

**Addendum 2 to a Class I and Class
III Cultural Resource Inventory of the
Bakken North Pipeline, Williams
County, North Dakota**

Prepared for

Plains All American Pipeline, L.P.

Prepared by

SWCA Environmental Consultants

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<u>COUNTY</u>	<u>TWP</u>	<u>RNG</u>	<u>SEC</u>	<u>SU</u>
Williams	155N	102W	15, 22	GA

**Addendum 2 to a Class I and Class III Cultural Resource Inventory
of the Bakken North Pipeline,
Williams County, North Dakota**

Submitted to:

State Historical Society of North Dakota

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SWCA Cultural Resource Report Number 11-512
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ABSTRACT

This report is a second addendum to the Class I and Class III report for the cultural resource inventory of the Bakken North Pipeline, Williams County, North Dakota (Baer et al. 2011; Riordan and Leroy 2011) and outlines the results of a Class III cultural resource inventory conducted by SWCA Environmental Consultants (SWCA) on October 20 and 25, 2011, on behalf of Plains All American Pipeline, L.P. (PAA), for the proposed Bakken North Pipeline reroute, known as the Arends Reroute. The survey area consists of 6.86 acres to accommodate additional areas for temporary workspace and a pipeline alignment shift due to landowner and engineering concerns. The Arends Reroute inventory area is located in Williams County, North Dakota, on privately owned lands, approximately 8.68 miles northwest of Williston, North Dakota.

In its entirety the proposed Bakken North Pipeline is 79.25 miles long and starts approximately 7.50 miles southwest of Williston, North Dakota, and terminates approximately 1.75 miles from Outlook, Montana. The jurisdictional agency presiding over the North Dakota portion of the Bakken North Pipeline is the North Dakota Public Service Commission (NDPSC). In compliance with NDPSC requirements, PAA requested SWCA perform a cultural resource survey to assess the potential effect of activities associated with the construction of the crude oil pipeline on cultural resources. As proposed, the final project construction footprint will be contained entirely within the land inventoried by SWCA, and incorporate portions of the previously inventoried area and reroutes (Baer et al. 2011; Riordan and Leroy 2011) and the new reroute discussed herein.

The Class III inventory includes irregularly shaped survey areas that combine both block and linear survey methods to accommodate the ancillary work areas and the pipeline reroute. In total, 6.86 acres were inventoried for the project. The proposed reroute is located in Sections 15 and 22 of Township 155 North, Range 102 West.

No cultural resources were observed during the course of the Arends Reroute inventory. It is recommended that the project be granted a determination of *No Historic Properties Affected* and *No Significant Sites Affected* and clearance to proceed as planned.

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- A Resource Location Map

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INTRODUCTION

This addendum report outlines the results of a Class III cultural resource inventory conducted by SWCA Environmental Consultants (SWCA) on October 20 and 25, 2011, on behalf of Plains All American Pipeline, L.P. (PAA), for the proposed Bakken North Pipeline Arends Reroute. The inventory area consists of 6.86 acres to accommodate additional temporary workspace and a pipeline alignment shift due to landowner and engineering concerns. The reroute inventory area is located in Williams County, North Dakota, on privately owned lands, approximately 8.68 miles northwest of Williston, North Dakota.

In its entirety, the proposed Bakken North Pipeline is 79.25 miles long and starts approximately 7.50 miles southwest of Williston, North Dakota, and terminates approximately 1.75 miles from Outlook, Montana. The final pipeline alignment within North Dakota, incorporating portions of the originally proposed alignment (Baer et al. 2011) and the rerouted alignments (including reroutes discussed in Riordan and Leroy [2011]), measures 32.11 miles in length. The jurisdictional agency presiding over the North Dakota portion of the Bakken North Pipeline is the North Dakota Public Service Commission (NDPSC). In compliance with NDPSC requirements, PAA requested SWCA perform a cultural resource survey to assess the potential effect of activities associated with the installation of the crude oil pipeline on cultural resources.

