

CULTURAL RESOURCE MANAGEMENT PROCEDURES

1. REASON FOR ISSUE: This handbook establishes new Department of Veterans Affairs (VA) management procedures which implement the policies contained in VA Directive 7545, Cultural Resource Management.

2. SUMMARY OF CONTENTS/MAJOR CHANGE

a. This handbook introduces new procedures on how VA will meet Federal preservation requirements for all program and construction activities that have an effect on cultural or historic resources.

b. It sets procedures for the assignment of Cultural Resource Management Officers (CRMO) for each administration, major program, and at each field facility (or regional area office, in some cases), both historic and non-historic.

c. It establishes the requirement and guidance for developing program and individual facility Cultural Resource Management Plans.

d. It establishes the requirement for reporting on certain cultural resource management activities.

e. It contains specific information on complying with Section 106 of the National Historic Preservation Act, the Federal cornerstone of the protection of historic properties, and other required procedures.

f. This handbook contains:

(1) Listing of VA programs most affected by Cultural Resource Management requirements;

(2) Inventory Listing of Identified Historic VA properties;

(3) Information on procedures for complying with Section 106;

(4) State Historic Preservation Officer Contacts;

(5) Historic American Buildings Survey Standards;

(6) The Secretary of the Interior's Rehabilitation Standards; and

(7) Sample documents for compliance with Section 106, Cultural Resource Management Plans, Scopes of Work for Historic Preservation Plans, and Archeological Surveys.

g. Although this Handbook focuses primarily on the physical facilities and archeological remains owned or under the control of VA, other cultural resources, such as artwork, crafts, furniture, historical documents, technological equipment, or other historical items, should be afforded similar attention.

3. RESPONSIBLE OFFICE: The Historic Preservation Office, Facilities Quality Office, Office of Facilities Management (18), Veterans Health Administration.

4. RELATED DIRECTIVE: VA Directive 7545, Cultural Resource Management.

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CULTURAL RESOURCE MANAGEMENT PROCEDURES

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CULTURAL RESOURCE MANAGEMENT PROCEDURES

1. PURPOSE

a. This handbook contains mandatory Department of Veterans Affairs (VA) procedures for preparing, approving, and implementing VA Cultural Resource programs and documents.

(1) Cultural Resource Management programs include: survey, inventory and evaluation of historic and cultural resources, historic preservation planning, processes for integrating cultural resource management into agency programs and activities, and archeological surveys.

(2) Cultural Resource Management documents include: National Register of Historic Places Nominations, Historic Preservation Plans, Historic American Buildings Survey reports, Section 106 compliance documents, such as letters and Memoranda of Agreement (MOA), and archeological reports.

b. This handbook introduces new procedures on how VA will meet Federal preservation requirements for all program and construction activities that have an effect on cultural or historic resources; it:

(1) Sets procedures for the assignment of Cultural Resource Management Officers (CRMOs) at each facility (or regional area office, in some cases), both historic and non-historic.

(2) Establishes the requirement and guidance for developing program and individual facility cultural resource management plans at the administration, major program, and individual facility level.

(3) Establishes the requirement for reporting on certain cultural resource management activities.

(4) Contains:

(a) Specific information on complying with Section 106 of the National Historic Preservation Act, the cornerstone of the protection of Federal historic properties.

(b) A listing of VA programs most affected by Cultural Resource Management requirements;

(c) Inventory Listing of Identified Historic VA Properties;

(d) Information on procedures for complying with Section 106;

(e) State Historic Preservation Officer (SHPO) contacts,

(f) Historic American Buildings Survey Standards;

(g) The Secretary of the Interior's Rehabilitation Standards;

(h) Sample documents for compliance with Section 106, Cultural Resource Management plans; and

(i) Scopes of work for Historic Preservation Plans and Archeological Surveys.

c. While each Administration, Office of Assistant and Deputy Assistant Secretary, key office, and field facility will have the opportunity to adapt the Department-wide formats and structures to their Cultural Resource Management Programs, we strongly recommend that they adopt the formats, guidance, and documents found in this Handbook as their own.

2. RESPONSIBILITIES OF MANAGEMENT

a. Administration Heads, Assistant Secretaries, Deputy Assistant Secretaries, other key officials, and field facility Directors are responsible for compliance with cultural resource management objectives for the programs and activities under their jurisdiction. This includes:

(1) Developing procedures to ensure that decisions affecting cultural resources are made in accordance with VA Directive 7545 and appropriate laws and regulations;

(2) Coordinating and implementing compliance activities in accordance with this policy and developed procedures;

(3) Ensuring that each facility (or regional area office, in some cases) and major program manager designates a CRMO and provides the CRMO with appropriate information and sufficient training, appropriate publications, authority, and total access to budgetary, management, and decision making processes to permit effective coordination of its Cultural Resource Management Program; and,

(4) Ensure every program affecting cultural resources (see App. A) and every historic VA facility (see App. B) has a Cultural Resource Management Plan outlining procedures for the integration of historic preservation requirements and the management of cultural resources.

(a) Procedures shall be developed and implemented, as appropriately, by Administration Heads, Assistant Secretaries, Deputy Assistant Secretaries, other key officials, field regional and facility directors, and the VA Preservation Officer, to address the overall policy and requirements found in the Advisory Council on Historic Preservation's regulations, "Protection of Historic Properties" (Title 36 Code of Federal Regulations (CFR) Part 800).

(b) Programmatic agreements and historic preservation plans may be used to address cultural resource management procedures, as appropriate (refer to Apps. H, I, and J).

(c) Procedures shall have sufficient management controls and oversight to ensure requirements of this policy are completed, including those required by 36 CFR Part 800.

b. The Associate Chief Medical Director for Construction Management will designate a Department Federal Preservation Officer who will:

(1) Coordinate the VA Cultural Resource Management Program and provide guidance on cultural resource management matters, including establishing an information network with and providing information to program and facility CRMOS;

- (2) Review VA activities, policies, and procedures that might affect cultural resources;
- (3) Maintain a comprehensive inventory of VA cultural resources; reviewing and forwarding nominations to the National Register;
- (4) Participate in consultations and reviewing agreement documents among VA, the Advisory Council on Historic Preservation, SHPOs, and local authorities having jurisdiction;
- (5) Provide cultural resource management training and technical information; and
- (6) Develop procedures and guidelines for preparing National Register nominations, preservation plans, documentation and other cultural resource planning efforts.

3. RESPONSIBILITIES OF CULTURAL RESOURCE MANAGEMENT OFFICERS (CRMO):

a. Each VA program (see App. A) and field facility shall have a qualified and interested individual named as CRMO. The limited duties will be collateral with other primary assignments. Every field facility, medical center, national cemetery, benefits office, whether historic or not, will have a CRMO. Smaller community facilities serviced by larger ones will come under the responsibility of the larger facility's CRMOS. **NOTE:** *The programs primarily affected by this requirement are listed in Appendix A.*

b. CRMO primary responsibilities are for the implementation of VA Directive 7545 and this Handbook for their program or facility. The CRMOS will:

- (1) Obtain knowledge or training in Cultural Resource Management.
- (2) Submit a Report on Cultural Resources to the Associate Chief Medical Director for Construction Management (08), or designee, if and when any controversial or significant preservation, nomination, consultation, archeological, or planning action will, is, or has taken place that affects important resources (see par. 20 for reporting guidelines).
- (3) Develop and implement a Historic Preservation Plan, also known as a Cultural Resources Management Plan, for their program or facility (see Apps. H, I, and J).
- (4) Ensure the Historic Preservation Plan will address:
 - (a) Inventory and evaluation of resources, buildings, artifacts, archeological sites, or records, under their jurisdiction. The VA Historic Preservation Officer has information to assist in this portion (see App. B).
 - (b) A brief evaluation of resources against established National Register criteria (see par. 5).
 - (c) A brief history of the facility or program, where appropriate.
 - (d) A statement of findings regarding historic, architectural or cultural significance. **NOTE:** *Submit findings in Annual Report.*

(e) **If no significant resources are found**, no further actions are required.

(f) **If significant historic or architectural resources are found:**

1. As funds become available, in coordination with the VA Historic Preservation Officer, prepare a National Register of Historic Places nomination, with the help of a consultant, if necessary, the SHPO, and the National Register staff at the National Park Service (NPS).

2. Put in place Tailored Procedures, or a Historic Preservation Plan, to ensure continued and proper preservation of the resources, ensuring development and integration of the plan into the programs and/or at the facility, including:

a. Proper continued use, maintenance, and treatment of the site, including appropriate training for crafts and trades people on staff. **NOTE:** *Appendix O contains information on appropriate building materials maintenance and treatment.*

b. Early project consultation with the SHPO, and the Advisory Council on Historic Preservation, if necessary.

c. Integration of historic preservation requirements and goals into internal planning, management, maintenance, design, construction, budgeting, and contracting procedures to protect historic properties and implement VA Directive 7545.

d. Safeguards to ensure compliance with Section 106 of the National Historic Preservation Act of 1966 (NHPA), such as, ensuring that the procurement officer will not issue a contract or commit Federal funds prior to having as part of the package a letter certifying compliance with Section 106 from the SHPO, or the Council (see Apps. E, F, and G).

4. RESOURCE IDENTIFICATION

a. Cultural resource surveys and studies shall be undertaken, as appropriate, by Administration Heads, Assistant Secretaries, Deputy Assistant Secretaries, other key officials, field facility Directors, and the VA Preservation Officer, to identify, evaluate and nominate significant cultural resources to the National Register of Historic Places, National Park Service, Department of the Interior, Washington, DC 20013-7172. Potentially eligible properties should be researched by the CRMO, written up on National Register nomination forms (see App. C). **NOTE:** *These forms, which are available from the VA Historic Preservation Office of NPS, are submitted to the VA Preservation Officer for review, processing, and signature prior to submitting to the Register.*

b. As undertakings are planned, the historic status of facilities and whether they contain cultural resources shall be considered.

5. THE NATIONAL REGISTER OF HISTORIC PLACES

a. The criteria for evaluating a property's eligibility for inclusion on the National Register are set out in Title 36 Code of Federal Regulations (CFR) Section 60.4. The quality of significance in American history, architecture, archeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and:

(1) Are associated with events that have made a significant contribution to the broad patterns of our history; or

(2) Are associated with the lives of persons significant in our past; or

(3) Embody the distinctive characteristics of a type, period, or method of construction, or represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or

(4) Have yielded, or may be likely to yield, information important in prehistory or history.

b. Ordinarily cemeteries, birthplaces, or graves of historical figures, properties owned by religious institutions or used for religious purposes, structures that have been moved from their original locations, reconstructed historic buildings, properties primarily commemorative in nature, and properties that have achieved significance within the past 50 years shall **not** be considered eligible for the National Register.

NOTE: *Seven exceptions to the National Register criteria are also set out in 36 CFR Section 60.4.*

Such properties will qualify if they are integral parts of a district that does meet the criteria, or if they fall within the following categories:

(1) A religious property deriving primary significance from architectural or artistic distinction or historical importance; or

(2) A building or structure removed from its original location, but which is significant primarily for architectural value, or which is the surviving structure most importantly associated with a historic person or event; or

(3) A birthplace or grave of a historical figure of outstanding importance if there is no appropriate site or building directly associated with his productive life; or

(4) A cemetery which derives its primary significance from:

1. Graves of persons of transcendent importance;

2. Age;

3. Distinctive design features; or

4. Association with historic events.

(5) A reconstructed building when accurately executed in a suitable environment and presented in a dignified manner as part of a restoration master plan, and when no other building or structure with the same association has survived;

(6) A property primarily commemorative in intent if design, age, tradition, or symbolic value has invested it with its own exceptional significance; or

(7) A property achieving significance within the past 50 years, if it is of exceptional importance.

c. Properties can be eligible for the National Register at the National, State, and local level of significance. Properties may be considered to be historically significant under the California Environmental Quality Act (CEQA) that are not eligible for inclusion in the National Register. **NOTE: Additional guidance for determining eligibility can be obtained from *National Register Bulletin 15: Guidelines for Applying the National Register for Evaluation*.**

6. THE NATIONAL HISTORIC PRESERVATION ACT OF 1966 (NHPA)

a. NHPA, as amended, Title 16 United States Code (U.S.C.) Section 470, establishes the role of the Federal government, in cooperation with other nations and in partnership with the States, local governments, Indian tribes, and private organizations and individuals to:

(1) Foster productive harmony between modern society and historic resources;

(2) Provide preservation leadership;

(3) Administer historic resources in a spirit of stewardship;

(4) Encourage preservation of nonfederally owned historic resources;

(5) Encourage preservation and use of the historic built environment; and

(6) Assist State and local governments and the National Trust for Historic Preservation in their historic preservation activities.

b. The act::

(1) Authorizes the expansion of the National Register of Historic Places to properties of State and local significance;

(2) Provides for the Governor of each state to designate a SHPO who will administer a statewide Historic Preservation Program;

(3) Allows local governments to participate in the National Historic Preservation Program;

(4) Establishes a Grants-in-Aid Program;

(5) Authorizes the creation of the Advisory Council on Historic Preservation to advise the President and Congress on historic preservation matters and under Section 106 to review Federal and federally assisted actions affecting historic properties; and

(6) Requires the Council and the Department of the Interior to issue regulations and guidance to implement the provisions of the act.

c. A summary of Federal agency responsibilities are outlined in the following four sections of the act:

(1) **Section 402** requires the Federal agency having direct or indirect jurisdiction over an undertaking outside the United States which may directly and adversely affect a property which is on the World Heritage List or on the applicable country's equivalent of the National Register to take into account the effect of the undertaking on such property for purposes of avoiding or mitigating any adverse effects.

(2) **Section 111** allows a Federal agency, after consultation with the Council, to lease or exchange a historic property if the agency determines that the lease or exchange will adequately ensure the preservation of the historic property.

(3) **Section 110** establishes the following Federal responsibilities with respect to historic properties, which are to:

(a) Assume responsibility for the preservation of historic properties which are owned or controlled by the agency and use historic properties available to the agency to the maximum extent feasible.

(b) Establish a program to locate, inventory, and nominate to the National Register all properties under the agency's ownership or control, and exercise caution to ensure that any eligible property is not inadvertently transferred, sold, demolished, substantially altered, or allowed to deteriorate significantly. Each Federal agency shall ensure:

1. The properties are managed and maintained in a way that considers the preservation of their historic, archeological, architectural and cultural values in compliance with Section 106 giving special consideration to the management of properties with National significance;

2. The preservation of properties not under the jurisdiction or control of a Federal agency, but subject to be potentially affected by an agency's actions are given full consideration in planning;

3. The Federal agency's preservation-related activities are carried out in consultation with other Federal, State, and local agencies, Indian tribes, Native Hawaiian organizations and the private sector;

4. The Federal agency's procedures for compliance with Section 106 are consistent with the Council's regulations; and

5. The identification and evaluation of historic properties and the development and implementation of agreements with other interested parties regarding the means by which adverse effects on such properties will be considered, and to provide for the disposition of Native American cultural items from

Federal or tribal land in a manner consistent with Section 3(c) of the Native American Graves Protection and Repatriation Act.

(c) Initiate measures to ensure that historic properties which will be substantially altered or demolished as a result of Federal action or assistance will be recorded prior to demolition.

(d) Designate a qualified preservation officer who will be responsible for coordinating the agency's activities under the NHPA.

(e) Carry out the agency's programs and projects in accordance with the purposes of the Act.

(f) Undertake such planning and actions as may be necessary to minimize harm to a National Historic Landmark which may be directly and adversely affected by a Federal undertaking.

(4) **Section 106** requires Federal agencies to take into account the effects of their activities and programs on historic properties and provide the Council with a reasonable opportunity to comment with regard to such undertaking. **NOTE:** *It is this section that is the most widely used by Federal planners and managers. The section states: "The head of any Federal agency having direct or indirect jurisdiction over a proposed Federal or federally assisted undertaking in any State and the head of any Federal department or independent agency having authority to license any undertaking shall, prior to the approval of the expenditure of any Federal funds on the undertaking or prior to the issuance of any license, as the case may be, take into account the effect of the undertaking on any district, site building, structure, or object that is included in or eligible for inclusion in the National Register. The head of any such Federal agency shall afford the Advisory Council on Historic Preservation, established under Title II of this Act, a reasonable opportunity to comment with regard to such undertaking."*

7. SECTION 106 - VA COMPLIANCE

Section 106 is a compliance process of consulting with and obtaining comments from the general public, represented by the SHPO, and preservation experts, represented by both the SHPO and the Advisory Council on Historic Preservation (the Council). Neither party has approval authority over anything VA proposes, but it is in the best interest of VA and the public to reach accord on program and project issues under their review.

a. **Purpose.** The Council seeks through the Section 106 process to accommodate historic preservation concerns with the needs of Federal undertakings. It is designed to identify potential conflicts between the two and to help resolve such conflicts to best represent the public interest and to prevent arbitrary destruction of historic resources with Federal funds.

b. **Regulations Implementing Section 106, 36 CFR Part 800.** The Council has developed regulations pursuant to the authority granted by the NHPA to define the process used by a Federal agency to meet these responsibilities. They are known as 36 CFR Part 800, "The Protection of Historic Properties." They provide for:

- (1) The review of all agency undertakings by the SHPO and the Council;
- (2) Consideration of primary agency mission;

(3) Consultation with the SHPO and public;

(4) Consideration of alternatives;

(5) Resolution by the Council; and

(6) Development of MOA or Programmatic Agreements to mitigate project effects on Historic and Cultural Resources.

c. **Participants.** The participants in the Section 106 process include:

(1) **All Executive Branch Federal Agencies.** The agency official with jurisdiction over an undertaking has legal responsibility for complying with Section 106 and is required to identify and evaluate affected historic properties, assess an undertaking's effect upon them, and afford the Council with an opportunity to comment. A Federal agency's responsibility to comply with Section 106 **cannot** be delegated to others except through statutory authority; however, the agency official may use the services of grantees, applicants, consultants, or designees, to prepare the necessary information and analyses, but remains responsible for Section 106 compliance.

(2) **State Historic Preservation Officers (the SHPO).** The SHPO is a key participant in the Section 106 process. The role of the SHPO in the Section 106 process is to consult with and assist the agency official when identifying historic properties, assessing effects upon them, and considering alternatives to avoid or reduce those effects.

(a) The SHPO reflects the interest of the State and its citizens in the preservation of their cultural heritage.

(b) When the SHPO declines to participate or does not respond within 30 days to a written request for participation, the agency official must consult with the Council without the SHPO to complete the Section 106 process.

(3) **The Advisory Council on Historic Preservation (the Council).** The Council is responsible for commenting to the Federal agency official on a undertaking that affects historic properties. It is an independent Federal agency established under NHPA to advise the President and Congress on historic preservation matters. The Council is authorized under NHPA to review the policies and programs of Federal agencies and recommend methods to improve the effectiveness, coordination, and consistency of such policies and programs. The Council is comprised of 20 members including: the Chairman, one member of an Indian tribe, one Governor, one Mayor, and four historic preservation experts who are appointed by the President; Architect of the Capitol; Secretaries of the Department of Interior and Department of Agriculture; four other Federal agency heads; President, National Conference of State Historic Preservation Officers; the Chairman, National Trust for Historic Preservation.

(4) **Interested Persons.** Interested persons are those organizations and individuals that are concerned with the effects of an undertaking on historic properties and may include: local governments; applicants for Federal assistance, permits, and licenses; Indian tribes; the public; and the NPS. NPS principal role in the Section 106 process is as the administrator of the National Register of Historic

Places, and the Historic American Building Survey and Historic American Engineering Record (HABS/HAER).

d. **The 5-Step Section 106 Process.** The process involves the following 5 steps which are detailed, with a flow chart in Appendix E. The steps are:

(1) **Identification and Evaluation of Historic Resources.** The Federal agency responsible for an undertaking begins by identifying the historic properties the undertaking may affect. To do this, the agency first reviews background information and consults with the SHPO and others who may know about historic properties in the area. Based on this review, the agency determines what additional surveys or other field studies may be needed, and conducts those studies. If properties are found that may be eligible for inclusion in the National Register of Historic Places (see par. 5), but have not yet been included, the agency evaluates them against criteria published by the NPS, which maintains the Register. This evaluation is carried out in consultation with the SHPO, and if questions arise about the eligibility of a given property, the agency may seek a formal determination of eligibility from the Secretary of the Interior.

(2) **Assessing Effects.** If historic properties are found, the agency then assesses what effect its undertaking will have on them. Again, the agency works with the SHPO, and considers the views of others. The agency makes its assessment based on criteria found in the Council's regulations and can make one of three determinations:

(a) No effect: the undertaking will not affect historic properties;

(b) No adverse effect: the undertaking will affect one or more historic properties, but the effect will not be harmful; or

(c) Adverse effect: the undertaking will harm one or more historic properties.

(3) **Consultation and/or Resolving Adverse Effect.** If an adverse effect occurs, the agency consults with the SHPO and others in an effort to find ways to make the undertaking less harmful. Others who are consulted, under various circumstances, may include local governments, Indian tribes, property owners, other members of the public, and the Council. Consultation is designed to result in a MOA, which outlines measures agreed upon that the agency will take to reduce, avoid, or mitigate the adverse effect. In some cases, the consulting parties may agree that no such measures are available, but that the adverse effect must be accepted in the public interest. If consultation proves unproductive, the agency or SHPO, or the Council itself, may terminate consultation. The agency must submit appropriate documentation to the Council and request the Council's written comments.

(4) **Council Comment.** The Council may comment during Step 3 of the process by participating in consultation and signing the resulting MOA. Otherwise, the agency obtains Council comment by submitting the MOA to the Council for review and acceptance. The Council can accept the MOA, request changes, or opt to issue written comments. If consultation is terminated, the council issues its written comments directly to the agency head, as the agency head had requested.

(5) **Proceed with Undertaking.** If an MOA is executed, the agency proceeds with its undertaking under the terms of the MOA. In the absence of an MOA, the agency head must take into account the Council's written comments in deciding whether and how to proceed.

e. **Sample Compliance Letter.** A sample letter showing how to initiate compliance with the SHPO and the Council is contained in Appendix F.

f. **Sample MOA.** A sample MOA, which generally completes compliance for most projects that affect historic districts, is contained in Appendix H.

g. **The Timing of the Section 106 Process.** Section 106 requires the Federal agency to complete the Section 106 process prior to the approval of the expenditure of any Federal funds on the undertaking, or prior to the issuance of any license or permit. This does not bar an agency from expending funds on, or authorizing, nondestructive planning activities preparatory to an undertaking before complying with Section 106, or to prohibit phased compliance at different stages in planning.

8. PROJECT PLANNING AT HISTORIC PROPERTIES

In consultation with the SHPO and following the "Standards and Guidelines for Evaluation," the agency official shall apply the National Register Criteria to properties that may be affected by the undertaking. The agency needs to provide the following information to the SHPO to assist in this consultation:

- a. Information on the property, i.e., date of construction, date of habitation, date of alterations, names of persons involved with the property; condition and integrity of property, etc.;
- b. Clear, unobstructed photographs of the property;
- c. At least one map showing the Area of Potential Effect (see par. 9) and the location of the property; and
- d. A discussion of why the property does or does not meet the National Register Criteria.

9. PRELIMINARY CONSIDERATIONS

a. All effort should be made to consider historic resources in the early stages of project planning. For design and rehabilitation, the Secretary of the Interior's Standards for Rehabilitation needs to be followed. These standards form the common basis for SHPO and Council comments when reviewing Federal projects.

b. Defining an "Undertaking" and an "Area of Potential Effects," (APE)

(1) **"Undertaking"** means:

(a) A project, activity, or program funded in whole or in part under the direct or indirect jurisdiction of a Federal agency, including those carried out by or on behalf of the agency or with agency financial assistance;

(b) Those programs, projects, or activity requiring a Federal permit, license, or approval; and

(c) Those programs, projects, or activity subject to State or local regulation administered pursuant to a delegation or approval by a Federal agency. **NOTE:** *The broad range includes: construction, rehabilitation and repair projects; licenses, permits, loans, and grants; leases; Federal property transfers; and many other types of Federal involvement.*

(2) **“Area of Potential Effect” (APE).** An APE is a geographic area, or areas within which an undertaking may cause changes in the character or use of historic properties, if any such properties exist. An APE is defined before the effort to identify historic properties actually begins and is not defined on the basis of land ownership. An APE should contain all areas where an undertaking may cause changes to land or structures whether such changes are direct or indirect, or beneficial or adverse, including all:

(a) Alternative locations for elements of the undertaking;

(b) Locations where the undertaking may result in disturbance of the ground;

(c) Locations from which elements of the undertaking may be visible; and

(d) Locations where the activity may result in changes in traffic patterns, land use, public access, etc.

(3) If a project, activity, or program is determined to be an undertaking, then the responsible Federal Agency Official must establish an APE.

10. FORECLOSURE OF COUNCIL COMMENT

a. Occasionally an agency requests that the Council issue its comments after it has made an irrevocable commitment to an undertaking, initiated demolition or construction, or issued a permit or license thereby making it meaningless for the Council to comment because the opportunity for the agency to consider and implement any alternative action that the Council may recommend is impracticable. The regulations at 36 CFR Section 800.6(d) require that the Council's decision to advise an agency that it has foreclosed its reasonable opportunity to comment is made after a majority vote of:

(1) The Council membership; or

(2) A panel of three or more Council members with the concurrence of the Chairman.

b. If the Council finds that the agency has foreclosed its opportunity to comment, the agency is vulnerable to litigation under NHPA.

11. DEMOLITION OF HISTORIC BUILDINGS

a. **Anticipatory Demolition.** The law forbids anticipatory demolition. VA must ensure that the agency does not grant a loan, permit, license, or other assistance to an applicant who, with intent to

avoid the requirements of Section 106, has intentionally, significantly, and adversely affected a historic property to which the grant would relate, or having legal power to prevent it, allowed such significant adverse effect to occur; unless the agency, after consultation with the Council, determine that circumstances justify granting such assistance despite the adverse effect created or permitted by the applicant.

b. **Building Demolition.** Section 110 of NHPA encourages Federal agencies to use, reuse, and preserve historic buildings to the maximum extent feasible. On occasion, VA decides that it is in the best fiscal, project, and program interest of the Department and the public to demolish a historic building. After completing Section 106 compliance, VA must document the building and its environment to the standards of the **Historic American Buildings Survey (HABS)**. The HABS Office within NPS, Department of the Interior, must first be contacted to determine what level of documentation they will require for the building. The different levels are:

- (1) **Level One** - Measured line drawings, historic drawings, detailed photographs, full data package.
- (2) **Level Two** - Numerous detailed photographs, full data package.
- (3) **Level Three** - General Photographs, outline brief data package.

