ERDC/CERL TR-07-7

Construction Engineering Research Laboratory

US Army Corps of Engineers®
Engineer Research and Development Center

Fort Hood Building and Landscape Inventory with WWII and Cold War Context

Julie Webster, Megan Tooker, Dawn Morrison, Susan Enscore, Suzanne Loechl, and Martin Stupich

March 2007

ERDC/CERL TR-07-7
March 2007

Fort Hood Building and Landscape Inventory with WWII and Cold War Context

Julie Webster, Megan Tooker, Dawn Morrison, Susan Enscore, and Suzanne Loechl

Construction Engineering Research Laboratory
U.S. Army Engineer Research and Development Center
2902 Newmark Drive
Champaign, IL 61822

Martin Stupich

Martin Stupich, Photographer
3431 Monte Vista Blvd NE
Albuquerque, NM 87106-3821

Final report

Prepared for Department of Public Works
DPW-NV-NR
4612 Engineer Drive, Room 76
Fort Hood, Texas 76544-5028

Under #CNC-Q312, #CNC-QB23, and #CNC-Q544

Executive Summary

This report inventories and evaluates, in terms of recommended eligibility for the National Register of Historic Places, all of the buildings constructed at Fort Hood (containing the Main Post, North Fort Hood, and West Fort Hood) between the years of 1942 and 1963. The authors inventoried and evaluated 463 buildings and all relevant landscape areas on the installation constructed or created during these years to make recommendations for determinations of standard eligibility to the National Register of Historic Places.

A World War II installation, Fort Hood, TX, was constructed in 1942 as the Army's Tank Destroyer Center. A sub-installation, known as North Fort Hood, was created during the war to provide additional space for training, and over the years since has been used for National Guard training. Gray AFB began life as the Camp Hood Air Strip in 1948 to support activities at the adjacent Killeen Base National Storage Site. The base transferred to the Army as Robert Gray Airfield on 31 May 1963. In 1969, Killeen Base was deactivated and the real property transferred to Fort Hood. In 1950, Congress designated Camp Hood as Fort Hood, a permanent installation. Over the years, Fort Hood has played a vital role in testing and training. It is currently home to Headquarters Command, III, the 4th Infantry Division, and the 1st Cavalry Division.

Field reconnaissance and historical data analysis provided sufficient evidence for the development of significant historic themes related to the history of Fort Hood and applicable to the properties under study: Vehicular Training and Transport, Army Aviation: Fixed and Rotary Wing, Headquarters and Ceremonial Activities, and Special Weapons Storage Program: Killeen Base. A total of 297 buildings and 10 landscape areas did possess significance under Criterion A or C for their association with these themes, a special design, or with an established Program Comment. An analysis of these properties' integrity resulted in 179 buildings and 8 landscapes recommended to be eligible to the National Register of Historic Places. The most historically significant aspect of the Main Post at Fort Hood is the layout that physically expresses the installation's mission of armored vehicle development and training. The survival of the layout to the present day has resulted in our designation of historic districts that contain the recommended eligible resources and form a basis for guiding future development while remaining in compliance with federal historic preservation legislation and associated implementing guidance documents.

Contents

List of Figures and Tables

Figures

Tables

Conversion Factors

Non-SI[1] units of measurement used in this report can be converted to SI units as follows:

Multiply	By	To Obtain
acres	4,046.873	square meters
cubic feet	0.02831685	cubic meters
cubic inches	0.00001638706	cubic meters
feet	0.3048	meters
inches	0.0254	meters
miles (U.S. statute)	1.609347	kilometers
square feet	0.09290304	square meters
square miles	2,589,998.00	square meters
yards	0.9144	meters

[1] *Système International d'Unités* ("International System of Measurement"), commonly known as the "metric system."

Preface

This study was conducted for the Directorate of Public Works (DPW), Environmental Division, Fort Hood under MIPR2DCERL0144/PO, "Cold War Inventory Phase I" (Project #CNC-Q312); MIPR3LCERL0665/PO "Cold War Building Inventory Phase II" (#CNC-QB23); and MIPR4ECERL0398/PO, "Assess Cold War Sig, Bldg Survey Phase III" (#CNC-Q544). The Fort Hood technical monitors were Dr. Cheryl Huckerby and Mr. Karl Kleinbach, Cultural Resource Management Program, Environmental Division.

The work was performed by the Land and Heritage Conservation Branch (CN-C) of the Installations Division (CN), Construction Engineering Research Laboratory (CERL). The CERL Project Manager was Dr. Susan I. Enscore. The contemporary building inventory forms photographic work was done by Martin Stupich, Albuquerque, New Mexico under contract No. DACA42-02-P-0058. Mr. Michael Denight is Acting Branch Chief, CEERD-CN-C, and Dr. John T. Bandy is Chief, CEERD-CN. The associated Technical Director is Dr. William D. Severinghaus, CEERD-CV-T. The Director of CERL is Dr. Ilker R. Adziguel.

CERL is an element of the U.S. Army Engineer Research and Development Center (ERDC), U.S. Army Corps of Engineers. The Commander and Executive Director of ERDC is COL Richard B. Jenkins and the Director of ERDC is Dr. James R. Houston.

Acronyms

ACHP	Advisory Council on Historic Preservation
AC&W	Aircraft Control and Warning
AD	Armored Division
AEC	Atomic Energy Commission
AFB	Air Force Base
AW	Automatic Weapons Battalion
BLORA	Belton Lake Outdoor Recreation Area
BOQ	Bachelor Officers Quarters
BUTC	Basic Unit Training Center (Tank Destroyer)
CCC	Civilian Conservation Corps
CMU	Concrete Masonry Unit
CRM	Cultural Resource Manager
DA	Department of the Army
DoD	Department of Defense
DRS	Division Restructuring Study
DPW	Department of Public Works
ERDC-CERL	Engineer Research and Development Center-Construction Engineering Research Laboratory
FHA	Federal Housing Authority
FM	Field Manual
FORSCOM	Forces Command
FY	Fiscal Year
GCA	Ground Control Approach
GHQ	General Headquarters
GSFU	Glazed Structural Facing Units
HABS	Historic American Buildings Survey

HAER	Historic American Engineering Record
LAW	Light Anti-tank Weapon
ICBM	Intercontinental Ballistic Missile
ICRMP	Integrated Cultural Resources Management Plan
ID	Infantry Division
LTC	Lieutenant Colonel
MASSTER	Mobile Army Sensor Systems Test, Evaluation, and Review
MATES	Mobilization and Training Equipment Site
MCA	Military Construction, Army
MICV	Mechanized Infantry Combat Vehicle
MLRS	Multiple Launch Rocket System
MOUT	Military Operations on Urbanized Terrain
MSE	Mobile Subscriber Equipment
MVA	Modern Volunteer Army
NARA	National Archives and Records Administration
NASA	National Aeronautics and Space Administration
NATO	North Atlantic Treaty Organisation
NCO	Noncommissioned Officer
NCSHPO	National Conference of State Historic Preservation Officers
NHPA	National Historic Preservation Act of 1966
NRHP	National Register of Historic Places
NSS	National Storage Site
OSS	Operational Storage Site
PA	Programmatic Memoranda of Agreement
POW	Prisioner of War
PX	Post Exchange
ROAD	Reorganization Objective Army Division
ROTC	Reserve Officer Training Corps
RTC	Replacement Training Center (Tank Destroyer, Basic)
SAC	Strategic Air Command

SAGE	Semi-Automatic Ground Environment System
SEA (or C)	South East Asia (metal hutments)
STANO	Surveillance, Target Acquisition and Night Observation
STAR	Specialized Training and Reassignment
STRAC	Strategic Army Corps
TCATA	TRADOC Combined Arms Test Activity
TDRTC	Tank Destroyer Replacement Training Center
TDTFC	Tank Destroyer Tactical and Firing Center
TOW	Tube-launched Optically-tracked Wire command link guided missile
TRADOC	Training and Doctrine Command
TRICAP	triple capability
UPH	Unaccompanied Personnel Housing
USGS	United States Geological Service
VOLAR	Project Volunteer Army
VOQ	Visiting Officers Quarters
WPA	Works Progress Administration

1 Methodology

1.1 Background

The National Historic Preservation Act of 1966 (NHPA), as amended, provides requirements for consideration of historic properties by Federal agencies. Section 106 of the NHPA requires Federal agencies to take into account the effects of their undertakings on historic properties and consult with preservation agencies regarding these effects and possible mitigating actions before spending federal funds on the undertaking. Historic properties are those properties that are either listed in, or are eligible for listing in, the National Register of Historic Places (NRHP). Section 110 of the NHPA requires installations and commands to develop and implement plans for the identification, management, and nomination of cultural resources. Army Regulation 200-4 outlines Army responsibilities for and general approaches to the management of cultural resources.

A World War II installation, Fort Hood, TX, was constructed in 1942 as the Army's Tank Destroyer Center. A sub-installation, known as North Fort Hood, was created during the war to provide additional space for training, and over the years since has been used for National Guard training. Gray Air Force Base (AFB) began life as the Camp Hood Air Strip in 1948 to support activities at the adjacent Killeen Base National Storage Site. The base transferred to the Army as Robert Gray Airfield on 31 May 1963. In 1969, Killeen Base was deactivated and the real property transferred to Fort Hood. In 1950, Congress designated Camp Hood as Fort Hood, a permanent installation. It is currently home to Headquarters Command, III Corps; the 4th Infantry Division (ID); and the 1st Cavalry Division. Over the years, Fort Hood has served as home to many important units and has played a vital role in testing and training. Fort Hood's growth over the years has resulted in an installation currently containing 5,425 buildings and covering 339 square miles.

Prior to this effort, no large-scale, comprehensive inventory or evaluation of properties associated with the World War II or early Cold War historical context themes has existed for Fort Hood. Consequently, this negatively affects Fort Hood's ability to meet its historic cultural resource compliance regulations, and inhibits effective long-range cultural resource management. Undertakings that affect potentially historic properties have to be dealt with on a time-consuming and costly case-by-case

approach. Unnecessary added project costs and delays will be inevitable without identifying and determining the NRHP eligibility of properties at Fort Hood.

1.2 Objective

The objective of this project is to provide the Fort Hood Cultural Resource Manager (CRM) with a historic context, inventory, and NRHP eligibility study of 457 permanent, semi-permanent, and temporary non-family housing buildings constructed between 1942 and 1963 (Table 1, Table 2, Table 3, and Table 4).[2] In addition to buildings, landscapes and landscape components developed between 1942 and 1989 were inventoried. The evaluation of these properties will allow the CRM to enter into mitigation discussions for any future undertakings on NRHP eligible properties. The properties are located in each of the three main cantonments that form part of Fort Hood (Figure 1): Main Post (Figure 2), North Fort Hood (Figure 3), and West Fort Hood (Figure 3).

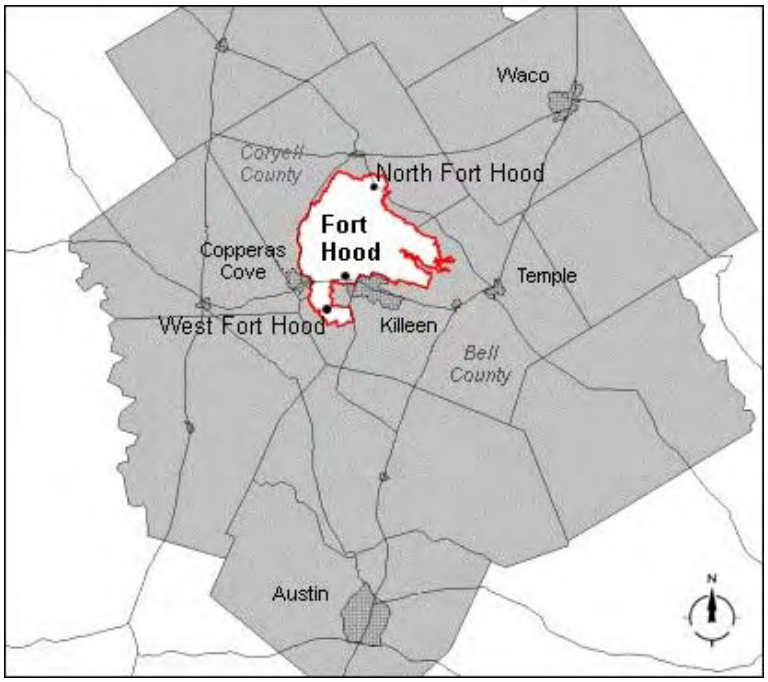

Figure 1: Map illustrating the Main Post, North Fort Hood, and West Fort Hood (ERDC-CERL 2002).

[2] World War II Temporary Buildings covered by the Programmatic Agreement were not included in the inventory. Family housing was not included as it was covered by a separate study.

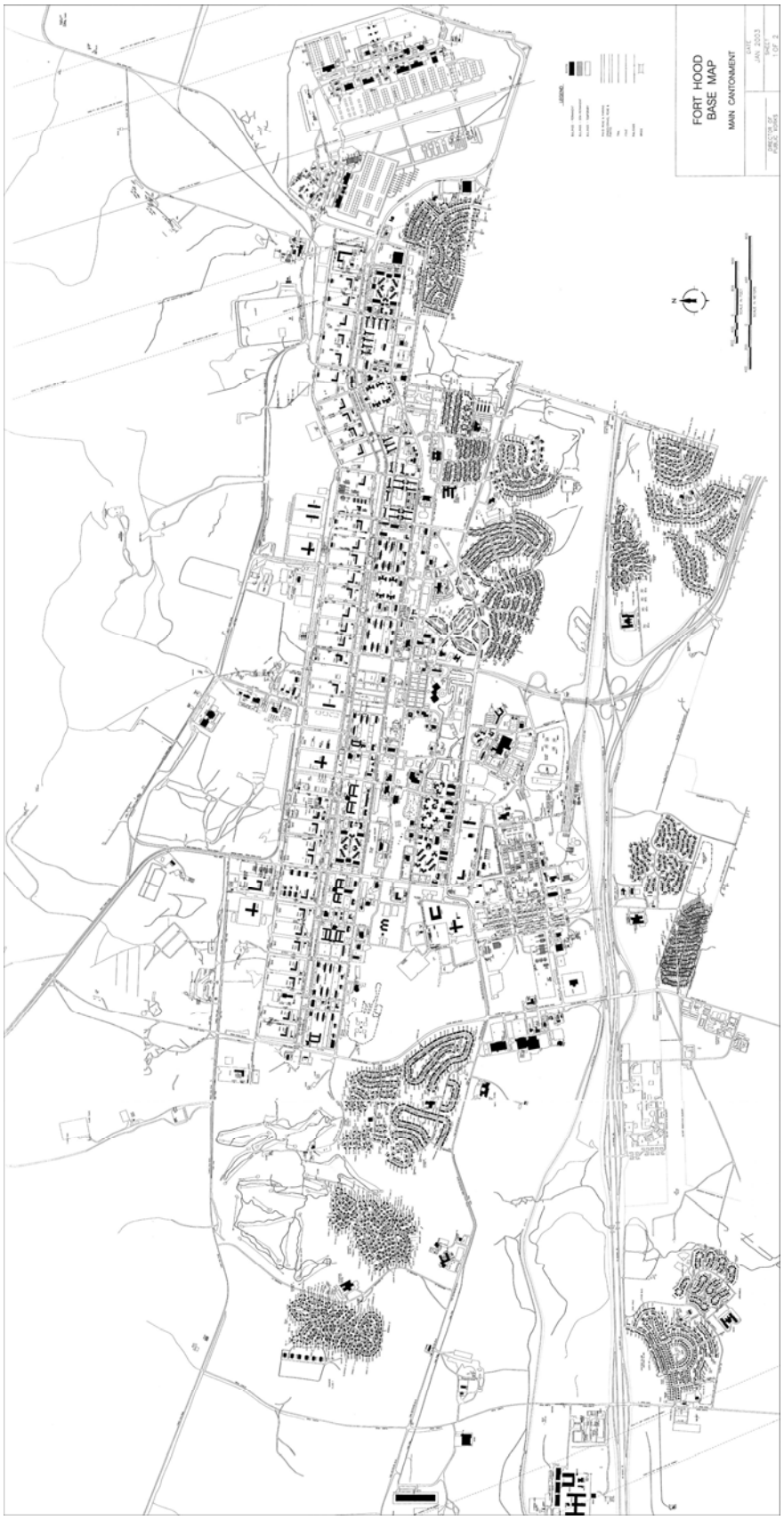

Figure 2. Main Post, 2003 (DPW, Fort Hood).

Figure 3. West and North Fort Hood, 2003 (DPW, Fort Hood).

Table 1. Main Post Buildings Inventoried and Evaluated[3]

BLDG#	BUILT	EARLY USE	CURRENT USE
100	1959	Power Substation/Switching Station Building	Power Substation/Switching Station Building
135	1956	Main Post Exchange	Exchange Branch
136	1956	Civilian Cafeteria	Exchange Service Outlet
137	1953	Bath House (Men)	Separate Toilet/Shower Building
138	1953	Bath House (Women)	Separate Toilet/Shower Building
139	1953	Filter Plant	Outdoor Pool Service Building
193	1952	Bath House (NCO)	Separate Toilet/Shower Building
194	1957	NCO Open Mess	Administration Building General Purpose - Community/Conference Center
224	1959	Exchange Automotive Service Station	Exchange Automotive Service Station
707	1949	Portable Airplane Hangar	Aircraft Maintenance Hangar
708	1949	Portable Airplane Hangar	Aircraft Maintenance Hangar
715	1956	Company Administration - Recreation - Supply	Aviation Unit Operations Building
1121	1943	Vehicle Maintenance Shop	Vehicle Maintenance Shop
1674	1952	Outdoor Pool Service Building	Outdoor Pool Service Building
1676	1952	Bath House	Separate Toilet/Shower Building
2239	1961	Bath House	Separate Toilet/Shower Building
2319	1960	Concession Building	Exchange Cafeteria
2476	1952	Outdoor Pool Service Building	Outdoor Pool Service Building
2479	1952	Bath House	Separate Toilet/Shower Building
2805	1959	Service Club	Administrative Building General Purpose
4166	n.d.	Private Residence	Heritage Center
4203	1958	Lumber Shed	Storage Shed General Purpose
4206	1955	Hazardous Material Storage Building	Hazardous Material Storage Building

[3] Several buildings on the original inventory list were not evaluated due to being covered by the WWII Temp Programmatic Agreement or the Capehart-Wherry Program Comment (#418, 6827, 6829, 57023, 57024, 57025, 57030), having been demolished (#134, 56409, 56411, 90024, 90050), or conflicting information in the facility database (#1938, 20115, 92043, 92072, 92073, 92083, 92084, 92086).

BLDG#	BUILT	EARLY USE	CURRENT USE
4207	1949	Engineering/Housing Maintenance Shop	Engineering/Housing Maintenance Shop
A4211	1951	Storage Building General Purpose	Storage Building General Purpose
4273	1958	Engineering/Housing Maintenance Shop	Engineering/Housing Maintenance Shop
4290	1958	Hazardous Material Storage Building	Hazardous Material Storage Building
4291	1961	Property Disposal Facility	Storage Building General Purpose
4481	1961	Water Supply/Treatment Building Potable	Water Supply/Treatment Building Potable
4487	1961	Water Supply/Treatment Building Potable	Water Supply/Treatment Building Potable
4488	1955	Water Supply/Treatment Building Potable	Water Supply/Treatment Building Potable
4490	1963	Storage Building	Engineering/Housing Maintenance Shop
4615	1959	Engineer Field Maintenance Shop	Vehicle Maintenance Shop
4616	1959	Engineer Field Maintenance Shop	Vehicle Maintenance Shop
4617	1959	Signal Field Maintenance Shop	Compact Item Repair Shop
4618	1959	Storage Building General Purpose	Storage Building General Purpose
4641	1958	Storage Building General Purpose	Storage Building General Purpose
4642	1963	Storage Building General Purpose	Storage Building General Purpose
4643	1958	Storage Building General Purpose	Storage Building General Purpose
4652	1949	Football Stadium (4,650 Capacity)	Stadium
4819	1944	Community Building (Hood Village)	Child Development Center
4820	1944	Commercial Building (Hood Village)	Child Development Center
4910	1963	Strategic Army Communications (STARCOM) System Transmitter Building	Animal Shelter
5764	1959	Officer Open Mess	Officer Open Dining Facility
5784	1959	Bath House (Officer)	Separate Toilet/Shower Building
5786	1956	Bachelor Officers Quarters	Unaccompanied Officers Quarters Military
5788	1956	Bachelor Officers Quarters	Unaccompanied Officers Quarters Military
5790	1956	Bachelor Officers Quarters	Unaccompanied Officers Quarters Transient
5792	1956	Bachelor Officers Quarters	Unaccompanied Officers Quarters Transient

BLDG#	BUILT	EARLY USE	CURRENT USE
6898	1963	Water Supply/Treatment Building Potable	Water Supply/Treatment Building Potable
7001	1961	Flight Control Tower	Flight Control Tower
7002	1960	Fire Station	Fire Station
7002a	1963	Storage Building General Purpose	Storage Building General Purpose
7003	1960	Lighting Equipment Vault	Navigation Building Air
7015	1961	Flight Simulator Building	Troops Dispensary/Health Clinic
7016	1963	Airfield Operations Building	Airfield Operations Building
7027	1960	Aviation Unit Maintenance (AVUM) Hangar	Aircraft Maintenance Hangar
7042	1960	Aviation Unit Operations Building	Aviation Unit Operations Building
7043	1961	Aircraft Parts Storage	Aircraft Production Parts Storage
7044	1960	Aircraft Maintenance Hangar	Aircraft Maintenance Hangar
7045	1961	Hazardous Material Storage Building	Hazardous Material Storage Building
7060	1962	Receiver Building	Receiver Building
8400	1958	Administration Building	Army Community Services Center
9000	1960	Concession Building	Exchange Service Outlet
9101	1957	Dispatch House	Dispatch Building
9104	1957	Oil House (for grease racks)	Hazardous Material Storage Building
9105	1957	Oil House (for grease racks)	Hazardous Material Storage Building
9108	1956	Water Booster Pump House (for wash racks)	Water Supply/Treatment Building Potable
9111	1956	Oil House (for grease racks)	Hazardous Material Storage Building
9112	1956	Battalion Motor Repair Shop	Vehicle Maintenance Shop
9113	1957	Oil House (for grease racks)	Hazardous Material Storage Building
9116	1956	Water Booster Pump House (for wash racks)	Water Supply/Treatment Building Potable
9120	1956	Oil House (for grease racks)	Hazardous Material Storage Building
9122	1956	Battalion Motor Repair Shop	Vehicle Maintenance Shop
9124	1957	Dispatch House	Dispatch Building
9210	1958	Permanent Barracks	Company HQ Building - Organizational Classroom - Enlisted UPH

BLDG#	BUILT	EARLY USE	CURRENT USE
9211	1958	Permanent Barracks	Company HQ Building - Enlisted UPH - Dining Facility
9213	1958	Permanent Barracks	Company HQ Building - Enlisted UPH
9214	1958	Permanent Barracks	Company HQ Building - Enlisted UPH - Dining Facility
9218	1959	Battalion Classroom	Organizational Classroom
9301	1960	Regimental Gymnasium	Physical Fitness Center
9406	1960	Regimental Chapel	Chapel
9407	1958	Battalion Classroom	Organizational Classroom
9408	1959	Regimental Headquarters	Brigade Headquarters Building
9409	1958	Regimental Dispensary	Troops Dispensary/Health Clinic
9410	1958	Branch Post Exchange	Administrative Building General Purpose
9411	1958	Battalion Classroom	Organizational Classroom
9418	1956	Permanent Barracks	Battalion HQ Building - Company HQ Building - Enlisted UPH
9419	1956	Permanent Barracks	Battalion HQ Building - Company HQ Building - Enlisted UPH
9420	1956	Permanent Barracks	Company HQ Building - Enlisted UPH - Dining Facility
9421	1956	Permanent Barracks	Battalion HQ Building - Company HQ Building - Enlisted UPH
9422	1953	Permanent Barracks	Battalion HQ Building - Company HQ Building - Enlisted UPH
9423	1956	Permanent Barracks	Battalion HQ Building - Company HQ Building - Enlisted UPH
9424	1956	Permanent Barracks	Battalion HQ Building - Company HQ Building - Enlisted UPH
9425	1956	Permanent Barracks	Company HQ Building - Enlisted UPH - Dining Facility
9426	1957	Battalion Headquarters	Administrative Building General Purpose
9427	1957	Battalion Headquarters	Administrative Building General Purpose
9501	1956	Dispatch House No. 1	Dispatch Building
9504	1956	Oil House (for grease racks)	Hazardous Material Storage Building

BLDG#	BUILT	EARLY USE	CURRENT USE
9507	1956	Water Booster Pump House (for wash racks)	Water Supply/Treatment Building Potable
9511	1956	Oil House (for grease racks)	Hazardous Material Storage Building
9513	1956	Battalion Motor Repair Shop	Vehicle Maintenance Shop
9520	1956	Oil House (for grease racks)	Hazardous Material Storage Building
9524	1956	Water Booster Pump House (for wash racks)	Water Supply/Treatment Building Potable
9527	1956	Oil House (for grease racks)	Hazardous Material Storage Building
9529	1956	Battalion Motor Repair Shop	Vehicle Maintenance Shop
9531	1956	Dispatch House No. 2	Dispatch Building
10001	1952	Permanent Barracks (Storck)	Battalion HQ Building - Company HQ Building - Enlisted UPH
10002	1952	Permanent Barracks (Storck)	Battalion HQ Building - Company HQ Building - Enlisted UPH
10003	1952	Permanent Barracks (Storck)	Company HQ Building - Enlisted UPH - Dining Facility
10004	1952	Permanent Barracks (Storck)	Battalion HQ Building - Company HQ Building - Enlisted UPH
10005	1952	Permanent Barracks (Storck)	Battalion HQ Building - Company HQ Building - Enlisted UPH
10006	1952	Permanent Barracks	Battalion HQ Building - Company HQ Building - Enlisted UPH
10007	1953	Permanent Barracks	Company HQ Building - Enlisted UPH - Dining Facility
10008	1953	Permanent Barracks	Company HQ Building - Enlisted UPH - Dining Facility
10009	1953	Permanent Barracks	Battalion HQ Building - Company HQ Building - Enlisted UPH
10010	1956	Permanent Barracks	Battalion HQ Building - Company HQ Building - Enlisted UPH
10011	1953	Permanent Barracks	Battalion HQ Building - Company HQ Building - Enlisted UPH
10012	1954	Battalion Headquarters	Brigade Headquarters Building
10013	1954	Battalion Headquarters	Administrative Building General Purpose

BLDG#	BUILT	EARLY USE	CURRENT USE
10014	1954	Battalion Headquarters	Brigade Headquarters Building
10015	1953	Regimental Headquarters	Brigade Headquarters Building
10016	1953	Permanent Barracks	Company HQ Building - Limited Use Instructional Bldg - Enlisted UPH
10018	1953	Permanent Barracks	Battalion HQ Building - Company HQ Building - Enlisted UPH
10020	1953	Permanent Barracks	Battalion HQ Building - Company HQ Building - Enlisted UPH
10021	1953	Permanent Barracks	Battalion HQ Building - Company HQ Building - Enlisted UPH
10022	1956	Permanent Barracks	Company HQ Building - Enlisted UPH - Dining Facility
10030	1958	Battalion Classroom	Organizational Classroom
10031	1957	Battalion Headquarters	Administrative Building General Purpose
10032	1957	Battalion Headquarters	Administrative Building General Purpose
10033	1958	Battalion Classroom	Band Training Building
10040	1958	Battalion Classroom	Organizational Classroom
10041	1960	Regimental Chapel	Chapel
10045	1958	Regimental Dispensary	Troops Dispensary/Health Clinic
10050	1958	Battalion Classroom	Organizational Classroom
10051	1958	Battalion Classroom	Organizational Classroom
10052	1958	Battalion Classroom	Organizational Classroom
11005	1953	Dispatchers Office	Dispatch Building
11006	1953	Motor Repair Shop No. 1	Vehicle Maintenance Shop
11007	1953	Motor Repair Shop No. 2	Vehicle Maintenance Shop
11008	1953	Motor Repair Shop No. 3	Vehicle Maintenance Shop
11009	1953	Motor Repair Shop No. 4	Vehicle Maintenance Shop
11017	1953	Oil House (for grease racks)	Hazardous Material Storage Building
11018	1953	Oil House (for grease racks)	Hazardous Material Storage Building
11019	1956	Battalion Motor Repair Shop	Storage Building General Purpose
11021	1958	Oil House (for grease racks)	Hazardous Material Storage Building

BLDG#	BUILT	EARLY USE	CURRENT USE
11024	1956	Water Booster Pump House (for wash racks)	Water Supply/Treatment Building Potable
11027	1958	Oil House (for grease racks)	Hazardous Material Storage Building
11029	1958	Combined Battalion Motor Repair Shop	Vehicle Maintenance Shop
11030	1959	Dispatch House	Dispatch Building
11040	1957	Oil House (for grease racks)	Hazardous Material Storage Building
11043	1956	Water Booster Pump House (for wash racks)	Water Supply/Treatment Building Potable
11047	1956	Oil House (for grease racks)	Hazardous Material Storage Building
11048	1957	Oil House (for grease racks)	Hazardous Material Storage Building
11050	1957	Combined Battalion Motor Repair Shop	Vehicle Maintenance Shop
11052	1957	Dispatch House	Dispatch Building
12003	1963	Two Company Barracks	Company HQ Building - Enlisted UPH
12004	1963	Two Company Barracks	Company HQ Building - Enlisted UPH
12008	1963	Two Company Barracks	Company HQ Building - Enlisted UPH
12022	1954	Battalion Headquarters	Administrative Building General Purpose
13003	1953	Oil House (for grease racks)	Hazardous Material Storage Building
13004	1953	Oil House (for grease racks)	Hazardous Material Storage Building
13020	1959	Oil House (for grease racks)	Hazardous Material Storage Building
13023	1959	Water Booster Pump House (for wash racks)	Water Supply/Treatment Building Potable
13027	1959	Oil House (for grease racks)	Hazardous Material Storage Building
13029	1959	Battalion Motor Repair Shop	Vehicle Maintenance Shop
13030	1959	Dispatch House	Dispatch Building
13031	1962	Battalion Motor Repair Shop	Storage Building General Purpose
13040	1959	Dispatch House	Dispatch Building

BLDG#	BUILT	EARLY USE	CURRENT USE
13041	1962	Battalion Motor Repair Shop	Storage Building General Purpose
13043	1959	Oil House (for grease racks)	Hazardous Material Storage Building
13044	1959	Oil House (for grease racks)	Hazardous Material Storage Building
13047	1959	Water Booster Pump House (for wash racks)	Water Supply/Treatment Building Potable
13051	1959	Oil House (for grease racks)	Hazardous Material Storage Building
13053	1959	Battalion Motor Repair Shop	Vehicle Maintenance Shop
14008	1958	Branch Post Exchange	Administrative Building General Purpose
14019	1958	Permanent Barracks	Company HQ Building - Enlisted UPH
14020	1958	Permanent Barracks	Company HQ Building - Enlisted UPH
14022	1958	Permanent Barracks	Company HQ Building - Enlisted UPH
14023	1958	Permanent Barracks	Company HQ Building - Enlisted UPH
15001	1959	Oil House (for grease racks)	Hazardous Material Storage Building
15002	1959	Oil House (for grease racks)	Hazardous Material Storage Building
15005	1959	Water Booster Pump House (for wash racks)	Water Supply/Treatment Building Potable
15008	1959	Oil House (for grease racks)	Hazardous Material Storage Building
15011	1959	Battalion Motor Repair Shop	Vehicle Maintenance Shop
15012	1963	Battalion Motor Repair Shop	Storage Building General Purpose
15015	1959	Dispatch House	Dispatch Building
15054	1959	Water Booster Pump House (for wash racks)	Water Supply/Treatment Building Potable
15057	1959	Oil House (for grease racks)	Hazardous Material Storage Building
15060	1959	Battalion Motor Repair Shop	Vehicle Maintenance Shop
15061	1963	Battalion Motor Repair Shop	Storage Building General Purpose
15064	1959	Dispatch House	Dispatch Building

BLDG#	BUILT	EARLY USE	CURRENT USE
20101	1956	Administration Building	Administrative Building General Purpose
20102	1956	Recreation Park Service Building	Recreation Park Service Building
40001	1956	Vehicle Maintenance Shop	Vehicle Maintenance Shop
40002	1956	Water Supply/Treatment Building Potable	Water Supply/Treatment Building Potable
56006	1963	Range Shop Building	Engineering/Housing Maintenance Shop
56007	1958	Target/Range Storage	Range Support Building

Table 2. North Fort Hood Buildings Inventoried and Evaluated

BLDG#	BUILT	EARLY USE	CURRENT USE
56412	1959	Range Office & Storage	Storage Building General Purpose
56413	1951	Enlisted Personnel Dining Facility	Dining Facility
56414	1951	Enlisted Personnel Dining Facility	Dining Facility
56522	1951	Enlisted Personnel Dining Facility	Dining Facility
56523	1951	Enlisted Personnel Dining Facility	Dining Facility
56524	1951	Enlisted Personnel Dining Facility	Dining Facility
56525	1951	Enlisted Personnel Dining Facility	Dining Facility
56528	1955	Bath House	Separate Toilet/Shower Building
56529	1955	Mess Kitchen	Dining Facility
56532	1951	Enlisted Personnel Dining Facility	Dining Facility
56533	1951	Enlisted Personnel Dining Facility	Dining Facility
56534	1951	Enlisted Personnel Dining Facility	Dining Facility
56535	1951	Enlisted Personnel Dining Facility	Dining Facility
56538	1955	Bath House	Separate Toilet/Shower Building
56539	1955	Mess Kitchen	Dining Facility
56542	1951	Enlisted Personnel Dining Facility	Dining Facility
56543	1951	Enlisted Personnel Dining Facility	Dining Facility
56544	1951	Enlisted Personnel Dining Facility	Dining Facility
56545	1951	Enlisted Personnel Dining Facility	Dining Facility
56548	1955	Bath House	Separate Toilet/Shower Building
56549	1955	Mess Kitchen	Dining Facility
56618	1951	Enlisted Personnel Dining Facility	Dining Facility
56622	1951	Enlisted Personnel Dining Facility	Dining Facility

BLDG#	BUILT	EARLY USE	CURRENT USE
56623	1951	Enlisted Personnel Dining Facility	Dining Facility
56624	1951	Enlisted Personnel Dining Facility	Dining Facility
56625	1951	Enlisted Personnel Dining Facility	Dining Facility
56628	1955	Bath House	Separate Toilet/Shower Building
56629	1955	Mess Kitchen	Dining Facility
56632	1951	Enlisted Personnel Dining Facility	Dining Facility
56633	1951	Enlisted Personnel Dining Facility	Dining Facility
56634	1951	Enlisted Personnel Dining Facility	Dining Facility
56635	1951	Enlisted Personnel Dining Facility	Dining Facility
56638	1955	Bath House	Separate Toilet/Shower Building
56639	1955	Mess Kitchen	Dining Facility
56702	1951	Enlisted Personnel Dining Facility	Dining Facility
56703	1950	Bath House Masonry Type	Separate Toilet/Shower Building
56708	1950	Bath House Masonry Type	Separate Toilet/Shower Building
56710	1951	Enlisted Personnel Dining Facility	Dining Facility
56752	1951	Enlisted Personnel Dining Facility	Dining Facility
56753	1951	Enlisted Personnel Dining Facility	Dining Facility
56754	1951	Enlisted Personnel Dining Facility	Dining Facility
56755	1951	Enlisted Personnel Dining Facility	Dining Facility
56758	1955	Bath House	Separate Toilet/Shower Building
56759	1955	Mess Kitchen	Dining Facility

Table 3. West Fort Hood “Q” Area Buildings Inventoried and Evaluated

BLDG#	BUILT	EARLY USE	CURRENT USE
92004	1952	Pill Box for Building 92106	Access Control Facility
92006	1952	Pill Box for Building 92107	Access Control Facility
92010	1953	Pill Box for Building 92124	Access Control Facility
92011	1953	Pill Box for Building 92124	Access Control Facility
92012	1949	Ammunition Storage Building	Storage General Purpose
92013	1949	Ammunition Storage Building	Storage General Purpose
92014	1952	Pill Box for Building 92125	Access Control Facility
92015	1952	Pill Box for Building 92125	Access Control Facility
92020	1952	Pill Tower for Building 92026 (Plant No. 1)	Access Control Facility
92021	1952	Pill Box for Building 92026	Access Control Facility
92025	1949	Communication Cable Vault	Communications Center

BLDG#	BUILT	EARLY USE	CURRENT USE
92026	1949	Atomic Bomb Plant No. 1 (Underground Type)	Special Weapons Plant
92027	1946-48	Battery Charging Building	Lab/Test Building General Purpose
92030	1953	Pill Box for Building 92133	Access Control Facility
92031	1953	Pill Box for Building 92133	Access Control Facility
92032	1953	Pill Box for Building 92134	Access Control Facility
92033	1953	Pill Box for Building 92134	Access Control Facility
92036	1953	Pill Box for Building 92138	Access Control Facility
92037	1953	Pill Box for Building 92138	Access Control Facility
92038	1957-61	Storage	Ground Transportation Equipment Building
92039	1958	Paint Storage	Hazardous Material Storage Building
92041	1952	Pill Tower for Building 92050 (Plant No. 2)	Access Control Facility
92042	1952	Pill Box for Building 92050	Access Control Facility
92044	1957-61	Storage	Administration General Purpose
92045	1946-48	Battery Charging Building	Maintenance Shop General Purpose
92050	1950	Atomic Bomb Plant No. 2 (Underground Type)	Special Weapons Plant
92052	1958	Paint Storage	Hazardous Material Storage Building
92056	1953	Pill Box for Building 92146	Access Control Facility
92057	1953	Pill Box for Building 92146	Access Control Facility
92058	1952	Pill Box for Building 92145	Access Control Facility
92059	1952	Pill Box for Building 92145	Access Control Facility
92060	1952	Thermonuclear Bomb Structure S	Ammunition Renovation Shop
92062	1958	Flammable Material Storehouse	Hazardous Material Storage Building
92063	1953	Receiver Building	Receiver Building
92065	1954	Base Spares Office	Administration General Purpose
92066	1950	Base Spares Warehouse	Storage General Purpose
92067	1950	Base Spares Warehouse	Storage General Purpose
92068	1948	Storage	Storage General Purpose
92070	1954	Maintenance Shop General Purpose	Maintenance Shop General Purpose
92071	1953	Handling Crew Building	Refuse/Garbage Building

BLDG#	BUILT	EARLY USE	CURRENT USE
92074	1957	Base Spares Warehouse	Lab/Test Building General Purpose
92080	1953	Transmitter Building	Transmitter Building
92085	1949-50	Pump Station	Water Supply/Treatment Building, Potable
92101	1946-48	Bedrock Igloo, Converted Type II	Special Weapons Magazine
92102	1948	Bedrock Igloo, Converted Type II	Special Weapons Magazine
92103	1946-48	Bedrock Igloo, Converted Type II	Special Weapons Magazine
92104	1946-48	Bedrock Igloo	Special Weapons Magazine
92105	1946-48	Bedrock Igloo	Special Weapons Magazine
92106	1946-48	Bedrock Igloo, Converted A Structure	Special Weapons Magazine
92107	1946-48	Bedrock Igloo, Converted A Structure	Special Weapons Magazine
92108	1946-48	Bedrock Igloo	Special Weapons Magazine
92109	1946-48	Bedrock Igloo	Special Weapons Magazine
92110	1946-48	Bedrock Igloo	Special Weapons Magazine
92111	1946-50	Bedrock Igloo	Special Weapons Magazine
92112	1946-50	Bedrock Igloo	Special Weapons Magazine
92113	1946-50	Bedrock Igloo	Special Weapons Magazine
92114	1946-50	Bedrock Igloo	Special Weapons Magazine
92115	1946-50	Bedrock Igloo	Special Weapons Magazine
92116	1946-50	Bedrock Igloo	Special Weapons Magazine
92117	1948-49	Bedrock Igloo, Converted Type II	Special Weapons Magazine
92118	1946-50	Bedrock Igloo	Special Weapons Magazine
92119	1948-49	Bedrock Igloo, Converted Type II	Special Weapons Magazine
92120	1948-49	Bedrock Igloo, Converted Type II	Special Weapons Magazine
92121	1946-50	Bedrock Igloo	Special Weapons Magazine
92122	1948-49	Bedrock Igloo, Converted Type II	Special Weapons Magazine
92123	1946-50	Bedrock Igloo	Special Weapons Magazine
92124	1949-50	Bedrock Igloo, Converted A Structure	Special Weapons Magazine
92125	1949-50	Bedrock Igloo, Converted A Structure	Special Weapons Magazine
92126	1948-49	Bedrock Igloo, Converted Type II	Special Weapons Magazine
92129	1948-50	Bedrock Igloo	Detection Equipment Building
92130	1946-48	Bedrock Igloo, Converted Type II	Special Weapons Magazine
92131	1948-50	Bedrock Igloo	Special Weapons Magazine
92132	1946-48	Bedrock Igloo, Converted Type II	Special Weapons Magazine
92133	1949-50	Bedrock Igloo, Converted A Structure	Special Weapons Magazine
92134	1949-50	Bedrock Igloo, Converted A Structure	Special Weapons Magazine
92135	1948-50	Bedrock Igloo	Underground Storage

BLDG#	BUILT	EARLY USE	CURRENT USE
92136	1946-48	Bedrock Igloo, Converted Type II	Special Weapons Magazine
92137	1948-50	Bedrock Igloo	Special Weapons Magazine
92138	1949-50	Bedrock Igloo, Converted A Structure	Special Weapons Magazine
92139	1946-48	Bedrock Igloo, Converted Type II	Special Weapons Magazine
92140	1948-50	Bedrock Igloo	Special Weapons Magazine
92141	1948-50	Bedrock Igloo	Special Weapons Magazine
92142	1946-48	Bedrock Igloo, Converted Type II	Special Weapons Magazine
92143	1948-50	Bedrock Igloo	Special Weapons Magazine
92144	1946-48	Bedrock Igloo, Converted Type II	Special Weapons Magazine
92145	1949	Bedrock Igloo, Converted A Structure	Special Weapons Magazine
92146	1949-50	Bedrock Igloo, Converted A Structure	Special Weapons Magazine
92147	1946-48	Bedrock Igloo, Converted Type II	Special Weapons Magazine
92148	1948-50	Bedrock Igloo	Special Weapons Magazine
92149	1946-48	Bedrock Igloo, Converted Type II	Special Weapons Magazine
92151	1948-50	Bedrock Igloo	Special Weapons Magazine
92152	1948-50	Bedrock Igloo	Special Weapons Magazine
92153	1949	Standard Storage Igloo, Type (N=9)	Detection Equipment Building
92154	1949	Standard Storage Igloo, Type (N=9)	Detection Equipment Building
92155	1949	Standard Storage Igloo, Type (N=9)	Detection Equipment Building
92156	1949	Standard Storage Igloo, Type (N=9)	Detection Equipment Building
92157	1949	Standard Storage Igloo, Type (N=9)	Detection Equipment Building
92158	1949	Standard Storage Igloo, Type (N=9)	Detection Equipment Building
92159	1949	Standard Storage Igloo, Type (N=9)	Detection Equipment Building
92160	1949	Standard Storage Igloo, Type (N=9)	Detection Equipment Building
92161	1949	Standard Storage Igloo, Type (N=9)	Detection Equipment Building
92162	1949	Standard Storage Igloo, Type (N=1)	Detection Equipment Building
92163	1951	Standard Storage Igloo, Type (N=60)	Special Weapons Magazine
92164	1951	Standard Storage Igloo, Type (N=60)	Special Weapons Magazine
92165	1951	Standard Storage Igloo, Type (N=60)	Special Weapons Magazine
92166	1951	Standard Storage Igloo, Type (N=60)	Special Weapons Magazine
92167	1951	Standard Storage Igloo, Type (N=60)	Special Weapons Magazine
92168	1951	Standard Storage Igloo, Type (N=60)	Special Weapons Magazine
92169	1951	Standard Storage Igloo, Type (N=60)	Special Weapons Magazine
92170	1951	Standard Storage Igloo, Type (N=60)	Special Weapons Magazine
92171	1951	Standard Storage Igloo, Type (N=60)	Special Weapons Magazine
92172	1951	Standard Storage Igloo, Type (N=60)	Special Weapons Magazine
92173	1951	Standard Storage Igloo, Type (N=60)	Special Weapons Magazine
92174	1951	Standard Storage Igloo, Type (N=60)	Special Weapons Magazine

BLDG#	BUILT	EARLY USE	CURRENT USE
92175	1951	Standard Storage Igloo, Type (N=60)	Special Weapons Magazine
92176	1951	Standard Storage Igloo, Type (N=60)	Special Weapons Magazine
92177	1951	Standard Storage Igloo, Type (N=60)	Special Weapons Magazine
92178	1951	Standard Storage Igloo, Type (N=60)	Special Weapons Magazine
92179	1951	Standard Storage Igloo, Type (N=60)	Special Weapons Magazine
92180	1951	Standard Storage Igloo, Type (N=60)	Special Weapons Magazine
92181	1951	Standard Storage Igloo, Type (N=60)	Special Weapons Magazine
92182	1951	Standard Storage Igloo, Type (N=60)	Special Weapons Magazine
92183	1951	Standard Storage Igloo, Type (N=60)	Special Weapons Magazine
92184	1951	Standard Storage Igloo, Type (N=60)	Special Weapons Magazine
92185	1951	Standard Storage Igloo, Type (N=60)	Special Weapons Magazine
92186	1951	Standard Storage Igloo, Type (N=60)	Special Weapons Magazine
92187	1951	Standard Storage Igloo, Type (N=60)	Special Weapons Magazine
92188	1951	Standard Storage Igloo, Type (N=60)	Special Weapons Magazine
92189	1951	Standard Storage Igloo, Type (N=60)	Special Weapons Magazine
92190	1951	Standard Storage Igloo, Type (N=60)	Special Weapons Magazine
92191	1951	Standard Storage Igloo, Type (N=60)	Detection Equipment Building
92192	1951	Standard Storage Igloo, Type (N=60)	Special Weapons Magazine
92193	1951	Standard Storage Igloo, Type (N=60)	Special Weapons Magazine
92194	1951	Standard Storage Igloo, Type (N=60)	Special Weapons Magazine
92195	1951	Standard Storage Igloo, Type (N=60)	Special Weapons Magazine
92196	1951	Standard Storage Igloo, Type (N=60)	Special Weapons Magazine
92197	1951	Standard Storage Igloo, Type (N=60)	Special Weapons Magazine
92198	1951	Standard Storage Igloo, Type (N=60)	Special Weapons Magazine
92199	1951	Standard Storage Igloo, Type (N=60)	Special Weapons Magazine
92200	1951	Standard Storage Igloo, Type (N=60)	Special Weapons Magazine
92201	1951	Standard Storage Igloo, Type (N=60)	Special Weapons Magazine
92202	1951	Standard Storage Igloo, Type (N=60)	Special Weapons Magazine
92203	1951	Standard Storage Igloo, Type (N=60)	Special Weapons Magazine
92204	1951	Standard Storage Igloo, Type (N=60)	Special Weapons Magazine
92205	1951	Standard Storage Igloo, Type (N=60)	Special Weapons Magazine
92206	1951	Standard Storage Igloo, Type (N=60)	Detection Equipment Building
92207	1951	Standard Storage Igloo, Type (N=60)	Detection Equipment Building
92208	1951	Standard Storage Igloo, Type (N=60)	Special Weapons Magazine
92209	1951	Standard Storage Igloo, Type (N=60)	Special Weapons Magazine
92210	1951	Standard Storage Igloo, Type (N=60)	Special Weapons Magazine
92211	1951	Standard Storage Igloo, Type (N=60)	Special Weapons Magazine
92212	1951	Standard Storage Igloo, Type (N=60)	Special Weapons Magazine

BLDG#	BUILT	EARLY USE	CURRENT USE
92213	1951	Standard Storage Igloo, Type (N=60)	Special Weapons Magazine
92214	1951	Standard Storage Igloo, Type (N=60)	Special Weapons Magazine
92215	1951	Standard Storage Igloo, Type (N=60)	Special Weapons Magazine
92216	1951	Standard Storage Igloo, Type (N=60)	Special Weapons Magazine
92217	1951	Standard Storage Igloo, Type (N=60)	Special Weapons Magazine
92218	1951	Standard Storage Igloo, Type (N=60)	Special Weapons Magazine
92219	1951	Standard Storage Igloo, Type (N=60)	Special Weapons Magazine
92220	1951	Standard Storage Igloo, Type (N=60)	Special Weapons Magazine
92221	1951	Standard Storage Igloo, Type (N=60)	Special Weapons Magazine
92222	1951	Standard Storage Igloo, Type (N=60)	Special Weapons Magazine
92300	1953	Cryogenic Equipment Storage Warehouses	Storage General Purpose
92301	1953	Cryogenic Equipment Storage Warehouses	Storage General Purpose
92302	1953	Cryogenic Equipment Storage Warehouses	Storage General Purpose
92303	1953	Cryogenic Equipment Storage Warehouses	Storage General Purpose
92304	1953	Cryogenic Equipment Storage Warehouses	Storage General Purpose

Table 4. West Fort Hood Non-Q Area Buildings Inventoried and Evaluated

BLDG#	BUILT	EARLY USE	CURRENT USE
90000	1963	unknown	Power Plant Building
90001	1951	Transmitter Building	Transmitter Building
90002	1953	Standby Power Building	Sub/Switch Station Building
90017	1955	Automotive Shop	Vehicle Maintenance Shop
90023	1955	Supply & Issue AIO Building	Vehicle Maintenance Shop
90031	1955	Warehouse & Automotive Shop	Storage General Purpose
90036	1951	USAF Dormitory	Company Headquarters Building
90037	1951	USAF Dormitory	Brigade Headquarters Building
90039	1951	USAF Dormitory	Administration General Purpose
90040	1951	USAF Dormitory	Company Headquarters Building
90041	1955	USAF Dormitory	Company Headquarters - Enlisted UPH
90042	1955	Airman's Dormitory	Battalion Headquarters Building
90043	1955	Base Dispensary	Health Clinic
90047	1955	Airfield Lighting Facilities	Navigation Building, Air

BLDG#	BUILT	EARLY USE	CURRENT USE
90049	1951	Navigational Aids/Operations/Control Tower	Flight Control Tower
90053	ca 1935	Whitehead Residence	Storage General Purpose
90054	ca 1935	Okay Store	Storage General Purpose
90057	1963	unknown	Hazardous Material Storage Building
90059	1957	Water Distribution	Water Supply/Treatmt Building, Potable
90060	1957	Sentry Post	Lab/Test Building General Purpose
90061	1957	Water Distribution	Water Supply/Treatmt Building, Potable
90063	1957	Radar Control Building	Lab/Test Building General Purpose
90064	1957	Operations Building ADDC	Lab/Test Building General Purpose
90065	1957	Technical Supply Building	Lab/Test Building General Purpose
90066	1957	Headquarters & Barracks	Electronic Equipment Building
90082	1953	Hydrant Refueling & Bulk Storage Facility	Fuel/Petroleum, Oil & Lubricants
90083	1953	Hydrant Refueling & Bulk Storage Facility	Fuel/Petroleum, Oil & Lubricants
90087	1952	Remote Receiver Building	Administration General Purpose
90088	1951	Navigational Aids Building	SCI Facility
91002	1950	Troop Housing Unit No. 2	Lab/Test Building General Purpose
91003	1950-55	Motor Inspection Office	Dispatch Building
91004	1947	Motor Pool	Vehicle Maintenance Shop
91025	1957	Headquarters Building	Lab/Test Building General Purpose
91042	1949	Site Supply & Post Engineer Warehouse	General Instruction Building
91044	1949	Site Supply & Post Engineer Warehouse	Lab/Test Building General Purpose
91046	1953	Paint Shop	Lab/Test Building General Purpose
91050	1954	Insect and Rodent Control	Storage General Purpose
91052	1957	Gasoline Station	Lab/Test Building General Purpose
91057	1948	Warehouse	Vehicle Maintenance Shop
91058	1948	Warehouse	General Item Repair Shop
91059	1948	Warehouse	Storage General Purpose
91061	1948	Auxiliary Power Station	Storage General Purpose
91065	1952	Auto Hobby Shop	Lab/Test Building General Purpose
91071	1950	Enlisted Men's Service Club	Exchange Service Outlet
91073	1954	Gymnasium	Physical Fitness Center
91074	1956	Chapel	Chapel
91075	1954	Bath House/Shower Facility	Separate Toilet/Shower Building
91076	1954	Chlorinator Building	Outdoor Pool Service Building

1.3 Regulations

Fort Hood, as part of a Federal agency, is required to comply with many Federal and State legislative actions, as well as DoD and Army instructions, directives, and regulations. Many of these come into play when Federal undertakings are involved. Undertaking means "a project, activity, or program funded in whole or in part under the direct or indirect jurisdiction of a Federal agency, including those carried out by or on behalf of the agency; those carried out with Federal financial assistance; those requiring a Federal permit, license, or approval; and those subject to State or local regulation administered pursuant to a delegation or approval by a Federal agency. Most often, undertaking refers to the use of Federal funds for a project, activity, or program involving a Federal agency."[4]

1.4 Scope

1.4.1 Concurrent Studies

Concurrent with this effort were two separate studies conducted on built environment resources at Fort Hood. Focusing on family housing complexes and the Defense Atomic Support Agency's Killeen Base weapon storage area, they are more limited in scope than this effort. As a result, they provide more in-depth information about their respective subjects than was possible to provide in this much larger inventory. In 2003, McCarthy and McCullough produced *Fort Hood Military Family Housing of the Cold War Era: McNair Village & Chafee Village*.[5] In this report, the two housing areas were evaluated for eligibility to the NRHP by analysis of physical condition and historical significance. Included in this report is an excellent overview of the Cold War and the United States Army during that period. Due to the existence of this historic context, the authors of the present installation-wide inventory and evaluation study did not include a Cold War/Army overview. In May 2005, Weitze produced *Cold War Properties at West Fort Hood, Texas: Research Overview and Preliminary Identification*. Chronicling the history and facility development of

[4] "The Secretary of the Interior's Standards and Guidelines for Federal Agency Historic Preservation Programs Pursuant to the National Historic Preservation Act," (http://www2.cr.nps.gov/pad/sec110.htm).

[5] Sheila McCarthy and Roy McCullough, *Fort Hood Military Family Housing of the Cold War Era, McNair Village and Chaffee Village*, (Omaha, NE; Midwest Regional Office, National Park Service, Department of the Interior, January 2003).

the Killeen Base and Gray AFB, Weitze's report provides an in-depth look at the role these installations played in the country's atomic weapons program. In addition to an informative account of the weapons program as it related to the storage facilities at Killeen Base, a detailed history is provided for both Gray AFB and Killeen Base (now combined as West Fort Hood). An in-depth history of West Fort Hood, therefore, is not included in this report.

1.4.2 Relevant Advisory Council on Historic Preservation Programmatic Agreements and Program Comments

Beginning in the late 1980s and picking up steam in the early years of this decade, the Department of Defense (DoD) sought more cost effective means to inventory and evaluate potentially historic buildings on military installations. Recognizing that many building types are repeated in great numbers across many installations, the Department of Defense, along with the Advisory Council on Historic Preservation (ACHP) and the National Conference of State Historic Preservation Officers (NCSHPO) created a series of agreements that allow the military to meet its NHPA obligations for entire classes of buildings at once in a nationwide manner. These agreements are in the form of Programmatic Memoranda of Agreement (PA) and Program Comments, and offer an alternative to the case-by-case approach to inventory and evaluation. At Fort Hood, one PA and three Program Comments affect hundreds of buildings and selected landscapes.

1.4.2.1 *DoD World War II Temporary Building Programmatic Memorandum of Agreement*

In a Congressional report on the Military Construction Authorization Bill for 1983, the DoD was directed to demolish World War II (1939-1946) temporary buildings.[6] A 1986 PA between the DoD, the ACHP, and the NCSHPO outlines procedures for fulfilling NHPA Section 106 requirements for mitigating the adverse impact of this demolition. Because of this mitigation (documentation of selected buildings and creation of a historic context), all remaining WWII temporary buildings have met NHPA requirements and were not included in this in-

[6] "Programmatic Agreement between the Department of Defense, the Advisory Council on Historic Preservation, and the National Conference of State Historic Preservation Officers," https://www.denix.osd.mil/denix/Public/Library/NCR/Documents/PMOA_WWII_Temps_1986-1991_amend.pdf.

ventory and evaluation.[7] World War II landscapes, however, are not covered by the PA and are addressed in this report.

1.4.2.2 Program Comment for Capehart and Wherry Era Army Family Housing and Associated Structures and Landscape Features (1949-1962)

On May 31, 2002, the ACHP approved the *Program Comment for Capehart and Wherry Era Army Family Housing and Associated Structures and Landscape Features (1949-1962)*.[8] Through this agreement, the Army's entire inventory of Capehart-Wherry housing is eligible to the NRHP for the purposes of Section 106 compliance, and a historic context with accompanying design guidelines has been produced for mitigation purposes.[9] In effect, this removes the need to inventory and evaluate Capehart-Wherry housing at Fort Hood, as the buildings are eligible regardless of level of integrity. Additionally, the landscapes containing these houses are also considered eligible. The Program Comment covers all maintenance and repair actions; rehabilitation; layaway and mothballing; renovation; demolition; demolition and replacement; and transfer, sale, or lease out of Federal control for Capehart-Wherry housing, associated structures, and landscape features, as well as all other family housing constructed between 1949 and 1962. At Fort Hood, Capehart-Wherry housing includes McNair Village, Walker Village, Wainwright Heights, Patton Park, Chaffee Village, Pershing Park, and Montague Village at West Fort Hood. Because of this Program Comment, these buildings were not included in this effort. We were, however, tasked to inventory all landscapes at Fort Hood, so they are included in this report.

---

[7] John S. Garner, *World War II Temporary Military Buildings: A Brief History of the Architecture and Planning of Cantonments and Training Stations in the United States*, (Champaign, IL: U.S. Army Corps of Engineers, Construction Engineering Research Laboratories), 1993.

[8] Advisory Council on Historic Preservation, *Program Comment for Capehart and Wherry Era Army Family Housing and Associated Structures and Landscape Features (1949-1962),* Washington, DC: Federal Register. Vol. 67, No. 110, June 7, 2002, 39332-39335.

[9] Kathryn M. Kuranda et al., *Housing an Army: The Wherry and Capehart Era Solutions to the Postwar Family Housing Shortage (1949-1962)*, (Aberdeen Proving Ground, MD; U.S. Army Environmental Center, 2003); R. Christopher Goodwin, and Associates, *Neighborhood Design Guidelines for Army Wherry and Capehart Era Family Housing*, (Aberdeen Proving Ground, MD; U.S. Army Environmental Center. 2003).

1.4.2.3 Program Comment for Cold War Era Unaccompanied Personnel Housing (1946-1974)

On August 18, 2006, the *Program Comment for Cold War Era Unaccompanied Personnel Housing (1946-1974)* was signed. This Program Comment is a DoD-wide agreement that declares all buildings and structures designed and built as unaccompanied personnel housing (UPH) between 1946 and 1974 to be eligible to the NRHP.[10] For the Army, this applies to all buildings with a current or original category code beginning with 72 and includes barracks, transient lodging, dining facilities, laundry facilities, garages and carports, hutments, tent pads, and bachelor officer quarters. A historic context for the Army UPH has been completed.[11] For these buildings at Fort Hood, no evaluation judgment is necessary, as they are considered eligible to the NRHP for purposes of Section 106 compliance regardless of level of integrity. As we had already inventoried these buildings when the Program Comment was signed, they are included in this report, as is an inventory and evaluation of their landscapes, which are not covered under this agreement. The Program Comment covers all ongoing operations, maintenance and repair; rehabilitation, renovation, mothballing, cessation of maintenance, new construction, demolition, deconstruction and salvage, remediation activities, and transfer, sale, lease, and closure of such facilities constructed between 1946 and 1974.

1.4.2.4 Program Comment for World War II and Cold War Era (1939-1974) Ammunition Storage Facilities

The *Program Comment for World War II and Cold War Era (1939-1974) Ammunition Storage Facilities* became effective on August 18, 2006. [12] This Program Comment applies to all DoD-wide buildings and structures designed and built between 1939 and 1974 as ammunition storage facilities, and determines them all to be eligible to the NRHP. For the Army, this applies to all buildings with a current or original category code beginning with 42 and includes ammunition bunkers, maga-

---

[10] Advisory Council on Historic Preservation, *Program Comment for Cold War Era Unaccompanied Personnel Housing (1946-1974),* (2006), *https://www.denix.osd.mil/denix/Public/Library/NCR/program_alternatives.html?fm-culres*

[11] Kathryn M. Kuranda et al., *Unaccompanied Personnel Housing (UPH) During the Cold War (1946-1989),* (Aberdeen Proving Ground, MD: U.S. Army Environmental Center, 2003).

[12] Advisory Council on Historic Preservation, *Program Comment for World War II and Cold War Era (1939-1974) Ammunition Storage Facilities,* (2006), https://www.denix.osd.mil/denix/Public/Library/NCR/program_alternatives.html?fm-culres

zines, and igloo storage. An existing historic context for these buildings will be expanded to meet mitigation requirements.[13] At Fort Hood, no evaluation judgment is necessary for these buildings, as they are considered eligible to the NRHP for purposes of Section 106 compliance regardless of level of integrity. As we had already inventoried these buildings when the Program Comment was signed, they are included in this report, as is an inventory and evaluation of their landscapes, which are not covered under this agreement. The Program Comment covers all ongoing operations, maintenance and repair, rehabilitation, renovation, mothballing, cessation of maintenance, new construction, demolition, deconstruction and salvage, remediation activities, and transfer, sale, lease, and closure of such facilities constructed between 1939 and 1974.

1.5 Approach

This report has several parts. First is the methodology used for the report, second is the historic context for Fort Hood, third is a landscape inventory, fourth is a discussion of the relevant architectural styles and trends at Fort Hood, the fifth contains the evaluation results, and the sixth contains the building inventory forms. Recommendations for eligibility to the NRHP are in this final report.

Per Section 110 of the NHPA, Fort Hood needs to evaluate all of its potentially historic properties 50 years of age and older. Compliance with this legislation requires the completion of a comprehensive survey-level building and landscape inventory for the Main Post, North Fort Hood, and West Fort Hood. Under a series of Military Interdepartmental Purchase Requests, the Corps of Engineers' Engineer Research and Development Center - Construction Engineering Research Laboratory (ERDC-CERL) was retained to complete this inventory and evaluation of the Fort Hood properties.

A research team comprised of architects, geographers, and landscape architects was assembled for the project. Julie L. Webster served as lead architect. Ms. Webster inventoried the buildings, prepared the building inventory forms, and wrote all of the architecture chapter and part of the evaluation chapter. Megan Weaver Tooker served as lead landscape architect, conducted the landscape fieldwork (along with

[13] Joseph Murphey et al., *Army Ammunition and Explosives Storage in the United States, 1775-1945*, (Fort Worth: U.S. Army Corps of Engineers Fort Worth District, 2000).

Suzanne Keith Loechl), and wrote the landscape chapters and part of the evaluation chapter. Dr. Dawn A. Morrison researched and co-wrote the historic context with Ms. Tooker. Dr. Susan Enscore served as project manager, conducted historical fieldwork and compiled the report. Student interns Rachel Lannan, Vincent Spencer, Timothy Scovic, and Sang Pak provided research support. Martin Stupich took the building photographs on the inventory forms.

Methodological guidance for this study was based on the *National Register Bulletin #15: How to Apply the National Register Criteria for Evaluation* (1991), *National Register Bulletin #16A: How to Complete the National Register Registration Form* (1997), and the Army's *Guidelines for Documenting and Evaluating Historic Military Landscapes*.[14] These guidelines use an integrated archival and field research approach for evaluating historic districts, buildings, and sites for the NRHP.

For a property to qualify for the NRHP, it must have important historical associations and retain its physical identity. To determine whether those basic requirements are met, documentary research and physical examination of the property is necessary.[15] The evaluation of Fort Hood properties described in this report is organized to reflect the qualification process, i.e.,:

- Categorize the property (as district, site, building, structure, or object) and determine which historic themes and contexts apply to the property.
- Determine if the property is significant under the National Register Criteria for Evaluation or whether the property is eligible under any applicable National Register Criteria Considerations.
- Determine whether the property retains enough physical integrity to convey its historical significance.

[14] National Park Service, *National Register Bulletin #15: How to Apply the National Register Criteria for Evaluation,* U.S. Department of the Interior, National Park Service, Interagency Resources Division, (1991); National Park Service. *National Register Bulletin #16A: How to Complete the National Register Registration Form*. U.S. Department of the Interior, National Park Service, Interagency Resources Division, (1997); Suzanne Loechl et al., *Guidelines for Documenting and Evaluating Historic Military Landscapes*. Champaign, IL: Construction Engineering Research Laboratory, 1996 [draft].

[15] *National Register Bulletin #15*, 3.

1.5.1 Establishing Property Types

ERDC-CERL was tasked to inventory and evaluate Fort Hood properties categorized as *buildings* and *landscapes*, the resources most likely to be affected by contemporary installation undertakings.[16] It is generally understood that buildings are designed to shelter human activity; and landscapes are made up of surface features (e.g., terrain and built environment) and the spatial relationship among those features. In this context, military buildings and landscapes are characterized by the uniformity and functionality necessary to carry out military missions expeditiously.

1.5.1.1 Buildings

The building assessment covers those buildings at Main Post (including Belton Lake Outdoor Recreation Area), North Fort Hood, and West Fort Hood that predate 1964. Exceptions include (1) military buildings categorized as World War II temporary mobilization construction for which eligibility has already been determined and documented by a nationwide programmatic agreement targeting these property types; (2) Capehart-Wherry era military family housing for which an evaluation has already been completed; and (3) nonmilitary buildings that predate Camp/Fort Hood. A comparison of original building use and composition against current-day use and conditions form the basis for building assessments. The level of investigation is equivalent to Historic American Buildings Survey (HABS) Level IV, the accepted standard for baseline inventories. Tabular field forms developed for each building surveyed appear in the Appendix (page 362).

1.5.1.2 Landscapes

Due to the overall size of Fort Hood, the landscape assessment covered broad patterns of land use through the end of the Cold War period (1989). As landscapes evolved over time, the landscape inventory was conducted to align with the historic context and both continue to that date. The building inventory includes only those built prior to 1964. To correctly evaluate the landscape as a whole, it is essential to know the significance and integrity of buildings in the landscape. Therefore, the landscapes inventoried for this project that contain post-1963 buildings cannot be considered fully evaluated, and the findings provided here for those landscapes are

[16] Individual examination of property types classified as structures, objects, or discrete sites was outside the project scope of work.

to be considered preliminary. The landscape was divided into historic districts, with significant concentrations, linkages, or continuity of sites or features. At this scale, the landscape districts may contain noncontributing components, such as ineligible buildings or structures, but the overall landscape still conveys the historic land use patterns of Fort Hood. Additionally, the continued land use has fit within the existing historic form, order, and features. Small scale features such as flagpoles, monuments, and gardens were not evaluated on an individual basis, but rather as contributing elements of a comprehensive historic land use pattern or district layout. The methodology follows guidance established by the National Park Service for the inventory and evaluation of cultural landscapes utilizing an integrated archival and field research approach.

1.5.1.3 Districts

Many Fort Hood resources (buildings and landscapes) fall into discrete historic districts that bear the requisite concentrations, linkages, and/or continuity of features to unite them. This is logical given that many military facilities were generally conceived and constructed as distinct complexes. The proposed Vehicular Training and Transport district on the Main Post is typical in this regard, with its landscape dominated by a repeating series of similar or identical barracks and motor pool compounds that represent the principles advocated in 1950s and 1960s construction policy. The repeating barracks and motor pool complexes are accompanied by an assortment of diverse support facilities located throughout this area. The functional relationships evident among the major building types and between these types and their support facilities indicate that the area was planned as a system. Likewise, the same relationships exist between resources in other districts at Fort Hood, such as the Killeen Base "Q" Area.

1.5.2 Archival Research

The goal of the archival tasks is to gather information for developing a historic context based on the installation's missions, primary activities, historical associations, and periods of significance, that will guide the determination of the most important areas and landscape characteristics within the installation. Archival research involves several tasks. The first task is the initial literature review. The second is to identify and locate primary research materials.

1.5.2.1 Literature review.

The research team used secondary literature to determine the general history of Fort Hood and the region, its natural history, and its geographical position. This

involved reading published material on the history of Fort Hood. Items looked at and reviewed included the Integrated Cultural Resources Management Plan (ICRMP), the Odie and Laura Faulk book *Fort Hood: The First Fifty Years* (1990), and newspaper articles concerning Fort Hood found at the post and area libraries.

1.5.2.2 Research material.

The research team then located primary research materials and additional secondary materials to establish a strategy to best utilize these resources. A member of the research team conducted a visit to the National Archives at College Park, Maryland on August 20 – 31, 2002 and December 4 – 6, 2005 to locate additional maps and historic photographs.

This report is based primarily on the collections found at Fort Hood, including the review of cultural resource studies, historical accounts, real property data, and visual information (photographs, technical illustrations, architectural drawings, maps, charts, etc.). Most of these resources were provided by the Cultural Resources Office, Community Relations/III Corps History Office, the Department of Public Works (DPW), the 4th ID Museum, and the 1st Cavalry Division Museum.

1.5.3 Site Visits

The research team conducted site visits to familiarize themselves with the Fort Hood buildings and landscapes under study, to identify and survey these properties, and to determine their character-defining features. The site visits occurred on February 24, 2002 to March 8, 2002, March 7, 2004 to March 19, 2004, November 8, 2004 to November 12, 2004, and June 20, 2005 to June 24, 2005. During the site visits, two researchers conducted site reconnaissance on foot using photography, sketches, and note-taking to help determine if the buildings were to be recommended eligible for the National Register, while two researchers conducted similar site reconnaissance in relation to the landscapes. Meanwhile, two researchers collected archival information such as real property cards, engineering drawings, and historic photographs from the installation as related to the properties original development and ongoing operations and maintenance.

1.5.4 Analysis

After the initial research was complete, the team analyzed the gathered information to make connections between the history of DoD, the Army, the installation, the evolution of landscapes, and relevant building construction designs and campaigns. The researchers outlined the historical context for the installation, identified

changes in military mission over time, identified important chronological periods, established a geographical context, and identified historical themes.

Historical contexts establish the perspective from which significance determinations are made. They unify the patterns, themes, trends, or cultural affiliations in history by which an event, property, or site is understood. A property may be significant within multiple historical contexts. To evaluate a property within its historical contexts, it is important to determine:[17]

- which aspects of history the property represents based on themes, geographical limits, and era,
- whether those aspects of history are significant, and
- whether the property is important in illustrating the historic contexts.

Archival and field information was integrated throughout the course of the research. Using the archival sources, the research team discovered relevant historical information. As the field research identified specific building type characteristics or relationships, the research team refined their questions and looked further in the archival records for answers. A discussion of the architectural characteristics of standardized Army building plans utilized at Fort Hood was developed for the project. The integration of archival and field methods necessitated an integration of visual and written sources in the final report.

This inventory relied on historic maps and original architectural drawings to provide evidence of the historical characteristics of the buildings and landscapes surveyed. For determining integrity of the properties, the researchers relied heavily on real property cards and architectural plans for the original conditions, as few historic photographs were found for the buildings in question. The researchers relied on the information from the real property office and the architectural plans to determine size, areas, and costs of the buildings. Little written history was found on the development of Fort Hood or on the construction and development of the buildings and landscapes spread throughout the Fort Hood area.

The actual building inventory is a series of forms, containing building location, photographs, description of the building; history; architectural and use integrity; the determination of eligibility; general condition of property, additions/alterations, bibliography, and building plans when available.

[17] *National Register Bulletin #15:* 7.

The landscape inventory is divided into three sections for each of the cantonments: Main Post, North Fort Hood, and West Fort Hood. A series of time overlay maps begin each section followed by a general discussion of the cantonment. Landscape characteristics are identified, including the layout and land use of the cantonments, their response to the natural environment, military influences, boundaries, and circulation networks including roads, railroads, and airfields; buildings and clusters of buildings; and vegetation.

1.5.5 National Register of Historic Places Criteria for Evaluation

In order to qualify for National Register eligibility a district or its component resources must meet one or more National Register Criteria for Evaluation in association with an important historic context.[18] The Criteria for Evaluation are types of significance warranting eligibility for the National Register. Criteria A and B are *associative* criteria; Criterion C is based on *design or construction*, and Criterion D is related to the *information* a property may provide about the historical period or context. The definitions are as follows:[19]

- **Criterion A: Event** — properties associated with events that have made a significant contribution to the broad patterns of our history.
- **Criterion B: Person** — properties associated with the lives of persons significant in our past.
- **Criterion C: Design/Construction** — properties that embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction.

[18] Properties less than 50 years old are generally excluded from listing on the National Register due to the lack of historical perspective necessary to accurately assess significance. However, a set of exceptions, called Criteria Considerations, modify the various National Register Criteria for Evaluation in narrowly defined circumstances. Properties younger than 50 years old may be eligible for listing on the National Register only if it is determined that they have exceptional significance (Criteria Consideration G). According to Department of the Army Pamphlet 200-4, Cold War era properties may have significance at the national level in association with military themes directly tied to the Cold War. Property types considered most likely to have exceptional importance under a nationwide Cold War military theme were those associated with nuclear weapons, research and development laboratories, testing and proving grounds, and manufacturing, storage, and maintenance sites. Of the Fort Hood resources examined under this study, the former Killeen Base is the only property found to be exceptionally important under one or more of these themes. Nonetheless, since the former Killeen Base has already reached 50 years of age, it was evaluated using the standard evaluation criteria.

[19] *National Register Bulletin #15*, 11-24.

- **Criterion D: Information Potential** — properties that have yielded, or may be likely to yield, information important in prehistory or history.

1.5.6 National Register of Historic Places Levels of Historic Significance

The NRHP also distinguishes between differing spatial levels of significance. Properties can have historical significance at the local, state, or national level. Non-military significance of Fort Hood properties was outside the scope of this study. Nonetheless, resource-specific investigation into local and state significance is recommended for properties predating the military installation should they be subject to undertakings. Properties known to predate Fort Hood include the Hiram B. Reynolds House and an unnamed frame house (now Building 4166). [20]

1.5.6.1 Local and State Significance for Military era properties

There is no indication in the available historical record that Fort Hood military buildings and landscapes have any significance in a local or state context. Neither the installation as a whole nor its component military properties appear to represent any significant aspects of local or state history. Design and construction documents show that virtually all buildings and designed landscape elements evaluated were of standard types commissioned by the Army centrally from Washington, DC, and constructed on a nationwide scale. The involvement of local architects, landscape architects, engineers, fabricators, and contractors to address site-specific conditions was standard practice at the time of construction and did not produce any variations or innovations of significance within a local or statewide historical context. Detailed looks into local and state level significance were outside the scope of this study.

[20] The Hiram B. Reynolds house was built in 1915 and is a fine example of an early 20th-century home with all the modern amenities of the time—indoor plumbing and carbide lighting. Mr. Reynolds was a businessman who participated in the agricultural and rural development of Central Texas in his early years. By the time the house was built for him and his family, he had retired from community service. Mr. Reynolds died in 1921. Not long after the family moved out of the house, the property was acquired by the government for Camp Hood. The house was initially used as general field officer's quarters and subsequently served as home to several of the installation Commanding Generals. The house is located adjacent to the Warrior Way Commissary parking lot next to the Walker Village housing community. At the time of this study, it provided office space for the Red Cross. The structure retains many of its original features and is considered representative of homes of the period and family means (Cheryl L. Huckerby, *Fort Hood Integrated Cultural Resource Management Plan: Fiscal Years 2002 – 2007*, Fort Hood, Texas: Environmental Division, Directorate of Public Works, 2001, 2-25, 4-62).

1.5.6.2 Nationally significant Fort Hood military themes

Some of the buildings and landscapes evaluated represent significant aspects of Fort Hood history under unifying military themes and contexts. These themes and contexts are based on historical association, and they have been physically expressed in the built environment. The themes are also related to certain dates that define the period of significance during which they played a role in the development of Fort Hood. Since Fort Hood is a military installation, the themes relate to military history, to the missions, traditions, and requirements that have played an important role in shaping the installation over its existence. Properties directly related to these themes and contexts are potentially eligible to the NRHP if they retain integrity. The themes and contexts presented below were determined to be significant in illustrating the history of Fort Hood.

1.5.6.2.1 Vehicular Training and Transport (1942-1989)

Although their missions physically shape most military installations, this is particularly true for Fort Hood. At the outbreak of World War II, it was quickly apparent the Army needed to develop and train an effective counter to the German blitzkrieg. Camp Hood was established as a place for learning how to destroy tanks and for training soldiers for anti-tank operations. Fort Hood was home to both the 1st and 2nd Armored Divisions (AD) during the Cold War period. During the Korean War, some units of the 2nd AD were deployed, but most remained at Fort Hood training mobilized reservists and replacements. This training mission continued through the Vietnam War when the armored divisions and mechanized infantry units from Fort Hood provided the large-scale mobility and firepower required for European readiness. During the Cold War, there was an increased need for better and faster combat vehicles and weapons. Fort Hood led the testing and associated training of new vehicles for the Army, which often led to the development of new troop formations and new maneuvering strategies associated with these vehicles.

The Main Post's layout emphasized this mission in its very shape as the broad linear avenues adjacent to the motor pools provided rapid unobstructed access to the vehicle training lands north of the cantonment. A major north-south avenue (Hood Road) provided access to the main entrance and to the railhead on the southern edge of the post. In conjunction, these transportation systems facilitated the rapid deployment of both troops and vehicles for exercises and in times of crisis. The most striking feature of the installation design was the very long, broad, parallel avenues on the north part of Camp Hood. Comprising the lion's share of the installation grounds, these roads resembled nothing so much as the interstate highways they preceded. They also presaged the future highway system's reason for existence: the

rapid movement of military troops and vehicles. The emphasis on transportation utility and expediency is reflected in the land uses in this area, which have remained constant from the original design to the present day. In order to most efficiently utilize training time, the acres of temporary World War II barracks for enlisted Tank Destroyer and Unit trainees were located in a long narrow band just to the south of their associated unit motor pools. The motor pools themselves were located just to the south of the training lands. As a result, the landscape became a case study in the exercise of rapid and unconstrained mobility. It was all about vehicles – a stationary place that existed to facilitate movement. Between the motor pools and the barracks was a linear open space bounded by two of the long avenues used for parking vehicles and as a place for mustering. The avenues also served as a ceremonial site for vehicular reviews. The flow of men and material worked so well that the pattern of roads and railroads was never altered. Even when the troop population was practically doubled in 1954 when Fort Hood became the only two-division post, the new arrivals were accommodated by creating a mirror image cantonment on the west side of Hood Road. This sort of expansion had been envisioned by the cantonment's head of design and construction, Major Gerald R. Tyler, who foresaw the possibility of multiple divisions and created an expandable linear arrangement.

1.5.6.2.2 Army aviation: fixed and rotary wing (1943-1979)

Although an airfield was constructed at the Main Post during World War II, the importance of aviation at Fort Hood grew rapidly after the war. Military planners acknowledged the need for moving entire armies by air. During the early Cold War period, the Army increased its aviation capabilities by improving the helicopter and using it as a means to moving troops across battlefields. The shake out of responsibilities between the Army and the newly created Air Force in the late 1940s resulted in an Army mission focused less on fixed-wing and more on rotary wing aircraft. The Army's use of helicopters during the 1950s grew to include reconnaissance, medical evacuation, and fire support. At the Main Post, Fort Hood, 1958 appropriations allowed the construction of helicopter facilities including: two runways, two runup areas, taxiways, parking, aprons, washing areas, fuel storage and dispensing, hanger, and shops. The airfield was expanded again in the 1970s to support the establishment of the 6th Cavalry Brigade, the first air combat cavalry brigade.

1.5.6.2.3 Ceremonial activities and post headquarters (1942-1989)

In keeping with other army post layouts of the era, the headquarters area at Camp Hood was set apart by its design with a semi-circular layout that contrasted with

the vast right-angled regularity typical of the fort as a whole. Throughout the life of the installation, this same piece of land has contained the headquarters facilities and the associated parade ground. The continuous use for top-level administrative activities and traditional military ceremonies provides a link not only with the history of Camp/Fort Hood, but to the larger history of the Army as well. The location remains at the top of the hierarchy, with the parade ground and current III Corps Headquarters building placed prominently along Hood Road and visible from the main installation gate. Due to the shift to a more mechanized military, Sadowski Field was one of the first designed to accommodate the reviewing of troops and their vehicles and aircraft. No longer useful were the centrally located parade grounds lined with barracks and officers housing. At Fort Hood, the size and orientation of Sadowski Field allowed for larger ceremonial activities and expansion onto the adjacent roadways.

1.5.6.2.4 Special weapons storage program: Killeen Base (1948-1969)

Killeen Base, now part of West Fort Hood, was the second National Storage Site planned and the first one operational for the storage of atomic weapons, and later thermonuclear weapons. The development of technologically new weapons required an equally advance system for transporting and storing them. Killeen Base and other nuclear weapon storage sites, were developed to meet this need. These installations contained storage, maintenance, and administrative facilities as well as everything required by the employees, including housing, retail, and recreation needs. Killeen Base was run by the Atomic Energy Commission and Sandia Corporation, and received support from both the Army and the Air Force. The site, designed by Black and Veatch of Kansas City, is a stellar example of the evolution, rapid design, and engineering required for the storage of nuclear warheads during the late 40s and early 50s. Killeen is one of only two underground facilities used for this purpose. Activity at the Killen Base facility declined with further advances in the design of nuclear weapons that reduced their maintenance and surveillance requirements. Killeen Base formally closed in 1969 and the property was transferred to the Army.

1.5.7 Seven Aspects of Integrity

For Fort Hood properties to qualify for National Register eligibility, not only must they meet one or more Criteria for Evaluation, but they must also retain integrity of

the features that convey their significance. Districts and individual resources are considered to retain integrity if they possess a majority of the following seven Aspects of Integrity:[21]

Location — the place where the historic property was constructed or the historic event occurred.
Design — the combination of elements that create the form, plan, space, structure, and style of a property.
Setting — the physical environment of a historic property.
Materials — the physical elements that were combined or deposited during a particular period of time and in a particular pattern or configuration to form a historic property.
Workmanship — the physical evidence of the crafts of a particular culture or people during any given period in history.
Feeling — a property's expression of the aesthetic or historic sense of a particular period of time.
Association — the direct link between an important historic event or person and a historic property.

