I.

Technical Report Guidelines

Technical Report Guidelines

Introduction	58
Report Guidelines	59
Distribution of Reports	

The following guidelines for technical reports were prepared to promote responsible and high-quality archeological research in Wisconsin. These guidelines are not intended to offer a rigid format or to exclude categories of data not listed. Rather, they outline the level of documentation that could be provided in reports prepared for all Public Archeology projects. The guidelines provide a general outline for the format and content of reports and were prepared in accordance with the federal guidelines for compliance with Section 106 of the National Historic Preservation Act. They also incorporate the report guidelines adopted by the Society for American Archaeology Regional Conference on Cultural Resource Management Subcommittee on Standards and Guidelines (1986). The guidelines follow the research process for federal and stateregulated research projects:

- Archival documentation or reconnaissance documentation only.
- Phase I identification research.
- Phase II evaluation of a site(s) according to the criteria of eligibility for listing on the National Register of Historic Places (NRHP)(36 CFR 60). This would also include a statement of significance for each site (potentially eligible, eligible, not eligible, etc.) and should include documentation for a formal Determination of Eligibility (if appropriate).
- Phase III mitigation of archeological properties after the agency and SHPO have reached a formal Determination of Effect (no effect, adverse effect, no

adverse effect, conditional no adverse effect, etc.).

These guidelines are for reports that detail the results of Phase I identification and Phase II evaluation research projects, as appropriate to the nature of the undertaking (project), results of the investigations, and nature of the sites identified. Reports detailing Phase III (formal excavation/mitigation) research projects are written in accordance with the Data Recovery Plan approved by the agency, SHPO, and Advisory Council on Historic Preservation. It is assumed that such reports will include all of the information described below, in addition to the requirements of the Data Recovery Plan.

Report Guidelines

A report should contain, minimally, the following sections and the information described under each section. Prehistoric sites should be documented in metric, and historic sites should be documented in both metric and English.

1. Title Page

The title page should contain information on the researcher, agency, and all relevant project numbers:

- the title of the report, including the name and location of the project and the type of archeological investigation(s)
- the principal author(s) and principal investigator, and their organizational affiliation and address

- a list of contributors and their organizational affiliations, if appropriate
- the name of the lead agency, institution, or organization funding the research, the agency project number, and the name and address of the client, if appropriate
- the number assigned by the Compliance Section (Division of Historic Preservation), referred to as the SHSW compliance number
- the date the report was prepared

2. Abstract

The abstract should contain enough information to be used as a summary statement for entry into the Bibliography of Archaeological Reports. The abstract should include

- the type of project and size of the project area (in hectares and acres) for which the archeological research was conducted
- the type of research conducted (Phase I, II, III, archival research, etc.), the methods used, and a brief summary of the results of the research
- the number of archeological sites investigated, including their state codification numbers
- a statement of significance for each site according to NRHP criteria (potentially eligible, eligible, not eligible, etc.)
- the nature of potential impacts, with recommendations

3. Table of Contents

The table of contents should list all sections (topical headings) within the report with the corresponding page numbers. Authors of sections should be indicated if different from the principal authors.

4. Lists of Figures, Tables, and Appendices

These lists should include the name of each individual figure (illustration, plate, map, etc.), table, and appendix with the corresponding page number. Figures and tables should be listed in the order in which they appear in the

text. They should be placed on the page(s) following their citation in the text.

5. Introduction

The introduction should include

- a description of the purpose and circumstances of the project, including project administration and constraints
- a map showing the location of the project area in Wisconsin
- a map showing the location of the project area on a USGS 7.5' quadrangle (to assist the SHPO in plotting surveyed areas on state base maps)
- a detailed map of the project area (such as highway plans showing the proposed right-of-way and slope intercepts) and/or the location of the project area plotted on a low-flight aerial photograph (USDA Agricultural Stabilization and Conservation Service 1" = 660' air photos, standard and available at every county ASCS office)
- a summary of the scope of work (contract requirements)
- dates of work and numbers of field personnel involved
- a concise summary of the report's contents, including site investigations, results, statement of significance, potential impacts, and recommendations, as appropriate

