

**Addendum to the Class I and
Class III Cultural Resource
Inventory of the Whiting Belfield
Oil Pipeline, Stark and Billings
Counties, North Dakota**

Prepared for

Merjent, Inc.

Prepared by

SWCA Environmental Consultants

October 2011

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<u>COUNTY</u>	<u>TWP</u>	<u>RNG</u>	<u>SEC</u>	<u>SU</u>
Billings	141N	98W	16	HE
Stark	140N	99W	14	HE

**Addendum to the Class I and Class III Cultural Resource Inventory of the
Whiting Belfield Oil Pipeline, Stark and Billings Counties, North Dakota**

Submitted to:

State Historical Society of North Dakota

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Addendum to SWCA Cultural Resource Report Number 11-260

October 21, 2011

ABSTRACT

This report is an addendum to the Class I and Class III report for the cultural resource inventory of the Whiting Belfield Oil Pipeline, Stark and Billings Counties, North Dakota (Lechert and Herson 2011) and outlines the results of a Class III cultural resource inventory conducted by SWCA Environmental Consultants (SWCA) on October 14, 2011, on behalf of Merjent, Inc. (Merjent) for two proposed reroutes of the Whiting Petroleum Corporation (Whiting) Belfield Oil Pipeline. The northern survey segment consists of 4.72 acres and the southern survey segment consists of 4.87 acres, both surveyed on private lands to accommodate engineering reroutes. The northern reroute is located in Billings County, North Dakota, in the E $\frac{1}{2}$ NE $\frac{1}{4}$ SE $\frac{1}{4}$ and SW $\frac{1}{4}$ SE $\frac{1}{4}$ NE $\frac{1}{4}$ of Section 16, Township (T) 141 North (N), Range (R) 98 West (W). The southern reroute segment is located in Stark County, North Dakota, in the NE $\frac{1}{4}$ NE $\frac{1}{4}$ and E $\frac{1}{2}$ NW $\frac{1}{4}$ NE $\frac{1}{4}$ of Section 14, T141N, R99W. The project area is located approximately 4.7 miles northeast of Belfield, North Dakota.

The jurisdictional agency presiding over the construction of the Belfield Oil Pipeline is the North Dakota Public Service Commission. Merjent is assisting Whiting with their application to the North Dakota Public Service Commission for a certificate of corridor compatibility and route permit for the project. Merjent retained SWCA to complete a Class I and Class III cultural resource inventory for the project.

The purpose of this Class III inventory was to survey two linear segments for engineering reroutes to the pipeline. As a result, one 4.72-acre area (1,714 feet long with a 120-foot-wide survey corridor) was surveyed for the northern reroute and one 4.87-acre area (1,768 feet long with a 120-foot-wide survey corridor) was surveyed for the southern reroute. In total, 9.59 additional acres were inventoried for the pipeline reroute project.

No cultural resources were identified during the course of the reroute inventory. Therefore it is recommended that a determination of *No Historic Properties Affected* and *No Significant Sites Affected* be granted and for the project to proceed as planned.

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TABLE OF CONTENTS

	<u>Page</u>
ABSTRACT.....	ii
INTRODUCTION	1
PROJECT SETTING AND BACKGROUND	5
BACKGROUND RESEARCH.....	5
FIELDWORK METHODS.....	5
INVENTORY RESULTS AND RECOMMENDATIONS.....	5
CONCLUSIONS.....	10
REFERENCES CITED.....	11

LIST OF FIGURES

<u>Figure</u>	<u>Page</u>
1 Map showing project location and reroute survey areas.....	2
2a Project area map showing northern reroute.	3
2b Project area map showing southern reroute.	4
3 Aerial map showing the northern reroute.....	6
4 Northern reroute as it crosses into the disturbed area, view to the north.....	7
5 Northern reroute area showing existing infrastructure in the background, view to the northwest.....	7
6 Aerial map showing the southern reroute.	8
7 Southern reroute overview, view to the west.....	9
8 Southern reroute overview, showing existing infrastructure in the background, view to the west.	9

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INTRODUCTION

This addendum report outlines the results of a Class III cultural resource inventory conducted by SWCA Environmental Consultants (SWCA) October 14, 2011, on behalf of Merjent, Inc. (Merjent) for the Whiting Petroleum Corporation (Whiting) Belfield Oil Pipeline. The purpose of the Class III inventory was to survey two proposed pipeline segments rerouted for engineering purposes. The jurisdictional agency presiding over the construction of the Whiting Belfield Oil Pipeline is the North Dakota Public Service Commission (NDPSC). Merjent is assisting Whiting with their application to the NDPSC for a certificate of corridor compatibility and route permit for the project. Merjent retained SWCA to complete a Class I and Class III cultural resource inventory for the project.

