

**CERTIFICATION OF APPLICATION PURSUANT TO**  
**NORTH DAKOTA CENTURY CODE §49-22-16.3**

**Oasis Midstream Services, LLC**  
**Case No. PU-15-733**

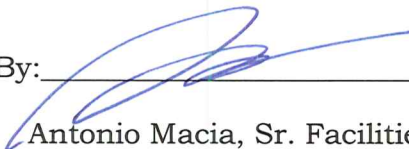
I, Antonio Macia, a representative of Oasis Midstream Services, LLC ("Company" with authority to bind the Company), do hereby certify under oath:

1. In an order dated March 23, 2016 in the captioned matter, the Public Service Commission ("PSC") approved Certificate of Corridor Compatibility No. 183 (the "Corridor Certificate") and Route Permit No. 195 (the "Permit") for the construction, operation and maintenance of a 19 mile long crude oil transmission pipeline.
2. Resulting from a constructability analysis the Company determined that a horizontal directional drill (HDD) is required to comply with the avoidance measures specified by the Project Unanticipated Discovery Plan (UDP). To complete the HDD extra temporary workspace (ETWS) is required for the stringing, and welding of the pipe to be installed via HDD. The ETWS is located at milepost 18.2 and would extend to the northwest beyond the Certificated Corridor. The ETWS is shown in detail on the route maps attached hereto referred to as Attachment 1.
3. The ETWS would be approximately 150-feet in width and 980-feet in length.
4. The Project UDP received North Dakota State Historic Preservation Office (SHPO) concurrence. The UDP and SHPO Concurrence Letter are attached and hereto referred to as Attachment 2.
5. Cultural and Natural Resource surveys have been completed of the area outside of the Certificated Corridor. Natural Resource and Cultural Resource Survey Reports are attached hereto referred to as Attachments 3 and 4 respectively.
6. Construction activities will not affect any known exclusion or avoidance areas within ETWS.
7. Each owner of real property within the ETWS and any governmental entity with an interest in the ETWS do not oppose the adjustment.
8. The Company will continue to comply with the Commission's order, law and rules designating the corridor and designating the route.

Dated this 27 day of June 2016.

Oasis Midstream Services, LLC

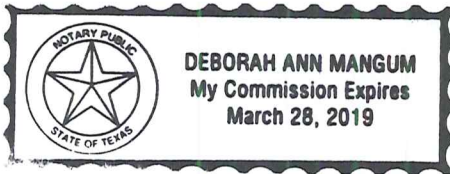
By: \_\_\_\_\_


  
Antonio Macia, Sr. Facilities Engineer

STATE OF TEXAS

COUNTY OF HARRIS

Subscribed and sworn to before me this 27 day of June, 2016, by Antonio Macia on behalf of Oasis Midstream Services, LLC.