NOTE: *For planning purposes see paragraph 18, and Appendix L, for additional information on levels two and three.*

12. EMERGENCY UNDERTAKINGS

a. If a disaster or emergency affects a historic or culturally significant property, VA may be responsive to the immediate emergency. VA may propose an emergency undertaking as an essential and immediate response to a disaster declared by the President or the appropriate Governor, in which case the usual Section 106 compliance does not apply. VA may satisfy Section 106 by notifying the Council and the appropriate SHPO of the emergency undertaking and affording them an opportunity to comment within 7 days.

b. Within 30 days after a disaster VA must fulfill Section 106 responsibilities.

c. VA CRMOs need to develop plans for taking historic properties into account during emergency operations, and the VA Preservation Officer and the Advisory Council can assist in the development of such plans.

13. PROPERTIES DISCOVERED DURING IMPLEMENTATION OF AN UNDERTAKING

Occasionally an agency will discover during implementation of an undertaking that it will affect a previously unidentified historic property, or will affect a known historic property in an unexpected manner. Several options to address these unexpected effects are:

a. **Advance Planning.** Agencies are encouraged to develop a plan for treating such properties during the planning phases of the undertaking. These plans can be documented and reviewed through the Section 106 process.

b. **Without Advance Planning:** If an agency has not developed a plan in advance, the three options it has are:

(1) The agency can consult to develop an MOA or request the Council's comments without an MOA. The Council must provide expedited review in either instance.

(2) The agency can develop and implement a plan for the property and notify the Council and SHPO as soon as possible. **NOTE:** *The Council must provide interim comments within 2 days and final comments within 30 days.*

(3) If the property is mainly of archeological value and is subject to the requirements of the Archeological and Historic Preservation Act (AHPA), the agency can comply with AHPA instead of Section 106. In this case the agency gives the SHPO an opportunity to comment and provides the Council with a report after the work has been completed.

c. If a newly discovered property has not previously been included in or determined eligible for the National Register, the Agency may assume that the property is eligible for purposes of Section 106. Additionally, if a discovery occurs in connection with an undertaking reviewed under Section 106 on lands under the jurisdiction of an Indian tribe, the agency official shall consult with the Indian tribe.

14. PROGRAMMATIC AGREEMENTS

Programmatic Agreements are special types of agreements to establish procedures which fulfill an agency's Section 106 responsibilities in a more responsive, efficient manner. CRMOs should consider developing Programmatic Agreements for their programs or facilities to streamline their responsibilities, in coordination with their SHPOs (for national program, the National Conference of SHPOs, the Advisory Council on Historic Preservation, and VA's Preservation Officer).

a. **Programmatic Agreements** are appropriate for programs or projects:

(1) When effects on historic properties are similar and repetitive, or are multi-State or national in scope;

(2) When effects on historic properties cannot be fully determined prior to approval;

(3) When non-federal parties are delegated major decisionmaking responsibilities;

(4) Which involve development of regional or land-management plans; or

(5) That involve routine management activities at Federal facilities.

b. **Development of a Programmatic Agreement.** The Council and the Agency must consult to develop a Programmatic Agreement. When a particular State is affected, the appropriate SHPO shall be a consulting party, and if the agreement involves issues that are national in scope, the President of the

National Conference of SHPOs, or a designated representative, shall participate. Other Federal agencies or interested parties may be invited to be consulting parties to participate, as appropriate.

c. **Public Involvement.** The Council, with the assistance of the agency, shall arrange for public notice and involvement appropriate to the subject matter and scope of the agreement. Views from affected units of State and local governments, Indian tribes, industries, and organizations will be invited.

d. **Execution of a Programmatic Agreement.** After consideration of any comments received and reaching final agreement, the Council and agency and any other consulting parties, as appropriate, shall execute the agreement.

e. **Effect of a Programmatic Agreement.** The implementation of an executed Programmatic Agreement satisfies the agency's Section 106 responsibilities for all individual undertakings included in the agreement until such agreement expires by its own terms, or is terminated.

15. COORDINATION

a. VA shall work closely with other agencies and interested parties in reviewing actions that may affect cultural resources, both formally as defined by regulations, and informally, in a spirit of partnership with those concerned with the resources.

b. To the extent feasible, steps taken to satisfy cultural resource management and environmental authorities shall be coordinated, resulting in a single document that can be used for the purpose of all such authorities.

16. STANDARDS

a. Utilization of Historic Buildings

(1) Prior to acquiring, constructing, or leasing new buildings, VA shall use historic buildings under VA control to the maximum extent feasible.

(2) Full consideration is to be given to rehabilitating historic buildings under VA control to support VA's mission.

(3) Where rehabilitation alternatives are comparable to other alternatives, and where construction and long-term costs are not significantly greater, rehabilitation is encouraged.

b. Preservation of Cultural Resources

(1) VA shall consider and follow preservation standards and guidelines established by the Secretary of the Interior, for all construction and maintenance activities that may affect cultural resources.

(2) In meeting building and fire code standards, consideration shall be given to the building's historic character and integrity.

(3) Using the Uniform Federal Accessibility Standards, access modifications for disabled persons shall be designed and installed to least affect the features of a historic building or resource that contribute to its significance.

(4) Measures are to be taken to stabilize vacant historic buildings and prevent significant deterioration, pending proposed disposition action.

c. Leases

(1) Leasing of VA historic buildings is encouraged when the buildings are not in use and a lease will ensure preservation of the building.

(2) Maintenance and rehabilitation of leased VA and non-VA historic buildings should be accomplished in accordance with the Secretary of the Interior's Standards for Rehabilitation, whether rehabilitation is accomplished by VA or other public or private organizations.

d. Records

(1) Records, such as printed material, plans, and photographs, shall be maintained in accordance with Federal and Departmental records management policies. Records shall be retained and disposed of as required by approved VA Records Control Schedules (RCSs). Historic records which have been appraised as having permanent historic value shall be transferred to the National Archives or other approved depositories. VA shall maintain copies of historic records, in accordance with the RCSs, so that historic information may be made available to the public.

(2) The VA Preservation Officer is responsible for maintaining an inventory of all known cultural resources under VA control, and for retaining copies of National Register documentation HABS documentation, and related historical information.

e. Documentation. When a cultural resource is to be substantially altered or demolished, timely steps shall be taken to document the resource. Documentation shall be accomplished in consultation with the State Historic Preservation Officer and VA Preservation Officer. **NOTE:** *HABS Standards are used; see Appendix L.*

17. ARCHEOLOGICAL RESOURCES

The looting and vandalism of archeological sites robs all citizens of a non-renewable part of their cultural heritage. Looters destroy information which is often the only way we can understand how people lived in the past. Looting destroys sacred remnants of early cultures, especially those of Native Americans.

a. All archeological resources contained on Federal land or affected by Federal undertakings are protected by several laws, the primary one being the Archeological Resources Protection Act. All archeological investigations or activities, including casual artifact collecting, must be done under the auspices of a Federal permit. The head of a Federal agency or facility and VA's Historic Preservation

Officer may issue written permits to conduct investigations. A bonified consulting contract serves as a permit. Archeological sites do not regenerate, nor can they be replaced.

b. Archeological resources shall be left undisturbed and protected unless removal of artifacts or intervention of the resource is justified by protection, research, or construction. Significant archeological data that would be lost as a result of construction projects, degradation or destruction from natural or human causes, or other activities will be recovered in accordance with professional standards (see App. K).

c. If potential archeological resources are discovered, the SHPO and VA Preservation Officer shall be contacted immediately for guidance.

d. Artifacts shall be properly evaluated, catalogued and curated in consultation with the SHPO and interested parties.

e. Human remains which are discovered and likely to be exhumed shall be treated with sensitivity to cultural, religious, and scientific research values. **NOTE:** *Refer to the Advisory Council's "Policy Statement Regarding Treatment of Human Remains and Grave Goods."*

18. PRESERVATION PLANNING DOCUMENTS

The following are various preservation planning documents that may be required. Questions concerning the applicability of these planning documents to a specific project or program should be referred to the VA Preservation Officer.

a. **Archeological Survey.** Archeological investigation and research consists of activities such as archival research, observation, and recording of above-ground and below-ground resources undertaken by a qualified archeologist. The SHPO shall be consulted in developing a specific research plan. Generally, there are three phases of investigation, (see App. L).

(1) **Phase One Survey.** A Phase One Survey, sometimes referred to as a reconnaissance survey, is based on archival research and limited field investigation and testing, which results in a determination as to whether there is a potential for archeological resources. A Phase One Survey should provide a location map of potential sites and specific management recommendations. A Phase One Survey is required where the potential for archeological resources is unknown.

(2) **Phase Two Survey.** A Phase Two Survey includes additional testing using sampling techniques, to evaluate and determine whether identified sites meet National Register criteria. A Phase Two Survey is required when there is a known potential for archeological resources.

(3) **Phase Three Survey.** A Phase Three Survey further uses sampling techniques to recover information about an archeological site prior to its destruction. A Phase Three Survey is required when an archeological site will be impacted by ground disturbing activity.

b. **Determination of Eligibility.** This is a determination, required for all VA properties and some non-VA properties, where VA provides assistance, as to whether a property contains any resources that may be eligible for the National Register. VA makes a determination in consultation with the SHPO. In

cases where there is not a consensus between VA and the SHPO, a final determination is provided by NPS. Most existing VA properties have been evaluated for their eligibility; however, determinations may be reviewed when new information is available. A resource that meets the criteria for eligibility shall be treated as if it were already listed on the National Register (see App. B).

c. **National Register Nomination.** The National Register nomination is an official application for listing a cultural resource in the National Register. The nomination form is used to summarize the significance of a resource and contains detailed descriptive information. For historic districts, it contains information on "contributing" and "non-contributing" elements, and the "boundaries" of the district. Nominations are required for all resources that are determined eligible for listing on the National Register (see App. C).

d. **HABS and HAER Documentation.** Documentation standards have been established by the HABS/HAER Program within NPS. Documentation usually consists of photographs, written data and sometimes measured drawings. Where an alteration is proposed for a cultural resource, documentation may be required. The specific level of documentation is determined by the NPS, after VA consults with the SHPO and the Advisory Council on Historic Preservation (see App. L).

e. **Historic Structure Report.** A historic structure report is a historical and technical evaluation of a building or structure. It provides information on interior and exterior character defining elements and features, and assesses their integrity and condition. A historic structure report may be required prior to a proposed rehabilitation or demolition project. **NOTE:** *See Appendix M for sample outline.*

f. **Historic Preservation Plan.** A historic preservation plan, cultural resources management plan, or preservation maintenance plan are comprehensive planning tools which ensure long-term protection and use of cultural resources. These plans may contain an inventory and evaluation of all known cultural resources and describe techniques for maintenance and rehabilitation. Plans which have been developed in consultation with the State Historic Preservation Office and the Advisory Council on Historic Preservation may be used to meet specific compliance responsibilities. Plans are recommended for all properties with significant cultural resources, particularly those properties that have cultural resource management concerns (see Apps. I and J).

g. **Memorandum of Agreement (MOA).** An MOA among VA, the SHPO, and the Advisory Council on Historic Preservation describes how the effects of a proposed undertaking will be taken into account (36 CFR Part 800.5), and will stipulate actions which will avoid or mitigate proposed effects on a cultural resource. An MOA is required for undertakings which will have an adverse effect (see App. H).

h. **Programmatic Agreement.** A programmatic agreement is a document which fulfills compliance responsibilities for a particular program, a large or complex project, routine maintenance activities, or a class of undertakings that would otherwise require numerous individual requests for comments from the Advisory Council on Historic Preservation (36 CFR Par 800.13). Programmatic Agreements may be required for certain projects and are particularly beneficial to clarify and simplify compliance review procedures for a program which may result in adverse effects to cultural resources. For example, a facility specific programmatic agreement would cover procedures and agreements for a window or roof replacement program which is implemented over several years; a Department-wide programmatic

agreement might be required where a program involves the disposition of underutilized buildings throughout VA.

19. PREPARATION AND SUBMISSION OF PLANS

a. CRMOs should develop Historic Preservation Plans in cooperation with the SHPO. Assistance and information on historic resources already identified, inventoried, evaluated, and nominated to the National Register of Historic Places, is available from VA's Preservation Officer.

b. Historic Preservation Plans should be a document or data system that is useful to the program or facility managers. It can be as short or long as necessary to maintain a permanent and integrated system of considering cultural resources in the normal conduct of facility program decision-making, planning, construction, maintenance, and any other action affecting the resources.

c. Submission of a brief outline should be made annually with the required report, as described in paragraph 20. The brief outline should contain a record of the contents of the facility's historic preservation plan, actions made to complete implementation of the plan, copies of pertinent documents, especially National Register nominations and MOA, but not copies of routine Section 106 compliance correspondence.

20. REPORTING REQUIREMENTS

a. VA must submit an annual report to Congress on several issues relating to Cultural Resources, Historic Preservation, and Archeological activity. VA's Historic Preservation Officer is the point of contact for the reports. Information from program and facility CRMOs is critical to the accuracy of the reports. Reports should be submitted as appropriate to fulfill VA's national oversight and reporting needs to comply with Congressional requirements.

b. All CRMO's are responsible for reporting in a timely manner on certain conditions or activities, as applicable, when:

(1) Significant controversial issues are identified by the SHPO;

(2) Cultural resource inventory, evaluation, and implementation studies are done;

(3) Legal documents, normally in the form of a MOA, are proposed or developed by the SHPO and/or the Advisory Council for a project or program; or

(4) There are suspected, identified, or executed archeological studies or actions.

c. Reports are to be submitted by program, regional, and field facility CRMOs to the Associate Chief Medical Director for Construction Management (08). The report should reflect historic preservation and cultural resource activities undertaken (see App. n).

d. To compile the report, the regional, facility, and program CRMOs are requested to submit information on the following items, as appropriate:

- (1) **CRMO.** The name, position, mailing address, and telephone numbers of the current person assigned the duties of CRMO.
- (2) **Preservation Issues.** Those preservation issues which are of a controversial or significant nature.
- (3) **Historic Preservation Plan.** A brief update on the preparation and implementation of the Historic Preservation Plan.
- (4) **List of Projects.** A list of projects which have completed Section 106 compliance requirements.
- (5) **National Register of Historic Places.** This includes copies of any recent nominations.
- (6) **Agreements.** That includes copies of any project MOA or Programmatic Agreements developed with the SHPO and the Advisory Council.
- (7) **All Archeological Activities.** These need to be incorporated into VA's Annual Report to the Secretary of the Interior, with information broken down as follows:
 - (a) Planning Studies, literature searches (Phase I), includes number, acreage covered, and cost;
 - (b) Identification and Evaluation Investigations (Phase II), includes number, acreage covered, sites identified, and cost;
 - (c) Data Recovery and Excavation (Phase III), includes number, acreage covered, sites identified, and cost;
 - (d) Unanticipated discoveries, i.e., the number and cost to investigate;
 - (e) Computerized systems managing archeological sites, explain the type of system;
 - (f) Collections management, i.e., old existing or newly discovered artifacts, cubic feet of stored material, percentage catalogued, number of linear feet of associated records, estimated cubic feet added in fiscal year;
 - (g) Total acreage surveyed and inventoried, at any time;
 - (h) Number of known archeological sites on property and their National Register status, if known;
 - (I) Permits granted to archeologists for investigations; and
 - (j) Law enforcement, i.e., any instances of looting of archeological artifacts or sites.

VA PROGRAMS AFFECTED BY CULTURAL RESOURCE MANAGEMENT DIRECTIVE

1. VETERANS HEALTH ADMINISTRATION

- a. Major Construction Projects.
- b. Minor Construction Projects.
- c. Miscellaneous and non-recurring maintenance.
- d. Leasing - all types.
- e. Land Acquisition and Disposal.
- f. Building Demolition.
- g. State Veterans Home Grant Program.
- h. Homeless Providers Grant Program.
- i. Enhanced use - asset and enterprise development.

2. NATIONAL CEMETERY SYSTEM

- a. Major Construction Projects.
- b. Minor Construction Projects.
- c. Maintenance and Repair.
- d. State Veterans Cemetery Grant Program.

3. VETERANS BENEFITS ADMINISTRATION

- a. Major Construction Projects.
- b. Minor Construction Projects.
- c. Leasing.
- d. Home Loan Guaranty Program - VA properties owned by foreclosure.

4. ALL PROGRAMS AND FACILITIES

- a. Archeological Artifacts.
- b. Artwork.
- c. Crafts.
- d. Furnishings.
- e. Historical Documents.
- f. Technological and Other Historically Significant Equipment.

INVENTORY LISTING OF IDENTIFIED HISTORIC VA PROPERTIES

Generally, listings are historic districts comprising all or most of the property, unless otherwise noted.

1. VA MEDICAL CENTERS

<u>LOC #</u>	<u>VAMC LOCATION</u>	<u>National Register Status*</u>	<u>Thematic Group**</u>	<u>Arche-ology Y/N</u>	<u>Date Built</u>
501	Albuquerque, NM	NR	Architecture		1932
502	Alexandria, LA	NR	Arch. Set		1929
553	Allen Park, MI	DOE	Arch. Set		1938
504	Amarillo, TX	DOE	Arch. Set		1939
505	American Lake, WA	DOE	Arch. Set	Y	1923
637	Asheville, NC	NR	History		1931
509	Augusta (LD), GA	DOE	B-18-20, Arch. Set		1913
513	Batavia, NY	DOE	Arch. Set		1932
514	Bath, NY	DOE	NHDVS & Arch. Set		1877
515	Battle Creek, MI	DOE	Arch. Set		1924
516	Bay Pines, FL	DOE	Arch. Set	Y	1924
516	Bay Pines, FL	NR	Indians Mounds	Y	
518	Bedford, MA	DOE	Arch. Set		1928
520	Biloxi (BD), MS	DOE	Arch. Set		1932
520	Biloxi (GD), MS	DOE	Arch. Set		1923
531	Boise, ID	NR	Fort	Y	1863
525	Brockton (WRD), MA	DOE	Arch. Set		1943
532	Canandaigua, NY	DOE	Arch. Set		1932
442	Cheyenne, WY	DOE	Architecture		1932
538	Chillicothe, OH	DOE	Arch. Set	Y	1923
539	Cincinnati (FTD), OH	NR	Fort		1890
541	Cleveland (BD), OH	Pot. Elig.	Bldg. 62		1846
542	Coatesville, PA	DOE	Arch. Set		1930
544	Columbia, SC	DOE	Arch. Set		1932
549	Dallas, TX	DOE	Arch. Set		1940
550	Danville, IL	NR	NHDVS	Y	1898
552	Dayton, OH	DOE	NHDVS	Y	1867
555	Des Moines, IA	DOE	Arch. Set		1933
564	Fayetteville, AR	DOE	Arch. Set		1933
565	Fayetteville, NC	DOE	Arch. Set	Y	1939
565	Fayetteville, NC	NR	Confed. Breastworks	Y	1865
436	Ft. Harrison, MT	DOE	Fort	Y	1892

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566	Ft. Howard, MD	DOE	Fort & Arch. Set	Y	1943
567	Ft. Lyon, CO	NR	Fort & Arch. Set	Y	1860's; 1932
568	Ft. Meade, SD	NR	Fort	Y	1891
590	Hampton, VA	DOE	NHDVS & Arch. Set	Y	1870
578	Hines, IL	DOE	Arch. Set		1922
579	Hot Springs, SD	NR	NHDVS	Y	1907
581	Huntington, WV	DOE	Arch. Set		1932
583	Indianapolis (CSR), IN	DOE	Arch. Set		1931
592	Knoxville, IA	DOE	Bldg. 27 & 28		1905
686	Leavenworth, KS	DOE	NHDVS	Y	1884
595	Lebanon, PA	DOE	Arch. Set	Y	1947
596	Lexington (LD), KY	DOE	Arch. Set		1930
597	Lincoln, NE	DOE	Arch. Set		1929
598	Little Rock (NLRD), AR	NR	Fort & Set		1896
600	Long Beach, CA	NR	Indian Village	Y	Unk.
604	Lyons, NJ	DOE	Arch. Set		1929
608	Manchester, NH	NR	Bldg. 11		1888
609	Marion, IL	DOE	Arch. Set		1940
610	Marion, IN	DOE	NHDVS	Y	1889
695	Milwaukee, WI	DOE	NHDVS	Y	1867
695	Milwaukee, WI	NR	Theater B-41	Y	1888
695	Milwaukee, WI	DOE	Rock Reef	Y	1837
618	Minneapolis, MN	DOE	Ft. Snelling		1921
619	Montgomery, AL	DOE	Arch. Set		1939
620	Montrose, NY	DOE	Arch. Set	Y	1949
621	Mountain Home, TN	DOE	NHDVS		1903
622	Murfreesboro, TN	DOE	Arch. Set	Y	1939
623	Muskogee, OK	DOE	History		1925
627	Newington, CT	DOE	Arch. Set		1930
556	North Chicago, IL	NR	Dewey House	Y	1914
631	Northampton, MA	DOE	Arch. Set		1923
632	Northport, NY	DOE	Arch. Set		1927
641	Perry Point, MD	DOE	Arch. Set	Y	1919
641	Perry Point, MD	NR	Mill & Mansion	Y	1750
646	Pittsburgh (AD), PA	DOE	Arch. Set		1925
649	Prescott, AZ	DOE	Fort	Y	1863
653	Roseburg, OR	DOE	Arch. Set		1933

658	Salem, VA	DOE	Arch. Set	Y	1933
662	San Francisco, CA	DOE	Arch. Set		1934
666	Sheridan, WY	NR	Fort		1898
667	Shreveport, LA	DOE	Archeology only	Y	
438	Sioux Falls, SD	DOE	Architecture		1920
656	St. Cloud, MN	DOE	Arch. Set		1923
402	Togus, ME	DOE	NHDVS		1866
402	Togus, ME	NR/NHL	Bldg. 1		1869
676	Tomah, WI	DOE	Arch. Set		1946
678	Tucson, AZ	DOE	Architecture	Y	1928
679	Tuscaloosa, AL	DOE	Arch. Set		1931
680	Tuskegee, AL	DOE	History		1923
685	Waco, TX	DOE	Arch. Set		1932
687	Walla Walla, WA	NR	Fort	Y	1856
691	W. Los Angeles (BD), CA	DOE	Arch. Set		1920
691	W. Los Angeles (WD), CA	DOE	NHDVS		1888
691	W. Los Angeles (WD), CA	NR	Bldgs. 20 & 66		1890
405	White River Junction., VT	DOE	Arch. Set		1938
452	Wichita, KS	DOE	Arch. Set		1933

* **NR** Listed on National Register of Historic Places

NHL National Historic Landmark

DOE Determination of Eligibility for the National Register of Historic Places

These designations are official from the Keeper of the National Register of Historic Places, National Park Service, Department of Interior.

Pot. Elig. Potentially Eligible for listing on the National Register of Historic Places. These properties have not received official certificates from the NPS, but are generally considered by VA and SHPOs to be historically significant and require preservation. They need additional evaluation and documentation.

NOTE: *For all of these designations, VA must comply with Sections 110 and 106 of the National Historic Preservation Act of 1966, for all projects and property management decisions that may affect the historic districts.*

** **Arch. Set** One of about 50 properties nationwide that serve as part of VA's Architectural Set, a thematic, multiple property nomination to the National Register. They share a common prototype floor plan, campus siting/landscaping, and overall health care design strategy; the exterior facades differ regionally by architectural style.

NHDVS One of eleven branches of the National Home for Disabled Volunteer Soldiers, established after the Civil War in 1867 by Congress to care for disabled veterans.

