

CLEARED For Open Publication

Mar 22, 2023

STATUS CONTRACTOR

#### Department of Defense OFFICE OF PREPUBLICATION AND SECURITY REVIEW

# PROGRAM COMMENT FOR DEPARTMENT OF THE ARMY VIETNAM WAR ERA HISTORIC HOUSING, ASSOCIATED BUILDINGS AND STRUCTURES, AND LANDSCAPE FEATURES (1963-1975)

Prepared by:

David Guldenzopf, Ph.D. Army Federal Preservation Officer Office of the Assistant Secretary of the Army for Installations, Energy and Environment

Submitted to:

Reid Nelson Executive Director Advisory Council on Historic Preservation

Date: 8 March 2023

Controlled by: Headquarters, Department of the Army Controlled by: OASA IE&E Distribution: Statement A POC: Dr. David Guldenzopf, 703 459-7756

## PROGRAM COMMENT FOR DEPARTMENT OF THE ARMY VIETNAM WAR ERA HISTORIC HOUSING, ASSOCIATED BUILDINGS AND STRUCTURES, AND LANDSCAPE FEATURES (1963–1975)

## **1.0. INTRODUCTION AND NEED FOR THE PROGRAM COMMENT**

## **1.1. Introduction**

Section 106 of the National Historic Preservation Act (NHPA), 54 U.S.C. 306108, requires Federal agencies to take into account the effects of projects they carry out, license, or assist (undertakings) on historic properties, and to provide the Advisory Council on Historic Preservation (ACHP) a reasonable opportunity to comment regarding such undertakings. The ACHP has issued the regulations that set forth the process through which Federal agencies comply with these responsibilities. Those regulations are codified under 36 CFR 800 (Section 106 regulations).

Under 36 CFR 800.14(e), federal agencies can request the ACHP provide Program Comments on a category of undertakings, in lieu of conducting individual reviews of those undertakings under 36 CFR 800.3 – 800.7. An agency can meet its NHPA Section 106 responsibilities regarding the effects of a category of undertakings on historic properties by following the steps set forth by the ACHP in a Program Comment.

The Army's real property is a vital component of its national defense mission, and many of the buildings and structures constructed by the Army over its 247-year history are now historic properties. Among those historic properties, historic housing is a significant concern; it is a large part of the Army's total housing inventory, is critical to the readiness mission and well-being of thousands of Soldiers and their families, and it requires extensive financial resources and process time for compliance with NHPA Section 106 and 36 CFR 800.

The Army has a unique and significant challenge among federal agencies in managing NHPA Section 106 compliance for its inventory of historic housing. The Army manages the largest inventory of historic housing in the federal government with over 30,000 historic homes currently over 50 years old and subject to NHPA Section 106 requirements. The Army's historic housing inventory includes examples that span from the early 19<sup>th</sup> century through the modern historic housing of the late 20<sup>th</sup> century that is subject of this Program Comment. The Army's historic housing represents a diverse inventory of American domestic architectural styles with highly varied levels of architectural integrity and historic significance. The Army will have an additional 70,000 modern historic homes added to its historic housing inventory over the next 50 years and will in this century have an unprecedented total of over 100,000 historic homes subject to NHPA Section 106 requirements.

This Program Comment for Department of the Army (Army) Vietnam War Era Historic Housing, Associated Buildings and Structures, and Landscape Features (1963–1975) (Program Comment) provides the Army with an alternative means to comply with NHPA Section 106 regarding the category of undertakings termed *management actions* for its inventory of Vietnam War Era housing, associated buildings and structures, landscapes, and landscape features

(Vietnam War Era housing). The Army has over 7,800 modern historic homes constructed during the 13-year Vietnam War Era from 1963-1975. Management actions required for this housing include maintenance, repair, rehabilitation, renovation, abatement of hazardous materials, mothballing, cessation of maintenance, demolition, new construction, lease, transfer, conveyance, and the use of modern, readily available industry standard building materials and methods in the implementation of management actions.

## 1.2. Need for the Program Comment

The need for this Program Comment is found in the Army's obligation to provide safe, healthy, quality housing to Soldiers and their families, and the unique challenges the Army has in managing NHPA Section 106 compliance for its large and growing inventory of historic housing. In 2019, the Secretary of the Army declared an Army Housing Crisis due primarily to widespread deficiencies and significant quality of life, health, and safety issues effecting military families living in historic Army housing.

To address the Army Housing Crisis and meet its housing obligations to military families, the Army must implement management actions to improve Army Vietnam War Era housing conditions effecting the quality of life for Soldiers and their families; address the health and safety risks from certain hazardous historic building materials; ensure cost efficient, effective, and consistent management of the overall inventory; implement climate adaptations and use modern resilient materials; and improve the NHPA Section 106 compliance processes times for actions intended to preserve Vietnam War Era housing.

Housing and associated living conditions are critical factors for military families in the context of the challenges and stressors Soldiers and their families must cope with in their daily lives. A direct connection exists between poor housing conditions and military readiness. Concerns among service members about poor housing conditions have been found to make it difficult to focus on the military mission, some service members are leaving the military because of poor housing conditions, and the issue is also impacting the ability to recruit new service members (GAO Report 20-281, Military Housing, March 2020).

Housing during the Vietnam War Era was constructed with single-pane windows, asbestos containing shingles and siding, minimal wall and attic insulation, galvanized steel pipes for water supply, cast iron drainpipes, 100-amp circuit breakers, obsolete HVAC components, and lead-based paint and asbestos containing building materials. Most original building materials in Army Vietnam War Era housing have been replaced. The housing is smaller, and floorplans are obsolete relative to the modern standards expected by military families. While improvements to Army Vietnam War Era housing have been made in the past, many requirements remain, and many continue to arise and create a continuous need for implementation of the management actions addressed in this Program Comment.

The Army must address both its current historic housing challenges and emerging 21st century challenges. Emergent 21<sup>st</sup> century challenges include the unprecedented growth in the Army's inventory of modern historic housing that will occur over the next 50 years, the related surge in NHPA Section 106 compliance requirements and associated significant financial and

compliance process time impacts. Additionally, as climate risks intensify, there is an increased need to use resilient current industry standard building materials and implement climate adaptation measures to ensure modern historic Army housing remains sustainable.

