Montgomery County Planning Board Guidelines for Burial Sites

Background

Cemeteries are significant and important cultural resources in Montgomery County. In 2017, the County Council passed two laws to help preserve and protect these unique and fragile resources. Section 33A-17 of the Montgomery County Code requires the Montgomery County Planning Board to maintain an inventory of burial sites in the county and Montgomery County Ordinance 18-31 (2017) requires that all human burial sites be preserved and protected as a condition of the preliminary plan of subdivision review and approval process. Preservation of these unique archaeological resources will further protect the cultural heritage of Montgomery County. In accordance with the revised County Code Chapter 50, “Subdivisions of Land”, the Planning Board is required to establish and amend over time, as needed, Guidelines for Burial Sites. These Guidelines will accomplish five stated goals that are intended to guide applicants, staff, and the Planning Board during the preliminary plan submission and review process. The goals of the Guidelines are as follows:

1. Establish procedures for making the inventory available to the public electronically;
2. Establish procedures for additions or exclusions to the burial site inventory;
3. Establish procedures and policies that will help adequately establish the location of burial site(s);
4. Establish standards sufficient to ensure adequate preservation of burial site(s); and,
5. Establish standards sufficient to ensure adequate maintenance of burial site(s).

Many of the practices laid out in these Guidelines specify methods of archaeological investigation and survey. The portion of the Guidelines relating to archaeological investigations and report preparation are based on the Maryland Historic Trust (MHT) publication, The Standards and Guidelines for Archaeological Investigations in Maryland (Shaffer and Cole, 1994), The Secretary of the Interior’s Standards for Archaeology and Historic Preservation, as well as accepted practices for archaeology in the Mid-Atlantic Region. All archaeological investigations, data collecting, and reporting done to achieve compliance with these Guidelines should conform to the MHT Standards and Guidelines.

Formal efforts to inventory cemeteries in Montgomery County began in 2004 (supported by a series of small grants awarded by the Montgomery County Historic Preservation Commission (HPC) and were sponsored by Peerless Rockville with financial assistance from Historic Takoma, Inc., and the Coalition to Protect Maryland Burial Sites. Subsequent phases of the volunteer effort were undertaken from 2004 to 2009 and resulted in a final written report dated 2010. This 2010 report included description forms for each identified cemetery, photographs, a geographical information system (GIS) database of the recorded locations, and summary recommendations. The Planning Department has made these data available to the public via the MCAtlas webportal.
In 2018, Montgomery Preservation, Inc., with the support of a mini grant from Heritage Montgomery, began an intensive volunteer program to revisit the sites identified in the original Cemetery Inventory to improve the locational data with cell-phone global positioning system (GPS) readings, current conditions, photographs, and additional descriptive information. Some cemetery locations suggested by historical research, but not found in the field from 2004 to 2009, were successfully located while a few were removed from the inventory. Additional cemetery sites identified through new historical research were added to the inventory. The results of the Montgomery County Cemetery Inventory Revisited project were delivered to the Planning Department in December 2018 and included an Excel spreadsheet with all the data from the description sheets (including coordinates in latitude and longitude), as well as electronic copies of the survey forms and photographs and other supporting materials. These data were reviewed by Historic Preservation staff for accuracy and sufficiency, and some attribute data (such as personal information about project volunteers) were redacted.

These Guidelines include information about maintaining the inventory, informing the public, and providing guidelines for complying with the County ordinance regarding burial sites in the Preliminary Plan of Parcel Subdivision Review Process. The Guidelines include four appendices with additional information to help the public:

Appendix A: Guidelines for Cemetery Investigations
Appendix B: Standards for Maintenance of Burial Sites
Appendix C: Definitions
Appendix D: Preliminary Plan Review Process

I. Burial Sites Inventory

The Burial Sites Inventory is the list of Burial Sites officially adopted by the Planning Board pursuant to Section 33A-17 of the Montgomery County Code. The Burial Site Inventory shall be maintained and updated as needed by the Planning Board or its designee. The inventory will consist of a GIS data layer, and associated documentation. Staff will develop and maintain metadata consistent with Federal Geographic Data Committee standards to accompany the GIS layer. This Inventory is not static, and it is intended that the list will change and evolve as new information is received by the Planning Board.

Sites in the inventory are divided into two broad categories:

- **Known sites confirmed in the field or through historical research**
  These sites have well documented locations. They are clearly visible on the surface today, and their location was confirmed through field observation, or historical information (such as maps and photographs) shows their location clearly.

- **Approximate Sites, exact location and condition not yet determined**
  Sites whose locations are not yet precisely known. Physical evidence has not yet been found on the surface, and additional research and fieldwork would be necessary to verify the location. Historical sources provide an approximate location. The source for the
location shown and whether the location is known or approximate will be included in the inventory.