1.5.8 Evaluation

The final step in the process involves creating recommendations of eligibility for the properties under study. First, it was determined which of the 1942-1963 buildings and the 1942-1989 landscapes were significantly related to the important historic themes of Fort Hood. The ones significantly related were then evaluated for their level of integrity (exteriors only for buildings), or how well they physically conveyed their significance. Properties that had significance and sufficient integrity were recommended to be eligible to the NRHP. Properties that were determined eligible under the existing Program Comments are also listed. Eligible/recommended eligible buildings area listed in tables and the evaluation results are also provided on the individual building forms. Separate maps are provided to show the Program Comment eligible landscapes and the recommended eligible landscapes.

1.5.9 Acknowledgements

Individuals that greatly assisted with the accomplishment of this report outside of ERDC-CERL are Cheryl Huckerby, former Fort Hood Cultural Resource Manager; Karl Kleinbach, Fort Hood Cultural Resource Manager; Randy Slagle, Michael Ry-

[21] *National Register Bulletin #15,* 7, 44-45.

nard, and Brenda Henderson of the Fort Hood Directorate of Public Works; Dr. Charlie Moore, Crystal Rohr, and Fred Chavez of the Fort Hood Community Relations/III Corps History Office; and Celia M. Stratton of the 4th ID Museum. Also extremely helpful were the photograph archivists in the Still Pictures room at the National Archives in College Park, Maryland.

2 Mixing Up A Storm: Texas Heat and a Cold War, 1942-1989

2.1 In the Beginning

"Fort Hood began life in the middle of a field, in a town that wasn't on a map."[22]

In September 1941, the central area of Texas spanning Coryell and Bell Counties, now home to Fort Hood, was sparsely populated and home to ranchers, farmers, cattle, and cotton. Farmsteads were numerous, and at an average of less than 100 acres per farm, tended to be small, and subsided year to year on revolving credit.[23] The largest settlement community in the area was Temple, in Bell County, with a 1940 population of 15,344 people, and the total 1940 population of neighboring Coryell County was 20,226 people.[24] The population, and thus the tax base, of the counties were so low in the first part of the 20th century that paved roads were a luxury seldom afforded in the area, and outside of the towns, likewise was true for utilities such as electricity, telephone lines and running water.[25] The Great Depression that began in 1929 hit the area hard, and like in so many areas of the country, forced its residents into subsistence living. By September 1941, the residents of Bell and Coryell Counties were primarily concerned with how to facilitate their day-to-day existence.

By September 1942, this picture of place was obsolete. The war in Europe, the attack on Pearl Harbor, and a series of conferences in 1941 in Washington DC, all combined to change the fate of Central Texas, and put more than just one town on

[22] Cliff Sees, "Tank Destroyer Tactical and Firing Center soldier shares stories," *The Fort Hood Sentinel, Special Supplement, Fort Hood 50th Anniversary* (July 2, 1992), 19.

[23] Odie B. Faulk, and Laura E. Faulk, *Fort Hood: The First Fifty Years*, (Temple, TX: The Frank W. Mayborn Foundation, 1990), 11.

[24] Faulk, *Fort Hood: The First Fifty Years*, 10.

[25] Ibid., 10-11.

the proverbial map. The facilitator of this change was the establishment of Camp Hood as the Tank Destroyer Tactical and Firing Center in Coryell and Bell Counties. Today, Fort Hood covers 340 square miles of land (217,337 acres), and is considered the Army's premier installation for the training and deployment of heavy forces (Figure 4). It is the only United States military base capable of accommodating two divisions, currently the 1st Cavalry Division and the 4th Infantry Division, as well as numerous additional military units and serving as a training facility for National Guard and Reserve units.[26] The transition from a World War II training camp that began in the "middle of a field," to the free world's largest armored training installation so well known as to be the topic of a 2002 David Letterman "Top 10 List," was largely attributable to the Cold War. [27]

Figure 4. Aerial image of Fort Hood Main Post in 2003 (Fort Hood Cultural Resources Office).

While Camp Hood evolved out of the military needs of World War II, Fort Hood as a permanent installation resulted from the perceived military needs of the Cold War. In turn, the evolution of Fort Hood directly mirrored broader trends evident in the

[26] Additional military units residing at Fort Hood include: Headquarters Command III Corps, Fort Hood Garrison, 13th Corps Support Command, Operational Test Command (USAOTC), NCO Academy, 720th Military Police Battalion, 13th Finance Group, 21st CAV Brigade, 89th Military Police Brigade, 504th Military Intelligence Brigade, and the 4th Battalion 5th Air Defense Artillery.

[27] On April 25, 2002, *The Late Show with David Letterman's* "Top 10 List" was filmed at Fort Hood and titled: "Top 10 Responses To 'How Big Is Your Army Base?'"

history of the United States Army since World War II, especially those of the Cold War. That is, larger military trends had a direct impact on the built environment of Fort Hood, whether in improving/modifying training ranges to accommodate new combat techniques/equipment/methods, or housing troop build-ups, or accommodating new units as part of a larger military reorganization. Essentially, if the Army was involved, so too was Fort Hood and more than likely that activity was reflected in Fort Hood's built environment. To an extent, the Cold War can be mapped out in Fort Hood's landscape just as easily as it can be spelled out in a history book.

2.2 The Tank Destroyer Concept

Before the attack on Pearl Harbor and before America's "official" entry into World War II, the powers that be in Washington, DC, were already analyzing and preparing military strategy, assessing what America's needs—in terms of troops, infrastructure and weaponry—would be should America enter the war, and planning a massive defense build-up. When the German *Blitzkrieg* devastated Europe in 1940, Congress moved to not only increase the size of America's military via the Selective Service Act of 1940, but also provided and improved military infrastructure and methods by tripling the military's budget for the coming fiscal year to $3 billion.[28] In the 1941 fiscal year alone, the increased budget facilitated construction of 20 new cantonments for housing and training the ever-increasing military, growing from 227,000 soldiers in 1939, to 1.2 million in June 1940, to 1.64 million by December 7, 1941.[29]

As crucial as the build up of troop strength and military infrastructure were to the coming war effort, perhaps more crucial was the pre-war military analyses and strategizing that occurred within the War Department. These efforts laid the foundation for how to use America's troops and equipment to the utmost effectiveness against the Axis powers. Likewise, and particularly in the case of Camp Hood, these analyses and strategizing efforts significantly impacted the construction and design of specialized training facilities. Camp Hood was not one of the original 20 cantonments planned for fiscal year 1941, but rather specifically was established as a result of a series of conferences and strategizing efforts conducted by the War Department in 1941. The main purpose of the conference series was to explore, dis-

[28] Faulk, *Fort Hood: The First Fifty Years,* 15-16.

[29] Garner, *World War II Temporary Military Buildings*, 6.

cuss, and develop a strategy for defeating an army of tanks, and specifically the German Panzer Divisions.

The first conference, held on April 15, 1941 in Washington, DC, was sponsored by the G-3 Operations and Training Division of the War Department General Staff, and attended by all branches of the Army. The main conclusion of this conference was that an offensive antitank capability needed to be developed (i.e., the best defense was a good offense), although there was disagreement over how the antitank units should be organized and who should command them. More importantly, the findings of this conference influenced General George C. Marshall, Jr., Chief of Staff of the Army, and Major General Lesley J. McNair, Commander of General Headquarters, Field Forces (GHQ), to establish, in May 1941, the Planning Branch as part of the G-3 Section of GHQ.[30] Assigned to command this Branch was Lieutenant Colonel (LTC) Andrew D. Bruce—the "Father of Fort Hood"[31]—who was tasked with finding ways to beat the German war machine of tanks and airplanes and "devising tactics to update the American Army's method of contending with armor and to train soldiers to use the many modern weapons denied them during the 20 years of austere budgets following the end of World War I" (Figure 5).[32]

LTC Bruce called a second antitank conference in Washington, DC, on May 26, 1941. The significant conclusion from this conference was that the current antitank companies were to remain with the infantry regiments, but antitank battalions were to be organized, antitank officers appointed at the divisional and headquarters level, and outfitted with 37-millimeter antitank guns taken from the artillery. This conference further decided that a large antitank unit was to be established before the end of 1941.[33]

---

[30] See Lt. Col. Emory A. Dunham, *Tank Destroyer History (Study No.29)*, (Army Ground Forces, Historical Section, 1946); Faulk, *Fort Hood: The First Fifty Years,* 17-18; and Christopher R. Gabel, *Seek, Strike, and Destroy: U.S. Army Tank Destroyer Doctrine in World War II*, Leavenworth Papers, No. 12 (Fort Leavenworth, KS: Combat Studies Institute, U.S. Army Command and General Staff College, 1985), 22.

[31] Lieutenant General (Ret.) Andrew D. Bruce, who served not only as the commander of the Planning Branch that developed the tank destroyer concept, but also as the first commander of Camp Hood (April 1942 – April 1943), was referred to as the Father of Fort Hood by the *Killeen Daily Herald,* November, 9, 1972.

[32] Faulk, *Fort Hood: The First Fifty Years,* 17.

[33] Dunham, *Tank Destroyer History,* 2.

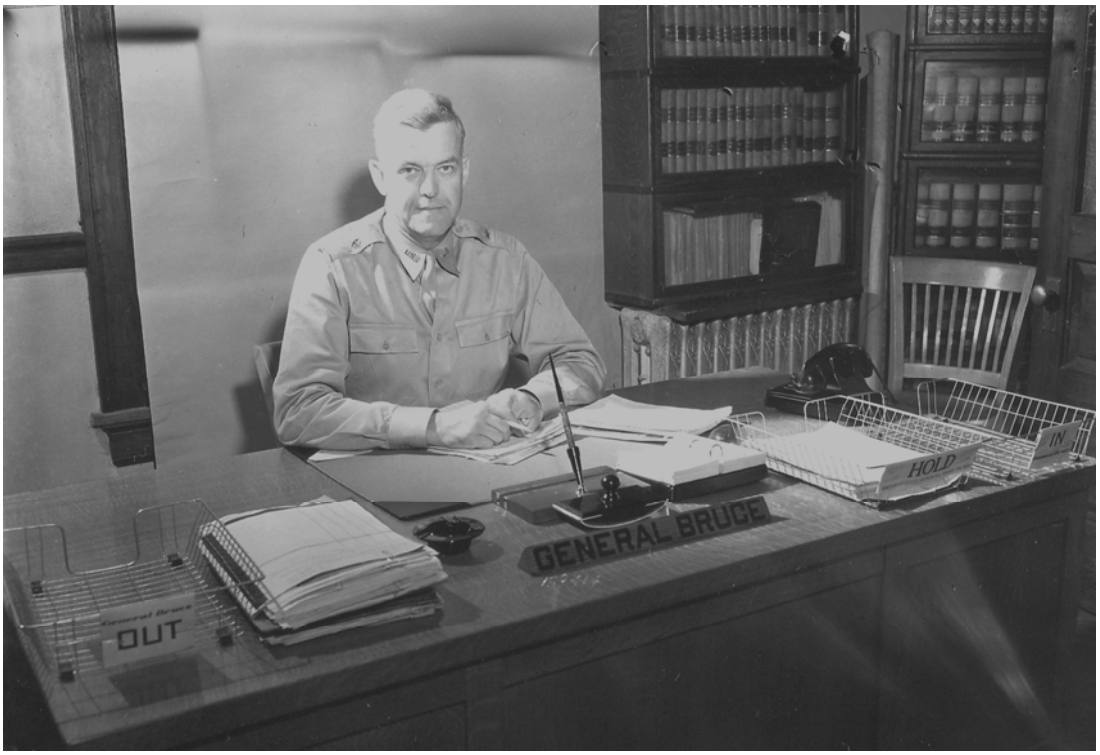

Figure 5. Brigadier General Andrew D. Bruce (NARA).

It was the antitank conference held July 14 -17, 1941, at the Army War College in Washington, DC, that would be declared "historic" for its recommendations—recommendations that eventually resulted in the establishment of Camp Hood. By July 1941, Brigadier General H.L. Twaddle, Assistant Chief of Staff, G-3, War Department, who called the conference, declared that the biggest job confronting the Army was stopping enemy tanks and other mechanized vehicles. As such, the conference's purpose was "to inform antitank officers of the antitank problems, the proposed test in maneuvers, the latest mechanized antitank doctrine, the latest developments in mechanized and antitank means and all duties of antitank officers in organizations."[34] In response, LTC Bruce recommended the 75-millimeter gun mounted on a halftrack vehicle as the primary antitank weapon, and explained to the conference that his ideal antitank weapon, "would be a fast-moving vehicle with a weapon packing a powerful punch, one that could be easily and quickly fired, and sufficient armored protection should be placed around it that it could not be put out of action by a machine gun."[35] The 75-millimeter gun mounted on a halftrack was favorably tested in Louisiana maneuvers during September 1941.

[34] Ibid.

[35] Ibid., 2-3; and Faulk, *Fort Hood: The First Fifty Years,* 19.

LTC Bruce and the Planning Branch further directed the development of the tank destroyer concept in August 1941 when it proposed a reorganization establishing 220 separate antitank battalions that would be attached to each division in a proposed 55-division Army, as well as battalions operating at the corps, field army, and GHQ levels.[36] In October 1941, the Planning Branch recommended that the antitank battalions no longer be controlled by the separate branches of the Army (i.e., infantry, field artillery, cavalry, etc.), but rather be organized under War Department control. The War Department, in turn, in November 1941, officially called for the establishment of a Tank Destroyer Tactical and Firing Center (TDTFC) to be activated in December 1941. In December 1941, the War Department redesignated the existing 53 antitank battalions as "tank destroyer" battalions operating under GHQ, thereby effectively establishing a new branch of the Army.[37]

The command of this new branch of the Army, the TDTFC, was assigned to LTC Bruce, and was tasked with developing "tank destroyer doctrine, equipment, and training."[38] The TDTFC was initially stationed at Fort Meade, MD, pending the locating and approval of a new permanent facility capable of handling the training of tank destroyers as envisioned by LTC Bruce, who felt that no existing base was suitable for the needs of his command. At the time, most Army bases and camps were only large enough to train one division, and Bruce envisioned a post capable of accommodating three to five divisions, and recommended that the Army procure more than 500,000 acres for the TDTFC.[39] He felt that the larger post would be more efficient, effective, and economical in the end.[40] However, his recommendation for a "super-sized" post was disapproved as it was felt acquiring that much acreage would decimate nearby local economies.

The important factors in selecting a permanent site for the TDTFC were "availability and topographical fitness of land for tactical maneuvers and ranges, cost of land,

---

[36] Faulk, *Fort Hood: The First Fifty Years,* 19.

[37] Ibid., 19-20.

[38] Ibid., 20.

[39] Ibid., 22.

[40] LTC Bruce believed that a larger post would provide a common maneuver and impact area while facilitating the increased range requirements of high velocity guns; also, the cost of acquiring the additional acreage was as cost effective as paying damages to land owners for leasing the land for maneuvers. The larger post would remove the need to transfer equipment and men to desert training facilities for large-scale maneuvers, reducing wear and tear on equipment and proving more economical (Faulk, *Fort Hood: The First Fifty Years,* 22).

water supply, availability of utilities, effect of general climatic conditions on training, adequate communication facilities (rail or road), central location, lack of congestion due to proximity of other large camps and proximity to recreational facilities."[41] Thus, after the Center's activation in December 1941, LTC Bruce, four of his top officers, Major Tyler of the Chief of Engineer's Office, and Leon H. Zach, a civilian engineer in the Chief of Engineer's Office who helped to design World War II cantonment layouts, set out to survey the six possible sites for the TDTFC.[42] These sites included three sites in Texas near Waco, Paris, and Bastrop; Durham, North Carolina; Hopkinsville, Kentucky; and Clarksville, Tennessee. The original site near Waco, Texas was Valley Mills, which was ruled out due to unsuitable terrain. However, while the team was in the area to view the Valley Mills site, a local Defense Projects Committee headed by Frank Mayborn (who would become a local publishing mogul) encouraged the team to tour the area surrounding Temple, Gatesville, and Killeen, and the rest, as they say, is history. LTC Bruce would later recall the process and reasoning that led him and his team to select the site near Killeen:

> I visited several areas in the United States and finally picked the site near Killeen. As I recall, some of the reasons for selecting this area for Camp Hood were the strategic railroads (the Cotton Belt could bring in raw recruits and equipment in the north part of the reservation and trained battalions could be shipped easily to any part of the United States via the Santa Fe and connecting railroads); there were large open areas for firing directly on enemy tank targets and for the initial training steps for a new battalion with plenty of rugged terrain for their final training; there was a minimum of pipe lines through the campsite; Temple, with a good hospital and office space, offered a place for temporary headquarters not only for the main camp, but for the headquarters of the major elements of the training center; land in the Temple area was available for an airport; and not in the least, was the patriotic attitude of the people, particularly those who had to move off their land. I left Central Texas convinced that, if we could find sufficient water, this was the site we should have.[43]

[41] Dunham, *Tank Destroyer History,* 10.

[42] Faulk, *Fort Hood: The First Fifty Years,* 32.

[43] *Armored Sentinel,* September 21, 1967.

Not only was LTC Bruce tasked with establishing a permanent post for the TDTFC, but he was also tasked with developing tank destroyer doctrine, equipment, and training. The first product to come out of this new branch of the Army was the tables of organization for tank destroyer battalions, which formed the foundation for a basic tank destroyer unit, initially configured of 35 officers and 807 enlisted men (later increased to 898 men), led by a headquarters and a headquarters company with a full complement of support platoons.[44] The TDTFC also developed equipment specifications for the optimal tank destroyer weapon (Figure 6), and began working on a tank destroyer doctrine, which became official with the publication of the War Department's Field Manual 18-5 (FM 18-5), *Tank Destroyer Field Manual, Organization and Tactics of Tank Destroyer Units*.[45] Writing for FM 18-5 began in January 1942; it was officially published in June 1942. The Manual declared, "The characteristics of tank destroyer units are mobility and a high degree of armor-piercing firepower, combined with light armor protection; strong defensive capacity against attacks of combat aviation; and flexibility of action permitted by generous endowment with means of communication."[46]

Figure 6. Tank destroyer with 57 mm gun waits for instruction, 1942 (NARA).

[44] Gabel, *Seek, Strike, and Destroy,* 20-24.

[45] Ibid., 20-24.

[46] Ibid., 25.

While the TDTFC was developing doctrine, training, and equipment, it was also officially relocated from Fort Meade, MD, to central Texas and a camp that was in the process of being built. The process of transferring the TDTFC began in February 1942, with temporary offices being set up in Temple, Texas, while construction began on Camp Hood.[47] But, not only did the tank destroyers undergo a physical relocation, they were also officially redesignated the Tank Destroyer Command on March 14, 1942, and then the Tank Destroyer Center on August 17, 1942.[48] With the dedication of Camp Hood on September 18, 1942, the tank destroyer concept was fully realized within 15 months of the first conference on how to defeat the German Panzer Divisions. Considering the numerous and significant obstacles faced by the G-3 Planning Branch, and then the TDTFC, namely the "lack of trained and experienced personnel; no antecedent special school for basic training; lack of equipment; lack of tables of organization; and lack of needed facilities," this was an amazing feat.[49]

2.3 When the Army Comes to Town

Major Gerald R. Tyler, who accompanied LTC Bruce in the site selection for the (then) TDTFC, was put in charge of constructing Camp Hood. Major Tyler, whose past work as chief architect on the Pennsylvania Turnpike, Quartermaster in charge of building Pine Camp in New York, and representative for the chief of the Engineering Branch, Construction Division, was "recognized as one of the army's top experts on army cantonments and at Killeen is building a cantonment which many army men say will be one of the finest in the United States."[50] Major Tyler arrived with the first team in charge of establishing Camp Hood in January 1942 and set up office in nearby Temple.[51] It was here that Tyler began drafting plans and details for the camp to be submitted to the War Department for approval. The final approved plans detailed a camp of (initially) 80,000 acres with mobilization type construction that could accommodate 23,475 troops, with utilities and hospital facilities built to accommodate an eventual garrison of 35,000 troops, all of which

[47] Dunham, *Tank Destroyer History,* 12.

[48] Ibid.

[49] Ibid.

[50] "Army Puts Big Man In Big Job For Camp Hood's Construction," (Fort Hood, TX: 4th Infantry Division Archives, Box 3, File "Diary-Camp Hood 2 of 3," n.d.).

[51] Faulk, *Fort Hood: The First Fifty Years,* 51.

was estimated to cost $22,800,000 and be completely constructed no later than August 1942 (Figure 7).[52] Although Major Tyler set a challenging goal for the construction of Camp Hood, it was understood at the time that Camp Hood was "being built under the highest priority rating of any army camp in the country."[53]

Figure 7. Soldiers unfolding garrison flag at Camp Hood (NARA).

The first step in constructing Camp Hood was the process of acquiring the land. When it was announced on January 15, 1942 that Camp Hood would become a reality, the government planned to acquire 80,000 acres; this figure was increased in July of the same year to 108,000 acres in order to accommodate 15,000 more soldiers at the camp.[54] This initial acquisition, which began in February 1942, was not without its problems. Not all of the 470 families that were eventually displaced by the establishment of Camp Hood were willing or happy to sell or vacate their land, even for a patriotic cause—or, as the military recorded the events, the families were

[52] "Camp Hood, Killeen, Texas: Selection of Site, and Construction," (Fort Hood, TX: 4th Infantry Division Archives, Box 2, April 20, 1950), 3; Faulk, *Fort Hood: The First Fifty Years,* 51.

[53] Walter B. Humphrey, "Two Months Ago Construction Started; In A Little More Than Two Camp Hood Will Be Finished," (Fort Hood, TX: 4th Infantry Division Archives, Box 3, File "Diary-Camp Hood 2 of 3," n.d.).

[54] Faulk, *Fort Hood: The First Fifty Years,* 37, 45.

simply too slow in vacating their land. This led to the issuance of a "take order" by the Federal district court in Waco in March 1942 that allowed the government to move onto the land of those landowners who were refusing, or too slow, to sell, and settle payment with them at a later date (Figure 8).[55]

Figure 8. Ruins of a farmhouse demolished to make way for new camp (III Corps History Office).

It appeared that the controversy surrounding the initial land acquisition for Camp Hood began brewing before an official announcement was made. One of the local newspapers began urging landowners to sell and vacate without thought to economic gain as part of their patriotic duty as early as January 16, 1942—the day after the official announcement regarding Camp Hood:

> Our country needs this camp and no sacrifice is too great to make to preserve our Democratic ideals and our happy way of life under the Stars and Stripes…. Most of them are willing to make this sacrifice to help this great land we all love and will move without a murmur, gladly and willing to serve their country when it needs them as it

[55] Ibid., 41. See Faulk, *Fort Hood: The First Fifty Years,* 37-46, for a more detailed accounting of the land acquisition for Camp Hood and the federal take order; also, see Dunham, *Tank Destroyer History*, 14, for the military's perspective on the need for a take order.

> does now…. We are at war and our country is in serious danger of being overrun by a ruthless foe and it strikes this writer that too much thought and effort is being made to get money out of the government rather than backing our government up with all our energy and resources and doing something to win the way.[56]

Of course, the local papers were operated by the same men who had campaigned heavily to have central Texas selected as a site for one of the many military installations that were being built as part of the war effort. While there can be no doubt that local landowners were patriotic, the reservation that some of them felt in leaving their land had to do with several factors. Foremost among them was that the majority of the owners were required to leave "all fences, walls, water tanks, and one dwelling on each piece of property for use by the Army," and as most owners did not have more than one dwelling on their property, this meant leaving the family home behind.[57]

Just as important to local landowners was the loss of grazing land for their cattle, and thus their livelihood. In an effort to placate the local community, Camp Hood issued grazing rights to displaced farmers on a pro-rated basis depending on how much land had been taken for the camp. Likewise, local landowners and residents would later bemoan the loss of significant cultural elements on the land taken for Camp Hood. Both rural churches, such as at New Hope, Sugar Loaf, and Antelope, and cemeteries, primarily family plots, were removed or relocated from the land.[58] The land occupied by Camp Hood also had a rich and often nefarious history commiserate with the mythos of the "Wild West" prized by local residents. Local lore rife with tales of Indian attacks, such as the Riggs Family Massacre at Sugar Loaf Mountain, and tales of hordes of stolen gold now hidden somewhere on Manning Mountain, as well as a stolen payroll from Fort Gates buried somewhere on the military reservation. There were also tales of lost mines (one reputedly owned by Jim Bowie), buried Indian treasures, and the lore and legend of famous western out-

[56] *Killeen Daily Herald,* January 16, 1942.

[57] Faulk, *Fort Hood: The First Fifty Years,* 42.

[58] Ibid., 44-45.

laws who rode through the area, such as Frank and Jesse James, John Wesley Hardin, Bill Longley, and Sam Bass.[59]

In January 1943, the Army decided that it needed more land to accommodate existing training needs and for a new training camp that would become known as North Camp Hood. This led to the acquisition of an additional 16,000 acres south of the cantonment, and 34,943 acres in Coryell County to the north for the establishment of the Tank Destroyer Basic Replacement Training Center and Tank Destroyer Basic Unit Training Center.[60] This new land acquisition displaced an additional 200 families and brought the acreage of Camp Hood up to 160,000 acres.[61]

The construction of the cantonment area began shortly after the land acquisition process began. The plans for Camp Hood as designed by Major Tyler[62] and approved by the War Department called for a cantonment derived from the rectangular (quadrangular) cantonment plan using primarily mobilization type (temporary) construction (of the series 700 and 800 building style).[63] Yet, Camp Hood posed a challenge to the standardized cantonment construction practices at the time, which for WWII were division-based and configured in either a triangular or quadrangular layout. The layout was determined by division size, wherein each leg of the layout would be dedicated to a brigade with training ranges adjacent to each brigade permitting "movement into the field without crossing into other brigade areas."[64] The intent of the standardized plans was to enable the mass construction of the 20 to 25 planned cantonments in the pre-WWII build-up within the short amount of time allotted by Washington. It was understood though, that the standard plans would have to be adapted to the uniqueness of each locale, and thus local Quartermasters

---

[59] The *Armored Sentinel* carried many stories detailing the local legends—see the following for examples: "Thar's Gold In Them That Hills—Maybe," October 7, 1960; "Scattering of Old Graveyards Are Reminders of the Past," February 10, 1961; "Historians Say '49ers Left 'Gold In Them There Hills'," September 14, 1962; "Fort Hood's Comanche Gap Once Site of Indian Massacre," November 8, 1963; "Gold Cache Rumored Hidden," September 21, 1967. See also Faulk, *Fort Hood: The First Fifty Years,* Chapter 1.

[60] Faulk, *Fort Hood: The First Fifty Years,* 45.

[61] Ibid.

[62] A September 14, 1962 article ("Earliest Days of Hood Meant Planning, Hard Work") in the *Armored Sentinel* states that Wyatt C. Hedrick Co. of Fort Worth completed the original plans for Camp Hood. Most other accounts credit Major Tyler with the original plans for Camp Hood.

[63] With the exception of the original latrine buildings in the motor pools, which were in the earlier 700 series style.

[64] Garner, *World War II Temporary Military Buildings*, 65.

were tasked with recommending changes "that would expedite construction" by avoiding "drastic, wholesale revisions" and were informed that "such alterations as were necessary had to be made quickly."[65]

Camp Hood, however, was planned with the hopes of facilitating and training multiple divisions (at least seven distinct troop units), and the brigade-driven layout with respect to training ranges was not appropriate to the tank destroyer training concept. The cantonment was built on 4,000 acres of land in a long rectangular shape, bordered by the Gulf Colorado and Santa Fe Railway tracks, with its buildings laid out in an L-pattern (Figure 9).[66]

Figure 9. 1944 map of Camp Hood (Main Post) (Fort Hood DPW).

[65] Lenore Fine and Jesse A. Remington, *The Corps of Engineers: Construction in the United States (United States Army in World War II: The Technical Services*, Vol. 3*)*, Office of the Chief of Military History, United States Army, (Washington, DC: U.S. Government Printing Office, 1972), 211.

[66] *Killeen Daily Herald*, September 18, 1977.

The cantonment was divided, essentially, into four parts: a warehouse and technical services area, an area of troop housing, the station hospital, and the training center and school area. "The eastern part of the World War II cantonment, about 40 % of the building area, was the tank destroyer school."[67] The training area was spread out to the north and northwest of the cantonment, rather than adjacent to each leg of the layout. The spread out nature of the layout provided a strong linearity to the cantonment and indelibly marked it as a site devoted to vehicular training and transport due to the long, wide boulevards adjoining the training lands. The following account described the organization of the cantonment as it was designed:

> The main entrance to the camp will be from the center of the south side, with a road of perhaps a quarter of a mile passing under the Santa Fe tracks up to the center of the area, where the post headquarters, the regimental commanders' quarters, and GHQ will be grouped. In the east end of the area is the tank destroyer school, with buildings designed and grouped for most convenient instruction of officers and non-commissioned officers. The firing ranges are immediately to the north. The school will have its own mess halls and specially-equipped motor buildings for its motor maintenance department. Down the center of the cantonment, generally, will run the scores of barracks and other buildings designed for the use of the Unit Training Center…the organization that is charged with the training of tank destroyer battalions [Figure 10]. The troops moving in and out of Camp Hood will be barracked there [Figure 11]. Then, in the west end of the area, will be the camp hospital, equipped to handle more than 1,000 men, and the quartermaster warehouses where camp supplies will be unloaded and stored. The camp has its own tracks running alongside each warehouse. Also in the west end is a special group of barracks and auxiliary buildings for housing the school troops which will be used in maneuvers and instruction for demonstration purposes. The camp will have recreation buildings for all companies, three large theaters, a large field house for basketball and other sports, and nine regimental chapels. Each battalion will have its own motor park area to the north of its barracks.[68]

---

[67] *Armored Sentinel: Anniversary Issue,* September 21, 1967.

[68] Humphrey, *Two Months Ago Construction Started*.

Figure 10. 1943 view of Camp Hood Unit Training Center area (NARA).

Figure 11. Interior of Camp Hood Barracks during WWII era (4th ID Museum, Fort Hood).

Construction of Camp Hood began in February 1942 with the first contract issued to tackle one of the biggest problems facing the new camp—providing a water supply. H.B. Zachery Company of San Antonio was given a contract to drill wells on site, as well as to build an 18-mile water line connecting local artesian wells to the camp; an additional contract was issued to Wiegand and Company of San Antonio to drill wells.[69] In March 1942, additional contracts were awarded for projects needed outside of the cantonment area—one contract to McKenzie Brothers, Williams and Whittle, of Dallas for a sewage disposal plant and another to the Industrial Electric Company of New Orleans for power hook-ups. Also in March 1942, bidding was opened for the construction of utilities, support infrastructure and the five building construction areas of the cantonment. To facilitate the speedy construction of the camp, the Army Corps of Engineers divided the building construction work into five areas. The following nine contracts were awarded: 1) Tankersley Trapp Associates of Oklahoma City for construction of areas 1 and 5; 2) Central Construction Company of Dallas for construction of areas 2 and 3; 3) Taylor and Byrnes of Fort Worth for construction of area 4; 4) R.F. Ball Construction Company of Fort Worth for clearing and site grading; 5) J.W. France Company of Corpus Christi for gas distribution and motor fuel storage facilities; 6) Taylor Construction Company of Taylor for the electrical distribution system; 7) Martin and Grace of Dallas for the camp railroad system; 8) Morgan Construction Company of Dallas for asphalt surfacing; and 9) H.B. Zachery Company, of San Antonio for water and sanitary sewer system.

The actual construction of Camp Hood began on April 7, 1942, and contractors were faced with the challenge of completing the construction within five months.[70] In addition to a challenging deadline, contractors were further confronted with an excessively rainy spring, shortages in manpower and materials, and a change in construction plans to accommodate an additional 15,000 troops two months prior to the deadline. Despite this, construction remained on or ahead of schedule. Helping to make this possible was the fact that in addition to the 5,000 carpenters and 12,000 skilled and unskilled laborers present at the outset of construction, all Works Progress Administration (WPA) projects in the area were closed down to induce the

[69] Information in this paragraph regarding contracts issued in the construction of Camp Hood was derived from Faulk, *Fort Hood: The First Fifty Years,* 51-52; "Camp Hood, Killeen, Texas: Selection of Site, and Construction," 3; "Camp Hood Authorized in 1942 and Begun," *Ft. Hood History Binder*, Casey Library Files (Fort Hood, TX), 1942; and "Contractors Start Moving In For Work," 1942 article excerpted in "History of Camp Hood, Killeen Texas," (Fort Hood, TX: 4th Infantry Division Archives, Box 3, File "Diary-Camp Hood 1 of 3").

[70] Faulk, *Fort Hood: The First Fifty Years,* 53.

men to gain private employment with the contractors to help build the camp.[71] Likewise, the Civilian Conservation Corps (CCC) further aided construction. In fact, by the time Camp Hood officially opened in September, the Station Hospital building was the only major facility not completed.[72] What was most impressive about the construction of the main cantonment of Camp Hood was not simply that it was completed in five months, but that it was the largest cantonment constructed in the United States and was built of temporary construction intended to have only a 15-year life expectancy that has, however, lasted far longer.

Equally impressive was the construction of what was initially considered to be a second military installation in the Coryell County area. In January 1943, as stated above, the War Department purchased additional acreage for Camp Hood, and part of this was the purchase of 34,943 acres near Gatesville (roughly 22 miles north of the main cantonment) for a sub-camp cantonment area that would become known as North Camp Hood. The purpose of this new sub-camp was to house the "Tank Destroyer Basic Replacement Training Center and Tank Destroyer Basic Unit Training Center, and to furnish training areas sufficient to accommodate the extensive training that would be necessary for the fulfillment of the mission of these two activities of the Tank Destroyer Center."[73] In addition, a Specialized Training and Reassignment (STAR) Unit—"one of the biggest STAR…Units in the country"[74]—was located at North Camp Hood. The addition and construction of North Camp Hood doubled the training capacity of Camp Hood and made Camp Hood one of the largest camps in the United States.[75]

Construction of the North Camp began on January 3, 1943, and consisted of Theater of Operations type construction with a life expectancy of five years, except for an 1,139-bed mobilization type hospital that could handle the expected 40,000 troops to be stationed there.[76] The War Department authorized in excess of $5,000,000 for

---

[71] "Camp Hood Construction," from an "Old Tank Destroyer Scrapbook," (Fort Hood, TX: 4th Infantry Division Archives, Box 8, File 3, n.d.).

[72] Faulk, *Fort Hood: The First Fifty Years,* 54.

[73] Ibid.; "Camp Hood, Killeen, Texas: Selection of Site, and Construction," 4.

[74] "Specialized Training Unit To Be Located At North Camp Hood," *The Hood Panther,* May 27, 1943. Men were "sent to STAR Units for final processing in determining what courses they will study and what colleges they will attend under the Army Specialized Training Program."

[75] "Construction Will Double Camp's Capacity," *The Hood Panther,* December 10, 1942.

[76] "Camp Hood, Killeen, Texas: Selection of Site, and Construction," 6.

the camp's construction.[77] The construction contract went to A. Farnell Blair of Decatur, Georgia, who was able to complete construction ahead of schedule due to mild weather and no shortages in manpower or materials. Although the deadline for the north camp's construction was set at June 30, 1943, North Camp Hood officially opened on May 29, 1943 (Figure 12).[78]

Figure 12. Aerial photo of North Camp Hood (NARA).

Additional construction at Camp Hood during 1942-43 included Theater of Operation type construction for two Prisoner of War camps, a 3000-man camp at North Camp Hood, and a 1000-man camp at the south cantonment.[79] Civilian war housing was also constructed at both camps, with 765 dwelling units constructed at the

[77] Ibid.

[78] Ibid.

[79] Ibid.

south camp in an area named "Hood Village," and 465 dwelling units at the north camp in an area named "North Village."[80] Also constructed at the south camp was the Camp Hood Army Airfield. The original airfield (operating in 1942) featured a dirt runway, running northwest-southeast, and was used by light aircraft. In 1943, Camp Hood Army Airfield was constructed with a more permanent airstrip that was hard-surfaced, 150 feet wide and 3,600 feet long with two taxiways.[81]

Official construction of Camp Hood was considered completed as of September 3, 1943. At that time, the installation contained 160,000 acres, 35 "ideal" firing ranges, and 5,630 buildings.[82] The list of buildings included the following: "18 chapels, 1 field house (Figure 13), 26 recreation buildings, 35 post exchanges, 1,384 barracks, 367 mess halls, 373 bachelor officers quarters, 4 clubs for officers, 4 clubs for enlisted men, 2 laundries, 2 hospitals [with a total of 132 buildings], 12 theaters, 1 bus station, 1 post office, 516 warehouses, 432 shops, and 2,014 buildings for miscellaneous purposes. The recreational facilities included: 3 swimming pools, a nine-hole golf course, several tennis courts, baseball and softball diamonds, a football field, basketball courts, and 3 bowling alleys."[83]

In October 1943, responsibility for camp construction and maintenance was transferred to the Post Engineer, Major C.T. Nunley. Although the Post Engineer was normally tasked with ensuring "efficient future operation, maintenance and repair," Major Nunley was "immediately pressed into service as construction engineer and contractor to add to the construction program already underway."[84] As such, in the period between 1943 and 1945, he oversaw the construction of 173 buildings in the cantonment, training camps, and recreational areas, as well as training ranges, fortifications, highways and roadbeds.[85] By the end of World War II, the total cost of Camp Hood, including the cost for the land, buildings, and improvements was approximately $84 million.[86]

---

[80] Ibid.

[81] Faulk, *Fort Hood: The First Fifty Years*, 56.

[82] "Camp Hood, Killeen, Texas: Selection of Site, and Construction," 6.

[83] Ibid.

[84] "About $84,000,000 Spent In Establishment of Camp Hood," *Camp Hood News,* September 20, 1945.

[85] Ibid.

[86] Ibid.

Figure 13. New field house, 1943 (NARA).

2.4 Training Tank Destroyers for World War II

On September 18, 1942, Camp Hood was officially opened and dedicated with all due fanfare and ceremony when the Army Corps of Engineers turned the recently constructed cantonment over to the Army (Figure 14). At the ceremony, Camp Hood was dedicated to the preservation of America and the destruction of its enemies, and in a speech by the Undersecretary of War, Robert P. Patterson, the Tank Destroyer Center was "dedicated to a war without compromise."[87] It was also noted in local newspapers that more than just a new cantonment was being dedicated, that a "new branch of the United States Army" was receiving "its first home."[88]

[87] "25,000 See Army's New Camp for Tank Destroyer Training Opened," *Temple Daily Telegram,* September 18, 1942.

[88] "More Than Just A Camp Being Opened Today," (Fort Hood, TX: 4th Infantry Division Archives, Box 3, File "Diary-Camp Hood 2 of 3," n.d.).

In fact, the first officially recognized tank destroyer battalions in the history of the U.S. Army not only passed in review at the opening day ceremonies, but were already in place and training at Camp Hood prior to that day. On March 31, 1942, the 893rd Tank Destroyer Battalion (first ever of its kind) arrived at Camp Hood from Fort Meade, Maryland, followed shortly thereafter by the 753rd Medium Tank Battalion from Camp Polk, Louisiana.[89] Both units "formed the nucleus of the permanent school troops," and because the camp was under construction, they bivouacked in a field near the northern part of the camp out of the way of construction and began their training.[90]

Figure 14. Army band in front of Headquarters, Tank Destroyer Center (NARA).

[89] "First Troops Near Gatesville," *Armored Sentinel,* September 21, 1967.

[90] Ibid.

These two battalions would become the first of many tank destroyer battalions to train at Camp Hood during World War II (Figure 15). Twelve out of the 100 battalions that went into combat from Fort Hood were awarded unit citations.[91] In the first three years of operation alone, Camp Hood trained more than 300,000 troops, or "a little more than three percent" of all military personnel that served in combat.[92] Further, an additional 42,000 men were sent to combat after processing through the Replacement Training Center, and 56,313 infantry replacements were trained at North Camp Hood.[93] This last statistic was an impressive figure given that the Infantry Replacement Training Center was activated at Camp Hood only in 1944.

Figure 15. Close-up of gun crew on mobile destroyer unit (NARA).

[91] Faulk, *Fort Hood: The First Fifty Years,* 85.

[92] Ibid.

[93] *Armored Sentinel,* September 14, 1962; *Killeen Daily Herald,* September 17, 1982; Faulk, *Fort Hood: The First Fifty Years,* 85.

The crucial role that Camp Hood played as a training facility during World War II served as a prelude to the role the installation would play in the decades to come. It was during World War II that Camp Hood began developing its reputation as a "fine armor training center."[94] This was a reputation built around several factors, foremost among them were Camp Hood's terrain and weather. Camp Hood's site was originally chosen for its "climate, rolling terrain and occasional wooded areas, and its caliche soil which would support heavy vehicles at all times of the year."[95] With this blank slate of a terrain to work with, designers and engineers were able to take full advantage of the landscape in constructing training ranges that were challenging, and able to simulate real battle conditions.[96] Camp Hood quickly became known for the quality of its training ranges, and the number of ranges it was able to accommodate (72 ranges by 1942).[97]

The natural terrain at Camp Hood also made it the prime location for the War Department's Project Sphinx, a project aimed at developing better tactics for fighting in the Pacific islands. The project's officers choose Manning Mountain and Clabber Point "as the site of this research because the terrain there closely resembled some of what would be found on Okinawa and in Japan itself."[98] Civilians and, more notably, German prisoners of war held at North Camp Hood were brought in to build more than 3,000 caves, spiderholes, dugouts, and pillboxes in the area.[99] This landscape was then used to train Air Corps, Tank Destroyers, Infantry, Artillery and Engineers in battle tactics that "saved the lives of many of the soldiers" that trained with Project Sphinx.[100]

Also adding to Camp Hood's reputation for training was the record it established during World War II of developing innovative training methods and techniques. It would later be said that training was "more than the major occupation at Fort Hood;

---

[94] *Armored Sentinel,* September 21, 1967.

[95] *Armored Sentinel,* February 7, 1957.

[96] "Formal Firing Practice Gives Way To Use Of Natural Terrain," *The Hood Panther,* December 10, 1942.

[97] *Camp Hood News,* September 14, 1944.

[98] Faulk, *Fort Hood: The First Fifty Years,* 81-82.

[99] Ibid. By late 1943, the POW camp held approximately 4,000 prisoners.

[100] Ibid.; see also "Man Made Tunnels, Caves Serve Many Roles," *Temple Daily Telegram,* September 22, 1967.

it could be called a philosophy."[101] This approach to training certainly had its roots during Camp Hood's years as a Tank Destroyer Center when a whole new doctrine for training needed to be developed. Among the list of military innovations created at Camp Hood were the use of live-fire ammunition during training, the physical training facilities, the use of the "crouch-hip" position for pistol firing, and the construction of a Nazi Village, "in which trainees could approach actual battle conditions in learning assault tactics" (Figure 16)."[102]

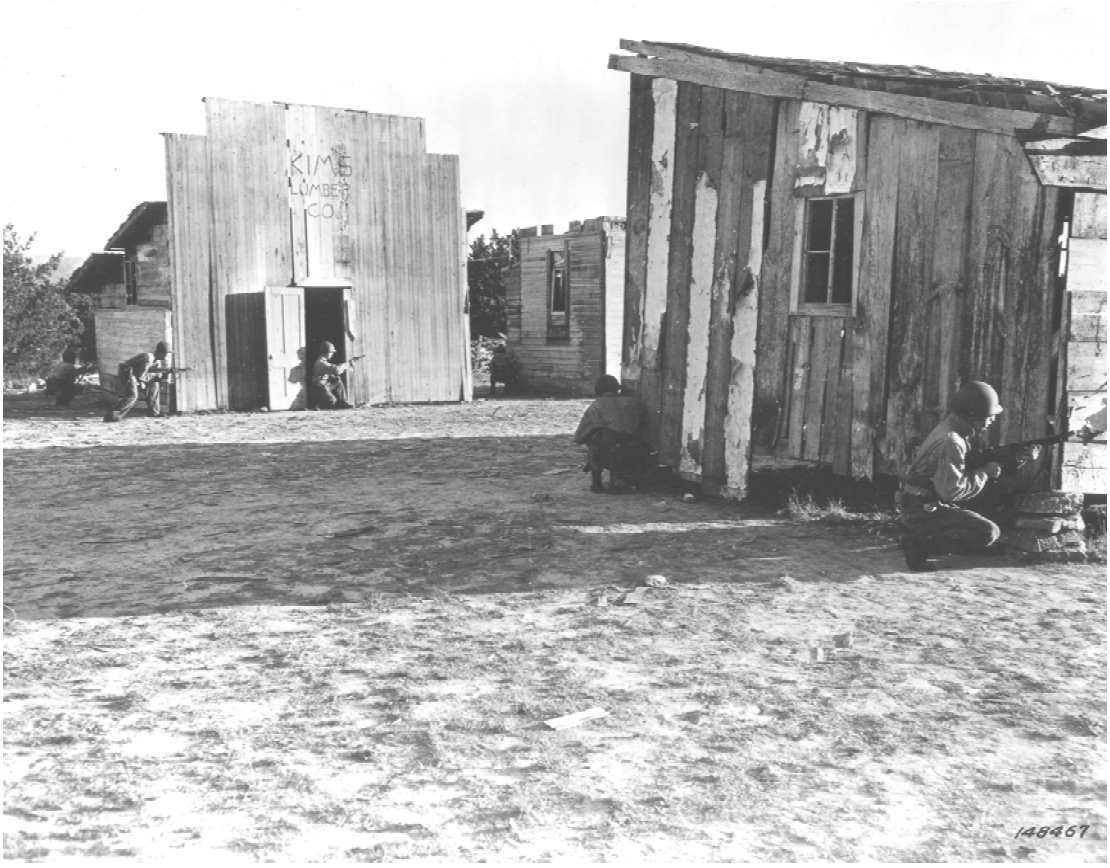

Figure 16. Soldiers train for battle in Nazi Village (4th ID Museum, Fort Hood).

Many of these innovations were developed in conjunction with tank destroyer training doctrine, and were employed as part of the famous tank-hunting course, which had become "famed throughout the country…and even outside… Many national magazines and metropolitan newspapers have sent special correspondents down to

[101] "18th Anniversary Issue," *Armored Sentinel,* September 16, 1960.

[102] *Killeen Daily Herald,* November 9, 1972; *Camp Hood News,* September 14, 1944; *Hell on Wheels,* May 9, 1946.

see its tough obstacle course, its infiltration course where men in training crawl through the weeds with live machinegun ammunition singing overhead, its Nazi village where the men of the tank destroyers learn all the secrets of village fighting, its homemade explosives, its battle-firing training where all men are taught to fire 45's and tommyguns fast and accurately from the hip (in darkness as well as light), its special methods of stalking enemy tanks."[103] Indeed, by the time World War II was won, Camp Hood had established itself as the largest training facility, as well as one of the most innovative, in the United States.

2.5 To Be or Not To Be—Peacetime Transition

With the end of World War II in 1945, the United States government faced the beginning of a peacetime economy and many decisions regarding the nature of a peacetime military, including the fate of the dozens of military installations erected for the war effort. In September 1945, the War Department conducted a series of "post war utilization studies" specifically targeted toward determining which installations should be retained and providing an estimate of how much it would cost to modify the installations for a permanent peacetime military. The utilization study done at Camp Hood was unique in that it considered the camp as "two separate and complete cantonment areas"—North and South Camp Hood.[104]

The report found that Camp Hood was located in an excellent area for military purposes and that, given its size, terrain, and climate, it was ideal for "artillery, for maneuver of foot troops and for armored units and artillery."[105] The real question facing the evaluators centered on the fact that it was fiscally non-viable to retain and upgrade two cantonments within the same camp, and that a choice needed to be made regarding which cantonment to keep. It was with this question of north versus south that the utilization study was primarily concerned. As the following summary conclusion of the report revealed, cost of building modification was a strong determinant in the final decision, given that North Camp Hood was primarily constructed of temporary, theater-of-operations type materials:

---

[103] *Hood Panther,* December 10, 1942.

[104] "Camp Hood, Texas," Post War Utilization Studies (Washington, DC: War Department: Office of the Chief of Engineers, 1945), Vertical File, III Corps History Office, Fort Hood, Texas.

[105] Ibid.

> From an engineering standpoint, South Camp Hood is considered quite satisfactory for postwar retention. North Camp Hood is not recommended for retention, for the reason that, the facilities at this camp will not be required for the proposed postwar strength of the Post. In addition to improvements to the sewage disposal plant and based on the assumptions given in the attached appendix, the cost of providing permanent housing for the officer complement, for the first three grades of NCO's and for remodeling the existing mobilization type barracks for the postwar use of 22,290 enlisted personnel at South Camp Hood would be in the neighborhood of $32,000,000.[106]

Thus, toward the end of 1946, North Camp Hood was closed and its buildings were torn down and sold.[107] The North Camp was not out of the picture entirely, though, as its headquarters building, a chapel, and some other buildings used as workshops and warehouses were retained. Further, it was reported that "the Camp did not lose its military appearance…as thousands of civilian components of the army, Texas and Oklahoma National Guard and reserve units from Texas and adjoining states" began using the North Camp each summer for training.[108] North Camp Hood became known as a "tent city" thereafter as every summer tens of thousands of Reservists, Guardsmen, and Reserve Officer Training Corps (ROTC) utilized the area for training (Figure 17).[109]

With the question resolved to retain the South Cantonment as Camp Hood, a new question arose regarding what to do with the cantonment in order to transition to a permanent military installation, and how to accommodate a peacetime army as well as its needs for any future military action. Although it was commonly agreed that "from the end of 1946 to 1950, Camp Hood changed little," this was less the result of need and more the result of a paltry postwar military budget.[110] During this time-period, however, there were some physical changes made to Camp Hood, aside from the dismantling of the North Camp. The most notable physical change was not ac-

---

[106] Ibid.

[107] *Armored Sentinel,* February 7, 1957.

[108] Ibid.

[109] North Fort Hood's secondary cantonment and summer-time use provided the basis for the No. 6 slot on David Letterman's Top Ten List of responses to "How big is your Army base?": "It's so big, it has its *own* army base." –Private First Class Diana Klinker.

[110] *Fifty Years of Excellence: Fort Hood 50th Anniversary, 1942-1992, The Great Place* (Fort Hood, TX: Public Affairs Office, 1992), 4.

tually within Camp Hood, but directly adjacent to it, with the establishment and construction of Killeen Base and Robert Gray Airfield.[111]

Figure 17. Group of cadets at Reserve Officers' Training Camp, North Fort Hood, 1951 (NARA).

Killeen Base came to life in 1947 as an airbase to be used in the training of troops in air transportation. At least, this was its purpose as reported to the public; in actuality Killeen Base was a secret project designed to serve as one of an eventual 13 atomic weapon storage depots across the country.[112] During the 1950s, this network played a large role in the nuclear deterrence developed by the U.S. military to defend against the Soviet Bloc. Known as National Storage Sites (NSSs), the purpose

[111] Robert Gray Airfield was named in honor of the Army Air Corps pilot who flew with the famed Doolittle mission to bomb Japan following the Pearl Harbor attack. For more on this mission see "Sixty Years After Mission, Gray Still Getting Tributes," *Fort Hood Sentinel: 60th Anniversary Edition,* July 4, 2002.

[112] Karen Weitze, *Cold War Properties at West Fort Hood, Texas: Research Overview and Preliminary Identification*, (Austin, TX: Prewitt and Associates, Inc., 2005), 1.

was to store and maintain both the nuclear and the non-nuclear components for atomic weapons and provide logistics for loading the weapons.[113]

All the storage sites were designed almost exclusively by the firm of Black and Veatch of Kansas City. They shared a similar infrastructure, including one to three assembly plants for non-nuclear bomb components, storage igloos for those components, "A" structures for storage nuclear material, "C" structures for maintenance work on nuclear material components, and "S" structures that were plants for the thermonuclear weapons. Support structures included storage, guard towers, and an administration area.[114]

Killeen Base (also known as Site Baker) was first on-line in March1948 and served as the sole storage site for approximately one year.[115] Both atomic and thermonuclear weapons were stored at Killeen Base, although the thermonuclear storage seems to have been a trial project at Killeen, and production weapons were not stored there.[116] Built largely underground into the east Texas hills, Killeen Base developed a web of heavily fortified tunnels housing the necessary plants, storage units, and various maintenance facilities. Operated originally by the newly formed Air Force, the Army took over installation management in 1952.[117] Both agencies operated Killeen Base for the Armed Forces Special Weapons Project. The Atomic Energy Commission and the Sandia Corporation managed the actual nuclear materials maintenance and storage activities.[118]

A program alteration in the early 1950s led to the construction of Operational Storage Sites (OSSs), which were smaller in size and joined to a Strategic Air Command (SAC) base, streamlining the process of storing and loading weapons. By 1956, a change in procedure resulted in the weapons storage facility being located on the SAC bases.[119] As a result of these changes, Killeen Base began to lose its utility for the program. Additionally, technological innovations reduced the need for active

[113] Ibid., 11.

[114] Ibid.

[115] Ibid., ix (preface).

[116] Ibid., 22.

[117] Ibid., 25.

[118] Ibid.

[119] Ibid., 11.

maintenance and surveillance for the nuclear materials. Killeen Base was phased out by 1969 and transferred to the Army at Fort Hood.[120]

Gray Army Airfield served in conjunction with Killeen Base from its outset in 1947. Originally known as the Camp Hood Air Strip, the installation at first consisted of one runway and a few temporary buildings. Activated in February 1948, the Air Force operated the facility under SAC with 13 assigned personnel.[121] When NSS-related missions began in August of that year, personnel were increased to 16 and one transport plane was assigned to the installation. Although runway improvements happened quickly, the development of a cantonment took several years. By February 1949, 44 airmen served at the Camp Hood Air Strip, living and working in portable buildings.[122] Within a few months, permanent construction appeared, first a crash fire station, then a control tower. A second aircraft arrived that summer and the number of personnel climbed to 79. By the end of the year, 98 airmen supported the newly designated Gray AFB.[123]

As Killeen Base increased production, activities at Gray rose in direct proportion, and rapidly outstripped the accommodations and working areas available. A tent city was set up, and additional temporary structures moved in during 1950.[124] The alert level on the base increased during the Korean War, and the runway was enlarged in both dimensions. New construction appeared in 1952, along with an increase in personnel to 335, and classified exercises in conjunction with Killeen Base continued.[125] A group of six fighter planes arrived at Gray in 1952. Operations at Gray AFB shifted when the Army took over management of Killeen Base in 1952, and the Air Force role at Gray became strictly support for Killeen Base, including the transport of atomic weapons.[126] As Killeen Base was slowly phased out after its mid-1950s peak, Gray AFB became less viable for the Air Force. By 1963, the Air Force closed out Gray AFB and it reverted to the Army.[127]

---

[120] Ibid., 25.

[121] Ibid., 27.

[122] Ibid., 27.

[123] Ibid., 27-28.

[124] Ibid., 28.

[125] Ibid.

[126] Ibid., 29-30.

[127] Ibid., 32.

One of the most prominent and significant events that occurred at Camp Hood during this peacetime transition was the establishment of a Post Planning Board in 1946, and the drafting of a Master Plan. When General Jacob L. Devers, Commander of Army Ground Forces, announced in May 1946 that Camp Hood would be converted to a permanent Army post, he made the call for a building program to be planned for the future fort, leading to the creation of the Planning Board.[128] The Board was composed of ranking military personnel from the training, logistics, personnel, technical, and communications departments on post, as well as the Deputy Post Commander and a General Officer who provided leadership to the Board.[129] The Planning Board was tasked with not only planning the conversion of Camp Hood into a permanent facility, but also of phasing the permanent construction with the retirement and disposal of the World War II temporary structures. As a result, the Planning Board had a dual mission statement:

> 1) The preparation of a comprehensive and continuing plan and program by which to achieve the orderly and systematic development and improvement of the Installation for its intended purpose, and 2) The submission of consolidated and properly supported construction programs and supporting data on which to base and fully defend military appropriations and authorization acts necessary to realize the objectives of the plan and program developed by the Planning Board.[130]

In line with their mission statement, the Planning Board drafted a Master Plan, entitled the "Future Development Plan," which became the first plan to be approved by the Department of the Army for the entire Fourth United States Army area.[131] The plan involved 2,650 buildings (9.5 million square feet), 448 miles of roads, 104 miles of electric distribution lines, 408 miles of natural gas pipelines, 137 miles of water mains, and 111 miles of sewer lines, and was based on "housing and training ground force troops with an Armored Division and Corps Headquarters as the major elements."[132] The Master Plan adhered to the layout of the World War II cantonment "to the greatest extent practicable" in order to save millions of dollars by util-

---

[128] *Hell on Wheels,* May 9, 1946.

[129] "Building For The Future," (Fort Hood, TX: III Corps History Office, Vertical File "History of Fort Hood", ca. 1960s), 3.

[130] Ibid.

[131] Ibid., 9; also see Faulk, *Fort Hood: The First Fifty Years,* 92-98 for a discussion of the Planning Board, but note that Faulk essentially copies the Planning Report cited here.

[132] "Building For The Future," 9.

izing existing infrastructure such as utilities, roads, drainage and erosion control features, and rail facilities.[133] As the Planning Board stated, "permanent development was also planned with an eye to flexibility of use and economic future expansion. This plan is analogous to the zoning map of a city; and, as such, must look far into the future as possible; it is confined to broad rather than detailed consideration."[134]

According to the Planning Board, the major planning principles incorporated into the Master Plan included four areas:

> First, allocation of adequate land areas to the various functions and activities of the installation, such as troop housing (75-100 men per acre), family housing (from 4 to 7 families per acre dependent upon the rank or grade of the occupants), training aids, ranges, and drill areas; administration, operational, service, recreational, and hospital areas, runway systems, approach zones, and parking aprons. Land use areas are properly related functionally with expansion 'built-in' each area;
> Second, a network of main arteries and secondary roads to provide adequate circulation within and between these areas, and for free flow to other areas related functionally, training areas, and access to nearby population centers;
> Third, the topography of the area, including water forms and existing vegetation; and
> Fourth, the mission and strength utilized as the basis of planning.[135]

As the Board explained, the first three principals remained fairly constant, while the fourth principle proved problematic and led to continuing revisions to the plan.

With a Master Plan approved and in place, the Planning Board set to work enacting the transition to a permanent installation. Given that the World War II cantonment had a preponderance of troop housing, but lacked the corresponding recreational, administrative, and other support structures, early priority was given to providing such facilities, especially welfare and morale facilities, which were considered to be "woefully inadequate for a peacetime installation."[136]

---

[133] Ibid.

[134] Ibid.

[135] Ibid., 10.

[136] Ibid., 7-8.

The biggest hindrance to the Planning Board, however, was the lack of funding available from Congress for permanent construction. In response, Fort Hood sought and received roughly $2 million in non-appropriated funding that had been built-up in Washington from welfare funds collected from clubs and theaters throughout the world that had closed with their host installations after the war.[137] With this money, Fort Hood began its postwar permanent construction program by building the Main Post Theater, a 4,560-seat reinforced concrete Post Stadium, the first nine holes of the permanent 18-hole golf course, three swimming pools, five baseball diamonds including the Main Post diamond with bleachers for 3,000 spectators, and 17 tennis and volleyball courts.[138] "Later authorizations from non-appropriated fund sources…provided the Main Post Exchange and Cafeteria, the noncommissioned officers open mess and swimming pool, and enlisted men's service club, and the Officers open mess and pool facilities." [139]

The only other permanent construction that occurred at Camp Hood during this peacetime transition was in the area of family housing for military personnel. While temporary barracks for unaccompanied enlisted men had been built in vast numbers during the war, no such construction program existed for family housing. Factors such as a lack of housing construction during the Depression, the return of World War II veterans, and the subsequent baby boom created a housing shortage nationwide for both civilians and military personnel. For the military, factors such as the rapid increase of soldiers with families, post-war military budget downsizing, and the nascent cold war buildup of manpower and facilities collided to create a severe shortage of adequate housing for most soldiers. The competition for off-post housing was intense, and congressional appropriations for on-post housing projects were extremely difficult to obtain.

In 1948, roughly $4 million was appropriated for 272 housing units at Fort Hood in the new McNair Village. Of the 272 units, 184 units were slated for enlisted men's families, and 88 units for officer's families, each category of housing constructed in their distinct land-use areas as dictated by the Master Plan.[140] Regardless of the type of construction underway, however, the Post Planning Board had decided to

---

[137] Ibid.

[138] Ibid.

[139] Ibid.

[140] Ibid., 8; "Magazine told story of Hood (in 1947)," *Armored Sentinel: Anniversary Special,* September 21, 1967.

adhere to the Army Corps of Engineers' recommendation that all new construction at Camp Hood be done in cream stucco and clay tile.[141]

Further efforts to provide housing for military families came out of Congress in 1949. Searching for a way to provide adequate housing without government appropriations, the Wherry Bill provided mortgages insured by the Federal Housing Authority (FHA) for military housing on military installations or on nearby land leased from the military.[142] By providing mortgage insurance, developers and lending institutions were persuaded to create these housing developments without fear of monetary loss. Since these developments were built and financed by private enterprise, no government financing was required. The builders received rent from the soldiers, which that was used to repay the mortgage.[143] Due to problems with lack of military control and shoddy operation and maintenance, the Wherry program was replaced in 1955 by the Capehart Housing Act.[144] While the construction and loan processes were much the same, once the property was completed, the contractor took his profits and the housing became government property, with the military making the mortgage payments.[145] Within a few years, new housing areas would rise at Fort Hood as a result of these programs.

Other construction projects proposed during this time included "25 additional family quarters, 15 enlisted men's barracks, a junior and senior high school with space left for elementary wings and a chapel seating 300 persons."[146] While no other permanent construction occurred during this peacetime transition, the Selective Service Act of 1948 did rejuvenate Camp Hood's population, leading to the rehabilitation and renovation of buildings to accommodate the increased troops. However, as it was observed, "no significant changes were made" due to the lack of federal funding.[147] The significant changes to Camp Hood's built environment would occur dur-

---

[141] Faulk, *Fort Hood: The First Fifty Years,* 93; "Magazine told story of Hood."

[142] Sheila McCarthy and Susan Enscore, *Dwelling for Officers and Airmen: The Aero Vista Wherry Housing Project at Biggs Army Airfield/Fort Bliss, Texas*, (Champaign, IL: Engineer Research and Development Center, Construction Engineering Research Laboratory, 2001), 2.

[143] Ibid., 3.

[144] William C. Baldwin, "Wherry and Capehart: Army Family Housing Privatization Programs in the 1950s," *Engineer,* April 1996:44.

[145] Ibid.

[146] "Magazine told story of Hood."

[147] Faulk, *Fort Hood: The First Fifty Years,* 99-100.

ing the early 1950s with the advent of the Korean War and the designation of Camp Hood as a permanent installation.

2.6 Fort Hood and the Korean War

Although Camp Hood survived the ax following the end of WWII, having been selected to remain active, local area residents continued their campaign to ensure the permanence of Camp Hood. Until Camp Hood was designated a permanent Fort, local area boosters would not feel confident about the government's continued presence in the area and its economy. Their efforts were realized when the Army General Staff approved the redesignation of Camp Hood to a permanent military installation, as well as its name change to Fort Hood (Figure 18), effective April 15, 1950.[148] This was a prescient move as the advent of the Korean War occurred just two months later.

Figure 18. Changing the sign from "Camp Hood" to "Fort Hood" after new designation, 1950 (NARA).

[148] Ibid., 106.

The Korean War—"the biggest little war" ever fought by America—which ran from 1950 through 1953, initiated several changes at Fort Hood. [149] Because of the war, the 1st AD was reactivated at Fort Hood in 1951, joining the 2nd AD, which had been stationed at Hood since 1946.[150] This temporarily made Fort Hood a two-division post until the 2nd AD was moved to Germany during the summer of 1951. The primary role of the 1st AD was directly tied to Fort Hood's role and mission during the Korean War, which was to train replacement troops for the war. As it was later learned, "at least two Fort Hood soldiers…were among the first Americans to see action in Korea."[151] The most noticeable changes occurring at Fort Hood during the Korean War, however, were physical, both in terms of the Fort's size and its construction program.

Over the course of the Korean War, Fort Hood expanded its size from roughly 160,000 acres to almost 210,000 acres. The first land expansion occurred in 1951 with the purchase of 1,400 acres on the southern end of the post. The second and more significant land expansion occurred in 1953-54, when the Army acquired close to 50,000 acres, at a cost of $2.9 million.[152] This second expansion was driven by the need to keep up with new weapons technology and to improve troop training in response to the Korean War. Specifically, the Army originally sought to acquire 62,000 acres, which was eventually reduced to 49,675 acres, of which 44,848 acres were in the Belton area and 4,827 acres were in the Gatesville area, and included land adjacent to the Belton Dam area (then under construction).[153] This expansion, approved by Congress in July 1953, afforded "longer firing ranges and larger impact areas for the 90mm and giant 120mm tank guns…[and allowed] 1st Armored soldiers to practice stream crossings and participate in other water training when Belton Lake is filled."[154] Echoing similar sentiments expressed during the original land purchase for WWII, General Clarke, Fort Hood Commander, expressed his regret to those families who had to relocate, but stated how the land was necessary to properly train "thousands of young men for fighting in Korea whose lives are more important than ancestral homes."[155]

---

[149] *Armored Sentinel,* June 24, 1960.

[150] Faulk, *Fort Hood: The First Fifty Years*, 108.

[151] Ibid.

[152] *Armored Sentinel,* September 14, 1962.

[153] Ibid.

[154] *Armored Sentinel,* July 9, 1953.

[155] *Killeen Daily Herald,* January 27, 1953.

As part of Fort Hood's mission emphasizing training, this land acquisition was augmented by updates and additions to the training ranges, as well as the advent of large training maneuvers conducted at Hood. Among the renovations to the training ranges during this time period were those aimed to train soldiers for actual combat conditions in Korea. To this end, new ranges included the "Hasty Fortification Area," which trained troops to protect themselves against surprise attacks from ground and air weapons;[156] a new combat rifle range employing the latest technology such as hidden and moving targets along with "friendly" and "enemy" targets to train reflexes;[157] and the "Korean bunkers" for refining "basic squad tactics, teamwork between squads and effective use of squad fire power," to prepare the troops for the "fierce bunker fighting" that was "among the most bitter of the Korean conflict."[158]

In conjunction with new and improved training ranges, troops at Fort Hood also participated in large-scale maneuvers. The first such maneuver held at Fort Hood was Exercise Longhorn in March 1952, which field-tested not only the 1st AD, but also tens of thousands of men from other units in the Army and Air Force (Figure 19).[159] As part of Exercise Longhorn, the Army negotiated maneuver rights from surrounding landowners who later complained about damage done to their property and the Army's failure to recompense them for said damage. As a result, Exercise Longhorn became one of the last large-scale maneuvers hosted at Fort Hood as landowners became reluctant to grant trespass rights without payment upfront at rates unaffordable by the federal government. This became clear in 1954 when the Army tried and failed to negotiate land use rights for Exercise Blue Bolt, which was eventually scaled down in size.[160] Exercise Longhorn also highlighted and supported the need for the 1953-54 land expansion.

---

[156] *Armored Sentinel,* February 12, 1953.

[157] *Killeen Daily Herald,* June 19, 1953; *Armored Sentinel,* June 18, 1953.

[158] *Armored Sentinel,* March 9, 1953.

[159] See Faulk, *Fort Hood: The First Fifty Years,* 111-112, for a brief overview of Exercise Longhorn.

[160] Ibid., *125.*

Figure 19. Men line up equipment and vehicles for inspection in preparation for Exercise Longhorn, 1952 (NARA).

The designation of Fort Hood as a permanent post and the Korean War also resulted in increased Congressional funding for Fort Hood's construction program to replace WWII temporary structures. Top of the priority list for permanent construction was troop housing. As such, construction on Fort Hood's first battalion-size permanent barracks began in June 1951. Completed in March 1953, the Storck Barracks, named in honor of Col. Louis J. Storck, who died in France in 1944, and his son, Lt. Louis J. Storck, Jr., who died in Korea in 1952, were constructed of reinforced concrete and masonry by Nathan Wohlfield of Dallas, under the supervision of the Corps of Engineers, Fort Worth District (Figure 20).[161] The eight buildings comprising the Storck Barracks cost $2 million, including the cost of utilities, grading, and landscaping, and were considered the most advanced in troop housing:

> Designed to give the maximum in natural lighting and ventilation, their spacious windows gives them a 'glassed-in' appearance to a passing observer. Each of the eight buildings can house a company of 225 men including such necessary facilities as a day room, orderly room, information room and education room, mess hall, and latrines.[162]

[161] See *Killeen Daily Herald,* March 19, 1953 and *Armored Sentinel,* August 27, 1953.

[162] *Armored Sentinel,* August 27, 1953; 256-man Hammerhead barracks were also constructed at Fort Hood.

The men of the 1st AD's 16th Armored Engineer Battalion were the first troops to occupy the new barracks.[163] In addition to the Storck Barracks, six additional barracks of similar design were under construction.

Figure 20. View of new barracks building at Fort Hood, 1950s (NARA).

Besides troop housing, the lion's share of funding for permanent construction during the Korean War went to family housing. An allocation of $4.5 million resulted in the completion of 568 units of Wherry housing in Walker Village by 1953; an additional 639 dependent housing units were proposed that year.[164] Other construction projects during this time included a Recreation Hall at Hood Village, a 29-room masonry construction elementary school, and in 1954, construction began on four battalion headquarters buildings, as well as facilities in support of the post's water supply.[165]

Although new construction was limited during this time (in comparison to later years), renovation projects abounded across the post. When, in 1953, the 1st AD was rebuilt as a strike force (rather than training men as replacements), "vacant build-

[163] Ibid.

[164] McCarthy and McCullough, *Fort Hood Military Family Housing,* 59.

[165] *Armored Sentinel,* September 14, 1962.

ings were reopened and redecorated" to accommodate the influx of troops.[166] Likewise that year, recreation facilities, such as the swimming pools, Theaters 2 and 3, Sports Arena No. 1, and the roller rink, were renovated and/or improved.[167] In 1954, as part of a post-wide program to remodel and air condition all post exchanges and snack bars, the Main Post Exchange (PX) was reopened after a $40,000 extensive remodeling project that included air conditioning, a sprinkler system, and new lighting fixtures and counters.[168]

Also needing physical accommodations at Fort Hood, as well as serving in support of Fort Hood's training mission, were the Food Service School and the Non-Commissioned Officers School (NCO Academy), both opened at Fort Hood during this time period. The Food Service School was the first service school to be operated at Fort Hood, opening in 1952 and graduating two hundred 1st AD soldiers in the same year.[169] The school was moved to Fort Hood from Fort Sam Houston, Texas, and was operated at Fort Hood, graduating thousands of cooks, until its deactivation in July 1958.[170]

The NCO Academy[171] was initiated at Fort Hood in 1951 by Major General Bruce C. Clarke (former 1st AD Commander), who, as a "training-conscious commander," also established the U.S. Continental Army Command and set up similar academies in Korea and Hawaii.[172] The purpose of the NCO Academy was to meet the needs of an "atomic Army" by producing military technicians and leaders by preparing enlisted soldiers, Reservists, and Guardsmen for leadership and qualifying them as military instructors. Not only did the NCO Academy instruct students on such topics as leadership responsibilities and human behavior, but it also provided specialist training in such fields as radio code sending and receiving, vehicle and weapon maintenance, and supply procedures.[173] During the 1950s, the NCO Academy en-

---

[166] *Armored Sentinel,* July 30, 1953.

[167] Ibid.

[168] *Armored Sentinel,* April 29, 1954 and *Armored Sentinel,* September 21, 1967.

[169] *Armored Sentinel,* January 15, 1953; the Food Service School was the first service school proper operated at Fort Hood; the NCO Academy, activated in 1950, was considered by some as a service school.

[170] *Armored Sentinel,* July 31, 1958.

[171] Also referred to in later years as the III Corps Academy.

[172] *Armored Sentinel,* June 19, 1959.

[173] Ibid.

dured several name designation changes while maintaining the same training mission, and graduated more than 20,000 students.[174]

By the end of the Korean War, Fort Hood began to see major activity in its permanent construction program. It would be in the later years of the 1950s, however, that major construction got underway at Fort Hood. This was largely because by the end of 1954, Fort Hood had become home to two divisions as well as headquarters for III Corps. In April 1954, III Corps was relocated from Camp Roberts, California, to Fort Hood, and in June 1954, the 4th AD was reactivated and joined the 1st AD already stationed and training at Fort Hood. [175]

2.7 Prepping the Atomic War

Following the cessation of hostilities of the Korean War, Fort Hood became even more involved as a training facility given its unofficial designation as a two-division post. Its official primary mission was stated as follows:

> The primary mission of Fort Hood is to provide essential housekeeping services, supplies, equipment and repair facilities for ground force troops stationed at Fort Hood, and similar services for reserve personnel that receive training at Fort Hood during the summer training period.[176]

As a secondary mission, Fort Hood was tasked with furnishing services, equipment, and supplies to Killeen Base, Gray AFB, and roughly 156 other satellite activities within a 375-mile radius.[177] As the country's largest military training facility, Fort Hood became a test bed for new weapons and technology, training and maneuver strategies, and unit reorganizations, all driven by emerging Cold War military philosophy as developed in Washington. The purpose behind training was to not only maintain a strong ground force, but more importantly to create a force capable of fighting an atomic war.

---

[174] See Ibid., as well as *Armored Sentinel,* June 4, 1953; January 1, 1958; and August 29, 1958 for articles on the NCO Academy.

[175] A document in the Fort Hood History binder at Casey Library, titled "25 Years of Fort Hood History" states that III Corps relocated from Fort MacArthur, California, not Camp Roberts.

[176] "Fort Hood, Texas," (Fort Hood, TX: 4th Infantry Division Archives, Box 4, 1954), 1.

[177] Ibid.

In the years following the Korean War, the Army instituted several programs and reorganizations geared toward achieving its philosophy. This was evident at Fort Hood in Operation Gyroscope, a program announced in 1955 that called for a rotational system of tactical units between permanent stateside stations and overseas duty stations. Fort Hood, one of six military posts chosen to participate in the program, began training the 4th AD that would, in 1957-58, rotate with the 2nd AD in Germany and stand vigilant against any possible move by Communist Russia.[178] Other ways in which the Army's Cold War philosophy was manifested at Fort Hood included the reorganization of the 4th AD in 1957, which became an atomic combat force armed with Honest John missiles. This reorganization was "in line with the new Army program of tailoring all [units] to fight wars in which atomic weapons have been included, while retaining the firepower and general effectiveness of successful non-atomic combat."[179] Further, the Army activated the Second U.S. Army Missile Command at Fort Hood, an outgrowth of the 4th AD unit.[180]

In line with the unit reorganizations was the field-testing of the reorganized units along with new maneuvering strategies. Various field exercises ranging in size from battalion level to combat command level to multi-division level were conducted at Fort Hood in the years following the Korean War. These exercises served to test new weapons, new troop formations, and new warfare strategies, as well as to inaugurate troops to atomic combat. As one reporter commented on a 1955 division level exercise, it helped "contribute to the American military thinking of tomorrow," on how to "make itself a more potent force in today's atomic-age."[181] In addition to Longhorn, large-scale exercises during this time period also included Cloverleaf III in 1959, which "simulated conditions of extensive nuclear, guerrilla infiltration, chemical, biological, and electronic capabilities of both friendly and aggressor forces," and Cimarron Drive and Exercise Big Thrust in 1960, which featured the firing of an Honest John rocket and tested the combat readiness of STRAC (Strategic Army Corps) Combat Command.[182]

---

[178] See *Armored Sentinel,* March 17, 1955; February 28, 1957; April 4, 1957; October 17, 1957 and March 27, 1959 for articles dealing with Operation Gyroscope.

[179] *Armored Sentinel,* April 4, 1957; see also *Armored Sentinel,* April 11, 1957; April 18, 1957.

[180] *Fort Hood Sentinel: Special Supplement, 50th Anniversary,* July 2, 1992.

[181] Jack Koten, "First Armored Exercise Aids Army Planning For Atomic Age," *Armored Sentinel,* March 3, 1955.

[182] *Armored Sentinel,* January 16, 1959; February 6, 1959; February 5, 1960 and April 29, 1960.

Of course, every summer, North Fort Hood served in continued support of both the Army's and Fort Hood's Cold War training mission by opening itself to the training of Reservists, Guardsmen, and ROTC. North Fort Hood was known as a training area and bivouac site, with semi-permanent supply and administrative facilities, as well as Special Services and Post Exchange facilities. This "tent city" (as it was commonly referred to) was well known for its training areas, which included tank and small arms ranges, as well as maneuver areas. Although these training areas would be used year round for training, the cantonment area of North Fort Hood was opened from June through August for two-week training cycles of anywhere from 30,000 to 40,000 civilian component troops.[183]

The heightened alert levels of the mid-1950s led to increasingly sophisticated radar networks designed to provide warning of attack.[184] Gray AFB received a radar station in 1957 that formed part of the Oklahoma City Air Defense Sector assigned to the 33rd Air Division (Defense).[185] The 814th Aircraft Control and Warning (AC&W) Squadron at Gray AFB served under Air Defense Control Center at Tinker AFB, Oklahoma. The station at Gray became part of more than 85 manned and unmanned stations, and consisted of a headquarters and barracks, a transmitter building, and operations building, two radars, and a power station.[186] Two separate locations at Gray were involved, with one radar on its own and the other radar co-located with the buildings.[187] The larger portion of the station was located at the southern end of Seven Mile Mountain, on an elevation known as Radar Hill.

The original radars assigned the station were outdated—an AN/FPS-3A and an AN/FPS-6, both from the post-WWII period.[188] Things began looking up for the unit in April 1959 when a much-improved, 200-mile range, AN/FPS-20A system that fed information to the Semi-Automatic Ground Environment (SAGE) System combat and direction centers was installed. SAGE was a national network of air defense radar systems with coordinated command and control facilities as defense against

[183] See *Armored Sentinel,* May 30, 1957; September 19, 1957; September 19, 1958; June 5, 1959; and July 29, 1960 for articles detailing the use of North Fort Hood during this time.

[184] For more detailed information on the 1950s military radar network, see David F. Winkler, *Searching the Skies: The Legacy of the United States Cold War Defense Radar Program*, (Champaign, IL; U. S. Army Construction Engineering Research Laboratories, 1997).

[185] Weitze, *Cold War Properties at West Fort Hood, Texas*, 32.

[186] Ibid.

[187] Ibid.

[188] Winkler, *Searching the Skies*, 158.

enemy bombers.[189] As intercontinental ballistic missiles (ICBMs) became a greater threat than bombers, funding for bomber defenses such as these radar systems was cut, and the Gray AFB Radar Hill installation was deactivated in late 1960.[190]

In addition to providing excellent training lands to test and refine a Cold War Army, Fort Hood was further viewed as a prime testing ground for new technology and equipment given its size and its ability to host large-scale maneuvers (Figure 21). In 1957, the M-103 tanks "underwent exhaustive field tests to determine their feasible use in combat" by the 4th AD, and in 1960, similar testing was given to the M-60 tanks by Fort Hood's STRAC tankers.[191] Aside from armor, Fort Hood also tested other equipment and programs such as a revolutionary new radar system in 1958 that was capable of detecting a single infantryman, and a new automotive maintenance program aimed at reducing the number of scheduled inspections.[192] Training at Fort Hood also led to the invention of new technology, such as the Fowler 3.5 Sighting and Aiming Device (invented by Sergeant Lucius T. Fowler), which became a standard training device.[193] In conjunction with testing new equipment and technology, Fort Hood also expanded and updated its training ranges to keep pace with these advances, including, for example, the construction of new "Trainfire" ranges used for teaching new methods of rifle marksmanship.[194] Likewise, Fort Hood's U.S. Army Airfield (Figure 22) was also the beneficiary of new and improved technology when, in 1958, a Ground Control Approach (GCA) system was installed that used radar surveillance in flight control, thereby enabling aircraft landings under bad weather conditions.[195]

---

[189] Ibid., 40-41.

[190] Ibid., 158.

[191] *Armored Sentinel,* October 3, 1957; June 17, 1960; August 12, 1960 and September 9, 1960.

[192] *Armored Sentinel,* July 17, 1958; September 12, 1958.

[193] *Armored Sentinel,* April 27, 1960.

[194] *Armored Sentinel,* January 29, 1960.

[195] *Armored Sentinel,* January 5, 1962.

Figure 21. Aerial resupply mission during Exercise Big Thrust, 1960 (NARA).

Figure 22. View of Hood Army Airfield, circa 1950s (NARA).

Also in support of Fort Hood's training mission and its role in preparing an army capable of fighting an atomic war, was the activation of the Language Training Facility in 1958. The Language Training Facility at Fort Hood was the first and largest of three such facilities activated in the Army, and had a dual mission of maintaining and improving the skills of Army linguists while training new interpreters and translators—a continuing need of the Cold War military.[196] Fort Hood was selected for one of the three language facilities because it was home to Company A of the 319th Military Intelligence Battalion with the largest concentration of linguists "west of the Mississippi River."[197] The facility at Fort Hood was comprised of a language laboratory capable of handling 48 students, "a tape library, a reading and reference library containing books in 27 languages, a film and record room stocking foreign language films and records, class rooms, recording rooms and a maintenance shop."[198] Housed in a building formerly used as officer's quarters modified for this new use, the school had an initial start-up cost of $80,000.[199]

Fort Hood also became home to the Aerial Observers School, which relocated to Fort Hood in 1959. The school was geared toward officers and NCOs, and taught courses in fire conduct, air navigation, using an aerial camera, communications, aerial reconnaissance for the armored column, parachuting, engine starting, ground handling, and first echelon maintenance.[200] Unlike the Language Training Facility or the NCO Academy, however, the Aerial Observer School was not conducted on a regular schedule and was offered only periodically as need and quota dictated.[201]

As much change as was witnessed in Fort Hood's training ranges and facilities following the Korean War, even more change was witnessed on Fort Hood's cantonment. In 1954, Fort Hood had roughly 2,200 mobilization type and 50 permanent type buildings, with an extensive list of construction projects to be undertaken.[202] By September 1957, Fort Hood had 2,650 buildings and had spent roughly $50 mil-

---

[196] The other two Language Training Facilities were located at Fort Bragg, N.C., and Fort Meade, MD.

[197] *Armored Sentinel,* September 25, 1959.

[198] *Armored Sentinel,* September 26, 1959.

[199] Ibid.; *Armored Sentinel,* September 9, 1960.

[200] *Armored Sentinel,* November 13, 1959.

[201] Ibid.

