

**State Archaeologist's Procedures
for
Implementing Minnesota's
Private Cemeteries Act
(MS 307.08)**

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The procedures outlined in this document pertain only to the duties of the State Archaeologist under MS 307.08. The State Archaeologist has primary authority over all unplatted, unauthenticated historic burials in Minnesota no matter what their ethnic or religious affiliation except those on federal lands.

For procedures related to the removal of Indian burials or management of authenticated Indian burial grounds on private lands in Minnesota, you must contact the Minnesota Indian Affairs Council (MIAC). On federal lands, you must contact the land manager.

Introduction

This document outlines standard procedures that will be employed by the Office of the State Archaeologist (OSA) to deal with historic human remains and historic human burial grounds with regard to Minnesota Statutes (MS) 307.08. It does not address procedures concerning the removal and reinternment of Indian remains or the management of historic Indian burial grounds on private property because the Minnesota Indian Affairs Council (MIAC) in consultation with other appropriate authorities has control of these activities.

Minnesota law basically treats human burials and cemeteries in two ways: as Public Cemeteries under MS 306 and as Private Cemeteries under MS 307. These laws were initially passed in the first decade of the 20th century. Publicly owned cemeteries usually are not restrictive regarding who can be buried there and tend to be active (i.e., open to new burials), although public cemeteries can also be owned by private groups with burial restrictions. Local units of government usually own public cemeteries.

Private cemeteries are those with restricted use governed by procedures established by a private association and they exist on private property. Most private cemeteries are affiliated with religious groups and under current law (MS 306.87, Subd. 3) only religious corporations can establish new private cemeteries. Lands containing officially recorded cemeteries are exempt from public taxes and assessments. Some well-known and well-marked private cemeteries are no longer active primarily due to church closure or lack of room.

The Public Cemeteries Law includes a section on “abandoned” cemeteries (306.243) that applies to both public and private cemeteries. Although there is no formal definition of “abandoned cemetery” in MS 306 or MS 307, based on the wording of MS 306.243 an abandoned cemetery is one where the cemetery contains graves dating prior to 1875 or graves of Civil War or pre-Civil War veterans and the cemetery association has disbanded or the cemetery is neglected. Under MS 306.245, a “neglected cemetery” is one that has not been maintained in a proper manner or kept free of weeds for 10 years. County boards *may* take charge of abandoned cemeteries, while township boards *may* maintain neglected cemeteries. State law does not prohibit the sale of cemeteries.

The State Archaeologist’s role in burial ground identification and management first appeared in state law in 1976 (MS 307.08, Subd. 3). Formal burial authentications began in the mid-1980s and have continued to the present. Although the State Archaeologist has numerous other duties defined in several other state laws and rules (MS 138.35; Rules 6120.20, Subpart 15a; Rules 4110.1500), the various obligations under MS 307.08 often dominate the daily OSA workload. The OSA last issued MS 307.08 procedures in 1991. These procedures were issued jointly by OSA and MIAC.

The need for revised MS 307 implementation procedures contained in this document arises for multiple reasons. Since 1991, there have been significant changes in personnel, administration, archaeological practice, and state and federal laws. With regard to personnel, State Archaeologist Christy Hohman-Caine resigned in 1992, State Archaeologist Mark Dudzik was appointed in 1995 and resigned in 2005, and State Archaeologist Scott Anfinson was appointed in 2006. Salaries for a full-time State Archaeologist and an assistant were instituted in 1995 as well as the placement of the OSA within the Minnesota Department of Administration.

It is not only OSA personnel that have changed over the last 16 years. The OSA carefully coordinates with the MIAC during authentication if Indian burials may be involved. Roger Head

resigned as the executive director of MIAC in 1993, Joseph Day was appointed as Head's replacement in 1994 and resigned in 2006, and Annamarie Hill was appointed in 2006.

On the legal front, the Private Cemeteries Act was revised in 1993, 1999, 2003, and 2007. These revisions have had major implications for MS 307 implementation procedures such as dealing with burial *grounds* instead of just burials, providing local governments Internet access to a burial sites database, and restructuring the management responsibilities of the principal players. The Legislative Auditor completed a major analysis of OSA activities in 2001 following a series of disagreements between State Archaeologist Dudzik and the MIAC. The Auditor's final report made several recommendations including the adoption of administrative rules pertaining to the regulation of archaeological activities, which these revised procedures should essentially fulfill in a practical if not legal sense, at least with respect to the State Archaeologist's MS 307.08 duties.

On the federal level, final rules implementing the Native American Graves Preservation and Repatriation Act (NAGPRA) were issued in 1995 and a final NAGPRA inventory of curated Indian skeletal remains for Minnesota was released by the National Park Service in 1999. These federal rules concerning Indian remains and grave goods provide some guidance for state procedures especially with regard to definitions.

Changes in archaeological practice since 1991 involve field, analytical, and communication techniques. Ground penetrating radar and other remote sensing techniques have greatly improved our ability to make non-invasive examinations of sub-surface features. Digital photography, geographic information systems (GIS), and email/internet access have become widespread allowing for rapid data sharing. Small sample radiocarbon dates and date correction techniques have increased our ability to assign accurate temporal relationships. DNA analysis and other advances in forensic anthropology have allowed more precise ethnic identification of human remains. All of these technological advancements have significant implications as to how MS 307.08 is implemented.

Under MS 307.08, the State Archaeologist is given the exclusive authority to *authenticate* human burials that were interred more than 50 years ago and buried outside of recorded cemeteries or buried in unplatted graves within recorded cemeteries. Authentication involves the determination that remains are indeed human, establishing the limits of burial grounds, and determining the ethnic affiliation of the remains. MS 307.08 also gives the State Archaeologist duties involving the removal and relocation (reinternment) of non-Indian remains, the analysis of removed remains, the management of unrecorded non-Indian cemeteries on private land and non-federal public land, and the maintenance of burial site records. A complete list of State Archaeologist MS 307.08 duties as well as the duties of other entities appears in Appendix B.

The State Archaeologist does not have any legal responsibilities on federal lands in Minnesota, although federal agencies often consult the OSA when dealing with human remains or burial grounds. Federal laws pertaining to human remains include NAGPRA passed in 1990 and the Archaeological Resources Protection Act (ARPA) passed in 1979. With regard to lands within Indian reservations, the State Archaeologist has burial site authority only on those lands that are not held in trust by the federal government.

The actual number of unrecorded cemeteries in Minnesota is impossible to determine as previously unknown burial mound groups continue to be discovered every year, the great majority of non-mound prehistoric burials are superficially invisible, and unrecorded early Post-Contact Indian and poorly marked non-Indian graves are strewn throughout the state. There are about 12,500 burial mounds that have been reported in Minnesota in over 1,500 discrete

locations. About 600 of these sites consist of lone mounds, while the other 650 sites consist of groups of mounds. The largest mound group in the state (21GD17 at Red Wing) once had over 225 mounds. The average number of mounds per mound site is eight (8).

A surveyor named Theodore Lewis undertook a detailed survey of burial mounds in the Upper Midwest between 1880 and 1895 (Finney 2001). Lewis mapped over 7,500 mounds in Minnesota at over 700 discrete locations. In the late 19th century and early 20th century, amateur archaeologist Jacob Brower undertook mound surveys in central Minnesota, mostly in areas not examined by Lewis. Newton Winchell published the results of the Lewis and Brower surveys as well as other archaeological and ethnographic information in 1911 in his landmark volume *The Aborigines of Minnesota*.

