



**GRENORA STATION UPGRADE PROJECT
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Enbridge's Grenora Station: A Class III Cultural Resources Inventory in Williams County, North Dakota

Prepared for:
Merjent, Inc.
Minneapolis, Minnesota

on behalf of:
Enbridge, Inc.

Principal Investigator:
William J. Bluemle

Prepared by:
William J. Bluemle
Metcalf Archaeological Consultants, Inc.
Bismarck, North Dakota

September 2011

Abstract

Merjent, Inc., on behalf of Enbridge, Inc., contacted Metcalf Archaeological Consultants, Inc. to conduct a Class III cultural resource inventory for the proposed Grenora Station facility expansion in Williams County, North Dakota. The Grenora Station project area is 2640' north-south by 2640' east-west, or 160 acres, minus a 300' east-west by 800' north-south, or 6 acre block which was not inventoried, for a total of 154 acres inventoried for this project. This total includes a survey inside the restricted area of the Grenora Station already constructed.

William J. Bluemle, Project Director, and William Christensen conducted the field work for the station on August 30 and 31, 2011. No cultural resources were identified during the inventory. Metcalf Archaeological Consultants, Inc. recommends a finding of *No Historic Properties Affected* for the proposed undertaking as surveyed, mapped and described herein.

Introduction

Merjent, Inc., on behalf of Enbridge, Inc., contacted Metcalf Archaeological Consultants, Inc. (MAC) to conduct a Class III cultural resource inventory for the proposed Grenora Station facility expansion in Williams County, North Dakota. The undertaking area of potential effect (APE) for direct effects to cultural resources is the surface and near subsurface that will be impacted by the ground disturbance associated with construction activities in and around the Grenora Station. Although the buildings/structures will be above ground, they will not cause any adverse indirect effects to above ground historic properties such as architectural sites or historic standing structures because none are within a mile of the remote locations where the stations will be located. William J. Bluemle, Project Director, and William Christensen of MAC conducted the field work for the substations on August 30 and 31, 2011.

Description of the Undertaking

Enbridge, Inc. intends to develop/expand facilities for the Grenora Station in Section 14, T. 159N, R. 103W, Williams County, North Dakota (Map 1). The majority of the APE was located in plowed fields currently in small grain crops. A small portion (6 acres) of the APE was located within the restricted area of the recently constructed Grenora Station. In addition, a 300' east-west by 800' north-south, or 6 acre block located in the approximate middle of the east side of the survey block was not surveyed, as it consists of the first Grenora Station, recently replaced by the existing Grenora Station in the northeast corner of the APE which is now scheduled for the facility expansion addressed by the current project. A total of 154 acres were inventoried for this project.

Files Search

On August 22, 2011 Megan Schoenfelder, MAC staff, conducted a search of the site and manuscript files at the State Historic Preservation Office of North Dakota for the proposed APE and the surrounding one mile radius. The purpose of the search was to determine if any previous surveys have been conducted and/or sites have been recorded. The search showed that one architectural site (a First Methodist church) and one architectural site lead (a house) have been recorded, both a bit over a mile to the northeast within the town of Grenora. Neither property will be impacted by the current project. The search also revealed one previous cultural inventory, a survey of Highway 50 conducted in 2010. The results of the files search are listed in Appendix A.

Environment

The Grenora Station APE is within the Garrison Study Unit (Unit #6). Gently rolling hills and numerous creeks and rivers make up these knob-and-kettle glaciated uplands, providing plentiful sloughs and potholes which are typical of this region. The soils in the study unit are comprised of glacial till for the most part, containing: Knife River flint, quartzite, jaspers, porcellanite, petrified woods and cherts, along with sandstones and pigment stones. The vegetation includes mixed prairie grasses, chokecherries, buffalo berries and gooseberries. The hardwood draws contain oak, ash and juniper trees. Other trees include cottonwoods, box elder, elm and willows. Large mammals, in the past and present, include: bison, elk, pronghorns, sheep, wolves and coyote. Small mammals include: fox, otters, badgers, porcupines and prairie dogs (SHSND 2008, 6.1-6.8).

