University of Georgia Preservation Guidelines for Buildings, Landscapes, and Archaeological Resources

Treatment Philosophy and Approach

Secretary of the Interior's Standards for the Treatment of Historic Properties

The Secretary of the Interior's Standards are precepts published by the U.S. National Park Service that provide guidelines for work on preservation projects. There are separate standards for preservation, rehabilitation, restoration, and reconstruction (see definitions below). The Standards must be followed on projects for which federal funding is provided and on projects receiving federal rehabilitation investment tax credits, but also provide valuable guidance for any work on historic (and in many cases) non-historic resources.

The Standards include a series of concepts about maintaining, repairing, and replacing historic materials, as well as designing new additions or making alterations. The Guidelines offer general design and technical recommendations to assist in applying the Standards to a specific property. Together, they provide and inform historic preservation best practices that help to protect cultural resources, and provide a framework and guidance for decision-making about work or changes to a historic property.

The Standards and Guidelines can be applied to historic properties of all types, materials, construction, sizes, and use. They include both the exterior and the interior and extend to a property's landscape features, site, environment, as well as related new construction.²¹⁴

In general, *Rehabilitation* is the most appropriate overarching treatment for many of the University of Georgia's historic resources, in that it protects historic, character-defining features while allowing for change to accommodate continued use of the property. The four treatments are further discussed below.

^{214.} Anne E. Grimmer, *The Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring & Reconstructing Historic Buildings* (Washington, D.C.: U.S. Department of the Interior, National Park Service, Cultural Resource Stewardship and Partnerships, Heritage Preservation Services, 2017).

The U.S. National Park Service has developed definitions for the four major treatments that may be applied to historic structures: preservation, rehabilitation, restoration, and reconstruction. The four approaches are as follows:

Preservation is defined as the act or process of applying measures necessary to sustain the existing form, integrity, and materials of an historic property. Work, including preliminary measures to protect and stabilize the property, generally focuses upon the ongoing maintenance and repair of historic materials and features rather than extensive replacement and new construction. The limited and sensitive upgrading of mechanical, electrical, and plumbing systems and other code-required work to make properties functional is appropriate within a preservation project. However, new exterior additions are not within the scope of this treatment. The Standards for Preservation require retention of the greatest amount of historic fabric along with the building's historic form.

Rehabilitation is defined as the act or process of making possible a compatible use for a property through repair, alterations, and additions while preserving those portions or features which convey its historical, cultural, or architectural values. The Rehabilitation Standards acknowledge the need to alter or add to a historic building to meet continuing or new uses while retaining the building's historic character.

Restoration is defined as the act or process of accurately depicting the form, features, and character of a property as it appeared at a particular period of time by means of the removal of features from other periods in its history and reconstruction of missing features from the restoration period. The limited and sensitive upgrading of mechanical, electrical, and plumbing systems and other code-required work to make properties functional is appropriate within a restoration project. The Restoration Standards allow for the depiction of a building at a particular time in its history by preserving materials, features, finishes, and spaces from its period of significance and removing those from other periods.

Reconstruction is defined as the act or process of depicting by means of new construction, the form, features, and detailing of a non-surviving site, landscape, building, structure, or object for the purpose of replicating its appearance at a specific period of time and in its historic location. The Reconstruction Standards establish a limited framework for recreating a vanished or non-surviving building with new materials, primarily for interpretive purposes.²¹⁵

Standards for Preservation

Preservation is defined as the act or process of applying measures necessary to sustain the existing form, integrity, and materials of an historic property. Work, including preliminary measures to protect and stabilize the property, generally focuses upon the ongoing maintenance and repair of historic materials and features rather than extensive replacement and new construction. New exterior additions are not within the scope of this treatment; however, the limited and sensitive upgrading of mechanical, electrical, and plumbing systems and other code-required work to make properties functional is appropriate within a preservation project.

^{215.} Ibid.

The Standards for Preservation are as follows:

- 1. A property will be used as it was historically, or be given a new use that maximizes the retention of distinctive materials, features, spaces and spatial relationships. Where a treatment and use have not been identified, a property will be protected and, if necessary, stabilized until additional work may be undertaken.
- 2. The historic character of a property will be retained and preserved. The replacement of intact or repairable historic materials or alteration of features, spaces and spatial relationships that characterize a property will be avoided.
- 3. Each property will be recognized as a physical record of its time, place and use. Work needed to stabilize, consolidate and conserve existing historic materials and features will be physically and visually compatible, identifiable upon close inspection and properly documented for future research.
- 4. Changes to a property that have acquired historic significance in their own right will be retained and preserved.
- 5. Distinctive materials, features, finishes and construction techniques or examples of craftsmanship that characterize a property will be preserved.
- 6. The existing condition of historic features will be evaluated to determine the appropriate level of intervention needed. Where the severity of deterioration requires repair or limited replacement of a distinctive feature, the new materials will match the old in composition, design, color and texture.
- 7. Chemical or physical treatments, if appropriate, will be undertaken using the gentlest means possible. Treatments that cause damage to historic materials will not be used.
- 8. Archeological resources will be protected and preserved in place. If such resources must be disturbed, mitigation measures will be undertaken. ²¹⁶

Preservation is appropriate as a treatment when the property's distinctive materials, features, and spaces are essentially intact and thus convey the historic significance without extensive repair or replacement; when depiction at a particular period of time is not appropriate; and when a continuing or new use does not require additions or extensive alterations.

Standards for Rehabilitation

Rehabilitation is defined as the act or process of making possible a compatible use for a property through repair, alterations, and additions while preserving those portions or features which convey its historical, cultural, or architectural values.

The Standards for Rehabilitation are as follows:

1. A property will be used as it was historically, or be given a new use that requires minimal change to its distinctive materials, features, spaces and spatial relationships.

^{216.} Ibid.

- 2. The historic character of a property will be retained and preserved. The removal of distinctive materials or alteration of features, spaces and spatial relationships that characterize a property will be avoided.
- 3. Each property will be recognized as a physical record of its time, place and use. Changes that create a false sense of historical development, such as adding conjectural features or elements from other historic properties, will not be undertaken.
- 4. Changes to a property that have acquired historic significance in their own right will be retained and preserved.
- 5. Distinctive materials, features, finishes and construction techniques or examples of craftsmanship that characterize a property will be preserved.
- 6. Deteriorated historic features will be repaired rather than replaced. Where the severity of deterioration requires replacement of a distinctive feature, the new feature will match the old in design, color, texture and, where possible, materials. Replacement of missing features will be substantiated by documentary and physical evidence.
- 7. Chemical or physical treatments, if appropriate, will be undertaken using the gentlest means possible. Treatments that cause damage to historic materials will not be used.
- 8. Archeological resources will be protected and preserved in place. If such resources must be disturbed, mitigation measures will be undertaken.
- 9. New additions, exterior alterations, or related new construction will not destroy historic materials, features, and special relationships that characterize the property. The new work will be differentiated from the old and will be compatible with the historic materials, features, size, scale and proportion, and massing to protect the integrity of the property and its environment.
- New additions and adjacent or related new construction will be undertaken in such a manner that, if removed in the future, the essential form and integrity of the historic property and its environment would be unimpaired.

Rehabilitation is appropriate as a treatment when repair and replacement of deteriorated features are necessary; when alterations or additions to the property are planned for a new or continued use; and when its depiction at a particular period of time is not appropriate.

Standards for Restoration

Restoration is defined as the act or process of accurately depicting the form, features, and character of a property as it appeared at a particular period of time by means of the removal of features from other periods in its history and reconstruction of missing features from the restoration period. The limited and sensitive upgrading of mechanical, electrical, and plumbing systems and other code-required work to make properties functional is appropriate within a restoration project.

217. Ibid.

The Standards for Restoration are as follows:

- 1. A property will be used as it was historically, or be given a new use that interprets the property and its restoration period.
- 2. Materials and features from the restoration period will be retained and preserved. The removal of materials or alteration of features, spaces and spatial relationships that characterize the period will be avoided.
- 3. Each property will be recognized as a physical record of its time, place and use. Work needed to stabilize, consolidate and conserve materials and features from the restoration period will be physically and visually compatible, identifiable upon close inspection and properly documented for future research.
- 4. Materials, features, spaces and finishes that characterize other historical periods will be documented prior to their alteration or removal.
- 5. Distinctive materials, features, finishes and construction techniques or examples of craftsmanship that characterize the restoration period will be preserved.
- 6. Deteriorated features from the restoration period will be repaired rather than replaced. Where the severity of deterioration requires replacement of a distinctive feature, the new feature will match the old in design, color, texture and, where possible, materials.
- 7. Replacement of missing features from the restoration period will be substantiated by documentary and physical evidence. A false sense of history will not be created by adding conjectural features, features from other properties, or by combining features that never existed together historically.
- 8. Chemical or physical treatments, if appropriate, will be undertaken using the gentlest means possible. Treatments that cause damage to historic materials will not be used.
- 9. Archeological resources affected by a project will be protected and preserved in place. If such resources must be disturbed, mitigation measures will be undertaken.
- 10. Designs that were never executed historically will not be constructed. ²¹⁸

Restoration is appropriate as a treatment when the property's design, architectural, or historical significance during a particular period of time outweighs the potential loss of extant materials, features, spaces, and finishes that characterize other historical periods; when there is substantial physical and documentary evidence for the work; and when contemporary alterations and additions are not planned. Prior to undertaking work, a particular period of time, i.e., the restoration period, should be selected and justified, and a documentation plan for restoration developed.

Standards for Reconstruction

Reconstruction is defined as the act or process of depicting, by means of new construction, the form, features, and detailing of a non-surviving site, landscape, building, structure, or object for the purpose of replicating its appearance at a specific period of time and in its historic location.

The Standards for Reconstruction are as follows:

- 1. Reconstruction will be used to depict vanished or non-surviving portions of a property when documentary and physical evidence is available to permit accurate reconstruction with minimal conjecture and such reconstruction is essential to the public understanding of the property.
- 2. Reconstruction of a landscape, building, structure or object in its historic location will be preceded by a thorough archeological investigation to identify and evaluate those features and artifacts which are essential for an accurate reconstruction. If such resources must be disturbed, mitigation measures will be undertaken.
- 3. Reconstruction will include measures to preserve any remaining historic materials, features, and spatial relationships.
- 4. Reconstruction will be based on the accurate duplication of historic features and elements substantiated by documentary or physical evidence rather than on conjectural designs or the availability of different features from other historic properties. A reconstructed property will re-create the appearance of the non-surviving historic property in materials, design, color and texture.
- 5. A reconstruction will be clearly identified as a contemporary re-creation.
- 6. Designs that were never executed historically will not be constructed. ²¹⁹

Reconstruction is appropriate as a treatment when a contemporary depiction is required to understand and interpret a property's historic value (including the recreation of missing components in a historic district or site); when no other property with the same associative value has survived; and when sufficient historical documentation exists to ensure an accurate reproduction.

