To: Wisconsin Archeological Survey – Guidelines Committee Members

From: Jennifer Haas Date: September 24, 2018

RE: Proposed Recommendations for the *Guide in Public Archaeology*

Objective

This memo presents recommendations relative to:

- Proposed changes to the Guide in Public Archeology
- Establishing procedure for the review of guidelines
- Method so information dissemination to the members

Background

The Wisconsin Archeological Survey published original guidelines for archaeological investigations in Wisconsin in 1997. An updated guide was prepared 15 years later, in 2012. Wisconsin Archaeologists are currently working under the 2012 guide.

In the seven years since the most updated guide, there have been substantial changes in Wisconsin's burial sites law (Wisconsin Statute § 157.70) with the adoption of 2017 Wisconsin Act 222 in August 2018. Revisions to the 2012 Guide are therefore in order to reflect the changes in the burial site law.

Committee Recommendations

The committee recommends that the Wisconsin Archaeological Survey adopt the following measures (Attachment 1):

- Adopt Addendum (See Attachment 2) to Chapter 4
- Adopt Addendum (See Attachment 2) to Chapter 5
- Adopt Revised Chapter 11: Investigation of Human Burial Sites (Attachment 3 and 4)
 - o Draft revisions provided October 2018
 - o Review/comment/vote in Spring 2019
- Establish schedule for guidelines review & process for periodic/regular updates.
 - o Every other year (Odd or Even Year)
 - o 30 days prior to Spring Meeting Guideline committee chair/WAS Chair makes call for proposed changes to the Guide from the membership.
 - o Spring meeting vote/discussion to direct Guideline committee to work on addendum
 - o 60 days prior to Fall Meeting Guidelines committee sends draft to membership for comments
 - o 30 days prior to Fall Meeting comments received
 - o Fall Meeting Draft submitted to membership for discussion, vote & adoption
- Establish the Guide as a "living document' house on the WAS website so that changes can be adopted as new circumstances arise and posted on WAS website without a full re-write of the Guide.

Attachment 1: Summary of Addendums and Revisions to the Guide for Public Archeology (2012)

Attachment 2: Addendum for Chapters 4 and 5 Attachment 3: Comments Regarding Chapter 11

Attachment 4: Draft Revised Chapter 11

Summary of Addendums and Revisions to the Guide for Public Archaeology in Wisconsin (The Wisconsin Archeological Survey 2012)

Adopted September 2018 (draft)

Chapter 4: Permits and Permissions

This addendum corrects the hyperlinks embedded in the document.

Public Land Permit

https://www.wisconsinhistory.org/pdfs/hp/Wis-State-Permit-2018.pdf

Burial Sites

https://www.wisconsinhistory.org/pdfs/hp/HPR-Request-to-Disturb-July-2017.pdf

Chapter 5: Phase I: Identification Surveys

This addendum provides an update for mapping best practices replacing portions of the following sections:

Documentation of an Archaeological Site

Documentation of a Burial Site

Chapter 11: Investigation of Human Burial Sites: Permission, Identification, Documentation, Removal, and Analysis

The entire chapter has been revised in 2018 and supersedes the 2012 chapter.

Attachment 2: Addendum for Chapters 4 and 5

Chapter 4: Permits and Permissions

Chapter 4: Permits and Permission is amended to correct for the following hyperlinks embedded in the document:

Public Land Permit

https://www.wisconsinhistory.org/pdfs/hp/Wis-State-Permit-2018.pdf

Burial Sites

https://www.wisconsinhistory.org/pdfs/hp/HPR-Request-to-Disturb-July-2017.pdf

Chapter 5: Phase I: Identification Surveys

Two sections are replaced in Chapter 5 including "Documentation of an Archaeological Site" and "Documentation of Burial Site".

Text in red is the revised text.

DOCUMENTATION OF AN ARCHEOLOGICAL SITE

When archeological materials are discovered, the site boundaries should be determined, and artifact concentrations or other patterns in artifact distribution should be mapped and documented. The distribution of artifacts can be recorded by piece-plotting, by conducting a controlled surface collection of equal-sized units placed systematically across the entire site area, or by recording the artifacts in relation to local topographic and environmental features, such as natural rises. In addition, global positioning system (GPS) coordinates can be taken at the locations of diagnostic artifacts, at the center of artifact concentrations, or at the boundaries of artifact concentrations or sites. GPS-derived coordinates (especially UTM coordinates) can aid greatly in site mapping and relocation.

