



**Proposed Program Comment for
Army Inter-War Era Housing (1919-1940)
Consultation Conference Call
12 Feb 2020
DESIGN GUIDELINES**

David Guldenzopf, Ph.D.
Department of the Army Federal Preservation Officer



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DESIGN GUIDELINES

for

ARMY INTER-WAR ERA HOUSING

AND SETTING

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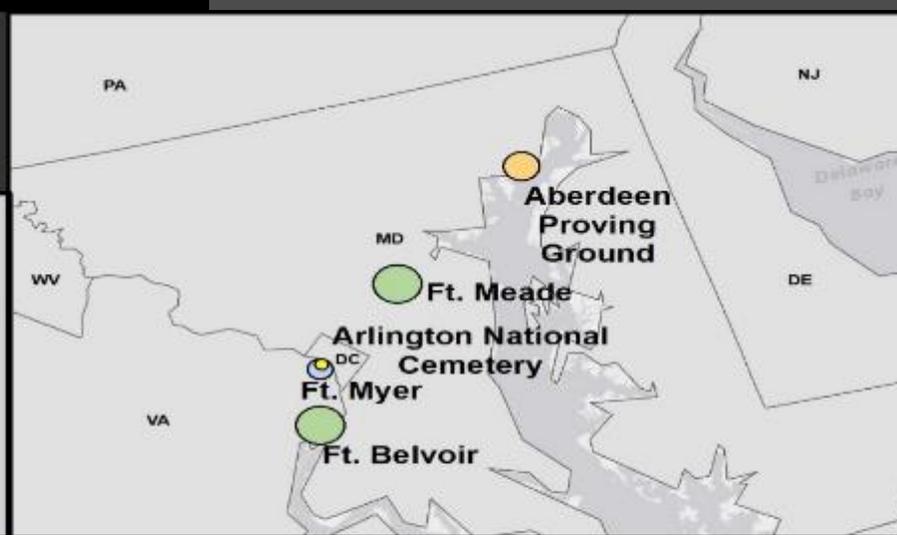


Army Inter-War Era Historic Housing (1919-1940) Locations

Over 3,200 Total Historic Housing Units

Historic Housing Units Per Installation

- 1 - 10 ● 101 - 200
- 11 - 40 ● 201 - 500
- 41 - 100



INSTALLATION	# OF HOUSING UNITS
Fort Benning, GA	492
USAG HI	386
Joint Base Lewis McChord, WA	330
Joint Base San Antonio, TX	296
Fort Sill, OK	259
Fort Bragg, NC	230
West Point, NY	206
Fort Knox, KY	202
Fort Belvoir, VA	164
Fort Bliss, TX	147
Fort Riley, KS	143
Fort Meade, MD	112
Aberdeen Proving Ground, MD	97
Carlisle Barracks, PA	75
Hawthorne Army Depot, NV	34
Joint Base Myer Henderson Hall, VA	22
Camp Parks, CA	9
Picatinny Arsenal, NJ	8
Rock Island Arsenal, IL	7
McAlester Army Ammunition Plant, OK	5
Presidio of Monterey, CA	4
Fort Campbell, KY	2
Watervliet Arsenal, NY	1
Arlington National Cemetery, VA	1

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I. Introduction

PROGRAM COMMENT INTENT AND APPLICABILITY: The intent of the *Program Comment for Inter-War Era Housing 1919-1940* is to achieve National Historic Preservation Act (NHPA) Section 106 compliance, improve the quality of life, health, and safety of military families living in Inter-War Era housing, and maintain the housing's historic and architectural character. The Program Comment for Inter-War Era Housing applies to and provides treatment measures for the effects of management actions on all Army constructed housing built between 1919 and 1940, and the setting where the housing is located. *Setting*, as used in these Guidelines includes the neighborhoods, landscapes, associated buildings and structures, and the historic districts within which the housing is located. The Program Comment and these Design Guidelines supersede and replace the processes, procedures, and requirements in installation Programmatic Agreements, Memoranda of Agreement, and other documents, standards, or guidelines for Army Inter-War Era housing and its setting.

INTER-WAR ERA HOUSING: The Inter-War Era (1919-1940) includes Army housing of several architectural styles, which fall into the categories of *Eclectic* houses and *Modern* houses (see *A Field Guide to American Houses*, McAlester, V. S., 2017). Standardized plans, developed by the Army Quartermaster Corps, were followed for the construction of Inter-War Era Army housing. Army standardized plans reflected prevailing civilian architectural designs and community planning trends of the time, with regional style variations and use of locally available materials. Regional style variations among Inter-War housing are exterior in nature, the interior layouts are generally very similar, corresponding to military rank. Since Army housing plan standardization was driven by cost analysis and efficiency of construction, Inter-War Era housing exteriors lack some of the design features and ornamentation associated with similar architectural styles in the civilian sector. The Army Quartermaster Corps also developed standardized plans for landscaping, neighborhood layout, and the design of entire installations, all of which may now constitute or be part of a historic district. The result of Army Quartermaster Corps standardization is that the same general housing, administrative buildings, landscape and neighborhood designs, and overall installation layouts are repeated, one after the other, on Army installations.



Introduction (cont.)

PROGRAM COMMENT TREATMENT MEASURES: Army installations are part of the country's built environment. Similar to civilian towns and cities, Army installations are a record of their time and development history, and represent the planning and architectural concepts associated with the times in which they were established and modified. The Army-wide history, development, designs and evolution of Army standardized planning, and Inter-War Era housing, neighborhoods, other built areas and historic districts on installations have been extensively documented and recorded. Additionally, the history of the Inter-War Era housing itself, its exterior designs and styles, interior designs and floorplans, and landscapes have also been extensively documented and recorded. Treatment measures in the NHPA Section 106 process address and mitigate the effects of management actions on historic properties. This existing set of documentation serves as a Program Comment treatment measure by documenting the historic context, recording exterior and interior housing designs and plans, and the designs of neighborhoods, landscapes, and the historic districts within which the housing occurs. The documentation is referenced below*, and is available on the Army's Program Comment website: <https://denix.osd.mil/army-pchh/home/>.

