MANUSCRIPT DATA RECORD FORM

1. Manuscript Number:
2. SHPO Reference #: 08-0343
3. Author(s): Duane Klinner
4. Title: Rush River Transmission Line for the Minnkota Power Cooperative, Inc., Pillsbury-Fargo Generation Outlet Project: Class II and III Cultural Resource Inventories, Cass County, North Dakota
5. Report Date: June 2008
6. Number of Pages: 16
7. Type I, T, E, O: I
8. Acres: 52 acres at Class III level; 58 acres at Class II level
9. Legal Location(s) with Historic Context Study Unit(s):

County	TWP	R	SEC	SU
Cass	T. 141 N.	R. 51 W.	4, 9, 10, 14, 15, and 16	#12 – SH

HDR ONE COMPANY | *Many Solutions* SM

June 27, 2008

Mr. Paul Picha
State Historical Society of North Dakota
North Dakota Heritage Center
612 East Boulevard Avenue
Bismarck, ND 58505-0830

Re: **NDSHPO: 08-0343 RUS/RDUP**
PSC 230-kV Transmission Line, Pillsbury to Fargo Generation Outlet Project

Dear Mr. Picha:

This report documents the cultural resources data collection (Class II Reconnaissance Inventory and Class III Intensive Cultural Resource Inventory) for the proposed 230 kV transmission line running through a small section of Rush River Township in North Dakota (approximately 4.5 miles long). This project is apart of a larger project known as the Pillsbury-Fargo Generation Outlet project, and is located in Township 141N, Range 51W, Sections 4, 9, 10, 14-16 in Cass County.

In May 2008, HDR Engineering, Inc. (HDR) was asked by Minnkota Power Cooperative, Inc (Minnkota) to complete a survey of a small section of Rush River Township for a reroute of the project. HDR accomplished this request by employing Earthworks, Inc (Earthworks) to complete the requested tasks. The North Dakota State Historic Preservation Office (SHPO) felt that there was a potential for unrecorded cultural properties to exist in the project area. Therefore, the SHPO suggested that a field survey, primarily pedestrian, take place in the proposed project area. The SHPO also confirmed that tribal consultations would not be needed since the project is not a federal undertaking as defined by Section 106 of the National Historic Preservation Act of 1966, as amended, and its implementing regulations (36CRF 800).

On May 28 2008, Earthworks Archaeologist reviewed information on file at the SHPO located in Bismarck, North Dakota to ensure that relevant cultural properties in the study area were considered during project planning.

On June 23 2008, Earthwork's archaeologist surveyed the project route in order to identify cultural resources. One new cultural resource (32CS5071) has been identified during the survey and is recommended as not eligible to the National Register of Historic Places. No previously identified unevaluated and/or significant sites will be impacted by the project.

The attached report created by Earthworks describes the work done for this area of the project.

HDR Engineering, Inc.
701 Xenia Avenue South
Minneapolis, MN 55416-3636
Phone (763) 591-5400
Fax (763) 591-5413
www.hdrinc.com

Please feel free to call me at 763-278-5992 if you have any questions about this report or by email at stephen.sabatke@hdrinc.com. Thank you for your attention to this matter.

Sincerely,
HDR Engineering, Inc.

Stephen Sabatke
Archaeologist
HDR Engineering, Inc.

Enclosure: Class II Reconnaissance Inventory and Class III Intensive Resources Inventory Report

EARTHWORKS
ARCHAEOLOGY & ENVIRONMENTAL INVESTIGATIVE SERVICES

RUSH RIVER TRANSMISSION LINE FOR THE MINNKOTA POWER COOPERATIVE, INC., PILLSBURY-FARGO GENERATION OUTLET PROJECT:

