

**SCOPE OF WORK:**

PHASE I DEEP SITE TESTING  
AND  
ADDITIONAL PHASE I CULTURAL RESOURCES SURVEY  
WITHIN THE  
DAWSON FLOOD CONTROL PROJECT  
LAC QUI PARLE COUNTY, MINNESOTA

1.00 INTRODUCTION

1.01 The Contractor will undertake Phase I Deep Site Testing and additional Phase I cultural resources survey for a portion of the Dawson Flood Control Project in Dawson, Lac Qui Parle County, Minnesota.

1.02 This cultural resources investigation partially fulfills the obligations of the Corps of Engineers (Corps) regarding cultural resources, as set forth in the National Historic Preservation Act of 1966 (Public Law [PL] 89-665), as amended; the National Environmental Policy Act of 1969 (PL 91-190); the Archeological and Historical Preservation Act of 1974 (PL 93-291); the Advisory Council on Historic Preservation “Regulation for the Protection of Historic Properties” (36 CFR Part 800); and the applicable Corps regulations. Curation of recovered materials and associated records will be at a facility meeting the requirements of 36 CFR Part 79, Curation of Federally-owned and Administered Archeological Collections.

1.03 This cultural resources investigation will serve several functions. The report will be a planning tool to aid the Corps in meeting its obligations to preserve and protect our cultural heritage. It will be a comprehensive, scholarly document that not only fulfills federally mandated requirements, but also serves as a scientific reference for future professional studies. It will identify resources that may require additional investigations and that may have potential for public-use development. Thus, the report must be analytical, not just descriptive.

2.00 PROJECT DESCRIPTION

2.01 The Dawson Flood Control Project (Project) is located in Dawson, Lac Qui Parle County, in southwestern Minnesota. The project area is located in the SW1/4, NE1/4, Section 21, Township 117 North, Range 43 West (Figure 1).

2.02 The Corps is conducting a study under Section 205 of the Flood Control Act of 1948, as amended, to determine the feasibility of providing flood protection to flood prone areas within the City of Dawson using a combination of levees, road raises, ditches and/or ponding areas.

2.03 A levee, pump station and storm water retention pond are one alternative proposed along the southern and eastern sides of the city’s sewage treatment plant in the N1/2, SE1/4, NE1/4 and SE1/4, NE1/4, NE1/4, Section 21, Township 117 North, Range 43 West (Figure 2). The west

end of the proposed levee alignment crosses Judicial Ditch 4, which is bordered by deciduous trees and tall grass. From there it heads east across a grassy field to a gravel section-line road which it parallels northwards to high ground on the south side of a cemetery. A gated outlet would be installed at Judicial Ditch 4 as part of the flood protection system. A 2.5-acre storm water retention pond would be located in the grassy field between the fenced sewage treatment plant and the proposed levee to the south. The levee alignment is 610 m (2000 ft) long by 20 m (66 ft) wide. Buried soil horizons were identified along this portion of the levee (see Section 2.05).

2.04 A levee and ditch are a second alternative proposed for the southern and eastern sides of the city's sewage treatment plant in the NE1/4, SE1/4, NE1/4, Section 21 and the NW1/4, SW1/4, NW1/4 and NW1/4, NW1/4, Section 22, Township 117 North, Range 43 West (Figure 2). The west end of the proposed levee alignment crosses Judicial Ditch 4 as part of the flood protection system and heads east across a grassy field on the south side of the city's sewage treatment plant until it reaches a north-south gravel road. The levee alignment then crosses the gravel road and angles northeastward across an agricultural field to Highway 212. The proposed levee segment east of Judicial Ditch 4 is paralleled on the landward side of a ditch. The levee alignment is 945 m (3100 ft) long. The levee and the ditch alignments are a total of 45 m (148 ft) wide. This levee alignment was subjected to a Phase I survey in 1999. However, the alignment has since been shifted to the north (see Section 2.08).

2.05 Random soil coring associated with a Phase I survey conducted in 1999 detected several well-developed buried soil horizons between ca. 50-160 centimeters below the modern surface along much of the levee alignment described above (Drew M. Foresberg and Thomas Madigan 2000. *Phase I Cultural Resources Investigation of Proposed Flood Protection Alignments at the City of Dawson, Lac Qui Parle County, Minnesota*. Reports of Investigations 604, Hemisphere Field Services, Inc., Minneapolis). Although no cultural materials were identified, there is a relatively high potential for intact precontact cultural deposits within the buried soil horizons along this portion of the levee alignment (Figures 3 and 4).

