

Final Submittal
February 2009

REAL PROPERTY MASTER PLAN DIGEST



Fort Sam Houston,
Texas



US Army Engineering and Support Center
Huntsville, Alabama



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Final Submittal

February 2009

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REAL PROPERTY MASTER PLAN DIGEST



**Fort Sam Houston,
Texas**



Prepared by:



Colorado DataScapes, LLC
Colorado Springs, Colorado



US Army Engineering and Support Center
Huntsville, Alabama



Prepared for:

Installation Management Command

REPLY TO
ATTENTION OF

DEPARTMENT OF THE ARMY
HEADQUARTERS, U. S. ARMY MEDICAL DEPARTMENT CENTER AND SCHOOL
AND FORT SAM HOUSTON
2250 STANLEY ROAD
FORT SAM HOUSTON, TEXAS 78234-6100

3 November 2008

Fort Sam Houston Real Property Master Plan Digest

As part of the US Army Installation management Command, Fort Sam Houston is home to the US Army Medical Department Center and School, US Army North, US Army South, and over 60 other tenants and units. We are a first rate training base and power support platform; a premier installation and committed community partner, providing combat-ready forces for the 21st Century.

To accomplish our mission and ensure we are prepared to respond in the future, we depend not only on our people, but on our limited resources. The Fort Sam Houston Real Property Master Plan (RPMP) is the overall strategy for installation development and sustainment over the short and long range. It is based on the comprehensive analysis and assessment of installation real property. This digest encapsulates the RPMP and communicates the most important features of the installation master planning process in a format meant to engage commanders, directors, Soldiers, civilians, contractors, and Families.

As members of the Fort Sam Houston Team, we all have an obligation to ensure the well-being, protection and use of Army resources in as efficient and sustainable a manner as possible. When making decisions regarding the development of this installation, we need to have the right information available at the right time to guide our planning.

This digest summarizes every aspect of the RPMP, identifies the forces of change acting on the installation, portrays a compelling vision of the future installation, and allows the Fort Sam Houston Team to work together to make sound planning decisions. The result will be an integrated, organized approach to the installation's development. The payoff will be better management of each and every dollar entrusted to us by the American public.

We are proud to present this RPMP Digest. The Fort Sam Houston Team is capable of responding and making decisions concerning the growth of our installation as the future Army realigns and develops new operations and requirements. This digest will facilitate our collaborative efforts to ensure Fort Sam Houston continues to be the Best Hometown in the Army.

RUSSELL J. CZERW
Major General, DC
Commanding
US Army Medical Department Center
and School and Fort Sam Houston

MARY E. GARR
Colonel, MS
Commanding
US Army Garrison,
Fort Sam Houston





Directory

Fort Sam Houston, Texas

Section 1 – Introduction

Section 2 – Vision and Mission

2.1	Current Installation Mission	2-1
2.2	Installation Strategic Goals	2-3
2.3	Real Property Vision, Goals, and Objectives.....	2-3
2.3.1	Real Property Vision	2-3
2.3.2	Real Property Goals and Objectives.....	2-3
2.4	Joint Basing	2-5

Section 3 – Installation Profile

3.1	Location	3-1
3.2	Installation History	3-5
3.3	Installation Population	3-6
3.4	Community Relationships and Planning.....	3-7

Section 4 – Existing Conditions Assessment

4.1	Development Constraints	4-1
4.1.1	Natural Constraints	4-1
4.1.2	Cultural Constraints	4-5
4.1.3	Operational Constraints	4-8
4.1.4	Development Constraints Summary.....	4-16
4.2	Land Use	4-18
4.3	Infrastructure.....	4-20
4.3.1	Real Property Facilities (Buildings) Assessment.....	4-20
4.3.2	Utilities Assessment.....	4-23
4.3.3	Transportation Assessment.....	4-26
4.3.4	Development Opportunities.....	4-28

Section 5 – Development Plans

5.1	Long-Range Component	5-1
-----	----------------------------	-----



5.2	Installation Design Guide.....	5-3
5.2.1	Visual Themes and Zones	5-3
5.2.2	Key Design Standards	5-6
5.3	Area Development Plans.....	5-10
5.3.1	Medical Education and Training Campus	5-12
5.3.2	Medical Complex	5-14
5.3.3	Community Center.....	5-16
5.3.4	Community Park Complex	5-17
5.3.5	Maintenance Complex	5-19
5.3.6	Infantry Post Reuse	5-20
5.3.7	Installation Management Command Headquarters	5-21
5.3.8	106th Strategic Signal Brigade.....	5-23
5.3.9	Post Theater.....	5-25
5.3.10	United States Army Reserve Enclaves.....	5-27
5.3.11	Kelly Heliport U.S. Army Reserve Center	5-28
5.3.12	Camp Bullis Medical Training Parks Complex	5-29
5.3.13	Camp Bullis Cantonment Area	5-31
5.3.14	Camp Bullis Air Base Ground Defense Complex	5-33
5.3.15	Combat Assault Landing Strip, Camp Bullis	5-35
5.4	Range and Training Plans	5-37
5.5	Integrated Natural Resources Management Plan.....	5-38
5.6	Integrated Cultural Resources Management Plans	5-41

Section 6 – Installation Development Strategies

6.1	Capital Investment Strategies.....	6-1
6.2	ACSIM and IMCOM Capital Investment Strategies	6-2
6.3	Funding Sources	6-2

Section 7 – Short-Range Program

Section 8 – Master Planning Future Focus Areas

8.1	Comparison of Master Plan to Vision, Goals, and Objectives	8-1
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8.2	Assessment of Master Plan Vision, Goals, and Objectives and Program.....	8-1
8.2.1	Vision, Goals, and Objectives Assessment.....	8-1
8.2.2	Real Property Master Plan Program Assessment.....	8-3
8.3	RMPM Program Requirements and Recommendations.....	8-4

Section 9 – References

9.1	Acronyms and Abbreviations	9-1
9.2	Selected References	9-3
9.3	Acknowledgements and Points of Contact	9-6

List of Figures

3.1	Combined Distribution of Land (in Acres) at Fort Sam Houston, Camp Bullis Training Area, and Canyon Lake Recreation Area	3-1
3.2	Military Installations in the San Antonio, Texas Area.....	3-2
3.3	External Roadways and ACPs, Fort Sam Houston.....	3-3
3.4	External Roadways and ACPs, Camp Bullis	3-4
3.5	Population Comparisons FY08 to FY14	3-6
3.6	Regional Demographic Data.....	3-8
3.7	City of San Antonio Council Districts.....	3-10
3.8	U.S. Congressional Districts, San Antonio, Texas.....	3-11
3.9	Fort Sam Houston Transition.....	3-12
3.10	Forecasted Data-Population Density Change, 2005 to 2013	3-13
4.1	Natural Constraints Impacting Development - Salado Creek Floodplain, Fort Sam Houston	4-2
4.2	Natural Constraints Impacting Development, Camp Bullis.....	4-3
4.3	Cultural Constraints Impacting Development, Fort Sam Houston	4-6
4.4	Cultural Constraints Impacting Development, Camp Bullis.....	4-7
4.5	Helipad Annoyance Buffer, Brooke Army Medical Center.....	4-8
4.6	Noise Contours, Camp Bullis.....	4-9
4.7	Operational Constraints, Fort Sam Houston.....	4-12
4.8	Operational Constraints, Camp Bullis	4-13
4.9	Range and Training Area, Camp Bullis	4-14



4.10	Development Constraints, Fort Sam Houston	4-16
4.11	Development Constraints, Camp Bullis.....	4-17
4.12	Existing Land Use, Fort Sam Houston	4-18
4.13	Existing Land Use, Camp Bullis.....	4-19
4.14	Existing Assets by Age	4-20
4.15	Existing Assets by Type	4-20
4.16	Real Property Assets Status (FY13 RPLANS)	4-21
4.17	Fort Sam Houston Essential Facility Requirements.....	4-22
4.18	Edwards Aquifer Region.....	4-24
4.19	Transportation Pre-BRAC.....	4-27
4.20	Future Transportation (Conceptual, Pending Approval).....	4-27
4.21	Opportunities for Development, Fort Sam Houston	4-28
4.22	Opportunities for Development, Camp Bullis.....	4-29
5.1	Future Land Use Plan, Fort Sam Houston (Pending Real Property Planning Board approval).....	5-2
5.2	Distribution of Visual Zones, Fort Sam Houston	5-4
5.3	Relationship of Visual Themes and Zones at Fort Sam Houston	5-4
5.4	Camp Bullis has One Visual Zone	5-5
5.5	Relationship of Visual Theme and Zone at Camp Bullis	5-5
5.6	ADP Overview, Fort Sam Houston.....	5-10
5.7	ADP Overview, Camp Bullis	5-11
5.8	Area Development Plan - Medical Education and Training Campus	5-13
5.9	Medical Complex.....	5-15
5.10	Community Center	5-16
5.11	Community Park Complex.....	5-18
5.12	Maintenance Complex.....	5-19
5.13	Infantry Post Reuse	5-20
5.14	Installation Management Command Headquarters	5-22
5.15	106th Strategic Signal Brigade	5-24
5.16	Post Theater	5-26
5.17	USAR Enclaves.....	5-27
5.18	Kelly Heliport USAR Center.....	5-28
5.19	Camp Bullis Medical Training Parks Complex.....	5-30



5.20	Camp Bullis Cantonment Area.....	5-32
5.21	Camp Bullis Air Base Ground Defense Complex.....	5-34
5.22	Combat Assault Landing Strip	5-36
5.23	Camp Bullis Range Area	5-37
7.1	Fort Sam Houston Future Projects Status Map, December 2008.....	7-4

List of Tables

4.1	Existing and Required Facilities (FY08 to FY13) (000 GSF).....	4-20
4.2	Installation Status Report Ratings as of 2nd Quarter 2008	4-22
5.1	IMCOM Projects.....	5-21
5.2	INRMP Implementation Costs (\$000).....	5-40
7.1	Short-Range Project List	7-1
8.1	Comparative Assessment of Master Planning Components	8-1
8.2	Vision, Goals, and Objectives Assessment Criteria.....	8-2
8.3	Vision, Goals, and Objectives Assessment	8-2
8.4	Real Property Program Assessment Criteria.....	8-3
8.5	RPMP Assessment	8-3



Directory

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1 Introduction

Fort Sam Houston, Texas

The Real Property Master Plan (RPMP) Digest is a strategic-level document containing information, plans, and recommendations reflected in the Installation RPMP and other key planning documents. The RPMP Digest captures and communicates the most important features of the installation master planning process—the overall short-, mid-, and long-term development and sustainment strategy—in a format meant to engage commanders, directors, Soldiers, civilians, contractors, and families.

The Real Property Master Plan Digest

Communicates a sense of place and understanding of what is special about Fort Sam Houston and Camp Bullis.

Provides an analysis of how the installations are changing and what the installations will look like in the near-term future.

Identifies the forces of change affecting Fort Sam Houston and Camp Bullis.

Coaches stakeholders to participate and make strategic choices.

Expresses a compelling vision of what the installations will be in the future.

Identifies constraints and solutions to deficiencies found in the master planning process.

Encourages thinking about what is best for the whole installation—not just for a single unit, organization, activity or individual—and the interests of current and future residents.

An installation's RPMP is an integrated document developed in accordance with Army Regulation 210-20, *Real Property Master Planning for Army Installations*. It is made up of five succinct components:

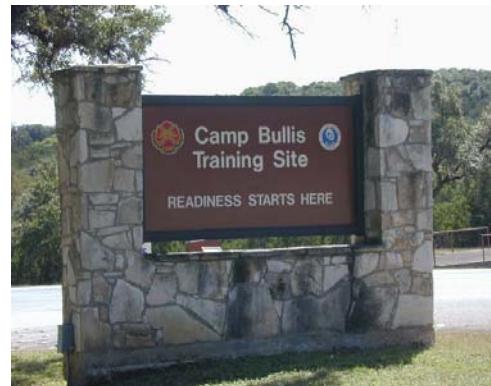
- ❖ The RPMP Digest encapsulates the essence of the RPMP.
- ❖ The Long-Range Component (LRC) contains focused, detailed planning strategies.
- ❖ The Installation Design Guide (IDG) prescribes the design, look, and feel of the installation.
- ❖ The Capital Investment Strategy (CIS) focuses on strategies to integrate current demands with long-term facility needs.
- ❖ The Short-Range Component (SRC) contains the CIS actions to be implemented within the Future Years Defense Program (FYDP).



Historic clock tower at Fort Sam Houston



Entrance to Fort Sam Houston



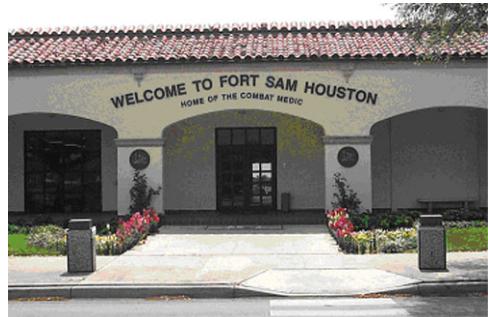
Entrance to Camp Bullis



Introduction

The Fort Sam Houston Digest reflects the following plans, reports, and studies:

- ❖ RPMP Presentation, March 2008
- ❖ Area Development Plans (ADPs) Presentation, March 2008
- ❖ Fort Sam Houston IDG, July 2006
- ❖ Fort Sam Houston Military Reservation Integrated Cultural Resources Management Plan (ICRMP), November 2007
- ❖ Camp Bullis ICRMP, November 2007
- ❖ Fort Sam Houston Military Construction (MILCON) Program Project List, September 2006
- ❖ Base Realignment and Closure (BRAC) Actions Final Environmental Impact Statement (EIS), March 2006
- ❖ Base Transition Update, February 2008
- ❖ Garrison Mission Analysis, August 2008
- ❖ Fort Sam Houston Comprehensive Traffic Engineering Study, April 2008
- ❖ Camp Bullis Transportation Condition Assessment, June 2008
- ❖ San Antonio Military Medical Center (SAMMC) Master Plan – Final Site Layout, July 2008
- ❖ Camp Bullis Water System Condition Assessment (Draft Report), April 2008
- ❖ Camp Bullis Wastewater System Condition Assessment (Draft Report), October 2008



Fort Sam Houston Welcome Center



Staff Post building



2 Vision and Mission

Fort Sam Houston, Texas

2.1 Current Installation Mission

The United States Army Medical Department Center and School and Fort Sam Houston train personnel from the Army, Air Force, Navy, and Marine Corps in the medical field; develop medical leaders; support training and readiness; and maintain installation infrastructure and services. The Garrison supports the "Home of the Combat Medic."

Installation Mission Description

Fort Sam Houston

- ❖ Medical training
- ❖ Hospital and patient care
- ❖ Headquarters and administration

Camp Bullis

- ❖ Field training
- ❖ Firing ranges
- ❖ Medical training
- ❖ Intelligence training

Garrison Vision

"The Garrison exists to provide a safe, quality living and working environment for the Military, Civilians and Families here at Fort Sam Houston, today and in the future."

Garrison Mission

"Provide our community, installation services that support Soldier and Family readiness offering a quality of life that matches their service to our Nation."



Change of Command



Camp Bullis training



Chapel



Vision and Mission

Fort Sam Houston Major Organizations



Installation Management Command



U.S. Army
Medical Command



Fifth Army



Sixth Army



Army Intelligence and
Security Command



Network Enterprise
Technology Command



AMEDD Center and
School



Brooke Army
Medical Center



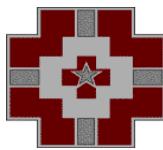
Medical Research &
Materiel Command



470th Military
Intelligence
Brigade



106th Strategic
Signal Brigade



32nd Medical
Brigade



U.S. Navy



U.S. Marine Corps



U.S. Air Force



U.S. Army
Reserve



U.S. Army
Acquisition Corps



U.S. Army Criminal
Investigation Command



4th Marine Recon
Battalion



Texas State Area
Command



Army National Guard



Clock tower



Family housing



Canyon Lake Recreation Area

2.2 Installation Strategic Goals

2008-2012 Installation Strategic Goals (IMCOM Overarching Interrelated Strategies)

- ❖ Develop and retain the best leaders and most professional workforce to accomplish Army goals and objectives.
- ❖ Optimize resources and employ innovative means to provide premier facilities and quality services.
- ❖ Be a streamlined, agile organization that is customer-focused and results-driven in support of current and future missions.
- ❖ Build and sustain state-of-the-art infrastructure to support readiness and mission execution and enhance the well-being of the military community.

2.3 Real Property Vision, Goals, and Objectives

2.3.1 Real Property Vision

The Real Property Vision, incorporating elements of all other related installation planning initiatives, sets the course for the installation's real property development for the next 25 years.

The Fort Sam Houston Real Property Vision:

Provide the best war-time installation that supports the needs of our all-volunteer force, transformation, sustainability, and sound stewardship of resources and the environment and also provides the platform from which we generate, project, and support the Nation's combat power.

2.3.2 Real Property Goals and Objectives

Goal 1

Support the needs of our all-volunteer force.

Objectives

- ❖ Housing
- ❖ Family Morale, Welfare, and Recreation (FMWR) facilities
- ❖ Dining
- ❖ Community (Army and Air Force Exchange Service [AAFES], Defense Commissary Agency [DeCA], etc.)



Goal 2

Support transformation.

Objectives

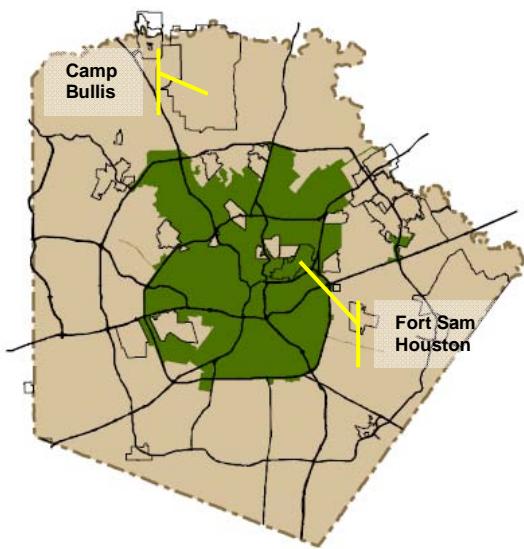
- ❖ Joint basing
- ❖ Stationing
 - ❖ Command and control facilities
 - ❖ Tactical equipment maintenance facilities

Goal 3

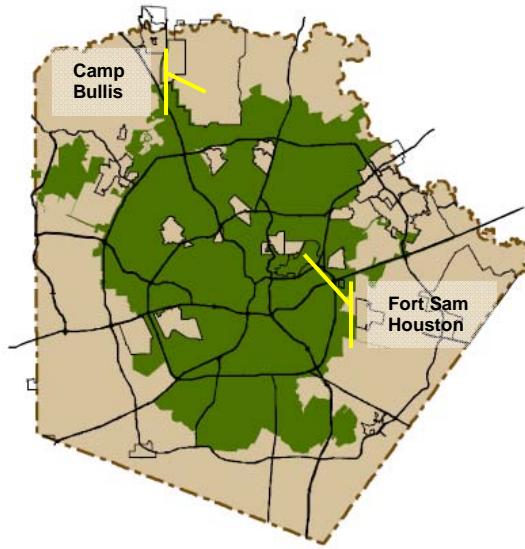
Incorporate sustainability principles, sound stewardship of resources, and the environment into real property management.