CLASS II AND III CULTURAL RESOURCE INVENTORIES, CASS COUNTY, NORTH DAKOTA

NDSHPO Reference # 08-0343

Prepared For:
HDR Engineering, Inc.
Minneapolis, Minnesota

Principal Investigator:
Duane Klinner

Prepared By:
Duane Klinner
EARTHWORKS, Inc.
Bismarck, North Dakota

Report of Investigation: 786 **June 2008**

EARTHWORKS
ARCHAEOLOGY & ENVIRONMENTAL INVESTIGATIVE SERVICES

RUSH RIVER TRANSMISSION LINE FOR THE MINNKOTA POWER COOPERATIVE, INC., PILLSBURY-FARGO GENERATION OUTLET PROJECT: CLASS II AND III CULTURAL RESOURCE INVENTORIES, CASS COUNTY, NORTH DAKOTA

NDSHPO Reference #: 08-0343

Prepared For:
HDR Engineering, Inc.
Minneapolis, Minnesota

Duane Klinner
Principal Investigator

Prepared By:
Duane Klinner
EARTHWORKS, Inc.
Bismarck, North Dakota

Report of Investigation: 786

June 2008

ABSTRACT

HDR Engineering, Inc., contracted EARTHWORKS, Inc., to conduct a cultural resource inventory for an alternate route of the Rush River Transmission Line for the Minnkota Power Cooperative, Inc., Pillsbury-Fargo Generation Outlet Project. The project corridor measured approximately 4.5 miles in length and 200' in width for a new 230 kV transmission line in Cass County, North Dakota.

EARTHWORKS archaeologist Duane Klinner, Principal Investigator, conducted the inventory on June 23, 2008. One segment of the project corridor measuring 12,570' in length and 200' in width (52.4% of the project corridor) was inventoried at the Class II level, and one segment of the project corridor measuring 11,422' in length and 200' in width (47.6% of the project corridor) was inventoried at the Class III level during fieldwork. A total of 57.5 acres was inventoried at the Class II Cultural Resource level, and a total of 52.3 acres was inventoried at the Class III Cultural Resource level.

No previously recorded cultural resources lie within a one mile radius of the project corridor. One new site, 32CS5071, was recorded during fieldwork. The site is a historic cultural material scatter located in the eastern end of the project corridor. It is the recommendation of EARTHWORKS that the site is *not eligible* for the National Register of Historic Places.

As newly recorded site 32CS5071 is recommended *not eligible* for the National Register of Historic Places, and no previously recorded cultural resources are located within the project corridor, EARTHWORKS recommends a finding of *No Historic Properties Affected* for the proposed project as inventoried, mapped, photographed, and described herein.

TABLE OF CONTENTS

ABSTRACT ii
INTRODUCTION 1
ENVIRONMENTAL SETTING 1
Topography 1
Flora 1
Fauna 3
RESEARCH GOALS/EVALUATION OF RESEARCH 3
LITERATURE REVIEW 3
FIELD METHODS/CONDITIONS 3
RESULTS 4
Newly Recorded Historic Site 32CS5071 5
SUMMARY AND MANAGEMENT RECOMMENDATIONS 5
APPENDIX A: PHOTOGRAPHIC OVERVIEWS OF THE PROJECT CORRIDOR A-1
APPENDIX B: MAPS OF PROJECT CORRIDOR CREATED BY HDR ENGINEERING, INC. B-1

LIST OF FIGURES

Figure 1: The location of the proposed undertaking and newly recorded site 32CS5071, as depicted on the USGS 7.5' Arthur (1967) and Arthur SE (1966) quadrangle maps. 2
Figure 2: Sketch map of newly recorded site 32CS5071. 6
Figure 3: Overview of site 32CS5071, view to the southeast. 7
Figure 4: Overview of site 32CS5071, view to the east. 7
Figure 5: Overview of the Class II level segment of the project corridor from its north end, view to the south. A-2
Figure 6: Overview of the Class II level segment of the project corridor from its south end, view to the north. A-2
Figure 7: Overview of the Class III level segment of the project corridor from its north end, view to the south. A-3
Figure 8: Overview of the Class III level segment of the project corridor from its east end, view to the west. A-3