Individual Army installations have also identified and recorded their Inter-War Era housing, historic districts, and landscapes in specific installation-level documentation. Installation-level documentation includes the installation Cultural Resource Management Plans that contain a historic context, a comprehensive inventory of all historic properties, electronic recordation of the location of these housing areas and historic districts in installation Geographic Information Systems, and extensive documentation prepared in the context of installation NHPA Section 106 compliance activities that identifies and

* References:

1. *National Historic Context for DoD Installations, 1790-1940, Volumes 1-4.* DoD Legacy Resource Management Program Project 92-0075 (1995).
2. *A Study of United States Army Family Housing Standardized Plans, Volumes 1-5.*, Grashof, B. (1986).
3. *Historic Context Study US Army Quartermaster General Standardized Plans 1866-1942.* Army Corps of Engineers, Seattle District (1997).
4. *Historic Context Study of Historic Military Family Housing in Hawaii.* DoD Legacy Resource Management Program Project 115 (2003).
5. *Design Guidelines for DoD Historic Buildings and Districts.* DoD Legacy Resource Management Program Project 07-382 (2008).



Introduction (cont.)

documents this housing and its setting. Examples of such detailed installation-level treatment measures from Army installations in Hawaii (HABS and HALS documents) are located on the Program Comment website. Additional treatment measures, such as these Design Guidelines, are included in the Program Comment. The Program Comment treatment measures address the effects of management actions (maintenance, repair, rehabilitation, renovation, layaway and moth-balling, demolition, demolition and replacement, and transfer, sale, or lease out of Federal control) on all Army constructed housing built between 1919 and 1940, and the setting where the housing is located.

DESIGN GUIDELINES*: The purpose of these Design Guidelines is to maintain the historic and architectural character of Inter-War Era housing and its setting, while addressing quality of life, health, and safety issues faced by the military families who live in the historic housing. This purpose is accomplished through implementation of the Design Guidelines with the use of *imitative building materials* in lieu of historical building materials.

According to the Secretary of the Interior's Standards and Guidelines for the Treatment of Historic Properties (SOI Standards), imitative building materials have a long history in American building construction. As reference in the SOI Standards, and as adopted for used in these Guidelines, imitative building materials are modern, readily available, industry standard, natural, composite, and synthetic materials that simulate the appearance of and substitute for more expensive historical building materials. The use of imitative materials is not new, yet it continues to raise philosophical questions among some preservationists who believe that the use of imitative materials in historic buildings should be avoided. The fact is however, according to the National Park Service's Preservation Brief 16**, imitative materials (or "substitute"

* After: *Design Guidelines for DoD Historic Buildings and Districts*. DoD Legacy Resource Management Program Project 07-382 (2008).

** *Preservation Brief 16: The Use of Substitute Materials on Historic Building Exteriors*. Technical Preservation Services, National Park Service (1988).



Introduction (cont.)

materials as used in Preservation Brief 16) are being used more frequently than ever in preservation projects with positive results. Preservation Brief 16 states that such building materials can be cost-effective, can permit the accurate visual duplication of historic materials, last a reasonable time, and with proper planning (as provided by these Design Guidelines), modern imitative building materials can be successfully used to maintain the appearance of historic properties.

These Design Guidelines, combined with the use of imitative building materials, will maintain the historical and architectural appearance of Inter-War Era housing and its setting, eliminate lead-based paint hazards in historic housing by replacing historical building materials containing lead-based paint, and will also reduce the high costs associate with historical building materials. The use of imitative materials to eliminate the lead-based paint hazards in housing is critical to the health and safety of our military family members. Additionally, the cost efficiencies resulting from the use of imitative building materials improves the quality of life for our military families by allowing upgrades and improvements to the housing that have not otherwise been possible due to excessive expenditures on high cost historical building materials.

The use of imitative building materials is appropriate for Army Inter-War Era housing. The Army has over 3,200 actively occupied Inter-War Era housing units that serve an institutional housing function for soldiers and their families. None of this housing is planned or is intended to be restored and preserved as historic house museums open to the public. This housing and the installation neighborhoods where it occurs has restricted access and is not open to the general public.

With the appropriate choice and proper installation, imitative building materials, when used following these Design Guidelines, will maintain the overall character-defining appearance that conveys historical, cultural, and architectural values of Inter-War Era housing and its setting, while improving the quality of life, health and safety of the military families who occupy Army Inter-War Era housing.



Introduction (cont.)

CHARACTER-DEFINING FEATURES*:

The character of a historic building is established by its form, size, scale, and decorative features. Character-defining features include the overall shape, style and design of the building, decorative details, interior spaces and features, as well as its setting. When identifying a building's character-defining features it is important to understand the features associated with a particular architectural style. The Inter-War Era (1919-1940) architectural style commonly found on Army installations is defined by the *Eclectic** house styles. Eclectic houses are varied and draw on Classical, Medieval, and Renaissance architectural traditions, resulting in historical or "period" styles that are variously termed *Colonial Revival*, *Spanish Revival*, *Tudor*, and *Mission*. Additionally, *Modern** house styles of American origin such as *Craftsman* are also present on Army installations. Eclectic and Modern styles have character-defining elements such as their forms and shapes, structural systems, roofs, and architectural details (most importantly windows, doors, chimneys, porches, and decorative details).

It is important to understand that any given Army example of Inter-War Era housing may not exhibit all character-defining features or materials of its architectural style. Army housing from the Inter-War Era generally exhibits a simplification of architectural style, will not exhibit all character-defining features or materials, will have been modified over time, and may exhibit features of several different architectural styles. The architectural styles are also manifested in a number of building forms, one or two story single family, bungalows, duplexes, and apartment buildings. The Army's intent in applying these Design Guidelines is to maintain the overall appearance of existing character-defining features rather than attempt to recreate missing features, create a style or appearance that no longer exists, or to restore the housing to a certain period in time or for purposes of visitation by the general public.

* Reference: *A Field Guide to American Houses*, McAlester, V. S., (Alfred A. Knopf 2017) for character-defining features and house styles as used in these Guidelines.