Objectives

- ❖ Utilities infrastructure
- ❖ Leadership in Energy and Environmental Design (LEED)
 - Silver
- ❖ Transportation infrastructure
- ❖ Adherence to environmental laws and regulations
- ❖ Resolve encroachment
- ❖ Implement land use management strategy



San Antonio, 1980, 263 square miles,
786,000 population



San Antonio, 2007, 504 square miles, 1.3
million population



Instructional facilities



Field hospital training

Goal 4

Provide the platform from which we generate, project, and support the Nation's combat power.

Objectives

- ❖ Instructional facilities
- ❖ Trainee unaccompanied personnel housing
- ❖ Field training facilities

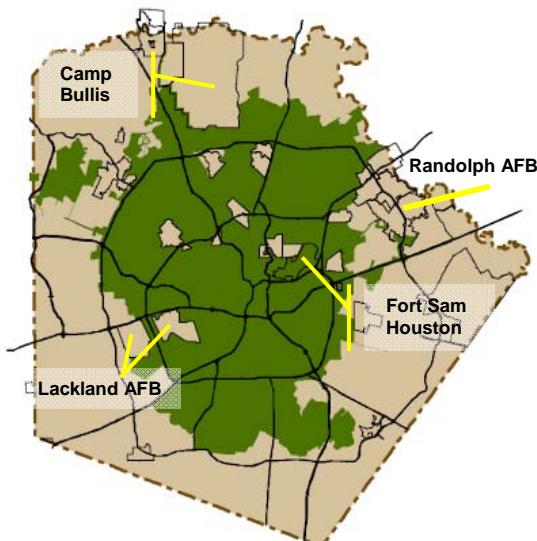
2.4 Joint Basing

Coordination is well under way as Fort Sam Houston looks ahead to joint basing under the U.S. Air Force in 2010. The Air Education and Training Command (AETC), currently located at Randolph Air Force Base, will be the Air Force headquarters overseeing the military installations in the San Antonio area.

AETC's vision and mission are as follows:

Vision – Deliver unrivaled air, space, and cyberspace education and training.

Mission – Develop America's Airmen today ... for tomorrow.



Joint Basing installation locations



3 Installation Profile

Fort Sam Houston, Texas

3.1 Location

Fort Sam Houston properties consist of three non-contiguous areas: Fort Sam Houston, Camp Bullis Training Area, and Canyon Lake Recreation Area. Fort Sam Houston is located in the south-central portion of Texas, surrounded by the city of San Antonio in Bexar County. The installation is just a few miles from the historic Alamo in downtown San Antonio. The installation covers 2,900 acres and is bounded by Interstate Highway 35 on the south and east and State Highway 281 on the west.

Fort Sam Houston also operates the Camp Bullis Training Area about 20 miles north of San Antonio. Camp Bullis was opened in 1917 and consists of 27,994 acres used for small weapons, dismounted, and wheeled vehicle training. The camp is made up of a cantonment area and training areas.

Under the Joint Basing Initiative, the Fort Sam Houston garrison operation will align under the U.S. Air Force, and the range and training areas will remain under Army control.

Fort Sam Houston has a permit from the Corps of Engineers to use 110 acres at Canyon Lake Recreation Area located 40 miles north of Fort Sam Houston.



Brooke Army Medical Center

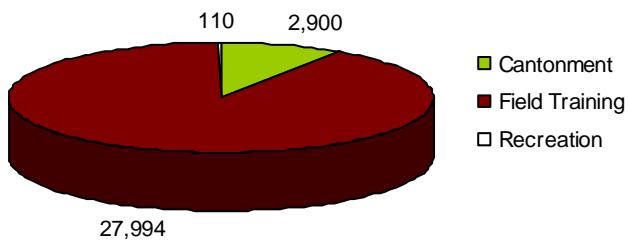


Figure 3.1 Combined Distribution of Land (in Acres) at Fort Sam Houston, Camp Bullis Training Area, and Canyon Lake Recreation Area

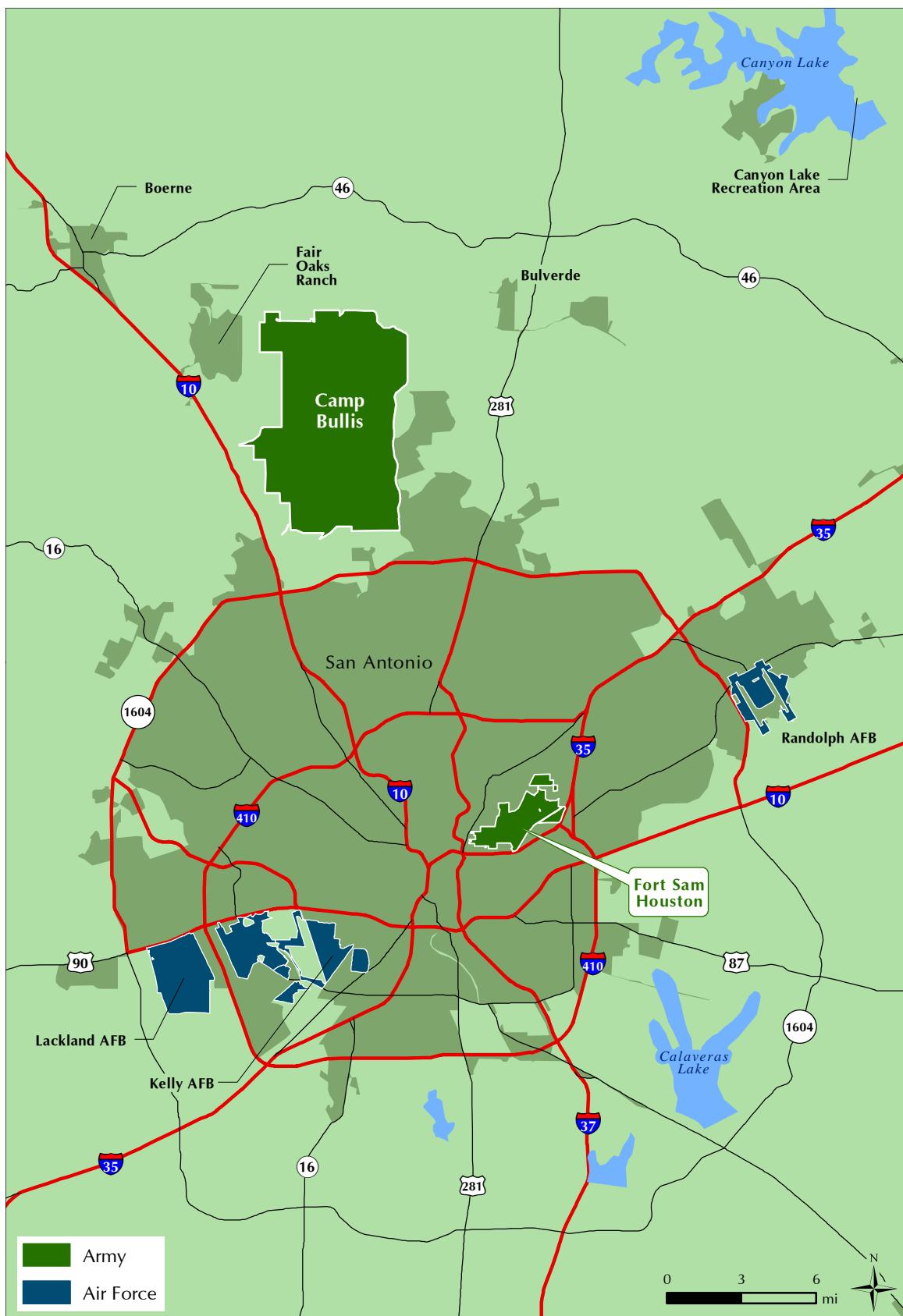


Figure 3.2 Military Installations in the San Antonio, Texas Area



Installation Profile

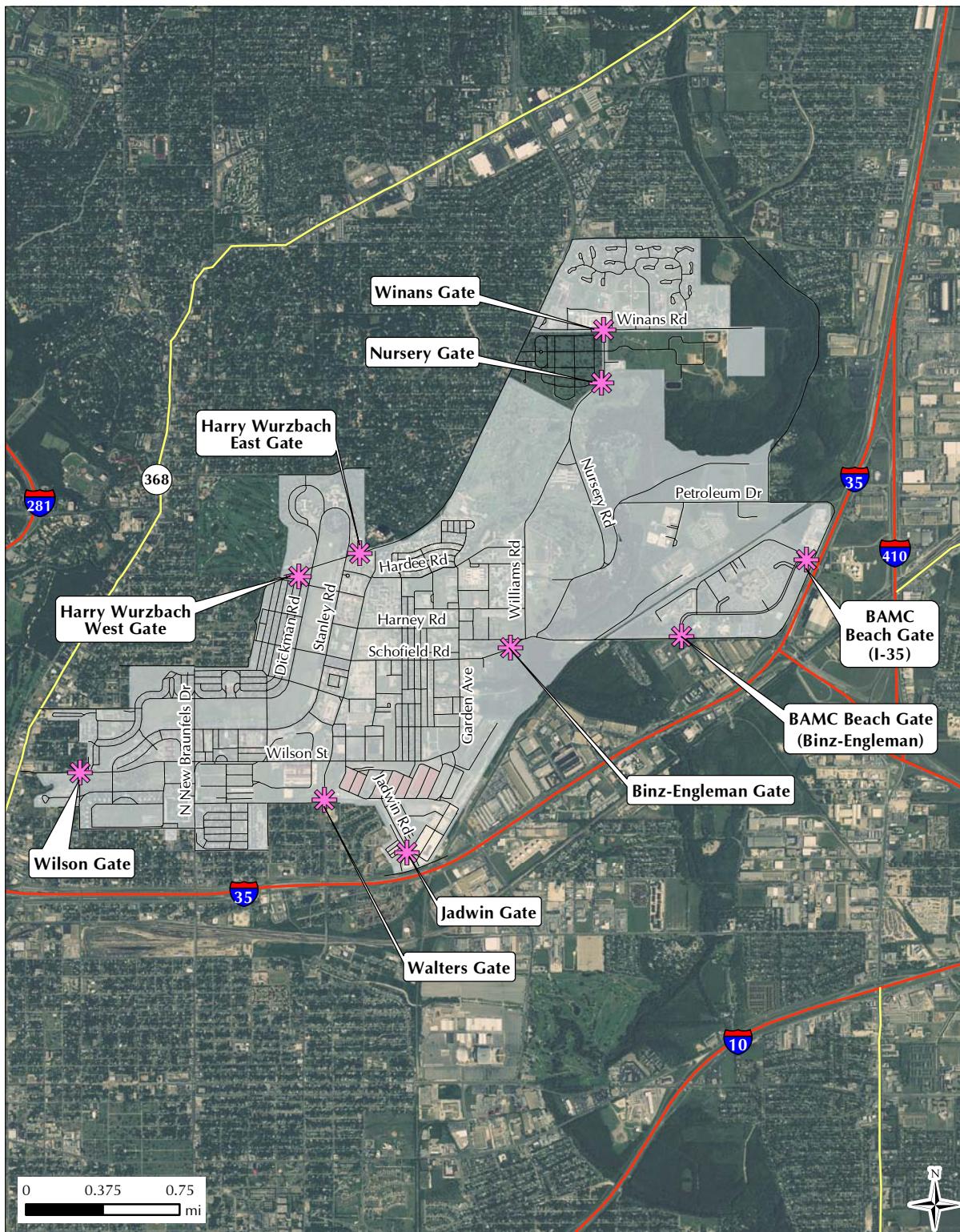


Figure 3.3 External Roadways and ACPs, Fort Sam Houston

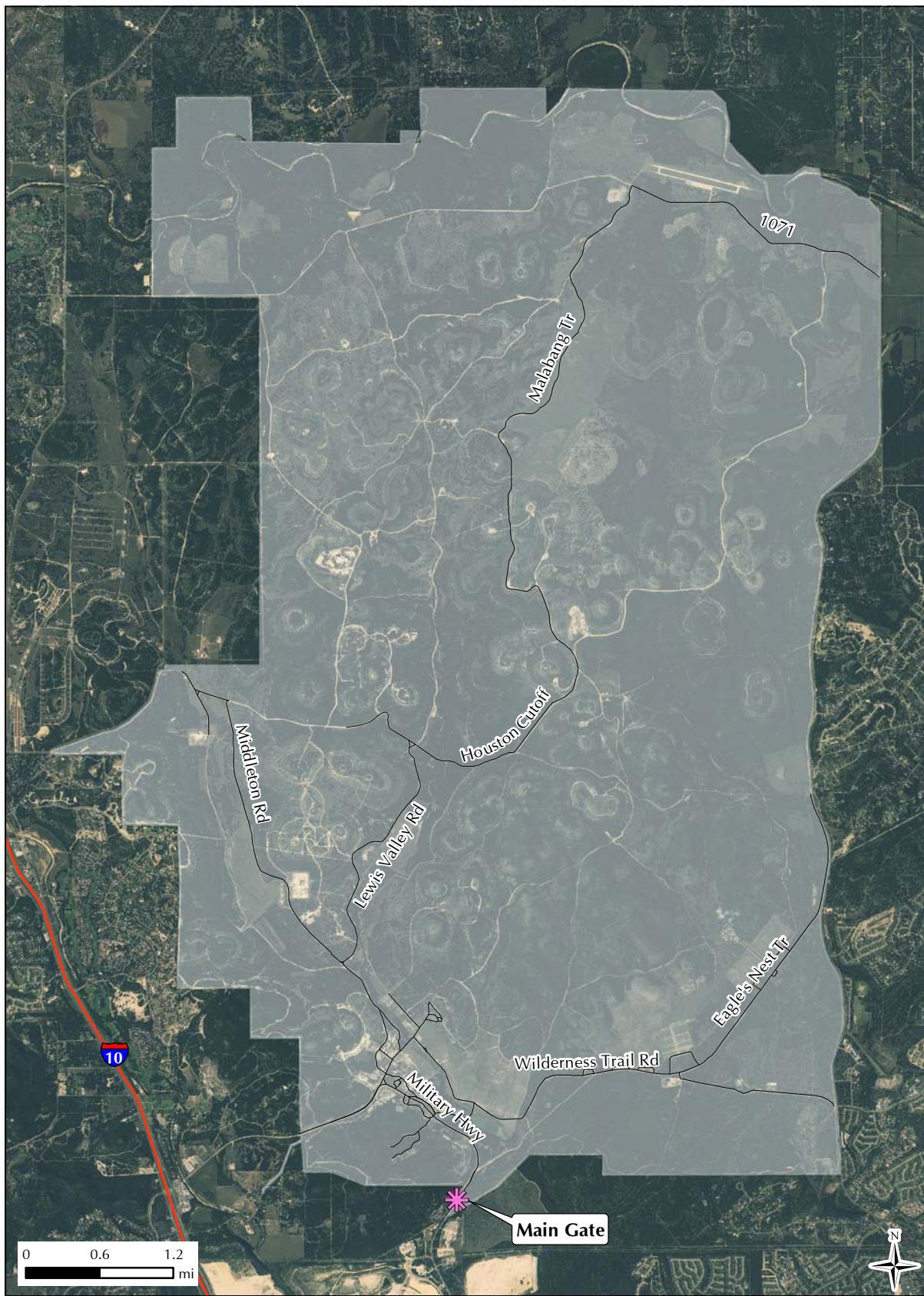


Figure 3.4 External Roadways and ACPs, Camp Bullis



3.2 Installation History

Fort Sam Houston, the ninth oldest Army installation, is named after General Sam Houston, hero of the battle of San Jacinto and first president of the Republic of Texas.

The U.S. Army has maintained a presence in the Alamo City since 1845, performing five distinct and important roles as a headquarters, logistical base, mobilization and training site, garrison, and provider of medical support. At first, the Army leased facilities in the city of San Antonio, including the Alamo. In fact, the Army repaired the Alamo structure and added a roof so it could be used as a headquarters.

In 1876, the Army began to move its facilities to the present site of Fort Sam Houston upon completion of the Quadrangle. The installation has since increased in size from the original 92 donated acres to approximately 3,000 acres today.

The headquarters and garrison have always constituted one of the Army's most important commands. Prior to the Civil War, the headquarters controlled 25 percent of the Army's forces. From 1910 until World War II, Fort Sam Houston was the largest Army post in the continental United States. Many of the most distinguished American soldiers have served here including 13 Army Chiefs of Staff and two United States Presidents.

The post's prominence led to significant tactical and organizational innovations. Military aviation was born here in 1910, and revitalized during the 1940s and 1950s. Large-scale troop maneuvers have been conducted, including the first effective use of the Command Post Exercise in 1911. Field exercises in the 1930s developed the Triangular Division, the foundation of the Army combat power in World War II. The delivery of troops to the battlefield by air also was tested here from 1939 to 1941. Aeromedical evacuation of casualties was first developed here as early as 1917.

At the end of World War II, the Army decided to make Fort Sam Houston its principal medical training facility and developed Brooke General Hospital into one of the Army's premier medical centers.

The significant contributions of Fort Sam Houston to the United States were recognized in 1975 when the installation was designated as a National Historic Landmark.

Today, Fort Sam Houston is the largest and most important military medical training facility in the world. As part of the BRAC process, it is transforming into a multi-service medical training center utilizing both the cantonment campus training complexes on Fort Sam Houston and the field training resources of Camp Bullis.



Quadrangle construction, 1876 (San Antonio Depot)



Camp Bullis during 1900s mobilization training



Scheel House at Camp Bullis



Old Brooke Army Medical Center



3.3 Installation Population

Located within the city of San Antonio, Fort Sam Houston is home to a population of about 28,000. The installation is a dynamic and growing one, taking on new headquarters missions for the Army Medical Command, Fifth U.S. Army, U.S. Army South, 5th Recruiting Brigade, 12th Reserve Officer Training Corps Brigade, U.S. Navy Regional Recruiting and the San Antonio Military Entrance and Processing Station, and the U.S. Naval School of Health Sciences-Bethesda Detachment.

Also located at Fort Sam Houston are Brooke Army Medical Center (BAMC), the Great Plains Regional Medical Command, Headquarters Dental Command, Headquarters Veterinary Command, the Institute for Surgical Research (trauma and burn center), the Defense Medical Readiness Training Institute, and the Army Medical Department Non-Commissioned Officer Academy.