The Army must address the extensive recurring maintenance, repair, and rehabilitation requirements for Vietnam War Era housing and seek to control those costs using industry standard building materials. The Army must abate the historic building materials used in housing from this period that present lead-based paint, asbestos, and other hazards to housing occupants; implement renovations that address the need for additional bedrooms and expanded living space; provide kitchen and bathroom improvements; implement climate change adaptations through the use of modern, climate resilient, energy efficient building materials and other energy efficiency measures; modernize heating, cooling and ventilation systems; modernize plumbing and electrical systems; and address NHPA compliance processes that impact the rapid turnaround and occupancy of housing by reassigned military families.

The Army also has the need to lease, transfer, or convey Vietnam War Era housing to facilitate housing operations by its housing privatization partners under the Army's Residential Communities Initiative (RCI). RCI operates under Army authority on Army installations nationwide through legal partnerships between the Army and private sector developers. Lease, transfer, and conveyance involves the execution of lease, transfer, and other conveyance documents for the purposes of transfer of Vietnam War Era housing to and between RCI partners, between RCI partners and the Army, and out of RCI partner or government ownership.

The Army must holistically manage its total inventory of Vietnam War Era housing to make certain the housing is preserved and maintained as a viable real property asset into the future. Managers of large inventories of real property understand that total inventory management includes the recurring need to at times cease maintenance and demolish certain properties that are no longer viable real property assets. For Army Vietnam War Era housing, cessation of maintenance and demolition are inventory management tools that reduce the excessive costs associated with maintaining certain homes that are no longer viable real property assets. The resulting cost savings are reinvested to maintain and preserve the remaining housing inventory as viable property assets. Cessation of maintenance and demolition may be required for certain Army Vietnam War Era housing when deterioration effects the structural integrity of homes, the habitability of homes, or the quality of life of military family occupants; when the homes are no longer needed, stand vacant and are expected to remain vacant into the foreseeable future; where hazardous materials and unsafe conditions exist that could affect the health and safety of occupants; and when new replacement housing is needed to improve the overall quality of life for military families. The majority of Program Comments issued by the ACHP over the past 20 years recognize the necessity for and include demolition as an accepted inventory management tool.

The role of demolition and reinvestment in the long-term preservation of modern historic Army housing is confirmed by 20 years of information from the Program Comment for Army Capehart-Wherry housing (1949-1962). In 2002, when ACHP issued the Program Comment for Army Capehart-Wherry housing allowing demolition and other total inventory management actions, there were 19,036 Army Capehart-Wherry homes. In 2022 there were 18,483 Army

Capehart-Wherry homes. With an average of 28 Capehart-Wherry homes demolished each year during the 20-year Program Comment period, the Army has removed 553 or 3% of deteriorated, excess, vacant, and unsafe Capehart-Wherry homes, meaning it has preserved 97% of its Capehart Wherry housing through reinvestment and continued improvement to maintain the housing as a viable asset for military families. The Program Comment for Army Capehart-Wherry housing states that Capehart-Wherry housing will be preserved through its continued use as housing, and it has been. With a 97% preservation rate over the past 20 years of implementation, the Program Comment for Army Capehart-Wherry housing demonstrates how the total inventory management capability including demolition provided by a Program Comment ensures the long-term preservation of modern historic Army housing.

The Army is also implementing a Program Comment for Army Inter-War Era housing (1919-1940) issued by the ACHP in 2020. The Program Comment for Army Inter-War Era housing authorized the programmatic use of modern industry standard building materials that have maintained the historic character of the housing, improved its climate resiliency, and have saved millions of dollars in the rehabilitation of Inter-War Era housing. The cost savings resulting from the use of modern industry standard building materials are reinvested to further preserve and improve the housing for military families. More information on these and other outcomes of the Program Comment for Army Inter-War Era housing may be found in the Annual Reports for 2021 and 2022 that are located at <a href="https://denix.osd.mil/army-pchh/home/">https://denix.osd.mil/army-pchh/home/</a>.

The effectiveness of Program Comments in delivering consistent and positive preservation outcomes for modern historic Army housing is demonstrated by the ongoing implementation of the Program Comment for Army Capehart Wherry housing and the Program Comment for Army Inter-War Era housing. These Program Comments demonstrate that the best means to ensure long-term preservation of the Army's large inventory of modern historic housing is to sustain the housing as a viable mission-supporting real property asset through the holistic inventory management capabilities provided by Program Comments. The Program Comments for Army Capehart Wherry housing and Army Inter-War Era housing continue to deliver tangible historic preservation benefits and consistent outcomes, improve the quality of life, health, and safety of Army families residing in the housing, and create significant NHPArelated cost efficiencies and process improvements. Similar benefits, outcomes, improvements, and efficiencies are required for the Army's large inventory of Vietnam War Era housing.

## 2.0. INTENT AND SCOPE OF THE PROGRAM COMMENT

#### 2.1. Intent of the Program Comment

This Program Comment is intended to provide the Army compliance with NHPA Section 106 for the management actions occurring on all privatized and non-privatized Army housing, associated buildings and structures, and landscape features constructed from 1963 through and including 1975. Management actions will be implemented under this Program Comment in lieu of conducting individual project reviews under 36 CFR 800.3 - 800.7, with an exception provided in section 5.2.4.3 regarding the treatment of properties of particular importance.

This Program Comment acknowledges that among federal agencies, the Army faces a unique and significant NHPA Section 106 compliance challenge due to its large and growing inventory of historic housing.

This Program Comment addresses a category of undertakings termed *management actions* and recognizes that implementation of those management actions directly improves the material living conditions for thousands of military families living in Army Vietnam War Era housing while ensuring the housing is preserved as a real property asset.

This Program Comment prioritizes the quality of life, health, and safety of military families in harmony with the preservation of Army Vietnam War Era housing. It is focused on preservation of this modern historic housing while addressing the effects that the historic preservation process may have on the people who live in and manage the housing. The material living conditions, financial impacts, and wellbeing of people are in the forefront as prevailing concerns in the preservation of modern historic Army housing.

This Program Comment recognizes that intensifying climate risks require the use of modern resilient building materials and that the implementation of climate adaptation measures are needed to ensure Army Vietnam War Era housing remains a sustainable real property asset.

This Program Comment recognizes that standardized plans developed by civilian sector architects were used in the construction of Army Vietnam War Era housing and that similar designs, plans, building materials, and construction methods were used in the construction of over 20 million comparable homes built in the private sector during this same 13-year period.

This Program Comment recognizes that the Army's inventory of Vietnam War Era housing is eligible for the National Register of Historic Places (NRHP) under Criterion A, due to its association with the history of the Vietnam War. Army Vietnam War Era housing is not eligible for the NRHP under Criteria B, C, or D. The Army's Vietnam War Era housing has been extensively altered to the degree that the inventory overall lacks architectural integrity.