For the pipeline project, 99.73 acres were previously inventoried on private lands in North Dakota (Lechert and Herson 2011). The reroutes surveyed for this project are located at the northern and southern ends of the proposed Whiting Belfield Oil Pipeline (Figures 1 and 2a–2b). The northern reroute is located in Billings County, North Dakota, on privately owned lands, and is situated on the Fairfield SE (1964) U.S. Geological Survey (USGS) topographic quadrangle. The southern reroute is located in Stark County, North Dakota, and is situated on the Belfield (1981) USGS topographic quadrangle. The project area is located approximately 4.7 miles northeast of Belfield, North Dakota.

The Class III inventory for the proposed northern reroute consists of a 4.72-acre linear survey area (1,714 feet long with a 120-foot-wide survey corridor) located in the E $\frac{1}{2}$ NE $\frac{1}{4}$ SE $\frac{1}{4}$ and SW $\frac{1}{4}$ SE $\frac{1}{4}$ NE $\frac{1}{4}$ of Section 16, Township (T) 141 North (N), Range (R) 98 West (W). The inventory for the proposed southern reroute consists of a 4.87-acre linear survey area (1,768 feet long with a 120-foot-wide survey corridor) located in the NE $\frac{1}{4}$ NE $\frac{1}{4}$ and E $\frac{1}{2}$ NW $\frac{1}{4}$ NE $\frac{1}{4}$ of Section 14, T140N, R99W. In total, 9.59 additional acres were inventoried for the two proposed reroutes. Both reroutes cross agricultural fields.

The proposed pipeline reroutes would be constructed within an 80-foot-wide temporary construction corridor centered on the pipeline centerline. All proposed construction activities would remain within the inventoried areas.

For the cultural resource investigation, Judith Cooper served as Principal Investigator. Field survey for the pipeline reroutes was performed by Jolene Schleicher and Alyssa Newcomb. All field notes and photographs are on file at SWCA's Bismarck, North Dakota, office under project number 20860.