Known as the Army Medical Department's brain trust, the Army Medical Department Center and School annually trains more than 25,000 students attending 170 officer, non-commissioned officers (NCO), and enlisted courses in 14 medical specialties.

The installation supports a retiree population of over 25,000.

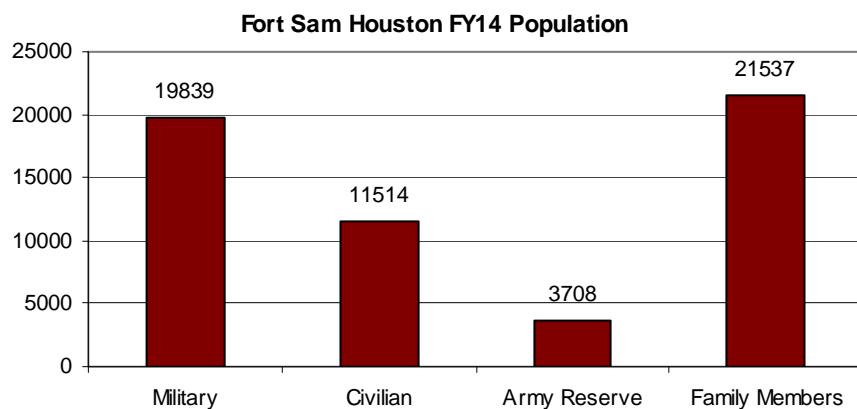
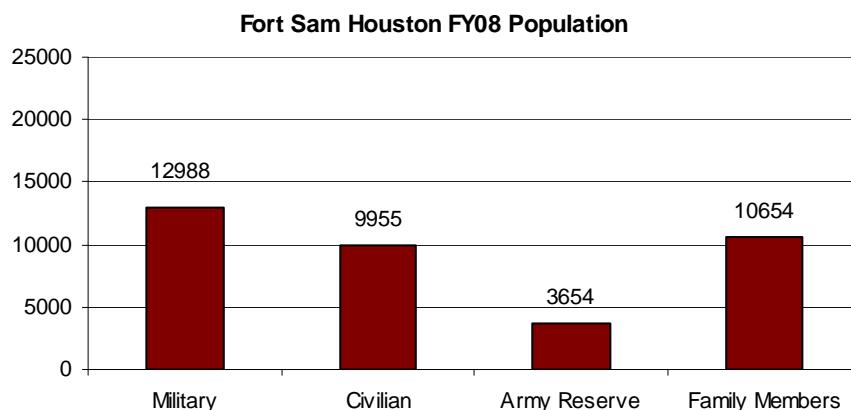


Figure 3.5 Population Comparisons FY08 to FY14



Demographic Data

The following information is demographic data obtained from Bexar County, Texas.

- ❖ Bexar County's population was 1,555,592 in December 2007.
- ❖ Renters occupied 189,771 apartments, and 39 percent of the population lived in rented homes or apartments.
- ❖ The median contract rent was \$548 per month in 2005.
- ❖ Seventeen percent of residents lived in poverty.
- ❖ Estimated Bexar County household average income was \$40,451 per year in 2005.
- ❖ The average age of residents in 2005 was 32.1.
- ❖ Of Bexar County residents age 25 or older, 76.9 percent held a high school diploma, and 22.7 percent held a bachelor's degree or higher in 2005.

3.4 Community Relationships and Planning

Throughout its existence, a close and harmonious relationship has prevailed between Fort Sam Houston and the city of San Antonio. The two have grown and matured together. The city often has been called the "mother-in-law of the Army" because so many soldiers, including Dwight D. Eisenhower, met their future spouses here.

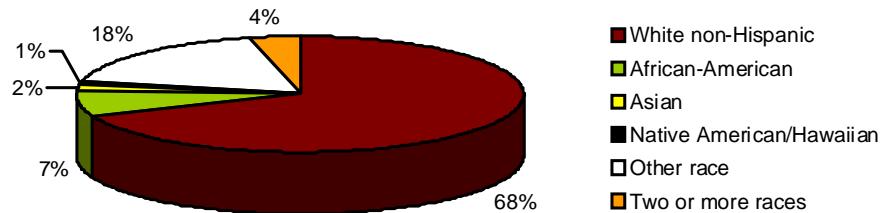
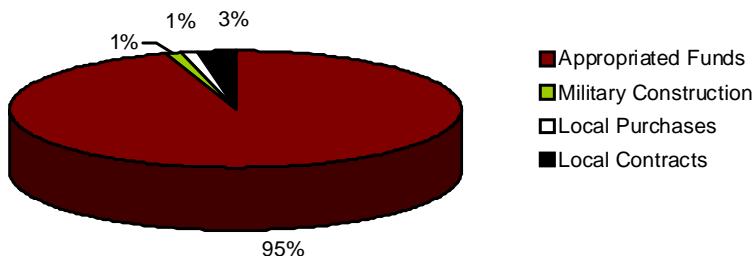
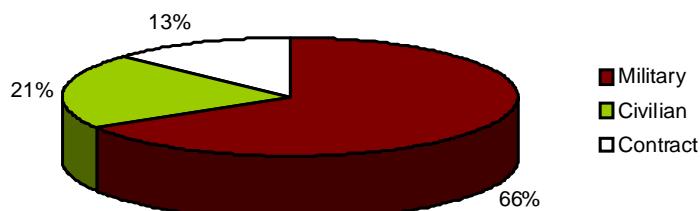
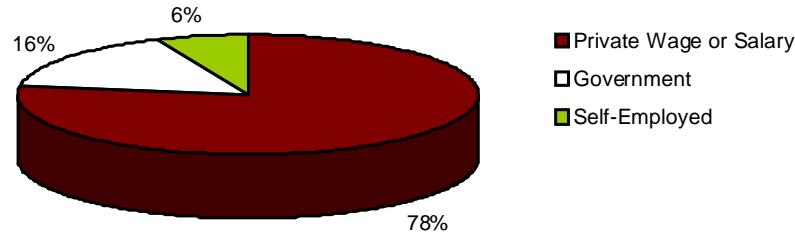
The Army Medical Department maintains several academic affiliations for bachelor's and master's degree programs with major universities that include Baylor University, University of Texas Health Science Centers at Houston and San Antonio, and the University of Nebraska.

The post participates with the Alamo Area Council of Governments (AACOG) and hosts several annual events that involve the San Antonio community.



Lincoln Military Housing new quarters



**Ethnic Composition in Bexar County (2000)****Expenditure Impact (in Millions) on Local Economy (2006)****Fort Sam Houston Workforce as of 30 Sep 06****Bexar County Employment (2000)***Figure 3.6 Regional Demographic Data*

Note: Reference the ethnic composition chart above, the Hispanic or Latino ethnicity is 57.0 percent (of any race) of the population of Bexar County. Hispanic or Latino is not reported separately in the race composition of census data, but is spread among all reported races as well as the category of two or more races.



Installation Profile

Recent San Antonio bond projects included \$15 million in transportation improvement projects, in conjunction with the Texas Department of Transportation, that will directly benefit Fort Sam Houston. Fort Sam Houston participated with the local community in the planning phases for these projects.

Supportive community relationships are evidenced in the 2006 State of the County Address "...the military's realignment of missions to Fort Sam Houston could eventually bring 5,000 new families and more than \$2 billion in construction. Fort Sam Houston will truly be the home of Army medicine, and supporting this expansion has been a real community effort."

The installation depends on the civilian school system for the education of its school-age family members as well as the extra-curricular activities that the schools provide. Fort Sam Houston benefits from the cultural activities, the recreational facilities, and the myriad sales and service establishments that the communities offer. This dependency of each sector upon the other creates the need for cooperation and coordination of effort to minimize actual or potential conflicts of interest.

Fort Sam Houston has adopted the Army Community Covenant, designed to develop and foster effective state and community partnerships with the Army. The Commanding General, Fort Sam Houston, the President of the Greater San Antonio Chamber of Commerce, and the Commanding General, Army North, signed the Army Community Covenant in a July 27, 2008 ceremony at Fort Sam Houston.

Fort Sam Houston has an annual payroll and operating budget of \$1.9 billion. Local purchases made by installation activities total almost \$23 million annually. Funding for construction projects averages \$30 million annually.



Downtown San Antonio



(From left) Major General Russell Czerw, Mr. Richard Perez, and Lieutenant General Thomas Turner signing the Army Community Covenant



South Texas Medical Center



Military installations directly affect local and state politics, economics, and necessary support functions for military families and missions. City and county representatives can support installation changes and matters of encroachment, help control costs to comply with federal laws, and provide social programs support and joint-funded infrastructure projects. Knowing which representatives to approach can help the installation work effectively with the local and state government and agencies. Most noteworthy support includes, but is not limited to, medical services, schools, Clean Water and Clean Air Acts, public health and safety, transportation projects, and privatization of utilities and housing.

The city of San Antonio government leadership consist of a mayor, 10 council districts, and a city manager. Fort Sam Houston is located within Council District 2, and Camp Bullis is located adjacent to Council Districts 8 and 9.

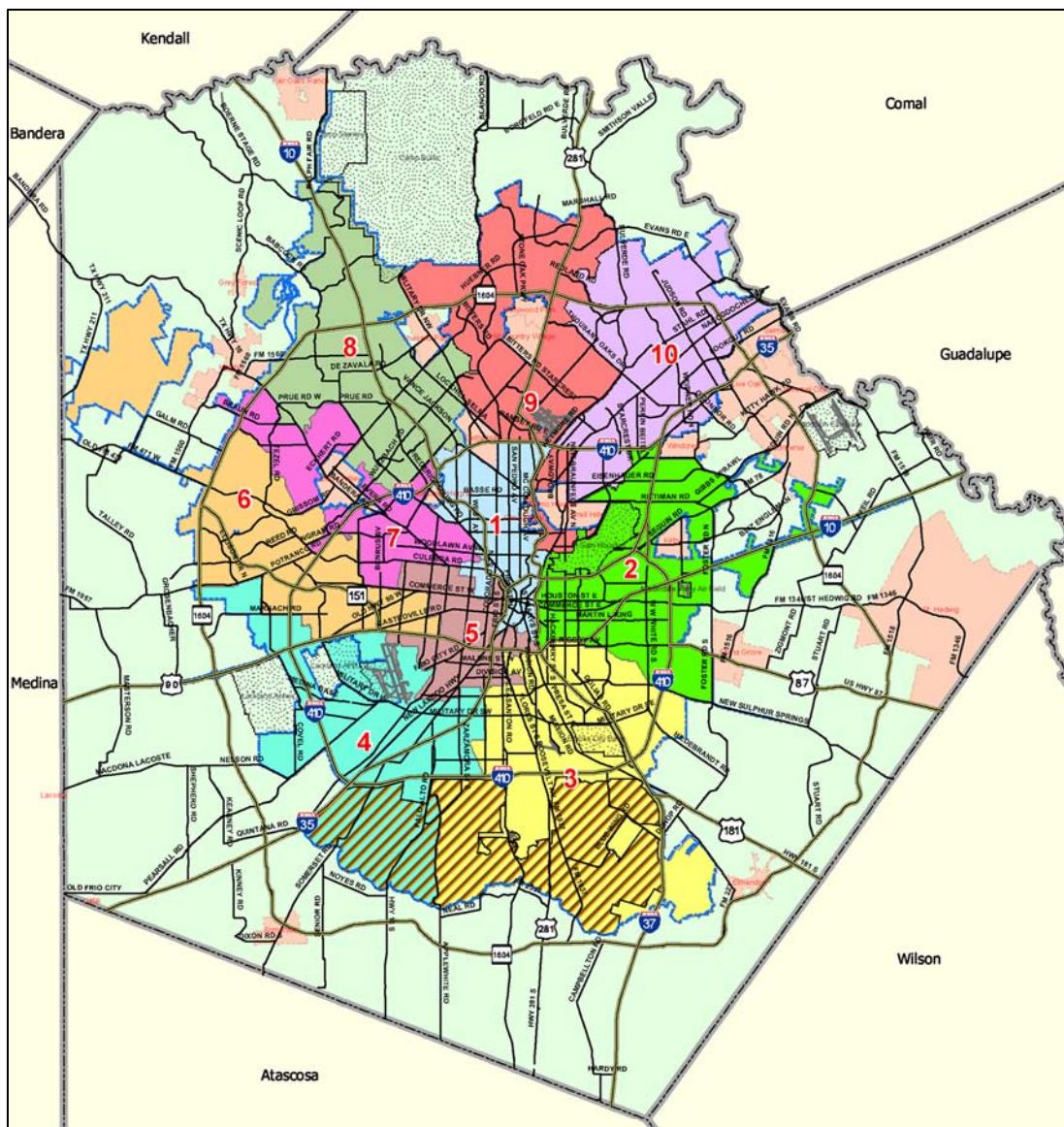


Figure 3.8 City of San Antonio Council Districts



Installation Profile

For Bexar County, the Commissioners Court, which is composed of the County Judge and four Commissioners, is the overall managing/governing body. The Court is responsible for budgetary decisions, tax and revenue decisions, and all personnel decisions except for certain positions that are either elected or appointed by the judiciary or other committees. The Court also appoints and monitors the actions of all County department heads other than those offices headed by elected officials. Fort Sam Houston is located within Precinct 4, while Camp Bullis is in Precinct 3.

State and federal representatives often work to support installation initiatives, such as construction project funding and inserts and BRAC actions. Fort Sam Houston and Camp Bullis are associated with at least five Texas State Representative Districts: 116, 119, 123, 124, and 125. U.S. Congressional Districts 20 and 21 are illustrated in Figure 3.8.



Figure 3.8 U.S. Congressional Districts, San Antonio, Texas



FORT SAM HOUSTON TRANSITION BRIEF



Migration Graphical Depiction

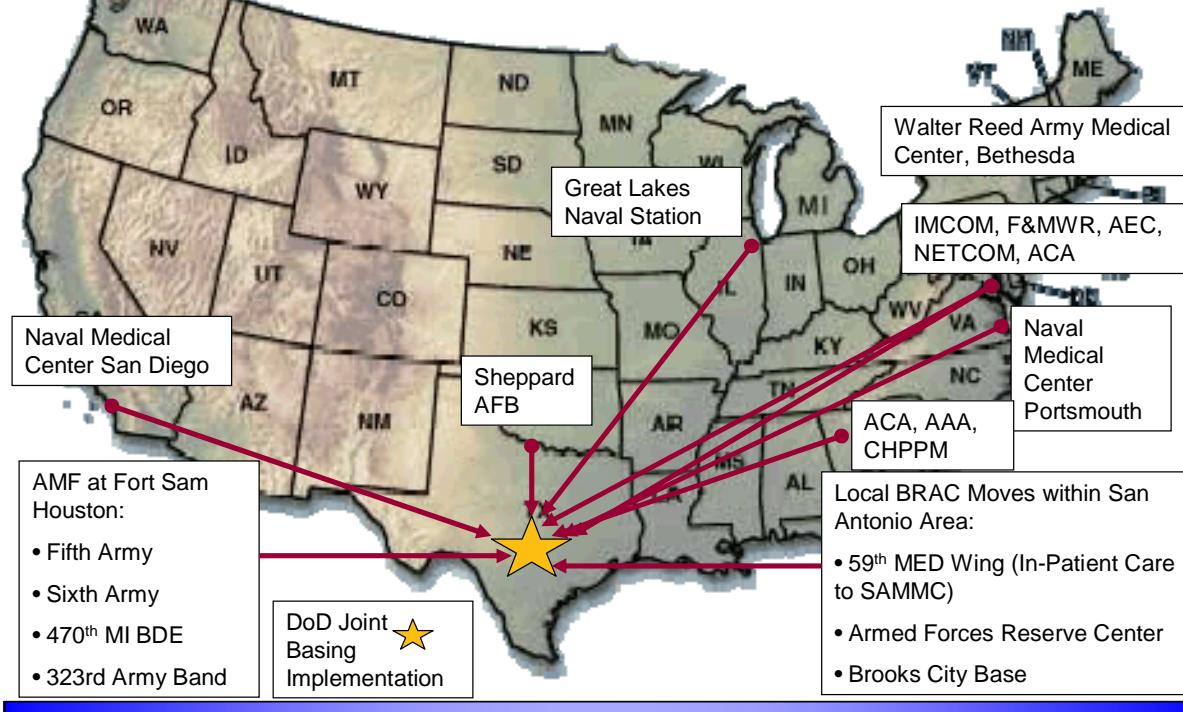


Figure 3.9 Fort Sam Houston Transition

Figure 3.9 graphically depicts the transition of major units that are relocating to Fort Sam Houston as a result of BRAC decisions. These major changes will significantly increase the population on the installation and residing in the surrounding communities.

Figure 3.10 identifies counties experiencing population changes that may affect available housing, schools, roadways, land uses, and potential encroachment to the installation. Working with local planning agencies early in the process, these changes can be managed to support the installation as well as prevent encroachment affecting the mission and operations.



Installation Profile

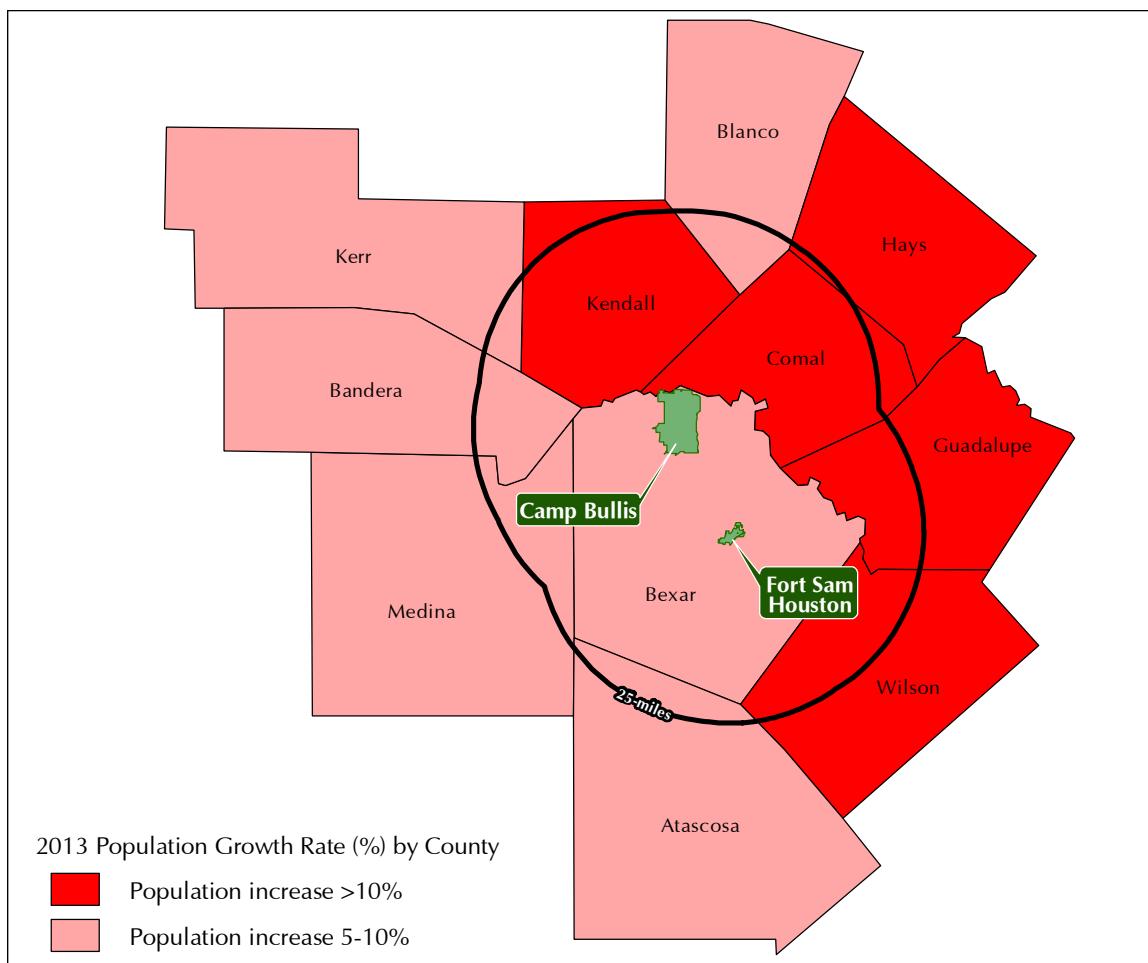


Figure 3.10 Forecasted Data-Population Density Change, 2005 to 2013



4 Existing Conditions Assessment

Fort Sam Houston, Texas

4.1 Development Constraints

Development constraints consist of natural, cultural, and operational limitations. The following paragraphs discuss key elements of each of these topics and provide an assessment of their potential to constrain future development.