A. **Electronic Availability**

The Burial Site Inventory GIS and attribute data will be made available to the public via the Montgomery County Planning Department Website. Planning Department Staff may redact some locational data consistent with the provisions of Montgomery County Code 18-31 if there is reason to believe the site is at risk for damage from vandalism. Locations considered sensitive or at risk will be represented by the boundaries of the parcel of land within which it is located, but the location within the lot will not be displayed publicly.

B. **Procedures for Updating the Inventory**

Future research may identify new locations, physically confirm suspected locations, or provide new information about existing inventory records. Further investigations may also show that some locations are mapped incorrectly, or that suspected cemetery sites do not survive, or were misidentified as burial sites. This research may include oral history, archival research, and non-invasive archaeological survey. Non-invasive archaeological survey includes techniques such as pedestrian survey, ground penetrating radar and other geophysical techniques that do not disturb the ground.

1. The Planning Board’s designee will update the Burial Sites Inventory, including additions, revisions, and exclusions/deletions, as new information becomes available so that it reflects the most current and accurate information.

2. Additions, revisions, and exclusions/deletions shall be presented to the Planning Board annually at a briefing.

3. In cases where there is a time-sensitive need to revise the Burial Sites Inventory, the Planning Board’s designee will review the evidence for a revision in an expedited manner. If the available evidence shows an addition, removal, or other change is warranted consistent with Appendix A: Guidelines for Cemetery Investigations, then the Planning Board’s designee will recommend that the Planning Board adopt the amendment to the Inventory as a consent item at the next Planning Board Hearing.

4. The Planning Board designee will notify State Department of Assessments and Taxation enumerated property owners in writing via certified letter 30 days prior to including new or updated locations in the inventory, and 30 days prior to removing a property from the inventory. If the property owner believes the precise site location is sensitive, the publicly available location will only show the lot boundaries containing the site.

C. **Public Outreach and Education Program.**

Planning Department staff will hold public meetings and educational events to help property owners and the public understand why the inventory was created, and what their rights and
responsibilities are under state and local laws. This information will be made available through 
printed brochures and the inventory website.

II. Consideration of Burial Sites During Subdivision Review

Applicants are strongly encouraged to contact the Compliance Review Archaeologist early when 
preparing their submission documents. For sites where the precise burial location is not yet 
determined, early discussions on the appropriate scope of work are strongly encouraged.

A. Preliminary Plan Application Requirements for Sites on the Inventory (18-31)

At the time an applicant files Natural Resources Inventory and Forest Stand Delineation 
(NRI/FSD) documentation, the applicant shall:

1. Adequately establish the known location and boundary of any burial site for which there 
is actual or constructive notice or that is included in the Montgomery County Burial Sites 
Inventory.

2. Stake the suspected location of the burial site on the Subject Property.

3. File an inventory of existing cemetery elements (including, but not limited to walls, 
gates, landscape features and tombstones, including a record of their inscriptions) and their 
conditions.

4. The proposed cemetery boundaries and the inventory of features shall be submitted in a 
report separate from the NRI/FSD. The Planning Department’s Compliance Review 
Archaeologist will review proposed boundaries of a burial site and determine whether 
additional burials are possible outside those boundaries or whether any other known or 
suspected cemetery exists within or immediately adjacent to the proposed subdivision.

B. Preliminary Plan Application Review

1. The cemetery must be shown on the preliminary plan, and any subsequent amendments 
to the plan.

2. If a cemetery or burial ground is present, the Planning Department will include this 
information in comments to the subdivision plan along with applicable requirements for 
conducting any needed technical investigations to verify or adjust the proposed delineation 
of the cemetery boundary.

3. To ensure the future protection of cemetery plots in the subdivision process, applicants 
shall conduct phased investigations in consultation with Historic Preservation staff and the 
Compliance Review Archaeologist that may include, but are not limited to, historical 
research, oral history, geophysical surveys, and archaeological testing. Appendix A
provides standards and guidelines for conducting investigations designed to establish boundaries and grave locations, and to record key cemetery features.

4. If any graves, human remains, or grave-associated artifacts are identified by archaeological investigations outside the preliminary boundary of the cemetery as shown on documents prepared at the NRI/FSD stage, the applicant must either revise the cemetery parcel boundary as needed to include them or request the Planning Board’s permission and authorization of the State’s Attorney for Montgomery County to relocate them for interment within the proposed cemetery parcel boundary, or some other location acceptable to the Board.

5. In the event human remains potentially associated with Native Americans are found, the applicant must consult with the Maryland Commission on Indian Affairs (MCIA), and follow protocols established by MCIA for the recording and handling of human remains.

C. Final Cemetery Parcel Approval

1. Prior to approval of the Preliminary Plan by the Planning Board, all necessary archeological investigations shall be completed and approved by the Compliance Review Archaeologist to finalize the location and size of the burial site and identify any additional resources on the Subject Property related to the burial site.