Contains Privileged Information -- Do Not Release

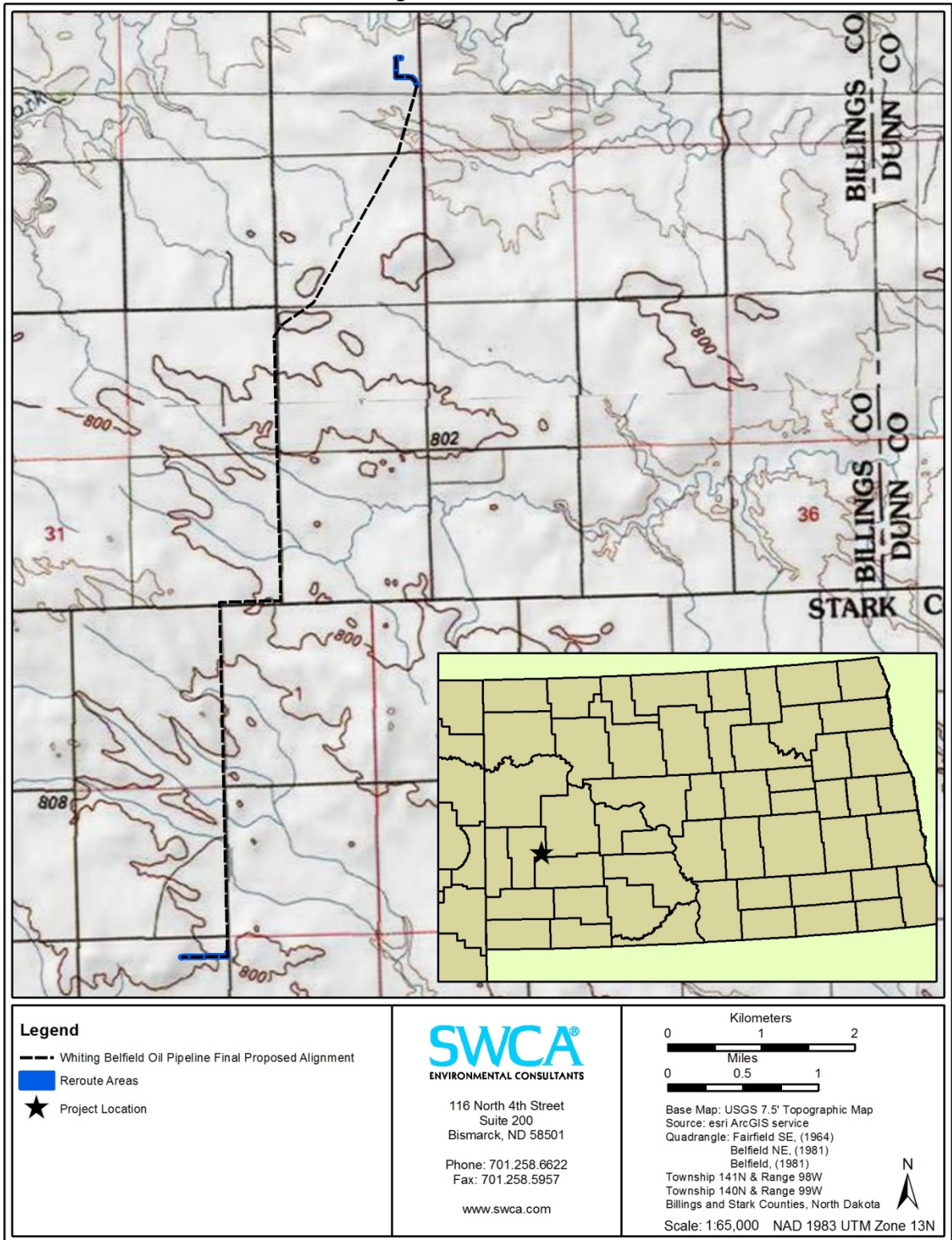


Figure 1. Map showing project location and reroute survey areas.