Field site or site boundary mapping should be created with reference to a known physical reference point. An ideal datum consists of a survey marker, iron property corner stake, recorded USGS monument, or an easily recognizable physical point on the landscape documented with GPS coordinates. Parcel corners without physical monuments, trees, and buildings are inappropriate as they are not permanent and may be difficult to relocate in the future. The physical model or hardware number of the GPS handheld unit, range of error recorded on the GPS unit during survey, the number of satellites used to record the GPS point, and GPS unit threshold (such as sub-meter accuracy), as well as the geospatial datum and projection used (e.g., NAD 1983 UTM Zone 16N) must be recorded. Field site and boundary maps must include a scale, north arrow (indicate grid, magnetic, or true north), title, and key.

METES AND BOUNDS DESCRIPTION OF A BURIAL AREA

Under law, the location of a human burial site can be protected by "cataloguing." To catalog a burial site, the WHS needs a metes and bounds description for the exterior boundary of the burial, the names and addresses of the property owners, a scaled sketch map, and a 7.5' USGS quad with the site

Attachment 2: Addendum for Chapters 4 and 5

boundaries clearly delineated. Photographs that depict the current boundaries of the cemetery and conditions at the cemetery are also of value.

In a compliance case, the agency forwarding information to the WHS for review must furnish the office with a metes and bounds description, or sufficient information for WHS staff to develop a metes and bounds description of the burial/cemetery. This description should include a suggested and justified boundary (including a "buffer"; cf. below) for the catalogued site.

Metes and bounds descriptions should be referenced to a permanent physical datum in the field. An ideal datum consists of a survey marker, iron property corner stake, or recorded USGS monument. Parcel corners without physical monuments, trees, and buildings are inappropriate as they are not permanent and may be difficult to relocate in the future. The equipment used to record field measurements should always be documented, similar to the recording of archaeological sites.

While appropriate and very useful for displaying geospatial information, a GPS unit and GIS software programs are not a surveyor's transit. A detailed legal description, such as a catalogued boundary, should be created in the field using a surveying instrument to measure the actual, not projected, distance and direction from the mapped location back to a parcel corner (marked by an iron stake or pin) or another physical monument.

The projected environment of a GIS program may be imperfect for creating a field survey level accurate, legal description, such as a catalogued boundary. When using a projected geospatial environment there is an assumption of error. While the error can be identified and reduced by using appropriate projections and spatial datums, a projected spatial environment may not be the appropriate tool for creating detailed, survey accurate, legal boundaries. The level of required accuracy must always be considered when developing metes and bounds descriptions within a GIS.

Comments Regarding Revisions to Chapter 11

- I highlighted in yellow edits that were made possibly requiring further discussion.
- Summary of Major Changes to the Chapter
 - References best practices for mapping catalogued burial sites (see below) that are included in a Chapter 5 Addendum
 - Adds in a section on monitoring
 - Minor edits to update hyperlinks & WHS contact information

• Best Practices Guidelines for Metes and Bounds Descriptions of Archaeological Sites, Burial Sites, and Cemeteries

The adoption of 2017 Wisconsin Act 222 includes significant changes regarding the procedure for changing the boundaries of catalogued burial sites. Under Wisconsin Statute 157.70(2)(j), removal of land from a catalogue requires:

- Director notifies the property owner, interested persons on the Registry, the county or local historical society, the relevant municipality, and, if applicable, the person(s) who submitted the application to have the site recorded in the catalog and allows for a 60 day comment period.
- Director review comments and provides the notice of decision to the individuals listed above
- Person had 30 days to appeal the decision to the Burial Sites Preservation Board

Given the process involved to alter catalogued boundaries, there is a concern for the establishment of carefully defined catalogued boundaries using techniques that minimize mapping error. That that end, WAS offers these best practices guidelines for establishing a metes and bounds description of archaeological sites, burial sites, and cemeteries. These best practices are included in revised sections of Chapter 5.

Chapter 11

INVESTIGATION OF HUMAN BURIAL SITES: Permission, Identification, Documentation, Removal, and Analysis

Revised September 2018

All archeologists working in Wisconsin must become familiar with state burial law (Wis. Stat. § 157.70) and the associated administrative rules (Chapter HS 2) adopted to implement this legislation, as well as current administrative policies developed and updated by the WHS. Copies of the current procedures and links to the law and administrative procedures are available at: http://www.wisconsinhistory.org/hp/burialsite s/.