The proposed construction right-of-way (ROW) width is 70 feet with a 50-foot-wide permanent ROW and 20 feet of temporary workspace. The temporary construction ROW will be offset according to construction needs and avoidance of cultural resources. As proposed, the final project construction footprint is contained entirely within lands inventoried by SWCA.

For the North Dakota portion of the Bakken North Pipeline project, 903.06 acres were previously inventoried (Baer et al. 2011; Riordan and Leroy 2011). The additional survey area discussed herein consists of 6.86 acres and includes additional land surveyed for temporary workspace and a pipeline alignment shift. The Arends Reroute inventory area is located in Williams County, North Dakota, in Sections 15 and 22 of Township 155 North, Range 102 West (Figures 1–3). The Class III inventory includes irregularly shaped survey areas that combine both block and linear survey methods to accommodate ancillary work areas and a pipeline reroute. In total, 6.86 acres were inventoried for the Arends Reroute project.

For the cultural resource investigation, Judith Cooper served as Principal Investigator. Fieldwork was performed by Chandler Herson, an archaeologist permitted within the State of North Dakota. All field notes and photographs are on file at SWCA's Bismarck, North Dakota, office under project number 17283.

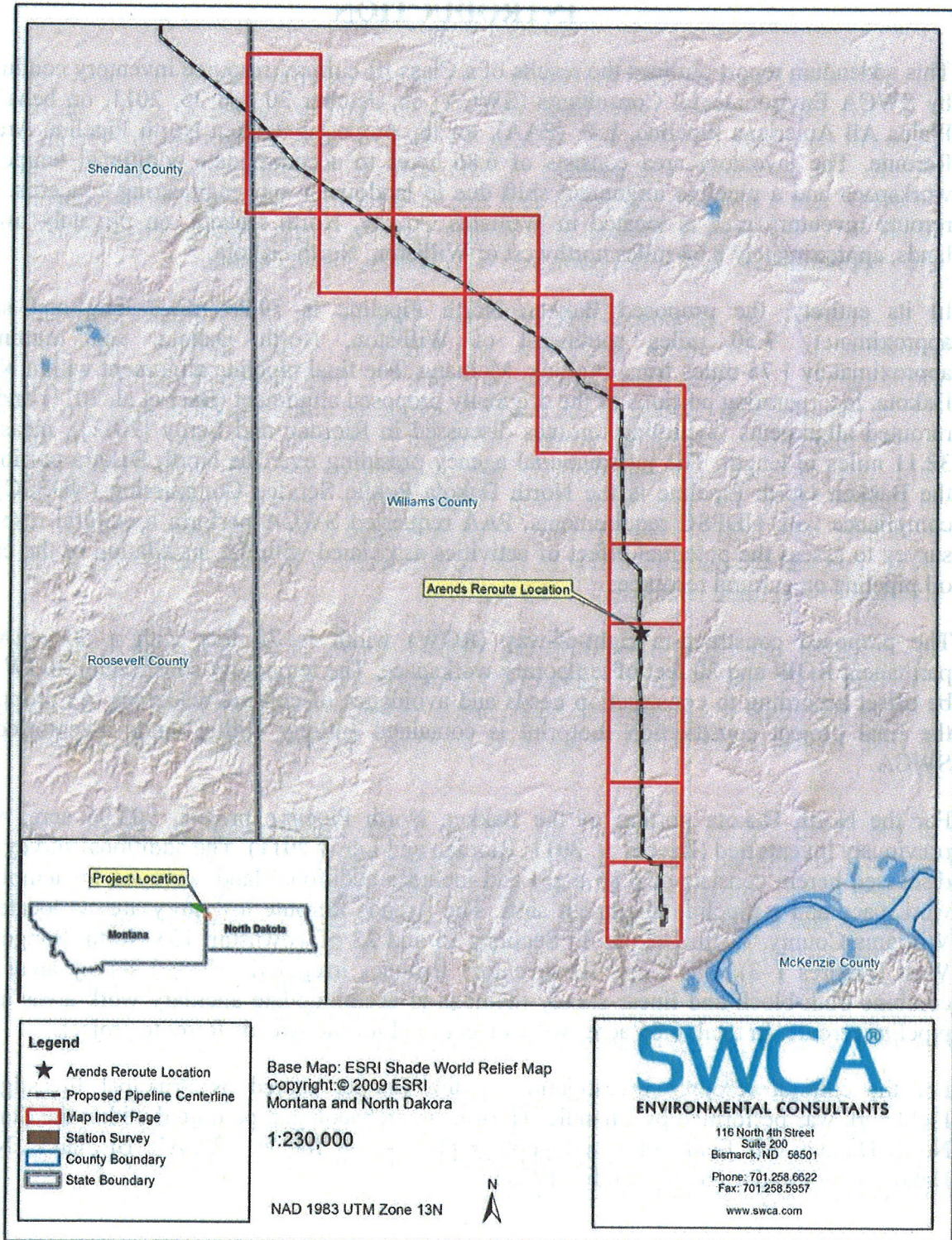


Figure 1. Project area overview map.