The mound-building period lasted for only about 2,000 years in Minnesota, from ca. 500 BC – to ca. 1500 AD. Considering that the ancestors of today's Indians have lived in Minnesota for at least 12,000 years, there are over 10,000 years of burials where all surficial traces have disappeared. Numerous Indian burial grounds from the more recent past are also unrecorded, especially within the boundaries of Minnesota's 11 Indian reservations.

The graves and burial grounds of non-Indian occupants of the state also number in the thousands. A compilation of Minnesota Cemetery locations by Pope and Fee (1998) lists 4,400 such sites. This compilation was based upon research of written records and historic maps. Not all of these cemeteries are recorded in official county records or show on modern maps and many of them have been abandoned and forgotten. The OSA database in 2007 included 623 non-mound burial grounds in the state, the majority of which are not included in Pope and Fee (1998). The OSA database does not include active public or private cemeteries because they are generally not within the scope of State Archaeologist duties.

The files of the State Archaeologist currently contain over 2,200 cemeteries, the great majority of which are not recorded in County Recorder offices and are not even known to the landowners where the cemeteries are located. Archaeologists have not examined the status of many of these cemeteries, especially the burial mounds, in over 100 years so we do not know their current condition. Many of Minnesota's burial mounds have been under cultivation for over a century so they are not visually apparent anymore, but burial pits still may exist below the plow zone.

The number of officially authenticated burial sites is relatively small, totaling about 50. In order to be authenticated, a site must have a letter from the State Archaeologist in the site file stating as much. Sites are not automatically authenticated even if detailed records exist (e.g., all Lewis mounds), but only as individual sites that have been field inspected by the State Archaeologist or a designated representative. Some authenticated sites only have portions authenticated and some authenticated prior to 2006 have with no boundary map in the file.

Thus it is no surprise that the Office of the State Archaeologist gets numerous calls every week about the possible occurrence of or disturbance of human burials. Not only are most of the known burial sites listed in the OSA files unknown to private landowners, but relatively few private developments in the state go through any cultural resources review process involving the State Archaeologist or the State Historic Preservation Office (SHPO).

Because both state and federal laws consider burials to be archaeological sites and because archaeologists are skilled at locating and interpreting buried features, archaeologists play a key role in the evaluation and treatment of such sites. Yet, unlike most other types of archaeological sites (e.g., camps, workshops), ancient burial sites in the United States are also considered to be sacred sites by Indian peoples. Some states and some archaeologists consider

such sites to be off limits to scientific study, especially excavation, although these sites contain valuable information for answering important research questions such as identifying the prehistoric relatives of today's Indian tribes and assessing prehistoric health and diets.

This dual nature of ancient burial sites initiated an emotional debate within the archaeological community beginning in the 1970s, a debate that continues to the present (see Thomas 2001). In Minnesota, archaeologists have not excavated Indian burial sites for purely scientific reasons since 1974 and almost all human remains excavated from ancient burial sites over the last 150 years have been returned to Indian peoples for reburial.

Because each burial situation involving the State Archaeologist is unique, there is a need to be flexible, but because burials are subject to strict legal processes, there is also a need to be consistent. Most importantly, because burials are held in high esteem by most cultures, there is a need to always be respectful and to carefully consult with relatives or ancestors if such can be identified.

Minnesota has one of the strictest burial protection statutes in the country. Under MS 307.08, it is a felony to intentionally disturb burials without proper authority. This includes unauthorized professional archaeological excavation of burials. The State Archaeologist can only authorize the removal of non-Indian burials that meet the conditions of MS 307.08, namely non-Indian remains interred over 50 years ago and non-Indian remains found outside of recorded cemeteries.

Only the Minnesota Indian Affairs Council (MIAC) can grant permission to remove Indian burials on non-federal land and shares management responsibilities with the landowner for historic Indian cemeteries on these lands. Once a burial or burial ground on private property has been authenticated as Indian, most of the responsibilities of the State Archaeologist under MS 307.08 end. On non-federal public lands, the State Archaeologist retains some management responsibilities for historic Indian burial grounds under MS 138.31 - .42. If burials are found on federal lands, neither the State Archaeologist nor the MIAC have jurisdiction and you must contact the federal land manager regarding questions of treatment, removal, or management.

OSA Burial Site Procedures

The State Archaeologist's duties under MS 307.08 can be divided into seven major categories:

- Authentication
- Removal of Non-Indian Remains
- Analysis of Removed Remains
- Relocation/Reinternment of Non-Indian Remains
- Management of Burial Grounds
- Record Keeping and Data Sharing
- Development Plan Review

Authentication

As defined in 307.08, Subd. 13, *authenticate* “means to establish the presence of or high potential of human burials or human skeletal remains being located in a discrete area, to delimit the boundaries of human burial grounds or graves, and to attempt to determine the ethnic, cultural, or religious affiliation of individuals interred.” The State Archaeologist has the exclusive right to authenticate unplatted historic burials in Minnesota.

Authentication by the State Archaeologist thus involves three steps: 1) *Verification* - an assessment of whether or not an area is indeed a human burial ground or exposed remains are indeed human, 2) *Identification* - an attempt to identify the ethnic, cultural, and/or religious affiliation of human remains, and 3) *Delimitation* - establishing the legal boundaries of the burial ground. Authentication can take place in the event of an accidental discovery of suspected human remains, upon request from an agency or landowners who have suspected burial grounds on their property, or at the discretion of the State Archaeologist based on need. The need for authentication is high if site destruction is threatened and low if landowner curiosity is the only factor.

The State Archaeologist can license other professional archaeologists to conduct the fieldwork necessary for an authentication. Not all archaeologists are qualified to do authentication work, however. To be qualified, an archaeologist must meet the general qualifications for licensing under MS 138.31 - .42 as well as one or more of the following qualifications:

- 1) Have conducted previous authentication work for the Minnesota OSA
- 2) Have previous experience excavating burial sites
- 3) Have previous experience in identifying human remains
- 4) Have geomorphological or geophysical experience in evaluating burial sites

If a probable Indian burial is involved, MIAC approval of the archaeological contractor is also needed if the fieldwork involves the *disturbance* of a possible Indian burial ground.

The following section outlines basic OSA guidelines for the three steps of authentication:

Authentication Step 1: Verification of Human Burials and Burial Grounds

Much of the authentication activity of the OSA is proactive in the sense that landowners, developers, agencies, or concerned citizens contact the OSA when a suspected burial ground may be disturbed by development or a decision is needed as to whether or not a burial ground

exists in a particular area for real estate transactions or tax assessment purposes. Other authentication activities of the OSA are in response to accidental discoveries of human remains due to construction disturbances, exposure through natural processes, or requests for a determination in non-development areas.

Under MS 307.08, Subd. 3a, “an agency, a landowner, or other appropriate authority” can request an authentication, but authentication is done at the discretion of the State Archaeologist. The State Archaeologist will prioritize authentication requests based on immanent threat, planning needs, current OSA staff schedules, and the likelihood that a burial actually exists in a given location. A significant percentage of authentication requests are made by nearby landowners in an attempt to stop adjacent developments. Some of these requests are based on sincere beliefs that burials will be disturbed, while other are based on convenient hearsay.