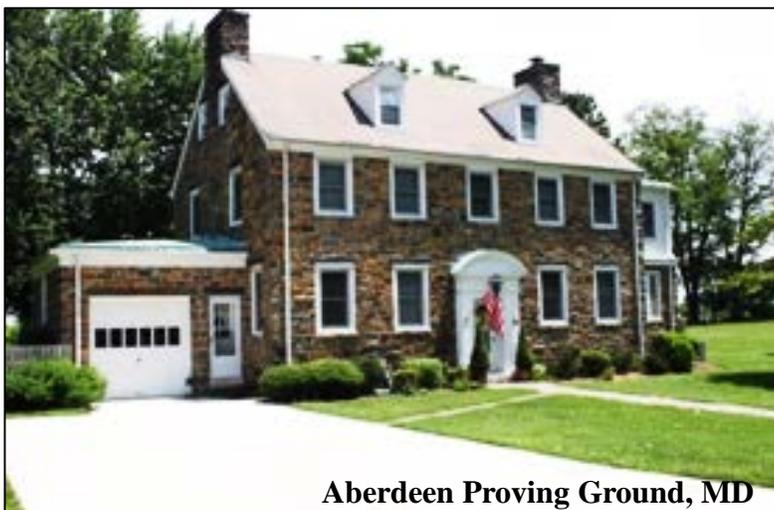
II. House Styles And Character-defining Features*:



Colonial Revival

Character-defining Features:

- Hipped or gabled roof
- Mostly symmetrical in form
- 2-stories, sometimes 1-story,
- Side wings may be present
- Central and accentuated entry door
- Decorative crown (pediment) on main doorway supported by pilasters
- Facade usually has a center door and symmetrical windows
- Double-hung windows, multi-pane glazing
- Dormers



* The house styles presented in this section are representative of the Army's Inter-War Era housing inventory. This is not an exhaustive review of all Inter-War Era house styles, subtypes, and forms.

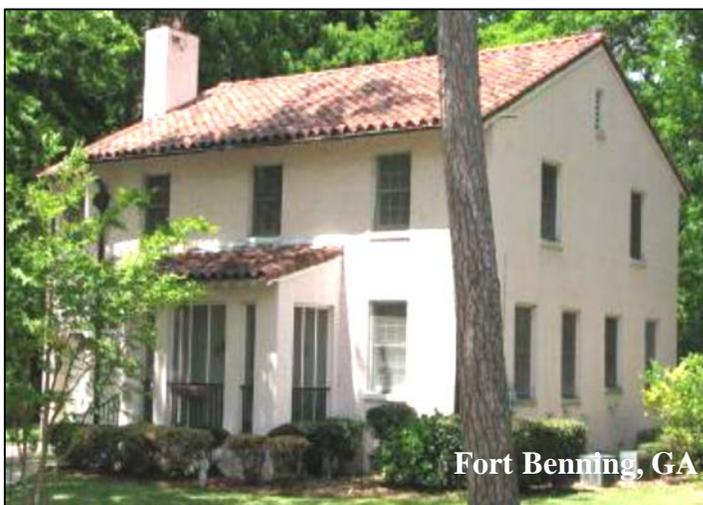


House Styles And Character-defining Features (cont.)

Spanish Revival

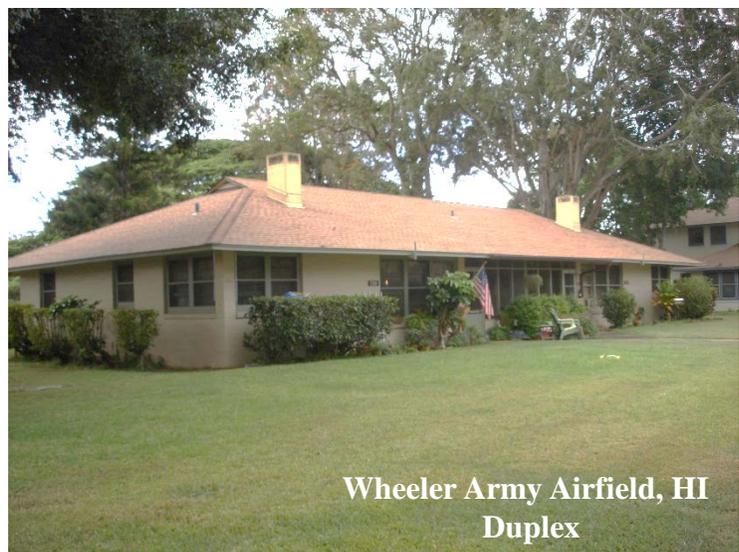
Character-defining Features:

- Symmetrical or asymmetrical form
- Low pitched roof
- Little or no eave overhang
- Stucco covered wall surface
- Red clay tile roof covering usual but may have been replaced with other materials
- Arches may be present above main doors and beneath porch roofs





House Styles And Character-defining Features (cont.)



Mission

Character-defining Features:

- Wood-framed hipped roof
- Wide overhanging eaves
- Open soffit
- Shingle or red clay tile roofing
- Deep-set windows
- Arched doorways
- Smooth stucco wall surface



House Styles And Character-defining Features (cont.)



Tudor

Character-defining Features:

- Steeply pitched roof
- Facade with front facing gables
- Tall, narrow windows, often in pairs or groupings
- Double-hung or casement windows with multi-pane glazing
- Decorative half timbering may or may not be present



House Styles And Character-defining Features (cont.)



Craftsman

Character-defining Features:

- Low pitched hipped or gabled roof
- Unenclosed eave overhang
- Exposed roof rafter ends (no fascia board)
- Decorative (false) beams or braces common
- Bracket-supported roof extension
- Double-hung windows



III. Guidelines for Building Rehabilitation, Alteration, and New Construction:

1. The appearance and character defining features of Inter-War Era housing and associated buildings and structures will be maintained with imitative building materials.
2. Where the existing housing does not accommodate current requirements or quality of life, interior floorplan alterations, exterior alterations, new additions, and new construction are acceptable when implemented in accordance with these Guidelines.
3. Exterior alterations and new additions will maintain the character of the historic housing and associated buildings and structures, and will be compatible with the mass, form, character-defining features, and architectural style of the historical housing and setting. Ensure the size and scale of the new addition in relationship to the building does not diminish, obscure or overwhelm the view and character of the historic building and/or district.
4. New additions will be placed in the rear and on secondary elevations of the housing wherever possible to maintain the front character-defining elevation and will be compatible with the scale, character-defining features, and architectural style of the historical housing and the setting.
5. New construction and replacement construction will be compatible with the mass, form, character-defining features and architectural style of the historical housing, associated buildings and structures, and the setting.
6. New compatible construction that occurs as infill within the existing pattern of neighborhood development serves to preserve the historic character of the setting.



Guidelines for Building Rehabilitation, Alteration, and New Construction (cont.)

7. New and replacement construction may accommodate additional square footage (i.e., square footage beyond that of the surrounding historic housing) in the rear and on secondary elevations of the housing and will maintain compatibility of the front elevation with the scale of the surrounding historic housing and the setting.
8. Where removal of exterior and interior character-defining historical materials or features is required, imitative materials that simulate the appearance and design of the historical materials may be used for replacement of removed historical materials.
9. Design new construction to maintain the overall historic character of a historic landscape and/or district including such elements as the site, topography, landscape features and historic views and vistas.
10. Design new construction to be compatible with the surrounding buildings and landscape features of a historic property and/or district in terms of height, form, massing, scale, size, proportion, roof type and architectural details.
11. Select materials and finishes for new construction that are compatible with the historic materials and finishes of surrounding historic buildings.
12. Design new construction to be compatible and sensitive to the historic buildings but do not exactly replicate existing historic buildings.