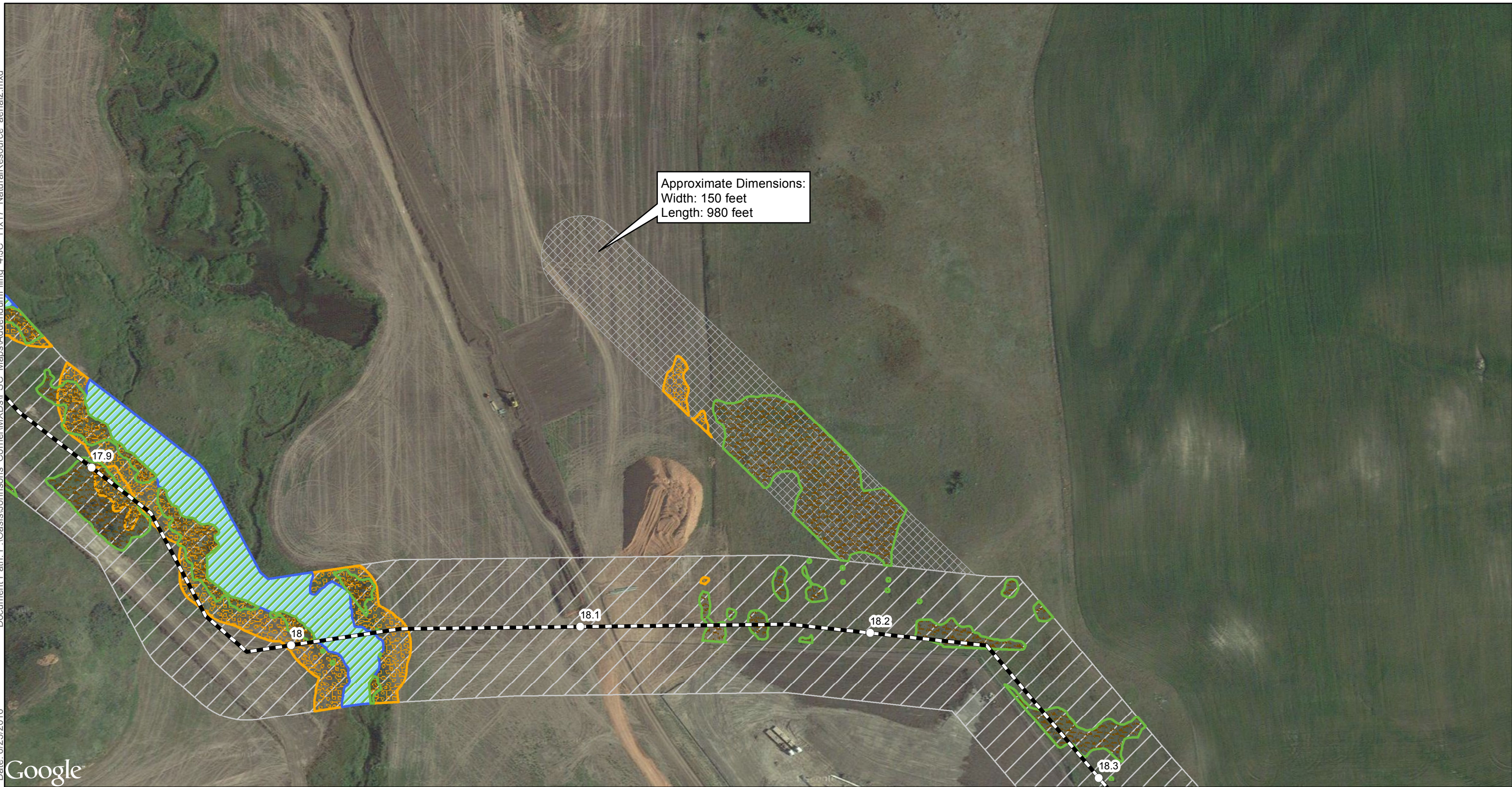




Notary Public

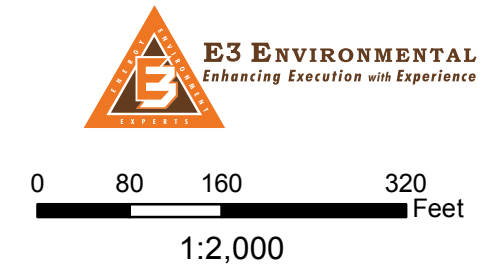
My Commission Expires: 3-28-2019

# Attachment 1



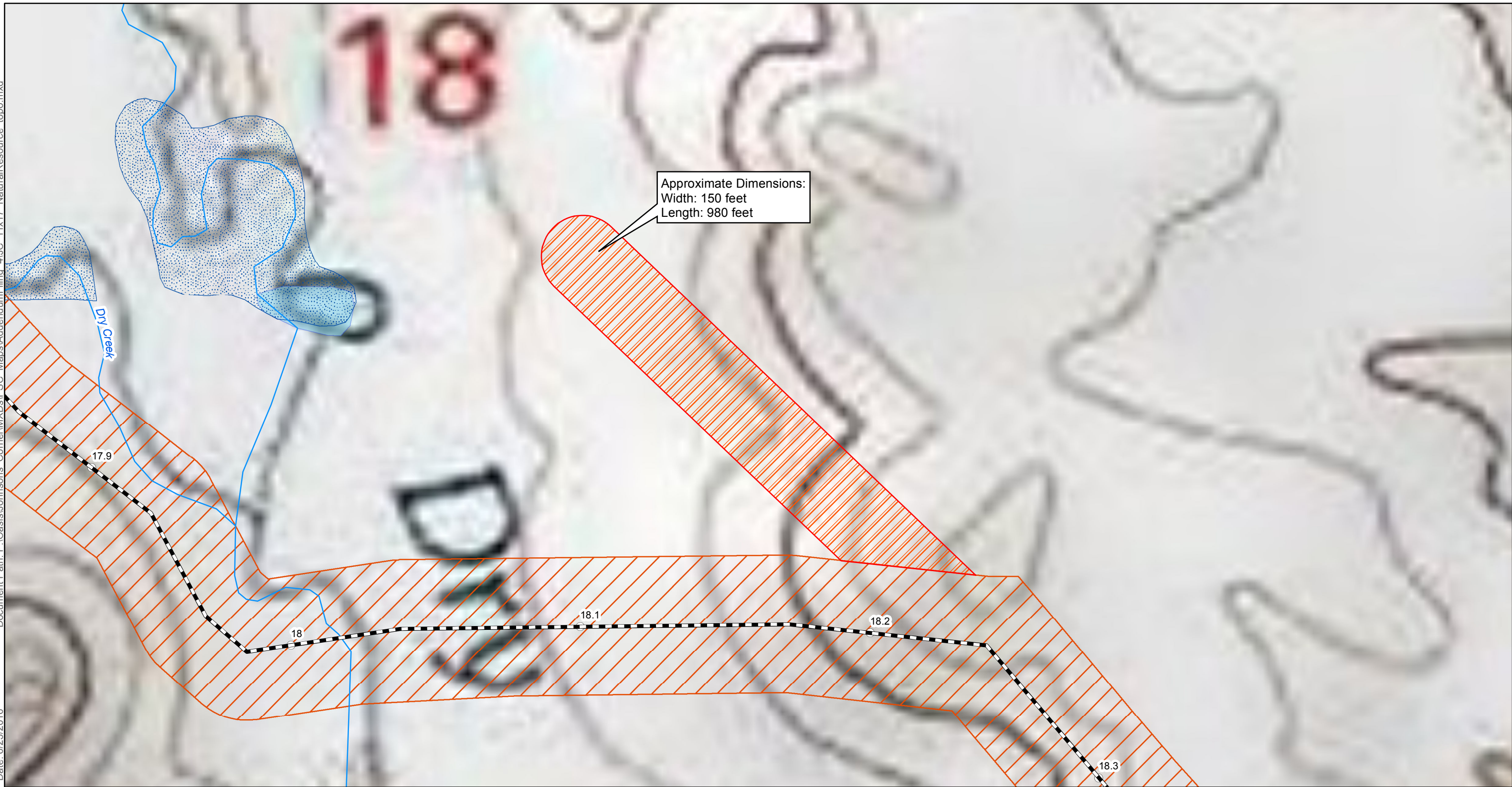
|                               |   |               |
|-------------------------------|---|---------------|
| Filed Centerline              | Potentially Occupied Structure              | Noxious Weeds |
| Valve                         | Potentially Occupied Structure (w/in 500ft) | Nest          |
| Corridor (1 mile)             | <b>Natural Resource Survey Data*</b>        |               |
| Environmental Survey Corridor | Woody Vegetation - Trees                    |               |
| ETWS                          | Woody Vegetation - Shrubs                   |               |
| ND Well Data                  | Waterbody                                   |               |
| ND WHPA Non-Community         | Wetland                                     |               |