2.06 Three soil cores along the proposed levee alignment produced three separate buried soil horizons. In general, the described buried soil horizons are as follows:

Depth (cm)	Horizon	Description
54-85	2Ab1	Very dark grey (10YR 3/1) loam
64-91	2Ab2	Black (10YR 2/1) to very dark gray (2.5Y 3/1) loam
149-156	3Ab	Very dark grey (2.5Y 3/1) loam

2.07 The Contractor will conduct Phase I deep site testing along the proposed levee in the area where buried soil horizons were previously identified. The Phase I deep site testing will include an area approximately 400 m (1200 ft) long by 20 m (66 ft) wide, encompassing approximately 2 acres, in the N1/2, SE1/4, NE1/4 and SE1/4, NE1/4, NE1/4, Section 21, Township 117 North, Range 43 West (Figure 5). Work should be sufficient to determine the general nature of any cultural resources identified and establish the need for Phase II evaluation. If cultural resources are recommended for Phase II evaluation, the Contractor will prepare a detailed time and cost estimates for further work.

2.08 The contractor will also conduct Phase I cultural resources survey along a portion of the proposed levee and ditch alignment that has been moved to the north in the NW1/4, SW1/4, NW1/4 and NW1/4, NW1/4, Section 22, Township 117 North, Range 43 West (Figure 5). The Phase I survey will include an area approximately 610 m (1830 ft) long by 67 m (200 ft) wide, encompassing approximately 8.4 acres. The exact location of the proposed levee route's shift to the north has not been finalized. However, the new alignment will parallel the original proposed route. The area the additional Phase I survey will cover is between the originally proposed alignment and the topographically high ground to the north. Work should be sufficient to determine the general nature of any cultural resources identified and establish the need for Phase II evaluation. If cultural resources are recommended for Phase II evaluation, the Contractor will prepare a detailed time and cost estimates for further work.

### 3.00 DEFINITIONS

3.01 Cultural Resources include any building, site, district, structure, object, data, or other material relating to the history, architecture, archeology, or culture of an area.

3.02 A Phase I Cultural Resources Investigation is an intensive, on-the-ground study of an area sufficient to determine the number and extent of the resources present and their relationships to project features. It will provide (1) data adequate to assess the general nature of the sites present; (2) recommendations for additional testing and/or archival research of those resources that may provide important cultural and scientific information; and (3) detailed time and cost estimates for Phase II testing and evaluation.

3.03 Phase II Testing and Evaluation is the intensive testing of and/or archival research on a resource that may provide important cultural or scientific information. This testing and archival research will result in (1) information adequate to determine whether the resource is eligible for inclusion on the National Register of Historic Places; (2) a Phase III mitigation plan for any eligible resources that will undergo a direct or indirect impact; and (3) detailed time and cost estimates for the mitigation.

3.04 Phase III Mitigation is the mitigation of direct or indirect impacts of construction upon eligible sites through the systematic removal of data. It typically includes the excavation of either complete cultural deposits or a systematic sample of them and the thorough analysis and interpretation of the data recovered. The excavation, analysis, and interpretation methods must be adequate to address the important research questions based on which the resource was determined eligible. In addition, because the mitigation process destroys the resource, data should be recovered that may be needed to address future research questions.

### 4.00 SURVEY AND TESTING REQUIREMENTS

4.01 The Contractor will conduct Phase I deep site testing and Phase I testing for the Dawson Flood Control Project, in accordance with Sections 2.01-2.08 and 3.02 above.

4.02 The Contractor's work will be subject to the supervision, review, and approval of the Corps' Technical Representative. The Corps' Technical Representative for this contract is Bradley Perkl, St. Paul District archaeologist, at (651) 290-5370.

*4.03 If the Contractor has questions regarding any aspect of the required work, conditions or provisions of this scope of work, the Contractor will contact the Corps' Technical Representative and resolve the confusion before proceeding. The Contractor will not proceed with work that is or appears to be beyond this scope of work without discussing such work with the Corps' Technical Representative, unless the Contractor is willing to assume responsibility for all costs associated with such work.*

4.04 Information on buried utilities in the site vicinities is available from the city or the appropriate utility companies. The Minnesota One Call Excavation Notice System number for utility information is (800) 252-1166.

4.05 The Contractor will employ a systematic, interdisciplinary approach in conducting the study, using techniques and methods that represent the current state of knowledge for the appropriate disciplines. The Contractor will provide specialized knowledge and skills as needed, including expertise in archeology, history and other social and natural sciences, particularly geomorphology.