[202] "Fort Hood, Texas," (Fort Hood, TX: 4th Infantry Division Archives, Box 4, 1954), 1-2; see pages 6-7 for list of construction projects completed, underway and planned.

lion in permanent construction, with $2,362,000 in Congressional appropriations for permanent construction yet to be spent that year, and another $15 million authorized by Congress for future construction.[203] Included in the construction already completed or underway by September 1957 was the renovation and rehabilitation of 165 temporary WWII barracks for enlisted men at a cost of $2,523,873 and two nurses' quarters and four bachelor officers' quarters for a cost of $213,461.[204]

Of the $2,362,000 yet to be spent in 1957, $1.2 million was allocated for aircraft facilities, with the remaining funds going toward the construction of two classrooms, an engineer field and a signal field maintenance shop, a fire and rescue station, and a headquarters building, as well as funding construction already underway on the Officers' Open Mess and Non-Commissioned Officers' Open Mess buildings.[205] New construction for aircraft facilities would augment building work completed in 1956, which included two new hangars with maintenance shops, a new operations building and a seven-story flight control tower at Fort Hood's U.S. Army Airfield.[206]

In 1957, the Master Plan and the Post Planning Board put in place a vision of Fort Hood as the home of an armored division, various smaller units, and a corps headquarters. As it was stated at the time, "the future of Fort Hood, a post which has grown from a smattering of tents and temporary wooden buildings to the sprawling military base of today with spacious lawns, brick buildings, permanent streets has even more in store as the Department of Defense envisions the post as ultimately one of the finest of all training areas in the world with modern buildings and grounds."[207]

Construction in 1958 followed this vision with the addition of four new barracks buildings of durable, modern building materials in the "H-style" design that were capable of housing two companies, with one company on each side and sharing a

---

[203] *Armored Sentinel,* September 19, 1957.

[204] *Armored Sentinel,* April 4, 1957. Renovation included improved heating, lighting and plumbing, built-in lockers, covering all exposed framing, sealing interior walls with prefinished hardboard wainscot, and painting or refinished interiors. Shower and toilet facilities were added to the second floors, and fire alarm systems installed. The barracks renovated included standard 74-man and 54-man hospital type barracks.

[205] *Armored Sentinel,* September 21, 1967.

[206] Ibid.

[207] *Armored Sentinel,* September 19, 1957.

common mess hall in the center.[208] Additional new construction completed that year included housing support structures such as the Dispensary No. 1 building, and the NCO Club, while renovation projects were conducted on post swimming pools as well as the 2nd Missile Command Sky Cavalry unit headquarters building formerly occupied by the 6th Automatic Weapons (AW) Battalion.[209]

In 1959, Fiddler's Green, the "new half-million dollar enlisted men's service club," was opened, as well as the new Officer's Mess.[210] Fiddler's Green was constructed by A.B. Zachery Company of San Antonio for $548,000, under the Army's plan for modernizing service clubs, and according to officials of the Post Special Services, included the finest facilities in the Fourth U.S. Army area.[211] The new building also included a PX cafeteria branch. Akin to Fiddler's Green, the new Officer's Mess also was constructed to include the finest facilities, such as air conditioning.

Included in the 1960 permanent construction schedule were a new golf course and two chapels capable of seating 350 people—the first permanent religious facilities constructed at Fort Hood.[212] There were also numerous renovation and rehabilitation projects in 1960, including a 3,500-square-foot addition to the Main Commissary Store costing $25,000, an upgrade to the Combat Command A, 1st AD Commander's conference room, the refitting of the former NCO Academy buildings for the Fort Hood Reception Center, and the beginning of work on the Community Annex Building.[213]

Housing construction at Fort Hood following the Korean War was also extensive. The temporary housing area of Hood Village was replaced in 1957 with three permanent housing areas providing 435 units: Chaffee Village, Wainwright Heights, and Patton Park.[214] Construction for an additional 500 Capehart housing units began in Patton Park in 1958. [215] In addition, 800 more units were proposed. Con-

---

[208] *Armored Sentinel,* August 29, 1958.

[209] *Armored Sentinel,* November 5, 1958.

[210] *Armored Sentinel,* March 31, 1959.

[211] Ibid.; *Armored Sentinel,* September 21, 1967.

[212] *Armored Sentinel,* November 10, 1960. Each chapel cost $200,000.

[213] See *Armored Sentinel,* July 8, 1960; September 30, 1960; November 18, 1960; and December 9, 1960.

[214] McCarthy, *Fort Hood Military Family Housing*, 60.

[215] Ibid., 61.

struction on 700 of those units located south of Highway 190 in Pershing Park and 100 units in Patton Park began in 1960.[216] Also in 1960, the 568 units in Walker Village were rehabilitated and updated.[217]

Indeed, permanent construction in support of the Cold War training mission of Fort Hood was accelerated following the Korean War and the post's designation as permanent. As one newspaper article remarked, new construction was "marching from east to west across the present cantonment, with a few greatly needed projects far ahead of the 'line of advance'."[218] By 1957, the Corps of Engineers had estimated Fort Hood's worth at approximately $155 million, including land and improvements (Figure 23); by 1960, this figure had increased to $177 million.[219] Further, the Post Planning Board had estimated that it would cost an additional $127 million to completely renovate Fort Hood's built environment from a temporary WWII cantonment to a permanent modern post, and set 1974 as the completion date for this transformation.[220] Before this deadline could be reached, however, the Cold War started to heat up in earnest.

Figure 23. Aerial view of Fort Hood Main Post, 1958 (4th ID Museum).

[216] Ibid.

[217] Ibid., footnote 165.

[218] *Armored Sentinel,* September 16, 1960.

[219] Ibid.

[220] Ibid.; *Armored Sentinel,* September 19, 1957.

2.8 Prelude to Vietnam

> The camp is now a fort, a permanent installation in Central Texas. It has served the country through one war and the Korean Conflict, and today is serving her well, as the country marches down the winding Cold War road. It is the training site of 40,000 men, and the home of III Corps, and the 1st and 2nd Armored Divisions. Its purpose is as clear now as it was 20 years ago.[221]

Twenty years previously, in 1942, Camp Hood was established to beat enemy forces. In 1962, when the above statement was given, it looked as if serious war clouds were once again gathering after the Berlin Crisis of 1961 and the Cuban Missile Crisis of 1962. Unfortunately, they were…in the form of the coming Vietnam War. The events leading up to the Vietnam War had a significant impact on Fort Hood, in terms of both its training mission and troop composition, and also in its built environment.

2.8.1 Berlin and Cuban Missile Crises

In response to the Berlin Crisis and President Kennedy's instruction "to prepare for any eventuality," the Army changed the mission of the 2nd AD from training to combat preparedness. On September 1, 1961, the III Corps ("Phantom Corps") was reactivated for the fourth time. After a fall of intensive training, the III Corps was designated a STRAC unit in February 1962.[222] STRAC's mission was to be ready for immediate deployment into combat whenever needed.[223] In addition, the Army alerted 113 units and extended 84,000 tours as part of its build-up of forces in 1961.[224] Troop strength at Fort Hood reached 40,000 men by fall of 1961.[225] In response to the Cuban Missile Crisis, the 1st AD moved to Fort Stewart, Georgia, in early October, but returned to Fort Hood by late December (Figure 24).[226]

---

[221] *Armored Sentinel,* September 14, 1962.

[222] Faulk, *Fort Hood: The First Fifty Years,* 133.

[223] Ibid.

[224] *Armored Sentinel,* January 5, 1962.

[225] Ibid.

[226] *Armored Sentinel,* January 4, 1963.

Figure 24. 1st AD soldiers return to Fort Hood after Cuban Missile Crisis (NARA).

In 1962, Kennedy announced that he had approved the immediate activation of two permanent regular Army divisions increasing the Army from 14 to 16 divisions. The 1st AD at Fort Hood was one of the two selected, the other was the 5th Infantry.[227] The 1st AD was then officially reactivated (Figure 25) under the Reorganization Objective Army Division (ROAD), along with the 5th Infantry.[228] This large Army reorganization under the Kennedy Administration was based on a division structure that allowed for variability depending on the specific war theater. New combat maneuver battalions became "building blocks;" a tank battalion, an infantry battalion, a mechanized infantry battalion, and the parachute infantry battalion. The number and combination of these battalions depended on the specific mission. The program met with success and the remaining 14 active divisions were reorganized by 1964.[229]

[227] *Armored Sentinel*, January 5, 1962.

[228] *Armored Sentinel*, July 13, 1962.

[229] McCarthy and McCullough, *Fort Hood Military Family Housing*, 42.

Figure 25. Activation ceremonies of the 1st AD, 1962 (NARA).

The Berlin Crisis pre-empted the annual summer training of guardsmen and reservists at North Fort Hood for the first time in 12 years, "with 40,000 troops comprising two armored divisions and many non-divisional STRAC units assigned to Fort Hood, there just wasn't enough space to move in anyone else this year."[230] There were only a few permanent buildings at North Fort Hood, and during annual training the soldiers lived in tents, but the area could be used to train thousands of men in an emergency. During the war years, approximately 72,000 troops were stationed at North and South Fort Hood.[231]

In addition to being prepared and ready for any eventuality, Fort Hood soldiers often helped domestically with damage and rescue operations in response to local disasters like floods and hurricanes.[232] Missions sometimes extended to peacekeeping functions, such as in 1962 when Fort Hood soldiers were sent to Oxford, Mississippi,

[230] *Armored Sentinel,* September 14, 1962.

[231] Ibid.

[232] Ibid.

to assure that James Meredith, the first black person to attend the University of Mississippi, safely remained in school. While at Oxford, Fort Hood's Task Force Echo "set up roadblocks, patrolled the streets, conducted searches of all in-coming automobiles and guarded the Municipal Airport."[233] Task Force Echo, which comprised one-tenth of the force in Oxford, played a unique role in history.[234]

2.8.2 Training for the coming war

Improved conventional weapons, increased mobility, and the development of nuclear weapons led to the evolution of Army tactical doctrine during the Cold War. As a result of growing concerns in Southeast Asia, several new training programs were implemented at Fort Hood. These programs were "in accordance with President Kennedy's increased emphasis on training to fight guerrillas and insurgents—even in an armored division."[235]

The 1st AD and the 6th Infantry began a vigorous, ranger training program, a counter-guerilla course, and an infiltration course, based on a famous WWII battle course.[236] In addition, Company B, 16th Engineer Battalion, 1st AD, constructed three platoon-type combat assault courses at Fort Hood at a cost of approximately $7,000 each.[237]

Training for a war in the jungles of Vietnam required a different set of skills than those used in WWII. The 2nd AD's simulated Vietnamese village brought a needed realism to training at Fort Hood. The village was located on East Range Road adjacent to Cowhouse Creek and contained a complex system of tunnels. Entrances to the tunnels were concealed and surrounded by booby traps, a moat, barbed wire, steep slopes, and bamboo *punji* sticks.[238] An *Armored Sentinel* article mentioned training in the tunnels, "After clearing the smoke from your lungs, you think about those men in Vietnam who are crawling through real tunnels. There are the pieces

[233] *Armored Sentinel*, January 4, 1963.

[234] *Armored Sentinel,* October 19 1962.

[235] *Armored Sentinel*, February 2, 1963.

[236] *Armored Sentinel,* June 9, 1961.

[237] *Armored Sentinel*, May 3, 1963; May 17, 1963.

[238] Faulk, *Fort Hood: The First Fifty Years*, 145.

of metal that just might be poisoned-tipped *punji* sticks or trick grenades. The grenade tossed into the tunnel could be [a] real one, and you might be dead."[239]

2.8.3 Maneuvers and Exercises

As the need for training and combat readiness increased in the 1960s, so did the frequency of large-scale maneuvers and exercises. Held in 1961, Exercise "Thunder Bolt" was the first joint Army and Air Force exercise. Six thousand troops took part in the exercise, demonstrating the strength and combat readiness of STRAC. "The primary purpose of the exercise was to provide training for commanders, staffs, and troops in the use of nuclear weapons and chemical, radiological and electronic warfare."[240] Many joint Army and Air Force exercises followed, including Exercise "Core Shield" and "Track Down" in 1962.

In 1963, the Secretary of Defense announced that the 2nd AD was selected to demonstrate the versatility and mobility of a STRAC armored division in Operation "Big Lift" (Figure 26). The requirements for this exercise were to airlift the entire division to Germany in less than 72 hours, marry up with a complete set of Armored Division equipment and supplies, engage in 9-day maneuver, clean, service, and store equipment and return home. The 2nd AD beat the goal by six hours and 50 minutes.[241] According to General Maxwell Taylor, then Chairman of the Joint Chiefs of Staff, "It was an impressive operation. It not only tested the caliber of our military planning and training, but most important demonstrated our capability to reinforce our allies in Europe."[242]

In the May 1964 Operation "Desert Strike," 28,000 men from Fort Hood joined the Air Force and other Army units in a 100,000-man maneuver conducted over 13 million acres of barren land in the Mojave Desert.[243] Troops traveled by train and highway convoys, part of the "largest deployment of armor in the continental US

[239] *Armored Sentinel*, September 21, 1967.

[240] *Armored Sentinel*, August 19, 1960.

[241] *Armored Sentinel*, January 3, 1964, October 25, 1963; November 22, 1963; December 6, 1963.

[242] *Armored Sentinel*, December 6, 1963.

[243] *Armored Sentinel*, May 1, 1964.

since WWII."[244] The operation, "an imaginary international situation seeming from disputed water rights" was termed a success.[245]

Figure 26. 2nd AD boards a plane to Germany in Operation "Big Lift" (NARA).

Fort Hood also borrowed land from the local community to hold exercises and maneuvers. For example for Blue Star I and II, landowners in six counties loaned land to the Army for three exercises.[246] Additional land was needed for this series of map maneuvers, "so that each headquarters would 'experience' factors of distance and time which could not be encountered with the land area on the military reservation."[247] In the end, Blue Star III was restricted to Fort Hood lands as a considera-

[244] *Armored Sentinel*, January 6, 1965.

[245] *Armored Sentinel*, January 8, 1965.

[246] *Armored Sentinel*, December 11, 1964.

[247] Ibid.

tion to landowners, and to avoid interrupting lambing season.[248] It was a successful exercise in civilian community and military relations.

2.8.4 Developing and Testing Military Equipment

During the Cold War, Fort Hood had an important role in testing new equipment, weapons, and training doctrine. 2nd AD was the first armored division to receive the Army's new main battle tank, the M-60 and the M-113 armored personnel carriers.[249] The M-60 was designed to replace the M-48 series (Figure 27 and Figure 28).[250] The M-113 was designed to replace the M-58, at about half the weight and light enough to be air dropped to troops in the field.[251]

Figure 27. M-60 tank commander rolls toward objective during training (NARA).

[248] *Armored Sentinel*, March 12, 1965.

[249] *Armored Sentinel*, September 14, 1962.

[250] *Armored Sentinel*, July 11, 1969.

[251] Faulk, *Fort Hood: The First Fifty Years,* 132; *Armored Sentinel*, September 14, 1962.

Figure 28. An M-60 tank spews flames on target during training exercise (NARA).

The 14th Artillery, 2nd AD tested the 45-tube M-91 rocket launcher in1963 and fired the Light Anti-tank Weapon (LAW) on a Fort Hood range for the first time in 1965.[252] In addition, the 2nd AD was selected to make first troop tests of the "revolutionary new command-reconnaissance vehicle, the T-114."[253]

In aviation, the first AH-1G Huey Cobra helicopter flight tested at Fort Hood in 1966 (Figure 29). It was developed by Bell Helicopter and slated to replace the UH-1B Huey, the principal arms helicopter in Vietnam.[254] This helicopter was designed to "form a fire support mission by supplying the necessary fire power in a far greater volume and shorter time than the UH-1B" and it had a 50 % speed increase over the "troop carrying Huey."[255]

---

[252] *Fort Hood Sentinel: Special Supplement, 50th Anniversary,* July 2, 1992, date of original articles, June 17, 1963 and September 17, 1965.

[253] *Armored Sentinel*, March 8, 1963.

[254] *Armored Sentinel*, June 17, 1966.

[255] Ibid.

Figure 29. Huey Cobra helicopter put through its paces at Fort Hood (NARA).

Even the National Aeronautics and Space Administration (NASA) was testing at Fort Hood. In 1965, NASA para-dropped a full-scale model "spacecraft" on Fort Hood ranges. The test, to determine the safety of a parachute landing versus a water landing, was the first time a "spacecraft" was used.[256] The spacecraft tested was a mock Gemini capsule.[257] NASA had been making drops at Fort Hood since 1963, as Hood's proximity to Houston and plentiful space made it an excellent site for testing. In the end, this method was never used with the Gemini Program.[258]

[256] *Armored Sentinel,* April 16, 1965.

[257] *Fort Hood Sentinel: Special Supplement, 50th Anniversary* (July 2, 1992), date of original article, April 23, 1965.

[258] Faulk, *Fort Hood: The First Fifty Years,* 145.

2.9 Constructing a Permanent Installation

During the Cold War period, there was an enormous need for construction at Fort Hood to build permanent structures and to replace the aging WWII buildings. In fact, "one million dollars a month were being spent in improving the facilities at Fort Hood in the 1960s."[259] Also during the 1960s, small parcels of land were purchased, increasing the size of Fort Hood to 218,405 acres.[260] A continuing construction program was developed at Hood to provide adequate living, medical, working and recreation facilities for the troops.

With the reactivation of the 1st AD, units were spatially reorganized on post. 1st AD occupied buildings west of Hood Road as far as the U.S. Army Hospital; the headquarters was relocated to occupy the area formerly occupied by the 53d Signal Battalion before its departure.[261] The implementation of this plan and reorganizing troops necessitated a change in the living area per man from 72 square feet to 55 square feet, still within minimum criteria established by Department of the Army, but not great for the soldier.[262]

By 1964 there was a severe housing shortage at Fort Hood, and it was estimated that the housing needs were being met on post for only 24% of the assigned personnel. The remaining 76% had to locate housing in the surrounding communities. The wait for housing for a lieutenant colonel or a major was from five to eight months.[263]

In 1965, construction began on a barracks complex at Battalion Avenue, between 33rd and 37th Streets that included two new barracks, a mess hall, an administration building, a supply building, and two battalion headquarters for the 2nd AD.[264] Construction was estimated to be completed by June 1966. Also starting construction were ten modern brick barracks built in a regimental brigade complex located be-

[259] *Fort Hood Sentinel: Special Supplement, 50th Anniversary* (July 2, 1992).

[260] Ibid.

[261] *Armored Sentinel*, January 1, 1962.

[262] Ibid.

[263] *Armored Sentinel*, April 3, 1964.

[264] *Armored Sentinel*, March 26, 1965.

tween Central and Battalion Avenues.[265] The new complex, the second largest single contract next to Pershing Park, replaced 122 existing wood barracks.[266]

A Killeen Daily Times article on the construction was headlined, "Wooden Barracks Give Way to Modern, Air-Conditioned Units," and described the new units at Fort Hood as built of brick, concrete block, and asbestos tile, designed to last 50 years, and to accommodate no more than 8 men to a room.[267] The article goes further to explain, "Important is the arrangement of functional areas, in the old barracks men slept in large bay rooms 40 bunks per room…these new barracks are more like college dorms."[268]

Planned for fiscal year 1966 was a complex of seven enlisted men's barracks, "which are identical to 10 under construction and 3 already completed," located in the "troop housing belt" between Battalion and Central Avenues between 58th and 67th Streets in blocks 2100, 2400, and 2700.[269] The construction included support buildings such as mess buildings, classrooms, and storage and administrative buildings.[270] In addition, new barracks were planned near the hospital: one for 326 men and one for 108 women.[271] Additional fiscal year 1966 construction included five tactical and equipment shops and facilities in the organizational motor park belt, all east of Hood Road, with two in block 1700, and one each in blocks 1500, 1300, and 9500.[272]

In 1962, plans for a new post hospital were announced, and the design contract was awarded in March 1962 to Wirtz, Calhoun, Tungate, and Jackson Architects of Houston, Texas.[273] In September 1965, the 392-bed, Darnall Army Hospital opened between South Avenue and the stadium near Golf Course No. 1.[274] It replaced the

[265] *Killeen Daily Times*, January 1, 1965.

[266] Ibid.

[267] *Killeen Daily Herald*, (no date) (4th ID museum, Box 184: III Corps Folder 184/4).

[268] Ibid.

[269] *Temple Daily Telegram*, December 10, 1965.

[270] Ibid.

[271] *Temple Daily Telegram*, November 19, 1965.

[272] Ibid.

[273] *Armored Sentinel*, August 17, 1962.

[274] Ibid.

WWII era hospital complex of 111 one-story connected buildings.[275] Five-stories tall, the new hospital complex (Figure 30) featured clinics, laboratory services, X-ray service, emergency room, and administrative area on the first floor. A cafeteria, library, chapel, post exchange, annex, barber shop, post office, and dining room were located on the lower level.[276]

Figure 30. President Lyndon B. Johnson arriving in front of Darnall Army Hospital, December 12, 1967 (NARA).

In 1962, the Old Reynolds house was renovated. Built in 1915 by Hiram B. Reynolds the house is only one of two left on post after the Army arrived. "An old farmhouse, the ten-room home has been living quarters for several general officers and colonels since Fort Hood acquired it. The Army has remodeled the inside and has added many modern conveniences."[277] The guesthouse east of Headquarters Avenue was also renovated at this time. It reopened in 1961 after repairs and renovations totaling $16,500 with 24 single rooms and four suites.[278] In February 1963, the Main Post Exchange was remodeled to add an additional 12,000 square feet of

[275] *Armored Sentinel*, October 22, 1965.

[276] *Armored Sentinel*, September 21, 1967.

[277] *Armored Sentinel*, September 28, 1962.

[278] *Armored Sentinel*, November 3, 1961.

shopping space.[279] Also during the 1960s, the Fairbanks Dental Clinic was built and dedicated.[280] The 2nd AD Chapel on 25th Street, the first permanent chapel constructed on post, was destroyed by fire in July 1967, and was rebuilt in 1969 (Figure 31). [281]

Figure 31. Newly rebuilt 2nd AD Chapel (NARA).

In 1961, the 2nd AD's museum opened in its new location at Building 411 off Battalion Avenue. According to newspaper accounts, the museum's exhibits tracking the famous "Hell on Wheels" division "tells the story of war and peace in equipment, souvenirs, photographs and press clippings."[282] The museum, originally located in Building 239, first opened in 1958 but rapid growth had the museum cramped for

[279] *Armored Sentinel*, February 2, 1963.

[280] *Armored Sentinel*, October 21, 1968.

[281] *Armored Sentinel*, July 11, 1969.

[282] *Armored Sentinel*, May 19, 1961.

space.[283] In May of 1963, the 1st Cavalry opened a museum on Battalion Avenue next to their headquarters in the S-4 Building. The building, formerly a storage space, was renovated for the museum. "I designed the building to have the style of light Spanish architecture on the inside and heavy Spanish architecture on the outside because of the 1st Cavalry's many encounters during the Mexican Wars," explained Captain Byron G Mitchell.[284]

New recreational facilities built on Fort Hood during the 1960s included a new bowling center, a rod and gun club, and an 18-hole golf course and clubhouse. In September 1965, Bowler's Green, a new 24-lane bowling center with modern automatic bowling lanes, pinsetters, and scorers was built between Fiddlers Green Service Club and Theater No 3 facing 162nd Street.[285] In addition, the new Rod and Gun Club opened in November 1965 (Figure 32).[286]

Figure 32. View of the Fort Hood Rod and Gun Club (NARA).

[283] Ibid.

[284] *Armored Sentinel*, May 31, 1963.

[285] *Armored Sentinel*, March 20, 1964.

[286] *Armored Sentinel*, September 10, 1965.

Fort Hood finally acquired an 18-hole golf course with the completion of the back nine holes at Golf Course No. 2.[287] In June, the Golf Club House was erected a short distance from the Bachelor Officer's Quarters just north of South Avenue. It measured 80 by 160 feet, with a total floor space of 12,800 square feet and was built by the 35th Engineer Group.[288]

2.9.1 Landscape beautification projects/competitions on post.

In 1960, landscape beautification competitions appeared at Fort Hood. This program continued at least until 1965 with Green Thumb awards totaling $225 and trophies given in three classifications: military unit, NCO quarters, and officers' quarters.[289] The landscape awards were given in five categories: lawns, shrubs, trees, flowers, and for the highest aggregate of the three classifications.[290]

> "With the advent of warm weather and sunny skies comes the time for all Fort Hood residents to start a personal landscape beautification program. Fort Hood is potentially one of the most attractive of the nation's large installations. Well-planned housing areas and neat rows of barracks are pleasing to the eye, but often the area around these buildings reminds one of the Sahara Desert. One of the best ways of making the housing areas more beautiful is to plant flowers and shrubs around homes. An added incentive for those who may not have a green thumb is the annual landscape beautification contest that is conducted in late summer. It only takes a little ugliness to give Fort Hood a seedy air, but just a little effort by everyone can turn this semi-desert area into an oasis."[291]

2.10 Transfer of Gray Air Force Base to Army

With the decrease in use of Gray AFB, the Air Force withdrew its few remaining units in 1963 and turned the installation over to the Army. The 501st Aviation Bat-

[287] *Armored Sentinel,* May 5, 1961.

[288] *Armored Sentinel*, June 30, 1961.

[289] *Armored Sentinel*, September 25, 1965.

[290] *Armored Sentinel*, July 8, 1960.

[291] *Armored Sentinel*, March 10, 1961.

talion, 1st AD, temporarily ran the base.[292] At the time, the runway at Gray Airfield was 10,000 foot long and 200 feet wide, which made it longer than several other Air Force runways and longer than the 4,712-foot long, 144-foot wide runway at Hood Airfield (Figure 33).[293] However, Hood Airfield had more traffic than Gray, averaging 200 arrivals or departures per day compared to the 120 to 140 daily at Gray Airfield.[294] Gen. Thomas W. Dunn, Commander of III Corps and Fort Hood described the benefit of the addition of the Gray facility to the Army aviation program at Fort Hood:

> Today's modern U.S. Army is placing paramount emphasis on aviation. It will be very much a part of the Army's future. I am pleased to know that Fort Hood is well equipped to meet the expected future growth of Army aviation with two splendid airfields, Fort Hood Army Airfield and Robert Gray Army Airfield. The combined capabilities of the two airfields make it possible for us to accommodate the small but strategic rotary wing H-13 as well as the huge KC-135 jet tanker of the U.S. Air Force. The Runways, ramps and hangars house the aviation battalions of the 1st and 2nd ADs, as well as the air cavalry troops of the two divisions. These fine aviation units are helping to build a solid foundation for Army aviation. Their contributions to this vital field of Army activity will help shape the future course of not only Army aviation but the U.S. Army as well.[295]

Gray's facilities included two vast ramps, an eight-story control tower, underground fuel storage area of more than a million gallons, and two new instrument simulators.[296] At the time, new buildings at Hood Airfield included an operations building; a plans, training, and operations building; and air traffic control and ground radar approach control buildings.[297] In 1961, a new seven-story control tower was completed and Fort Hood could "boast of one of the most modern and well-equipped structures of its type in the Army."[298] The transfer of Gray took place a month be-

---

[292] *Armored Sentinel*, October 11, 1963.

[293] Ibid.

[294] Ibid.

[295] *Armored Sentinel*, October 19, 1963.

[296] *Armored Sentinel*, June 14, 1963.

[297] *Armored Sentinel*, June 11, 1963.

[298] *Armored Sentinel*, January 5, 1962.

fore Exercise Big Lift and the extra facility aided the Army in transporting troops to Germany.

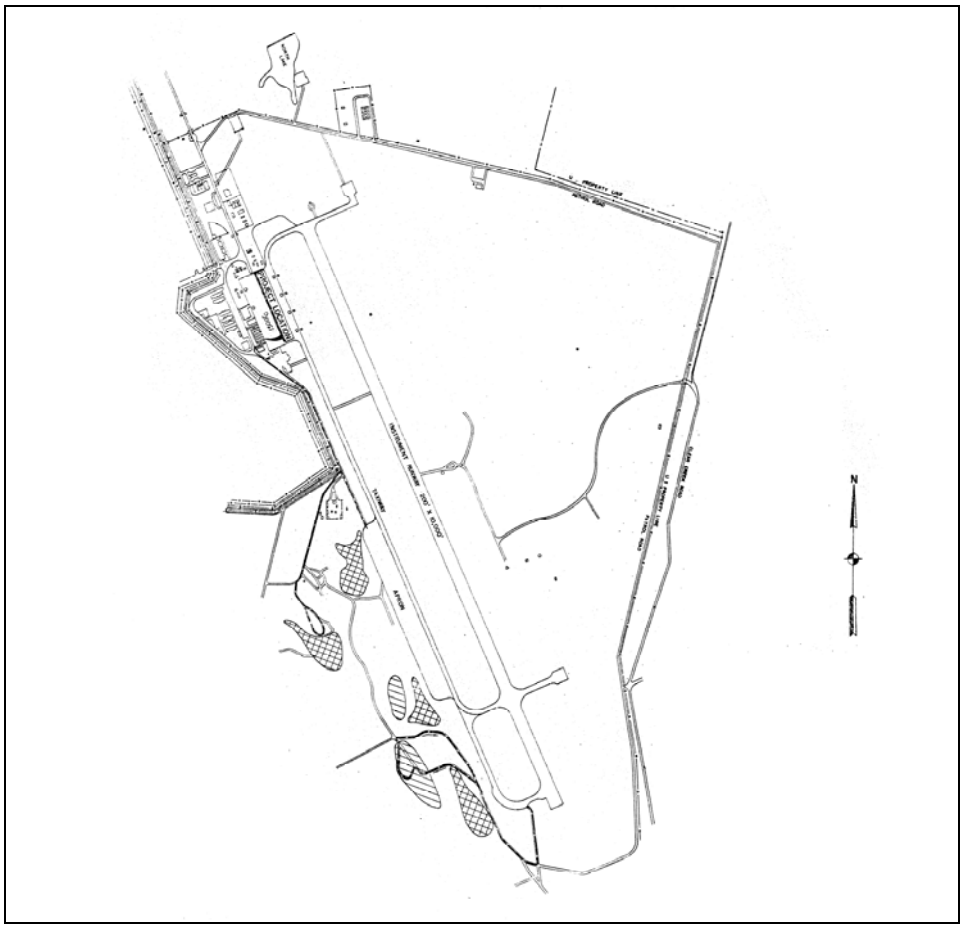

Figure 33. 1960s Map of Gray Air Force Base (West Fort Hood) (Fort Hood DPW).

2.11 Fort Hood and the Vietnam War

In retaliation for the August 1964 attack on U.S. destroyers in the Gulf of Tonkin, Congress voted to empower the President to "take all necessary measures" to repel any armed attack against the forces of the United States.[299] By the end of 1965, 184,000 American soldiers were deployed to Vietnam.[300]

[299] McCarthy, *Fort Hood Military Family Housing*, 29.

[300] Kuranda, *Unaccompanied Personnel Housing,* 3-21.

Fort Hood provided a valuable training role during the Vietnam War. The III Corps supervised the training and deployment of more than 137 units to Southeast Asia. The III Corps mission during the Vietnam War was to be prepared to move out rapidly to Europe to protect North Atlantic Treaty Organization (NATO) nations should the Soviet Union or its allies take advantage of U.S. involvement in Vietnam.[301] The 1st AD trained and provided logistics to National Guard troops in addition to their STRAC mission. In 1967, the 1st AD sent five battalions of the 198th Infantry Brigade to Vietnam.[302]

The 2nd AD sent men from its cavalry, infantry, field artillery, engineering, and 87th chemical brigades.[303] The 2nd AD was the first regular armored division to be assigned to the STRAC, with a mission to be prepared to deploy to any part of the world within 72 hours after receiving an alert notification.[304] Combined, 1st and 2nd AD trained more than 22,000 individuals for the Vietnam War.[305]

While the 1960s Army was better trained than ever before, there was a growing hostility toward the war. A coffee house in Killeen served as a local headquarters for the antiwar movement, although the group did not seem to get much publicity in the community.[306] When Jane Fonda, actor and activist, showed up at Fort Hood to distribute anti-war literature, she was quietly handled by the Military Police and banned from the post.[307]

Based on a campaign promise, President Nixon began withdrawing troops from Vietnam in June 1969. The 1st Cavalry was the first Fort Hood division to arrive in Vietnam and the last to leave when the 3rd Brigade returned to Fort Hood in 1972.[308] "By May 1972, the regular Army had been reduced to 850,000 troops from its wartime peak of 1.5 million and by 1974, the Army was reduced further to

[301] Faulk, *Fort Hood: The First Fifty Years,* 146.

[302] Ibid.

[303] Ibid.

[304] *Armored Sentinel*, July 11, 1969.

[305] *Armored Sentinel*, January 6, 1967.

[306] Faulk, *Fort Hood: The First Fifty Years,* 149-50.

[307] Ibid.

[308] III Corps, Fort Hood, Texas, *Celebrating Sixty Years of Excellence, 1942-2002,* (III Corps History Office, Fort Hood Texas, 2002).

783,000, a level that the Army maintained for the remainder of the Cold War era."[309]

2.12 A Two Division Post

It was officially announced on September 25, 1967, that Fort Hood had been designated a two-division post.[310] The announcement was made during Fort Hood's 25th anniversary celebration. Prior to this, Hood had formally been home to only one division although two had been stationed there for several years. Officials at Fort Hood hoped that the designation would help attract funds to convert all remaining temporary type buildings to permanent facilities at a cost of approximately $190 million over the next 20 years.[311] At the time, Fort Hood had already spent $126 million in appropriations from Congress.[312] As of 1967, Fort Hood's mission was home post for two STRAC armored divisions and supporting troops, and the III Corps Headquarters.[313]

In January of 1967, the Secretary of Defense, Robert S. McNamara released $564 billion for construction of military housing, barracks, and other projects in a move to boost military morale and the civilian economy.[314] McNamara stated that "this action at this time will have a beneficial effect upon morale in the armed forces, satisfy valid construction and housing requirements, and have a salutary effect on the construction industry."[315] Funds had been on hold since the conflict in Vietnam escalated in December 1965. Funds unfrozen at this time included appropriations for two hospital barracks, bachelor officers' quarters, a dental suite, a complex of seven enlisted men's barracks, and road widening.[316]

---

[309] Kuranda, *Unaccompanied Personnel Housing,* 3-21

[310] Faulk, *Fort Hood: The First Fifty Years,* 148.

[311] "Old Temporary Structures to be Replaced Hood Designated Two-Division Post," *Armored Sentinel*, September 29, 1967.

[312] *Armored Sentinel*, September 29, 1967.

[313] *Killeen Daily Herald*, September 18, 1967.

[314] "McNamara Frees $564 Million for Military Buildings," *Austin American-Statesman*, January 21, 1967.

[315] Ibid.

[316] "Fort Hood to get $13.6 Million," *Austin American-Statesman*, January 21, 1967.

Construction projects were soon underway and included the widening of a 10-block strip of Battalion Avenue, construction of the dental clinic, enlisted men's and women's barracks in the Darnall Hospital area, and extensions to three streets. The enlisted men's barracks complex was constructed west of the old hospital area and included seven 326-man air-conditioned barracks, three battalion sized mess halls, three administration and supply buildings and four headquarters, a gym, chapel, post exchange, dispensary, and parking.[317] An exclusive classroom facility was built on North Avenue.[318]

Construction on the new Bachelor Officers Quarters (BOQ), housing 300 male and female officers at a cost of $2.7 million, began in January 1968.[319] In July 1968, another $11.25 million was released for two tactical shops, a sewage treatment plant, and improvements to the water supply system.[320] The cost of the sewage treatment plant was split with the city of Killeen. The plant served 90,000 people but was designed to incorporate an expansion to 130,000, and eliminated eight odorous lagoons.[321]

The Senate passed an $877,000 appropriation for constructing hangers and shops at Fort Hood in 1968.[322] By the end of 1968, $16 million in construction work was coming to completion; the widening of Battalion Avenue from 27th to 37th Streets, two new tank repair shops, and two battalion storage buildings (Figure 34).[323] Fairbanks Dental Clinic, located on Headquarters Ave and 31st Street, opened in October.[324]

---

[317] *Armored Sentinel*, August 11, 1967.

[318] Ibid.

[319] *Temple Daily Telegram*, August 15, 1968.

[320] *Temple Daily Telegram*, May 17, 1968.

[321] *Armored Sentinel*, November 24, 1967.

[322] *Temple Daily Telegram*, June 27, 1968.

[323] *Armored Sentinel*, October 18, 1968.

[324] Ibid.

Figure 34. Newly constructed storage building, 1967 (NARA).

2.13 Killeen Base Closes

Killeen Base was slated to be shut down by the Department of Defense by October 31, 1969, as one of 36 post closings across the nation.[325] Area civic leaders and state representatives lobbied the Army to prevent this from happening. On September 22, it was approved to put the facilities at Killeen Base to use for a new Army testing center and save long-term construction costs of $5.6 million.[326] As a result, Killeen Base officially became part of Fort Hood and with Gray Army Airfield, was re-designated West Fort Hood.[327]

The new test center, Mobile Army Sensor Systems Test, Evaluation, and Review (MASSTER) was set up to provide "continuous testing and evaluation of doctrine, concepts and material for Army battlefield surveillance and information gathering."[328] MASSTER was a one-of-a-kind center under the auspices of the Surveillance, Target Acquisition and Night Observation (STANO) systems office, which was responsible for acquiring technology within 5-10 years that would enable the

[325] "Killeen Base Kept Open as Part Of Hood," *Killeen Daily Herald*, September 30, 1969.

[326] Ibid.

[327] "Killeen Base Now IS West Ft. Hood," *Armored Sentinel*, October 3, 1969.

[328] "Hood Test Center Will Help Improve Army Field Intelligence Capabilities," *Killeen Daily Times*, September 3, 1969.

Army to train and fight continuously, 24 hours a day, in any weather.[329] The new center was to be staffed by 200 civilian and military personnel who would report to the facility in October.[330] Hood was selected for MASSTER, "because this area has the weather, terrain, facilities for ground and air forces and above all, the kind of mobile minded leadership which has imagination and vision."[331]

In 1970, MASSTER was responsible for testing the AN-VS4 night observation device. In the two-week test, MASSTER evaluated the equipment that subsequently became critical in aiding combat infantry in locating and destroying the enemy.[332] That same year, it was reported that Vietnam and MASSTER were the most significant happenings in the Army, and that the number of MASSTER employees had grown to 282.[333]

2.14 Post-Vietnam Re-organization and Construction

In 1971, the 1st AD was sent to Europe to replace the 4th AD, which was deactivated and merged with the 1st AD. The 1st Cavalry came to Fort Hood in their place (Figure 35).[334] The official change of command took place on May 6, 1972, "the Old Ironsides crest was lowered and the vehicle–mounted troops left the field, signifying the departure of the division. The troops then returned to the field, repositioning their vehicles in symbolic structure of the new division. Nearly 1/3 of the new division's rotary-winged aircraft created an impressive scene as they landed on the field."[335] The division was reorganized under a new concept involving the triple capability (TRICAP) of the Army: the helicopter, foot soldier, and armor. This reorganization was an experiment and was tested by MASSTER. The division organization consisted of an armored brigade, mechanized infantry brigade, airmobile brigade, and support troops.[336] The TRICAP experiment lasted until February 1975

[329] Ibid.

[330] Ibid.

[331] *Armored Sentinel*, January 30, 1970.

[332] *Armored Sentinel*, April 17, 1970.

[333] *Armored Sentinel*, January 8, 1971.

[334] Faulk, *Fort Hood: The First Fifty Years,* 154.

[335] *Armored Sentinel*, May 7, 1971.

[336] Faulk, *Fort Hood: The First Fifty Years,* 155.

when the 1st Cavalry Division became Armored.[337] Also at this time, the III Corps became part of the newly established Forces Command (FORSCOM).[338]

Figure 35. Aerial view of 1st Cavalry Headquarters (NARA).

After the Vietnam War, the draft was ended and the Army made a change to an all-volunteer force. Project Volunteer Army, VOLAR, was aimed at "determining the effectiveness of certain expenditures in the effort to achieve zero-draft by July 1, 1973."[339] Since this required that the Army be seen as an attractive option, the goals of VOLAR, were to "1) Increase enlistments by increasing the attractiveness of the Army, 2) initiate programs and policies considered essential to early attainment of the zero-draft goal, and 3) additional action if 1 and 2 fail."[340] Much of the effort

[337] McCarthy and McCullough, *Fort Hood Military Family Housing*, 53.

[338] *Armored Sentinel*, July 1973.

[339] *Armored Sentinel*, May 28, 1971.

[340] Ibid.

to make the Army "attractive" went into improved housing and additional recreational facilities such as a new field house.

In response to VOLAR goals, the army rehabbed or built more than 200,000 barracks spaces during the period of 1972-1976. While local newspaper headlines in 1970 read, "On Post Housing Critical; Waits of up to One Year,"[341] by 1975 the headlines had changed to reflect the VOLAR changes, or "Army Takes On a New Look."[342] For the Army, "the whole point is to make life attractive for the modern volunteer army" and a shift from the drab boxy barracks of the past to the modernistic apartment-style quarters with privacy for the soldiers was one of the main design criteria.[343]

In fiscal year 1970, $15.5 million was requested for new barracks buildings, a new post office, and tactical facilities (Figure 36).[344] Five barracks were located on the site of the old hospital complex and three others were added to an existing five barracks complex.[345] In 1972, three barracks complexes were constructed, one located at 58th and Battalion Avenue, one at 72nd and Central Avenue, and one at Clear Creek Road and Central Avenue. Of these three A-style barracks, the largest complex was the one at 72nd and Central Avenue, and included two 655-man barracks with common dining hall, brigade headquarters, chapel, gym, branch exchange and unit dispensary.[346]

[341] *Armored Sentinel*, July 31, 1970.

[342] *Focus*, III Corps History Office, Vertical files, B Drawer 2, Folder: May – June 1975 Articles, May 11, 1975.

[343] Ibid.

[344] "Ten New Barracks Sought For Hood," *Temple Daily Telegram*, January 22, 1968.

[345] Ibid.

[346] "Enlisted Barracks Under Construction," *Armored Sentinel*, September 17, 1971.

Figure 36. New Fort Hood barracks, 1970s (NARA).

New A-style barracks were the result of a design competition, and Forts Hood, Polk and Sill were selected to receive complexes specifically designed for southern climates.[347] The apartment-style barracks were designed with four bedrooms surrounding a central living room and to "to allow bachelor soldiers more of a chance to get away from their unit in off duty hours."[348] The A-style barracks were designed with each unit holding a brigade with administrative and supply rooms on the first floors for individual companies. The complexes, called "modular barracks", had open courtyards for recreation.[349] Looking more like luxury apartments, the landscaped barracks were co-ed by floor and "featured wall to wall carpet, semi-private rooms with private baths, cable tv, vacuum cleaners, and air conditioning."[350]

In 1975, Congress approved $45 million in appropriations for Fort Hood. Construction included new barracks north of Tank Destroyer Boulevard and Battalion Avenue between 161 and 162nd Streets, a tactical shop, flight simulator building, a 28-chair expansion of the dental facility, plus modernization of nine existing barracks.[351]

---

[347] "Hood Housing Plan Aimed at 'Most Modern' Concept," *Killeen Daily Herald*, May 27, 1973.

[348] Ibid.

[349] *Killeen Daily Herald*, February 6, 1972.

[350] *Dallas Morning News*, August 31, 1975.

[351] *Killeen Daily Herald*, October 1, 1975.

Continuing the testing and training missions at Fort Hood, three solar energy prototypes were built to test energy savings and economic feasibility, with each utilizing a different power level.[352] The least expensive and most simple prototype used solar energy to provide hot water for barracks at Battalion and 40th (Building 14019). The mid-range prototype used solar energy for air conditioning and heating an administration building at Battalion and 62nd (Building 29015). The third prototype planned was to use solar energy as 50 % of energy needed to operate an entire brigade headquarters and barracks complex, some 19 buildings.[353] It is unknown whether the third prototype was constructed, how long the experiments lasted, or the results obtained.

As part of the priority to provide better housing facilities for the military under VOLAR, 208 family units were built in the Clear Creek area in 1972. The new complex, consisting of 140 brick, one-story duplexes, bordered the Clear Creek golf course adjacent to the west entrance.[354] One thousand more family units were planned south of the duplexes.[355] By 1975, 1,900 family units were completed as the final phase of a 2,300-unit development. This brought the total family housing units to 5,238, approximately one-third of Fort Hood families.[356] In addition, a 360-space mobile home park was constructed in 1974 south of Montague Village at West Fort Hood.[357] A new 88-unit guest house, the Robert Leslie Poxon House, was built along Fort Hood Road on the site of the seventh fairway of the Beckett Golf course.[358]

New construction during the 1970s for soldier recreation and improved quality of the life at Fort Hood included a 1,000-seat movie theater, a post exchange in Pershing Park, a branch NCO club, an 18-hole golf course at Clear Creek, and a massive field house and natatorium.[359] By 1970, there were five movie theaters on Fort Hood. The first was located in the central area near the main PX, the second in Montague at West Fort Hood, the third, near Bowlers and Fiddlers Greens on 162nd

[352] "Hood Tests Solar Energy," *Killeen Daily Herald*, August 22, 1976.

[353] Ibid.

[354] *Killeen Daily Herald*, July 14, 1972.

[355] *Temple Daily Telegram*, October 25, 1971.

[356] *Temple Daily Telegram*, August 14, 1975.

[357] "Hood Housing Plan Aimed at Most Modern Concept," *Killeen Daily Herald*, May 27, 1973.

[358] *Fort Hood Sentinel*, August 25, 1972; *Killeen Daily Herald*, December 10, 1973.

[359] *Temple Daily Telegram*, October 15, 1971.

Street in 1st AD, the fourth in the 2nd AD at 24th Street, and the fifth at North Fort Hood was used during the summer.[360] Palmer Theater, a new 1,000-seat theater was dedicated on May 7, 1971 (Figure 37).[361] It was located on 31st Street and replaced Theater 4 in the "Hell on Wheels" area. The opening of Palmer Theater featured the world premiere of "Support your Local Gunfighter" staring James Garner and Suzanne Pleshette.[362]

A massive sports complex, including a field house (Figure 38) and natatorium was constructed on 62nd opposite Post Theater #3. The $2 million dollar structure contained handball and squash courts, four basketball courts, a stage with 2,000 spectator seats, and a four-lane track.[363] In addition, it featured a roll-away boxing ring and one wall along the pool rolled away to open the pool to a terrace.

Figure 37. Palmer Movie Theater (NARA).

[360] *Armored Sentinel*, December 4, 1970.

[361] *Armored Sentinel*, May 7, 1971.

[362] Ibid.

[363] *Killeen Daily Herald*, June 9, 1974.

Figure 38. Aerial view of Abrams Field House (NARA).

By 1975 there was a shortage of vehicle maintenance facilities and a program was founded to eliminate the shortage. In addition to two shops built in 1972, a modern tactical shop was completed in March 1976, and two more in 1977.[364] Funds were proposed for Fiscal Year (FY) 1978 Military Construction, Army (MCA) to construct four more shops, and during the next five years, an additional nine.[365]

Several other large projects changed the landscape at Fort Hood the 1970s. A project to raise the level of Belton Reservoir by 25 feet and relocate roads and park facilities was begun in 1971.[366] After the project, the Belton Lake Outdoor Recreation area offered swimming, boating, and fishing opportunities for soldiers and their families. In 1975, a new I-190 interchange opened, eliminating a four-way traffic signal at the entrance to Fort Hood.[367]

[364] *Temple Daily Telegram*, October 25, 1971.

[365] III Corps History Office, Vertical File, A Drawer 5, Folder: Congressional Relations 1977.

[366] *Temple Daily Telegram*, June 11, 1970.

[367] *Killeen Daily Herald*, September 11, 1975.

In February 1975, the Fort Hood commissary opened as the largest U.S. Army commissary at 36,500 square feet.[368] The commissary was built to support almost 123,000 people including active duty personnel, retired military men and women in the area, and their dependants. In April 1976, the PX was expanded adjacent to the commissary. The 75,000-square foot mall was the third largest in the exchange system.[369] A new prototype 28-chair dental facility for the 1st Cavalry Division opened in December 1976 and was dedicated to Col. George T. Perkins.[370] By the end of the 1970s and VOLAR, the support facilities for soldiers at Fort Hood were some of the best in the Army.

2.15 Attempted Land Acquisition

News of the Army's proposal to expand Fort Hood first became public on March 4, 1975.[371] In the mid-1970s, the Army realized that they needed more training land because the existing maneuver training area was not adequate to permit sufficient field training time for the units presently stationed at Fort Hood. It was also felt that the existing training areas did not permit realistic maneuvers for units larger than a brigade unless the impact area was "dedudded," a costly and hazardous process involving the removal of unexploded shells from an area. By acquiring additional land they could also save approximately $2 million a year by not having to send portions of its division to Fort Bliss for additional training.[372] The initial land acquisition was formally proposed to Congress as a three-year phased acquisition on March 18, 1975.[373] It was later decided, however, to submit a total funding request for FY 1977 rather than "drag out the matter over a period of time to the hardship of the owners."[374]

Shortly after news spread of the Army's proposal, the community banded together and called a meeting. At the first meeting, 475 concerned citizens and neighbors of the installation elected a 23-member steering committee to lead a protest against

---

[368] *Austin American-Statesman,* February 19, 1975.

[369] *Fort Hood Sentinel*, April 16, 1976.

[370] *Killeen Daily Herald,* December 12, 1976.

[371] Faulk¸ *Fort Hood: The First Fifty Years,* 158.

[372] "Fort Hood Land Expansion May Obtain 90,000 Acres," *Temple Daily Telegram*, March 5, 1975.

[373] "Fort Hood Expansion Funding Included in Ford's Budget," *Killeen Daily Herald*, June 28, 1976.

[374] Ibid.

the planned expansion saying "if this expansion is going to be stopped, it will have to be stopped in Congress" and "all we want to know is why they are taking people's land during peacetime."[375] The group named themselves "Our Land, Our Lives; A Coalition of Human Rights" and two delegates were selected to go to Washington. The next day, the *Dallas Times-Herald* headline "Ranchers and Farmers Fighting the Army" prompted national attention to the protest.[376]

The "Our Land, Our Lives" protest was led by retired Gatesville banker, Dawson Cooper, and was succinctly based on two areas of concern, the adverse economic impact the expansion would cause by removing ranch and farmlands from Coryell County, and the emotional and financial cost to landowners.[377]

On March 13th, the Army held its first press conference on the issue. Lt. General Robert M. Shoemaker, Commander of the III Corps and Fort Hood, explained that training at Fort Hood was compromised by the lack of sufficient physical space and while the units were ready to go to war, their readiness was not at its optimal level.[378] Shoemaker explained that, "a full disclosure was to be made after the Ford administration's appropriations bill went to Congress."[379] He also explained that current armor and weapons were much more advanced and therefore required more room to train and fire.[380] Data was released to the press, stating that in 1953 Fort Hood had a single division and 20,000 troops, 250 tanks, and 30 aircraft using the land. In 1975, Fort Hood had two plus divisions, 40,000 plus troops, 500 tanks, and 500 aircraft.[381] The Army estimated displacement at 156 families, and guaranteed that each family would receive fair value for their land, moving expenses, and a comparable replacement dwelling "in an area not less desirable."[382]

When it was found that no formal study existed justifying the acquisition, the House Armed Services committee deferred action on the bill. On November 24, 1975, the Army released an environmental impact statement that found the land

[375] *Lampasas Dispatch*, March 10, 1975.

[376] *Dallas Times-Herald*, March 11 1975.

[377] "Fort Hood Expansion Protested," *Temple Daily Telegram*, March 11, 1975.

[378] *Temple Daily Telegram*, May 13, 1975.

[379] "General Gives Reason Why More Land is Needed," *Lampasas Dispatch*, March 24, 1975.

[380] Ibid.

[381] *Temple Daily Telegram*, April 3, 1975.

[382] *Killeen Daily Herald*, June 28, 1976.

acquisition to be the least costly means for accomplishing troop training. On December 10, landowners released comments on the report, saying the Army "used the study to advocate and justify the expansion of Fort Hood."[383]

In the end, the Senate committee's decision to deny the Army's request to buy 59,300 acres of Coryell County was documented in an official report, but basically the committee was not satisfied that the Army had given full and complete study to other alternatives. In the report, the committee thanked the efforts of "Our land, Our lives," and for bringing the issues into the open.[384]

Being unable to acquire land outside the then-current boundaries of the installation, and as an alternative, in August of 1978, soldiers at Fort Hood began dedudding 8,000 acres of the impact area to create more training and maneuver land. After 24,000 acres were cleared, the land became "dual purpose land" and could be used for live-fire as well as maneuvers.[385]

2.16 Important visitors, training and testing

Since the early 1970s, Fort Hood has played a major role in the testing and introduction of new equipment, weapons, and tactical doctrine. In 1976, several NATO leaders visited Fort Hood for an on-site look at how the Army trains.[386] The tour encompassed 2nd AD training, simulator sites, motor pools, and modern modular barracks.[387] The leaders watched the tank course, live-fire course, and viewed combine arms tactics, complete with infantry, armor, artillery, and attack helicopters.[388]

In 1978, Fort Hood hosted a visit from President Carter (Figure 39). During the two-hour stop, the President watched a joint Army and Air Force weapons firing and combined arms exercise from atop Blackwell Mountain. The *American-Austin Statesman* reported that the U.S. Army and Air Force planned to blow up more than $2 million dollars worth of missiles, artillery rounds and bombs during a "Texas-

[383] *Temple Daily Telegram*, May 7, 1976.

[384] *The Gatesville Messenger*, June 3, 1976.

[385] Faulk, *Fort Hood: The First Fifty Years,* 161.

[386] "NATO Leaders Visit Fort Hood," *Killeen Daily Herald*, September 22, 1976.

[387] Ibid.

[388] Ibid.

sized training exercise."[389] Post Commander Lt. Gen. Fuller responded, "There is a purpose, we have been asked to show the president our tactics and how we employ our forces."[390] Fort Hood was a frenzy of activity as soldiers pulled 14-16 hour days getting ready for the President's visit; clearing brush from Blackwell Mountain, landscaping, and painting barracks among other endeavors.[391]

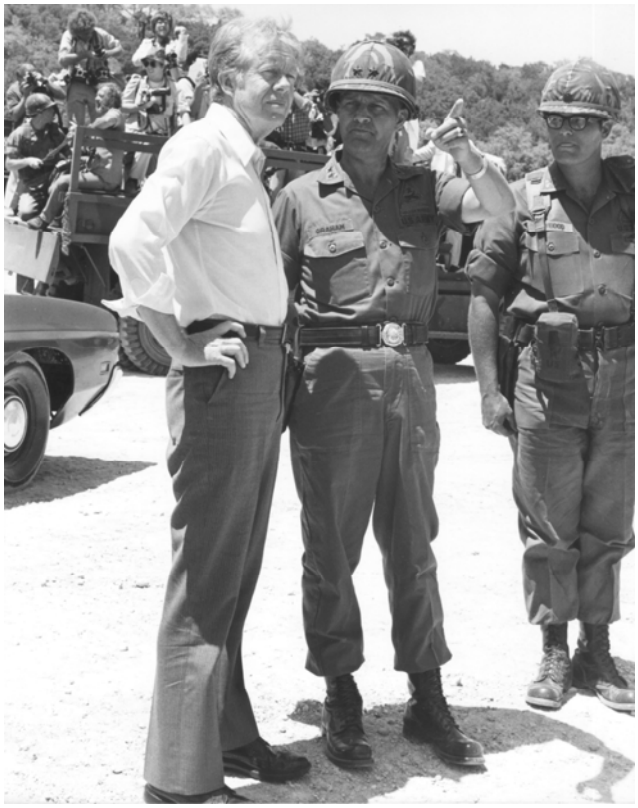

Figure 39. President Jimmy Carter visits Fort Hood, 1978 (NARA).

Fort Hood continued to further Army aviation while pioneering the tactics of attack helicopters. The Army's first air cavalry unit was created at Fort Hood in February 1975. The 6th Cavalry Brigade (Air Combat) was separated from the 1st Cavalry Division and placed under the command of the III Corps.[392] The unit, comprised of 200 combat helicopters, gave Hood a training advantage over other installations.

---

[389] *Austin American-Statesman*, June 22, 1978.

[390] *Dallas Morning News,* June 23, 1978.

[391] Ibid.

[392] *Temple Daily Telegram*, January 1, 1976.

For example, the Cobra helicopter was used for combined arms training in conjunction with a mix of tanks, infantry artillery, and tactical air defense weapons (Figure 40).[393] In 1975, the air combat unit moved into new barracks conveniently located near to the Fort Hood Army Airfield.[394]

Figure 40. AH-1G "Cobra" helicopter searches for target (NARA).

In 1975, the 2nd AD became the first division in the Army to activate a 4th brigade. The brigade was created to take the place of the 3rd Brigade that had been deployed to Germany for "Brigade 75."[395] The 2nd AD continued to test equipment and weapons for the Army. In 1969, the 2nd AD tested the M-656 amphibious vehicle, and in 1973 tested the M-60A2 tank.[396] In 1975, the 2nd AD was the first armored division to train soldiers on the Tube-launched Optically-tracked Wire command link guided

[393] *Temple Daily Telegram*, May 13, 1975.

[394] *Fort Hood Sentinel*, January 31, 1975.

[395] *Temple Daily Telegram*, January 1, 1976.

[396] *Armored Sentinel*, July 11, 1969; *Killeen Daily Herald*, July 15, 1975.

missile system (TOW). While complex to train on, the system proved to be incredibly accurate.[397]

Fort Hood received the world's largest aircraft, Lockheed's C-5A Galaxy cargo plane, for training in July 1975. At a length of 227 feet and with a 222 foot wingspan, the cargo area of the aircraft could hold "5 greyhound busses or 65 Volkswagens," or "8 tanks, 50 jeeps or a minuteman missile" and 78 passengers.[398]

2.17 Still More Permanent Structures

During the 1970s, the National Guard actively used North Fort Hood for summer training. The infrastructure consisted of only a few WWII temporary structures and the soldiers were billeted in tents. "Tent city" was made up of thirteen battalion blocks each consisting of 100 concrete tent slabs, five semi-permanent kitchens, four temporary lavatories, and one temporary latrine.[399] It was clear that the facilities at North Fort Hood were inadequate, even after the 1972 addition of 150 prefabricated metal buildings.[400]

In 1978, Congress appropriated funds for the building of permanent structures at North Fort Hood for the training of reserves and national guardsmen.[401] This new construction was to provide permanent housing for 2,400 officers and enlisted personnel and included sixteen 100-man barracks, fifteen 40-man barracks, and three 400-man dining facilities.[402] In addition, ten 20-man BOQs, one brigade headquarters, three battalion headquarters and nine administration and supply buildings were completed in fall 1979.[403] The new facility, large enough to accommodate whole regiments of combat units, hosted troops from all over Texas and a dozen other states.[404]

---

[397] *Fort Hood Sentinel*, February 28, 1975.

[398] *Temple Daily Telegram*, July 27, 1975.

[399] "Notes on MCA construction," III Corps History Office, Fort Hood, Texas, Vertical file A, Drawer 5, Folder: Organizational History Files, 1978.

[400] *Armored Sentinel*, January 1, 1972.

[401] Faulk, *Fort Hood: The First Fifty Years,* 166.

[402] Ibid.

[403] Ibid.

[404] Ibid.

In addition, $2.7 million was spent on a permanent Texas National Guard Mobilization and Training Equipment Site (MATES) at North Fort Hood.[405] Primarily used for maintenance, the facility was located on 82 acres (26 acres fenced) and opened in the spring of 1980.[406] The first MATES facility at North Fort Hood was established in 1950 and was housed in WWII temporary structures. The new site employed 131 workers and was responsible for maintaining 1,000 military vehicles.[407]

By 1979, Darnall Army Community Hospital was in need of expansion and upgrading. Built for a one-division post in 1965, the 1976 eligible population had grown to 135,000.[408] The $49.7 million construction project, begun in 1979 and completed in 1984, doubled the size of the hospital and tripled the outpatient clinic space. The project also included upgrading power, heat, and air conditioning.[409]

Appropriations for 1981 included $8.8 million for a 1st Cavalry Division headquarters building and $2.45 million for a road to connect West Fort Hood with Turkey Run Road to move ammunition stored at West Fort Hood to the ranges.[410] Also included was $5 million for a flight simulator building for helicopter training, $3 million for weather stripping and energy control, and $2 million for a childcare center.[411]

The groundbreaking ceremony for the 1st Cavalry Division headquarters was held April 3, 1981 on Cooper Field.[412] Previously, the division was headquartered in a brigade headquarters building on Battalion Avenue (Figure 41). The structure, three stories tall with a central courtyard, marked the first time an entire division was headquartered in one building at Fort Hood.[413] The 2nd AD's new headquarters, planned to be a mirror of this building, was completed in October 1985.[414]

---

[405] *Killeen Daily Herald*, May 15, 1980.

[406] Ibid.

[407] Ibid. The National Guard leases NFH facilities.

[408] "Notes on MCA construction."

[409] *Killeen Daily Herald*, February 20, 1978 and March 3, 1979.

[410] *Temple Daily Times*, September 11, 1980.

[411] Ibid.

[412] *Fort Hood Sentinel*, April 28, 1983.

[413] Ibid.

[414] Ibid.

Figure 41. Old 1st Cavalry Division area, April 1983 (1st Cavalry Museum).

By the end of the 1970s, Fort Hood had less than half the hanger and shop space required to maintain the 375 aircraft stationed there. One large hanger project was planned for 1977 and another for 1981 at Hood Airfield.[415] Planned for FY 1980 were terminal facilities for arrivals and departures. The installation of two flight simulators in the late 1970s and early 1980s enabled 900-1,100 helicopter pilots to realistically flight train at a fraction of the cost of flying.[416]

2.18 1980s Reorganization

Fort Hood and all three brigades of the 1st Cavalry Division were selected as the exclusive test site and unit for a FORSCOM Division Restructuring Study (DRS). The

[415] "Notes on Military construction activities," III Corps History Office, Fort Hood, Texas, Vertical File A, Drawer 5, Folder: Congressional Relations 1977.

[416] "$45 Million Approved for Hood Construction," *Killeen Daily Herald,* October 1, 1975; "House Panel Oks Hood Funds," *Temple Daily Telegram,* May 10, 1980; "Organization of Major Units at Fort Hood," III Corps History Office, Fort Hood, Texas, Vertical File Folder: Congressional Relations, 1977.

restructuring tested better-tailoring smaller maneuver battalions to optimize the potential of the new weapons of the 1980s including the XM-1 tank, Mechanized Infantry Combat Vehicle (MICV), a new attack helicopter, and new artillery munitions.[417] Under the DRS concept, Army divisions would have more units but each unit would be smaller and more agile. Ideally, the units would consist of three armored battalions, two mechanized battalions, and one field infantry battalion along with transportation, engineer, maintenance, and chemical companies.[418]

This was the first restructuring of divisions designed specifically to meet future army weapons requirements.[419] Brig. Gen. James H. Patterson, the assistant division commander of the 1st Cavalry Division, explained "the practical manifestations of these trends in greater firepower and mobility leads to the concept for the restructured division. The restructure of the division into more, smaller maneuver battalions with additional firepower integral to the division preserves the concept of the combined arms team."[420]

After a few months, the study was determined "too ambitious" and only the 2nd Brigade continued in the study.[421] The Phase II field test was completed in September 1978, and while there was no clear outcome, the study entered Phase III.[422] Phase III allowed for internal recommendations and testing and fine tuning and was completed in September 1979. It was estimated that the cost of restructuring the whole Army would exceed $50 billion, and it is assumed that this is why the restructuring was tabled.[423] The 2nd Brigade returned to its former structure.[424]

Another unit reorganization plan was announced in 1983. "Division 86" or "Force Modernization," based on lessons learned from the DRS, again was a reorganization based on a new family of equipment, the XM-1 tank, a new mechanized combat

[417] "Gen. Patterson Discusses Restructuring at Ft. Hood," May 24, 1977 (1st Cavalry Division Archives, Fort Hood, Texas, Box 11, 1970-1970, Folder DRS, 1976-77).

[418] *Army Times*, August 16, 1976.

[419] *Army Times*, September 6, 1976.

[420] *Killeen Daily Herald*, May 24, 1977.

[421] Faulk, *Fort Hood: The First Fifty Years,* 163.

[422] *Killeen Daily Herald*, September 17, 1978.

[423] *Killeen Daily Herald*, November 1, 1981.

[424] Faulk, *Fort Hood: The First Fifty Years*,163.

vehicle, a new attack helicopter, new artillery munitions, and other modern weapons.[425] This new reorganization affected both the 1st Cavalry and the 2nd AD.[426]

The reorganization of the Army also affected MASSTER, reorganizing the mission, transferring some functions to other test facilities, and cutting the workforce by 103 officers and 40 civilians by September 1977.[427] It was renamed the Training and Doctrine Command (TRADOC) Combined Arms Test Activity (TCATA) and its primary mission was to conduct large-scale combined arms field tests. While MASSTER had averaged 60 tests per year; TCATA handled fewer, larger-scaled tests.[428] For example, TCATA served as test monitors and evaluators for the DRS. In April 1979 when rumors were circulating that TCATA was thinking about leaving, the Central Texas community banded together to issue reports on why it should stay.[429] A primary player in the test and evaluation mission of Fort Hood and the Army, MASSTER and TCATA were instrumental in the fielding of the M1 Abrams tank, M2/3 Bradley infantry/cavalry fighting vehicle, the multiple launch rocket system (MLRS), and the AH-64 Apache helicopter.[430]

The "Reforger" exercises began in 1969 as a result of the Vietnam War when the United States pulled troops out of Europe to send to Vietnam. Once a year troops returned *en masse* to Europe in support of the 1967 NATO trilateral agreement committing the Army and Air Force to the defense of NATO.[431] These annual exercises reflected U.S. commitment to NATO while testing combat readiness.[432] Referred to as "NATO War Games" by the media, these exercises demonstrated the "ability of a single combat battalion, picked at random, to quickly respond to an emergency deployment order, deploy, pick up equipment and ammunition and move swiftly and effectively into a realistic tactical scenario."[433]

---

[425] Ibid., 172.

[426] *Killeen Daily Herald*, November 1, 1981.

[427] "MASSTER Dies, TCATA Survives," *Killeen Daily Herald*, April 1, 1976.

[428] Ibid.

[429] Faulk, *Fort Hood: The First Fifty Years,* 161.

[430] "Operational Test Command (OTC)," http://www.otc.army.mil/Otc/History%20-%20MASSTER.htm; "Operational Test Command (OTC)," http://www.otc.army.mil/Otc/History%20-%20TCATA.htm

[431] Faulk, *Fort Hood: The First Fifty Years,* 167.

[432] *Temple Daily Telegram*, September 4, 1983.

[433] *Killeen Daily Herald*, September 5, 1982; *Harker Heights Tribune*, September 7, 1983.

By 1979, equipment was stockpiled secretly in Europe so units could leave at a moments notice. Once in Europe, the troops regained possession of their tanks and equipment and spent two weeks on the exercise. The first major NATO winter exercise in many years was held in January 1979.[434] During "Reforger 1983," more than 8,000 troops from the 1st Cavalry division and the III Corps troops entered the Netherlands for the first time since World War II. This was the first major deployment for the 1st Cavalry since Vietnam.[435] For the final "Reforger" exercise for Fort Hood in 1987, 9,000 soldiers from the 1st Cavalry Division deployed to Northern Germany.[436] It was the largest deployment of forces to Germany since WWII.

For "Brigade '75," Fort Hood sent battalions to Southern Germany to train for 6-month periods.[437] Although the exercise was put on hold for a while due to cost issues, President Carter ordered an entire mechanized brigade to be permanent duty stationed in Germany in 1978. In 1980, those troops returned from Germany and the Brigade '75 center closed.[438]

The U.S. Readiness Command at North Fort Hood conducted exercise "Brave Shield," a series of medium-scale joint Army/Air Force readiness exercises, in 1975. Approximately 15,000 soldiers and airmen simulated war between two countries to perfect techniques of mutual combat based on lessons learned from Vietnam and the Middle East.[439]

An exercise called "Roadrunner" spanned 16 Texas counties during 23-30 January 1987. Roadrunner was staged to stretch communication links and command capability over a greater and more realistic distance.[440] Some 9,000 soldiers participated in the training exercise while Fort Hood worked hard to maintain good community relations.[441]

---

[434] Faulk, *Fort Hood: The First Fifty Years*, 164.

[435] Ibid., 172.

[436] *Hood Sentinel: Special Supplement, 50th Anniversary,* July 2, 1992.

[437] Faulk, *Fort Hood: The First Fifty Years,* 164.

[438] *Fort Hood Sentinel*, January 3, 1980.

[439] *Temple Daily Times*, August 24, 1975.

[440] *Temple Daily Times*, January 2, 1987.

[441] *Killeen Daily Herald*, January 28, 1987.

During the 1980s, the III Corps was active in modernization efforts; the training and testing of new weapons and introduction of new equipment such as the M1 Abrams tank, the M2/3 Bradley fighting vehicles, AG 64 Apache helicopter, the MLRS, and mobile subscriber equipment (MSE).[442] The primary mission of the III Corps still focused on Europe and the training of active and reserve forces for deployment and exercises.[443]

The XM-1 Abrams main battle tanks arrived at Fort Hood for testing by the 1st Cavalry Division, 2nd Battalion, 5th Cavalry in September 1980. The three tanks arrived by rail for the 8-month long series of TCATA designed tests. The XM-1 tanks weigh almost 60 tons and were designed to replace the M-60 series.[444] In January 1984, the first M3 Bradley fighting vehicles arrived for use by 2nd AD.[445] In 1984, the Apache helicopter training brigade was established to master the Apache, Blackhawk, and OH-58 in battlefield conditions. By July 1987, the CH-47D Chinook helicopter had also arrived at Fort Hood. In June of 1988, the laser guided Hellfire missile system was fired for the first time at Fort Hood in a tactical situation.[446] The Apache helicopters from 6th Cavalry were armed with the laser guided Hellfire missile system during a live-fire exercise, involving OH-58 scout helicopters, Apache war birds, and Air Force A-10 Thunderbolt jets. The Hellfire missile was determined to be a "tank killer."[447]

Training at Fort Hood expanded to include military operations in urban terrain. St Elijah, a $7.8 million Military Operations on Urbanized Terrain (MOUT) facility, was built in the early 1980s on an isolated hilltop in the range area. This replica of a European village contained 32 buildings including hotels, a school, stores, residences, two gas stations, a police station, and a four-foot sewer.[448]

---

[442] *Fort Hood Sentinel: Special Supplement, 50th Anniversary*.

[443] Ibid.

[444] *Killeen Daily Herald*, September 11, 1980.

[445] *Fort Hood Sentinel*, January 5, 1984.

[446] *Killeen Daily Herald*, June 16, 1988.

[447] Ibid.

[448] Faulk, *Fort Hood: The First Fifty Years,* 172.

Basic training was reintroduced to Fort Hood in March 1989 for the first time since 1967. Four hundred soldiers arrived while a mobilization training center was established at North Fort Hood and some of the training ranges were rebuilt.[449]

Sadly, 1988 brought Army budget cuts and a mandate to reduce the civilian workforce at Fort Hood.[450] Since fuel, maintenance, and vehicle equipment cost money, officials claimed the budget cuts put the readiness of troops in jeopardy. Training increased on armor and flight simulators, but it could not replace live training.[451] As reported in the Killeen Daily Herald in 1980, "Fort Hood may never go back to its heydays of 1976 when there were 71,146 military and civilians working at Hood — compared to the current 61,462."[452]

2.19 End of the Cold War

The end of the Cold War was marked by the visit of Soviet officials in 1988 (Figure 42). The Soviets watched company-sized attacks on a mock urban combat "city," the 2nd AD's tank gunnery exercises, and talked with soldiers from the division. In addition, they watched a combined arms live-fire exercise and a demonstration of the new Multiple Launch Rocket system and the Apache attack helicopter. The following U.S. weapons were also showcased: the M-1, the OH-58dD observation helicopter, and the Bradley fighting vehicle.[453]

Equally impressive was the new III Corps Headquarters Building, Van Fleet Hall, which opened in spring of 1989. The headquarters building was built at the corner of Hood Road and Headquarters Avenue and is visible upon entering the installation. Construction began on the building in October of 1985, with the best in energy conservation design, and all materials originated in Texas. It overshadows the previous WWII headquarters building and is a fitting symbol of the Cold War era.

[449] *Fort Hood Sentinel*, March 2, 1989.

[450] *Killeen Daily Herald*, June 25, 1988.

[451] *Killeen Daily Herald*, December 26, 1988.

[452] *Killeen Daily Herald*, September 7, 1980.

[453] *Killeen Daily Herald*, July 8, 1988.

Figure 42. Soviet Marshal Sergi F. Akhromeyev visits Fort Hood, June 1988 (NARA).

3 Main Post Landscape Elements

3.1 Overlay Maps

Maps of Fort Hood's Main Post representing the periods of significance, as discussed in the historic context, have been included to show major changes in the landscape. These maps have been overlaid in pairs to illustrate how the landscape developed over time and to show how elements of the landscape appeared or disappeared during specific periods.

3.1.1 WWII Period and Beginning of the Cold War, 1944/1956 Map

This map illustrates the built environment during the WWII era and at the start of the Cold War as well as the transition of Fort Hood from a temporary camp to a permanent installation (Figure 43). In the 1956 map, the beginning of the eastern expansion of the cantonment is seen adjacent to the new hammerhead barracks as evidenced in the first hint of the curve of Battalion, Central and Park Avenues. In addition, the first permanent hammerhead barracks are visible on the former site of the Tank Destroyer School. Other additions seen during this period include the McNair Village Housing Area east of Hood Road, the beginnings of Chaffee Village south of McNair Village, the stadium east of the railroad and warehouse area, and the four Bachelor Officers Quarters and officers club just west of the east gate.

3.1.2 Cold War Period, 1956/1977 Map

The most noticeable change during this period was the westward expansion of the cantonment. Most major construction during this period was concentrated in the residential land use zone and in the motor pools (Figure 44). Large permanent barracks, in several architectural styles, replaced many of the World War II temporary buildings. However, several large buildings including the hospital, a six-story BOQ, Commissary, and PX were added to the south and west of the cantonment. In addition, there was a large increase in family housing. The Capehart and Wherry programs supported the construction of large suburban-type housing developments on the periphery of the cantonment area to the east, south, and west.

3.1.3 End of Cold War to Present Day, 1977/2003 Map

At Fort Hood, the need for vigilance and combat readiness has supported continued maintenance, increased technology, and improved facilities since the Cold War period. For example, facilities were expanded in the early 1990s to support Operation Desert Shield/Desert Storm. The majority of improvements to the landscape since the Cold War period include the continued replacement of WWII temporary buildings, the renovation of existing Cold War barracks, the addition of improved commissaries and shopettes, motor pool buildings, and athletic fields (Figure 45). New headquarters buildings were built in the 1980s for both divisions and the III Corps. In addition, new structures have been built at Hood Army Airfield, and the Liberty Village and Kouma Memorial Village housing areas were added south of Route 190.

Figure 43. 1944 map of the Main Post of Fort Hood in black overlaid with a 1956 map in green (ERDC-CERL and Fort Hood).

Figure 44: 1956 map of the Main Post of Fort Hood in black overlaid with a 1977 map in green (ERDC-CERL and Fort Hood).

Figure 45: 1977 map of the Main Post of Fort Hood in black overlaid with a 2003 map (ERDC-CERL and Fort Hood).

3.2 Landscape Characteristics of the Main Post

In landscape studies the term "landscape characteristic" has a specific meaning. Landscape characteristics are the tangible evidence of the activities and habits of the people who occupied, developed, used, and shaped the land to serve human needs; they may reflect the beliefs, attitudes, traditions, and values of these people.[454] Identifying the characteristics of the military landscape requires an understanding of the natural and cultural forces that have shaped it. This section will describe these processes and the resulting landscape features that together comprise the military landscape.

3.2.1 Spatial Organization and Land Use

Several factors drive the spatial organization of an installation and the way the military uses the land. These include the mission of the military and the type of training to occur at an installation, topographical advantages of the land for training (predominant landforms and other natural features), available water supply, adequate railroad and road facilities, circulation networks, and other resources. As will be seen in the following discussion, the relationship between the built environment and these types of resources had a large impact on the spatial layout of the Main Post area at Fort Hood (Figure 46). [455]

Built as a Tank Destroyer and Tactical and Firing Center, the mission and the relationship to the wide expanse of training land to the north drove the need for a long linear cantonment as opposed to a more centralized triangular or quadrangular layout as seen at other WWII mobilization camps.[456] Initially there were two proposed locations for the cantonment, one in its present location and another adjacent but slightly more west and tilted to provide some access to training lands on three sides (Figure 47). The former site was chosen, most likely based on lower construction

[454] National Park Service, *National Register Bulletin #30; Guidelines for Evaluating and Documenting Rural Historic Landscape,* (U.S. Department of the Interior, National Park Service, Interagency Resources Division, 1992), 3.

[455] Loechl, *Historic Military Landscapes*, 43.

[456] Diane Shaw Wasch et al., *World War II and the U.S. Army Mobilization Program: A History of 700 and 800 Series Cantonment Construction*, (Washington, DC: Cultural Resources; National Park Service, Department of the Interior, 1993), 35-37.

costs, as the chosen site could utilize some existing roads and was closer to the railroad.

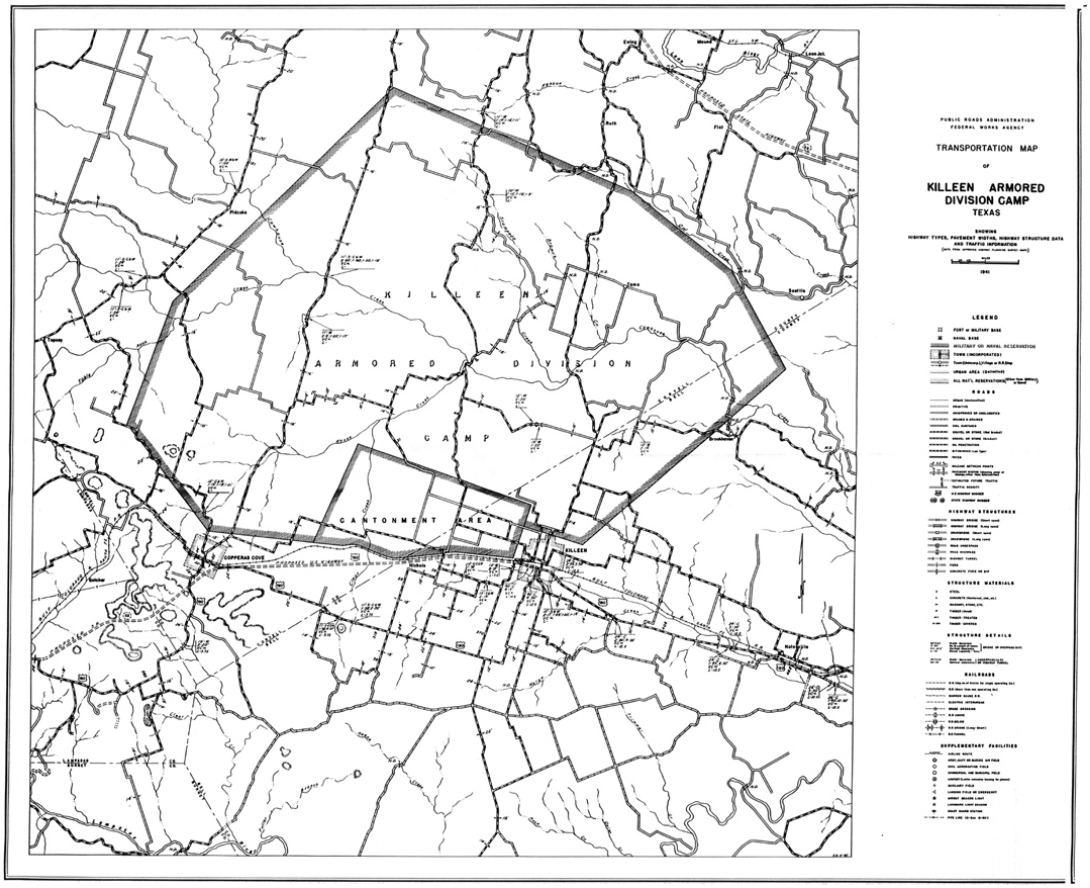

Figure 46: Map of proposed Camp Hood and location of cantonment, 1941 (Fort Hood).

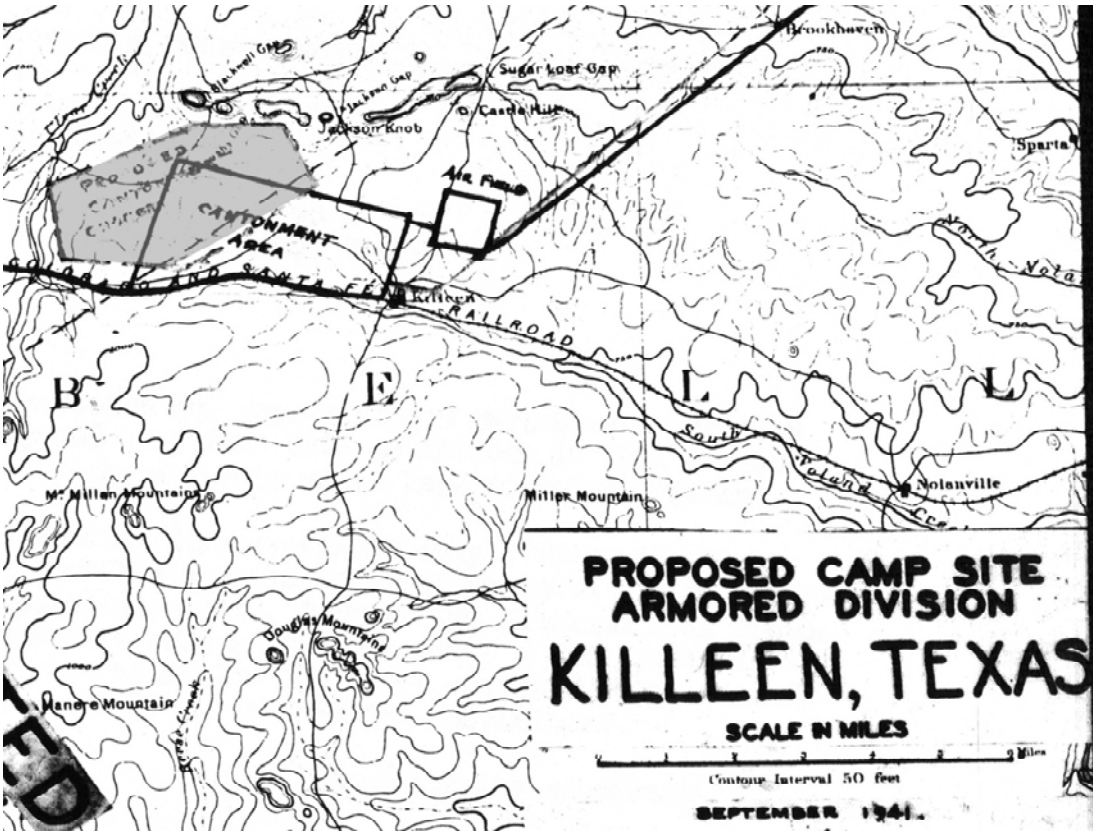

Figure 47: Map showing a second proposed site for the cantonment in gray, September 1941 (NARA).