INTRODUCTION

HDR Engineering, Inc. (HDR), contracted Earthworks, Inc., to conduct a cultural resource inventory for the proposed construction of a portion of the Rush River Transmission Line for the Minnkota Power Cooperative, Inc. (Minnkota), 230 kV Pillsbury-Fargo Generation Outlet Project in portions of Sections 4, 9, 10, 14, 15, and 16, T. 141 N., R. 51 W., Cass County, North Dakota (Figure 1).

One segment of the project corridor measuring 12,570' in length and 200' in width (52.4% of the project corridor) was inventoried at the Class II level, and one segment of the project corridor measuring 11,422 ' and 200' in width (47.6% of the project corridor) was inventoried at the Class III level during fieldwork.

EARTHWORKS archaeologist Duane Klinner, Principal Investigator, conducted the inventory on June 23, 2008. One new historic site, 32CS5071, was encountered and recorded during fieldwork. The site is discussed in detail in the RESULTS and SUMMARY AND MANAGEMENT RECOMMENDATIONS sections of this document. The entirety of the illustrations, maps, field notes, and photographic records relevant to the undertaking are on file at the EARTHWORKS office in Bismarck, North Dakota.

ENVIRONMENTAL SETTING

The project corridor is located approximately 4.5 miles to the southeast of the town of Arthur in Cass County, North Dakota. This places the project within the Sheyenne River Study Unit (#12) as described in the *North Dakota Comprehensive Plan for Historic Preservation: Archaeological Component* (SHSND 1990). The SHSND (1990) document provides a generalized overview of the physiography and previous research in the study unit. A project area specific description of the environmental setting is presented below.

Topography

The topography of the project corridor consists of a gently rolling upland plain bisected by shallow seasonal drainages and runoff channels. The Rush River bisects the southwestern edge of the project corridor and runs along the southern edge of the corridor for approximately 0.6 miles. Other water sources in the immediate area consist of shallow intermittent ponds.

Flora

The project corridor has been converted for agricultural use (Figures 5 through 8 in Appendix A). The present-day biota does not necessarily reflect that of the past. In the past, the vegetation of the corridor would have consisted of tall grasses with small wooded areas along the Rush River and other prominent water systems. Introduced vegetation consists of domesticated crops and short grasses, and several rows of deciduous trees.