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



Map not to scale, for environmental review purposes only.

**Oasis Midstream Services, LLC**  
 Wild Basin to Johnsons Corner  
 Crude Oil Pipeline  
 Siting Criteria  
 Natural Resource - Aerial Map  
**Additional Pullback Area**  
 McKenzie County, North Dakota



|                               |                      |                                      |
|-------------------------------|----------------------|--------------------------------------|
| Filed Centerline              | NHD Waterbody        | ICBM Direct Line to Control Facility |
| Valve                         | NWI Wetland          | Abandoned Mine                       |
| Corridor (1 mile)             | <b>Criteria Data</b> | NDGS Landslide Deposits              |
| Environmental Survey Corridor | Federal Land         | North Dakota Mineral Trust Lands     |
| ETWS                          | State Land           | PLOTS Land                           |
| NHD Waterway                  | Native American Land |                                      |
|                               | ICBM Facility        |                                      |

**E3 ENVIRONMENTAL**  
*Enhancing Execution with Experience*

1:2,000

Map not to scale, for environmental review purposes only.

**Oasis Midstream Services, LLC**  
 Wild Basin to Johnsons Corner  
 Crude Oil Pipeline  
 Siting Criteria  
 Natural Resource - Topo Map  
**Additional Pullback Area**  
 McKenzie County, North Dakota

# Attachment 2



**STATE  
HISTORICAL  
SOCIETY  
OF NORTH DAKOTA**

February 1, 2016

Jack Dalrymple  
*Governor of North Dakota*

Garrett L. Knudsen  
Archaeologist  
E3 Environmental, LLC  
871 West Jefferson Avenue  
St. Paul, MN 55102

**North Dakota  
State Historical Board**

Margaret Puetz  
*Bismarck - President*

ND SHPO Ref: 16-0462b Oasis Midstream Services LLC, Wild Basin to Johnsons  
Corner Crude Oil Pipeline Project, McKenzie County, ND, Procedures for  
Unanticipated Cultural Resources Plan

Gereld Gerntholz  
*Valley City - Vice  
President*

Albert I. Berger  
*Grand Forks - Secretary*

Dear Garrett:

Calvin Grinnell  
*New Town*

We have received and reviewed project correspondence and document 16-0462b:  
"Oasis Midstream Services LLC, Wild Basin to Johnsons Corner Crude Oil Pipeline  
Project, Procedures for Unanticipated Cultural Resources," plan by Garrett L. Knudsen  
and William F. McCarthy (E3 Environmental, January 2016) and find it acceptable.

Diane K. Larson  
*Bismarck*

Chester E. Nelson, Jr.  
*Bismarck*

Thank you for the opportunity to review the current report. Please include the ND  
SHPO reference number listed above in any further correspondence for this specific  
project. If you have any questions, please contact either Paul Picha at (701) 328-3574 or  
[ppicha@nd.gov](mailto:ppicha@nd.gov) or Susan Quinnell at (701) 328-3576 or [squinnell@nd.gov](mailto:squinnell@nd.gov).