Wisconsin's burial sites preservation law, Wis. Stat. § 157.70, was passed in 1987 and amended in 2018 under 2017 Wisconsin Act 222. Under this law, discoveries of human bone must be reported immediately to the WHS (as well as local law enforcement personnel). All ground disturbance in the area of the discovery should cease, and excavation or construction cannot proceed without the authorization of the Director of the WHS. It is illegal to disturb burial sites without prior authorization. Only a "qualified archeologist" approved by the Director may work within the boundaries of a human burial site and oversee the excavation of human burials

To apply for this approval, an archeologist must demonstrate experience in the excavation of burials by submitting a curriculum vitae and two letters of reference for consideration to the Director of the WHS.

In brief, archeologists and those they may represent must coordinate all phases of burial site investigation, documentation, reporting, and disposition with the WHS.

Provisions of NAPGRA may apply to the investigation of burial sites not only with respect to the inventory, consultation, and repatriation of Native American human remains and certain cultural items, but also because aspects of the law pertain to intentional excavation or inadvertent discovery of Native American human remains and cultural items on federal lands or tribal lands. Archeologists need to be aware of the applicability of NAGPRA for each project, and coordinate with all appropriate agencies.

BURIAL SITE DEFINITION

In Wisconsin, a human burial site is defined as "any place where human remains are buried" 157.70(1)(b) (cf. http://www.legis.state.wi.us/statutes/Stat015 7.pdf).

In the WHPD database, burial sites are clearly labeled. Some of these sites were recorded very early; specific details are often lacking and the site boundaries are often indefinite or highly generalized.

Nevertheless, they are considered burial sites for the purposes of Wisconsin law, and if you plan on conducting ground-disturbing activities within the recorded boundaries of any human burial site, you first need to receive permission to do so from the WHS.

BURIAL SITE IDENTIFICATION

Records and Literature Search

Prior to initiating field work (either Phase I or Phase II) at a burial site, an archeologist should compile information on the cultural history of the region in general and the project area in particular. That effort should include, at a minimum, data on the geology, soils, and biotic environment as well as the known and expected distribution of all sitetypes (historic and prehistoric). The type of background research necessary is detailed in Chapter 3, "Archival Research." In addition, when working at historic cemeteries, the investigator should visit the County Register of Deeds office and copy the deed or deeds for the burial site.

Additional information may also be available from the Wisconsin State Old Cemetery Society (WSOCS): http://www.wisconsinhistory.org/localhistory/ directory/viewsociety.asp?id=100

Ground-Disturbing Activities at a Recorded Burial Site

Prior to initiating ground-disturbing activities, including archeological investigations, within the boundaries of a reported burial site as mapped and described in the WHPD, a "burials-qualified" archeologist must obtain permission from the Division of Historic Preservation—Public History. The policy and procedures for completing this pre-field step are posted on the WHS web site athttp://www.wisconsinhistory.org/hp/burialsite s/. A *Request to Disturb a Human Burial* site form is prepared, including attachments referenced on the form, and submitted to the Wisconsin Historical Society.

Field Survey

The goal of an archeological survey is to determine whether archeological sites, including prehistoric and historic burial sites, are present within a delimited area. Background research and interviews with local residents and collectors are useful for obtaining corroborating information on site locations and additional information on site types and locations that may not be referenced or recorded in written documents. THPOs or other tribal experts might also have site information unavailable through other sources.

Surface survey. Burial sites are often, but not always, marked by surface features. These indications may include actual human bone or bone fragments discovered on the surface of badly eroded and/or plowed sites; grave pit depressions; obvious changes of vegetation, either natural or cultural (lilies or lilacs, for example); spirit houses; wooden crosses; prehistoric mounds; and gravestones or fragments of stone markers.

Please note that, according to Chapter HS

2.2 (8), "grave markers" means any surface indications of burials including stone monuments, spirit houses, wooden crosses, and prehistoric Indian mounds. All are recognized as burial sites under provisions of state law.

