Standards for Reconstruction
and
Guidelines for Reconstructing Historic Buildings

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.*

Standards for Reconstruction

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 to 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 recreate 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.

Guidelines for Reconstructing Historic Buildings

Introduction

Reconstruction is different from the other treatments in that it is undertaken when there are often no visible historic materials extant and only a foundation remains. Whereas the treatment Restoration provides guidance on restoring—or recreating—historic building features, the **Standards for Reconstruction and Guidelines for Reconstructing Historic Buildings** should be followed when it is necessary to recreate an *entire non-surviving building* using new material. But, like restoration, reconstruction also involves recreating a historic building which appears as it did at a particular— and most significant—time in its history. Because of the potential for historical error in the absence of sound physical evidence, this treatment can be justified only rarely and, thus, is the least frequently undertaken. Reconstructing a historic building should only be considered when there is complete and accurate documentation on which to base it. Extant historic surface and subsurface materials should also be preserved. Finally, the reconstructed building must be clearly identified as a contemporary recreation.

Research and Document Historical Significance

Guidance for the treatment **Reconstruction** begins with ***researching and documenting*** the building's historical significance to determine whether its recreation is essential to the public understanding of the property. In some instances, reconstruction may not be necessary if there is a historic building still existing on the site or in a setting that can explain the history of the property. Justifying a reconstruction requires detailed physical and documentary evidence to minimize or eliminate conjecture and ensure that the reconstruction is as accurate as possible. Only one period of significance is generally identified; a building, as it evolved, is rarely recreated. If research does not provide adequate documentation for an accurate reconstruction, other interpretive methods should be considered, such as an explanatory marker.

Investigate Archeological Resources

Investigating archeological resources is the next area of guidance in the treatment **Reconstruction**. The purpose of archeological research is to identify any remaining features of the building and site that are essential to an accurate recreation and must be reconstructed. Archeological resources that are not essential to the reconstruction should be left in place. The archeological findings, together with archival documentation, should be used to replicate the design, materials, and plan of the historic building.

Identify, Protect, and Preserve Extant Historic Features

Closely aligned with archeological research, recommendations are given for ***identifying, protecting, and preserving*** extant features of the historic building. It is never appropriate to base a **Reconstruction** upon conjectural designs or on features from other buildings. Any remaining historic materials and features should be retained, when feasible, and incorporated into the reconstruction. Both the historic and new materials should be documented to assist in interpretation.

Reconstruct Non-Surviving Building and Site

After the research and documentation phases, guidance is given for **Reconstruction** work itself. Exterior and interior features are addressed in general, always emphasizing the need for an accurate *depiction*, i.e., careful duplication of the appearance of historic materials and features for interpretative purposes. While the use of traditional materials and finishes is always preferred, in some instances, substitute materials may be used if they are able to convey the same appearance. Where non-visible features of the building are concerned, such as interior structural systems, contemporary materials and technology may be used. Recreating the features of the building site or setting, based on archeological findings, should also be an integral part of project work.

Code-Required Work

Accessibility and Health and Safety

Code requirements must also be met in **Reconstruction** projects. A reconstructed building may be considered as essentially new construction. Thus, code-requirements should be addressed in the design stage so as not to detract from the reconstructed appearance of the building.

Reconstruction 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, Reconstruction may be considered as a treatment. Prior to undertaking work, a documentation plan for Reconstruction should be developed.*

Overview

Recommended	*Not Recommended*
Researching and documenting the property's historical significance focusing on documentary and physical evidence which is needed to justify reconstruction of the non-surviving building.	Undertaking a reconstruction based on insufficient research, so that, as a result, a historically inaccurate building is created.
	Reconstructing a building unnecessarily when an existing building adequately reflects or explains the history of the property, the historical event, or has the same associative value.
	Executing a design for a building that was never constructed.
Investigating archeological resources to identify and evaluate those features and artifacts which are essential to the design and plan of the building.	Failing to identify and evaluate archeological material prior to reconstruction, or destroying extant historic material not relevant to the reconstruction but which should be preserved in place.
Minimizing disturbance of the terrain to reduce the possibility of destroying archeological resources.	Using heavy machinery or equipment in areas where it may disturb archeological resources.
Identifying, retaining, and preserving extant historic features of the building and site, such as remnants of a foundation, chimney, or walkway.	Beginning reconstruction work without first conducting a detailed site investigation to physically substantiate the documentary evidence.
	Basing a reconstruction on conjectural designs or on features from other historic buildings.

Building Exterior

Recommended	*Not Recommended*
Reconstructing a non-surviving building to depict the documented historic appearance. Although traditional building materials, such as masonry, wood, and architectural metals are preferable, substitute materials may be used as long as they recreate the historic appearance.	Reconstructing features that cannot be documented historically or for which existing documentation is inadequate.
	Using substitute materials that do not convey the appearance of the historic building.
Recreating the documented design of exterior features such as the roof shape and its coverings; architectural detailing; windows; entrances and porches; steps and doors; and their historic spatial relationships and proportions.	Omitting a documented exterior feature; or rebuilding a feature, but altering its historic design.
	Using inappropriate designs or materials that do not convey the historic appearance, such as aluminum storm and screen window combinations.
Reproducing the appearance of historic paint colors and finishes based on physical and documentary evidence.	Using paint colors that cannot be documented through research and investigation to be appropriate to the building or using other undocumented finishes.
Installing exterior electrical and telephone cables underground, or in the least obtrusive location possible.	Attaching exterior electrical and telephone cables to the principal elevations of the reconstructed building, unless they can be documented as having been there historically.
Using signage to identify the building as a contemporary recreation.	Failing to explain that the building is a reconstruction, thus confusing the public's understanding.