2. The Applicant must stake/survey the final location of the burial site on the subject property and show the final location of the burial site on the Preliminary Plan documents.

   a. If a new parcel boundary is created through Preliminary Plan approval, the final parcel boundary for the cemetery shall fully encompass the burial site as determined by any archaeological or historical investigations.

   b. If the parcel boundaries remain unchanged through Preliminary Plan approval, the location of the burial site must still be shown on the preliminary plan and final record plat.

3. The Applicant must submit a final resource inventory of existing and suspected burial site elements, and the final technical report for archaeological investigations conducted to identify potential grave locations and cemetery boundaries, consistent with the requirements of Chapter 50. If the full report is not completed pending forensic/osteological or other detailed artifact analysis, a management summary of field results that is reviewed and approved by the Compliance Review Archaeologist must be submitted. A final technical report must be completed and approved by the Compliance Review Archaeologist prior to issuance of the first land disturbance permit.

4. Prior to approval of a preliminary plan, the Applicant shall develop with Staff a long-term maintenance program for maintaining the burial site and develop a process for protecting the burial site during future construction activities per Section III B (below).
5. Upon approval of a preliminary plan of subdivision, any cemetery located in accordance with these Guidelines which does not meet the regulations of the zone in which it is located shall be deemed to be a certified nonconforming use unless otherwise specified by the Planning Board.

6. For development sites that have an existing recorded lot or subdivision approval, and need to go through a Sketch or Site Plan review, the same standards for inventory, review, protection and maintenance apply.

III. Standards for Preservation of Burial Sites:

A. The cemetery must be protected by arrangements sufficient to assure the Planning Board of its future maintenance and protection. Specific guidelines for cemetery preservation can be found in Appendix B.

B. The long-term maintenance and protection program must provide for the protection of the site during all phases of construction work for the entire project, the phase of construction adjacent to the cemetery parcel, as well as the perpetual maintenance of the cemetery, including all grave markers, fencing, statuary, related landscaping, and any other cemetery elements identified during the submission process. These arrangements must ensure that stones or markers are in their original location. If markers are not in their original location, are leaning, or are toppled, the applicant will propose a plan to reset them in coordination with the Compliance Review Archaeologist. The Archaeologist must agree to the sufficiency of these plans prior to Planning Board approval of a site plan. Covenants, easements, and/or other agreements to maintain and protect the burial site(s) may include but is not limited to, a determination of the following:

1. Current and proposed property ownership;
2. Responsibility for maintenance;
3. A maintenance plan, and schedule;
4. Provisions for granting access for persons in interest consistent with Maryland State Law (Real Property Section 14-121 Annotated Code of Maryland); and
5. Any other specifications deemed necessary by the Planning Board.

C. The program must be detailed in a plan document for review and approval by the Compliance Review Archaeologist and the comment by the MHT.

IV. Burial Sites Approved for Relocation by the Planning Board

A. Preservation in place is the preferred treatment for burial sites. Burial sites are important cultural, historical, and archaeological resources whose integrity of setting and location shall remain largely undisturbed. The Planning Board may approve the relocation of burial sites as part of a preliminary plan of subdivision, if the conditions of Chapter 50 Section 4.3.M.4 Montgomery County Code and applicable state law have been satisfied. Should burial sites be approved for relocation, an appropriate standard of archaeological investigations must be completed by the applicant to provide assurance that all the graves have been located and removed. The removal of
a burial site shall require the applicant to produce a detailed data recovery and relocation plan describing:

1. The methods that will be used to locate all graves at the site;
2. A plan for conducting public notice and obtaining the authorization of the State’s Attorney required by law;
3. The methods for controlled excavation of each grave site by professional archaeologists;
4. Provisions as appropriate for the transport and study of recovered human remains by a qualified forensic anthropologist;
5. Provisions for the safe and respectful storage of any human remains and associated objects pending reinterment;
6. A specific plan for reinterment, so chosen after consultation with descendants (if known), and persons in interest as defined by Maryland State law;
7. In the event human remains potentially associated with Native Americans are to be relocated, the applicant must consult with the Maryland Commission on Indian Affairs (MCIA), and follow protocols established by MCIA for the recording, handling and reinterment of human remains.
8. Provisions for appropriate analysis, study, and curation of any artifacts recovered during excavation; and,
9. Completion of a detailed technical report that presents the history of the site, the methods employed in the study and excavation, detailed discussion and analysis of the individual graves, and a conclusion.

The Planning Board may approve the relocation proposal or further condition the removal as warranted by the Board. The applicant will be responsible for meeting the requirements of the State’s Attorney for Montgomery County following Planning Board approval.

B. The data recovery plan and technical report must be reviewed and approved by the Compliance Review Archaeologist prior to submission of the first record plat. The Compliance Review Archaeologist must further review all reinterments, preservation plans, record plat submittals, easement documents, funds, and any interpretive elements proposed for the site prior to issuance of the first building permit for the development. Following burial site relocation, the Compliance Review Archaeologist will update the Burial Sites Inventory as appropriate.