Contains Privileged Information -- Do Not Release

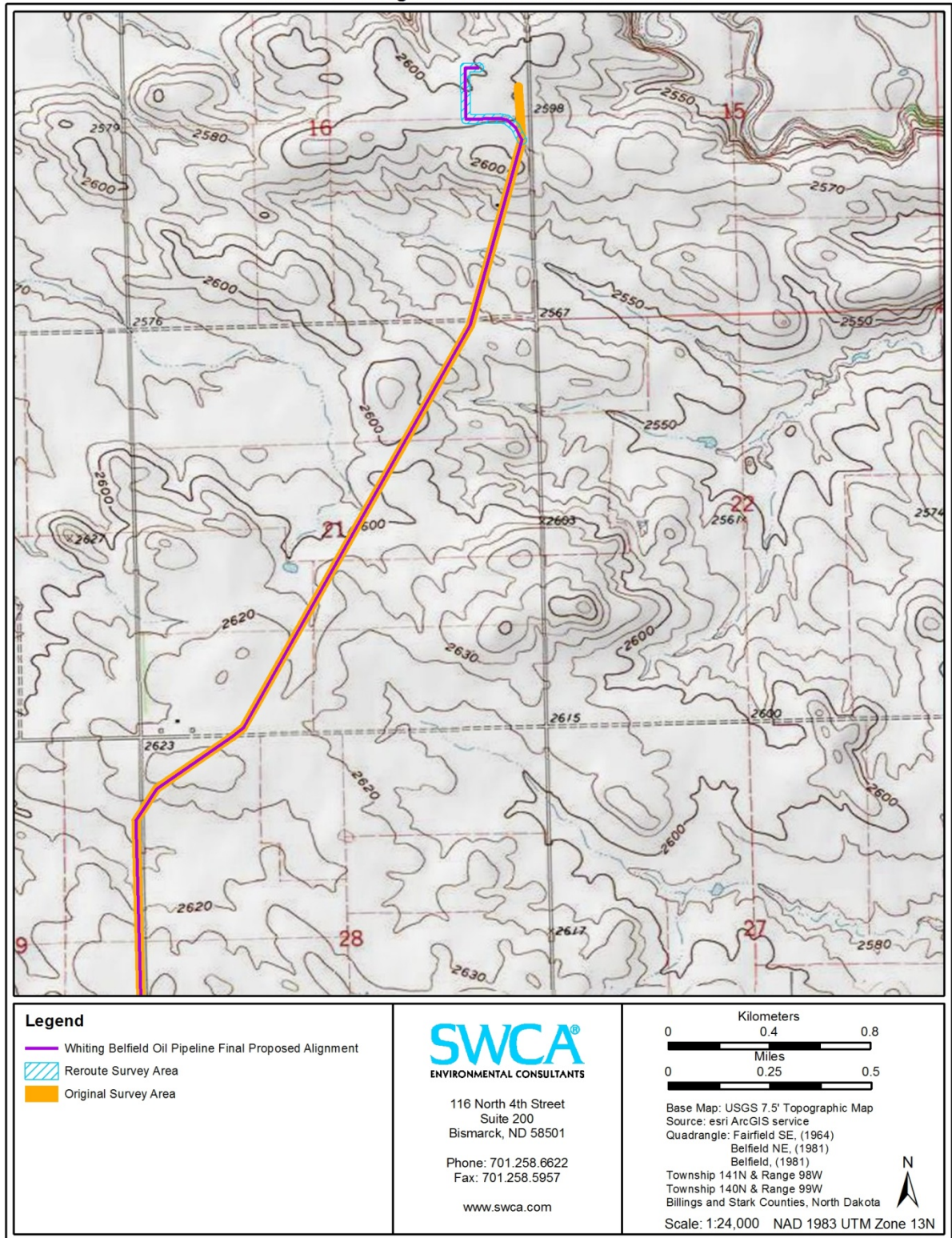


Figure 2a. Project area map showing northern reroute.

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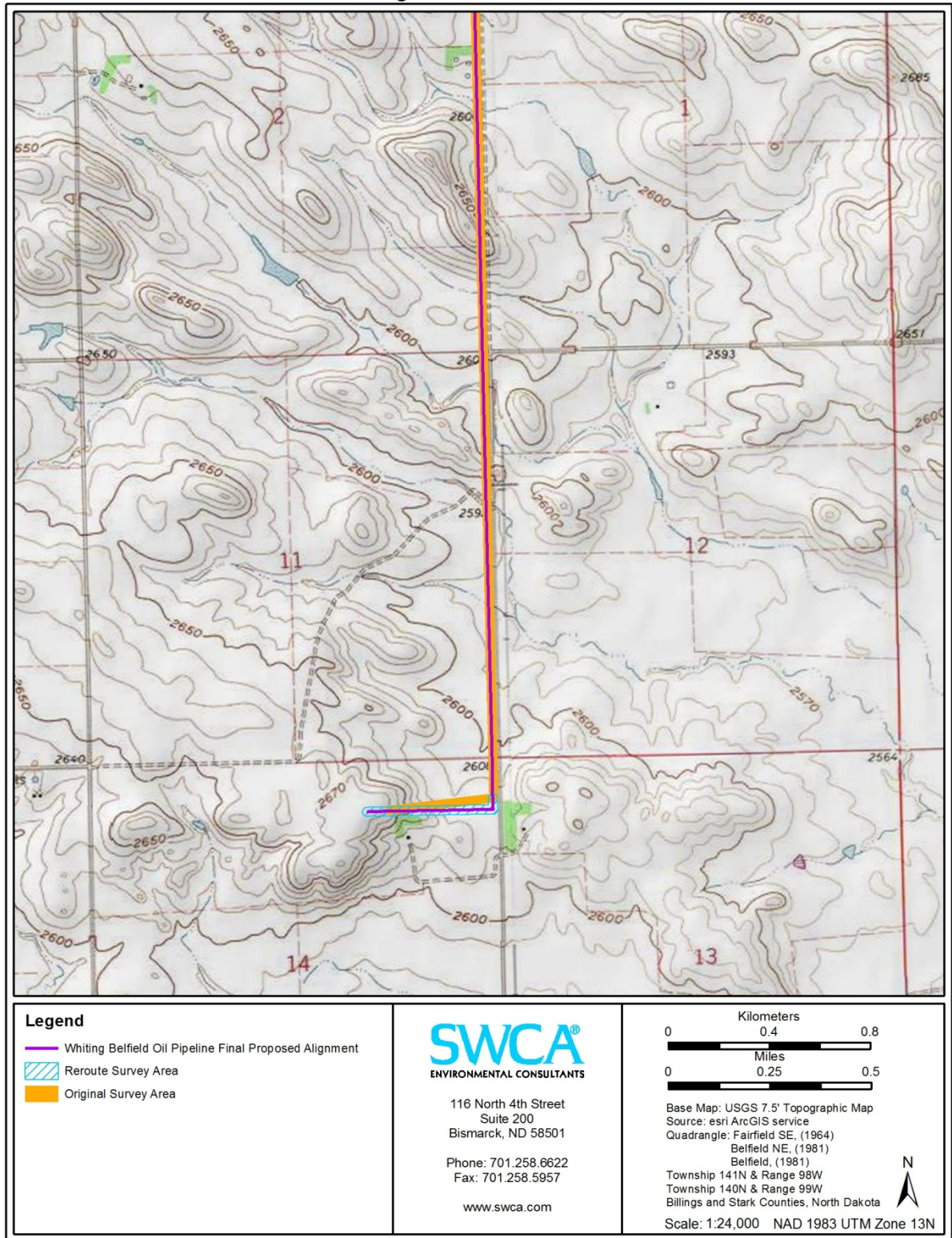