This Program Comment includes mitigation measures and recognizes that any adverse effects of management actions on Army Vietnam War Era housing are addressed and resolved through those mitigation measures.

This Program Comment ensures positive historic preservation outcomes resulting from its flexible, efficient, consistent, and cost-effective management process that preserves the continuity of historical use of Army Vietnam War Era housing.

This Program Comment is calibrated to the conditions, significance, and ubiquity of the Army Vietnam War era housing property type; is holistic in its scope and effect; and will provide long-term preservation by ensuring that the housing will be a mission-supporting real property asset into the future.

#### 2.2. Scope of the Program Comment

The scope of this Program Comment includes and addresses all privatized and nonprivatized Army housing constructed from 1963 through and including 1975. The Army's best available information indicates there are 7,843 Vietnam War Era homes on 18 Army installations in 13 states. The Army's current information on Vietnam War Era homes indicates the following locations and numbers of homes: Fort Hood, TX – 2,032 Vietnam War Era homes; Fort Benning, GA - 1,292; Fort Carson, CO – 839; Fort Gordon, GA – 740; Fort Meade, MD – 675; Fort Bragg, NC – 615; USAG-Hawaii, HI – 555; Fort Campbell, KY – 230; Fort Riley, KS - 211; Fort Sill, OK – 199; Fort Polk, LA – 182; Fort Jackson, SC – 119; Fort Leavenworth, KS – 44; Fort Detrick, MD – 40; Fort Stewart, GA – 38; Redstone Arsenal, AL – 18; Joint Base Lewis McChord (JBLM), WA – 10; Aberdeen Proving Ground, MD – 4. This information represents the best available Army Vietnam War Era housing inventory information as of the date of this Program Comment.

## 3.0. DESCRIPTION AND SIGNIFICANCE OF ARMY VIETNAM WAR ERA HOUSING

The Army Vietnam War Era housing property type includes military housing constructed on Army installations during the period 1963-1975 to house the increased number of military personnel required to support the Vietnam conflict. This property type is comprised of residential buildings including ranch houses, duplexes, multiplexes, townhouses, and apartment buildings along with associated structures, such as carports and storage sheds, and landscape features concentrated in distinct neighborhoods within residential areas of Army installations. Reflecting expediently constructed and cost-effective examples of housing types popular in the civilian sector during this time, this military housing is characterized by a functional contemporary architectural character, minimal ornamentation, and high degree of standardization in design, materials, and construction. The Vietnam War Era homes in these military neighborhoods have collectively undergone significant modifications from active use over the years and no longer retain architectural design integrity. The property type does retain a significant historical association with the Vietnam War.

During the Vietnam War Era, the DoD looked to the civilian housing market and adopted popular Modern house designs from the civilian sector and applied those in constructing military housing. While the DoD sought to adopt modern design principles for Vietnam War Era housing, size limitations and cost criteria established by Congress for military family housing influenced the resulting housing stock in terms of architectural expression and interior design.

The US Army Corps of Engineers (USACE) managed the contracting and construction of Army family housing for the Department of the Army during the Vietnam War Era. Beginning in 1964, USACE used new standardized housing design plans developed for DoD by civilian architectural firms as a basis for Army housing construction contracts (DoD Design Folio, 1964). The standardized plans in the DoD Design Folio reflect housing designs that the architects were already using in the private sector. USACE hired local and regional architectural and engineering firms from the private sector to construct the Army family housing at each installation. Due to wartime financial constraints, the standardized design plans in the DoD Design Folio were subject to extensive site-specific design modifications, and the actual housing constructed was much more modest, stripped-down versions of the housing depicted in the DoD Design Folio.

Army homes from this period fall within the category of *modern housing* (see: A Field Guide to American Houses, Virginia Savage McAlester, 2017). Starting in 1964, townhouses began to be constructed by the Army in significant numbers. While townhouses and apartments became a predominate type of Army family housing constructed during the Vietnam War Era, single family homes, duplex homes, and apartment buildings also continued to be constructed following the same designs, building materials, and construction methods that were used in millions of homes constructed in the private sector during this period. The Army Vietnam War Era neighborhoods used standard civilian sector designs and principles of residential planning and development. The townhouses were constructed for enlisted personnel up to and including junior officers (lieutenants and captains). Army townhouse developments applied and followed the existing trends in community planning and townhouse neighborhood design concepts from the civilian sector.

The Army's Vietnam War Era housing property type is historically significant under NRHP Criterion A based on its historical association with the Vietnam War. The Vietnam War was a major event in American history from the early 1960s through the mid-1970s. The heightened warfighting requirements and costs had direct implications for military activities at installations in the United States, including the Army family housing construction program. The Vietnam War had a significant fiscal impact on Army housing construction appropriations, influencing the types and numbers of housing built. The 1964 DoD Design Folio states that DoD objectives dictated the development of a family housing development plan that would provide reduced costs in siting, construction, and maintenance. A proposed solution included the townhouse design developments. Multi-story, row-unit townhouses, closely sited within large open areas was recognized as creating the required economies of scale. While ranch style single family and duplex housing designs for senior officers were included in the DoD Design Folio and continued to be constructed, townhouse and apartment construction on Army installations predominated during the Vietnam War Era. Army Vietnam War Era housing illustrates the historical progression of Army housing policy, the influence of wartime policies and their financial implications as reflected in the housing construction program.

Army Vietnam War Era housing is not significant under NRHP Criteria B, C, or D. Army Vietnam War Era is not associated with the productive lives of significant architects, military figures, or real estate developers from this period (Criterion B (Persons)). Regarding Criterion C (Design/Construction), this property type does not represent distinctive characteristics of type, period, and method of construction, does not represent the work of a master; possess high artistic value; or represent a significant and distinguishable entity whose components lack individual distinction. Standardized plans developed by civilian sector architects were used in the construction of Army Vietnam War Era housing, and the same plans, designs, building materials, and construction methods were used in the construction of 20.4 million comparable homes in the private sector during this period (https://www.census.gov/construction/nrc/index.html). Additionally, the Army's inventory of Vietnam War Era housing has had extensive physical modifications impacting its architectural design integrity including extensive replacement of original interior and exterior building elements and original building materials. Army Vietnam

War Era housing overall lacks architectural design integrity due to substantial physical modifications that have occurred and does not convey significance under Criterion C. Regarding Criterion D (Information Potential), the housing inventory is not likely to yield important information since it does not represent the principal source of information on design or construction of housing from this period.