The State Archaeologist has the right to enter all non-federal property for the purposes of authentication (MS 307.07, Subd. 11), but the State Archaeologist will always attempt to gain landowner permission before undertaking an authentication. Sometimes, if the land ownership is unclear or an emergency situation exists, the State Archaeologist will enter land prior to discussing it with the landowner in order to make an initial assessment.

The first step in dealing with an authentication request is to check the OSA site files to determine if human remains or burial grounds have been previously reported in a specific area. The proximity to other recorded cultural features (e.g., ancient village sites, ghost towns) is examined as burials are almost always placed close to human habitation sites. The environmental setting is investigated to assess the likelihood of burials being in a particular location. Intentional burials and especially cemeteries containing multiple graves are usually placed in upland locations, in well-drained soils, and in pleasant settings often with a good view of the adjacent landscape. Studies of burial mound locations have determined that most mounds are located near bodies of water and are concentrated in certain regions of the state (e.g., Anfinson 1984). About 78% of excavated mounds in Minnesota have contained human remains (Arzigian and Stevenson 2003:232).

Written accounts of burial locations can vary greatly even when they originated with archaeologists. Theodore Lewis almost always was correct when identifying a mound and produced accurate maps of mounds, but his contemporary Jacob Brower occasionally misidentified natural features as mounds and produced maps that are only general approximations of mound dimensions and distributions. Modern archaeologists also have varying skills when it comes to mound identification, mound mapping, interpreting soils, and identifying human remains. There are even officially numbered sites that do not appear to be mounds. Thus written accounts must be carefully scrutinized.

Besides examining OSA files, historical records, and the environmental setting, the OSA will also consider oral accounts that suggest a burial exists in a particular area. Assessing the veracity of oral accounts is particularly challenging because people’s memories can be faulty and motives can be questioned. The OSA standard is basically what would be considered reliable evidence in a court of law. To assess oral evidence the following questions can be asked:

- How detailed is the locational description?
- Do multiple individuals not of the same nuclear family suggest a burial is present on the property?
- Are the individuals widely respected in their community, especially with regard to their knowledge of the community’s history and cultural beliefs?

- Is the oral evidence *traditional knowledge* as opposed to *experiential knowledge*? For instance, is the opinion that a burial is present at a particular location based on a reliable eyewitness account (e.g., “My father told me...”) as opposed to sensory or extra-sensory perceptions (e.g., “I have a feeling...”; “I had a vision...”)?
- If the possible burial was first noted by an individual reacting to a proposed development, is there evidence that its presence had been previously known to other individuals or to a local community, although it may have not been openly discussed?

If the records assessment or reliable oral evidence suggests that a burial or burial ground is likely to exist in a particular area, a field visit by OSA staff may be scheduled. As the OSA has only two staff members, schedules can be tight and if there is not an immanent threat to a particular site and it is located some distance from the OSA office, it may take several weeks to actually make a field visit or the State Archaeologist may never visit the location if it is not threatened. Archaeologists in Minnesota do not undertake winter fieldwork as the ground is frozen and snow can obscure surface features so this too limits field time.

During the initial field visit, the OSA will attempt to confirm the presence of a burial or burial ground based on non-invasive or minimally invasive techniques. These techniques include a careful examination of the entire area for bone and artifacts in exposed soil, for surface features (e.g., mounds, depressions, markers), and for other visual indicators of burials or burial grounds (e.g., unusual plantings, disturbed ground vegetation). Small diameter soil probes may also be used to determine if a feature is cultural versus natural, look for sub-surface features, or assess soil conditions (e.g., age, depositional history).

If the initial field examination results are problematic, but there is reliable written or oral evidence for a burial ground in a specific area, additional field work may be recommended utilizing more invasive hand excavation methods (e.g., large diameter soil cores, shovel tests, trenching, formal test units). At this time, the landowner or developer has the option of hiring a qualified archaeological contractor to assist with the authentication if the OSA cannot complete the additional work in a timely manner due to schedule conflicts or the lack of funding. The archaeological contractor must obtain a Burial Site Assessment License from the OSA before beginning fieldwork (see Appendix C). If the detailed field examination fails to find any evidence for burials, the State Archaeologist may terminate the authentication procedure at any time and make a negative declaration.

If the results of even intensive field examination are problematic, yet there are detailed records and/or strong oral evidence for a burial ground in a particular area and the area cannot be reasonably avoided by a development, the OSA may recommend more aggressive methods to find possible burials or burial features. Depending on the detail of the locational information and the nature of the development, the additional work may involve large area hand excavation or even machine excavation. In some instances, the additional work can be done in conjunction with construction activities and may essentially be professional archaeological monitoring of controlled soil removal. If these aggressive techniques are to be utilized on a suspected Indian burial ground, careful consultation with MIAC will take place prior to any disturbance.

It should be stressed that a burial site will not be authenticated on the basis of soil coring and/or geophysical remote sensing alone if there are no obvious and appropriate surface features. Furthermore, even if reliable records (e.g., Lewis notes) exist that suggest an area once was a burial ground, if surface features are lacking and sub-surface testing fails to evidence burials or definitive burial features, these areas too will not be authenticated as burial grounds.

Authentication Step 2: Identification of Affiliation

MS 307.08 requires that the State Archaeologist attempt to define the “ethnic, cultural, or religious” affiliation of human remains from unrecorded cemeteries or burial plots. This process is called “identification” and is a discrete part of the authentication process. The purpose of identification is to determine the appropriate initial treatment of the remains, to determine who should be consulted regarding the find and possible analysis, to determine the final disposition of the remains, and to determine who should manage the burial grounds where *in situ* remains are located or where remains are to be re-interred at the original discovery location.

Initial identification focuses on determining if the remains are Indian or non-Indian as the MIAC needs to be involved in the process as soon as possible if the remains are Indian. Initial identification is usually based on previous records of burials in specific locations, the general age of the burial based on the condition of the bone or the site geomorphology, any associated artifacts, the burial type, and the burial location. If there are no previous records, if the age of the burial is not immediately apparent, if there are no diagnostic grave goods, if there is no associated feature that is culturally diagnostic (e.g., a mound), or if the location is not diagnostic, the remains will be sent to a forensic anthropologist for additional examination.

Forensic anthropologists can help determine the ethnicity of skeletal remains utilizing a number of indexing criteria based on measurements or morphological characteristics. Although elements of the skull are the only truly accurate identifiers of race using these indicators (see Gill and Rhine 1990), there are a few non-cranial bones where measurements or anatomical characteristics can suggest racial origin. With regard to the skull, teeth are probably the most commonly used ethnic identifier for discriminating Caucasoid (White) from Mongoloid (Indian) remains. Shovel-shaped incisors have long been known to be associated with Indians where a shovel-like impression is present on the inside surface of the incisors, especially the maxillary incisors. Other dental indicators of Indian affiliation are enamel extending into the roots, fused roots, and extra roots in mandibular molars. Measurements of the mid-facial region are also useful in determining ethnicity.

If the skull is not present, the femora of Indians show certain characteristics such as general curvature and also flattening of the upper shaft. Although rarely used due to cost and delay, genetic testing could also be employed to discern ethnicity. Radiocarbon dating can be used to determine the age of organic material that is over 300 years and younger than 50,000 years, but this method too is infrequently used for authentication analysis due to cost and delay.