Figure 2b. Project area map showing southern reroute.

PROJECT SETTING AND BACKGROUND

The project setting, including discussions of the topography, climate, hydrology, geology, soils, and flora and fauna; environmental constraints; and cultural and historic overview are described in the original Class I and Class III report (Lechert and Herson 2011).

BACKGROUND RESEARCH

As part of the initial phase of this investigation, SWCA conducted a background search of archaeological and historical literature and records for the project area and surrounding 1-mile area. Researchers searched relevant records holdings at the State Historical Society of North Dakota and other available sources for information regarding previously recorded historic and prehistoric sites located within the project area. Background research was conducted on April 26, 2011. The results of this search are detailed in Lechert and Herson (2011). No previously recorded sites are located within the reroute survey areas.

FIELDWORK METHODS

The two reroute survey areas consist of linear survey corridors 120 feet wide. Inventory was conducted by means of pedestrian transects spaced at no more than 30 meters (m). No subsurface testing was conducted. For a detailed discussion of the project survey methods, refer to Lechert and Herson (2011).

INVENTORY RESULTS AND RECOMMENDATIONS

SWCA performed a Class III inventory of the two proposed reroutes on October 14, 2011. The proposed northern reroute is located primarily within harvested wheat fields dominated by cut wheat stalks, with smooth brome and low forbs located along the edges of the fields and fence lines (Figures 3 and 4). A portion of the reroute is located in an area heavily disturbed by the construction of a tank pad and possible compressor station (Figure 5). Bare ground visibility was approximately 5 to 20 percent within the agricultural field and 100 percent within the disturbed area. Soils within the project area consist of brown silty clay loam formed through residual and colluvial processes. Impacts to the project area include agricultural activities and construction of a tank pad and other related infrastructure.

The proposed southern reroute is located in a harvested wheat field and a plowed agricultural field (Figures 6 and 7). Vegetation is dominated by cut wheat, with some smooth brome, thistle, and nettles. Deciduous trees line the survey corridor to the south. A pipeline scar is visible along the proposed pipeline centerline before crossing to the south. At the west end of the reroute, a tank pad and related infrastructure have been built (Figure 8). Bare ground visibility within the harvested wheat field is 5 to 15 percent, with visibility within the plowed field averaging 75 to 95 percent. Soils within the project area consist of brown sandy clay loam formed through residual, colluvial, and alluvial processes. Impacts to the project area include agricultural activities and construction of a tank pad and other related infrastructure.

No cultural resources were encountered during the course of either the northern or southern reroute surveys.

