

## Fahn, Patrick J.

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**From:** William McCarthy [wmccarthy@go2e3.com]  
**Sent:** Friday, September 09, 2011 9:55 AM  
**To:** Fahn, Patrick J.  
**Cc:** cmorohl@nd.gov; 'Kline, Jim'  
**Subject:** PU 11-66 GCP: Unanticipated Discovery Plan and ND SHPO Concurrence  
**Attachments:** UDP SHPO Concurrence 9 7 2011.pdf; Garden Creek Pipeline Unanticipated Discovery Plan.pdf

Mr. Fahn,

Attached, please find the Unanticipated Discovery Plan developed for Bear Paw Energy's Garden Creek NGL Pipeline Project (PU 11-66). This Plan has been reviewed and approved by the North Dakota State Historic Preservation Office.

Please contact me should have questions or seek additional information.

Best regards,

**Bill McCarthy**

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September 7, 2011

Dr. Judy R. Cooper  
Archaeologist  
SWCA Environmental Consultants  
116 North 4<sup>th</sup> Street Suite 200  
Bismarck, North Dakota 50501

NDSHPO REF.: 08-7800 PSC Bear Paw Energy Natural Gas Liquids Garden Creek Pipeline, McKenzie County, Cultural Resources Monitoring and Discovery Plan

Dear Judy:

We have received and reviewed correspondence and project documents for "Cultural Resources Monitoring and Discovery Plan for the Bear Paw Energy Natural Gas Liquids Garden Creek Pipeline, McKenzie County, North Dakota," by Carolyn Riordan and Judith R. Cooper (SWCA, September 2011), and find it acceptable.

Thank you for the opportunity to review the project. If you have questions please contact either Paul Picha at [ppicha@nd.gov](mailto:ppicha@nd.gov) or (701) 328-3574 or Susan Quinnell at [squinnell@nd.gov](mailto:squinnell@nd.gov) or (701) 328-3576.

Sincerely,

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

c: Patrick Fahn ND PSC

**Cultural Resources Monitoring and  
Discovery Plan for the Bear Paw  
Energy Natural Gas Liquids Garden  
Creek Pipeline, McKenzie County,  
North Dakota**

Agency

**State Historical Society of North Dakota**

Prepared for

**E3 Environmental, LLC**

Prepared by

**SWCA Environmental Consultants**

September 7, 2011

**Cultural Resources Monitoring and Discovery Plan for the Bear Paw Energy Natural  
Gas Liquids Garden Creek Pipeline, McKenzie County, North Dakota**

Prepared for

**E3 Environmental, LLC  
817 Vandalia Street  
St. Paul, Minnesota 55114**

Prepared by

**Carolyn Riordan and Judith Cooper**

Submitted by

**SWCA Environmental Consultants  
116 North 4th Street, Suite 200  
Bismarck, North Dakota 58501  
Voice: 701-258-6622 or Fax: 701-258-5957  
[www.swca.com](http://www.swca.com)**

**Principal Investigator: Judith R. Cooper**

Agency

**State Historical Society of North Dakota**

**September 7, 2011**

TABLE OF CONTENTS

	<b><u>Page</u></b>
INTRODUCTION .....	1
QUALIFICATIONS .....	2
Archaeological Monitors .....	2
Construction Personnel.....	2
OPEN TRENCH INSPECTION AND MONITORING.....	2
Open Trench Inspection .....	3
Monitoring.....	3
DISCOVERY DEFINITION .....	4
PROCEDURES FOR ADDRESSING DISCOVERIES IDENTIFIED BY CONSTRUCTION PERSONNEL.....	4
TREATMENT OF DISCOVERIES BY ARCHAEOLOGICAL PERSONNEL.....	5
AGENCY NOTIFICATION AND REPORTING.....	5
SPECIAL PROCEDURES FOR DISCOVERIES OF HUMAN REMAINS .....	5
REFERENCES CITED.....	7

LIST OF TABLES

<b><u>Table</u></b>	<b><u>Page</u></b>
Table 1. Contact Information.	6

## **INTRODUCTION**

This Discovery and Monitoring Plan documents the procedures to be implemented in the event that cultural resources are discovered during construction of the Bear Paw Energy Natural Gas Liquids Garden Creek Pipeline (Garden Creek Pipeline) in McKenzie County, North Dakota. Bear Paw Energy, LLC (Bear Paw) proposes to construct a 63.17-mile-long natural gas liquids pipeline connecting the Garden Creek Gas Processing Plant, located northeast of Watford City, North Dakota, to the Riverview Terminal, located just southwest of Sidney, Montana. The portion of the project that falls under the jurisdiction of the North Dakota Public Service Commission is 54.21 miles long and is located in McKenzie County, North Dakota.