Contains Privileged Information -- Do Not Release

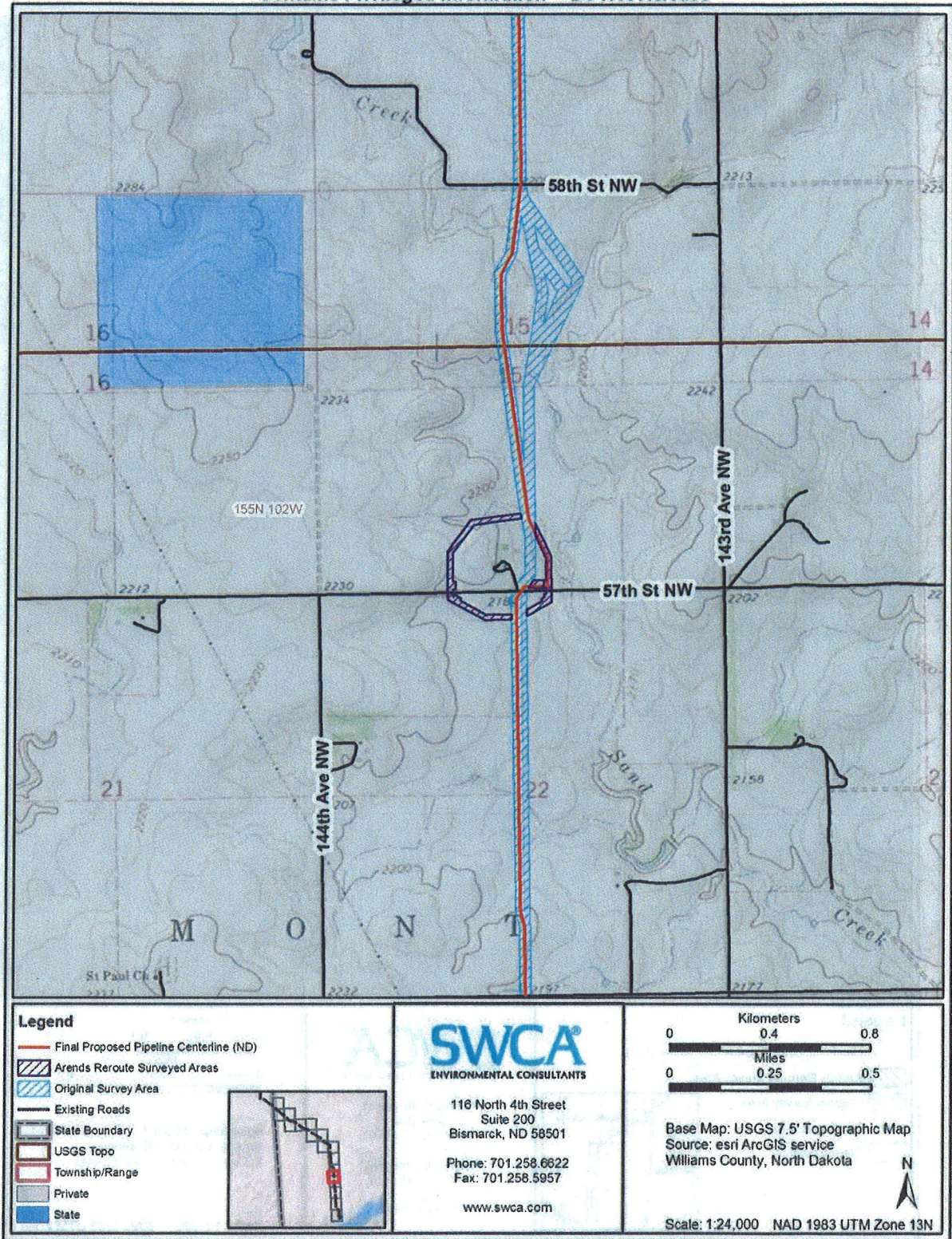


Figure 2. Project area map.