Board of Regents Treatment Guidelines

The guidance afforded by the Board of Regents Campus *Historic Preservation Guidelines* generally follows the Secretary of the Interior's Standards for the Treatment of Historic Properties, specifically noting the four treatment approaches. In addition, the Board of Regents guidelines note:

One approach to treatment is not mutually exclusive of another, and often an overall recommendation for treatment will combine aspects of multiple approaches. Treatment of an Institution's historic buildings will generally favor rehabilitation due to requirements for interior upgrades, but projects will necessarily include the preservation of surviving historic features such as stairways, windows, and other unique details. Most historic landscapes, however, will favor preservation through the development of specific maintenance plans that allow for the appropriate replacement of plant species

219. Ibid.

and the repair of historic materials. Therefore, treatment recommendations for all cultural resources must be determined on a case-by-case basis.²²⁰

The *Campus Historic Preservation Plan Guidelines* also notes that coordination is required in implementation of historic preservation treatments as part of the Physical Master Plan for University campuses, as follows:

Following the Identification and Evaluation of Cultural Resources, decisions must be made concerning the treatment and use of these resources for the purposes of the Physical Master Plan. Because the Master Plan Process requires the balancing of numerous objectives, of which historic preservation is but one, Recommendations for Treatment & Use must outline an implementation strategy and consider priorities for the management of campus cultural resources. ²²¹

The *Campus Historic Preservation Plan Guidelines* recommend the following project-level procedures as appropriate:

- Nomination to Georgia/National Register of Historic Places
- Develop Resource-Specific Preservation Maintenance Plan
- Preservation and Rehabilitation through BOR Capital Program²²²

Finally, the guidelines recognize that while all resources that pass the test of the Georgia and National Register criteria are considered historic, they may not all be equally valued by the Institution or the Board of Regents.²²³ Further:

The Institution is responsible for managing and considering the effects on all properties that are eligible for the GNRHP, but they are not required to maintain these buildings, landscapes, or sites in museum-quality condition, nor necessarily keep every such resource standing or intact. It is up to the individual Institutions in consultation with the BOR and HPD to decide how their cultural resources are managed within the requirements of applicable legislation and policy.²²⁴

Guidelines for University of Georgia Historic Resources

Based on the findings of this study, and on the treatment approaches and preservation precepts offered by the National Park Service and the Board of Regents, the following guidelines have been developed for the historic resources assessed in the Historic Preservation Master Plan.

This section provides treatment guidelines directed specifically to the management of historic buildings and structures, landscape resources, and archaeological sites found within University of Georgia campuses and properties. The guidelines are consistent with the *Secretary of the Interior's Standards for the Treatment of Historic Properties* and the *Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for the Secretary of the Interior's Standards for the Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for the Secretary of the Interior's Standards for the Secretary of the Secr*

^{220.} Board of Regents Campus Historic Preservation Guidelines, Section 4.2.

^{221.} Ibid., "Recommendations for Treatment and Use."

^{222.} Ibid.

^{223.} Ibid., Section 4.1.

^{224.} Ibid.

Treatment of Cultural Landscapes, as well as the Board of Regents *Campus Historic Preservation Plan Guidelines*. The guidance offered herein should be used in concert with the preservation recommendations developed in the future for specific buildings, structures, landscape resources, and sites.

The University of Georgia has historic buildings and landscapes from all periods of its historical development that are important to the character of its campuses and are valued by students, faculty, alumni, and the general public. However, the University of Georgia is a dynamic institution with the need to grow and change to accommodate expanding enrollment, evolving programs, and new initiatives. As has been the case in past decades, alterations and additions to existing buildings will be necessary as change occurs. This section focuses on guidelines to accommodate change to the University's historic resources while preserving the historical integrity through which they contribute to campus character. Change is a vehicle through which the University's distinctive identity can be strengthened and enhanced. The stewardship and appropriate treatment of historic buildings plays an important role in that process.

In conjunction with the Standard Operating Procedures outlined in this report, the guidelines that following guidelines should be considered both by University Facilities Planning Office personnel and outside design consultants during all stages of planned alterations to historic areas of the University campuses and properties.

Guidelines for Buildings and Structures

The basic guidelines for work on the University's historic buildings and structures are as follows:

- Undertake all work in compliance with the Secretary of the Interior's Standards.
- Retain the character of the historic building and environs by protecting the building and significant site features. (See Guidelines for Landscape Resources, below.)
- Ensure that proposed new elements or construction are compatible with historic character of the building and its site.
- Protect adjacent natural resources during construction activities.
- Document through detailed as-built drawings, photographs, and written narrative all changes and treatments to the building and its immediate site. Maintain records of treatments and preserve documentation according to professional archival standards. Maintain a copy of records in University archives.
- Retain features and materials at both the exterior and interior that date from the period of significance of the buildings to the greatest extent possible.
- Ensure that design and construction work is performed by trained and experienced personnel. Ensure that major repair efforts or modifications to historic buildings and structures are designed and overseen by experienced historic preservation professionals.

 Incorporate sustainable design principles in all future projects that respect the preservation principles listed above.

Prioritization of Treatment

Prioritization of work required on historic buildings and structures is determined through condition assessment, and may be phased if needed to address budget, schedule, and functional constraints. Repairs related to structural stabilization and safety issues, which may range from implementation of structural repairs to replacement of broken glass, should be completed first. Work related to exterior envelope waterproofing should follow to prevent water infiltration and deterioration of building envelope materials, and to address conditions that may lead to continued deterioration and loss of historic fabric. These types of repairs include repairs to roofing and flashings, masonry and wood cladding repairs, and window and door repairs. The next priority is modifications required to permit continued use of the building, such as work required to meet code, for universal access, for egress, to rehabilitate interior finishes, to upgrade building systems, or to address mitigation of hazardous materials (if present). This recommended prioritization should be adjusted as needed for specific projects, e.g., removal of hazardous materials may be required prior to implementation of other work.

Finally, in addition to the specific repairs recommended, cyclical maintenance tasks such as inspection, painting of exterior wood and metal elements, recoating of concrete and stucco finishes (if historically coated), pointing of mortar joints in brick masonry and stonework, replacement of joints sealants, tree care, and other ongoing maintenance tasks must be continually implemented to avoid damage to the historic site and building fabric and to reduce the need for large-scale repair projects in future.

All work performed on building and site features should be documented through notes, photographs, and measured drawings and/or sketches, or with as-built annotations to construction documents at project completion. The project work should be documented within the University system, and records maintained as a part of the permanent record of the building and to provide information for future repairs and ongoing maintenance. In addition, these records will allow future observers to identify which materials are historic.

Alterations and Additions to Historic Buildings

The following general guidelines should be used for planning and design involving historic buildings on University campuses. These general guidelines are followed by more specific guidelines related to the features and materials of historic buildings.

Alterations to Historic Buildings

As noted above, of the four recognized treatment approaches in historic preservation, the *Rehabilitation* treatment is specifically intended to address alterations and changes in use. In an academic environment, periodic alterations of existing buildings are typically needed to accommodate changing programs and technologies. Sometimes buildings designed for a use in one era cannot accommodate the changed requirements for that use in another era. At the University of Georgia, such changes are most clearly seen in the need for state-

of-the-art classrooms and in science disciplines where research facilities require larger and more complex spaces and support systems.

The development of a new use for an existing building originally designed for a different purpose is called adaptive reuse. A key question in addressing an adaptive reuse project is the ability of the building to accommodate a new use or needed changes to an existing use without the loss of historical integrity. The basic principle of adaptive reuse is that the reuse of historic buildings should have minimal architectural consequences. Reuses that result in the destruction of character-defining features should be avoided. Whenever possible, historic buildings should be used for purposes that respect their original fabric. A building's existing features should be utilized without compromising the understanding of their original purpose.

The following guidelines are related to the rehabilitation and adaptive reuse of historic buildings.

Historical Development

- When a rehabilitation and adaptive reuse project is to be undertaken, examine the existing building to identify historic building fabric and determine how the building has changed over time. Original construction documents should be consulted along with field survey.
- Identify which building features, configurations, and materials are related to different periods of change.

Period of Significance

- The period of significance is based on the building's historical development, and may include campaigns of change. Changes that have been made to a building that are older than fifty years of age are generally considered to be significant and usually relate to one or more of the historic contexts significant to the building.
- Some changes that damaged or destroyed historic fabric or are of poor quality or design may be considered inappropriate or not of significance even if they relate to a recognized historic context.
- In general, changes to a building within the past fifty years are not considered historically significant nor are changes of any period that diminish the character and quality of the building.

Character-Defining Features

- Identify the interior and exterior character-defining features, configurations, and materials that are related to the building's period(s) of significance.
- Character-defining features may include individual building elements (such as a wall, wall features, windows, doors, stairway, cornice, portico, etc.) or may be a material (such as brick, stone, metal, plaster, or wood).
- Identify features and materials that are not significant to the building and its period(s) of significance and that may be freely modified as appropriate to the proposed project.

Primary and Secondary Spaces

- As discussed further below in this chapter under guidelines for interiors, distinguish between primary and secondary spaces before determining preservation treatments.
- In general, entrances, public spaces, circulation spaces, and special spaces of high significance or design quality should be considered primary spaces. These spaces should receive the highest level of preservation treatment, preserving significant historic fabric with little change.
- Secondary, non-public, or repetitive spaces such as offices, classrooms, and spaces in everyday use may be identified as secondary spaces where an increased level of change is possible without the loss of historic integrity for the building as a whole.
- Utilitarian or historically unfinished spaces such as storage rooms, utility closets, mechanical rooms, basements, and attics can accommodate a high degree of change without loss of integrity to the building overall.

Appropriate Use

- A change or proposed new use for an historic building should be appropriate to the character of the building and permit retention of character-defining features to the greatest extent possible.
- Uses that require the reconfiguration, disfigurement, removal, or destruction of character-defining features should be discouraged.
- For significant features, the program, design, and layout for a selected use should adapt to the preservation requirements of the building, not vice versa.
- Appropriate uses and levels of change may be identified for primary and secondary spaces identified in the building.