A Class I and Class III cultural resource inventory was performed for the project area, during which eight cultural resources were revisited and ten cultural resources were newly identified, including five isolated finds and five sites (Reinhart et al. 2011; Riordan et al. 2011). Nine sites (32MZ69, 32MZ168, 32MZ879, 32MZ934, 32MZ938, 32MZ1562, 32MZ2200, 32MZ2202, and 32MZ2203) and five isolated finds (32MZX1129, 32MZX1130, 32MZX1131, 32MZX1132, and 32MZX1133) are recommended not eligible for listing in the National Register of Historic Places (NRHP), and no further work is recommended. Two sites (32MZ767 and 32MZ937) are recommended eligible; however the portions of the sites that are within the project area are recommended as non-contributing portions of their respective sites. Based on the proximity to the construction corridor fencing and monitoring is recommended at 32MZ937. Two sites (32MZ2201 and 32MZ2204) have been left unevaluated regarding their NRHP eligibility and avoidance through reroute, necked-down construction corridor design, fencing, and monitoring are recommended. Upon review, on July 7, 2011, the State Historical Society of North Dakota (SHSND) concurred with these findings (NDSHPO Ref. 11-1786). This Discovery and Monitoring Plan is being prepared because the potential for exposure of previously unidentified or buried cultural material within the project route during mechanical excavation exists.

Significant historical or archaeological artifacts or sites located on lands under the jurisdiction of the State of North Dakota or its political subdivisions are protected under Section 55-02-07 of the North Dakota Century Code (NDCC). Furthermore, NDCC Section 23-06-27 and North Dakota Administrative Code (NDAC) Section 40-02-03 provide special protection of human burial sites, human remains, and burial goods. In accordance with applicable North Dakota laws and regulations, this plan contains procedures for addressing cultural resource discoveries identified by both qualified archaeologists and construction personnel during construction of the Garden Creek Pipeline, including procedures for the initial treatment of discoveries, the evaluation and treatment of discoveries, and the treatment of human remains.

## **QUALIFICATIONS**

### **ARCHAEOLOGICAL MONITORS**

All archaeologists/monitors must be qualified based on the standards required under the Secretary of Interior Standards. Principal Investigators on private/fee land will be listed on the State of North Dakota archaeological or historical permit. SWCA archaeologists will be required to be up-to-date on SWCA safety protocol and will be expected to follow safety guidelines at all times. Monitors will be required to read and fully understand the procedures set-forth in the Monitoring Plan. No additional training will be required.

### **CONSTRUCTION PERSONNEL**

Training is necessary in order for construction personnel to recognize potential archaeological resources. All Bear Paw responsible parties and construction personnel will meet with Bear Paw representatives for basic training prior to participating in construction. This training will provide orientation regarding recognition of cultural resources as well as a general overview of the culture history of the region, so that construction personnel are familiar with the types of archaeological resources that may be encountered during construction. The training will also outline the steps to be followed in the event of a significant archaeological discovery during construction (e.g., the discovery of human remains). The following items will be reviewed within the program:

- definition of a discovery and examples of discoveries;
- steps towards discovery protection until such time as they can be properly evaluated by a qualified archaeologist;
- proper notification of the appropriate Bear Paw personnel;
- the necessity of reporting discoveries in a timely manner and complying with the other stipulations provided in this plan;
- the need to treat any human skeletal remains that are encountered with dignity and respect; and
- penalties for failure to report discoveries or to comply with the procedures outlined in this plan.

### **OPEN TRENCH INSPECTION AND MONITORING**

This section details the open trench inspection and monitoring plan to be used during construction. The open trench inspection and monitoring plan includes the specification of areas to be inspected, methods to be utilized during inspection and monitoring of the right-of-way, and discovery recordation methods. Areas designated in the Class III cultural resources reports for open trench inspection and monitoring will require an archaeological monitor (Reinhart et al. 2011; Riordan et al. 2011).

## **OPEN TRENCH INSPECTION**

Archaeological inspection will only be required after trenching has been completed, except when human remains are encountered by construction personnel. If construction personnel identify what they believe to be human remains during trenching, procedures detailed below will be followed. At least one archaeologist will inspect the right-of-way subsequent to pipeline trenching. Laying pipe and backfilling the trench will only be allowed after the archaeological inspection has been completed. Inspection will consist of an examination of the trench walls and backdirt piles for evidence of artifacts, cultural features, stained occupation surfaces, concentrations of animal bone, or human remains. For safety reasons, examination of trench walls will generally be conducted from the ground surface. Trench backdirt will not be screened, but uncontrolled collection of artifacts may occur from backdirt piles, as may the collection of charcoal and/or stained sediment for possible radiocarbon dating.