6. Environmental Setting

The Environmental Setting section should include

- a description of the current environmental characteristics of the project area and how they may have affected the results of the field investigations
- a review of the history of land use for the project area (regardless of the results of the investigations), including a detailed description of current land use
- a description of the prehistoric environment, including the geology, geomorphology, soils, hydrology, and vegetation, if archeological properties were identified, with the environmental

information related to the nature and type of archeological properties identified

7. Archeological Context

This section should include

- a summary of the archeological record for the project area and surrounding region (i.e., known archeological site distributions in, or within one mile of, the project area)
- a description of the nature and type of previously reported sites and previous field investigations
- a description of Euro-American occupations in the area, based on archival research (such as early plat maps)
- a description of the information sources consulted (such as published material, site files, unpublished manuscripts, and informants)
- relevant culture histories, chronological sequences, settlement and subsistence patterns, site types, and other available data useful in assisting in the identification of archeological sites

For reports detailing the results of Phase II evaluations, an archeological context should be developed. This should include a description and the results of other site evaluations within the region (e.g., cultural overviews or study units). Cultural components should be identified and temporal associations should be specified and reviewed.

8. Methods

This section should describe the research design (purpose and intent of the research, including assumptions, techniques, strategies, methods, and hypotheses), field methods, analyses conducted, and any additional information on how the research was conducted. If a sampling strategy was used in the field or laboratory, it should be described.

Phase I Identification. The Methods section for a Phase I report should include

- A description of the research design and a discussion of any departure from the strategy initially proposed.
- A description of the field methods and techniques used (surface collection, shovel probing or testing, coring, excavation units, backhoe trenching, etc.). This description should include the distance between and within survey transects, percentage of ground visibility, and representative soil profiles. If more than one technique was used, maps or text should clearly describe where within the project area specific techniques were used. Each map should contain a scale, north arrow, caption, and key to symbols used.
- If an archeological site was identified, information on how the data were recorded, the nature of field mapping, and a description of how the artifacts were collected and provenience information recorded.
- A description of the field methods and techniques used to evaluate the archeological site(s), such as excavation units, mechanical removal of the plow zone, backhoe trenching, groundpenetrating radar, or coring.
- A description of the laboratory processing procedures used.
- A description of the classification/typological schemes used in artifact description and analysis, and the means of chronological determination for the assemblage. All artifacts classes or types should be explicitly defined; if following a published description, the source should be cited and included in the References Cited section.

Phase II Evaluation. For a Phase II project report, the Methods section should include

- A description of the research design and a discussion of any departure from the proposed research strategy.
- A description of the field methods and techniques used to evaluate the archeological site(s), such as excavation units, mechanical removal of the plow zone, backhoe trenching, ground pene-

- trating radar, or coring. Maps should be used to provide this information and should contain a scale, north arrow, caption, and key to symbols used.
- A description of how the data were recorded, the nature of field mapping, and how the artifacts and other samples (floral, soil, charcoal, etc.) were collected and provenience information recorded.
- A description of the laboratory processing procedures used.
- A description of the classification/typological schemes used in artifact description and analysis, and the means of chronological determination for the assemblage. All artifacts classes or types should be explicitly defined; if following a published description, the source should be cited and included in the References Cited section.
- A description of the field and laboratory techniques used in the study of paleoecological data (pollen, floral, faunal, sediment, phytolith, etc.).
- A description of specialized analytical techniques (edge wear analysis, raw material source identification, manufacturing techniques, etc.).

9. Results of Investigations

Phase I Identification. If archeological sites are identified during a Phase I project, the Results section should contain

- The location of all identified sites, plotted on a copy of the USGS quadrangle map (7.5' series), *and* on either a low-flight aerial photo or the project map, if of reasonable scale. (Note: USDA Agricultural Stabilization and Conservation Service 1" = 660' air photos are standard and are available at every county ASCS office).
- A description of the site, including site size, cultural-temporal affiliation (if known), site type/function, and the reliability and value of the data recorded (considering field condition, present land use, etc.). If a site map is provided, it should have a scale, north arrow, key to symbols used, and caption.

