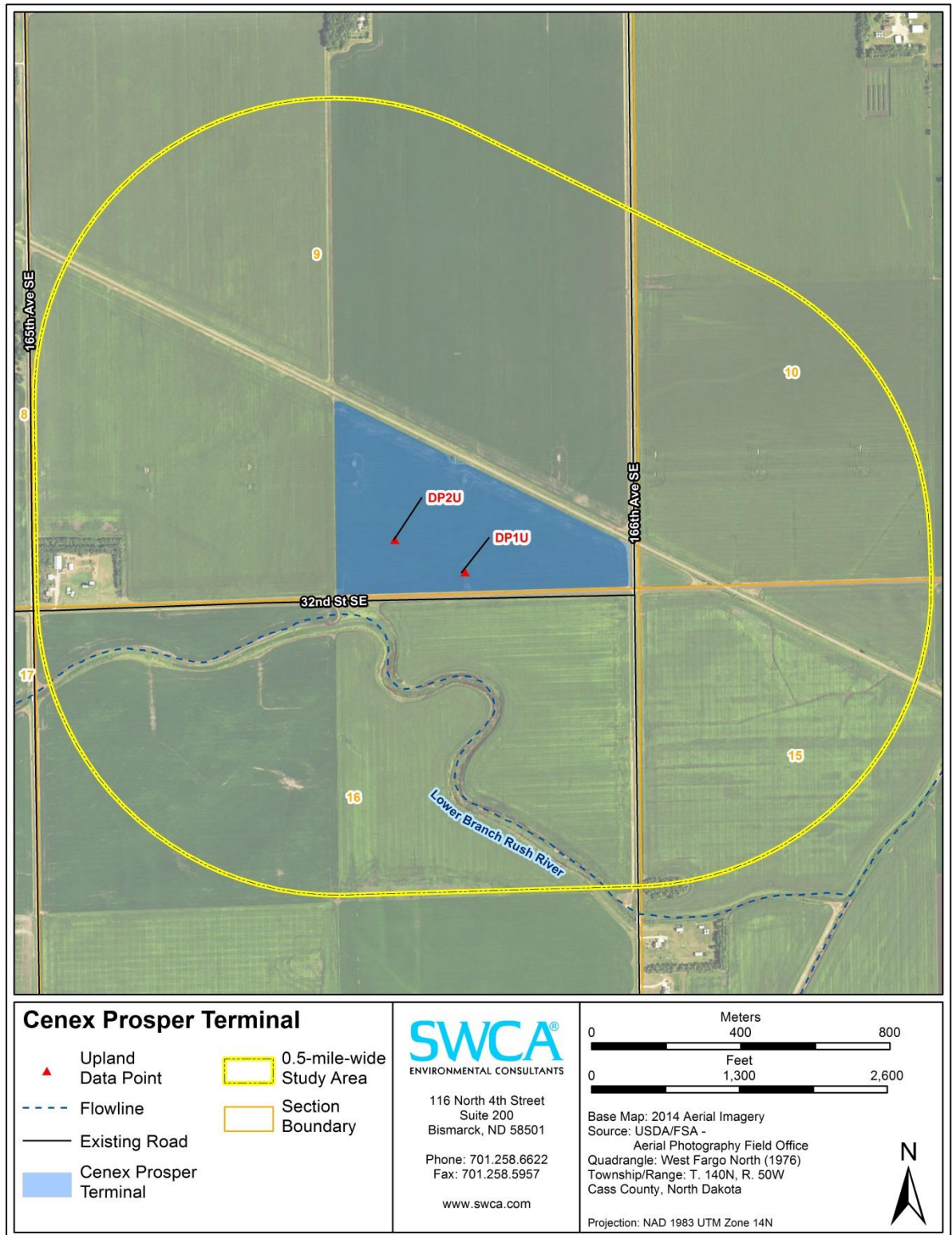


Figure A-1. Overview map of proposed Cenex Prosper Terminal.