Methods employed to locate different types of burial sites in diverse environments vary. Consequently, survey and sampling strategies must be evaluated and individually developed for each survey. For example, if background research suggests that an isolated historic grave might lie within a given project area, the transect interval employed must represent the minimum necessary to locate that burial. In areas of dense vegetation and limited ground visibility, undertaking surface survey during the late fall or early spring is advisable. Various remote sensing techniques also are now available and might prove viable. The results of a remote-sensing investigation will need to be "ground-truthed," since these techniques cannot identify human skeletal remains and might not produce results that can clearly be identified as human graves.

If an archeologist identifies a feature that might represent a prehistoric Indian mound or other burial feature for which no site record exists (e.g., it is not in the ASI of the WHPD), that feature

may be explored using a soil probe or other appropriate technique to assess further whether or not this "earthwork" is actually a Native American mound. In such instances, the archeologist may wish to contact the WHS to discuss sampling options prior to undertaking that activity.

Under state law, it is not necessary to physically uncover human bone to designate a mound (or any other location) a burial site. If a soil profile confirms a soil discontinuity that is cultural in origin and clearly not related to "recent" land disturbance or agricultural activity, the location of that mound feature must be documented on an ASI form and submitted to the State Archeologist at WHS.

Even if no human remains are encountered, or the results from coring or other sampling techniques are inconclusive, the elevated earthen feature might still be a mound and protected under Wisconsin's burial law. This assessment should be based on the location, shape, size, and configuration of the feature.

Subsurface survey. Subsurface testing within the boundaries of a human burial site may be undertaken:

after documentary research is completed

- following surface survey (if advisable)
- in the event that surface survey could not be effected because of dense ground cover
- if permission has been obtained from the WHS to conduct limited subsurface testing

The investigations must be designed to provide the maximum amount of information regarding the stratigraphic continuity and spatial extent of the site.

Depending on the nature of local sediments, vegetation cover, size of the area to be tested, and cost and other considerations, remote sensing techniques might be selected as the least intrusive and most cost- effective method for examining a large area. Ground-penetrating radar (GPR) and soil resistivity surveys have both proved useful in specific archeological contexts (primarily historic) where radio interference from outside power sources is not a factor. Because results of these tests can vary tremendously depending on local conditions, subsequent test excavations are typically recommended to confirm ("ground-truth") the results.

In some cases, controlled, monitored, mechanically assisted excavation of large areas of overlying fill or other disturbed soils (e.g., plow zone) to locate grave outlines or burial pits can be a practical, low-cost alternative to the use of remote sensing equipment (which, as noted, typically requires ground-truthing to verify the nature of detected anomalies). Mechanical stripping is potentially destructive (although minimally so, when properly implemented), but it provides the most comprehensive and definitive plan view of surface distributions of burial (and other) features. Before beginning any mechanical site stripping at a human burial site you must contact staff at the WHS. This type of activity represents a special request and is not covered under the provisions for "limited appropriate subsurface exploration" (HS 2.04[2]).

The request to conduct burial site investigations should contain the following information:

- site name
- site code
- state burial number
- brief project description, i.e., why is the work necessary?

 nature and extent of the proposed work, including methods to be employed and size of the area to be investigated

WHS staff will review the information and, if it is complete, will approve the application to disturb.

Controlled, monitored, mechanically-assisted stripping of overlying soils is typically recommended when early maps indicate the presence of Indian mounds or other burials within the present-day project area but surface indications of those cultural features no longer remain. The same situation might apply in some village sites (e.g., Oneota) known to have burials. As noted, permission must be obtained from WHS prior to any mechanical stripping within a reported burial site.

When the sediments in the area under investigation exhibit clear soil horizons (with color and textural differences), burial pits can be detected by locating areas of disturbed soil profiles. Soil probing can be effective in locating burials, particularly if a systematic survey strategy is employed. Close-interval testing is recommended when probing to locate burials. The standard shovel-testing interval of 10 to 15 meters used for Phase I surveys is not considered adequate or effective for locating burials.

Monitoring

The Wisconsin Historical Society routinely requires monitoring by a Qualified Archaeologist during ground disturbing activities within uncatalogued burial sites as a condition of the permission to disturb. Monitoring involves observation, and sometime active participation, by an archaeologist of on-going ground disturbing activities, typically involving heavy equipment), at or near to archaeological and burial sites, to identify, document, protect, and/or recover human burial features and/or archaeological materials. Monitoring is conducted to insure that archaeological and burial sites are not inadvertently disturbed during construction projects as well as to assess the presence/absence of human burial features and/or archaeological deposits in areas inaccessible by traditional survey/testing techniques (such as under pavement and/or fill). Monitoring is not a substitute for standard methods employed to identify archaeological and/or burial sites.