A. Ruric Todd III  
*Jamestown*

Sara Otte Coleman  
*Director  
Tourism Division*

Kelly Schmidt  
*State Treasurer*

Sincerely,

Alvin A. Jaeger  
*Secretary of State*

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

Mark Zimmerman  
*Director  
Parks and Recreation  
Department*

and

Director, State Historical Society of North Dakota

Grant Levi  
*Director  
Department of  
Transportation*

Claudia J. Berg  
*Director  
Accredited by the  
American Alliance  
of Museums since 1986*



# **Addendum to Class I and Class III Cultural Resource Inventory of the Wild Basin to Johnsons Corner Crude Oil Pipeline Project, McKenzie County, North Dakota.**

Prepared for:

**Oasis Midstream Services, L.L.C.**

Prepared by:

**E3 Environmental, L.L.C.**



June 2016



**E3 ENVIRONMENTAL**  
*Enhancing Execution with Experience*

**MANUSCRIPT DATA RECORD FORM**

- 1. Manuscript Number: [SHPO assigns]
- 2. SHPO Reference #: [SHPO assigns]
- 3. Authors: Garrett Knudsen
- 4. Title: Addendum to Class I and Class III Inventory of the Johnsons Corner Pipeline Project
- 5. Report Date: June, 2016
- 6. Number of Pages (Including front matter, references cited and appendices): 10
- 7. Type – I = Inventory (Class I and Class III CRI)
- 8. Acres – 496
- 9. Legal Location(s) (no quarter sections) with Historic Context Study Unit(s):  
 Consult township tables in The North Dakota Comprehensive Plan for Historic Preservation: Archeological Component, (SHSND 1990) for Study Unit assignments.  
 Study Units: LM, CB, KN, HE, SM, GA, JA, GR, NR, SR, SO, SH, YE

| <u>COUNTY</u> | <u>TWP</u> | <u>RNG</u> | <u>SEC</u>           | <u>SU</u> |
|---------------|------------|------------|----------------------|-----------|
| McKenzie      | 151N       | 98W        | 35, 36               | LM        |
|               | 150N       | 98W        | 1                    | LM        |
|               | 150N       | 97W        | 3, 6-12              | LM        |
|               | 150N       | 96W        | 7-11, 13, 14, 18, 23 | LM        |
|               | 150N       | 95W        | 17, 18               | GA        |

**Addendum to Oasis Midstream Services LLC. Wild Basin to  
Johnsons Corner Crude Oil Pipeline Project  
Class I and Class III Cultural Resource Inventory**

Submitted to:

State Historical Society of North Dakota

**Prepared for:**

Oasis Midstream Services L.L.C.

**Prepared By:**

Garrett L. Knudsen

**Principal Investigators:**

Garrett L. Knudsen

June, 2016

E3 Environmental, LLC  
871 Jefferson Ave  
St. Paul, MN 55102



## SUMMARY

E3 Environmental, LLC (E3) conducted a Class I and a Class III cultural resources inventory for the Oasis Midstream Services, L.L.C Wild Basin to Johnsons Corner Crude Oil Pipeline Project (Project). The Project falls entirely on private land in McKenzie County, North Dakota. The regulatory agencies involved are the North Dakota State Historic Preservation Office (ND SHPO) and the North Dakota Public Service Commission (NDPSC); ND SHPO guidelines are implemented in this cultural resources study. After the original Survey Corridor of 493 acres was originally surveyed (September 2015) and reported (January 2016), an additional area of 3 acres of 250-foot wide Survey Corridor was added and surveyed in June 2016.

The original Class I inventory conducted November 2015 identified 18 completed cultural resources surveys (MS#5749, MS#6051, MS#7144, MS#11710, MS#11739, MS#12014, MS#12150, MS#12312, MS#13002, MS#13063, MS#13099, MS#13515, MS#13847, MS#14083, MS#14122, MS#14475, MS#14548, and MS#14839) within one-half mile of the proposed pipeline (Project Corridor). Fourteen previously-recorded cultural resources are located within the Project Corridor, including five *sites* (32MZ772, 32MZ782, 32MZ793, 32MZ2672, and 32MZ2697) and nine *isolates* (32MZX184, 32MZX187, 32MZX415, 32MZX1119, 32MZX1173, 32MZX1190, 32MZX1214, 32MZX1228, and 32MZX1229). Of these, one (32MZ793) is recorded within a 250-foot width, centered on the Project centerline and surrounding ancillary areas (Survey Corridor). The additional Survey Corridor area detailed in this report falls within the areas addressed in the original Project report (Woodward, Pnewski, & Knudsen 2016).

The original Class III inventory, conducted in September, 2015, included pedestrian survey of the Survey Corridor and a re-investigation of previously recorded archaeological sites there. Although this area overlapped, for the majority of its length, a 75-foot wide corridor surveyed for cultural resources Summer, 2015, the entire Survey Corridor was re-surveyed in 15-meter (maximum) transects as part of this study. These survey efforts identified 15 newly-recorded cultural resources: three archaeological sites (32MZ2953, 32MZ2954, and 32MZ2955) and 12 isolates (32MZX1533, 32MZX1534, 32MZX1535, 32MZX1536, 32MZX1537, 32MZX1538, 32MZX1539, 32MZX1540, 32MZX1541, 32MZX1542, 32MZX1543, and 32MZX1544). E3 also re-located and investigated previously-recorded prehistoric site (32MZ793) within the Survey Corridor. Details of these results are included in the original report (Woodward, Pnewski, & Knudsen 2016). The additional Survey Corridor area, surveyed in June, 2016, is negative for additional cultural resources.

Construction activity within the additional Survey Corridor area addressed in this report **WILL NOT** affect any known cultural resources. Conclusions and recommendations for the entire original Survey Corridor are detailed in the original report (Woodward, Pnewski, & Knudsen 2016).