The Army's public website for the Program Comment contains extensive information on the history, architecture, and the NRHP significance of Army Vietnam War Era housing, see <a href="https://www.denix.osd.mil/army-vwehh-pc">https://www.denix.osd.mil/army-vwehh-pc</a>. Army-wide historic context reports, historic documents, installation level inventory, evaluation, and documentation of the housing are located on the website.

## 4.0. CATEGORY OF UNDERTAKING AND ASSESSMENT OF EFFECT

#### 4.1. Category of Undertaking

The category of undertaking addressed by this Program Comment is *management actions*. Management actions are defined as maintenance, repair, rehabilitation, renovation, abatement of hazardous materials, mothballing, cessation of maintenance, demolition, new construction, lease, transfer, conveyance, and the use of modern industry standard building materials and methods in the implementation of management actions.

This category of undertakings is defined based on both the Army's Vietnam War Era housing management needs and on two previous Program Comments for modern historic Army housing. The definition of management actions as the category of undertaking for Army Vietnam War Era housing follows the definition of management actions established in the Program Comment for Army Capehart-Wherry housing and the Program Comment for Army Inter-War Era housing.

## 4.2. Assessment of Effect

The Army's management actions will have an adverse effect on Army Vietnam War Era housing. An adverse effect occurs when an action may alter, directly or indirectly, any of the characteristics of a historic property that qualify the property for inclusion in the NRHP in a manner that would diminish the integrity of the property's location, design, setting, materials, workmanship, feeling, or association. The characteristic that qualifies Army Vietnam War Era housing for inclusion in the NRHP is its historical association with the Vietnam War under NRHP Criterion A.

The Army's mitigation measures focus on addressing the adverse effects of management actions on the housing's historical association with the Vietnam War and include professional research and public education regarding the history of the housing within the historic context of the Vietnam War; inventory and documentation regarding the housing's location, design, setting, materials, workmanship, and feeling; the identification and treatment of properties of particular importance; and the development and implementation of Neighborhood Design Guidelines among other measures. The mitigation measures ensure that any adverse effects of management actions are taken into account in consideration of the NRHP significance of the Army Vietnam War Era housing property type.

### **5.0. MITIGATION MEASURES**

NHPA Section 106 mitigation measures address and resolve the adverse effects of undertakings on historic properties and the qualities that make the properties historically significant. Since the Army's inventory of Vietnam War Era housing is significant based on its historical association with the Vietnam War, the mitigation measures for Army Vietnam War Era housing are properly focused on mitigating adverse effects to the significance of Army Vietnam War Era housing under NRHP Criterion A.

#### **5.1 Prior Mitigation Measures**

The Army has existing documentation on the history and historic context of Vietnam War Era housing, installation-specific inventory and evaluation reports of Vietnam War Era housing recording its design and architectural style, interior designs and floorplans, factors influencing design variations, and its associated buildings and structures, and landscape features. This existing set of prior Army documentation serves as a Program Comment mitigation measure since it provides comprehensive documentation and recordation of Vietnam War Era housing, associated buildings and structures, and landscape features. The existing documentation for Army Vietnam War Era housing is consolidated on the Army's Vietnam War Era Housing website https://www.denix.osd.mil/army-vwehh-pc.

The prior documentation includes the overarching DoD-wide historic context *Vietnam* and the Home Front: How DoD Installations Adapted, 1962–1975, June 2014; the Department of Defense Housing Design Folio, 1964; Fort Gordon Cold War Architectural Survey, April 2005; Architectural Survey Conelly Duplex Units, Hawthorne Army Depot, NV, September 2014; and Architectural Inventory and Evaluation of 1970s-Era Family Housing at U.S. Army Garrison Fort Carson, CO, August 2019.

## 5.2. Additional Mitigation Measures

Unless otherwise specified, all additional mitigation measures in this section will be completed in three calendar years from the date of ACHP Federal Register notice of issuance of the Program Comment. Documents resulting from these mitigation measures will as appropriate, be made available to the public by means of the Army's Vietnam War Era housing website at <a href="https://www.denix.osd.mil/army-vwehh-pc">https://www.denix.osd.mil/army-vwehh-pc</a>, following security review and clearance.

#### 5.2.1. Public Education on the History of Army Vietnam War Era Housing

The Army will maintain a public website containing information about the history of the Army Vietnam War Era housing for public educational purposes. The Army will provide relevant public documentation regarding Vietnam War Era housing and make that information available via the website, thereby providing the public a single and readily accessible source of information on the history of this housing. The Army will also use social media to distribute information on Vietnam War Era historic housing and other Army historic preservation information.

## 5.2.2. Historic Context Research for Army Vietnam War Era Housing

New scholarly information on the history of Vietnam War Era housing through in-depth professional research and presentation of additional Army Vietnam War Era housing historic context information was developed by the Army for this Program Comment. The Army conducted archival research and assessed historical information relevant to the nation-wide historic context of the housing, address the history and characteristics of the military construction program for Vietnam War Era housing in the context of the Vietnam War. The two-volume historic context documentation is published on the Army's Vietnam War Era Housing public website https://www.denix.osd.mil/army-vwehh-pc.

### 5.2.3. Army-wide Vietnam War Era Housing Inventory and Evaluation

An Army-wide inventory and evaluation of Vietnam War Era housing was developed by the Army for this Program Comment. This includes the inventory of representative Vietnam War Era housing architectural styles, associated buildings and structures, and landscape features, and information and evaluation of the housing's location, design, setting, materials, workmanship, and feeling, provide information. The report also provides the identification and evaluation of properties of particular importance. The documentation is published on the Army's Vietnam War Era Housing public website <u>https://www.denix.osd.mil/army-vwehh-pc</u> as part of the two-volume historic context document.

## **5.2.4.** Designation, Recordation, Documentation, and Treatment of Properties of Particular Importance

#### 5.2.4.1. Designation of Properties of Particular Importance

Army Vietnam War era housing properties of particular importance are defined as: Army Vietnam War era housing that retains a high degree of integrity, represents particularly important historical aspects of the Army Vietnam War Era housing program, and that represent particularly important building types or methods of construction. To be considered properties of particular importance Army Vietnam War Era housing must retain original location, scale, mass, proportion, materials, and ornamentation from the period of construction.

A total of 555 Army Vietnam War era homes equivalent to 7.1% of the total Army inventory of 7,843Vietnam War era homes are designated as properties of particular importance. The 555 Army Vietnam War era homes designated as properties of particular importance are in the Akolea, Aloala, and Ralston neighborhoods, at Schofield Barracks, Hawaii (HI).