Preservation of Historic Fabric

 In designing for adaptive reuse, preserve, rehabilitate, and repair existing features and materials contributing to a building's period(s) of significance to the maximum extent possible.

Repair rather than Replace

- Retain and repair historic building features and materials whenever possible to preserve historic building fabric.
- When a historic feature or material is deteriorated beyond reasonable repair, replace it in-kind, matching the existing design, materials, configurations, and fabrications.

New Features and Materials

 New features and materials introduced into a historic building as part of an adaptive reuse project should be compatible with, but distinguishable from, the historic features and materials.

- Install new elements in a manner that respects, complements, and reinforces the visual character of the historic building.
- The new features should not overpower or detract from the historic character and appearance of the building.
- Avoid dramatic contrast with historic materials and features in the design of new features.

Contemporary Character

- In general, new elements should be of current, contemporary design and should be designed in a simple, straightforward manner that complements existing historic character and detailing but is expressive of its own time.
- New features should not attempt to copy or introduce new historical detailing into the building that might confuse the historical record. Avoid false historicism.
- When a historic feature is missing, do not attempt to replicate it unless adequate documentation exists as to its design and composition. Do not use conjecture or use designs borrowed from other buildings.

Doorways and Entrances

- Preserve existing doorways and entrances to a building undergoing adaptive reuse. Preserve existing historic fabric and detailing.
- Preserve the primary entrance to a building as the primary entrance following adaptive reuse. To the greatest extent feasible while preserving the historic character and materials, accommodate universal accessibility at the primary building entrance.
- Do not close or infill historic entrances and door openings.
- Where historic entrances and doors have been replaced with inappropriate materials, consider replacing the non-historic entrances with new materials that better reflect the historic character of the building.

Windows

- Retain and repair existing historic windows and window detailing whenever possible.
- Where windows are deteriorated beyond repair, replace the windows with new windows using modern technologies but matching historic materials, configurations, and detailing.
- The introduction of weatherstripping and storm windows is an appropriate treatment and may be introduced to existing windows when compatibly designed and installed. Storm windows improve performance while preserving building fabric, and interior storm windows avoid intrusion to the historic character of the building facades.
- Do not close and infill historic window openings.

Accessibility

- Provide barrier-free access to buildings undergoing adaptive reuse to the highest degree possible without the loss of historic features, fabric, and integrity.
- Designs, configurations, and material for incorporating barrier-free access should be compatible with the historic context.
- Avoid damage to, removal of, or obscuring of historic fabric.

Mechanical Equipment

- Install new mechanical equipment and systems in locations and in a manner that has minimal impact upon the historic appearance of the building.
- On the exterior, equipment should not be visible from the building's primary facade(s).
- Do not infill windows with mechanical vents and equipment except in visibly unobtrusive locations, such as basement or attic windows on rear facades.
- Avoid cutting openings in historic walls for vents and equipment.
- On the interior, install ductwork and related equipment in secondary or utilitarian spaces, using existing concealed spaces, or new soffits and chases that are carefully designed to have a minimal impact upon interior spaces.
- Do not install suspended ceilings in primary spaces. Do not install suspended ceilings in secondary spaces unless unavoidable. If installed in a secondary space, make sure that suspended ceilings do not cross, reduce in size, or obscure historic window openings.

Additions to Historic Buildings

To a significant degree, the predominant character of the University of Georgia campuses is historic in nature and has been expressed in varying architectural styles over time. New additions will be required for historic buildings to accommodate expansion and needed change, and are sometimes a means of limiting impact to historic portions of a building.

The focus of the design of new additions to historic buildings should be the relationship of the addition to the character and appearance of the existing building to which it is attached. The following considerations for additions to historic buildings are based upon the best practices for historic preservation outlined in the Secretary of the Interior's Standards for Rehabilitation.

Demolition of Historic Resources

• The demolition of historic buildings, additions, features, or landscape resources should be avoided in planning for new construction, both new buildings and additions to existing buildings.

• Historic buildings and features should only be removed when the existing resources are deteriorated beyond the possibility of rehabilitation and reuse.

Materials

- The use of materials that are sympathetic to existing materials in the adjacent historic building is an important way for an addition to achieve a level of compatibility.
- Designers should observe how existing materials are used in the specific building to which the addition is related.
- The palette of materials used in the historic building—masonry, trim, windows, doors, decorative elements, etc.—should be identified early in the conceptual design process, along with the ways in which the materials are used.
- Historic and character-defining materials and uses should be identified. A
 palette of materials for the addition that is similar to and complementary with
 existing materials should be developed for review and approval. Materials
 need not always be exactly the same, but they should be of a visually
 complementary color, size, texture, scale, and level of craftsmanship. The use
 of materials that dramatically contrast with existing materials should be
 avoided.

Building Layout and Form

- New additions should be designed to complement the layout, form, and massing of the historic building with which they are associated.
- The predominant characteristics of the existing building should be identified—symmetry/asymmetry, receding forms, rhythms of openings, contrasting relationships, etc. Once identified, characteristics that can be reflected in the new addition should be explored.
- Additions should not obstruct or alter the historic building's primary facade, especially its entrance.
- Additions should generally be located to the side or rear of the existing building and should be secondary to its presentation, form, and character.
- Additions should be of the same average height, width, and overall mass as the existing building. In most instances they should have the same type and form of roof.
- New additions should be set off from the wall plane of the historic building where they adjoin; the joint should be clearly evident, distinguishing new from old.
- Building mass is directly related to the materials used on the primary elevations and the proportion of solids (walls) to voids (windows, doors, and other openings). Contemporary materials can sometimes create a weightless appearance in comparison to the historic masonry used traditionally. It is

important to balance the sense of mass projected by historic buildings even when new additions are more open and airy.

Architectural Vocabulary

As discussed in the chapters on individual campuses, architectural styles at the University have varied over the years and have generally related to national design trends. However, in each architectural style designers have often found ways to express the distinctive character of the particular campus where individual buildings are located.

Additions to historic buildings should use contemporary vocabularies and design elements to reflect and related to the historic character of the buildings associated with particular campuses. Many University buildings are highly decorative or strongly characteristic of a particular architectural style. The Federal, Beaux Arts, and Mid-century Modern styles used for many of the University's buildings each have distinctive design elements that can inspire contemporary expression.

Design elements related to sustainability are particularly appropriate for use in contemporary additions, finding a new way to express relationships to the community, landscape, and environment.

Historic Interiors

Treatment of the interiors of historic campus buildings is discussed above in the section on Alterations to Historic Buildings and is further addressed below.

The following guidelines are recommended:

- When change is undertaken, historic configurations, materials, and features should be retained to the extent possible.
- Wholesale removal and replacement of historic interior materials and features should not be permitted.
- Historic room configurations and circulation patterns should be retained, and historic interior building fabric, should be preserved to the greatest extent possible.

Approach to Interior Rehabilitation and Adaptive Reuse

When historic interiors are renovated, the preservation of as much original historic building fabric as possible is a primary goal.

- Historic building fabric and architectural details should be retained whenever possible. The removal or alteration of historic building fabric and architectural details diminishes the integrity and character of the historic building.
- In considering a new use for a building, careful planning and evaluation should first determine whether the proposed use is appropriate to the building and whether the degree of change necessary to accommodate the use can be accomplished without significant impact to the interior's historic character and integrity. Some historic buildings cannot accept dramatically different new uses.

• Proposed interior construction work should conform to the same principles and processes as that for exterior work on historic buildings.

As discussed above, in planning for interior changes, primary and secondary spaces of the historic interior should be identified.

- In primary spaces such as entrances, corridors, stairways, and special rooms, little or no change should occur.
- In secondary spaces of daily use such as classrooms and offices, moderate change may occur but as much historic fabric as possible be preserved.
- In utilitarian spaces such as storage spaces, mechanical spaces, closets, attics, and basements, more extensive change may occur. New mechanical or telecommunication service distribution (ducts, conduits, raceways, etc.) should be focused in these areas.
- The historically significant elements of each interior space should be identified. Historically significant characteristics of the building interior include room layout and plan, spatial flow, circulation patterns, light, and interior volumes. For example, historic interior building features include doors, transoms, frames, hardware, windows, light fixtures, blackboards, trim, stairways, etc., while historic interior materials include plaster, wood, tile, etc.
- Each historic space, feature, element, and material should be assessed for the degree of change it can sustain. The rehabilitation approach for each historic space should preserves as historic building fabric to the greatest extent possible.
- Design of the proposed project should take into consideration the sensitivity of interior spaces, how character-defining features and materials will be retained, and how less sensitive spaces will be adapted.
- Damaged or deteriorated historic building fabric should be repaired.
- When the extent of deterioration does not allow for repair, the material or feature should be replaced. Replacement should be completed in-kind as possible, otherwise with substitute materials to match the historic appearance. Replacement components should be documented.
- If an element is missing, it may be reproduced provided there is adequate physical and documentary evidence as to its form and appearance.
- If adequate evidence is unavailable, missing features may be replaced with contemporary elements that are physically and visually compatible with the context.
- New interior construction work should be compatible with existing historic character but should be distinguishable from it.
- Exact duplication of historic materials and elements for new features should be discouraged to avoid confusion between what is authentically historic and what is new.

 Where new walls or partitions are planned, consideration should be given to providing new trim and woodwork similar to historic woodwork in scale, material, and general character, but different in profile and detail, so that the new interior work is compatible and of similar quality without being a direct copy.

Building Codes and Emergency Egress

Most building codes have provision for the preservation of historic buildings. Many historic buildings do not conform to current codes and trying to make them conform would in some cases result in significant alterations and diminishment of historical integrity.

The goal in implementing code-related changes to a historic building is to meet the requirements of the code (e.g., safety-related modifications) as closely as possible while minimizing the negative impact on historic character. This usually involves working with code officials in creating a customized mitigation plan for the building. The mitigation plan identifies code and safety issues and outlines creative solutions to make buildings safe. Mitigation measures may include the installation of fire detection and alarm systems, emergency lighting, smoke barriers isolating portions of a building, new emergency egress stairways in appropriate locations, and sprinkler systems where possible.

Designers should meet with code officials early in the design process to review issues associated with an existing building and to identify an approach to public safety and code compliance that can be further developed and carried through the design process.