V. Applicability

The Guidelines in II – IV above are mandatory for projects submitted to the Planning Board. Other situations may arise in which known or suspected burial sites may be affected by development, or where unanticipated human remains are encountered. This section addresses how these Guidelines may apply in such situations. Property owners should contact the Historic Preservation Office for technical advice and assistance for any of the circumstances described below.
A. Crime Scenes

These Guidelines do not apply to the investigation of a crime scene. If unanticipated human remains are encountered, those who find the remains should contact Montgomery County police. If police investigators determine that the find is not related to a crime, these Guidelines describe applicable best practices a property owner may wish to follow for determining the extent of burials on their land, guidelines for disposition of remains, and preservation of the burial site. Note that if the unanticipated remains are not part of a crime scene, state laws prohibiting the willful damage of the grave or relocation without the authorization of the State’s Attorney for the County would apply.

B. Development Projects Not Requiring Preliminary Plan Applications.

While not mandatory for projects not including Planning Board approval of a subdivision, these Guidelines would be applied to other regulatory applications and offer best practices for delineating cemetery boundaries, handling of human remains, and burial site preservation and maintenance.
Appendix A: Guidelines for Cemetery Investigations in Montgomery County

It is sometimes the case that there may be graves that either are not marked, are not marked in a way that is obvious to a casual observer or were marked by wooden markers or field stones that have not survived in place. Some burial grounds may have fences, plantings or other features that define the cemetery’s boundary, but many others do not, or if they have such features, they may have been added long after the first interments and may not accurately reflect the location of all graves. Graves may be present outside cemetery fence lines or areas where clearly marked graves are present.

I  Archaeological Investigations to Determine Cemetery Boundaries

A.  Staff Consultation: Prior to initiating investigations to inventory cemetery features or establish boundaries, applicants should meet with Historic Preservation staff to review what is already known about the location, and discuss appropriate methodologies for any needed studies. If consultants are to be engaged to complete investigations, the scope of work must be reviewed by the Compliance Review Archaeologist in the Historic Preservation Office prior to initiating work.

B.  Historical Research: Historical documents, such as maps, aerial photographs, deeds, wills, or family histories, may contain information on the location of grave sites. Work to identify cemetery boundaries should begin with a thorough review of previous historical research on the site and existing documents.

C.  Oral History: Descendants, members of the county’s long-established communities and local preservation groups are often knowledgeable about the locations of former house sites and their associated burial grounds. The locations of burial grounds were often passed down orally within rural communities. Interviewing persons with knowledge about a burial ground can help establish how it may have changed over time; whether there were additional grave markers that no longer survive, or whether any graves or grave stones may have been removed or relocated. It is recommended that interviews with descendants follow the Principles and Best Practices for Oral History developed by the Oral History Association (http://www.oralhistory.org/about/principles-and-practices-revised-2009/).
D. **Geophysical and Other Non-Invasive Investigations:** Geophysical investigations, such as Ground Penetrating Radar (GPR), soil resistivity, magnetometer, soil chemistry, and other techniques such as tile probe surveys or use of human remains detection dogs can help detect the presence of grave shafts or other buried cultural features not marked or visible on the surface without disturbing the ground. Project applicants may propose a wide variety of remote sensing techniques provided their use can be justified for the particular context. A combination of multiple approaches may yield the most reliable results. Non-intrusive survey techniques are most effective when more than one contrasting method is used (e.g. GPR and magnetometer). This helps control for potential gaps in the survey data arising from local conditions such as soil composition, moisture content, underground utilities, and past natural or non-grave related human disturbance of the ground.

Where geophysical techniques are employed, a technical report should be prepared that details the instrument and applicable settings used, the transect interval, and graphically shows the location and interpretation of anomalies detected. For GPR surveys for example, this should include sample processed GPR profiles showing the shapes and depths of detected anomalies, as well as representative time-slice plan view maps of the anomalies. This will help in understanding the potential depth of any graves present, as well as provide information about other disturbances or sources of interference that may potentially mask the location of additional graves not detected by geophysical methods.

In cases where potential grave shafts are identified in areas that may be subject to future ground disturbance or construction, any anomalies interpreted as potential grave shafts must be tested archaeologically to determine whether the anomaly is in fact associated with a grave.

E. **Archaeological Field Investigations:** Maryland state law requires the authorization of the State’s Attorney for the county be obtained prior to remains being removed from the site. All archaeological work plans for work in cemeteries must include provisions for fulfilling the public notice requirements of state law and obtaining the authorization of the State’s Attorney, and for the proper and respectful handling of any human remains and associated objects pending reinterment. Any analysis of potential human remains should be conducted by a qualified forensic anthropologist. Analysis of human remains potentially associated with Native Americans should be conducted in a manner consistent with protocols developed by the Maryland Commission on Indian Affairs.