4.06 The Contractor's key personnel working on this project must meet the Secretary of the Interior's professional qualification standards for precontact archaeologists, historic archaeologists, and historians as given in Appendix A of 36 CFR Part 61. Key personnel include the Contractor's principal investigator, field and laboratory supervisors, and field crew chiefs.

4.07 The Contractor may be required, per Minnesota Statutes 138.31-138.42, to obtain a cultural resources permit or archeological license from the Office of the State Archaeologist prior to the start of any field work. Contact Mark Dudzik at 612-725-2411 for information and a permit application. Mr. Dudzik is also the point of contact for burial sites information.

4.08 The Contractor will provide all materials and equipment necessary to perform the required services expeditiously.

4.09 The survey interval required for subsurface testing is 10 meters (~ 33 feet). However, this interval may vary depending upon field conditions, site density, or size. If a larger interval is used, this decision must be justified in the Contractor's report.

4.10 Deep testing will include suitable methods to determine if cultural materials or deposits reside within the buried soil horizons in the project area. Appropriate techniques, such as augering, coring or machine excavation should be used to penetrate overburden to a depth of at least 2 meters (~ 6 feet).

4.11 The Contractor will screen all subsurface tests through ¼-inch mesh or smaller hardware cloth.

4.12 The Contractor will return all surveyed areas as closely as practical to presurvey conditions. Care should be taken to minimize crop damage in agricultural fields.

4.13 The Contractor must keep standard records that include field notes and maps, subsurface testing forms, and photographs.

4.14 State site forms will be prepared for all sites discovered during the survey, and records on previously reported sites will be updated if new information is obtained. Data should be included on the present condition of each site and on the contents and locations of any collections from it. The Contractor will also submit all site forms and updates to the appropriate State agency. In addition, the UTM location of the site shall be noted on all state site forms.

4.15 The Contractor will recommend any Phase II testing and evaluation measures that are warranted, including time and cost estimates.

4.16 The Contractor will, at no cost to the Government, secure the rights of ingress and egress on properties not owned or controlled by the Government. The Corps will provide landowner information to the Contractor before the start of fieldwork. The Contractor will secure the consent of the owner, or the owner's representative or agent, in writing prior to effecting entry on such property. If requested, a letter of introduction signed by the District Engineer can be provided to explain the project purposes and request the cooperation of landowners. Where a landowner denies permission for survey or testing, the Contractor must immediately notify the Corps' technical representative and must describe the extent of the property to be excluded from the survey or testing.

4.17 All cultural artifacts located during the course of the field work belong to the respective property owners. Reasonable efforts will be made by the Contractor to convince property owners to donate the material for curation to a facility meeting the requirements of 36 CFR Part 79 (Curation of Federally-owned and Administered Archeological Collections), so that these artifacts are available to future researchers. The Contractor shall have property owners willing to donate items sign a release form or donation agreement indicating such. Property owners desiring to keep artifacts should have these returned to them after inventory, cleaning, analysis, and photography have been completed.

4.18 The Contractor is responsible for making all curatorial arrangements with the Minnesota Historical Society or another institution in Minnesota that meets the requirements of 36 CFR Part 79. The curation facility must be able to ensure the preservation of the artifacts and associated records and have procedures for making them available for research and public viewing. Use of a particular curation facility is subject to the approval of the Corps' Technical Representative. The Contractor is responsible for processing the artifacts recovered under the contract for accessioning by the curation facility and for delivering the processed artifacts to the facility.

4.19 Should the Contractor, in the course of conducting investigations under this contract, discover human remains, associated and/or unassociated funerary objects, sacred objects, or objects of cultural patrimony, activity in the vicinity of the discovery shall immediately cease. The Contractor shall take immediate steps to secure and protect these remains, including

stabilization, covering or reburial. As soon as practicable after discovery, the Contractor shall notify the Corps' technical representative of the discovery, its location, and any information on the nature of the discovery, including items found and their apparent age and condition. No further activity shall be allowed in the area of the discovery until the Corps completes the consultation process with appropriate Native American groups.

## 5.00 GENERAL REPORT REQUIREMENTS

5.01 The Contractor will submit the following documents, described in this section and Section 6.00: field notes, a field report, a draft contract report, and a final contract report.

5.02 The Contractor's field report will be a brief summary of the nature, extent and results of the field work conducted. It may be in the form of a letter to the Corps' Technical Representative.