- A description of all cultural material recovered listed by site, temporal period, and artifact and/or feature type.
- Description and illustrations of all diagnostic artifacts, or of a sample of each type, using either line drawings or photographs that include a scale and label showing each artifact's cultural/temporal association.
- Measurements and descriptions of all projectile points. Chronological/cultural names should be provided and raw material types noted.
- Descriptions of all cultural material observed but not collected; the reasons for not collecting certain material should be noted.
- For historic archeological sites, a sketch map that shows the locations of all structural remnants and artifact concentrations. The results of a deed search should be presented detailing the history of ownership.
- An assessment of integrity for each site, such as the degree of erosion, deflation, or deposition, and an assessment of site context and stratigraphic context as indicated by shovel test data or soil cores.

Phase II Evaluation. For a Phase II evaluation, the Results section should contain

- The location and name (including state codification number) of the site, plotted on a copy of the USGS quadrangle map (7.5' series), *and* on either a low-flight aerial photo or the project map, if of reasonable scale. (Note: USDA Agricultural Stabilization and Conservation Service 1" = 660' air photos are standard and are available at every county ASCS office).
- A description of the site, including site size, cultural-temporal affiliation (if known), site type/function, and the reliability and value of the data recorded (considering field condition, present land use, etc.).
- A site map showing the site boundaries; location of all excavation units, shovel probes (tests), areas mechani-

cally stripped of the plow zone, and areas in which any other investigative technique was used; and locations of features and artifact concentrations. The map should also contain a scale, topographic features, modern features, and the coordinates of a permanent datum.

- A description of the levels excavated (natural, cultural or arbitrary) and an explanation of techniques used.
- A description of all cultural material, with tabulations by horizontal and vertical provenience, count, weight (if appropriate), temporal period, and artifact type. Distribution plotting should be used, when appropriate, to assess site structure.
- Illustrations of diagnostic artifacts, or of a sample of each type, using either line drawings or photographs that include a scale and a label showing each artifact's cultural/temporal association.
- Measurements and descriptions of all projectile points. Chronological/cultural type names should be provided (Raddatz Side Notched, Monona Stemmed, etc.) and raw material types indicated.
- Quantification of all lithic debitage in a table containing appropriate lithic reduction stages and raw material types.
- Descriptions of ceramics. If possible, all ceramic rims should be described and typed and attributes (paste, temper, profile, etc.) assigned to a specific type.
- Descriptions of all cultural material observed but not collected; the reasons for not collecting certain material should be noted.
- Tabulations of faunal and floral material by taxon and number, if possible.
- Results of radiocarbon dating of representative samples. It is not acceptable to state in the report that a sample has been submitted but the results are not available for interpretation and inclusion. If samples have been submitted but the lab has not processed them in a

- timely manner, the sample number and name of the lab should be listed.
- Laboratory reference numbers for all absolute dates.
- For historic archeological sites, a map showing the locations of all structural remnants and artifact concentrations. The results of the archival search should be presented detailing the history of ownership, occupation, and land use.
- An assessment of site integrity, such as the degree of erosion, deflation, or deposition, and an assessment of site context and stratigraphic context as indicated by shovel test data or soil cores. This interpretation should be accompanied by the supporting data generated in the field (e.g., detailed soil description, a geomorphologist's report, and illustration of profiles and/or soil core data.

Statement of significance. The site's significance, or potential to contribute to scientific or humanistic understanding of the past (potentially eligible, eligible, not eligible, etc.), should be determined after evaluating the site's potential to contribute information to the historic context defined for the site. Relevant research questions that could be addressed by further study of the site should be outlined and supporting documentation provided. The value of the site to any specific living group should be addressed, as should the site's possible interpretive value. It is not sufficient to say that a site is significant simply because it has an intact feature.