2. VA NATIONAL CEMETERIES

<u>N/C NAME</u>	<u>N/C LOCATION</u>	<u>National Register Status*</u>	<u>Thematic Group** Y/N</u>	<u>Arche- ology</u>	<u>Date Est.</u>
Albany Rural C. S/L	Albany, NY	Pot. Elig.	Civil War Related		1862
Alexandria	Pinesville, LA	DOE	Civil War ***		1867
Alexandria	Old Town Alexandria, VA	NR	Civil War ***		1862
Allegheny Cem. S/L	Pittsburgh, PA	Pot. Elig.	Civil War Related		1875
Annapolis	Annapolis, MD	DOE	Civil War ***		1862
Ashland Cem. S/L	Carlisle, PA	Pot. Elig.	Civil War Related		1865
Balls Bluff	Leesburg, VA	NHL	Civil War ***		1865
Baltimore	Baltimore, MD	DOE	Former Estate		1936
Barrancas	Pensacola, FL	DOE	Civil War ***		1868
Bath	Bath, NY	DOE	NHDVS		1879
Baton Rouge	Baton Rouge, LA	DOE	Civil War ***		1867
Baxter Springs S/L	Baxter Springs, KS	Pot. Elig.	Civil War Related		1869
Bay Pines	St.Petersburg, FL	DOE			1933
Beaufort	Beaufort, SC	DOE Civil War ***			1863
Beverly	Beverly, NJ	DOE Civil War ***			1864
Biloxi	Biloxi, MS	Pot. Elig.			1934
Camp Butler	Springfield, IL	DOE	Civil War ***		1862
Camp Chase	Columbus, OH	NR	Civil War Related		1879
Camp Nelson	Nicholasville, KY	Pot. Elig.	Civil War ***		1866
Cave Hill	Louisville, KY	Pot. Elig.	Civil War ***		1863
Chattanooga	Chattanooga, TN	DOE	Civil War ***		1867
City Point	Hopewell, VA	DOE	Civil War ***		1866
Cold Harbor	Mechanicsville, VA	DOE	Civil War ***		1866
Congressional Cem. S/L	Washington, DC	NR	Famous Burials		1817
Corinth	Corinth, MS	DOE	Civil War ***		1866
Crown Hill	Indianapolis, IN	Pot. Elig.	Civil War ***		1866
Crown Hill Confed.	Indianapolis, IN	Pot. Elig.	Civil War		1931
Culpeper	Culpeper, VA	DOE	Civil War ***		1867
Cypress Hills	Brooklyn, NY	DOE	Civil War ***		1862
Cypress Hills Mon.	Brooklyn, NY	Pot. Elig.			1941
Cypress Hills Union/P	Brooklyn, NY	Pot. Elig.	Civil War Related		1870
Danville	Danville, VA	NR	Civil War ***		1866
Danville	Danville, IL	NR	NHDVS		1898
Danville	Danville, KY	Pot. Elig.	Civil War ***		1862
Danville Confed. Plot	Danville, KY	Pot. Elig.	Civil War Related		Unk.
Dayton	Dayton, OH	DOE	NHDVS		1867

Fayetteville	Fayetteville, AR	DOE	Civil War ***		1867
Finn's Point	Salem, NJ	NR	Civil War Related		1875
Florence	Florence, SC	DOE	Civil War ***		1865
Forest Hill Cem. S/L	Madison, WI	Pot. Elig.	Civil War Related		1862
Forest Home C. S/L	Milwaukee, WI	Pot. Elig.	Civil War Related		1863
Forest Lawn Cem S/L	Omaha, NE	Pot. Elig.	Civil War Related		1887
Fort Bayard	Fort Bayard, NM	Pot. Elig.			1922
Fort Crawford S/L	Prairie du Chien, WI	Pot. Elig.			1904
Fort Gibson	Fort Gibson, OK	DOE	Civil War ***		1868
Fort Harrison	Richmond, VA	DOE	Civil War ***		1866
Fort Leavenworth	Fort Leavenworth, KS	DOE	Civil War ***		1862
Fort Logan	Denver, CO	DOE			1950
Fort Lyon	Fort Lyon, CO	DOE	Military		1906
Fort McPherson	Maxwell, NE	DOE			1873
Fort Meade	Sturgis, SD	NR			1878
Fort Rosecrans	San Diego, CA	DOE			1934
Fort Sam Houston	San Antonio, TX	DOE	Military		1937
Fort Scott	Fort Scott, KS	DOE	Civil War ***		1862
Fort Smith	Fort Smith, AR	DOE	Civil War ***		1867
Fort Snelling	Minneapolis, MN	DOE	Military		1939
Fort Whipple	Prescott, AZ	DOE	Settlers	Y	1863
Fort Winnebago	Portage, WI	Pot. Elig.			1862
Glendale	Glendale, VA	DOE	Civil War ***		1866
Golden Gate	San Bruno, CA	Pot. Elig.			1938
Grafton	Grafton, WV	NR	Civil War ***		1867
Green Mount C. S/L	Montpelier, VT	Pot. Elig.	Civil War Related		1865
Hampton	Hampton, VA	DOE	Civil War ***		1866
Hampton VAMC	Hampton, VA	DOE	NHDVS		1898
Hot Springs	Hot Springs, SD	NR	NHDVS		1907
Jefferson Barracks	Saint Louis, MO	DOE	Civil War ***		1866
Jefferson City	Jefferson City, MO	DOE	Civil War ***		1867
Keokuk	Keokuk, IA	DOE	Civil War ***		1862
Knoxville	Knoxville, TN	Pot. Elig.	Civil War ***		1863
Lake Side Cem. S/L	Port Hudson, MI	Pot. Elig.	Civil War Related		1881
Leavenworth	Leavenworth, KS	DOE	NHDVS	Y	1884
Lebanon	Lebanon, KY	NR	Civil War ***		1867
Lexington	Lexington, KY	Pot. Elig.	Civil War ***		1863
Little Rock	Little Rock, AR	DOE	Civil War ***		1868
Los Angeles	Brentwood, CA	DOE	NHDVS		1888
Loudon Park	Baltimore, MD	DOE	Civil War ***		1862

Marietta	Marietta, GA	Pot. Elig.	Civil War ***	1866
Marion	Marion, IN	DOE	NHDVS	1889
Memphis	Memphis, TN	DOE	Civil War ***	1867
Mill Springs	Nancy, KY	Pot. Elig.	Civil War ***	1862
Mobile	Mobile, AL	NR	Civil War ***	1865
Mound Cem. S/L	Racine, WI	DOE	Civil War Related	1868
Mound City	Mound City, IL	DOE	Civil War ***	1864
Mount City S/L	Woodlawn Cem., KS	DOE	Civil War Related	1874
Mount Moriah S/P	Philadelphia, PA	DOE	Civil War Related	1878
Mount Pleasant S/L	Augusta, ME	Pot. Elig.	Civil War Related	1862
Mountain Home	Johnson City, TN	DOE	NHDVS	1903
North Alton Confed.	North Alton, IL	DOE	Civil War Related	1867
Nashville	Madison, TN	Pot. Elig.	Civil War ***	1866
Nat'l Mem/Pacific	Honolulu, HI	NR	WWII; Natives Y	1948
Natchez	Natchez, MS	NR	Civil War ***	1866
New Albany	New Albany, IN	DOE	Civil War ***	1862
New Bern	New Bern, NC	DOE	Civil War ***	1867
Oakdale Cem. S/L	Davenport, IA	Pot. Elig.	Civil War Related	1866
Oakwood Confed Mound	Chicago, IL	Pot. Elig.	Civil War Related	1866
Philadelphia	Philadelphia, PA	DOE	Civil War ***	1862
Point Lookout Confed	St. Mary's County, MD	Pot. Elig.	Civil War Related	1874
Port Hudson	Zachary, LA	DOE	Civil War ***	1866
Prospect Hill C. S/L	Brattleboro, VT	Pot. Elig.	Civil War Related	1864
Prospect Hill C. S/L	York, PA	Pot. Elig.	Civil War Related	1868
Puerto Rico	Bayamon, PR	NR		1948
Quincy	Quincy, IL	Pot. Elig.		1899
Raleigh	Raleigh, NC	Pot. Elig.	Civil War ***	1865
Richmond	Richmond, VA	DOE	Civil War ***	1866
Rock Island	Rock Island, IL	Pot. Elig.	Civil War ***	1863
Rock Island Confed.	Rock Island, IL	Pot. Elig.	Civil War Related	1863
Salisbury	Salisbury, NC	DOE	Civil War ***	1865
San Antonio	San Antonio, TX	DOE	Civil War ***	1867
San Francisco	"Presidio," S.F., CA	NR	Military	1884
Santa Fe	Santa Fe, NM	DOE	Settlers	1875
Seven Pines	Sandstone, VA	DOE	Civil War ***	1866
Sitka	Sitka, AK	DOE		1924
Springfield	Springfield, MO	DOE	Civil War ***	1867
St. Augustine	St. Augustine, FL	DOE		1881
Staunton	Staunton, VA	DOE	Civil War ***	1866
Stockade Confed.	Sandusky Bay, OH	Pot. Elig.	Civil War Related	1862

Togus	Togus, ME	DOE	NHDVS	1866
Wilmington	Wilmington, NC	Pot. Elig.	Civil War ***	1867
Winchester	Winchester, VA	DOE	Civil War ***	1866
Wood	Milwaukee, WI	DOE	NHDVS	1871
Woodlawn	Ayer, MA	Pot. Elig.		1918
Woodlawn	Elmira, NY	Pot. Elig.	Civil War Related	1874
Woodlawn Cem. S/L	Cleveland, OH	Pot. Elig.	Civil War Related	1863
Zachary Taylor	Louisville, KY	NR		1928

* **NR** Listed on National Register of Historic Places

NHL National Historic Landmark

DOE Determination of Eligibility for the National Register of Historic Places

NOTE: *These designations are official from the Keeper of the National Register of Historic Places, National Park Service, Department of Interior.*

Pot. Elig. Potentially Eligible for listing on the National Register of Historic Places. These properties have not received official certificates from the National Park Service, but are generally considered by VA and State Historic Preservation Officers to be historically significant and require preservation. They need additional evaluation and documentation.

NOTE: *For all of these designations, VA must comply with Sections 110 and 106 of the National Historic Preservation Act of 1966, for all projects and property management decisions that may affect the historic districts.*

** **Civil War** One of 59 National Cemeteries established as a direct result of and during the Civil War by Union forces for the burial of soldiers lost in battle.

Civil War Related One of many additional National Cemeteries established during or after the Civil War to bury either Union or Confederate Soldiers. Some were established to bury disabled soldiers upon their subsequent deaths.

NHDVS One of eleven branches of the National Home for Disabled Volunteer Soldiers, established after the Civil War in 1867 by Congress to care for disabled veterans. Each branch contained a cemetery area; these cemeteries were brought into the National Cemetery System in 1973.

**Military/
Settlers** These National Cemeteries were established as a direct result of the migration of pioneer settlers into the western territories. They are mostly on or near wilderness military forts or posts that were built and staffed to defend settlers from the Indians.

*****Multiple
Property** One of 59 national cemeteries included in multiple property nomination to the National Register of Historic Places, "Civil War Era National Cemeteries."

SAMPLE NATIONAL REGISTER OF HISTORIC PLACES FORM

NPS Form 10-900
(Oct. 1990)

OMB No. 10024-0018

United States Department of the Interior
National Park Service

National Register of Historic Places
Registration Form

This form is for use in nominating or requesting determinations for individual properties and districts. See instructions in How to Complete the National Register of Historic Places Registration Form (National Register Bulletin 16A). Complete each item by marking "x" in the appropriate box or by entering the information requested. If any item does not apply to the property being documented, enter "N/A" for "not applicable." For functions, architectural classification, materials, and areas of significance, enter only categories and subcategories from the instructions. Place additional entries and narrative items on continuation sheets (NPS Form 10-900a). Use a typewriter, word processor, or computer, to complete all items.

1. Name of Property

historic name _____

other names/site number _____

2. Location

street & number _____ not for publication ___
city or town _____ vicinity ___
state _____ code ___ county _____ code ___ zip code _____

3. State/Federal Agency Certification

As the designated authority under the National Historic Preservation Act of 1986, as amended, I hereby certify that this nomination request for determination of eligibility meets the documentation standards for registering properties in the National Register of Historic Places and meets the procedural and professional requirements set forth in 36 CFR Part 60. In my opinion, the property meets does not meet the National Register Criteria. I recommend that this property be considered significant nationally statewide locally. (See continuation sheet for additional comments.)

Signature of certifying official _____ Date _____

State or Federal agency and bureau _____

In my opinion, the property meets does not meet the National Register criteria. (See continuation sheet for additional comments.)

Signature of commenting or other official _____ Date _____

State or Federal agency and bureau _____

4. National Park Service Certification

I, hereby certify that this property is:

- entered in the National Register
 See continuation sheet.

- determined eligible for National Register
 See continuation sheet.

- determined not eligible for the National Register
- removed from the National Register
- other (explain): _____

Signature of Keeper

Date of Action

5. Classification

Ownership of Property

(Check as many boxes as apply)

- private
- public-local
- public-State
- public-Federal

Category of Property

(Check only one box)

- building(s)
- district
- site
- structure
- object

Number of Resources within Property

(Do not include previously listed resources in the count.)

Contributing

Noncontributing

_____ buildings
_____ sites
_____ structures
_____ objects
_____ Total

Name of related multiple property listing

(Enter "N/A" if property is not part of a multiple property listing.)

Number of contributing resources previously listed in the National Register

6. Function or Use

Historic Functions

(Enter categories from instructions)

Cat: _____:

Sub _____

Current Functions

(Enter categories from instructions)

7. Description

Architectural Classification

(Enter categories from instructions)

Materials

(Enter categories from instructions)

foundation _____
roof _____
walls _____

other _____

Narrative Description

(Describe the historic and current condition of the property on one or more continuation sheets.)

8. Statement of Significance

Applicable National Register Criteria

(Mark "x" in one or more boxes for the criteria qualifying the property for National Register listing)

- A** Property is associated with events that have made a significant contribution to the broad patterns of our history.
- B** Property is associated with the lives of persons significant in our past.
- C** Property embodies the distinctive characteristics of a type, period, or method of construction or represents the work of a master, or possesses high artistic values, or represents a significant and distinguishable entity whose components lack individual distinction.
- D** Property has yielded, or is likely to yield information important in prehistory or history.

Criteria Considerations

(Mark "X" in all the boxes that apply.)

Property is:

- A** owned by a religious institution or used for religious purposes.
- B** removed from its original location.
- C** a birthplace or a grave.
- D** a cemetery.
- E** a reconstructed building, object, or structure.
- F** a commemorative property.
- G** less than 50 years of age or achieved significance within the past 50 years.

Narrative Statement of Significance

(Explain the significance of the property on one or more continuation sheets.)

Areas of Significance

(Enter categories from instructions)

Period of Significance

Significant Dates

Significant Person

(Complete if Criterion B is marked above)

Cultural Affiliation

Architect/Builder

9. Major Bibliographical References

Bibliography

(Cite the books, articles, and other sources used in preparing this form on one or more continuation sheets.)

Previous documentation on file (NPS)

- preliminary determination of individual listing (36 CFR 67) has been requested.
- previously listed in the National Register
- previously determined eligible by National Register
- designated a National Historic Landmark
- recorded by Historic American Buildings Survey # _____
- recorded by Historic American Engineering Record # _____

Primary Location of Additional Data

- State Historic Preservation Office
- Other State agency
- Federal agency
- Local government
- University
- Other

Name of repository:

March 27, 1996

VA HANDBOOK 7545
APPENDIX C

NPS Form 10-900-a
(8-86)

OMB No. 1024-0018

United States Department of the Interior
National Park Service

National Register of Historic Places
CONTINUATION SHEET

Section _____ Page _____
name of property _____
county and state _____

**United States Department of the Interior
National Park Service**

**National Register of Historic Places
CONTINUATION SHEET**

Section _____ Page _____
_____ name of property
_____ county and State
_____ name of multiple property listing

A blank National Register nomination form is available on MS WordPerfect for Windows and MS Word for Windows disk; call VA Historic Preservation Office (202 565-5680) to obtain one.

THE SECRETARY OF THE INTERIOR'S STANDARDS FOR REHABILITATION

The Standards are to be applied to specific rehabilitation projects in a reasonable manner, taking into consideration economic and technical feasibility. They pertain to historic buildings of all materials, construction types, sizes, and occupancy, and encompass the exterior and the interior of historic buildings. They also encompass related landscape features and the building's site and environment as well as attached, adjacent or related. The Secretary of the Interior is responsible for establishing standards for all national preservation programs and advising Federal agencies on the preservation of historic properties listed or eligible for listing on the National Register of Historic Places.

Rehabilitation is defined as the process of returning a property to a state of utility, through repair or alteration, which makes possible an efficient contemporary use while preserving those portions and features of the property which are significant to its historic, architectural, and cultural values.

The standards are to be applied to specific rehabilitation projects in a reasonable manner, taking into consideration economic and technical feasibility. They pertain to historic buildings of all materials, construction types, sizes, and occupancy, and encompass the exterior and the interior of historic buildings. They encompass related landscape features and the building's site and environment as well as attached, adjacent or related new construction.

1. A property shall be used for its historic purpose or be placed in a new use that requires minimal change to the defining characteristics of the building and its site and environment.
2. The historic character of a property shall be retained and preserved. The removal of historic materials or alteration of features and spaces that characterize a property shall be avoided.
3. Each property shall 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 architectural elements, from other buildings, shall not be undertaken.
4. Most properties change over time; those changes that have acquired historic significance in their own right shall be retained and preserved.
5. Distinctive features, finishes, and construction techniques or examples of craftsmanship that characterize a property shall be preserved.
6. Deteriorated historic features shall be repaired rather than replaced. Where the severity of deterioration requires replacement of a distinctive feature, the new feature shall match the old in design, color, texture, and other visual qualities and, where possible, materials. Replacement of missing features shall be substantiated by documentary, physical, or pictorial evidence.
7. Chemical or physical treatments, such as sandblasting, that cause damage to historic materials shall not be used. The surface cleaning of structures, if appropriate, shall be undertaken using the gentlest means possible.

8. Significant archeological resources affected by a project shall be protected and preserved. If such resources must be disturbed, mitigation measures shall be undertaken.

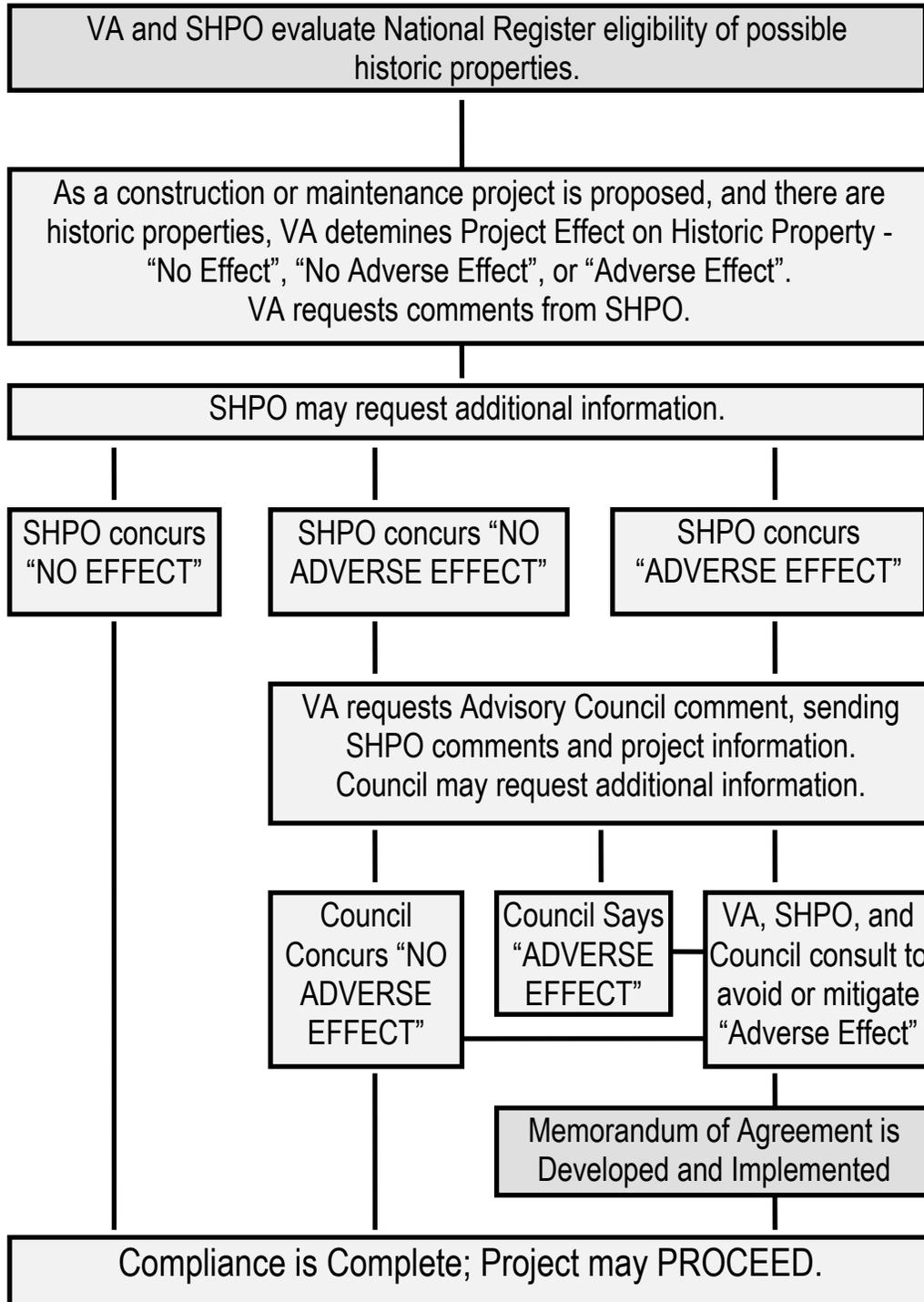
9. New additions, exterior alterations, or related new construction shall not destroy historic materials that characterize the property and its environment. The new work shall be differentiated from the old to protect the historic integrity of the property and shall be compatible with the massing, size, scale, and architectural details to protect the historic integrity of the property and its environment.

10. New additions and adjacent or related new construction shall 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.

NOTE: *Reference: The Department of the Interior Regulations (36 CFR, Part 67).*

SECTION 106 REVIEW PROCESS

This flow diagram applies to VA construction and maintenance projects. Refer to 36 CFR Part 800 and to this handbook for further guidance. Steps taken in coordination with the VA Historic Preservation Officer are in darker shading. Participants are: State Historic Preservation Officer (SHPO) and Advisory Council on Historic Preservation (Council), VA, federal funding grant or license applicants, interested local groups, individuals, or Indian Tribes.



THE FIVE-STEP SECTION 106 PROCESS

1. FIRST STEP: IDENTIFICATION AND EVALUATION OF HISTORIC PROPERTIES

a. Area of Potential Effect (APE). If a project, activity, or program is determined to be an undertaking, then the responsible Federal agency official must establish an "area of potential effects" (APE) or geographic area or areas within which an undertaking may cause changes in the character or use of historic properties, if any such properties exist. An APE is defined before the effort to identify historic properties actually begins and is not defined on the basis of land ownership. An APE should contain all areas where an undertaking may cause changes to land or structures whether such changes are direct or indirect, or beneficial or adverse, including all:

- (1) Alternative locations for elements of the undertaking;
- (2) Locations where the undertaking may result in disturbance of the ground;
- (3) Locations from which elements of the undertaking may be visible; and
- (4) Locations where the activity may result in changes in traffic patterns, land use, public access, etc.

b. Identification. Once the responsible Federal agency official has determined if a project, activity, or program is an undertaking and has established the undertaking's APE (see Handbook subpar. 9.b.) the agency official is required to assess the information needs and determine what actions should be taken to identify historic properties within APE. Title 36 CFR Section 800.4 requires the agency official to:

- (1) Review existing information on historic properties within the APE;
- (2) Request the views of the SHPO on further actions to identify historic properties;
- (3) Seek information from local governments, Indian tribes, public and private organizations, and other parties likely to have knowledge of or concerns about historic properties in the APE; and
- (4) Determine if any additional actions are needed to identify historic properties. Then in consultation with the SHPO, the agency official shall make a reasonable and good faith effort to identify historic properties in the APE and evaluate the eligibility of these properties for including in the National Register.

c. SHPO Review of VA's Determination of Eligibility. After the SHPO has received adequate documentation from the agency, the SHPO has 30 days to review the agency's determination of eligibility of the property's eligibility for the National Register, and can reach three conclusions:

- (1) The SHPO concurs with the agency's determination

(a) If the agency official and the SHPO agree that a property is eligible under the criteria, the property shall be considered eligible for the National Register for Section 106 purposes.

(b) If the agency official and the SHPO agree that the criteria are not met, the property shall be considered not eligible for the National Register for Section 106 purposes.

(2) The SHPO disagrees with the agency's determination. If the agency official and the SHPO do not agree, the agency official shall obtain a determination from the Secretary of the Interior pursuant to applicable NPS regulations. The Keeper of the National Register's determination is final and cannot be appealed.

(3) The SHPO does not provide views within 30 days. If the SHPO does not provide views, then the SHPO is presumed to agree with the agency's official's determination for the purpose of this subsection.

d. **When NO historic properties are found.** The agency official shall provide documentation of this finding to the SHPO, notify interest persons and parties, and make the documentation available to the public. In these circumstances, the agency official is not required to take further steps in the Section 106 process, and the undertaking may PROCEED (Step 5).

e. **When Historic Properties are Found.** The Agency shall assess the effects in accordance with Step 2 - Assessing Effects.

f. **Owner Consent Not Required.** The Council's regulations do not require consent by owner of the property which is being evaluated for National Register eligibility. Although there is no specific directive that notice regarding the outcome of this eligibility determination be provided to the property owner, the owner needs to have been identified and contacted as a part of the agency's process to assess its information needs and should continue to receive information regarding the status of the Section 106 process from the responsible Federal agency.

g. **Public Inquiry to Council.** The public has the right to request that the Council consider an agency official's finding. The Council is specifically directed by this section of the regulations to refer any such public inquiry to the Keeper of the National Register for an official determination of eligibility.

2. SECOND STEP: ASSESSING EFFECTS

a. Possible effects on cultural resources shall be considered at the earliest stages of project and program planning, prior to a final decision regarding the proposed undertaking. **NOTE:** *Refer to 36 CFR Part 800.9 for definition of effects and 800.5 for procedures assessing effects.*

b. Planning documents shall contain sufficient information on assessing effects and evaluating alternatives that could avoid or mitigate any adverse effect to a cultural resource.

c. The SHPO and Council must be consulted regarding potential effects of the proposed undertaking and alternatives.

d. **Criteria of Effect:** In consultation with the SHPO, the agency official shall apply the Criteria of Effect to historic properties that may be affected by the undertaking, giving consideration to the views, if any, of interested persons. An undertaking has an effect on a historic property when the undertaking may alter characteristics of the property that may qualify the property for inclusion in the National

Register. For the purpose of determining effect, alteration to features of the property's location, setting, or use may be relevant depending on a property's significant characteristics and should be considered. The agency official needs to consider the effect of all reasonably foreseeable consequences of the undertaking, such as:

- (1) A project, program, or activity does not have to be negative or adverse to constitute an effect;
- (2) The potential of the undertaking to "alter characteristics of the property that may qualify it for inclusion in the National Register before it will be determined to have an effect;"
- (3) The possible effects of an undertaking including visual, audible, atmospheric, use, and setting; or
- (4) Effects which need not be direct and physical.

e. **When NO effect is found.** The agency official shall notify the SHPO (see App. F) and interested persons who have made their concerns known to the agency office and document the finding, which shall be available for public inspection. Unless the SHPO objects with 15 days of receiving such notice the undertaking may PROCEED (Step 5). If the SHPO files a timely objection then the agency official shall consult with the SHPO to apply the Criteria of Adverse Effect.

f. **Public Inquiry to Council.** When requested by any person, the Council shall consider an agency official's finding and within 30 days advise the agency, the SHPO, and the requester of its views. The agency official should reconsider its finding in light of the Council's views, but is not required to suspend action on an undertaking.

g. **When an Effect is Found.** The agency official, in consultation with the SHPO, shall apply the Criteria of Adverse Effect.

h. **Criteria of Adverse Effect.** An undertaking is considered to have an adverse effect when the effect on a historic property may diminish the integrity of the property's location, design, setting, materials, workmanship, feeling, or association. Adverse effects on historic properties include, but are not limited to:

- (1) Physical destruction, damage, or alteration of all or part of the property;
- (2) Isolation of the property from of alteration of the character of the property's setting when that character contributes to the property's qualification for the National Register;
- (3) Introduction of visual, audible, or atmospheric elements that are out of character with the property or alter its setting;
- (4) Neglect of a property resulting in its deterioration or destruction; and
- (5) Transfer, lease, or sale of the property.

i. **Exceptions to the Criteria of Adverse Effect.** Effects of an undertaking that would otherwise be found to be adverse may be considered as being not adverse for the purpose of Section 106 compliance, when the:

(1) Historic property is of value only for its potential contribution to archeological, historical, or architectural research, and when such value can be substantially preserved through the conduct of appropriate research, and such research is conducted in accordance with applicable professional standards and guidelines.