5.03 The Contractor's field notes will include legible copies of important notes and records kept during the investigation. Especially important are the daily field journal of the Principal Investigator or field director, field site survey forms, and subsurface testing forms. One copy of these notes should be submitted to the Corps' Technical Representative with the draft contract report but should not be bound into the report.

5.04 The draft contract report will detail the approach, methods, and results of the investigation and make recommendations for further work. It will be submitted to the Corps' Technical Representative, who will review it and forward it to other appropriate agencies for review. Comments will be returned to the Contractor, who will make the necessary revisions and submit the final contract report.

5.05 The Contractor's draft and final reports will include at least the following sections, as appropriate to the study. The length of each section depends on the level of detail required of the study and the amount of information available. The reports should be as concise as possible, yet provide all the information needed for evaluating and managing the project and for future reference.

a. Title page: The title page will provide the following information: the type of study; the types of cultural resources assessed (archeological, historical, and architectural); the project name and location (county and state); the date of the report; the Contractor's name; the contract number, the name of the author(s) and/or Principal Investigator; the signature of the Principal Investigator; and the agency for which the report is being prepared.

b. Management summary: This section will provide a concise summary of the study, containing all the information needed for management of the project. This information will include the reason the work was undertaken, who the sponsor was, a brief summary of the scope of work and budget, a summary of the field work and lab analysis, the limitations of the study, the results, the significance of the results, recommendations for further work, and the repository for records and artifacts.

c. Table of contents

d. List of figures (includes plates)

e. List of tables

f. Introduction: This section will identify the sponsors (Corps of Engineers) and their reason for the study and present an overview of the study with each site located on USGS quad maps. It will also define the location and boundaries of the study area (using regional and area-specific maps); define the study area within its regional cultural and environmental context; reference the scope of work; identify the institution that did the work and the number of people and person-days/hours involved; give the dates when the various phases of the work were completed; identify the repository of records and artifacts; and provide a brief outline of the report and an overview of its major goals.

g. Previous archeological and historical studies: This section will briefly summarize and evaluate previous archeological and historical research in the study area including the researchers, dates, extent, adequacy, and results of past work and any cultural/behavioral inferences derived from it.

h. Environmental background: This section will briefly describe the current and precontact environment of the study area, including its geology, vegetation, fauna, climate, topography, physiography, and soils. The relationship of the environmental setting to the area's history should be stressed. The level of detail in this section will be commensurate with that of the other report sections.

i. Theoretical and methodological overview: This section will state the goals of the sponsor and the researcher, the theoretical and methodological orientation of the study, and the research strategies that were applied to achieve the goals.

j. Field methods: This section will describe all field methods, techniques, and strategies and the reasons for using them. It will also describe field conditions, relevant topographic and physiographic features, vegetation conditions, soil types, stratigraphy, general results, and the reasons for eliminating any uninvestigated areas.

k. Laboratory and analysis methods: This section will explain the laboratory methods employed and the reasons for selecting them. It will reference accession or catalog numbers of any collections, photographs, or field notes obtained during the study and state where these materials are permanently housed. It will also describe and justify the specific analytical methods used, including any quantitative analysis of the data, and discuss limitations or problems with the analysis.

l. Results: This section will describe the cultural resources found during the study. It will minimally include each site's description (including size, depth, and artifact density); its location (USGS quad, legal description and UTM coordinates, and elevation); the amounts and types of remains recovered; its environmental setting; its current condition; the direct and

indirect impacts of the project upon it; and any additional interpretations (e.g., site type, cultural components, and human behavioral information).

m. Evaluation and conclusions: This section will formulate conclusions about the location, size, condition, and distribution of the resources found; their relationships to other sites in the area; and their possible importance in terms of local and regional prehistory, protohistory, and history. It will also relate the results of the study to the stated goals; identify any changes in the goals; assess the reliability of the analysis; and discuss the potential of and goals for future research.

n. Recommendations: This section will recommend any further work deemed necessary. It will summarize Phase II evaluation measures that would be needed to determine whether specific resources are eligible for the National Register of Historic Places, as well as a time and cost estimate for this work. It will also describe any areas that were inaccessible and recommend future treatment of them. If the Contractor concludes that no further work is needed at any site, the evidence and reasoning supporting this recommendation will be presented.

o. References: This section will provide bibliographic references (in *American Antiquity* format) for every publication cited in the report. References not cited in the report may be listed in a separate "Additional References" section.

p. Appendices: This section will include the Scope of Work, resumes of project personnel; copies of all correspondence relating to the study; state site forms for all sites evaluated, artifact catalog sheets, and any other pertinent information referenced in the text.

q. Figures: The locations of all sites and other features discussed in the text will be shown on legibly photocopied USGS 7.5' topographic quadrangle maps bound into the report. In addition, the locations of all subsurface tests will be indicated on maps of appropriate scale and detail, and keyed to the subsurface testing forms included with the field notes. Other recommended figures are regional and project maps, photographs of the project area, and line drawings or photographs of diagnostic artifacts, structures, and unit or feature profiles.

r. Tables: The report should include tables of cultural materials by site and provenience (for example, excavation unit and level). Information that may require more detailed tabulation includes lithic tool types and raw materials, ceramic attributes, and floral and faunal remains.