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APPENDIX B
Survey Area Soil Series Map

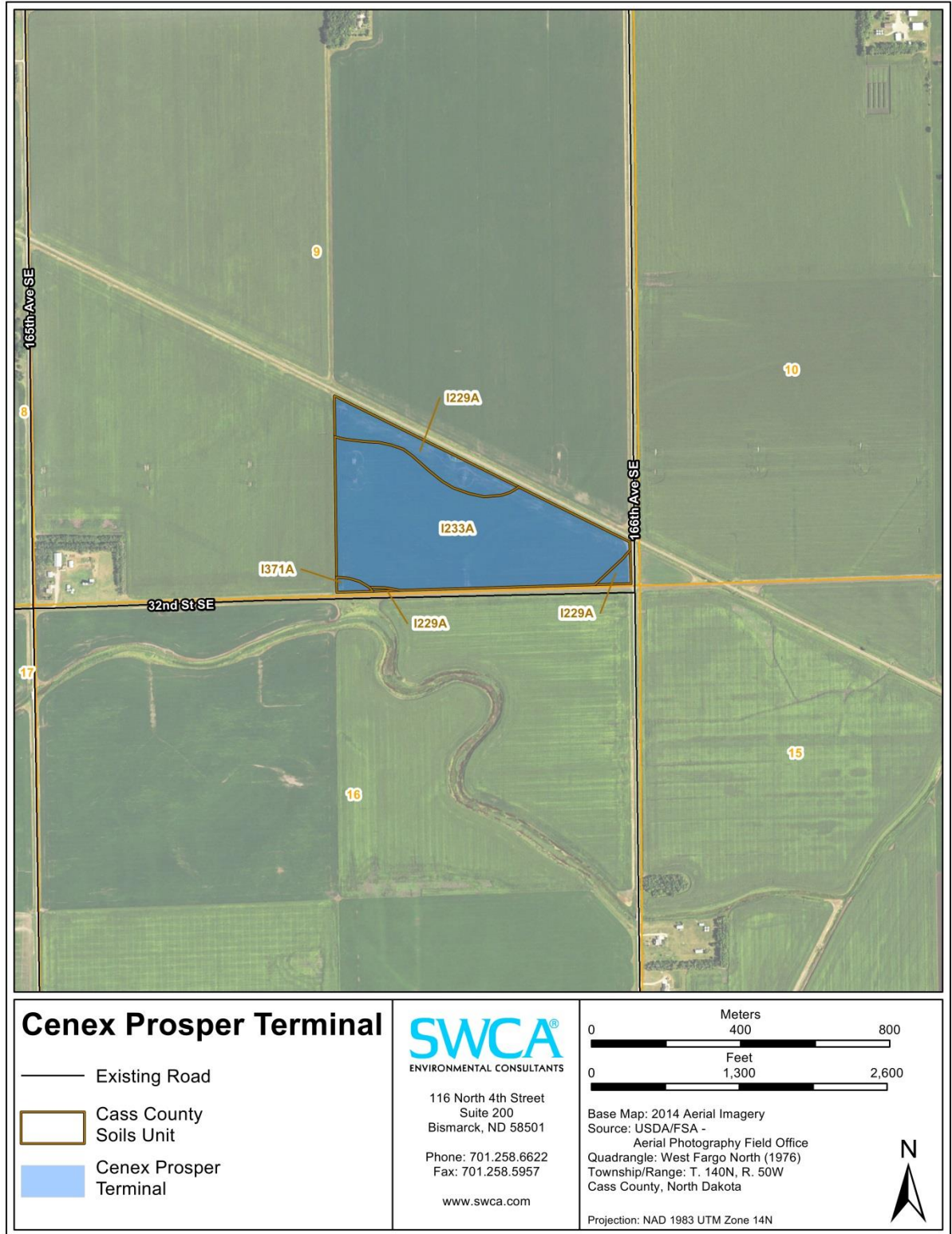


Figure B-1. Soils map of proposed Cenex Prosper Terminal.

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APPENDIX C
Photographs of Project Area



Figure C-1. Data Point 1 Upland (DP1U) overview point, facing north (photograph taken October 21, 2015).



Figure C-2. Data Point 2 Upland (DP2U) overview point, facing south (photograph taken October 21, 2015).