There are two types of monitoring efforts that may be appropriate for burial sites, depending on the probability for encountering human burial features.

Spot-Check Monitoring. Spot check monitoring consists of partial monitoring of the progress of excavation over the course of the project conducted by a Qualified Archaeologist. During spot checks, all spoils material, open excavations, recently grubbed areas, and other soil disturbances are inspected for archaeological material as well as to assess the degree of disturbance. The frequency and duration of spot checks is based on the relative sensitivity of the exposed soils and active work areas. The monitoring archaeologist determines the degree of disturbance, likelihood of encountering significant archaeological materials and/or human burial features, and if further monitoring is warranted.

Controlled Archaeological Monitoring. Controlled archaeological monitoring consists of the Qualified Archaeologist directing the heavy equipment during the initial phases of construction. This process involves the careful removal of the initial surface layers to examine for burial related features prior the continuation of the construction activities. Where possible, controlled archaeological monitoring should be preceded by very close interval shovel testing and/or soil coring to identify areas likely harboring intact soil horizons.

Reporting Results of Monitoring. The results of the archaeological monitoring activities are reported in a technical report that is submitted to the Wisconsin Historical Society. The report includes a discussion of methods, information about the archaeological and burial site, and the results of the monitoring activities, including a discussion of soil stratigraphy.

Burial Site Documentation

The following documentation is needed to determine the effect of a project on a human burial site and for "cataloging" the site under Wis. Stat. § 157.70(5), a crucial step for the site's long-term preservation:

- the legal definition of property boundaries as contained in a warranty deed or other legal document
- a certified survey plat of the cemetery or, if not available, a less formal plat maintained by the property manager
- a field sketch map, to scale, of the cemetery showing external and internal landmarks such as streets and lanes, location of marked burials, and location(s) of known or reputed unmarked burials if this information is not shown on the cemetery plat (the map or field notes need to include a property corner, or property line description)
- for field notes: orientation of burials as interpreted from cemetery plat or physical evidence, grave marker orientation, age, and/or surficial evidence; physical condition of cemetery; potential for unmarked graves; property owner or manager contact information
- photographs that illustrate the current setting and condition of the cemetery the owner's name and contact information
 - a cataloging boundary description that includes the appropriate justifications

Currently, the Wisconsin Department of Transportation (WisDOT) requires all archeological consultants to provide the above documentation for projects involving burial sites. Contact WisDOT for a copy of the required "Documentation for Cemeteries" form.

In cases where no deed or property description is available, such as pre-contact mound groups or other unmarked or undocumented graves, sufficient information should be generated to allow the WHS to catalog the site as described below.

CATALOGUING BURIAL SITES

Documentation

According to Administrative Rule Chapter HS

2.3 (2), documentation of a burial site may include, but is not limited to:

- * physical evidence, as demonstrated by archeological or written historical reports showing the presence of human bone or grave markers
- * adequate historical documentation
- * oral depositions, affidavits, or oral histories
- * any additional information requested by the Director

Metes and Bounds Description of a Burial Area

Under law, the location of a human burial site can be protected by "cataloguing." To catalog a burial site, the WHS needs a metes and bounds description for the exterior boundary of the

burial, the names and addresses of the property owners, a scaled sketch map, and a 7.5' USGS quad with the site boundaries clearly delineated. Photographs that depict the current boundaries of the cemetery and conditions at the cemetery are also of value. Please consult Chapter 5 Documentation of an Archaeological Site and Documentation of a Burial site for mapping best practices.

In a compliance case, the agency forwarding information to the WHS for review must furnish the office with a metes and bounds description, or sufficient information for WHS staff to develop a metes and bounds description of the burial/cemetery. This description should include a suggested and justified boundary (including a "buffer"; cf. below) for the catalogued site.

Historic burial sites. Many historic burials already have metes and bounds descriptions recorded on deeds filed with the County Register of Deeds. The WHS appreciates (but does not require) a copy of the deed describing the cemetery, including its name and burial site and state site number (as available) and the page number(s) of the volume from which the description was copied.

If there is a deed describing the boundaries of a burial site, this legal description must be verified in the field against the actual (i.e., present-day) dimensions of the burial site.