(2) Undertaking is limited to the rehabilitation of buildings and structures and is conducted in a manner that preserves the historical and architectural value of affected historic properties through conformance with the Secretary's "Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings."

(3) Undertaking is limited to the transfer, lease, or sale of a historic property, and adequate restrictions or conditions are included to ensure preservation of the property's significant historic features.

j. **If the Agency Official Determines that the Effect is NOT Adverse, Consult SHPO.** Obtain the SHPO's concurrence with the finding SHPO (see App. F); and notify and submit finding to the Council for a 30-day review period along with the following documentation, which shall be available for public inspection:

(1) Summary documentation, including:

(a) A description of the undertaking;

(b) A map, or other documentation, showing the area of effects;

(c) A summary description of the historic properties subject to effect;

(d) The agency's reasons for believing that the undertaking will have no adverse effect on historic properties;

(e) A copy of the SHPO's letter indicating concurrence in the determination of no adverse effect; and

(f) Copies of, or a summary of, the views of any interested persons.

(2) Complete documentation including a:

(a) Description of the undertaking, including photographs, maps, and drawings, as necessary;

(b) Description of historic properties that may be affected by the undertaking;

(c) Description of the efforts used to identify historic properties;

(d) Statement of how and why the Criteria of Adverse Effect were found inapplicable; and

(e) The views of the SHPO, affected local governments, Indian tribes, Federal agencies, and the public, if any were provided, as well as a description of the means employed to solicit those views.

k. **Council Review of the Agency's No Adverse Effect Determination.** Following receipt of the required documentation, the Council has 30 days in which to:

(1) **Not object, or concur.** The agency may PROCEED with the undertaking (Step 5).

(2) **Concur with conditions.** If the agency formally accepts the Council's conditions in writing, the agency may PROCEED with the undertaking (Step 5). If the agency does not accept the conditions, the agency should initiate adverse effect consultations.

(3) **Object.** The agency should initiate adverse effect consultations.

l. **Council Does Not Respond.** If the Council does not respond with 30 days after receipt of an agency's no adverse effect determination and adequate documentation, the agency can PROCEED with the undertaking (Step 5).

3. THIRD STEP: CONSULTATION / RESOLVING ADVERSE EFFECT

a. **Defining Adverse Effect.** An undertaking must be considered to have an adverse effect when any **one** of the following conditions applies:

(1) An undertaking meets one or more of the criteria of adverse effect; **NOTE:** *When an agency determines that an undertaking will adversely affect a historic property the agency must notify the Council of this finding to provide them with the opportunity to participate in the adverse effect consultations;* or

(2) The SHPO disagrees with an agency's determination of no adverse effect, and the agency accepts the SHPO's conclusions;

(3) The Council objects to an agency's determination of no adverse effect; or

(4) The agency does not accept the conditions recommended by the Council to a determination of no adverse effect.

b. **The Consultation Process.** Certain parties automatically participate in the consultation process; other parties **must** be invited to participate under certain conditions, while other parties **may** be invited to participate if the Federal agency, SHPO, and Council unanimously agree.

c. Automatic Consulting Parties

(1) **The responsible Federal agency.** The agency cannot delegate its legal responsibility to consult. If several Federal agencies have responsibilities for components of a single undertaking, the agencies should determine which will act as the "lead Federal agency" for purposes of ensuring that all agreed upon actions are satisfactorily completed.

(2) **The SHPO.** Ideally, the SHPO is always involved as a representative of the State's interest. If the SHPO does not respond to requests to consult or withdraws from consultation, the Council must participate.

(3) **The Council.** The Council **MUST** be a consulting party when the SHPO does not respond to requests to consult or withdraws from consultation. Additionally, the Council **MUST** participate in the consultation process when an undertaking will directly and adversely affect a National Historic Landmark. The Council **MAY** be a consulting party when requested by the agency or the SHPO or when it elects to be involved.

d. **Mandatory Participation by Interested Persons.** The following interested persons **MUST** be invited to participate in consultation, if they so request:

(1) The head of a local government when the undertaking may affect historic properties within the local government's jurisdiction;

(2) The representative of an Indian tribe when an undertaking will affect Indian lands or properties of historic value to the tribe on non-Indian lands;

(3) Applicants for or holders of grants, permits, or licenses that are the subjects of Section 106 review; and

(4) An owner of affected lands which must be a person who meets the regulations' definition of "interested person" and who holds title to real property within the undertaking's APE.

e. **Optional Consulting Parties.** Others may be invited to participate in consultation when jointly determined appropriate by the agency, SHPO, and Council, if participating:

(1) Traditional cultural leaders which are recognized by members of a Native American group or other social or ethnic ground as experts on the group's traditional history and cultural practices;

(2) Other Native Americans including Native Hawaiians and others who are identified by themselves and recognized by others as members of a named, native cultural group that historically has shared linguistic, cultural, social, and other characteristics, but that is not necessarily a federally recognized Indian tribe or Alaska Native corporation; or

(3) Others who meet the definition of "interested person" in the regulations.

f. **Avoiding, Minimizing, or Mitigating Adverse Effect.** Consultation seeks ways to avoid, minimize or mitigate the adverse effects of an undertaking on the historic property using the at least some of the following strategies:

(1) **Avoiding or Minimizing Adverse Effects**

(a) Move the undertaking to an alternative site;

- (b) Use an alternative design;
- (c) Pursue an alternative undertaking; or
- (d) Cancel the undertaking.

(2) Mitigating Adverse Effects

- (a) Use an alternative design;
- (b) Alter the location or the siting of the undertaking;
- (c) Limit the magnitude of the undertaking;
- (d) Rehabilitate rather than demolish some of the historic properties;
- (e) Adopt a planned program of preservation and maintenance;
- (f) Move the historic property to another site;
- (g) Donate, sell, or lease the historic property;
- (h) Salvage archeological or architectural elements for curation or reuse; and/or
- (i) Document the historic property before significantly altering or demolishing it. **NOTE:** *This is generally done to standards of the Historic American Buildings Survey for submission to the Library of Congress, see Appendix L.*

g. The Process of Reaching an Agreement

(1) **Initiating Consultation.** The agency is responsible for initiating consulting and providing the above documentation to each of the consulting parties. Additional documents may be developed as consultation proceeds. NEPA documents can be used for Section 106 purposes, but the agency should ensure that it contains adequate information to address the questions raised through the Section 106 process.

(2) **Public Involvement.** Agencies are required to provide an adequate opportunity for members of the public to receive information and express their views. The agency may use its existing public involvement procedures to provide this opportunity. The level and type of public participation needs to be appropriate to the scale and type of undertaking, and to the likelihood that historic properties may be present and subject to effect.

(3) **Means of Consultation.** The Council's regulations do not establish procedures for consultation; however it does recognize the need to structure the consultation process to meet the need of the undertaking. Consultation can take place through meetings, telephone calls, correspondence, on-site inspections, and public hearing or information meetings. No time limits are imposed on this portion of

the process. The agency should take steps to ensure that the exchange of information is balanced, fair, and gives full consideration to the views and needs of all the parties.

(4) **Memorandum Of Agreement (MOA).** Once the consulting parties have agreed on ways to avoid, minimize, or mitigate the adverse effects of an undertaking, these measures are formalized in a written document called a MOA which serves four primary purposes; it:

(a) Specifies the mitigation measure or alternatives agreed to by the consulting parties;

(b) Identifies who is responsible for carrying out the specified measures;

(c) Renders the Council's comments as required by the NHPA; and

(d) Serves as an acknowledgment by the signatories that, in their collective view, the agency has "taken into account" the effects of the undertaking on historic properties.

(5) **Development of a Memorandum of Agreement.** An MOA is a legal document which renders the Council's comments, as required by the NHPA, and evidences that an agency has complied with the requirements of Section 106. Since it assigns duties and responsibilities to parties of the agreement it must meet certain legal standards. The Council's publication, "Preparing Agreement Documents," contains many suggestions for developing these agreements and specifically recommends that the MOA:

(a) Identifies the undertaking and the documents and plans referenced within this agreement clearly and specifically;

(b) Identifies the responsible agency and all other parties to the agreement;

(c) Assigns duties only to signatories or concurring parties;

(d) Avoids the use of the passive voice;

(e) Includes all the measures negotiated through consultation and fully addresses all the effects of the undertaking including those that may have been determined to not adversely effect historic properties;

(f) Remembers the "cold" reader;

(g) Identifies shorthand references;

(h) Identifies the affected historic properties clearly and completely;

(i) Provides complete citations and includes all statutory authorities;

(j) Uses consistent terminology that is adequately explained and consistent with statutory definitions; and

(k) Is structured logically and sequentially.

(6) **Components of an MOA.** A sample MOA is found in Appendix H; other formats and stipulations for MOAs appear in The Council's booklet, "Preparing Agreement Documents". An MOA has three principal parts:

(a) **The Preamble** identifies the project, cites the legal authority for the MOA, and names the parties to the agreement;

(b) **The Stipulations** state the agreement upon mitigation and identify the party that is responsible for carrying out the measure;

(c) **The Signatures** evidence execution of the agreement and show that the agency has taken into account the effects of the undertaking and provided the Council with a reasonable opportunity to comment.

(7) **Types of MOAs**

(a) **Three-party MOAs** reflect that the Council participated in the consultation and development of the document. Any of the consulting parties can write this agreement and there are not time limits on the consultation leading to the finalization and execution of a three-party MOA. The signatures can be added in any order although the Council usually prefers to execute the document last, and the MOA becomes effect on the date the last signature is obtained.

(b) **Two-party MOAs** reflect that the Council did NOT participate in consultation. The Council, however, is required to "accept" the MOA as evidenced by its signature after it has been fully negotiated and executed by the agency and SHPO. The Council has 30 days from receipt of a two-party MOA and adequate documentation to review the agreement. Before this review period ends the Council is required to:

1. Accept the MOA and notify all the consulting parties, which concludes the Section 106 process and the undertaking may PROCEED (Step 5); or

2. Advise the Agency Official of changes that would make the MOA acceptable. If the Agency Official and SHPO agree to the Council's recommended changes the Section 106 process is concluded and the undertaking may PROCEED (Step 5); or

3. Decide to comment on the undertaking and provide comments to the Agency Official within 60 days of receiving the MOA, unless the Agency Official agrees otherwise.

(c) **Failure to carry out the terms of an MOA.** If an agency fails to carry out the terms of an MOA the agency is required to resubmit the undertaking to the Council for comment.

h. **Terminating Consultation.** The regulations provide for the responsible Federal agency, the SHPO, or the Council to terminate consultation if the party determines that "further consultation will not be productive." If this occurs, the agency is required to request the Council's and notify all other consulting parties of its request. Consultation cannot be terminated until the parties have made a good faith effort to utilize the consultation process to the fullest extent practicable. Concurring parties CANNOT terminate consultation.

4. **FOURTH STEP: COUNCIL COMMENT**

a. **Council comment through the execution or acceptance of an MOA.** The agency may PROCEED (Step 5) with an undertaking, provided that it fulfills all of its responsibilities under the MOA, after the Council has executed or accepted an MOA. If an agency later finds that it cannot carry out the terms of the MOA or the undertaking has been modified, the agency should notify the Council and SHPO and renegotiate the terms of the MOA.

b. **Council comment without an MOA.** When the Council has commented in the absence of an MOA, the regulations require an agency to "...consider the Council's comments in reaching a final decision on the proposed undertaking." When the agency has made a final decision with respect to the undertaking it must then notify the Council of its decision and may legally PROCEED with the undertaking (Step 5.).

c. **Agency Head Documents Decision.** The 1992 Amendments to the National Historic Preservation Act contain a new provision which specifically addresses situations where consultation has been terminated, it states: "With respect to any undertaking subject to section 106 which adversely affects any property included in or eligible for inclusion in the National Register, and for which a Federal agency has not entered into an agreement with the Council, the head of such agency shall document any decision made pursuant to section 106. The head of such agency may not delegate those responsibilities pursuant to such section. Where a section 106 memorandum of agreement has been executed with respect to an undertaking, such memorandum shall govern the undertaking and all of its parts."

5. **FIFTH STEP: PROCEED WITH UNDERTAKING**

SECTION 106 COMPLIANCE LETTER - SAMPLE

1. Format

(a) _____
State Historic Preservation Officer
or
Advisory Council on Historic Preservation

Attn: (b) _____

Dear _____:

It is the intention of the Department of Veterans Affairs (VA) to (c) _____ at VA's
(d) _____ in _____. This property is (e) _____ in the National Register of Historic
Places.

The proposed project involves (f) _____.

Enclosed are (g) _____ for your review.

It is our opinion and determination that the proposed project will result in (h) _____ effect to
any significant historic, prehistoric or cultural resources, or to any National Register listed or eligible
property. We request your comments on our determination of effect and on the project.

If you have any questions or if you need additional information, please contact
(i) _____ at (_____) _____.

Sincerely,

(j) _____

Enclosures

cc: (k) _____
VA Historic Preservation Officer (087)
Advisory Council on Historic Preservation
or (opposite of addressee) State Historic Preservation Officer
Other interested parties

2. Instructions

(a) Name and address of State Historic Preservation Officer or Advisory Council on Historic Preservation. A listing of State Historic Preservation Office addresses are found in Appendix G. The addresses for the two Advisory Council offices are:

- (1) For states east of the Mississippi River **AND** Minnesota, Iowa, and Missouri:

Director, Eastern Division of Project Review
Advisory Council on Historic Preservation
Old Post Office Building
1100 Pennsylvania Avenue, NW, Suite #809
Washington, DC 20004,
Telephone: (202) 606-8505
FAX: (202) 606-8672

- (2) For states west of the Mississippi River **EXCEPT** Minnesota, Iowa, and Missouri:

Director, Western Division of Project Review
Advisory Council on Historic Preservation
730 Simms Street, #401
Golden, Colorado 80401,
Telephone: (303) 231-5320
FAX: (303) 231-5325

(b) It is preferable to address your letter to the attention of a specific staff compliance officer (if known) at the State Historic Preservation Office and the Advisory Council on Historic Preservation.

(c) A brief description or title of the project.

(d) Project location (VA medical center N/C, etc.; may include city, county and address as well as state).

(e) The property will either be considered: “*listed*”, “*eligible for listing*”, or “*ineligible for listing*.” If the current status is unknown, check with VA’s Historic Preservation Office.

NOTE: *In some cases, VA may be required to conduct an archeological survey where the potential for archeological resources is unknown. VA’s Historic Preservation Office and the State Historic Preservation Office archeologist should be contacted to discuss the need and requirements for an archeological survey.*

(f) Describe in a brief paragraph the project’s scope, impact on existing historic buildings, and the reason for the project or the deficiency it will solve.

(g) Provide additional appropriate information such as a written description, drawings, maps, photographs, etc. Information necessary to describe a project will vary for each project and each project development stage. A brief statement with a site plan may be all that is required for some projects. When rehabilitating a significant building, complete working drawings and specifications may be required. In addition, the SHPO or Council may also request specific additional information.

(h) The project will be determined to be having either: “*no effect*”, “*no adverse effect*”, or “*an adverse effect*” to the historic resource. Refer to earlier guidance on determining effect.

(i) Name and telephone of the individual coordinating compliance.

(j) Routine correspondence to the SHPO and Council should be signed by either the Medical Center Director, or other VA official responsible for the project.

(k) Appropriate individuals internal and external to VA or involved/interested parties should be provided courtesy copies. Copies of correspondence should also be provided to VA’s Historic Preservation Office (087). When writing to either the SHPO or Council, a courtesy copy should be sent to the other agency.

ADDRESSES
ADVISORY COUNCIL ON HISTORIC PRESERVATION
STATE HISTORIC PRESERVATION OFFICE

1. ADVISORY COUNCIL ON HISTORIC PRESERVATION:

For Advisory Council review and assistance:

Director, Eastern Division of Project Review
Advisory Council on Historic Preservation
Old Post Office Building, Suite #809
1100 Pennsylvania Avenue, NW
Washington, DC 20004
(202) 606-8505

Director, Western Office of Project Review
Advisory Council on Historic Preservation
730 Simms Street, Suite 450
Golden, Colorado 80401
(303) 231-5320

2. STATE HISTORIC PRESERVATION OFFICES (SHPOs):

ALABAMA SHPO

Alabama Historical Commission
468 South Perry Street
Montgomery, AL 36130-0900
205 242-3184

ALASKA SHPO

Division of Parks
Office of History & Archeology
P.O. Box 107001
Anchorage, AK 99510-7001
907 762-2622

ARIZONA SHPO

Arizona State Parks
1300 West Washington, #415
Phoenix, AZ 85007
602 542-4174

ARKANSAS SHPO

Arkansas Historic Preservation
Program
323 Center Street, Suite 1500
Little Rock, AR 72201
501 324-9880

CALIFORNIA SHPO

Office of Historic Preservation
Department of Parks & Recreation
P.O. Box 942896
Sacramento, CA 94296-0001
916 653-6624

COLORADO SHPO

Colorado Historical Society
1300 Broadway
Denver, CO 80203
303 866-3395

CONNECTICUT SHPO

Connecticut Historical Commission
59 S. Prospect Street
Hartford, CT 06106
203 566-3005

DELAWARE SHPO

Division of Historical & Cultural
Affairs
Hall of Records
P.O. Box 1401
Dover, DE 19903
302 739-5313

**DISTRICT OF COLUMBIA
SHPO**

City Administrator
1 Judiciary Square
441 4th Street., NW, Suite 1120
Washington, DC 20001
202 727-6053, and:
Historic Preservation Division
614 H Street, NW Suite 305
Washington, DC 20001
202 727-7360

FLORIDA SHPO

Division of Historical Resources
Department of State

R. A. Gray Building
500 S. Bronough Street
Tallahassee, FL 32399-0250
904 488-1480

GEORGIA SHPO

Office of Historic Preservation
205 Butler Street, SE, Suite 1462
Atlanta, GA 30334
404 656-2840

HAWAII SHPO

Department of Land & Natural
Resources
P.O. Box 621
Honolulu, HI 96809
808 548-6550

IDAHO SHPO

Idaho State Historical Society
210 Main Street
Boise, ID 83702
208 334-2682

ILLINOIS SHPO

Illinois Historic Preservation
Agency
Old State Capitol
Springfield, IL 62701
217 785-1153

INDIANA SHPO

Department of Natural Resources
Division of Historic Preservation &
Archeology

402 West Washington Street
Indiana Government Center South,
Rm. 274
Indianapolis, IN 46204
317 232-4020; 1646

IOWA SHPO

State Historical Society of Iowa
Capitol Complex
East 6th and Locust Streets
Des Moines, IA 50319
515 281-8837

KANSAS SHPO

Kansas State Historical Society
120 West Tenth Street
Topeka, KS 66612
913 296-3251

KENTUCKY SHPO

Kentucky Heritage Council
Capitol Plaza Tower, 12th Floor
300 Washington Street
Frankfort, KY 40601
502 564-7005

LOUISIANA SHPO

Office of Cultural Development
Department of Culture, Recreation
and Tourism
P.O. Box 44247
Baton Rouge, LA 70804
504 342-8200

MAINE SHPO

Maine Historic Preservation
Commission
55 Capitol Street, Station 65
Augusta, ME 04333
207 289-2132

MARYLAND SHPO

Director of Historical and Cultural
Programs
Department of Housing and
Community Development
100 Community Place, Third Floor
Crownsville, MD 21032-2023
410 514-7600

MASSACHUSETTS SHPO

Massachusetts Historical
Commission
80 Boylston Street, Suite 310
Boston, MA 02116

617 727-8470

MICHIGAN SHPO

Michigan Historical Center
717 W. Allegan Street
Lansing, MI 48918
517 373-0511, 1630

MINNESOTA SHPO

Minnesota Historical Society
345 Kellogg Boulevard West
St. Paul, MN 55102-1906
612 296-2747

MISSISSIPPI SHPO

Mississippi Department of
Archives & History
P.O. Box 571
Jackson, MS 39205-0571
601 359-6850

MISSOURI SHPO

State Department of Natural
Resources
205 Jefferson
P.O. Box 176
Jefferson City, MO 65102
314 751-4422

MONTANA SHPO

Montana Historical Society
1410 8th Avenue
P.O. Box 201202
Helena, MT 59620-1202
406 444-7715

NEBRASKA SHPO

Nebraska State Historical Society
P.O. Box 82554
Lincoln, NE 68501
402 471-4787

NEVADA SHPO

Division of Historic Preservation &
Archeology
Historic Preservation Office
101 South Stewart Street
Capitol Complex
Carson City, NV 89710
702 687-6360

NEW HAMPSHIRE SHPO

State Historic Preservation Office
19 Pillsbury Street
P.O. Box 2043
Concord, NH 03301
603 271-3483

NEW JERSEY SHPO

Department of Environmental
Protection & Energy
CN-402
401 East State Street
Trenton, NJ 08625
609 292-2885, 3541, 2023

NEW MEXICO SHPO

Historic Preservation Division
Office of Cultural Affairs
Villa Riveria, Room 101
228 East Palace Avenue
Santa Fe, NM 87503
505 827-6320

NEW YORK SHPO

Parks, Recreation & Historic
Preservation
Agency Building #1
Empire State Plaza
Albany, NY 12238
518 474-0443, 0468, 0479

NORTH CAROLINA SHPO

Division of Archives & History
Department of Cultural Resources
109 East Jones Street
Raleigh, NC 27601-2807
919 733-7305, 4763

NORTH DAKOTA SHPO

State Historical Society of North
Dakota
Heritage Center
612 E. Boulevard Ave.
Bismarck, ND 58505
701 224-2667

OHIO SHPO

The Ohio Historical Society
Ohio Historic Preservation Office
1985 Velma Avenue
Columbus, OH 43211-2497
614 297-2470

OKLAHOMA SHPO

Oklahoma Historical Society
Wiley Post Historical Building
2100 N. Lincoln Blvd.
Oklahoma City, OK 73105
405 521-2491

March 27, 1996

**VA HANDBOOK 7545
APPENDIX G**

OREGON SHPO

State Parks and Recreation
1115 Commercial Street, N.E.
Salem, OR 97310-1001
503 378-5019

PENNSYLVANIA SHPO

Pennsylvania Historical & Museum
Commission
P.O. Box 1026
Harrisburg, PA 17108
717 787-2891

PUERTO RICO SHPO

Office of Historic Preservation
Box 82; La Fortaleza
San Juan, PR 00901
809 721-2676

RHODE ISLAND SHPO

Rhode Island Historical
Preservation Commission
Old State House
150 Benefit Street
Providence, RI 02903
401 277-2678

SOUTH CAROLINA SHPO

Department of Archives & History
P.O. Box 11669
Columbia, SC 29211
803 734-8609

SOUTH DAKOTA SHPO

Office of History
South Dakota State Historical
Society
Cultural Heritage Center
900 Governors Drive
Pierre, SD 57501
605 773-3458

TENNESSEE SHPO

Department of Environment &
Conservation
401 Church Street, L & C Tower
Nashville, TN 37243-0435
615 532-0109, and:
Tennessee Historical Commission
701 Broadway

Nashville, TN 37243-0442
615 532-1550

TEXAS SHPO

Texas Historical Commission
P.O. Box 12276, Capitol Station
Austin, TX 78711-2276
512 463-6100

UTAH SHPO

Utah State Historical Society
300 Rio Grande
Salt Lake City, UT 84101
801 533-3500, 7039

VERMONT SHPO

Vermont Division for Historic
Preservation; Agency of
Development and Community
Affairs
135 State Street, Drawer 33
Pavilion Building, 4th Floor,
Montpelier, VT 05633-1201
802 828-3211

VIRGINIA SHPO

Department of Historic Resources
Commonwealth of Virginia
221 Governor Street
Richmond, VA 23219
804 786-3143

WASHINGTON SHPO

Office of Archeology & Historic
Preservation
111 West 21st Avenue, KL-11
Olympia, WA 98504
206 753-4011, 4117

WEST VIRGINIA SHPO

Department of Culture & History
Historic Preservation Office
Capitol Complex
1900 Kanawha Boulevard East
Charleston, WV 25305-0300
304 558-0220

WISCONSIN SHPO

Historic Preservation Division
State Historical Society of
Wisconsin
816 State Street
Madison, WI 53706
608 264-6500

WYOMING SHPO

Department of Archives Museum
& History
Barrett Building, 4th Floor
2301 Central Avenue
Cheyenne, WY 82002
307 777-7697

MEMORANDUM OF AGREEMENT FOR A PROJECT OR PROGRAM - SAMPLE

MEMORANDUM OF AGREEMENT

Between

The Department of Veterans Affairs

**The _____ State Historic Preservation Office
and**

The Advisory Council on Historic Preservation

WHEREAS, The Department of Veterans Affairs (VA) has determined that the demolition of Buildings _____, at the Veterans Affairs Medical Center, _____, _____, will have an effect on a property determined eligible for the National Register of Historic Places; and,

WHEREAS, the VA has consulted with the _____ State Historic Preservation Officer (SHPO) and determined that the effect is adverse, but unavoidable in order to provide _____ (veterans/medical center staff) with _____; and,

WHEREAS, the VA has requested the comments of the Advisory Council on Historic Preservation (Council) pursuant to Section 106 of the National Historic Preservation Act of 1966 (16 U.S.C. 470f) and its implementing regulations, "Protection of Historic and Cultural Properties" (36 CFR Part 800); and,

NOW, THEREFORE, VA, the _____ SHPO, and the Council agree that the undertakings shall be implemented in accordance with the following stipulations in order to take into account their affect on the historic district:

STIPULATIONS

The VA will ensure that the following measures are carried out:

1. The VAMC Director will offer, for a period of not less than 60 days through public announcement and advertisement, the availability of Buildings _____ for sale to any interested individuals, parties, or organizations for one dollar each with removal from site and relocation. The VAMC will consult with the _____ SHPO on the targeted publications and contents of the advertisement.
2. VA will have Buildings _____ recorded so that there will be a permanent record of their history and appearance. The Historic American Buildings Survey (HABS) (National Park Service, Department of the Interior, Washington, D.C. 20243, 202-343-9606) will first be contacted to determine what level of documentation is required. All documentation must be accepted by HABS for submission to the Library of Congress, and the SHPO notified of its acceptance, prior to the demolition or removal of the buildings. Copies of this documentation will be provided to the _____ SHPO and VA's Historic Preservation Office.

3. VA will construct the _____ project in accordance with construction documents/plans dated _____. VA will submit to the SHPO the any significant changes in the project plans for review and comment. The SHPO will have 30 days from receipt of the plans to provide VA with comments. If there are concerns that cannot be satisfactorily resolved between VA and the _____ SHPO, the project plans will be submitted to the Advisory Council on Historic Preservation for their review and comment in accordance with 36 CFR Part 800.6.