4.1.1 Natural Constraints

All aspects of the natural environment are measured, evaluated, and monitored to assess their potential to influence or constrain development and sustainability initiatives.

The key natural constraint impacting Fort Sam Houston is the floodplain area.

Floodplains

Fort Sam Houston's major surface drainage feature is Salado Creek, which runs through the north and eastern portions of the installation. The 100-year floodplain is prevalent in the cantonment area. Army policy discourages development within floodplains unless there are no practicable alternatives to the siting and all appropriate mitigation measures are used.

The key natural constraint at Camp Bullis is the presence of protected species.



Camp Bullis wildlife



Camp Bullis training areas are limited seasonally by the nesting habits of endangered, migratory birds.



Cave gate used to protect the cave ecosystem



Flood gauge

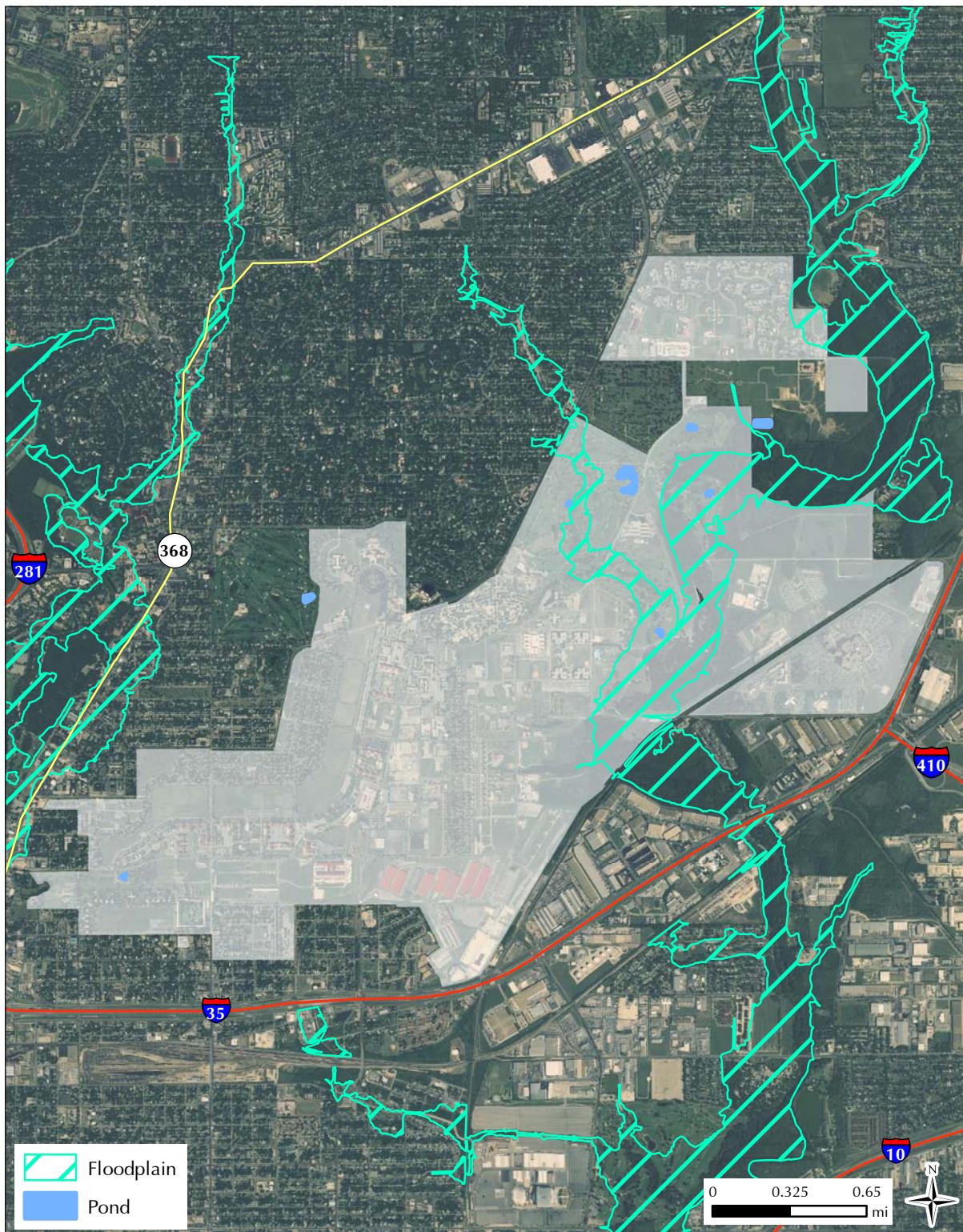


Figure 4.1 Natural Constraints Impacting Development, Salado Creek Floodplain, Fort Sam Houston

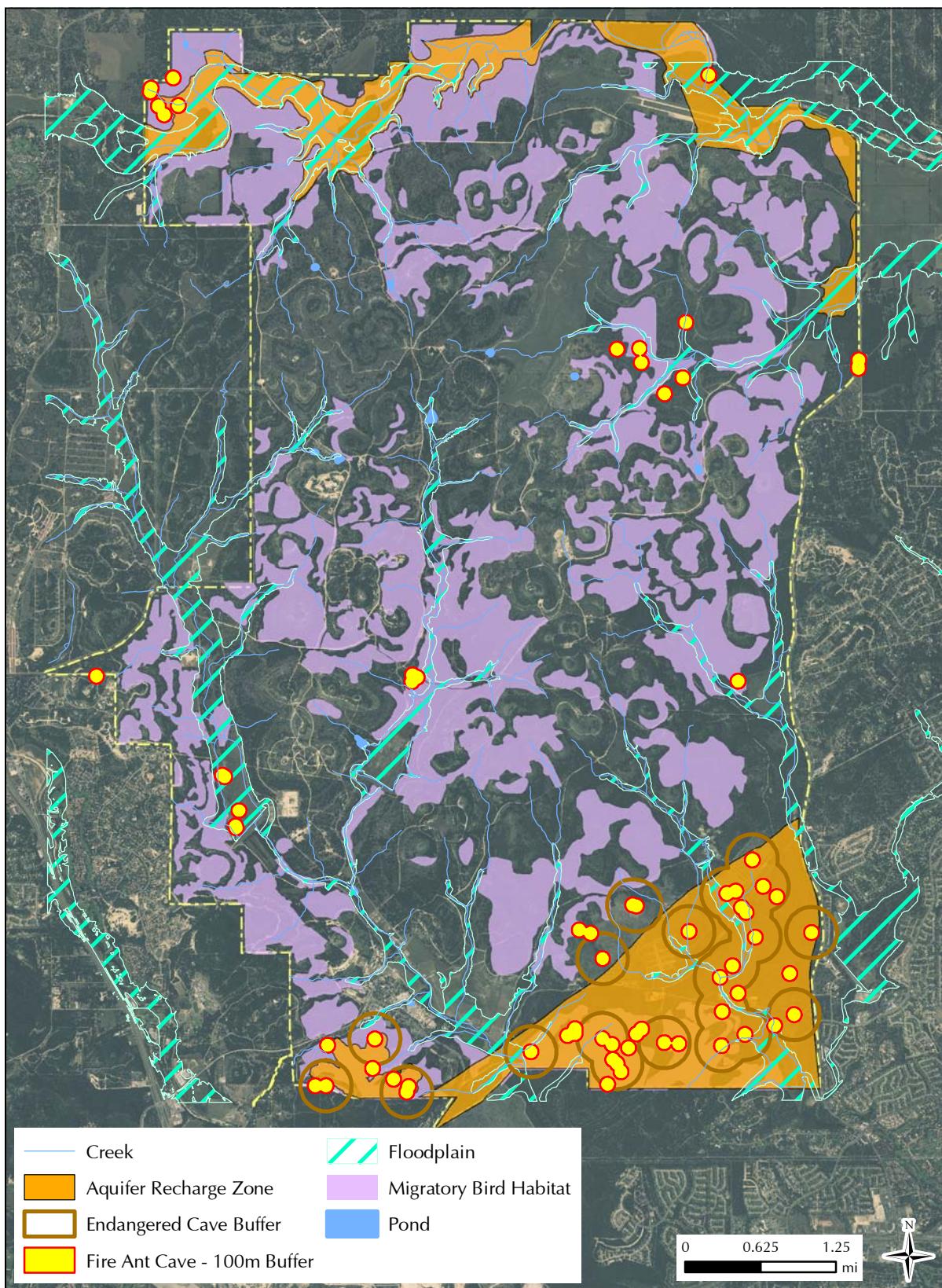


Figure 4.2 Natural Constraints Impacting Development, Camp Bullis



Endangered Species

Currently, two bird species, two beetles, and a spider are designated as federally listed endangered species in the Camp Bullis area.

the black-capped viero and the golden-cheeked warbler are migratory birds that nest at Camp Bullis causing seasonal training restrictions.

Caves at Camp Bullis provide homes to three endangered species: *Cicurina madla* (Madla's cave spider found in one cave), *Rhadine exilis* (beetle found in 22 caves), and *Rhadine infernalis* (beetle found in 3 caves). These species are unique to the karst topography of north and northwest Bexar County, Texas where their critical habitat has been designated. No critical habitat has been designated on Camp Bullis because successful military stewardship under an INRMP is sufficient to protect the species' habitat.



Rhadine infernalis



Rhadine exilis



Black-capped viero (Vireo atricapilla)



Golden-cheeked warbler (Dendroica chrysoparia)



Madla's cave spider (Cicurina madla)



Clock tower



Historic gate



145-Series buildings

4.1.2 Cultural Constraints

Fort Sam Houston has more than 900 historical buildings on site, the largest collection of historic structures of any installation. Even more consequential is the historical integrity demonstrated by sections of the post that represent different eras of construction and reflect changes in Army concepts in planning and design.

There are two historical areas designated on Fort Sam Houston that constrain development. The National Historic District is an area anchored by three buildings documented on the National Register of Historic Places (NRHP). Fort Sam Houston also has a National Historic Conservation District that is historically sensitive. Both are in the western portion of the installation and date back to the late 1800s.

Cultural resources surveys, inventories, and assessments conducted to date at Fort Sam Houston have resulted in the identification of a wide range of historic properties, including the following:

- ❖ National Historic Landmark District encompassing the Quadrangle/Staff Post, Infantry Post, and Cavalry and Light Artillery Post
- ❖ Conservation District, (New Post Area)
- ❖ 723 NRHP-eligible historic buildings and structures, including 257 contributing properties in the National Historic Landmark District
- ❖ 13 historic landscapes that include five historic posts and other features
- ❖ 5 individual NRHP listed properties: the Quadrangle Building 16, Clock Tower Building 40, Pershing House Quarters 6, Gift Chapel Building 2200, and the Old BAMC Building 1000

Archaeological studies on Fort Sam Houston have identified 12 sites, none of which is eligible for the national register.

Camp Bullis has 350 archaeological sites. Twenty four are eligible for listing on the NRHP. Cultural resources surveys at Camp Bullis have identified contributing elements in the form of buildings, structures, and landscape features that require preservation and protection. The Cantonment Historic District includes 40 buildings and 32 landscape features that have been identified as a potential NRHP district. Changes to Camp Bullis shown in Figure 4.4 must preserve the historic character of the cantonment area.



Cultural impacts to development result in additional time required for project initiation and coordination and possible additional project costs.

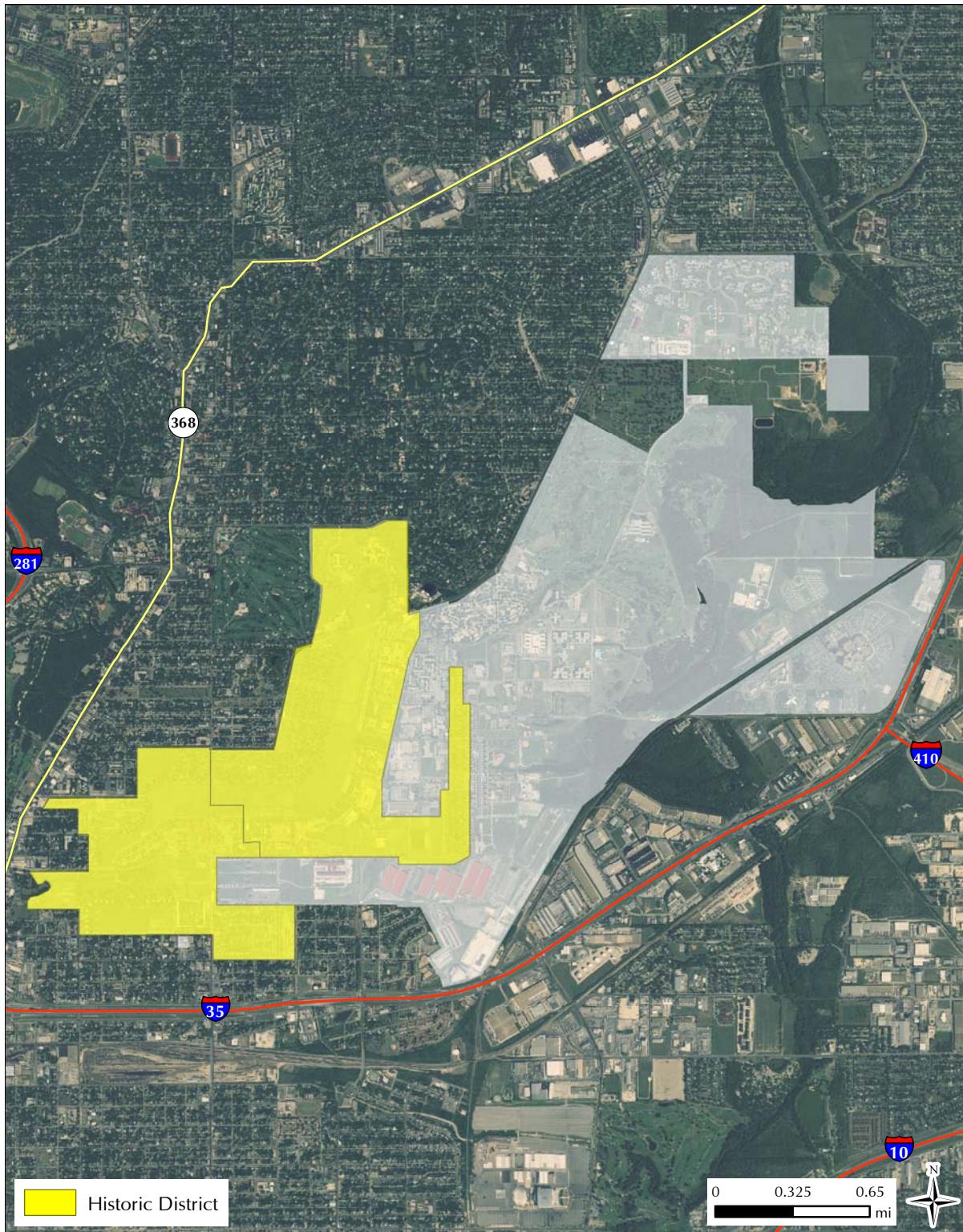


Figure 4.3 Cultural Constraints Impacting Development, Fort Sam Houston

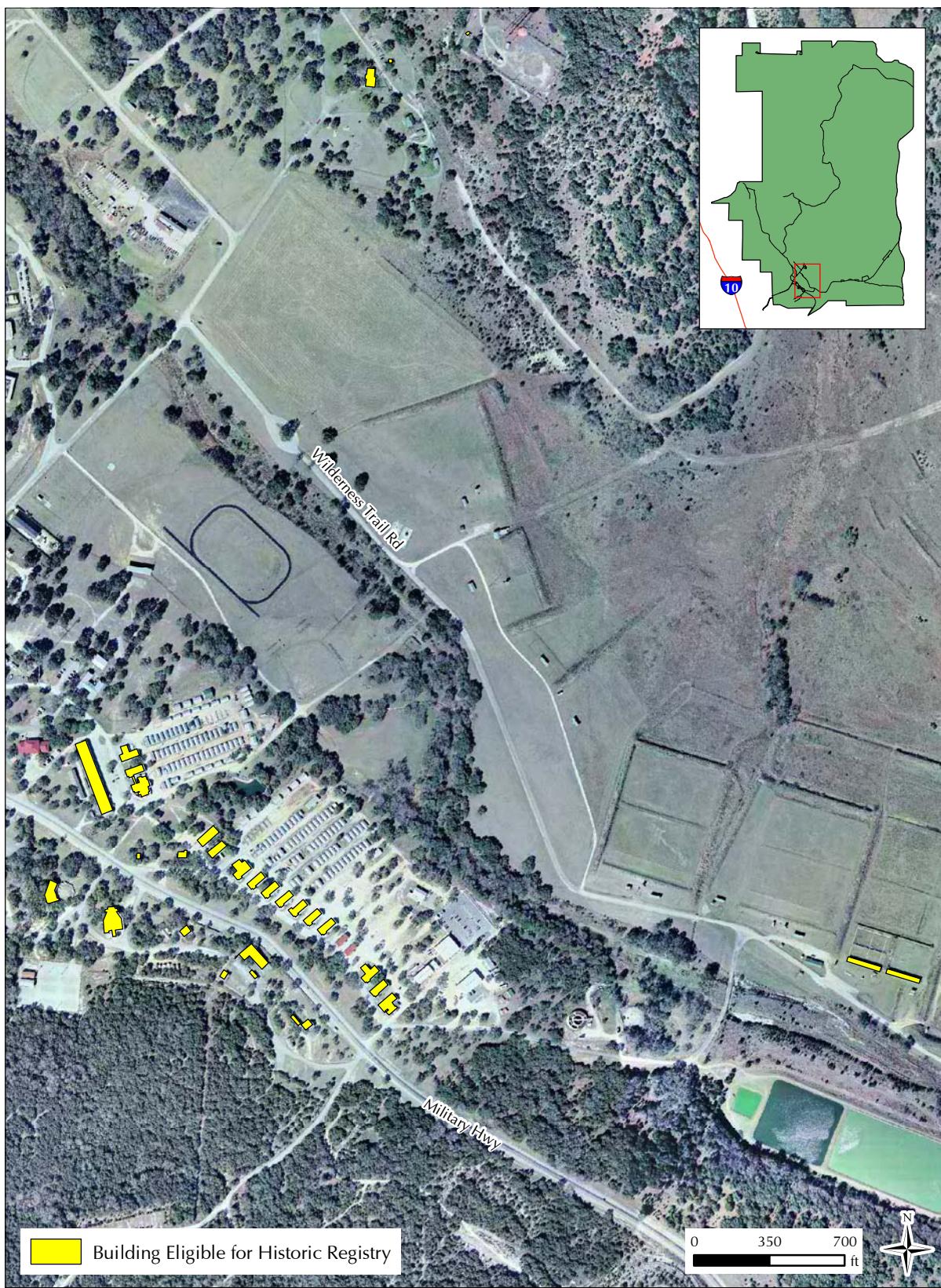


Figure 4.4 Cultural Constraints Impacting Development, Camp Bullis



4.1.3 Operational Constraints

Aviation Operations

There is one helipad on Fort Sam Houston, and several helicopter landing sites are used. There are no fixed-wing airfields. Clear zones present operational constraints to development with continued use of the helipads. Fort Sam Houston is in the process of coordinating for possible helicopter landing on the roof of one of the medical center buildings. A clear zone for helicopters exists near BAMC across George Beach Avenue to the southeast.