Barrier-Free Access

In 1990 the Americans with Disabilities Act (ADA) was passed, requiring the provision of basic levels of accessibility to almost all properties open to and used by the general public. The ADA is a comprehensive civil rights legislation that applies to private property owners, governments, employment centers, and transportation services. With the passage of the ADA, property owners became responsible for ensuring that barrier-free access is provided to buildings, sites, and landscapes that are open to the public.

Buildings existing prior to the passage of the Act are required to comply depending on their use. Existing buildings that provide public accommodations, such as lodging, food service, or public gathering spaces, are required to comply when it is "readily achievable" to do so. New construction and alterations to existing buildings are required to comply at the time of construction work. Standards for the design of accessible facilities are defined in the Americans with Disabilities Act Accessibility Guidelines (ADAAG), as well as in the American National Standards Institute (ANSI) and the International Building Code (IBC).

Section 4.1.7 of the ADAAG states that historic buildings are allowed certain exemptions from the design standards relative to the protection of existing historic fabric. These are considered "qualified historic buildings." This section prevents undesirable modifications to historic building elements judged to have historical or architectural significance. Flexibility with respect to the preservation of historic building features has been integrated into recent building codes and ADA standards. In cases where provision of accessibility is not possible without degrading the historic character of a building, alternative solutions are considered acceptable and should be developed. In general, with respect to barrier-free access:

- New construction should provide barrier-free access under the provisions of the Americans with Disabilities Act.
- When undertaking work required by life safety or accessibility codes, features should be designed to be functional but as unobtrusive as possible.
- Where necessary to accommodate changes in elevation, ramps should be designed to be compatible with the existing rhythm, symmetry, scale, and detailing of the building.
- When new stair towers or elevators are required to be installed on a historic building outside of the existing building footprint, the additions should comply with the guidelines outlined in this preservation plan for additions and new construction.
- Accessibility improvements should not be highly visible design statements that visually overwhelm or detract from the existing building.
- The best designs will provide barrier-free access that promotes independence for disabled persons while also preserving significant features, materials, and finishes.

Guidelines for Building Materials and Features

Design guidelines for historic buildings should address the treatment of historic fabric both during construction projects and during ongoing maintenance and repairs. Aside from treatments and changes made in the course of making alterations and additions, the preservation and integrity of historic buildings is greatly determined by the quality of their ongoing maintenance. The information below provides guidelines for the appropriate treatment of historic building fabric.

As noted above, at the University of Georgia, historic buildings are in generally in good condition. For the most part, the University's historic buildings were well constructed, and they are not being allowed to deteriorate. The quality of maintenance at the University is excellent. Buildings are being well maintained both inside and outside. A few exceptions are noted in the individual building assessments outlined in discussion of individual campuses, most notably related to locations where inappropriate pointing of masonry joints was performed.

Below are general guidelines for the treatment of most common historic materials used in University buildings. These guidelines are consistent with the principles embodied in the Secretary of the Interior's Standards, as also discussed in the chapter on Preservation Approach, especially the *Standards for Rehabilitation*.

When addressing construction and maintenance issues related to historic building fabric, repair is always preferable to replacement, even if the repaired historic fabric has visual imperfections. Preserving authentic historic building fabric is a

high priority. When replacement is necessary, replacement should be in-kind, matching the historic materials in form, configuration, color, texture, and appearance.

Concrete

Concrete is composed of portland cement combined with coarse and fine aggregate (gravel and sand). Concrete is very strong in compression, but steel reinforcement is needed to give concrete tensile strength. The alkalinity of the concrete protects the embedded reinforcement from corrosion; however, this protection is lost over time as the concrete carbonates by reacting with carbon dioxide in the air. Concrete in building construction may be cast-in-place or precast. Cast-in-place concrete is formed and poured at the site and is commonly used for foundations, floors, columns, walls, ramps, and walkways. Precast concrete is fabricated under controlled conditions and shipped to the site. Precast concrete was a featured material of the Mid-century Modern era and is expressive of changes in building technology and structural systems.

At the University, exposed concrete structures appeared in the late 1950s and early 1960s in the Science Complex on Compton Hill (1959–1960) and the new low and high-rise dormitories near the intersection of Lumpkin and Baxter Streets (1961–1967). Stegeman Coliseum (1964) is a unique expression of concrete on the Athens campus, with its sweeping poured-in-place concrete shell, concrete wall screens, and massive buttresses.

Concrete Deterioration

Deterioration of concrete often occurs through cracking or delamination. Cracking can be caused by the shrinkage of the concrete during installation, thermal expansion and contraction, or structural stresses. The exposure and rusting of steel reinforcing causes cracking as the rusting metal expands. Delamination (the loss of material in thin sheets) may be caused by inherent flaws in the original material, and can be exacerbated by freeze/thaw cycling, salts, and structural stresses.

No significant deterioration of concrete was observed in campus buildings during field reviews undertaken in preparation of this preservation plan. Maintenance personnel should undertake periodic inspection of buildings where concrete materials are exposed to the weather.

Concrete Repair

- Removal of deteriorated concrete should use methods that do not damage surrounding sound concrete.
- The surface of the concrete to be repaired should be properly prepared to provide a mechanical key with the new concrete repairs.
- Corroded reinforcement should be exposed, cleaned to bare metal, and painted with a rust-inhibiting coating.
- Concrete repair patches should be formed in place rather than trowel-applied.
- Repair mixes should be formulated to match the strength and appearance of existing material.

 Test samples should be prepared off-building with various mixes and finishing and curing techniques to find the closest possible match in color and texture. Once an appropriate mix design is determined, trial samples should be prepared in situ for evaluation.

Masonry Walls

Many of the historic buildings at the University of Georgia use masonry as an exterior building material. Brick is the most prominent and character-defining building material at the University regardless of period of construction or style. Limestone has been used as a featured secondary material in historic University buildings over the years.

Brick Masonry

Brick has been the primary exterior wall material for historic buildings at the University of Georgia from the University's earliest days until the Modern era. Early brick making technology produced bricks of varying quality, and most brick was produced locally. The quality of the brick used in older historic buildings varies considerably, depending upon the raw materials used, shaping methods, firing methods, and other manufacturing considerations.

In some cases, the brick used for early buildings at the University of Georgia appears to have lacked durability under normal weathering. Many of the early buildings have been covered with stucco, an indication that the brick may have experienced deterioration and needed to be protected from further weathering. The exterior brick walls of Old College were reconstructed due to deterioration in about 1910.

Due to the nature of the firing process, individual brick units typically have an outer hard-fired surface and a softer inner core. Without the outer surface, the brick is vulnerable to rapid deterioration. Removal of the outer surface by spalling or by harsh abrasive or chemical cleaning greatly reduces the durability of the original brick. Brick functions best when laid with bricks of a similar type and with a mortar mix that is carefully matched to the compressive strength of the brick itself.

It is important that brick masonry be protected from concentrated water runoff, through adequate roofing, flashing, and site drainage. Bricks are porous and can absorb moisture. Water infiltration can cause freeze/thaw damage to bricks in cold weather. Water from the ground can carry salts in solution into the masonry, which can cause internal stresses as the salts form during evaporation. Waterproofing coatings are not appropriate for above-grade brick masonry because they can trap water within the masonry.

Stone Detailing

Limestone and granite were used as trim material for sills, lintels, watertables, and capstones in the masonry walls of many University buildings. Other stones were also used as accents in some buildings. Limestone is a light-colored homogeneous stone with few mineral inclusions and can be so regular in color and texture that it can easily be confused for cast stone. Its regularity, fineness, and relative softness make it ideal for the carved columns, capitals, sills, and other detailing common to Beaux Arts design.

Masonry Deterioration

Only limited masonry deterioration was observed during field surveys of University buildings conducted in the preparation of this plan. Although masonry is generally very durable, proper care should be taken to ensure its long-term survival.

Open masonry joints are a common problem in historic University buildings, especially at locations that are difficult to access and inspect. Open joints allow water to enter the wall. Open joints are often most prevalent at upward-facing locations such as watertables and parapet copings. Parapet walls are vulnerable because of their exposure to weathering from two sides. At the University of Georgia, parapets appear to be well maintained, and sealant was often observed at upward-facing joints.

Surface deterioration and spalling are problems caused by water infiltration into masonry. Saturation of porous brick due to water infiltration from above or from the ground can result in spalling. Spalling exposes the soft inner core of the brick to weathering, accelerating deterioration. Efflorescence, a whitish stain on brick that is the result of crystallized water-soluble salts, is often a sign of water saturation.

Surface deterioration and spalling are also common in masonry at the base of many entrances to buildings. This condition is often caused by the use of salts for deicing in winter as well as to saturation and freeze/thaw cycles. Sodium, calcium, and magnesium chloride based deicing salts can damage entryway and foundation masonry, as well as doors and door frames. The salts are absorbed into the masonry with the water. As the masonry dries, the salt residue forms deep within or on the surface of the masonry causing internal stresses and damage.

Masonry walls may be damaged by the corrosion of embedded metal elements and structural stresses. Embedded metal materials, such as steel angles, metal anchors, and through-wall pipes, will corrode in the presence of water. The expanding of corroding metal can crack masonry joints and even stone or brick. The rusting of steel lintels over windows can lift and crack surrounding masonry. The use of steel lintels over windows became common during the Beaux Arts era, and corrosion-related cracking is evident at the lintels of a number of University buildings.

Inappropriate treatments and repairs can cause further masonry deterioration. Historic masonry is sometimes repointed with modern portland cementcontaining mortars with high compressive strengths that were not available historically and which are inappropriate to the historic walls. Inappropriate pointing was observed on several University buildings on North Campus during field surveys in preparation of this plan.

Sealant should only be installed in masonry units located on wash surfaces, such as parapet copings, projecting watertables and belt courses, and steps. Sealant is not typically appropriate for masonry joints on vertical wall surfaces. Sealant will trap water within the masonry wall. Structural problems, such as settlement, may shift an entire wall, causing cracking through joints as well as through stone or brick units. Cracking along the mortar joints or through masonry units is often an indication of cyclical movement or displacement. Masonry cracks provide opportunities for moisture penetration which leads to further deterioration. Such movement appears to have occurred at Lustrat House on the South Quadrangle in the past. If cracks or displaced masonry are observed in a masonry wall, a structural engineer should be consulted to determine the cause and appropriate remedial treatments.

Masonry Repointing

Repair of mortar joints should be undertaken when open or deteriorated joints are observed.