In addition, the Main Post was split into a Tank Destroyer School and the Unit Training Center with the layout noticeably different for each. The Tank Destroyer School, located east of 31st Street, was characterized by many small classrooms, BOQs, and officers housing encircling a large mess (Figure 48). West of 31st Street, the barracks for the battalions of the Unit Training center sprawled uniformly across the cantonment. A similar split was created during the Cold War era by the presence of two divisions and the resulting duplicate imprint on the landscape.

The design and construction of the cantonment was headed by Major Gerald R. Tyler. Since he envisioned the potential of multiple divisions at Camp Hood, the cantonment was laid out across 4,000 acres in a linear arrangement bordering the railroad tracks. The buildings were laid out in an "L" shape with stem side containing the Tank Destroyer School and the Unit Training Center running east to west. At the base of the "L" were the quarters for the Training Brigade and the Quartermaster area. West of the "L" was the hospital complex, the ammunition area, and the internment camp. The main entrance was designed at the center with the post headquarters adjacent to this road. The cantonment was designed and constructed so that with a few alterations the facility would be suitable for other types of troops; for example, the introduction of infantry units in 1944.

Figure 48: Layout of Tank Destroyer School from 1946 (revised 1953) map (Fort Hood).

It is not known why the hospital complex was laid out at an angle to the rest of the cantonment (Figure 49). Possible reasons include flatter topography for construction or the need to clearly delineate the hospital from the rest of the cantonment and make it a separate entity.

During the cold War period, the decision to expand the cantonment to the east (erasing the Tank Destroyer School) largely contributed to the spatial arrangement of Fort Hood. To avoid the city of Killeen, directly to the east of the Main Post area, this eastern expansion occurred as a northeasterly curved addition to the otherwise uniform east-west layout of the rest of the cantonment. This curve was first documented in a 1947 master plan map of proposed development (Figure 50).

Figure 49: Layout of the hospital complex at an angle to the rest of the cantonment from a 1946 map (revised 1953) (Fort Hood).

The first permanent barracks, hammerhead barracks, were completed in 1952 along the new curve in the road. By 1964, new permanent barracks and motor pool areas had been built to the east of 42nd Street; but west of 42nd Street was still comprised of WWII temporary construction. Later after the construction of Darnell Hospital in 1965, the cantonment was expanded to the west, over the site of the old WWII hospital complex. A-style and rolling pin barracks were built in the expansion west of 72nd street. At the end of the Cold War in 1989, all but two blocks of the troop housing area remained WWII construction. The new barracks complexes changed the uniform layout to one of irregular groupings and removed the once clear pattern.

In addition to affecting the layout, the armored mission of Fort Hood directed how the military used the land. This functional use of the landscape in support of the mission was almost machine-like with the circulation and land use belts directing troops and mechanized vehicles into the training lands and back again. Land uses directly related to the mission include the motor pools, the airfield and railroad loading area for transportation of troops and equipment, training, parade grounds, and administration. Land uses indirectly related to the mission include residential, support, commercial, storage and warehouse, and educational areas.

During the WWII era, land use at Fort Hood was laid out in broad linear patterns, with the motor pools across the north of the cantonment, the troop housing in the central section, and recreational and administrative land uses across the south. Support areas, such as the hospital, supply and warehouse, ammunition storage, civilian housing (Hood Village), and prisoner internment were to the southwest of the cantonment. During the Cold War era, these patterns stayed consistent with the exception of the addition of large clusters of family housing along the south side of the cantonment. The hospital was moved to the south of the cantonment and the Prisoner of War (POW) camp was replaced by other support structures, the Commissary and PX. The ammunition area was moved farther northwest. It remained in use on the periphery of the cantonment until the adjacent Comanche Housing Area and school were built.

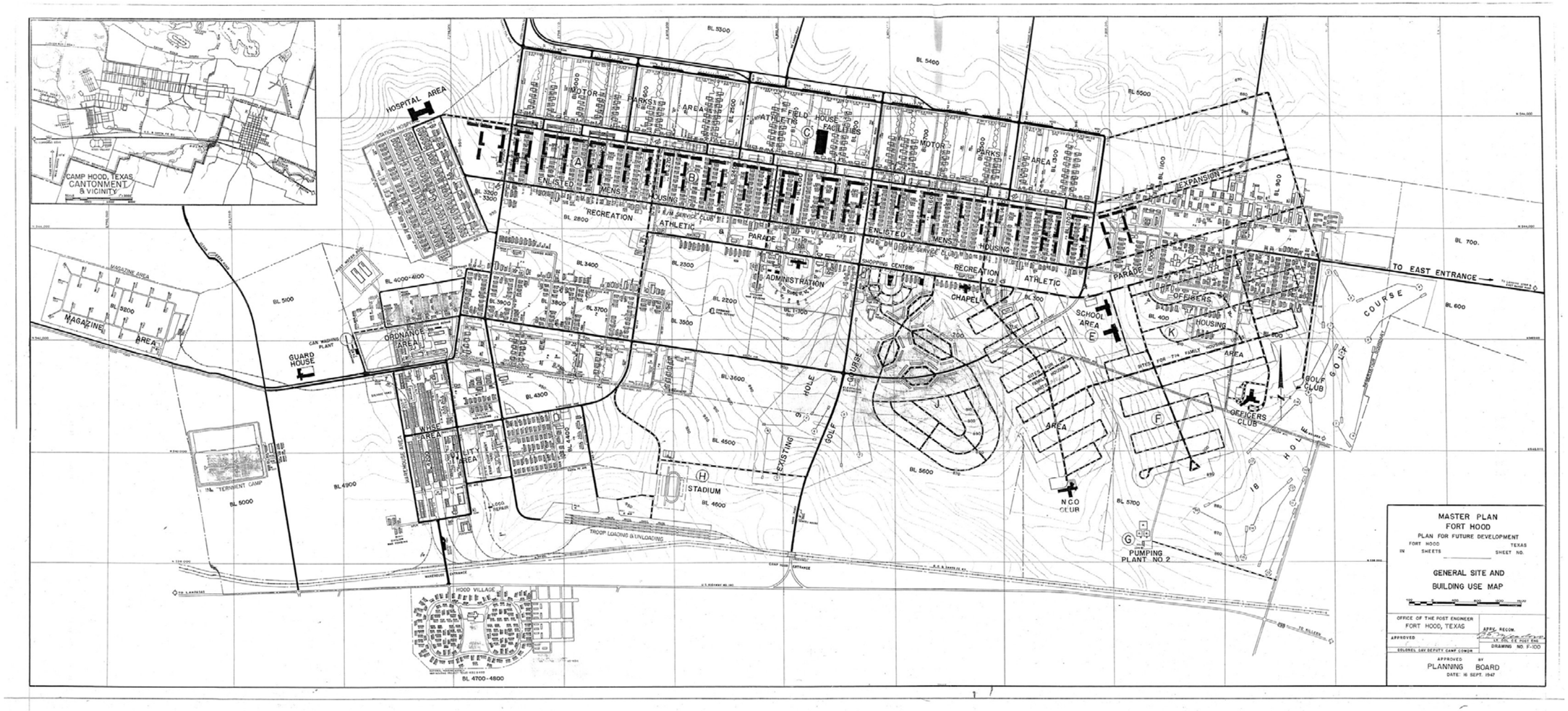

Figure 50: Master Plan for Future Development at Fort Hood, dated 1947 (Fort Hood).

3.2.2 Response to the Natural Environment

Major natural features such as mountains and rivers influenced the location and organization of military installations. Fort Hood lies in the transition zone between the High Plains located to the west and the Black and Grand Prairies located to the east. This zone is Limestone Hill Country – a limestone plain characterized by gullies and rugged bluffs called mesas. The installation site lies across a section of the Cowhouse Creek, a tributary of the Leon River. In addition, Belton Lake borders the installation to the east.

The Fort Hood cantonment is sited in a long linear arrangement, stretching from the eastern to the western boundaries of the installation, on a flat area along the southern base of several mountains/mesas (Blackwell Mt., Black Mt., Elm Mt., etc.). It appears the cantonment was arranged in this location and manner to provide easy linear access to the training lands to the north, including a series of shooting ranges (Figure 51).

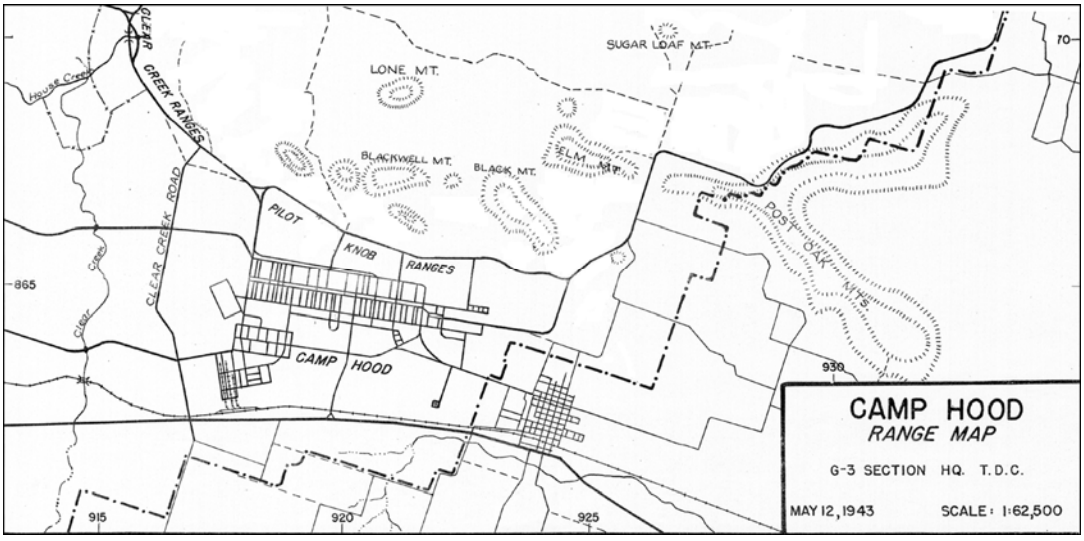

Figure 51: Range map from 1943 depicting the location of the cantonment along the southern edge of several mountains (Fort Hood).

The rolling, semiarid terrain is ideal for multifaceted training and testing of military units and individuals. The landscape affords all types of terrain; lowlands, wooded areas, and hills with steep inclines. The many hills offer observation and the vegetative cover is satisfactory for concealment. The rivers, streams, and Belton Reservoir offer amphibious training (Figure 52). The climate is suitable for year-round training.

Figure 52: An armored personnel carrier and soldiers train at Belton Lake, 1962 (NARA).

3.2.3 Military Cultural Traditions

Military cultural traditions are reflected on military installations in both organization and aesthetics.[457] Abstract values such as hierarchy, uniformity, efficiency, discipline, utility and patriotism are physically manifested in the landscape to varying degrees giving military installations the appearance and sense of place that makes them easily recognizable.[458]

At Fort Hood, the WWII semi-circular layout of the headquarters and officers quarters buildings, on the site of the present day III Corps Headquarters building and associated parade field, is a great example of hierarchy in the landscape. This clearly visible imprint on the landscape was a deviation from the highly uniform, rectilinear layout of the troop housing along Battalion Avenue (Figure 53). The semi-circular shape clearly stood out from the rows and rows of WWII temporary

[457] Loechl, *Historic Military Landscapes,* 45.

[458] Ibid.

structures and immediately alluded to its importance. This semi-circular form was also repeated in the layout of the officers' quarters adjacent to the Tank Destroyer School, although to a lesser degree but still showing hierarchy placed on these residences (see Figure 48).

Fort Hood has a high level of uniformity; basic components and designs are repeated within the installation and within the Army as a whole, for example, the use of a single company unit used to layout regiments and whole cantonments. The WWII camps, Cold War barracks, and motor pools show the same cluster of buildings and footprints stamped across the landscape. At Fort Hood, this repetition is reinforced by the linear layout. Any break from this rigid formality, for example at the semi-circular former headquarters area or the skewed layout of the hospital, is extremely pronounced. The Army's use of standardized plans not only enhances the uniformity but also reflects the efficiency inherent in the Army.

Uniformity is echoed in the repetitive and identical setbacks and siting of homes in the installation's family housing and neighborhoods (Figure 54). Hierarchy can also be visible in housing areas, for example in Patton Park, when the quarters of higher-ranking officials are larger, with larger yards, and better landscaping. Discipline is evident in the maintenance of vegetation across the Main Post, with trimly mowed grass and the over use of single species of pruned, evergreen shrubs.

Utility is seen across Fort Hood in the motor pools, warehouses, and support areas with form following function in layout and operations. The location and layout of motor pools adjacent to the training lands, and warehouses and quartermasters buildings adjacent to the railroad are examples. Patriotism is seen throughout the military and Fort Hood in the ceremonial spaces, such as parade grounds, monuments, and the naming of roads and buildings.

Figure 53: WWII era semi-circular layout of the headquarters area of the Main Post, date unknown (4th ID Museum, Fort Hood).

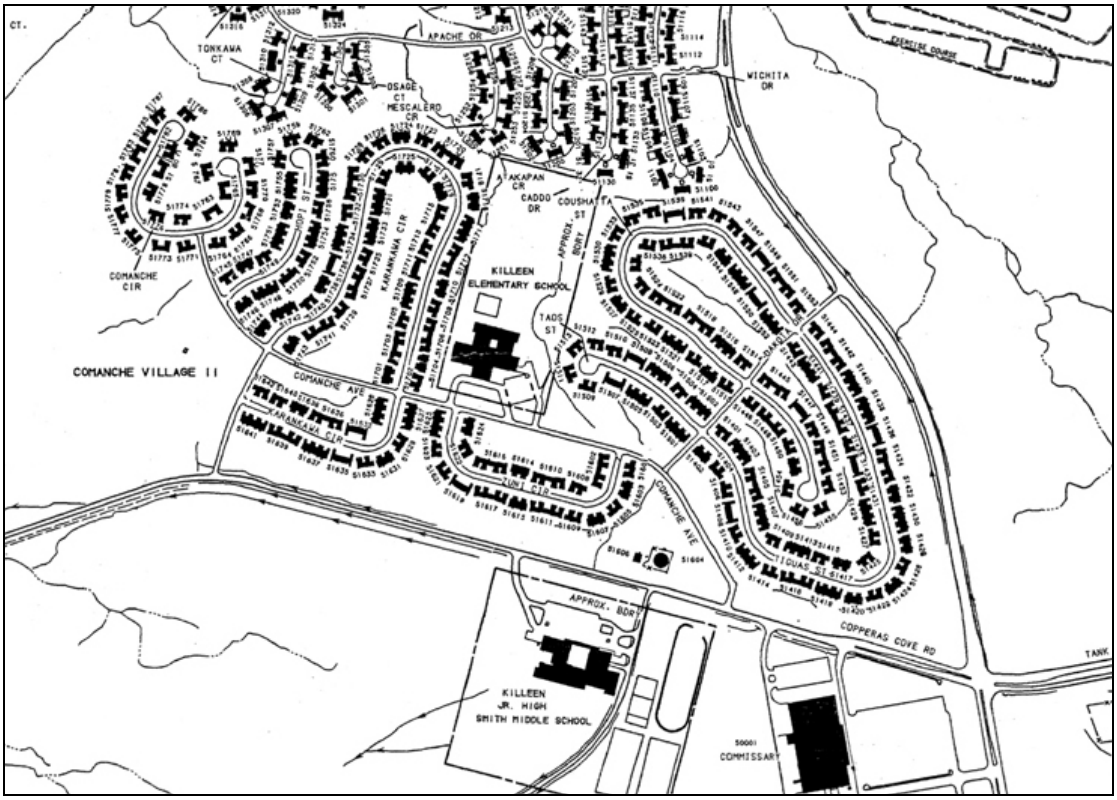

Figure 54: Map of Comanche II Housing Area to show uniform setbacks, circa 1989 (Fort Hood).

3.2.4 Circulation Networks

The intricate WWII era roadway system remains today. These roadways are reminiscent of the complex landscape of buildings and structures necessary to support 40,000 troops and their mission. There is a clear hierarchy to the roads today based on the width and level of traffic; for example, Hood Road and the east-west boulevards and avenues are wider and have a heavier traffic flow, and the numbered north-south roads have the lightest traffic flow. It was unknown if this was planned into the "temporary" Camp Hood, but most likely this pattern has evolved over the years as the installation has increased in size. The road names still reveal the original land use; troop housing for battalions along Battalion Avenue and motor "parks" or pools located along Park Avenue (today renamed Hell on Wheels Avenue). The warehouse area and railroad spur is between Warehouse Avenue and Spur Drive and Santa Fe Avenue, and headquarters is located on Headquarters Avenue.

During the Cold War period, several of the smallest feeder roads were closed to build the larger complexes of barracks and supporting buildings. However, the larger east-west roads remained and were expanded to better handle increased traffic flow. The largest contribution during this period was the expansion of the cantonment in the eastern direction. To better fit the expansion, the road was designed to jog to the north before heading east. This curve altered the formal, rectangular layout of the roads from the WWII period.

Regarding the railroads, the Santa Fe Western (Gulf, Colorado and Santa Fe Railway, the main line from Los Angeles to Galveston) line runs along the southern border of the installation. The region is also served by the Southern Pacific, International and Great Northern, Missouri Kansas and Texas, and Missouri Pacific Railway systems that interchange(d) at nearby points over the installation's history.

The warehouse and supply area was laid out in the southwestern corner of the cantonment (Figure 55). The spur was built parallel to the contours and close enough to the main track so that very little track and grading were needed. The warehouse structures were built along the track (Figure 56) and a loading area was built east of the warehouse area. The loading facilities included four tracks with concrete end ramps and four concrete side ramps and flood lights for loading at night (Figure 57).

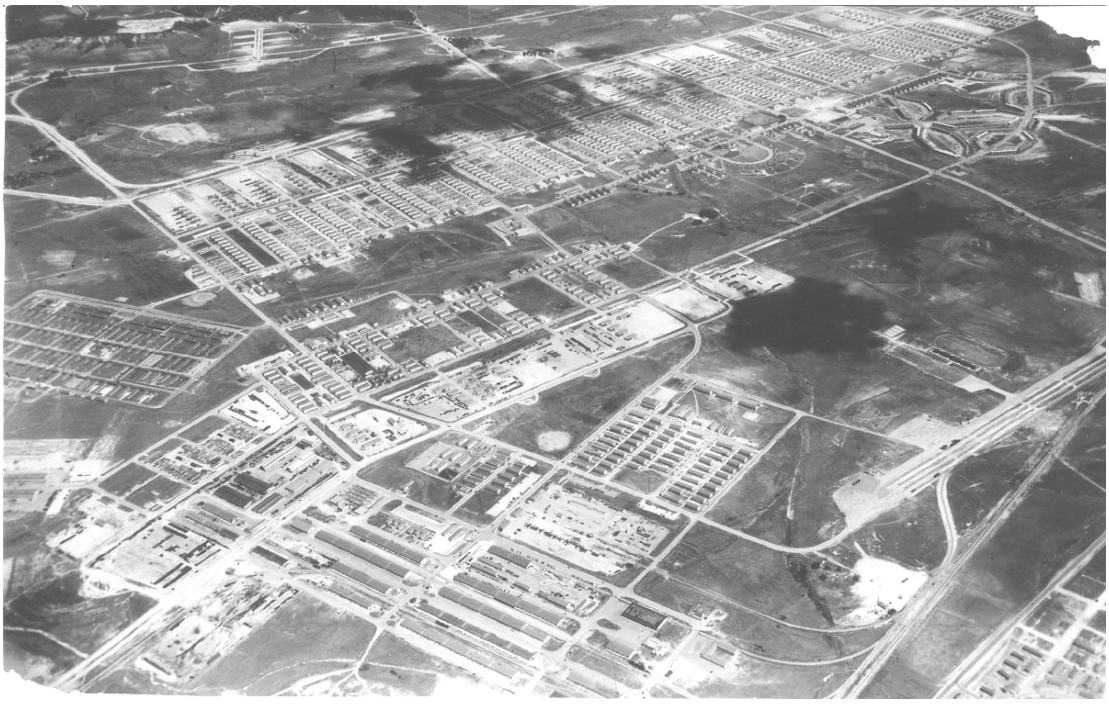

Figure 55: Main Post with railroad and warehouse area in the foreground, date unknown (4th ID Museum, Fort Hood).

Figure 56: Aerial photograph depicting railroad layout, date unknown (4th ID Museum, Fort Hood).

Figure 57: Wives and children at the Fort Hood railhead waiting for return of troops after the "Cuban Crisis," December 10, 1962 (NARA).

Hood Army Airfield was built in 1943 and contained one asphalt landing strip, 150' x 3600', and two cross-wind landing strips, one 50' x 1,200' and the other 50' x 1,400' (Figure 58). In addition, the airfield had an apron to the north, two administration buildings (20' x 30'), and was fenced. Records noted that the airfield was primarily used for liaison flights and visiting official planes, and was not designed for continued usage.[459] Also noted, was that the topography was such that the airfield could be expanded to include three runways with a length of 5,000' without difficulty or excessive cost.

[459] "Standard Airport Facilities Record," dated November 20, 1943 (4th ID Museum, Fort Hood).

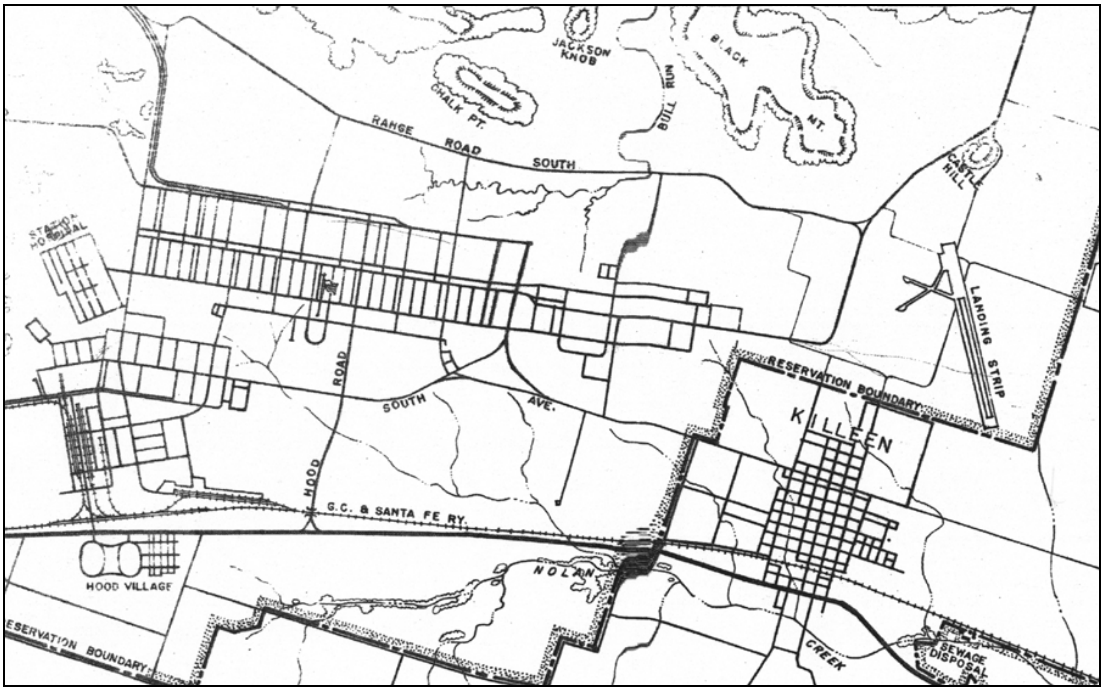

Figure 58: Map showing Hood Army Airfield (upper right corner) in relation to the Main Post, circa 1947 (Fort Hood).

The first permanent buildings, two hangers, were built at the airfield in 1950.[460] Since most fixed-wing aircraft were transferred to the newly created Air Force in 1947, the Army focused on improving its use of the helicopter during the Cold War. Through appropriations beginning in 1958, improvements were made to Hood Army Airfield to support the new helicopter mission. It was noted in the appropriation hearings that at the time, there were no helicopter facilities at Fort Hood and the planned stationing of a light cargo helicopter company at Fort Hood required appropriate helicopter facilities.[461]

A new rotary-wing apron, helipad lighting, taxiways, fuel storage facilities, and a fire and rescue station were approved for construction in 1958. By the early 1960s, the original runway was extended to 4,700 feet in length. In addition, a seven-story flight control tower, two hangers and associated maintenance shops, and a new op-

[460] Kathryn M. Kuranda et al., *Historic Context for Army Fixed-Wing Airfields, 1903-1989*, (Aberdeen Proving Ground, MD: U.S. Army Environmental Center, January 2002), B-9.

[461] United States Congress, House of Representatives, Committee on Appropriations, "Military Construction Appropriations for 1958, Hearings Before the Subcommittee of the Committee on Appropriations, House of Representatives, Eighty-fifth Congress, First Session, Department of the Army," (Washington, DC: G.P.O., 1957).

eration building had been constructed.[462] The airfield was again expanded in the 1970s to meet TRICAP requirements, MASSTER testing, and the activation of the 6th Cavalry Brigade, the first air combat cavalry brigade (Figure 59 and Figure 60).

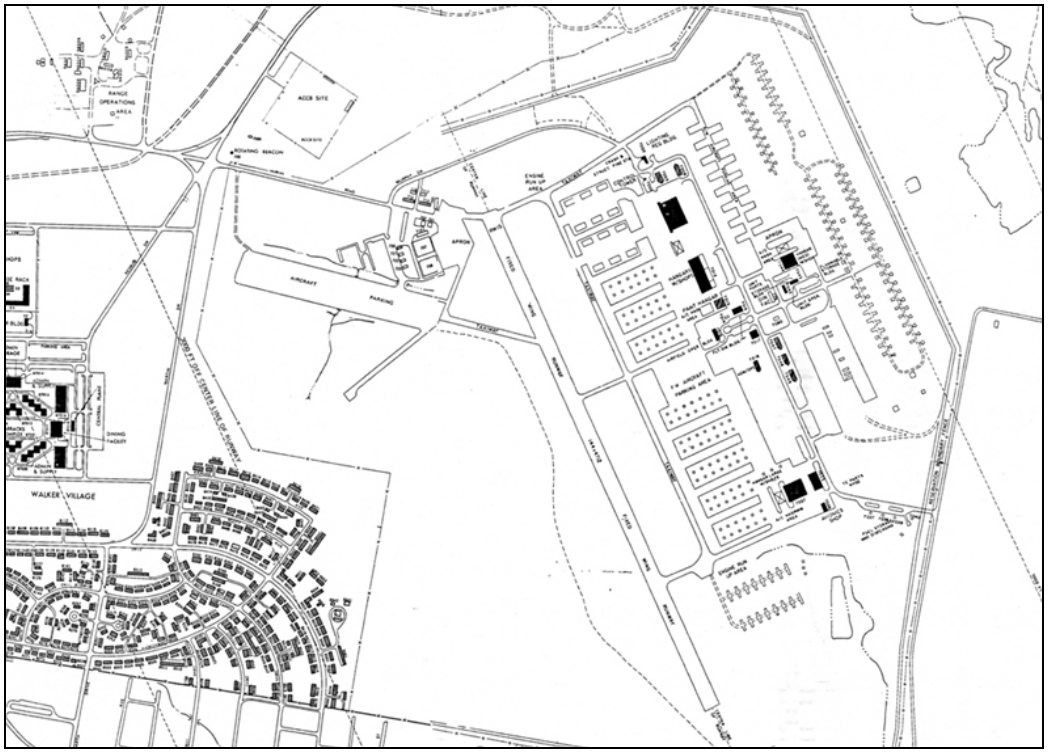

Figure 59: Map showing Hood Army Airfield after Cold War improvements for helicopter use, circa 1977 (Fort Hood).

[462] Kuranda, *Historic Context for Army Fixed-Wing Airfields,* B-10.

Figure 60: Aerial view of Hood Army Airfield, circa August 1977 (NARA).

3.2.5 Boundary Demarcations

Boundary demarcations for military installations include the delineation of areas of land use and activities and the boundaries of the installation as a whole.[463] When the initial 108,000 acres of land were purchased for the construction of Camp Hood in 1942, the parcel of land was bounded on the south by the Gulf Colorado Santa Fe railroad line and Route 190. The northern edge was formed in part by the Atlantic pipe line. The installation extended east to the community of Brookhaven and west to Twin Mountains (see Figure 46). In January 1943, an additional 16,000 acres in Bell County and 34,943 acres in Coryell County near Gatesville were purchased.[464] The land near Gatesville became the site of the Tank Destroyer Replacement Training Center, later called North Fort Hood. Camp Hood reached its peak population of almost 95,000 troops in late June 1943.[465]

---

[463] Loechl, *Historic Military Landscapes,* 46.

[464] Faulk, *Fort Hood: The First Fifty Years*, 45.

[465] *Fort Hood Sentinel: Special Supplement 50th Anniversary*.

Additional land purchases in 1953, after Fort Hood was declared a permanent installation, included land on the eastern boundary of the installation as well as Belton Lake (later Belton Reservoir), that could be used for amphibious training. This brought the installation to 207,551 acres, almost its current size.[466] The local community joined together to stop attempts made in 1965 to purchase additional training land west of the installation.

Due to its large size, the boundaries of Fort Hood are delineated by the city of Killeen, the railroad, the Leon River, roads and highways, and a pipeline. The cantonment itself hugs the southeastern corner of the installation, and is bordered by the city of Killeen to the east and the railroad and Highway 190 to the south. Portions of the west and all of the north side of the cantonment are open to the training lands.

Unlike most military installations with clearly defined borders, the size of Fort Hood has prevented it from being fenced completely. Because of this, only the cantonment areas have been fenced and controlled access points have been placed at all roads leading to the cantonment areas at the Main Post, North and West Fort Hood in compliance with recent force protection requirements.

3.2.6 Vegetation

Vegetation is a characteristic of the landscape that bears a direct relationship to long-established patterns of land use.[467] For example, residential neighborhoods are often the most heavily planted areas on military installations while other areas are often left open for various military activities. Patterns of vegetation may delineate boundaries, land use areas, and natural areas such as streams or ravines.

Native vegetation in the area of Fort Hood consists primarily of sedge grass, junipers, cedars, oaks, and mesquite. Since most native vegetation was cleared to build the cantonment, the remaining native vegetation is found mostly in stream beds and in open space around the periphery of the cantonment area. Around the Main Post, open areas used for light physical training, recreation, golf courses, etc., were either grass or a mix of grass and native vegetation.

---

[466] Faulk, *Fort Hood: The First Fifty Years*, 114.

[467] Loechl, *Historic Military Landscapes,* 46.

The areas of planted vegetation, most likely around headquarters buildings, ceremonial spaces, service clubs, museums, and churches, are usually highly visible sites and sites of importance within the hierarchy of the military (Figure 61 and Figure 62). Rarely was vegetation planted around troop housing or utilitarian spaces such as motor pools or warehouse and supply areas. A 1946 tree cover map depicts natural clusters of trees in open space and recreational areas (Figure 63). Street trees were planted along both sides of Hood Road, the north side of Headquarters Avenue, along both sides of Tank Destroyer (formerly South Avenue), and along both sides of Warehouse Avenue. Notes on the drawing described street trees or row plantings as being generally hardwood species, with oak, elm, and sycamore prevailing. Area plantings were also included on the map and were described as areas planted generally with softwoods such as redbuds, locust, pecan, and crepe myrtle. These type plantings were shown on the map to be around the entrance to Camp Hood, the east side of the stadium, north of the parade ground (currently Sadowski Field), and north of Headquarters Drive. Some of the plantings along Warehouse Avenue remain today (Figure 64).

Figure 61: Aerial view of 2nd AD headquarters and surrounding vegetation, circa August 1977 (NARA).

Figure 62: 2nd AD chapel and vegetation, circa 1969 (NARA)

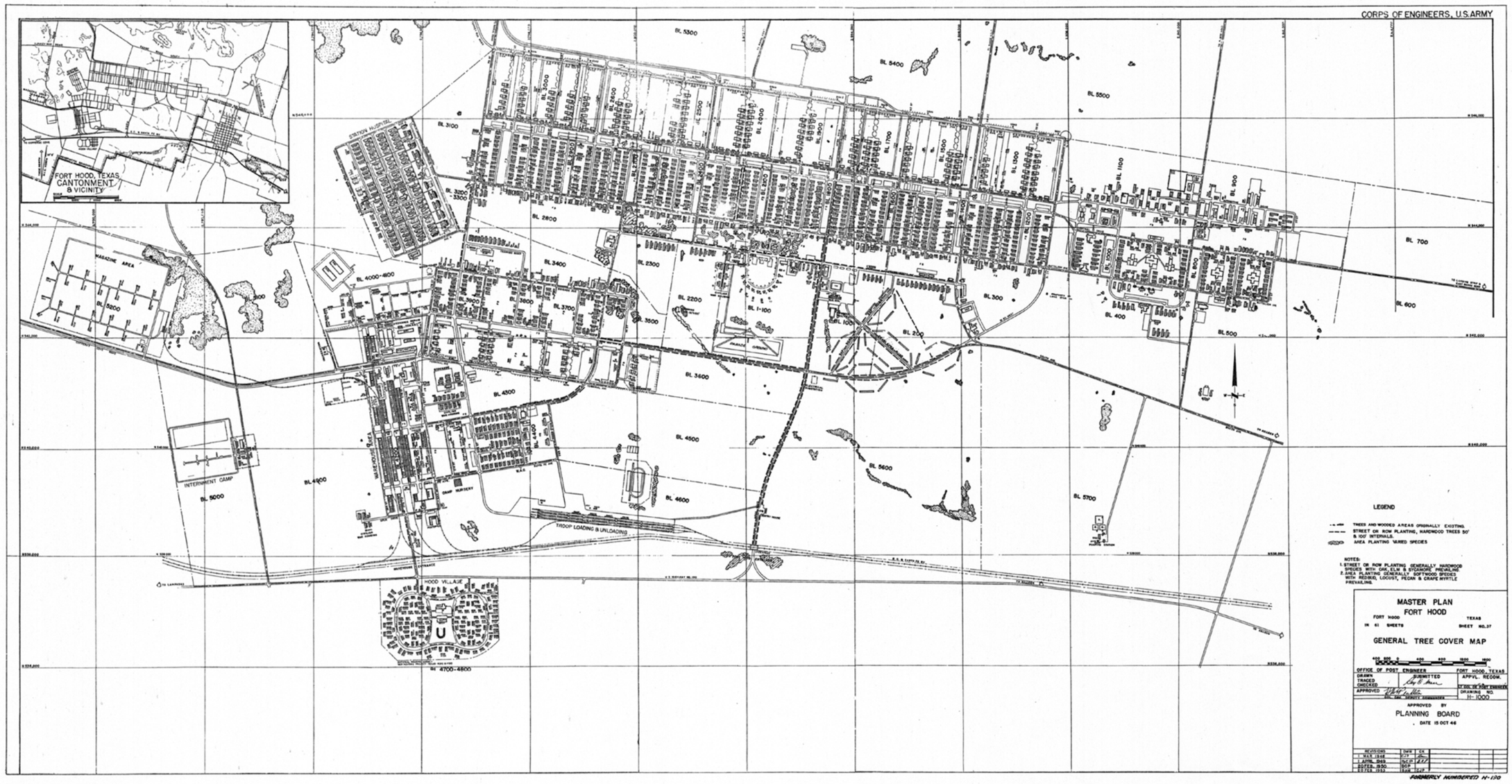

Figure 63: General Tree Cover Map, with tree-lines streets marked with dashes and showing natural and cultivated groupings of plants, circa 1946, revised 1953 (Fort Hood).

Figure 64: Remaining street trees along Warehouse Avenue (ERDC-CERL 2004).

During the Cold War period, barracks were usually designed without elaborate landscape plans. Landscaping around these barracks and support buildings generally was sparse, usually a ring of moderately sized trees planted around the building (Figure 65). Any shrubs or beds tended to be concentrated at the entrances. Family housing areas were also sparsely planted, relying on the manicured lawns for effect. Moderately sized street trees lined the streets and evergreen shrubs were planted on either side of the door or sparsely across the front foundation. Very few photographs were found that depicted the landscape around buildings other than the headquarters during the periods of significance and we can only look at the vegetation today and imagine what it looked like 50 and 25 years ago.

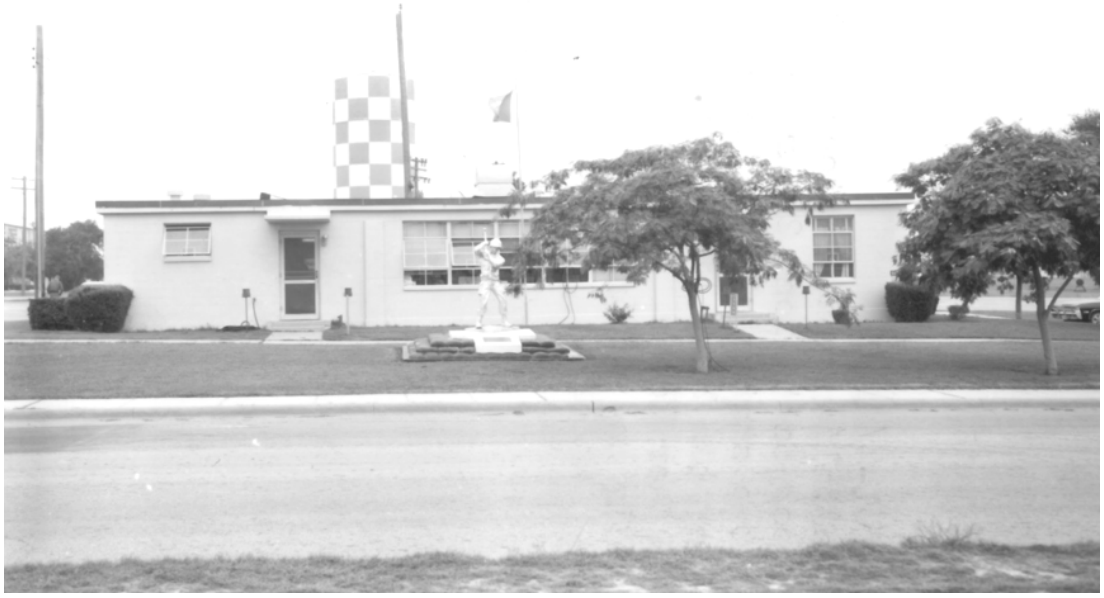

Figure 65: 2nd Armored Division battalion headquarters building with typical plantings, September 1969 (NARA).

3.2.7 Clusters, Buildings, and Structures

Clusters are groupings of buildings and structures, often similar in style that function as a cohesive unit, for example a cluster of barracks, residential quarters or administration buildings. Clusters are usually designed to create a symbiotic relationship with the exteriors and interiors relating to one another in some way.

3.2.7.1 Barracks

The WWII landscape at Fort Hood was laid out based on a company unit. A single company required two or three 74-man barracks, one mess hall, one recreation building, and one supply building (Figure 66).[468] This unit provided the basis for developing overall camp layouts. Several of these units would then share a recreation hall, a chapel, a PX, an officers' club and a theater. This typical military planning demonstrates the traditions of uniformity and efficiency within the military. During the WWII period, Camp Hood buildings were primarily 800-series mobiliza-

[468] Garner, *World War II Temporary Military Buildings*, 12.

tion-type construction. By the end of 1943, 5,630 WWII temporary buildings had been erected at Fort Hood (Figure 67).[469]

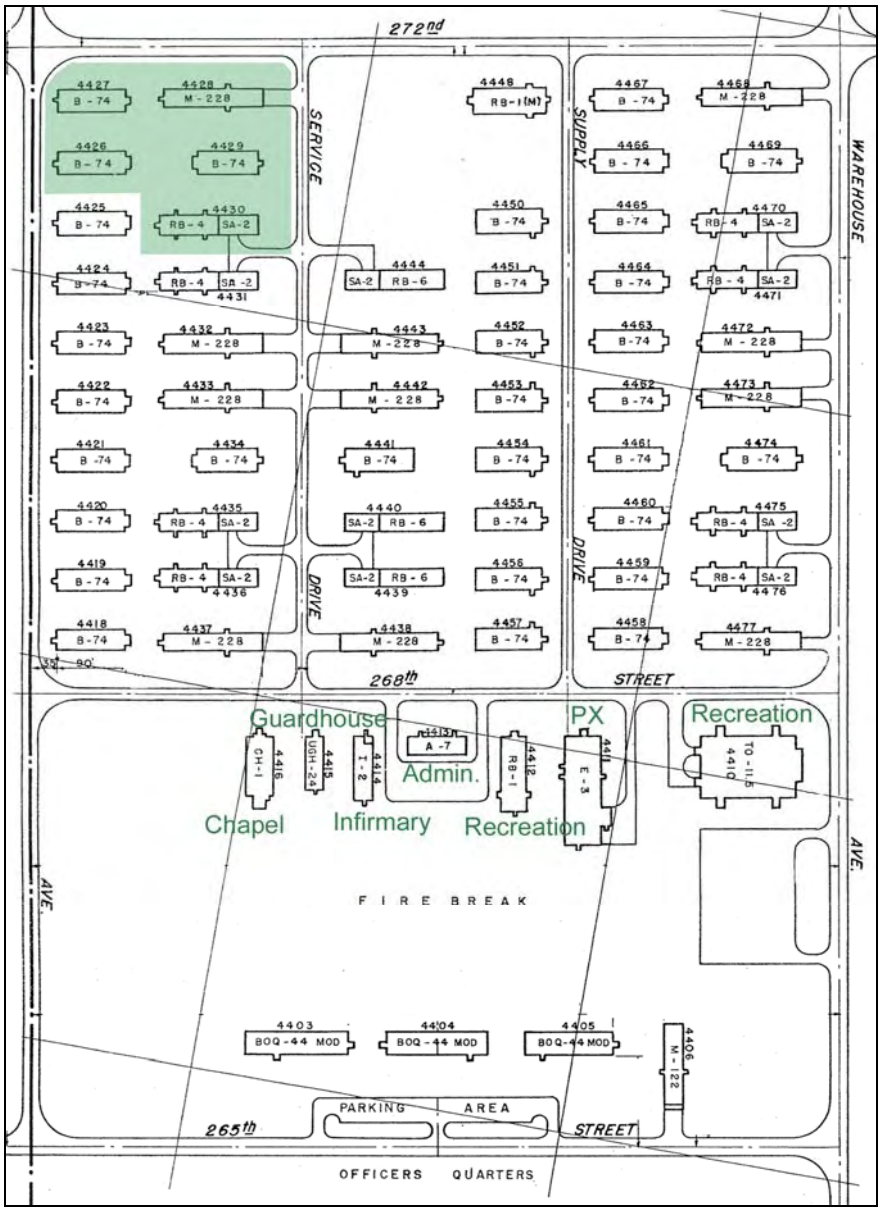

Figure 66: Detail from 1953 Master Plan depicting one company unit (shaded in green), three 74-man barracks, one 228-man mess, and one company administration, storehouse, recreation building (Fort Hood).

[469] Faulk, *Fort Hood: The First Fifty Years*, 56.

Figure 67: Aerial of Fort Hood showing the large number of WWII temporary buildings in 1951 (4th ID Museum, Fort Hood).

From 1945 to 1950, Congress authorized the construction of 83,000 new permanent barracks spaces for the Army based on claims the World War II temporary barracks were deteriorating and constituted a hazard.[470] At the same time, the Department of Defense was encouraging standardization in unaccompanied personnel housing (UPH) designs. During the Cold War, seven standard barracks designs were prepared for the Army. They included hammerhead barracks; H-style barracks; rolling pin barracks; Lyle, Bisset, Carslile and Wolfe barracks; Benham-Blair and Associates barracks; starship barracks, and quadrangle barracks.[471]

The Army's major priorities in developing troop housing were company unity and consolidated basic company functions.[472] Early Cold War era troop housing still re-

[470] Kuranda, *Unaccompanied Personnel Housing,* 3-23.

[471] Ibid, 3-25.

[472] Ibid.

flected elements common to the WWII camps such as unit cohesiveness; typically five to seven barracks buildings were surrounded by dining facilities, unit administration buildings, classrooms, and gymnasiums. For example, a typical hammerhead barracks contained quarters, mess facilities, administration facilities, and sufficient storage to support a company. The most common sizes of barracks, and those built at Fort Hood, were the 225-man and the 263-man barracks, large enough to support a full-strength infantry company.

In the 1950s, accommodating all company functions in a single building was the prime consideration in the design of barracks.[473] The two selected designs, the hammerhead and the H-style barracks, consolidated troop housing, mess hall, and administration together in one building. A 1947 Fort Hood master plan and map of proposed development depicted hammerhead barracks replacing all the WWII temporary troop housing (see Figure 50). In fact, only twenty-four hammerhead barracks were constructed at Fort Hood. Built between 1952 and 1956, all were located east of 31st Street in the cantonment expansion area (Figure 68). Standardization and uniformity in design were the character-defining elements of the hammerhead barracks.[474]

Figure 68: Hammerhead barracks (Building 10007) at Fort Hood (ERDC-CERL 2004).

[473] Ibid.

[474] Ibid., 3-38.

Hammerhead barracks were most commonly clustered in groups of four and ten. Each four-building group housed a battalion (typically four companies) and each ten-building group accommodated a regiment.[475] Training complexes often had an eleventh barracks in the regimental complex that housed the cadre who trained the regiment. Minor variations in the number of buildings in a complex and the size of the buildings were noted, likely reflecting differences in the composition of the regiments. Fort Hood has clusters of hammerheads numbering eleven, five, and eight. The eight barracks complex most likely represents an incomplete regimental complex (Figure 69).

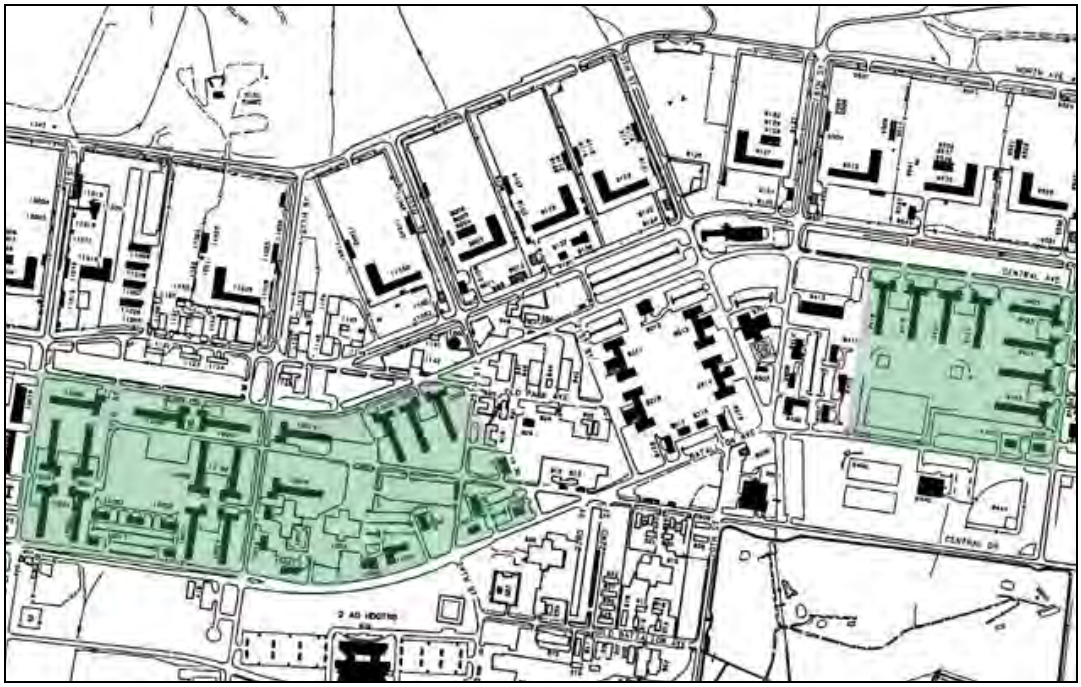

Figure 69: Detail from 1989 Fort Hood Main Post map depicting different clusters of hammerhead barracks (Fort Hood).

The H-style barracks, providing space for two companies instead of just one, were considered a cost-saving measure by the Army.[476] Company integrity was maintained as the two companies occupied opposing sides of the building. Administration, supply rooms, mess hall and lavatories were located between the two companies. Eight H-style barracks were built at Fort Hood in 1958 in two distinct complexes (Figure 70). One complex is located between 40th and 37th Streets, and

[475] Ibid.

[476] Ibid, 3-26.

the other between 20th and 21st Streets. H-style barracks were generally grouped in fives for a regiment. However, Fort Hood contains two clusters of only four barracks. The large mass and scale of these barracks allows for an open, sprawling landscape surrounding the buildings (Figure 71). Both the H-style barracks and hammerhead barracks were utilitarian in appearance.

Figure 70: H style barracks (Building 14020) at Fort Hood (ERDC-CERL 2004).

Figure 71: Aerial photograph of a cluster of H-style barracks (right) and rolling pin barracks (left) (ERDC-CERL 2004).

In the 1960s, rolling pin barracks dominated barracks construction. The rolling pin barracks were designed in response to Congressional price ceilings for barracks construction.[477] By separating barracks and support services such as dining and administration, more money was available for each barracks building. Rolling pin barracks were the first Cold War era barracks that separated support functions in barracks design.[478] At Fort Hood, twenty-one rolling pin barracks were built west of 33rd Street between 1966 and 1969 (Figure 72).

Figure 72: Rolling pin barracks (Building 12004) at Fort Hood (ERDC-CERL 2004).

Rolling pin barracks were generally constructed in clusters of five buildings. Two mess halls, two administration buildings, and two supply buildings were built to support each cluster. A regiment area was composed of ten rolling pin barracks or two clusters. The new complexes also contained additional support buildings including chapels, dispensaries, and NCO clubs, rendering them self-contained units.[479] At Fort Hood, the rolling pins are clustered in groups of five with two dining halls, two administrative buildings, and two classrooms (Figure 73).

[477] Ibid., 3-30.

[478] Ibid.

[479] Ibid.

Figure 73: Detail from 1989 Fort Hood Main Post map depicting clusters of rolling pin barracks and associated buildings (Fort Hood).

A-style barracks, possibly exclusive to Fort Hood, were constructed on a limited basis in the early 1970s. Eight A-style barracks were built at Fort Hood between 1972 and 1974. The A-style design allowed for a smaller footprint than rolling pin barracks and could accommodate more parking, but still able to house five companies (Figure 74).[480] At Fort Hood, usually two A-style barracks were built together to form a regimental complex and joined by a two-story, brick consolidated mess hall (Figure 75). However, two individual A-style barracks (Buildings 21003 and 41002) appear independently clustered with two and three rolling pin barracks at the installation.

[480] Ibid, 4-77.

Figure 74: A-style barracks (Building 31007) at Fort Hood (ERDC-CERL 2004).

Figure 75: Detail from 1989 Fort Hood Main Post map depicting different clusters of A-style barracks and associated buildings (Fort Hood).

With the introduction of the Volunteer Army program in the early 1970s, the Army recognized the need to attract and retain soldiers. Quality of life issues were identified as important to troop morale and retention rates.[481] The Army held a design competition for barracks and selected two designs, the Lyle, Bisset, Carlisle, and Wolfe and the Benham-Blair and Affiliates, that enhanced individual privacy.[482]

[481] Ibid., 3-32.

[482] Ibid., 3-33.

Individual three-person rooms with a bathroom replaced open bay squad rooms and central latrines. Both designs featured small clusters of buildings that could be linked in a variety of configurations to house varying numbers of Soldiers. Thirty-five Lyle, Bisset, Carlisle, and Wolfe barracks were built at Fort Hood between 1974 and 1978 (Figure 76).

Figure 76: Aerial view of 6th Cavalry Brigade Lyle, Bisset, Carlisle, and Wolfe barracks (center) and associated support buildings, August 1977 (NARA).

The Lyle, Bisset, Carlisle, and Wolfe barracks were generally built in complexes designed to house a 3,300-man group or brigade layout.[483] Centrally located support facilities included mess halls, headquarters, branch exchange, chapel, a dispensary and occasionally a gymnasium. Sometimes, as at Fort Hood, the support facilities were located to the side of the housing complex. The basic unit of design was a twelve-man, four-bedroom module. The twelve-man module was stacked in three-story structures, and paired creating seventy-two-man clusters. These clusters could then be grouped in twos, threes, or fours and linked to form irregularly shaped units for varying troop strength. The barracks buildings enclosed large lawns and training areas within a pedestrian environment; vehicles were restricted to the periphery of the complex. Unlike the previous barracks designs, the landscape around the

[483] Ibid., 4-85.

buildings was designed to provide a "civilian-like setting" for soldiers.[484] At Fort Hood, each cluster of Lyle, Bisset, Carlisle, and Wolfe barracks formed a unique grouping (Figure 77).

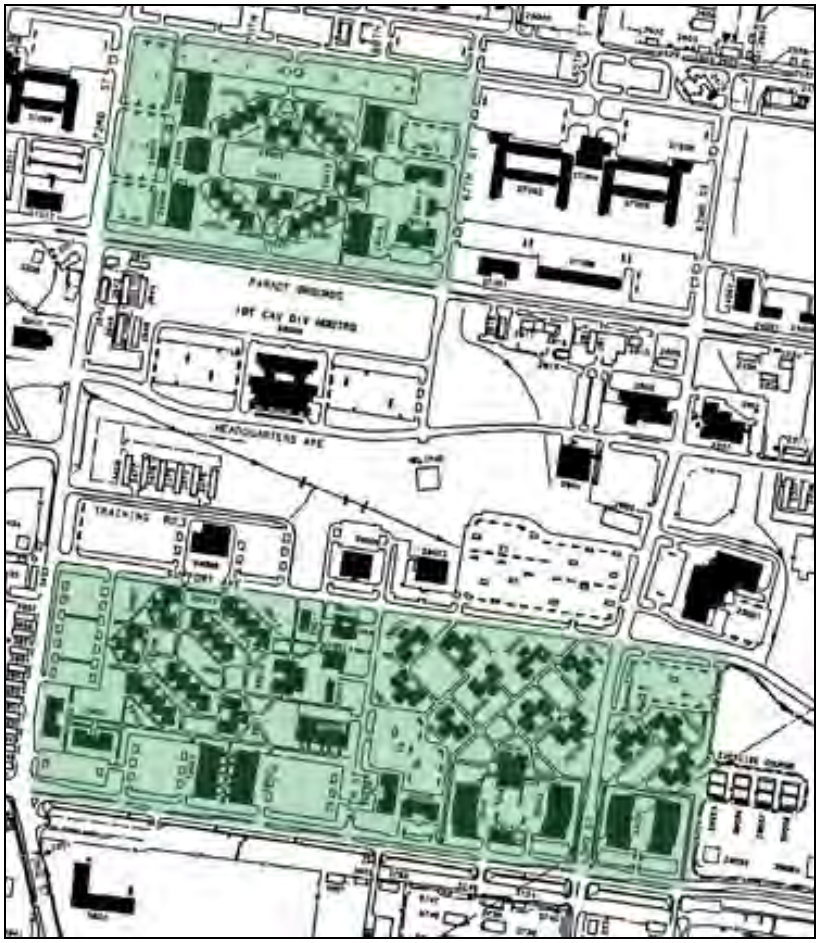

Figure 77: Detail from 1989 Fort Hood Main Post map depicting differing clusters of Lyle, Bisset, Carlisle, and Wolfe barracks and associated buildings (Fort Hood).

Also during this time, the hammerhead and H-style barracks were renovated to meet Army requirements to provide individual three-person rooms.[485] These barracks, along with the Rolling Pin barracks, were modified again in the 1990s, when the Army standards changed to two-person suites. The building footprints and associated landscape elements did not change.

[484] Ibid., 3-35.

[485] Ibid., 4-4.

3.2.7.2 Family Housing

The first family housing project at Fort Hood was Hood Village (Figure 78). Started in 1942, the housing complex contained 765 apartments and 389 trailers plus 88 laundry and utility trailers.[486] Built by the Federal Public Housing Authority as civilian war housing, the area had a unique figure eight layout. All that remains today are the old community center and a commercial building, used today as a day care and youth center (Buildings 4819 and 4820). The new Liberty Village and Kouma Village Housing areas built on the site in 1988 and 1995 did not maintain the historic layout.

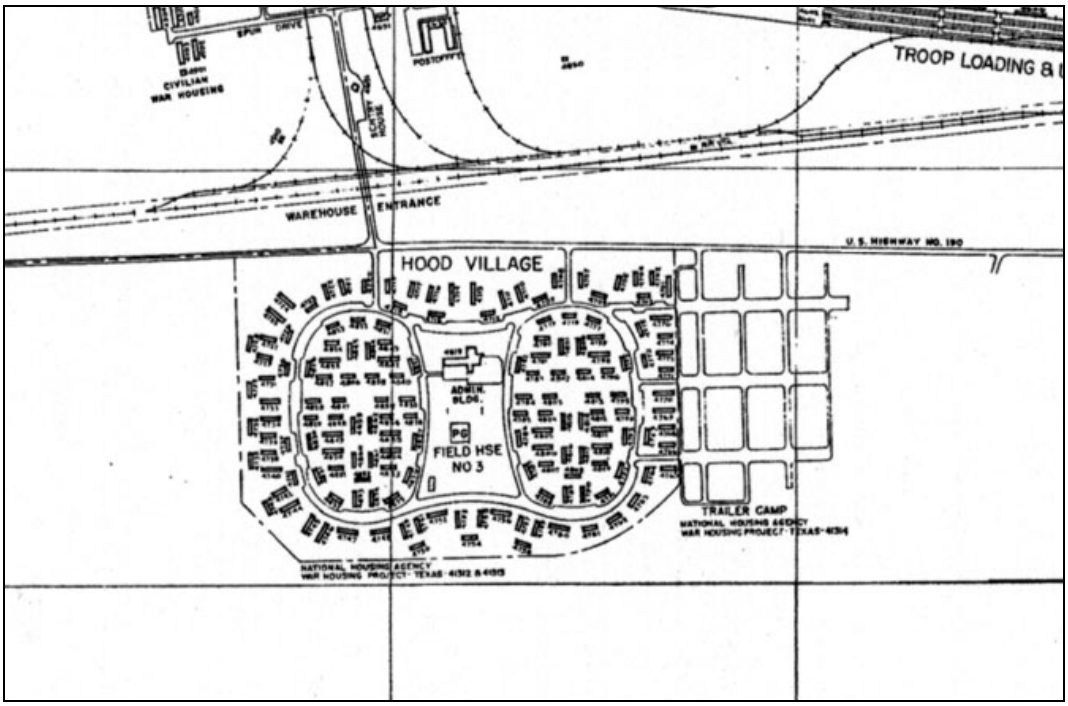

Figure 78: Section of 1946 map (revised 1953) showing layout of Hood Village and trailer park (Fort Hood).

The next housing project, McNair Village, was built with 1948 appropriation funds. The 272 units, built as eight-family row type construction, were slated for both enlisted men (184 units) and officers (88 units) (Figure 79).[487] As space allowances changed, the units did not have the larger square footage allowed for officers, but due to the housing shortages at the time, officers remained in those units until

[486] Faulk, *Fort Hood: The First Fifty Years*, 55.

[487] McCarthy and McCullough, *Fort Hood Military Family Housing,* 59.

1956.[488] The first Wherry Housing project at Fort Hood was started in 1952. Containing 568 units, Walker Village was built in a suburban layout near the airfield (Figure 80).[489]

Figure 79: Photograph of McNair Village at Fort Hood (ERDC-CERL 2004).

Figure 80: Walker Village at Fort Hood (ERDC-CERL 2004).

With the arrival of the III Corps in 1954, there was a large increase in the need for family housing at Fort Hood, especially for Generals and Colonels. In June 1955, Wherry construction began on three new housing areas – Patton Park (14 units for colonels, 3 units for generals), Chaffee Village (238 units), and Wainwright Heights

[488] Faulk, *Fort Hood: The First Fifty Years,* 94; McCarthy and McCullough, *Fort Hood Military Family Housing,* 58.

[489] McCarthy and McCullough, *Fort Hood Military Family Housing,* 59.

(90 units) (Figure 81).[490] These houses were specifically deigned for a southern climate with overhanging roofs to provide shade, painted lighter colors to reflect the sun, and containing air conditioning.[491] At the end of this construction, Hood Village was demolished. In 1958, 500 Capehart units were added to Patton Park. In 1960, 100 more Capehart units were added to Patton Park and 700 were built south of Route 190 in Pershing Park. The housing frenzy continued through the 1970s. In 1970, the Venable Village housing area was added south of Route 190 (Figure 82). Comanche I, II, and III housing areas were added west of Clear Creek Road in 1973, 1975, and 1976 (Figure 83).[492]

The Wherry and Capehart Program neighborhoods were constructed based on suburban planning principles with wide curving streets, long blocks, cul-de-sacs, and large front yards (Figure 84). Some housing areas, like McNair Village, have rear yards opening onto large common areas, some with playgrounds (Figure 85).

Figure 81: Photograph of Patton Park at Fort Hood (ERDC-CERL 2004).

[490] Ibid., 60.

[491] Ibid.

[492] Ibid., 61.

Figure 82: Photograph of Venable Village at Fort Hood (ERDC-CERL 2004).

Figure 83: Aerial view of Comanche Village on west end of Fort Hood, August 1977 (NARA).

Figure 84: Photograph of the Wainwright Heights housing area (ERDC-CERL 2004).

Figure 85: Photograph of a playground behind units in McNair Village (ERDC-CERL 2004).

While street patterns of subdivisions originally evolved from the natural topography of a site, at Fort Hood these curvilinear neighborhoods were possibly designed to avoid the monotony of straight rows of similar houses and reduce traffic speeds in areas with children (Figure 86).[493] In general, the structures were set equidistant from the road and from each other based on site planning instructions from the War Department (1947) and the Army Corps of Engineers (1959). The strict adherence to setbacks and distances between buildings, gives the neighborhoods a strong uniform appearance, also very characteristic of the military.

[493] Kuranda, *Housing an Army*, 5-21.

Figure 86: Photograph of curvilinear streets in the Chaffee Village housing area (ERDC-CERL 2004).

3.2.7.3 Motor Pools

All company motor pools were built along the northern edge of the cantonment. Motor pool buildings during the WWII period typically consisted of a row of five motor shop buildings, one or two motor repair shops, a storehouse, a lavatory, and a radio shop (Figure 87). These temporary structures were replaced a few at a time with permanent structures during the Cold War period. Each Cold War motor pool cluster consisted of a 101,200 sq ft permanent tank repair shop building, a 12,950 sq ft battalion storage building, a 960 sq ft dispatch house, a 1,500 sq ft oil and paint storage building, grease and wash racks, water pump houses, concrete apron, and hardstand of approximately 166,000 sq yards, access drive, and fencing (Figure 88). Each cluster formed by an individual motor pool is uniformly repeated across the linear landscape between barracks and the training lands.

Figure 87: Aerial view taken above Fort Hood, with repeating line of WWII era motor pools on the far left, October 1948 (NARA).

Figure 88: Aerial view of motor pool areas between North and Park Avenues looking west, August 1977 (NARA).

3.2.7.4 Support Buildings

Each of the following support buildings built within the Cold War era created individual landscapes, built independently to support personnel on the installation and do not fit into a larger landscape context. In support of the new permanent installation, an 85-bed hospital was constructed south of the cantonment in April 1965 (Figure 89). Darnall Hospital was originally constructed to support a one-division installation of approximately 17,000 troops. As Fort Hood grew into a two-division installation, the hospital needed to expand. An addition, essentially doubling the size of the hospital, was begun in 1979 and completed in 1984.

Figure 89: Front ground level view of Darnall Army Hospital from southwest corner, July 1966 (NARA).

Adjacent to Darnall Hospital, a six-story BOQ was built in 1969 to house 300 soldiers and included dining facilities (Figure 90). Traditionally, BOQs received more architectural attention than barracks, as priorities were to provide officers with added amenities such as individual bathrooms and kitchenettes. This BOQ, Keith Ware Hall, has since been reclassified as transient housing. In addition, four other BOQs were built at Fort Hood. These three-story hammerheads were built in 1956 and are located adjacent to the east gate of the installation and the Fort Hood Officers Club, which served as the dining facility for the officers (Figure 91).

Figure 90: Photograph of Keith Ware Hall looking south (ERDC-CERL 2004).

Figure 91: Hammerhead BOQs at east end of Fort Hood Main Post (ERDC-CERL 2004).

Army transient quarters were developed in the past 35 years and were constructed to provide low cost, temporary housing for Army personnel and their families.[494] An eighty-eight-unit guest home, Paxon House, was constructed in 1973 along Hood Drive. Its style is reflective of contemporary motel design (Figure 92).

Other buildings that exemplify the Cold War period are the Commissary and PX built in 1962 and 1966. Adjacent to each other on the west side of the cantonment, both were the largest in the United States at the time of construction, fitting for the only two-division post (Figure 93).

[494] Kuranda, *Unaccompanied Personnel Housing,* 3-46.

Figure 92: Photograph of Paxon House along Hood Road (ERDC-CERL 2004).

Figure 93: Aerial view of the Post Exchange (left) and Commissary (right) located on the west side of Fort Hood Main Post, August 1977 (NARA).

3.3 Identified Historic Landscapes

The landscape characteristics section above addresses the landscape of the Main Post as a whole. Upon examination, there are seven identifiable historic landscapes within the Main Post. These areas, further discussed below, are delineated by a consistent land use pattern over time, and contain components that relate to each other in a functional and temporal sense.

3.3.1 The Vehicular Training and Transport Landscape

The spatial arrangement of the Main Post is the direct result of the armored mission of Fort Hood. The linear spatial arrangement (Figure 94) has allowed the cantonment to expand and become the only two-division installation in the United States. In the 1950s, Army site planning changed and troop housing was no longer oriented toward the parade ground. Due to improvements in technology and the need to review large armored and mechanized troops, older parade grounds were too small.[495] Fort Hood was originally not oriented towards a parade ground but toward the training lands.

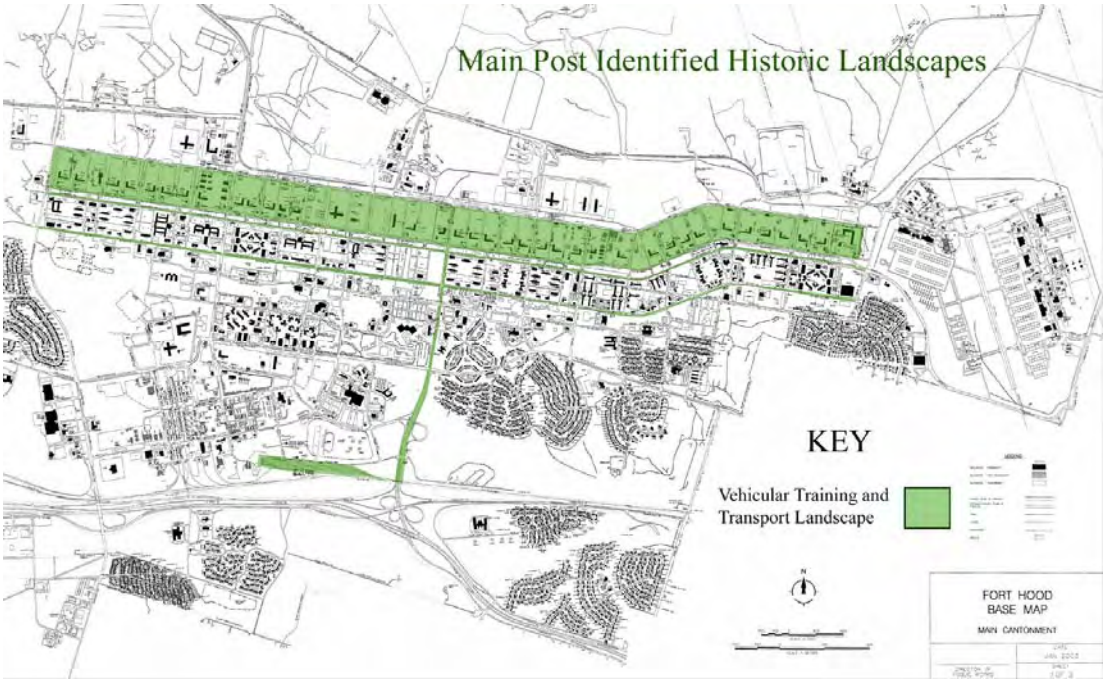

Figure 94. Main Post historic vehicular landscapes (Fort Hood and ERDC-CERL).

The strong linear arrangement of the Main Post has also aided in maintaining consistent land use over the years. The strong belts of land use laid out in 1943, (i.e., motor pools, troop housing, recreation, parade ground and administration, and support and family housing) are still in use and visible today. A 1947 "Future Development Plan" (see Figure 50) created by a post planning board basically created

[495] Ibid., 3-28.

zones of land use in a master plan for the future. While their intention was to save money by using the existing utilities, road network, and railroad area in construction of the permanent installation, their plan also served to preserve the essence of Camp Hood.[496] Overall, the troop housing and motor pool zones have stayed the most consistent, with the motor pool landscape changing very little since the early Cold War period (Figure 95). The recreation, parade ground, and headquarters zone has undergone the most change with many support structures, such as theaters, medical centers, museums, and commercial buildings, filling in the open space and pushing athletic fields and recreation into the periphery of the cantonment.

The motor pools represent a landscape that has undergone the least modification from WWII to present day. Land usage and landscape features (e.g., fence lines and boundary delineations between motor pools) have not changed through time. However, significant changes to the built environments occurred during the Cold War era, wherein single large buildings replaced the WWII-built rows of five to eight smaller buildings. On a large scale, the linear layout and location of the motor pools adjacent to training lands, was purely functional and forms a repetitive pattern across the landscape with each identical to the next in terms of the placement of structures within each motor pool.

On a smaller scale within each motor pool, the layout of individual features is also functional and based on the size of the vehicles, supply needs, and service needs of the vehicles. The placement of wash facilities at the north of the lots adjacent to the training lands, the dispatch and storage buildings that face the barracks and current parking areas, and the slope of the site that takes drainage away from the cantonment exemplify this functional aspect (Figure 96). For both the large scale and the small scale, the motor pool utilitarian landscape is a direct result of the armored mission of Fort Hood.

[496] Faulk, *Fort Hood: The First Fifty Years*, 94.

Figure 95. Aerial photograph of motor pool area in foreground (ERDC-CERL 2004).

Figure 96: Photograph of wash area and wastewater runoff system in motor pools (ERDC-CERL 2004).

Through the addition of a second division and the III Corps, the conversion of the multitude of World War II temporary buildings into a smaller number of permanent facilities, and the expansion of the cantonment to both the east and the west, the intricate hierarchical roadway system continues to preserve the spatial arrangement of the Main Post. Hood Road remains at the top of the hierarchy, the east-west boulevards and avenues are a close second, and the tertiary north-south roads remain at the bottom of the hierarchy. This strong hierarchy serves to strengthen the linear layout and land use patterns and to reinforce the mirror-image layout of the two division capabilities of the Main Post (with Hood Road as a visual partition between the two divisions).

In addition, the railroad is an important part of the installation's history, and key in both the location of Fort Hood and the fort becoming a permanent installation. Throughout both the WWII and the Cold War periods, the railroad was important in the mobilization and readiness missions of Fort Hood. Historic photographs document the continued use throughout the Cold War for exercises and training maneuvers (Figure 97 and Figure 98) and the transport of equipment to ships in Galveston.

Figure 97: 2nd AD loading for trip to San Antonio to take part in Army Day parade, 1946 (4th ID History Office, Fort Hood).

Figure 98: Loading a flat bed rail car in preparation for Task Force Irwin, April 1977 (NARA).

The roadways and railroad are significant components of the vehicular training and transportation landscape of the Main Post. Together they complete a picture of how soldiers used the landscape at Fort Hood to respond to mobilization and readiness efforts throughout WWII and the Cold War. The character-defining features of the railroad include the remaining track, the troop and vehicular loading area, and associated lighting and signage.

3.3.2 Hood Army Airfield

The Hood Army Airfield (Figure 99) is a perfect example of landscape change to accommodate new technologies, i.e., the shift of Army Aviation from fixed-wing to rotary-wing aircraft in the beginning of the Cold War (Figure 100). By the 1960s, the Army recognized the importance of the helicopter in providing greater mobility for the troops, based on its success in Vietnam and in fighting counterinsurgency operations. Because of this, the helicopter quickly became an important piece of Army doctrine and was highlighted in Cold War Army restructuring (ROAD and TRICAP). In addition, Fort Hood was home to the very first air cavalry unit, the 6th Cavalry Brigade. Created in 1965, the 6th Cavalry cemented Fort Hood's leadership in Army aviation, use of combat helicopters, and combined arms training during the Cold War period.

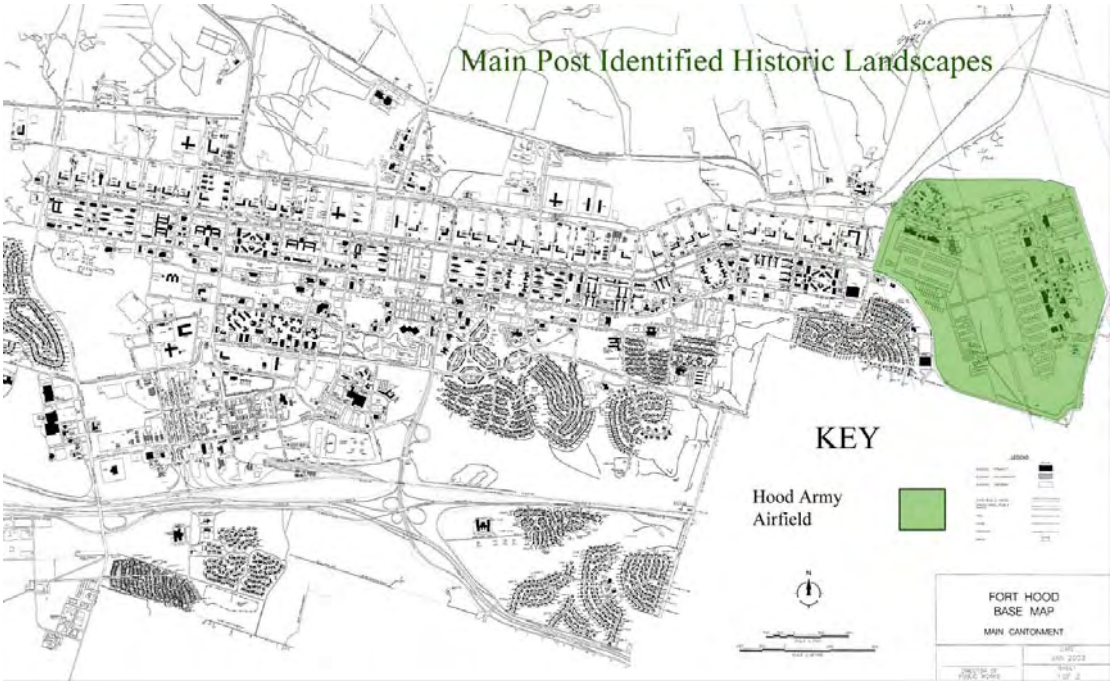

Figure 99: Main Post Hood Army Airfield historic landscapes (Fort Hood and ERDC-CERL).

Figure 100: Aerial photograph of Hood Army Airfield (ERDC-CERL 2004).

The airfield was expanded in the 1950s, and again in the 1970s, in direct response to mission needs and new technology associated with rotary wing aircraft in the Army. These Cold War era improvements to the airfield still exist today and while many of the buildings may not be architecturally eligible, the airfield landscape is significant and retains most of its integrity. Features of the airfield include the

runways and taxiways, supporting buildings, and landscape improvements for rotary wing aircraft.

3.3.3 Capehart-Wherry Family Housing Areas

Since the family housing areas at Fort Hood built under the Wherry and Capehart funding programs have previously been determined eligible to the National Register through the Capehart–Wherry Era Family Housing Program Comment, they are discussed only briefly in this report (Figure 101). Family housing was constructed for the U.S. Army under the Wherry and Capehart Acts from 1949 to 1962. The Wherry housing areas at Fort Hood include McNair Village, Walker Village, Wainwright Heights, Chaffee Village, and the first 17 homes in Patton Park. Housing built under the Capehart Program included 600 units in Patton Park and 700 units in Pershing Park.

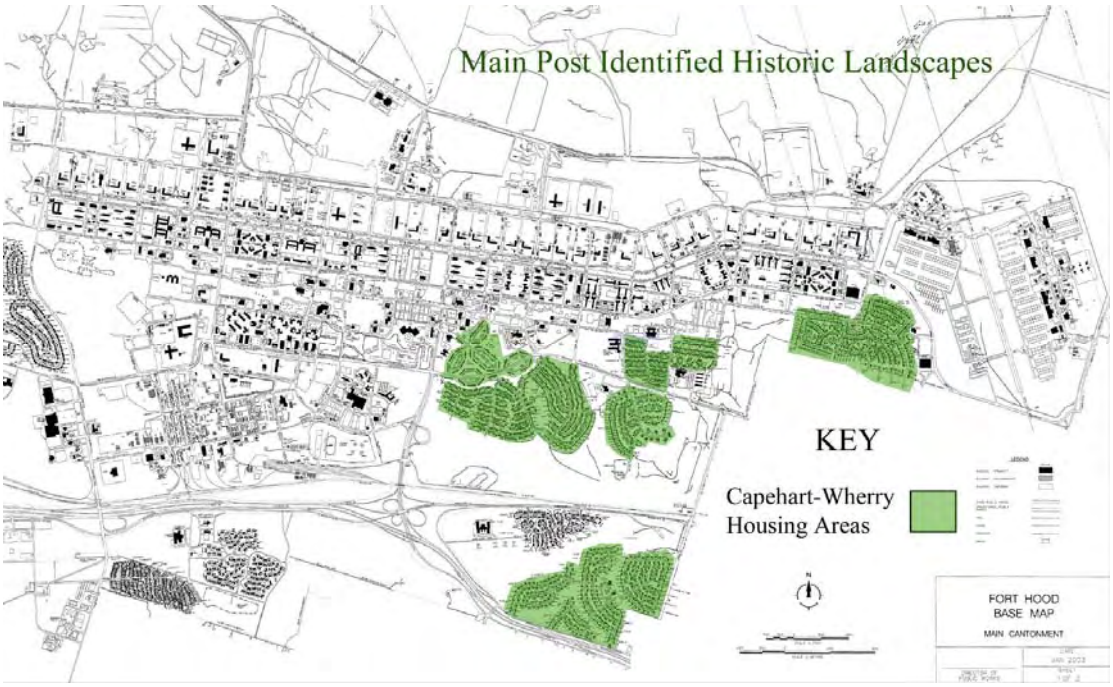

Figure 101: Main Post Capehart-Wherry Family Housing historic landscapes (Fort Hood and ERDC-CERL).

Character-defining features of all Capehart-Wherry neighborhoods are planned residential communities that include uniform setbacks, standardized placement of buildings on lots, wide curvilinear streets and sidewalks, and natural and designed common areas and open space.[497] Many neighborhoods include amenities such as playgrounds, community buildings, schools, bus stops, pools, privacy fencing, and tree-lined streets.

3.3.4 Cold War Era Unaccompanied Personnel Housing

The designs for unaccompanied personnel housing facilities have slowly evolved to meet rising standards of living, and the increased need for individual space and privacy for enlisted men. The layout (and use) that made the most sense for the military 60 years ago is still the same today, i.e., small units of action, clustered together with support services, replicated across the landscape (Figure 102). It is important to realize the change in the Army to "all-volunteer" and the implication it had on the design and layout of the Cold War era barracks. For example, the Lyles, Bissett, Carlisle, and Wolfe barracks have a "dorm-like" appearance and focus on living space and privacy, changes that improved the quality of life for Soldiers.

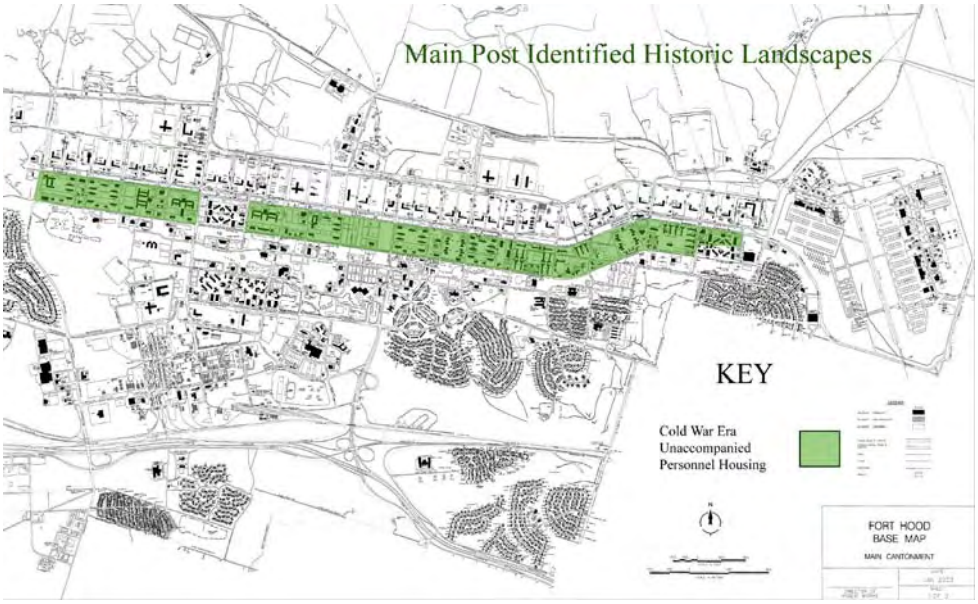

Figure 102: Main Post Unaccompanied Personnel Housing historic landscapes (Fort Hood and ERDC-CERL).

[497] For more information on features of Capehart-Wherry neighborhoods, see Christopher R. Goodwin and Associates, *Neighborhood Design Guidelines for Army Wherry and Capehart Era Family Housing*, (Aberdeen Proving Ground, MD; U.S. Army Environmental Center, 2003), 15.