Building Interior

Recommended	*Not recommended*
Recreating the appearance of *visible* features of the historic structural system, such as posts and beams, trusses, summer beams, vigas, cast-iron columns, above-grade masonry foundations, or load-bearing brick or stone walls. Substitute materials may be used for unexposed structural features if they were not important to the historic significance of the building.	Changing the documented appearance of visible features of the structural system.
Recreating the historic floor plan and interior spaces, including the size, configuration, proportion, and relationship of rooms and corridors; the relationship of features to spaces; and the spaces themselves.	Altering the documented historic floor plan or relocating an important interior feature, such as a staircase, so that the historic relationship between the feature and the space is inaccurately depicted.
Duplicating the documented historic appearance of the building's interior features and finishes, including columns, cornices, baseboards, fireplaces and mantels, paneling, light fixtures, hardware, and flooring; and plaster, paint, and finishes such as stenciling, or marbling; and other decorative or utilitarian materials and features.	Altering the documented appearance of the building's interior features and finishes so that, as a result, an inaccurate depiction of the historic building is created. For example, moving a feature from one area of a room to another; or changing the type or color of the finish.
Installing mechanical systems and their components in the least obtrusive way possible so as not to impact the recreated interior spaces, features or finishes, while meeting user need.	Altering the historic plan or the recreated appearance unnecessarily when installing mechanical systems.
Installing the vertical runs of ducts, pipes, and cables in closets, service areas, and wall cavities where they will not be visible.	Installing vertical runs of ducts, pipes, and cables where they will intrude upon the historic depiction of the building.

Building Site

Recommended	*Not Recommended*
Basing decisions for reconstructing building site features on documentary and physical evidence.	Reconstructing building site features without first conducting a detailed investigation to physically substantiate the documentary evidence.
Inventorying the building site to determine the existence of aboveground remains and subsurface archeological materials, and using this evidence as corroborating documentation for the reconstruction of related site features. These may include walks, paths, or roads; vegetation such as trees, shrubs, grass, or other plant materials; hills, terracing, or berms; light posts, fences, walls, or benches; sculpture or statuary; or fountains, or pools.	Giving the building's site a false appearance by basing the reconstruction on conjectural designs or on features from other sites.
Reestablishing the historic relationship between the building or buildings and historic site features, whenever possible.	Changing the historic spatial relationship between the building and site features, or reconstructing some site features, but not others, thus creating a false historic appearance.

Setting (District or Neighborhood)

Recommended	*Not Recommended*
Basing decisions for reconstructing features in the building's historic setting on documentary and physical evidence.	Reconstructing features in the setting without first conducting a detailed investigation to physically substantiate the documentary evidence.
Inventorying the setting to determine the existence of aboveground remains and subsurface archeological materials, and using this evidence as corroborating documentation for the reconstruction of missing features of the historic setting. Such features could include remnants of paving materials; fences or walls; types of vegetation, gardens, and yards; adjacent open spaces such as fields, parks, commons, or woodlands; and important views or visual relationships.	Giving the building's setting a false historic appearance by basing the reconstruction on conjectural designs or on features from other districts or neighborhoods.
Reestablishing the historic spatial plan between buildings and landscape features in the setting.	Changing the historic spatial relationship between buildings and landscape features in the setting by reconstructing some missing elements, but not others.

Code-Required Work

Whereas preservation, rehabilitation, and restoration treatments usually necessitate retrofitting to meet code requirements, in this treatment it is assumed that the **Reconstructed** *building will be essentially new construction. Thus, only minimal guidance is provided in this section, although the work must still be assessed for its potentially negative impact on the reconstructed building.*

Recommended	*Not Recommended*
Accessibility	
Taking accessible requirements into consideration early in the planning stage so that barrier-free access can be provided in a way that is compatible with the reconstruction.	Obscuring or damaging the historic appearance of the reconstructed building in the process of providing barrier-free access.
Placing accessible facilities, restrooms for instance, in a separate building, such as a visitor center, located away from the reconstructed building, rather than in the reconstructed building itself if these facilities would negatively impact its historic appearance.	
Developing virtual tours to help explain and interpret the reconstructed building when it is not feasible, or is physically impossible, to make it accessible without negatively impacting its historic appearance.	
Life Safety	
Considering life-safety code requirements, such as the installation of fire-suppression systems, early in the planning stage of the project so that the work is compatible with the reconstruction.	Meeting life-safety requirements without considering the impact of the work on the reconstructed building.

Climate Change and Natural Hazards

A reconstructed building may be considered as essentially new construction. Thus, treatments to reduce the potential impact of climate change and natural hazards should be addressed, when appropriate to the particular **Reconstruction** project, in the design stage so as not to detract from the reconstructed appearance of the building.

Sustainability

A reconstructed building may be considered as essentially new construction. Thus, sustainability should be addressed, when appropriate to the particular **Reconstruction** project, in the design stage so as not to detract from the reconstructed appearance of the building.

(The topic of sustainability is addressed in detail in **The Secretary of the Interior's Standards for Rehabilitation & Illustrated Guidelines on Sustainability for Rehabilitating Historic Buildings**. Although specifically developed for the treatment Rehabilitation, the Guidelines can be used to help guide the other treatments.)