The composition of mortar used for repointing should duplicate that of the original historic mortar mix as closely as possible. An historic mortar analysis can provide valuable information for characterizing the original mortar, particularly in matching the sand color, mineralogical content, and grain size. The type of binder originally used—commonly lime putty, natural cement, and/or portland cement—can also generally be determined by examination of the historic mortar.

The compressive strength of the mortar is also important. The new mortar must be weaker and more permeable than the existing masonry while achieving good bond with the masonry units.

Matching the color, texture, and appearance of the historic mortar is achieved through trial and error using test panels. Sand matching that of the historic mortar should be used. Mineral pigments may be added to test panels to match the color of historic mortars. Multiple test panels are usually needed to achieve the right color and texture match.

Repointed joints should match historic mortar joints in color, texture, joint size, profile tooling, and any decorative details, such as penciling.

Sealants

- Elastomeric sealants should be applied to joints in upward-facing joints such as parapet copings, sills, watertables, projecting cornices, and steps. These joints are particularly prone to water penetration.
- Proper sealant installation involves installation of a backer rod with the correct diameter for the size of the joint. Sealant must be installed against the backer rod, forming a concave joint between the masonry units.

Crack Repair

- Cracks in masonry should be properly diagnosed before undertaking any repair work.
- Cracks caused by structural stresses should be investigated by a structural engineer to determine their cause and appropriate remedial repairs. Any underlying structural problems must be addressed before performing repairs.
- Cracks through masonry joints should be repaired by repointing the affected joints.

- Cracks through brick units usually require removal and replacement of the cracked brick with new brick matching the historic wall in size, color, and texture.
- Isolated cracks through stone masonry units may be filled with cementitious grout to limit future water infiltration.
- Not all cracks in masonry require repair. Cracks may simply be a part of the natural weathering process for some masonry. Small, hairline cracks on vertical surfaces of stone masonry should not be repaired unless they are wide enough to allow water to infiltrate into the masonry wall.
- In some cases, continuous vertical cracks may be an indication of the masonry accommodating cyclical thermal movements. In these cases, the cracks should usually be sealed with elastomeric sealant to accommodate future movement while preventing water infiltration.

Stone Repair

- Small chips or shallow spalls in stone units usually do not require repair. Retooling of the stone to blend sharp edges and ensure that water drains from the surface may be the only repair that is required.
- Larger spalled or damaged areas of stone masonry should be repaired by installation of a masonry dutchman. In this procedure, the deteriorated portion of the masonry is cut away and a new piece of matching stone is installed to match the original profile.

Repair of Corroding Lintels

Steel lintels are used over windows in a number of historic buildings at the University. Cracking of masonry due to corrosion of lintels was observed at several locations.

- Repair of lintels begins with removal of the overlying brick or stone units to expose the lintel. The original brick or stone should be removed as whole units, cleaned of mortar, and salvaged for use in the masonry repair.
- The corroding lintel can then be cleaned of corrosion and coated with a rustinhibiting coating system, or (depending upon the configuration and severity of corrosion) removed and replaced with a new lintel. The use of hot-dipped galvanized steel should be considered for new lintels. In either case, the lintel should be properly protected by a new flashing system.
- Whenever possible, salvaged brick or stone should be used to reconstruct the masonry over the window lintel. It is important that the masonry repair follow the brick or stone size, pattern, and row height in the surrounding wall. Replacement mortar should match the original in its thickness, color, texture, and finishing.

Masonry Cleaning

In considering the cleaning of historic masonry, evaluate the historic material, the type of soiling, the reason for cleaning, and the cleaning method.

- Cleaning should be undertaken only where dirt or other material obscures significant architectural features, or is causing, or has the potential to cause, damage to masonry.
- Cleaning methods should be carefully selected to be effective without harming the historic material.
- Cleaning treatments fall into three general categories: water-based, chemical, and mechanical methods. Water-based methods include pressurized water spray, heated water treatments, and mist-spray. Chemical methods involve the use of soaps, detergents, acidic and alkaline cleaners, and biocidal treatments. Chemical cleaners may be applied in gel, liquid, paste, or poultice form. Mechanical cleaning methods include the use of tools, such as brushes, scrapers, and specialized microabrasive and laser-based cleaning equipment. It is possible to combine treatments for the best results, such as combining mild mechanical methods with low-pressurized water spray.
- For all types of cleaning, test samples at representative unobtrusive locations should be prepared and carefully evaluated prior to proceeding with the overall cleaning work.
- Sandblasting should never be used to clean historic masonry because it is extremely damaging to the masonry substrate.

Architectural Metals

Architectural metalwork is found on the exterior of historic University buildings in entrances, windows, handrails, canopies, and decorative light fixtures and on the interior in stairways, hardware, and decorative features. In Mid-century Modern buildings, beginning at the University in 1959, metal was used for more expansive curtain wall construction, including aluminum frames and coated metal infill panels.

Metal Deterioration

Corrosion is the major cause of deterioration of architectural metalwork and is triggered by the presence of moisture. Corrosion can be exacerbated by corrosive environments, such as salt-laden water. Metal elements where water can collect, such as at the bottoms of handrails and light posts, are particularly vulnerable. Corrosion of steel involves significant expansion of the corroding metal, which can cause cracking of adjacent masonry or concrete.

Metal Repair

The architectural metalwork of historic buildings can be maintained through application of protective coatings where appropriate. Some metals must be painted for protection while others may be left unpainted.

- Cast iron, steel, and tin should be painted to protect them from corrosion.
- Copper, bronze, aluminum, and stainless steel should generally be left exposed, unless they were coated as part of the historic treatment of the building.

- Deteriorated paint on painted metal surfaces should be removed using appropriate methods, including wire-brushing for non-decorative elements exhibiting light rust, or chemical paint removal for heavier built-up paint. Historic paint coatings on metal often contain lead; appropriate abatement measures should be followed when lead-containing paint must be removed.
- Severe corrosion may require that entire sections of metalwork be removed to a shop for repair.
- Newly-cleaned metal should be immediately protected with a rust-inhibiting primer and finish coating designed for use on metal substrates.

Wood Framing, Siding, and Trim

Wood is used to a limited extent in most of the University's historic buildings. Wood was a primary structural, functional, and decorative material in the University's earliest buildings, and wood cornices and other details are present on some twentieth century Beaux Arts buildings as well. Interior structural framing, floors, and stairs were often built with wood in early buildings on North Campus. The need for fire protection led to the substituting of concrete and metal floor and stair systems for wood in the early twentieth century.

Wood windows were commonly used in University buildings up to the early 1950s, in part due to the predominance of use of the Colonial Revival style for University dormitories during the 1930s. Metal windows were substituted for wood in most academic buildings by the 1920s. As discussed further below, windows are important character-defining features in historic buildings. Where original wood or metal windows are still present, they should continue to be preserved.

Wood remains a featured material of historic interiors in many historic University buildings. Where extensive renovations have been undertaken, such as in most buildings on North Campus, the historic interior woodwork that remains is not always readily understood.

Deterioration of Wood

The most prevalent problem affecting exterior architectural woodwork is water penetration from poorly maintained roof, flashing, and site drainage systems. This can often be seen at various wood elements, including cornices, porch columns, and wood cladding. Water penetration can lead to wood rot and insect infestation. Little wood deterioration was observed during field surveys in preparation of this plan.

Wood elements are also vulnerable to infestation with termites. Termites can cause significant damage to wood framing or finish elements before the damage becomes readily visible.

The condition of wood elements is highly dependent upon the extent and quality of regular maintenance. Without routine inspection and prompt remedial action, wood deterioration will accelerate rapidly on both the interior and exterior. Early detection and repair avoids more extensive and costly repair later.

Historic craftsmanship was based upon the uses and characteristics of different wood species. In rehabilitation and repair projects, replacement wood should

match the historic materials. Availability, cost, and quality, however, are also important considerations in the selection of wood species. For instance, oldgrowth white pine was used extensively for structural framing historically and was much denser than the white pine available today. Cedar, on the other hand, was not readily available historically, but may now preferable for use in wood detailing that will be exposed to the elements because of its resistance to weathering.

Wood Repair

- Painting of exterior woodwork is the primary means of its protection from weathering. Painted surfaces should be well-maintained.
- Wood elements should not be removed for minor defects of appearance. Retaining authentic historic building fabric is a higher priority and more important to a building's historic integrity than a defect-free appearance.
- Severely deteriorated wood should be removed and replaced. It is usually not necessary, however, to remove an entire wood element that has localized areas of decay. Rather, partial replacement with a wood dutchman element can be an effective repair.
- In areas of significant or ornamental wood elements, commercially available epoxy consolidants and fillers formulated specifically for wood can be considered to allow repair of the original historic wood element. Before installing epoxy fillers, it is necessary to remove all decayed and softened wood from the repair area.
- New wood elements should match the historic feature and material and its visual and physical qualities, duplicating its size, shape, texture, and detail. If the original wood species is not readily available or lacks the inherent decay resistance of the historic material, a compatible decay-resistant wood type should be used.
- The installation of vinyl or aluminum siding materials on historic buildings that were original clad with wood siding is not an appropriate preservation treatment, as these treatments significantly alter the historic appearance and character of a building by removing or covering important details such as cornice, window and door trim, and wood siding.

Roof and Drainage Systems

Roof systems are the most important building element in the overall protection of a historic building and should have the highest priority in building maintenance. Roofs not only keep water out of a building's interior, they keep water from penetrating and damaging exterior walls and structural members. Providing a weather-tight roof and properly functioning drainage system is critical to the preservation of historic buildings.

The roofs of many historic buildings at the University are low-slope and are not visible from the ground. These roof surfaces are not generally considered to be character-defining features of the historic buildings. The roofs of other early University buildings are more steeply sloped and are important character-defining elements of the building. In most cases, the original roof finish material at steep-sloped roofs has been previously replaced.

Roof Maintenance and Repair

Continued and ongoing maintenance is the most effective means of preventing serious problems resulting from the deterioration of roof and drainage systems. Failure to effectively control and conduct water from roofs and away from buildings can cause multiple and expensive deterioration problems in masonry walls as well as in concrete, steel, and wood structural components.

- Roofs should be thoroughly inspected at least once a year. Roof drainage systems should be evaluated holistically as an architectural, landscape, and civil engineering issue. Inspections should review how water flows on the roofs, is conducted to the ground, and carried away from the building.
- Many of the University's historic buildings have internal roof drains which must be kept clear and flowing.

Flashing is a continuous metal barrier that seals vulnerable roof joints and is used to bridge gaps between dissimilar materials. Flashing prevents water from infiltrating the building at corners, ridges, valleys, parapets, or other changes in plane that are prone to separation, including joints between an original building and additions, and at the perimeter of openings in the wall (such as at doors and windows).