If there is no existing deed with a metes and bounds description, the archeologist must define the burial area and "sufficient contiguous land" necessary to protect the site; this may be accomplished by surface survey and/or subsurface testing. "Sufficient contiguous land" is defined in the statute as a minimum of 10 feet from any part of a burial site. Although statutes define a minimum 10- foot buffer, WHS currently recommends a 15-foot buffer (but larger and smaller buffers may be negotiated; Wis Stat. § 157.70[2][a]).

Prehistoric burial sites. As with previously undefined historic burial sites, the archeologist must first define the burial area and sufficient contiguous land necessary, under the law, to protect the site. The site boundaries and cataloguing boundary should be drawn around the entire mound group rather than individual mounds, and the buffer distance from the edges of all of the mounds should be a minimum of 15 feet (although statutes dictate 10 ft). Obviously if a boundary is drawn around an entire group, the buffer around some mounds might be larger than 15 feet. There might be cases where a 15-foot buffer is not practical, or where a larger buffer seems appropriate. In those cases, please contact the WHS. Archaeologists should be aware of tribal consultation and/or participation in the archaeological investigations of burial sites involving Native American remains.

If landowners request a larger buffer zone, their request must be reasonable, not excessive (simply to take advantage of a larger tax exemption). When a burial site with a protective buffer is catalogued, the burials and buffer area included in the catalogued area form a "no disturbance zone." Once the landowners are notified of the cataloguing, they may apply for a property tax exemption by contacting WHS. WHS and the landowner then contact the Register of Deeds. Once the catalogued area is recorded, it becomes part of the deed, and the protected area "runs with the land."

EXCAVATION OF HUMAN REMAINS

To ensure that the excavation, analysis, and report preparation of human remains investigations are performed and completed in a timely manner, and that sufficient information is provided to the Director of the WHS to allow for a disposition decision per Wis. Stat. §157.70(6) and HS 2.05(1), the WHS has a developed a standard burial contract (Burial Contract) between the

qualified professional (archeologist), WHS, and the project sponsor. This contract needs to be adapted to specific project needs and fully executed prior to any excavation or investigation. Contact the Wisconsin Historical Society to establish a Burial Contract.

To excavate human remains from a burial site in Wisconsin, an archeologist must be "qualified" as per 157.70 and HS 2.04(6)(a) and approved (in writing) by the Director.

To apply for approval, an archeologist must meet the Secretary of the Interior's Standards, have experience with human osteology or human anatomy, and demonstrate experience in the excavation of burials by submitting a curriculum vitae and two letters of reference for consideration to:

Director, Wisconsin Historical Society 816 State Street Madison, WI 53706

Please consult directly with WHS before initiating this process for information on current requirements.

A listing of "Archeologists Qualified to Excavate Burials" is updated as needed and kept on file at the WHS, and is available online via the WHS Web site: http://www.wisconsinhistory.org/hp/burialsite.s/about/bs_burialexcavation.pdf.

Before initiating fieldwork on state, county or municipal land, the archeological contractor must also secure a field permit under Wis. Stat. § 44.47(4) from the State Archaeologist.

AUTHORIZATION

The discovery of any human remains, or remains suspected to be human, must be reported immediately to the WHS in person, by telephone, or by e-mail (phone: 800.342.7834 or 608.264.6507). Additionally, the burial area should be secured and all activities in the immediate area should cease. Contacting local law enforcement is essential for securing the area.

No excavation of human bone from a burial context is permitted without the express permission of the Director of the WHS. Note, however, that an archeologist does not need prior authorization to excavate human remains if the bone is not recovered from a burial context—for example, if isolated fragments of human bone are found in a trash midden or a refuse pit.

If the context of discovery is at all questionable, it must be treated as a burial site until evidence is collected that clearly demonstrates that it is not a burial.

Discovery of a Native American burial site on federal or tribal lands automatically invokes the Native American Graves and Repatriation Act (NAGPRA). NAGPRA may also pertain to discoveries on non- federal/tribal lands if Native American human remains "are taken" into possession and control by a "museum" as defined by NAGPRA. The consulting archeologist should ensure that compliance agencies understand their responsibilities under both state and federal burial laws. The contracting archeologist must contact the WHS immediately and must also contact the funding or licensing federal agency regarding its policy on the excavation of (Native American) human remains. The excavation of non–Native American human remains still requires authorization from the Director of the WHS.