IV. Guidelines for Windows and Doors

1. Maintain windows and their functional and decorative features including but not limited to the following: frames, sashes, muntins, sills, decorative jambs and moldings, hardware, shutters and detail materials such as stained glass, beveled glass, textured glass or tracery. If windows and their functional and decorative features present a lead-based paint hazard or other hazard, replace with imitative materials.
2. Maintain historic doors and their functional and decorative features including but not limited to the following: frames, panels, glazing, sidelights, fanlights, surrounds, thresholds, hardware and screen doors. If doors and their functional and decorative features present a lead-based paint or other hazard, replace with imitative materials.
3. When an entire window or door requires replacement, replace with imitative materials, ensure a similar size and configuration.
4. It is inappropriate to apply new features, where none currently exists, to a historic window or door to create a false historical appearance. Such features include but are not limited to shutters and molding.
5. Awnings may be installed over windows and doors but should not obscure or damage the windows, doors, or other character-defining features.



Guidelines for Windows and Doors (cont.)

7. Storm windows can be installed but should not obscure character defining features of the window. For example, if a window is a double-hung sash, install a storm window with a horizontal divider that matches the location of the window.
8. Storm doors can be installed so that they do not obscure or damage the existing door and frame. Select storm doors compatible with the color and character of the existing door.
9. If new windows or door openings are required, they should be installed only on secondary elevations (rear elevation or elevations not visible from the public right-of-way) wherever possible. The new windows should be compatible with, but not duplicate, the building's historic windows and fenestration to avoid creating a false historical appearance.
10. Windows or doors that have to be covered from the inside for security and other purposes should be locked, cleaned, and covered on the exterior or interior rather than infilled with a permanent material such as brick or concrete, where security requirements allow.

Examples of Decorative Features of Windows and Doors:

- Transoms
- Sidelights
- Fanlights
- Decorative brackets and hoods
- Architectural trim, molding, panels, thresholds and surrounds
- Stained or colored glass, textured glass, beveled glass
- Hardware
- Screens or storm windows and doors
- Shutters
- Awnings



V. Guidelines for Entrances, Porches and Details

1. Maintain historic entrances, porches and their functional and decorative features including: columns, pilasters, piers, entablatures, sidelights, transoms, steps/stairs, railings, floors and ceilings.
2. Maintain and repair historic entrances, porches and their features through appropriate methods. If replacement of historical materials presenting a lead-based paint or other hazard is required, replace with imitative materials.
3. If a portion of an entrance, porch or feature is deteriorated beyond repair, replace using imitative materials that match the original in size, design, and scale. If replacement of historical materials presenting a lead-based paint or other hazard is required, replace with imitative materials.
4. If replacement of an entire entrance, porch or feature is necessary, replace by simulating the original in size, design, and scale using imitative building materials.
5. It is inappropriate to enclose a historic front or primary entrance or porch. If enclosure of a historic entrance or porch on a secondary elevation is necessary, design the enclosure to maintain the historic character of the entrance or porch, building and district. For instance, recess the enclosure behind columns, balustrades and other features and/or consider using glass instead of solid materials.



VI. Guidelines for Roofs

1. Maintain historic roof coverings, functional and decorative features (including but not limited to: cresting, dormers and chimneys) whenever possible.
2. Protect and maintain roofing materials through regular maintenance using appropriate methods, including removal of debris from roofs and cleaning and maintenance of gutter systems.
3. If a portion of a historic roof covering or feature is deteriorated beyond repair, it is appropriate to replace using imitative materials.
4. If replacement of an entire historic roof or feature is needed, replacement with imitative materials is appropriate.
5. Gutter systems should be compatible with the historic character of the building and/or historic district, imitative gutter materials may be used and should avoid concealing other architectural features to the extent possible.
6. Non-functional concealed, built-in gutter systems may be replaced with modern exposed gutters similar to others in common use within the neighborhood or historic district. Installation of exposed gutters should avoid concealing other architectural features to the extent possible.



Guidelines for Roofs (cont.)

7. It is inappropriate to apply new features, where none currently existed, to a historic roof to create a false historical appearance. Such features include but not limited to: balustrades, cupolas and cresting.
8. New roof features such as skylights, vents, solar panels, antennas, satellite dishes and mechanical equipment should be installed in areas not visible from the street whenever possible.
9. Dormers and necessary additions to roofs will be compatible with the character of the historic building in size, design and scale, and will be located in areas not visible from the street if possible.
10. It is inappropriate to use temporary measures long term, such as exposed tarpaper as a finished roofing material. In addition, tar or asphalt products should not be used to patch clay tiles, slate, wood or metal roofs. Imitative material may be used as patch treatment.
11. If historic roofing material has previously been replaced with a different material, i.e., if a slate, wood shingle, or clay tile roof has been replaced at some earlier point in time with asphalt shingles, it is appropriate to re-roof with asphalt shingles.



VII. Guidelines for Foundations and Walls

1. Maintain historic foundations and exterior walls that contribute to the historic character of a building, including their functional and decorative features such as cornices, bays, piers and pediments.
2. Maintain and repair materials, details and features of foundations and exterior walls through appropriate methods.
3. If a portion of a foundation, exterior wall or feature is deteriorated beyond repair, replace with imitative materials.
4. If replacement of an entire foundation, exterior wall, or feature is necessary, replace with imitative materials.
5. It is generally inappropriate to introduce new features such as windows, doors, and vents to front elevation exterior walls. If new features are required, features should be installed on secondary elevations (rear or side elevations, or elevations not visible from the public right-of-way) whenever possible.
6. It is inappropriate to remove or conceal any historic exterior wall materials or features including but not limited to: panels, pediments, bargeboard and cornices. It is appropriate to remove and replace these materials with imitative materials.
7. Imitative materials may be used to cover exterior walls.