• Repair or replacement of deteriorated flashing should be part of routine preventive maintenance. In the inspection of flashing, small holes or pinholes can be a sign of trouble in addition to obvious flaws such as cracks or corrosion.

The repair of roofs that are a visible part of the building's character should be executed in-kind to match historic conditions, including materials and workmanship.

- Significant materials should be replaced to match the historic materials. For example, copper gutters should be replaced with copper, and galvanized with galvanized. The gutter profiles and mounting system should be consistent with the historic elements.
- When in-kind replacement is not feasible, replacement materials should match the visual and physical characteristics of the historic roof system.
- At the University of Georgia, the roofs of many historic buildings are sloping and may have had wood or slate shingles. These roofs appear to have been replaced with new roofs of metal, synthetic slate, or asphalt shingles. When cyclical roof replacement is needed for these buildings, the original roof material should be used for the new roof if feasible.
- The installation of snow guards should be considered on sloping roofs above the eaves and up the lower portion of the roof to prevent snow and ice from falling on pedestrians.
- Where deteriorated or missing, historic gutters and downspouts should be replaced in-kind to match historic visual qualities including materials, profiles, and details. Replacement gutters should not alter the character of the building's eaves and architectural detailing.

Where low-slope roofs are not readily visible from grade, it is generally acceptable to use contemporary roofing systems that meet functional needs. Sight lines from nearby buildings, streets, and other vantage points should always be evaluated in determining when to use contemporary roof systems. Slope, drainage, and insulation requirements should be reviewed when replacing roofing at low-slope roof areas.

Doors and Windows

Doors and windows are significant character-defining features that should be preserved and maintained whenever possible. At the University of Georgia, many of the historic doors and windows have been replaced over the years.

Most of the original doors on the University's older historic buildings were made of wood and had a limited amount of glass, if any. The effects of constant use and weather exposure, however, undoubtedly led to severe wear. In many cases, the original wood entrance doors have been replaced with metal door systems, often incorporating expansive glazing.

Most of the University's early buildings were constructed with wood doublehung windows. Buildings from the mid-1920s onward tended to use steel casement, awning, and hopper windows. Historic windows were usually of high quality and when maintained can continue to provide appropriate performance. Thermal efficiency and comfort can be improved through the installation weatherstripping and storm windows, preferably on the interior.

Door Treatments

- Doors are subject to wear from exposure to the weather and frequent use. Periodic inspections are important to ensure that doors are operating properly and hung correctly to avoid failure at hinges or other hardware. Push plates and kick plates protect the finishes of wood doors in these vulnerable areas. Wood and metal doors are also damaged by moisture which causes wood rot and corrosion. Deicing salts can cause damage to wood finishes and dramatically accelerate the rate of corrosion.
- Wood doors can be refinished to repair scratches, worn areas, or deteriorated finishes. It is important to match the original finish of the wood doors in both color and gloss level and to retain the original design intent. Where the original door included a clear finish (such as stain and varnish), contemporary UVresistant clear finishes can be considered for use.
- Missing elements of historic doors should be replaced in-kind, and the door's original size, profile, and configuration should be preserved.
- Glazed entry features such as transoms, sidelights, and partially glazed doors should also be retained, repaired, or replaced-in-kind.
- In some situations, improved weather-stripping around door frames can reduce air and water infiltration and help protect a door's historic features.
- Deteriorated doors that are beyond repair should be replaced in-kind, to match the original in materials, design, visual qualities, and size.

- Where original historic doors have been replaced with inappropriate modern doors, when the existing doors reach the end of their useful life, the doors should be replaced with new replica doors matching the character of the original doors. If no documentation of the original doors is available, a sympathetic door design based on interior doors of the building or other similar campus buildings can be considered.
- Where required by code, retrofitting of exterior doors for accessibility, emergency egress, and fire-safety should be done in a manner that preserves the door's historic character. Common alterations include modification of hardware and/or door swings and replacement of original glass with safety glazing.

Window Treatments

Historic windows are critical aesthetic elements of a building and proper treatment is extremely important in retaining historical integrity. Both fenestration patterns and the configuration of individual windows are characterdefining features that contribute to a building's design, proportion, and rhythm. Historically, light and ventilation were important to building use and performance before electric service and artificial air conditioning became commonplace. Windows were designed to maximize interior natural light. Natural ventilation remains important today. Windows placed on opposite sides of a building or room allow cross-breezes to circulate fresh air to inside spaces.

Storm windows can be used to help achieve increased thermal efficiency at historic windows without removing historic materials and features.

- Repair and retrofit of historic windows can include addition of new weatherstripping and adjustment for the tight fit of sash in the frame. This work can greatly reduce air and water infiltration and provide thermal efficiency and occupant comfort.
- The use of exterior storm windows can be considered, particularly where the original window is relatively simple in design.
- Interior storm windows are available and are particularly appropriate for use with historic windows in institutional buildings. Interior storm windows maintain the appearance of the exterior facade and generally are configured with very narrow frames and as single large panes covering the entire window opening. These types of storm windows are generally left in place at all times, so they are most appropriate in buildings with contemporary HVAC systems where operation of the windows for ventilation is not needed.
- Replacement of windows should only be considered when the original windows are severely deteriorated beyond repair, or where the original windows were previously removed and replaced.
- Replacement windows should match the historic window type of operation, shapes, widths, thicknesses, and configurations of the stiles, rails, mullions, and muntins.

Storm windows can be used to help achieve increased thermal efficiency at historic windows without removing historic materials and features.

- The use of exterior storm windows is sometimes an appropriate treatment, especially if storm windows or screens were present historically. Where divided storm windows are used, window sash divisions should match those of the historic windows behind.
- Interior storm windows are available and are particularly appropriate for use with historic steel windows. Because interior storm windows maintain the appearance of the exterior facade, they are preferable, and often less expensive, in cases where the windows are non-operable. Inexpensive and reversible magnetic storms can be removed in warm weather so that windows can open.
- Interior storm windows should be installed with air-tight gaskets, ventilating holes, and/or removable clips to avoid condensation damage to wood or steel sash.
- Where interior storms are used, sufficient ventilation must be provided at the historic prime sash to avoid moisture condensation that will damage the historic unit.

Guidelines for Landscape Resources

The overarching concept for appropriately managing the historic landscapes of the University of Georgia is to maintain a flexible approach to preservation, where historically significant landscape features are retained as possible, while features that are less significant are adapted to meet the changing needs of the University. This concept is born from the knowledge that, while the University has a unique historic character that is defined by important historic resources, the campus remains a living entity that must constantly evolve according to the current and future needs students, faculty, staff, and visitors.

The primary preservation concerns for University of Georgia historic landscapes are that character-defining spatial patterns and relationships are retained and respected, that the particular aesthetic that has developed at each property over time, conveying a particular sense of place, is also retained, and that new features sited within the context of historic areas are visually compatible with the character of the cultural landscape. These guidelines address the recommended historic landscape management goals articulated below.

The information contained in this section is offers overarching guidance covering a broad scope of management issues relating to the University of Georgia's historic landscape. These guidelines address issues that may be found in, or affect, multiple locations throughout the University system of properties. The guidelines address those issues that are common throughout the campuses, regardless of geographic location. They should be reviewed and implemented prior to undertaking any alteration or new work on historic properties. In addition to general guidelines, topics include site planning, spatial organization, land use, natural features and systems, planting and vegetation, circulation, paving and parking, walls and fences, site furnishings, commemorative and artwork features, and views and vistas.

To maintain the historic character of the landscape of University of Georgia campuses and properties, the following management goals are recommended:

- To maintain a sense of place while adapting to shifting and growing student and faculty populations.
- To understand that the historic campus landscape has value equal to that of historic architecture.
- To undertake planning within proposed new developed areas taking into consideration the character of the existing campus.
- To consider both the opportunities and constraints of altering the cultural landscape prior to undertaking any new planning and construction initiatives.
- To implement a process for evaluating how a new campus project or undertaking may affect historic landscape resources.
- To utilize the latest technology—including GIS systems, remote-sensing technology, viewshed analysis software, and new archaeological methodologies—in order to identify landscape features and accomplish landscape-related goals.

General Guidelines

- Protect and maintain the historic landscape as well as the architectural character of the campus.
- Endeavor to preserve and maintain historic landscapes in good condition and to present a positive appearance to alumni, visitors, students, and the general public, while protecting their enduring value.
- Promote functionality and convenience, energy efficiency, and comfort as part of the landscape and built environment of the campus as a whole, without compromising the integrity of historic features.
- Institute environmentally sound cultural and natural resource treatment and maintenance methods that are also culturally sensitive and sustainable over the long term.
- Ensure that any design guidelines developed for the campus encourage adaptation and change that also preserves character-defining features.
- Continue to use a property as it was designed to be used, or find a new use that minimizes changes to character-defining features.
- Identify and retain distinguishing landscape qualities and characteristics.
- Maintain, protect, and repair existing character-defining features, materials, and finishes. If features are deteriorated beyond repair, replace in-kind.
- Be authentic: if a feature is missing or must be removed, use accurate documentation to guide replacement.
- Respect the evolution of historic changes, fashion, taste, and use.
- Understand that the historic campus landscape has equal value to that of historic architecture.
- Recognize that the relationships between buildings and landscaped open spaces help define the character of the campus and must be preserved, maintained, used, and developed carefully.
- Avoid moving historic buildings, structures, or landscape resources. Moving a historic resource destroys its association with its original setting, landscape features, and potential archaeological information. Historic resources may be moved as a last resort to avoid demolition; however, the resource should be relocated to a new site with a similar historic setting and every effort must be made to preserve original fabric.
- Avoid removing significant historic buildings and structures from the landscape.
- Avoid additions to historic landscapes and structures whenever possible. If additions are required, design them to be as unobtrusive as possible and to not overwhelm the original structure. Ensure that additions are compatible in design and detailing to the original structure, while clearly representing a contemporary work.