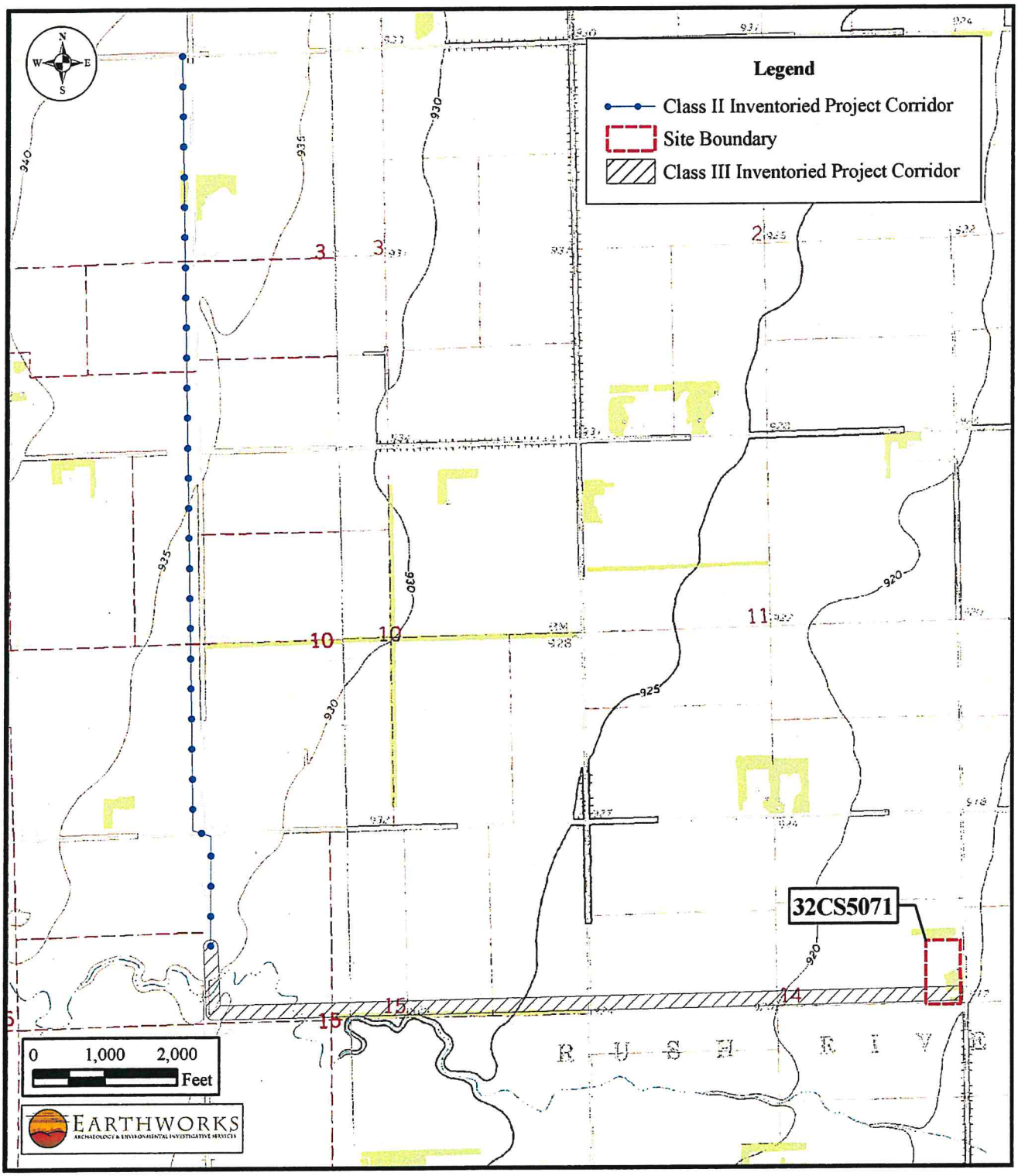

Figure 1: The location of the proposed undertaking and newly recorded site 32CS5071, as depicted on the USGS 7.5' Arthur (1967) and Arthur SE (1966) quadrangle maps.

Fauna

It can also be said that the types and distributions of faunal species present in the general area today do not necessarily reflect those of the past. While the following list is not exhaustive of the fauna present, it represents the species most likely to have been encountered during historic or prehistoric times. The region would have been habitat for diverse large and small mammals, as well as some birds, amphibians, and reptiles. In the past, people would have commonly encountered bison, elk, pronghorn antelope, and white-tailed deer. In addition, wolf, coyote, cotton-tailed rabbits, jack rabbits, badger, beaver, and ground squirrel would have been present, as well as raptors, songbirds, and game birds.

The Rush River and other larger drainages in the area would have been home to various species of fish, and all of the drainages would have supported diverse types of waterfowl (ducks, geese, etc.), and many amphibians and reptiles. The water sources would also have drawn in and concentrated the faunal resources.

RESEARCH GOALS/EVALUATION OF RESEARCH

Following the mandated policies implementing the National Historic Preservation Act (NHPA [Public Law 89-665]), as amended, this proposed project was inventoried to locate any cultural resources within the area of potential affect. An additional goal of the inventory was to allow HDR, Minnkota, and the funding agency(ies) to plan the proposed undertaking so as to avoid any cultural resources and, if not possible, to test, evaluate, and if necessary mitigate cultural resources within the proposed project area prior to construction. The goal of the inventory has been achieved as no previously recorded cultural resources were encountered within the project corridor, and the one newly recorded historic site, 32CS5071, is recommended *not eligible* for the National Register of Historic Places (NRHP).