4. VA will seek to identify planning funds and, when funds are identified and available, develop and implement a plan for the management of historic, architectural and cultural resources (termed an Historic Preservation Plan or "Plan") for the Veterans Affairs Medical Center at _____, _____. When the Plan is approved by the SHPO and the Council, work carried out in accordance with the Plan, will require no further review by the SHPO or the Council. The Plan will include, but not be limited to the following: Overview; Site History; Identification, Inventory and Evaluation; National Register Nomination; Treatment; Maintenance Standards & Schedules; Design Standards; Phase I Archeological Investigation; and, Compliance Procedures.

Execution of this Agreement and implementation of its terms evidences that, in accordance with 36 CFR Part 800, VA has afforded the SHPO and the Council an opportunity to comment on the demolition of historic buildings for the purpose of constructing _____ at the VA Medical Center at _____, _____, which is eligible for inclusion on the National Register of Historic Places.

DEPARTMENT OF VETERANS AFFAIRS:

HISTORIC PRESERVATION OFFICE:

Director, _____ VA Medical Center Date

State Historic Preservation Officer Date

ADVISORY COUNCIL ON HISTORIC PRESERVATION:

APPROVED:

APPROVED:

Executive Director Date

Chairman Date

HISTORIC PRESERVATION PLAN - SAMPLE OUTLINE

1. In general, a Historic Preservation Plan, also called a Cultural Resource Management Plan, is best formatted in a three ring binder and/or a computer disk, and may contain the following items:

- a. Executive Summary / Overview;
- b. Management Recommendations;
- c. Site and Building Intensive Inventory: Identification, Evaluation of all Resources;
- d. Historical Overview and Site History;
- e. National Register of Historic Places Nomination, if not already listed;
- f. Historic American Buildings Survey (HABS) documentation, if needed for Section 106 compliance;
- g. Planning Integration of FDP, 5-Year Plans with preservation considerations;
- h. Design Guidelines for Future Construction;
- i. Materials Treatment - Guidance and Standards;
- j. Maintenance Schedules;
- k. Sections 106 and 110 Compliance Guidance and Procedures;
- l. Phase I (and II, if needed) Archeological Investigation; and
- m. Specific Preservation Issues.

2. The Outline needs to be as follows:

I. Summary Information

- A. History and Significance Summary
- B. Project Review Requirement Summary
- C. Issues and Management Recommendations
- D. Archeological Information Summary

E. Building and Landscape Inventory

II. Legal Requirements

A. Historic Preservation Laws and Regulations

B. Rehabilitation Standards

C. VA Directives and Procedures (handbook)

III. Historical Research and Documentation

A. Site and Building Inventories and Evaluations

B. National Register Nomination(s)

B. HABS Documentation

C. Archeological Survey

IV. Technical Information and Guidelines

A. Maintenance and Repair

B. Building Rehabilitation

C. Landscape Maintenance and Rehabilitation

D. Additions and New Construction

HISTORIC PRESERVATION PLAN - SAMPLE SCOPE OF WORK

1. A proposed major construction project will have a significant affect upon the _____ Department of Veterans Affairs (VA) Medical Center. The VA medical center property includes: (insert the name of the former _____ Branch of the National Home for Disabled Volunteer Soldiers or one of 50 properties in VA’s Architectural Set), which has been determined eligible for listing in the National Register of Historic Places. As part of planning for this construction project, additional information is needed on historical and archeological resources.

a. This scope of work for this preservation planning effort includes the following four tasks:

(1) **TASK ONE** - Phase One Archeological Survey;

(2) **TASK TWO** - National Register Nomination and Inventory;

(3) **TASK THREE** - Historic American Building Survey (HABS) Overview and Building Documentation; and

(4) **TASK FOUR** - Historic Resource Planning Notebook.

b. This preservation planning effort will be accomplished as a reimbursable to the design contract for the major construction project. _____ Associates is the architectural/engineering firm for the major construction project. As preservation planning expertise is not available in-house, _____ Associates will contract with qualified preservation consultants to perform this work.

c. The preservation consultants are expected to be fully knowledgeable of Federal historic preservation laws, regulations, standards and guidelines. Research methods, and submissions shall meet professional standards including those established by VA, the State Historic Preservation Office (SHPO), the National Park Service (NPS), and the Advisory Council on Historic Preservation (Council).

d. As appropriate, the Inventory, HABS effort and National Register nomination needs to be coordinated and not duplicate similar efforts. The Inventory should be a comprehensive inventory of all significant contributing and non-contributing buildings, structures and landscapes elements. The format needs to be similar to the HABS "short forms" and include photographs of each resource. **NOTE:** *The basic difference is that the HABS effort does not include non-contributing resources.* Portions of the Inventory will be used as backup to the National Register nomination.

e. Research on the history of this facility has previously been undertaken. Backup information to the 1981 determination of eligibility and 1988 archeological project needs to be reviewed. There is substantial information available from the VA medical center and VA’s Historic Preservation Office, including written records, plans and photographs.

f. Suggestions by the consultant are welcomed to encourage public involvement, awareness and recognition of this historic resource planning effort.

2. The following pages describe in detail each task including a list of contact persons.

a. **TASK ONE - Phase One Archeological Survey**

(1) This task requires preparation of a Phase One Archeological Survey of the _____ VA medical center property. The purpose of the Survey is to identify the presence and location of significant prehistoric and historic archeological resources. The Survey requires a literature review, development of a cultural resource overview and context, and an appropriate level of field testing identifying the presence of archeological resources. Testing should document any evidence of prior disturbance. The survey report must include a site sensitivity map showing locations of archeological sites, and areas of high, low, and no archeological potential. This report will provide management recommendations.

(a) The data recovered from an earlier excavation, and the resulting report need to be incorporated, as appropriate, into the Phase One Archeological Survey of the entire facility.

(b) Sites that are determined potentially eligible for the National Register may require additional testing and evaluation. The consultant archeologist may be requested to complete additional testing, data recovery, or construction monitoring services. **NOTE:** *If this additional work is required, it will be negotiated with the consultant archeologist as additional tasks.*

(2) Professional Standards. The consultant archeologist is responsible for ensuring that the Phase One Archeological Survey, including survey methods, report format, and management recommendations, meet professional standards including those established by the _____ SHPO, the NPS, and VA's Historic Preservation Office.

(3) Coordination. The archeologist is responsible for coordinating review and acceptance of the research methodology with the _____ SHPO. Prior to initiation of any field work, the archeologist shall contact the VA medical center Chief Engineer to coordinate scheduling of field work. During field work, periodic status reports shall be provided to the SHPO, VA's Historic Preservation Office and the VA medical center Chief Engineer, and any other interested parties. The 100 percent complete draft report is to be submitted to the _____ SHPO and VA's Historic Preservation Office for review.

(4) Final Report Distribution. Copies of the accepted final survey report will be distributed as follows:

- (a) SHPO (one copy),
- (b) National Technological Information Service (one copy),
- (c) Director, VA medical center (one copy), and
- (d) VA Historic Preservation Office (one copy)

(5) Curation. All artifacts discovered during this investigation shall be properly inventoried and stored at an approved curation facility in accordance with Federal standards. Copies of the curation agreement shall be included in the survey report. Other archeological collections and artifacts which

have been discovered previously shall also be identified and recommendations made for their proper disposition.

b. **TASK TWO - National Register Nomination and Inventory**

(1) This task requires preparation of a National Register nomination for the _____ Branch of the National Home for Disabled Volunteer Soldiers and all other above ground cultural resources at a VA Medical Center eligible for the National Register.

(2) The consultant will be responsible for undertaking appropriate historical research and field work. A copy of the existing determination of eligibility is available. VA's Historic Preservation Office will provide copies of National Register nominations prepared for other similar VA properties.

(3) The format for the nomination will follow NPS guidelines and _____ SHPO survey requirements. The nomination must include as backup a comprehensive building, structure and landscape resource inventory, and appropriate documentation from the HABS effort and archeological survey.

(4) The consultant shall coordinate technical review of the nomination(s) with the _____ SHPO. The final nomination must be provided to VA's Historic Preservation Office for review and approval. VA's Historic Preservation Office coordinates the final submission of the nomination(s) to the _____ SHPO and NPS.

c. **TASK THREE - HABS Overview and Building Documentation**

(1) This task requires preparation of a historic documentation package of the former National Home for Disabled Volunteer Soldiers. The documentation needs to meet HABS standards, and include an "overview" with "short forms" for individual buildings. Building #____, proposed for demolition, will be documented to an "outline format" level.

(2) The consultant shall request the NPS Regional Office for a determination of the recommended level of documentation and for additional technical guidance. The VA shall review NPS's recommendation, prior to the consultant proceeding.

(3) The final documentation package must be reviewed and accepted by NPS and VA Historic Preservation Office. The original documentation package must be submitted by the consultant to the NPS, for inclusion in the HABS collection at the Library of Congress. High quality archival copies of the accepted documentation package are to be provided to the:

- (a) Director, VA medical center (one copy),
- (b) SHPO (one copy), and
- (c) VA Historic Preservation Office (one copy).

d. **TASK FOUR - Historic Resource Planning Notebook**

(1) This task requires development of a Historic Resource Planning Notebook. This notebook is to be used as a consolidated reference tool to assist the VA medical center staff in complying with Federal preservation laws, regulations and standards. The notebook will contain specific detailed information about a VA medical center, as well as general technical guidance on regulations and preservation techniques.

(2) Format

(a) The historic resource planning notebook should be in a standard three-hole loose-leaf binder. The loose-leaf binder allows for future updating of sections. It should have divider pages and table of contents to facilitate its use as a quick and easy reference guide. The writing style for the summary sections needs to be clear, succinct, and appropriately written for VA managers and staff who may have limited experience with historic resource planning requirements.

(b) Following is an outline for the Historic Resource Planning Notebook. Some sections noted with an asterisk (*) may be developed or supplied by VA's Historic Preservation Office.

I. Summary Information

- A. History and Significance Summary
- B. Project Review Requirement Summary
- C. Issues and Recommendations (Prioritize and make recommendations on significant preservation planning and maintenance issues, including specific projects identified in the Facility Development Plan and 5-Year Plan.)
- D. Archeological Information Summary
- E. Building and Landscape Inventory

II. Legal Requirements

- A. Historic Preservation Laws and Regulations *
- B. Secretary of the Interior's "Standards for Rehabilitation" *
- C. VA Policy on Cultural Resource Management *

III. Historical Research and Documentation

- A. National Register Nomination(s) (copy)
- B. HABS Documentation Package (copy)
- C. Phase One Archeological Survey (copy)
- D. Public Informational Brochure

IV. Technical Information and Guidelines

- A. Maintenance and Repair *
- B. Building Rehabilitation
- C. Landscape Maintenance and Rehabilitation

D. Additions and New Construction

(3) Review and coordination. The historic resource planning notebook is to be reviewed at both a 50 percent complete and 100 percent complete stage. The reviewing parties include:

- (a) Chief Engineer, VA medical center (00/138) (two copies),
- (b) SHPO (one copy),
- (c) Advisory Council on Historic Preservation (one copy),
- (d) VA's Historic Preservation Office (087) (two copies), and
- (e) VHA Regional Office (one copy).

NOTE: *Following final review of the historic resource planning notebook, ten high quality copies will be provided to the VA project manager, contract officer, or Historic Preservation Office for final distribution. If information is developed in word processing or data base format, diskette, copies shall be provided.*

(4) Public Informational Brochure. A brief informational brochure will be prepared summarizing the history and significance of a VA medical center. It should supplement the existing _____ VA medical center Walking Tour Brochure. The format of the brochure needs to be reviewed by VA's Historic Preservation Office and the _____ VA medical center Public Affairs Office. A camera ready original and 300 copies shall be provided.

(5) Final briefing: The preservation consultant will coordinate an approximately half day briefing on the historic resource planning effort at _____ VA medical center, which will include:

- (a) A briefing for the Director and key staff;
- (b) A more detailed briefing for staff that will be utilizing the historic resource planning notebook; and
- (c) A general audience presentation and/or display of the historic resource planning effort and its findings.

3. SUMMARY OF DELIVERABLES (not including draft reviews)

- a. Task One - Phase One Archeological Survey (4 copies);
- b. Task Two - National Register Nomination(s) (original);
- c. Task Three - HABS Documentation (original and three copies); and

d. Task Four - Historic Resource Planning Notebook (10 copies), and Public Informational Brochure (300 copies), and a briefing (1/2 day session)

4. CONTACT PERSONS AND ADDRESSES

a. Project Contractor - (A/E)

NOTE: *Address varies with each project.*

b. VA medical center review and coordination

Director (00), _____ VA Medical Center
Chief, Engineering Service (00/138)

c. VA Historic Preservation Office review

Historic Preservation Officer (087)
Department of Veterans Affairs
810 Vermont Ave., NW
Washington, DC 20420
(202) 565-5680

d. VA project manager for design contract

NOTE: *Address varies with each project.*

e. For SHPO review and assistance

NOTE: *Address varies with each project.*

f. For Advisory Council review and assistance

Director, Eastern Office of Project Review
Advisory Council on Historic Preservation
Old Post Office Building, Suite #809
1100 Pennsylvania Avenue, NW
Washington, DC 20004
(202) 606-8505

Director, Western Office of Project Review
Advisory Council on Historic Preservation
730 Simms Street, Suite 450
Golden, Colorado 80401
(303) 231-5320

g. For HABS determination and archeological assistance

March 27, 1996

VA HANDBOOK 7545
APPENDIX J

Chief, Cultural Resources Division
Mid-Atlantic Regional Office
143 South Third Street
Philadelphia, PA 19106

NOTE: *For HABS determination: Tina LeCoff (215) 597-6484.*

NOTE: *For archeological assistance: Bert Herbert (215) 597-2334.*

h. For sending copy of archeological report

NTIS - National Technological Information Service
Department of Commerce
5285 Port Royal Road
Springfield, VA 22161
(703) 487-4600

ARCHEOLOGICAL SURVEYS - SAMPLE SCOPE OF WORK
PHASE I - TEST AND SITE SURVEY; RECORDS SEARCH
PHASE II - EVALUATE HISTORIC SIGNIFICANCE/POTENTIAL
PHASE III - EXCAVATE FOR PROJECT MITIGATION (SCOPE BY CONTRACTOR)

SCOPE OF WORK
PHASE ONE - ARCHEOLOGICAL SURVEY

VA Medical Center _____, _____

1. General Requirements

a. This is a scope of work for a Phase One Archeological Survey of the _____, ____ Medical Center property. The approximately __ acre campus is located at _____, ____.

b. The purpose of the survey is to identify the presence of significant prehistoric and historic archeological resources. The survey will require a literature review, development of a cultural resource overview and context, and an appropriate level of field testing identifying the presence of archeological resources. Testing should document any evidence of prior disturbance. A final survey report will include a site sensitivity map showing locations of archeological sites, and areas of high, low, and no archeological potential. The report will provide management recommendations.

c. This Phase One Archeological Survey includes only: **NOTE:** *Describe project location and impact, area to be surveyed, and any general needs.*

d. Sites determined potentially eligible for the National Register may require additional testing and evaluation. The archeologist may be requested to complete additional testing, data recovery, or construction monitoring services as an amendment to this project. **NOTE:** *Any additional work will be negotiated with the archeologist.*

e. All artifacts discovered during this investigation must be properly inventoried and stored at an approved curation facility in accordance with Federal standards. Copies of pertinent reports and photographs are to be provided to the State Historic Preservation Office (SHPO), the Department of Veterans Affairs (VA's) Historic Preservation Office and other appropriate depositories for archeological information.

2. Specific Responsibilities

a. Professional Standards. The archeologist is responsible for ensuring that the Phase One Archeological Survey, including survey methods, report format, and management recommendations, meet professional standards including those established by the State of _____, the National Park Service (NPS), and VA Historic Preservation Office. The report shall be clearly organized and understandable to non-archeologists.

b. Coordination. The archeologist is responsible for coordinating review of the archeological investigation with the A/E, VA project manager, VA Historic Preservation Officer, SHPO, and other interested parties. Prior to initiation of any field work, the archeologist contacts the VA project

manager, VA's point-of-contact during all field work. Draft and final reports are to be submitted to reviewing parties. The draft report is to be considered 100 percent complete. The final report will address review comments.

3. **Schedule** (To be determined.)

4. **Qualifications**

a. The principal archeologist must have:

- (1) At least a graduate degree in archeology, anthropology, or closely related field;
- (2) At least 1 year of full-time professional experience at a supervisory level in the study of archeological resources of the prehistoric and historic periods; and
- (3) A demonstrated ability to carry research to completion; and
- (4) Supervised projects in the field relating to general North American archeology.

b. Other archeologists taking part in the survey must have:

- (1) A graduate degree in archeology or anthropology or closely related field;
- (2) At least 4 months of supervised field and analytic experience in general North American archeology; and
- (3) Demonstrated ability to carry research to completion.

5. **Submission of Technical and Cost Proposal**

a. Technical proposals will be evaluated on:

- (1) Qualifications (archeologist and/or firm);
- (2) Assigned personnel;
- (3) Relevant experience;
- (4) Understanding of VA's needs and work to be performed;
- (5) Approach to fulfilling these needs; and
- (6) Ability to perform work on schedule.

NOTE: *No specific format for the technical proposal is required; however, it should include a brief statement on the approach to the project and research design.*

b. Cost proposals will be evaluated on the overall efficiency of the research effort. Consideration will be given to overall cost and personnel rates; therefore, the cost proposal should include a detailed cost estimate that includes itemized tasks with estimated hours required for personnel. It should include salary rates for personnel, itemized separately from overhead and profit rates and direct expenses.

c. This Phase One archeological investigation will be undertaken through an amendment (reimbursable basis) to an existing VA contract with A/E, under project # ___ - ___. The A/E will serve as the principal contractor, and will be responsible for billings and contractual arrangements with the archeologist.

6. Contacts

- a. Principal contractor (A/E): The name, address and telephone number.
- b. VA project manager (for contracting purpose): The name and telephone number.
- c. State review contact: The name and telephone number.

STATEMENT OF TASK
PHASE II - ARCHEOLOGICAL INVESTIGATION
VA Medical Center at _____, _____

1. A new domiciliary is proposed for _____ VA Medical Center. Construction of this domiciliary will impact an archeological site (_____) which may potentially be eligible for the National Register. A Phase Two archeological investigation is required to determine whether this site meets National Register eligibility.

a. This Phase Two investigation will require review of previous investigations at this site and will likely include limited field sampling. The Phase Two investigation shall meet federal archeological standards as established by NPS.

b. If it is determined that the site meets National Register eligibility, then the archeologist will develop an appropriate mitigation plan. This plan addresses any future data recovery requirements, and will be developed in coordination with the SHPO's archeologist and VA. **NOTE:** *This contract may be amended to include implementation of mitigation plan requirements.*

2. Submission requirements

a. A final Phase Two report on site _____ must be submitted which includes a summary of the archeological investigation and completed SHPO survey forms. A copy of a written opinion by the State regarding its eligibility must be included.

b. If the site is found to be eligible, then the archeologist prepares a mitigation plan, which assumes that the site will be totally impacted by the proposed construction.

c. All records pertaining to this investigation and all archeological artifacts discovered will be forwarded to an approved curation facility. Copies of pertinent reports and photos will be provided to the SHPO, VA medical center, VA's Historic Preservation Office, and other appropriate depositories for archeological information.

3. Contractual arrangement and contacts

a. This Phase Two investigation will be undertaken on a reimbursable basis with _____ and Company, under project # _____. _____ and Company will serve as the principal contractor, and will be responsible for billings and contractual arrangements.

b. The archeological consultant will submit draft and final reports directly to the SHPO archeologist and VA's Historic Preservation Office for technical review and approval. During field work, day to day coordination will be with the Chief Engineer, at the _____ VA Medical Center.

HISTORIC AMERICAN BUILDINGS SURVEY (HABS)

1. Sample Letter Requesting Required Level Of Documentation

a. Addresses of HABS Regional Offices

Rocky Mountain Region South
Historic American Building Survey
National Park Service
12795 West Alameda Parkway
P.O. Box 25287
Denver, Colorado 80225-2500

Eastern Region Area Office
Historic American Building Survey
National Park Service
75 Spring Street, S.W.
Atlanta, Georgia 30303

Western Region Area Office
Historic American Building Survey
National Park Service
600 Harrison Street
Suite 600
San Francisco, California 94107-1372

Mid Atlantic Region
Historic American Building Survey
Cultural Resource Planning Branch
National Park Service
U.S. Custom House
2nd and Chestnut, Room 251
Philadelphia, PA 19106

b. Format

Dear Sir or Madam:

Under the terms of a Memorandum of Agreement (MOA) with the Advisory Council on Historic Preservation (ACHP) and the _____ State Historic Preservation Officer (SHPO) regarding the construction of a new Ambulatory Care addition at the _____ VA Medical Center, we are contacting your office to determine what level and kind of recordation is required for the demolition of Building _____, identified in Item 3 of said MOA. (See Attachment 1.)

The construction of a new _____ requires the removal of Building _____, currently used for _____. This 19__ (STYLE), __-story masonry structure was built as _____. The interior of Building _____ has been renovated numerous times for different medical uses, so no original fabric of significance remains.

Additionally, it was agreed that that standard short form documentation for the entire campus, would also be done as part of this project.

We hope that the above information is sufficient for you to determine appropriate documentation levels. We appreciate your prompt consideration of this matter. We have retained the services of a professional photographer to undertake HABS-level photographic documentation of Building _____. (See attachment B, current photographs of the buildings.) If you require additional information, please contact our historic preservation consultant, at _____. Please respond directly to _____, at _____.

March 27, 1996

_____, with a copy to me, regarding your requirements for documenting this building for HABS.

Sincerely yours,

Medical Center Director

Enclosures

cc: (Consultant)

**HISTORICAL AMERICAN ENGINEERING RECORD STANDARDS FOR RECORDING
BUILDINGS AND STRUCTURES**

2. Summary Checklist of HABS/HAER Archival Requirements

NOTE: *Most VA structures that may require documenting for the Library of Congress are individual buildings or historic districts with numerous buildings. For these situations, the Historic American Building Survey (HABS) standards apply. For any unusual engineering or industrial site, the Historic American Engineering Record (HAER) applies. The acronyms are referred together as in HABS/HAER.*

a. **Cover Sheet.** The cover sheet must be prepared using the archival mount card without slits provided by the National Park Service (NPS) Regional Office. This card must be labeled as described on page L-16.

b. **Index to Photographs.** The Index to Photographs must be typed on bond paper. The photographs should be arranged sequentially, from the most general view to the most detailed and exterior to interior. The words "facade" and "elevation" must not be used. Instead, "rear", "front", or "side" should be used.

c. **Photographs.** Resin-Coated (R-C) paper is not acceptable. Each photograph is labeled on the back. Use a No. 1 (soft) pencil, and write on a hard surface so that the emulsion does not crack. The words "HABS No." or "HAER No." must be included on each photograph. For example: the photograph must be labeled "HABS No. C0-72-1" not "C0-72-1."

d. **Negatives.** Each negative must be labeled, with the appropriate HABS/HAER number, in the margin on the base (shiny) side of the negative. The negative is placed in the labeled archival sleeve. Type the appropriate HABS/HAER No. in the upper right-hand corner of the negative sleeve. The words "HABS No." or "HAER No." must be included on each negative. For example: the negative must be labeled "HABS No. C0-72-1" not "C0-72-1." For a specific example, see page L-20.

e. **Data Pages.** The data pages must contain a title sheet. Each page of the written historical documentation must be labeled with the project name, HABS/HAER No. , and Page No. in the upper right-hand corner of the page.

NOTE: *Be aware that if the HABS/HAER project does not follow the guidelines, it will be returned for further editing.*

3. HABS CONTACTS

HABS REGIONAL OFFICES:

Rocky Mountain Region South
Historic American Building Survey
National Park Service
12795 West Alameda Parkway
P.O. Box 25287
Denver, Colorado 80225-2500

Eastern Region Area Office
Historic American Building Survey
National Park Service
75 Spring Street, S.W.
Atlanta, Georgia 30303

Western Region Area Office
Historic American Building Survey
National Park Service
600 Harrison Street
Suite 600
San Francisco, California 94107-1372

Mid Atlantic Region
Historic American Building Survey
Cultural Resource Planning Branch
National Park Service
U.S. Custom House
2nd and Chestnut, Room 251
Philadelphia, PA 19106

4. ARCHIVAL REQUIREMENTS

a. The functions of HABS/HAER are to:

- (1) Document historically significant architectural and engineering sites;
- (2) Preserve this documentation; and
- (3) Make it available to scholars, professionals, and the public.

b. The documentation produced by HABS/HAER is a permanent record, often the only remaining record of a site or structure, and comprises one of the largest collections of historic architectural and engineering records in the country. The documentation is stored in the Prints and Photographs Division of the Library of Congress.

c. There will be no smoking, eating, or drinking near items that are to become part of the collection. Paper clips are to be removed from drawings, photographs, and data pages. **NOTE:** *Paper clips will rust, tear the paper, or bend photographs in a short period of time.* If it is necessary to retain a paper clip, a piece of bond paper should be placed between the clip and the pages. Paper clips should never be placed on photographs.

d. Pins, staples, rubber bands, or cellophane and plastic covers of all kinds should be removed. Rubber bands contain harmful chemicals and will deteriorate, stick to, and stain documents. Plastics tend to trap excess moisture and fungus next to documents and may adhere to photographic emulsions. Plastics (except archival plastics such as mylar) contain harmful chemicals.

e. Paper (including photographic paper) deteriorates for two principal reasons: it is attacked by harmful substances in the environment, and its physical and chemical composition is such that it will deteriorate regardless of how it is stored. **NOTE:** *Most late-19th and 20th century papers are impermanent because they contain acid. Highly acidic papers include newsprint, yellow carbon copy paper, and black photo album paper; for example, photographs should not be placed next to black construction paper.*

f. Ball-point ink contains acidic oil which migrates. Ball-point ink should never be used on photographs or papers. Carbon inks are acceptable. Soft (No. 1) pencil is the best choice for archival use and is permanent in spite of its tendency to smudge.

g. Sunlight is very damaging, causing fading and discoloring; therefore, material should not be left where it will be exposed to sunlight. Ideally, storage areas should be not more than 70 degrees Fahrenheit and 50 percent relative humidity, with no ultraviolet light (i.e., sunlight or fluorescent light, unless filtered).