Documentation for a Determination of Eligibility. Archeological sites should be evaluated according to the criteria for listing on the NRHP. Each site should be placed in its context (e.g., state plan, thematic nomination, regional cultural overview, or property types as defined by the Office of the State Archaeologist) and an assessment made of its interpretive or research potential. Each site should be considered of potential National Register quality until enough information on its nature and condition is collected to permit a professional determination of significance. Potential research questions should be detailed.

A copy of the Determination of Eligibility (NPS Form 10-900) should be included as an appendix to all Phase II evaluation reports in which the recommendation is that the archeological site be considered eligible for listing on the NRHP.

10. Summary and Recommendations

An evaluation of the impact of the proposed project (or project alternatives) on the archeological resources should

- Provide a recommendation for the need for additional work. Any recommendation for no further work must be explained fully; it indicates that the site is not eligible for the NRHP and means that the site will be destroyed by the proposed undertaking (project). Recommendations for further work should be explained fully and include a discussion of the nature and extent of the proposed research.
- Discuss the type and degree of adverse effects the project will have on the site.
- Identify possible cumulative adverse effects the project may have on the site.
- Identify possible indirect impacts to the site as a result of the project (e.g., impacts from altered water flow, changes in lake levels, or increased industrial, recreational, commercial, or residential development).

Specific recommendations should be directed toward preservation and conservation of archeological resources and should include

- Where possible, a discussion of alternatives and their implications. The report should recommend the alternative that either assures the preservation of the resource or, if preservation in place is not possible, allows for maximum recovery of the potential archeological data.
- Recommendations and justifications for preservation, mitigation, or additional preliminary work, described in enough detail so the agency can understand how to proceed. A statement should be included that mitigation ef-

forts be coordinated with the State Historic Preservation Office.

Curation statement. All artifacts, samples, field notes, maps, log books, photographs, drawings, analysis sheets, project correspondence, and any other documentation generated during the project should be deposited in a facility that meets the standards described in the "Curation Guidelines" section.

The report should provide a statement of the present location of artifacts and documentation and, if different, of the facility that will serve as the permanent curation location. A letter signed by an authorized representative of the curation facility should be included; it should contain

- a statement that the collection will be curated in perpetuity, indicating the procedures to be followed should the institution no longer be able to curate the collection at a later date
- an explanation of how the collection will be cataloged
- the specific date by which the collection will be transferred to the curation institution

It is the responsibility of the archeologist to obtain permission for permanent curation prior to the initiation of fieldwork.

Accidental discovery. The report should also include a statement that acknowledges the possibility that presently undiscovered archeological sites may exist in the project area. The statement should note that if such discoveries are made, the agency, project coordinator, or construction personnel should immediately notify the Office of the State Archaeologist at 608/264-6495. Discoveries that potentially involve human remains should be directed to the Burial Sites Preservation Office at 608/264-6503 or 1-800/342-7834. The local police or sheriff's department should be called if a potential burial area cannot be appropriately secured until it can be evaluated by qualified personnel.

11. References Cited

The references cited should follow *American Antiquity* style guidelines.

12. Appendices

Appendices should include necessary supporting data, such as the scope of work, the proposal for work, or the Memorandum of Agreement (or letters) between the contractor and the principal investigator. Examples include

- the project research design (especially if approved by the SHPO as a separate document, such as a WisDOT corridor methodology)
- artifact summary tables (if too lengthy to incorporate into the main text)
- a curation statement and supporting documentation
- National Register form NPS 10-900 for a Determination of Eligibility
- qualifications of the primary project personnel
- the scope of work requested by the agency
- project correspondence

Distribution of Reports

Archeologists working on compliance projects should provide copies of reports to the following offices:

- Two copies of the report should be submitted to the State Historic Preservation Officer (SHSW) as a part of the Section 106 consultation process. This is generally done by providing copies to the agency funding the research, which then forwards the copy to the SHPO. One copy of the final report will be forwarded to the State Archaeologist for entry in the Bibliography of Archaeological Reports and to be forwarded to the Regional Archaeology Office.
- If human remains, cemeteries, or potential burial areas are described in the report, one copy should be sent to the Burial Sites Preservation Office (SHSW).