## PROJECT OVERVIEW

Oasis Midstream Services, L.L.C. (Oasis), owns and operates petroleum assets in North Dakota. Oasis is proposing the Wild Basin to Johnsons Corner Crude Oil Pipeline Project (Project). The Project is a new, approximately 14-mile, steel, 10-inch diameter petroleum pipeline that will originate one-half mile north of the 30<sup>th</sup> St. NW and 121 Ave NW junction and ends at Highway 23 in McKenzie County, North Dakota (see Figure 1).

Oasis has retained E3 to fulfill cultural resource obligations regarding the Project and assess the potential effects of activities associated with constructing the Project to cultural resources, and is prepared to supplement Oasis's submittal to the NDPSA for an amended Certificate of Corridor Compatibility and Route Permit Application for the Project which includes the cultural resources survey results for the additional Survey Corridor area.

Class I and Class III cultural resource inventories conducted by E3 Environmental, LLC (E3) in September 2015 for Oasis can be found in the original report (Woodward, Pnewski, & Knudsen 2016). The Project is being constructed on 496 acres of private land within North Dakota. The southern terminus of the project is located approximately 19 miles west of Watford City, North Dakota along Highway 22. The northern terminus of the Project is located approximately six miles northwest of Watford City, North Dakota in McKenzie County. The project is situated on Schafer, Schafer SE, and Johnsons Corner North Dakota, U.S. Geological Survey (USGS) topographic quadrangles. Refer to Figure 1 for added Project location.

Garrett L. Knudsen was Principal Investigator. Table 1 details the Project location.

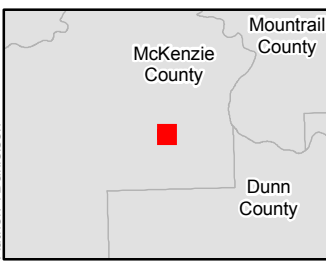
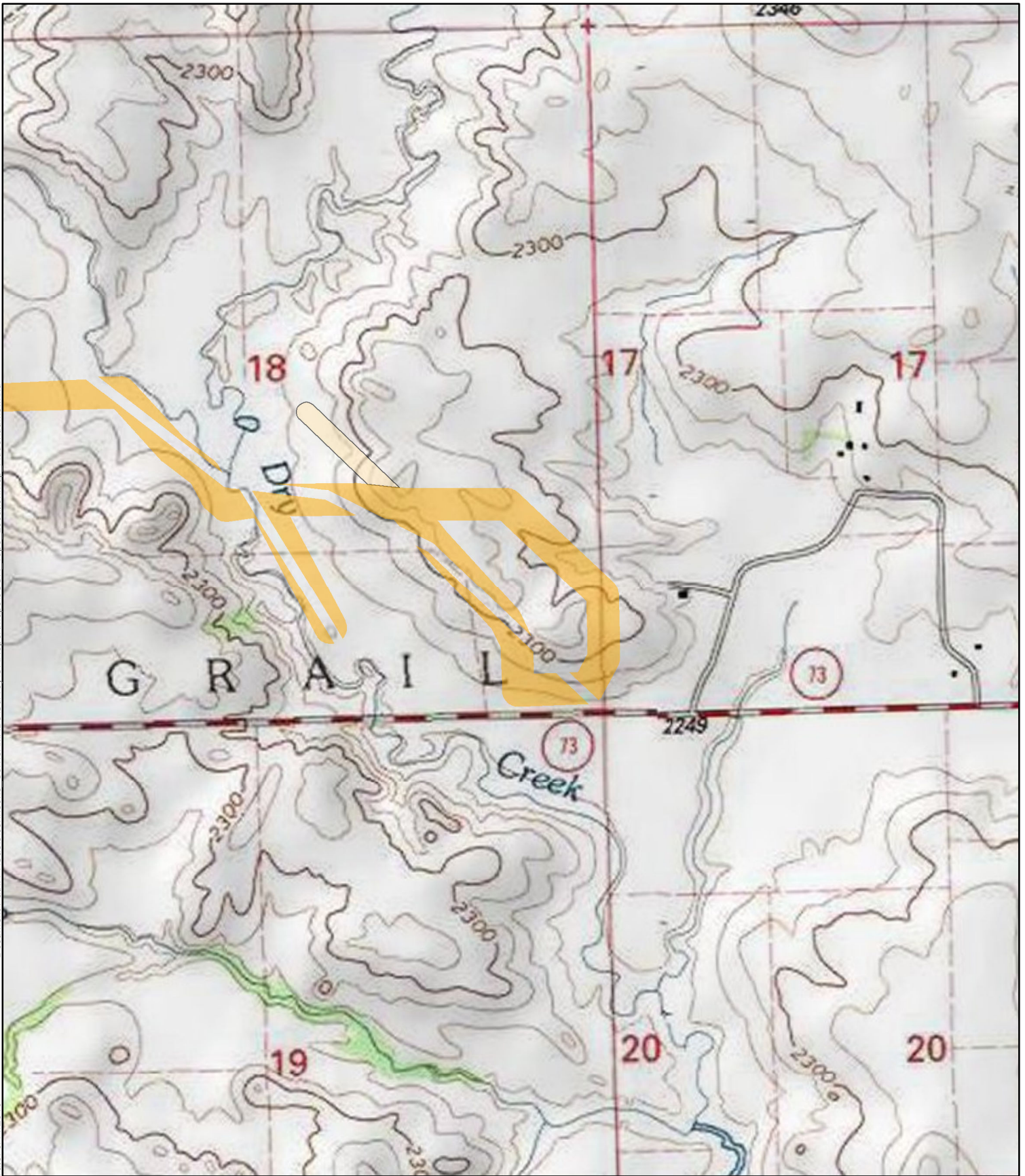
**Table 1. Legal Location of Project**