Archaeological investigations should begin with a pedestrian survey designed to identify depressions in the earth, overgrown head or foot stones, fences, and concentrations or alignments of unmodified fieldstone that might mark graves, as well as the location of any plantings such as yucca, vinca, lilies, daffodils or others that could be associated with burial grounds. The vicinity of animal burrows should be inspected to see any coffin hardware or human remains which might have been brought to the surface.
The most definitive method for identifying the presence or absence of unmarked graves is through archaeological testing. Archaeological testing can be most effectively targeted when it follows historical, oral history, and geophysical investigations and an archaeological pedestrian survey. These methods can help identify which areas near known graves are most likely to have additional burials and are thus a priority for archaeological excavation. Intensive archaeological testing will generally include hand excavation above a geotechnical anomaly, depression, or other indication of an unmarked grave to the interface between the surface layer and the underlying subsoil. Soil should be hand screened through hardware mesh cloth no coarser than ¼ inch mesh size. Excavation should expose the whole perimeter of any subsurface feature found to assess the likelihood that it is a grave. Excavation should not extend deeper into the grave shaft than necessary to reveal it in planview and establish its dimensions. Disturbance of the grave itself should be avoided.

Mechanical testing of potential grave locations is acceptable when done with a smooth-edged bucket, and under the supervision of a qualified archaeologist. Mechanical excavation should only proceed to the interface between topsoil and subsoil. Where mechanical excavation is planned, at least a sample of the topsoil must be hand excavated and screened to assess the likelihood that human remains, or associated coffin hardware are present on or near the surface. If hand excavation and screening of the topsoil recover human remains or coffin hardware, then mechanical excavation in that location shall not be attempted.

F. Professional Qualifications: Work must be directed by a professional archaeologist meeting the qualifications listed in Appendix C. The work plan must provide for the services of a qualified forensic anthropologist to analyze any potential human remains recovered during the investigations (see Appendix C: Definitions).

II Guidelines for Archaeological Reporting and Curation

Analysis and reporting of investigations carried out to define cemetery boundaries must be sufficient to clearly document what was done and provide the technical basis for the conclusions drawn. If human remains are recovered, these must be analyzed by a qualified forensic anthropologist to verify that the bones are in fact human.

At the conclusion of investigations, the applicant shall prepare an archaeological technical report. The report must be consistent with the Standards and Guidelines for Archeological Investigations in Maryland (Shaffer and Cole 1994), and include a summary of the history of the cemetery site and environs, a discussion of field methods employed, a description of results including maps, plan and profile view drawings and photographs of investigated features, an inventory of recovered artifacts, a report from the forensic anthropologist (as needed), and a conclusion that includes a long-term maintenance program for maintaining the burial site, a plan for any potential relocations of human remains and associated materials to the site, and a process for protecting the burial site during future construction activities. The report will also create or amend as necessary any Maryland Inventory of Historic Properties (MIHP) or Maryland Inventory of Historic Properties Archeological Site Survey Forms. The draft report must be submitted for review by the
Montgomery County Compliance Review Archaeologist, and MHT. The report must be approved by the Compliance Review Archaeologist prior to Preliminary Plan approval.

**Archaeological Curation:** At the conclusion of analysis and reporting, any human remains or associated grave items should be reinterred on site, or at an appropriate cemetery location selected in consultation with the Compliance Review Archaeologist. Other artifacts recovered during any archaeological testing are the property of the landowner. It is recommended that applicants arrange to curate the artifact collection and associated documentation with the Maryland Archeological Conservation Lab (MAC Lab), at the Jefferson Patterson Park and Museum, St. Leonard, MD.
Appendix B: Standards for Maintenance of Burial Sites

Features identified in a burial site’s inventory should be maintained in a fashion that will preserve them for future generations. Proper maintenance of a cemetery is key to the continued preservation of the site. A maintained cemetery welcomes visitation and will experience fewer problems with deterioration or vandalism. A maintenance schedule should include day-to-day, periodic, and long-term maintenance components. Guidance for proper cemetery maintenance can be found from the National Park Service: Preservation Brief 48: Preserving Grave Markers in Historic Cemeteries. The needs and priorities for maintenance and preservation are specific to each cemetery site and must be approved by the Planning Board as part of parcel subdivision process.

Short term goals shall include as appropriate:
- Weeding
- Pruning
- Mowing
- Removing Litter

Longer term goals shall include as appropriate:
- Landscaping
- Addressing Erosion
- Replacement of trees and significant plantings
- Installation of fencing
- Gravestone repair

Mowing
Modern mowers allow for efficient maintenance but are one of the major causes of damage to markers in historic cemeteries. The following guidelines will help preserve the site.