If human remains are discovered during monitoring of construction, the archeologist must direct the contractors to stop all construction in that area until WHS has evaluated the discovery, based upon discussions with the parties involved and possibly a field visit, regarding whether the remains can be removed. The Wisconsin Archeological Survey strongly recommends preservation of burials in place, rather than removal, whenever possible. If permission is given to remove the remains, a standard contract must be signed by ALL parties involved inclusive of the Wisconsin Historical Society, the property owner, and the archaeological consultant. The archeologist must inform the contractor that no construction can proceed in that area until the excavation of the human remains is completed.

METHODS

Documentation

A large number of field and laboratory forms for documenting burials and human remains are now available online. The archeologist and skeletal analyst should choose the forms that best fit the situation.

The methods for excavation and analysis are detailed in the Burial Contract and tailored for specific projects/discoveries.

Exposure and Initial Documentation

As noted, the WHS maintains a list of "qualified" archeologists approved to excavate human burials: <a href="http://www.wisconsinhistory.org/hp/burialsite.o

The following guidelines represent the minimum information that must be recorded during the excavation of human remains:

- 1. The first step is to identify boundaries of the burial pits(s) and record burial dimensions (once exposed) and pit size (length, width, depth), orientation, burial type, position, shape, and vertical and horizontal location in plan view. Contrasts in soil color and texture should be described, and soil samples taken of the surrounding pit fill. The entire excavation process should be documented photographically.
- 2. Prior to exposing the human remains, the context of the human remains should be fully addressed. For example, casket materials such as wood, metal, or glass should be documented. If individuals will be re-interred, all efforts should be made to remove wooden and metal casket materials intact. These materials should not be discarded, or if they are substantially degraded, at a minimum, a sample of wood should be kept from each interment, for identification and analysis. Metal casket nails and hardware, casket viewing glass, etc. should be treated similarly. All personal items places within a grave or casket should be kept and never discarded.
- 3. The next step is to carefully remove the sediments surrounding the burial(s) and expose the human remains using excavation tools appropriate to the task. The bone should not be touched with sharp metal tools. Wooden or bamboo picks, brushes of various sizes, artist's soft metal painting tools, and cans of compressed air are all useful in helping to expose burials. All pit fill should be screened through ¼-inch or finer screen to catch small bones such as sesamoids, ossicles (bones of the ear), hyoid pieces, phalanges, and other fragments. Care should be taken during excavation to identify these types of bones in situ if possible. A second sample of sediments should be taken from the area of the sacrum, if feasible. Care is needed in removing sediments from this area due to the possibility of fetal bones being present with female skeletons. If bones are damp when initially exposed, they should not be left to dry in direct sunlight.

4a. If the burial is supine, the frontal bone of the cranium and the innominates (pelvic bones) will normally be the first exposed through excavation. These elements are often the most fragmentary and often hold the greatest potential for determining sex and age, and they should be excavated last if possible. They can be used as landmarks from which to approximate the locations of the long bones (arms and legs) and expose them before excavating the chest, pelvic, and cranial regions. Once an area is exposed, it should be kept free of sediment by covering it with cloth. This is not always easy, as one area (e.g., elbow or hip joint) may still be in articulation with other bones.

- 4b. If the burial is flexed, the side of the skull (and possibly the lateral portion of the orbit), the side of the pelvis, and the knee joint will likely be exposed first. Because of the circumstances of burial deposition, excavation must begin at the most elevated points and work sideways and downward until the remains are exposed. Procedures used must be sensitive to the context and reflect the objectives (including time and cost constraints) of the recovery plan as well as field conditions and safety concerns for the remains.
- 5. All skeletal elements and associated objects should be left in situ if possible until the remains are completely exposed, photographed, and mapped on graph paper. Photographic documentation must include both black- and-white prints and color slides and/or digital photographs, as well as a list of photographs taken with their numbers, orientations, and type of film used. All photographs should include a date, identification of agency or individual, a scale, and an arrow pointing to magnetic north. The WHS site and burial numbers must also appear in the photograph if assigned and available. In those instances where bone has not preserved, or is in such a poor state of preservation that it fragments upon excavation, all surrounding sediment should be excavated en masse as a flotation sample. The sample can be processed via flotation and/or retained for re-interment.
- 6. The vertical and horizontal location of the human remains should be recorded, and a scale drawing made of each burial and any associated artifacts.
- 7. Field notes and the information on the Field Recording Form (contact WHS for current format/form information) must be as complete as possible. If feasible, and if within the scope of the project, the land adjacent to the burial must be investigated to determine whether there are features that might provide additional context for interpreting the burial site and associated mortuary behavior. If the adjacent land cannot be surveyed, that fact must be explicitly recorded in the field notes.
- 8. Certain stipulations of the customized "standard" contract may preclude various degrees of field and laboratory documentation and levels of analysis.