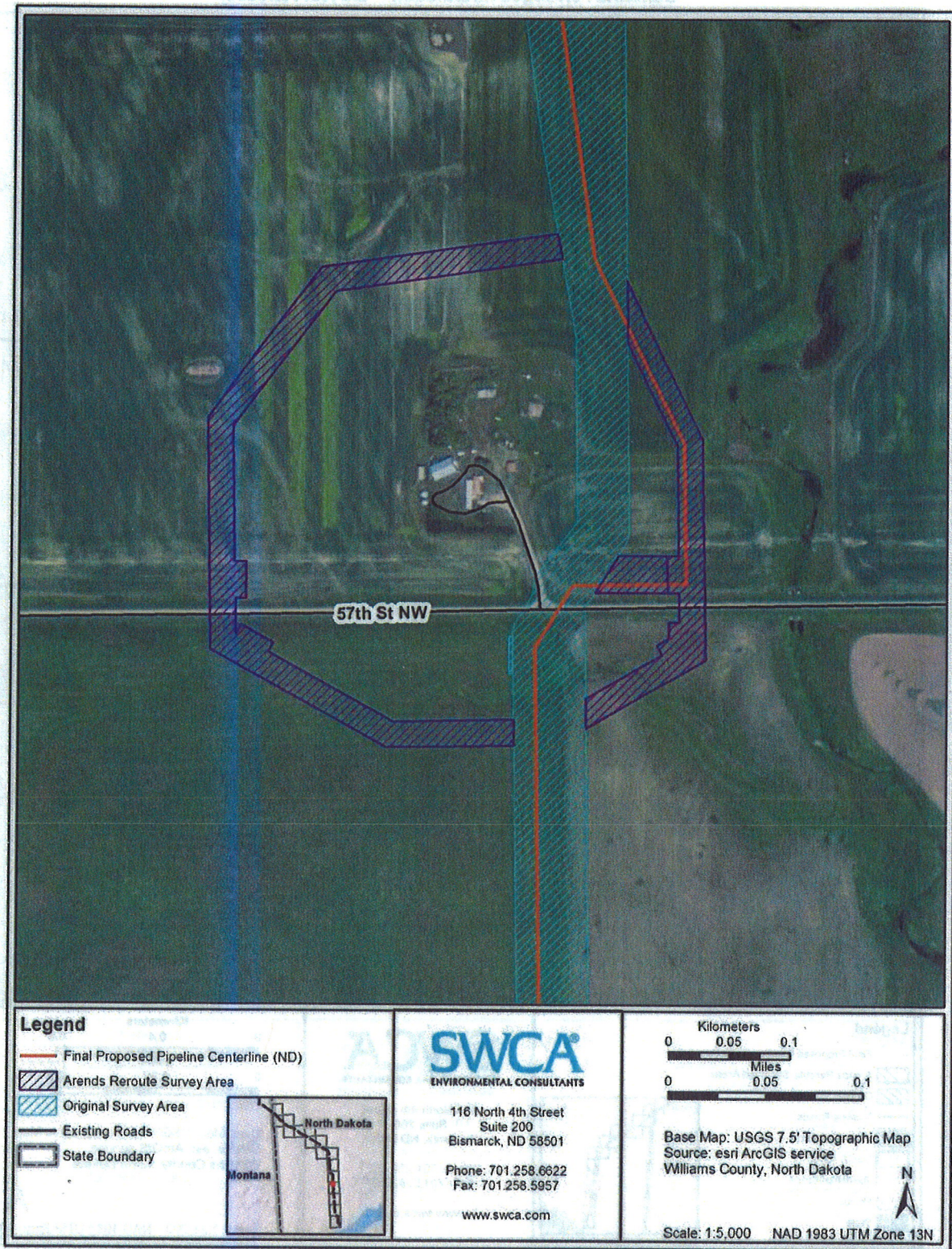


Figure 3. Project area aerial map.

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 (Baer et al. 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 (SHSND) and other available sources for information regarding previously recorded historic and prehistoric sites located within the project area. Background research was conducted on January 26, March 7 and 8, and April 12, 2011. The results of this search are detailed in Baer et al. (2011). One previously recorded site lead, 32WIX148, is located within the Arends Reroute survey area.

FIELDWORK METHODS

The inventory area included irregularly shaped survey areas totaling 6.86 acres. Inventory was conducted by means of pedestrian transects spaced at no more than 30 meters. No subsurface testing was conducted. For a detailed discussion of the project survey methods and site evaluation, refer to Baer et al. (2011).

INVENTORY RESULTS AND RECOMMENDATIONS

The Class III inventory was performed on October 20 and 25, 2011, for the proposed Bakken North Pipeline Arends Reroute. The proposed reroute travels through harvested and fallow agricultural fields dominated by wheat in the cultivated field and smooth brome and crested wheatgrass in the fallow field. Bare ground visibility ranged from 10 to 15 percent within the fallow field to between 85 and 90 percent within the harvested field (Figures 4 and 5). Soils throughout the project area consist of brown silty clay loam formed through residual and colluvial processes. Impacts to the project area include agricultural activities and erosion.