If the remains are thought to be Indian, the State Archaeologist immediately contacts MIAC at the beginning of the authentication process. MIAC and OSA must then attempt to determine the tribal affiliation so the appropriate tribes can be consulted during the rest of the process and any removed remains can be turned over to the appropriate tribe as expeditiously as possible. Tribal affiliation is very difficult to determine if the remains are over 1,000 years old (cf. Ossenberg 1974; Myster 2001). If the remains are over 300 years old and less than 1,000 years old and are from an original context in a mound, they are generally considered to be tribally affiliated with Siouan groups (e.g., Dakota, Ioway, Oto) as the Ojibwe did not enter Minnesota in large numbers until after AD 1750. In the northern half of Minnesota, the Ojibwe did re-use some mounds for burials.

Religious and family affinity is also difficult to determine unless diagnostic grave goods are present or a grave marker of some type still exists. If religious or family affinity can be determined, an attempt may be made to consult with officials of that religion or the family.

Authentication Step 3: Delimitation of Burial Ground Boundaries

The 1993 amendment of MS 307.08 made it a felony to willfully disturb a burial *ground*, not just a burial. It is therefore essential that authentication ultimately defines an exact boundary for a burial ground to delimit the area that cannot be disturbed without the consent of appropriate authorities. An exact boundary is also needed for the purposes of land transfer, land value assessment, and obtaining tax exempt status under MS 307.09. The below standards are meant to deal with establishing boundaries for the most common forms of burial grounds encountered by the OSA. Procedures for applications for variances for disturbances within OSA established boundaries will be dealt with in the section on Management.

Once the OSA has set the limits of a burial ground, a sketch map will be made of the area. At the landowner's request, these limits can be temporarily marked with wire-stake pin flags. The landowner may then hire a certified land surveyor to officially survey the boundary. This boundary should be added to the landowner's plat/deed and can be filed with the County Recorder along with a request to certify the area as a private cemetery.

Burial Mounds and Mound Groups

Previous State Archaeologists in Minnesota have variously defined "buffer zones" around lone mounds or individual mounds within a mound group, but have rarely delimited such zones around entire mound groups. Hohman-Caine typically used a 50-foot buffer beyond the base of a mound, while Dudzik typically used a 20-foot buffer. Because so few mound excavations examined areas beyond the bases of mounds, we have little information about the probability of encountering burials outside of actual mound limits, but based on the few accounts we do have, we would expect that burials beyond mounds or in between mound will be uncommon. The establishment of buffer zones around mounds is therefore more to protect the integrity of the "setting and feeling" for a burial ground as well as to insure that mounds will not be inadvertently disturbed by adjacent construction.

Standard buffer zones around mounds and mound groups are difficult to establish because modern land-use situations vary greatly as do the size, shape, and condition of mounds and mound groups. Mounds can be located in rural areas away from development, in parks, within housing developments, and within existing small-lot urban yards. Individual mounds can be in simple conical shapes, various linear shapes, or complicated effigy mounds. Mound groups can be composed of two mounds or over 200 mounds. Some individual mounds can be only partially intact and as can some mound groups.

Because of these complications, it is the policy of the State Archaeologist to suggest certain standards for defining mound burial ground limits, but to make these standards adaptable to the great variety of real-world situations. Different standards may be applied to developed (e.g., urban) versus undeveloped (e.g., rural) areas, to different types of mound groups, and to mounds or mound groups in various states of preservation.

In cases where a lone mound is clearly visible and essentially intact, a 20-foot buffer around the outer base of the mound will be suggested, although in some highly developed settings (e.g., established urban residential areas) a smaller buffer may be suggested. In cases where a mound has been extensively disturbed these buffers may be even more constricted. For example, at 21HE65, a mound is clearly visible in the back yard of a small developed residential lot within the City of Mound. The mound has a garage and retaining wall built into its western portion. In 2007, an authentication by the State Archaeologist established the boundaries

contiguous with the garage wall and retaining wall on the west side, but established the boundaries on the other three sides at 5-feet beyond the currently visible base of the mound feature.

Mound groups pose more difficult boundary problems, especially large groups. As noted earlier, there are about 12,500 burial mounds that have been reported in Minnesota in over 1,500 discrete locations. About 600 of these sites consist of lone mounds, thus there are about 650 sites that are considered to be mound groups. The largest mound group in the state (21GD17) once had over 225 mounds, while the average number of mounds per mound group is eight (8).

If we look at Winchell (1911), there are almost 200 mound groups where there is over 100 feet between at least two of the mounds within the group. The gaps between individual mounds in these groups can be up to 1000 feet, with 26 of the groups having gaps of over 500 feet. Thus if we were to apply a 50-foot rule for boundary definition around individual mounds within a group, there would still be significant gaps at many sites that would fall outside the boundary. This is what occurred at 21OT13 and a mobile home development was built within a mound group. This incident led to the 1993 addition of the word “grounds” to MS 307.08 and has resulted in continued management problems at the site.

The boundary procedure for mound groups in undeveloped areas is to draw 20-foot buffers around the mounds that form the outer edge of the group and then to connect the arcs of these perimeters to form the burial ground boundary. When there is a greater than 100-foot distance between mound bases of perimeter mounds, an indentation in the boundary is formed using a 20-foot distance from the nearest interior mound as the new delimiter. When gaps of several hundred feet are present between any two mounds in a mound group, a discontinuous boundary may be established. Lines may be squared off where practical to make a less complex boundary as long as a 20-foot distance is maintained from any mound in the group.

In developed areas, the same procedures will be attempted, although it may not be possible to draw one contiguous boundary where residences and other structures have already intruded into the group. In these cases, boundaries will be drawn around intact sub-groups of mounds or individual mounds using the same procedures as described above. For instance, at 21HE17 in Bloomington, the mound group is embedded in a housing development and it is impossible to draw a boundary of the entire group that would not include houses and roads. Therefore, protective buffers around the mounds are individually defined at varying distances from the mound bases.

In the case of partially intact mound groups, firm boundaries will be drawn around the visible mounds in the group and the inclusion of areas that once contained mounds that are no longer visible will depend upon each situation. It is extremely difficult to determine without extensive excavation whether or not burials survive within areas that once contained mounds. This is true even for mounds in mound groups whose locations can be reconstructed with some accuracy based on Theodore Lewis’ field notes. Soil coring can occasionally assist with finding features in these former mound locations, but soils can be disturbed and vary for many reasons other than burial pit construction (e.g., rodent borrows, tree falls, modern excavations). If a landowner wants to develop a parcel of land once contained within a mound group where the mounds are no longer visible, the State Archaeologist will make a determination of whether or not that area is still a burial ground utilizing field methods described above. In complex circumstances where the former burial ground was extensive and/or not well mapped, it is practical to assume that the landowner or developer will pay the costs associated with authentication survey due to limited staff and budget constraints at the OSA.

Whenever possible, the OSA will attempt to determine boundaries for an entire mound group even when the group involves multiple landowners. However, in cases where some of the mounds in the group are no longer visible or if there is an immediate need to only define the limits of a portion of the group, a partial boundary may be determined.

Non-Mound Cemeteries

Recorded cemetery boundaries often come almost to the edge of the internal perimeter plots. This means perimeter burials in recorded cemeteries are often only a few feet from the edge of the cemetery. Because graves in most unrecorded cemeteries tend to be unmarked with no formal landscaping still visible, nearby intrusions tend to cause less impact to the integrity of setting and feeling of the cemetery, at least in the way these terms are defined by the National Register of Historic Places.