The consolidation of barracks and support services into larger buildings during the Cold War period had a major effect on changing the scale of Fort Hood's landscape (Figure 103). The uniform and closely spaced WWII temporary buildings, one and two stories in height, were replaced by more massive structures. Now, three and four-story complexes are surrounded by expansive parking lots and open space.

Designed to integrate living and training for the armored soldier, the UPH areas on the Main Post were built in a linear group directly adjacent to the motor pools. The main character-defining feature of the Cold War era UPH barracks is the cluster arrangement of barracks and support buildings; although each UPH type is comprised of a cluster, the cluster arrangements vary by type. The buildings typically cluster around a large open space with minimal vegetation, physical training equipment, and the occasional picnic table and cooking grill. Barracks, dining halls, and transient housing buildings have recently been determined NRHP-eligible under the *Cold War Era Unaccompanied Personnel Housing* program comment, signed into effect by the ACHP on 18 August 2006.

Figure 103: Clusters of rolling pin barracks separated by clusters of WWII temporary buildings (III Corps History Office, Fort Hood). Image is looking east at 53rd Street between Old Ironsides and Battalion with Buildings 21008 and 21009 in foreground.

3.3.5 Ceremonial Activities and Post Headquarters

Unlike most installations in the country, Fort Hood was not laid out around a central parade ground (Figure 104). A planning map from 1947 indicated the block between Headquarters and Battalion Avenue should be used as recreation, open space, and parade grounds, so it is possible the earliest parade grounds were located in this area. The first parade ground noted on an early map of Fort Hood was located south of the headquarters building and officers' housing at Hood Road and South Avenue (currently Tank Destroyer Boulevard). Today this is the site of Sadowski Parade Ground (Figure 105 and Figure 106), though it is difficult to determine if this parade ground dates back to the WWII period.

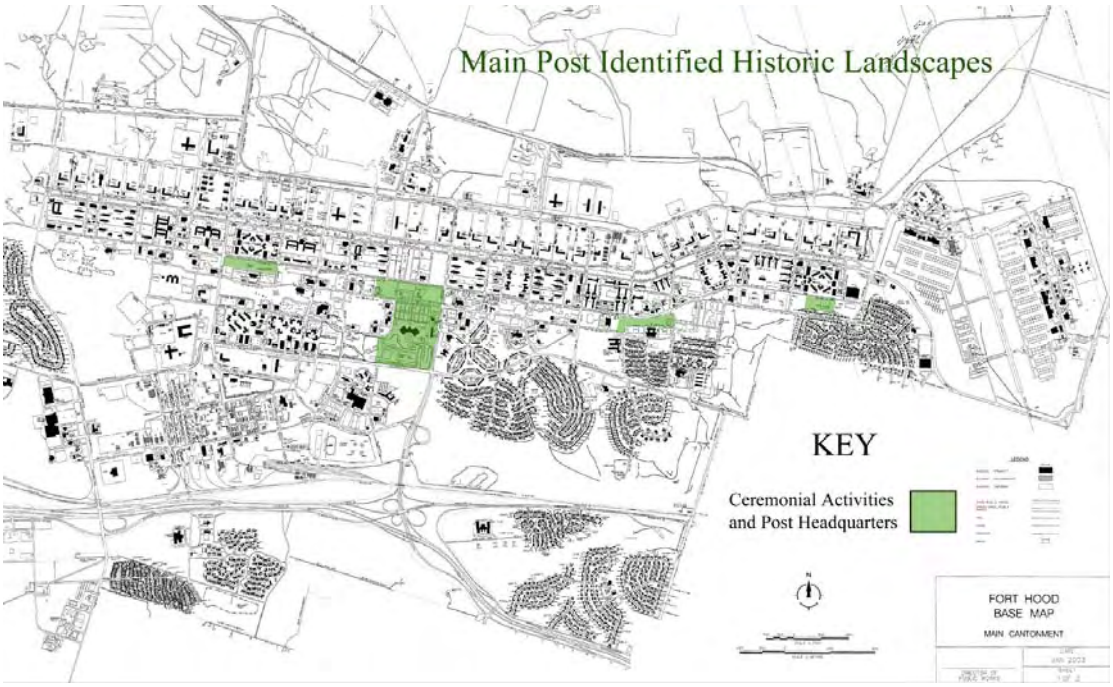

Figure 104: Main Post historic ceremonial landscapes.

Figure 105: Parade ground, currently Sadowski Parade Ground, in use, 1946 (4th ID Museum, Fort Hood).

Figure 106: Aerial view of Sadowski Parade Ground, date unknown (III Corps History Office, Fort Hood).

Sadowski Parade Ground was dedicated in January 1960, although the plaque was not placed until 1991. Adjacent to Hood Road and visible right inside the main gate, this parade field commands an impressive place. Sadowski Field is still regularly used and is a great example of continued ceremonial use over time. In addition, the size and layout of the parade ground accommodates the review of armored vehicles and rotary-wing aircraft.

North of Sadowski Parade Ground is the relatively new III Corps Headquarters building and parking lot. Built in the 1980s, the building and parking lot sit on the site of the old post headquarters and associated administrative buildings that were laid out in a striking semi-circular design. While the new building is drastically different from the WWII era post headquarters, it is representative of consistent land use on the installation. Other examples of consistent land use for ceremony and leadership on Fort Hood include the old WWII Post Chapel, a small park commemorating Fort Hood, and the Broumas Memorial Park, all situated north of the headquarters building.

Gaffey Parade Ground was located between 52nd and 58th Streets. Research indicated the field was rededicated in 1960 by the 2nd AD. Today the site is home to the First Cavalry Division Museum and outdoor display area (Figure 107). The outdoor display area was dedicated as Broumas Memorial Park in 1974. This compatible use partially preserves the open space and has some ceremonial utility.

Figure 107: Broumas Memorial Park along Tank Battalion Avenue (ERDC-CERL 2004).

Today parade fields exist adjacent to the two division headquarters buildings along Battalion Avenue. Cooper Parade Ground, formerly Sky Beaver Field, located in front of the 1st Cavalry Division headquarters building, was dedicated and renamed in 1977 (Figure 108). It was rededicated in 1984 when the division concrete patch was laid. Iron Horse Field, recently named Cameron Field, is located adjacent to the 4th ID headquarters building (Figure 109). No information was found on the history of this parade ground, but it is assumed it dates to the construction of the new headquarters building in 1985.

Warhorse Parade Ground is located adjacent to the Walker Village housing area. Its location is not noted on any of the Cold War maps (Figure 110). It does appear in an aerial photograph from 1977 and appears to have the same podium in direct line to the 6th Cavalry barracks. The name is probably recent, as the "Warhorse" Brigade (2nd Brigade, 4th ID) was not activated at Fort Hood until 1995. A 1989 map notes two baseball/softball fields on the site that are not evident in the 1977 aerial.

Gaffey, Cooper, and Warhorse Parade Grounds are mostly significant to individual divisions and brigades and not the installation as a whole. Since they are not associated with any significant Fort Hood theme, they do not have National Register significance and are not included within the ceremonial activities district.

Figure 108: Cooper Field located in front of 1st Cavalry Division Headquarters (ERDC-CERL 2004).

Figure 109: Cameron Field located adjacent to 4th ID Headquarters (ERDC-CERL 2004).

Figure 110: Warhorse Parade Ground with Walker Village in the background (ERDC-CERL 2004).

3.3.6 Remaining WWII Mobilization Landscape

The WWII warehouse and quartermaster areas remain in use at Fort Hood and were inventoried as part of this project. Today, these areas are mainly used for storage and administrative offices today. The buildings are mostly WWII temporary structures with some modern infill. The buildings are located near the short railroad spurs to facilitate warehouse storage and inventory management (Figure 111). The layout of the area and the type of buildings present are essentially the same as found on any military installation for logistical purposes. While the landscape associated with these areas is mostly intact, it is not significant under any of the identified Fort Hood themes.

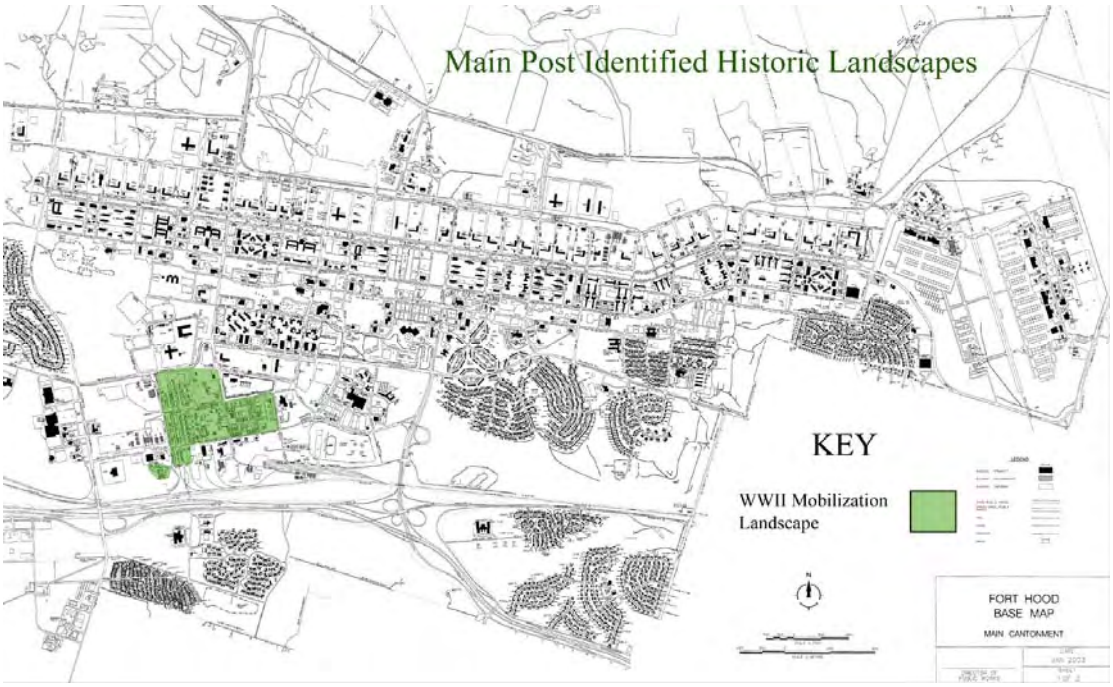

Figure 111: Main Post WWII historic mobilization landscapes (Fort Hood and ERDC-CERL).

Adjacent to the warehouse area, one of three original WWII civilian war housing complexes remains at Fort Hood (Figure 112). The former civilian housing facilities are now used for other purposes, and the layout of the area has been significantly altered over the years.

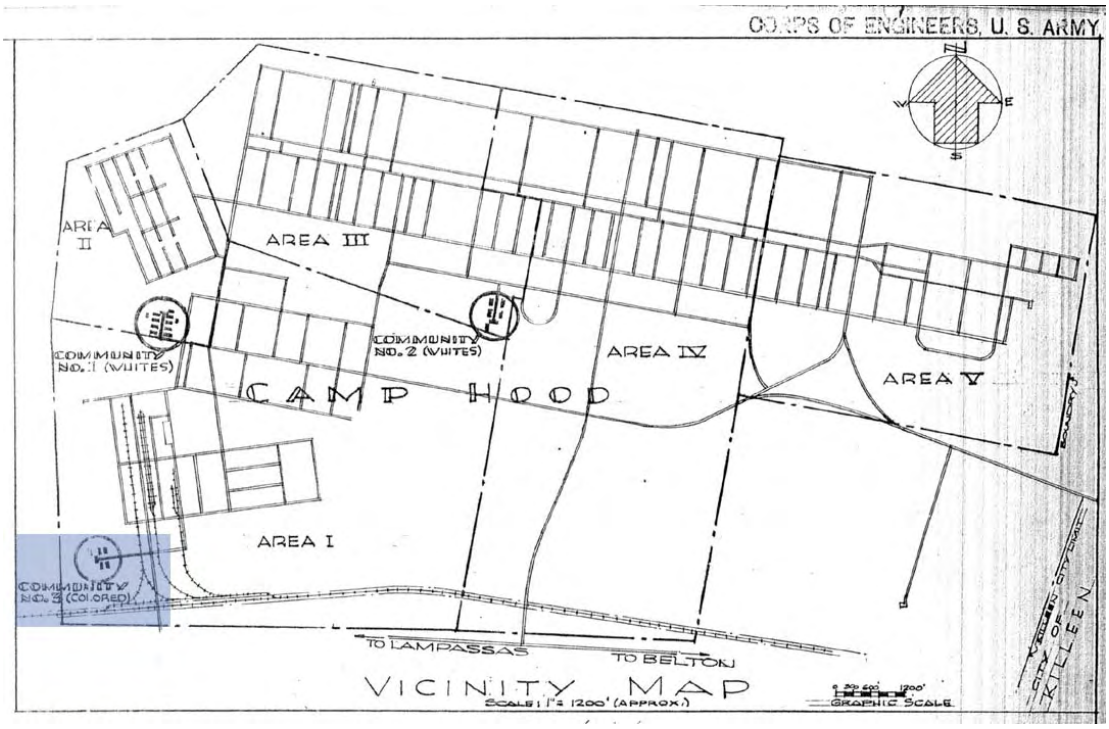

Figure 112: Map of three housing areas (circled) for civilian war workers with the extant area highlighted, July 1942 (Fort Hood).

3.3.7 Recreational Landscape

There is some consistency in the recreational landscape from the WWII and Cold War periods to the present (Figure 113). Recreational areas in use during the WWII period included pools and tennis and volleyball courts that were located between what is today Hell on Wheels and Old Ironsides Avenues. Additional swimming pools were scattered around the Main Post and are still in use today (Figure 114). The stadium, plans of which date to 1948, is still in the same location south of Darnall Hospital. However, the bowling alley, rifle range, lighted baseball and softball fields, basketball and handball courts, once located on the strip of open space between Battalion and Headquarters Avenues (now Tank Destroyer Boulevard), are gone.

Anderson golf course, located in the southeastern corner of the cantonment, first appeared on the 1946 (revised 1953) recreation map where it was noted that nine of the 18 holes were completed (Figure 115). Another nine-hole golf course, originally located along Hood Road by the main gate, was likely gone by the 1960s. A new golf course was built in the Clear Creek area toward the end of the Cold War period.

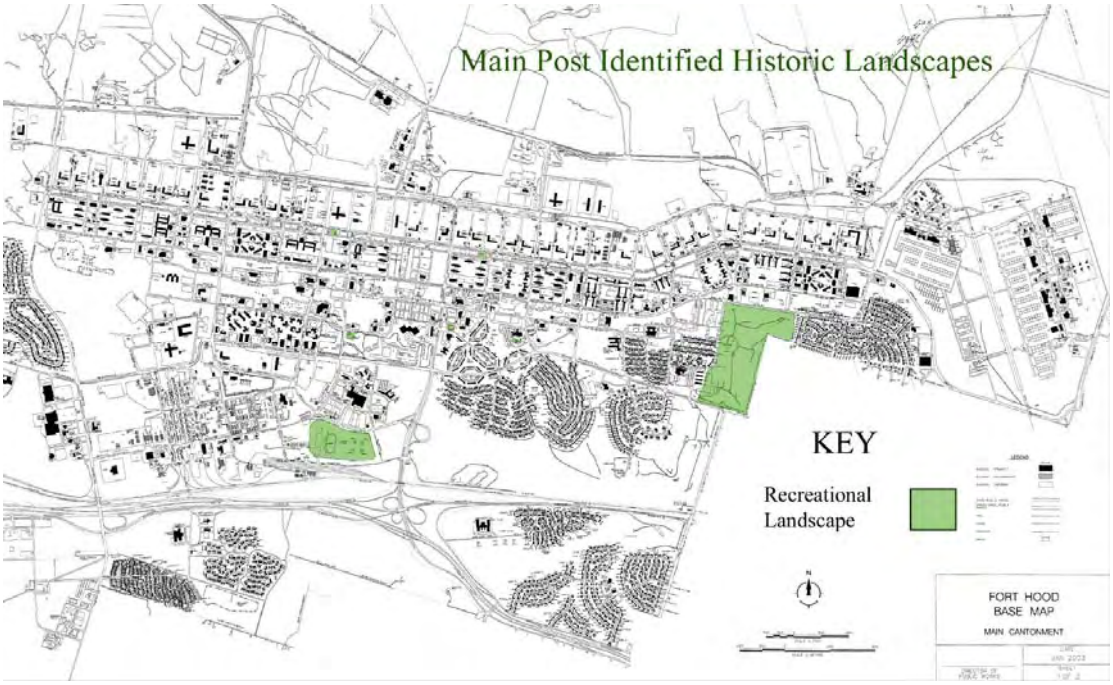

Figure 113: Main Post historic recreation landscapes (Fort Hood and ERDC-CERL).

Figure 114: Photograph of swimming pool (Building 1676) located between Old Ironsides Ave and Hell on Wheels Avenue (ERDC-CERL 2004).

For further recreation, Belton Lake Outdoor Recreation Area (BLORA) is located on Belton Lake and contains a beach, picnic areas, boat rental, water slide, and moun-

tain biking trails (Figure 116). Since it is not adjacent to the cantonment areas, the landscape at BLORA was not evaluated. However, some of the structures are included in the building survey.

Figure 115: Photograph of Anderson Golf Course, Fort Hood Main Post (ERDC-CERL 2004).

Figure 116: Belton Lake Outdoor Recreation Area (ERDC-CERL 2005).

3.4 Summary of Character-defining Features for Significant Main Post Landscapes

Five of the seven identified historic landscapes on the Main Post were determined to have significance under the identified Fort Hood historical themes.[498] These sites are integral to understanding the overall landscape of Fort Hood and its unique lay-out in direct response to the mission. In addition, these sites help to illustrate the historic themes discussed in this report. The spatial arrangements and land uses illustrated by these sites have both WWII and Cold War significance for Fort Hood's mission as a WWII tank destroyer training center and school, and as a two-division post for training and readiness for the Cold War.

Listed in Table 5 are the character-defining features for the significant historic landscapes for the Main Post cantonment. Character-defining features are defined as a prominent or distinctive aspect, quality, or characteristic of a historic landscape that contributes significantly to its physical character. In order for a landscape to be considered significant, character-defining features that convey its historic themes must be present.

Table 5. Character-defining features of significant Main Post landscapes.

Significant Landscapes	Landscape Area Components	Character-Defining Features
The Vehicular Training and Transport Landscape	Transportation network (Roadway system, railhead, and rail loading area)	Linear cantonment layout Consistent land use Buildings clustered into small units of action replicated across the linear layout Access to railroad for movement of troops and equipment Support services located nearby for expediency Primary axis of Fort Hood Road Broad secondary east-west boulevards & avenues Open area between broad avenues Tertiary north-south roads Symmetry of two divisions on either side of Hood Road

[498] The recreational landscape and the remaining WWII landscape were not found to be associated with any significant Fort Hood themes, and were not further evaluated.

Significant Landscapes	Landscape Area Components	Character-Defining Features
	Motor pool compounds	Expandable linear layout addressing training area Boundary delineations & fence lines Uniform placement of building-structure clusters within each compound Motor repair, dispatch, storage, oil house & water booster pump buildings Extensive hardstand pavement for vehicle maneuvering & parking Vehicle wash facilities adjacent to training ranges Grease rack/oil house facilities Sloped paving & concrete drainage swales for vehicle fluid & waste water runoff
Hood Army Airfield	Airfield, associated buildings and structures, runways, and landscape	Control tower, aircraft maintenance hangars & support buildings Runways, taxiways, aprons & parking Aircraft fueling & washing infrastructure Airfield lighting & navigational aids Fencing and controlled access
Capehart-Wherry Family Housing Areas	Multi-family Housing: McNair Village	Multi-unit buildings situated in unique semi-circular forms around access roads Buildings respond to natural topography Parking in carports opposite housing units Semi-private areas fronting housing units Recreational sites (e.g. playgrounds & basketball courts) Privacy fencing
	Single family and duplex housing: Walker Village, Wainwright Heights, Chaffee Village, Patton Park Pershing Park	Cohesive neighborhood layout Uniform setbacks & building placement on lots Community buildings (e.g. schools) Recreational sites (e.g. playgrounds & pools) Public open spaces and common areas Site amenities (e.g. mailboxes & bus stops) Vegetation (e.g. tree-lined streets) Wide curvilinear roadways and sidewalks Privacy fencing
Cold War Era Unaccompanied Personnel Housing	Cold War barracks, associated support buildings and landscape	Barracks and support buildings clustered into small units of action replicated across the linear layout Open areas Parking lots Central areas used for PT or training Walkways Picnic areas Statues, monuments, displays and unit insignia Shade trees and foundation plantings

Significant Landscapes	Landscape Area Components	Character-Defining Features
Ceremonial Activities and Post Headquarters	Sadowski Parade Ground Broumas Memorial Park (formerly Gaffey Parade Ground) Site of current and former post headquarters Post chapel	Prominent location near III Corps headquarters and proximity to original post Headquarters site High visibility at installation main gate along Hood Road Continued ceremonial use Associated open space Podiums & review grandstands Speaker systems & lighting Memorializations, plaques and monuments Helicopter pad Display vehicles and aircraft

4 North Fort Hood Landscape Elements

4.1 Overlay Maps

Maps of North Fort Hood representing the three periods (WWII, Cold War, and the present day) have been overlaid to show broad patterns of change in Fort Hood's landscape. These maps illustrate how the landscape developed over time and show how elements were added to or removed from the landscape during specific periods.

4.1.1 WWII Period to early Cold War Period, 1943/1953 Map

Built of temporary, theater of operations type construction with a life expectancy of 5 years, North Fort Hood was designed to hold 40,000 troops (Figure 117).[499] In addition to housing, a 1,139-bed hospital, a POW camp with 3,000 quarters, and 465 civilian housing units in a cluster called "North Village" were built to support the mission.[500] When North Camp Hood was deactivated in 1946 after being determined unsuitable for post-war retention, it was converted into a National Guard, ROTC, and Army Reserve training area. The majority of the buildings at North Camp Hood were torn down or sold.[501] Only a few remained, such as the chapel, headquarters building, and warehouse buildings.

Half of the original cantonment was abandoned after the structures were removed. In 1946, new concrete slabs were poured for tents to accommodate the thousands of National Guard, ROTC, and Army Reserve units that occupied the landscape every summer.[502] The uniform rows and rows of tents were nicknamed "Tent City."

---

[499] Faulk, *Fort Hood: The First Fifty Years*, 54.

[500] Ibid, 54-55.

[501] Ibid, 87.

[502] Ibid.

4.1.2 Early Cold War Period, 1953/1971 Map

During the Korean War years, the Army suspended National Guard training at North Fort Hood. Permanent mess halls and shower/latrines were added to the landscape in 1951 (Figure 118). In 1952, Longhorn Army Air Field was added in support of Operation Longhorn.[503] Other than these changes, the landscape at North Fort Hood changed very little during this period.

4.1.3 Late Cold War Period to Present Day, 1971/2003 Map

Throughout the 1960s and 1970s, the National Guard continued training at North Fort Hood. The 1970s brought big changes to the built environment (Figure 119). In 1972, 149 South East Asia (SEA or C) metal hutments were added to the landscape after bad windstorms destroyed many of the tents.[504] Then in 1978, construction was begun on a permanent National Guard Mobilization and Training Equipment Site (MATES) at North Fort Hood. In addition, new permanent barracks, mess halls and company headquarters were built at North Fort Hood in 1979 to support the continued seasonal land use by the National Guard and Army Reserve. Tent City was in continual use during this period.

[503] Ibid., 111.

[504] Memorandum for Record from Deputy Facilities Manager, Ray C. Moore dated 7 April 1978 on proposed and ongoing OMA and MCA projects at North Fort Hood (III Corps History Office, Vertical Files, Organizational History Files 1978).

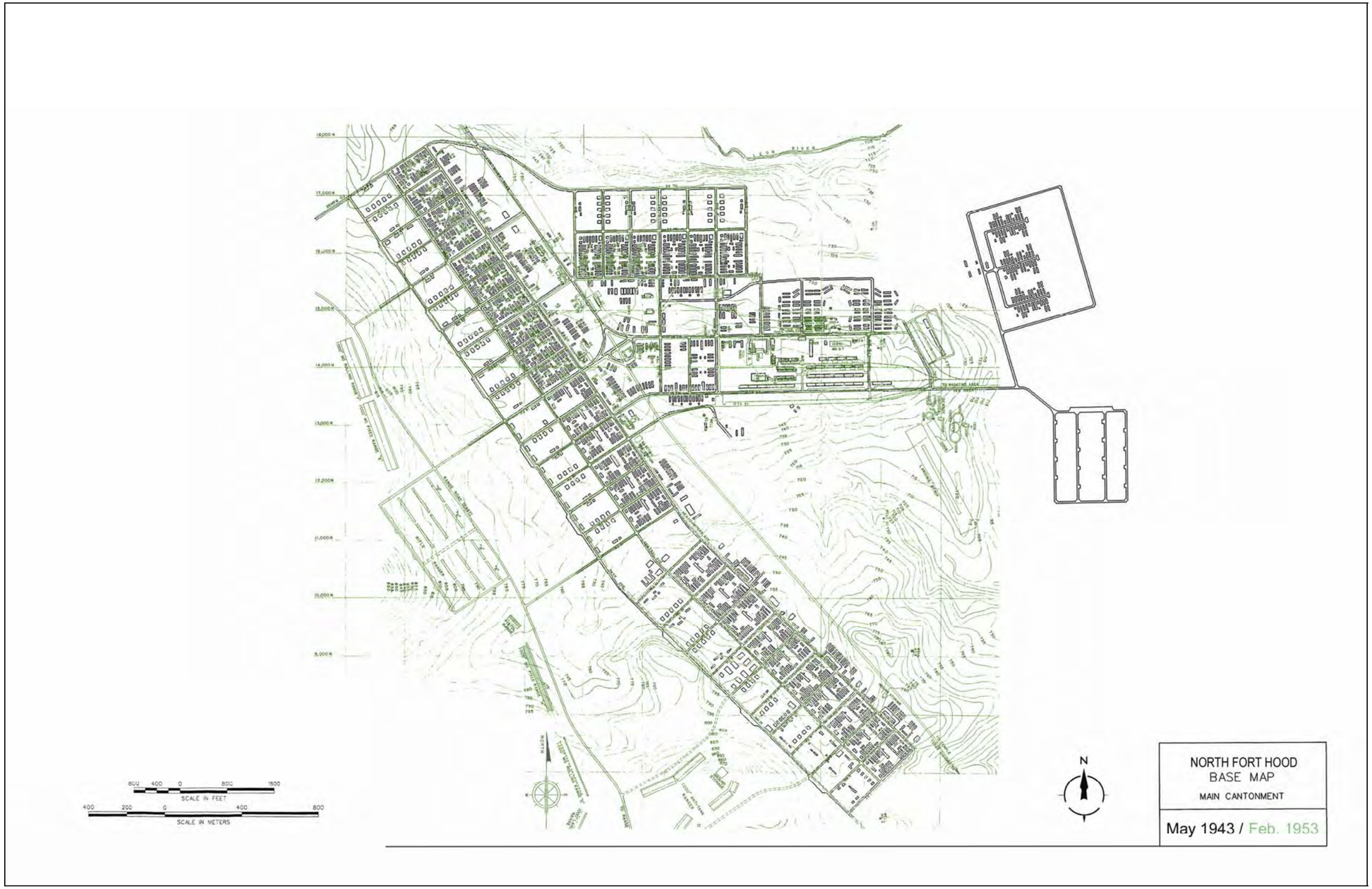

Figure 117: 1943 trace of aerial photograph of North Fort Hood overlaid with 1953 map (ERDC-CERL and Fort Hood).

Figure 118: 1953 map of North Fort Hood in black overlaid with 1971 map in green (ERDC-CERL and Fort Hood).

Figure 119: 1971 map of North Fort Hood in black overlaid with 2003 map in green (ERDC-CERL and Fort Hood).

4.2 Landscape Characteristics

As stated in the previous chapter, landscape characteristics are tangible evidence of the activities and habits of the people who occupied, developed, used, and shaped the land to serve human needs; they may reflect the beliefs, attitudes, traditions, and values of these people.[505] Identifying these characteristics requires an understanding of the natural and cultural forces that have shaped it. This section pertains to the North Fort Hood cantonment landscape as a whole and describes these processes and the resulting landscape features that together comprise the military landscape at North Fort Hood. The purpose of this section is to help Fort Hood become sensitive to the overall landscape and how it affects decision making with regard to landscape planning on the ground.

4.2.1 Spatial Organization and Land Use

The spatial organization is the relationship among the land use areas, circulation networks, predominant landforms, and natural features.[506] The mission of the military drives the spatial organization of an installation and the way the military uses the land. There are often major landscape changes when the mission changes, as when the Army turned the North Fort Hood site over to the National Guard in 1946, for example.

Since the overall Fort Hood site was selected due to the topographical fitness of the land for training, the low cost of land, available water supply, and adequate rail and road facilities, it is likely the sub-cantonment (North Fort Hood) site was selected to take advantage of the proximity of the site to Gatesville and Temple, the Cotton Belt Railroad, or to capitalize on adjacent training lands. Research reveals it was originally built to house the Tank Destroyer Basic Replacement Training Center (RTC) and the Tank Destroyer Basic Unit Training Center (BUTC).[507] North Fort Hood was laid out and built quickly as a temporary post with an intricate roadway system that is somewhat extant today.

---

[505] National Park Service, *National Register Bulletin #30,* 3.

[506] Loechl, *Historic Military Landscapes,* 43.

[507] Faulk, *Fort Hood; The First Fifty Years*, 54.

Only portions of the old maps remain from this period; it is therefore difficult to determine if the cantonment was laid out in specific units or if and when these units overlapped. The map that does exist from 1943 lists three headquarters buildings: one for the Camp, one for BUTC and one for RTC (Figure 120). Also, a map of just the RTC Area from 1943-44 clearly illustrates the buildings and their use. It is not clear if there was any overlap of facilities or if the units functioned very separately as individual units. However, the map reveals a utilitarian landscape where function and order are emphasized. The cantonment at North Fort Hood was laid out in a linear fashion, not unlike that of the Main Post.

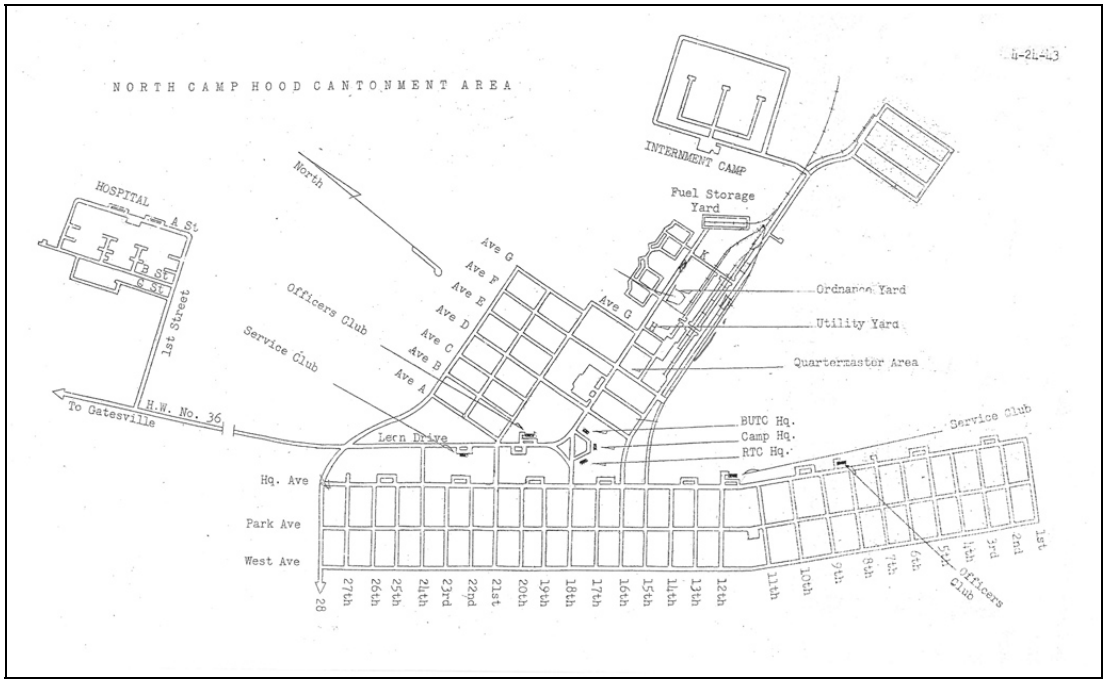

Figure 120: Map of North Fort Hood Cantonment Area from 1943 (Fort Hood).

Examination of the 1943-44 map of the Tank Destroyer Replacement Training Center (TDRTC) area (Figure 121) reveals that the land use areas were fairly consistent across the cantonment. Support, retail, and recreation exist across the north (between Leon Drive and Headquarters Avenue); the barracks, dining facilities, and administration are in the center (between Headquarters Avenue and Park Avenue now Central); and motor pools can be seen along the south adjacent to the training areas and ranges.

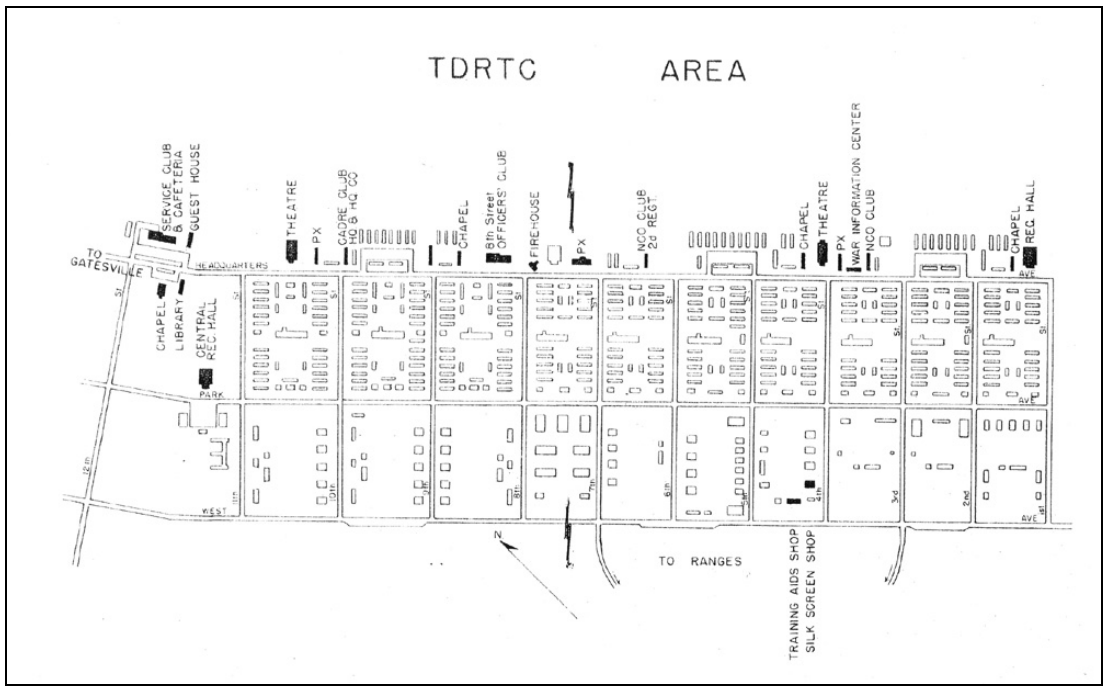

Figure 121: Map of TDRTC Area from 1943-44 (Fort Hood)

Located to the east of the cantonment and Highway 36 were all the support services for the installation: the fire house, fuel storage yard, utility yard, ordnance yard, magazines, POW encampment, the railroad loading areas, the airfields, and an additional section of cantonment that is not in use today. In addition, there was a civilian housing area, called North Village, built by the Federal Public Housing Authority in 1943, which consisted of 465 family dwellings.[508] Concrete sidewalks are all that remain of North Village today. Research found mention of a U.S. Disciplinary barracks activated at North Fort Hood in 1944, although it is not marked on any map. It is noted to have been constructed from vacated POW units.[509] Also, any remnant of the WWII era hospital complex clearly seen on maps and aerial images from the 1940s, was not located during site visits to date. Unfortunately, the complex is not depicted on maps of the installation from later periods and is not visible in current aerial photographs.

[508] Ibid., 55.

[509] Ibid., 56.

4.2.2 Response to the Natural Environment

Major natural features such as mountains and rivers influenced the location and organization of military installations. The Fort Hood cantonment was best sited on flat areas while the mountainous lands were used for training and testing, since little or no excavation or land moving was required to prepare these lands for training activities. It appears the siting of the cantonment at North Fort Hood was done to facilitate the longest linear arrangement of the cantonment allowing for several separate divisions or units within the natural constraints of the site: the Leon River to the north and east, Langford Mountain to the south, and the Dalton Mountains to the west.

The two airfields at North Fort Hood, the Longhorn landing strip and the Shorthorn landing strip, were located along the northeastern boundary near the Leon River and away from the mountains and training areas. The landing strips are oriented almost north-south.

4.2.3 Military Cultural Traditions

As stated in the Main Post section, military cultural traditions (such as hierarchy, uniformity, utility, and discipline) are reflected on military installations both organizationally and aesthetically and are often physically manifested in the landscape.[510] An example of hierarchy formerly present within the North Fort Hood landscape was the WWII era Leon Drive (later expanded to become Highway 36) headquarters area. Approaching along Leon Drive, one passed the more prominent support buildings, a church, an officers' club, and a service club. Leon Drive led to and ended in a circular drive in front of three impressive headquarters buildings, situated around a central flagpole, exhibiting the hierarchical importance of these buildings above all others. This landscape was greatly altered when Leon Drive became Highway 36, an extension to connect Gatesville and Temple, sometime before 1950. Though one headquarters building remains today, the resulting headquarters area is no longer as impressive a sight, and the cantonment now has a much divided feel to it.

The design and arrangement of the enlisted men's quarters reflect uniformity in the landscape. The simple pattern of basic components is repeated throughout the

[510] Loechl, *Historic Military Landscapes*, 46.

landscape until the desired number of quarters is attained with the current reserve barracks, metal hutments, and tent pads replacing the WWII temporary buildings. The uniform roadways, consistent block after block, are still visible although all the buildings are gone and portions of the landscape have remained vacant for many years. The picturesque layout of the no longer extant North Village, a suburban-feeling housing area for civilian employees, showed a break from the uniformity and discipline seen everywhere at North Fort Hood (Figure 122). The lack of landscaping and beautification throughout the cantonment show the efficiency of the reserve mission. The warehouse and storage areas adjacent to the railroad reflect their utility.

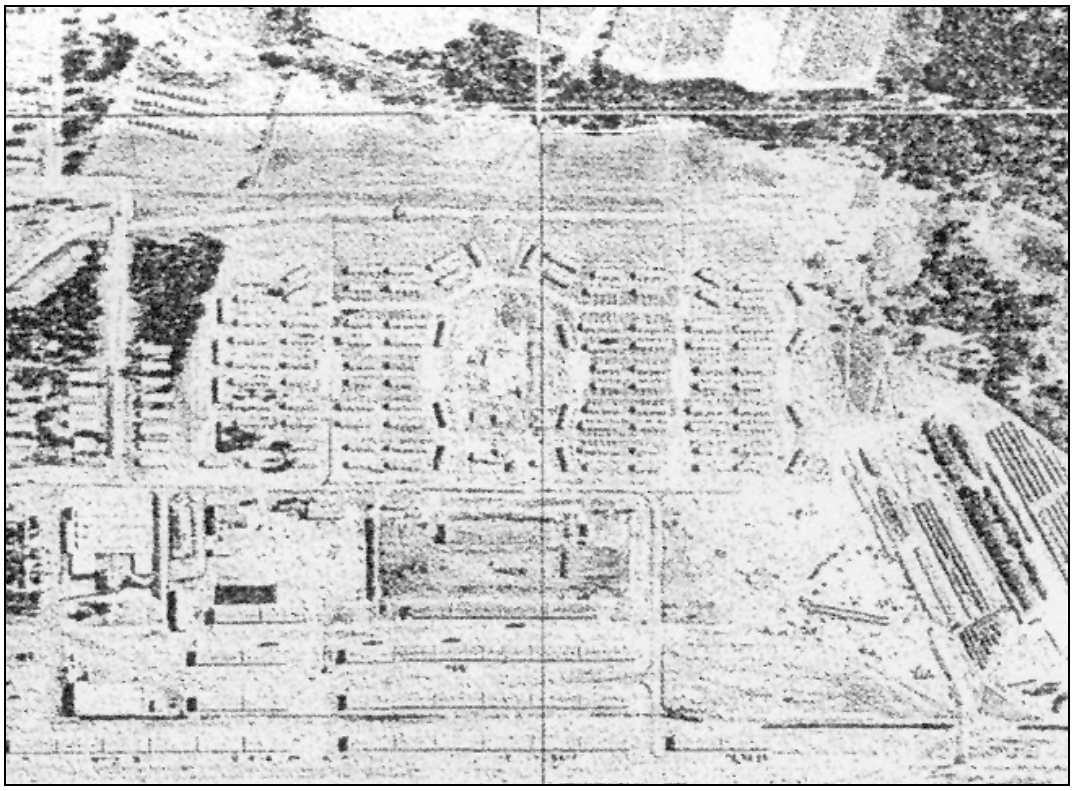

Figure 122: North Village as seen from 1943 aerial (Fort Hood).

4.2.4 Circulation Networks

The intricate WWII era roadway system of the North Fort Hood cantonment remains today. These roadways are reminiscent of the complex landscape of buildings and structures necessary to support 40,000 troops and their mission. There appears to be no hierarchy to the roads (with the exception of Leon Drive); instead block after block was laid out in an orderly grid across the landscape.

When North Camp Hood opened in 1943, Leon Drive came from Gatesville and ended in a circle in front of the three headquarters buildings (see Figure 120). Looking at old pre-Hood era maps it is difficult to tell how much of Leon Drive existed prior to the Army's occupation of the area, or how much was built specifically for Camp Hood. However, on a 1936 map from the Texas Highway Department of Coryell County, a Highway 36 was proposed to connect Gatesville and Temple.[511] According to map research for this project, between 1943 and 1949 Leon Drive was extended from the headquarters buildings to Temple and was named Highway 36.[512] It is not clear if it followed the proposed route exactly. This highway project bisected the cantonment and resulted in the removal of the circular drive and two of the headquarters buildings. It is likely the highway project went ahead after North Camp Hood was deactivated in 1946. While the road connected two important cities, it had a vast effect on the landscape of North Fort Hood.

The railroad lines are gone today but landscape evidence, such as the earthen mound for the track, still exists. The railroad was one of the historic motives for the siting of North Fort Hood. A spur line was built from Gatesville on the St. Louis Southwestern line; this was not the same line as the Santa Fe Rail Road that serviced Killeen and the Main Post. Concrete loading and unloading platforms still exist, as do the lines along the warehouse buildings (Figure 123).

Two airfields serviced North Camp Hood. The Shorthorn Army Airfield is present on a WWII era aerial image and the 1947 U.S. Geological Survey (USGS) map, but not on the 1943 map. Longhorn Army Air Field (Figure 124) was constructed in 1952 northeast of Shorthorn in support of the Longhorn Operation.[513] The Longhorn Airfield remains intact and may get occasional use, but was not active during any field visits to the installation. The Shorthorn Airfield was used during the Cold War as a heliport and is gated and guarded and in similar use today by the National Guard.

---

[511] "General Highway Map, Coryell County, TX," prepared by the Texas State Highway Department in cooperation with the US Department of Agriculture Bureau of Public Roads, 1936.

[512] Observations based on a 1943 map of North Fort Hood (see Figure 120) and "North Camp Hood General Site Plan and Building Use Map," Office of the Post Engineer, Camp Hood Texas, dated April 1, 1949 and revised February 20, 1950.

[513] Faulk, *Fort Hood: The First Fifty Years,* 111.

Figure 123: Railroad loading ramps at North Fort Hood (ERDC-CERL, 2004).

Figure 124: Longhorn Army Air Strip, North Fort Hood (ERDC-CERL, 2004).

4.2.5 Boundary Demarcations

North Fort Hood is located along the northern boundary of the military reservation delineated by the Leon River, as marked on the 1971 map. Like much of Fort Hood, this portion is not fenced. Roads that travel through Fort Hood in the north are public roads and this makes restrictions difficult. Highway 36 has bisected the North Fort Hood cantonment since the late 1940s. It is an important connection between Gatesville and Temple for the neighboring small towns and rural area. As a result, the boundaries are vague, and Fort Hood has needed to mark the training areas carefully. In addition, the Pleasant Grove Cemetery located near the POW site is open to the public and has been over the years. Since September 11, 2001 and with year-round use of the site, areas of North Fort Hood have been gated off to vehicular traffic and a gated entrance was added to the western section of the cantonment (the MATES area and vehicle and tank storage areas are gated separately).

4.2.6 Vegetation

Native vegetation in the area consists primarily of sedge grass, junipers, cedars, oaks, and mesquite. Much of the pre-Army natural landscape was affected by farming (cotton, oats and corn) and grazing activities and as a result, there was little vegetation around North Fort Hood when the Army acquired the land.

The best view of historic vegetation is the aerial map from the 1940s (Figure 125). Vegetation, mainly native oaks, grew around areas such as the theater, administration buildings, and support buildings to the east of Leon Drive and the headquarters area. It is possible this area had more native vegetation to begin with (many of the oaks appear to be very old) and in the haste to build, the existing vegetation dictated where buildings were placed.

Today some remnant evergreen shrubs (*Taxus* spp., common name of yew) remain in the area of the headquarters buildings (Figure 126), the Service Club (Figure 127), and the site of the Officer's Club. This is typical of hierarchy in the landscape and the military, wherein the highest profile buildings would get the best landscaping. It is possible these buildings were chosen for landscaping to create a more impressive view as one approached along the former Leon Drive. In the 1943 aerial photograph (see Figure 125), the North Village civilian housing area appears to not have any trees. It is possible that since North Camp Hood (the WWII era post) was operational for just a short time, the civilian families living there never felt inclined to plant any vegetation.

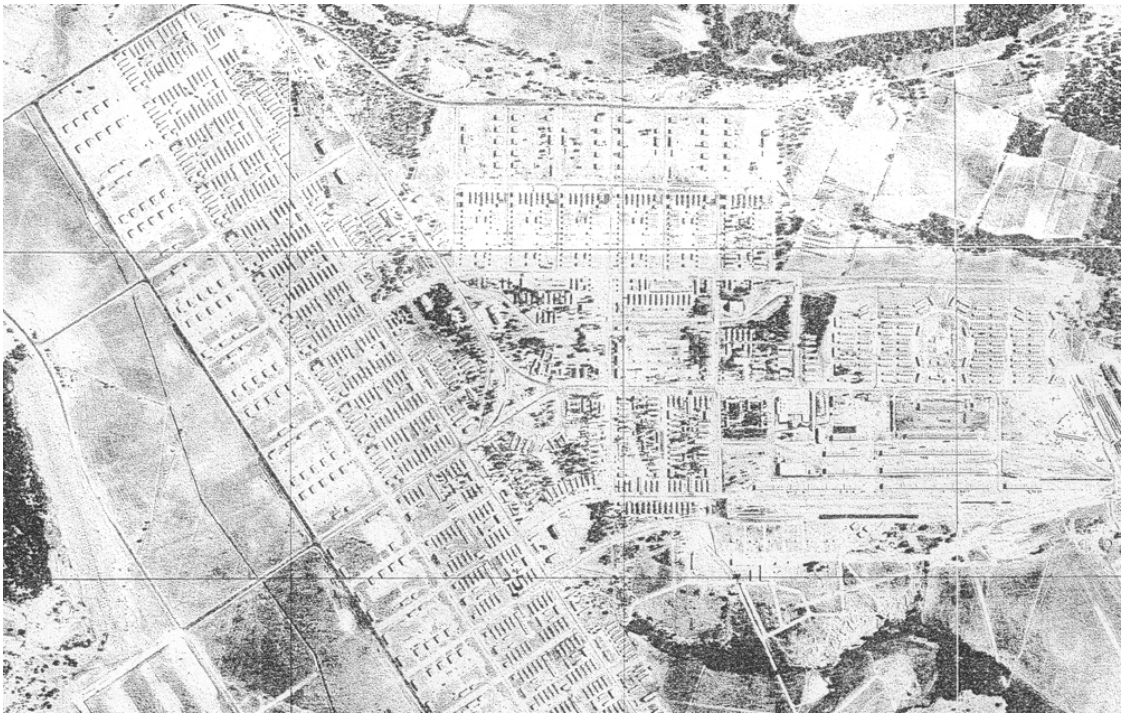

Figure 125: Areas of vegetation as seen on 1943 aerial image (Fort Hood).

Figure 126: Planted evergreens in front of former site of Headquarters building (ERDC-CERL, 2004).

Figure 127: Vegetation planted around WWII era Service Club (ERDC-CERL, 2004).

4.2.7 Clusters of Buildings and Structures

The various occupations of North Fort Hood were marked with different architectural styles. During the World War II era, the landscape was heavily covered with WWII theater of operations type construction. Typically, military planning had clusters of WWII temporary buildings functioning as a unit. Each unit or division had a number of barracks buildings, their associated administrative buildings, dining halls, and lavatories. Several of these units would then share a recreation hall, a chapel, a PX, an officers' club and a theater (see Figure 121). This clustering was duplicated in "Tent City" with battalion blocks consisting of 100 concrete tent pads (16' x 32') surrounding five tile block kitchens, four temporary latrines and a temporary lavatory (Figure 128).[514] This typical military planning demonstrates the tradition of uniformity and efficiency within the military.

Several WWII era structures remain today; a service club, a church (Figure 129), a telephone switch house, a laundry/dry cleaning building, recreation center, fire station (Figure 130), and an administration building (Figure 131). With the exception of the church and the fire station under their original use, most are currently being used for storage or other purposes associated with the National Guard. When

[514] "Memorandum for Record," Ray C. Moore, April 7, 1978.

North Camp Hood was decommissioned in 1946, almost all the temporary buildings were torn down and removed from the site.

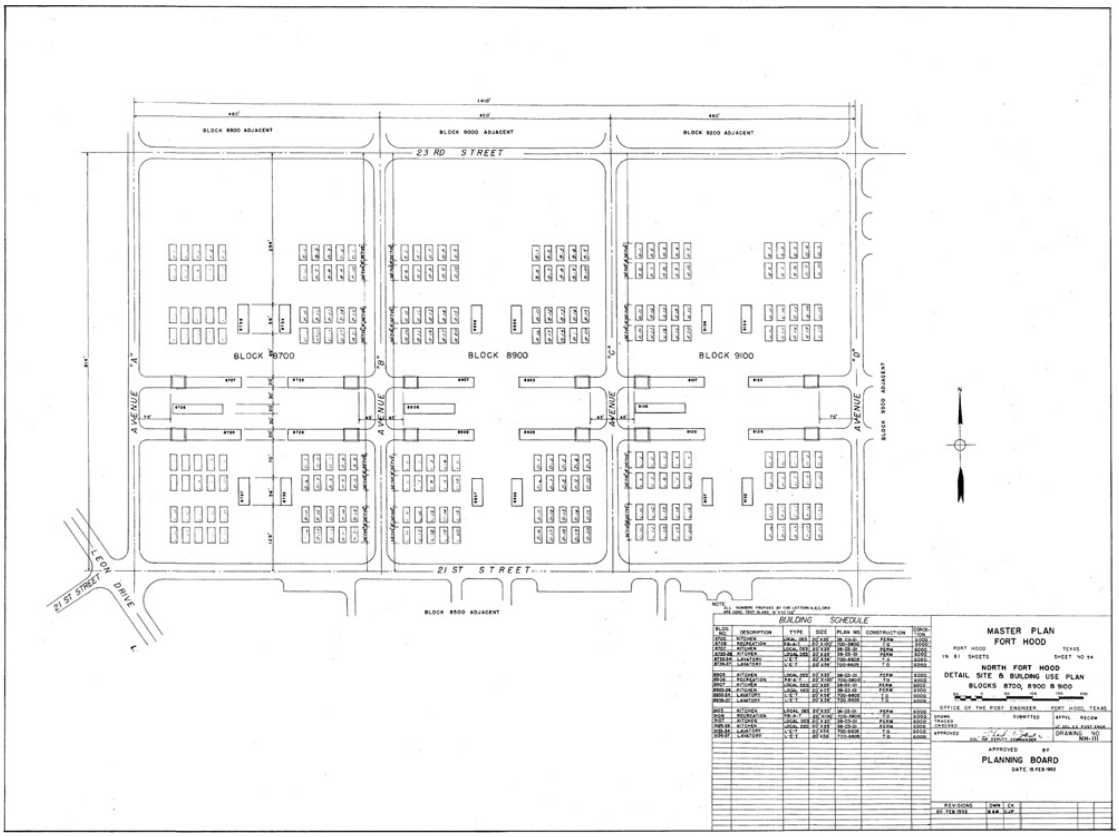

Figure 128. Proposed plan of three blocks of "Tent City" from 1953 “North Fort Hood Detail Site and Building Use Plan” (Fort Hood).

Figure 129: WWII era church at North Fort Hood (ERDC-CERL, 2004).

Figure 130: WWII era fire station at North Fort Hood (ERDC-CERL, 2004).

Figure 131: WWII era administration building #56327 (ERDC-CERL, 2004).

In 1946, where the WWII temporary buildings once stood, concrete slabs were poured for tents so the National Guard could use the site for seasonal training. These tent groupings were nicknamed "Tent City." In 1951, permanent mess kitchens (these structures had tents attached where soldiers would eat) were built in the sea of concrete pads (Figure 132). Temporary buildings housing showers and la-

trines were also added to the site by 1953 (Figure 133).[515] A series of temporary metal structures, called SEA hutments, procured from depot stock were added to the landscape in 1972. However, they do not appear on any Fort Hood maps until 1989 (Figure 134). These structures still remain on the site from 18th Street to 21st Street (Figure 135). One block of these structures was used for NCO training from the 1970s to 1981 and then as seasonal training.[516]

Figure 132: Dining Facility #56754 built in 1951 (ERDC-CERL, 2004).

[515] Ibid.

[516] Ted Waters, Army Reserve Affairs, Telephone interview by Susan Enscore, Fort Hood, June 23, 2005.

Figure 133: Post WWII temporary latrine surrounded by tent slabs (ERDC-CERL, 2004).

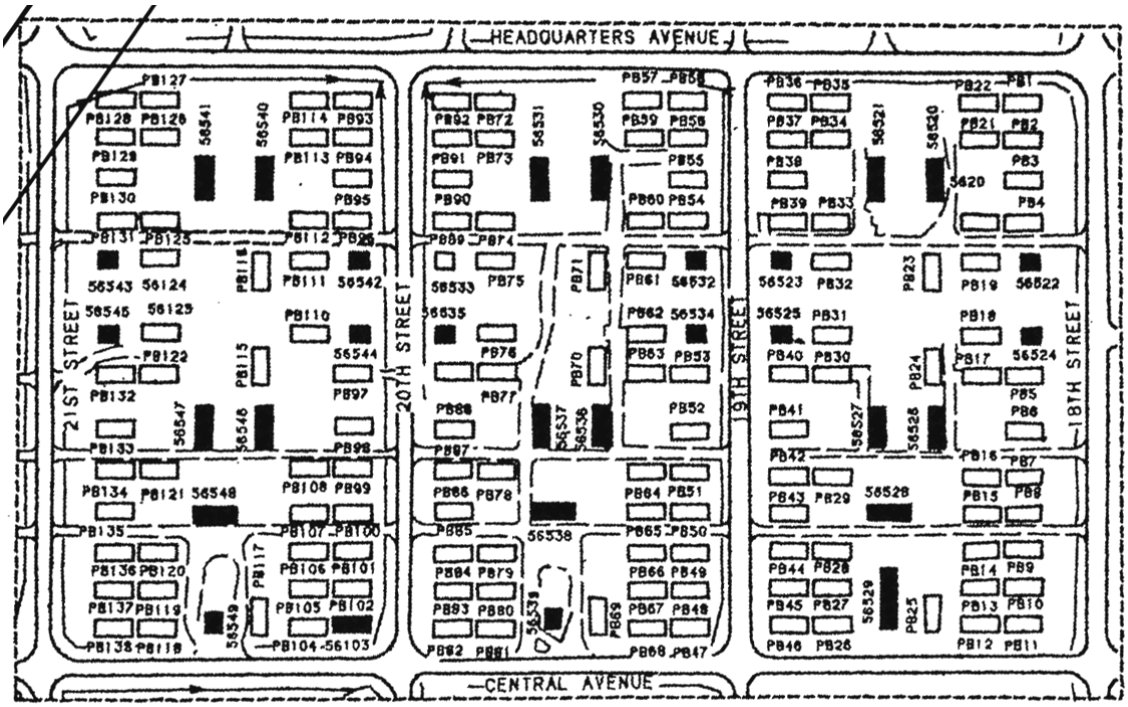

Figure 134: Layout of metal temporary hutments from 1989 map (Fort Hood).

Figure 135: Photograph of metal temporary hutments along 19th Street (ERDC-CERL, 2004).

The late Cold War era was marked by the new construction of permanent buildings at North Fort Hood. In 1978, a permanent MATES was built at the junction of Highway 36 and North Range Road (Figure 136). In 1979, 31 new Army Reserve Annual Training barracks, dining halls, and Company headquarters buildings were built in two linear rows from 12th Street to 17th Street (Figure 137).[517] These concrete-block, one and two-story barracks were designed by the firm of Saunders, Cheng, and Appleton of Alexandria, VA based on mobilization style housing.[518] Through the 1980s and 1990s the site continued to be used as a seasonal training post for Army Reserve and National Guard.

[517] "Memorandum for Record," Ray C. Moore, April 7, 1978.

[518] Kuranda, *Unaccompanied Personnel Housing*, 4-106.

Figure 136: New MATES complex at North Fort Hood with cantonment in background (ERDC-CERL, 2004).

Figure 137: New barracks and dining facilities added in 1979 (ERDC-CERL, 2004).

Currently the site is operational year round due to the ongoing war efforts and demands. The Korean War era metal temporary hutments are currently slated for removal. New structures will be built in their place giving the once temporary landscape a sense of permanence.

There are very few objects that remain on the North Fort Hood landscape from the significant eras. The flagpole may be original but was moved from its WWII era location in front of the camp headquarters building (under Highway 36) approximately 20 feet to the east to stand in front of the single remaining headquarters building. While the original headquarters building is gone today, the flagpole remains in its Korean War era location (Figure 138).

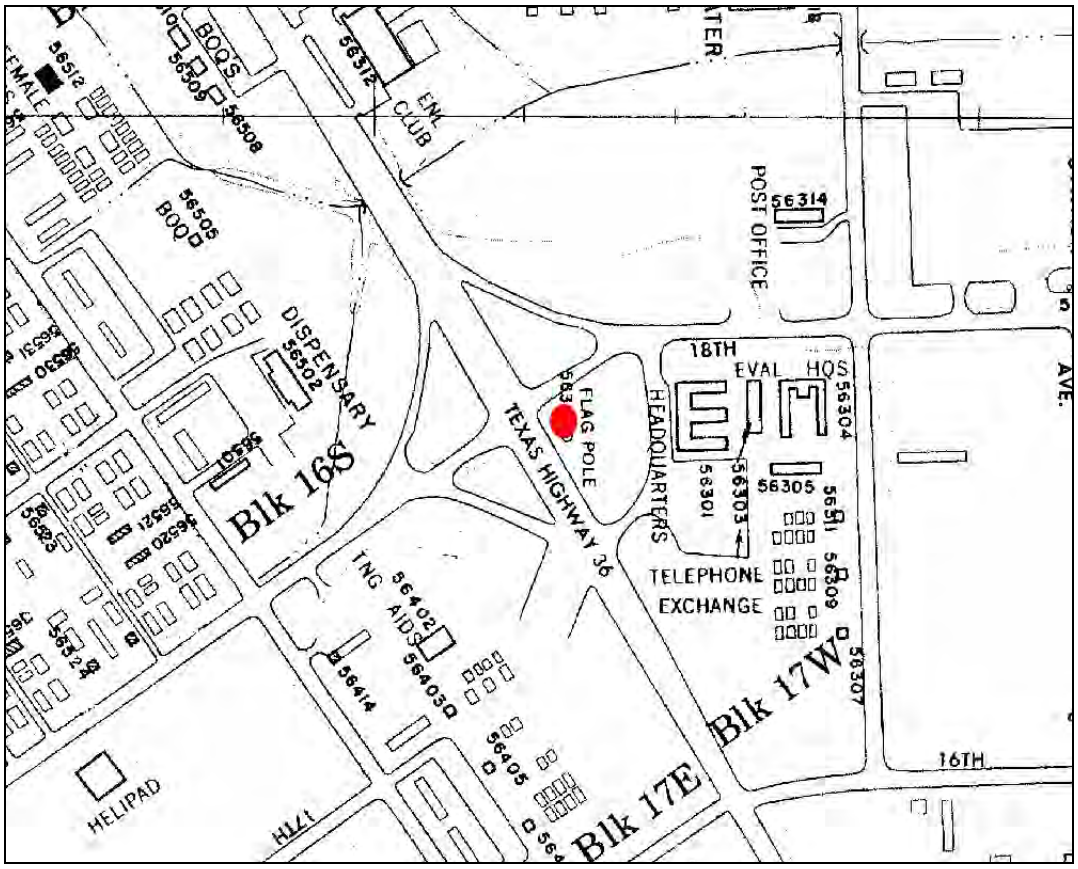

Figure 138: Location of Korean War era flagpole on 1971 map (Fort Hood).

4.3 Identified Historic Landscapes

The landscape characteristics section above addresses the North Fort Hood landscape as a whole. Upon examination, there are four identifiable landscapes within the Main Post. These areas, further discussed below, are delineated by a consistent

land use pattern over time, and contain components that relate to each other in a functional and temporal sense.

4.3.1 Cold War Era Unaccompanied Personnel Housing

4.3.1.1 "Tent City"

In 1946 after the removal of almost all of the WWII era temporary buildings by the Army, the "Tent City" was laid out for the National Guard. A large number of concrete tent slabs were poured enabling the National Guard to host large numbers of troops for short periods of time (Figure 139). Of the original thirteen uniform blocks of concrete tent slabs, only two whole blocks and five half blocks remain today (Figure 140). As of 2002, Tent City was still in use by the Guard to handle the seasonal influx of Soldiers, although no photographs were allowed during site work. This is a consistent Fort Hood land use dating back to the Korean War era. However, the site lacks integrity since so few of the original regimental blocks remain.

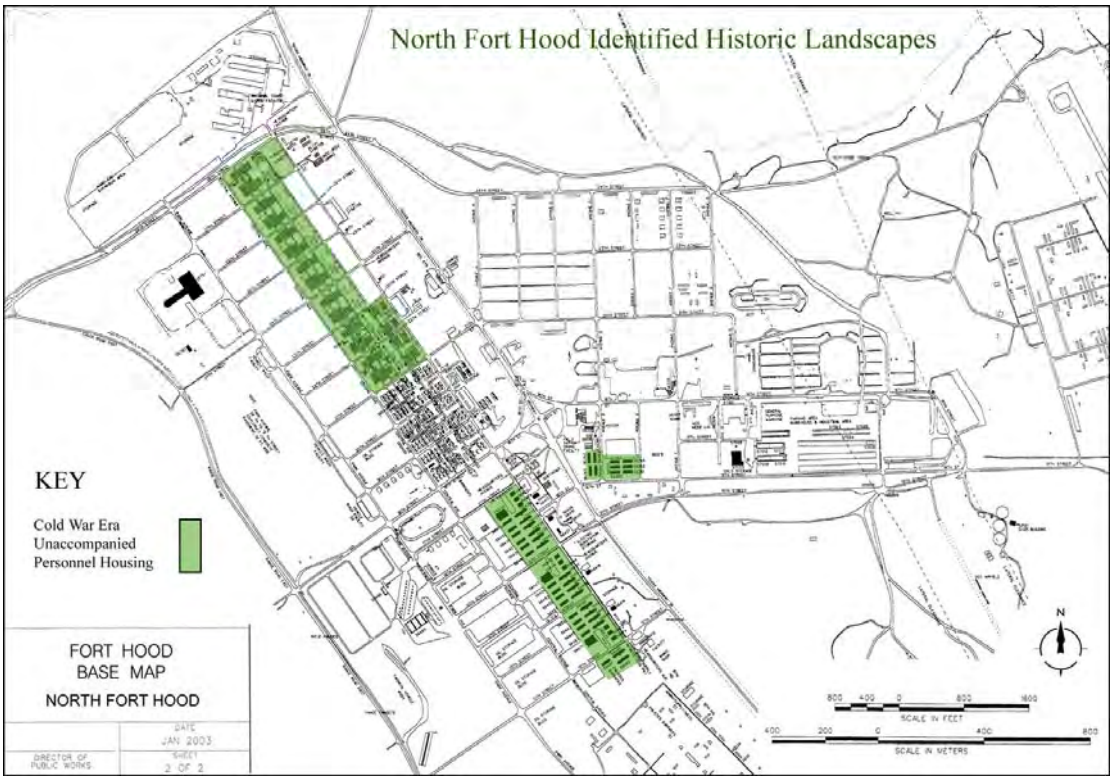

Figure 139: North Fort Hood Unaccompanied Personnel Housing historic landscapes (Fort Hood and ERDC-CERL).

Figure 140: Aerial view of the "Tent City" area (ERDC-CERL, 2004).

4.3.1.2 Army Reserve Barracks and Dining Halls

At North Fort Hood, there are two long rows of Army Reserve Barracks, dining halls and Company headquarters buildings built in 1979. While these 31 buildings are discussed in the Cold War Unaccompanied Personnel Housing historic context, they were completed too recently to be covered under the *Cold War Era Unaccompanied Personnel Housing Program Comment*, which covers facilities built between 1946 and 1974.[519] While the 1951 mess kitchens and tent pads are covered under this Program Comment, and therefore eligible to the NRHP, the landscape is not. The associated landscape was not found to have integrity as discussed above.

4.3.2 POW Encampment

A POW encampment was built during the World War II era and located to the east of the North Fort Hood cantonment (Figure 141 and Figure 142). Traces of this encampment remain on the landscape today although the area is heavily overgrown by vegetation. This vegetation made foot survey and photography impossible during fieldwork visits for this project. A newspaper article details remains of the concrete

[519] Ibid.; *Cold War Era Unaccompanied Personnel Housing (1946-1974)* program comment signed into effect by the Advisory Council on Historic Preservation on August 18, 2006.

pads for the barracks and latrine and shower buildings as visible in 1975.[520] Traces of walkways and concrete pads can be seen from current aerial photography (Figure 143). Since this is the only remaining undisturbed POW encampment remnant at Fort Hood (the Main Post encampment is currently under the PX) and was the larger of the two (North was built for 3,000 men and South was built for 1,000 men), it should be further researched.[521] Potential lines of inquiry include looking for evidence of fencing, buildings and structures, and guard areas. After further research, it is possible it may be eligible as an archeological site.

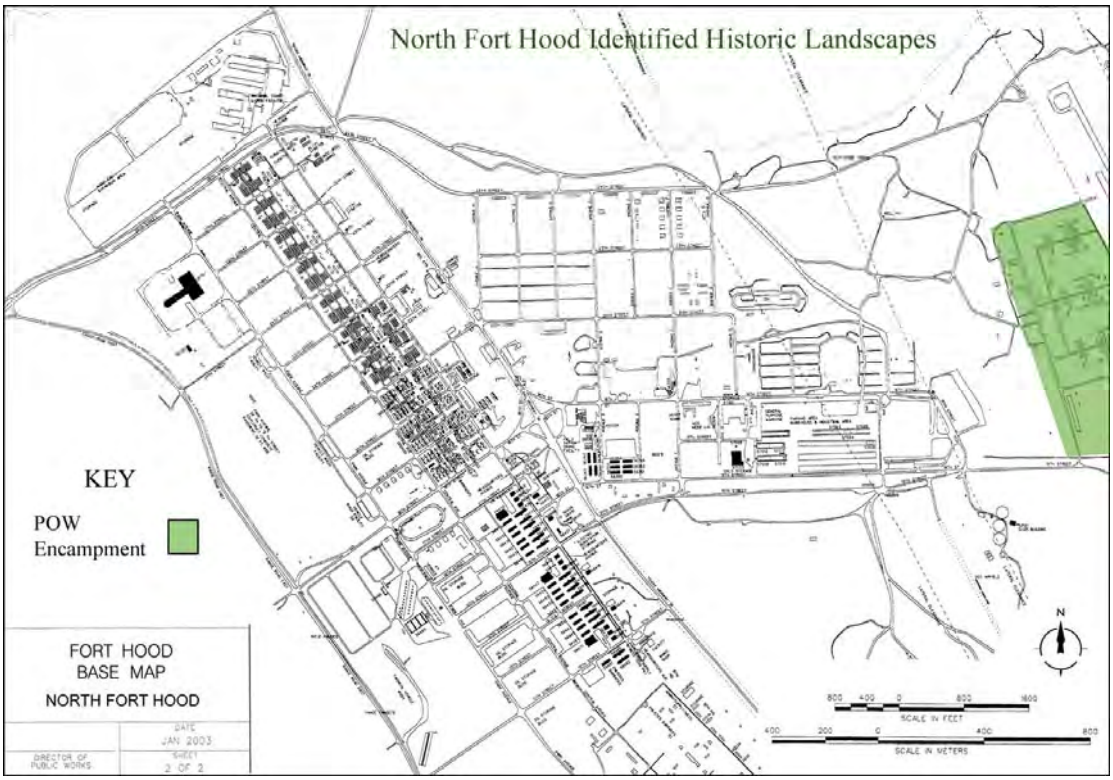

Figure 141: North Fort Hood POW Encampment historic landscapes (Fort Hood and ERDC-CERL).

[520] "It Was 'Stalag Hood' in WWII," *Gatesville Messenger*, November 6, 1975.

[521] Ibid.

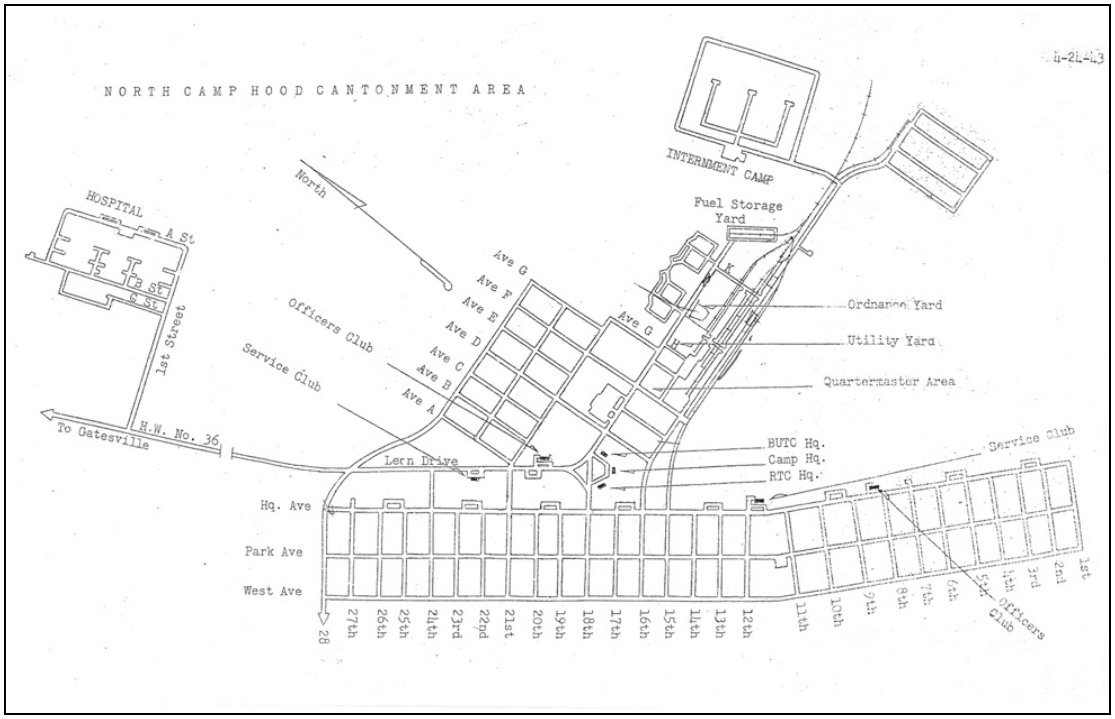

Figure 142. 1943 map showing location of Internment Camp at top of map (Fort Hood).

Figure 143: Photograph of remains of the POW Camp (between pink lines) at North Fort Hood. (ERDC-CERL, 2004).

A map of a proposed POW Burial Plot in the same area was found during the archival research but no trace of it was found on the landscape (Figure 144). However, the same newspaper article from 1975 said evidence of the cemetery at that time included flat pieces of sandstone and cedar posts spaced in "neat funeral arrangement."[522] Further research on this site is recommended as well.

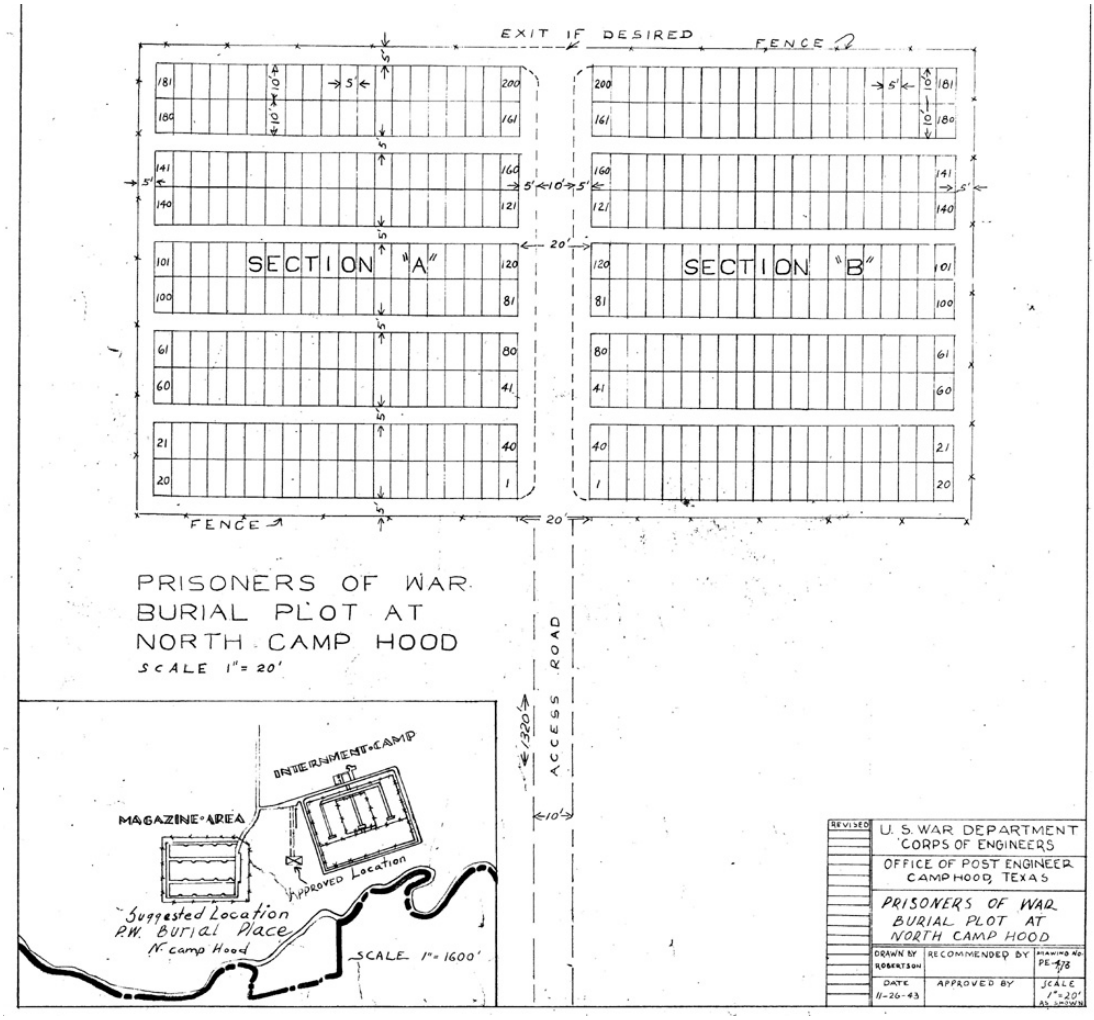

Figure 144: Proposed Prisoner of War Burial Plot at North Camp Hood, 1943 (Fort Hood).

[522] Ibid.

4.3.3 Remaining WWII and Korean War Mobilization Landscape

After years of use, the intricate roadway system continues to reflect the spatial arrangement of North Fort Hood. It provides a clear two-dimensional picture of the installation and how it was laid out in response to the WWII mobilization effort, and the sub-cantonment needs of Fort Hood (Figure 145). The road system shows no hierarchical structure as is present in the Main Post, and the installation layout is not as clearly oriented to a transport function, although the motor pools are adjacent to the training lands. The railroad, once critical for moving troops in and out of North Fort Hood, has since disappeared. However, landscape evidence of the railroad line, such as mounds of earth for the track, still exists showing its association with the remaining warehouse buildings and the concrete loading areas.

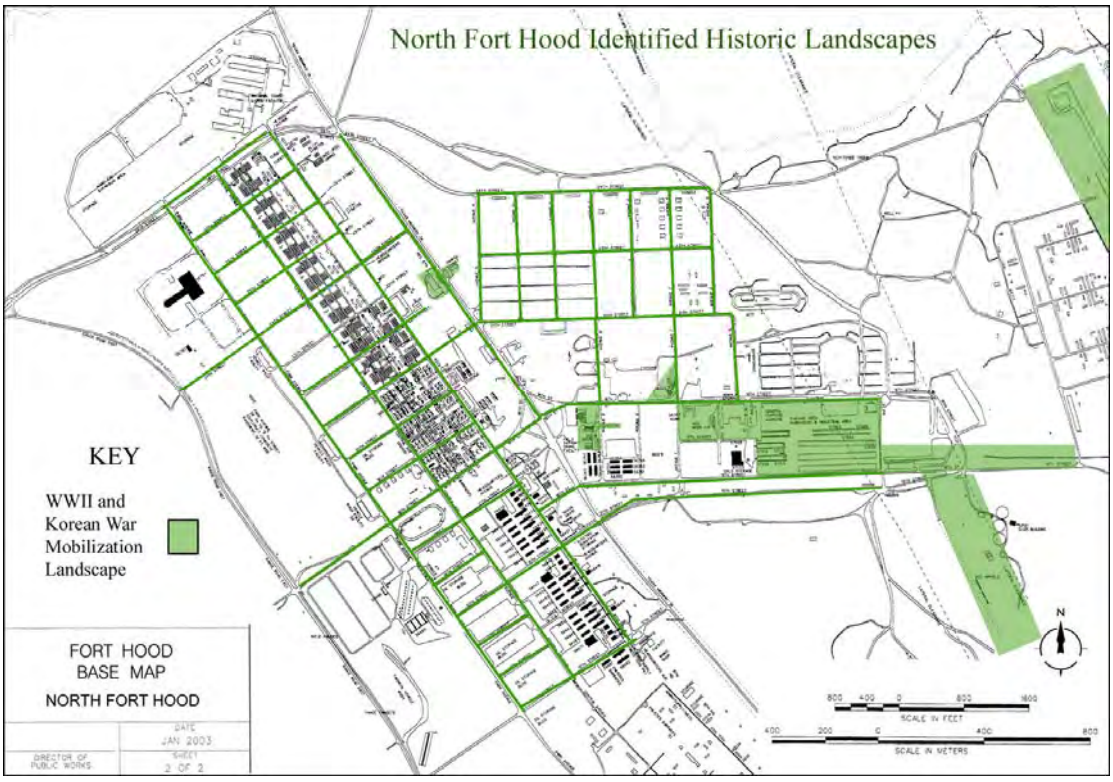

Figure 145: North Fort Hood WWII and Korean War mobilization historic landscapes (Fort Hood and ERDC-CERL).

Today only about a quarter of the WWII landscape is in use (although this increases somewhat during the summer months), and most of the roads remain in relatively good condition. Nearly all WWII buildings have been removed and most of the area is now empty. The few remaining WWII temporary structures across North Fort

Hood include a fire station, service club, chapel, telephone switch building, and various buildings used for storage.[523]

Both of the North Fort Hood original airfields remain. The WWII era Shorthorn Airfield is still in use today by the National Guard (Figure 146). The Korean War era Longhorn Airfield is extant but was not in use when the site work for this report was conducted in 2002 and 2004 (Figure 147).

Figure 146: Remnant landscape of magazine area at North Fort Hood with Shorthorn Army Airfield in background (ERDC-CERL, 2004).

[523] These remaining WWII temporary structures are covered under a 1986 Programmatic Agreement for temporary buildings; however, the landscape is not covered ("Programmatic Memorandum of Agreement," [WWII Temporary Buildings]).

Figure 147: Aerial photograph of Longhorn Army Airfield (ERDC-CERL, 2004).

4.4 Summary of Character-defining Features for Significant North Fort Hood Landscapes

While none of the four identified landscapes on North Fort Hood were determined to have significance under the identified Fort Hood-specific historical themes, the "Tent City" and the Army Reserve barracks and dining halls landscapes possess significance under nationwide UPH historic context. Listed in Table 6 are the character-defining features for the individual significant historic landscapes for North Fort Hood. As discussed for the Main Post, character-defining features must be present for the landscape to be significant. While the mess kitchens and tent pads of the "Tent City" are covered by the UPH Program Comment, the associated landscape is not covered and was evaluated for this report.

Table 6. Character-defining features of significant North Fort Hood landscapes.

Significant Landscapes	Landscape Area Components	Character-Defining Features
Cold War Era Unaccompanied Personnel Housing	"Tent City": Korean War era tent pads and dining facilities	Continued land use Uniform concrete tent pads Sparse vegetation near dining areas Utility poles and boxes Walkways
	Army Reserve barracks and dining halls	Barracks and dining halls in uniform rows across the cantonment Landscape between buildings used for PT or training Walkways Picnic areas Consistent land use

5 West Fort Hood Landscape Elements

5.1 Overlay Maps

Overlay maps representing the West Fort Hood landscape from the Cold War period to the present day are provided in the following pages. These maps serve to illustrate how the landscape developed over time and show how elements of the landscape were added or removed during specific periods. Few maps have been found for West Fort Hood and the ones that have been found contain little useful information for the early Cold War period.

5.1.1 Cold War Period, 1953/1977 Map

Plans were announced on November 8, 1946, to build an Army Air Corps base at West Fort Hood. War Department plans for an NSS, called Killeen Base or Site Baker (to be built adjacent to the airfield) were kept secret. No maps were found from this period connecting Killeen Base and the airfield (Figure 148). Killeen Base, designed by the firm of Black and Veatch, included a high security "Q" Area, where atomic and nuclear weapons were maintained and stored, and an associated administrative "A" Area, which contained troop housing, recreation, and warehouse and motor pool areas.