Removal

As noted earlier, the WHS has developed a standardized burial investigation contract that needs to be approved by all parties prior to any disturbance of a human burial. Please contact WHS directly for further information about this process. Again, the Wisconsin Archeological Survey strongly recommends preservation of burials in place, rather than removal, whenever possible.

Analysis and Report

After removal, the human skeletal material should be taken to an appropriate facility for analysis. This facility should have appropriate security and meet basic curation standards. Human remains excavated in Wisconsin cannot be moved to out-of-state facilities for analysis without the express permission of the WHS or the respective federal agency.

The analysis must be completed by a "Qualified Skeletal Analyst" as defined in HS 2.02(12) and HS 2.04(6)(b) and whose name and qualifying documentation are on file with the WHS. A WHS-approved list of such analysts is maintained online at

https://www.wisconsinhistory.org/pdfs/hp/HPR-Burial-Sites-Skeletal-Analysts-List.pdf

The analysis and report must be done in an expedient manner and within the time frame laid out in the excavation contract.

The analysis of human remains covered under Wisconsin's burial sites preservation law are intended to provide sufficient information to the Director of the WHS to allow for a disposition decision per Wis. Stat. §157.70(6) and HS 2.05(1).

The analysis and written report must include:

- 1. The standard report sections expected of all professional archeological reports as outlined in this volume, including the following:
- a) a complete literature search and interviews with local residents undertaken before beginning the excavation
- b) an overall site map that references the location of the burial(s) relative to a permanent datum point as well as the preparation of an in-situ plan view and profile drawings of the excavation and each burial
- c) scaled photometric documentation of the disturbance, the excavation, and any associated objects
- d) a completed archeological site inventory form, as submitted to the State Archaeologist at the WHS
- 2. The analysis of the human remains must include:
- a) determination of either direct kinship or the cultural, tribal, or religious affiliation of the remains if possible
- b) minimum and maximum number of individuals identified, including their age and sex, if possible
- c) to the extent necessary to make the determination, documentation and description of trauma, evidence for cultural and/or medical intervention, presence and documentation of pathology, and any relevant taphonomic factors (for guidance, refer to Standards for Data Collection from Human Skeletal Remains, edited by J. E. Buikstra and D. H. Ubelaker)
- 3. Please be aware of the following:
- a) Soil removed from the bones during cleaning must be retained with the remains for future disposition.
- b) No bone samples may be retained for study without the express permission of the Director under HS 2.04(9).
- c) No images, pictures, video, drawings, or illustrations of the burial or of work on the human remains may be used in any public presentation or report until the WHS accepts the report.
- d) The archeological contractor is responsible for transferring all reports generated and copies of field notes, maps, and photographs related to the burial site to the WHS, under HS 2.04(10).
- e) The archeological contractor is responsible for submitting two copies of the report to the director of the WHS for review once the excavation and analysis are completed. As noted above, the report must include information on the context of the discovery and any associated cultural information that would aid in determining the antiquity and direct kinship, or the cultural, tribal, or religious affiliation, of the remains.

DISPOSITION

Once WHS staff receive the report on the excavation and analysis of human remains removed from either an uncatalogued or a catalogued burial site, they will review the report. If the report is not acceptable, the author will be notified and the report returned with comments. Once the report is accepted, the WHS staff will prepare a memo summarizing their review of the report and making the recommendation to the Director of the WHS about the disposition of the human remains.

A notice is prepared and sent to all individuals, organizations, or descendant communities who have expressed an interest in the type of burial(s) that has been unearthed. The individuals, organizations, or descendant communities have 30 days to respond in writing. All responses are carefully reviewed, and the Director then makes a decision on the final disposition of the remains.

The remains will then be transferred and either reburied or curated and the matter considered closed.