Unlike all other Army installations with Vietnam War era housing, the housing in these three neighborhoods at Schofield Barracks has had minimal exterior modifications in terms of materials, additions, and new construction. This housing not undergone the significant redesign and extensive replacement of original building materials and ornamentation that has occurred throughout the rest of the Army inventory of Vietnam War Era housing. The original building designs and building materials such as jalousie windows and concrete block and wood boardand-batten siding are original, roof modifications are minimal. Interior modifications are also minimal to maintain the livability of the units and consist of replacement finishes, fixtures, and appliances. In select cases, some housing units were combined, and those original interior floor plans were modified.

Despite some minimal modifications over time, Army Vietnam War era housing in the Akolea, Aloala, and Ralston neighborhoods retains sufficient integrity of association, feeling, location, and setting to convey their historical association with the Vietnam War. The buildings retain a high degree of integrity of design, materials, and workmanship. The housing is however not distinctive or distinguishable in its design and construction relative to the national inventory of housing from this period. Additionally, research has not identified any association with persons important in the past, and the housing is unlikely to yield information important to history because it is not the principal source of information representing housing constructed during the Vietnam War Era.

The inventory conducted at Schofield Barracks confirmed that the military followed civilian-sector housing trends and did not construct housing that was unique or distinctive from the 20 million civilian sector homes constructed in the US during this period. Through the retention of original building materials and design, the housing in the Aloala, Akolea, and Ralston neighborhoods maintains the domestic design principles popularized during the period. The Vietnam War Era housing in the Aloala, Akolea, and Ralston neighborhoods retains original location, scale, mass, proportion, materials, and ornamentation from the period of construction. The neighborhood designs are cohesive and visually convey original suburban residential design from the Vietnam War Era. Therefore, the 555 Army Vietnam War era homes located in the Akolea, Aloala, and Ralston neighborhoods at Schofield Barracks, HI meet the definition of properties of particular importance and are so designated.

#### 5.2.4.2. Recordation and Documentation of Properties of Particular Importance

The Army has recorded and documented the designated properties of particular importance. The recordation and documentation include site-specific archival research of primary and secondary source materials and review of previous studies to develop a specific history and statement of significance for the designated properties of particular importance at Scofield Barracks. Research includes a review of drawings, historic photographs, and written documents, as available. Fieldwork investigations documented the current appearance of the buildings with digital images of individual building types including elevations and exterior details of the housing. The digital photographs follow National Park Service digital photography standards and show the respective housing in context. The documentation of the designated properties of particular importance is published on the Army's Vietnam War Era Housing website <a href="https://www.denix.osd.mil/army-vwehh-pc/">https://www.denix.osd.mil/army-vwehh-pc/</a> in the two-volume historic context document. The "Historic Context for Army Vietnam War Era Historic Housing, Associated Structures, and Landscape Features (1963-1975) Volumes 1 and 2" are hereby designated as an Appendix to this Program Comment, see section 10.0.

#### 5.2.4.3. Treatment of Properties of Particular Importance

Inventory management requirements for Army Vietnam War Era housing may necessitate the cessation of maintenance and demolition of properties of particular importance designated in section 5.2.4.1. The Army will follow the consultation process in 36 CFR 800.6 - 800.7 to address adverse effects when designated Vietnam War Era housing properties of particular importance are proposed for cessation of maintenance and demolition. Memoranda of Agreement (MOAs) or Programmatic Agreements (PAs) prepared in accordance with 36 CFR 800 to resolve the adverse effects of cessation of maintenance and demolition on the designated properties of particular importance are subject to the following requirements of this Program Comment: a) properties of particular importance have been identified, evaluated, and designated under this Program Comment and no further actions under 36 CFR 800 or any MOA or PA shall be stipulated or required to identify, evaluate, or designate additional Army Vietnam War Era housing properties of particular importance and, b) the documentation of properties of particular importance prepared in section 5.2.4.2 will be incorporated as a mitigation measure in any MOA or PA prepared to address cessation of maintenance and demolition of Army Vietnam War Era housing properties of particular importance. The procedures in this section for treatment of properties of particular importance apply over the duration of this Program Comment.

## 5.2.5. Neighborhood Design Guidelines

The Army will: (i) Prepare Army Vietnam War Era Housing Neighborhood Design Guidelines in coordination with the ACHP within one year of issuance of this Program Comment, (ii) Use a qualified professional and the information in the historic context study referenced in section 5.2.2 to prepare the Neighborhood Design Guidelines, (iii) Address the design and setting of Vietnam War Era neighborhoods and landscape features in the Neighborhood Design Guidelines, (iv) Ensure the Neighborhood Design Guidelines are available to those installations with Vietnam War Era housing, and (v) Implement the Neighborhood Design Guidelines to the maximum extent practicable in planning management actions that affect the overall design of Vietnam War Era neighborhoods.

#### 5.2.6 Historic Preservation Tax Credits

The Army FPO will advise its Residential Communities Initiative (RCI) privatized housing partners that Vietnam War Era housing may be eligible for Federal and State historic preservation tax credits upon ACHP issuance of this Program Comment. The Army FPO will provide supplemental tax credit information on request from RCI housing partners including offices and website locations that provide information on applicable tax credits.

#### 5.2.7. Annual Report

On or before January 31st of each reporting year, the Army will provide an Annual Report on the Program Comment to the ACHP for the preceding year. The Annual Report will provide the status of the Army's implementation of the mitigation measures. The Annual Report will include a summary of final Army decisions made during the reporting year for demolition of Vietnam War era housing. The Annual Report will identify significant issues that may have arisen while implementing the Program Comment, how those were addressed, and how they may be avoided in the future. The Annual Report will include an assessment of the overall effectiveness of the Program Comment in meeting its intent.

#### 5.2.8. Annual Meeting

After its submission of the Annual Report and upon the ACHP's request, the Army will schedule a meeting with the ACHP, and invite the National Conference of State Historic Preservation Officers (NCSHPO), the National Association of Tribal Historic Preservation Officers (NATHPO), the National Trust for Historic Preservation (NTHP), and any other ACHP identified invitees to discuss implementation of the Program Comment. Prior to the Annual Meeting, the Army will provide an Annual Report on the Vietnam War Era Housing Program Comment to the meeting invitees relating the status of completion of the mitigation measures in section 5.2. The Annual Meeting provides an opportunity for attendees to provide their views on the overall effectiveness of the Program Comment in meeting its intent and purpose. The Army will document the occurrence of the meeting and participants, and its response to recommendations made by the ACHP. Annual Meetings may take place in-person, by phone, by videoconference, or any combination of such methods.