When the Air Force Strategic Air Command arrived at the Camp Hood Air Strip in 1948 (soon to become Gray AFB), the landscape consisted of an airstrip and one temporary building.[524] Three metal Quonset huts and other temporary buildings and tents were quickly added.[525] In 1949, the first permanent building, a crash fire station, was built and work began on a flight control tower.[526] The early 1950s was a time of physical growth for the landscape around the airstrip, adding a base op-

[524] Weitze, *Cold War Properties at West Fort Hood,* 27.

[525] Ibid.

[526] Ibid.

erations building, a mess hall, barracks, a new crash first aid station, chapel, gymnasium, pool and bath house, and family housing at KayBee Heights (now Montague Village).[527] By the mid 1950s, the runway had been extended 1,600 feet and new industrial buildings were built for the airstrip.

In 1952, the Armed Forces Special Weapons Project and Sandia Corporation built the first plant for thermonuclear weapons, called an "S" structure, expanding the weapon storage capabilities at the Killeen Base "Q" Area.[528] In 1957, Air Materiel Command replaced SAC as command of Gray AFB.[529] In addition, a new complex was built on the southern end of Seven Mile Mountain for the 814th Aircraft, Control, and Warning (AC&W) Squadron.[530] The Air Force removed their remaining units from Gray AFB and the Army took control in June 1963.[531] Killeen Base was formally closed as a nuclear weapons storage site in 1969.

5.1.2 End of Cold War to Present Day, 1977/2003 Map

After the closing of Killeen Base, the site became part of the newly christened West Fort Hood, along with the equally newly renamed Robert Gray Army Airfield (formerly Gray AFB) (Figure 149). Hangers, associated buildings, and parking were added on the east side of the airfield in the mid-1980s. During the 1980s and 1990s, many new buildings appeared in the former Killeen Base area including new barracks, a new complex for Operational Test Command (formerly TEXCOM, TCATA, and MASSTER), and 303rd Military Intelligence Battalion warehouse buildings. Additional motor pools have been built on the periphery of the "A" Area. Adjacent to the airstrip and to the south, a new flight tower, firehouse, terminal, and maintenance buildings have been built. West Fort Hood is currently the airfield used for troop deployment because it is equipped to handle commercial flights. In addition, it is currently a joint-use facility with the city of Killeen, and new infrastructure on the installation, such as the fire station and flight control tower, will facilitate this relationship

[527] Ibid., 28.

[528] Ibid., 21.

[529] Ibid.

[530] Ibid., 32.

[531] Faulk, *Fort Hood: The First Fifty Years,* 124.

Figure 148: 1953 map of Gray Air Force Base in black overlaid with a 1977 map of Gray Airfield and Killeen Base in green (ERDC-CERL and Fort Hood).

Figure 149: 1977 map of West Fort Hood in black overlaid with a 2003 map in green (ERDC-CERL and Fort Hood).

5.2 Landscape Characteristics

Killeen Base and Gray AFB were established simultaneously on land then part of Camp Hood. Once adjacent installations, today both are owned and managed by the Army and are called West Fort Hood. For the purpose of this section of the report, the landscape of West Fort Hood has been divided into two component landscapes: Killeen Base and Gray AFB. First, while these landscapes were conceived at the same time, each has evolved and functioned over the years as separate entities. Second, these two landscapes were managed by different military and civilian entities in support of their disparate missions, resulting in a complex ownership history. And third, Killeen base was designed as a "segregated compound," the landscape fractioned off from that of Gray AFB by perimeter fencing and highly controlled access.[532] As Dr. Karen Weitze describes in her 2005 report titled, *Cold War Properties At West Fort Hood Texas*, they were "two historically related but distinct military installations."[533]

Dr. Weitze divides up the Cold War landscape at West Fort Hood into three areas: the Killeen Base "Q" Area (for weapons storage, assembly and maintenance); the Killeen Base administrative cantonment, (a cluster of structures and landscape immediately east of the "Q" Area); and Gray AFB. This evaluation combines two landscape areas (Killeen Base cantonment area and Gray AFB) since they have functioned as one landscape since Killeen Base ceased its NSS mission in 1962 and very little of the original cantonment area exists today.

5.2.1 Killeen Base

5.2.1.1 Spatial Organization and Land Use

All NSS and OSS were similar in their layout and all were designed by the architectural and engineering firm of Black and Veatch of Kansas City, Missouri.[534] Black and Veatch, the leading firm in designing special weapons storage areas, designed all thirteen NSS and OSS in the United States as segregated compounds with fencing and perimeter roads clearly defining the

[532] Weitze, *Cold War Properties at West Fort Hood,* 20.

[533] Ibid., x (preface).

[534] Ibid., 20.

boundaries and controlling access.[535] They were geographically dispersed sites but always associated with an abutting military installation. The spatial arrangements of all these sites are visually distinctive.[536]

Killeen Base contained a "Q" Area and an "A" Area, based on access control and security clearance requirements as dictated by the Atomic Energy Commission (AEC).[537] The highly secure "Q" Area was used for the assembly and storage of atomic and later thermonuclear weapons. The less secure "A" Area contained the administrative facilities needed to support the "Q" Areas. "Q" Areas were spatially distinct from surrounding support facilities. The "Q" Area at Killeen Base consisted of two underground assembly plants, munitions storage igloos, "A" structures, an "S" structure, warehouses, battery charging buildings, small arms storage buildings, pill boxes, and guard towers. Seven Mile Mountain was used to dictate the layout of the buildings and structures and roads, but was not modified during the construction of these facilities.

The landscape of West Fort Hood evolved in response to changes in weapons technology. For example, the transition from atomic weapons to thermonuclear weapons resulted in some change in the spatial arrangement. Bedrock igloos were converted to "A" structures, and a "C" structure for thermonuclear maintenance work was added.[538] The site was turned over to the Army in 1963, when weapons technology shifted to ballistic weapons (which had different requirements) and the special weapons mission at Killeen Base therefore was ended. The munitions storage land use did not change when the site changed ownership from the Air Force to the Army. Select sections of the old igloos are still used by the Army for munitions storage; other igloos are used as general storage. At the time of the site visits, no structures in Killeen Base "Q" Area were known to have been razed.

5.2.1.2 Response to the Natural Environment

The natural environment at Killeen Base was crucial to the mission of an NSS. Both the lack of settlement in the area and the topography of Seven Mile Mountain contributed to the site selection of Killeen Base (Figure 150). The topography and soil structure allowed the under-

[535] Ibid.

[536] Ibid.

[537] Ibid., 27.

[538] Ibid., 36-39.

ground plants to be built as separate facilities connected by tunnels.[539] The storage igloos were built into the bedrock and earthen-covered to assist with blast control and protection. The topography contributed to views and sight-lines necessary for the protection and security of the weapons. The natural environment of Seven Mile Mountain greatly influenced the design and organization of the site; the roads follow the curve of the mountain and the terrain, and pill boxes and guard towers were placed to optimize the views and sightlines to "A" structures and the entrances to the plants.

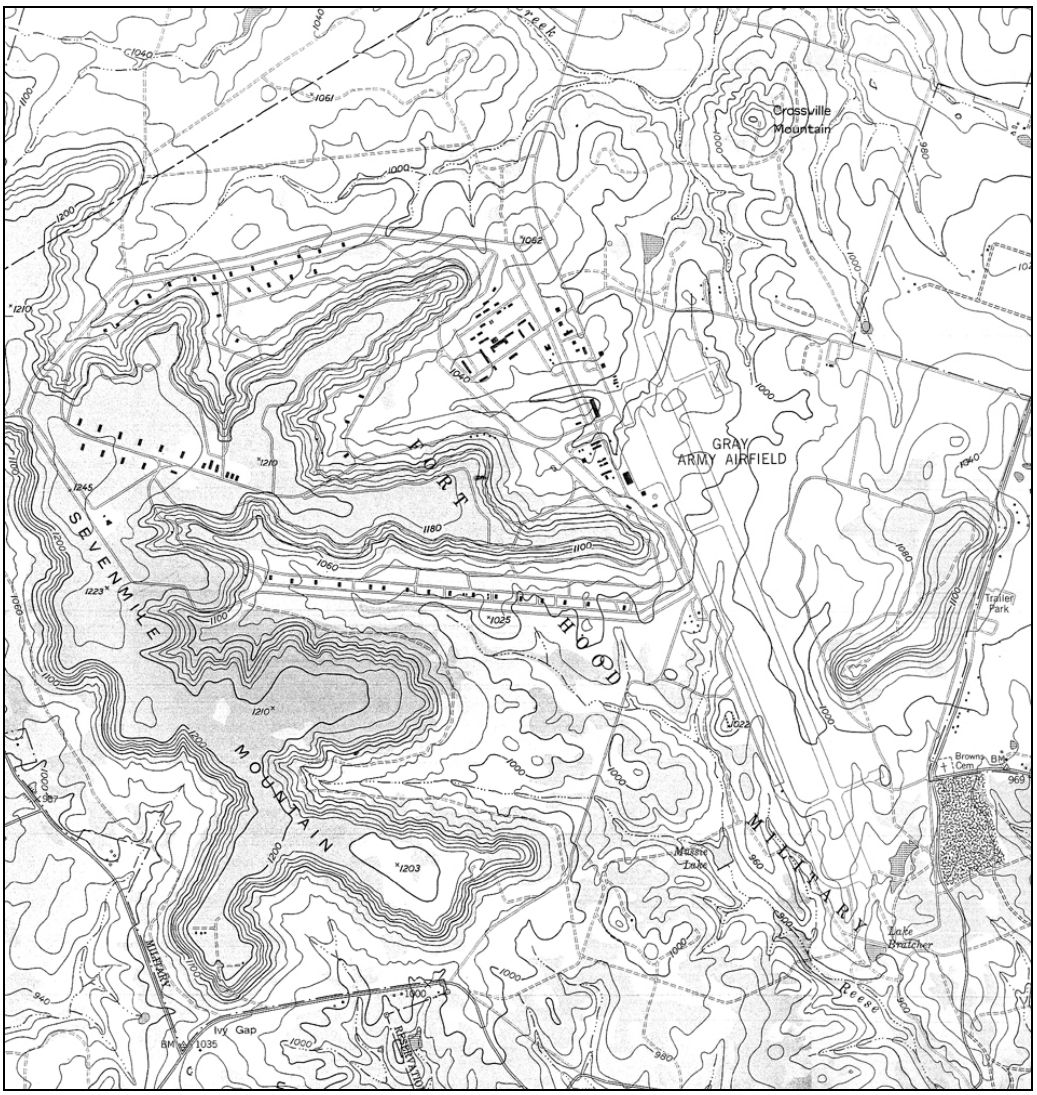

Figure 150: USGS map of West Fort Hood depicting topography circa 1978 (ERDC-CERL).

[539] Ibid., 20.

5.2.1.3 Military Cultural Traditions

As defined in previous chapters, military cultural traditions are how military values are expressed on the landscape and include values such as hierarchy, uniformity, discipline, utility, and power.[540] Although the secret nature and rigid security of the site are not values per se, these were of utmost importance and are evident in the layout of the landscape at Killeen Base. With little else on the landscape, the large number of igloo structures, repetitive in appearance and uniform in character, gives Killeen Base a unique sense of place (Figure 151). Killeen Base's historic multi-fenced layout reflects the military hierarchy present at the time, with each separate area requiring different levels of security clearances. The top-secret mission of Killeen Base during its period of significance is important to the history of our Nation, the military, and the Cold War. Evidence of other traditional military cultural traditions in the landscape such as utility and order are evident in the "Q" Area of Killeen Base due to the specific nature of the storage mission, the design and architecture based solely on function, and the efficiency of space.

Figure 151: Row of above-ground igloos along South Road (ERDC-CERL, 2004).

[540] Loechl, *Historic Military Landscapes*, 46.

5.2.1.4 Circulation Networks

The network of roads on Killen Base was developed in response to the mission and laid out to accommodate the large expanse of igloos. The road placement also responded to security issues as well as the topography of the site. The site was circumscribed by high, chain link fences with inner and outer fence roads for patrol and maintenance (Figure 152). The interior roads followed the curve and topography of Seven Mile Mountain. Original Black and Veatch plans for Killeen Base included only two roads; Loop Road and Supply Road.[541] The South and North Road loops were added in the flat areas to the north and south to accommodate rows of above-ground igloos. North Vent and South Vent Roads are small gravel roads and not paved; currently North Vent Road is closed.

The main gate during the period of significance was located in the Killeen Base "A" cantonment area (currently part of Gray Airfield) at the intersection of Station Avenue and Valley Road. According to the 1977 map, there was a guardhouse there (building #91053), but it was gone by 1989. There also appeared to be a locked gate at Loop Road and Outer Gate Road at the northeast corner of the site, which is no longer extant.

Figure 152: Inner Fence Road and fence on left, South Road on right (ERDC-CERL, 2004).

[541] Weitze, *Cold War Properties at West Fort Hood,* 36.

The Gulf, Colorado, and Santa Fe Railroad line was used to transport atomic weapons parts from Sandia Laboratory in New Mexico to Killeen Base.[542] The trip to Killeen Base took three days and occurred every other week. The materials were unloaded to an undisclosed platform and trucked to Killeen Base.[543] A 1952 map of Gray AFB depicts plans for a proposed railroad spur from the main line of the Gulf, Colorado, and Santa Fe Railroad ending at the north end of Gray Airfield to allow for direct transport to Killeen Base (Figure 153). Research revealed neither documentary nor physical evidence of the spur having actually been constructed.

Regardless of the reality of the railroad spur, the movement of weapons from the storage facilities to planes on Gray Airfield was integral to the site's mission. It was rumored that an underground tunnel existed from inside the perimeter of the "Q" Area to an atomic loading pit on the airfield. No physical evidence exists of this tunnel, and the location of the atomic pit is not on any maps. In addition, no research has been uncovered detailing transport of these weapons by truck to the airfield. Further research is needed to make any determinations.

5.2.1.5 Boundary Demarcations

During the Cold War period, the boundaries of Killeen Base were clearly marked by high, chain link fences topped with strands of barbed wire. These fences circumscribed the Killeen Base site. In addition, two roads, one inside and one outside the fence, followed the site perimeter for patrol and maintenance. The majority of this boundary infrastructure remains today with just the portion of fence between Killeen Base "Q" Area and Gray Airfield cantonment missing. This extant fence delineating the boundaries enforces the integrity and visually reinforces the secure nature of the site.

5.2.1.6 Vegetation

It is likely that very little vegetation existed on site during the Cold War due to the heightened need for security and fire suppression. While historic aerial photographs were located for North Fort Hood and the Main Post, none were available for Killeen Base to show vegetation detail and to compare to present day. Today the vegetation is overgrown (junipers, mesquite, ash, grasses, and yucca), obstructing many of the historic views and viewpoints and some of the pillbox structures (Figure 154). Because of the existing vegetation, it is difficult to get a clear idea of what the landscape looked like historically and the importance of the views and sight-

[542] Ibid., 48.

[543] Ibid.

lines from the pillboxes to the "A" structures. This overgrowth affects the integrity of the site to some extent, but with some clearing and thinning the integrity can be improved.

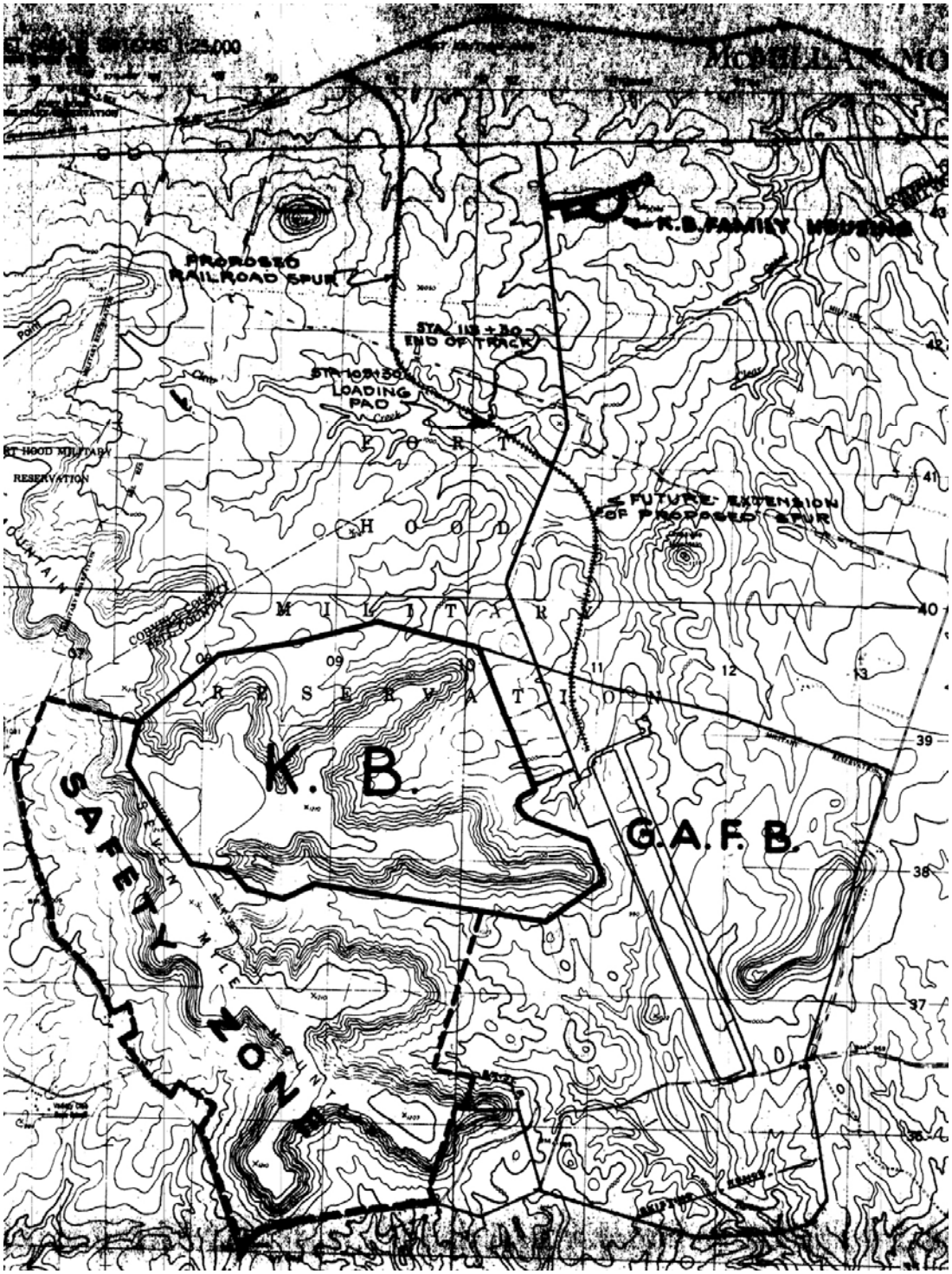

Figure 153: Killeen Base Site plan for Proposed Railroad Spur dated December 19, 1952 (Fort Hood).

Figure 154: Vegetation obstructing views from pillbox (ERDC-CERL, 2004).

5.2.1.7 Clusters, Buildings, and Structures

The buildings and structures strongly contribute to the Cold War context of the landscape. The unique nature and mission of the buildings is clearly visible (Figure 155). Since the Killeen Base facility is one of only two NSS and OSS that include underground structures, the landscape and layout of the buildings is significant in identifying this type of facility. All the buildings and structures at Killeen Base and the other NSS and OSS were designed by Black and Veatch and typically included the following types: one, two, or three assembly plants, igloos for the storage of non-nuclear bomb components, "A" structures for the storage of nuclear materials, "C" structures for maintenance work on the nuclear materials, "S" structures for thermonuclear weapons and later for use by Sandia, warehouses, battery charging buildings, small arms ammunition storage buildings, pillboxes, and guard towers.

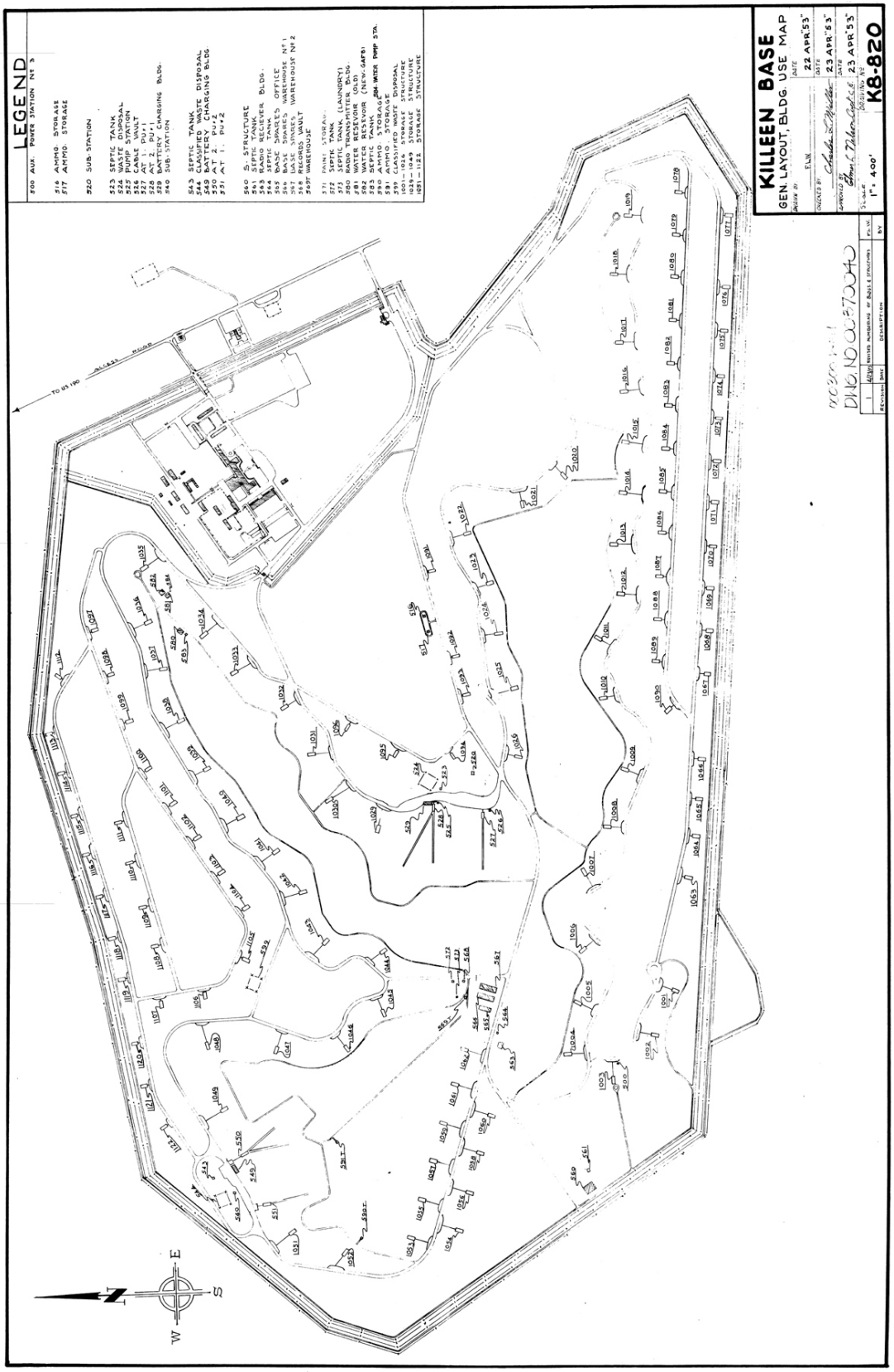

Figure 155: Killeen Base General Layout and Building Use Map, dated 23 April 1953 (Fort Hood).

The entire Killeen Base "Q" Area is a cluster of uniformly placed igloos. The bedrock igloos uniformly dotted along winding Loop and Supply Roads follow the topography of the mountain. In addition, the above-ground igloos located along the North and South Road loops and the west end of Supply Road form distinct clusters typical of the military. These clusters together form a visual spatial arrangement that is unique to NSS and OSS.

There are four other clusters of buildings and structures on the base: around each of the two plant entrances, the warehouse area along Supply Road, and the water storage buildings at the northeast corner. Each of these clusters is unique and not typical of any other installation. The two underground plants located at Killeen Base were designed and built between 1946 and 1949. Each underground plant contained several chambers for the storage of pits and initiators, for workrooms, and for administrative needs.[544] Support structures outside each plant included a pillbox, a tower with sightlines to both plant entrances (Figure 156), and a battery charging building (Figure 157). Dr. Weitze notes the plants also had associated fenced areas across from plant entrances for burial of small radioactive waste items, such as gloves.[545] The aboveground "S" structure was built in 1952 as a plant for thermonuclear weapons. However, by the mid-1950s the structure was used for weapons inspections by Sandia personnel.[546] During site work for this project, it was being used as an ammunition depot.

Figure 156: Structures including bldg 92043 and tower, associated with plant #92050 (ERDC-CERL, 2004).

[544] Ibid., 12.

[545] Ibid., 34.

[546] Ibid., 36.

Figure 157: Battery charging building #92045 associated with Plant #92050 (ERDC-CERL, 2004).

There are 49 bedrock igloos on the Killeen Base site that were built between 1946 and 1950 along Loop and Supply Roads (Figure 158).[547] They were constructed by tunneling into the bedrock and adding an arched reinforced-concrete structure.[548] In 1949, 10 aboveground standard igloos designed by Black and Veatch were built in a cluster at the western end of Supply Road.[549] In 1951, 60 more were added along the North Road and South Road loops (Figure 159). These arched structures were built of reinforced concrete with submerged footings and covered with two feet of earth.[550]

[547] Ibid., 34.

[548] Ibid., 39.

[549] Ibid.

[550] Ibid., 40.

Figure 158: Bedrock igloo #92103 (ERDC-CERL, 2004).

Figure 159: Above-ground igloo #92219 along North Road (ERDC-CERL, 2004).

The "A" structures at Killeen Base were converted from the existing bedrock igloos over the period from 1947 to 1954 (Figure 160). "A" structures were designed to store the nuclear weapons components, specifically the pits and initiators.[551] Nine igloos were converted; areas of the underground plants were used for storage as well. Pillboxes and towers were built to protect the contents of the "A" structures and the entrances to the plants. They were designed to hold snipers during the opening and closing of "A" structures. The views and vantage points to the igloos and the surrounding landscape were very important (Figure 161).

Figure 160: Entrance to converted "A" structure #92107 (ERDC-CERL, 2004).

Included in the design of the NSSs and OSSs were several command and control buildings, including pump and water storage buildings, small arms storage buildings (Figure 162), warehouses, and radio transmission and reception buildings (Figure 163).[552] The support and control buildings for Killeen Base were in two main clusters: along Supply Road and on the top of

[551] Ibid., 15.

[552] Ibid., 40-42.

the hill in the northeast corner, or adjacent to the two plants. All these structures contribute to the landscape and the specialized mission of the site.

Figure 161: View from top of pillbox #92107 across to #92106 (ERDC-CERL, 2004).

Figure 162: Small arms ammunition storage building #92012 (ERDC-CERL, 2004).

Figure 163: Radio reception building #92063 (ERDC-CERL, 2004).

Landscape objects such as fencing were extremely critical at Killeen Base for security and controlled access. The majority of the period fencing remains, enclosing the north, west and south boundaries. New fencing has been added by the Army to enclose the north and south aboveground igloo areas. These new fences have divided the Killeen Base landscape into pieces and have somewhat affected the integrity (Figure 164).

Figure 164: Pillbox #92037 and new non-compatible fencing (ERDC-CERL, 2004).

5.2.2 Gray Airfield

5.2.2.1 Spatial Organization and Land Use

The early mission of Camp Hood Airfield/Gray AFB/Gray Army Airfield was to support Killeen Base, and at the time of activation, the built environment consisted of an airfield and one hutment. A full-sized cantonment was slow in coming and construction at the site occurred in many phases. The administrative "A" Area for Killeen Base, which was fenced off from the airfield and associated structures, initially functioned as a separate landscape. Over time, the landscape of the "A" Area and that of Gray AFB slowly merged and finally became one when the Army took over the site in 1963. In addition, the site has a complex ownership history (the Army, the Air Force, and the Army again), with the owners' having different needs and agendas. As a result, it is difficult to identify a cohesive unit or any spatial arrangement in the landscape today.

What has remained constant over the years is the location of the airstrip and the general relationship of the built environment to that airstrip. All the industrial buildings related to the maintenance and operation of the aircraft have consistently been located in a linear pattern between Gray Drive and the west side of the airstrip. The east side of the airstrip was unoccupied until hangers were constructed there in the mid-1980s. The administrative and support buildings were built between the Killeen Base "A" Area and the airstrip. This facilitated the merging of these two landscapes into one cantonment in the 1960s.

New construction in the cantonment area has either replaced buildings or filled in open spaces and has not affected the overall landscape. However, a new flight control tower and the new Operational Test Command Center, located at the junction of Headquarters and Station Avenues, recently have been built within the boundaries of the old perimeter of the Killeen Base "Q" Area. While this is still most visible in maps, the historic boundary of the "Q" Area is a key part of its integrity and should be preserved.

The land use patterns for Gray have remained fairly constant as well. The 1950s era barracks are either being used as administrative offices or have been replaced with a new cluster of barracks built between 1989 and 2001. While this is a consistent land use, the new barracks buildings are much larger and spaced closely together. The commercial and support facilities (bank, chapel and post exchange) have remained in the same general area. According to the 1958 map of Killeen Base, the tennis court appears to be in the same position today. However, in 1958 there were four tennis courts, 2 baseball diamonds, and a football field. Today there is only one tennis court, and a baseball diamond. The location of the diamond has changed but still is relatively near the tennis courts.

5.2.2.2 Response to the Natural Environment

The Gray Army Airfield was built on flat, open space. It is bordered by Seven Mile Mountain to the west and Crossville Mountain to the north (see Figure 150). The airstrip is at a north-northwest to south-southeast orientation. Since proximity to Killeen Base was the most important criterion in site selection, the airfield was carefully laid out amid the topography.

5.2.2.3 Military Cultural Traditions

The landscape of Gray Airfield can best be described as utilitarian – with the airfield and the industrial areas that support the airfield reflecting the historic utility of the landscape. The cantonment area has served as housing, commercial and administrative support first for Killeen Base, and then both the Base and Gray, and most recently mainly just for Gray. Because of the extremely slow growth of the cantonment area and the dual landscape role, the cantonment area does not display many of the traditional military values. Historically, hierarchy at the Killeen Base area was depicted on the landscape in terms of security and access. Today many miscellaneous sections of Gray are gated and guarded, such as motor pools and airfield access points, dividing the landscape into pieces and eliminating any overall hierarchical order.

5.2.2.4 Circulation Networks

For the most part, the circulation network at Gray Airfield remains the same as it was during the Cold War period. The most substantial change is the elimination of the Inner and Outer Fence Roads that historically separated the Killeen Base "A" Area from Gray Airfield. The fencing historically circumscribed the Killeen Base "Q" Area and separately the "A" Area for security and access control. Outer Fence Road has been renamed Service Drive and the Inner Fence Road is gone. In addition, Access Road (as named on a 1957 map) was changed to Robert Gray Drive by 1977. Robert Gray Drive is the main road into the cantonment area and runs the length of the built environment along the airstrip.

Although the Gray Airfield runway was lengthened several times over the years as aircraft technology changed and the use and mission of the site were modified, it has remained in the same location and has the same orientation as the original runway. The current joint use between the Army and the Killeen Municipal Airport will further change circulation patterns for aircraft.

5.2.2.5 Boundary Demarcations

Gray Airfield fits within the boundaries of the Fort Hood Military Reservation and those boundaries have not changed for a long time. The airfield itself is fenced off – along Mohawk Road to the north, between associated maintenance buildings and Robert Gray Road on the west side, from Mohawk Road to the new Killeen Airport on the east, and around the air strip to the south. Since the size of the airstrip has changed many times over the years, this fence does not mark the historic boundary. Like Killeen Base, fencing at Gray is used as access control.

As discussed in the Spatial Organization section above, several new buildings, the new flight control tower, and the Operational Test Command complex have been built within the historic boundary of the "Q" Area. Since the heavy fencing has been removed between the Gray cantonment area and the "Q" Area, there is only a minimal visual impact. However, this boundary demarcation was critical during the period of significance and this breech of that boundary, and any further construction, will impact the integrity of the "Q" Area.

5.2.2.6 Vegetation

Today plantings exist around select sections of the base such as commercial, support, housing, and administrative areas of the cantonment. There is little or no vegetation around the industrial use areas such as the motor pools and aircraft maintenance buildings. It is assumed this was also true during the Cold War era, although no historic photographs have been found. Commercial and support areas between Gray Drive and Service Drive, the chapel, the bank (Figure 165), and the fitness center all have foundation plantings and some trees. In addition, administrative buildings along Headquarters Avenue such as the laboratory and testing buildings, have mature foundation plantings (Figure 166). The cluster of historic barracks buildings (#90036-43), now administrative buildings, is surrounded by some older trees and newer shrubs and picnic areas. The newer plantings were possibly added after the transition from housing to offices. The vegetation adds to the integrity of the older buildings in the cantonment complex as well as to the quality of life for those living and working around this area and in the industrial areas where there is a lack of vegetation.

Figure 165: Plantings in front of the bank building #91071 (ERDC-CERL, 2004).

Figure 166: Plantings in front of laboratory building #91025 (ERDC-CERL, 2004).

The landscape around the baseball diamond and tennis court (Figure 167) has always been used for recreation and open space. Historically, the site held four tennis courts, two baseball diamonds, and a football field. In the center of the large open area, clusters of trees line the ravines and Station Avenue to the west.

Figure 167: Vegetation around tennis court #91033 (ERDC-CERL, 2004).

5.2.2.7 Clusters, Buildings, and Structures

There are very few defined clusters of buildings in the landscape at Gray Airfield. The industrial buildings associated with the airfield are laid out linearly, with the relationship of the building to the airstrip being most important. Even the historically separate areas, the airfield and the Killeen Base "A" Area, are no longer distinct clusters today. The slow growth pattern of the installation and the replacement of individual buildings blurs the connections between buildings. Clusters traditionally exist in the housing areas and motor pools. At Gray, the one cluster of barracks is distinctive but brand new, while the more historic motor pool has been altered over the years. Recently built specialized areas in the landscape, such as the new Alert and Weather Facility, the new Military Intelligence Battalion, and the new Operational Test Command complex do form clusters.

Several buildings and structures have been in existence since the early 1950s. However, these buildings are dotted across the landscape and are difficult to interpret as historic buildings ei-

ther because they have a different use today or they are surrounded by more modern buildings. While portions of the cantonment area have remained unchanged, for example the warehouse and motor pool associated with the Killeen Base "A" Area, the airfield side of West Fort Hood has been constantly updated due to technology and new aircraft requiring new towers, longer runways, and new hangers.

In 1947, the first building, Troop Housing Unit No. 1, was constructed for the Killeen Base "A" Area.[553] Designed by Black and Veatch, this building contained housing, mess, and squadron operations as well as a post exchange.[554] By 1949, an additional troop housing building, a group of warehouses, motor pool, wash rack, and a fenced storage yard were constructed adjacent to the troop housing building (Figure 168). Tennis courts and ball fields were added to the area according to a 1961 plan (Figure 169). While the Troop Housing Unit No. 1 is no longer extant, at least one structure (Figure 170), the tennis courts (see Figure 167), and most of the motor pool buildings remain of this original cluster once significant to Killeen Base operations (Figure 171).

[553] Ibid., 79.

[554] Ibid., 45.

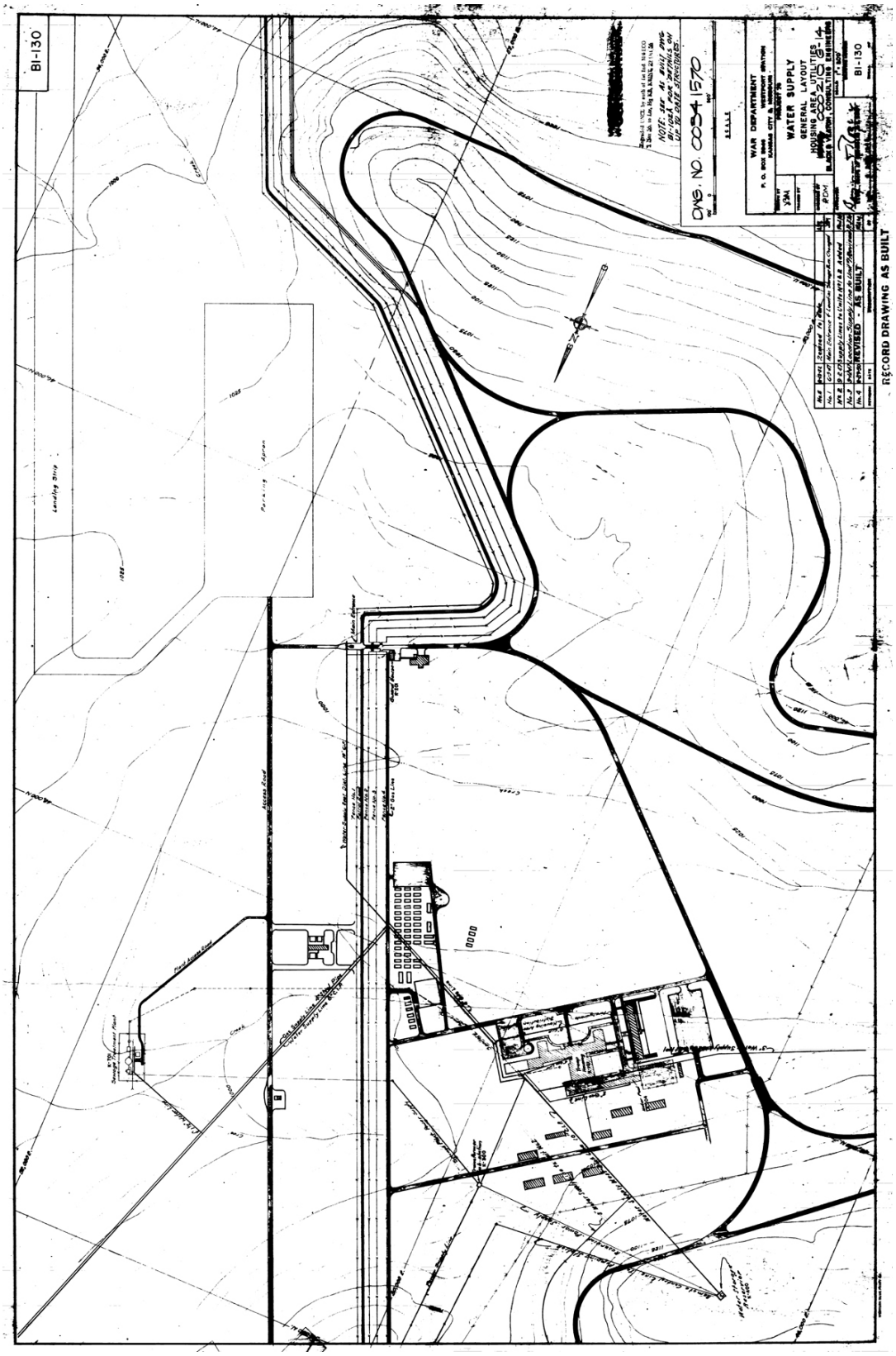

Figure 168: Black and Veatch and War Department plan for Water Supply and General Layout for Housing Area Utilities, dated June 2, 1947 and revised as built 1950 (Fort Hood).

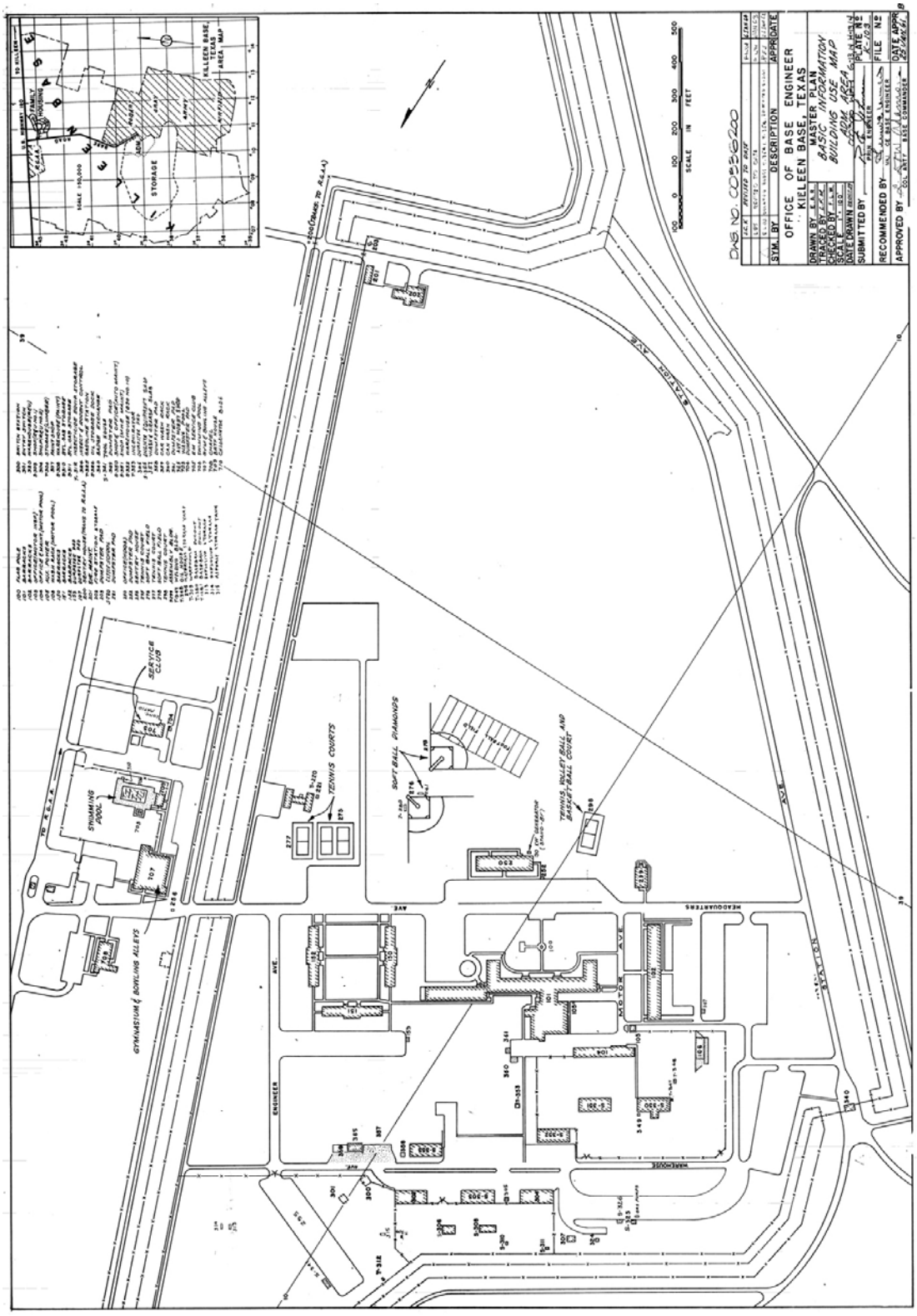

Figure 169: Killeen Base Master Plan, Basic Information Building Use Map of Administration Area, Office of the Base Engineer, Killeen Base, dated 25 January 1961 (Fort Hood). Recreation area including tennis courts is in the center of the map.

Figure 170: Old Troop Housing Unit No. 2 for Killeen Base "A" Area #91002 (ERDC-CERL, 2004).

Figure 171: Motor pool for Killeen Base "A" Area (ERDC-CERL, 2004).

In 1948, the Gray landscape consisted of a 8,400 x 200-foot runway and one building, a 16 x 36 "hutment for 13 personnel."[555] Over the next few years, Quonset huts, a tent city, and a series of portable buildings dotted the landscape, until budgets would allow the planned construction. Records show four hutments were shipped from Hill AFB in Utah.[556] The field formally became Gray AFB at the end of 1949.[557] A 1950 map reveals that these structures and tent pads were located where the chapel, bank, and pool are located today. The first permanent buildings, a fire station and a flight control tower, were built between 1949 and 1951 along the airstrip. The flight control tower remains today (Figure 172), although a newer one has recently been constructed.

Figure 172: Former flight control tower and snack bar #90049 (ERDC-CERL, 2004).

[555] Ibid., 27.

[556] Chief of Staff, USAF to Commanding General, Air Materiel Command, Wright-Patterson AFB, December 10, 1948, (NARA: RG 341 Entry 494, Box 22 File: Texas 1948 A-L).

[557] Weitze, *Cold War Properties at West Fort Hood,* 28.

In 1951, construction commenced on several permanent buildings adjacent to the airfield: a base operations building, a mess hall, airmen's barracks, and a crash first aid station.[558] These barracks and the mess hall were built on a triangular piece of land sandwiched between the airstrip and Killeen Base, and surrounded by Robert Gray Drive. The distinct triangle and barracks remain today, although they are currently used for administration (Figure 173).

Figure 173: Airman's barracks (building #90039) from 1951 (ERDC-CERL, 2004).

In 1952, the construction continued, extending the runway and adding a cluster of support buildings directly east of the enclosed "A" Area for Killeen Base. A chapel (Figure 174), gymnasium, and bank were built, as well as a pool and bathhouse. These buildings were used by both Killeen Base and Gray personnel and began the merging of these two landscapes.

[558] Ibid.

Figure 174: Killeen Base chapel #91074 (ERDC-CERL, 2004).

Further construction in 1955-6 and again in 1957, added more industrial buildings, a warehouse, and an automotive shop, in a linear pattern along the western edge of the airstrip; a fitness center adjacent to the pool; and two barracks (Figure 175) and a dispensary adjacent to the 1951 barracks in the triangle. Very little building information was found for the late 1960s and 1970s. In the mid-1980s, hangers were constructed on the eastern side of the airstrip.

Figure 175: 1955 era barracks #91041 (ERDC-CERL, 2004).

The Montague housing area is located along Clarke Road just inside the new West Fort Hood gate. It was formerly known as Kay Bee Heights, named after Killeen Base.[559] The housing area was originally designed by Black and Veatch and plans for the housing area, dated 1949, show the unique semi-circular layout (Figure 176). It is believed construction began in 1949, and five new family units were built in 1952.[560] South of Montague Village is a 360-space mobile home park that was built in 1974 (Figure 177).[561] This housing area has expanded greatly over the years, with the most recent additions constructed in the 1990s (Figure 178).

Radar Hill is a self-contained cluster of buildings located at the southern end of Seven Mile Mountain. It was home to the 814th AC&W Squadron beginning in 1957. The Gray radar site was deactivate in 1960. Buildings in the complex included: a squadron headquarters, two barracks, an operations building, a transmitter building, a power station, a sentry house, and two radars.[562] Today the complex is not in use, but the buildings are extant (Figure 179). It is unknown what use the site will have in the future.

The Cold War era structures at Radar Hill are an example of a specialized cluster. The Cold War era structures are extant and in good shape. However, the landscape between the structures is in disrepair. Recently removed modular buildings have left scars on the landscape: random parking lots, paths and driveways, concrete foundation pads, and a large number of telephone poles and power lines.

[559] Ibid., 46.

[560] Ibid., 28.

[561] A May 27, 1973 article ("Hood Housing Plan Aimed at Most Modern Concept") in the *Killeen Daily Herald* states that the mobile home park was slated to open in 1974.

[562] Weitze, *Cold War Properties at West Fort Hood,* 32.

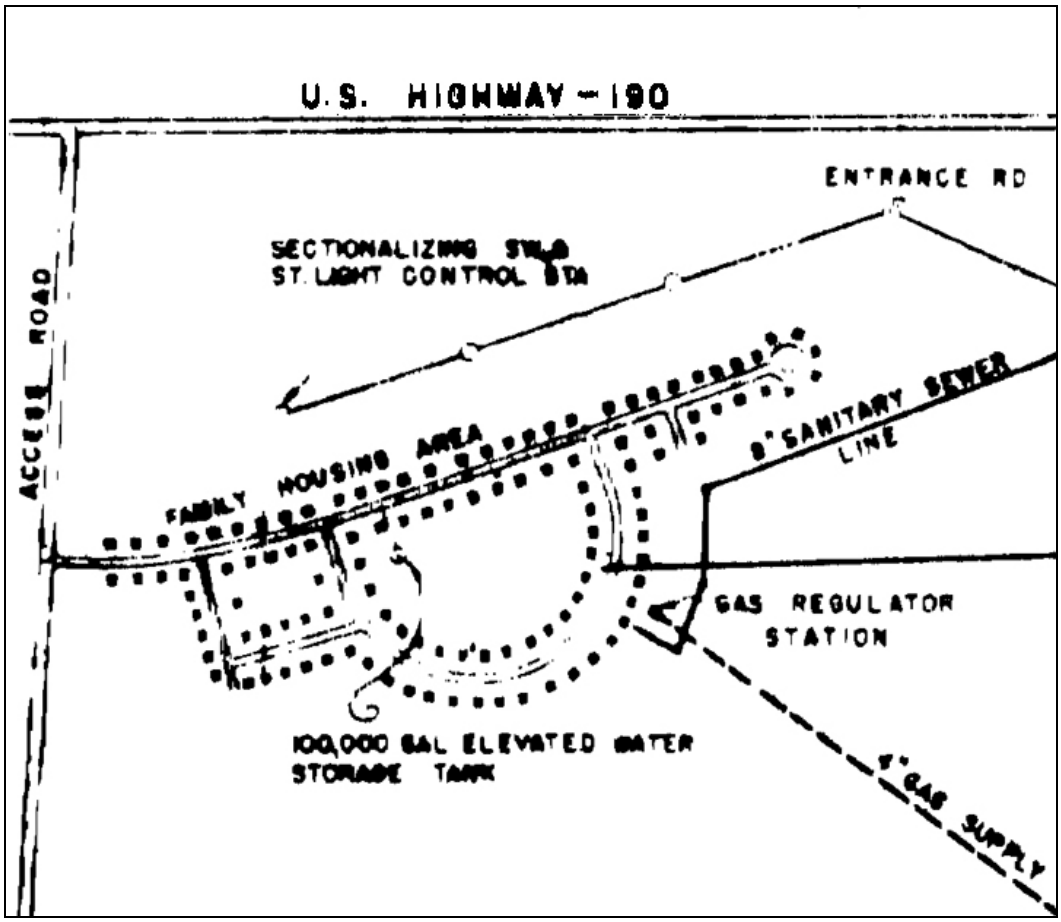

Figure 176: Detail from Black and Veatch plans for Killeen Base Family Housing Layout, dated April 1, 1949 (Revised as built January 21, 1953) (Fort Hood).

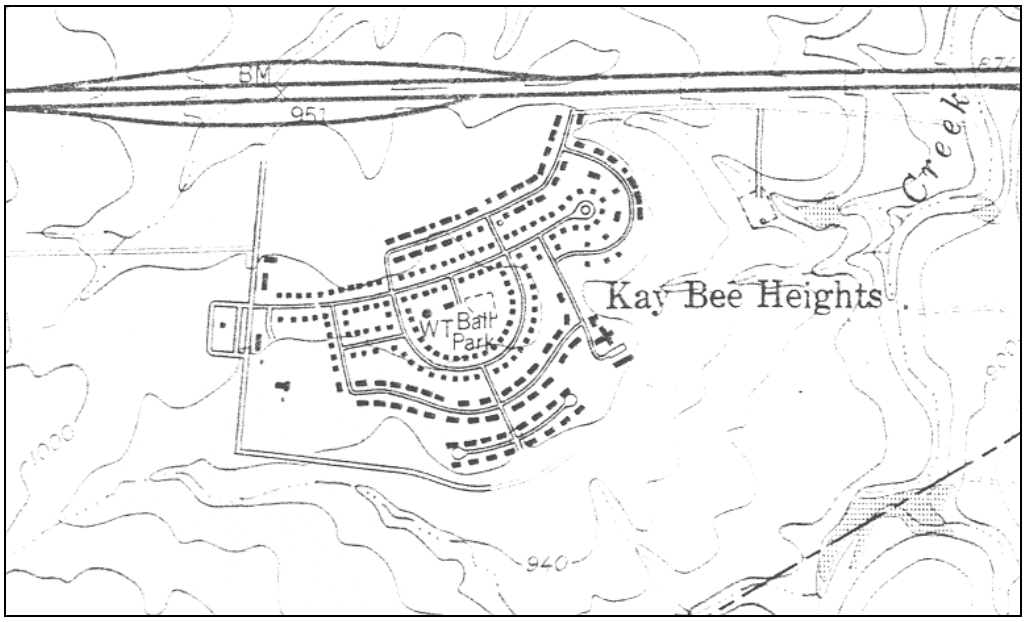

Figure 177: USGS map depicting Kay Bee Heights in 1978 (ERDC-CERL).

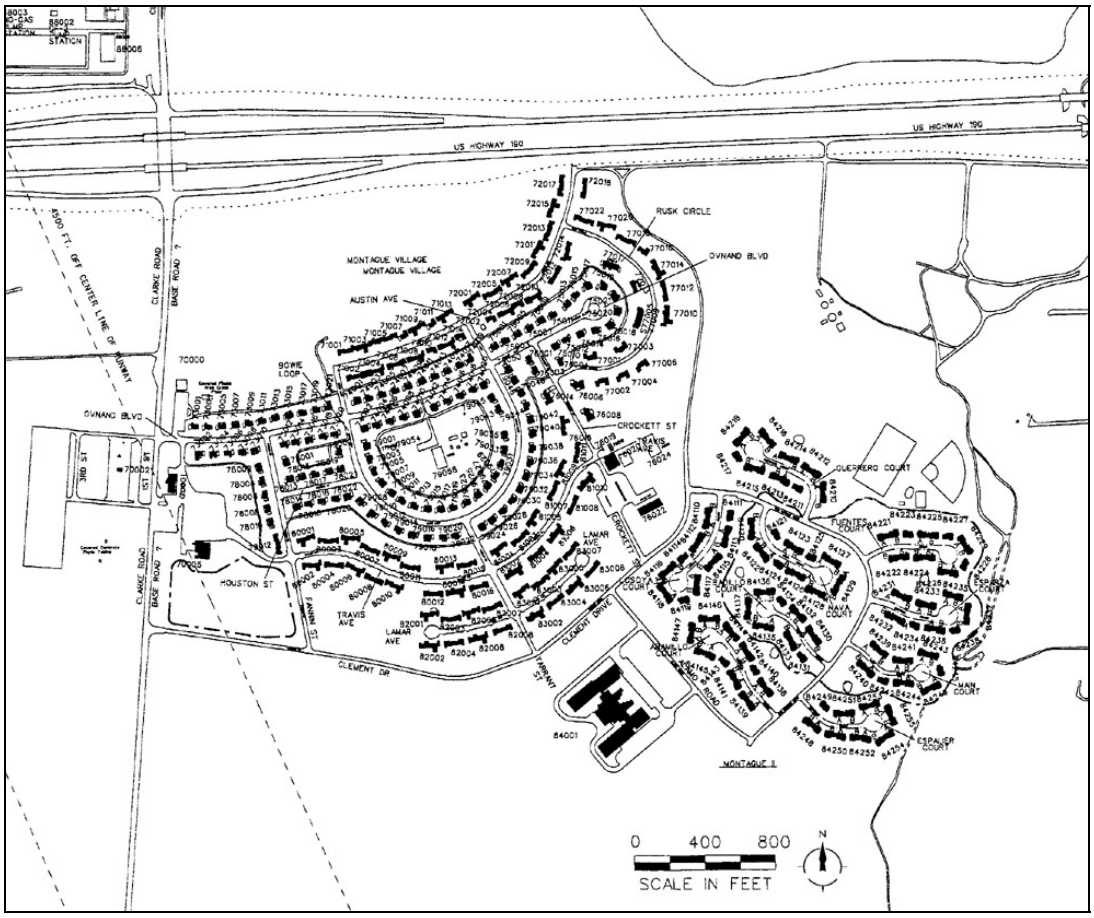

Figure 178: Montague Village Housing Area, 2003 (Fort Hood).

Figure 179: Cluster of buildings (#90064-6) at Radar Hill (ERDC-CERL, 2005).

5.3 Identified Historic Landscapes

The landscape characteristics section above addresses the West Fort Hood landscape as a whole. Upon examination, there are five identifiable historic landscapes within West Fort Hood. These areas, further discussed below, are delineated by a consistent land use pattern over time, and contain components that relate to each other in a functional and temporal sense.

5.3.1 Killeen Base "Q" Area

Killeen Base was sited and built as a result of the existing landscape characteristics. The site was selected due to the topography of Seven Mile Mountain. The first two NSS sites, Manzano and Killeen, were designed as fully underground facilities.[563] All NSS sites built after these first two were aboveground sites. The storage facilities, or igloos, at Killeen Base were sited based on blast predictions, building materials, and vantage points and sightlines for the guarding and protection of the contents of these igloos. All of this required a keen knowledge of the landscape. Killeen Base was designed by Black and Veatch, leaders in design of special weapons storage facilities and the designers of the other 12 NSS and OSS sites in the United States.[564]

The integrity of the "Q" Area is high. Since the acquisition of the site by the Army in 1963 and the closing of Killeen Base in 1969, the site has experienced little change and compatible use has preserved much of the Cold War landscape. Contributing landscape features include the roadways, portions of the perimeter fencing that remain, and all the buildings and structures (the underground plants and associated above-ground structures, the storage igloos and bedrock igloos and their associated pillboxes). The removal of some of the period perimeter fencing, and the addition of new fencing around the munitions storage areas currently in use, detracts somewhat from the integrity and strong visual impact of the landscape. However, fencing has always been integral to the site use, and can be easily removed.

The atomic loading pit located adjacent to the Gray Airfield (used for loading atomic weapons into planes) and the railroad spur (which may have been built connecting the Gulf, Colorado and Santa Fe Railroad line to Killeen Base entrance) both contribute to the mission of Killeen Base.[565]

---

[563] Ibid., 26.

[564] Ibid.

[565] Ibid., 48.

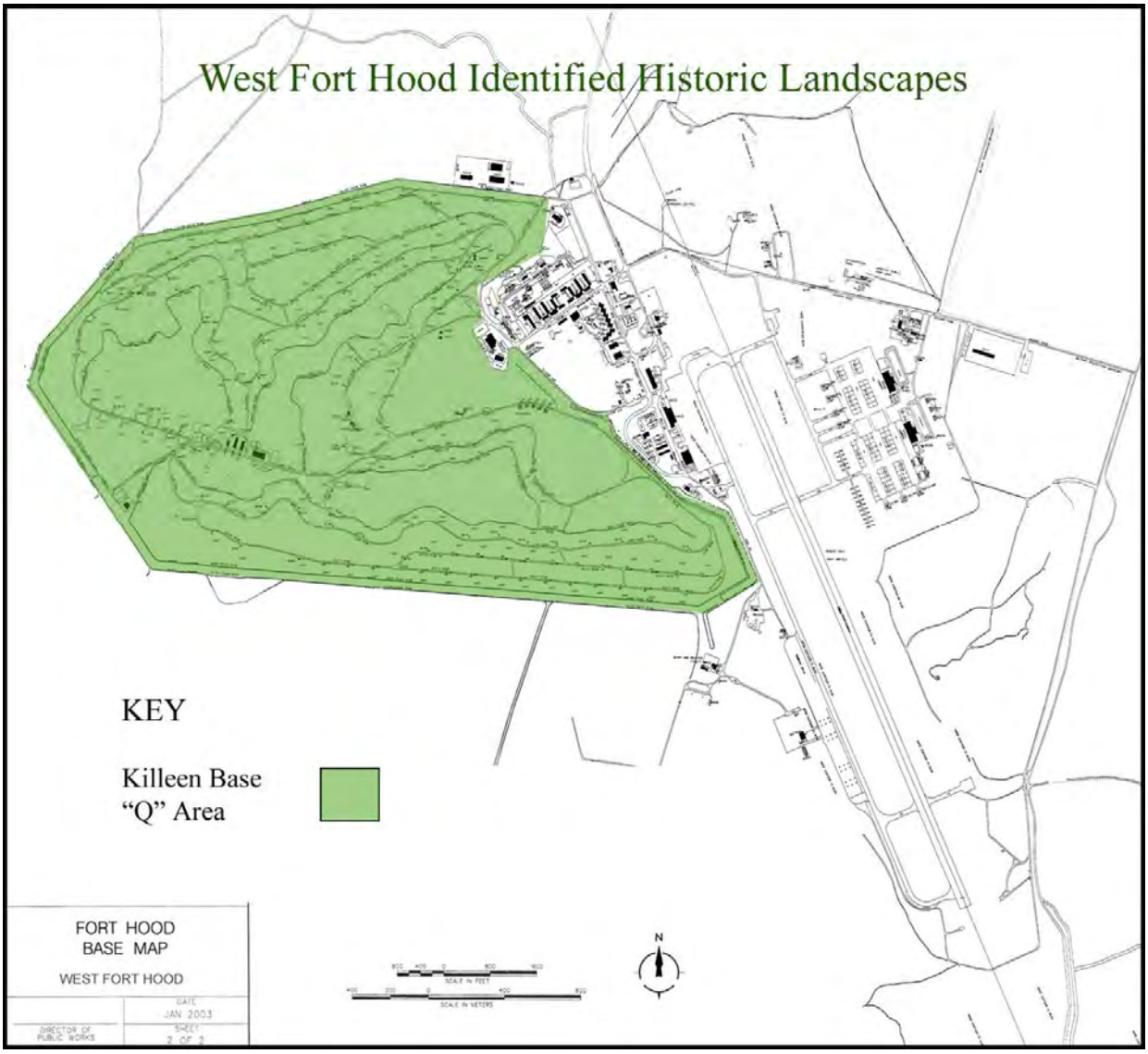

Figure 180: West Fort Hood, Killeen Base "Q" Area historic landscapes (Fort Hood and ERDC-CERL).

These areas are located outside of the "Q" Area but need to be further researched since both of these sites were integral in moving weapons from the "Q" Area to aircraft and off site. More research is needed to determine if these sites actually exist and where they are located in the landscape (Figure 153).

Character-defining features that contribute to the historic landscape of Killeen Base include the buildings, plants, storage igloos, pillboxes, towers, associated views, and Cold War era fencing and associated features. Other landscape features that contributed indirectly to Killeen Base are Montague Housing Area, any remnants of the railroad spur, and remaining tennis courts and softball and baseball fields.

5.3.2 Gray Army Airfield

While Killeen Base remains relatively unchanged, Gray Army Airfield has grown and evolved with the Army since 1963 (Figure 181). As a result, much of the Cold War context is gone and what does exist has a low level of integrity. Concrete links and separations between Killeen Base and Gray Army Airfield, such as gates and fences, are gone today and the boundaries have blurred to the point where the "A" Area is now part of the Gray Army Airfield landscape. However, the Killeen Base "Q" Area has remained a separate entity. In her report, Dr. Weitze writes that Gray AFB was "intimately tied to activities at Killeen Base," however today there is little infrastructure to support this.[566] She also states that the Killeen Base "A" cantonment and the Gray AFB do not have potential for eligibility based on the lack of remaining early Cold War buildings.[567]

The mission of Gray Airfield has changed over the years and is now a joint-use airport for the Army and City of Killeen. While the site has received consistent transportation land use over the years and the landing strip is in a consistent location and orientation, it has been enlarged and expanded several times, affecting the integrity of the landscape. Support buildings and features for the airfield, such as refueling buildings, hangers, towers, and fire stations, have been moved, demolished, and updated over the years, making land use continuity and spatial patterns in the landscape impossible to find.

In addition, the cantonment area at West Fort Hood has changed drastically over the years. From a cluster of Quonset huts, the cantonment area has grown to include the facilities that support military life such as chapels, recreation, and commercial areas. As a result of the merging of the Killeen Base "A" Area cantonment with Gray Airfield, the cantonment landscape fails to read as a cohesive unit.

[566] Ibid., 34.

[567] Ibid., 64.

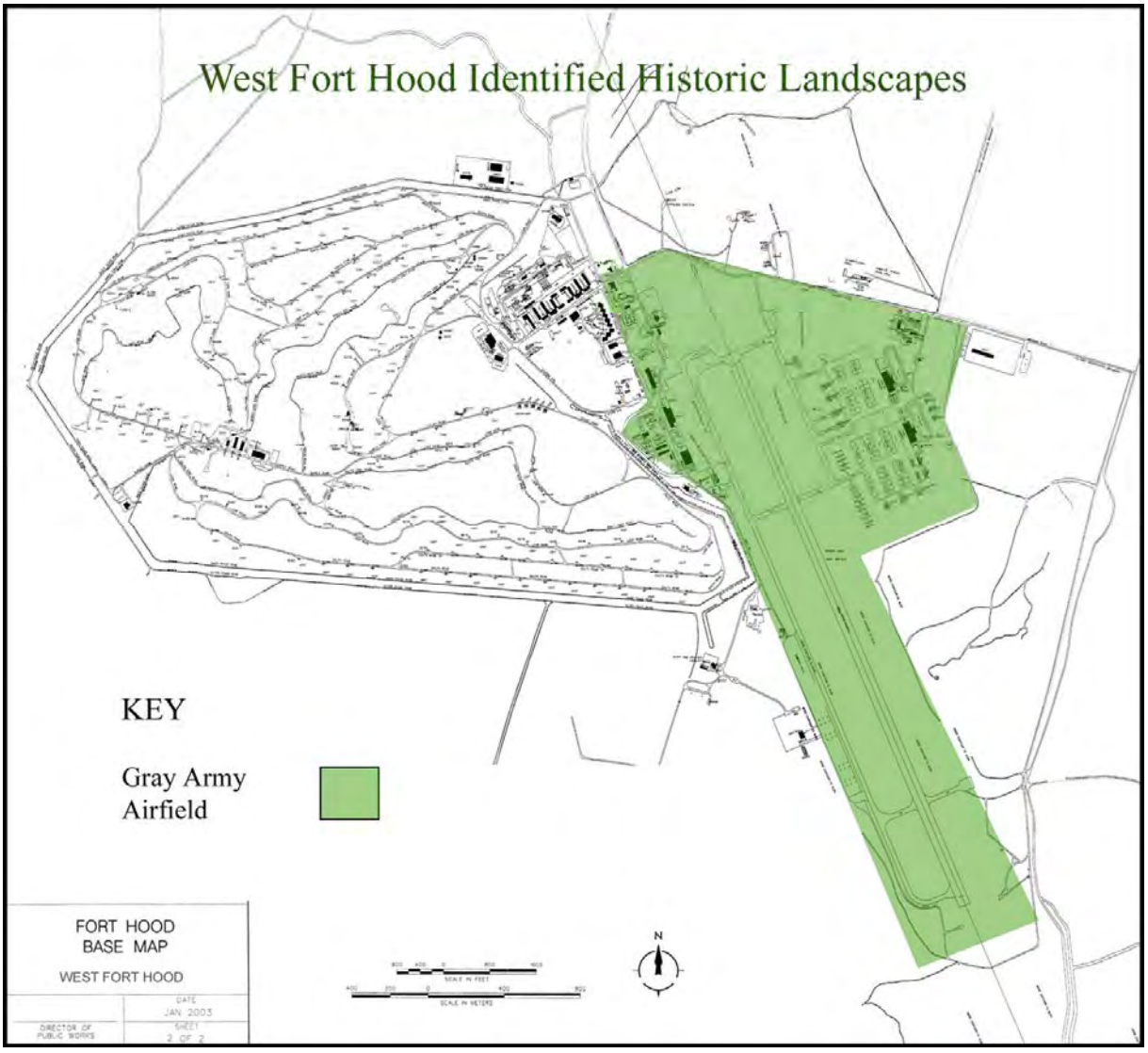

Figure 181: West Fort Hood Gray Army Airfield historic landscapes (Fort Hood and ERDC-CERL).

5.3.3 Aircraft Control and Warning Radar Station

The Aircraft Control and Warning Station is located a short distance from Killeen Base and Gray Airfield on the top of Seven Mile Mountain (Figure 182). This site was built in 1957 but is currently vacant. The receiving radar and the command-and-control buildings, which housed the 814th AC&W Squadron until late 1960, are still extant. While non-contributing modular buildings were recently removed, the landscape was in a state of disrepair when visited in June 2005 and at this time has low integrity due to neglect. Component parts of the station include the buildings and structures, remaining Cold War era fencing, and the radar tower.

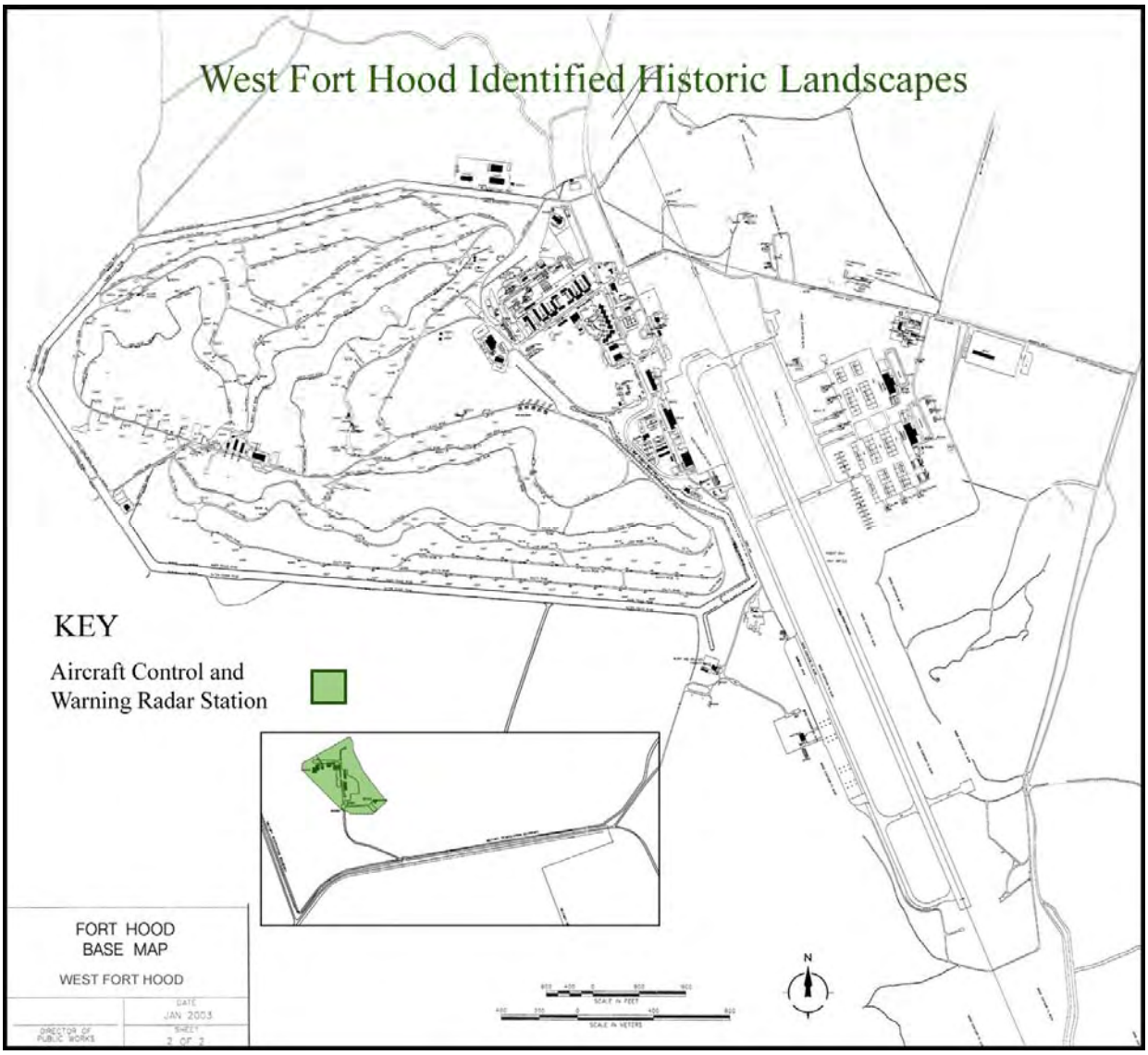

Figure 182: West Fort Hood radar station historic landscapes (Fort Hood and ERDC-CERL).

5.3.4 Unaccompanied Personnel Housing: Airmen's Dormitories

Six airmen's dormitories located adjacent to Gray Army Airfield are covered under the Cold War Era UPH program comment (Figure 183). These dormitories housed Air Force personnel working at Gray. The landscape around the dormitories is encircled by roads and parking similar to the Cold War period, however the buildings are currently used as headquarters and administrative offices. While the area around the buildings appears to be more heavily landscaped now than it would have been during the period of significance, the landscape retains its integrity.

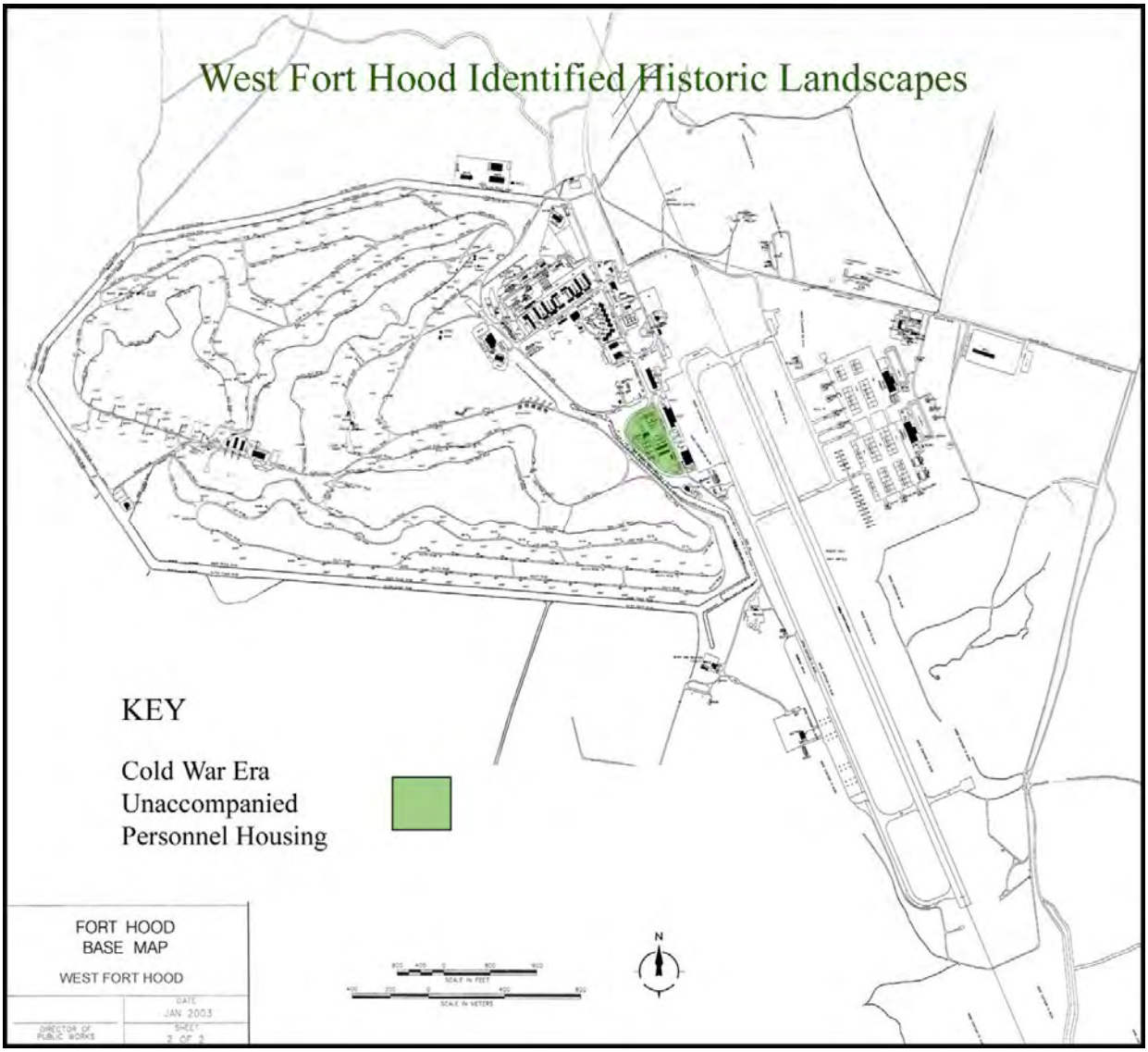

Figure 183: West Fort Hood Unaccompanied Personnel Housing historic landscapes (Fort Hood and ERDC-CERL).

5.3.5 Montague Village

Montague Village family housing was initially designed by Black and Veatch as housing for Killeen Base and was called Kay Bee Heights Housing Area. Laid out in a unique semi-circular shape around a central park, the housing area is distinctive. Two phases of construction at Montague Village were completed under the Wherry and Capehart Acts from 1949 to 1962. As specified in the June 7, 2002 *Program Comment for Capehart and Wherry Era Army Family Housing and Associated Structures and Landscape Features (1949-1962)*, the landscape conforms to the essential qualities indicative of Capehart and Wherry housing areas.

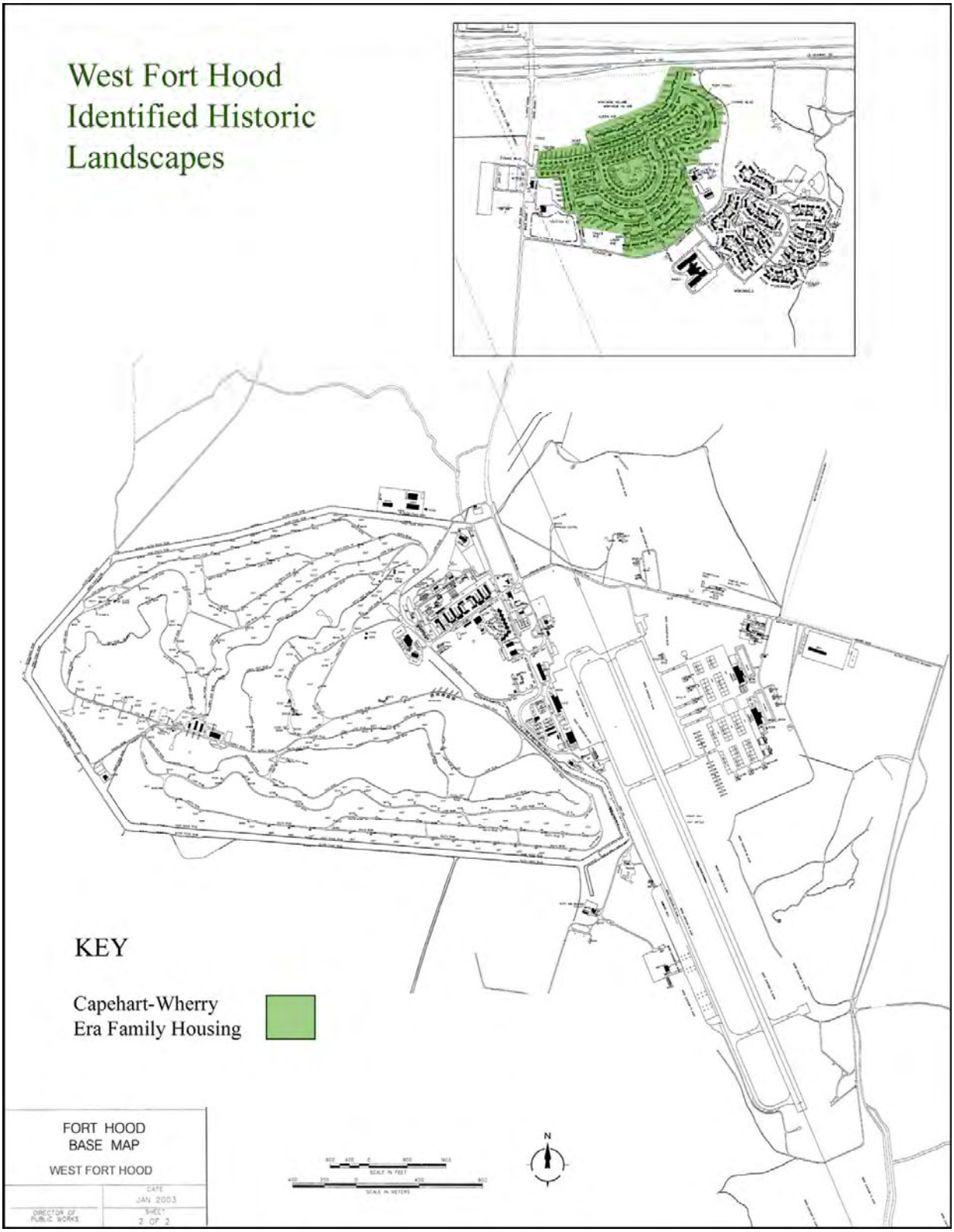

Figure 184: West Fort Hood Capehart-Wherry Family Housing landscapes (Fort Hood and ERDC-CERL).

5.4 Summary of Character-defining Features for Significant West Fort Hood Landscapes

In order to be historically significant, a landscape must be directly associated with significant Fort Hood specific themes or with themes covered by existing Program Comments. The landscape's ability to reflect the important trends or events of the past is based on the continued presence of character-defining features that were essential in creating the landscape.

Listed in Table 7 below are the character-defining features for the individual significant historic landscapes for West Fort Hood. The three significant landscapes at West Fort Hood are the Killeen Base "Q" Area, the Airmen's dormitories, and Montague Village Housing Area. The UPH and Capehart-Wherry Program Comments cover the Airmen's dormitory buildings and the Montague Village buildings and landscape, respectively. The landscape in which the Airmen's dormitories are placed was also determined historically significant under the UPH theme. The Radar Hill landscape and Gray Army Airfield were excluded from further evaluation because they lacked a direct association with any significant Fort Hood themes or Program Comments and they lacked integrity.

Table 7. Character-defining features of significant West Fort Hood landscapes.