Examples of Decorative Features of Foundations and Exterior Walls:

- Windows, various types
- Doors, various types
- Pediments, cornices and entablatures
- Brackets
- Quoins
- Patterning of brick or shingles
- Corbelling
- Latticework



VIII. Guidelines for Interiors

1. Where the existing interior floor-plan does not accommodate current quality of life requirements, floor-plan alterations, reconfigurations, and use of imitative materials are acceptable when implemented in accordance with these Guidelines for Interiors.
2. Retain interior features that are important in defining the overall historic character of the building to the extent possible, or replace with imitative materials. Interior character-defining features are: columns, cornices, baseboards, crown molding, fireplaces and mantels, stairs, and ceiling height. If interior features present a lead-based paint or other hazard, remove the feature and replace with imitative materials.
3. Retain wallpaper, plaster, and finishes such as stenciling, marbleizing, and graining; and other decorative materials to the extent possible. If such decorative finishes present a lead-based paint or other hazard, remove and replace with imitative materials.
4. Avoid installing dropped ceilings below ornamental ceilings or in rooms with high ceilings. If dropped ceilings are necessary, they should be installed in a manner set back from the windows so they are not visible from the exterior.
5. Retain stairs in their historic configuration and location whenever possible. If a second means of egress is required, construct new stairs in secondary spaces if possible.
6. The installation of security features and fire suppression systems should be implemented in a manner to permit retention of character-defining features wherever possible.
7. Features of outdated or obsolete mechanical and electrical systems, such as radiators, vents, fans, grilles, plumbing fixtures, wiring, fuse boxes, switch plates, and lights, may be removed.



Guidelines for Interiors (cont.)

8. If new heating, air conditioning, lighting and plumbing systems are installed, they should be done in a way that does not destroy character-defining features and finishes to the extent possible. Ducts, pipes, and wiring should be installed as inconspicuously as possible: in secondary spaces, in the attic or basement if possible, or in closets if possible.
9. If a portion of an interior feature or finish is deteriorated beyond repair, it is appropriate to replace the damaged portion using imitative materials.
10. If replacement of an entire interior feature or finish is necessary, replace with imitative materials. If interior doors require replacement for security purposes, replace with imitative materials if possible and where imitative materials meet security requirements.
11. It is inappropriate to apply new interior features and finishes where none currently exist to create a false historical appearance. Such features include but not limited to decorative finishes such as stenciling or marbling, columns and moldings.
12. Avoid removal of any character-defining historic interior feature or finish in a primary interior space to the extent possible. If removal can not be avoided replacement with imitative materials is acceptable.
13. Remove loose and damaged plaster and replace with imitative materials, replacement of plaster walls with drywall is appropriate.

Examples of Interior features and finishes:

- Columns
- Cornices
- Baseboards
- Fireplaces and mantels
- Built-in cabinets and bookcases
- Paneling (bead board, wainscoting)
- Light fixtures
- Flooring (wood, terrazzo)
- Plaster
- Decorative finishes (stenciling, graining, and marbling)



IX. Interior Structural Systems

1. Maintain historic character-defining visible interior structural systems and their features to the extent possible through regular inspections and appropriate repair methods.
2. Repair original interior structural systems and their features either by augmenting or upgrading individual parts or features.
3. If an original structural system or feature requires replacement, replace with materials with similar functional characteristics.
4. Remove visible features of an interior structural system only when necessary when due to use requirements or other issues. Replace removed visible features or structural system with features or a structural system that meets functional requirements.
5. Design and install mechanical and electrical systems to minimize the alteration or damage to a structural system or feature. For example, limit the number of cutouts or holes in a structural member or feature to the extent possible.
6. If a structural feature or system has been previously replaced, it is unnecessary to attempt to restore or recreate what is believed to be original features or systems.

Features of Interior Structural Systems:

- Brick walls (load-bearing)
- Interior columns
- Roof trusses
- Posts and beams
- Stone foundation walls



X. Guidelines for Historic Designed Landscapes and Features*

1. Maintain features of historic designed landscapes to the extent possible including but not limited to: the relationship and spatial arrangement of the various components of the landscape, water features, circulation patterns, topography, vegetation, structures, site furnishings and objects.
2. Maintain historic designed landscape features including but not limited to: fountains, sculpture, site and street furnishings, monuments and gravestones, walkways, sidewalks, fences, walls, and hills, trenches and terraces to the extent possible. If all or a portion of a historic designed landscape feature requires replacement, it is appropriate to replace with imitative materials. Installation of new fencing in historic housing areas to meet quality of life or other functional needs where none currently exists and replacement of existing fencing should be limited to side and back yards and is not subject to any specific design requirements or other criteria being impermanent and removable. Repair and replace historic fencing with imitative materials.
3. Maintain historic plant materials** through appropriate methods to the extent possible. If replacement of historic plant materials is necessary, replace with the same or similar species where possible and practicable, or with selections from an installation's approved plant material list (if such a list is available). Removal of historic plant material may occur when there is a threat of or ongoing impacts to housing and infrastructure. It is acceptable to remove historic plant material, including non-native species, that are not compatible with and impact significant environmental factors such as water availability.

*Historic Designed Landscapes and Features are landscapes and their features that are 50 year old or older, were consciously designed or laid out by a landscape architect, master gardener, architect, or horticulturist according to design principles, and retain significant character-defining features of their original design.

**Historic plant materials are plants that have historical or botanical significance. Historic plant materials are those plants directly associated with a historic figure or event, or part of a notable landscape design 50 years old or older. Such historic plant materials may be a non-native or uncommon cultivar, exceptional in size, age, and/or rare and commercially unavailable.

Definitions reference: Preservation Brief 36 *Protecting Cultural Landscapes: Planning, Treatment and Management of Historic Landscapes*, Technical Preservation Services, National Park Service (1994)



Guidelines for Historic Designed Landscapes and Features (cont.)

4. If a portion of a historic landscape feature is deteriorated beyond repair, replace the damaged portion using imitative materials where possible and practicable.
5. Replacement of a historic landscape feature that is not currently existing is not required.
6. Ensure the placement of the new landscaping or feature does not cause damage to archaeological sites.
7. Avoid removing, obscuring or concealing historic landscape features to the extent possible.