- Base all work involving historically significant features on historic documentation derived from research and evaluation consistent with the National Register of Historic Places and the Secretary of the Interior's standards.
- Avoid introducing conjectural features into the landscape as a means for restoring a historic condition.
- Minimize the visual impact of functional elements such as parking lots, trash receptacles, dumpsters, traffic signs, mechanical and electrical equipment, bus shelters, and utility lines within historic campus spaces. Carefully group, place, and screen these types of features to be as inconspicuous as possible and respectful of adjacent historic landscapes and buildings.
- Design universal accessibility features to be the least intrusive to the character of historic spaces and places, and endeavor to maintain the symmetry, detailing, and visibility of important building facades and landscapes.
- Avoid adding parking areas in historic landscapes.
- Avoid developing new uses for existing buildings and landscapes that require new parking lots within historic landscapes.
- Document all alterations to historically significant features through drawings and photography, and maintain the documentation in an archival setting.
- Develop a process for completing all physical planning and construction work to occur within areas identified as historically significant to include (see also standard operating procedures included in this report).
- Review the most recent versions of the University's master plan, any relevant precinct studies, and this Historic Preservation Plan to determine the project's compatibility with existing planning documents.

Natural Systems and Features

Natural features and systems are often a key consideration in the origin and siting of cultural features. Protecting and celebrating natural features help to convey a unique sense of place within the built environment. The responses of cultural resources to topography and natural resources often determine aspects of site design. Landform and natural resources such as streams, hills, ravines, forests, and prime agricultural soils often provide a context for cultural resources, and affect their development. Preservation of the relationship between a resource and key contextual conditions is often desirable.

- Maintain as possible the topography that is characteristic of each historic campus or property landscape.
- Limit ground-disturbing activities when implementing new development and construction. Avoid excessive grading and make all efforts to control soil erosion and run-off.

Spatial Organization

A clear understanding of how landscape resources are sited and how context contributes to significance should guide management decisions for historic university landscapes. The relationships between buildings and landscaped open spaces define the character of the campus or property and should be preserved, maintained, used, and developed carefully.

- Maintain historic spatial patterns as possible when introducing new features.
- Maintain the relationships between historic buildings and between other historic landscape features. If a feature is to be removed, consider replacing it with a compatible new feature in order to maintain the historic spatial pattern.
- Evaluate trees and other landscape elements to ensure that they do not obscure important spatial and visual historic relationships between buildings, paths, roads, and spaces.

Land Use

Land uses often influence the form and configuration of built features. They also influence the way that the community interacts with a place. Retaining historic land uses, or adaptively reusing historic resources by introducing a compatible new use, are often important goals of historic preservation.

- Maintain the distinct historic land uses that currently exist within each landscape character area.
- Limit, monitor, and control access to areas that are vulnerable to damage from human access or use.

Circulation

Circulation includes roads, parking, walks, and stairs. Circulation systems can be an integral part of the design of a historic landscape, or can interfere with spatial organization and views.

- Retain all historic sidewalks and pedestrian circulation patterns.
- Where replacement of historic paving materials is required, replace in kind, utilizing materials that are similar in appearance and composition to those that must be replaced.
- Avoid altering existing circulation routes or establishing new circulation routes unless absolutely necessary.
- Avoid constructing new roads within historic landscapes.
- Avoid removing roads that are historically significant.
- Minimize the visual impacts of vehicles and vehicular access systems. Consider the potential impact on views when planning to add or change circulation systems.
- Minimize the visual impacts of any new pedestrian access systems. Also consider the potential impact of circulation systems on sensitive natural and

archaeological resources. If issues of concern cannot be mitigated, consider using a different alignment for the walk that fulfills related goals.

Vegetation

The University of Georgia properties and campuses feature combinations of historic plantings and contemporary plantings, as well as native plant communities, some of which are presented in carefully designed compositions.

- Identify and document the locations of historic plantings and plant materials. Determine and document the design intent associated with historic plantings on campus. Utilize the information to maintain historic plantings in good condition and replace them when needed. When replacement is necessary, install plant material that is consistent with the historic. If the historic plant is no longer available, or invasive species were used, replace it with a species that is similar in terms of size, form, color, and habit and not invasive.
- Develop and adhere to a planting master plan that contains a list of preferred material for any future plantings within historic landscapes of the university system.
- Ensure that the design palette incorporates appropriate species for each location. For example, avoid using large-scale shrubs adjacent to walks, which will require excessive pruning to maintain at an appropriate scale.
- Rely on vegetation that is native to Georgia, and the physiographic province of the campus or property, for non-specialized or non-thematic plantings, as they typically require less water and maintenance, and survive longer. Avoid installing vegetation that is classified in Georgia as invasive. Monitor for and control invasive plant species. Remove and/or control any invasive species that have already been planted or naturalized.
- Evaluate the health and vigor of significant historic trees and shrubs using an arborist and horticulturalist, and develop a plan for long-term treatment and maintenance.
- Undertake periodic and cyclical maintenance of all vegetation in order to prevent deterioration or loss of plant material. Frequent maintenance of vegetation will also prevent damage to adjacent and nearby resources, such as historic buildings and sidewalks. Maintenance practices should be tied specifically to the design intent of the historic landscape.
- Remove dead trees and shrubs and those identified as potentially hazardous to individuals or resources because of their health or condition. Avoid the use of heavy equipment during removals.
- Cut all tree and shrub trunks to be demolished flush with the ground, and grind to remove. Avoid leaving stumps.
- Utilize the most ecologically sensitive means of vegetation removal. Consider using mechanical means of removal, such as hand-pulling or removal with tools, before employing chemicals.
- Employ best management practices in maintaining plants and plant communities.

- Practice integrated pest management (IPM) wherever possible. Avoid the use
 of pesticides and herbicides unless absolutely necessary. If chemical controls
 are used, apply the minimum necessary to achieve the proposed effect. Allow
 only qualified applicators to apply chemicals.
- Avoid using de-icing products with high-sodium content that can damage plants and materials.
- Existing vegetation, especially trees, in construction areas should be protected from soil compaction and closely monitored throughout the construction period. Tree roots typically extend at least to, and usually well past, the drip line of the tree. At a minimum, the area within the drip line should be protected from soil compaction from construction equipment, which will inhibit water penetration to the root zone and threaten the health of the tree.
- Establish careful policies for commemorative and garden features such as memorial trees and other plantings that respect the character of historic landscapes.

Buildings and Structures in the Landscape

 Avoid removing or relocating significant historic buildings and structures. If removal of historic buildings and structures are planned for removal, document these features thoroughly through drawings and photography.

(Refer to Guidelines for Buildings and Structures, above.)

Views and Vistas

Views are an essential part of the campus experience. Buildings face one another across open space forming quadrangles, while paths offer glimpses of spaces, places, and important buildings, and windows and plazas help connect members of the campus community with each other and their environment. Views and vistas should be an important consideration in the preservation of historic landscapes at the University of Georgia.

- Avoid placing new features in such a way as to compromise the views of any historic building facades or important landscape features.
- Maintain views and vistas to the natural setting of each property. Avoid new development that will block existing views.
- Undertake periodic maintenance efforts to thin or remove vegetation that is obscuring important views.
- Also consider utilizing vegetation to screen undesirable views before constructing new walls or fences.
- Minimize the visual impact of vehicular circulation systems. Consider using techniques such as vegetative screens to diminish views of roads and parking.
- Minimize the visual impact of functional site elements such as parking lots, trash receptacles, dumpsters, traffic signs, mechanical and electrical equipment, bus shelters, and utility lines within historic areas of the campus.

Carefully place and screen functional site elements to be as inconspicuous as possible and respectful of adjacent historic landscapes and buildings.

Consider incorporating views of the surrounding landscape into the campus experience.

Site Furnishings

Site furnishings are essential elements of the campus that afford a sense of comfort, scale, and welcome for the University community. There are few site furnishings on campus that are historic, however. Nonetheless, all site furnishings should be maintained in good condition. Generally, they should be considered as a part of a larger system of features that either conveys a sense of identity to the campus as a whole, or to specific precincts or areas of the campus. Site furnishings should be designed to be as non-intrusive as possible. By conceiving of site furnishing as consistently represented systems of features, the University can reduce visual clutter and allow the character of the architecture and landscape to dominate.

- Keep the number of contemporary site furnishing to the minimum required for the comfort and safety of the community.
- Use site furnishings that are compatible with the character of the campus or property in composition, style, and materials. Ensure that all new small-scale features, such as seating, signage, light posts, and railings are compatible with the historic character of the campus. Ensure that the styles of site furnishings throughout campus are compatible with one another, and consistent within areas of similar historic character and design.
- Provide new site furnishing features that are a product of their own time. Avoid establishing site furnishings that are historic replicas.

Commemorative Features and Artwork Guidelines

Commemorative features and artwork include plaques, memorials, sculpture, mosaics, and dedicated benches and trees. They often provide links to important events and persons associated with the University. Together with their landscape settings, these features are an integral component of the campus. To adequately plan for their retention and maintenance, as well as future additions, consider the guidelines that follow:

- Create a long-term plan and vision for the accommodation of future commemorative and artwork features within the campus. The plan should identify appropriate types and locations for future features.
- Commemorative features are revered objects that require regular maintenance to remain in good condition. Prepare a comprehensive commemorative feature maintenance program that includes a manual to guide work for each individual artwork, monument, or type of monument.
- Inspect artwork and monuments regularly to ensure that they remain in good condition. Document inspections with reports and photographs to aid in the understanding of any ongoing condition issues.

 Maintain the landscape compositions surrounding monuments and artwork as frameworks for the objects. Remove or correct overgrown plantings, cracked paving, and poor site drainage as observed.

Maintenance

Maintenance is an essential part of the process of meeting the Secretary of the Interior's Standards for the Treatment of Historic Properties. Maintenance is preservation. In keeping with the intentions of the standards, best practice guidelines are presented below for undertaking work on specific historic resource materials, including both landscape and building elements.

- Understand that incompatible treatment of historic landscapes that occurs as part of routine maintenance and minor alterations can eventually have an impact equal to major rehabilitation and new construction.
- Do not use maintenance methods or materials that damage historic fabric.
- Consider the cumulative effects of routine maintenance and minor alterations as seriously as major rehabilitation and new construction.
- Establish a specific fund for maintenance of existing historic buildings and landscapes, and make the fund known to potential donors. Include maintenance funding as part of the total cost of any new buildings and landscapes.
- Establish a preventive maintenance schedule for the special conditions of historic buildings and landscapes.
- Prepare maintenance manuals that direct the specific tasks for individual buildings and landscape features and when they are to be performed, and maintenance protocols that indicate the approved methods for how to complete maintenance tasks.
- Prepare appropriate maintenance schedules and specifications for each historic building and landscape area.
- Provide preservation training for buildings and landscape maintenance staff.