5. ASSIGNING HABS AND HAER NUMBERS

a. All documentation must be labeled with a HABS or HAER number before being transmitted to the NPS Regional Office. HABS or HAER number are a means of identifying a site or structure. They comprise the basis for the cataloging and filing system at the Library of Congress. It is extremely important that the correct HABS or HAER number appear on all drawings, photographs, negatives, and written data.

b. All HABS and HAER numbers will be assigned through the NPS Regional Coordinator. **NOTE:** *Allow 2 to 3 weeks to have HABS or HAER number assigned.*

6. WRITTEN HISTORICAL DOCUMENTATION

a. Written documentation is an essential part of the program. Records submitted to the Library of Congress are not considered complete unless the written historical component is included. The historical documentation needs to be prepared to conform to one of three formats, depending on the nature and significance of the site or structure. In general, when the NPS stipulates the level of documentation necessary to mitigate an adverse effect on a resource, the kind of format for historical report will be stipulated as well.

b. When the HABS/HAER outline or narrative format is specified, the histories must be designed, conducted, or supervised by a Historian or Architectural Historian who meets the qualifications specified in Title 36 Code of Federal Regulations (CFR) Part 61:

(1) History. The minimum professional qualifications in history are a graduate degree in history or closely related field; or a bachelor's degree in history or closely related field plus one of the following:

(a) At least 2 years of full-time experience in research, writing, teaching, interpretation, or other demonstrable professional activity with an academic institution, historical organization or agency, museum, or other professional institution; or

(b) Substantial contribution through research and publication to the body of scholarly knowledge in the field of history.

(2) Architectural History. The minimum professional qualifications in architectural history are a graduate degree in architectural history, art history, historic preservation, or closely related field with coursework in American architectural history; or a bachelor's degree in architectural history, art history, historic preservation, or closely related field plus one of the following:

(a) At least 2 years of full-time experience in research, writing, or teaching in American architectural history or restoration architecture with an academic institution, historical organization or agency, museum, or other professional institution; or

(b) Substantial contribution through research and publication to the body of scholarly knowledge in the field of American architectural history.

NOTE: *If there are any questions regarding these qualifications, please contact the HABS/HAER Regional Coordinator at the previously cited address.*

c. **HABS Short Form.** For many architectural resources, the HABS "short form" provides adequate information to supplement the photographic record. However, an agency or contractor should not use this form without consulting first with the NPS Regional Office. **NOTE:** *The "short form" is not used for documenting engineering or industrial sites for HAER..*

d. **HABS Outline and Narrative Formats.** In general, historical and descriptive data for HABS projects are prepared in standard outline format. This ensures that all important information is included and makes this information easily accessible to researchers. The format is meant to be flexible, so categories may be omitted or changed if appropriate. If a narrative form is specified by the Regional Office, or is preferred by the researcher, the writer should take care to include all the same information contained in the short form. Documentation for buildings and structures include:

(1) **Historic Name.** The historic name is the name used to identify the structure in the HABS/HAER collection. It should be used consistently as the title for all records. The historic name is defined as the name of the original owner of a house, or the original name or designated use of a public or commercial building. Occasionally, the recognized historic name of a house or estate is not the name of the original owner; for example, "Mount Vernon." If the original owner or use is unknown, the address qualified by a general designation should be used; for example, "107 North George Street (Commercial Building)." Structures are often known by a more recent name. In such case, the later name should be included in parentheses; for example, "Loughran Building (Bassin's Restaurant)." If a later owner was particularly prominent, the name may be hyphenated, as in "Riggs-Riley House." The source for the historic name (usually a deed, building permit, or tax records) must be noted in the historical information.

(2) **Location.** A precise location is essential to the identification of a structure. Where possible, a numbered street or road address should be given. If the road has a number rather than a name, indicate whether it is a Federal, State, or county road. If a structure does not have a specific address, give the names of the nearest roads and/or geographic features and the distance of the structure from these locations. The city, county, and State are self-explanatory. Rural structures are to be identified by the nearest town with a zip code in the same State and county, followed by "vicinity." Areas or districts within a city may be listed before the city name. Independent cities not in a county should be followed by the words "(Independent City)," enclosed in parentheses. The word "County" (or in Louisiana, "Parish") should always follow the county name to avoid confusion with the city name.

(3) **Present Use.** Indicate both the present use and the intended use for the site, or the projected date of demolition or alteration.

(4) **Significance.** This is one of the most important sections of the documentation. It should be a concise summation of the architectural (or engineering) and historical importance of the structure. "None" is unacceptable as an entry under the Statement of Significance. The Statement of Significance should be written with sensitivity to the individual merits of the structure within the context of its environment. Significance is based on unique architectural features, design by an important architect, the presence of innovative structural systems, or an important historic event or person associated with the site. Examples of less obvious, but equally important, factors that contribute to the significance of a structure may include:

- (a) An early demonstration of a style for an area,
- (b) A local architect's interpretation of a national trend,
- (c) Contribution to the integrity of an historic streetscape,
- (d) Illustration of a local style which is rapidly disappearing, or
- (e) Association with a trend or event in local history.

(5) **Date of Erection.** Be as complete as possible. Mention sources for all dates cited. If found, give dates of plans, building permits, abrupt changes in tax assessments, cornerstone laying ceremonies, completion of dedication dates, existence of a date stone, etc. If the date is unknown, state "unknown." If no exact date can be determined, indicate by the word "circa," and state the source or the reasons for making the estimate (style, circumstantial evidence from tax records, local oral history source, etc.).

(6) **Original and Subsequent Owners.** (Outline and narrative formats only.) This section refers to a complete chain of title for the building. In many cases, it will be a statement of the site's relationship to local history. Uses of the building should be traced, and this should be integrated with the history of ownership and alterations as much as possible. Information on tenants should be included if appropriate. Suggested areas of investigation include: city directories, newspaper indexes, obituary files, personal reminiscences, county histories, tax assessment records, etc.

(7) **Historic Events and Persons Associated with Structure.** This section is meant to include a general history of the building. In many cases, it will be a statement of the site's relationship to local history. Uses of the building should be traced, and this should be integrated with the history of ownership and alterations as much as possible. Information on tenants should be included if appropriate. Suggested areas of investigation include: city directories, newspaper indexes, obituary files, personal reminiscences, county histories, tax assessment records, etc.

(8) **Architect or Engineer.** Information should be included stating where the architect, engineer, or firm practiced, and placing the structure in the firm or individual's work.

(9) **Architectural Information.** All terminology used in this section should be widely understood and defined in Webster's New International Dictionary (Unabridged). This section focuses on information not readily apparent in photographs or drawings, such as materials of construction or complex architectural details

(10) **Exterior a Interior Features of Note** (Short form only.). This section includes prominent elements that are particularly important to the character of the structure, as well as features that are not readily apparent in photographs. In the case of engineering or industrial structures, this would include extant machinery or structural systems.

(11) **Floor Plans.** Sketch plans may be substituted for verbal description of floor plans in both formats. Sketch plans need to be simple, straightforward, one-line drawings no larger than 8 1/2 by 11 inches in size. They can be freehand or hard-line, on a blank sheet or on graph paper. Generally, they are not drawn to scale, although elements should be drawn in correct proportion to one another. Labels, north arrow, overall dimensions, and the date sketched are required.

(12) **Bibliography and References.** Since HABS/HAER data are a permanent record of the built environment and a research tool, a complete bibliographic section is essential. References should be cited in the outline, narrative, or on the short form, using the style of footnotes specified in Kate Turabian's A Manual for Writers of Term Papers, Theses, and Dissertations. In addition, a full bibliographic addendum sheet will probably be necessary. Consult Turabian's Manual for Writers for format. If a source is not widely available, mention where it may be found. Bibliographic citations **which include the name and location of the collection** should be listed for all historic views and original drawings. When possible, annotate references by indicating briefly what information was obtained from each

(13) **Project Information.** This information, in the "Other Information" section of the short form or on a separate sheet, should include, as appropriate, the:

- (a) Federal agency involved,
- (b) Name of the project causing the alteration or demolition,
- (c) Names and affiliations of all who participated in preparing the documentation, and
- (d) Dates the records were prepared..

e. **Outline Format.** Double space between outline headings, single space text. Omit any headings or part of a heading that is not appropriate, and renumber other outline headings as needed.

NAME OF STRUCTURE (Secondary Name) HABS No: _____

Location:

Present Owner: This heading may be combined to Present Owner and Occupant if they are one and the same. Include address of owner if it is different from address of structure.

Present Use:

Significance:

PART I. HISTORICAL INFORMATION

A. Physical History:

1. Date(s) of erection
2. Architect
3. Original and subsequent owners
4. Builders, contractors, suppliers
5. Original plans and construction
6. Alterations and additions

B. Historical Context:

PART II. ARCHITECTURAL INFORMATION

A. General Statement:

1. Architectural character
2. Condition of fabric

B. Description of Exterior:

1. Overall dimensions
2. Foundations
3. Walls

4. Structural system, framing
5. Porches, stoops, balconies, bulkheads
6. Chimneys
7. Openings
 - a. Doorways and doors
 - b. Windows and shutters
8. Roof
 - a. Shape, covering
 - b. Cornice, eaves
 - c. Dormers, cupolas, towers

C. Description of Interior:

1. Floor plans and describe floors
2. Stairways
3. Flooring
4. Wall and ceiling finishes
5. Openings
 - a. Doorways and doors
 - b. Windows
6. Decorative features and trim
7. Hardware
8. Mechanical equipment
 - a. Heating, air conditioning, ventilation
 - b. Lighting

c. Plumbing

D. Site:

1. General setting and orientation
2. Historic landscape design
3. Outbuildings

PART III. SOURCES OF INFORMATION

A. Original Architectural Drawings:

B. Early Views:

C. Interviews:

D. Bibliography:

1. Primary and unpublished sources
2. Secondary and published sources

E. Likely Sources not yet Investigated:

F. Supplemental Material:

Prepared by: Name
Title
Organization
Date

f. **Partial Example of Outline Format**

HOLBROOK BUILDING

HABS No. CA-109

Location: 58 Sutter Street
Assessor's Block 289, Lot 4, San Francisco

Present Owner: Moraine Investment

Present Occupant: Vacant

Present Use: Vacant

Statement of Significance : The Holbrook Building is a significant early post-fire office building designed by a major San Francisco architectural firm. It is distinguished by the integrity of its facade and contribution to the streetscape. The Holbrook Building was rated "3" in Splendid Survivors, the survey of historic buildings by the Foundation for San Francisco's Architectural Heritage. This designation implies that the building is eligible for the National Register of Historic Places. It also is rated "3" on a scale of 0-5 for worthwhile buildings in the San Francisco Planning Department's Architectural Quality Survey. The survey notes the quality of its cornice and top story as a contribution to the streetscape. Also recognized is its role as a transition in scale between the neighboring Anglo and London Paris National Bank Building and nearby high-rise structures.

PART I. HISTORICAL INFORMATION

Date of Erection: 1912

Architect: MacDonald & Applegarth

Historical Narrative:

The Holbrook Building was constructed in 1912 for Charles H. Holbrook, an early San Francisco business pioneer and financial investor. The architect was one of the most prominent post-fire San Francisco firms, MacDonald & Applegarth. General contractor for the building was Williams Brothers & Henderson. Hicks & Polte served as the electrical contractor. The Holbrook Building has served a wide variety of tenants. Notable among these have been the offices of the Anglo and London Paris National Bank (The Crocker Anglo Bank) and the Bank of Tokyo.

g. Narrative Report

(1) For engineering and industrial sites, the HAER requires that a historical narrative be submitted with the graphic documentation to ensure that future researchers will be able to identify with certainty the name, location, and technological nature of resources within the HABS/HAER collection. The length and scope of historical reports will vary considerably depending on the significance of the site and the resources available. The expertise required by the person preparing the report will also vary from site to site. While most projects can be documented in a report of three to seven pages by someone with only general knowledge of the subject area, a site of great significance will require that expertise of a specialist with considerable knowledge of the subject and may require a much longer report, perhaps 100 pages or more.

(2) Although the content and length of reports will vary, certain basic facts must always be covered:

- (a) Name, common and historic if both are known;
- (b) Location;
- (c) Description of structures or ruins on the site;
- (d) Dates of construction, alterations, additions;
- (e) Engineers and/or architects, if known;
- (f) Important events in the development of the site; and
- (g) Historical significance of the site to the State or region, or if appropriate, national significance.

(3) More detailed information needs to be included according to the specific requirements of each site. A factory, for example, would require a:

- (a) Explanation of the industrial process;
 - (b) Description of any machinery, including function, date of fabrication, and manufacturer, if known; and
 - (c) Description of the power source and power transmission system.
- (4) Or, for example, a bridge would require:
- (a) Number and length of spans;
 - (b) General dimensions of the structure;
 - (c) General design elements, for example, truss type and style of connections;

- (d) Materials used in various parts of the structure; and
- (e) Role of the bridge in the local or regional transportation system.

(5) The manuscript must be double-spaced on one side only of 8 1/2-by-11-inch, white bond paper. It must be typewritten and have 1-inch margins. Relevant illustrative materials need to be keyed directly to the text whenever possible. For example, if you are discussing the arrangement of textile machinery on the second floor of a mill, use the following type of notation:

"(see photos 9 through 11, and drawing on sheet 2 of 5)"

(6) A bibliography of works cited follows the notes and must be double-spaced; however, if the report contains good footnotes that refer to all sources used, a bibliography is not required.

(7) The title page includes the following information in the format shown:

Location:

Date of Construction, Alterations:

Present Owner:

Present Use:

Significance:

Historian and Date:

NOTE: *The sample report should be used to gain a general idea of the format and style of a report and should not be considered as either maximum or minimum as far as length, content, depth of research, etc.*

7. PHOTOGRAPHS

a. For complete guidelines, refer to HABS/HAER standards for documentary photography: Photographic Specifications for HABS/HAER.

NOTE: *The following refers primarily to processing finished photographs for transmittal to the Library of Congress.*

b. Negatives which are marked "nitrate film" rather than "safety film," or films that appear yellow, deteriorated, have a strong odor, or feel sticky, should be removed from the collection. Nitrate film combusts spontaneously, burns furiously, and exudes fumes damaging to paper, other film, and people. All nitrate negatives should be duplicated onto safety film.

c. A negative and print on fiber-based archival paper are required for each photograph sent to the Library of Congress. Resin-coated (R-C) paper is not acceptable.

d. **Cover Sheet.** A cover sheet is made for the complete Photo-Data set. **Use an archival mount card without slits**, and label as shown below:

(1) In the upper left corner type the name of the structure and any secondary names, address (or vicinity), city or town, county, and State, each on a separate line.

Abraham Pike House (Grand Rapids Art Museum)
230 Fulton Street
East Grand Rapids
Kent County
Michigan

(2) Place the HABS/HAER number for the structure in the upper right corner.

(3) In the center of the cover sheet, type what kinds of information are included in the complete set. This includes photographs and written historical and descriptive data. Use all capital letters.

NOTE: *Examples of cover sheets, indexes to photographs, negatives, prints, and photographic mount cards prepared for transmittal follow. Any or all of these may be used as appropriate.*

Example 1. Cover Sheet

Jefferson Street Bridge
Spanning East Branch of Wears Creek
South of U.S. Highway 50/63
City of Jefferson
Cole County
Missouri

HAER No. MO-30

PHOTOGRAPHS

WRITTEN HISTORICAL AND DESCRIPTIVE- DATA

Historic American Engineering Record
National Park Service
Rocky Mountain Regional Office
Department of the Interior
P.O. Box 25287
Denver, Colorado 80225

e. Labeling Photographs

(1) Each photograph is labeled on the back. Use a No. 1 (soft) pencil only and write on a hard surface so that the emulsion does not crack. On the back of each photographs write the HABS/HAER number for the structure, with the sequential number, in the upper right-hand corner. The print will be stamped with the HABS/HAER rubber stamp in the Regional Office.

(2) Place each negative and one print (if there are two) in an acid-free archival sleeve. The full HABS/HAER number should be typed in the upper right-hand corner.

(3) One print is mounted on an archival photographic mount card with slits. The information shown below is typed in the upper right corner when the holes are on the left margin. In all capital letters, type either:

HISTORIC AMERICAN ENGINEERING RECORD or
HISTORIC AMERICAN BUILDINGS SURVEY
SEE INDEX TO PHOTOGRAPHS FOR CAPTIONS

HABS No. or HAER No.

f. Index to Photographs

(1) Index to Photographs for Individual Properties. All mounted photographs and written data are compiled into a Photo-Data set. Photographs should be arranged in a logical consistent manner. The preferred arrangement is as follows:

(a) Exterior Views

1. General;

2. Front;

3. Right Side;

4. Rear;

5. Left Side; and

6. Details.

(b) Interior Views

1. First Floor:

a. Rooms in order of importance or in a logical sequence; and

- b. Details following appropriate rooms.
- 2. Second Floor (and above, as applicable).

(c) Photocopies

- 1. Exterior Views;
- 2. Interior Views; and
- 3. Architectural Drawings.

(d) Occasionally, a different arrangement makes more sense, in which case the preparer should use appropriate discretion. It may be useful to key photographs to a site or building plan. Each view is then assigned a sequential number starting with 1 and continuing until all photographs and photocopies have been numbered. This number is used to identify each different view. It is always written with the HABS/HAER survey number for the site, such as "HABS No. CA-101-1, HABS No. CA-101-2," etc. This number is typed on the archival sleeve for the negative and print. It is also written in acetate ink (using a Rapidograph or similar pen) in the margin of each negative on the base (shiny) side.

(e) An identification sheet should be prepared for the photographs and labeled "Index to Photographs." There is one index for each structure or site. It identifies the structure and all available HABS/HAER documentation for it, and it lists captions for the photographs. The format is illustrated in the following example of a large project. Smaller projects follow the same format, omitting what is not applicable.

NOTE: *On the Index to Photographs, "facade" and "elevation" should not be used, instead use rear, front, or side.*

(2) Index to Photographs for Districts and Complexes:

(a) When dealing with historic districts, one general HABS/HAER number is assigned to the grouping of structures. For example, the Leadville Historic District, consisting of over 100 structures in the town of Leadville, CO, could receive HABS No. CO-42.

(b) Individual structures being documented within the district are arranged by historic name of the structure or by their addresses, and then receive upper case letter designations. For example, the three commercial buildings along Harrison Avenue would receive HABS No. CO-42-A, HABS No. CO-42-B, and HABS No. CO-42-C. A separate cover sheet and index to photographs are required for each building.

(c) General photographs, such as streetscapes, are organized under the Index to Photographs for the overall historic district.

(d) Historic complexes, such as mines or farms, receive one general HABS/HAER number for the complex. Structures within the complex are arranged alphabetically by name, and then assigned an

upper case letter designation like the historic districts. Historic complexes require only one cover sheet and one index to photographs for the entire grouping of structures.

(3) Assembling the Index to Photographs

(a) Variations may be appropriate, but the documentation available for the structure need to be listed in the following order and format:

1. Drawings. Include number of sheets, date, and type of drawing, such as:

4 sheets (1974, including site plans, plans, elevation, isometric of framing,
details)

2. Photographs. The number and date of HABS/HAER photographs are listed exterior views first, then interior views, such as:

14 exterior photos (1968, 1970).
3 interior photos (1970).

3. Photocopies. All photocopies and their dates are listed. Mention the date of original item, not the date that the photocopy was made. Specify whether the photocopy is of an interior or exterior photograph, a watercolor, an engraving, etc., such as:

1 photocopy of 1914 watercolor.
2 photocopies of 1936 exterior photos.
6 photocopies of 1889 plans.

4. Data Pages. The number and date(s) of the data pages are listed, such as:

8 data pages (1968, 1970)

5. Field Records. If there are any field records for a structure, they are filed together in an envelope as one set of field records for that particular structure or site. They are listed as one set, but the contents are itemized parenthetically, such as:

1 set of field records, including four field notebooks.
32 field photos

(b) The photographer's name and the date of the photographs are listed next, then the sequential number for each particular view with its caption (as shown in the example above.)

(c) Note that in assigning captions, no two photographs should be identified in precisely the same way, to avoid confusion when a researcher requires a view. You may, for example distinguish them by the vantage point from which each shot was taken.

(d) When the one photographer produces all views, but at different times, use the following format:

Name, Photographer, Date
VA-966-1 NORTH FRONT
VA-966-2 EAST SIDE

(e) More than one photographer:

VA-966-1 Name, Photographer, Date
CAPTION

(f) If there are numerous photographs, the photographers' names could be listed at the beginning of the indexing the following format:

Jack Boucher, Photographer, June 1980 (VA-966-2, 4, 9-13, 15)

(g) For photocopies where previous photographers, illustrators, or delineators are unknown, this should be noted; otherwise give their names. Identify the source of the original, if known.

(h) Finally, the index is to be typed on bond paper, then photocopied onto archival bond paper. The photocopy work will be done at the Regional Office.

g. **Negatives.** The HABS/HAER number for the structure, with its sequential photograph number, must also be labeled on each negative. Use a Rapidograph pen with acetate ink and print the number in the margin on the vase (shiny) side of the negative, not on the emulsion side. The negative is placed in a labeled archival sleeve (available in limited quantities from the Regional Office or large quantities from archival paper companies). Use an acid-free paper archival sleeve and label it for the particular negative using the HABS/HAER number (e.g., HABS No. CA-101-1). Type the number in the upper right corner of the negative sleeve.

h. **Photographic Mount Cards**

(1) Photographs are mounted on 8 1/2 by 11 inch cards of archival paper (available in limited quantities from the Regional Office or large quantities from archival paper companies). These cards have slits in which to insert either 4 by 5 or 5 by 7 inch photographs. If the photograph is 8 by 10 inches, the print is dry-mounted by the Library of Congress. The cards, however, still need to be labeled before submission to the Regional Office.

(2) Each mount card is labeled to identify the photograph. The HABS/HAER number with sequential number, is typed in the upper right corner of the mount card with the three holes on the left margin. For example:

HISTORIC AMERICAN BUILDINGS SURVEY

March 27, 1996

**VA HANDBOOK 7545
APPENDIX L**

SEE INDEX TO PHOTOGRAPHS FOR CAPTIONS

HABS No. CA-101-1

HISTORIC STRUCTURES REPORT - OUTLINE

1. OVERVIEW

One of the basic planning documents used in the management of historic structures is the Historic Structures Report (HSR). An HSR is prepared whenever there is to be a major intervention into historic structures or where activities are programmed that affect the qualities and characteristics that make properties eligible for inclusion in the National Register of Historic Places. HSRs are intended to be cost efficient, well defined, and professionally solid “action” documents, spanning the gap between planning and implementation.

2. THREE SECTIONS

An HSR should consist of three elements:

a. An administrative data section, which includes:

(1) Institutional references such as the name of the structure, its management category, and structure number;

(2) The relationship between the HSR and other planning documents such as the identification of the planning document in which the ultimate preservation treatment of the structure was established;

(3) Alternative ways studied of meeting management objectives; and

(4) Other issues such as storage of archival material collected during preparation of the report and justification for the proposed treatment or recommendations for changes in the proposed treatment.

b. A physical history and analysis section, addressing such topics as:

(1) The significance of the structure and its setting;

(2) The appearance, occupation, and use of the structure and its setting;

(3) A description and record of existing conditions;

(4) An evaluation of the impact of the proposed use on the integrity of the structure;

(5) An engineering report on safety and load-bearing limits;

(6) Identification and analysis of significant factors affecting preservation of the structure;

(7) Recommended steps for preservation treatment, the basis for such recommendations, and preliminary design drawings;

(8) The impact of the proposed action on the structure with recommendations to avoid or mitigate potential adverse effects;

(9) Estimates of the cost to carry out recommendations; and

(10) Recommendations for further study.

c. An appendix, containing:

(1) Information about materials analysis;

(2) Assessment of future research potential;

(3) An annotated bibliography;

(4) Technical data and research notes; and,

(5) Information about historic furnishings uncovered during the study but unrelated to the treatment discussed in the report.

3. GOALS

a. Depending on the existing information, the significance, the need for additional information, the nature and significance of the affected resources, the condition, and the extent or level of treatment to which the resources may be affected by proposed plans or actions, one of three levels of structure identification may be used:

(1) exhaustive;

(2) thorough; or

(3) limited.

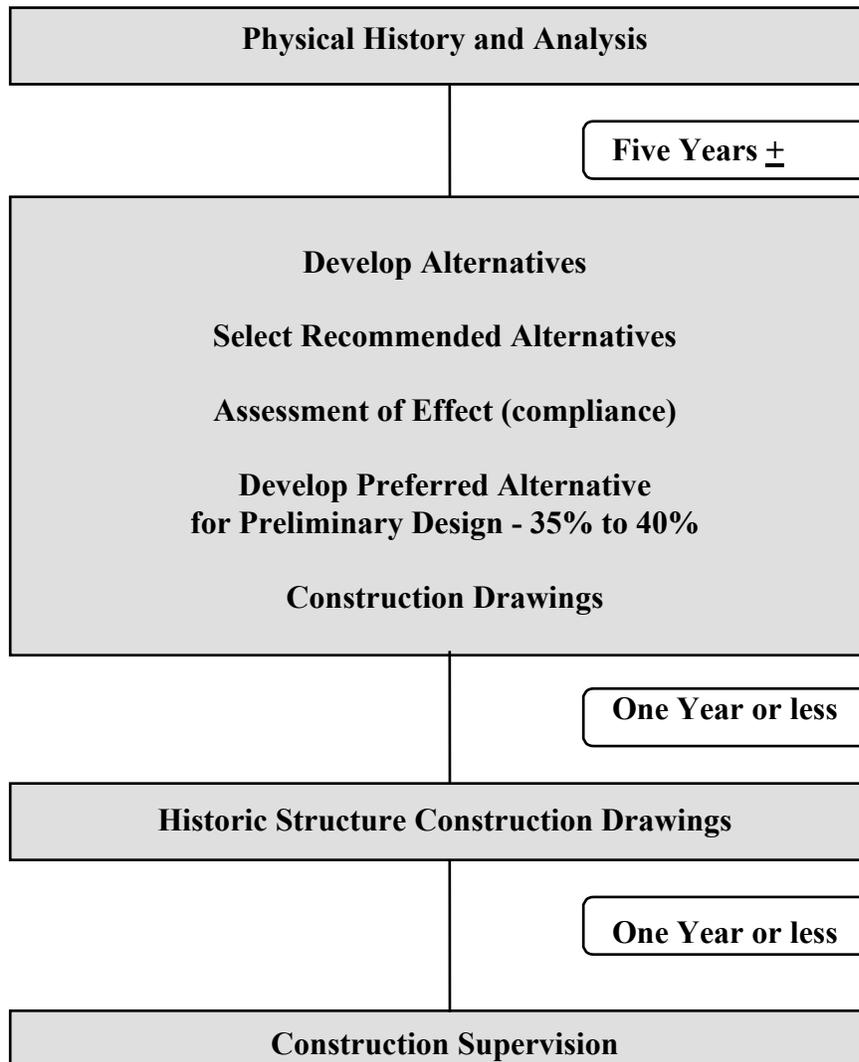
b. A HSR should be a useful planning document, written for the primary audience, that discusses program development and program implementation. It should be restricted to information that bears directly on historic fabric and character; used when existing information about physical history and condition of the resource does not provide an adequate basis upon which to address anticipated management issues, alternative courses of action for impending development which could have a significant adverse effect on a historic structure; and limit the research effort to a specific development issue that can be anticipated for the resource and related to the significance of the resource.