Problematic Practices:
1. Riding mowers (these may knock headstones, damaging or toppling them);
2. Bumping stones with any mower;
3. Leaving grass clippings on stones (this will allow moisture to accumulate on a stone, or where the stone is joined to a base, causing the marker to deteriorate).

Best Practices:
1. Use a walk-behind mower
2. Stay at least 12 inches away from any stone with a mower
3. Trim next to stones with hand tools
4. Equip mower with rubber bumpers and discharge guards
5. Remove grass clippings.

Adding a non-grass buffer around stones or other features such as mulch may help protect them from mowing. It is best in some settings to consider alternatives to grass lawns such as low
growing heathers, phlox or other ground covers that will grow well in the area, stay low, look attractive, and require less maintenance. Some useful suggestions can be found from the National Center for Preservation Technology and Training: Preservation Maintenance of Turf Using Resource Sensitive Techniques in Historic Landscapes.

**Landscaping**
Many headstones, footstones, and other features may get buried due to erosion, subsidence, accumulation of grass and leaf litter, burrowing animals and other forces. To best preserve the cemetery’s historic landscape and to respect those buried there, such items should be continually exposed. Regular grounds maintenance will help forestall some of these problems, but where a stone has significantly sunk into the ground, or where a stone is leaning and in danger of toppling, or has toppled, the intervention of someone trained in cemetery conservation may be needed. In such cases, the stone can be carefully lifted, leveled, and sharp gravel placed underneath to help prevent further movement. Guidance for resetting headstones can be found from the National Center for Preservation Technology and Training: Resetting Ground Supporting Headstones.

**Trees**
Historic cemeteries may have multiple trees and bushes. The health of any trees should be assessed in order to establish a plan for their maintenance or removal and replacement. Ideally, a tree would be replaced with a tree of a similar species, unless these are so close to grave markers that the growth of the tree may move or damage the stone. Weed trees growing within a few feet of grave markers or other cemetery landscape features should be removed promptly before they displace markers or other important objects. Note that tree removal on cemeteries included in the Master Plan of Historic Sites may be subject to Forest Conservation requirements.

- Inspect trees to ensure the root system is not interfering with gravestones
- If removal of a tree in proximity to a gravestone is necessary, cut it as close to ground as possible. Allow the stump to decay naturally. Do not use chemical herbicides as these may discolor or damage stones.
- Replacement trees should not interfere with grave markers, fences, paths, or roads

**Fencing**
Where consistent with the historical character of a graveyard, applicants should consider installing a fence around the perimeter of the cemetery. A fence may promote the long-term maintenance of the site and further delineate the space from the surrounding environment. Applicant should discuss proposed fence design with Historic Preservation staff. Where the cemetery is listed as a historic site, or is in a historic district, the applicant will need to obtain a Historic Area Work Permit from the Historic Preservation Commission.

**Gravestone Cleaning and Repair**
Cleaning: Gravestones can be damaged by natural weathering and by people. The weathering of stone is a physical and chemical process that occurs slowly over time at different rates depending on the material. Marble may erode faster than other stones because the calcite and
dolomite it contains is more soluble in acid rain. Pollutants and the growth of lichens, moss, or mold can also stain grave markers. However, one must not confuse a stone’s natural patina (color) with pollutants. The goal of cleaning and repairing headstones is not to return a headstone to its original brightness, but to stop or slow the potential damage that is being done. Overly aggressive cleaning methods needed to return a stone to its original color will cause irreparable damage by removing some of the stone’s surface thus making it more vulnerable to future erosion.

Repair: Resetting tilted grave markers or repair of broken stones will not only help preserve the historical character of a site but will also help forestall future damage. Gravestone repair needs to be understood as a kind of conservation that may require specialized materials and skills. Resources for training, materials, and techniques should be consulted and approved by Planning Department staff before attempting any repairs. If the repair is complex in nature, consult a conservation professional for further instruction or information.

A repair:

1. should not be as strong as the original material, otherwise it may cause the original material to crack.
2. should be reversible to allow for redoing in the future with better materials
3. should respect the original material.
4. should be historically accurate (e.g. appropriate mortar).
5. should not inhibit natural permeability/breath-ability of the stone (beware of sealants).
6. should only be conducted on sound stones.

Additional guidelines and resources for safe cleaning and repair methods can be found at:

- Preservation Brief 48: Preserving Grave Markers in Historic Cemeteries
- National Center for Preservation Technology and Training: Cemetery Conservation
- Maryland Historical Trust: Historic Cemetery Preservation
- Coalition to Protect Maryland Burial Sites
- Chicora Foundation: Cemetery Lawn Maintenance
Appendix C: Definitions and Terms used in the Guidelines

**Anomaly**—In archaeological survey, an anomaly is an area whose characteristics as measured by a geophysical instrument such as ground penetrating radar or magnetometer differ from its surroundings. Anomalies may be places where the soil is denser or looser than the surrounding soil, or where there is a concentration of magnetic material such as iron or brick. Anomalies may correspond to archaeological features such as grave shafts, foundations, wells, or other man-made structures.

