



3. Minnkota is proposing a route modification in the E1/2 and the E1/2 of E1/2 of W1/2 Section 32, Township 142 North, Range 82 West, in Oliver County, North Dakota, to accommodate the landowner's route alignment adjustment request.

4. HDR, on behalf of Minnkota, has completed a Class III Cultural Resource Inventory of the proposed route modification, and no cultural resources were identified during the survey. Copies of the Class III Cultural Resource Inventory Report are attached hereto as **Exhibit A**. The Class III Cultural Resource Inventory has been submitted to the State Historical Society of North Dakota, State Historic Preservation Office.

5. Minnkota considered the exclusion area, avoidance area, selection, and policy criteria set forth in Sections 69-06-08-02(1)-(4) of the North Dakota Administrative Code when reviewing the proposed route modification. An analysis of those criteria, as they relate to the proposed route modification, is provided in Tables 1-4 in the attached **Exhibit B**. A map depicting the location of exclusion and avoidance areas in relation to the proposed route modification is provided as Exhibit 1 to the Affidavit of Michael Hennes (Hennes Aff.).

6. No exclusion areas, as set forth in Section 69-06-08-02(1) of the North Dakota Administrative Code, are located within the proposed route modification. *See Exhibits A and B; see also Hennes Aff., Exh. 1.*

7. With the exception of rural water pipelines, which may be present but are not anticipated to be impacted, no avoidance areas are located within the proposed route modification. *See Exhibits A and B; see also Hennes Aff., Exh. 1.*

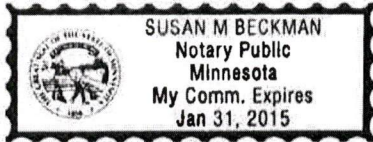
8. Clearing the right-of-way within the modified portion of the Project route during the fall of 2013, outside of avian breeding and nesting seasons, will enable Minnkota to minimize or avoid potential impacts to avian species.

FURTHER AFFIANT SAYETH NOT.

Brian Hunker  
Brian Hunker

Subscribed and sworn to before me  
this 4 day of November, 2013.

Susan M. Beckman  
Notary Public



To:	Dennis Rankin USDA Rural Utilities Service		
From:	Stephen Sabatke and Michelle Porwoll	Project:	Center to Grand Forks 345kV Transmission Line
cc:	Laura Dean (RUS) and Minnkota Power Cooperative (John Graves and Mike Hennes)		
Date:	10/23/2013	Job No:	186001 Task 004 Department 164

**Re: Class III Intensive Archaeological Resources Inventory Center to Grand Forks 345kV Line Supplemental Addendum 4 - Appendix 1**

**Introduction**

Minnkota Power Cooperative, Inc., (Minnkota) is building a 250-mile-long, 345-kilovolt (kV) Transmission Line (Project) from the Center 345-kV Substation, near Center, North Dakota, to the Prairie Substation, located just west of Grand Forks. The U.S. Department of Agriculture Rural Utilities Service (RUS) is providing financial assistance for the Project. The RUS determined that the Project required consultation under Section 106 of the National Historic Preservation Act of 1966, as amended, and it's implementing regulations (36 Code of Federal Regulations (CFR) Part 800). Section 106 requires federal agencies to take into account the effects of their undertakings on properties listed, or eligible for listing, on the National Register of Historic Places (NRHP). The Project also requires consideration of impacts to historic and cultural resources under Section 101(b) of the National Environmental Policy Act (NEPA). In November 2010, the RUS published an Environmental Assessment with scoping (EA) in accordance with its Environmental Policy and Procedures for Implementing the NEPA (7 CFR Part 1794), prior to the completion of historic property identification studies. Therefore, a Programmatic Agreement among the consulting parties, which includes RUS, the State Historical Society of North Dakota (SHSND), the U.S. Fish and Wildlife Service (USFWS), and Minnkota, details the specific procedures relating to historic property identification, possible adverse effects, and treatment of historic properties.