Significant Landscapes	Landscape Area Components	Character-Defining Features
Killeen Base "Q" Area	Killeen Base "Q" Area buildings, structures, features and landscape	Utility & order of "Q" Area layout Clear site boundary demarcation Perimeter secured with chain link fences Controlled access Two perimeter roads, one inside and one outside fence, for patrol & maintenance Internal site roadways Underground plants & above ground structures Storage igloos Modified bedrock igloos & their associated pillboxes Other mission associated buildings, warehouses, ammunition storage buildings, radio buildings Clear sightlines between pillboxes & "A" structures Clear sightlines between pillboxes, towers and plant entrances Site layout in response to topography and blast control Security grates over drainage features
Cold War Era Unaccompanied Personnel Housing	Airmen's Dormitories	Uniform row of buildings Walkways and parking lots Picnic areas Landscaping, foundation planting, and trees

Significant Landscapes	Landscape Area Components	Character-Defining Features
Capehart-Wherry Era Family Housing	Montague Village (Formerly Kay Bee Heights)	Unique semi-circular layout Cohesive neighborhood layout Uniform building setbacks and building placement on lots Community buildings (e.g. schools) Wide curvilinear roadways and sidewalks Site amenities (e.g bus stops & mailboxes) Foundation shrubs and street trees First phase layout designed by Black and Veatch, designers of Killeen Base Central community park and playground Privacy fencing

6 Architectural Overview

Army planning principles, practices, and designs introduced in the 1950s promoted a utilitarian aesthetic that lacked picturesque layouts and adorned buildings. This industrial aesthetic is clearly evident in Fort Hood architecture today. The setting is one of standardized building designs of various types and periods, laid out in repeated patterns that reflect the organization of the tactical units and functions they house and support.

This architectural overview examines categories of pre-1964 buildings that are grouped based on architectural and functional similarities. In most but not all cases, a military definitive design (i.e., standard plan) was used to construct buildings within a given category. The use of standard plans was (and still is) common practice in military construction. Standardization ensures architectural equity from installation to installation, facilitates funding requests made to Congress, and expedites construction once approvals and funding have been obtained. Standardization is applied to very large projects (e.g., barracks complexes) and small support infrastructure (e.g., water pump houses).

Sometimes however, due to specific Fort Hood requirements, it was beneficial to deviate from standard plans to address highly specialized project needs. Accordingly, the result was typically a purpose-built facility. Similarly, some construction projects were small enough or inexpensive enough to make the use of military standard plans unnecessary. In such cases, a building of local design built of local (or readily available) materials was erected.[568]

In addition to this architectural overview, data specific to individual Fort Hood buildings is detailed in the building survey forms found in the Appendix of this report.

[568] For information on the design of non-standard buildings, see the individual building forms in the Appendix.

6.1 Main Post buildings

The primary Main Post building types that represent the important Fort Hood themes identified in this report fall into three major categories: motor pool buildings, airfield infrastructure, and unaccompanied personnel housing. Character-defining features of each building type are listed below in tables following each section. While these buildings possess significance, they may not all be recommended eligible due to integrity issues.

6.1.1 Motor pool facilities (67)

Motor pools (Table 8) were constructed for each of the battalions housed in the barracks across the boulevard formed by Hell on Wheels and Old Ironsides Avenues. The typical Fort Hood motor pool consists of motor repair shops, dispatch houses, oil houses, water booster pump houses, and non-building structures such as grease racks. The prominent motor repair shops are aligned along Hell on Wheels Avenue. Support buildings and structures are located on all four sides of the fenced compounds. Within each complex, the shops and their support setup are separated by a large area of pavement for parking and maneuvering vehicles. This pavement is sloped and a system of inlets and culverts provides safe drainage of vehicle fluids. The Cold War era motor pool configuration of buildings, support infrastructure, and pavement remains intact today at Fort Hood (Figure 185).

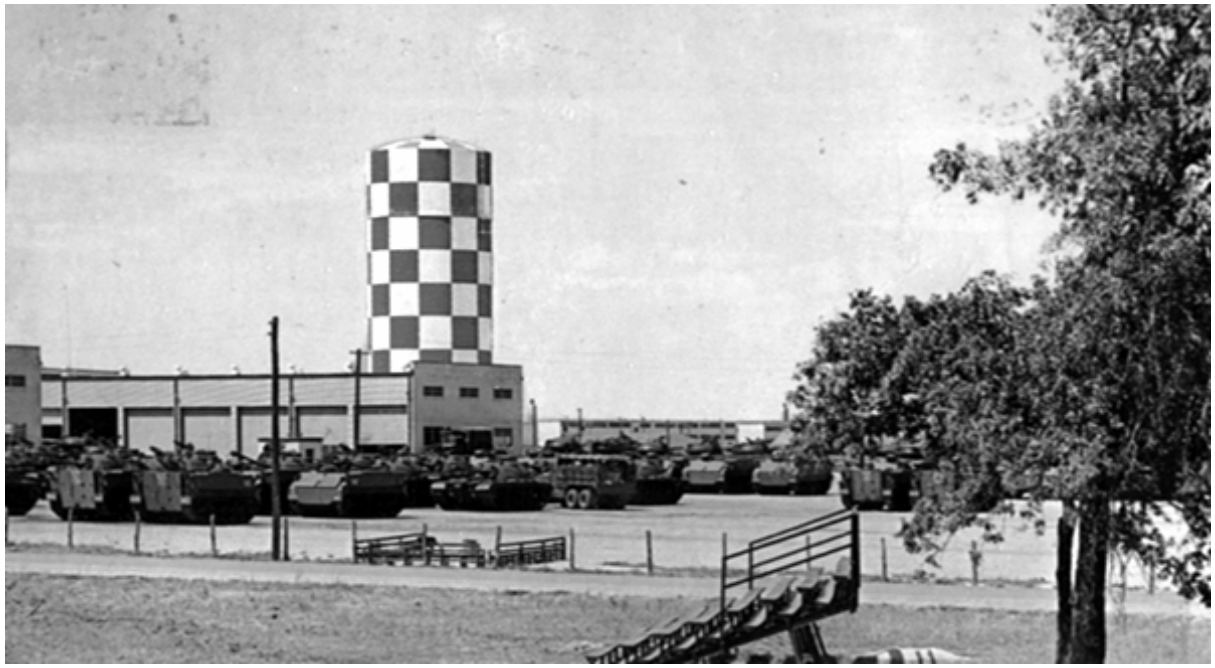

Figure 185. A pre-1970 photograph of a Fort Hood motor pool (Webster).

6.1.1.1 Motor repair shops (19)

The motor repair shops (now generally referred to as vehicle maintenance shops) are facilities that provide space and equipment to maintain vehicles and associated parts for all levels of maintenance. Typical operations include inspection, lubrication, preventive maintenance, diagnostic analysis, welding, direct exchange systems replacement, mobile maintenance team support, major components replacement, emission control systems repair, body and frame repair, sanding, painting, and administration and scheduling of vehicle use and maintenance.[569]

Four pre-1964 permanent motor repair shop types are found in the Main Post motor pool corridor. The L-shaped high-bay shops for repair of large tracked vehicles dominate most motor pool compounds. A smaller low-bay shop typically accompanied the high-bay structure, presumably for maintenance on smaller tactical vehicles. These low-bay structures have since been repurposed for use as general storage. Four examples of a third repair shop type, also a high-bay variety, are located in the former tank destroyer school motor pool area along 31st Street. The fourth shop type is a low-bay variant that accompanies the high-bay shops in the former tank destroyer school motor pool. Only one example, Building 11019, of this fourth type of motor repair shop exists on Fort Hood.

The motor repair shops were virtually identical in terms of functional areas, namely shop areas, tool and equipment areas, offices, and restrooms. The larger L-shaped repair shops, however, featured small dispensaries for the treatment of minor on-the-job injuries. These building types are of reinforced concrete frame and concrete masonry unit (CMU) infill construction. High-bay shops allowed for vehicle clearances and hoists, while all shops had the necessary clearance for overhead door tracks. Exterior features included large overhead doors, steel factory windows with operable awning and/or hopper insets, roof ventilators, and pipe door guards near vehicle entrances. Personnel door types varied by shop type. Because they dominate building elevations, vehicle bay overhead doors are generally one of the most important character-defining features of the typical repair shop. Certainly some of the original overhead shop doors would have been replaced with newer rolling metal varieties over the years. However, original 56-panel overhead doors remain on the high-bay shops in the former tank destroyer school motor pool area. Fort Hood buildings 9112, 9122, 9513, 9529, 11006, 11007, 11008,

[569] Department of the Army Pamphlet (DA PAM) 415-28, *Construction, Guide to Army Real Property Category Codes,* (Washington, DC: Headquarters Department of the Army [HQDA], February 11, 2000), 415-28.

11009, 11019, 11029, 11050, 13029, 13031, 13041, 13053, 15011, 15012, 15060, and 15061 are examples of significant motor repair shops.[570]

6.1.1.2 Dispatch houses (11)

As stated above, additional vehicle support facilities are associated with the motor repair shops. Dispatch houses (now called dispatch buildings) provide space for the dispatcher of a motor pool to check the operational paperwork on vehicles prior to their departure. This facility is normally placed at the motor pool entrance/exit point. [571] At Fort Hood, this location is along Hell on Wheels Avenue. Main Post dispatch houses feature CMU construction, flat roofs, and original metal awning windows. Fort Hood buildings 9101, 9124, 9501, 9531, 11005, 11030, 11052, 13030, 13040, 15015, and 15064 represent this significant building type.

6.1.1.3 Oil houses (27)

Simple cube-like oil houses are located at the sides of each motor pool complex. They are currently in use as hazardous material storage buildings. These freestanding facilities serve as special storage for any material or combination of materials that may be classified as hazardous or unsafe. This includes storage of hazardous wastes. While these facilities typically require special construction and systems to prevent contamination, those at Fort Hood lack this sort of customization.[572] Main Post oil houses feature CMU construction, flat roofs, some original windows and doors, and roof ventilators. Fort Hood buildings 9104, 9105, 9111, 9113, 9120, 9504, 9511, 9520, 9527, 11017, 11018, 11021, 11027, 11040, 11047, 11048, 13003, 13004, 13020, 13027, 13043, 13044, 13051, 15001, 15002, 15008, and 15057 are examples of this significant building type.

---

[570] Two additional motor repair shops were built at Fort Hood that do not conform to the facilities described above and do not represent important themes identified in this report. Map analysis shows a semi-permanent World War II-vintage "Type A" facility (Building 1121) was relocated to the 1100-block motor pool from the former tank destroyer school motor pool in the early 1950s. Its form and semi-permanent steel and metal construction set it apart from the other shops. The other nonstandard shop (Building 40001) is located west of 72nd Street, outside the motor pool corridor that abuts the training ranges. While it shares construction methods with most Fort Hood motor pools, its location and oversized U-shape to accommodate multiple vehicle types set it apart. No supporting documentary evidence was found to support inclusion with the historically significant motor repair shops in the dominant belt along the training ranges.

[571] DA PAM 415-28, 27.

[572] Ibid., 86.

Associated with the oil houses were grease racks located haphazardly within select motor pools (Figure 186). They typically are positioned at the sides of the compounds away from vehicular traffic. These steel-framed structures consist of drive-on, drive-through, and drive-off ramps that provide under-vehicle access for servicing wheeled or tracked vehicles. They are used for scheduled maintenance, inspection, lubrication, and oil changes, and were historically associated with the motor pool oil houses.[573]

Figure 186. Grease racks shown in various locations within select motor pools (Stupich).

6.1.1.4 Water booster pump houses (10)

Pavement in the Main Post motor pool corridor slopes north toward North Avenue, directing vehicle fluids runoff to a series of water booster pump houses. These facilities (now referred to as potable water supply and treatment buildings) house the equipment and support functions used to purify and supply water for a potable water system.[574] A series of inlets feed the purified water into the installation stormwater system via concrete culverts that lie between the back side of the motor pool compounds and North Avenue. These simple, flat-roofed CMU pump houses typically retain their original metal awning windows, but some are in very poor

[573] Ibid., 30.

[574] Ibid., 132.

physical condition due to vehicle impacts. Fort Hood buildings 9108, 9116, 9507, 9524, 11024, 11043, 13023, 13047, 15005, and 15054 exemplify this significant building type.[575]

Table 8. Character-defining features of significant Main Post motor pool buildings.

Building type	Number of properties by type	Character-defining features
Motor pool repair shops	19	Constructed in battalion-level vehicle complexes Linear building footprint for repeated vehicle bays High-bay & low-bay vehicle maintenance areas with adjoining offices & tool cribs Flat roofs & exposed CMU walls Overhead doors at vehicle bays Metal industrial doors & factory windows
Dispatch houses	11	Sited at primary motor pool compound access points Small, rectangular footprint Flat roofs & exposed CMU walls Metal industrial doors & factory windows
Oil houses	27	Sited at near vehicle grease racks Small, cube-like massing Flat roofs & exposed CMU walls Metal industrial doors & factory windows Roof ventilators
Water booster pump houses	10	Sited at near vehicle wash racks Small, cube-like massing Flat roofs & exposed CMU walls Metal industrial doors & factory windows

6.1.2 Airfield facilities (5)

The dominate architecture on any airfield is the aircraft hangars. The flight control tower is also a distinctive structure. When the airfield operations building also serves as the control tower, it gains primacy (Table 9). Generally, the remaining buildings are subordinate to the structures above and therefore their significance is lesser.

6.1.2.1 Aircraft hangars (4)

There are four hangars of two basic types at Hood Army Airfield: portable and maintenance with shops. Buildings 707 and 708 represent the former, while Buildings 7027 and 7044 are examples of the latter. The portable hangars are sited on the original flightline, while the

[575] An additional water supply and treatment facility (Building 40002) is located outside the primary motor pool corridor. Building 40002 services vehicle maintenance shop Building 40001. While of the same basic construction as the pump houses described above, Building 40002 is much larger to accommodate the increased vehicle fluids volume generated by its oversized shop building.

maintenance hangars are located off the newer runway. All four hangars provide space for the maintenance and repair of Army aircraft at all levels.[576]

The portable airplane hangars are most likely of the type documented in Drawing No. T.O. 12.16, *Theater of Operations Hangar, Portable, Pressed Steel, 130 ft x 160 ft*. These hangars are distinctive for their sweeping corrugated pressed steel arch form. This form sets atop a series of two-pin steel trusses spaced at 18 ft intervals. Steel six-light awning windows are located on the slanted corrugated iron side walls of the hangars, centered in the 18-ft structural bays. The front and back walls are also of corrugated iron. Oversized hangar doors dominate the front building elevation, which faces away from the airfield. These doors are comprised of six metal panels that stack neatly inside the hangar (three to a side) when drawn. Eighty-foot continuous ridge ventilators run down the apex of each hangar to circulate air. The floors of the hangars were originally gravel, but modern 5-in. thick concrete floors were poured in the late 1950s. While both portable hangars have been the recipient of building additions (most notably the construction of Building 738 which connects the two hangars), these modifications are dwarfed by the dominant and dramatic form of these structures.[577]

The 1960 hangars at Hood Army Airfield were part of a construction program launched by the Army to support their new air cavalry concept. This program was dominated by two standard hangar designs: Plan No. 39-01-62, entitled *12,000 Square Feet – 20,000 Square Feet With Shops*, and Plan No. 39-01-64 for *20,000 Square Feet – 35,000 Square Feet With Shops*. Both plans are essentially identical, with variation only in scale.[578] Their configuration featured a central gable-roofed aircraft hangar bay flanked on each side by two-story office modules. The hangar high bay was framed in structural steel, while the office modules were of CMU construction. Six metal telescoping hangar doors were typical. Hangar door pockets that projected from the front sidewalls and contained the stacked hangar doors when drawn were typical as well. Building 7027 is an example of the larger air cavalry facility (Figure 187) and Building 7044 is representative of the smaller hangar (Figure 188).

---

[576] DA PAM 415-28, 51.

[577] Drawing entitled "Installation of Steel Projecting Windows & Ridge Ventilators in Buildings 707 & 708," 19 June 1958, Drawings on file at the Fort Hood Department of Public Works, Building 4612, Fort Hood, TX.

[578] Michael A Pedrotty, Julie L. Webster, Gordon L. Cohen, and Aaron R. Chmiel, *Historical and Architectural Overview of Military Aircraft Hangars: A General History, Thematic Typology, and Inventory of Aircraft Hangars Constructed on Department of Defense Installations*, (Langley AFB, VA: HQACC, September 1999, Revised May 2001), 6-18. While these plans were developed in the late 1950s, examples of their use can still be found in the late 1980s.

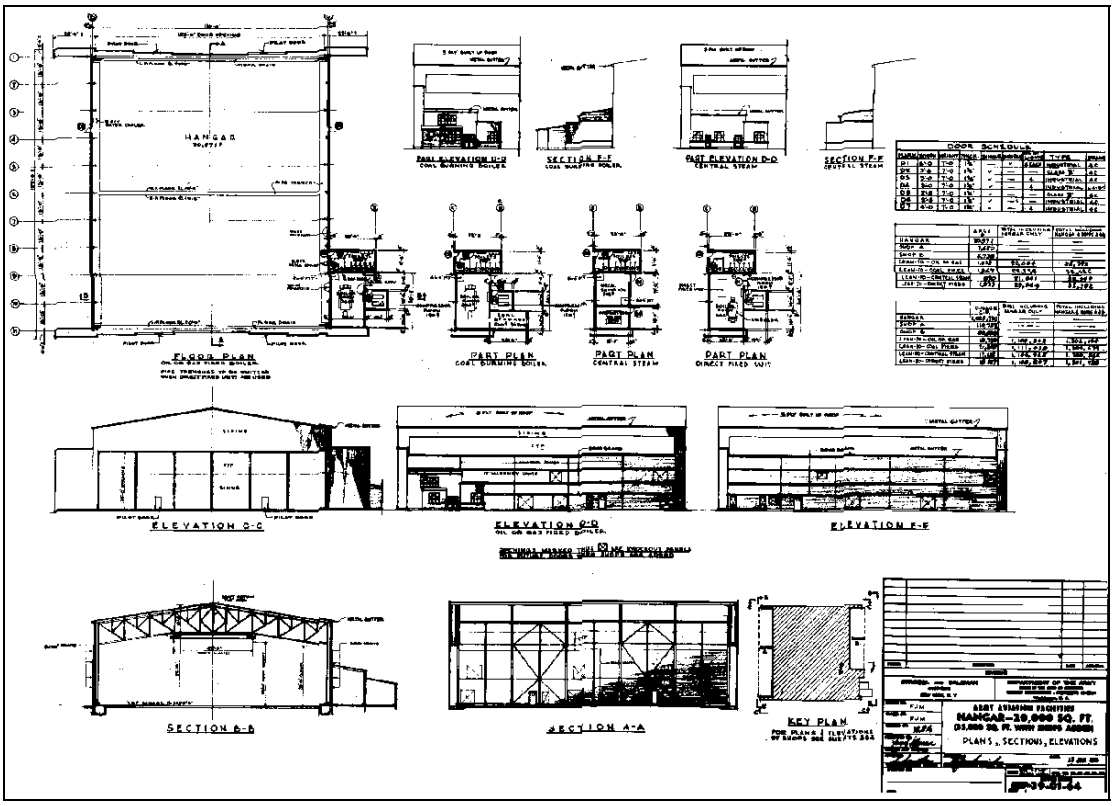

Figure 187. Definitive design for the larger Army Air Cavalry maintenance hangar (ERDC-CERL).

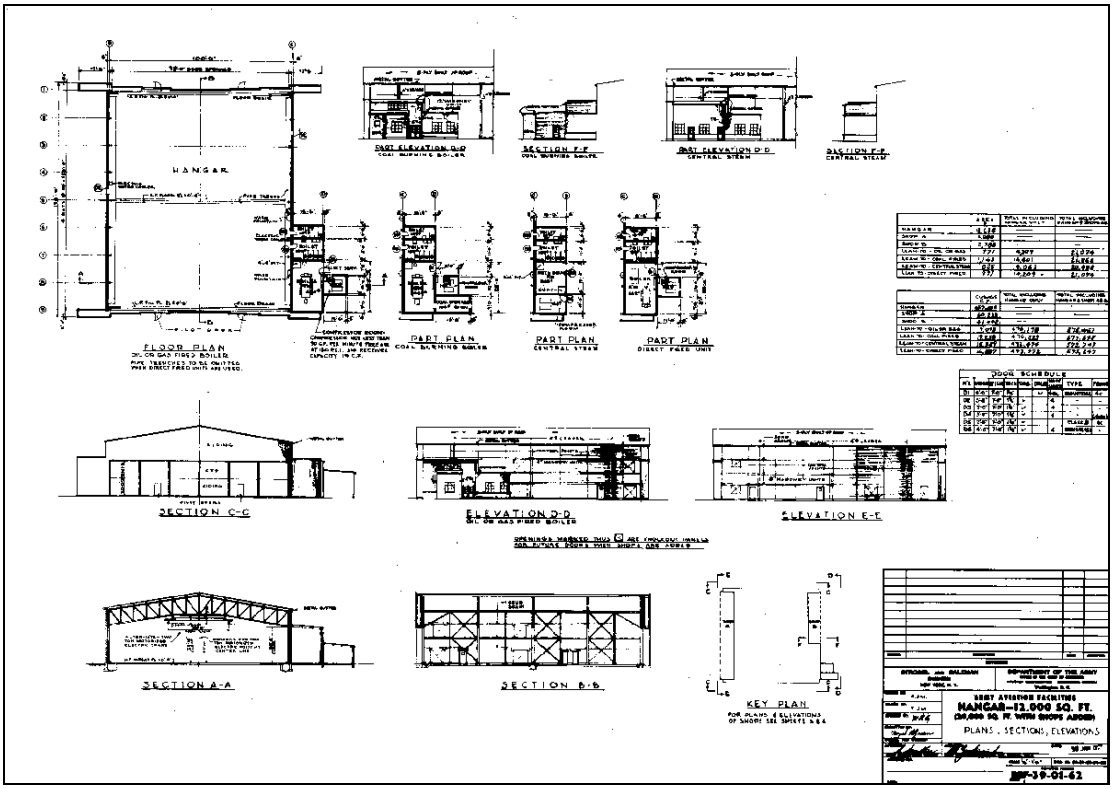

Figure 188. Definitive design for the smaller Army Air Cavalry maintenance hangar (ERDC-CERL).

6.1.2.2 Flight control tower (1)

The Fort Hood flight control tower, Building 7001, is documented in Drawing No. 86-06-08, *Flight Control Tower*, dated May 1960. York, Boese and Associates of Fort Worth modified the U.S. Army Corps of Engineers standard plan to meet local conditions and produced the working drawings. This facility uses communications systems, visual signaling, and other equipment to provide air traffic control service to aircraft at Hood Army Airfield.[579]

The tower was composed of seven stories and a rooftop platform. Each story, except for level 7, served three functions that varied by floor. Stair runs and landings in the southeast corner of each floor served as vertical circulation. A small room adjacent to the stairs on levels 1, 4, and 5 provided storage space. Toilet rooms were located in this same area on levels 2 and 6; the tower's mechanical room was situated in this area on level 1. In addition to these secondary service spaces, levels 1-6 housed the following primary functions:

- Level 1—power
- Level 2—radar
- Level 3—administration
- Level 4—maintenance/storage
- Level 5—electronics
- Level 6—air conditioning

The level 1 power room contained electrical and telephonic ducts, and was treated with acoustical walls and ceiling. The level 2 radar room also had acoustical finishes, but included blackout curtains as well. This room housed the radar control console. The level 5 electronics room contained receiving equipment. All six of these levels were clad in insulated metal panels.

Level 7 served only one purpose, that of control room. It was filled with air traffic control equipment racks and the airfield lighting control panel. An exterior platform of steel grating and pipe rails surround the tower at this level and provide for outside observation. Heat-absorbing insulated glass encloses the control room while affording views in all directions. This glazing provides the tower with a distinctive profile, as it flares outward to maximize views. A scuttle on the control room ceiling provides access to the rooftop platform. This platform provided mounts for antennae, lighting, and booms.

[579] DA PAM 415-28, 22.

Table 9. Character-defining features of significant Main Post airfield buildings.

Building type	Number of properties by type	Character-defining features
Portable airplane hangars	2	Proximity to airfield Sweeping pressed steel arch form Aircraft bays formed by series of long-span 2-pin steel trusses Stacking oversized multi-panel hangar doors Slanted corrugated iron sidewalls with steel 6-light awning windows Front/back walls of corrugated iron Continuous ridge ventilators down apex of arch Gravel floors
Maintenance hangars	2	Design with 2 variations in scale Proximity to airfield Central steel-framed aircraft bay topped with gable roof Flanking 2-story flat-roofed, CMU office modules Stacking oversized multi-panel hangar doors Projecting hangar door pockets at front sidewalls
Flight control tower	1	Proximity to airfield High multi-level structure Power, radar & electronics services Top-floor control room glazed on all sides for clear views of runways & helipads Exterior platform for outside observation Rooftop deck with equipment mounts

6.1.3 Unaccompanied personnel housing (UPH)

Main Post UPH (i.e., housing for unmarried troops) is arranged in blocks that feature a particular barracks type and a precise number of barracks that together reflect the housing requirements of tactical units of a specific composition.[580] A similar housing and planning phenomenon occurred at virtually every Army installation active during the early Cold War period. For this reason, the Army and DoD have approached significance determinations for this type of housing programmatically under the Cold War Era UPH program Comment dated August 18, 2006. Nonetheless, this study examined individual building conditions and integrity.

Not surprisingly, barracks constitute the most modified collection of buildings at Fort Hood. While this study did not investigate piecemeal modifications by building, some projects involving multiple Fort Hood facilities are worth noting. Recent wholesale barracks renovations (al-

[580] Adam Talaber, *Options for Restructuring the Army*, "How Army Units Are Used in the Field" [sec 3], (Washington DC: Congressional Budget Office, May 2005). Actual unit size in the field is determined largely by mission requirements and resource levels. The tactical increments presented here are tied to early Main Post development.

most complete at the time of this study) left the buildings virtually unrecognizable as 1950s and 1960s Army standard designs. The overhaul of barracks involved deconstruction down to the superstructure, spatial reconfiguration, and reconstruction. The upgrades were likely necessary to bring the facilities into compliance with the 1995 one-plus-one housing standard. Extensive pre-modification descriptions are provided below that act as a baseline from which to understand and evaluate these building types. For information on Army housing standards, and the impetus and nature of barracks modifications, see *Wholesale modifications to barracks* (Section 6.1.4).

6.1.3.1 Hammerhead barracks

The historic diversity of barracks designs prior to the 1950s ended with the introduction of three initial hammerhead barracks designs by Louis and Henry, Architects of Louisville, KY.[581] The three standard hammerhead barracks types accommodated 105, 165, and 225 unaccompanied troops, respectively. The new DoD policy of promoting greater unit cohesion through housing design was reflected in the Louis and Henry hammerhead barracks by providing housing, dining, administrative, and storage space for an entire company under one roof (Figure 190). Four or five of these barracks typically housed a battalion, nine or ten housed two battalions, and four battalions constituted a regiment — the largest tactical increment used in planning the Fort Hood troop housing area (Figure 190).

Figure 189. Hammerhead barracks at Fort Hood (4th ID Museum).

[581] Kuranda, *Unaccompanied Personnel Housing*, 3-26; "Military Construction Program Booms at Armored Force Training Center," *Engineering-News Record,* 17 July 1952, 26.

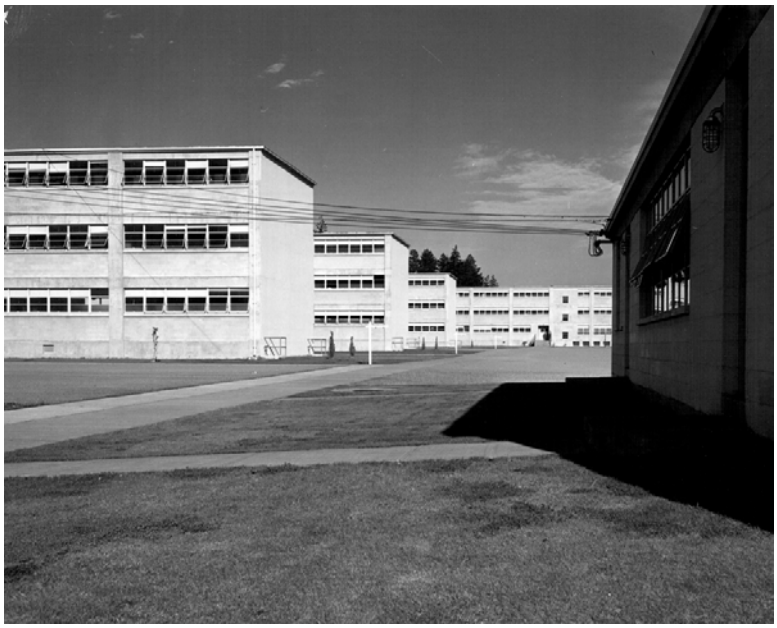

Figure 190. A 1956 photograph of various hammerhead barracks types (Fort Lewis Museum).

These buildings were strictly utilitarian, with a straightforward expression of structure and materials. Their distinctive footprints resemble the outline of a hammer — a three-story barracks wing forming the 'handle' with a single-story kitchen/mess wing forming the 'head' and 'face' (see Figure 191).

Four types of hammerhead barracks (which do not directly correspond to the initial Louis and Henry designs) are found on Fort Hood Main Post. Their designations in this report are 225-man Type A, 225-man Type B, 263-man Type A, and 263-man Type B.[582] Prior to major rehabilitation, each type could be distinguished by its occupancy, interior arrangement, and exterior glazing; each A/B type remains discernible by the direction of building footprint (right facing or left facing).[583]

[582] Note that while Kuranda, *Unaccompanied Personnel Housing*, refers to a single 225-man hammerhead barracks design, there are two variants at Fort Hood.

[583] It should be noted that tactical unit personnel levels can vary. This may account for differences in individual barracks designs as well as differences in the composition of barracks blocks and complexes. As a reference point, the initial Louis and Henry 225-man hammerhead design was planned to accommodate a full-strength infantry company of the day ("Military Construction Program Booms at Armored Force Training Center").

Today the Fort Hood hammerhead barracks serve functions similar to those for which they were designed, but in varying combinations by building (Table 10). Because few barracks now host the full array of company-level functions, most can no longer be considered self-sufficient at the company level.

Table 10. Current functions housed in Fort Hood hammerhead barracks.

CATCODE	Title	Definition
14183	Battalion Headquarters	A facility which houses the command, personnel, intelligence, operations, supply, communications, and other specialized functions of a battalion/squadron headquarters, to include battalion aid stations (p 29).
14185	Company Headquarters	A facility provided to companies, batteries, and troops as space to perform daily administrative and supply activities; also known as a company operations facility (p 29).
17138	Limited Use Instructional Building	A facility which contains special design features which allow its use in conducting hands-on training with Army equipment. These features are of such a nature that the facility cannot be used as applied instruction space (p 36).
72111	Enlisted UPH	Housing for unaccompanied enlisted personnel and comparable civilian grades; provides lodging for permanent party soldiers (grades E1-E6) and Department of Defense civilian employees (grades GS6 and below) who are authorized space (p 93).
72210	Dining Facility	A facility with cafeteria style dining operations for unaccompanied personnel; serving lines will include regular full menu and short order or fast food meals and self-service areas for beverages, desserts, and salads (p 94).

Source: DA PAM 415-28.

Plans for the *original* Fort Hood hammerhead barracks are described below, with across-the-board modifications to the initial design described later in Section 6.1.4.

225-man hammerhead Type A (9)

The Fort Hood 225-man hammerhead Type A barracks are documented in Drawing No. 21-01-64, *Barracks 225 Enlisted Men*, dated February 1951. The design was distributed centrally by the Office of the Chief of Engineers, Military Construction-Engineering Division, Washington, DC. Roy W. Leibsle, Architect, of Houston modified the standard plans to meet local conditions and produced the working drawings. According to War Department AGO Form 5-47, *Real Property Record—Buildings*, dated 1952, each of the Fort Hood 225-man Type A hammerheads was constructed to accommodate 225 men as the design intended.

The 225-man Type A hammerhead had an 11-bay barracks wing or 'handle' with 24-ft barracks structural bays of 38 ft - 10 in. width. The center portion of the *first floor* handle housed the four primary building entrances and their foyers, two stairwells to the upper floors, one toilet-washroom-shower suite, one large lounge, six NCO quarters, and one quarter each for the First Sergeant, Company Officer, and Commanding Officer. The far end of the handle housed a 35-man open-bay squad room and the end closest to the service wing housed a day room that could

double as a classroom.[584] A large mess hall, located in the 'head' portion of the floor plan, ran perpendicular to the handle. There structural bays were spaced at 17 ft - 2 in. A kitchen occupied the 'face' of the hammer shape in plan at the end of the mess hall. The kitchen dimension across the face portion of the hammer profile measured 57 ft – 8 in. Mess room capacity in the 225-man Type A hammerhead was 160 – 200 personnel depending on table and chair types, sizes, and arrangement. Additional interior details included specialized areas in the *kitchen* for pot washing and dishwashing. The kitchen also had a dedicated office, toilet, janitor closet, and storage room.[585]

The spatial arrangement of the *second and third floors* was identical. Each had a pair of stairwells, a pair of toilet-washroom-shower suites, one large lounge, and eleven NCO quarters. The four NCO quarters adjacent to the stairwells and lounges were larger than the remaining seven to fill out their structural bays. The second and third floors each had two 35-man open-bay squad rooms situated at the remote ends of each floor. While the *squad rooms* were configured as open bays, the original building design included movable partitions for the creation of semi-private areas. Partitions on the stairwell side of the plan screened four beds and four lockers per bay. Those on the toilet-washroom-shower suite side screened two beds and two lockers per bay.[586]

A partial *basement* occupied the 'eye,' 'neck,' and 'face' portions of the hammer shape (Figure 191). The boiler room was located at the neck and the transformer room beyond was at the face, just below the first-floor kitchen. Company storage and issue rooms were situated in the eye, beneath the day room. The stairwell near the first-floor day room provided access to the basement, directly into the issue room. From the issue room, personnel could check in and check out arms and supplies. A stair hall in the neck provided access to both the boiler room and company storage. The remainder of the basement plan was unexcavated crawl space.[587]

[584] Day rooms are multipurpose recreation spaces typically found in military barracks.

[585] Drawing 21-01-64, Sheets 3 and 6 of 80, Drawings on file at the Fort Hood Department of Public Works, Building 4612, Fort Hood, TX, 1951.

[586] Ibid., Sheet 4 of 80.

[587] Ibid., Sheets 3 of 80 and 5.1 of 73.

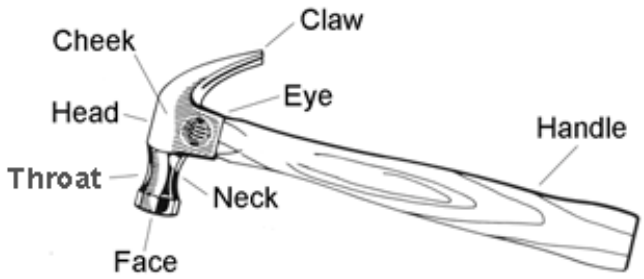

Figure 191. Anatomy of a hammer (Hammernet).

Reinforced concrete and CMU infill structural elements remain exposed on the *interior*. Kitchen walls were finished in glazed structural facing units (GSFUs), and kitchen support rooms and barracks toilet areas had GSFU wainscoting. Exposed concrete was the typical floor treatment throughout, except for quarry tile in the kitchen, ceramic tile in the toilet areas, and exposed concrete in the stair wells and secondary service areas. Ceilings were exposed concrete throughout.[588]

Exterior building facades featured an exposed reinforced concrete structural bay system with CMU infill (see Figure 68). The CMU infill was a cavity-type wall made up of 4-in. deep masonry units separated by a 2-in. void. The building was topped with bituminous built-up roofing over lightweight insulating fill. While the roof was sloped in a hip fashion, the angles were slight and not visible from ground level. Plain concrete stairs with iron pipe rails stepped up to the primary building entry doors. These doors were unadorned and featured a single upper light. Similar paired doors were originally located at the kitchen/mess corner vestibule and porch. Near grade, the crawl space was vented with openings covered with simple grilles. Metal louvered openings ventilated the water heater room.[589]

Bands of metal-sash, awning- and hopper-type *windows* at the first through third floors provided most of the visual interest on the building exterior. The windows were tied together visually with continuous precast concrete sills. Three-light window units were typical in the barracks wing, except for the four-light day room windows. A variety of three-, four-, five-, and six-light units were located in the kitchen and mess hall wing. Small hopper window units

[588] Ibid., Sheet 8.1 of 80.

[589] Ibid., Sheet 21 of 80.

were located near grade at the finished basement.[590] Fort Hood Buildings 10001, 10004, 10007, 10009, 10011, 10016, 10018, 10020, and 10021 represent this significant building type.

225-man hammerhead Type B (5)

The 225-man Type B hammerhead differed only in that it was a mirrored reflection of the 225-man Type A hammerhead. The mirrored footprint is evident on installation maps. Fort Hood Buildings 10002, 10003, 10005, 10006, and 10008 represent this significant building type.

263-man hammerhead Type A (4)

The Fort Hood 263-man hammerhead Type A barracks are documented in Drawing No. 21-01-64, *Barracks—One Company Type A*, dated June 1954. The design was distributed centrally by the Office of the Chief of Engineers, Military Construction-Engineering Division, Washington, DC. Unlike previous hammerhead types by Louis and Henry, the 263-man Type A was designed by Spector and Montgomery, Architects-Engineers of Falls Church, Virginia. John Linn Scott and Marvin C. Turner, Architect-Engineer of Austin modified the Spector and Montgomery plans to meet local conditions. According to War Department AGO Form 5-47, *Real Property Record—Buildings*, dated 1956, each of the Fort Hood 263-man Type A hammerheads was constructed to accommodate the requisite 263 men.

The 263-man Type A hammerheads evolved from the earlier hammerhead designs and exhibit only minor variation. The distinctive hammer shape was utilized, including the three-story barracks wing in the handle and the one-story service wing in the head of the hammer. Like previous hammerheads, this type employed 24-ft structural bays that are 38 ft - 10 in. wide. It retained the same number of barracks and service wing bays; however, the kitchen was reconfigured slightly to encroach on the mess hall space.[591]

On the *first floor*, the 263-man Type A was designed with virtually all the same spaces found previously in hammerhead designs: the toilet-washroom-shower suite; lounge; NCO, First Sergeant, Company Officer, and Commanding Officer quarters; open-bay squad room, day room, mess hall, and kitchen. The only difference in the 263-man Type A style was one less entrance

[590] Drawing 21-01-67, Sheets 6 and 7 of 44, Drawings on file at the Fort Hood Department of Public Works, Building 4612, Fort Hood, TX.

[591] Drawing 21-06-64, Sheets 1 and 4 of 72, Drawings on file at the Fort Hood Department of Public Works, Building 4612, Fort Hood, TX.

and foyer in the barracks wing. The space freed by this change was used for a mailroom, an amenity not included in previous Fort Hood hammerhead designs. The first-floor day room matched that of the previous hammerhead barracks except for relocated doors to the mess hall to accommodate a revised cafeteria queue. Six NCO quarters were located on the first floor, and the first-floor squad room housed the typical 35 enlisted men. The kitchen reconfiguration mentioned above allowed for an added built-in refrigerator. With that exception, the kitchen featured all the support spaces found in earlier Fort Hood hammerhead designs.[592]

The *second and third floors* of the 263-man Type A barracks were virtually identical to those in the prior hammerheads, with the standard toilet-washroom-shower suites, floor lounge, NCO quarters, squad rooms, and two stairwells. Like the earlier designs, thirty-five-man squad rooms were typical at each end of the upper floors.[593]

Storage areas for the 263-man Type A were relegated to the *basement*. The basement plan was simplified somewhat from earlier hammerhead designs to fit neatly into structural bays. With the increase in building occupancy, an arms storage room was added in the basement adjacent to the issue room and day room stairs. The direct stairwell access between the basement issue room and first-floor day room mimicked previous hammerhead configurations. Like earlier hammerhead designs, the basement boiler room was located diagonally to the company storage area and was flanked by two unexcavated areas under the kitchen and mess hall. The bulk of the grade-level barracks wing remained unexcavated.[594]

The *interior finish* of exterior and interior walls in the 263-man Type A design was exposed masonry. Exceptions were GSFUs in the kitchen and exposed concrete in the basement. GSFU wainscoting was also found in kitchen support rooms and in the toilet areas. Floors in high-traffic spaces, corridors, and officer rooms were finished in asphalt tile. Quarry tile flooring was found in kitchen areas, ceramic tile flooring finished the toilet/lavatories, and secondary service area floors and stairs were exposed concrete. Like the previous hammerhead designs, ceilings were exposed concrete throughout. One exception was the grease-resistant acoustical ceiling in the mess hall.[595]

[592] Ibid.

[593] Ibid., Sheet 2 of 72.

[594] Ibid., Sheets 1 and 3 of 72.

[595] Ibid., Sheet 1 of 72.

The 263-man Type A hammerhead shared principal *exterior* features with its predecessor hammerhead designs: the distinctive exposed reinforced concrete structural bay system, CMU cavity infill walls, very slightly-pitched asphaltic built-up roofing, ribbons of metal sash windows, precast concrete sills, simple concrete entry stairs with pipe rails, plain one-light exterior entry doors, and grilled crawl space vents. Most variations in the 263-man Type A design are window-related.[596]

The primary exterior difference between the 263-man Type A hammerhead and its predecessors was an overall increase in glazing. Four-light metal awning windows banded at the barracks wing replaced the three-light units typical in previous designs. Three-light stairwell windows were characteristic, as were service wing window units with three, five, and six lights. Other window differences are found near grade in the excavated basement areas, where 263-man Type A basement windows incorporated banded single-awning units rather than the free-standing hoppers found in earlier hammerhead designs.[597] Fort Hood Buildings 9418, 9420, 9422, and 9424 represent this significant building type.

263-man hammerhead Type B (6)

The 263-man Type B hammerhead differed only in that it was a mirrored reflection of the 263-man Type B hammerhead. The mirrored footprint is evident on installation maps. Fort Hood Buildings 9419, 9421, 9423, 9425, 10010, and 10022 represent this significant building type.

6.1.3.2 H-Style barracks (8)

By 1954 rising construction costs made the hammerhead barracks unaffordable and forced the design and approval of a new standard barracks type. That new barracks, dubbed the H-style for its H-shaped footprint, housed two full companies (or 300 plus soldiers), virtually doubling the capacity of the hammerheads. The H-style was commonly arranged in a block of four to accommodate two battalions. It was designed by George M. Ewing Company, Architects-Engineers of Philadelphia and Washington, DC.[598] The Ewing design incorporated the concept of unit cohesiveness by providing each company its own wing, but also achieved economy by consolidating toilet and dining functions. Like the hammerhead designs, the H-style was utilitarian and lacked ornamentation.

---

[596] Ibid., Sheet 5 of 72.

[597] Ibid.

[598] Kuranda, *Unaccompanied Personnel Housing,* 4-39.

Fort Hood H-style barracks are located on the Main Post only, situated in two four-building clusters between Old Ironsides and Battalion Avenues. The easternmost cluster was constructed between 20th and 21st Streets; the westernmost cluster was built between 37th and 40th Streets.

Today the Fort Hood H-style barracks serve most of the functions for which they were designed. As is the case with the hammerheads, the H-style barracks provide various combinations of their original functions, and no one building is currently a full-service, two-company barracks. The primary housing and company headquarters functions of each have been retained. Some dining facilities have been converted to administrative use and one organizational classroom was added.

Floor plans for the *original* Fort Hood H-style barracks are described below, with modifications to the initial design described later in text that follows.

The Fort Hood H-style barracks are documented in Drawing No. 21-01-121, *Barracks—Enlisted Men Two-Company*, dated May 1955. The design was distributed centrally by the Office of the Chief of Engineers, Military Construction-Engineering Division, Washington, DC. Freese, Nichols and Turner Engineers of Houston modified the standard plans to meet local conditions and produced the working drawings; construction was administered by Lawless and Alford, Incorporated. According to Department of the Army (DA) Form 2877, *Real Property Record*, dated 1958, each of the Fort Hood H-style barracks was designed to accommodate 326 enlisted personnel.

The H-style barracks employed the same construction methods as their hammerhead predecessor, namely a reinforced concrete frame structural system with CMU infill walls. They also incorporated similar massing, with three-story barracks wings and lower service wing. After those similarities, the designs diverged significantly, most notably in terms of footprint shape and size. The kitchen/mess wing composition and general floor plans differed considerably. The H-style plan was based on a 19 ft - 4 in. structural grid in both directions in the barracks and kitchen/mess wings.[599]

The H-style plan was organized with one company located in each 'vertical stroke' (or *upright*) of the H shape. The *first floor* of each upright, one for each company, was occupied by 12 NCO

[599] Drawing 21-01-121, Sheets 5-A through 7-A, Drawings on file at the Fort Hood Department of Public Works, Building 4612, Fort Hood, TX, 1955.

quarters (one alternating as a cook's room) situated on a double-loaded corridor. Entry points directly into the uprights were located at the back end walls. The inside portion of each upright closest to the 'horizontal stroke' of the H (the *cross member*) was dedicated to company, arms, and general storage. The larger company storage rooms included an issue area and counter. Company lounges were located in the front inside corners of the uprights. Front first-floor cross member spaces for each company were symmetrical about the H centerline. High-ranking officers resided there, including Commanding, First Sergeant, and Company Officers. The officer quarters were flanked by stairwells and primary entry vestibules, as well as mail-rooms and storage closets off the Company Officer rooms. Across the hallway were laundry, utility, toilet, storage, litter, and telephone areas; secondary points of entry for each company were located on this side as well. The central corridor widened on the back side and was outfitted with shelf and hook strips for coat and hat removal prior to entry into the adjacent mess hall.[600]

Unlike the hammerhead designs, the *second and third floors* of the H-style plan varied somewhat. Both floors of both uprights were split into two open-bay squad rooms with movable metal partitions that provided some privacy. While not explicitly stated on the drawings, the partition layout indicates that each squad room accommodated 16 enlisted men. Stairwells and additional NCO quarters were located at the front half of the second-floor cross member. Separate NCO and enlisted toilet and shower facilities were across the hall. Two long, narrow day rooms occupied the center of the second floor; a drywall partition divided the two and was removable. These day rooms, each with its own exterior sun deck, extended into the kitchen/mess wing. A small second-story freestanding fan room was located behind the day rooms. The front spaces of the third-floor cross member mimicked those on the second floor except a central lounge replaced the day rooms. This lounge had a centrally-located folding partition that allowed the space to be alternately configured as one or two lounges. Like the second-floor plan, separate NCO and enlisted toilet and shower facilities were located across the hall. There, in place of the day rooms, three additional NCO quarters looked out over the rear two-story service wing.[601]

The *kitchen and mess hall* were located in the service wing attached to the rear of the H cross member. Access to the dining facilities was through two doors off the cross member hallway and down a set of three steps. The mess hall was rectangular, measuring three by four structural bays. Kitchen facilities were located across the back of the mess hall in the most remote

[600] Ibid., Sheet 185-A.

[601] Ibid., Sheets 7-A, 186-A, and 187-A.

portion of the wing. Dry storage and built-in refrigerator/freezer spaces were situated in one corner of the kitchen. An office, toilet room, and janitor's closet were located in the opposite kitchen corner.[602]

The H-style barracks had no *basement* of any consequence with the exception of a subterranean utility room located under a corner of the service wing. The only means of access was down an exterior staircase located in an areaway that shares a wall with the kitchen.[603]

Exposed CMU walls, GSFU bases, asphalt tile floors, and concrete ceilings were standard H-style *interior finishes*. In general, areas that involved food preparation were finished in GSFUs and quarry tile (Figure 192). Those with plumbing fixtures were finished in GSFUs and ceramic tile. Storage areas, utility rooms, stair halls, and vestibules had concrete floors and minimal finishes. High-traffic areas, such as the first-floor cross member corridor and mess hall, were finished with furred-in acoustical wallboard ceilings to dampen sound.[604]

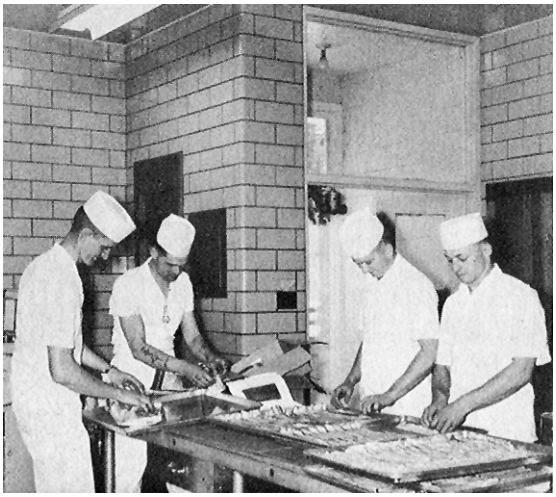

Figure 192. A 1962 photograph of H-Style kitchen interior finishes (Fort Lewis Museum).

Like the hammerhead designs, the H-style *exterior* featured an exposed reinforced concrete spandrel-column structure and CMU cavity infill walls. Unlike the hammerhead barracks, the H-style was constructed on a concrete foundation rather than over a crawlspace. This made the H-style building appear more firmly anchored to its site and eliminated crawl space vents

[602] Ibid., Sheet 184.2.

[603] Ibid.

[604] Ibid., Sheets 184.2 and 185-A.

and windows. While both designs had slightly-sloped built-up roofs that appeared nearly flat from ground level, those on the H-style were laid as intersecting gables; the hammerhead roofs were laid in a hip fashion. Subtle gable peaks were evident on the H-style end walls. Building entrances were at grade, with no stairs, rails, or embellishments to call them out. There were rails, however, around the second-floor sun decks of the rear service wing. The service wing rooftop was rife with air intakes and power ventilators that served the fan room and kitchen.[605]

Bands of four-over-four and six-over-six metal sash *windows* were typical in the original H-style barracks design (Figure 193).[606] Each unit was divided into two operable awning-type sashes. Four-light awning windows were located in the stair halls. Twelve- and eighteen-light metal factory-type units were installed at the mess hall, illuminating and ventilating the space with alternating sets of operable and fixed sashes (Figure 194). Other similar window types in various configurations were located about the service wing as well. Window openings were accentuated visually with precast concrete sills. Two-foot concrete *brise soleils*, or sun shades, ran continuously across the building elevations over the third-floor windows.[607] Fort Hood buildings 9210, 9211, 9213, 9214 14019, 14020, 14022, and 14023 are examples of this significant building type.

Figure 193. Original windows on H-Style barracks at Fort Lewis, WA (ERDC-CERL, 2004).

[605] Ibid., Sheets 9-A and 188-A.

[606] The H-style barracks described in Kuranda, *Unaccompanied Personnel Housing*, feature one-over-one-light metal sash windows.

[607] Drawing 21-01-121, Sheets 9-A, 188-A, and 189-A. While only located over third floor windows at Fort Hood, these projecting canopies were located over the windows on all floors of H-style barracks at other installations. This allowed them to shield all windows from direct sun and rain while remaining open for ventilation.

Figure 194. Original mess hall windows on H-Style barracks at Fort Lewis, WA (ERDC-CERL, 2004).

6.1.3.3 Rolling Pin barracks (3)

By the mid-1950s, austere housing conditions was cited as a factor in declining soldier recruitment and retention figures. To reverse this trend and to circumvent Congressional cost ceilings, Army officials began pursuing a new barracks design in FY57. By FY59 the Army had a new standard two-company barracks, dubbed the 'rolling pin' for its building footprint.[608] The new design, typically built in groups of five or ten, housed the troop billet function exclusively. The omission of company-level support functions provided by previous Cold War era barracks (i.e., administrative, dining, and supply) allowed the Army to improve housing conditions within the Congressional budget.[609]

Without these support functions, however, it was necessary to build freestanding headquarters and mess facilities along side the 5- or 10-plex of rolling pin barracks. By the 1960s, these buildings were complemented by a host of additional facilities (i.e., chapels, dispensaries, and NCO clubs) intended to make unit housing complexes independent from the Main Post.[610]

The rolling pin standard was designed by J. N. Pease and Company, Engineers-Architects of Charlotte, NC. The Pease design incorporated the quality of life features and finishes identi-

[608] The rolling pin design was employed for virtually all permanent troop housing through the FY68 Army construction program.

[609] Kuranda, *Unaccompanied Personnel Housing*, 3-30.

[610] Ibid.

fied by the Army for inclusion in the new barracks design: brick exteriors, aluminum windows with exterior canopies, smaller squad rooms, built-in closets, suspended ceilings in the corridors and toilets, acoustical tile ceilings in the dayrooms and lounges, plaster walls, mechanical ventilation, and vinyl and terrazzo tile flooring.[611]

The Fort Hood rolling pin barracks covered by this study (Buildings 12003, 12004, and 12008) are situated in a five-building cluster on Main Post between 33rd and 37th Streets (Figure 195). Today they continue to serve the housing function for which they were designed. However, the company headquarters function that was intentionally excluded from the original design has been reintroduced into the buildings. Floor plans for the original Fort Hood rolling pin barracks are described below, with wholesale modifications to the initial design described later in text that follows.

The rolling pin barracks are documented in Drawing No. 21-01-142, *Barracks—Enlisted Men Two-Company*, dated November 1959. The design was distributed centrally by the Office of the Chief of Engineers, Military Construction-Engineering Division, Washington, DC. According to DA Form 2877, Real Property Record, dated 1964, each of the Fort Hood rolling pin barracks was designed to accommodate 326 enlisted personnel.

The rolling pin barracks employed a concrete post-and-beam structural system with a brick cavity wall building envelope. Like the earlier barracks designs, the rolling pin was three stories in height. Its massing was largely comprised of a long, rectangular three-story form (for enlisted personnel) with rolling pin 'handles' at each end (for NCOs). These handles were also three stories in height, but they took up less footprint. While it is not explicitly stated on the drawings, the rolling pin plan was presumably organized with one company occupying half the building on all three levels.

[611] Ibid.

Figure 195. Rolling pin barracks at Fort Hood (1st Cavalry Museum).

The *first floor* was occupied by 6 eight-man enlisted squad rooms and 12 two-man NCO quarters situated on double-loaded corridors in the central block and handle wings, respectively. Entry points were located at the ends of the central block on both sides of the building. Off the entrance lobbies and corridors were the stairwell, company laundry, orderly, storage, and telephone booth areas. Company lounges were situated on the front side of the central corridor, flanking the centrally-located enlisted toilet/shower facilities. Additional storage was located near the toilet/shower areas. NCO quarters located in the handle wings were complemented with their own NCO lounge and NCO toilet/shower room.[612]

The *second and third floors* of the rolling pin plan were identical. Both floors featured 12 eight-man enlisted squad rooms in the central block, 16 two-man NCO quarters in the handle wings, and 2 lone two-man NCO quarters in the front corner of the central block near the stairwells. Two enlisted toilet/shower facilities were located off the front side of the central block corridor, directly over those on the first floor. Again, NCO quarters in both wings had their own toilet/shower facilities. Two small storage rooms were located at each end of the central block at the juncture with the handle corridors. One of these closets on each end of the building could

[612] Drawing 21-01-142, Sheet 5, Drawings on file at the Fort Hood Department of Public Works, Building 4612, Fort Hood, TX, 1959.

serve as a mechanical chase if the design was constructed in a climate that required air conditioning.[613]

The *basement* area under the rolling pin central block may have served as storage space for the two companies, but this is not indicated on the drawings. Two stairwells lead to this largely open space at the front corners of the central block. An L-shaped mechanical equipment room, marked by equipment pads and a sump, was located in a back corner. Direct access to the mechanical equipment room from the exterior was provided via an exterior stairwell and areaway at the back of the building. An excavated crawl space was located under each of the NCO wings. Areaways at the back of each wing provided access to a small crawl space access door.[614]

Interior finishes for the rolling pin barracks were available in two varieties: basic and alternate. Exposed CMU walls without wainscoting, concrete ceilings, and asbestos tile or concrete floors dominated the 'basic' interior. Exceptions were found in plumbed spaces where glazed structural unit walls with a cove base, dropped ceiling tiles, and ceramic tile floors were the norm. For the alternate design, wall finishes were upgraded to plaster with a vinyl tile base.[615]

The rolling pin post-and-beam structural system was not exposed on the *building exterior*, but rather was clad in brick on all faces (the basic rolling pin design calls for CMU exterior facing). The building was topped with slightly-sloped built-up roofs that appeared nearly flat from grade. Power roof ventilators were located over the toilet/shower spaces and rooftop hatchways and skylights were positioned over both stair wells. Primary building entrances were at grade with no stairs, rails, or embellishments to call them out. There were pipe rails, however, around the stairs and areaway to the basement-level mechanical equipment room. Crawl space vents dotted all building elevations near grade.[616]

Three-awning aluminum *window units* provided the primary visual interest on the front and back facades of the rolling pin barracks. They were arranged in bands of four at all floors of the central enlisted block and the last bay of the NCO wings. These units were tripled at the remaining NCO wing window expanses. Pairs of the same aluminum window appeared adjacent to the stairwells on the front façade and at the laundry rooms on the back façade. Extruded aluminum window sills added little interest to the building exterior. On the contrary,

[613] Ibid., Sheets 6 and 7.

[614] Ibid., Sheet 4.

[615] Ibid., Sheets 5-7.

[616] Ibid., Sheet 10.

distinctive two-foot cast concrete *brise soleils*, or sun shades, ran almost continuously across the front and back building elevations over all windows and doors.[617]

6.1.3.4 Hammerhead BOQs (4)

Hammerhead Bachelor Officers Quarters were the first major class of BOQs built by the Army after World War II (Figure 196). These quarters for unmarried officers were based on standardized designs with construction similar to the hammerhead barracks built for enlisted men. BOQ-type hammerhead interiors differed from the enlisted men barracks in two respects: BOQ hammerheads included lounges and offices rather than a kitchen/mess wing, and officers were housed in suites instead of open-bay squad rooms. They differed in plan as well. Depending on the needs of the installation, the hammerhead BOQ design could be constructed in two or three stories.[618] Those at Fort Hood are all three stories in height.

The Fort Hood hammerhead BOQs had a ten-bay wing of officer suites on all three levels. The suites included living/sleeping quarters, closets, and a shared toilet/shower facility. Two half bays flanked the suite wing and housed stairwells that serviced the remote ends of the building. Beyond the front-most stairwell on the first floor was a one-story office/lounge area. The second and third stories stopped short of this first-floor projection. Storage and service areas were located in a partial *basement* under the first-floor office/lounge space. The remainder of the basement remained unexcavated.

Figure 196. A 1954 photograph of a standard hammerhead BOQ at Fort Lewis, WA (Fort Lewis CRM).

[617] Ibid.

[618] Kuranda, *Unaccompanied Personnel Housing*, 4-203.

Exterior building facades featured an exposed reinforced concrete frame with CMU infill. At Fort Hood this framing system is accentuated by the exterior paint scheme. Both frame and infill remained exposed on the interior. The building was topped with bituminous built-up roofing. While the roof was slightly sloped, the angles were slight and hardly visible from ground level. A concrete stoop and extended roof eave created the entrance porch. This porch was located to the side of the office/lounge projection and featured double entry doors. On the opposite side of the office/lounge projection, concrete stairs lead down to the basement service areas. The stairwell was surrounded by simple pipe railing, and adjacent to it was a tall brick boiler flue. Pairs of metal sash awning windows were located between each structural bay on all three levels. Similar units in a single arrangement were located at the stair hall bays and office/lounge projection. The awning windows have since been replaced with aluminum double-hung units.

At the time of their construction, these buildings housed unmarried officers. Today the Fort Hood hammerhead BOQs serve as unaccompanied officers quarters and transient quarters. The former is a facility that meets or exceeds the minimum standards for assignment as housing for unaccompanied officers, warrant officers, and authorized civilians. The latter—also called visiting officers' quarters (VOQ)—is a facility that provides short-term, temporary lodging for the personnel listed above.[619] Buildings 5786, 5788, 5790, and 5792 are representative of the three-story version of the hammerhead BOQ.[620]

Table 11. Character-defining features of significant Main Post UPH buildings.

Building type	Number of properties by type	Character-defining features
Hammerhead barracks (24)	225-man Type A (9) 225-man Type B (5) 263-man Type A (4) 263-man Type B (6)	Constructed in groups to form housing complexes Distinctive hammer-shaped building footprint Three-story barracks wing & adjoining one-story kitchen/mess wing massing Slightly pitched roof that appears flat Exposed reinforced concrete frame Exposed concrete masonry unit infill walls Banded metal awning & hopper windows Entrances that lack architectural embellishment Interior layout that includes open-bay squad rooms, double-loaded central corridor & kitchen with mess hall
H-style barracks	8	Constructed in groups to form housing complexes Distinctive H-shaped building footprint

[619] DA PAM 415-28, 95.

[620] Like two of the hammerhead BOQs, two Capehart family housing units located in the Patton Park housing area—Buildings 6827 and 6829—are categorized as transient quarters in IFS. For more information on these buildings, see McCarthy and McCullough, *Fort Hood Military Family Housing*.

Building type	Number of properties by type	Character-defining features
		Three-story barracks wing & central two-story service wing massing Slightly pitched intersecting gable roofs Exposed reinforced concrete frame Exposed CMU infill walls Banded four-over-four- & six-over-six-light metal sash windows (& other multi-light configurations at service wing) Continuous brise soleils above windows on third floors Entrances that lack architectural embellishment Interior layout that includes open-bay squad rooms, double-loaded corridors & service wing comprised of kitchen, mess hall & day rooms
Rolling Pin barracks	3	Constructed in groups to form housing complexes Distinctive rolling pin footprint Three-story central enlisted block & three-story NCO wing massing Slightly pitched roof that appears flat Post-and-beam structural system concealed in facing brick Three-awning aluminum windows in 2, 3, and 4 unit configurations Long brise soleils above all windows and doors Entrances that lack architectural embellishment Interior layout that includes 8-man squad rooms, 2-man NCO quarters, double-loaded corridors & no administrative or dining support functions
Hammerhead BOQs	4	Style similar to hammerhead enlisted men barracks Flat roof Exposed reinforced concrete frame with CMU infill Metal sash awning windows Remote end entries Officer lounges & offices rather than kitchen/mess wing Ten-bay wing of suites instead of open-bay squad rooms Suites with living/sleeping quarters, closets & shared toilet/shower Storage/service areas in partial basement under 1st-floor office/lounge

6.1.4 Wholesale modifications to barracks

Modifications to barracks are common and inevitable because Army-wide housing standards continually evolve for reasons of affordability, technological improvement, and soldier quality of life. Compliance with the evolving standards is mandatory, the modifications generally involve major construction, and the work is centrally funded. Consequently, most Fort Hood barracks modification projects were executed complex by complex.

6.1.4.1 Modifications under the Modern Volunteer Army program (1972)

The last service member was drafted in the United States in December 1972 and reported for training in June 1973. All-volunteer recruiting began on 1 July 1973, and the Modern Volun-

teer Army (MVA) was established.[621] The program was intended to strengthen professionalism, enhance Army quality of life, and develop a modern accession system. Improvements were made "to remove from Army life those sources of dissatisfaction that were deterrents to service."[622] Improvements included modernization of barracks and replacement of temporary buildings over a 5-year period. The most significant upgrade to troop living quarters was the partitioning of open-bay squad rooms to enhance soldier privacy. Ultimately, the goal was to provide soldiers with a standard of living comparable to that available in other careers. The FY72 budget included sizeable increases to cover the upgrades. Architectural ramifications of authorized MVA programming lagged somewhat, but eventually came to fruition in the form of wholesale barracks renovations that took place in the 1970s and 1980s. These were carried out in compliance with a new comprehensive Army Housing Program developed to advance MVA objectives.[623]

The most common MVA-driven modification made to barracks was the subdivision of squad rooms into two-person NCO or enlisted rooms with the addition of partitions. Latrines were typically upgraded and many day rooms were subdivided into smaller rooms for vending and TV areas. Some kitchen and dining operations were consolidated, thus freeing former mess halls for conversion into administration areas, classrooms, and storage rooms. Dining facilities that remained were modified with short-order and self-service areas, which often encroached on sit-down dining space. On some hammerhead exteriors, window modifications were made to conceal the newly placed interior squad room partitions. Infill panels and one-over-one metal sash windows typically replaced the original bands of multipane awning units.

6.1.4.2 The Two-Plus-Two Program (1983)

In 1983, DoD established the *two-plus-two* troop housing standard to further improve privacy for enlisted members. Despite earlier improvements under the MVA program, soldiers were still living in facilities with bunks and gang latrines. That environment was judged to be inferior by 1980s living standards. The two-plus-two rule provided for a two-room suite for four personnel with a shared bathroom.

---

[621] Prior to implementation of the MVA program, DoD conducted Project Volunteer Army (VOLAR), an MVA field experiment. Under VOLAR, MVA ideas and approaches were tested and developed under local conditions. Fort Benning, GA, and Fort Carson, CO, were VOLAR test sites (William Gardner Bell, *Department of the Army Historical Summary, Fiscal Year 1972,* (Fort McNair, DC: Center of Military History, 1974), 57).

[622] Ibid., 56-57.

[623] Ibid.

6.1.4.3 Modifications under the One-Plus-One program (1995)

By the 1990s the two-plus-two housing standard was considered obsolete in terms of contemporary living standards. Quality-of-life surveys showed the need for more living space and increased privacy for single soldiers. Responding to those findings, DoD approved the *one-plus-one* housing standard. Under that standard, two service members share an efficiency apartment with two 118-sq-ft living/sleeping rooms, closets, a bathroom, and a kitchenette. Although the program increased housing costs, a return on the investment was expected in the form of higher retention rates, lower recruitment and training costs, and heightened morale and productivity for enlisted service members.[624]

6.2 North Fort Hood Buildings

In the northwest area of the North Fort Hood cantonment is a Korean War era development made up of temporary mobilization barracks called C-huts. C-huts were constructed during the Cold War era to meet the Army's need for rapidly deployable buildings. It is believed that the Fort Hood C-huts were originally used in Southeast Asia and moved to North Fort Hood in 1959-1960. They now house Army National Guard units during training exercises.[625] This basic barracks unit is a rectangular metal structure with a shed roof, generally sited on a grid (see Figure 135). Those at North Fort Hood were typical in this regard. While the C-huts are not part of this inventory, some of their secondary support buildings were surveyed.[626] Of particular interest are two types determined significant under the August 18, 2006 Cold War Era UPH Program Comment: kitchens and dining facilities (Table 12).

6.2.1 Mess kitchens (6)

Meals for soldiers stationed in the C-huts at North Fort Hood were supplied from centrally located, permanent, rectangular, CMU kitchens (ca. 1955). The front gable roof was sheathed with composition/asphalt shingles. The eaves featured exposed rafter ends and the gable ends were covered in clapboard siding. Single and double wood 5-panel doors originally provided

[624] "Perry Approves New Standard for Single Soldier Housing," *American Forces Information Service,* (Washington DC: Office of the Assistant Secretary of Defense for Public Affairs, 11 December 1995).

[625] Kuranda, *Unaccompanied Personnel Housing,* 4-188 and B-33.

[626] The C-hut barracks at North Fort Hood are not carried on the official Fort Hood real property inventory. As this inventory formed the basis of buildings to be surveyed in this study, ERDC-CERL was not tasked to survey these structures.

access at the front and rear corner of the building. Serving windows were located on the front elevation facing a 16-by-54-foot concrete tent pad. The pad served as the underpinning for tents used to shelter soldiers from the elements. The design capacity of the mess kitchens was 51 persons.

6.2.2 Enlisted personnel dining facilities (29)

The C-hut dining facilities (ca. 1951) were virtually identical to the mess kitchens with two exceptions: gable end treatment and capacity. Rather than having clapboard siding, the gable ends of the dining facilities were exposed CMUs topped with an integrated vent near the gable apex. Records show that the dining facilities were 7 sq ft smaller in area and accommodated one less person (50) than their complementary mess kitchens.

Table 12. Character-defining features of significant North Fort Hood buildings.

Building type	Number of properties by type	Character-defining features
Mess kitchens	6	CMU construction Gable roof with gable end walls covered in clapboard siding Exposed rafter ends at eaves Single and double wood 5-panel doors Front serving windows Concrete tent pad 51-person capacity
Enlisted personnel dining facilities	29	CMU construction Gable roof with integrated gable end vent Exposed rafter ends at eaves Single and double wood 5-panel doors Front serving windows Concrete tent pad 50-person capacity

6.3 West Fort Hood Buildings

6.3.1 Special weapons storage facility at former Killeen Base

The area formerly known as Killeen Base "Q" Area is located in a hilly location on the west side of Killeen-Fort Hood Regional Airport (formerly Robert Gray Army Air Field) at West Fort Hood. Many buildings that make up this area are extremely specialized, purpose-built facilities that take advantage of the topography. "Q" Area building types include (Table 13):

- assembly plants—underground type (2 buildings)
- S structure (1 building)
- various storage igloos (49 buildings)

- ammunition storage (2 buildings)
- warehouses (10 buildings)
- battery charging buildings (2 buildings)
- pill boxes and towers (20 buildings)
- miscellaneous munitions storage area buildings (10 buildings)

Because Killeen Base is highly significant as one of a limited number of continental NSSs for atomic bombs, a study independent of this research was conducted by Cold War specialist Karen J. Weitze. The resulting report, *Cold War Properties at West Fort Hood, Texas: Research Overview and Preliminary Identification*, was completed in May 2005. For architectural information on the "Q" Area buildings, reference the Weitze report. However, since the Weitze report puts emphasis on the specialized facilities, some information on standard storage igloos is provided below.

6.3.1.1 Bedrock igloos

As the name suggests, bedrock igloos are embedded in bedrock. At Killeen Base, they are located throughout the hilly portions of the base with typically only the headwall visible. Bedrock igloos have two sets of doors with an interior hallway. To protect their contents from prairie fires, 'fusible links' in the door vents prevent the igloos from becoming, in effect, fireplaces. A metal alloy solder in the vent link melts when heated to a specified temperature and pulls the door pins apart to drop weights that block the vent, thus cutting off oxygen to the igloo. Without oxygen, any fires inside the igloo would die out. In addition to this safety mechanism, the igloos were sited so any explosion would blow straight out away from the hillside in a 'shotgun' effect.

6.3.1.2 Stradley igloos

The standard Stradley-type (also referred to as earth-covered or above-ground) igloos appear as 'lumps' on the Killeen landscape. They are the southernmost located igloos along South Road and South Road "A". Stradley igloos house a single open arched space with no interior hallways. In case of an explosion, they are designed to blow straight up into the air and then cave in on themselves to suffocate any fires inside. Stradley igloos are covered in 24 in. of dirt overhead and have various features that afford lightning protection. Hidden in their earthen roof is an interlocking metal grid that sweeps over the igloo and ties into a series of lightning rods po-

sitioned down the centerline of the mound.[627] This grid (which looks like rebar) dispenses the electrical charge of a lightning bolt over the ground and also helps to stabilize the igloo topsoil. Stradley igloos also feature protective vented doors with fusible links.

Table 13. Character-defining features of significant West Fort Hood buildings.[628]

Building type	Number of properties by type	Character-defining features
Atomic bomb plants—underground type	2	Interior tunnel works Angled dead-end blast corridors Multiple interior access doors (blast, airlock, isolation & vault doors) Interior gates at lower/upper access tunnels to A/B/C Structures Network of individual work chambers Wet & dry bulb assemblies throughout tunnels Hubbellite flooring & acoustical panels in selected chambers Deluge shower floor grating & showerheads in B/C Structures Steel "troopship" containers in A Structures Steel shelving for plutonium pits in A Structures Head & wing walls, with blast doors, at tunnel entrances Exterior domed vents above K Structures
Thermonuclear bomb S structure	1	Truncated arched roof of light-weight steel trusses Windowless façades Large airlock rooms functioning as front & rear entrances to main highbay work chamber Small airlock rooms functioning as front & rear entrances to secondary work chamber Highbay work chamber Interior layout of individual rooms, including centered group of 4 rooms in secondary work chamber work benches or tables lining the walls of the secondary work chamber; Large corner room with outside entrance, series of panel vents & corner sump pump
Battery charging buildings	2	Concrete block walls Exterior wall sheathing, windows & doors Arched, frangible roof of partially pre-fabricated wooden trusses
Pill boxes	18	Unadorned reinforced concrete walls, roof & floor View and gun ports Interior & exterior access ladders
Pill boxes	2	Unadorned reinforced concrete walls, roof & floor View and gun ports Exterior access ladders
Bedrock igloos—converted A structures (9)	Temporary A structures (2)	Head & wing walls, with blast door, at exterior entrances Steel, screening & partition doors at entrance to rear storage area Free-standing reinforced concrete vault room at back of igloo storage area

[627] The lightning rod requirements for these igloos have changed since their construction. Initially four rods were required on the igloo vent alone, and four additional rods ran in line down the length of the igloo. Current standards mandate only one lightning rod in each of the following locations: on the head wall, at mid-igloo, and on the vent.

[628] Information gathered by the research team was augmented with material from Weitze, *Cold War Properties at West Fort Hood,* 52-56.

Building type	Number of properties by type	Character-defining features
		Specially configured steel racks inside vault Ceiling hooks down center of vault for hand-held lamps
	1951 & 1954 Converted A structures (7)	Head & wing walls, with blast door, at exterior entrances Triple-secured entrance to rear storage area Steel racks bolted to walls & floor
Bedrock igloos—converted type II	16	See 'bedrock igloos' below, plus included: Added interior walls Added bank-vault doors
Bedrock igloos	24	Embedded in bedrock Headwall is only visible portion Two sets of entry doors separated by interior hallway Protective vented doors with fusible links Sited so any explosions blow away from hillside
Standard storage igloo	70	Stradley-type (i.e. earth-covered or above-ground) 24 in. of topsoil Series of lightning rods down centerline Interlocking rebar grid dispenses electrical charges from lightning rods Protective vented doors with fusible links Single open arched space with no interior hallways Configured so any explosions blow straight up into air to suffocate fires

6.3.2 Former Gray Air Force Base Barracks

Six barracks buildings that once housed airmen near the Gray AFB airfield are significant under the Cold War Era UPH program comment. These barracks are of two basic types: wood-framed temporary construction and CMU permanent structures. The permanent barracks are further subdivided into larger- and smaller-capacity variants.

The 1951 wood-framed barracks are of the hotel or apartment type. Their simple, unadorned appearance is reminiscent of World War II temporary mobilization construction, suggesting that they were erected for expediency. They feature continuous wooden brise soleils over the windows at each floor, deep eaves at the roofline, metal end-wall egress stairs, and a receding central entry/circulation area flanked by enclosed stair towers of contrasting color. Buildings 90036, 90037, 90039, and 90040 represent this significant building type.

As mentioned above, the permanent 1955 airmen dormitories have two capacities. The two-story version is based on Standard Plan No. 21-01-112 for a 330-man (2-company) capacity barracks with mess and administration. The three-story version presumably accommodated an additional company. Both types are surprisingly similar to their wood-framed counterparts, featuring continuous concrete brise soleils over the windows at each floor, deep eaves at the roofline, metal end-wall egress stairs, and a projecting central entry/circulation area punctuated with orange brick cladding. Buildings 90041 (2-story) and 90042 (3-story) represent their respective permanent building types.

7 Evaluation, Findings, and Recommendations for Fort Hood Properties

7.1 Fort Hood Buildings

As stated previously, this evaluation covers three Fort Hood sub-installations: Main Post, North Fort Hood, and West Fort Hood. Each sub-installation is the product of a discrete building campaign, or multiple campaigns, in support of a distinct military mission. While all three sub-installations have resources significant for their association with important historical events or trends (Criterion A), the available historical records reveal no association between evaluated Fort Hood buildings and the life of any individual significant in U.S. history (Criterion B). Similarly, no findings indicate that any Fort Hood buildings will likely yield future information important in U.S. history (Criterion D). With the exception of the Killeen Base "Q" Area, there is nothing architecturally distinctive about the type or method of construction used to erect Fort Hood buildings. The properties were built using materials and techniques that were conventional at the time of construction. They are not the work of a master builder and they do not have high artistic value (Criterion C).

An overview of the significant and recommended eligible Fort Hood buildings that served the various missions and support roles under the major themes identified in this report can be found in the sub-installation-specific tables below.

7.1.1 Main Post

One hundred ninety-eight (198) Main Post buildings were evaluated under this study.[629] Many of these buildings were deemed significant under Criterion A for their association with events

[629] Capehart-Wherry era family housing was excluded as it had already been determined eligible under a Program Comment. Likewise, WWII temporary buildings were excluded since they were already covered under a separate programmatic agreement.

and trends that have made an important contribution to broad patterns of military history, specifically in the areas of:

- vehicular training and transport,
- Army aviation—fixed and rotary wing, and
- Cold War era unaccompanied personnel housing.

Although 17 of these significant buildings have associative significance under Criterion A, their repurposing, major rehabilitation, additions, window replacements, interior reconfigurations, and other modifications have degraded their overall integrity so they no longer convey their importance in their relevant historical context. In addition, 86 inventoried Main Post buildings were found ineligible because they are not directly related to significant Main Post themes or one of the applicable Program Comments. See Table 14 for Main Post buildings that possess significance under a Main Post theme, retain their integrity, and are recommended as eligible for the NRHP. See Table 15 below for Main Post buildings that have been determined eligible to the NRHP under a Program Comment.

Table 14. Evaluation data for NRHP-recommended eligible Main Post buildings under Fort Hood themes.

Building Numbers	Early Use (#)	NR Eligibility Status	NR Criteria	Thematic Group	Retained Aspects of Integrity
707-708, 7027	hangars (3)	recommended eligible	A	Army Aviation-Fixed and Rotary Wing	location, design, setting, materials, workmanship, feeling, and association
7001	flight control tower (1)	recommended eligible	A	Army Aviation-Fixed and Rotary Wing	location, design, setting, materials, workmanship, feeling, and association
9112, 9122, 9513, 9529, 11006-11009, 11029, 11050, 13029, 13053, 15011, 15060	motor repair shops (14)	recommended eligible	A	Vehicular Training and Transport	location, design, setting, materials, workmanship, feeling, and association
9101, 9124, 9501, 9531, 11005, 11030, 11052, 13030, 13040, 15015, 15064	dispatch houses (11)	recommended eligible	A	Vehicular Training and Transport	location, design, setting, materials, workmanship, feeling, and association
9104-9105, 9113, 9504, 9520, 11017-11018, 11040, 11047-11048, 13003-13004, 13020, 13027, 13043-13044, 15001-15002, 15008, 15057	oil houses (20)	recommended eligible	A	Vehicular Training and Transport	location, design, setting, materials, workmanship, feeling, and association
9116, 9507, 9524, 11024, 11043, 13023, 15054	water booster pump houses (7)	recommended eligible	A	Vehicular Training and Transport	location, design, setting, materials, workmanship, feeling, and association

Table 15. Evaluation data for Main Post buildings eligible to the NRHP under a Program Comment.

Building Numbers	Early Use (#)	NR Eligibility Status	NR Criteria	Thematic Group	Retained Aspects of Integrity
9210-9211, 9213-9214, 9418-9425, 10006-10011, 10016, 10018, 10020-10022, 14019-14020, 14022-14023, 10001-10005, 12003-12004, 12008	barracks (35)	eligible	program comment	Cold War Era UPH	location, setting, and association
5786, 5788, 5790, 5792	BOQs (4)	eligible	program comment	Cold War Era UPH	location, setting, and association

Although constructed after 1963 and therefore not evaluated in this report, the following 39 UPH buildings constructed between 1964-1974 have been determined eligible to the NRHP under the *Program Comment for Cold War Era Unaccompanied Personnel Housing (1946-1974)*:

Buildings111, 12005-12007, 12009, 16003, 16004, 16006, 16008, 16009, 21002, 21003, 21006, 21008, 21009, 27002, 27004, 27006, 31007-31009, 34006, 34008, 34010, 36001, 36006, 37003, 37004, 37006, 37008, 37009, 41002, 41007-41009, 87012, 87013, 87015, and 87017.

Six (6) ammunition bunkers (Buildings 51015-51020) constructed in 1966 in the northwest corner of the Comanche III housing area on the western edge of the Main Post are also eligible to the NRHP under the *Program Comment for World War II and Cold War Era (1939-1974) Ammunition Storage Facilities*. While not part of this project, this information is provided for Fort Hood management purposes.

7.1.2 North Fort Hood

Forty-four (44) North Fort Hood buildings were evaluated under this study. While none were found to be significant under the major Fort Hood themes identified in this report, many were deemed eligible under the *Program Comment for Cold War Era Unaccompanied Personnel Housing (1946-1974)*. North Fort Hood buildings that are NRHP-eligible under this DoD-wide Program Comment are listed in Table 16. The remaining nine buildings surveyed at North Fort Hood are excluded from the table because they had no association with any significant Fort Hood themes.

Table 16. Evaluation data for North Fort Hood buildings eligible to the NRHP under a Program Comment.

Building Numbers	Early Use (#)	NR Eligibility Status	NR Criteria	Thematic Group	Retained Aspects of Integrity
56413-56414, 56522-56525, 56532-56535, 56542-56545, 56618, 56622-56625, 56632-56635, 56702, 56710, 56752-56755	enlisted personnel dining facility (29)	eligible	program comment	Cold War Era UPH	location, setting, and association
56529, 56539, 56549, 56629, 56639, 56759	mess kitchen (6)	eligible	program comment	Cold War Era UPH	location, setting, and association

7.1.3 West Fort Hood

West Fort Hood was initially several discrete, but interrelated, installations, namely:

- Killeen Base "Q" Area,
- Killeen Base "A" Area,
- Gray AFB, and
- Radar Hill.

Killeen Base was one in a series of alpha-coded NSSs operated by the AEC during the early years of the Cold War. These storage sites contained a stockpile of protected special (i.e., nuclear) weapons. The AEC assembly, test, and storage sites came to be known as "Q" Areas due to their security clearance restrictions (i.e., "Q" clearance). The Killeen Base "Q" Area was the nucleus for the group of installations making up current-day West Fort Hood. The Killeen Base "A" Area served as administrative and personnel support to the "Q" Area. Gray AFB provided offensive weapon transport, while the radar facility on Radar Hill provided defensive AC&W capabilities.

Two hundred fifteen (215) buildings were evaluated across West Fort Hood. Because the Killeen Base "Q" Area is highly significant and architecturally distinct, it was assessed separately from the rest of the West Fort Hood buildings.[630]

[630] For these same reasons, additional more comprehensive studies of the "Q" Area are currently in progress under separate contract.

7.1.3.1 Non-NSS buildings

Forty-eight (48) non-NSS buildings dating prior to 1964 were evaluated outside of the "Q" Area (i.e., at former Killeen Base "A" Area, Gray AFB, and Radar Hill). None were found to be significant under the major Fort Hood themes identified in this report. However, a small number of airmen's dormitories at former Gray AFB (now Gray Army Airfield) were deemed eligible under the *Program Comment for Cold War Era Unaccompanied Personnel Housing (1946-1974)* dated August 18, 2006. Those buildings are listed in Table 17. The remaining 42 non-NSS buildings surveyed at West Fort Hood were judged ineligible due to their lack of association with any significant historical themes. This includes 19 "A" Area, 16 Gray AFB, and 7 Radar Hill buildings.