**Archaeological Professional**—Meets the Secretary of the Interior’s Professional Qualification Standards, as stated in the Secretary of the Interior’s *Standards and Guidelines for Archeology and Historic Preservation* (36 CFR 61), as follows:

1. “The minimum professional qualifications in archeology are a graduate degree in archeology, anthropology, or closely related field plus:

2. At least one year of full-time professional experience or equivalent specialized training in archeological research, administration or management;

3. At least four months of supervised field and analytic experience in general North American archeology; and

4. Demonstrated ability to carry research to completion.

“In addition to these minimum qualifications, a professional in prehistoric archeology shall have at least one year of full-time professional experience at a supervisory level in the study of archeological resources of the prehistoric period. A professional in historic archeology shall have at least one year of full-time professional experience at a supervisory level in the study of archeological resources of the historic period.”

**Burial Site**—Montgomery County Ordinance 33A-17 defines a burial site as the “physical location where human remains were buried in the earth, or entombed in mausoleum or columbarium. A burial site includes a cemetery, but does not include the sprinkling of ashes from cremated remains.”

**Cemetery**—See Burial Site

**Collection**—The material remains that are excavated or removed during a survey, excavation, or other study of a prehistoric or historic archeological resource, as well as the associated records that are prepared or assembled in connection with the survey, excavation, or other study.

**Compliance Review Archaeologist**—Staff archaeologist with the Montgomery County Planning Department tasked with overseeing the Burial Sites Inventory program and review of archaeological sites under the historic preservation ordinance and cemetery sites under Ordinance
18-31.

**Curation**—Inventorying, accessioning, labeling, cleaning, and cataloging a collection (to be completed by the archeological consultant). Providing curatorial services means managing and preserving a collection according to professional museum and archival practices, including, but not limited to: storing and maintaining a collection, using appropriate methods and containers, under appropriate environmental conditions and physically secure controls (to be completed by repository).

**Data Recovery Plan**—Written description of proposed archival research, archaeological fieldwork, and analysis methods and techniques.

**Feature**—Physical remains of past human activity in a discrete area of a landscape or archaeological site such as a building foundation, a well, or grave shaft.

**Forensic Anthropologist**—A forensic anthropologist conducts anthropological analyses of human remains to determine, where possible, the approximate age, sex, race, and other characteristics of the remains that may be of use in potentially identifying the individual. A qualified forensic anthropologist independently supervising a project should have at a minimum a master’s degree, and preferably a doctoral degree or equivalent in Physical/Biological Anthropology or a closely related field with a significant emphasis in training and experience on forensic anthropology, human osteology, skeletal biology and human variation.

**Grave Shaft**—The area of a grave between the burial and the ground surface. Once a burial has been placed in the bottom of a grave the shaft is filled in with the earth excavated from the grave. This soil will be a mixture of the dark topsoil with the lighter subsoils beneath and will be less compact that the surrounding soil. This difference in color and texture helps make grave shafts detectable by archaeological survey.

**Ground Penetrating Radar**—Geophysical survey instrument used to detect variations in soil density. Discrete areas of difference, anomalies, may correspond to areas of past human activity and provide an indication of buried features of an archaeological site.

**Historic Preservation Staff**—The Historic Preservation staff, including preservation planners, architectural historians, and a 36 CFR 61 qualified archeologist, are part of the Historic Preservation Section in the Montgomery County Planning Department, M-NCPPC.

**Historic district:** A group of historic resources which are significant as a cohesive unit and contribute to the historical, architectural, archeological or cultural values within the Maryland-Washington Regional District and which has been so designated in the master plan for historic preservation.

**Historic resource:** A district, site, building, structure or object, including its appurtenances and environmental setting, which is significant in national, state or local history, architecture, archeology or culture. This includes, but is not limited to, all properties on the "Locational Atlas and Index of Historic Sites in Montgomery County.”
**Historic site:** Any individual historic resource that is significant and contributes to the historical, architectural, archeological or cultural values within the Maryland-Washington Regional District and which has been so designated in the master plan for historic preservation.

**Magnetometer**—Geophysical survey instrument used to detect variations in the earth’s magnetic sphere. Discrete areas of variation, or anomalies, may correspond to concentrations of magnetic material such as iron or brick, and thus serve as an indication of past human activity.

**Maryland Historical Trust (MHT)**—The Maryland Historical Trust is the principal operating unit within the Division of Historical and Cultural Programs, an agency of the Maryland Department of Housing and Community Development. The MHT was created in 1961 to assist the people of Maryland in identifying, studying, evaluating, preserving, protecting, and interpreting the state’s significant historic, architectural and cultural resources. The Maryland Historical Trust serves as the state historic preservation office (SHPO) for Maryland.