## 6.0. APPLICABILITY OF THE PROGRAM COMMENT

This Program Comment applies to all Army Vietnam War Era housing, associated buildings and structures, landscapes and landscape features, and neighborhoods built from 1963 through and including 1975. Over 99% of Army's Vietnam War Era housing is privatized housing operated under the Army's RCI program. The Program Comment applies to all Army Vietnam War Era housing, both privatized and non-privatized.

The Program Comment does not apply when a management action may cause physical damage, destruction, or change the physical features of other historic properties including properties of traditional religious and cultural importance to Federally recognized Indian tribes or NHOs; human remains, funerary objects, sacred objects, and cultural patrimony as defined in the Native American Graves Protection and Repatriation Act (NAGPRA).

The Army reviewed its National Historic Landmarks (NHL) documentation to confirm there are no Army Vietnam War Era housing designated as individual NHLs or as contributing properties to any NHL district. There are no known Army Vietnam War Era historic housing, associated buildings and structures, and landscape features that are NHLs, or that qualify for NHL designation.

## 7.0. IMPLEMENTATION OF THE PROGRAM COMMENT

## 7.1. Effect of the Program Comment

The Program Comment for Army Vietnam War Era housing includes all privatized and non-privatized Army housing constructed from 1963-1975. By adhering to the terms of the

Program Comment, the Army meets its responsibilities for compliance with Section 106 of the NHPA for management actions effecting Army Vietnam War Era housing.

The Army will implement the management actions under the Program Comment in lieu of conducting any individual project reviews under 36 CFR 800.3 - 800.7 for Army Vietnam War Era housing. One exception is under section 5.2.4.3 whereby the Army will follow the resolution of adverse effect process in 36 CFR 800.6 - 800.7 and resulting PAs or MOAs when Vietnam War Era housing properties of particular importance designated in section 5.2.4.1 are subject to cessation of maintenance and demolition.

This Program Comment supersedes and replaces any requirements for Army Vietnam War Era housing in all preceding Section 106 PAs, MOAs, or Army Alternate Procedures. The Army will implement the proposed Program Comment in lieu of all PA, MOA, Army Alternate Procedure requirements and procedures previously applicable to Army Vietnam War Era housing. PAs, MOAs, or Army Alternate Procedures prepared after ACHP issuance of this Program Comment will identify this Program Comment and indicate that the Program Comment meets all Army responsibilities for compliance with Section 106 of the NHPA for management actions associated with Army Vietnam War Era housing. PAs, MOAs, Army Alternate Procedures, any other agreements, procedures, plans, standards, or guidelines shall not in any way modify, effect, or alter the terms of this Program Comment. The terms of this Program Comment may only be modified through amendments made in accordance with Section 9.0 of this Program Comment.

The Army will implement the Program Comment in lieu of any procedures, development agreements, lease and conveyance documents, environmental management plans, guidelines, reporting requirements, Integrated Cultural Resources Management Plans, and all other documents, standards, procedures, or guidelines pertaining to the historic preservation of Vietnam War Era housing.

The Army will ensure that RCI housing privatization entities to which it leases or otherwise coveys Vietnam War Era housing for the purposes of possession, management, and operation as housing and associated ancillary purposes follow this Program Comment for all management actions associated with these properties. This provision also applies to the reversion of leased or otherwise conveyed Vietnam War Era housing from a management entity back to the Army, whereby the Army will follow this Program Comment for all management actions associated with these properties.

#### 7.2. Duration of the Program Comment

The Program Comment will remain in effect from the date of issuance by the ACHP through December 31, 2055. This duration serves to integrate NHPA compliance with the ongoing real property management requirements in place for privatized Army housing. The duration of the Program Comment synchronizes with the term of the ground leases that have been executed with the Army's privatized housing partners under the RCI program. Upon termination of Army RCI program ground leases, ownership of all RCI partnership owned

improvements including all housing that is located within the boundaries of the ground lease is conveyed back to the Army.

The Program Comment will remain in effect from the date of ACHP issuance through December 31, 2055, unless prior to that time the Army determines that such comments are no longer needed and notifies the ACHP in writing, or the ACHP withdraws the Program Comment in accordance with 36 CFR 800.14(e)(6), or the ACHP amends the Program Comment to change its duration per Section 9.0. Following withdrawal or expiration of this Program Comment, the Army will be required to comply with Section 106 through the process in 36 CFR 800.3 - 800.7, or an applicable program alternative under 36 CFR 800.14, for each individual undertaking formerly covered by this Program Comment.

## 7.3. Further Historic Property Identification and Evaluation

The Army's Vietnam War Era housing has been extensively identified, evaluated, and documented by existing information and by information developed under section 5.0. of this Program Comment. The Army will not implement any further historic property identification, evaluation, and mitigation efforts in connection with the management actions covered by the Program Comment other than those efforts specified as additional mitigation measures in Section 5.2 of this Program Comment.

Army Vietnam War Era housing areas are the equivalent of suburban tract housing developments in the private sector. As such, there is significant prior ground disturbance in Vietnam War Era housing areas and neighborhoods resulting from the original construction of the housing including overall grading of the entire housing development area, housing construction, construction of associated buildings and structures, road and sidewalk construction, installation of above and below ground utilities, landscaping, construction of recreational structures, and subsequent ground disturbing actions that have occurred after the original construction. Such areas of extensive ground disturbance associated with housing tract developments are considered to have a low probability for the presence of NRHP eligible archeological properties. Therefore, no further efforts to identify or evaluate archeological properties in Vietnam War Era housing areas and neighborhoods are required for the implementation of Program Comment management actions other than those actions identified in section 8.0.

## 8.0 TREATMENT OF ARCHEOLOGICAL PROPERTIES AND HUMAN REMAINS

Army installation NHPA agency officials including installation commanders, garrison commanders, or their designees, and installation cultural resource managers shall ensure that RCI partners, contractors, and installation staff involved in implementing management actions in Vietnam War Era housing neighborhoods are provided information regarding any known undistributed areas within those neighborhoods; the presence of known archeological properties, Native American or Native Hawaiian human remains, funerary objects, sacred objects, and cultural patrimony within those neighborhoods; and the installation's procedures in the event of discovery of or effects to archeological properties, human remains, and cultural items. RCI partners, contractors, installation staff, and others involved in implementing management actions

in Vietnam War Era housing neighborhoods will exercise caution in known undistributed areas; will seek to avoid impacts to known archeological properties, Native American or Native Hawaiian human remains and cultural items whenever possible; and will follow the procedures in 8.1 and 8.2 if such archeological properties, human remains, or cultural items may be affected by or are discovered during the implementation of management actions.