In the case of historic non-Indian cemeteries, if there is no map or burial plot available for the cemetery and an ownership line does not appropriately demarcate the cemetery, the OSA will typically set the boundary of the cemetery 5 feet beyond the dimensions of the outer burial pits and will make the boundary a rectangle or other polygon for easier surveying and plotting. If a perimeter fence or obvious landscaping is still associated with the cemetery, the boundary will be set 10 feet beyond the fence and/or will include all the obvious landscaping. A larger or smaller boundary may be defined based on the nature of existing adjacent developments and consultation with probable descendants.

In the case of Precontact non-mound cemeteries, a boundary similar to that established for a mound group will be utilized. Thus a 20-foot buffer beyond perimeter graves will typically employed with some variation based on landform and intensity of existing development.

Lone Graves

Unlike mound burials, which have at least a minimum formal boundary defined by the foot of the mound, unrecorded lone graves rarely have a defined perimeter that is wider than the burial pit itself. Unrecorded lone graves also tend to lack markers and visible landscaping. Thus the legal boundaries of lone graves are set fairly tight to the shape of the burial pit. Individual burial plots in recorded cemeteries tend to be 3-4 feet in width and 10 – 12 feet in length, but the excavation sizes of lone burials not contained in caskets can vary somewhat from these dimensions, being either smaller or larger. The OSA will typically set the boundary of lone graves 5 feet beyond the dimensions of the burial pit and will make the boundary a rectangle for easier surveying and plotting. If a perimeter fence or obvious landscaping is still associated with the grave, the boundary will be set 5 feet beyond the fence and/or may include all the obvious landscaping.

Formal Notification of OSA Authentication

Once the OSA has completed all three steps of a burial authentication, a letter will be sent to the landowner from the State Archaeologist informing the landowner of the results. If a burial ground was determined to exist on the land, the probable ethnic identity of the burial will be stated and a map included showing the burial ground boundary. In most cases, the local zoning authority will be copied on the letter. If the burial ground is of probable Indian affiliation, MIAC will be copied and MIAC will then have the major management responsibilities for privately owned burial grounds including granting variances for intrusions that could be considered to be

disturbances. Under MS 138.31 - .42, the State Archaeologist will also have some management responsibilities if an unplatted historic burial ground is on non-federal public land.

The boundary of the burial ground determined by the State Archaeologist is the legal boundary for the purposes of MS 307.08, but is not an officially platted boundary for the other purposes of MS 307. Thus in order to define a Private Cemetery for new internments or for tax exempt purposes, the procedure outlined in MS 307.01 must be followed, which involves hiring a certified surveyor to map the boundary and filing the resulting plat with the County Recorder. The OSA will delimit the MS 307.08 boundary with stakes or pin-flags prior to the certified survey if so requested by the landowner. Landowners are encouraged to add OSA authenticated burial ground boundaries to their deeds.

In summary, here are some general guidelines for assessing particular kinds of burial sites in Minnesota:

PRECONTACT PERIOD

MOUND: Boundaries generally are set at 20' from mound base or outer mound bases.

I. Lewis Notes, Other Reliable Survey Information, or Human Remains Apparent

A) Mound visible or remains *in situ*: **Authenticate** (no testing necessary)

B) Mound not visible, human remains location not specific or disturbed

1) hand soil coring or remote sensing to assess potential

2) shovel testing or hand trenching: **Authenticate** if positive

3) machine excavation if Step 2 negative and area to be disturbed:

Authenticate if positive

II. Non-reliable Map or Newly Reported Mound

A) Group of mounds in good setting: **Authenticate** (no testing necessary)

B) Lone mound in good setting or group of mounds in poor setting:

1) hand soil coring or remote sensing to assess potential

2) shovel testing or hand trenching: **Authenticate** if positive

3) machine excavation if Step 2 negative and area to be disturbed:

Authenticate if positive

C) Mound not visible

1) shovel testing or hand trenching: **Authenticate** if positive

2) machine excavation if Step 1 negative and area to be disturbed:

Authenticate if positive

NON-MOUND: Boundaries generally are set at 10-20 feet from individual graves.

I. Human remains *in situ* and in primary context: **Authenticate**

II. Accurate location of remains recovered in primary context.

1) hand soil coring or remote sensing to assess potential

2) shovel testing or hand trenching: **Authenticate** if positive

3) machine excavation if Step 2 negative and area to be disturbed:

Authenticate if positive

POST-CONTACT PERIOD

CEMETERY: Boundaries generally are set at 5-10 feet from outer individual graves.

I. Reliable Information with Features Visible or Human Remains *In Situ*

Authenticate (no testing necessary); soil probe to help assess site limits

II. Reliable Information with No Features Visible or Human Remains *In Situ*

- 1) hand soil coring or remote sensing to assess potential
- 2) shovel testing or hand trenching: **Authenticate** if positive
- 3) machine excavation if Step 2 negative and area to be disturbed:
Authenticate if positive

III. Unreliable Information with No Features or Human Remains *In Situ*

- 1) hand soil coring or remote sensing to assess potential
- 2) shovel testing or hand trenching: **Authenticate** if positive
- 3) machine excavation if Step 2 negative and area to be disturbed:
Authenticate if positive

LONE GRAVE: Boundaries generally are set at 5-10 feet from grave edge.

I. Reliable Information with Features Visible or Human Remains *In Situ*

Authenticate (no testing necessary)

II. Reliable Information with No Features Visible and no Human Remains *In Situ*

- 1) hand soil coring or remote sensing to assess potential
- 2) shovel testing or hand trenching: **Authenticate** if positive
- 3) machine excavation if Step 2 negative and area to be disturbed:
Authenticate if positive

III. Unreliable Information with No Features and no Human Remains *In Situ*

- 1) shovel testing or hand trenching if information somewhat exact:
Authenticate if positive
- 2) machine excavation if Step 2 negative or location information
inexact, and area to be disturbed: **Authenticate** if positive

Burial Removal Procedures

Under MS 307.08, the State Archaeologist can authorize the removal of non-Indian remains that are located outside of recorded cemeteries providing the landowner agrees to the removal. The OSA generally approves removals if the burial remaining in place creates an obvious hardship for the landowner, if the burial constrains critical development by making it excessively costly or unsafe, if the burial is threatened with destruction by natural forces, or if the burial can provide important research information. In all cases, burial removal must proceed with the utmost care and respect.

Because burials are archaeological sites, traditional archaeological methods are used for the removals. This means that careful hand excavation rather than machine excavation is preferred, there is detailed recording of the process, there is adequate and appropriate scientific analysis of the remains and any artifacts, and a professional report is prepared. In general, the fieldwork, analytical, and reporting standards outlined in the *SHPO Manual for Archaeological Projects in Minnesota* (Anfinson 2005) must be followed.

OSA staff generally will not have the time or resources to complete a removal unless the burial site is relatively small, has convenient access, and does not significantly conflict with OSA schedules. The landowner can hire a private contract archaeologist to complete the removal as long as that contractor is approved by the OSA and meets minimum qualification standards. The contractor must complete a research design for OSA review and approval prior to initiating any fieldwork. Fieldwork methods should insure that minimal damage is done to the remains or any associated grave goods, yet should recover all the remains and affiliated artifacts from the area specified by the OSA.