4. INTEGRATION OF DESIGN PROCESS

The HSR is an integral part of the design process, and is usually done for all projects affecting historic structures, although not titled a Historic Structures Report. Often, as built research, results of design analysis, alternatives studied, and other data developed for documentation under Section 106,

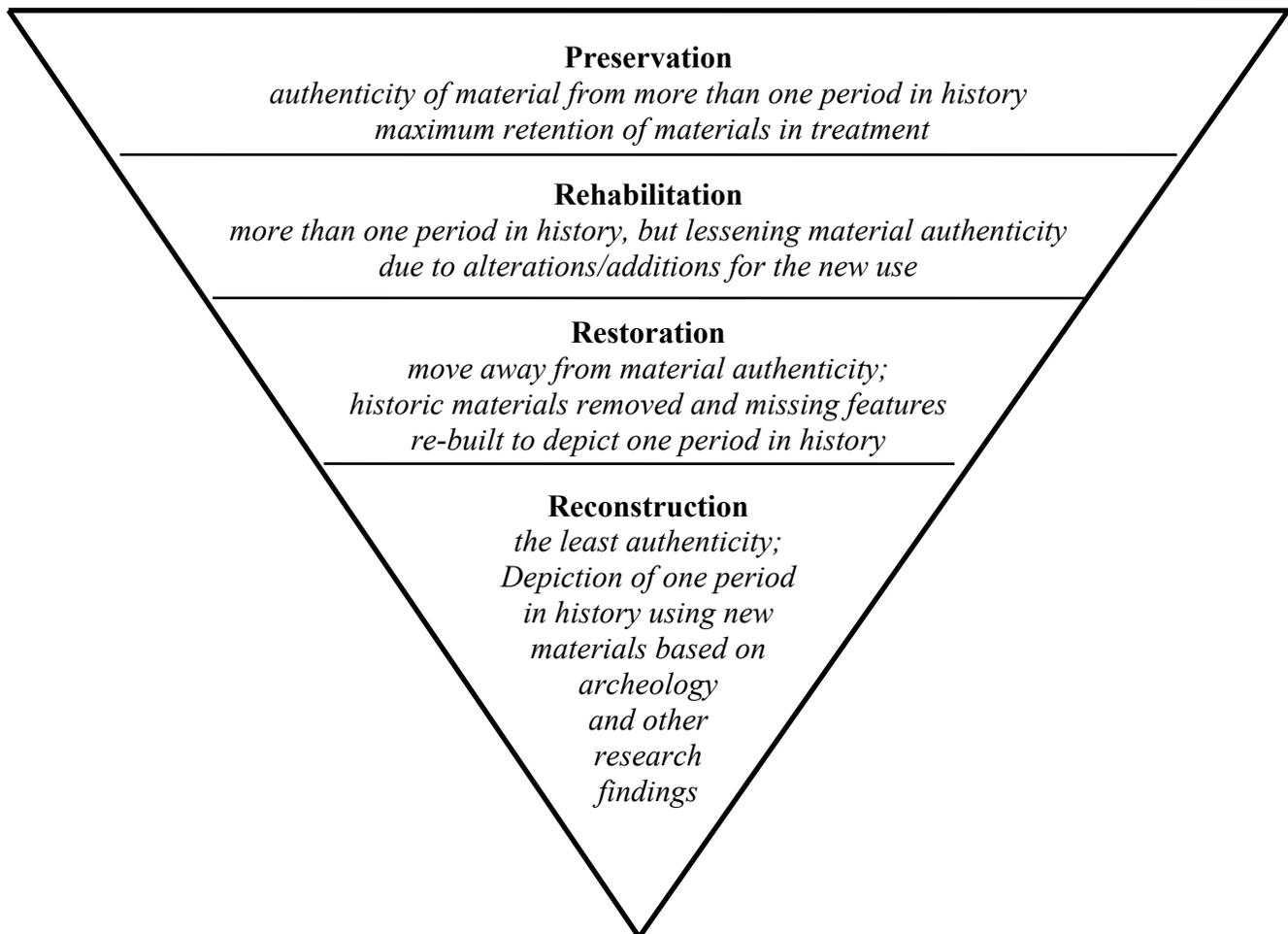
may be bundled together and considered a HSR. It is important to always have a conventional design analysis and/or preliminary design and/or review phase when treatment to a historic structure is funded and imminent. This way, design treatments proposed for historic structures could be far more timely and in synch with more conventional design projects. See following design chart:

Historic Structure Preliminary Design



4. TREATMENT OPTIONS - PREDICTING LOSS AND CHANGE

- a. **Preservation** requires retention of the greatest amount of historic fabric, along with the building's historic form, features, and detailing as they have evolved over time.
- b. **Rehabilitation** acknowledges the need to alter or add to a historic property to meet continuing or new uses while retaining the building's historic character.
- c. **Restoration** allows for the depiction of a building at a particular time in its history by preserving materials from the period of significance and removing material from other periods.
- d. **Reconstruction** establishes a limited framework for re-creating a vanished or non-surviving building with new materials, primarily for interpretive purposes.



NOTE: An inverted pyramid suggests the varying degree of material retention following treatment, and emphasizes the shift from material authenticity to historical depiction in restoration and reconstruction.

**CULTURAL RESOURCE MANAGEMENT OFFICER (CRMO)
STATUS REPORT - SAMPLE FORMAT (OPTIONAL)**

1. **Name of Facility** (list separate divisions individually).
2. **National Register of Historic Places Status, i.e.,** listed, eligible, not eligible, landmark, unknown.
3. **CRMO.** State the name, position, mailing address, and telephone numbers of the current person assigned the duties of CRMO.
4. **Preservation Issues.** Give a brief explanation of controversial or significant concerns about proposed VA actions on historic resources, identification of resources, and names of groups or individuals involved.
5. **Historic Preservation Plan.** Give a brief update on the preparation and implementation of the Plan. Also list any Historic American Buildings Survey packages (please provide copy), Historic Structures Reports, or other historic resource planning documents developed.
6. **List of Projects.** List the projects that have completed Section 106 compliance requirements.
7. **National Register of Historic Places.** Include copies of any recent nominations or other actions.
8. **Agreements.** Include copies of any project Memorandum of Agreement or Programmatic Agreements developed with the SHPO and the Advisory Council. Discuss circumstances leading up to agreements, status of actions undertaken to comply with agreements.
9. **All Archeological Activities.** List all archeological activities for incorporation into VA's Annual Report to the Secretary of the Interior, with information broken down as follows:
 - a. Planning Studies, Literature Searches (Phase I), i.e., number, acreage covered, and cost;
 - b. Identification and Evaluation Investigations (Phase II), i.e., number, acreage covered, sites, and cost;
 - c. Data Recovery and Excavation (Phase III), i.e., number, acreage covered, sites identified, and cost;
 - d. Unanticipated discoveries, include the number and cost to investigate;
 - e. Computerized systems managing archeological sites, explain the type of site;
 - f. Collections management, include old existing or newly discovered artifacts, cubic feet of stored material, percentage catalogued, number of linear feet of associated records, estimated cubic feet added in the present fiscal year;
 - g. Total acreage surveyed and inventoried, at any time;

- h. Number of known archeological sites on property and their National Register status, if known;
- i. Permits granted to archeologists for investigations; and
- j. Law enforcement, i.e., any instances of looting of archeological artifacts or sites.

MATERIALS MAINTENANCE AND TREATMENT MANUAL

CONTENTS

- 1. **PURPOSE**
 - (1) Cracks or Spalls
- 2. **TREATMENT PROCEDURES**
 - (2) Loose or Detached Units
 - (3) Damaged or Missing Mortar
 - (4) Inappropriate Patching
- 3. **SITWORK**
 - a. Drainage
 - b. Vegetation
- 4. **CONCRETE**
 - a. Description
 - b. Cleaning
 - (1) Bitumen
 - (2) Caulking Compound
 - (3) Chewing Gum
 - (4) Coffee, Tea, Alcoholic Beverages, and Soft Drinks
 - (5) Copper, Bronze
 - (6) Efflorescence
 - (7) Iron Rust
 - (8) Oil
 - (9) Wet Paint
 - (10) Dry Paint
 - c. Repairs
 - (1) Cracks
 - (2) Spalls
 - (3) Erosions
 - (4) Unit Loose
- 5. **MASONRY**
 - a. Description
 - b. Cleaning
 - (1) Surface Dirt or Pollutants
 - (2) Paint
 - (3) Rust
 - (4) Tar/Asphalt
 - (5) Vegetation
 - (6) Efflorescence
 - (7) Bird Encrustations
 - (8) Caulking Compound
 - c. Repairs
- 6. **METALS**
 - a. Description
 - (1) Iron and Steel
 - (2) Copper
 - b. Cleaning
 - (1) Cast Iron and Wrought Iron
 - (2) Aluminum
 - (3) Copper
 - (4) Steel
 - c. Repairs
 - (1) Minor Holes
 - (2) Leaks at Joints
 - (3) Deterioration
- 7. **WOOD**
 - a. Description
 - b. Cleaning
 - (1) Dirt
 - (2) Paint
 - (a) Abrasive
 - (b) Thermal
 - (c) Chemical
 - c. Repairs
 - (1) Chips, Cracks or Scratches
 - (2) Loose Elements
 - (3) Missing Elements
 - (4) Structural Deterioration
 - (5) Insect Damage
- 8. **SLATE SHINGLES**
 - a. Description
 - b. Cleaning
 - (1) Dirt
 - c. Repairs
 - (1) Cracked or Missing

(2) Delamination

(6) Hardware

9. ASPHALT SHINGLES

- a. Description
- b. Repairs
 - (1) Cracked or Torn
 - (2) Loose
 - (3) Worn, Damaged or Missing

10. WINDOWS AND DOORS

- a. Description
- b. Cleaning
 - (1) Hardware
- c. Repairs
 - (1) Infiltration
 - (2) Window Inoperable
 - (3) Door Inoperable
 - (4) Loose or Cracked Glass
 - (5) Window or Door - Damaged or Missing

11. STUCCO AND PLASTER

- a. Description
- b. Cleaning
 - (1) General
 - (2) Paint
- c. Repairs
 - (1) Cracks
 - (2) Spalls

12. TERRA COTTA

- a. Description
- b. Cleaning
- c. Repairs
 - (1) Crazeing
 - (2) Spalling

13. BIBLIOGRAPHY

1. PURPOSE

The purpose of the following report is to provide a comprehensive guide to the maintenance and repair of historic buildings. This report is a compilation of several manuals on the maintenance and repair of selected VA buildings. Each section is categorized by material, then further divided into sub-categories of description, cleaning procedures, and repair.

2. TREATMENT PROCEDURES

Treatment Procedures consist of the instructions of how to carefully clean, repair, or replace the important and significant historic fabric and architecture of historic buildings. Much concern is given to the use of gentle non-abrasive products in the cleaning process. The strategy is to use, re-use, and protect as much original building fabric as possible. The recommended procedures may not always apply to every situation, so good judgment must prevail.

3. SITEWORK

a. **DRAINAGE:** Earth must slope away from building walls and foundations. Eroded areas and depressions must be filled to provide positive drainage. Fill should consist of weed-free top soil with refill areas showing settlement one month after initial fill activity. Planting grass or other plant material (in accordance with a master landscape plan) will help to hold the fill material in place and prevent future erosion.

b. **VEGETATION:** Tree shrub branches must not be permitted to scrape against the building foundations, walls, windows, or roofs. Pruning should be accomplished according to accepted landscaping standards. Consideration should be given to removing branches which overhand roofs and contribute to excessive leaf debris in gutters or are in danger of breaking and falling onto brittle clay tiles. Such action, however, must be balanced with the aesthetic contribution of the tree and the attendant health of the tree itself. Remove all vines from building surfaces. Vines contribute to premature failure of materials by holding moisture and penetrating softer materials. Do not use salt to kill vegetation near foundations.

4. CONCRETE

a. DESCRIPTION

(1) Concrete consists of sand, gravel, crushed stone or other coarse material, bound together by a hardened paste of water and cement. If properly proportioned, the mixture remains plastic for a sufficient period of time. This allows it to be cast or molded into a predetermined size, shape, or finish. After the water evaporates from the mixture, the concrete becomes strong, hard, and durable. Concrete is distinguished from other cement-water-aggregate mixtures such as mortar and stucco by the size of the aggregate in the mixture. Concrete is commonly used for sidewalks, paving, porches, steps, foundations, window wells, and pre-cast decorative units.

(2) Concrete is a durable, strong material which if properly mixed, detailed, and installed will last for many years. However, certain kinds of deterioration may occur. Because concrete becomes monolithic when poured into large units, adequate provision for movement of earth or other building elements must be provided. In the case of sidewalks and foundations, the settlement of the ground underneath often results in cracks in the concrete. Porch decks and steps are subject to the same problem.

(3) Any concrete unit with an exposed edge is subject to the possibility of water entry. As concrete weathers, the aggregate may be exposed, also allowing water to penetrate the material. Another area sensitive to water penetration may occur at locations where other materials, particularly metals, penetrate the concrete. Water penetration in concrete may result in cracking or spalling.

(4) The inspection of concrete can be accomplished visually. Almost all concrete deterioration manifests itself on the surface of the material in the form of cracking, staining, or spalling. When deterioration is found, the appropriate repair of concrete should be implemented. Just as important is the determination of the underlying cause of the problem. Many times this involves water penetration. The cause of the concrete deterioration should be located and corrected prior to the repair of the concrete itself.

b. **CLEANING:** Most concrete cleaning can be accomplished with water under low pressure (100 psi or less) spray or jet. Gentle use of bristle brushes may assist in removal of dirt. On vertical surfaces, begin at top of the area to be cleaned and work downward. Removal of stains from concrete can be accomplished using various methods depending on the type of stain in question. Some common stains and suggested remedies are listed below.

(1) BITUMEN STAINS

(a) Scrape off any excess bitumen. Scrub the remaining material with a bristle brush and scouring powder and water. Rinse thoroughly.

(b) Do not use solvents as they will increase penetration of the stain into the concrete.

(c) Molten bitumen can be cooled with ice until brittle, then chipped with a chisel. Clean remaining bitumen with scouring powder and water. Rinse afterwards.

(2) **CAULKING COMPOUND STAINS:** Scrape off any excess. Apply poultice impregnated with denatured alcohol. Allow to dry and remove caulking compound with a stiff brush. Wash with hot water and scouring powder. Rinse thoroughly.

(3) **CHEWING GUM STAINS:** Use process for caulking compound stains. Remove any remaining gum stain with chloroform. Rinse thoroughly.

(4) **COFFEE, TEA, ALCOHOLIC BEVERAGE, AND SOFT DRINK STAINS:** Apply layers of soft white cotton cloth soaked in a solution of 1 part glycerol and 4 parts water. Let stand 30 minutes. Remove cloth. Rinse cloth and repeat process if necessary.

(5) COPPER, BRONZE STAINS: Dry mix 1 part ammonium chloride with 4 parts fine powdered talc. Add household ammonia and stir to smooth poultice. Place on stain and let dry. Scrub with clean water. Repeat if necessary.

(6) EFFLORESCENCE

(a) Light efflorescence: remove with low pressure water jet or dry brushing with a bristle brush.

(b) Heavy efflorescence: dampen surface with water. Apply mixture of 1 part muriatic acid and 12 parts water. Scrub with stiff bristled brush. Flush with clean water.

(7) IRON RUST

(a) Mop with mixture of 1 pound oxalic acid powder per 1 gallon water.

(b) Let stand 2-3 hours.

(c) Rinse with water while scrubbing with stiff brushes or brooms. Repeat as necessary .

(8) OIL STAINS: Saturate with paint thinner. Cover with absorbent material (talc, cat litter, corn starch). Let stand overnight. Sweep clean. Repeat if necessary. If stain persists, bleach with laundry bleach.

(9) WET PAINT: Soak up freshly spilled paint with paper towels or soft cloth. Do not wipe as this will drive paint further into the concrete. Scrub area with scouring powder and water until no further improvement is seen. Wait three days for remaining paint to completely dry. Use dry paint process below. Do not use paint solvents as they will drive paint deeper into the concrete.

(10) DRY PAINT: Remove as much as possible with bristle brush. Apply poultice impregnated with commercial paint remover. Allow to stand 1/2 hour. Scrub gently to loosen paint. Wash off any remaining residue with scouring powder. Rinse thoroughly.

c. **REPAIRS**

(1) **CRACKS**

(a) Hairline, non-structural cracks that show no sign of worsening normally need not be repaired. Cracks larger than hairline cracks, but less than approximately 1/16 inch, can be repaired with a mix of cement and water. If the crack is wider than 1/16 inch, fine sand should be added to the mix to allow for greater compactibility, and to reduce shrinkage during drying.

(b) Minor cracks in concrete can be repaired on a temporary basis using a synthetic caulking material. Under proper conditions for concrete work, deteriorated areas should be repaired using a non-shrinking material compatible in color with the surrounding material.

(c) Active structural cracks will move as loads are added or removed. Thermal cracks will move as temperatures fluctuate. Thus expansion-contraction joints may have to be introduced before repair is undertaken. Active cracks should be filled with sealant that will adhere to the sides of the cracks and will compress or expand during movement.

(2) SPALLS

(a) Repair of spalling entails removing the loose, deteriorated concrete and installing a compatible patch that dovetails into the existing sound concrete.

(b) If a large, clean break or other smooth surface is to be patched, the contact area should be roughened with a hammer and chisel. In all cases, the substrate should be kept moist with wet rags, sponges, or running water for at least an hour before placement of the patch. Bonding between the patch and substrate can be encouraged by scrubbing the substrate with cement paste or by applying a liquid bonding agent to the surface of the substrate.

(c) If the defective concrete is a small precast unit such as a coping section or a step, the entire unit should be replaced with a new unit matching the surrounding pieces in color, texture, size, and shape.

(d) If reinforcing bars are exposed and rusting, concrete should be chipped away around the bar until the steel is uncovered. Rust on exposed rebars should be removed by a wire brush or sandblasting. An epoxy coating applied immediately over the cleaned rebar will diminish the possibility of further corrosion.

(e) If the damage to the concrete can be linked to inadequate provision for expansion, the installation of proper expansion joints should be investigated.

(3) **EROSION:** Due to its durability, ease of installation, and relative low cost, concrete is used in places that receive a great deal of wear. When cracking or spalling reaches the point when normal maintenance and repair procedures fail to stop deterioration, replacement of the entire unit or surface may be necessary.

(4) **UNIT LOOSE:** If a precast concrete unit is loose, deteriorated mortar is the likely problem. If this is the case, the units should be reset in new mortar which matches the original mortar in color, strength, thickness, contour of joint, and texture.

5. MASONRY

a. DESCRIPTION

(1) Masonry is a term that characterizes brick, granite, limestone, and sandstone. Masonry is a modular material made from clay. The material consists of a series of interconnected cells. It is strong under compression, but weak in tension. Masonry is available in a variety of colors, shapes and textures. It is essentially fireproof.

(2) Masonry is susceptible to chemical, mechanical, thermal, and biological processes which can cause the material to deteriorate. All of these processes are a result of water infiltration. If water gains access to the inner porous structure of the unit, it may initiate chemical reactions (formation of salts), mechanical action (stress caused by freezing and thawing), or provide moisture necessary to accommodate living organisms that can cause deterioration.

(3) Other causes of masonry deterioration include vibration, poor structural design, deterioration of wood or metal anchoring, framing or structural members, and combining masonry of conflicting properties and/or sizes.

(4) Most masonry deterioration is easy to spot. When deterioration occurs, it is important that the cause of the problem be localized. Cracked or chipped masonry indicates spalling or mechanical/structural stress. Organic growth on masonry indicates a high moisture content.

b. CLEANING

The reasons for cleaning a building must be considered carefully before arriving at a decision to clean. Sometimes, a building may appear to be dirty, however, it may only be the appearance of weathered masonry. If there is any evidence that dirt and pollutants are having a harmful effect on the masonry, the building should be cleaned. However, excessive cleaning may actually wear down the existing masonry or accelerate the deteriorating effect of pollutants.

Cleaning methods are generally divided into three groups: water, chemical, and abrasive. Water methods soften the dirt and rinse deposits from the surface. Chemical cleaners react with the dirt or masonry to hasten the removal process. Mechanical methods include grit blasting, grinders, and sanding discs, which remove dirt by abrasion.

(1) SURFACE DIRT OR POLLUTANTS: Dirt or pollutants should be removed using the gentlest means possible. For accumulated dirt, washing with a low pressure water stream may be enough. Should this technique not be adequate, the next approach would be washing with water and hand scrubbing the surface with bristle brushes and a mild detergent. Under no circumstances should abrasives be used. Sandblasting is not an acceptable cleaning method. Water pressure should not exceed 600 psi.

(2) PAINT

(a) Generously apply tested and approved paint remover.

(b) Allow to set for a minimum of 2-3 hours.

(c) Rinse paint debris and stripper with low pressure water.

(3) RUST: Localized stains such as rust stains from hanger supports shall be treated by hand scrubbing using a bristle brush with detergent and water.

(4) TAR/ASPHALT

(a) Remove as much residue by hand as possible with scrapers such that the masonry is not scoured or damaged.

(b) Apply tested and approved tar and asphalt remover liberally to dry surfaces.

(c) Allow to set.

(d) Reapply and scrub with a bristle brush over stained area.

(e) Rinse thoroughly with low pressure water.

(5) VEGETATION

(a) Manually remove as much loose organic material as possible using flat blade scrapers if necessary. Do not score or damage masonry surfaces.

(b) Pre-wash and hand scrub with a bristle brush, detergent and water. Rinse with low pressure water.

(6) **EFFLORESCENCE:** White stains should indicate the presence of efflorescence and subflorescence processes, which means that moisture has been accumulating in the masonry. Pre-wash and hand scrub with a bristle brush, detergent and water. Rinse with low pressure water.

(7) **BIRD ENCRUSTATION:** Hand scrub with a bristle brush, detergent and water. Rinse with low pressure water.

(8) CAULKING COMPOUND

(a) Remove as much residue by hand as possible with scrapers such that masonry is not scored or damaged.

(b) Apply tested and approved caulk remover liberally to dry surfaces.

(c) Allow to set.

(d) Rinse thoroughly with low pressure water.

c. REPAIRS

(1) **CRACKS OR SPALLS:** in the case of a unit which is cracked or spalled, the damaged unit should be carefully removed and replaced with a new or salvaged unit. The replacement should match the original and surrounding brick in color, texture, size, and hardness. Mortar for the replacement unit should precisely match the original in the surrounding area in color, texture, composition, and strength.

(2) **LOOSE OR DETACHED UNITS:** The loose unit, if undamaged, should be reset. The unit should be anchored to backing if the original was anchored. The unit should be reset in mortar which matches the adjacent mortar in color, texture, strength, and composition. The mortar joint should be the same width, depth, and contour as the surrounding joints. If a new unit is required, it should match the original in size, shape, color, and texture.

(3) **DAMAGED OR MISSING MORTAR:**

(a) Mortar will wear more quickly than masonry, and should periodically be raked out of the joints back to the point where original mortar is still completely sound. It is important that new mortar be no stronger than the old. If high-strength contemporary mortars are used, they can actually be stronger than the old brick, thus they will exert tremendous pressure on the brick which can lead to cracking or spalling.

(b) All joints to be repointed should be raked to a depth of not less than 3/4 inch at horizontal joints and 1/2 inch at vertical joints. The joints should be hand raked; no power tools or hand tools which might damage adjacent masonry should be used. All mortar should be removed, especially that adhering to sides of existing units. No wire brushes should be used.

(c) Repointing mortar should consist of Portland cement, lime, sand, and water. The mortar should match the original strength, color, and texture. The raked masonry should be rinsed with low pressure water to remove all loose mortar and dirt residue. The joints should be presoaked so that each masonry unit and joint is nearly saturated but surface dry when repointed. Mortar should be applied before it has begun to set, and should be at proper workability. The new joint should be raked at approximately 1/16 inch behind the face of the brick to preserve original joint thickness. It should be tooled to the proper shape to duplicate the original appearance. No mortar shall remain on the exposed surface. The joints should be brushed after initial curing to raise the grain.

(d) Weep holes should be maintained in location and size. They should not be covered or filled in with mortar.

(e) When work is completed, the entire area should be dry brushed and cleaned by hand washing with a detergent.

(4) **INAPPROPRIATE PATCHING:** When an area has been patched using inappropriate mortar, masonry, or craftsmanship, the work should be replaced according to approved standards.

6. METALS

a. DESCRIPTION

(1) IRON AND STEEL

(a) Galvanized iron or steel is a sheet metal that has been coated with zinc to protect it against many types of corrosion. This coating even has limited self-healing properties where the iron or steel has become exposed through wear, aging or discontinuities such as pinholes in the coating. In these areas, a

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galvanic reaction between the coating and the base material will cause the zinc to corrode and form a protective compound on the base. If the iron or steel were left unprotected, it would rust and eventually deteriorate completely. Galvanized iron or steel is normally painted when it is used for moldings, cornices, dormers, and other decorative elements.

(b) Older galvanized metal has a tendency to flake. During the galvanizing process, a multiple layer structure of iron and zinc alloys is created between the base metal and the zinc coating's outer surface. These layers tend to react differently to the usual stresses encountered by the material, causing the outer layer to flake off.

(c) Most galvanized metal, particularly that used for cladding and decoration, was painted. Proper preparation of galvanized metal is essential or the paint will not adhere to the material. The metal must be thoroughly cleaned of all grease, dirt, and other adherents. Galvanized metal can become discolored due to dampness or extremes of temperature.