The majority of the specific APE for the Grenora station is situated in cultivated fields currently with a mid-late-season small grain crop. Approximately $\frac{3}{4}$ of the project area was in this crop, which provided 30-60% ground surface visibility (GSV). The remaining $\frac{1}{4}$ of the plowed fields had drainage and pothole lakes (mostly dry at the moment) with heavier grasses and forbes providing 0-10% GSV. The block is bordered on the east by County Road 5 (Map 1).

The portion of the APE location within the existing Grenora station in the northeast corner of the APE measured approximately seven acres. Approximately one quarter of the fenced-in area had not yet been developed at the time of the inventory, and was covered in fairly sparse short-cut grasses providing 20-40% GSV in general, with bare ground following the length of the fence line. This undeveloped area within the fence did appear to have been graded at one time, probably during the original construction of the station.

Field Methods

The cultural resource inventories were accomplished using pedestrian transects spaced at 15-20 meter intervals. Special attention was paid to areas of enhanced GSV such as blow outs and rodent back dirt piles. The APE was mapped with the aid of a hand held Magellan Pro CX GPS unit, photographed with a digital camera, and documented in the field notes.

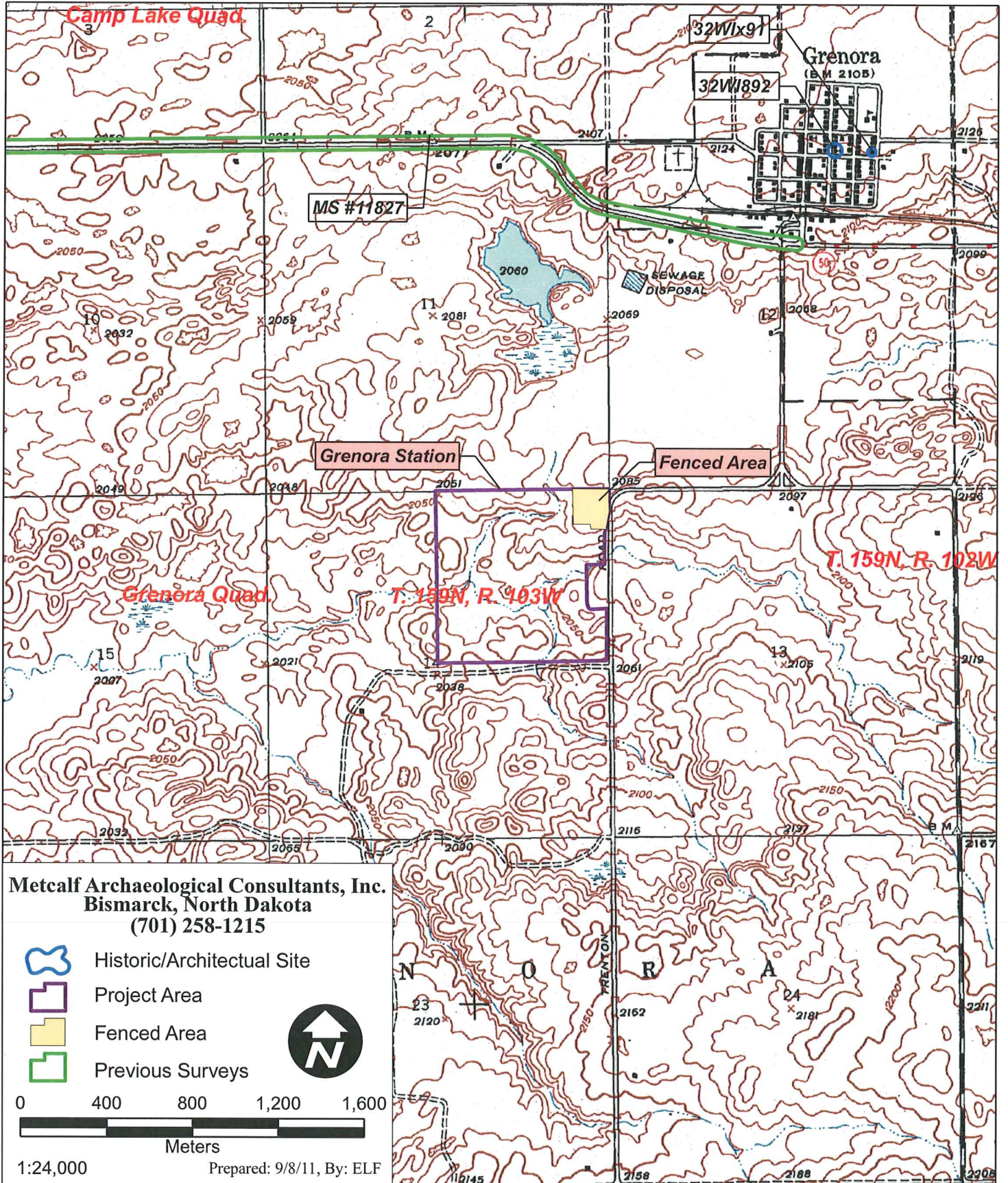
The seven acre restricted area defining the existing Grenora Station was inventoried with the help of Stan Johnson representing Enbridge. Stan Johnson accompanied William Bluemle of MAC inside the fence. Required safety equipment for this restricted area included a hard hat, steel toed boots, fire retardant (FR) overalls and a "4 in 1 multi-gas monitor (oxygen, carbon monoxide, hydrogen sulfide, and combustible gasses [Lower Explosive Limit]." William Bluemle of MAC was responsible for providing all safety equipment except the monitor. The use of a monitor was provided by Stan Johnson, who ensured that all safety requirements for work in the area were met by MAC. The field notes, maps, and electronic photo images are on file at the MAC Bismarck office.