SWCA attempted to revisit 32WIX148, a site lead for a cultural material scatter. Based upon information available from the SHSND, the site lead appeared to overlap the project area (Appendix A). No cultural materials or features associated with 32WIX148 were observed within the project area.

No cultural resources were newly recorded by SWCA archaeologists during the course of the inventory and no other previously recorded cultural resources are located within the reroute survey area.



Figure 4. Project area overlooking harvested wheat field, facing south.



Figure 5. Project area overlooking fallow field, facing northeast.

CONCLUSIONS

On October 20 and 25, 2011, SWCA conducted a Class III inventory for the proposed Bakken North Pipeline Arends Reroute. The Class III inventory includes irregularly shaped survey areas that combine both block and linear survey methods to accommodate ancillary work areas and a pipeline reroute. In total, 6.86 additional acres were inventoried for the project. All proposed construction activities will remain within the area inventoried by SWCA in 2011.

No cultural resources were observed during the course of the inventory. It is recommended that the project be granted a determination of *No Historic Properties Affected* and *No Significant Sites Affected* and clearance to proceed as planned.

REFERENCES CITED

Baer, Sarah, Stephanie Lechert, Jolene Schleicher, Michael J. Retter, Celia Moret-Ferguson, Nicholas Smith, and Chandler S. Herson