LITERATURE REVIEW

A literature review of the State Historical Society of North Dakota's (SHSND) site and manuscript files was conducted by Chandler S. Herson, EARTHWORKS Archaeological Technician, on May 28, 2008. No cultural resources (sites, site leads, and isolated finds) have been recorded within a one-mile radius of the project corridor. The review also noted that no previous cultural resource investigations were on file at the SHSND for the study area at the time of the literature review.

FIELD METHODS/CONDITIONS

The Class II and Class III level inventories were conducted on June 23, 2008, by EARTHWORKS archaeologist Duane Klinner, Principal Investigator. The project corridor consisted of a 200' wide by 4.5 mile long corridor.

One segment of the project corridor, totaling 12,750' in length and 200' in width (57.5 acres) was inventoried at the Class II level, and one segment of the project corridor, measuring 11,422' in length and 200' in width (52.3 acres) was inventoried at the Class III level during fieldwork (Figures 5 through 8 in Appendix A). The latter segment was characterized by being adjacent to, or near, the Rush River, and was inventoried by the archaeologist walking zig-zag

pedestrian transects spaced no more than 20 m apart. Due to the project corridor being within cultivated fields, the inventoried area had excellent ground surface visibility with an overall average of 85%.

If an artifact or feature was encountered during the survey, the location was marked with a pin flag and the area surrounding the artifact or feature was intensively inspected to locate any other associated artifacts or features. Based on the number and types of artifacts or features noted during the search, the grouping was determined to be either an isolated find, site lead, or a site using the following criteria:

> *An isolated find is considered to be a location of five or fewer artifacts and identified by the archaeologist(s) as representing an area of very limited past activity may be recorded as an isolated find. In all cases of identifying a location of an isolated find the archaeologist(s) should consider whether the location has good or better potential to contain buried artifacts. In such cases consideration should be given to recording the location as a site lead (SHSND draft nd.:17).*

A site lead is defined using one of two criteria, with considerations:

> *(1) A location reported by a landowner or other non professional as containing cultural resources. These locations are considered to be site leads until such time as a qualified archaeologist or architectural historian can determine whether the site is an isolated find or site.*
>
> *(2) A location consisting of five or fewer surface visible artifacts is in the professional judgment of the archaeologist(s) likely to be only a limited surface expression of a former occupation where most of the artifacts are not visible (i.e., still buried).*
>
> *Consideration should be given by the principal investigator, the lead agency and the SHPO as to whether a site lead location should be examined more closely, possibly by subsurface investigations prior to a determination of No Historic Properties Affected or No Adverse Affect (SHSND draft nd.:17).*

Sites are defined as such:

> *A cultural resource site is defined as a location of past human activity that took place over 50 years ago and left physical traces of the activity in the form of (1) an intact cultural feature (2) five or more artifacts found within about 60 m of each other, and/or (3) an intact subsurface cultural deposit regardless of the number of artifacts (SHSND draft nd: 17).*

After the resource was adequately defined, the appropriate site, site lead, or isolated find forms and other documentation were completed. The additional documentation included plotting the cultural resources on a USGS, 7.5' topographic map, photographing the resources, and generating sketch maps using data collected with a mapping grade Trimble GeoXT GPS unit.

RESULTS

One new site was encountered and recorded during fieldwork. This cultural resource is discussed below.

Newly Recorded Historic Site 32CS5071

Site 32CS5071 is comprised of a sparse scatter of historic cultural materials within a plowed field (Figures 2, 3, and 4). The USGS 7.5' Arthur SE (1966) quadrangle map indicates that at least two buildings were once located within the site area. The buildings and any foundation(s), however, have been removed.