The archaeological inspector will locate the cultural remains with GPS and in relation to cadastral monuments or permanent structures. If the discovery is not within the boundaries of a previously recorded site, a permanent datum will also be placed at the edge of the right-of-way. Monitors will take additional necessary steps to ensure that the cultural remains in the trench can be relocated. This may include (but is not limited to) insertion of pins above the feature in the trench profile wall to facilitate relocation from above, burial of pins above the feature for relocation via metal detection, and other techniques designed to enable the feature to be relocated after construction is complete.

## **MONITORING**

Monitoring will occur at specified sites when ground disturbing activities are taking place. For the purposes of this document, ground disturbing activities are defined as any activities that have moderate to high potential to expose buried cultural resources. These include but are not limited to blading, grading, stripping, and trenching activities. They can also include transiting of sites by heavy tracked vehicles if no other activities will occur subsequent to transiting. In general, any activity that has the potential to disturb more than an inch or two of sediment over an area more than three feet square will be considered ground disturbing. Certain activities within sites will not require monitoring. These consist of activities with low potential to expose cultural resources or for which monitoring would not identify disturbed or exposed cultural activities. Examples of activities with low potential to expose cultural resources include simple transiting of sites by rubber-tired vehicles, installation of temporary fence posts, transiting of areas that have been previously disturbed (and monitored) by the project or prior to the project.

Pipeline right-of-way construction will be observed by at least one archaeologist in the areas designated for monitoring at each location where machinery is actively involved in ground disturbance activities. Archaeologist(s) will view the ground disturbance as it occurs to identify cultural remains exposed by construction equipment. In the event that cultural material is observed during right-of-way preparation (see "Discovery Definition" below), construction will be temporarily suspended at that location to allow the archaeologist to safely examine the exposed remains. Once the discovery has been initially recorded, construction will be allowed to proceed. Discoveries will be recorded and evaluated by the methods

presented below. Once the discovery has been initially recorded, construction will be allowed to proceed.

### **DISCOVERY DEFINITION**

Archaeological discoveries consist of evidence of human activity that is more than 50 years old with potential to yield data pertinent to regional history and prehistory. Prehistoric discoveries include, but are not limited to, features (small hearth features, housepit features, storage features, etc.), artifact concentrations, and activity areas. Historic discoveries include, but are not limited to, features (historic hearths, trash deposits, structures, old canals, roads, etc.), artifact concentrations, and activity areas. Isolated historic artifacts or small concentrations of non-human bone will not be considered discoveries.

### **PROCEDURES FOR ADDRESSING DISCOVERIES IDENTIFIED BY CONSTRUCTION PERSONNEL**

The following procedures will be initiated in the event unanticipated cultural resources are discovered. When a discovery is encountered, the construction activity that resulted in the exposure of the discovery will be immediately halted and the construction manager will be notified. The construction manager in turn will notify the Bear Paw project manager.

Bear Paw's responsible party involved in unanticipated discoveries of archeological materials will order construction contractors to suspend ground-disturbing activities adjacent to the discovery. Cessation of ground-disturbing activity will encompass a sufficient area to protect the discovery and provide a buffer zone for adequate and safe investigation of the discovery and any associated features or artifacts. A recommended guideline for the buffer zone is at least 100 feet (30 meters [m]) around the discovery, but its size can be adjusted to protect the discovery adequately without unnecessary hindrance to construction. Visual barriers such as temporary fencing will be placed around the discovery area to protect it from further disturbance. Vehicle traffic within the vicinity may need to be limited or halted until the discovery is inspected.

Bear Paw's responsible party will then notify and consult an archeologist qualified under NDAC Section 40-02-02 to review the discovery. In the event a qualified archaeologist is not immediately available, photographs of the discovery may be transmitted to the archaeologist for review, at which time the archaeologist will determine if a field visit is required. During the review phase, suspension of all work and vehicle traffic in the buffered area is required. If the archaeologist determines that the discovery is non-cultural, Bear Paw will be notified and the halted construction activity can resume.

If the discovery is deemed cultural and a field visit is required, the archaeologist will be scheduled for an on-site visit as soon as possible. In the meantime, Bear Paw's responsible party will notify the construction manager to suspend work within the buffered discovery area until the field visit by the archaeologist occurs. During the field visit, the archaeologist will determine whether the discovery is potentially significant.

### **TREATMENT OF DISCOVERIES BY ARCHAEOLOGICAL PERSONNEL**

When a discovery is reviewed by an archaeologist, the discovery will be fully recorded according to approved standards. The initial treatment of any discovery will consist of recording the location of the discovery; recording summary data concerning the feature(s) and/or other remains (including dimensions, qualitative characteristics, and associated remains); photographing the discovery and the overall context of the exposed material; and profiling trench walls containing cultural features or strata (where safe and prudent). The feature(s) will then be excavated and a sample or all feature fill will be collected for laboratory analysis including pollen studies, flotation, and carbon dating as appropriate. Feature plans and profiles will be drawn. Features will be photographed. Uncollected feature fill will be screened using 0.25-inch mesh. If necessary, additional horizontal exposure of sediments/deposits around the feature may be investigated to evaluate the feature context.