5.06 The Contractor will submit to the Corps' Technical Representative the negatives for all photographs that appear in the final report.

## 6.00 FORMAT SPECIFICATIONS

6.01 There are no specific format requirements for the field report. A letter report is usually sufficient.

6.02 There are no format requirements for the field notes; however, they must be legible. If the original handwritten notes are illegible, they should be typed.

6.03 Formats for both the draft and final contract reports are as follows:

a. The Contractor will present information in whatever textual, tabular, or graphic forms are most effective for communicating it.

b. The draft and final reports will be divided into easily discernible chapters, with appropriate page separations and headings.

c. The final report text will be typed, single-spaced (the draft report should be space-and-one-half or double-spaced), on good quality bond paper, 8.5 inches by 11.0 inches, with 1.5-inch binding and bottom margins and 1-inch top and outer margins, and may be printed on both sides of the paper. All pages will be numbered consecutively, including plates, figures, tables, and appendices.

d. All illustrations must be clear, legible, self-explanatory, and of sufficiently high quality to be reproduced easily by standard xerographic equipment, and will have margins as defined above. All maps must be labeled with a caption/description, a north arrow, a scale bar, township and range, map size and dates, and map source (e.g., the USGS quad name or published source). All photographs or drawings should be clear, distinct prints or copies with captions and a bar scale.

## 7.00 MATERIALS PROVIDED

7.01 The Corps' Technical Representative will furnish the Contractor with access to any publications, records, maps, or photographs that are on file at the St. Paul District headquarters that are appropriate to the study being undertaken.

7.02 At the Contractor' request, the Corps' Technical Representative will provide information on National Register of Historic Places criteria for eligibility and on the preparation of Determinations of Eligibility.

## 8.00 SUBMITTALS

8.01 The **field work completion date** for this project will be December 16, 2002. The Contractor will contact the Corps' Technical Representative at least 7 days before the field work begins to discuss the field work schedule and plans.

8.02 The Contractor will submit reports according to the following schedules:

a. Field report: A brief letter report summarizing the field work and its results will be submitted to the Corps' Technical Representative with five (5) business days after the completion of field work.

b. Draft contract report: Seven (7) copies of the draft contract report will be submitted no later than 30 days after completion of the field work (draft report will be due on or before

January 22, 2003). The Corps of Engineers, the State Historic Preservation Office, and possibly other pundits will review the draft contract report. The draft contract report will be submitted according to the report and contract specifications outlined in this scope of work.

c. Project field notes: One legible copy of all the project field notes will be submitted with the draft contract report.

d. Final contract report: The original and 15 copies of the final report will be submitted no later than 30 days after the Contractor receives the Corps of Engineers comments on the draft contract report (final report will be due on or before May 21, 2003). The final report will incorporate all the comments made on the draft report.

## 9.00 CONDITIONS

9.01 Failure of the Contractor to fulfill the requirements of this scope of work will result in rejection of the Contractor's report and/or termination of the contract.

9.02 Neither the Contractor nor their representative shall release any sketch, photograph, report, or other materials of any nature obtained or prepared under this contract without specific written approval of the Corps' Technical Representative prior to the acceptance of the final report by the Government. Dissemination of investigation results through papers at professional meetings or publication in professional journals is encouraged. However, professional discretion should be used in releasing information on site locations where publication could result in damage to cultural resources.

9.03 All materials, documents, collections, notes, forms, maps, etc., that have been produced or acquired in any manner for use in the completion of this contract shall be made available to the Corps' Technical Representative upon request.

9.04 Principal investigators will be responsible for the validity of material presented in their reports. In the event of controversy or court challenge, the principal investigator(s) will be placed under separate contract to testify on behalf of the Government in support of the findings presented in their reports.

9.05 The Contractor will be responsible for adhering to all State laws and procedures regarding the treatment and disposition of human skeletal remains. Any human remains encountered will be treated with respect and will not be placed on public display.