Burial Analysis Procedures

Once remains are removed, the amount and type of analysis will be determined on a case-by-case basis based on the burial context, probable age, and condition. For remains from recorded cemeteries and recent burials (ca. last 150 years), the analysis will usually be limited to aging and sexing if appropriate elements are available. Detailed skeletal analysis, radiocarbon dating, and other geochemical techniques will not be employed unless the remains appear to date prior to the Post-Contact Period (pre-1837) or there is a request from a professional archaeologist or physical anthropologist. Appropriate professional anthropologists or forensic scientists will be employed to undertake any detailed analysis of removed human remains.

The OSA retains the right (MS 307.08, Subd. 7) to require the scientific analysis of removed Indian remains. While this is usually left to the discretion of MIAC or tribal authorities, there are instances where the State Archaeologist may request additional analysis if the remains are deemed to be especially ancient or of particular scientific interest.

Reinternment Procedures

It is standard OSA protocol to rebury all remains recovered by or for the OSA unless the remains have unusual scientific value and cannot be associated with living relatives. There is no one designated cemetery for reburying such remains and the State Archaeologist does not have funds to cover the purchase of burial plots or burial costs. Thus churches, organizations, or local governments will be contacted to carry out the reinternment. MIAC is in charge of the reinternment of Indian burials. If reburial takes place outside the limits of a known burial site and is on private property, the State Archaeologist no longer has any legal obligations with regard to that burial as it no longer meets the 50-year rule specified in MS 307, Subd. 7. Such burials should be recorded with county governments.

Management of Unrecorded Burial Grounds

Under MS 307.08, Subdivisions 2 and 13, the State Archaeologist has management responsibilities for unrecorded non-Indian cemeteries and under MS 138.31 - .42 has management responsibilities for any archaeological site on non-federal public land. These responsibilities include approving requests for disturbances, removals, and landscape alterations within cemeteries and approving requests for the discharge of firearms over or within cemeteries. *Disturbance* is defined in 307.08, Subd. 13 as “any activity that significantly harms the physical integrity or setting of a human burial or human burial ground.” If a burial ground can be classified as “abandoned” under MS 306.243, the County Board has management authority.

Examples of disturbances include significant excavation or grading for the purposes of construction or landscaping, the placement of buildings or structures, the removal of trees, and the removal or displacement of markers or fences. Disturbance would not include mowing, minor landscaping that doesn’t involve significant excavation, or the placement of small temporary structures (e.g., birdbaths). Structures that already exist within a burial ground prior to authentication generally do not need to be removed if they are non-portable.

There is no requirement that authenticated burial grounds be fenced or posted. There is nothing illegal about selling burial grounds and no legal requirement landowners contact OSA if they intend to sell, but landowners are obligated to inform purchasers of known or suspected burial grounds (see MS 307.08, Subd. 7 and MS 513.55).

If a landowner would like to obtain permission to carry-out an activity that could be considered a disturbance within an authenticated privately owned non-Indian cemetery, application must be made to the State Archaeologist for a variance. The application must include a detailed description of the activity and a sketch map or plan where the activity will occur. The landowner is responsible for obtaining any permits required by local zoning authorities.

If the burial ground has been determined to be of probable Indian affiliation, the Minnesota Indian Affairs Council (MIAC) becomes an “appropriate authority” along with the landowner for management purposes. Only MIAC can grant permission to remove Indian burials and MIAC must approve any “disturbance” within the limits of a private burial ground as established by the State Archaeologist during the authentication process. On non-federal public land, OSA and MIAC share management responsibilities with the land manager.

Record Keeping and Data Sharing

Under MS 307.08, Subd. 11, the State Archaeologist is required to keep records of data pertaining to burial sites and make the data accessible to appropriate entities through a Web site. Under MS 037.08, Subd. 5, the State Archaeologist is also required to make this data available to the Minnesota Land Management Information System (LMIC). Because burial sites data are considered to be “security information” under MS 307.08, Subd. 11, this data is not available for use by the general public. The specific data that is not publicly shared usually has to do with the exact location of burial sites.

State Archaeologist Christy Hohman-Caine started a burial site file in the early 1980s. This file now contains detailed information on hundreds of burial sites examined by or subject to inquiries by State Archaeologists Hohman-Caine, Dudzik, and Anfinson. It includes both officially numbered and unnumbered sites. The file also contains some information on unconfirmed burial sites that have been reported to the State Archaeologist over the last 30 years. The unconfirmed sites have either not been field checked by an archaeologist or field checked but not found.

In the late-1990s, the OSA parsed burial site information from the master archaeological site database, which was at that time maintained by the State Historic Preservation Office (SHPO). A Burials Site Database was created using the parsed data. This database does not contain information on all of the unconfirmed sites in the OSA’s paper burial site files, only those sites that have OSA-assigned official state site numbers or SHPO-assigned alpha numbers.

The OSA makes the Burials Site Database partially available to local governmental agencies on a webpage maintained by LMIC. This webpage went on-line in September 2003. At that time, a letter was sent by OSA to all county governments and assigned them a password to access the site. The site provides a graphic interface allowing local governments to determine if a burial site exists within a specific quarter-quarter section of land (40 acres). If a site does exist within the quarter-quarter, the agency can contact the OSA to get more specific information about a particular burial.

The OSA also makes burial sites data available to city governments and other appropriate planning authorities, as well as to private contract archaeologists, but will not provide full database records to any unauthorized entity. The OSA will provide parcel specific burial site information to landowners upon request or to prospective buyers of particular parcels. The OSA does not provide private citizens broad access to burial sites information either electronically or through paper files. Detailed locational information obtained from the State Archaeologist

pertaining to burial sites may not be passed to a third party without the permission of the State Archaeologist.

Development Plan Review

Under MS 307.08, Subd. 10, state agencies and local governments as well as private developers are required to submit development plans to the State Archaeologist when human burials are known or suspected to be threatened by development. If the burials are thought to be Indian, the development plans must also be submitted to MIAC. The State Archaeologist is supposed to review the plans within 30 days of receipt and make recommendations for preservation in place or removal of burials if such are shown to exist.

Submittals should include a detailed description of the project, the legal location of the project with numerical Township, Section, and Range as well as the quarter-quarter of the section, a general location map (e.g., USGS 7.5') clearly showing the project location, a detailed plan (if available) of the project, and a description of any known burial sites or other archaeological manifestations within or adjacent to the project area.

The State Archaeologist may recommend an archaeological survey be completed to better assess the potential of a development to harm burials. If the State Archaeologist cannot complete the survey due to schedule or budgetary conflicts, the agency or private developer may be required to bear the survey costs if the project is to be reviewed in a timely manner.

If burials are authenticated within the project boundary, requests for removal will be considered by the State Archaeologist in the case of non-Indian burials and the MIAC in the case of Indian burials on private land. In the case of Indian burials on public land, OSA and MIAC will jointly consider removal requests. Removals will generally not be approved by the State Archaeologist if multiple historic burials are intact and the removal request is principally of an economic nature. If the State Archaeologist determines that burials must be avoided by construction projects, normal procedure would be to request that the authenticated area be fenced during construction to avoid inadvertent disturbance.

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Appendices

A. Definitions from 307.08, Subd. 13

Abandoned cemetery. “Abandoned cemetery” means a cemetery where the cemetery association has disbanded or the cemetery is neglected and contains marked graves older than 50 years.