Results and Management Recommendations

No cultural resources were identified during the current project and a finding of *No Historic Properties Affected* is recommended for the proposed undertaking as surveyed, mapped and described herein.



Figure 1: View over the APE looking north from the south side, the Grenora Station scheduled for expansion during the current project is visible in the background, and the older Grenora Station is visible on the east edge of the photo (Image 15).



Map 1: Location of project area, sites and surveys as depicted on the USGS 7.5' Grenora (1948) quadrangle map.



Figure 2: View over the project area, looking east from the west side (Image 17).



Figure 3: View inside the restricted area, looking northeast from the southwest corner (Image 7).



Figure 4: View inside the restricted area, looking west; fence is visible in the background (Image 14).

References Cited

SHSND (State Historical Society of North Dakota)

2008 *The North Dakota Comprehensive Plan for Historical Preservation: Archeological Component*. <http://history.nd.gov/hp/hpforms.html>.

Appendix A:
Files Search Results

Table 1: File Search Results				
T/R-Section	SITS #	Site Type & Description	Recorder, Date	MS #
159/103-10	No Sites			11827
159/103-11	No Sites			11827
159/103-12	32WI892	Architectural- First Methodist Church	Van Hale, 1999	11827
	32WIx91	Architectural- house	BAM, 1996	
159/103-13	No Sites/No Surveys			
159/103-14	No Sites/No Surveys			
159/103-15	No Sites/No Surveys			
159/103-22	No Sites/No Surveys			
159/103-23	No Sites/No Surveys			
159/103-24	No Sites/No Surveys			

Table 2: Manuscript List	
MS #	Reference
11827	Engel, D. 2010 Highway 50 from Grenora to the State Line: A Class III Cultural Resource Inventory in Williams County, North Dakota

File Search Performed By:	File Search Typed By:
Name, Date	Name, Date
Meagan Schoenfelder, 08/22/2011	Meagan Schoenfelder, 08/22/2011



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September 14, 2011

Ms. Suzanne Canevello
Administrative Officer
MAC
PO Box 2154
Bismarck ND 58502

NDSHPO REF.: 11-2699 PSC "Enbridge's Grenora Station: A Class III Cultural Resource Inventory in Williams County, North Dakota" [T159N R103W Section 14]

Dear Ms. Canevello:

We reviewed NDSHPO REF.: 11-2699 PSC "Enbridge's Grenora Station: A Class III Cultural Resource Inventory in Williams County, North Dakota" and find it acceptable. Thank you for the report.

If consulted by a federal or state agency, we would concur with "*No Historic Properties Affected*" and "*No Significant Sites Affected*" determinations provided the project is of the nature stated and it takes place in the plotted location in the above-referenced report.

If you have questions please contact Susan Quinnell at squinnell@nd.gov or (701) 328-3576.

Sincerely,

Merlan E. Paaverud, Jr.
State Historic Preservation Officer (North Dakota)
and
Director, State Historical Society of North Dakota

C: Mr. Patrick Fahn, PSC
C: Mr. Paul Hartzheim, Merjent