Numerous helicopter landing sites and landing zones are located throughout the Camp Bullis Training Area in support of training operations there. In addition, there are three drop zones and one combat assault fixed-wing airfield that support training. Camp Bullis does not have a permanent helipad.

Restricted airspace around the San Antonio Airport constrains aviation operations at Camp Bullis to a 2,000-foot altitude limit.

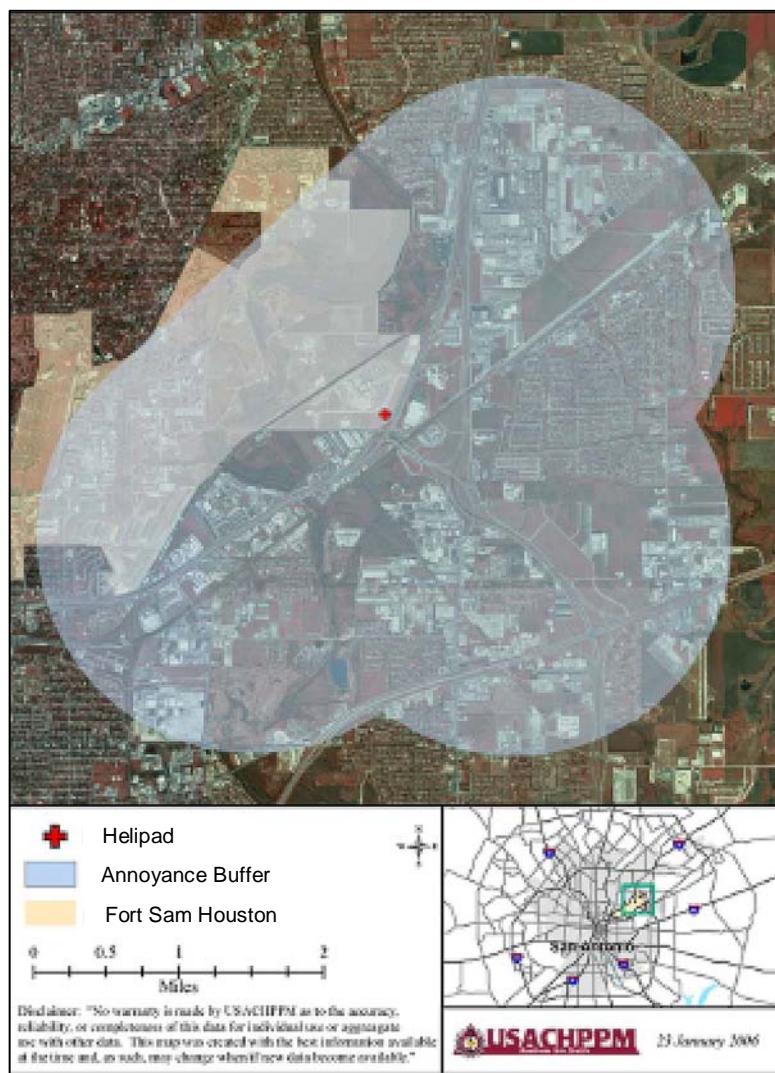


Figure 4.5 Helipad Annoyance Buffer, Brooke Army Medical Center

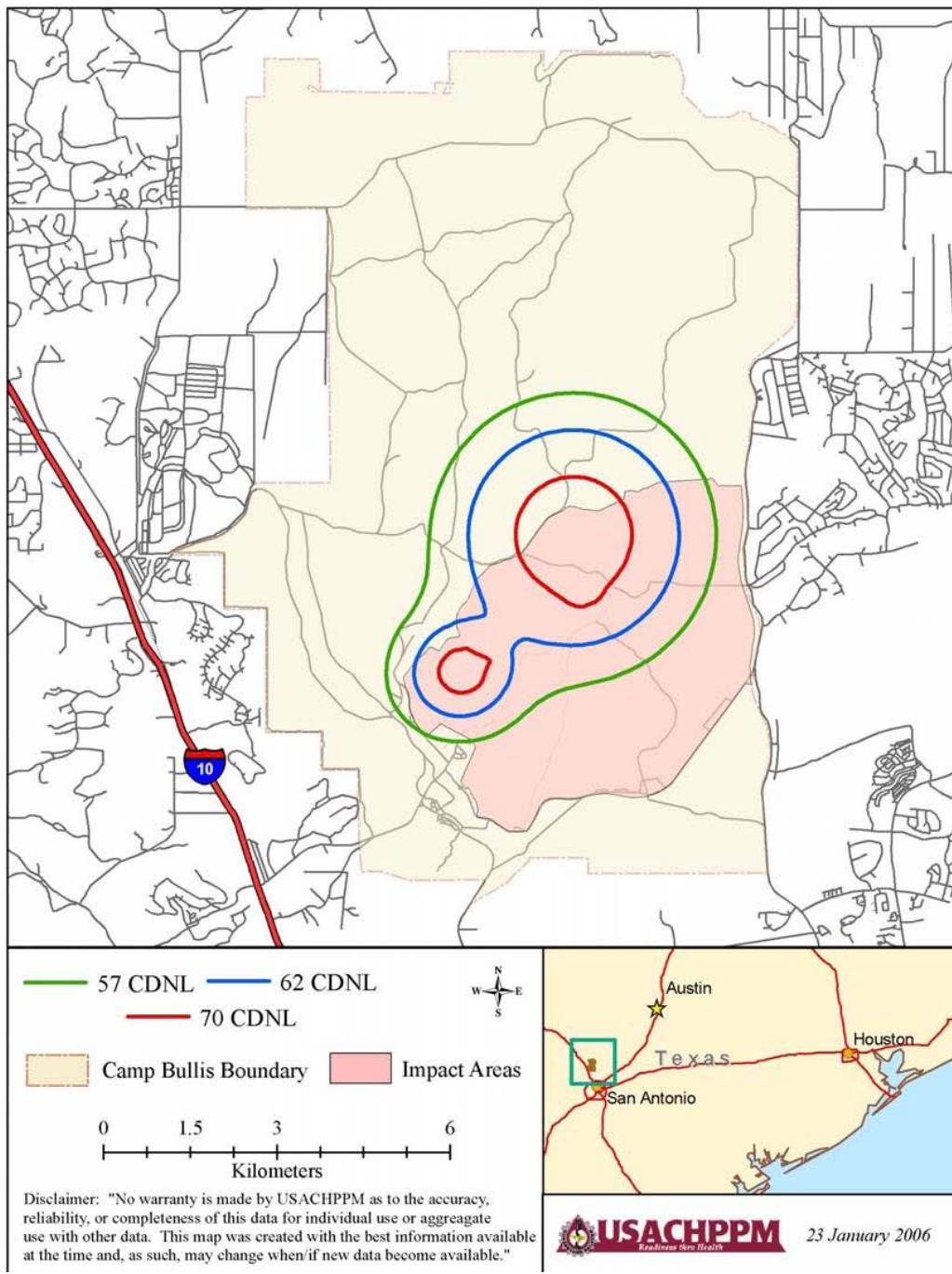


Figure 4.6 Noise Contours, Camp Bullis



Explosive Safety Quantity Distance

Storage of munitions at Fort Sam Houston is limited. The current ammunition storage location in the 4100 area is being eliminated and all munitions will be stored in a single ARMAG (armored magazine) container, which has little impact on development since Explosive Safety Quantity Distance (ESQD) restrictions are minimal. Camp Bullis provides several small buildings for the storage of live-fire ammunition used in training, and is affected by minor ESQD restrictions.

The ESQD arc establishes the minimum required safety distance around the Ammunition Supply Point and is a development constraint. No habitable buildings and limited operations can be accommodated within the controlled space. Expanding missions may increase the ammunition storage requirement resulting in a need to increase the storage and holding capacities with their associated ESQD arcs.

Noise

Noise from training and operational missions is an inherent part of a military installation and is addressed in the Fort Sam Houston Master Plan presentation. Effective education and noise complaint management programs at Fort Sam Houston and at Camp Bullis have minimized noise complaints.

Noise zones extend outside the boundaries of the Camp Bullis Training Area and have existed for several generations. The off-post noise impact from operational training activities at Camp Bullis is primarily from small caliber weapons at established ranges. Other contributors to noise are helicopter operations into and out of the Camp Bullis Training Area and C-130 aircraft using the Combat Assault Landing Strip.

Encroachment

Encroachment around the Camp Bullis Training Area by construction in neighboring communities has increased the use of the training area by migratory birds for nesting habitat.

Hazardous Materials

The toxicity of lead-based paint in older buildings at Camp Bullis must be considered when development plans would require demolition. Lead can be absorbed into the body by inhalation and ingestion, and when lead is scattered in the air as a dust, fume, or mist, it can be inhaled and absorbed through the lungs. Lead can also be absorbed through the digestive system when swallowed. The Resource Conservation and Recovery Act (RCRA) and Occupational Safety and Health Administration (OSHA) consider lead paint a “non-listed solid waste” but it is a “hazardous waste” if it meets the standards for toxicity.



Camp Bullis training area



Medical evacuation training



Convoy training area includes 100 miles of road infrastructure



Convoy Live-Fire Range



Virtual Combat Convoy Trainer

Non-Contiguous Areas

The National Cemetery, the Union Pacific Railroad, and Grayson Street impact development at Fort Sam Houston. All divide the installation, creating non-contiguous areas, a factor that limits options when considering future plans and increases the requirements for access control points (ACPs) into separated areas.

The Medical Complex is almost completely built out, thereby limiting future development in that area. The 2011 SAMMC North Master Plan proposes extending the Medical Complex development areas across the “relocated” railroad in the future.

Range and Training Areas

Fort Sam Houston has several designated training areas near the school sites that constrains new development in those areas.

Camp Bullis provides an outstanding joint training facility for the medical training mission supporting Fort Sam Houston, Reserve, and National Guard units. The range and training areas are mission-critical resources that must be protected from encroachment, both internally and externally.

The Camp Bullis range and training area encompasses 27,994 acres, including:

- ❖ Convoy Live-Fire Range
- ❖ Road march areas
- ❖ Law Enforcement Range
- ❖ 28 training areas
- ❖ C-130 landing strip
- ❖ 18 small-arms ranges
- ❖ 4 drop zones
- ❖ 2 forward operating bases
- ❖ Military Operations on Urban Terrain (MOUT) sites
- ❖ Virtual Combat Convoy Trainer
- ❖ Demolition range

Figures 4.7 and 4.8 show operational constraints at Fort Sam Houston and Camp Bullis.

Figure 4.9 shows Camp Bullis range and training areas.