| <b>Township</b> | <b>Range</b> | <b>Section(s)</b>    |
|-----------------|--------------|----------------------|
| 151N            | 98W          | 35, 36               |
| 150N            | 98W          | 1                    |
| 150N            | 97W          | 3, 6-12              |
| 150N            | 96W          | 7-11, 13, 14, 18, 23 |
| 150N            | 95W          | 17, 18               |

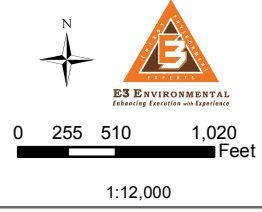
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Date: 6/14/2016

Author: TDanielson



- Previous Survey Corridor
- Additional Survey Area



For environmental review purposes only.

**E3 Environmental**  
 Cultural Resource Survey

Site Location Map  
**Additional Survey Area**  
 McKenzie County, ND



## **REGULATORY FRAMEWORK**

The principal law relevant to the protection of cultural resources for the Project is the National Historic Preservation Act (NHPA), which established a State Historic Preservation Office (SHPO) in each state.

### **FEDERAL**

Zero acres of the Survey Corridor for the Project fall within federally-managed land.

### **STATE**

Zero acres of the Survey Corridor for the Project fall within state-managed land.

## **SURVEY CORRIDOR**

For purposes of this project, and to meet pertinent state regulatory requirements, the Survey Corridor (see Figure 2) consists of:

- The Original 250 foot-wide ROW centered on the centerline and surrounding ancillary areas, encompassing 493 acres.
- The additional pull back area increases the total ROW by 3 acres to 496 acres.

## **INVENTORY METHODS**

Standard Class I Cultural Resource Inventory methodologies were utilized: research was conducted on files maintained at the State Historical Society in Bismarck, North Dakota. These files consist of a searchable digital database, Geographic Information System (GIS) based mapping, and traditional paper files for site forms and manuscripts. In addition, General Land Office (GLO) maps were consulted to help identify potential locations of previously unrecorded cultural resources.

Archaeologists conducted the survey by walking parallel transects at 15 meter intervals across the Survey Corridor. When possible, E3's archaeologists examined subsurface exposures in erosional cut banks, road cuts, rodent burrow entrances, and ant hills for artifacts or evidence of buried cultural deposits. In areas where the surface visibility was less than 30 percent, tighter spaced transects were utilized, with spacing not exceeding 10 meters. None of the additional survey area addressed in this site had less than 10 percent.

None of the additional survey area addressed in this site had less than 5 percent surface visibility; no shovel tests were completed.



Only resources that appeared to be more than 50 years old were recorded. Site locations and boundaries were mapped using a Trimble Geo XT 6000 Global Positioning System (GPS) unit and are provided in North American Datum (NAD) 83, and Universal Transverse Mercator (UTM) projection. Archaeologists conducting the inventory utilized the appropriate North Dakota Site Form(s) when recording cultural resources.

## **INVENTORY RESULTS**

### **CLASS I RESULTS**

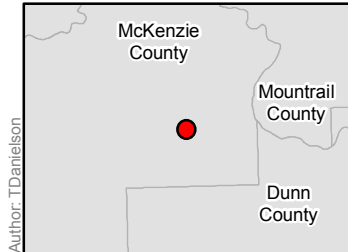
The additional Survey Corridor discussed in this report falls within the area described in the Project Class I inventory detailed in the original report (Woodward, Pnewski, & Knudsen 2016), conducted October, 2015

### **CLASS III RESULTS**

The additional Survey Corridor area discussed in this report was negative for cultural resources. The Project Class III inventory is detailed in the original report (Woodward, Pnewski, & Knudsen 2016).

**Table 4. Approximation of Surface Visibility within the Survey Corridor**

| <b>&lt;10%</b> | <b>10-20%</b> | <b>20-30%</b> | <b>30-40%</b> | <b>40-50%</b> | <b>50-60%</b> | <b>60-70%</b> | <b>70-80%</b> | <b>80-90%</b> | <b>&gt;90%</b> |
|----------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|
| 0              | 0             | 5             | 10            | 10            | 20            | 20            | 20            | 10            | 5              |



- Milepost
- Proposed Centerline
- Additional Survey Area
- Previous Survey Corridor

0 30 60 120 Feet

1:1,500

For environmental review purposes only.

**E3 Environmental**  
 Cultural Resource Survey

Site Sketch Map

**Additional Survey Area**  
 McKenzie County, ND



## **CONCLUSION**

Construction activity within the additional Survey Corridor area addressed in this report **WILL NOT** affect any known cultural resources. Conclusions are recommendations for the entire original Survey Corridor are detailed in the original report (Woodward, Pnewski, & Knudsen 2016).