The landform consists of a flat upland plain that is seasonally flooded. The entire site has been disturbed by agricultural use and the planting of a tree row in the southern portion of the site area. Cultural materials observed at the site include over 150 fragments of glass, metal, ceramics, crockery, isolators, and bone fragments

A title search was conducted for the legal location of the site by Duane Klinner on June 23, 2008. The search indicated that the land was patented by John Pherson (aka Person) on October 1, 1883. The land was transferred by Jens Person to Henry Person, Freda Muhs, and Ella Lehman on March 30, 1934. Various quit claim deeds and land transfers were filed beginning in late 1952, for members of the Lehman family, including Frances J. Lehman, Darrell H. Lehman, Louis P. Lehman, Dallas Lehman, and Mavis Lehman, and also Lorraine B. Zehren. The land is presently owned by Frank Kasowski.

A search of the landowners names was conducted on the North Dakota Biographical Index website. The search indicated that only a few of the names were listed, with the references providing only brief descriptions of family and/or personal life. Based on the generalized data for the landowners, we assume none of the individuals played a significant role in local, regional, or national events.

The site currently retains some aspects of spatial integrity with a moderate potential for intact buried cultural materials. However, none of the superstructures remain at the site. EARTHWORKS recommends site 32CS5071 *not eligible* for the NRHP because the site cannot be associated with any people or events considered important to local, State, or Regional history (Criterion A and B), the site does not contain any unique architecture or distinctive construction style (Criterion C), and the site has a low potential to contain intact buried cultural deposits, or to yield important information regarding the history of the area (Criterion D).

SUMMARY AND MANAGEMENT RECOMMENDATIONS

HDR Engineering, Inc., contracted EARTHWORKS to conduct Class II and Class III cultural resource inventories of a 4.5 mile long by 200' corridor for an alternate route of the Rush River Transmission Line for the Minnkota Power Cooperative, Inc., 230 kV Pillsbury-Fargo Generation Outlet Project. The project corridor is located in Cass County, North Dakota, approximately 4.5 miles to the southeast of the town of Arthur, North Dakota.

EARTHWORKS archaeologist Duane Klinner, Principal Investigator, conducted the inventory on June 23, 2008. One segment of the project corridor, measuring 12,570' in length and 200' in width (57.7 acres), was inventoried at the Class II level. The remainder of the project corridor, measuring 11,422' in length and 200' in width (52.3 acres) was inventoried at the Class III level during fieldwork.