New Design and Construction

- Undertake all landscape-related work in compliance with the Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for the Treatment of Cultural Landscapes.
- Consider utilizing previously disturbed sites as the location for new development.
- Avoid removing historic features to implement new development, if possible.
- Evaluate all proposed new development that may affect historic landscape features in consultation with an historical landscape architect, archaeologist, and other appropriate preservation professionals.
- Select project teams and architects for the design of new construction projects who have experience working with historic buildings or

contemporary buildings within a historic context to ensure that design compatibility is achieved.

- Design and situate new additions and alterations to the landscape in such a way that, if removed in the future, the essential form and integrity of the landscape would be unimpaired.
- Design new building and landscape features to visually relate to the historic environment.
- Carefully site new buildings within appropriate designated open space to fit within the broad campus design parameters.
- Identify the character-defining features of the surrounding historic buildings and landscapes in order to consider ways to protect them.
- Design new building and landscape features to complement the materials, size, scale and proportion, massing, and architectural vocabulary of existing features in the surrounding historic area. Materials should be of a complementary color, size, texture, scale, and level of craftsmanship. Avoid the use of materials that are visually incompatible with surrounding historic landscape and buildings.
- Differentiate new work from existing historic resources. Replications of historic elements should be avoided in new construction, as false historicism diminishes the integrity of the existing historic buildings and confuses the distinction between old and new.
- Avoid demolishing historic buildings, structures, and landscape features when designing new construction projects, or demolishing the majority of a structure while leaving only the historic facade. This practice destroys the historic integrity of the structure and leaves a false historical exterior.
- Undertake sufficient study and recordation of historic landscape features that require modification, repair, or removal using drawings and photographs before work is performed to protect research and interpretive values.
- Utilize sustainable and "green" methods of new construction whenever possible.

Archaeological Resources in the Landscape

- Undertake appropriate archaeological investigations prior to commencing construction in areas that are likely to contain subsurface cultural deposits. Limit the extent of disturbance to that necessary to meet research and management. Ensure that any excavated earth is replaced in a manner that replicates the landscape's appearance prior to digging.
- Engage a qualified archaeologist to monitor planting efforts in areas that may contain subterranean cultural resources.
- Undertake tree removal from areas with known or potential cultural and archaeological resources under the guidance of a historical landscape architect and archaeologist.

- Ensure that any construction, demolition, or maintenance activity that involves ground-disturbance in an area that may contain subterranean cultural resources is monitored by a qualified archaeologist.
- Avoid land-use activities, permanent or temporary, which threaten or impair known or potential archaeological resources.
- Avoid impacts to archaeological sites by designating a limit-of-disturbance area around the resource. The limit-of-disturbance area should be determined by an archaeologist.

(Refer to Guidelines for Archaeological Resources, below.)

Accessibility

- New construction of both buildings and landscapes should provide barrierfree access under the provisions of the Americans with Disabilities Act (ADA).
- Make barrier-free and universal accessibility a primary design factor when considering overall planning, design, and interpretation within the campus landscape. All features associated with accessibility should conform to ADAAG (Americans with Disabilities Act Accessibility Guidelines) standards.
- Recognize that universal accessibility includes access opportunities for persons who are visually impaired, as well as physically-impaired, and for persons who use walkers, canes, or crutches, as well as wheelchairs.
- Implement accessibility features in such a manner that they do not detract from the character of historic landscapes.
- When undertaking work required by life safety or accessibility codes, features should be designed to be functional, but as unobtrusive as possible.
- Implement accessibility features in such a manner that they do not detract from the character of the historic resource. The best designs will provide barrier-free access that promotes independence for disabled persons while also preserving significant historic features.
- Accessibility improvements should not be highly visible design statements that overwhelm or detract from the existing building.
- Ensure when new stair towers or elevators are required outside the existing building footprint that the addition complies with the guidelines provided for new construction.
- Preserve the historic entry experience of sites and buildings for everyone.
- Modify entrances located at or near to grade to provide barrier-free access wherever possible. At grade entrances or low slope ramps that do not require handrails will minimize the impact of the accessible entrance. If required, ramps should be located on secondary elevations whenever possible and should be integrated to work with the existing rhythm and design of the building. New ramps and railing should be constructed using compatible materials and design.

- Avoid steep slopes, ensure that walk widths meet ADAAG standards, and take other precautions to make these walks accessible to all visitors. As an alternative, consider down-grade sloping ramps that connect to interior elevators.
- Preserve visual symmetry where applicable.

Sustainable Design

 Evaluate the potential to comply with Leadership in Energy and Environmental Design (LEED) Green Building Rating Systems and Sustainable Sites Initiative (SITES) Rating Systems when considering new construction projects. Endeavor to certify projects under one of the two systems. Considerations include water efficiency, energy efficiency, promotion of biodiversity and native plant species, the use of certified materials, and preservation of historic fabric, among others.

Guidelines for Archaeological Resources

To identify and preserve significant archaeological resources on University property, as well as to avoid unintentional destruction of archaeological sites, the following procedure is offered. This procedure follows closely those outlined by the Georgia Council of Professional Archaeologists (2014) guideline for archaeological survey and archaeological testing.²²⁵ (The flowchart provided later in this chapter illustrates the suggested process.) Should an undertaking require archaeological survey, testing, or mitigation to comply with federal legislation, such as the National Historic Preservation Act (NHPA) of 1966, the guidelines outlined by the Georgia Council of Professional Archaeologists must be followed in consultation with the Georgia State Historical Protection Office, as well as any federal agency with regulatory authority over the undertaking. Such instances include undertakings that use federal money or require federal permits.

The Georgia Archaeological Site File, which supplies archaeological site data to GNAHRGIS, documents where archaeological sites have been recorded. Unless a property has been thoroughly surveyed, it cannot be assumed that all archaeological sites present on a property are recorded. Additionally, unless a recorded site has been tested, its significance on a University or national level may not be known. For these reasons, a search of GNAHRGIS for archaeological sites is an essential component of an archaeological assessment, but does not complete such an assessment.

The value of an archaeological site largely resides in the integrity of the contexts in which artifacts and materials are found, relative to how they were left by the people who created or used them. In Georgia, contexts with integrity usually reside in the soil. For this reason, a majority of the procedures outlined here are focused on searching through, and assessing the integrity of, soil deposits. Soil also is an essential component of determining whether or not archaeology should become part of the plan for an undertaking. This determination can be made by

^{225.} Georgia Council of Professional Archaeologists, *Georgia Standards and Guidelines* for Archaeological Surveys, revised April 2014, http://georgiaarchaeology.org/GCPA/wp-content/uploads/2007/05/GA-Arch-Standards-and-Guidelines-revised-April-2014.pdf.

simply asking: "Will this project disturb soil that has not been recently disturbed?" If the answer is "yes" the following procedure is recommended to avoid destruction of valued archaeological contexts.

The procedure presented here is an outline of steps to be taken when it is determined that an undertaking has the potential to disturb archaeological sites. A flow chart of this process is provided below. Certain steps in this process, such as background research and archaeological survey and reporting, are detailed processes themselves, and are fully discussed in the Georgia Council of Professional Archaeologists (GCPA) guideline for archaeological survey, which is attached as Appendix D.²²⁶ Where relevant, portions of this document are referenced for in-depth description of how the step is to be executed.

Should it become apparent that an undertaking will disturb soil that has not been recently disturbed, the first step is to engage a professional archaeologist to direct, perform, assess, and report on the archaeological investigation. The archaeologist should meet the Secretary of Interior's *Professional Qualifications Standards* (36 CFR 61).²²⁷ To meet these qualifications an archaeologist must have a graduate degree in archaeology, anthropology, or a closely related field; be able to provide evidence of research completion in the form of thesis or research report; and have sixteen months of full-time professional experience and/or training. In addition to these qualifications, an archaeologist directing an archaeological assessment on University property should also have at least six months of archaeological experience in the southeastern United States, and be certified by the Register of Professional Archaeologists.

Before any field work is begun, a thorough literature and records search must be completed. This step will aid in the identification of known archaeological resources and historical documents that may indicate the likelihood of archaeological sites, cemeteries, and other resources. A list of resources that should be consulted is found in the GCPA guideline in section III.B.11-5.

Following the literature and records search, an archaeological survey can proceed. An archaeological survey involves soil sampling and surface inspection by qualified archaeologists and technicians. This step will identify most archaeological sites, and will collect information that will allow for an initial assessment of integrity of archaeological deposits. The standards for an archaeological survey are detailed in the GCPA guideline in sections III.D and III.F. The results of the survey, along with the treatment and curation of any artifacts collected, should be compiled into a report that meets the guidelines for such a report in the GCPA guideline in section V. This report will include a section that assesses the significance of any archaeological site encountered in the survey.

If no significant archaeological sites are encountered in the survey, then no further archaeological work will be required. If the archaeologist identifies a

^{226.} Ibid.

^{227.} U.S. Department of the Interior, National Park Service, Archeology and Historic Preservation: Secretary of the Interior's Standards and Guidelines, https://www.nps.gov/history/local-law/arch_stnds_9.htm, accessed April 2018.

potentially significant archaeological site, this site should be avoided, or its significance should be tested through more thorough investigation.

If a potentially significant archaeological site is to be avoided, a plan to avoid the site must be developed and implemented.

Archaeological testing for significance is a process that determines if a site has sufficient integrity and value to warrant preservation or study. A plan to test the site must be developed by the qualified archaeologist. This plan must be reviewed and approved by a UGA preservation representative as well as the Georgia State Historic Protection Officer (SHPO). Though each significance test of a site is unique and designed to meet the characteristics of the individual site, certain standards apply, and are detailed in the GCPA guideline in section III.E. The results of the test, along with the treatment and curation of any artifacts collected, should be compiled into a report that meets the guidelines for such a report in the GCPA guideline in Section V. This report should include a section that fully assesses the significance of the archaeological site.

If the site is found not to warrant preservation or study, then no further archaeological work will be required. If the site is found by the archaeologist to be significant, and the UGA preservation representative and the Georgia SHPO concur, then the site should be avoided, or a plan to mitigate the effect on the site by the undertaking must be developed and implemented. Such a plan must be developed by the archaeologist in consultation with the UGA preservation representative and the Georgia SHPO to meet the needs of all stakeholders.

All documents produced and artifacts collected should be curated at the University of Georgia Laboratory of Archaeology according to its guidelines. This will constitute a permanent record of work done on UGA property.



Figure 47. Procedure for identification and preservation of archaeological sites.