When appropriate, the location around the discovered cultural material will be tested to determine the extent of the cultural material. Testing can include, but is not limited to, excavation of controlled units over and around the feature area or placement of test units and/or auger probes. Testing will be designed to identify the nature and extent of the discovery and any associated activity area(s) or other features, if present.

### **AGENCY NOTIFICATION AND REPORTING**

If the discovery is deemed potentially significant, Bear Paw and the archaeologist will consult and coordinate with the State Historical Society of North Dakota (SHSND) to propose procedures for further treatment of the discovery, while minimizing impacts to the construction schedule to the extent possible. Suspended construction activities in the discovery area may not proceed until approval has been obtained from the SHSND and other involved agencies and parties.

A report detailing all cultural resources identified, recorded, tested, and/or excavated during the construction phase of the Garden Creek Pipeline project, regardless of significance, will be prepared by the archaeologist and submitted to the SHSND for review within six months of project completion.

### **SPECIAL PROCEDURES FOR DISCOVERIES OF HUMAN REMAINS**

Should human remains be encountered during construction of the Garden Creek Pipeline, per the protocol outlined above, all work will be immediately halted at the general location of the discovery. This location will be immediately secured, including a buffer zone of 100 feet (30 m) surrounding the discovery. Construction personnel and vehicles will promptly vacate the buffer zone. Vehicle traffic within the buffer zone will be limited to that necessary to remove vehicles and equipment from the buffer zone. Care will be taken to prevent any disturbance of the potential human remains during removal of vehicles and equipment. Until appropriate consultation has occurred, the discovery shall remain protected from any disturbance, such that no remains or associated artifacts are touched, moved, or collected.

Following notification of the construction manager and Bear Paw project manager, Bear Paw will immediately notify local law enforcement, the county coroner, and the SHSND. Contact information for relevant parties is listed in Table 1.

**Table 1. Contact Information.**

<b>Contact/Agency</b>	<b>Phone</b>	<b>Address</b>
County Sherriff's Office, McKenzie County, North Dakota	701-444-3654	201 5th St NW Watford City, North Dakota 58854
Coroner (Calvin Parrish), Coroner's Office, McKenzie County, North Dakota	701-770-4522	2492 Beaver Creek Road Watford City, North Dakota 58854
Chief Archaeologist (Paul Picha), Archaeology and Historic Preservation Division, North Dakota State Historical Society	701-328-3574	North Dakota State Historical Society 612 East Boulevard Ave. Bismarck, North Dakota 58505

The coroner and local law enforcement will make the official ruling on the nature of the remains, being either forensic or archaeological. The subsequent treatment of the discovery, including custody of the remains, will follow guidelines set forth in the NDCC Chapter 23-06 and NDAC Section 40-02-03, as follows.

- If the remains are deemed forensic (non-archaeological), the county coroner will retain custody of the remains and determine the plan of action.
- If the remains are deemed to be archaeological (historic or prehistoric) in nature, within 24 hours of notification, the SHSND will send a staff member to evaluate the remains and determine the race and age of the remains, if possible. The subsequent plan of action will depend on the race of the burial.
  - If human remains are determined to be non-Native American, the SHSND will retain custody of the burial and, following consultation with appropriate parties, determine a plan of action.
  - If the human remains are determined to be Native American or of unknown race, the remains will be left in place and protected from any form of disturbance until a plan for their protection or removal can be generated. The SHSND will contact and consult with the North Dakota Intertribal Reinterment Committee to determine the subsequent plan of action.

**REFERENCES CITED**

- Reinhart, Damien, Cooper, Judith R., Lechert, Stephanie, and Smith, Nicholas  
2011 *A Class I and Class III Cultural Resource Inventory of the Bear Paw Energy Natural Gas Liquids Garden Creek Pipeline, U.S. Forest Service Lands, McKenzie County, North Dakota.* An unpublished report prepared by SWCA Environmental Consultants and submitted to the State Historical Society of North Dakota.
- Riordan, Carolyn, Cooper, Judith R., Lechert, Stephanie, and Slessman, Scott  
2011 *A Class I and Class III Cultural Resource Inventory of the Bear Paw Energy Natural Gas Liquids Garden Creek Pipeline, Private Lands, McKenzie County, North Dakota.* An unpublished report prepared by SWCA Environmental Consultants and submitted to the State Historical Society of North Dakota.