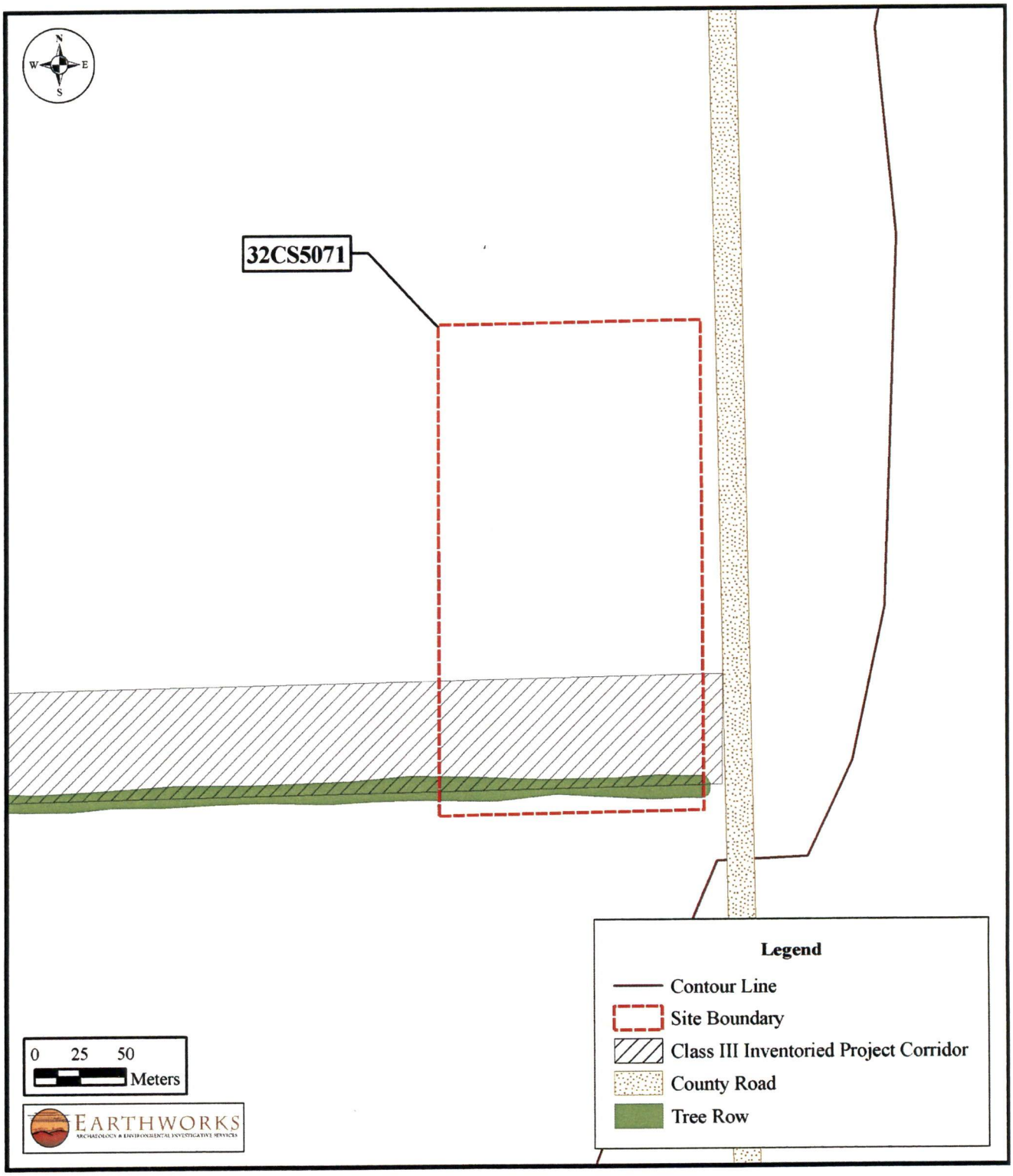

Figure 2: Sketch map of newly recorded site 32CS5071.

Figure 3: Overview of site 32CS5071, view to the southeast.

Figure 4: Overview of site 32CS5071, view to the east.

No previously recorded cultural resources lie within a one mile radius of the project corridor. One new site, 32CS5071, was recorded during fieldwork. The site is a historic cultural material scatter located in the eastern end of the project corridor. It is the recommendation of EARTHWORKS that the site is *not eligible* for the NRHP.

As newly recorded site 32CS5071 is recommended not eligible for the NRHP, and no previously recorded cultural resources are located within the project corridor, EARTHWORKS recommends a finding of *No Historic Properties Affected* for the proposed project as inventoried, mapped, photographed, and described herein.

APPENDIX A: PHOTOGRAPHIC OVERVIEWS OF THE PROJECT CORRIDOR

Figure 5: Overview of the Class II level segment of the project corridor from its north end, view to the south.

Figure 6: Overview of the Class II level segment of the project corridor from its south end, view to the north.

Figure 7: Overview of the Class III level segment of the project corridor from its north end, view to the south.

Figure 8: Overview of the Class III level segment of the project corridor from its east end, view to the west.

MAPS
Created by HDR Engineering, Inc.
Note: May Contain Privileged and Confidential Information
Distribution Limited by Hard Copy Only
DO NOT RELEASE