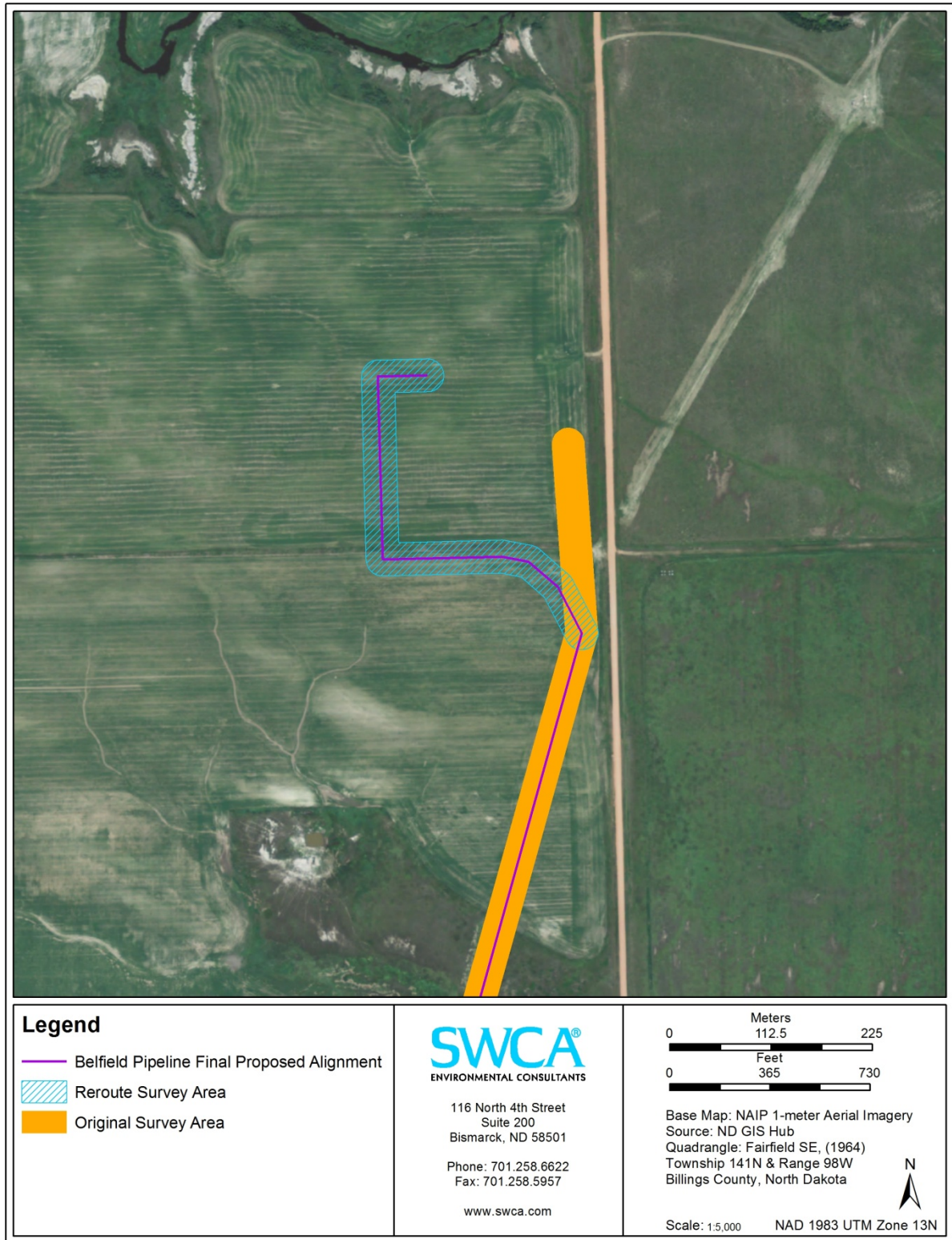


Figure 3. Aerial map showing the northern reroute.



Figure 4. Northern reroute as it crosses into the disturbed area, view to the north.



Figure 5. Northern reroute area showing existing infrastructure in the background, view to the northwest.