**Maryland Inventory of Historic Properties (MIHP)**—The Maryland Historical Trust’s list of districts, sites, buildings, structures, and objects of known or potential value to the prehistory, history, terrestrial or underwater archeology, architecture, engineering, and culture of Maryland.

**Maryland Inventory of Historic Properties Archeological Site Survey Form**—Form to be completed when an archeological site is identified. The form includes information on type of site, condition, location, and artifacts recovered.

**Maryland Register of Historic Properties**—The Maryland Historical Trust’s list of all properties included in or determined by its director to be eligible for listing in the National Register of Historic Places.

**National Register of Historic Places**—The official federal list, maintained by the National Park Service, of districts, sites, buildings, structures, and objects significant in American history, architecture, archeology, engineering, and culture.

**Planning Board or Designee**—The Montgomery County Planning Board. The Board may designate Montgomery County Planning Department to act as its designee where specified in these Guidelines.

**Preservation and Historic Preservation**—“Identification, evaluation, recordation, documentation, curation, acquisition, protection, management, rehabilitation, restoration, stabilization, maintenance, and reconstruction, or any combination of the foregoing activities.” (16 U.S.C. 470w[8]).

**pXRF**—Portable X-Ray Fluorescence Spectroscopy. Technique for identifying the chemical composition of a subject using X-Ray beams. It is most often used in archaeology on objects such as ceramic vessels to help identify potential sources of the clay used. It has been used for chemical analysis of soils on archaeological sites to identify features such as grave shafts.
Person in Interest—In Maryland Code: Real Property Article § 14-121. Burial sites – Access "Person in interest" means a person who:
(i) Is related by blood or marriage to the person interred in a burial site;
(ii) Is a domestic partner, as defined in § 1-101 of the Health - General Article, of a person interred in a burial site;
(iii) Has a cultural affiliation with the person interred in a burial site; or
(iv) Has an interest in a burial site that the Office of the State's Attorney for the county where the burial site is located recognizes is in the public interest after consultation with a local burial sites advisory board or, if such a board does not exist, the Maryland Historical Trust.

Significant— Having the qualities of a historic site, district or resource that contribute to its historical character and potential eligibility for listing in the County’s Master Plan for Historic Preservation.

Stratigraphic integrity—An archeological site that is found in soil that has kept its original soil stratigraphy and is undisturbed or has been minimally disturbed by erosion, agricultural practices, or other soil disturbance.

Tile Probe Survey— Using a tile probe (long metal rod) to identify potential grave shafts. The distance the probe can be inserted into the ground is measured at regular intervals across a site. Grave shafts may have soil that is less compact than the soils around them, allowing them to be identified this way.
Appendix D: Preliminary Plan Review Process
Preliminary Plan Review Process

**Forest Conservation**

*Description:* Before submitting a Preliminary Plan, a Natural Resources Inventory (NRI) or Forest Conservation Plan Exemption (FCPE) must be approved.

*Cemetery Requirements:* Conduct initial survey and inventory of cemetery boundaries and features. Applicants may meet with Planning Department Staff to determine what studies may be required for cemetery delineation, and begin those investigations prior to preliminary plan submittal.

*Timing:* Planning Department Staff have 30 days to review NFIRFSD and cemetery documentation provided at that time.

**Submit Preliminary Plan**

*Description:* Instructions for submitting Preliminary Plans can be found at: https://montgomeryplanning.org/development/development-applications/preliminary-plan/

*Cemetery Requirements:* Stake cemetery boundary, include boundary on preliminary plans.

**Development Review Committee**

*Description:* Planning Board takes testimony and votes whether to approve the preliminary plan.

*Cemetery Requirements:* Planning Department Staff will review to determine whether additional investigations are required to verify or refine proposed cemetery boundary.

**Preliminary Plan Revisions**

*Description:* Preliminary Plans may be amended. Before submitting an application, applicants must meet with planning staff and receive an amendment checklist that outlines the required submission items.

**Amendments**

*Description:* Preliminary Plans proposing to relocate human remains with the approval of the Planning Board.

*Cemetery Requirements:* Must comply with the provisions of Section IV of the Burial Sites Guidelines, including obtaining the authorization of the State’s Attorney for Montgomery County.

*Timing:* Following approval of the preliminary plan by the Planning Board.

**Relocations**

*Description:* Preliminary plans proposing to relocate human remains with the approval of the Planning Board.

*Cemetery Requirements:* Must comply with the provisions of Section IV of the Burial Sites Guidelines, including obtaining the authorization of the State’s Attorney for Montgomery County.

*Timing:* Following approval of the preliminary plan by the Planning Board.

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*Description:* Instructions for submitting Preliminary Plans can be found at: https://montgomeryplanning.org/development/development-applications/preliminary-plan/

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