This Addendum 4 – Appendix 1 addresses changes to the Project right-of-way (ROW) between structures 27 to 30. This shift was proposed to accommodate a landowner's request and avoid a wooded ravine. Fieldwork for the shift was completed on October 18, 2013. No cultural materials or surface features were identified.

**Methods**

The previous Class I inventory (HDR Engineering, Inc., 2010) provided useful information on where known sites were located, gave an indication of where previous investigations were concentrated, and which areas lacked systematic study. The RUS specifies that the regulations require a good faith effort to identify historic properties and that this does not equate with identifying every possible archaeological site on the landscape. The RUS contends that previous years of archaeological research have given a

fairly good idea of where on the landscape important archeological sites may be concentrated. In September 2010, at the request of Minnkota and RUS, HDR developed an initial predictive model (Justin and Eigenberger 2011) to statistically illustrate areas of precontact archaeological site probability within the Project.

HDR has been implementing a program of intensive field work to locate buried and near-surface archaeological and cultural sites, to test the model and to guide field work as refinements in Project planning identify new areas that warrant field examinations. Field methods included pedestrian survey and shovel testing.

Pedestrian survey employed transects spaced at no greater than 15-meter (m) intervals. When surface features or artifacts were identified, additional transects were surveyed at 5 or 10 m intervals, depending on the ground surface visibility. When found, cultural materials were recorded and photographed and GPS coordinates were collected for future mapping. Pedestrian survey also identified additional areas where subsurface testing would be recommended. These areas were recorded, photographed, and GPS coordinates were collected and added to field maps.

Subsurface testing, or shovel testing, was used in high probability areas and where the ground surface was obscured by vegetation. Shovel tests were spaced at no greater than 15 m intervals and followed the center of the transmission line ROW, or the natural landform when appropriate, to properly test the area. Tests were excavated to a maximum depth of 100 centimeters (cm), or until either a buried C horizon or two culturally sterile soil strata were encountered. All excavated soils were passed through a ¼ inch mesh hardware cloth. Artifacts identified during shovel testing were recorded, photographed if diagnostic, placed in plastic bags, and reburied at the approximate level found in the test. UTM coordinates were recorded with a Trimble GPS unit for later mapping.

Data gathered during the survey were recorded on shovel test forms and in the field notebook of the principal investigator. Items noted included the location of survey areas and individual shovel tests, the depth of each shovel test and its associated soil profile, the presence or absence of cultural materials within each test, and the excavated soil texture, inclusions, and Munsell color.

For a complete description of the Predictive Model, the Area of Potential Effects, the methods utilized for the Field Survey, and the Collection Policy, please refer to the *Class III Intensive Archaeological Resources Inventory Center to Grand Forks 345kV Line* report (Justin and Eigenberger 2011), the *Class III Intensive Archaeological Resources Inventory Center to Grand Forks 345kV Line Supplemental Addendum 1* (Justin and Eigenberger 2012), the *Class III Intensive Archaeological Resources Inventory Center to Grand Forks 345kV Line Supplemental Addendum 2* (Justin and Eigenberger 2012), the *Class III Intensive Archaeological Resources Inventory Center to Grand Forks 345kV Line Supplemental Addendum 3* (Eigenberger and Porwoll), and the *Class III Intensive Archaeological Resources Inventory Center to Grand Forks 345 kV Line Supplemental Addendum 4* (Eigenberger 2012).

# Results of Investigations

## Summary

Due to the size of the Project and multiple layout changes, archaeological survey of the Project was conducted in multiple mobilizations.

- The Class III archaeological survey was conducted from October 3 to November 18, 2010, and from May 16 to July 1, 2011.
- The Class III Addendum 1 survey was conducted from October 31 to November 7, November 16 to 19, December 9, 2011, and January 4 to 5, 2012.
- The Class III Addendum 2 survey was conducted February 6 to 7, 2012.
- The Class III Addendum 3 survey was conducted from April 2 to 6, 2012.
- The Class III Addendum 3 – Appendix 1 survey was conducted on June 13, 2012.
- The Class III Addendum 3 – Appendix 2 survey was conducted on July 23, 2012.
- The Class III Addendum 3 – Appendix 3 survey was conducted on August 28 to 30 and September 4 to 5, 2012.
- The Class III Addendum 4 survey was conducted on February 21, 2012, and April 11 to April 20, 2012.