Table 17. Evaluation data for West Fort Hood non-NSS buildings eligible to the NRHP under a Program Comment.

Building Numbers	Early Use (#)	NR Eligibility Status	NR Criteria	Thematic Group	Retained Aspects of Integrity
90036-90037, 90039-90042	airmen's dormitories (6)	eligible	program comment	Cold War Era UPH	location, setting, and association

7.1.3.2 Former Killeen "Q" Area NSS buildings

One hundred sixty-seven (167) pre-1964 NSS buildings were evaluated within the former Killeen Base "Q" Area. Virtually all were found to be significant under either the August 18, 2006 *Program Comment for World War II and Cold War Era (1939-1974) Ammunition Storage Facilities* or the *Special Weapons Storage Program—Killeen Base* theme identified in this report. In addition to being associated with events and trends that have made a significant contribution to broad patterns of military history (Criterion A), the former Killeen Base "Q" Area is made up of many buildings that embody the distinctive characteristics of a type, period, and method of construction, and represent a significant and distinguishable entity (Criterion C). All "Q" Area buildings recommended as NRHP-eligible are listed in Table 18. All "Q" Area buildings determined NRHP-eligible by Program Comment are listed in Table 19.

Table 18. Evaluation data for NRHP-recommended eligible West Fort Hood NSS buildings under Fort Hood themes.

Building Numbers	Early Use (#)	NR Eligibility Status	NR Criteria	Thematic Group	Retained Aspects of Integrity
92026, 92050	atomic bomb plants—underground type (2)	recommended eligible	A and C	Special Weapons Storage Program-Killeen Base	location, design, setting, materials, workmanship, feeling, and association
92027, 92045	battery charging buildings (2)	recommended eligible	A and C	Special Weapons Storage Program-Killeen Base	location, design, setting, materials, workmanship, feeling, and association
92004, 92006, 92010-92011, 92014-92015, 92021, 92030-92033, 92036-92037, 92042, 92056-92059	pillboxes (18)	recommended eligible	A and C	Special Weapons Storage Program-Killeen Base	location, design, setting, materials, workmanship, feeling, and association
92020, 92041	pill towers (2)	recommended eligible	A and C	Special Weapons Storage Program-Killeen Base	location, design, setting, materials, workmanship, feeling, and association

Table 19. Evaluation data for West Fort Hood NSS buildings eligible to the NRHP under a Program Comment.

Building Numbers	Early Use (#)	NR Eligibility Status	NR Criteria	Thematic Group	Retained Aspects of Integrity
92106-92107, 92124-92125, 92133-92134, 92138, 92145-92146	bedrock igloos—converted A structures (9)	eligible	program comment	WWII & Cold War Era Ammunition Storage Facilities	location, design, setting, materials, workmanship, feeling, and association
92101-92103, 92117, 92119-92120, 92122, 92126, 92130, 92132, 92136, 92139, 92142, 92144, 92147, 92149	bedrock igloos—converted type II (16)	eligible	program comment	WWII & Cold War Era Ammunition Storage Facilities	location, design, setting, materials, workmanship, feeling, and association
92104-92105, 92108-92116, 92118, 92121, 92123, 92129, 92131, 92135, 92137, 92140-92141, 92143, 92148, 92151-92152	bedrock igloos (24)	eligible	program comment	WWII & Cold War Era Ammunition Storage Facilities	location, design, setting, materials, workmanship, feeling, and association
92162	standard storage igloos—type N=1 (1)	eligible	program comment	WWII & Cold War Era Ammunition Storage Facilities	location, design, setting, materials, workmanship, feeling, and association
92153-92161	standard storage igloos—type N=9 (9)	eligible	program comment	WWII & Cold War Era Ammunition Storage Facilities	location, design, setting, materials, workmanship, feeling, and association
92163-92222	standard storage igloos—type N=60 (60)	eligible	program comment	WWII & Cold War Era Ammunition Storage Facilities	location, design, setting, materials, workmanship, feeling, and association (except 92207: location, setting, and association)

One building, the thermonuclear bomb S structure (Building 92060), has significance under Criterion A and Criterion C, but repurposing, major rehabilitation, and additions have degraded its overall integrity so it no longer conveys its importance in the *Special Weapons Storage Program—Killeen Base* context. In addition to this single compromised building, the remaining 23 "Q" Area buildings covered by this study were deemed ineligible for their lack of association with any significant historical themes. Most of these are simple (and often prefabricated) warehouses and storage buildings.

7.2 Fort Hood Landscapes

This study covers landscapes within the previously mentioned three Fort Hood sub-installations: Main Post, North Fort Hood, and West Fort Hood. Some sub-installations contain multiple landscapes that serve multiple military missions. All three sub-installations have landscapes significant for their association with important historical events or trends (Criterion A) as outlined below. While a number of sites commemorate military personnel, no landscape is significant under Criterion B. To have significance under this criterion, sites must illustrate (not commemorate) the important achievements of their namesakes. The Killeen Base "Q" Area landscape was found to have significance under Criterion C because it embodies distinctive characteristics of a type, period, or method of construction. No Fort Hood landscapes were found to be the work of a master builder and they do not have high artistic value (Criterion C). Likewise, no findings indicate that any Fort Hood landscapes will likely yield future information important in U.S. history (Criterion D). However, an archeological assessment of the North Fort Hood WWII POW encampment was recommended and is currently underway.

An overview of the NRHP-recommended eligible Fort Hood landscapes that served the various missions under the major themes identified in this report can be found in the sub-installation-specific tables below.

7.2.1 Main Post

This report finds that, as a whole, the Fort Hood Main Post area does not possess enough historic significance and integrity to make it eligible for the NRHP as a site or historic district. However, five individual landscape component areas within the cantonment are recommended as eligible. These sites, further discussed below, are integral to understanding the overall landscape of Fort Hood and its unique layout in direct response to the mission. In addition, these sites help to illustrate the historic themes discussed in this report. The spatial arrangements and land uses illustrated by these sites have both WWII and Cold War significance for Fort Hood's mission as a WWII tank destroyer training center and school, and as a two-division

post for training and readiness for the Cold War. These sites also possess some or all of the National Register's seven aspects of integrity (location, design, workmanship, association, feeling, setting, and materials).

The five landscapes are identified as districts containing significant concentrations, linkages, or continuity of sites or features. At this scale, the landscape districts may contain noncontributing components, such as ineligible buildings or structures, but the overall landscape still conveys the historic land use patterns of Fort Hood. These districts are significant under Criterion A for their association with events and trends that have made an important contribution to broad patterns of military history, expressly in the areas of:

- Vehicular training and transport,
- army aviation—fixed and rotary wing,
- ceremonial activities,
- Cold War era unaccompanied personnel housing, and
- Capehart-Wherry era family housing.

Of particular interest in the Main Post landscape are the linear layout, consistent land uses, transportation networks, planned residential neighborhoods for unaccompanied personnel, and those for families. Transportation networks are particularly critical for mobilization and readiness missions of an armored post and include the roadways, and the railroad loading areas. These networks serve as a spatial framework and integrate the historic districts.

Three Main Post landscapes are recommended eligible to the NRHP under Fort Hood specific themes (see Table 20). These landscapes contain building clusters, circulation networks, spatial organization, and lands uses that, in unison, convey the historical significance of Fort Hood. The motor pool compounds and transportation network landscape has a consistent land use overall and has changed little since original construction. The compounds are devoted to vehicular transport and the component parts are spatially arranged to facilitate this use. The individual compounds are replicated in a long, linear band across the northern edge of the cantonment. The utility of this layout, adjacent to both the ranges and the barracks, provides a clear picture of the importance of Fort Hood's role as a premier armored training installation. The Hood Army Airfield landscape also exhibits a consistent land use with components specifically for, and integrally related to, its mission. As such, it reflects the technological changes in Army aviation over the decades the field has been in existence, particularly the increasing role played by helicopters. The ceremonial activities and post headquarters landscape has a consistent land use and ceremonial use. While the III Corps Headquarters building is a non-contributing feature of the district, it occupies the site of the old post headquarters, and does not adversely affect the landscape's integrity.

Table 20. Evaluation data for NRHP-recommended eligible Main Post landscapes under Fort Hood themes.

Landscape Areas	Period of Significance	NR Eligibility Status	NR Criteria	Thematic Group	Retained Aspects of Integrity
Motor pool compounds and Transportation Network (railhead and roadways)	1942-1989	recommended eligible	A	Vehicular Training and Transport	Location, setting, feeling, materials, workmanship, association, design
Hood Army Airfield	1943-1979	recommended eligible	A	Army Aviation-Fixed and Rotary Wing	Location, setting, feeling, materials, workmanship, association, design
Sadowski Parade Ground, Broumas Memorial Park, headquarters, post chapel	1942-1989	recommended eligible	A	Ceremonial activities and post headquarters	Location, setting, feeling, association

The *Program Comment for Capehart and Wherry Era Army Family Housing and Associated Structures and Landscape Features (1949-1962)* includes both the dwellings and the landscapes that contain them. As a result, the family housing landscape on the Main Post is eligible to the NRHP. This landscape consists of the six family housing developments constructed during the Capehart-Wherry era. The specific areas under this landscape are listed in Table 21.

Table 21. Evaluation data for Main Post landscapes eligible to the NRHP under a Program Comment.

Landscape Areas	Period of Significance	NR Eligibility Status	NR Criteria	Thematic Group	Retained Aspects of Integrity
Family Housing (McNair Village, Chaffee Village, Patton Park, Walker Village Wainwright Heights, and Pershing Park)	1949-1962	eligible	program comment	Capehart-Wherry Era Family Housing	Location, setting, feeling, materials, workmanship, association, design

Although the UPH Program Comment does not address the landscapes in which the NRHP-eligible UPH buildings are located, the extensive band of UPH housing on the Main Post presents a distinct, integrated area. The inter-related layout of barracks and support buildings, open space, circulation paths, central multi-use spaces, and areas for relaxation are replicated across the entire length of the cantonment. This landscape provides a physical context that conveys the essential components of the Army's long history of housing for Soldiers during the Cold War. The specific landscape recommended as eligible to the NRHP by association with the UPH buildings is listed in Table 22.

Table 22. Evaluation data for NRHP-recommended eligible Main Post landscapes associated with buildings NRHP-eligible under a Program Comment.

Landscape Areas	Period of Significance	NR Eligibility Status	NR Criteria	Thematic Group	Retained Aspects of Integrity
Cold War barracks, associated support buildings and landscape	1946-1974	recommended eligible	A	Cold War Era UPH	Location, setting, feeling, association

7.2.2 North Fort Hood

This report finds that, as a whole, the North Fort Hood cantonment area does not possess enough historic significance and integrity to recommend it as eligible for the NRHP as a site or historic district. However, two individual landscape component areas within the cantonment do possess a low level of historic significance by association with UPH buildings.

The pre-1990 North Fort Hood landscape was evaluated, and includes World War II and Cold War era developments. The WWII landscape and POW encampment were not directly related to any significant Fort Hood specific theme as identified in this report. Additionally, very little of the WWII landscape, and nothing of the POW encampment remains at North Fort Hood, just several non-contiguous buildings and the layout as visible in the roads. As a result, these landscapes lack the necessary integrity to be recommended eligible. However, the remaining WWII mobilization buildings are NRHP-eligible under the WWII temporary buildings PA.

While the remaining tent pads and mess facilities of the Korean War era "tent city" are NRHP-eligible under the *Program Comment for Cold War Era Unaccompanied Personnel Housing (1946-1974)*, the associated landscape has experienced repeated modification over time exemplified by the missing blocks. As a result, the landscape does not retain sufficient integrity to illustrate the associated historic context. The 1979 Army Reserve barracks and dining halls, while included as significant in the UPH historic context, were constructed too recently to be NRHP-eligible under the *Program Comment for Cold War Era Unaccompanied Personnel Housing (1946-1974).* As a result, the associated landscape was not eligible for recommendation to the NRHP. Evaluation results for the two UPH-associated landscapes are listed in Table 23.

Table 23. Evaluation data for North Fort Hood landscapes.

Landscape Areas	Period of Significance	NR Eligibility Status	NR Criteria	Thematic Group	Retained Aspects of Integrity
Army Reserve barracks and dining halls	none	not eligible	Buildings constructed after the program comment cut-off date	N/A	N/A
"Tent City"	(1950-1989)	not eligible	program comment	Cold War Era UPH	Landscape does not retain enough integrity

7.2.3 West Fort Hood

As mentioned previously, West Fort Hood is made up of several discrete, but interrelated, developments: Killeen Base "Q" Area, Killeen Base "A" Area, Gray AFB, and Radar Hill. The Killeen Base "Q" Area was the former nucleus for the group of installations; it is highly significant and distinct as a landscape. As such, it was assessed separately from the rest of West Fort Hood landscapes.[631]

7.2.3.1 Non-Killeen Base "Q" Area landscapes

Outside of the "Q" Area, landscapes of the former Killeen Base "A" Area, Gray AFB, and Radar Hill were assessed. None were found to be significant under the major Fort Hood themes identified in this report and are therefore recommended not NRHP-eligible. However, two landscapes were either directly addressed by, or associated with, an existing Program Comment.

The *Program Comment for Capehart and Wherry Era Army Family Housing and Associated Structures and Landscape Features (1949-1962)* includes both the dwellings and the landscapes that contain them. As a result, the one Capehart-Wherry era family housing landscape on West Fort Hood is eligible to the NRHP. The specific landscape eligible under this Program Comment is listed in Table 24.

Table 24. Evaluation data for West Fort Hood non-Killeen "Q" Area landscapes eligible to the NRHP under a Program Comment.

Landscape Areas	Period of Significance	NR Eligibility Status	NR Criteria	Thematic Group	Retained Aspects of Integrity
Montague Village (formerly Kay Bee Heights)	(1949-1962)	eligible	program comment	Capehart-Wherry era family housing	Location, setting, feeling, association, design

Although the UPH Program Comment does not address the landscapes in which the NRHP-eligible UPH buildings are located, a small landscape containing enlisted barracks near the airfield at former Gray AFB presents a distinct cluster with a continued land use. The inter-

[631] For these same reasons, additional more comprehensive studies of the "Q" Area are currently in progress under separate contract.

related layout of barracks, open space, circulation paths, central multi-use spaces, and areas for relaxation are indicative of the military's long history of housing for unaccompanied personnel. The specific landscape recommended as eligible to the NRHP by association with the UPH buildings is listed in Table 25.

Table 25. Evaluation data for NRHP-recommended eligible non-Killeen "Q" Area landscapes associated with buildings NRHP-eligible under a Program Comment.

Landscape Areas	Period of Significance	NR Eligibility Status	NR Criteria	Thematic Group	Retained Aspects of Integrity
Airmen's dormitories	(1951-1989)	recommended eligible	A	Cold War Era UPH	Location, setting, association

7.2.3.2 Former Killeen "Q" Area landscape

The former Killeen Base "Q" Area landscape has significance under the Fort Hood *Special Weapons Storage Program—Killeen Base* theme for its role in the history of United States military nuclear weaponry (Criterion A). Specifically, it supported the top-secret nuclear weapon storage mission of Killeen Base. This facility is only one of two NSS and OSS that included underground structures, making the landscape and building arrangements are particularly important. Accordingly, the former Killeen Base "Q" Area landscape represents a significant and distinguishable entity (Criterion C). Additionally, many of the component properties in the landscape are significant under the *Program Comment for World War II and Cold War Era (1939-1974) Ammunition Storage Facilities.* These ammunition bunkers covered under the program comment at West Fort Hood are scattered throughout the Killeen Base landscape along South Road, North Road and Loop Road (see Table 19 for buildings eligible under the Program Comment). The recommended NRHP-eligible "Q" Area landscape is shown in Table 26.

Table 26. Evaluation data for NRHP-recommended eligible West Fort Hood Killeen "Q" Area landscapes under Fort Hood themes.

Landscape Area	Period of Significance	NR Eligibility Status	NR Criteria	Thematic Group	Retained Aspects of Integrity
former Killeen Base "Q" Area	1948-1969	recommended eligible	A and C	Killeen Base—Special Weapons Storage	Location, setting, feeling, materials, workmanship, association, design

7.3 Findings and Recommendations

Fort Hood has a distinguished history in the Army and possesses properties that have historical value to the nation. The installation played significant roles in the development of wheeled and tracked military vehicles and rotary-wing aircraft. It served as a primary storage facility for nuclear weapons during an escalating arms race with the Soviet Bloc, and has provided training for vast numbers of full and part-time military personnel. It remains one of the premier Army installations and supports large-scale military commands, including III Corps and two full divisions. Fort Hood buildings and landscapes have been inventoried, evaluated, and presented in this report. The properties that best convey this installation's historical significance have been either recommended eligible to the NRHP under fort Hood specific historical themes, or determined eligible under a relevant Program Comment. A brief summary of their importance and recommendations for future management are provided below, arranged by subcantonment.

7.3.1 Main Post

The Fort Hood Main Post holds NRHP recommended eligible properties significant under NRHP Criterion A for their association with events and trends that have made an important contribution to broad patterns of military history. There are three historic districts on the Main Post: Vehicular Training and Transport District, Headquarters and Ceremonial District, and Army Aviation: Fixed and Rotary Wing District (Figure 197). These districts comprise significant Main Post landscapes that contain a high concentration of NRHP-eligible and/or recommended eligible building clusters, circulation networks, original spatial organization and lands uses that, in unison, convey the historical significance of Fort Hood. The most important elements of these districts are:

- the layout of the road and rail networks and their relationships to the adjoining land uses such as the motor pools bordering the Vehicular Training and Transport area to the north and their spatial ties to both the training lands and the enlisted housing;
- the use of Hood Road as a divider between the mirror images of the two divisions' areas;
- the specialized spatial arrangement of buildings and ground facilities at the Airfield; and
- the density of the built environment within these districts such as the ceremonial open space remaining from the original headquarters area.

The layout directly relates to the primary mission involving heavy motorized transport, and the need to efficiently utilize men and machines for both training and deployment.

The individual buildings within the historic districts form a lower order of importance and often have lost their historical integrity or physical historic context, with some exceptions. The

first exception to this is the motor pool buildings. They are most strongly associated with the Vehicular Training and Transport theme, and most of these buildings retain their integrity. They are recommended eligible as part of the Fort Hood Main Post Vehicular Training and Transport Historic District. The Airfield contains a second group of buildings recommended as eligible to the NRHP. Directly associated with the military aviation theme, the buildings retain integrity and form part of the Fort Hood Army Aviation: Fixed and Rotary Wing Historic District.

In addition to the buildings and landscapes at the Main Post recommended as eligible under the Fort Hood specific themes, there are two use-types of buildings eligible under program comment agreements: Capehart-Wherry housing areas and UPH areas (Figure 198). For the Main Post, there are six Capehart-Wherry housing areas and two spatially distinct groups of UPH (the main linear one and the small group of BOQs). The landscapes containing the UPH properties and the Capehart-Wherry housing areas are described herein as Program Comment Areas.

Figure 197. Fort Hood Main Post Historic Districts (ERDC-CERL).

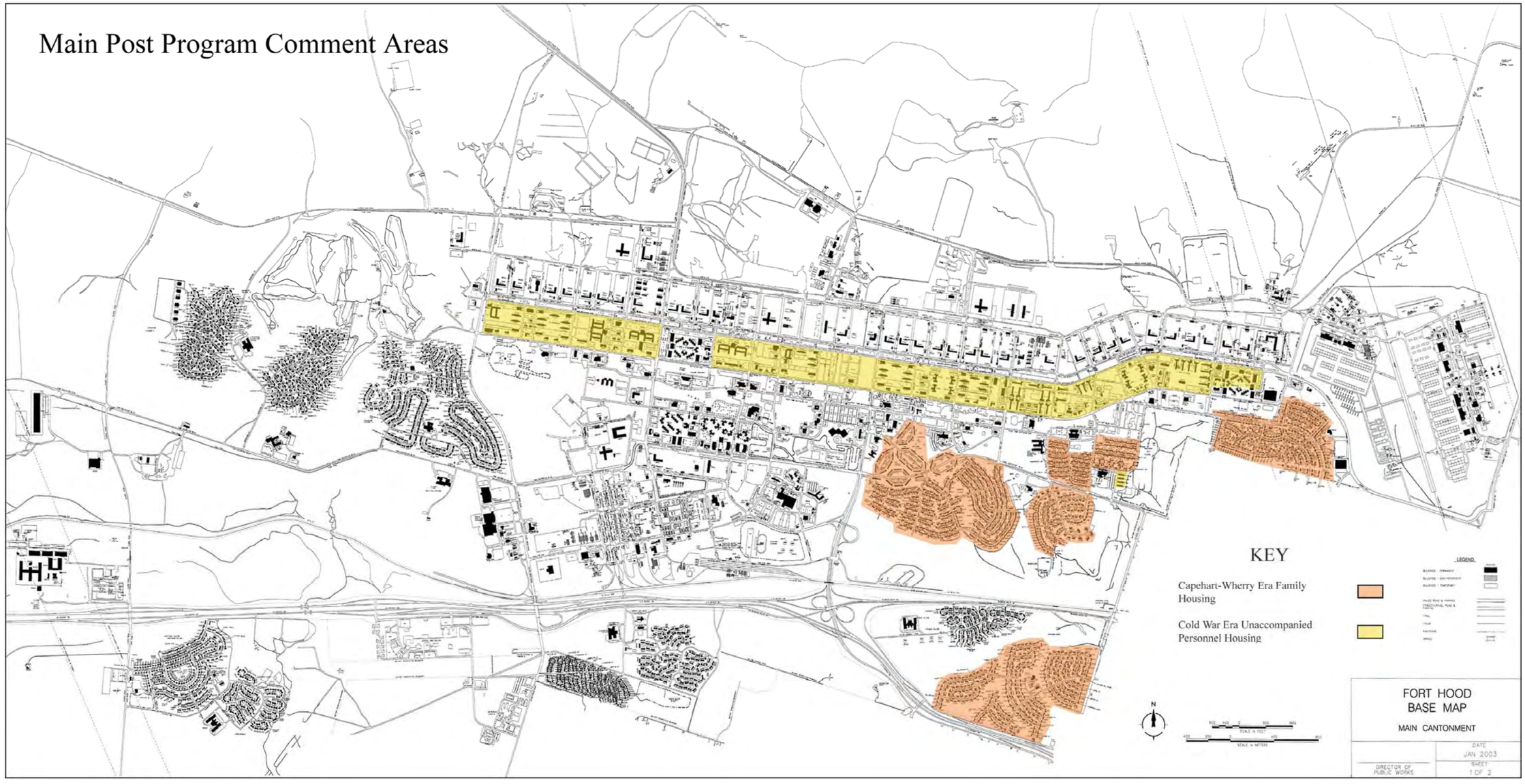

Figure 198. Main Post Program Comment Eligible Areas (ERDC-CERL).

7.3.1.1 Recommendations for the Main Post

- It is recommended that the historic and current land use patterns in the historic district be preserved and any new construction should be sited to maintain these patterns. Existing buildings in the historic districts should retain uses consistent with historic land use patterns.

- It is recommended that Gray Army Airfield retain its consistent land use and general layout when adding new support infrastructure and when making technological advances within the army air mission.

- It is recommended that the historic railroad landscape features and roadway system be preserved. Specifically, the hierarchy of the roadway system should be preserved since the strong east/west roads reinforce the bands of land use and the unique, mission-related layout of the cantonment.

- Historically the housing areas were built along the periphery of the cantonment and it is recommended that this be continued as exemplified by the Capehart-Wherry housing areas. New construction (and additions) should maintain the uniformity and appropriate setbacks established by the streetscape. (See *Neighborhood Design Guidelines for Army Wherry and Capehart Family Housing*, 2003).

- The historic two-division occupancy of the Fort Hood Main Post has resulted in a replicated layout divided by Hood Road. If subsequent evaluation of younger buildings and landscapes determines this layout to be NRHP-eligible, this layout should be preserved as much as possible through future troop realignments.

- The landscape surrounding the current III Corps headquarters building, and in proximity to the original Post Headquarters area is historically significant for its role as ceremonial space, its location along Hood Road and visual location at the entrance to Fort Hood. While the historic "U" shaped layout is gone and the new building is non-contributing, the landscape should remain in ceremonial use and not be developed.

- Where feasible, modifications to existing buildings and new construction in the historic districts should be of a scale consistent with historical landscape precedent. Where feasible, make use of existing building footprints and utility infrastructure.

7.3.2 West Fort Hood

The Killeen Base ("Q" Area) is significant under NRHP Criterion A for its role in the history of United States military nuclear weaponry. The main factory buildings and modified bedrock igloos are also recommended as eligible under NRHP Criterion C for their design. The buildings and landscapes of the "Q" Area form the Killeen Base Historic District (Figure 199), comprised of buildings and structures, circulation networks, original spatial organization and lands uses that retains a high level of integrity and significance.

While several buildings in the Killeen Base "A" Administration area retain individual integrity, not enough physical contextual integrity or documented significance remains for eligibility either as individual structures or for a district nomination under the Killeen Base – Special Weapons Storage theme. Gray Army Airfield contains no landscape characteristics or buildings/structures that meet eligibility requirements due to the extensive modifications, alterations, and demolitions that have occurred in this area for decades.

In addition to the buildings and landscapes at West Fort Hood recommended as eligible under the Fort Hood specific theme, there are three use-types of buildings eligible under program comment agreements: Capehart-Wherry housing (Montague Village), unaccompanied personnel housing, and ammunition storage. The landscapes containing these properties are described herein as Program Comment Areas (Figure 200).[632]

[632] Ammunition storage areas do not appear on the West Fort Hood Program Comment map because they are located within the boundaries of and contributing to the Killeen Base Historic District. Any undertaking to the bunkers should comply with recommendations for the Killeen Base Historic District.

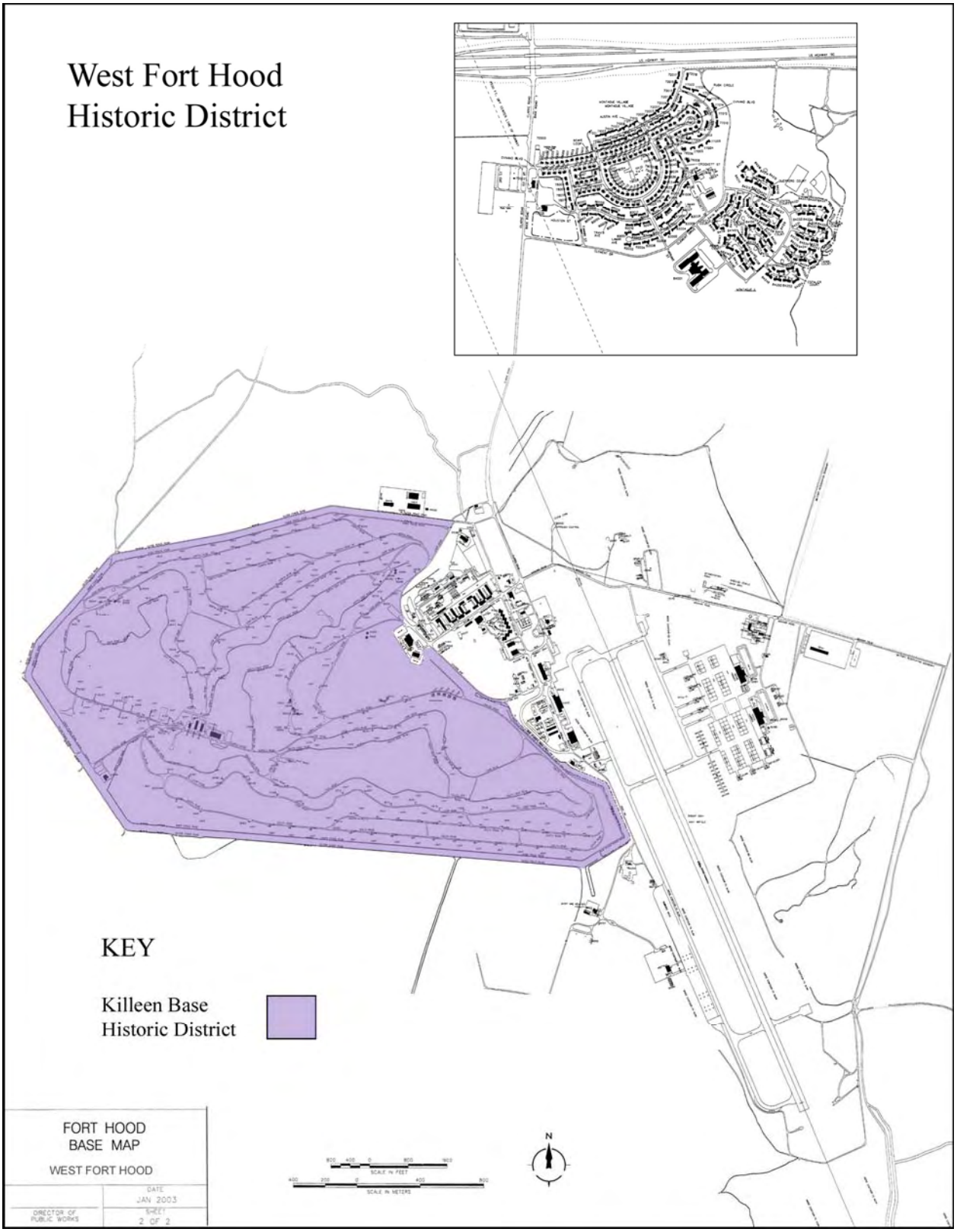

Figure 199. Killeen Base Historic District (ERDC-CERL).

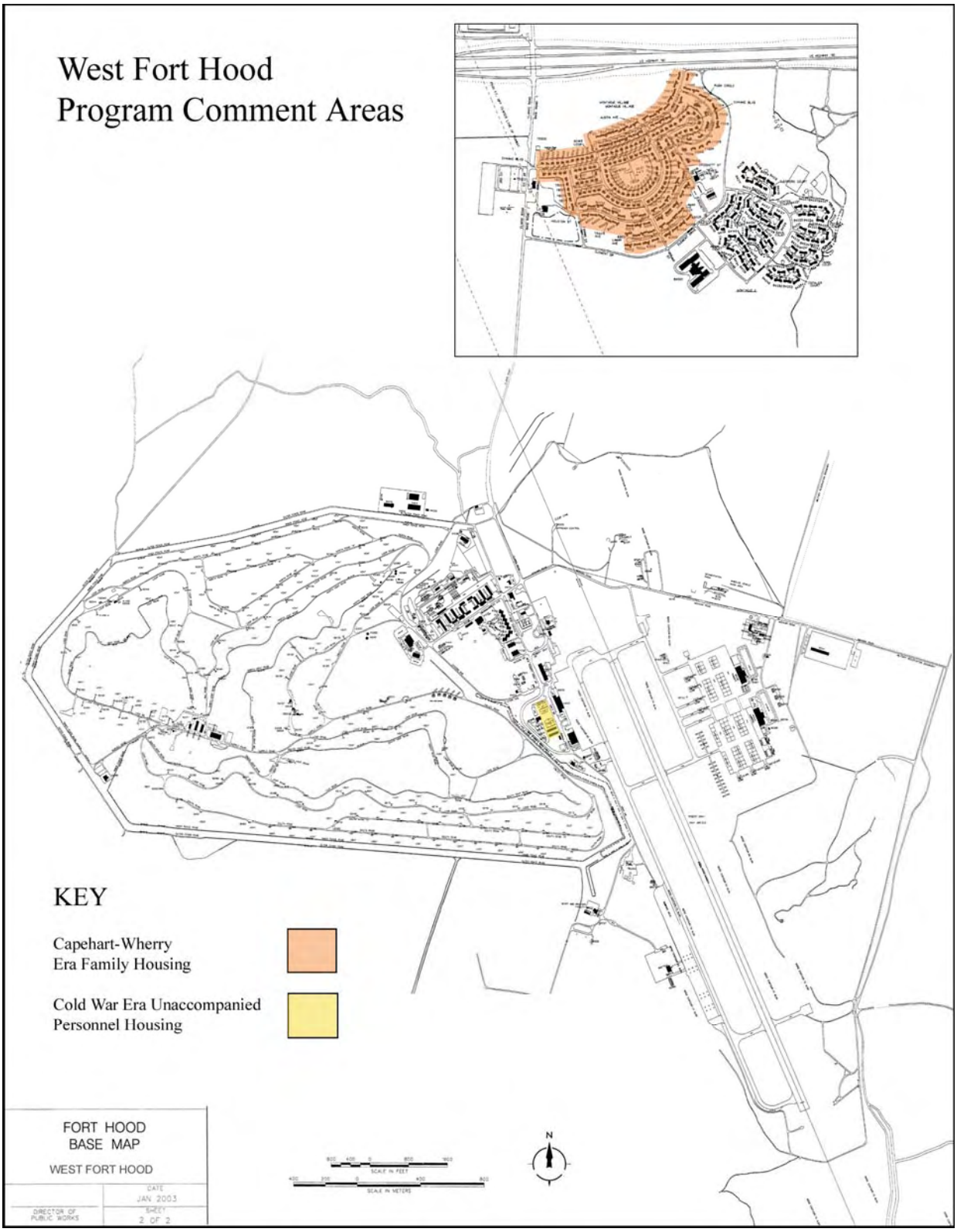

Figure 200. West Fort Hood Program Comment Eligible and Recommended-Eligible Areas (ERDC-CERL).

7.3.2.1 West Fort Hood Recommendations

- No new construction should be allowed within the Killeen Base Historic District and the boundary demarcation for the "Q" Area fence should be preserved.
- Existing buildings in the Killeen Base Historic District should retain uses consistent with historic land use patterns.
- Where feasible, modifications to existing buildings in the Killeen Base Historic District should be of a scale consistent with historical landscape precedent. Where feasible, make use of existing building footprints and utility infrastructure. Any modifications to buildings and structures should be reversible.
- Overgrown vegetation threatening the overall integrity of pillboxes or other buildings and structures should be removed.

7.3.3 North Fort Hood

Although no buildings and landscapes at North Fort Hood were recommended as eligible under any Fort Hood specific themes, there are mess facilities and tent pads eligible under the *Program Comment for Cold War Era Unaccompanied Personnel Housing (1946-1974).* Future undertakings involving these properties should follow the guidance found in the Program Comment.

7.4 Suggestions for Future Research

The creation of this report allows Fort Hood to meet many of its obligations under the NRHP. As with any such work, however, finding answers to some questions only raises others, and some necessary work was outside the scope of this project. Among the items that should be considered for the future are:

- Since this study covers buildings constructed before 1964, it will be necessary to continue the inventory and evaluation of buildings through the entire Cold War period (up until 1989). Preliminary landscape findings in this report from the period 1964-1989 will have to be confirmed or rejected as part of future building evaluations.
- It is recommended that eligible buildings in historic districts not under program comments be mitigated if an undertaking will result in an adverse effect on their historic character. Primary among these are the "Q" Area buildings at Killeen Base, the Main Post motor pool buildings, and the Airfield buildings. The Main Post motor pools are so repetitive; documentation could be conducted on only one sample for each unique type, which could then serve as mitigation for all like complexes. HABS/HAER (Historic American Engi-

neering Record) Level II is recommended as the preferred method of documentation for mitigation purposes.

- Very few buildings at Gray Army Airfield fell into the scope of this study, and most of the air mission support buildings were not included. As they come of age to be inventoried and evaluated, the history of the area will need more extensive investigation, particularly the missions and role of Gray AFB as a SAC base. This information might be located at the Air Force Historical Research Agency.

8 Bibliography

Books/Government Reports/Documents

1st Armored Division Yearbook, Fort Hood, Texas. Doraville, GA: Albert Love Enterprises, Inc., ca. 1965.

2nd Armored Division 1990 Reunion and 50th Anniversary. Fort Hood, Texas (Booklet), 1990. Killeen Public Library, Vertical File "Ft. Hood."

"25 Years of Fort Hood History." Fort Hood History binder, Casey Library, Fort Hood, Texas.

III Armored Corps. "Old Post Chapel Rededication Ceremony: 1942-Camp Hood; 2001-Fort Hood," 2001. (Booklet).

III Corps and Fort Hood Public Affairs Office. "III Mobile Armored Corps, Fort Hood, Texas: First in Army Combat Power." 4th Infantry Division Archives, Box 32 File 4.

III Corps, Fort Hood, Texas. *Celebrating Sixty Years of Excellence, 1942-2002*. III Corps Office, Fort Hood Texas, 2002.

4th Armored Division Yearbook, Fort Hood, TX. Dallas: Taylor Publishing Company, date unknown.

4th Armored Division Yearbook: H&S Company, 508th Tank Battalion. Fort Hood, Texas, August 1956.

4th Infantry Division Museum. *4th Infantry Division Brief History* Fort Hood, Texas, revised March 2000.

About Camp Hood [Guide Book]. Vertical File "Fort Hood History." Killeen Public Library.

Advisory Council on Historic Preservation. *Programmatic Agreement Between the Department of Defense, the Advisory Council on Historic Preservation, and the National Conference of State Historic Preservation Officers,* 1986. https://www.denix.osd.mil/denix/Public/Library/NCR/Documents/PMOA_WWII_Temps_1986-1991_amend.pdf

_____. *Program Comment for Capehart and Wherry Era Army Family Housing and Associated Structures and Landscape Features (1949-1962)*, Washington, DC: Federal Register, Vol. 67, No. 110, June 7, 2002, 39332-39335.

_____. *Program Comment for Cold War Era Unaccompanied Personnel Housing (1946-1974),* 2006, https://www.denix.osd.mil/denix/Public/Library/NCR/program_alternatives.html?fm-culres.

_____. *Program Comment for World War II and Cold War Era (1939-1974) Ammunition Storage Facilities,* 2006, https://www.denix.osd.mil/denix/Public/Library/NCR/program_alternatives.html?fm-culres.

"Army Puts Big Man In Big Job For Camp Hood's Construction." 4th Infantry Division Archives, Fort Hood, Texas. Box 3, File "Diary-Camp Hood 2 of 3."

Bell, William Gardner. *Department of the Army Historical Summary, Fiscal Year 1972.* Fort McNair, DC: Center of Military History, 1974.

Birnbaum, Charles A. *The Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for the Treatment of Cultural Landscapes*. Washington, DC: U.S. Department of the Interior, National Park Service, 1996.

"Black Service Men in WWII." 4th Infantry Division Archives, Fort Hood, Texas. Box 8 File 3.

"Building For The Future." III Corps History Office, Fort Hood, Texas. Vertical File "History of Fort Hood," ca. 1960s.

"Camp Hood Authorized in 1942 and Begun." Fort Hood History Binder. Casey Library, Fort Hood, Texas, 1942.

"Camp Hood Construction." In "Old Tank Destroyer Scrapbook." 4th Infantry Division Archives, Fort Hood, Texas. Box 8, File 3.

"Camp Hood, Killeen, Texas." 4th Infantry Division Archives, Fort Hood, Texas. Box 2.

"Camp Hood, Killeen, Texas: Selection of Site, and Construction." 4th Infantry Division Archives, Fort Hood, Texas. Box 2, April 20, 1950.

Camp Hood, Texas. Published by Southwestern Bell Telephone Co. 4th Infantry Division Archives, Fort Hood, Texas. Box 39 File 10 (96.6).

"Camp Hood, Texas." *Post War Utilization Studies.* Washington, DC: War Department: Office of the Chief of Engineers, Fort Hood, Texas. Vertical File, III Corps History Office, Fort Hood, Texas, 1945.

"Camp Hood Timeline Notes - First TD Center." 4th Infantry Division Archives, Fort Hood, Texas. Box 8, File 3.

The Central Texas Area Welcomes You To…Fort Hood. Lubbock, TX: Marquam and Co., Inc., 1965.

Chief of Staff, USAF to Commanding General, Air Materiel Command, Wright-Patterson AFB, December 10, 1948. RG 341 Entry 494, Box 22 File: Texas 1948 A-L. National Archives and Records Administration, College Park, MD.

"Contractors Start Moving In For Work." In *History of Camp Hood, Killeen Texas.* 4th Infantry Division Archives, Fort Hood, Texas. Box 3, File "Diary-Camp Hood 1 of 3."

Cox, Mike. "Faceoff at Fort Hood." *Fort Hood History File*, Killeen Public Library, 1976.

Daly, William V. "Camp Hood & Camp Bowie, Texas: 1942-1943." 4th Infantry Division Archives, Box 39, 96-8, 1995.

Department of the Army Pamphlet (DA PAM) 200-4: *Cultural Resources Management.* Washington, DC: Headquarters Department of the Army, October 1, 1998.

Department of the Army Pamphlet (DA PAM) 415-28: *Construction, Guide to Army Real Property Category Codes.* Washington, DC: Headquarters Department of the Army, February 11, 2000.

Doherty, Linda L. *An Analysis of Recent Coverage of Ft. Hood, Texas, in the Print Media of Five Surrounding Communities: Temple, Killeen, Belton, Copperas Cove and Gatesville.* M.A. Thesis submitted to the Department of Journalism, University of Wyoming, Laramie, Wyoming, 1978.

Duncan, Gra'Delle. *Killeen: Tale of Two Cities, 1882-1982.* Austin, TX: Eakin Publications, Inc., 1984.

Dunham, Emory, Lt. Col. "Tank Destroyer History." Study No. 29. Washington, DC: Army Ground Forces, Historical Section, 1946.

"Fact Sheet on the 1st Armored Division." Washington, D.C.: The Information Section, Analysis Branch, Headquarters Army Ground Forces. 4th Infantry Division Archives, Fort Hood, Texas. Box 32, File 13, "III Corps," March 1, 1947.

"Fact Sheet on 2nd Armored Division." Washington, D.C.: The Information Section, Analysis Branch, Headquarters Army Ground Forces. 4th Infantry Division Archives, Fort Hood, Texas. Box 32, File 13, "III Corps," March 1, 1947.

Faulk, Odie B. and Laura E. Faulk. *Fort Hood: The First Fifty Years*. Temple, TX: The Frank W. Mayborn Foundation, 1990.

Fifty Years of Excellence: Fort Hood 50th Anniversary: 1942-1992. Washington DC: Department of the Army, 1992.

Fine, Lenore and Jesse A. Remington. *The Corps of Engineers: Construction in the United States (United States Army in World War II: The Technical Services*, Vol. 3*)*. Office of the Chief of Military History, United States Army. Washington, DC: U.S. Government Printing Office, 1972.

"For Escort Officers." 4th Infantry Division Museum Archives, Fort Hood, Texas. Box 4, ca. 1953.

Fort Hood 2001 Guide Book. San Diego: MARCOA Publishing, Inc., 2001.

"Fort Hood, Texas." 4th Infantry Division Archives, Fort Hood, Texas. Box 4, 1954.

"Fort Hood, Texas: History." 4th Infantry Division Archives, Fort Hood, Texas. Box 32 File 13, "III Corps."

Fort Hood, Texas Information Map. III Corps History Office, Fort Hood, Texas. Vertical File "Map of Fort Hood (Feb. 1972)."

Fort Hood, Texas Information Map. III Corps History Office, Fort Hood, Texas. Vertical File "Map of Fort Hood Sept 1984."

Fort Hood Welcomes You. III Corps and Fort Hood, Pamphlet 360-28, 1970.

Gabel, Christopher R. *Seek, Strike, and Destroy: U.S. Army Tank Destroyer Doctrine in World War II*. Leavenworth Papers No. 12. Fort Leavenworth, KS: Combat Studies Institute, U.S. Army Command and General Staff College, September 1985.

Garner, John S. *World War II Temporary Military Buildings: A Brief History of the Architecture and Planning of Cantonments and Training Stations in the United States*. Champaign, IL: U.S. Army Corps of Engineers, Construction Engineering Research Laboratories, 1993.

"Gen. Patterson Discusses Restructuring at Ft. Hood." 1st Cavalry Division Archives, Fort Hood, Texas. Box 11, 1970-1970, Folder DRS, 1976-77, May 24, 1977.

"German POW Information." 4th Infantry Division Archives, Fort Hood, Texas. Box 8 File 3.

Goodwin, R. Christopher and Associates. *Neighborhood Design Guidelines for Army Wherry and Capehart Era Family Housing*. Aberdeen Proving Ground, MD; U.S. Army Environmental Center, 2003.

Griffith, Douglas and Tomme R. Actkinson. *Mnemonic Enhancement and General Technical Ability*. U.S. ARI Field Unit, Fort Hood. September 1978.

Hammernet. Vaughan and Bushnell Manufacturing. http://hammernet.com/anatomy.htm.

"History of Camp Hood." III Corps History Office, Fort Hood, Texas. File: History of Fort Hood; see also Infantry Museum, Box 3, File "Diary-Camp Hood 1 of 3."

Huckerby, Cheryl L. *Fort Hood Integrated Cultural Resource Management Plan: Fiscal Years 2002-2007*. 2001. Fort Hood, Texas: Environmental Division, Directorate of Public Works, 2001.

Humphrey, Walter B. "Two Months Ago Construction Started; In A Little More Than Two Camp Hood Will Be Finished." 4th Infantry Division Archives, Fort Hood, Texas. Box 3, File "Diary-Camp Hood 2 of 3."

Johnson, Briard P. Maj. Gen. *A Condensed History of Hell on Wheels 2D Armored Division*. Evansville, IN: Unigraphic, Inc., 1980.

Kuranda, Kathryn M., Kirsten Peeler, Christine Heidenrich, Carrie Albee, and Katherine Grandine. *Housing an Army: The Wherry and Capehart Era Solutions to the Postwar Family Housing Shortage (1949-1962)*. Aberdeen Proving Ground, MD: U.S. Army Environmental Center, 2003.

Kuranda, Kathryn M., Brian Cleven, and Katherine Grandine. *Unaccompanied Personnel Housing (UPH) During the Cold War (1946-1989)*. Aberdeen Proving Ground, MD: U.S. Army Environmental Center, December 2003.

_____. *Historic Context for Army Fixed-Wing Airfields, 1903-1989*. Aberdeen Proving Ground, MD: U.S. Army Environmental Center, January 2002.

Loechl, Suzanne Keith, Samuel A. Batzli, Susan I. Enscore, and Megan Weaver Tooker. *Guidelines for Documenting and Evaluating Historic Military Landscapes*. Champaign, IL: Construction Engineering Research Laboratory, 1996 [draft].

Lynd, Alice (ed.) *We Won't Go: Personal Accounts of War Objectors*. Boston: Beacon Press, 1968.

Murphey, Joseph, Dwight Packer, Cynthia Savage, Duane Peter, and Marsha Prior. *Army Ammunition and Explosives Storage in the United States, 1775-1945*. Fort Worth: U.S. Army Corps of Engineers Fort Worth District, 2000.

McCarthy, Sheila and Susan Enscore. *Dwelling for Officers and Airmen: The Aero Vista Wherry Housing Project at Biggs Army Airfield/Fort Bliss, Texas*. Champaign, IL: Engineer Research and Development Center, Construction Engineering Research Laboratory, 2001.

McCarthy, Sheila and Roy McCullough. *Fort Hood Military Family Housing of the Cold War Era, McNair Village and Chaffee Village*. Omaha, NE: Midwest Regional Office, National Park Service, Department of the Interior, January 2003.

Moore, Ray C. "Memorandum for Record from Deputy Facilities Manager." III Corps History Office, Fort Hood, Texas. Vertical Files, Organizational History Files 1978, April 7, 1978.

"More Than Just A Camp Being Opened Today." 4th Infantry Division Archives, Fort Hood, Texas. Box 3, File "Diary-Camp Hood 2 of 3."

National Park Service. *National Register Bulletin #15: How to Apply the National Register Criteria for Evaluation*. U.S. Department of the Interior, National Park Service, Interagency Resources Division, 1991.

National Park Service. *National Register Bulletin #16A: How to Complete the National Register Registration Form*. U.S. Department of the Interior, National Park Service, Interagency Resources Division, 1997.

National Park Service. *National Register Bulletin #30: Guidelines for Evaluating and Documenting Rural Historic Landscapes*. U.S. Department of the Interior, National Park Service, Interagency Resources Division, 1992.

"Notes on MCA Construction." III Corps History Office, Fort Hood, Texas. Vertical file A Drawer 5, Folder: Organizational History Files, 1978.

"Notes on Military Construction Activities." III Corps History Office, Fort Hood, Texas. Vertical File, A Drawer 5, Folder: Congressional Relations 1977.

"Operational Test Command (OTC)." http://www.otc.army.mil/Otc/History%20-%20MASSTER.htm.

"Operational Test Command (OTC)." http://www.otc.army.mil/Otc/History%20-%20TCATA.htm.

"Organization of Major Units at Fort Hood." III Corps History Office, Fort Hood, Texas. Vertical File Folder: Congressional Relations, 1977.

Pedrotty, Michael A., Julie L. Webster, Gordon L. Cohen, and Aaron R. Chmiel. *Historical and Architectural Overview of Military Aircraft Hangars: A General History, Thematic Typology, and Inventory of Aircraft Hangars Constructed on Department of Defense Installations*. Langley AFB, VA: HQACC, September 1999, Revised May 2001.

"Perry Approves New Standard for Single Soldier Housing." *American Forces Information Service.* Washington DC: Office of the Assistant Secretary of Defense for Public Affairs, December 11, 1995.

Potter, Lou, William Miles, and Nina Rosenblum. *Liberators: Fighting on Two Fronts in World War II*. New York: Harcourt Brace Jovanovich Publishers, 1992.

"Program & Guide, Official Opening, North Camp Hood." III Corps History Office, Fort Hood, Texas, May 29, 1943.

"Programmatic Agreement between the Department of Defense, the Advisory Council on Historic Preservation, and the National Conference of State Historic Preservation Officers." https://www.denix.osd.mil/denix/Public/Library/NCR/Documents/PMOA_WWII_Temps_1986-1991_amend.pdf.

"Remember When?" 4th Infantry Division Archives, Fort Hood, Texas. Box 39, File 17 "TD Training-Camp Hood."

The Secretary of the Interior's Standards and Guidelines for Federal Agency Historic Preservation Programs Pursuant to the National Historic Preservation Act. (http://www2.cr.nps.gov/pad/ sec110.htm).

Scanlan, Tom (ed.). *Army Times: Guide to Army Posts*. 1st ed. Harrisburg, PA: The Stackpole Company, 1963.

Sees, Cliff. "Tank Destroyer Tactical and Firing Center soldier shares stories." *The Fort Hood Sentinel, Special Supplement, Fort Hood 50th Anniversary*, July 2, 1992.

"Standard Airport Facilities Record." 4th Infantry Division Archives, Fort Hood, November 20, 1943.

Bell County Historical Commission. *Story of Bell County, Texas*. Vol. I. Austin, TX: Eakin Press, 1988.

Talaber, Adam. *Options for Restructuring the Army*, "How Army Units Are Used in the Field" [sec 3]. Washington DC: Congressional Budget Office, May 2005.

"Tank Destroyer Scrapbook." 4th Infantry Division Archives, Fort Hood, Texas. Box 8, File 3.

Trahan, E.A. Lt. Col. (ed.). *A History of the United States Second Armored Division: 1940 to 1946*. Atlanta: Albert Love Enterprises, 1947.

United States Army. *What They Said About the Fourth Armored Division*. Landshut, Germany: 4th Armored Division, Public Relations Section, 1945.

United States Army, 5th Tank Destroyer Group. *History of Fifth Tank Destroyer Group From Activation 1 September 1942 to V-E Day, 9 May 1945*.

United States Army Environmental Center. *Thematic Study and Guidelines: Identification and Evaluation of U.S. Army Cold War Era Military-Industrial Historic Properties*. Aberdeen Proving Ground, MD: U.S. Army Environmental Center, 1998.

United States Congress, House of Representatives Committee on Appropriations. *Military Construction Appropriations for 1958: Hearings Before the Subcommittee of the Committee on Appropriations, House of Representatives, Eighty-fifth Congress, First Session, Department of the Army*. Washington, DC: Government Printing Office, 1957.

United States Congress, Senate Committee on Armed Services, Subcommittee on Military Construction. *Fort Hood Land Acquisition: Hearings Before the Subcommittee on Military Construction of the Committee on Armed Services, United States Senate (94th Cong. 2d Sess.), Killeen, Texas, Gatesville, Texas, March 5 and 6, 1976*. Washington, DC: Government Printing Office, 1976.

United States Congress, Senate Committee on Armed Services, Preparedness Investigating Subcommittee. *Investigation of the Preparedness Program: Report by Preparedness Investigating Subcommittee of the Committee on Armed Services United States Senate, under the Authority of S. Res. 212 (89th Cong. 1st Sess.) on the Combat Readiness of the 4th Infantry Division, Fort Lewis, Wash.; 5th Infantry Division (Mechanized), Fort Carson, Colo.; 1st Armored Division, Fort Hood, Tex.; 2D Armored Division, Fort Hood, Tex.* Washington, DC: Government Printing Office, 1966.

United States Congress, Senate Committee on Armed Services, Preparedness Investigating Subcommittee. *Investigation of the Preparedness Program: Report by Preparedness Investigating Subcommittee of the Committee on Armed Services United States Senate, under the Authority of S. Res. 225 (90th Cong. 2d Sess.) on the Combat Readiness of Army and Marine Corps Divisions in the United States.* Washington, DC: Government Printing Office, 1968.

Wasch, Diane Shaw, Perry Bush, Keith Landreth, and James Glass. *World War II and the U.S. Army Mobilization Program: A History of 700 and 800 Series Cantonment Construction*. Washington, DC: National Park Service, Department of the Interior, 1993.

Weitze, Karen J. *Cold War Properties at West Fort Hood: Research Overview and Preliminary Identification*. Austin, TX: Prewitt and Associates, Inc., May 2005.

Winkler, David F. *Searching the Skies: The Legacy of the United States Cold War Defense Radar Program*. Champaign, IL; U. S. Army Construction Engineering Research Laboratories, 1997.

Fort Hood Maps, Plans and Drawings

524th Engineer Corps, Fort Hood, Texas. "North Fort Hood, Special Map Sheets 1 and 2." Corps Engineer, III Corps, Fort Hood, Texas. General Base Map was compiled by U.S. Army Engineer District, Fort Worth, Texas, May 1971.

"Aerial Image of Fort Hood Main Post." Cultural Resources Office, Fort Hood, Texas, 2003.

Black and Veatch and War Department. "Plan for Water Supply and General Layout for Housing Area Utilities." Department of Public Works, Fort Hood, Texas, June 2, 1947. Revised as built 1950 (Fort Hood).

_____. "Water Supply, General Layout Housing Area Utilities." Department of Public Works, Fort Hood, Texas, June 2, 1947. Revised as built 1950.

Black and Veatch. "Family Housing, General Layout, Camp Hood." Department of Public Works, Fort Hood, Texas, April 1, 1949 Revised as built, January 21, 1953.

Bohannan-Huston, Inc. "Base Map Fort Hood, Texas." U.S. Army Engineer District Fort Worth, Corps of Engineers, Fort Worth, Texas, January 1989.

_____. "Base Map North Fort Hood, Texas." U.S. Army Engineer District Fort Worth, Corps of Engineers, Fort Worth, Texas, January 1989.

"Camp Hood Range Map, G-3 Section, H.Q. T.D.C." Department of Public Works, Fort Hood, Texas, May 12, 1943.

Directorate of Public Works, Fort Hood, Texas. "North Fort Hood Base Map." Directorate of Public Works, Fort Hood Texas, January 2003.

_____. *Fort Hood Installation Design Guide, Installation Profile, Chapter 4,* "Existing Land Use Map." Figure 4-11. Date unknown.

_____. "West Fort Hood Base Map." Directorate of Public Works, Fort Hood Texas, January 2003.

_____. "Fort Hood Base Map". Directorate of Public Works, Fort Hood Texas, January 2003.

Drawing 21-01-67, Sheets 6 and 7 of 44. Drawings on file at the Fort Hood Department of Public Works, Fort Hood, Texas.

Drawing 21-06-64, Sheets 1 and 4 of 72. Drawings on file at the Fort Hood Department of Public Works, Fort Hood, Texas.

Drawing 21-01-121, Sheets 5-A through 7-A. Drawings on file at the Fort Hood Department of Public Works, Fort Hood, Texas, 1955.

Drawing 21-01-64. Drawings on file at the Fort Hood Department of Public Works, Fort Hood, Texas, 1951.

Drawing 21-01-142, Sheet 5. Drawings on file at the Fort Hood Department of Public Works, Fort Hood, Texas, 1959.

"Installation of Steel Projecting Windows & Ridge Ventilators in Buildings 707 & 708." Drawing on file at the Fort Hood Department of Public Works, Fort Hood, Texas, June 19, 1958.

"Killeen Base; General Layout and Building Use Map." April 23, 1953.

"Killeen Base, Site Plan, Proposed Railroad Spur." December 19, 1952.

"Killeen Base, Killeen, Texas." February 9, 1958.

"Layout of Tank Destroyer School." Department of Public Works, Fort Hood, Texas, 1946 (revised 1953).

"Map of North Camp Hood Cantonment." Department of Public Works, Fort Hood, Texas, April 24, 1943.

"North Camp Hood General Site Plan and Building Use Map." Office of the Post Engineer, Camp Hood, Texas. April 1, 1949, revised February 20, 1950.

"North Fort Hood." 4th Infantry Division Archives, Fort Hood, Texas, 1943-44.

Office of the Base Engineer, Killeen Base, Texas. "Master Plan, Basic Information Building Use Map, Adm. Area." January 25, 1961.

Office of the Post Engineer, Camp Hood, Texas. "Aerial Map of North Fort Hood," June 1, 1943.

Office of the Post Engineer, Fort Hood, Texas. "Master Plan Fort Hood, Detail Site and Building Use Plan, Block 28." Directorate of Public Works, Fort Hood, Texas. October 15, 1946, revised February 20, 1953.

_____. "Master Plan Fort Hood, General Recreation Map." Directorate of Public Works, Fort Hood, Texas. October 15, 1946, revised February 20, 1953.

_____. "Master Plan Fort Hood, General Tree Cover Map." Directorate of Public Works, Fort Hood, Texas. October 15, 1946, revised February 20, 1953.

_____. "Master Plan Fort Hood, Plan for Future Development, General Site and Building Use Map." Directorate of Public Works, Fort Hood, Texas, September 16, 1947.

_____. "North Fort Hood Detail Site and Building Use Plan, Blocks 8700, 8900 & 9100, Sheet No. 54." Directorate of Public Works, Fort Hood, Texas, February 20, 1953.

_____. "North Fort Hood General Site Plan and Building Use Map, Sheet No. 53." Directorate of Public Works, Fort Hood, Texas, February 20, 1953.

_____. "North Camp Hood General Site Plan and Building Use Map, Sheet 37 of 40." Directorate of Public Works, Fort Hood, Texas. April 1, 1949, revised February 20, 1950.

"Proposed Camp Site Armored Division Killeen Texas." Attached to "Engineering Features of Proposed Army Camp Site Report" from Wyatt C. Hendrick, Inc. Architects and Engineers to Zone Constructing Quartermaster at Fort Sam Houston. RG 77, Series Security-Classified Subject Files, 1940-1945, Box 482, File: 685 Camp Hood. National Archives and Records Administration, College Park, MD, September 20, 1941.

Public Roads Administration, Federal Works Agency. "Transportation Map of Killeen Armored Division Camp, Texas," 1941.

Headquarters, Tank Destroyer Center. "Camp Hood Range Map." Directorate of Public Works, Fort Hood, Texas, May 12, 1943.

"TDRTC Area Map" from *Welcome to the Tank Destroyer Replacement Training Center, North Camp Hood, Texas*, 1943-44. 4th Infantry Division Museum, Fort Hood Texas. Folder "Camp Hood Photos, WWII".

Tears Engineers. "Gray Air Force Base, Hydrant Refueling and Bulk Storage Facilities." Fort Worth, Texas: Corps of Engineers, May 1, 1953.

Texas State Highway Department. "General Highway Map, Coryell County, TX." In cooperation with the U.S. Department of Agriculture Bureau of Public Roads. Directorate of Public Works, Fort Hood, Texas, 1936.

U.S. Army Corps of Engineers, Office of the District Engineer, Fort Worth, Texas. "Fort Hood, Texas, Project Location Map, NCO Open Mess and Pool." May 1956.

U.S. Engineer Office, San Antonio District, Fort Sam Houston, Texas. "Camp Hood, Texas, Housing for Civilian War Workers, Vicinity Map." July 1942.

_____. "Camp Hood, Texas, Tank Destroyer Center, Plan of Cantonment." October 25, 1943, revised May 13, 1944.

U.S. Geological Survey. "McMillan Mountains, Texas, SE/4 Fort Hood 15' Quadrangle." Map Room, General Libraries, University of Texas, Austin. 1958, photorevised 1978.

U.S. War Department, Corps of Engineers. "Prisoners of War Burial Plot at North Camp Hood." Office of the Post Engineer, Camp Hood, Texas. November 26, 1943.

Williams-Stackhouse Incorporated. "Base Map, West Fort Hood, Killeen Texas." Fort Worth, Texas: U.S. Army Corps of Engineers. March 1977.

_____. "Base Map, Fort Hood, Killeen, Texas." Fort Worth, Texas: U.S. Army Corps of Engineers. March 1977.

Periodicals

Army History:
PB-20-90-1 (No. 14) April 1990; PB-20-91-1 (No. 17) Winter 1990/1991; PB-20-91-3 (No. 19) Summer 1991; PB-20-91-4 (No. 20) Fall 1991; PB-20-92-1 (No. 21) Winter 1991/1992; PB-20-92-2 (No. 22) Spring 1992.

Baldwin, William C. "Wherry and Capehart: Army Family Housing Privatization Programs in the 1950s." *Engineer,* April 1996:42-44.

Clark, Mark Edmond. "General Maxwell Taylor and His Successful Campaign Against the Strategy of Massive Retaliation." *Army History* PB-20-90-3 (No. 16) Fall 1990.

Dyer, Phillip A. "World's Best Tankers: Fifty Years of 'Forging the Thunderbolt'." *Army History* PB-20-90-2 (No. 15) Summer 1990.

Focus. III Corps History Office, Vertical files, B Drawer 2, Folder: May – June 1975 Articles, May 11, 1975.

Fort Hood Public Affairs Office. "Post of the Month: Fort Hood, Texas." *U.S. Lady* (December) 1964: 14-19

Hall, Michael. "Viva Fort Hood." *Texas Monthly:* December 2000.

Life Magazine. July 7, 1971.

"Military Construction Program Booms at Armored Force Training Center." *Engineering-News Record*: 17 July 1952.

McNair, Lesley J. "Training Philosophy for a New Army." *Army History* PB-20-91-1 (No. 17) Winter 1990/1991.

Morgan, Thomas D. "Wargames: Training for War." *Army History* PB-20-91-3 (No. 19) Summer 1991.

Morriss, Mack (Sgt.). "Tank Destroyers." *Yank* 1, no. 17 (October 7, 1942): 5-7.

Rogers, Charles A. "A Division is Reborn." *Armor* July-August 1954. (Unit Histories I Binder, Casey Library).

Tygiel, Jules. "The Court-Martial of Jackie Robinson." *American Heritage* 35 no. 5 (August-September 1984): 34-39.

Williams, Gurney. "Tank Stoppers." *Collier's Magazine* September 12, 1942: 60-61.

Newspapers

Army Times

August 16, 1976; September 6, 1976.

Austin American-Statesman

February 19, 1975; June 22, 1978.

The Armored Sentinel (Fort Hood)

January 15, 1953; June 4, 1953; July 30, 1953; August 27, 1953; April 29, 1954; March 17, 1955; February 28, 1957; April 4, 1957; April 11, 1957; April 18, 1957; May 30, 1957; September 19, 1957; September 21, 1957; October 3, 1957; October 17, 1957; January 1, 1958; July 31, 1958; August 29, 1958; September 19, 1958; November 5, 1958; January 16, 1959; February 6, 1959; March 27, 1959; March 31, 1959; June 5, 1959; September 25, 1959; September 26, 1959; November 13, 1959; January 29, 1960; April 27, 1960; April 29, 1960; June 17, 1960; July 29, 1960; August 12, 1960; August 19, 1960; September 9, 1960; January 5, 1962; June 17, 1963; October 25, 1963; November 23, 1963; December 6, 1963; January 3, 1964; September 20, 1965; September 21, 1967; July 11, 1969; February 12, 1953; June 4, 1953; July 7, 1953; July 30,1953; August 27, 1953; April 29, 1954; February 7, 1957; January 1, 1958; July 31, 1958; August 29, 1958; June 19, 1959; June 24, 1960; July 8, 1960; August 19, 1960; September 16, 1960; September 30, 1960; October 7, 1960; November 10, 1960; November 18, 1960; December 9, 1960; February 10, 1961; March 10, 1961; May 5, 1961; May 19, 1961; June 9, 1961; June 30, 1961; November 3, 1961; January 1, 1962; January 5, 1962; July 13, 1962; August 17, 1962; September 14, 1962; September 28, 1962; October 19, 1962; January 4, 1963; February 2, 1963; March 8, 1963; May 3, 1963; May 17, 1963; May 19, 1961; May 31, 1963; June 11, 1963; June 14, 1963; October 11, 1963; October 29, 1963; October 25, 1963; November 11, 1963; November 22, 1963; December 6, 1963; January 3, 1964; March 20, 1964; April 3, 1964; May 1, 1964; December 11, 1964; January 6, 1965; January 8, 1965; March 12, 1965; March 26, 1965; June 17, 1965; April 16, 1965; April 23, 1965; September 10, 1965; September 25, 1965; October 22, 1965; January 6, 1967; August 11, 1967; September 18, 1967; September 21, 1967; September 29, 1967; November 24, 1967; October 18, 1968; October 21, 1968; July 11, 1969; January 30, 1970; April 17, 1970; July 30, 1970; December 4, 1970; January 8, 1971; May 7, 1971; May 17, 1971; May 28, 1971; September 17, 1971; January 1, 1972; August 25, 1972; July 2, 1992; July 1993.

The Camp Hood News

September 14, 1944; September 20, 1945.

Dallas Times-Herald

March 11, 1975.

Dallas Morning News

August 31, 1975; June 23, 1978.

Fort Hood Sentinel

February 28, 1975; April 16, 1976; August 16, 1976; September 15, 1977; June 22, 1978; June 7, 1979, January 3, 1980; October 8, 1981; April 28, 1983; July 24, 1986; July 2, 1992; July 4, 2002.

Fort Worth Press

February 10, 1943.

Gatesville Messenger

November 6, 1975; June 3, 1976.

Hell on Wheels

May 9, 1946.

The Hood Panther

December 10, 1942; May 27, 1943.

Harker Heights Tribune

September 7, 1983.

Killeen Daily Herald

January 16, 1942; March 19, 1953; August 27, 1953; January 1, 1965; September 21, 1967; September 30, 1969; February 6, 1972; May 27, 1973; June 9, 1974; August 31, 1975; September 11, 1975; October 1, 1975; July 14, 1972; July 15, 1975; October 1, 1975; April 1, 1976; May 7, 1976; June 28, 1976; August 22, 1976; September 22, 1976; December 12, 1976; September 18, 1977; February 20, 1978; March 3, 1979; May 15, 1980; September 7, 1980; March 15, 1981; September 5, 1982; September 15, 1982; September 16, 1982; September 17, 1982; January 2, 1987; July 8, 1988; December 26, 1988; May 10, 1992; September 18, 1992.

Lampasas Dispatch

March 10, 1975, March 24, 1975.

Temple Daily Telegram

January 15, 1942; March 8, 1942; September 18, 1960, November 19, 1965; December 10, 1965; September 22, 1967; January 22, 1968, May 17, 1968; June 27, 1968; August 15, 1968; June 11, 1970; October 15, 1971; October 25, 1971; January 31, 1975; March 5, 1975; March 11, 1975; April 3, 1975; May 13, 1975; July 27, 1975; August 14, 1975; January 1, 1976; May 10, 1980; September 4, 1983.

Temple Daily Times

August 24, 1975; September 11, 1980; January 2, 1987.

Photographs

Photographs on file at the 1st Cavalry Museum. Fort Hood, Texas.

Photographs on file at the 4th Infantry Division Museum. Fort Hood, Texas.

Photographs on file at the Fort Hood Community Relations/III Corps History Office, Fort Hood, Texas.

Photographs on file at the Fort Lewis Cultural Resource Management office. Building 2012, Fort Lewis, Washington.

Photographs on file at the Fort Lewis Museum. Building 4320, Fort Lewis, Washington.

Photographs on file at the National Archives and Records Administration. College Park, Maryland.

Photographs in the personal collection of Julie L. Webster.

Interviews

Waters, Ted. Army Reserve Affairs. Telephone interview by Susan Enscore. Fort Hood, June 23, 2005.

Appendix: Building Inventory Forms

Key to building inventory forms

IDENTIFICATION	
Current Building #	Facility designation given to the property for tracking purposes in the Army's Integrated Facilities System (IFS). This number is the primary identifier for all properties.
Original Building #	Facility designation given to the property prior to its current designation. This number can be used by researchers to identify the property in historical reference material. The primary sources of Original Building # for this study were real property cards and drawings.
Building Name	Common or commemorative title given to the property.
Owner	Federal agency responsible for property. The Department of the Army is the sole owner for all properties covered by this study.
Post Location	Sub-installation in which the property resides.
Address	Street name or other location designator. Note that installation properties rarely have precise street addresses.
CATCODE	Five digit real property category coding system used to account for and control facilities on military installations. The first digit represents one of nine facility classes; the second digit represents the facility category group; the third digit represents the basic category within a group; the fourth and fifth digits represent the specific property within a basic category.
Current Use	Functional title associated with the property CATCODE.
Early Use	Facility use associated with the property prior to its Current Use designation. The primary sources of Early Use were real property cards, drawings, and drawing logs. Key secondary sources were Weitze 2005 and the Fort Hood ICRMP.
NATIONAL REGISTER ELIGIBILITY	
Eligibility Status	Final NRHP eligibility determination. The property was determined to be either 'eligible' or 'not eligible' based on whether or not it possessed significance and integrity.
Eligibility Type	If found eligible for the NRHP, the property was categorized as being 'individually eligible' or eligible as a 'contributing element in a district'.
Theme/District	Theme or district associated with an identified important historical association, and a means of organizing significant properties into coherent groups.
Significance Criteria	National Register Criteria for Evaluation criterion that describes how the property is significant for its historical association. The four criteria are: A (event), B (person), C (design/construction), and D (information potential).
Integrity Aspects	Seven characteristics that the property can possess to retain its integrity and convey its significance, including: Location, Design, Setting, Materials, Workmanship, Feeling, and Association.
Significance	Narrative description of the property's links to the relevant Criteria for Evaluation that lead to a National Register eligibility determination. This is established by evaluating the property within its historic context.

SOURCES OF INFORMATION	
Primary reference material used to produce the building inventory forms.	
POJECT INFORMATION	
Surveyors	ERDC-CERL assessors that produced this study.
Affiliation	ERDC-CERL name and mailing address.
Survey Dates	Dates of onsite fieldwork at Fort Hood.
PHYSICAL DESCRIPTION	
Year Completed	Construction completion date. The primary sources of Year Completed were IFS and real property cards; key secondary sources were Weitze 2005 and the Fort Hood ICRMP. Where no definitive date was found in the above sources, drawings and drawing logs were used to approximate construction dates. It should be noted that dates associated with property transfers between military services were not used.
Original Cost	Cost of original construction (in $US) as documented on available real property cards. Note that Original Cost for West Fort Hood properties may be interim 1963 and 1969 values.
Construction Type	Facility designation tied to the expected length of occupancy (e.g. temporary buildings have an expected occupancy of 3 years or less).
Condition	General condition of the property at the time of field investigations.
Integrity	General integrity of the property at the time of field investigations.
Building Style	Architectural style, standard military building type, or general building category of the property.
Current Plan #	Drawing number assigned to Fort Hood cartographic material during digitization. This number can be used to retrieve drawings from the Fort Hood automated drawing system. Only drawings for which electronic files were obtained by ERDC-CERL are documented here.
Original Plan #	Designation for drawings used to construct the property. The primary source for Original Plan # was real property cards.
Designer	Architectural and/or engineering firm or licensed professional responsible for the property's design. The primary source for Designer was drawings.
Builder	Construction contractor responsible for building the property. The primary source for Builder was real property cards.
Area	Figure for the usable area of the property in square feet.
Plan Shape	General building footprint descriptor.
Stories	Number of floors above grade that make up the property.
Basement	Y (yes)/N (no) designation indicating whether or not the property had a level below-grade.
Foundation Matl	Structural underpinning of the property that rests directly on the earth and carries the load of the superstructure above.
Structural Matl	Component material that supports the weight of the building, its contents, and resist dynamic loads such as wind, snow, and seismic forces.
Cladding Matl	Exterior, nonstructural finish material on a building.
Roof Shape	Roof form that caps a building (e.g. gable, gambrel, or shed).
Roof Material	Finish material that covers a roof (e.g. asphalt shingle, built-up roofing, or corrugated metal).
Roof Pitch	Slope of the roof in relation to the horizontal.
Window Type	Style of window (e.g. double hung, hopper, awning, or storefront). Original windows were designed with (orig).

Window Lite(s)	Number and configuration of lights (individual panes of glass) within a window sash.
Window Material	Component material of a window assembly.
Window Grouping	Arrangement of windows on the building façade (e.g. single, double, or banded).
Porch Type	Style and/or configuration of the property's covered entrance.
Porch Placement	Location of the porch on a building (e.g. front or side).
Porch Roof Shape	Roof form over the porch.
Porch Materials	Component materials of the porch.
Door Type/Config	Style and/or arrangement of doors (e.g. single, double, or overhead). Original doors were designed with (orig).
Door Matl/Traits	Component material and/or door properties (e.g. metal flush or wood panel).
Other Features	Other architectural, engineering, or functional attributes of the property.
Alterations/Additions	Changes made to the property over time that may affect its integrity. Other special notes on the property are presented here as well.
PHOTOGRAPHS	
File Name	File Name corresponds to the electronic graphic file of the field photograph, and is used to import photographs into the inventory form.
Photographer	All photographs presented on the inventory forms were taken by Martin Stupich, professional photographer.
Photo Date	Date photograph was taken during onsite fieldwork at Fort Hood.
DRAWINGS	
File Name	File Name corresponds to the Current Plan # noted above, and is used to import drawings into the inventory form.
IDENTIFICATION	
Current Building #	Facility designation given to the property for tracking purposes in the Army's Integrated Facilities System (IFS). This number is the primary identifier for all properties.
Original Building #	Facility designation given to the property prior to its current designation. This number can be used by researchers to identify the property in historical reference material. The primary sources of Original Building # for this study were real property cards and drawings.
Building Name	Common or commemorative title given to the property.
Owner	Federal agency responsible for property. The Department of the Army is the sole owner for all properties covered by this study.
Post Location	Sub-installation in which the property resides.
Address	Street name or other location designator. Note that installation properties rarely have precise street addresses.
CATCODE	Five digit real property category coding system used to account for and control facilities on military installations. The first digit represents one of nine facility classes; the second digit represents the facility category group; the third digit represents the basic category within a group; the fourth and fifth digits represent the specific property within a basic category.
Current Use	Functional title associated with the property CATCODE.
Early Use	Facility use associated with the property prior to its Current Use designation. The primary sources of Early Use were real property cards, drawings, and drawing logs. Key secondary sources were Weitze 2005 and the Fort Hood ICRMP.

NATIONAL REGISTER ELIGIBILITY	
Eligibility Status	Final NRHP eligibility determination. The property was determined to be either 'eligible' or 'not eligible' based on whether or not it possessed significance and integrity.
Eligibility Type	If found eligible for the NRHP, the property was categorized as being 'individually eligible' or eligible as a 'contributing element in a district'.
Theme/District	Theme or district associated with an identified important historical association, and a means of organizing significant properties into coherent groups.
Significance Criteria	National Register Criteria for Evaluation criterion that describes how the property is significant for its historical association. The four criteria are: A (event), B (person), C (design/construction), and D (information potential).
Integrity Aspects	Seven characteristics that the property can possess to retain its integrity and convey its significance, including: Location, Design, Setting, Materials, Workmanship, Feeling, and Association.
Significance	Narrative description of the property's links to the relevant Criteria for Evaluation that lead to a National Register eligibility determination. This is established by evaluating the property within its historic context.
SOURCES OF INFORMATION	
Primary reference material used to produce the building inventory forms.	
PROJECT INFORMATION	
Surveyors	ERDC-CERL assessors that produced this study.
Affiliation	ERDC-CERL name and mailing address.
Survey Dates	Dates of onsite fieldwork at Fort Hood.
PHYSICAL DESCRIPTION	
Year Completed	Construction completion date. The primary sources of Year Completed were IFS and real property cards; key secondary sources were Weitze 2005 and the Fort Hood ICRMP. Where no definitive date was found in the above sources, drawings and drawing logs were used to approximate construction dates. It should be noted that dates associated with property transfers between military services were not used.
Original Cost	Cost of original construction (in $US) as documented on available real property cards. Note that Original Cost for West Fort Hood properties may be interim 1963 and 1969 values.
Construction Type	Facility designation tied to the expected length of occupancy (e.g. temporary buildings have an expected occupancy of 3 years or less).
Condition	General condition of the property at the time of field investigations.
Integrity	General integrity of the property at the time of field investigations.
Building Style	Architectural style, standard military building type, or general building category of the property.
Current Plan #	Drawing number assigned to Fort Hood cartographic material during digitization. This number can be used to retrieve drawings from the Fort Hood automated drawing system. Only drawings for which electronic files were obtained by ERDC-CERL are documented here.
Original Plan #	Designation for drawings used to construct the property. The primary source for Original Plan # was real property cards.
Designer	Architectural and/or engineering firm or licensed professional responsible for the property's design. The primary source for Designer was drawings.
Builder	Construction contractor responsible for building the property. The primary source for Builder was real property cards.
Area	Figure for the usable area of the property in square feet.

Plan Shape	General building footprint descriptor.
Stories	Number of floors above grade that make up the property.
Basement	Y (yes)/N (no) designation indicating whether or not the property had a level below-grade.
Foundation Matl	Structural underpinning of the property that rests directly on the earth and carries the load of the superstructure above.
Structural Matl	Component material that supports the weight of the building, its contents, and resist dynamic loads such as wind, snow, and seismic forces.
Cladding Matl	Exterior, nonstructural finish material on a building.
Roof Shape	Roof form that caps a building (e.g. gable, gambrel, or shed).
Roof Material	Finish material that covers a roof (e.g. asphalt shingle, built-up roofing, or corrugated metal).
Roof Pitch	Slope of the roof in relation to the horizontal.
Window Type	Style of window (e.g. double hung, hopper, awning, or storefront). Original windows were designed with (orig).
Window Lite(s)	Number and configuration of lights (individual panes of glass) within a window sash.
Window Material	Component material of a window assembly.
Window Grouping	Arrangement of windows on the building façade (e.g. single, double, or banded).
Porch Type	Style and/or configuration of the property's covered entrance.
Porch Placement	Location of the porch on a building (e.g. front or side).
Porch Roof Shape	Roof form over the porch.
Porch Materials	Component materials of the porch.
Door Type/Config	Style and/or arrangement of doors (e.g. single, double, or overhead). Original doors were designed with (orig).
Door Matl/Traits	Component material and/or door properties (e.g. metal flush or wood panel).
Other Features	Other architectural, engineering, or functional attributes of the property.
Alterations/Additions	Changes made to the property over time that may affect its integrity. Other special notes on the property are presented here as well.
PHOTOGRAPHS	
File Name	File Name corresponds to the electronic graphic file of the field photograph, and is used to import photographs into the inventory form.
Photographer	All photographs presented on the inventory forms were taken by Martin Stupich, professional photographer.
Photo Date	Date photograph was taken during onsite fieldwork at Fort Hood.
DRAWINGS	
File Name	File Name corresponds to the Current Plan # noted above, and is used to import drawings into the inventory form.

Fort Hood building forms

See Volume 2 for Main Post and Volume 3 for North Fort Hood and West Fort Hood.

REPORT DOCUMENTATION PAGE

Form Approved
OMB No. 0704-0188

1. REPORT DATE (DD-MM-YYYY)	2. REPORT TYPE	3. DATES COVERED (From - To)
March 2007	Final	

4. TITLE AND SUBTITLE
Fort Hood Building and Landscape Inventory with WWII and Cold War Context

5a. CONTRACT NUMBER

5b. GRANT NUMBER

5c. PROGRAM ELEMENT NUMBER

6. AUTHOR(S)
Julie Webster, Megan Tooker, Dawn Morrison, Susan Enscore, Suzanne Loechl, and Martin Stupich

5d. PROJECT NUMBER

5e. TASK NUMBER

5f. WORK UNIT NUMBER

7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES)
U.S. Army Engineer Research and Development Center (ERDC)
Construction Engineering Research Laboratory (CERL)
PO Box 9005
Champaign, IL 61826-9005

8. PERFORMING ORGANIZATION REPORT NUMBER
ERDC/CERL TR-07-7

9. SPONSORING / MONITORING AGENCY NAME(S) AND ADDRESS(ES)
DPW-ENV-NR
4612 Engineer Drive, RM 76
Fort Hood, Texas
76544-5028

10. SPONSOR/MONITOR'S ACRONYM(S)

11. SPONSOR/MONITOR'S REPORT NUMBER(S)

12. DISTRIBUTION / AVAILABILITY STATEMENT
Approved for public release; distribution is unlimited.

13. SUPPLEMENTARY NOTES
Copies are available from the National Technical Information Service, 5285 Port Royal Road, Springfield, VA 22161.

14. ABSTRACT

This report inventories and evaluates, in terms of recommended eligibility for the National Register of Historic Places, all of the buildings constructed at Fort Hood (containing the Main Post, North Fort Hood, and West Fort Hood) between the years of 1942 and 1963. The authors inventoried and evaluated 463 buildings and all relevant landscape areas on the installation constructed or created during these years to make recommendations for determinations of standard eligibility to the National Register of Historic Places. The currently existing Program Comments for Unaccompanied Personnel Housing, Ammunition Storage, and Capehart-Wherry Housing were taken into consideration when determining recommended eligibility for relevant properties. The most historically significant aspect of the Main Post at Fort Hood is the layout that physically expresses the installation's mission of armored vehicle development and training. The survival of the layout to the present day has resulted in our designation of historic districts that contain the recommended eligible resources and form a basis for guiding future development while remaining in compliance with federal historic preservation legislation and associated implementing guidance documents.

15. SUBJECT TERMS

Fort Hood, TX	National Register of Historic Places (NRHP)	National Historic Preservation Act (NHPA)
historic preservation	historic buildings	historic landscapes

16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT	18. NUMBER OF PAGES	19a. NAME OF RESPONSIBLE PERSON 19b. TELEPHONE NUMBER (include area code)
a. REPORT	b. ABSTRACT	c. THIS PAGE			
Unclassified	Unclassified	Unclassified	SAR	375	Sue Enscore (217) 352-6511, ext 4434