Appropriate authority. “Appropriate authority” means: (1) the trustees when such have been legally defined to administer burial grounds; (2) the Indian Affairs Council in the case of Indian burial grounds lacking trustees; (3) the county board in the case of abandoned cemeteries under section 306.243; and (4) the state archaeologist in the case of non-Indian burial grounds lacking trustees or not officially defined as abandoned.

Artifacts. “Artifacts” means natural or artificial articles, objects, implements, or other items of archaeological interest.

Authenticate. “Authenticate” means to establish the presence of or high potential of human burials or human skeletal remains being located in a discrete area, to delimit the boundaries of human burial grounds or graves, and to attempt to determine the ethnic, cultural, or religious affiliation of individuals interred.

Burial. “Burial” means the organic remnants of the human body that were intentionally interred as part of a mortuary process.

Burial ground. “Burial ground” means a discrete location that is known to contain or has high potential to contain human remains based on physical evidence, historical records, or reliable informant accounts.

Cemetery. “Cemetery” means a discrete location that is known to contain or intended to be used for the internment of human remains.

Disturb. “Disturb” means any activity that significantly harms the physical integrity or setting of a human burial or human burial ground.

Grave goods. “Grave goods” means objects or artifacts directly associated with human burials or human burial grounds that were placed as part of mortuary ritual at the time of internment.

Human remains. “Human remains” means the calcified portion of the human body, not including isolated teeth, or cremated remains deposited in a container or discrete feature.

Identification. “Identification” means to analyze organic materials to attempt to determine if they represent human remains and to attempt to establish the ethnic, cultural, or religious affiliations of such remains.

Marked. “Marked” means a burial that has a recognizable tombstone or obvious grave marker in place or a legible sign identifying an area as a burial ground or cemetery.

Qualified physical anthropologist. “Qualified physical anthropologist” means a specialist in identifying human remains who holds an advanced degree in anthropology or a closely related field.

Qualified professional archaeologist. “Qualified professional archaeologist” means an archaeologist who meets the United States Secretary of the Interior's professional qualification standards in Code of Federal Regulations, title 36, part 61, appendix A, or subsequent revisions.

Recorded cemetery. “Recorded cemetery” means a cemetery that has a surveyed plat filed in a county recorder’s office.

State. “State” or “the state” means the state of Minnesota or an agency or official of the state acting in an official capacity.

Trustees. The recognized representatives of the original incorporators, board of directors, or cemetery association.

B. Duties of Various Entities under Subdivisions of MS 307.08

State Archaeologist

- 2: approves requests for disturbances and removals and (with the landowner) landscape alterations or the discharge of firearms at non-Indian, non-Abandoned, unrecorded cemeteries
- 3: allows (with the landowner) protective posting and determines type of signage for non-Indian cemeteries
- 3a: authenticates all unrecorded burials over 50 years old
- 3a: may retain the services of *various* experts for authentication and identification
- 3a: has the discretion to undertake authentication at a given location
- 5: may assume the costs for the state on private or state lands associated with authentication, recording, surveying, and marking burial grounds and the costs of identification, analysis, rescue, and reburial of human remains
- 5: may enter into agreements with private landowners for their payment of the above listed costs
- 5: provides burial data to the Land Management Information Center (LMIC)
- 7: develops provisions (with other appropriate authorities) for the disposition of non-Indian remains removed from their original context
- 7: determines ethnic identity of human remains
- 7: determines (with MIAC) the tribal affinity of Indian remains
- 7: develops (with MIAC) provisions for disposition of non-tribally identified Indian remains removed from their original context on public land
- 7: determines if studies are needed of removed Indian remains prior to final disposition
- 7: reviews requests (with other appropriate authorities) for variances to disturb non-Indian cemeteries
- 10: reviews and makes recommendations on development plans on public or private lands that may impact burials
- 11: maintains burial sites files and makes the data accessible to appropriate entities on the OSA website
- 12: may enter property for the purposes of authenticating burial sites
- 13: the State Archaeologist is an *appropriate authority* for actions involving all non-Indian and non-tribally identified Indian remains and all non-Indian, non-Abandoned, and unrecorded burial grounds

Minnesota Indian Affairs Council (MIAC)

- 2: approves requests for disturbances and removals and (with the landowner) landscape alterations or the discharge of firearms at Indian cemeteries
- 3: allows (with the landowner) protective posting and type of signage for Indian cemeteries
- 3a: may request authentications
- 3a: approves (with the State Archaeologist) professional authentication consultants if disturbances of Indian cemeteries may be involved
- 4: approves archaeological consultants used for authenticating Indian burials on public lands

- 5: may assume the costs for the state on private or state lands associated with identification, analysis, rescue, and reburial of human remains
- 6: reviews land use change requests on Indian burial grounds
- 7: determines (with the State Archaeologist) the tribal affinity of Indian remains
- 7: develops (with the State Archaeologist) provisions for disposition of non-tribally identified Indian remains removed from their original context on public land
- 7: develops provisions for disposition of non-tribally identified Indian remains removed from their original context on private land
- 7: determines if studies are needed of removed Indian remains prior to final disposition
- 7: reviews requests (with other appropriate authorities) for variances to disturb Indian cemeteries
- 8: approves requests (with the landowner) the removal of Indian burials
- 10: reviews and makes recommendations on development plans that may impact Indian burials
- 13: MIAC is an *appropriate authority* for actions involving all Indian burials or Indian burial grounds

The State/State Agencies

- 2: approves (with other appropriate authorities) requests for landscape alterations or the discharge of firearms at cemeteries on state land
- 3: allows (with other appropriate authority) protective posting and type of signage at cemeteries on state lands
- 3a: may request authentications
- 5: is responsible for the costs on private or state lands associated with authentication, recording, surveying, and marking burial grounds and the costs of identification, analysis, rescue, and reburial of human remains
- 5: may enter into agreements with private landowners for their payment of the above listed costs
- 5: LMIC must integrate burial sites data into to their information systems
- 5: must bear the costs of LMIC data delivery of burial sites data
- 7: must apply to MIAC and the State Archaeologist for variances to disturb Indian burials grounds on state lands
- 7: must apply to the State Archaeologist for variances to disturb non-Indian burials grounds on state lands
- 7: must inform prospective buyers of state land of authenticated or suspected burials on those lands
- 8: must pay the costs of burial relocations on state lands
- 8: may make efforts to purchase of private burial grounds
- 9: must cooperate with the State Archaeologist and MIAC to carry out the provisions of 307.08
- 10: must submit plans to MIAC and/or the State Archaeologist for developments on state lands that may disturb burials

Local Governments

- 2: approves (with other appropriate authorities) requests for landscape alterations or the discharge of firearms at cemeteries on their lands
- 3: allows (with other appropriate authorities) protective posting and type of signage at cemeteries on their lands
- 3a: may request authentications
- 5: is responsible for the costs on their lands associated with authentication, recording, surveying, and marking burial grounds and the costs of identification, analysis, rescue, and reburial of human remains
- 7: must apply to MIAC and the State Archaeologist for variances to disturb Indian burials grounds on their lands
- 7: must apply to the State Archaeologist for variances to disturb non-Indian burials grounds on their lands
- 7: must inform prospective buyers of their lands of authenticated or suspected burials on those lands
- 8: must pay the costs for burial relocations on their lands
- 9: must cooperate with the State Archaeologist and MIAC to carry out the provisions of 307.08
- 10: must submit plans to MIAC and/or the State Archaeologist for developments on their lands that may disturb burials
- 13: The *county board* is an *appropriate authority* for actions involving officially abandoned cemeteries (MS 306.243).