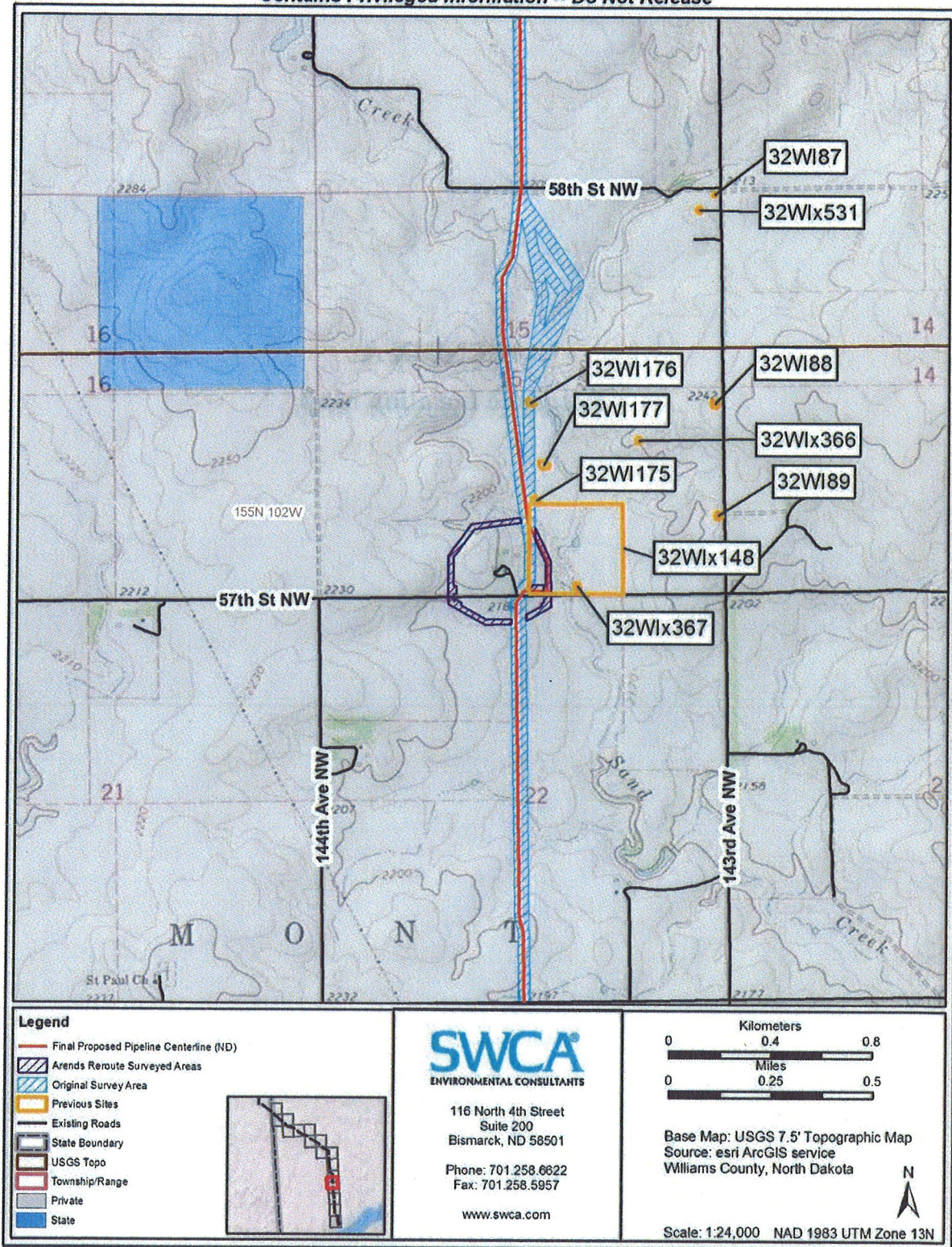
2011 *A Class I and Class III Cultural Resource Inventory of the Bakken North Pipeline, Williams County, North Dakota*. Prepared by SWCA Environmental Consultants for Plains All American Pipeline, Houston, TX.

Riordan, Carolyn, and Adam D. Leroy

2011 *Addendum to a Class I and Class III Cultural Resource Inventory of the Bakken North Pipeline, Williams County, North Dakota*. Prepared by SWCA Environmental Consultants for Plains All American Pipeline, Houston, TX.

APPENDIX A
Resource Location Map

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Resource location map showing 32WIX148