## **REFERENCES**

Woodward, D., J. Pnewski, & G. Knudsen. (2016). Oasis Midstream Services LLC.,  
Wild Basin to Johnsons Corner Crude Oil Pipeline Project, McKenzie County.  
Submitted to North Dakota SHPO.

# Attachment 3

**Addendum: Natural Resource Survey Report**  
**Wild Basin to Johnson's Corner Crude Oil Pipeline**

Prepared for:  
Oasis Midstream Services, LLC

June 22, 2016

E3 Environmental, LLC  
871 Jefferson Ave  
St. Paul, MN 55102



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**OVERVIEW:**

E3 Environmental, LLC (E3), at the request of Oasis Midstream Services, LLC (Oasis), performed natural resource surveys for extra temporary workspace (ETWS) to be utilized to stage, weld, and prepare a pipeline for a proposed horizontal directional drill (HDD) for the Wild Basin to Johnson's Corner Crude Oil Pipeline (Project). Appendix A depicts the additional surveyed area addressed by this report. The original alignment and survey corridor was originally surveyed by E3, following North Dakota Public Service Commission (NDPSC) regulations, in September of 2015. These surveys included:

- Raptor nest documentation and status determination,
- Wetland and waterbody delineation and jurisdictional characterization,
- Woody vegetation delineation and inventory,
- Noxious weed inventory and delineation, and
- Protected species surveillance and habitat assessment

This report serves as an addendum to the Wild Basin to Johnson's Corner Crude Oil Pipeline Natural Resource Survey Report. The original report was submitted as Appendix D in the Consolidated Application filed with the NDPSC on November 16, 2015 (PU-15-733)

**SURVEY CORRIDOR:**

The Project ETWS is located at milepost 18.2 in Section 18, T150N:95W. The Survey Corridor, which was approximately 3.0 acres in size and includes the ETWS (Appendix A). The ETWS is located along a hill slope north of the previously surveyed area and extends northwest into disturbed grassland and an agricultural field.

**METHODOLOGY:**

E3 biologists followed standard survey protocols which are consistent with those utilized during surveys conducted previously for the Project. One field visit was required to cover the entire Survey Corridor, on June 8, 2016.

**SURVEY RESULTS:**

**Raptor Nests**

No previously unrecorded raptor nests were identified within the Survey Corridor or within line-of-sight on June 8, 2016.



### Wetlands and Waterbodies

No previously unrecorded wetland or waterbodies were identified or mapped within the Survey Corridor.

### Woody Vegetation

One previously unrecorded woody vegetation patch, totaling 1.2 acres, was observed within the Survey Corridor. This feature was inventoried and its location recorded. The details of this patch are described in Table 1.

**Table 1. Woody vegetation patches and their anticipated mitigation coverages.**

| Woody Veg ID | Patch Type   | Species           | Percent Cover of Species |            |                 | Area Surveyed (acres) | Anticipated Disturbance (acres) |
|--------------|--------------|-------------------|--------------------------|------------|-----------------|-----------------------|---------------------------------|
|              |              |                   | Survey Corr.             | Const. ROW | Est. Mitigation |                       |                                 |
| WVS-392      | Upland Shrub | Western snowberry | 30%                      | 30%        | 30%             | 1.1                   | 1.1                             |
|              |              | Chokecherry       | 2%                       | 2%         | 2%              |                       |                                 |
|              |              | Silver sagebrush  | 2%                       | 2%         | 2%              |                       |                                 |
|              |              | Prairie Rose      | 2%                       | 2%         | 2%              |                       |                                 |

### Noxious Weeds

Two previously unrecorded noxious weed patches were observed within the Survey Corridor. These features were comprised of Canada thistle. These locations were recorded and mapped. The details of these patches are described in Table 2.

**Table 2. Noxious weed patches, species percent cover, and acreage.**

| Noxious Weed ID | Species        | Percent Cover | Acres |
|-----------------|----------------|---------------|-------|
| NX-85           | Canada Thistle | 25%           | 0.01  |
| NX-86           | Canada Thistle | 25%           | 0.06  |

### Threatened and Endangered Species

No threatened or endangered species or associated critical habitat were observed within the Survey Corridor.



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**RECOMMENDATIONS:**

Woody vegetation and noxious weeds were both present with the Survey Corridor on June 8, 2016. E3 recommends following the guidance presented in the original Natural Resource Report, including:

**Woody Vegetation**

- Follow PCS guidelines for tree-clearing activity;
- decrease ROW to 50-feet through woodlands and shrublands to minimize loss; and
- seed mixes will likely be required to replace shrubs such as western snowberry and silver sagebrush.