Private Landowner

- 2: authorizes (with other appropriate authorities) landscape alterations or firearms discharge at cemeteries on their land
- 3: allows (with other appropriate authorities) protective posting and type of signage at cemeteries on their lands
- 3a: may request authentications on their land
- 5: may assume costs for authentication, recording, surveying, and marking of burial grounds on their lands and identification, analysis, rescue, and reburial of human remains from their lands upon agreement with the state
- 7: must apply to MIAC for variances to disturb Indian burials grounds on their lands
- 7: must apply to the State Archaeologist for variances to disturb non-Indian burials grounds on their lands
- 7: must inform prospective buyers of authenticated or suspected burials on their lands
- 8: may request that the state purchase burial grounds on their lands
- 10: must submit plans to MIAC and/or the State Archaeologist for developments on their lands that may disturb burials
- 12: should grant permission to the public for entry to cemeteries on their land if such access does not unnecessarily burden them or restrict their use of the property

**C. APPLICATION FOR MINNESOTA BURIAL SITE ASSESSMENT
ARCHAEOLOGICAL LICENSE**

This license only applies to burial assessment activities conducted for the Office of the State Archaeologist (OSA) under the provisions of Minnesota Statutes 307.08 at the specific site, project, or locality listed on the application. Separate licenses must be obtained for reconnaissance (Phase I) or evaluation (Phase II) survey work and for intensive site excavations (Phase III) on public land as specified in Minnesota statutes 138.31 - .43. Only the listed individual is licensed as a principal investigator, not the institution, agency, or company or others who work for that entity. The licensed individual and the sponsoring entity are required to comply with all the conditions attached to this license form.

Name: _____

Institution/Agency/Company Affiliation: _____

Title/Position: _____

Address: _____

Work Phone: _____ Fax: _____ E-Mail: _____

Name of Advanced Degree Institution: _____ Year: _____

Name of Department: _____ Degree: __MA __MS __PhD

Project/Site Name and Number: _____

Land Owner: _____

Dates of Fieldwork: _____

Signed (applicant): _____ Date: _____

Required Attachments: 1) *Curriculum Vita* ____ (if not previously submitted)
2) Documentation of Appropriate Experience ____ 3) Research Design ____

Submit one copy of this form and attachments to:
Office of the State Archaeologist, Ft. Snelling History Center, St. Paul, MN 55111
612-725-2411 612-725-2729 FAX 612-725-2427 email: mmosa@state.mn.us

State Archaeologist Approval: _____ Date: _____

Mn Indian Affairs Approval (Indian burial): _____ Date: _____

Minnesota Historical Society Approval (public land): _____ Date: _____

License Number: _____

Form Date: 12/18/07

**CONDITIONS OF ARCHAEOLOGICAL LICENSE FOR
BURIAL ASSESSMENT PROJECTS
UNDER THE PROVISIONS OF MINNESOTA STATUTES 307.08**

- 1) The license only applies to archaeological burial assessment activities done for the Minnesota State Archaeologist. This work usually involves intensive examination of a specific locality utilizing methods that may physically disturb burials (e.g., intensive soil coring, shovel tests, formal excavation units, trenching, or monitoring machine excavation). It is done for the purpose of assessing the presence of human burials in a specific locality. Only the State Archaeologist can actually authenticate historic burials in Minnesota. The State Archaeologist will serve as co-Principal Investigator for most authentication activities.
- 2) The licensed individual and the sponsoring institution/agency/company are required to comply with all the conditions attached to the license form. If the licensed individual should cease association with the licensed project prior to completion of all required activities outlined in the approved research design, the Office of the State Archaeologist (OSA) must be immediately notified and a plan must be developed by the licensee or the institution/project sponsor to fulfill reporting and curation obligations or bring the project to completion utilizing another licensed principal investigator.
- 3) The license only applies to work conducted at a specific location on private property or non-federal public property in the state of Minnesota as listed on the license application.
- 4) The license only applies to fieldwork conducted during the dates specified on the license application. A new license must be obtained for fieldwork that will take place outside the specified dates even if it is at the same site/locality or for the same project.
- 5) The license applicant must be a *Qualified Professional Archaeologist* as specified in Minnesota Statutes 138.31, Subd. 10, meeting the Secretary of the Interior's Professional Qualifications Standards for Archaeology (http://www.cr.nps.gov/local-law/arch_stnds_9.htm). The applicant must also have demonstrated experience or training in dealing with human remains and with assessing soil conditions and features commonly associated with human burials.
- 6) A research design must be attached to the license application that specifies and justifies the field methods to be used, the analysis techniques employed, and the geographic area to be investigated. It must also list an approved curational facility if non-burial artifacts are expected to be recovered on public lands.
- 7) A separate *annual* license must be obtained for reconnaissance/Phase I and evaluation/Phase II survey work on public land outside the burial authentication limits even if that work is being done for the same project or is in the same locality.
- 8) Only the individual listed on the license application is licensed as the principal investigator for the particular site or project listed on the application. The license is non-transferable. The institution/agency/company or others who work for that entity are not licensed to be a principal investigator for the specified site/project unless a separate license is obtained. The licensed Principal Investigator is required to be on-site for the majority of the authentication fieldwork.
- 9) The licensee must comply with the field, laboratory, and reporting guidelines contained in the *SHPO Manual for Archaeological Projects in Minnesota* and the procedures outlined in *State Archaeologist's Procedures for Implementing Minnesota's Private Cemeteries Act*. Any exceptions must be described and justified in the research design submitted with the license application. The OSA must approve any research design alterations proposed after the initiation of the project.

10) Permission to enter land for the purposes of burial site assessment must be obtained from the landowner or land manager. The State Archaeologist can assist with obtaining permission.

11) If obvious human remains are encountered during fieldwork, all disturbances at that locality must immediately cease and the State Archaeologist contacted. Obvious human remains and obvious grave goods should be left *in situ* unless the State Archaeologist or, in the case of probable Indian remains, the Minnesota Indian Affairs Council (MIAC), authorizes their removal.

12) All archaeological materials not directly associated with burials recovered from non-federal public lands in Minnesota are the property of the state and must be curated with an OSA-approved institution. The approved curatorial institution must be included in the research design. Archaeological materials from state sites may be temporarily stored for analysis at a location other than the final curatorial facility, but must be transferred to the final curatorial facility in a timely manner following report completion. Non-burial materials recovered from private lands are the property of the landowner, but every effort should be made by project archaeologists to retain significant archaeological materials and to curate them in a responsible manner.

13) A comprehensive report must be submitted to the State Archaeologist within 30 days of completion of fieldwork. This report should meet the general reporting standards specified in the *SHPO Manual for Archaeological Projects in Minnesota*. The report must include a fully completed official state site form if a burial or any other type of archaeological site is located. A time extension may be granted in certain circumstances.

14) A license can be denied for any of the following reasons: a) failure to meet the required professional qualifications standards, b) failure to possess the required topical experience, c) failure to fulfill the conditions of a previous license, or d) exhibiting unethical behavior such as trafficking in or unapproved retention of artifacts obtained from public lands, falsifying field notes or reports, plagiarism, or intentionally misrepresenting professional qualifications or experience.

15) This license can be revoked or suspended by the State Archaeologist at any time for failure to fulfill the conditions of the license or for exhibiting unethical behavior such as listed above.