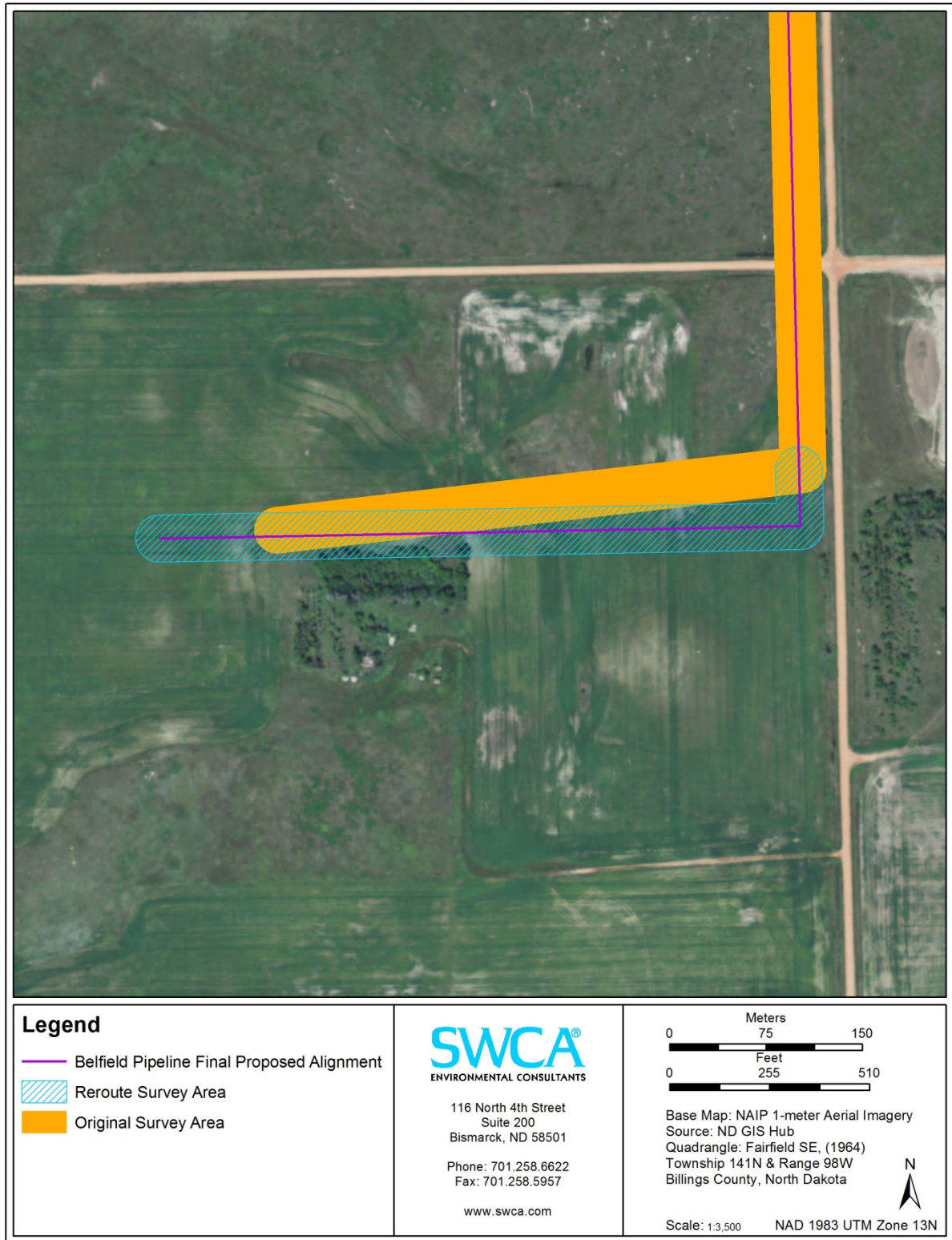


Figure 6. Aerial map showing the southern reroute.



Figure 7. Southern reroute overview, view to the west.



Figure 8. Southern reroute overview, showing existing infrastructure in the background, view to the west.

CONCLUSIONS

On October 14, 2011, SWCA conducted a Class III inventory for two proposed Whiting Belfield Oil Pipeline reroutes. The project area is located on privately owned lands in the E $\frac{1}{2}$ NE $\frac{1}{4}$ SE $\frac{1}{4}$ and SW $\frac{1}{4}$ SE $\frac{1}{4}$ NE $\frac{1}{4}$ of Section 16, T141N, R98W, in Billings County, North Dakota; and in the NE $\frac{1}{4}$ NE $\frac{1}{4}$ and E $\frac{1}{2}$ NW $\frac{1}{4}$ NE $\frac{1}{4}$ of Section 14, T140N, R99W, in Stark County, North Dakota. In total, 9.59 additional acres were inventoried for the proposed reroutes. All proposed construction activities would remain within the inventoried area.

No cultural resources were identified during the course of the reroute inventory. Therefore, it is recommended that a determination of *No Historic Properties Affected* and *No Significant Sites Affected* be granted and for the project to proceed as planned.

REFERENCES CITED

- Lechert, Stephanie, and Chandler Herson
2011 *A Class I and Class III Cultural Resource Inventory of Whiting Belfield Oil Pipeline, Stark and Billings Counties, North Dakota*. Prepared by SWCA Environmental Consultants for Merjent, Inc., Minneapolis, MN.