Historic Designed Landscape Features:

- Fences, walls, hedgerows
- Water features
- Topography features
- Parks, and other open spaces

Vegetation Features:

- Individual plants, trees
- Groupings of plants such as woodlands, planting beds, gardens

Topography Features:

- Terraces
- Hills
- Berms
- Bluffs
- Trenches or Ditches

Site Furnishing Features:

- Bridges
- Gazebos
- Recreational structures
- Monuments and statues
- Benches
- Lighting

Circulation Features:

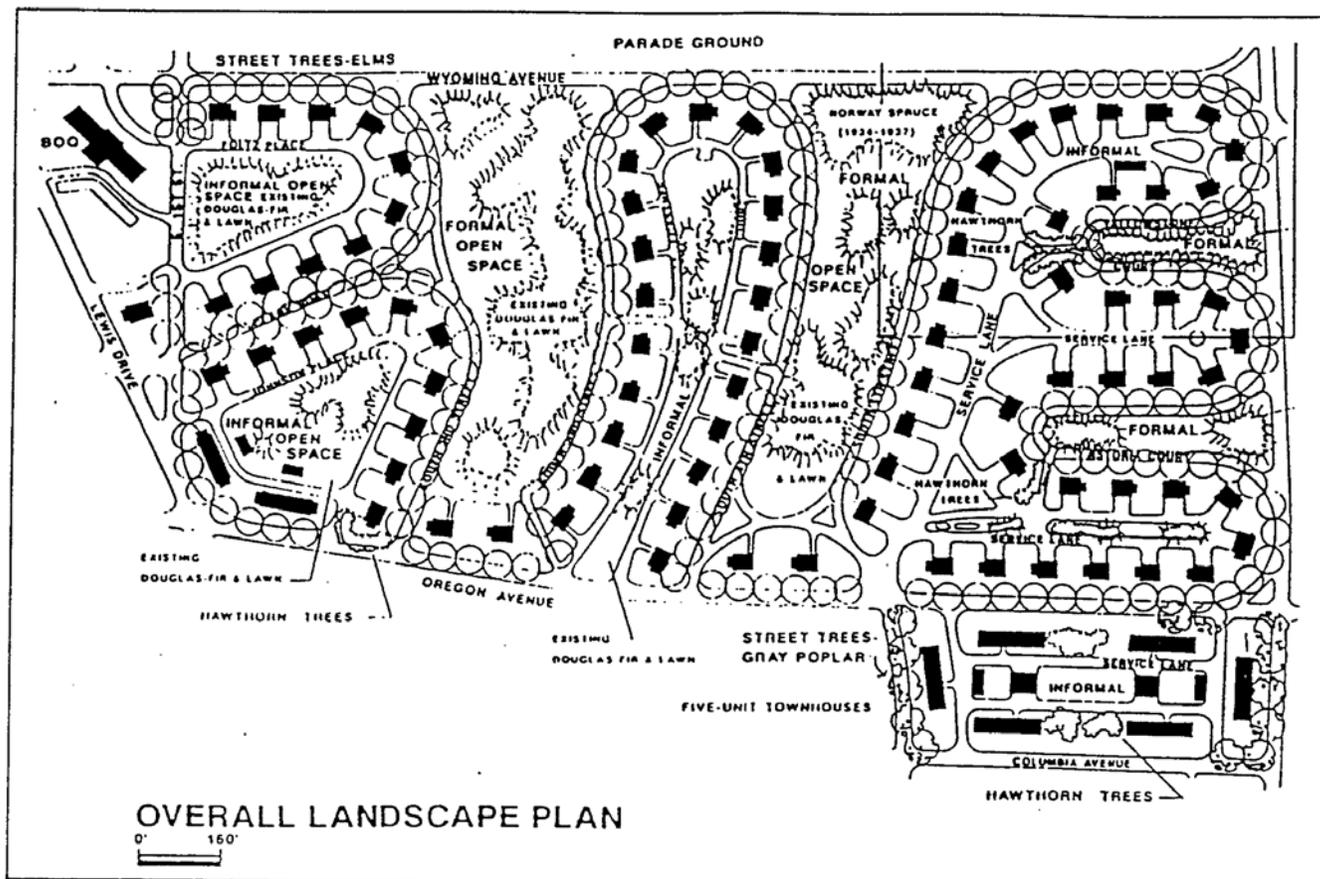
- Walkways, paths, sidewalks
- Transportation corridors such as railroads, roadways

Water Features:

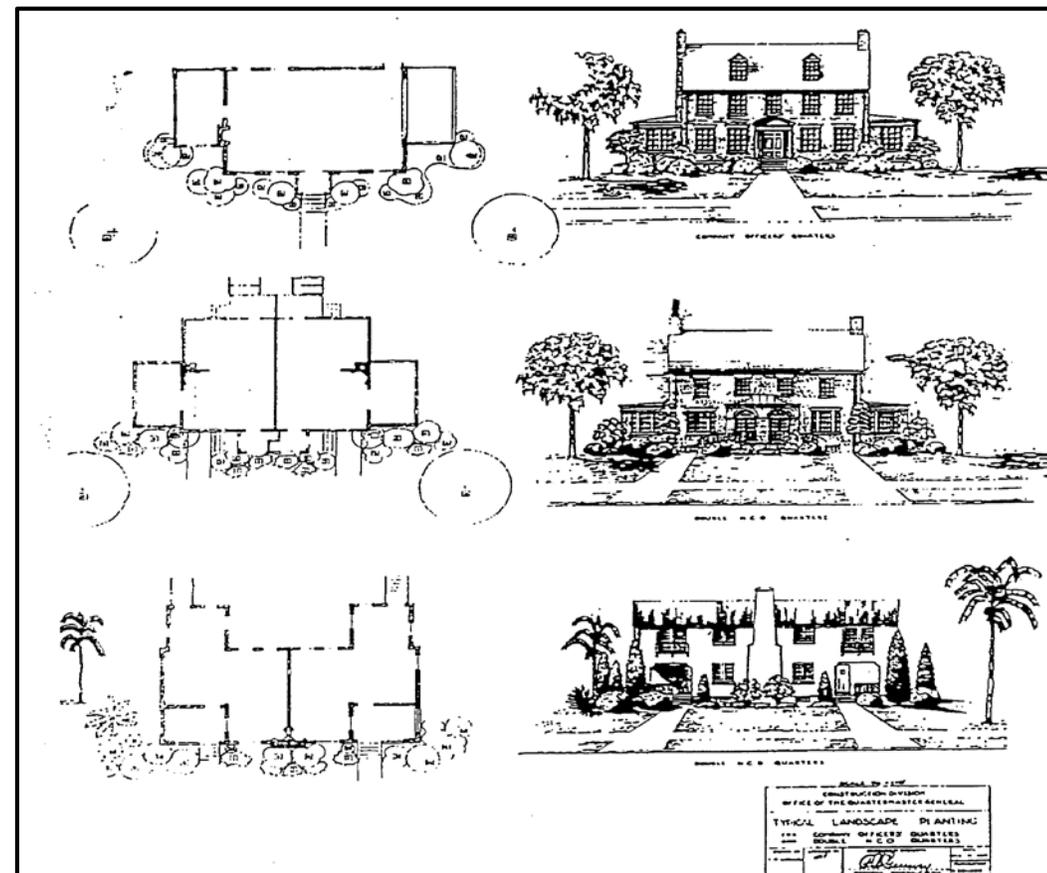
- Ponds
- Lakes, streams and creeks
- Pools
- Canals
- Fountains

Guidelines for Historic Designed Landscapes and Features (cont.)