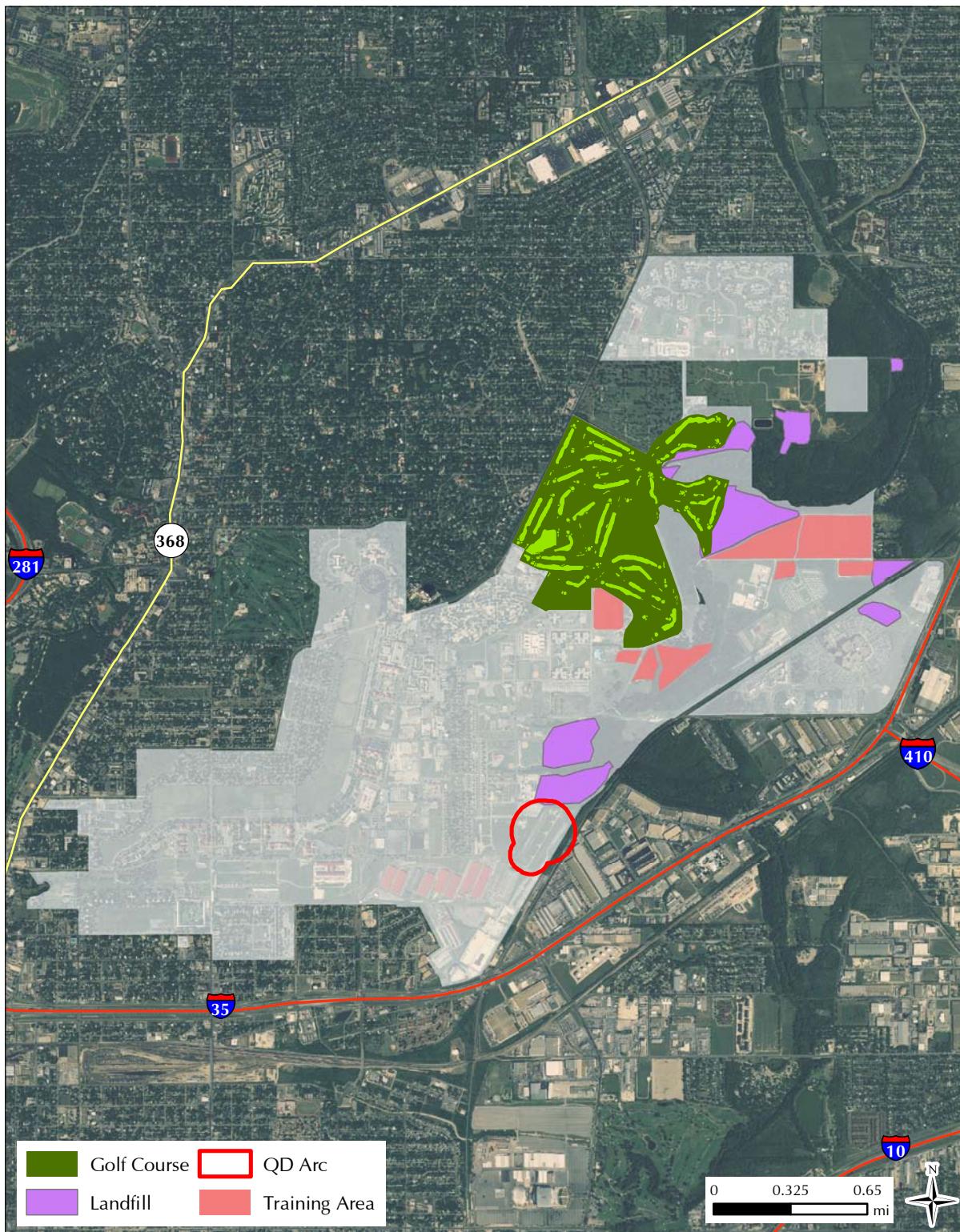


Figure 4.7 Operational Constraints, Fort Sam Houston

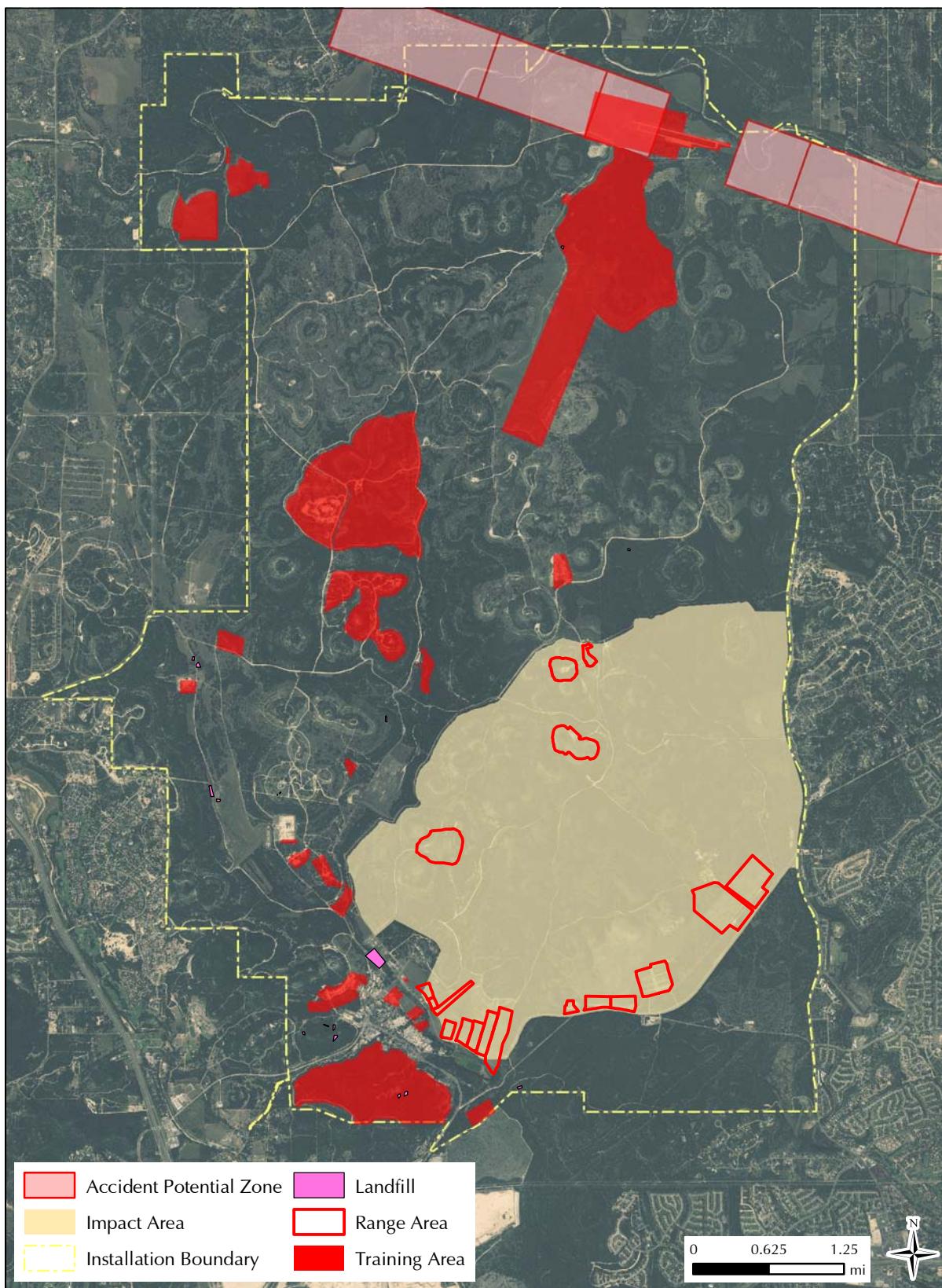


Figure 4.8 Operational Constraints, Camp Bullis



Existing Conditions Assessment

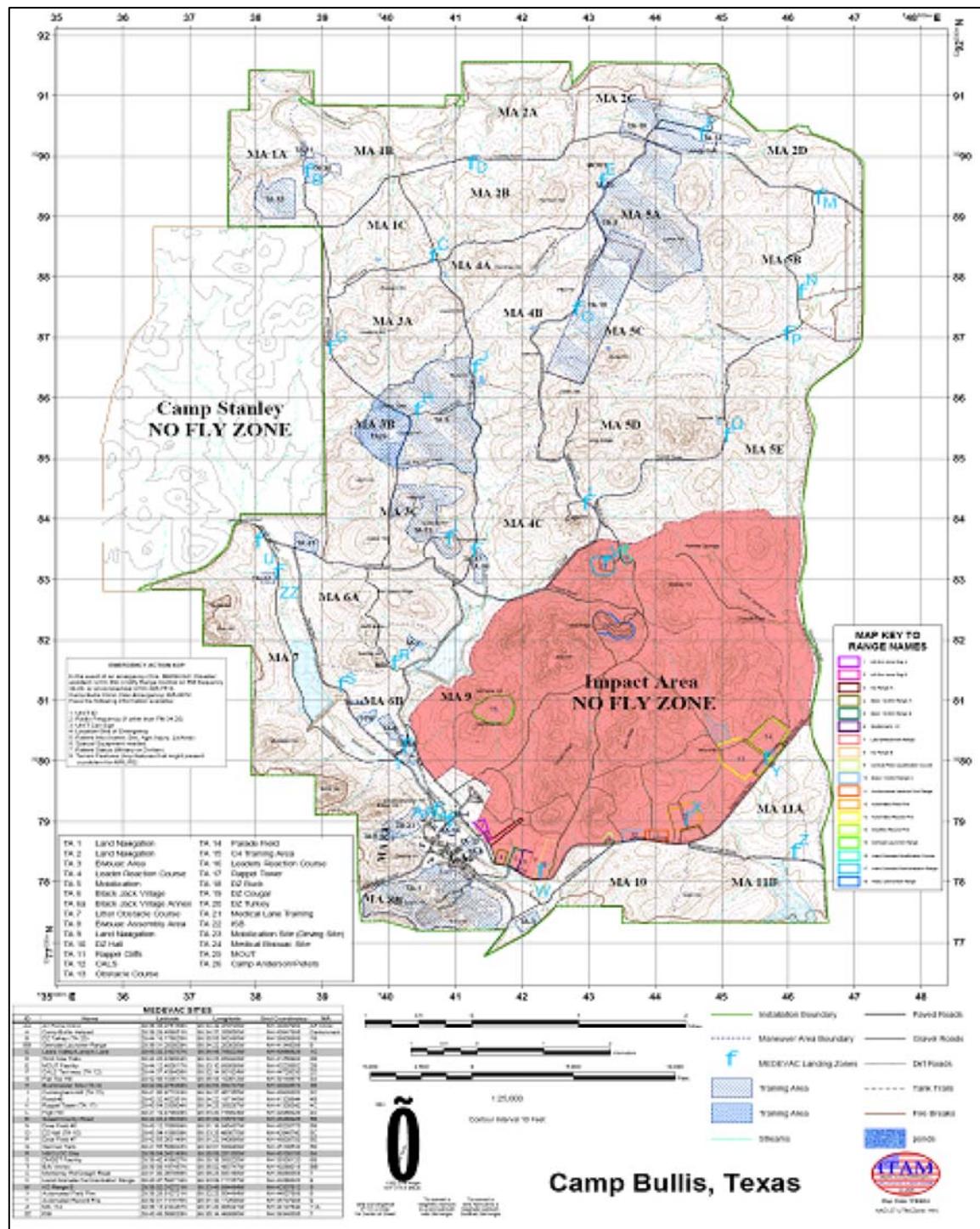


Figure 4.9 Range and Training Area, Camp Bullis



Antiterrorism/Force Protection Standards



ATFP standards

Force protection standards within controlled installations require a 148-foot (45-meter) standoff from the controlled perimeter and an 82-foot (25-meter) standoff from roads to most facilities. The standoff increases to 246 feet (75 meters) for facilities in areas without controlled perimeters. Antiterrorism/force protection (ATFP) standoff requirements have significantly affected development at Fort Sam Houston requiring the elimination of many parking lots close to facilities and the expansion of other parking areas to compensate for the losses. Large buildings present at Fort Sam Houston are especially affected by standoffs and challenges to provide adequate parking. A consolidated parking structure will be built for the Medical Complex as one of the means to address parking area shortages.

Landfills

Current off-site landfill facilities have adequate capacities to properly dispose of solid wastes generated at Fort Sam Houston and Camp Bullis. No operational landfills exist at Fort Sam Houston or at Camp Bullis. Eight former landfill sites on Fort Sam Houston are located along Salado Creek, six of which are within the Salado Creek floodplain. Landfills along Salado Creek have not received refuse since the mid-1970s. Camp Bullis has one closed landfill located north of the cantonment area. Closed landfills are under remediation and constrain development to only certain types of reuse.

Open Space and Recreational Areas

Certain areas of the installation are designated as open space and recreational areas that are preserved for those purposes. It is critical these areas are retained to support the quality of life and sustainability initiatives that enhance the Fort Sam Houston environment. Some open space and recreational areas are shown on the Fort Sam Houston Development Constraints Map.

Canyon Lake Recreation Area provides 110 acres of multi-use area.

Two world-class golf courses occupy about 253 acres of land in the center-north portion of Fort Sam Houston. The preservation of this recreational space constrains development in the golf course areas.



Cabin at Canyon Lake Recreation Area



4.1.4 Development Constraints Summary

Figures 4.10 and 4.11 show development constraints at Fort Sam Houston and Camp Bullis.

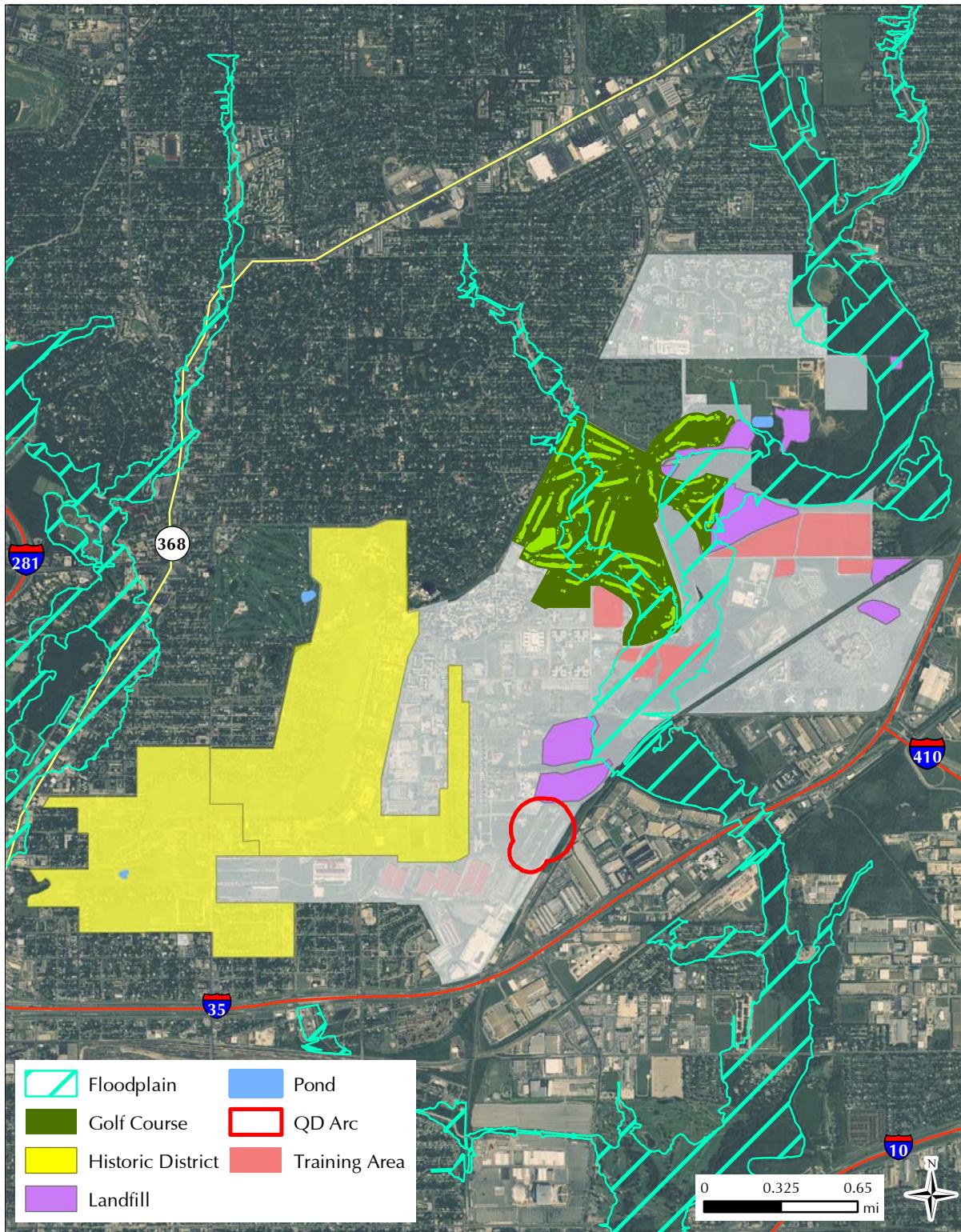


Figure 4.10 Development Constraints, Fort Sam Houston

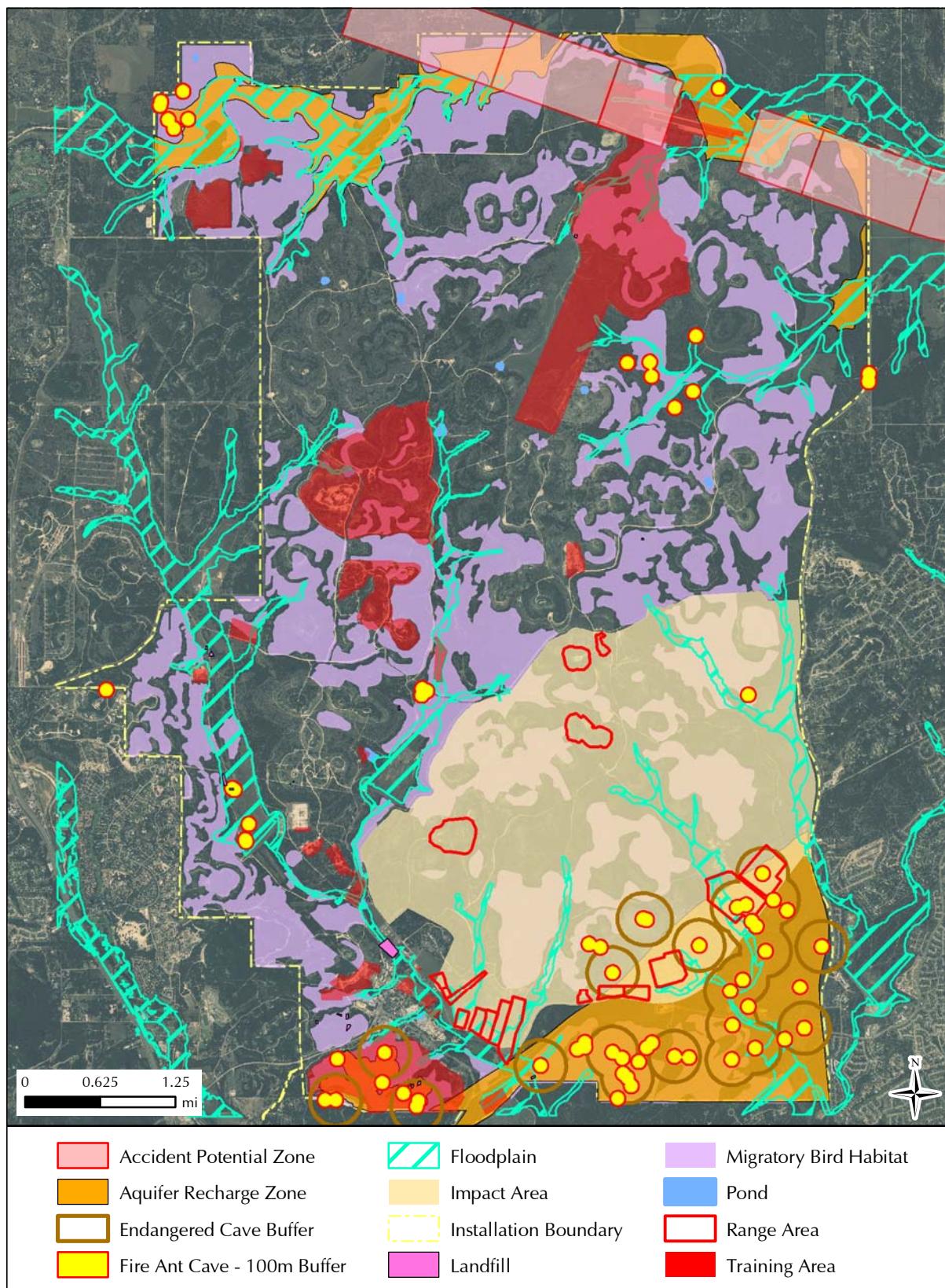
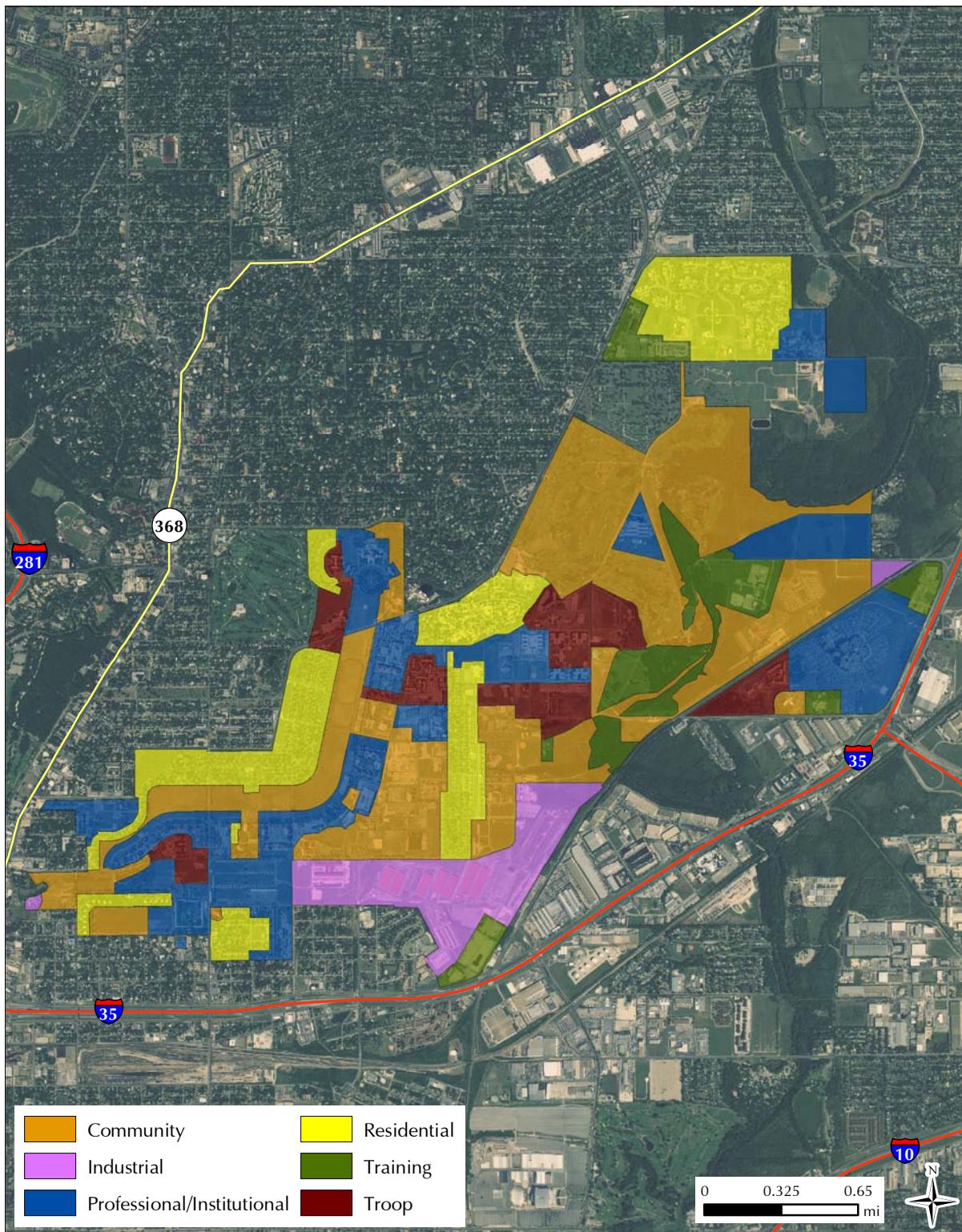


Figure 4.11 Development Constraints, Camp Bullis



4.2 Land Use

The RPMP and IDG provide land use information for Fort Sam Houston and Camp Bullis pending approval by the Real Property Planning Board.