## 8.1. Archeological Properties and Human Remains of Non-Native American and Non-Native Hawaiian Origin

If a previously known NRHP eligible archeological property will be adversely affected by a Program Comment management action, mitigation measures to resolve the adverse effect to that archeological property will be developed following the procedures in 36 CFR 800.3 – 800.7, or by following the archeological property mitigation procedures in an applicable installation NHPA PA, MOA, or Army Alternate Procedures, as appropriate. The discovery of a NRHP eligible archeological property or human remains of non-Native American and non-Native Hawaiian origin during the implementation of management actions for Vietnam War Era housing will be addressed following the procedures in 36 CFR 800.13 regarding post review discoveries, or by following the archeological property discovery procedures in an applicable installation NHPA PA, MOA, or Army Alternate Procedures, as appropriate. Archeological properties associated with the Vietnam War Era (1963-1975) located in Army Vietnam War Era neighborhoods are addressed under this Program Comment as landscape features.

## **8.2.** Native American and Native Hawaiian Human Remains, Funerary Objects, Sacred Objects, and Cultural Patrimony

The Army acknowledges that the respectful treatment of Native American and Native Hawaiian human remains are a paramount concern and that an appropriate treatment is to protect and preserve Native American or Native Hawaiian human remains in situ, wherever possible. If Native American or Native Hawaiian human remains, funerary objects, sacred objects, and cultural patrimony may be affected by or are discovered during the implementation of management actions under this Program Comment, the Army installation agency official will implement the appropriate statutory provisions of NAGPRA and the regulatory compliance procedures in 43 CFR 10, a NAGPRA Comprehensive Agreement, or a NAGPRA Plan of Action, as appropriate.

#### 9.0. PROGRAM COMMENT AMENDMENT AND WITHDRAWAL

The ACHP may formally amend this Program Comment after consulting with the Army and other parties as it deems appropriate.

## 9.1. Amendment by Chairman, ACHP

The Chairman of the ACHP, after notice to the rest of the ACHP membership and the Army may amend this Program Comment to extend its duration. The ACHP will notify the Army and will publish notice in the Federal Register regarding such amendment within 30 days after their issuance.

## 9.2. Amendment by Executive Director, ACHP

The Executive Director of the ACHP, after notice to the ACHP membership and the Army may amend this Program Comment to adjust due dates and make corrections of grammatical and typographical errors. The ACHP will notify the Army and will publish notice in the Federal Register regarding such amendments within 30 days after their issuance.

## 9.3. Withdrawal of the Program Comment

If the ACHP determines that consideration of Army Vietnam War Era housing is not being carried out in a manner consistent with this Program Comment, the ACHP may withdraw the Program Comment. The Chairman will notify the Army and will publish notice in the Federal Register regarding withdrawal of the Program Comment within 30 days of the decision to withdraw. If this Program Comment is so withdrawn, the Army shall comply with the requirements of 36 CFR 800.3 – 800.7, or an applicable program alternative, for individual undertakings effecting Army Vietnam War Era housing.

## **10.0 APPENDIX**

Appendix - Historic Context for Army Vietnam War Era Historic Housing, Associated Structures, and Landscape Features (1963-1975), Volume 1 and Volume 2. [see <a href="https://www.denix.osd.mil/army-vwehh-pc/">https://www.denix.osd.mil/army-vwehh-pc/</a>].

## **11.0 DEFINITIONS**

The following definitions apply to and are implemented by this Program Comment:

*Abatement* means actions to eliminate, lessen, reduce, or remove hazardous and toxic materials, and unsafe conditions.

Army Vietnam War Era historic housing includes all privatized and non-privatized housing, with construction started or completed during the period 1963-1975, that is located on an Army installation or joint base and owned, operated, and or managed by the Army or by an Army privatized housing partner including those operating under the RCI program. The terms *housing*, *Army Vietnam War Era housing*, and *Vietnam War Era housing* are used interchangeably in the Program Comment and mean all Army Vietnam War Era historic housing, associated buildings and structures, landscapes and landscape features, and neighborhoods.

*Army Vietnam War Era housing property type* means Army Vietnam War Era housing, associated buildings and structures, landscapes and landscape features, and Vietnam War Era neighborhoods.

*Army Vietnam War Era neighborhood* means a geographical area, district, development, community, subdivision, or locality on an installation that is characterized by and comprised predominantly of Army Vietnam War Era housing, associated buildings and structures, and landscapes and landscape features.

Associated buildings and structures includes detached garages, carports, storage buildings, above and below ground utilities and service systems including water, sewage, storm water, gas, and electrical service systems, tennis courts, pools, buildings and structures associated with recreational and athletic activities, playgrounds and playground equipment, all other recreational buildings and structures, fencing, community centers, shelters, associated ancillary facilities that support housing, and any and all other buildings, structures, and objects associated Army Vietnam War Era housing with or located within Army Vietnam War Era housing neighborhoods.

*Cease or cessation of maintenance* means an action to permanently halt maintenance and repair of housing and /or associated buildings and structures and landscape features when the property is no longer in a mission supporting operational status; resources are and will remain unavailable to maintain, mothball, or demolish the property; and there is no foreseeable alternative use or intent to bring the property back to operational status at a future time.

*Current industry standard building materials and methods* means modern industry standard building materials, methods and techniques that are currently in use in the construction industry today. It includes natural, composite, and synthetic building materials; and the designs, types, techniques, materials, equipment, temporary structures, and suitable methods to accomplish construction.

*Demolition* and *demolish* means complete dismantling and/or destruction of Army Vietnam War Era housing in its entirety, or partial demolition to remove exterior portions of the housing when the housing is found to be either deteriorated, excess to needs, vacant, presents health and safety hazards, or when replacement with new housing is necessary to improve the quality of life of military families.

*Deteriorated* means Army Vietnam War Era housing that is significantly impaired as to affect the habitability of the housing or the quality of life of military family occupants.

*Excess to needs* means housing present on an installation that is excess to current and foreseeable future needs as indicated by Army housing market surveys and housing requirements analyses.

*Health and safety hazards* means housing that has any of the following conditions: significantly damaged roofs or walls; non-functional mechanical systems; unsafe common areas such as stairs; significant rodent, insect, or mold infestations; lead based paint exposure risks; asbestos exposure risks; risk of exposure to other chemical or environmental hazards; violations of health and safety codes and standards; damages due to fire, flooding, or natural disasters; or other conditions that make the housing unsafe, present health hazards, or cause the housing to be uninhabitable.