*Historically Documented Examples of Inter-War Era Designed Landscapes:



Historic Quartermaster Corps Designed Landscape Plan, Broadmoor Neighborhood, Joint Base Lewis/McCord, WA



Historic Quartermaster Corps Standardized Landscape Planting Plan for Officer Quarters and NCO Duplexes

*For historical and documentary purposes only, not a guideline.



Guidelines for Landscapes and Features (cont.)

Examples of Existing Inter-War Era Housing Landscapes:





XI. Guidelines for Historic Districts Containing Inter-War Era Housing

1. Maintain historic views and view sheds of historic buildings and historic districts including scenic vistas and open space whenever possible.
2. Plan new construction adjacent to historic buildings and within the boundaries of a historic district to be compatible with the historic character of the building and/or district in scale, size and design.
3. Retain the historic community plan of historic districts including but not limited to cultural or man-made features such as circulation systems, streetscapes and furnishings, designed landscapes, and monuments and statues, as well as the natural features such as open space, wooded areas, rivers and landforms, to the extent possible.
4. Design and locate new features, such as buildings, streets, parking areas, street furniture and monuments, to be compatible with the historic community plan and character of the historic district in terms of scale, size, and design.
5. To meet quality of life or other functional needs for residents of historic districts, installation of new fencing surrounding side and back yards where none currently exists, and replacement of existing fencing surrounding side and back yards is acceptable and not subject to additional review or design considerations (see Guideline X).

Guidelines for Historic Districts Containing Inter-War Era Housing (cont.)

Example of a Historic District Containing Inter-War Era Housing:



Main Post Historic District Fort Bliss, TX

- Red lines depict the Main Post Historic District boundaries
- Yellow lines depict Inter-War Era housing
- Orange lines depict historic non Inter-War Era housing



XII. Guidelines for Circulation Systems and Paving Patterns

1. Maintain historic circulation patterns including but not limited to: streets, sidewalks, alleyways, driveways, bridges and green space along with their features such as curbing, surface materials, orientation, and landscaping, to the extent possible.
2. Maintain features of historic circulation and paving pattern during construction projects.
3. Maintain historic planting strips between the sidewalk and street as well as medians, and avoid paving over existing planting strips or medians, to the extent possible.
4. If a portion of a historic circulation or paving pattern or feature is deteriorated, replacement with original or imitative materials is appropriate.
5. If replacement of an entire historic circulation or paving pattern or feature is necessary, replacement with original or imitative materials is appropriate.
6. Design new circulation and paving patterns such as street extensions, new bridges and parking lots to be compatible with the character of a historic building and/or district in regard to design, scale, and size whenever possible.
7. Locate new parking lots in the same location as seen within the historic district and screen with appropriate walls or landscaping in keeping with the character of the historic building and/or district.



Guidelines for Circulation Systems and Paving Patterns (cont.)

8. Locate new parking decks on side streets rather than main thoroughfares if possible and design them to be compatible with the character of the historic building and/or district in regard to design, size, and scale.
9. If necessary, introduce street furniture, trash receptacles, mailboxes and other similar elements in locations that do not detract from the character of a historic building and/or district. Make sure street furniture, trash receptacles and other elements are compatible in design and scale with the character of the building and/or district. Imitative materials are appropriate for introduced features.
10. Avoid removing, obscuring or concealing a feature of a historic circulation or paving pattern such as granite curbing or stamped curbing when repaving streets to the extent possible.
11. Avoid removing, obscuring or concealing significant landscape or topographical features to construct a new circulation or paving pattern such as a street extension or parking lot to the extent possible.
12. If a street, alleyway or other paving pattern must be permanently closed off from vehicular traffic for security and force protection purposes, use bollards or barricades if possible.
13. If new lighting is necessary, incorporate new lighting that is compatible with the character of the historic building and/or district.



XIII. Guidelines for Associated Buildings and Structures

1. Maintain and repair historic associated buildings and structures and their features through appropriate methods.
3. If a feature or element of a historic associated building or structure is deteriorated, replace the damaged portion with imitative materials that match the original in size, design and scale.
4. If a historic associated building or structure is missing entirely, it is unnecessary to replace it.
5. It is inappropriate to apply new features, where none currently exist to a historic associated building or structure that creates a false historical appearance.
7. Design exterior changes to non-historic associated buildings or structures such as garages in a manner that preserves the character of the historic property and/or district in terms of the size, design and scale using imitative materials.
8. Locate, site and design new accessory buildings and structures such as garages to be compatible with surrounding buildings, structures and landscape features of a historic property and/or district, including but not limited to the following: size, design and scale, setback, spacing, and placement or distance from adjacent buildings and orientation.
9. New storage sheds may be installed in back yards, and in a manner that limits visibility from the street whenever possible.



XIV. Guidelines for Force Protection

1. Comply with force protection standards in a manner that maintains character-defining interior and exterior spaces, materials, and features wherever possible.
2. Install force protection systems and equipment such as security systems, cameras and surveillance equipment, lighting and other equipment in a manner that maintains character-defining features and materials wherever possible.
3. Locate and site new buildings, structures and infrastructure for force protection, including but not limited to: access control points, bollards, fencing and barrier walls, in a manner that preserves the historic character of a building and setting.
4. If possible, locate small components of sensor and surveillance technologies under building eaves or inside light fixtures to minimize the impact to the historic fabric and visual impact of a building, district and setting.
5. Locate ventilation equipment or other force protection utilities on inconspicuous elevations, such as on the rear façade, to limit the visibility from the public right-of-way and, if possible, screen from view utilizing landscaping or fences and walls appropriate to the character of the historic building and/or district.
6. If possible, construct new force protection measures such as security bars, grilles, and ventilation equipment in a reversible manner so that the system can be removed in the future with minimal damage to the historic building.
7. It is inappropriate to remove, conceal, damage or destroy historic materials, features and finishes of historic buildings or landscapes for force protection purposes unless it cannot otherwise be avoided. If interior alterations are necessary, contain alterations to secondary and other non-character-defining interior spaces wherever possible. If interior doors require replacement for security purposes, replace with imitative materials if possible and where imitative materials meet security requirements.