The most recent fieldwork was conducted for this Class III Addendum 4 – Appendix 1 report, and was completed on October 18, 2013, which consisted of pedestrian survey of the ROW shift between Structures 27 to 30 (Survey Segment BB).

No cultural materials were identified during the fieldwork completed for the Class III Intensive Archaeological Resources Inventory Center to Grand Forks 345kV Line Supplemental Addendum 4 – Appendix 1.

## Survey Segment Coverage

### Oliver County

#### *Township 142N, Range 82W, Section 22*

#### **Survey Segment BB – ROW Shift Structures 27 to 30**

The ROW shift between Structures 27 to 30 is in the north half of Section 32, within a flat, cultivated wheat field and a pasture with rolling topography that traverses a ravine (Figure 1). According to the Final Center to Grand Forks Archaeological Predictive Model (FCGFAPM), the ROW shift between Structures 27 to 30 is within a moderate to high probability zone.

The entire ROW shift, from Structure 27 to 30, was pedestrian surveyed. Survey was conducted in four transects spaced at 15 m intervals. Ground surface visibility in the wheat field was fair, at 25 percent, and visibility in the pasture was poor to fair and ranged from 0 to 25 percent. Although prairie grasses obscured surface visibility within the pasture, rodent mounds and cow tracks, and landform slumps were opportunistically examined along the route. A large portion of the shift crosses a deep ravine that

was extensively sloped and did not contain any terraces conducive to shovel testing. No cultural materials or surface features were observed and no areas suitable for shovel testing were identified.

### Identified Sites

No cultural materials or surface features were identified during the fieldwork completed for the Class III Intensive Archaeological Resources Inventory Center to Grand Forks 345kV Line Supplemental Addendum 4 – Appendix 1.

### Conclusions and Recommendations

This report is provided to RUS to assist with its responsibilities for compliance with Section 106 of the NHPA, as amended (36 CFR 800).

No cultural materials or surface features were identified during the pedestrian survey for the Class III Intensive Archaeological Resources Inventory Supplemental Addendum 4 – Appendix 1. HDR recommends that construction activities proceed in these areas without further cultural resource considerations.

## References

- Eigenberger, Erika. 2012. *Class III Intensive Archaeological Resources Inventory Center to Grand Forks 345 kV Line Supplemental Addendum 4*. Final report prepared for Minnkota Power.
- Eigenberger, Erika and Michelle Porwoll. 2012. *Class III Intensive Archaeological Resources Inventory Center to Grand Forks 345 kV Line Supplemental Addendum 3*. Final report prepared for Minnkota Power.
- HDR Engineering, Inc. 2010. *Class I Literature Search Proposed Minnkota Power Cooperative, Inc. Center to Grand Forks 345 kV Line*. Report prepared for Minnkota Power.
- Justin, Michael and Erika Eigenberger. 2011. *Class III Intensive Archaeological Resources Inventory Center to Grand Forks 345 kV Line*. Final report prepared for Minnkota Power.
- Justin, Michael and Erika Eigenberger. 2012. *Class III Intensive Archaeological Resources Inventory Center to Grand Forks 345kV Line Supplemental Addendum 1*. Final report prepared for Minnkota Power.
- Justin, Michael and Erika Eigenberger. 2012. *Class III Intensive Archaeological Resources Inventory Center to Grand Forks 345kV Line Supplemental Addendum 2*. Final report prepared for Minnkota Power.