*Historic property* means buildings, sites, structures, objects, and districts that are eligible for inclusion or that are included in the NRHP.

*Landscape features and landscapes* includes the overall design and layout of the Vietnam War Era housing neighborhoods and communities including roadway circulation systems and patterns, plantings and landscaping, open spaces, playgrounds, recreational landscape features including but not limited to recreational and athletic fields, golf courses, fencing, parking areas, signage, site furnishings, parade grounds, lighting, sidewalks and curbing, driveways, setbacks, all visual elements and viewsheds into Vietnam War Era historic properties and neighborhoods into other historic properties and districts, any and all other landscape features present in Vietnam War Era (1963-1975). The term *landscape features* as used throughout the Program Comment is inclusive of all Vietnam War Era landscapes and landscape features.

*Lease, transfer, and conveyance* means the execution of lease, transfer, and conveyance documents for the purposes of lease, possession, management, operation, and transfer of Vietnam War Era housing. Includes execution of transfers and conveyances of ground leases and property ownership between RCI partners, between RCI partners and the Army; and actions to transfer or convey Vietnam War Era housing by sale or other means out of Federal governmental ownership and control and/or out of RCI partner ownership and control to any other public or private entities.

*Maintenance and repair* means activities required to maintain the interior and exterior of housing, mechanical systems, and all interior and exterior building features, elements, and materials in an operational state, or to bring them back to operating condition by repair or replacement of obsolete, broken, damaged, or deteriorated mechanical systems, features, elements, and materials on housing interiors or exteriors.

*Management actions* means maintenance, repair, rehabilitation, renovation, abatement of hazardous materials, mothballing, cessation of maintenance, demolition, new construction, lease, transfer, conveyance, and the use of current readily available industry standard building materials and methods in the implementation of management actions.

*Mechanical systems* means heating, ventilation, air conditioning, plumbing, and electrical systems, and the individual elements and components of each system.

*Mitigation measures* means any existing, new, or updated materials or actions that serve to address, reduce, minimize, or otherwise mitigate adverse effects on historic properties, and may include research reports, historical documentation, recordation, and other materials and activities.

*Mothballing* means an action to close and deactivate housing and /or associated buildings and structures for an extended period, with the intent that the property would be brought back to a mission supporting operational status at some future time.

*New construction or new housing construction* means the use of current industry standard building materials and methods for construction of new housing, associated buildings and structures, and landscape features within existing Vietnam War Era housing neighborhoods. New housing construction usually occurs when there is a housing deficit determined through local

housing market surveys and installation housing requirements analyses. New housing construction may include single family homes, duplexes, multiplexes, townhouses, apartments, and associated buildings, structures, and landscape features. New construction is restricted to the boundaries of existing Vietnam War Era housing neighborhoods due to significant prior ground disturbance in these neighborhoods. Army Vietnam War Era housing developments, like suburban tract housing developments in the civilian sector, are considered to have a low probability for the presence of NRHP eligible archeological properties due to a high degree of prior ground disturbance from housing and housing-related infrastructure construction. Prior ground disturbance in Army Vietnam War era neighborhoods is due to the original neighborhood construction including overall grading of the entire neighborhood development area, construction of the Vietnam War era housing itself, construction of associated buildings and structures, road and sidewalk construction, installation of above and below ground utilities, landscaping, construction of recreational areas and structures, and subsequent ground disturbing actions that have occurred after the original construction. Appropriate NHPA and NAGPRA procedures will be followed in accordance with section 8.0 of this Program Comment in the event of effects to or discovery of Native American or Native Hawaiian human remains or cultural items, or an NRHP eligible archeological property or human remains of non-Native American and non-Native Hawaiian origin.

*Original historic building materials and historic building materials* means the building materials that were used in the initial construction of Vietnam War Era housing.

*Privatized housing* means Army housing that has been privatized under the Army's Residential Communities Initiative (RCI). The RCI operates on Army installations through the operation of legal partnerships between the Army and private sector developers. At each installation where RCI housing is located, the Army conveys ownership of existing housing and leases land to the RCI partnership. The RCI partnership then operates and manages the conveyed housing and leased lands for military housing purposes.

*Properties of particular importance* means Army Vietnam War Era housing that retains a high degree of integrity, represents particularly important historical aspects of the Army Vietnam War Era housing program, and that represent particularly important building types or methods of construction. To be considered properties of particular importance Army Vietnam War Era housing must retain original location, scale, mass, proportion, materials, and ornamentation from the period of construction.

*Public educational materials* mean Vietnam War Era housing historic contexts, reports, and other documentation containing public information on the history of Vietnam War Era housing.

*Quality of Life* means the general wellbeing and material living conditions of individuals and military families living in historic housing.

*Rehabilitation* means repairs, additions, and other alterations and modifications to a building that preserve, to the greatest extent possible, historic building materials, historic building design, and other historic building features in accordance with Secretary of the Interior's Standards for the Treatment of Historic Properties (36 CFR 68).

*Renovation* means improvements to housing using current industry standard building materials and methods and including any interior and exterior alterations and modifications; exterior additions that increase square footage of housing; interior floor plan changes; actions to improve energy efficiency and climate resiliency; removal and replacement of out of date, obsolete, damaged, deteriorated, or defective interior and exterior building materials and elements including windows and doors; removal and replacement of interior walls, ceilings, and flooring; removal and replacement of mechanical systems or elements thereof; and other alterations and modifications that modernize housing to improve the quality of life of residents.

*To the maximum extent practicable* means to implement to the extent feasible or capable of being considered or carried out with reasonable effort taking into account considerations regarding the financial implications for housing improvements and new construction and the benefits those and other management actions have in terms of improving the quality of life, health, safety of military families.

*Undisturbed area(s)* means a definable area within an Army Vietnam War Era neighborhood that has not been altered from its natural condition by human activities. Undisturbed areas must retain the natural topography and natural soil horizons existing before any human-caused influences or changes. Undisturbed areas must have not been affected to any degree by grading, filling, removal of trees or vegetation, prior excavation or construction, or any other human-caused influences or influences or activities.

*Vacant* means housing that has been unoccupied for six months or longer and is expected to remain unoccupied into the foreseeable future.

*Viewshed* includes all the area visible from a particular location, viewing point, or series of viewing points. It includes all visual elements and surrounding points that are in the line of sight from any location, viewing point, or series of viewing points and excludes all points and locations that are not visible and/or are obstructed by terrain, other natural features, man-made features, and points beyond the horizon.

.