XV. Guidelines for Routine Maintenance

1. Inspect the roof to ensure it is weather tight. Missing roofing materials should be replaced and holes repaired according to appropriate methods. Imitative materials may be used for replacement and repairs.
2. Inspect walls and foundations for insect and vermin infestation, moisture, cracks, deterioration and settlement. If problems occur, repair according to appropriate methods.
3. Inspect the windows and doors to make sure they are operable and sealed properly to prevent water intrusion.
4. Inspect potential points for water intrusion such as crawl space openings, foundations and basement windows to make sure water is being diverted away from the building.
5. Inspect potential points for moisture intrusion such as masonry wicking in moisture, and condensation from poorly ventilated attics.
6. Gutter systems should be routinely cleaned and inspected to ensure they do not leak and discharge water away from the building.
7. Ensure that painted surfaces have a sound non-lead based paint film, including but not limited to the following: walls, windows, doors, and architectural details.
8. Avoid painting or sealing unpainted masonry, glass or metal surfaces since this could accelerate deterioration.



Guidelines for Routine Maintenance (cont.)

9. Repair loose architectural features according to appropriate methods, including but not limited to the following: brackets, rafters, pediments, cornices, balustrades, shutters, storm windows and doors, and siding.
10. Repair damaged structural features, such as masonry settling, eaves and porch posts, using appropriate methods in a timely manner before further structural damage occurs. Imitative materials may be used.
11. Vegetation around the historic property should be maintained and pruned back from the walls and foundations at least 12 inches. Remove ivy or other vegetation from walls and remove overhanging tree limbs and branches.
12. Remove trees and other vegetation when necessary to prevent gutter clogging, drainage issues, damage to infrastructure, or for safety purposes.
13. Mechanical, electrical and plumbing systems should be routinely inspected to make sure they are operating efficiency and correctly.



XVI. Guidelines for Emergency Repairs and Disasters

1. It is appropriate to make temporary repairs to a historic property. The repairs should be done in a manner that will cause minimal harm to the historic property where possible. Appropriate temporary repairs include the use of tarpaulins, plywood and bracing timbers to stabilize and secure the building.
3. Remove standing water from basements and crawl spaces; however, ensure that pumping water will not collapse foundations when groundwater is high.
4. Remove all water-soaked materials including insulation, wallboard and wall coverings.
5. Air dry the building with ventilation. Avoid systems that pump in super-dry air.
6. Remove debris from and around the historic property including damaged trees and overhanging tree limbs.
7. Remove loose and damaged plaster and replace with imitative materials, replacement of plaster with drywall is appropriate.
8. Clean and sanitize historic features using non-abrasive cleaners.
9. Avoid harming historic features when treating non-historic features, wherever possible.
10. Features that are deteriorated beyond repair may be replaced with imitative materials, replacing only the damaged portion
11. Conduct an inventory of found items, loose decorative elements, furnishings and collections. These items should be saved for reuse when possible.



XVII. Guidelines for Mothballing and Layaway of Housing

1. Ensure that roofs are weather tight by replacing missing shingles or tiles and repair openings in an acceptable method. Imitative materials may be used for missing roofing materials.
2. Gutters should be cleaned and inspected to ensure they do not leak and that they discharge water away from the building. Additionally, potential points of water intrusion such as basement windows and crawlspaces should be inspected and blocked to divert water away from the building.
3. Walls and foundations should be inspected for deterioration and damage. Make appropriate repairs to prevent moisture and water penetration. This includes repointing of masonry surfaces and repainting of wood siding.
4. Entry points should be sealed by closing door and window openings using infill materials such as plywood, corrugated panels and metal grates or grilles.
5. The installation of infill materials should not damage door and window openings and associated building features such as sashes, doors and frames.
6. Exterior doors should be reinforced and secured. If the historic doors would be damaged or disfigured by adding reinforcement, temporarily remove the doors and replace with secure modern doors. Store historic doors on site for reuse if possible.



Guidelines for Mothballing and Layaway of Housing (cont.)

7. Shut off water utilities to the building and drain the pipes.
8. If the building has monitoring and alarm devices such as fire suppression systems, fire alarms and security alarms, they should remain operational—especially functional sprinkler systems.
9. Disconnect all electrical systems not necessary for security, fire prevention and/or ventilation.
10. Loose architectural and structural features such as brackets, porch posts, balustrades and mantels should be repaired. If repair is not feasible, document, remove and store the features on site if possible.
11. Pest infestations should be exterminated and properly seal off their access to the building, which includes properly screening chimneys, vents, grills and louvers with a heavy duty wire mesh and termite treatments.
12. The building should be adequately ventilated. This will vary depending on the building, the climate and the building's freeze-thaw cycle. Solutions range from the covering of small openings with heavy duty wire mesh to forced air ventilation in humid climates.
13. Vegetation around the building should be pruned back from the walls at least 12 inches and remove overhanging tree limbs and branches.
14. A monitoring plan should be developed to ensure these measures remain effective.



XVIII. Guidelines for Demolition

1. Prior to making a decision to demolish an Inter-War Era housing building, other alternatives should be considered such as rehabilitation, layaway and mothballing.
2. If demolition and replacement occurs in a historic district or adjacent to a historic property, consult Guidelines III and XI for additional guidance on the proper infill for the property.
4. During demolition, protect adjacent historic buildings, sites, landscape features, and archeological resources from damage.
5. Prior to the beginning of demolition, a procedure must be in place to address the accidental discovery of archeological resources or human remains during ground disturbing activities. Accidental discovery procedure provisions include: cessation of ground disturbing activities in the immediate area of the discovery, appropriate notifications and consultations with stakeholders, and provision for commencing ground disturbing actions following completion of the accidental discovery procedure. If the installation has accidental discovery procedures in place in a plan or NHPA-related document, those procedures may be followed. If existing installation accidental discovery procedures are followed, there is no need to prepare additional accidental discovery procedures.
6. Proposed demolition of Inter-War Era Housing is a *Major Decision* (MD) requiring Headquarters, Department of the Army approval. Demolition proposals require preparation of a MD package that includes: an executive overview, scope of the plan with cost and justification / rationale for demolition, financial assessment of the impacts on development costs for the overall housing project, a schedule, and design information for any replacement construction. The MD package will be coordinated through the chain of command for concurrence/non-concurrence by the Department of the Army Federal Preservation Officer and approval/disapproval by the Deputy Assistant Secretary of the Army for Installations, Housing and Partnerships.



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