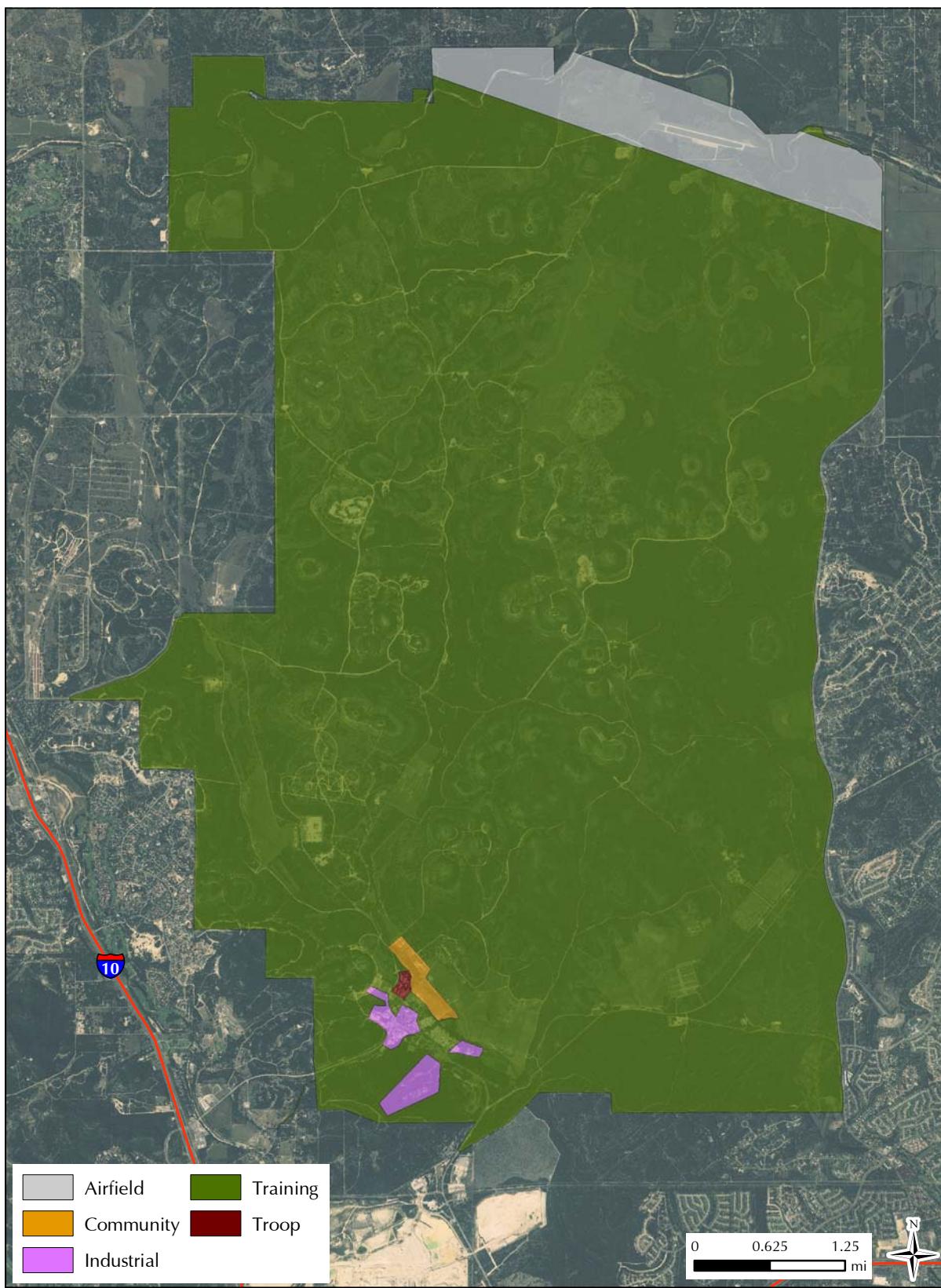


Figure 4.13 Existing Land Use, Camp Bullis



4.3 Infrastructure

4.3.1 Real Property Facilities (Buildings) Assessment

Existing Facility Inventory

Fort Sam Houston has 1,305 buildings in the fiscal year (FY) 2008 Real Property Inventory (RPI). Camp Bullis has 244 buildings, and Canyon Lake Recreation Area has 50 buildings.

In the table below, existing assets include permanent assets, semi-permanent assets, and leased family housing found in the Real Property Planning and Analysis (RPLANS) Tabulation of Existing and Required Facilities (TAB) Facility Category Group (FCG) Summary, 31 January 2008, with a unit of measure of square feet (SF). Planned Construction is taken from the FY13 TAB Summary; shortfalls are in family housing.

In Table 4.1 Existing and Required Facilities (FY08 to FY13), all measures are gross square feet (GSF). Slight rounding errors appear in the table when using RPLANS data directly.

Table 4.1 Existing and Required Facilities (FY08 to FY13) (000 GSF)

Facility Category	Major Facility Category Description	Existing Assets (FY08 TAB)	Planned Construction (FY13 TAB)	Demo*	Total Existing and Planned Construction	FY13 Requirement	Balance
100 Series	Operations & Training	1,909	388	0	2,296	2,069	227
200 Series	Maintenance	367	49	0	417	278	139
300 Series	Research Development Testing	104	155	0	259	259	0
400 Series	Supply and Warehousing	787	12	0	799	403	396
500 Series	Medical	1,674	796	0	2,470	1,553	917
600 Series	Administration	1,758	0	0	1,758	1,561	197
711 Series	Family Housing	8,274	0	0	8,274	9,540	-1,266
720 Series	Barracks & Unaccompanied Transient Housing	1,966	1,541	0	3,508	2,301	1,207
700 Series	Community Support	1,108	67	0	1,176	995	181

* Demolition plans are under development.

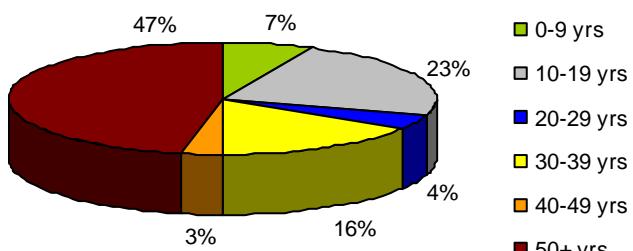


Figure 4.14 Existing Assets by Age

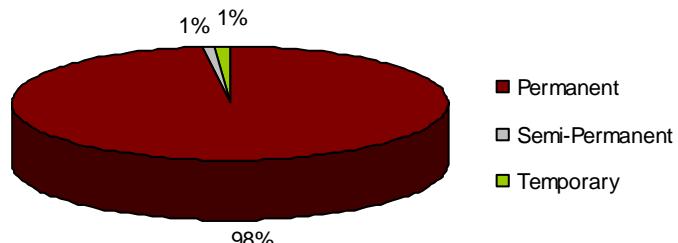


Figure 4.15 Existing Assets by Type

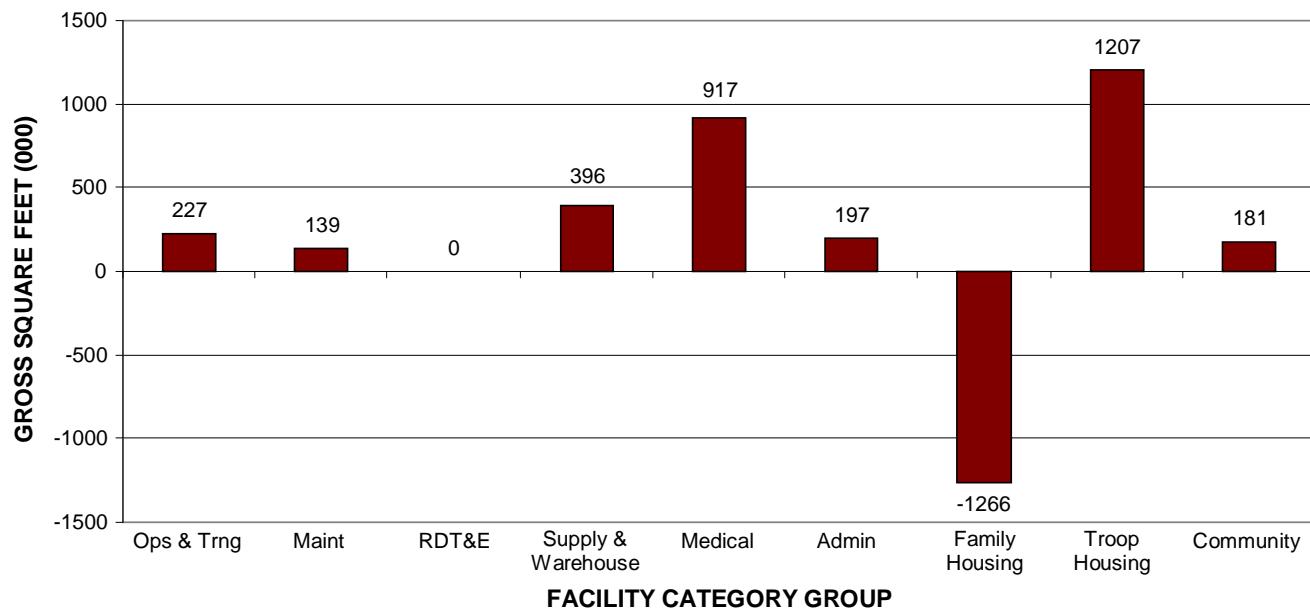


Figure 4.16 Real Property Assets Status (FY13 RPLANS)



Existing Conditions Assessment

Table 4.2 Installation Status Report Ratings (as of 2nd Quarter 2008)

ISR Category	Ops & Training	Maint & Production	RDT&E	Supply	Medical	Admin	Housing & Cmty Spt	Mobility	Utilities
Mission		N/A							
Quality									
Quantity									

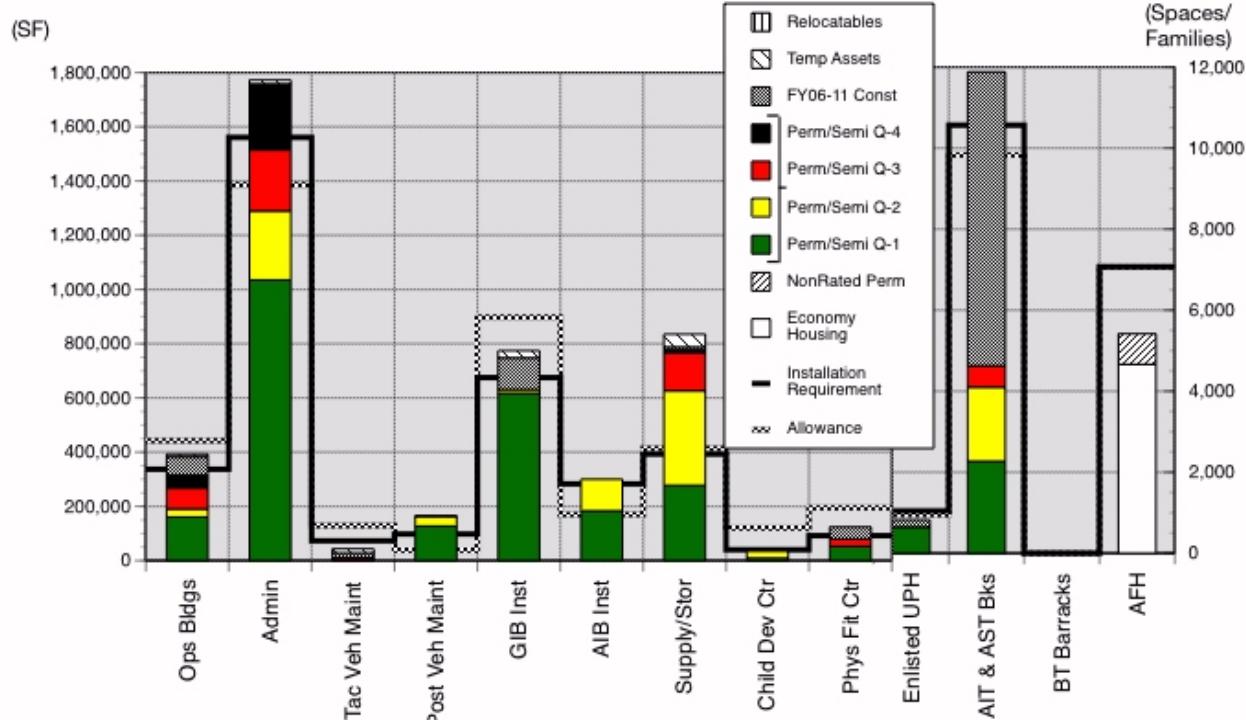


27 Feb 2008

Fort Sam Houston Analysis of Essential Facility Requirements – FY 2013



(Spaces/
Families)



- Notes:
- Assets as reported by Installation - Jan08 HQRPLANS(v17.2), Sep07 HQEIS
 - Force Structure from corporate sources Oct07 ASIP
 - Allowance generated from standard criteria and the ASIP; Requirements, if different, from installation
 - Construction from Nov07 new construction (FY06-11 MCA, BCA, AFH, NAF)
 - Q-1/Q-2/Q-3/Q-4 Condition Data for perm/semi-perm reported by installations - 2007 ISR lock

Oct07 ASIP	Mil	USCiv
• FY08	12,875	5,509
• FY13	19,394	6,690

Figure 4.17 Fort Sam Houston Essential Facility Requirements



4.3.2 Utilities Assessment

Fort Sam Houston has privatized several utility systems. The installation purchases electricity and natural gas and operates wells to supply water. Overall, the utility systems are in satisfactory condition and have sufficient capacity to support planned future development.

Natural Gas System

Natural gas service is privatized and is provided to Fort Sam Houston by CPS Energy. There are no capacity issues related to natural gas.

Camp Bullis has no natural gas service and uses propane gas for heating and hot water.

Electric System

Supply of electricity is privatized at both Fort Sam Houston and Camp Bullis. Service is provided by CPS Energy, which owns the electrical plant to the electrical meters. Power is purchased at the point of delivery. An easement has been granted to construct a new substation near BAMC. The medical center has a 10-megawatt plant for backup power. Power is sufficient or can be made to be sufficient to support future development.

CPS Energy offers “windtricity” blocks by meter account making renewable energy credits available.

Hot Water and Chilled Water Systems

Hot water and chilled water systems (HWCW) exist at buildings 902, 1377, 2010, and 3605. HWCW equipment plants serve professional/institutional areas, such as the Medical Education and Training Campus and BAMC. Cooling loads are the greatest demand on these systems. Maintenance problems exist for building 2010. The remaining system appears adequate. No current plans call for additions to the existing system.

Water System

Fort Sam Houston obtains its water from water wells supported by the Edwards Aquifer. The Edwards Aquifer also supports Lackland and Randolph Air Bases, Kelly Barracks, and BAMC. In a January 2008 Biological Opinion from the U.S. Fish and Wildlife Service, the Department of Defense (DoD) installations in the San Antonio area have been limited to 12,000 acre-feet of Edwards Aquifer water per year. Based on historical usage, Fort Sam Houston's agreed share of DoD water allocation has been 30.8 percent, but discussions are underway with the Air Force to increase this percentage based on BRAC growth at Fort Sam Houston.



Electrical substation



Water reuse system



A recent water study reported that Fort Sam Houston will be 50 percent short of water for the expected demand after BRAC implementation. The study's baseline, however, did not take into account the aggressive initiatives that Fort Sam Houston has implemented. Fort Sam Houston's actual groundwater use has been as follows: 2004, 1,127 acre-feet; 2005, 1,685 acre-feet; and 2006, 1,614 acre-feet. A large amount of reuse water is purchased from the San Antonio Water System (SAWS), a public utility owned by the city of San Antonio. The purchased water is recycled, which does not count against the Edwards Aquifer groundwater withdrawal restrictions. Current consumption includes approximately 700 acre-feet of reuse water for landscape irrigation and cooling towers. The 500 and 1000 blocks are areas of low pressure (32 to 35 pounds per square inch). These areas are recommended for further study to determine possible solutions to the low pressure situations.

Camp Bullis is supported by three wells into the shallow and drought-prone Trinity Aquifer. A 2008 study concluded that while the water supply is adequate for the current needs at Camp Bullis, it is insufficient for future needs. Solutions to water needs for future development are under study.

Sanitary Sewer

Fort Sam Houston currently maintains wastewater discharge permits and operates under a Federal Acquisition Regulation Part 41 contract for utilities connecting with SAWS at 26 points around the installation. An update of a 1986 wastewater report is in progress and is anticipated to be completed by late 2008. Sewer capacity is satisfactory.

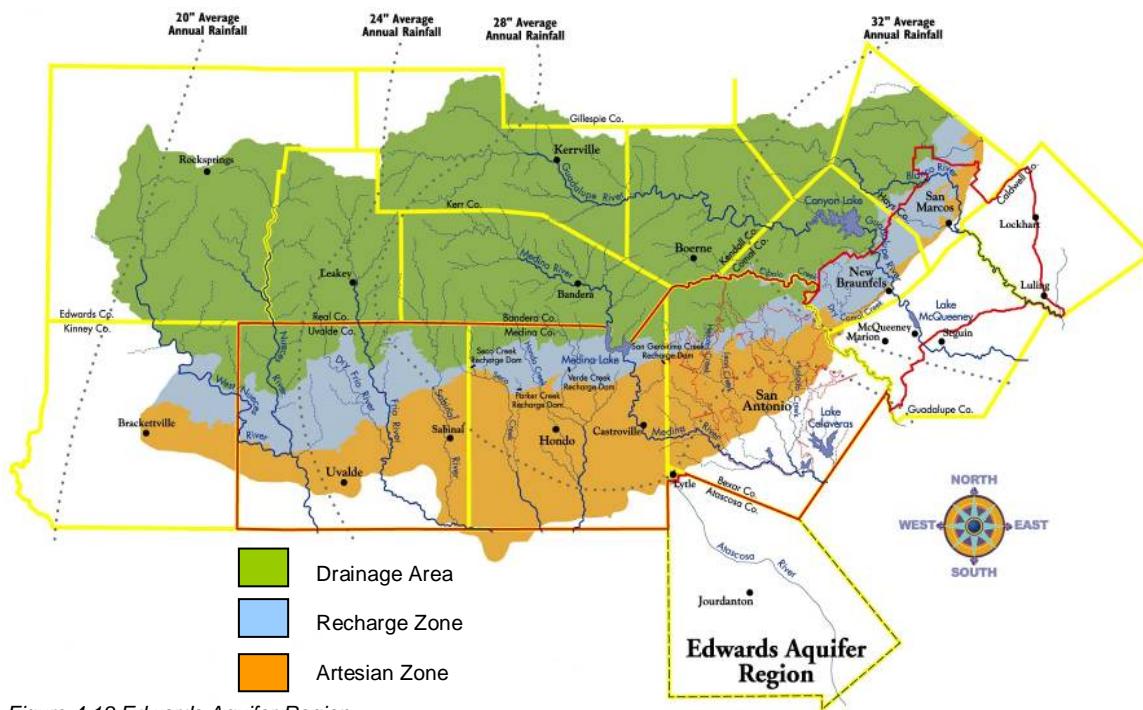


Figure 4.18 Edwards Aquifer Region



Stormwater drainage



Open channel and culvert



Salado Creek warning sign

The wastewater system at Camp Bullis consists of three components: a packaged treatment plant, post-treatment holding ponds, and a post-treatment irrigation system. Wastewater collection at Camp Bullis is at capacity.