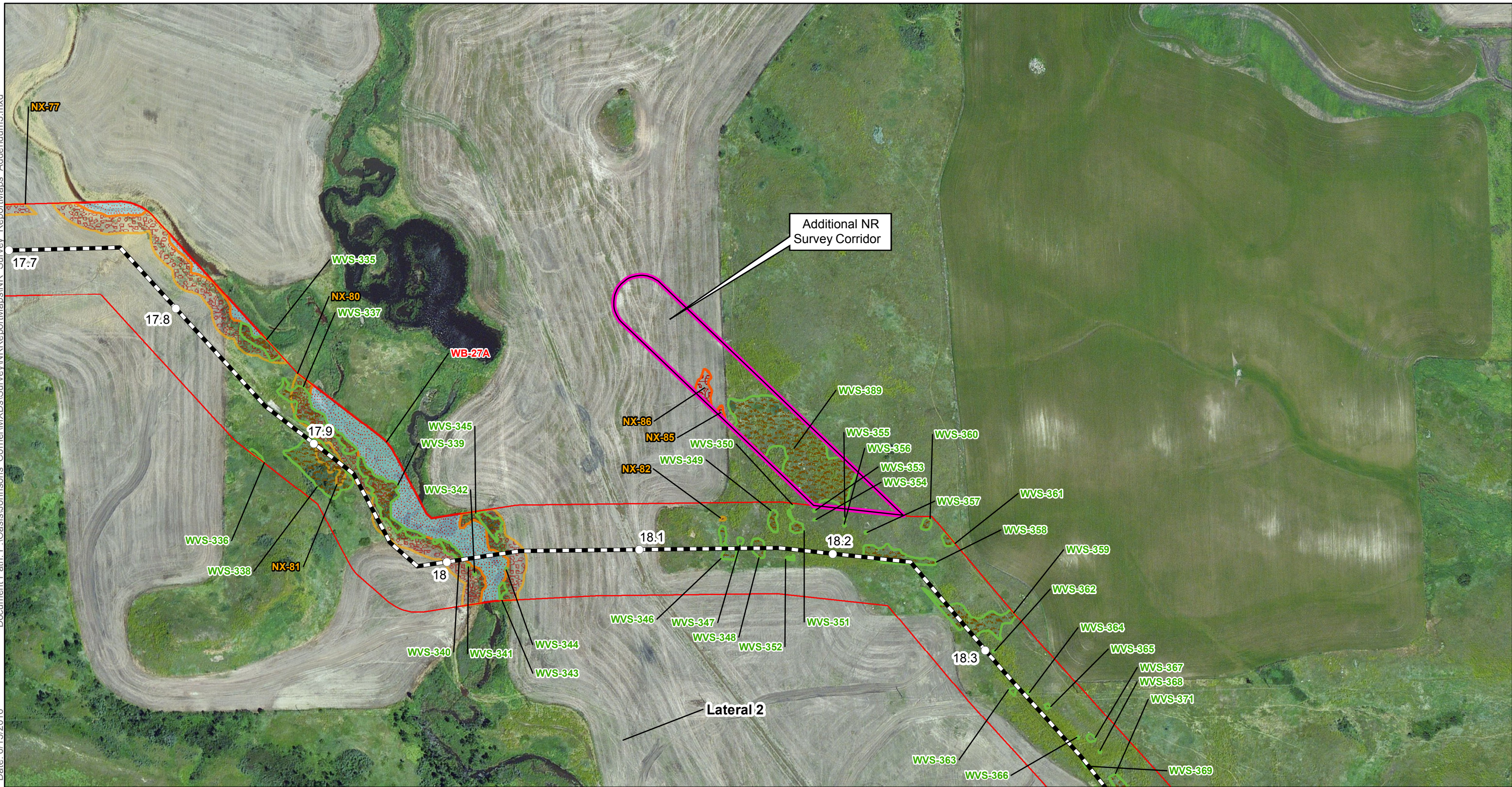
**Noxious Weeds**

- Minimize top soil spread and traffic in areas with high concentrations of noxious weeds;
- visually inspect equipment prior to leaving infested areas – clean vegetation and soils from vehicles and equipment prior to entering uninfected tracts; and
- contractors will thoroughly clean the equipment and materials (e.g., timber mats, bridges, etc.) at the contractor yard prior to mobilization to the Project and upon departure from locations of infestations to prevent spread of nuisance weeds.


**Appendix A**  
**Natural Resource Maps**

Document Path: P:\Oasis\Johnsons Corner\MXDs\Survey\NRReportMaps\NR\_Survey\_ReportMaps\_Addendum3.mxd  
 Date: 6/15/2016

Author: TDanielson



|                                    |  |                                     |
|------------------------------------|--|-------------------------------------|
| ○ Milepost                         | <b>Waterbody Features</b>                  | <b>Natural Resource Survey Data</b> |
| ▬ Centerline                       | <b>Class, Jurisdictional Determination</b> | ☐ Noxious Weed                      |
| ▭ Natural Resource Survey Corridor | ☐ Waterbody, No                            | ☐ Woody Vegetation - Shrubs         |
| ▭ Additional NR Survey Corridor    | ☐ Waterbody, Yes                           | ☐ Woody Vegetation - Trees          |
| ● Nest                             | ☐ Wetland, No                              |                                     |
| ▭ Nest Buffer                      | ☐ Wetland, Yes                             |                                     |



0 100 200 400 Feet  
1:3,000

Map not to scale, for environmental review purposes only.

**Oasis Petroleum**  
 Wild Basin to Johnsons Corner  
 Natural Resource Survey  
**Addendum Survey**  
 McKenzie County, North Dakota

Attachment 4

Redacted