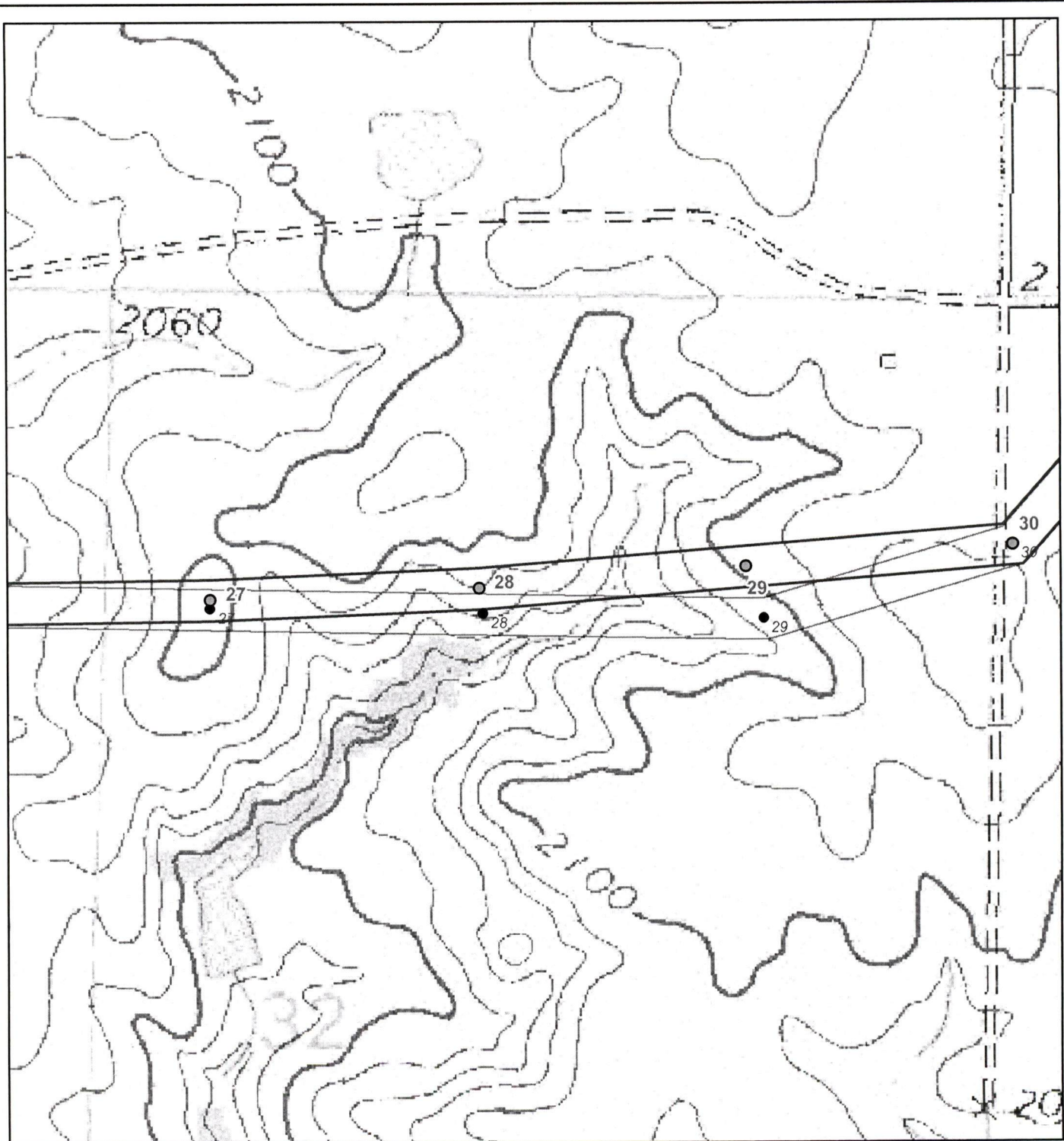
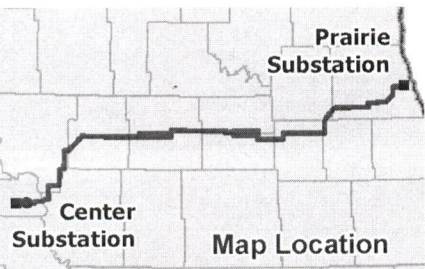


Figure 1  
 Proposed Project Route Modification  
 Detailed Archaeological Survey Area  
 Center to Grand Forks Project



- Proposed Project Structure
- ▭ Proposed Project ROW
- Approved Project Structure
- ▭ Approved Project ROW