(d) Galvanized metal can deteriorate due to galvanic action when it comes into contact with many other metals. If hangers or fasteners are improperly specified and are not specifically made for use with galvanized metal, they may cause the sheet metal to corrode and fail. Also, because of its thinness, galvanized sheet metal can be dented or torn easily.

(2) COPPER

(a) Copper is a ductile, soft, non-magnetic metal that is characterized, when new, by a bright reddish brown color. It is highly electrically and thermally conductive. Copper is used in several useful alloys and is easily worked while possessing enough strength for minor structural use.

(b) Upon exposure, copper reacts by forming a surface layer of insoluble green salt which retards further corrosion. Copper is not subject to galvanic action, but it does promote galvanic action in other metals. Thus it should be separated from other metals by insulating materials and fastened with copper or bronze fasteners. Copper is subject to abrasion. It can be protected by painting or coating with lead.

(c) Copper is extremely durable, with the only points of failure being at the seams, at flashing, and at nailing points. Deterioration of these points can be spotted by visual inspection.

b. CLEANING**(1) CAST IRON AND WROUGHT IRON**

(a) Hand clean with stiff wire brushes, putty knives, emery cloth.

(b) Naval jelly can be used on severe rusting. Rinse thoroughly and dry.

(c) Prime all iron work immediately after cleaning and repaint.

(2) ALUMINUM: Cleaning of aluminum should be accomplished using the mildest method possible. Begin with the mildest method and work through succeeding harsher methods until success is

achieved. If possible, find an inconspicuous section of the soiled surface to test the method being used. Methods from mild to harsh are listed below:

- (a) Wash with mild soap and water and rinse.
- (b) Clean with solvents or emulsion cleaners.
- (c) Use polishes or water and scouring powders. These usually will remove corrosive stains.
- (d) Abrasive cleaners can be used with fine steel wool (#0000-00). These must be used with caution as they can dull highly-polished aluminum.

(e) Etching cleaners may be used to clean highly corroded aluminum. These must be used with extreme care to protect the worker and adjacent materials.

(3) COPPER: Mechanical cleaning methods including dry grit blasting should never be used on copper. Low pressure water spray, or wiping with a damp cloth is useful for most cleaning. A mild detergent may be used with water to remove oily spots. Rinse thoroughly and dry.

(4) STEEL

- (a) Use wire brushes and emery cloth for minor rusting.
- (b) Use sand or grit blasting (80-100 psi) to remove heavy rust. Mask surrounding areas. Replace all caulking displaced by grit blasting.

(c) Use chemical rust removers for hard to reach areas. Protect adjacent materials. Do not use rust removers containing hydrochloric acid.

- (d) Rinse and dry all surfaces after treatment.
- (e) Apply rust inhibiting primers immediately after cleaning.

c. REPAIRS

(1) MINOR HOLES: Minor holes can be repaired using galvanized sheet metal patches and solder. Seal the patch with roofing cement. For gutters, the patch should be done on the inside surface. Down spouts will usually have to be patched on the outside surface, so the patch should be as clean and small as possible.

(2) LEAKS AT JOINTS: When joints fail, the joined surfaces should be cleaned and checked for deterioration. If the metal is sound, the two elements should be joined and resoldered. Be sure to provide for thermal expansion. When several leaks occur in the same element or a few very large holes exist, the piece should be replaced. The replacement piece should be the same material, size, cross section, weight and finish as the piece being removed.

(3) **DETERIORATION:** Any sheet metal deterioration should be considered a critical problem. Minor deterioration should be corrected by stabilizing the metal unit until it can be replaced. Deteriorated areas can be patched using sheet metal soldered and/or nailed in place overlapping the deteriorated area and sealed with roofing cement.

7. WOOD

a. DESCRIPTION

(1) Wood is a natural material, requiring only some seasoning, cutting and finishing for use. It is usually thought of as a solid material though, in fact, only 20 to 40 percent of cured wood is composed of solids. The remaining is air which occupies the cellular wood structure. This accounts for the excellent insulating and working quality, as well as its tendency to absorb water.

(2) The most significant threat to wood is moisture. Moisture is sucked deep into the cell structure by capillary action. When drying occurs, the surface dries first, and these areas shrink. The still-swollen inner cells resist the shrinkage, resulting in deterioration, commonly known as weathering. Weathering is particularly common at end grains, and it can accelerate deterioration caused by other harmful agents.

(3) Absorption of moisture can cause substantial changes to occur in the shape of wood sections. When these changes take place at points where several pieces meet or where anchoring devices attach the pieces to another material, large stresses can result in cracking or failure.

(4) Ultraviolet light is absorbed readily by some chemical components of wood, though only close to the surface. This results in a brittle surface, and subsequent loss of wood material.

(5) Fungi is a serious threat to wood. Spores enter the wood and can penetrate deeply, destroying cell walls and causing decay through chemical reactions. Fungi requires temperatures of 50 - 100 degrees Fahrenheit, air, and a moisture content of 30 percent. Wood that is in contact with wet soil or that is above wet soil separated by an area that is poorly ventilated, or wood joints that trap water, or wood with cracks or checks caused by weathering are particularly susceptible to fungi.

(6) Insects also pose a serious threat to wood. Termites are the most prevalent pest, while various species of beetles can be destructive. Termites usually require moist soil nearby, but some varieties thrive on dry wood. Most beetles seek out dry wood that has been previously attacked by fungi.

(7) When deteriorated wood elements are discovered, the cause of the deterioration should be determined. Faulty gutters and down spouts are a common cause of wood deterioration, as are leaks in flashing. These problems must be solved prior to any extensive wood repair.

b. CLEANING

(1) **DIRT:** The build-up of dirt and pollutants can lead to the premature deterioration of wood finishes. By routinely water washing the features, chemical processes, induced by the presence of dirt and acids, that break down the protective coatings of wood will be limited. It is suggested that the

features be washed semiannually. It is best to undertake washing when conditions are best for rapid evaporation. The following steps should be taken:

(a) Ensure that all windows and doors are closed tightly.

(b) Remove as much of the foreign material (loose dirt, etc.) prior to saturating the surface. This may be done manually with brooms, brushes, or sponges.

(c) Using a hose with moderate spray, saturate the wood features, windows and doors.

(d) For chalking, dirt, soot, cobwebs, and cocoons, etc., use a mixture of soap and water (1/2 cup household detergent to a gallon of water). Manually scrub the wood, working from top to bottom, with a cloth, sponge, or soft bristle brush. Be sure to wash windows evenly to avoid streaking.

(e) To remove mildew, follow the same procedure using one cup non-ammoniated detergent to one quart household bleach to one gallon of water and scrub with a medium brush.

(2) PAINT: Paint becomes hard and brittle with age and is unable to expand and contract with weather conditions. This will result in peeling or cracking. Paint may also blister as a result of prolonged heat, or as a result of trapped moisture. Wrinkling occurs when the top layer of paint dries prior to the layer underneath.

(a) ABRASIVE: Abrasive methods of paint removal utilize manual items such as putty knives, paint scrapers, sandpaper, sanding blocks, and sanding sponges, as well as mechanical items such as orbital sanders. It is not recommended to use rotary drill attachments, disc sanders, water blasting, or sandblasting.

(b) SCRAPING: Generally speaking, putty knives and paint scrapers are excellent for the removal of loose paint. These tools must be used with care as to avoid gouging the wood.

(c) SANDING: After scraping, either manual or mechanical methods of sanding should be used to feather uneven surfaces. Manual methods should be used for decorative and hard to reach items, and mechanical methods should be used for large, flat surfaces.

1. Manual methods utilize sandpaper, sanding blocks, and sanding sponges.

2. Suggested mechanical tools are the orbital sander and belt sander. The orbital sander is designed as a finishing and feathering tool. The belt sander is capable of removing multiple layers of paint. A medium grit, open-coat aluminum oxide sandpaper should be used for both sanders.

(d) THERMAL METHODS: Thermal methods of paint removal are excellent for total paint removal. Tools applicable for thermal paint removal are the electric heat plate (for use on flat surfaces) and the electric heat gun (for use on solid decorative molding, balusters, and fretwork). The blow torch is not recommended because it can scorch the wood.

1. **ELECTRIC HEAT PLATE:** The electric heat plate is similar to an iron. It operates between 500 and 800 degrees Fahrenheit (not hot enough to vaporize lead paint). The plate is held close to the painted exterior surface until the layers of paint begin to soften and blister, then moved to an adjacent location while the softened paint is scraped off with a putty knife.

2. **ELECTRIC HEAT GUN:** The electric heat gun (hot-air gun) looks like a hand held hair dryer. The gun heats between 500-750 degrees Fahrenheit. The heat gun works well on heavy paint build up on both flat and curved surfaces.

(c) **CHEMICAL METHODS:** Unless necessary, this method should be avoided when possible. The reason for this is that the process is very messy, can produce toxic vapors, and will likely damage skin if it is not properly protected. This, however, will prove effective in limited situations such as removing paint residue from intricate decorative features or removing paint from window muntins, because heat devices may shatter glass. There are two types of chemical paint removers: solvent-base strippers and caustic strippers.

c. **REPAIRS**

(1) **CHIPS, CRACKS OR SCRATCHES:** These conditions are the result of expansion and contraction of the wood during freeze thaw cycles. They may also be the result of impact. The following procedure may be used for patching holes, cracks, and partially decayed areas:

(a) Clean the hole, crack or partially decayed areas of all dirt, wood chips, and rotted wood. This may require cutting back rotted sections to solid material.

(b) Treat area with fungicide. Care should be taken to follow the literature provided with the product because fungicide is a toxic substance.

(c) Waterproof with two or three applications of boiled linseed oil

(d) The cracks, holes, and depressed areas may be filled with a number of compounds. For relatively small cracks and holes, wood putty would be appropriate. Where wood is partially decayed, porous, and in need of stabilization, the application of semi-rigid epoxies would be appropriate. Epoxy patching compounds can be used to build up missing sections or decayed ends of members. When building up or patching a flat surface, the finished surface should be sloped slightly to carry water away from the building.

(e) Sand the dried patch to feather the edges, clean thoroughly of dust, and paint the surface.

(2) **LOOSE ELEMENTS:** This condition may be the result of rusted nails, deteriorated binding compound, or impact. Wood elements that have become loose should be reattached to their backing material using the same fastening system as the original. The loose elements should be fastened securely to adjacent construction with appropriate nails, screws, bolts, or other anchors. An appropriate finishing procedure of sanding, priming, and painting should be used to assure a match with existing work.

(3) MISSING ELEMENTS

(a) Wood sections may be in need of replacement if they have rotted significantly or if they have been seriously damaged from impact.

(b) In the event that a wood element is missing, significantly damaged, or deteriorated, it should be replaced with a new element that matches the original in size and profile. Replace existing fabric only when no other stabilization method such as painting and patching will not suffice.

(c) For distinctive architectural features such as windows, doors, cornices, columns, pilasters, and pediments, the original design specifications for the features should be consulted. Once the new wood section has been cut and shaped to a perfect fit, attach the section to its backing material using the same fastening system as the original and repaint according to the specifications.

(4) STRUCTURAL DETERIORATION

(a) In some cases, the original roof framing may not have been properly sized to support the load of slate over time, thus the weight of the slate causes the roof to sag. In other cases, the sheathing and structural system will begin to fail as the result of improper maintenance which has allowed moisture to accumulate beneath the surface of the slate. For this reason it is important to repair any damaged slate before such damage has occurred.

(b) In the event of severe deterioration, the damaged element should be removed and replaced with new material. Deteriorated pieces should be removed carefully and the backing or adjacent material cleaned and prepared to receive the new work. The new pieces should match the dimensions and profile of the original.

(c) Sagging roof, rotting or broken structural members can indicate severe structural problems and often requires the strengthening or replacement of structural members. The repair of such problems should be left to professionals.

(5) INSECT DAMAGE

(a) Insect damage can be prevented by removing wood from insects' reach, rendering the environment unsuitable for their habitation by poisoning, and/or using preservatives which are toxic to the insects. Keeping wood painted provides a coating which helps to prevent penetration by insects and laying of eggs. Gaps and holes which allow entry of insects should be patched and sealed using wooden plugs. Where the original building included gaps by design, insect screening used inconspicuously may remedy the problem.

(b) If there is active infestation, fumigation will kill beetles and airborne insects. This method must be left to professionals. In addition, for full penetration, it is sometimes necessary to remove certain parts of the building fabric. Damage caused by insect infestation must be repaired in accordance to the guidelines in this schedule.

8. SLATE SHINGLES

a. **DESCRIPTION**

(1) Slate is a metamorphic rock which was formed in layers, resulting in a stone that splits readily into thin slabs. These slabs are strong and durable, with high tensile strength. It can be found in numerous solid or striped colors.

(2) Roofing slate is available in a variety of stock colors, textures, and thickness. Normal range of thickness for roof slates is 1/4 inch to 2 inches. The most common roof slate averages 3/16 inch thick, the length and width of the slate ranges in size from 6 inches x 10 inches to 14 inches x 42 inches. The slate shingles are held in place with nails or clips. Those designed for nailing are delivered pre-drilled with two nail holes per slate. The most common nails for slate shingles are flat-headed wire nails made of copper, copper alloy or aluminum. Where nail heads are exposed, they are coated with elastic roofing cement to provide protection.

(3) Slate is normally applied to wood lath which is nailed to the roof framing members, or to solid wood sheathing which has been covered with roofing flat or rolled roofing.

b. **CLEANING:** Dirty slates should be cleaned with a tested and approved chemical cleaner to remove any debris, moss, organic material and dirt.

c. **REPAIRS**

(1) **CRACKED OR MISSING**

(a) Despite the durability of slate shingles, they will have a tendency to crack or jar loose as the result of natural weathering processes. Falling branches and walking on roof improperly will also cause the shingles to crack or detach from the roof structure.

(b) It is important that damaged or missing slates be replaced as soon as possible. To limit damage prior to the permanent repair, temporary slates should be placed over the areas where the substrate is exposed. When choosing replacement slates, make sure that the new slates match the old in terms of color, size, and thickness. Insure that at the time the roof is repaired the underlayment and sheathing is thoroughly inspected. All deteriorated underlayment, sheathing, and roof structures should be repaired or replaced.

(c) Slates are held in place two ways: with metal clips or more commonly, with two nails per slate. The nails should be copper nails specifically made for the purpose.

(d) Because slate is brittle, it is important that slate roofs be walked upon as little as possible. For this reason, it is suggested that a chicken ladder or ladder hooks be used during all repairs. If it is necessary to walk on the roof, be sure to step on the portion of the shingle that overlaps the shingle below and not on the center where the shingle is most vulnerable.

(2) **DELAMINATION:** Delamination is a natural form of deterioration caused by weathering. This process is expedited in areas of extreme temperatures and as the result of chemicals in precipitation.

When deterioration reaches a generally high level so that routine maintenance no longer results in a stable, weather-tight roof, the entire roof surface and substrate, if necessary, should be replaced.

9. ASPHALT SHINGLES

a. DESCRIPTION

(1) Asphalt is a solid or semi-solid cementitious material consisting primarily of bitumens found in nature or as by-products of petroleum refining processes. It can be turned into a pourable liquid by heating, and can be dissolved in petroleum distillates and residual oils. It can be emulsified in water. It is a powerful binding material that is unaffected by most non-petroleum-based chemicals. It is durable and highly waterproof when properly used.

(2) Asphalt roofing shingles consist of a base of asphalt-saturated felt, stabilizers usually consisting of finely ground stone, sometimes pigmented and fired to produce permanent colors. The resulting shingle is durable, elastic for ease of installation and repair, and available in a wide variety of textures and colors. A felt underlayment is usually installed beneath the shingles.

(3) Deterioration is usually a result of poorly installed or deteriorated nails or roofing adhesive, improperly executed ridges, valleys or flashing, damage from impact, or damage from heavy storms and winds. After twenty years or so, the asphalt shingle becomes dried out and brittle as all of the liquid content has been evaporated by the elements. At this point, shingles tear easily and can lose their waterproof qualities. Replacement of the entire roof is necessary when this point is reached.

b. REPAIR

(1) CRACKED OR TORN

(a) Shingle damage generally occurs as the result of freezing temperatures which make the asphalt brittle, impact, walking on the roof, inoperable or damaged gutters, faulty flashing, or high winds.

(b) If a roof shingle is damaged, it should be replaced. The shingle above that to be replaced should be bent up carefully to allow access to the damaged unit. The nails holding the defective shingle can be cut using a chisel or hack saw, thus allowing the shingle to be removed. The replacement shingle should be inserted, held in place with roofing cement (re-nailing may not be possible due to the shingle above). The color and texture and exposure of the replacement shingle should match that of the surrounding shingles as closely as possible. Care should be taken to avoid tearing the felt that overlaps the damaged area on all sides, applying mastic all the way around the patch to form a weather tight seal.

(c) When the damaged shingle is removed, be sure to check the underlayment and sheathing, if exposed, for damage. If either of these elements is deteriorated, it should be examined more closely over a larger area, first from the underside (in the attic), and deteriorated material repaired or replaced as necessary.

(d) When nailing replacement shingles, use galvanized roofing nails only. Apply roofing cement to the nail heads.

(2) **LOOSE:** A loose shingle implies that the nails are broken or that the shingle has torn around the nails. If the shingle has torn, follow the replacement procedure above. If the nails are broken, the loose shingle should be refastened. Remove any loose pieces of nails that remain; and reattach the shingle with roofing cement or, if possible, with galvanized roofing nails. Prior to refastening a loose shingle, inspect the felt underlayment for damage.

(3) **WORN OUT, DAMAGED, OR MISSING:** After a given period of time, asphalt shingles will wear down as the result of natural weatherizing and need replacement. If properly maintained, asphalt shingles should last twenty to thirty years. When deterioration reaches a generally high level so that routine maintenance no longer results in a weather tight roof, the entire roof surface, and the substrate, should be replaced.

10. WINDOWS AND DOORS

a. **DESCRIPTION:** When wood elements are used in windows and doors, they become subject to forces brought about by the interaction of the wood elements with metal thresholds and weather-stripping. Deterioration of doors and windows can be caused by three factors: inherent characteristics of wood, failure of mechanical components, or deterioration at the interface of mechanical wood elements.

b. CLEANING

(1) **HARDWARE:** For minor cleaning, a template around the hardware or masking of the door or window proper can protect surrounding parts and avoid the necessity of removing the hardware. Refer to section on metals for instructions on cleaning various types of metals. For periodic cleaning of hinges, locks, and latch sets, remove hardware to prevent damage to the door or window. Corrosion of cast or wrought iron parts must be removed with care to avoid abrasion to the original surface.

c. REPAIR

(1) **INFILTRATION:** Wood frames dry out over time and shrink, causing cracks where the frame meets the wall. Caulking compounds are available in a wide variety of properties and colors. Care should be taken to use the appropriate composition and color for the task. Application should follow manufacturers instructions. All surfaces should be clean, dry, and surface primed if required. Joints more than 1/2 inch deep and joints where suitable backstop has not been provided should be packed with back-up material before applying caulking. Weather-stripping is available in wood, metal (usually copper or bronze), or plastic. It is applied to doors or windows to cover joints they make with the sill, casings, or threshold.

(2) **WINDOW INOPERABLE:** Identifying the source of the problem is the most important step. Look for misaligned or broken window sections, accumulated paint, rusted hardware, broken sash cords, or swollen wood. If the window still does not operate properly, the window mechanism requires attention. The rope and pulley mechanism can usually be reached by removing part of the frame, which is generally nailed or screwed in place. Worn ropes should be replaced, and pulleys checked for proper operation. Any missing weights should be replaced; often they can be found at the bottom of the wall below the window if the rope has broken. If the pulleys and ropes are working properly and the window

still will not open easily, the sides of the window sash should be planed or sanded in small increments until it slides easily in the frame.

(3) **DOOR INOPERABLE:** If a door frame is in good condition, hardware is operational and it still does not open and close properly, adjustments should be made to the door itself. The door edges can be sanded or planed to allow it to open and close freely; however, first the hinges should be checked for proper operation and to be sure door is plumb. Adjustments can be made by shimming the hinges.

(4) **LOOSE OR CRACKED GLASS:** Glazing compound dries out over time, and glass may crumble or fall out of the window sash. If the glass is sound, it should remain in place and the glazing compound replaced according to standard glazing techniques. Glass that has been broken or cracked should be replaced to eliminate risk of injury and loss of energy from the building. The procedure involves the following:

(a) Using pliers and chisels, remove all old glass and scrape the old putty out of the glazing rabbet. Save all chips and beads for reuse.

(b) Wipe the area clean of dust and dirt using a cloth and water mixed with alcohol or ammonia.

(c) Using a putty compound formulated for wood, bed a glass unit that fits properly into the glazing rabbet. The putty should form a 130-140 degree angle from the face of the glass to the rabbet section of the sash.

(5) **WINDOWS AND DOORS DAMAGED OR MISSING:** If original doors and windows still exist, every attempt should be made to repair them for continued use. If units are missing or damaged beyond repair, and there are many original units still in place, replacement units should match the original in shape, size, material, finish, and contour. If all units are to be replaced, the decision will have to be made in regard to the material for the replacements: aluminum or wood. Either is acceptable if the profile, glass area, and shape of the original is maintained, and if the color or finish is appropriate.

(6) **HARDWARE:** The most common failure of door hardware involves the set screw. The associated hole enlarges with use. The larger it is the faster the wear. Reversal of the spindle and knob occasionally will increase the life of these parts. A more permanent repair involves filling the hole with silver solder and redrilling. Another solution involves turning the knob 90 degrees on the spindle and drilling a new set screw hole. Worn hinge knuckles can be remedied by placing washers between the knuckles to return the door to its original height.

11. STUCCO AND PLASTER

a. **DESCRIPTION:** Stucco, usually an exterior finish, and plaster, usually an interior finish, can be considered together when thinking of maintenance.

b. CLEANING

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(1) **GENERAL:** Protect all surrounding materials. Use mild soaps and soft brushes to remove chalking and dirt. Rinse surfaces with water. Use sponges for interior plaster work, water sprays for exterior stucco work.

(2) **PAINT:** It is not necessary to remove all layers of paint down to raw stucco/plaster. To remove paint that has built up in many layers on stucco/plaster, use one of the following methods:

(a) Remove mechanically with scrapers and wire brush.

(b) Remove chemically with commercially available organic strippers. Follow manufacturer's instructions and protect surrounding materials.

(c) Before painting, allow surface to dry completely. Wait thirty days to paint new stucco or plaster. Fill cracks in if necessary before painting. Paint with 1 coat oil base primer and 2 coats oil base top coat.

c. REPAIR**(1) CRACKS**

(a) Hairline cracks are a natural occurrence in stucco and plaster and seldom require repair unless they result in loose material or it is determined that moisture is able to penetrate the cracks.

(b) To repair cracks, brush affected area with a stiff bristle brush to remove loose stucco/plaster. Remove loose debris. Inspect substrate for damage and repair as required. Lightly wet all cracks and fill with several coats of cement mastic.

(2) **SPALLS:** Brush affected area with a stiff bristle brush to remove loose stucco/plaster. Remove debris. Inspect substrate for damage and repair as required. Provide keyed surface for secure stucco/plaster application. In concrete, drill 3/4 inch holes, 3/4 inch deep at 3 inches O.C. each way. In clay tile, block rake out 3/4 inch deep troughs in mortar joints. Use welded mesh wire only if it was used originally. Wet keyed surface and apply Portland cement plaster (for stucco: 1 part cement, 3 parts sand, 1/4 part lime. Match sand to texture of existing.) Allow each coat to dry fully (minimum 24 hours each). Apply two additional coats. Tool and finish exposed surfaces to match the original.

12. TERRA COTTA

a. **DESCRIPTION:** The term terra cotta refers to a high grade of weathered or aged clay which, when mixed with sand or with pulverized fired clay, can be molded and fired at high temperatures to a hardness and compactness not obtainable by brick. Historically, there are four types of terra cotta: brownstone, fireproof construction, ceramic veneer, and glazed architectural.

b. CLEANING

(1) The successful cleaning of glazed architectural terra cotta removes excessive soil from the glazed surface without damaging the masonry itself. The most widely recommended cleaning materials

are water, detergent, and a natural nylon bristle brush. More stubborn stains may be cleaned with steam or weak solutions of muriatic or oxalic acid.

(2) Cleaning methods not recommended for terra cotta are abrasive methods (such as sandblasting), the use of strong acids, high pressure water cleaning, or the use of metal bristle brushes. All of these methods will damage the glaze and subsequently expose the porous material to the damaging effects of water.

c. **REPAIR:** Deterioration in glazed architectural terra cotta is insidious in that outward signs of decay do not always indicate the more serious problem within. One of the primary agents of deterioration is water. Therefore, water-related damage can be repaired only after the source has been eliminated.

(1) **CRAZING:** crazing is the formation of small random cracks in the glaze, a common form of water-related deterioration in glazed terra cotta. When a new terra cotta unit first comes from the kiln after firing, it has shrunk to the smallest possible size. With the passage of time, it expands as it absorbs moisture from the air. The glaze then goes into tension because the unit no longer fits into its covering. Unless the cracks visibly extend into the porous tile beneath the glaze, crazing should not be regarded as a highly serious material failure.

(2) **SPALLING:** The partial loss of masonry is caused by water that has been trapped inside the masonry system itself. Trapped water is often caused by poor detailing, insufficient maintenance, or leaks. In most cases, the water evaporates from the surface, however, in terra cotta, the water is prohibited from evaporating due to the glaze. The water is stopped by the glaze until it build up significant pressure to pop off sections of the glaze. It is important to coat or seal these blistered areas to prevent further entry of water into the system. All loose material must be removed, then the area must be painted over with an acrylic based product or masonry paint.

13. BIBLIOGRAPHY

This report consists of a compilation of the following manuals:

VAMC Mountain Home, Tennessee Cyclical Maintenance Plan
Preservation/Urban Design/Inc., Ann Arbor/Washington DC

VAMC Clement J. Zablocki Vol. 1 & 2 Maintenance and Treatment Plan
Planning and Design Institute, 4545 North Woodburn, Milwaukee, Wisconsin 53211

VAMC Salem, Virginia Historical Resources Management Plan, Cyclical Maintenance Plan
Sorg and Associates, 1000 29th Street, NW, Suite T-200, Washington, DC 20007

VAMC Waco, Texas Historical Preservation Plan, Treatment Procedures
Roy Eugene Graham and Associates, 3133 Conn. Ave., NW, Suite 221, Washington, DC 20008

Historic Preservation Briefs

U.S. Department of the Interior, Preservation Assistance Division, National Park Service, Technical
Preservation Services

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APPENDIX O**