Treated wastewater effluent is stored temporarily in holding ponds and ultimately discharged through spray irrigation. Camp Bullis operates under a zero discharge operating permit redistributing treated wastewater effluent through irrigation of the nearby firing ranges. Recycled/reuse water is not used for irrigation at any facilities other than the ranges.

A 1986 study of the system is still valid since no maintenance or upgrades have been made to the system.

Stormwater System

Fort Sam Houston is drained primarily by Salado Creek as seen in Figure 4.1. The creek runs north to south through the eastern portion of the installation and drains into the San Antonio River. Flow from the installation into the creek is primarily from surface runoff. The western part is drained by the Alamo Ditch, a tributary of the San Antonio River. The southern and central portions of Fort Sam Houston proper are drained by the city of San Antonio's stormwater drainage system. A stormwater study is in progress for Fort Sam Houston.

The stormwater system consists of a network of open channels, culverts, and storm sewers. The systems are owned and operated by Fort Sam Houston up to the installation boundaries. A study of the storm water system completed in the early 1980s determined that the system was poorly maintained and undersized. Fort Sam Houston is required to provide stormwater detention of a capacity equal to the difference between previous impervious surfaces and new. Low areas along Salado Creek are prone to flooding over the roadways about three to four times a year.

No formal stormwater system is currently in place at Camp Bullis. Stormwater drainage at Camp Bullis is generally through natural settings (e.g., interim creeks and valleys). Natural drainage is enhanced by occasional curbing, parking lots, and ditches. Stormwater capacity issues are mitigated for new construction by designs that include detention ponds.

Communication

Fort Sam Houston currently has over 96,000 linear feet (18 miles) of copper telephone communications cabling and 131,000 linear feet (25 miles) of fiber optic cabling to support secure telephone and data communications on the installation (Martin, 2006).

Camp Bullis currently has over 15,000 linear feet (3 miles) of copper telephone communications cabling and 15,000 linear feet (3 miles) of fiber optic cabling.



4.3.3 Transportation Assessment

Fort Sam Houston is a fully access-controlled installation. Major access/egress to the external roadway network is through ten active, controlled entry gates at Fort Sam Houston and one at Camp Bullis. Current ACPs make use of canopy shelters to cover vehicle inspection areas. This is a significant reduction to the over 30 access points to the installation prior to September 2001. A major public thoroughfare along North New Braunfels Avenue through the post was interrupted by the implementation of the new access controls.

There are 864 lane miles of paved roadway in the existing inventory at Fort Sam Houston and more than 34 lane miles of unpaved roadways servicing the installation.

A traffic study was completed in April 2008 with over \$20 million of roadway projects recommended to prepare for expected traffic in 2012. The prioritized improvement projects involve roadway widening and intersections. A 2010 project is programmed to improve the transportation network at Fort Sam Houston. Other needed improvements totaling \$35 million remain unprogrammed.

Figures 4.18 and 4.19 show pre-BRAC and future transportation networks. The future plan shows a major change to Stanley Road (south and east of the main parade field area) from its current status as an arterial.

Camp Bullis has 56 paved and 46 unpaved lane miles of roadway. A Transportation Condition Assessment study completed in June 2008 recommends 34 projects for over \$8.5 million, which include ACP improvements, roadway widening, resurfacing, realignment, and drainage improvements.

Fort Sam Houston and Camp Bullis have no railroad service. A Union Pacific Railroad line splits Fort Sam Houston on its east side. As seen in Figures 4.19 and 4.20, the BAMC area is separated by the rail line from the east side of the main post area. As a result, separate ACPs are located at the entrances to both areas. The Union Pacific right-of-way is supported by a fee simple agreement.

Helicopters are able to access Fort Sam Houston and Camp Bullis; however, the only fixed-wing airfield exists at Camp Bullis for combat assault landings. Landing pads are available at both locations for rotary-winged aircraft.

Commercial air travel is provided by the San Antonio Airport, an estimated 25-minute drive north from Fort Sam Houston.



Fort Sam Houston access control point



Access control point



Camp Bullis drainage

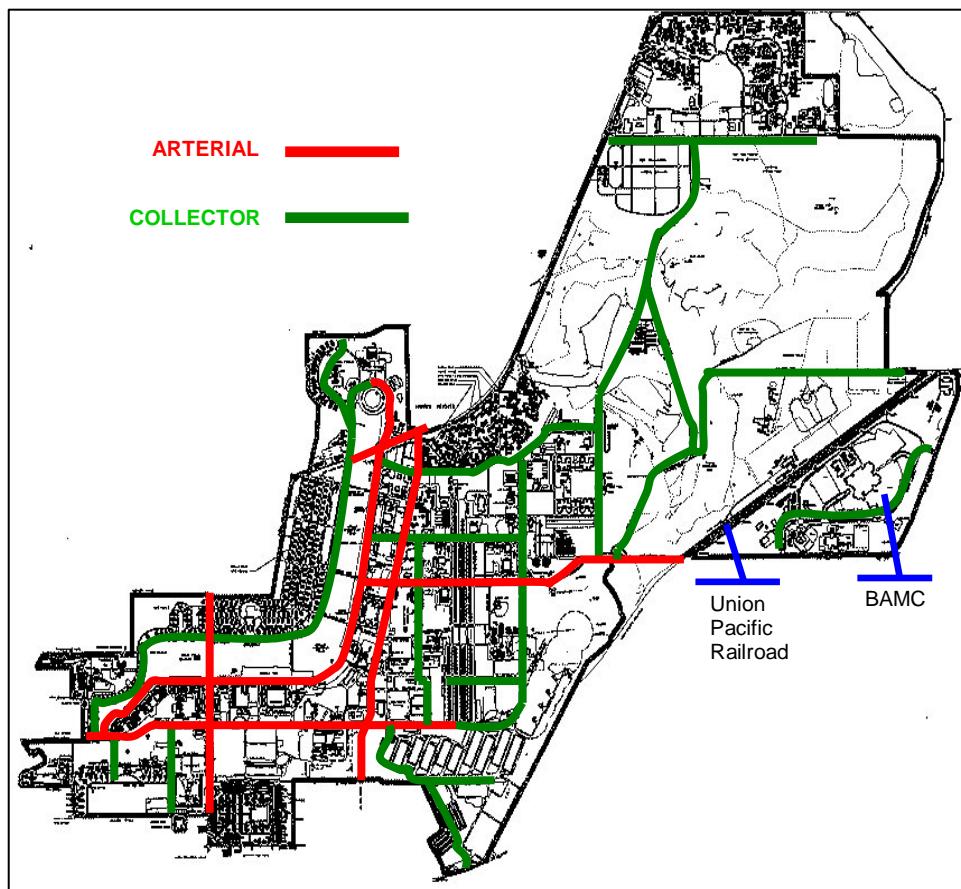


Figure 4.19 Transportation Pre-BRAC

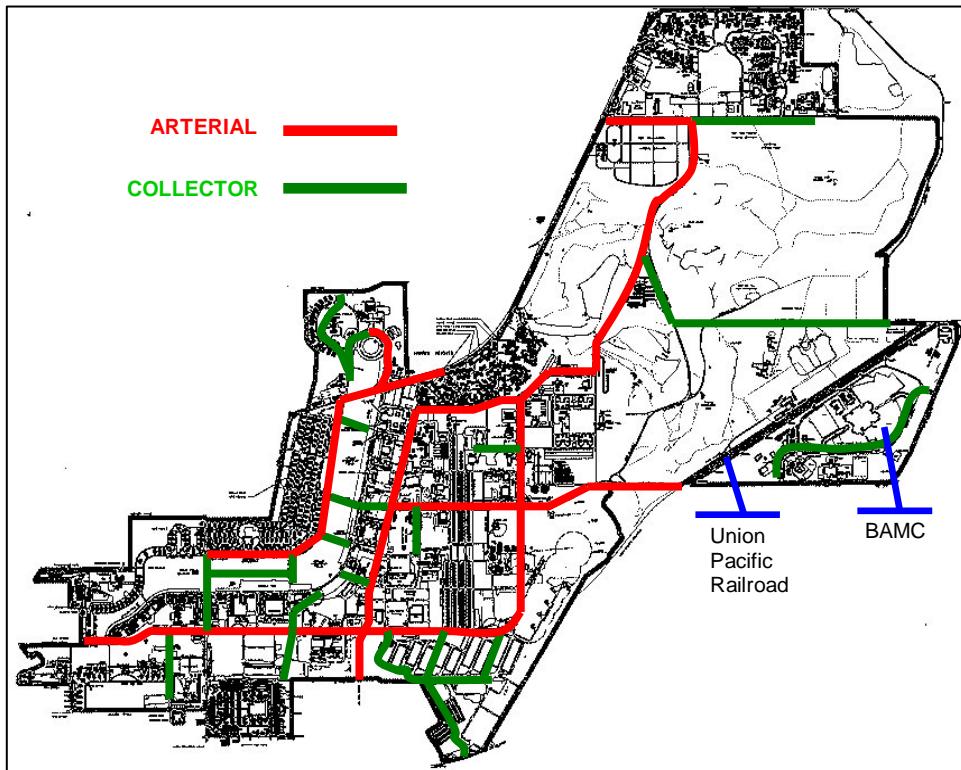


Figure 4.20 Future Transportation (Conceptual, Pending Approval)



4.3.4 Development Opportunities

Development opportunities at Fort Sam Houston are highlighted in Figure 4.21. These can include open space and redevelopment opportunities within existing built-up areas.

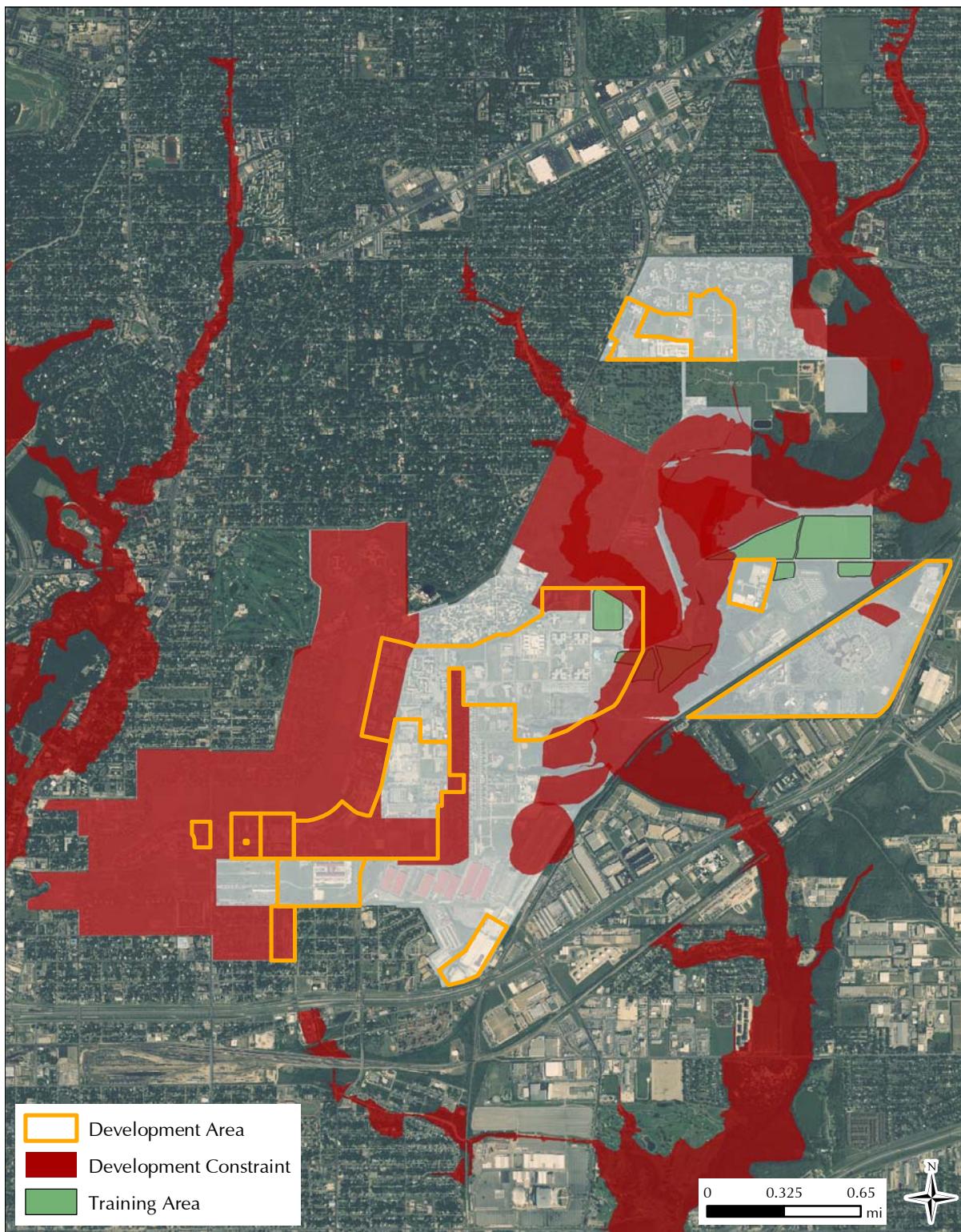


Figure 4.21 Opportunities for Development, Fort Sam Houston



Figure 4.22 shows areas of Camp Bullis available for development.

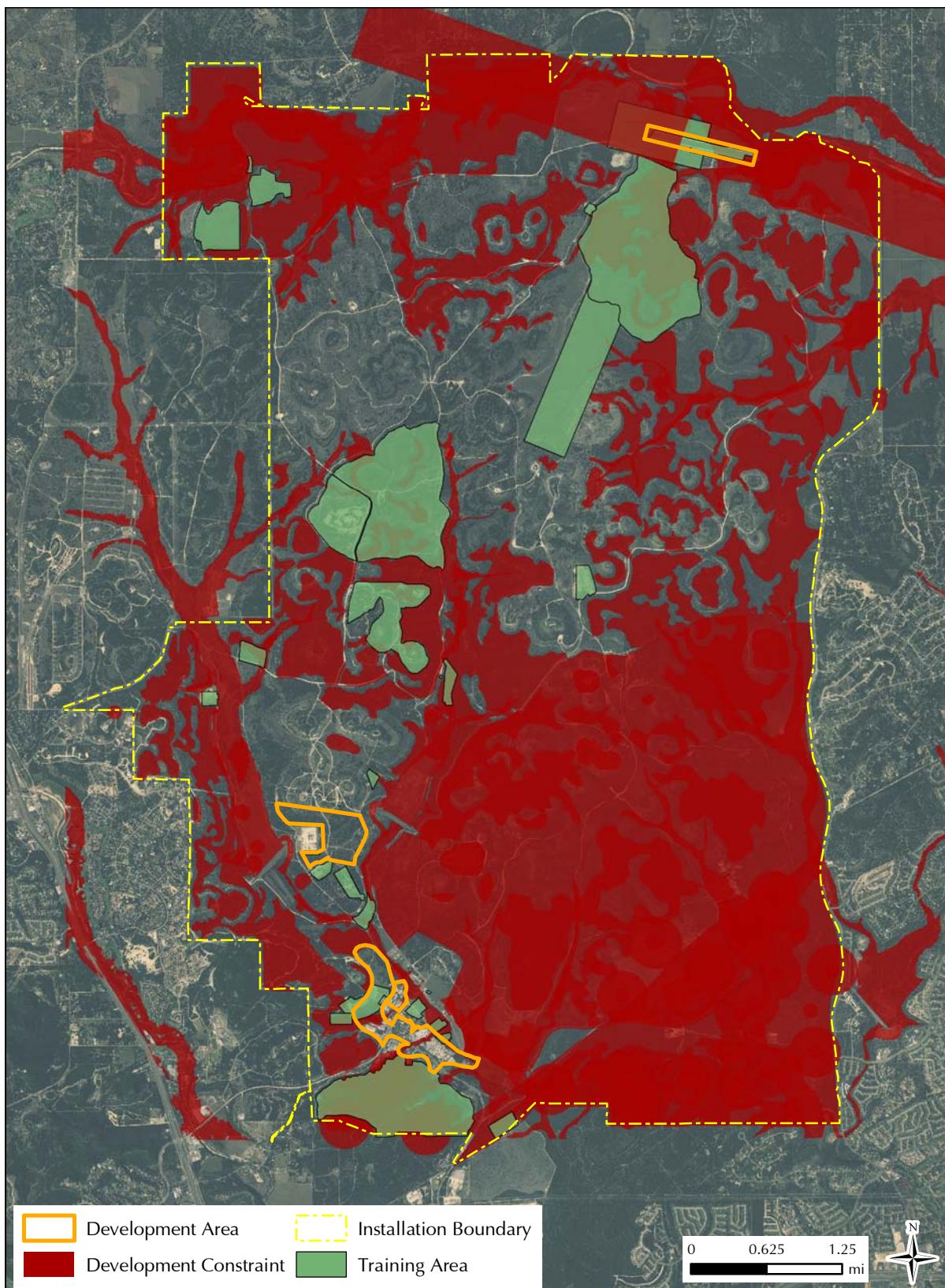


Figure 4.22 Opportunities for Development, Camp Bullis



5 Development Plans

Fort Sam Houston, Texas

5.1 Long-Range Component

Currently in development, the LRC outlines strategic and long-range (20- to 50-year) plans for the installation. It includes a comprehensive assessment of all aspects of the natural and man-made environment and establishes strategies and guidelines to support development of a sustainable installation that will adequately address all mission requirements. It includes the Future Land Use Plan and the Future Development Plan based on a Balanced TAB that forms the basis for project-specific development actions that occur in the SRC.

The LRC strategy for Fort Sam Houston will focus on the necessary redevelopment of the older areas of the installation that contain existing (or soon to be) inadequate or substandard facilities.

Current actions are under way to address a comprehensive update of the Fort Sam Houston and Camp Bullis LRC, particularly elements of the LRC including:

- ❖ A comprehensive development constraints map
- ❖ A green infrastructure plan
- ❖ Various utility and transportation assessments
- ❖ A Future Land Use Plan
- ❖ A comprehensive Future Development Plan

Figure 5.1 presents the Future Land Use Plan for Fort Sam Houston. It is critical that all future development initiatives follow this land use plan to ensure that capital investments occur in the appropriate areas to support the installation's overall development vision and goals.



Historic unit area



Long Barracks



Old Medical Complex facility

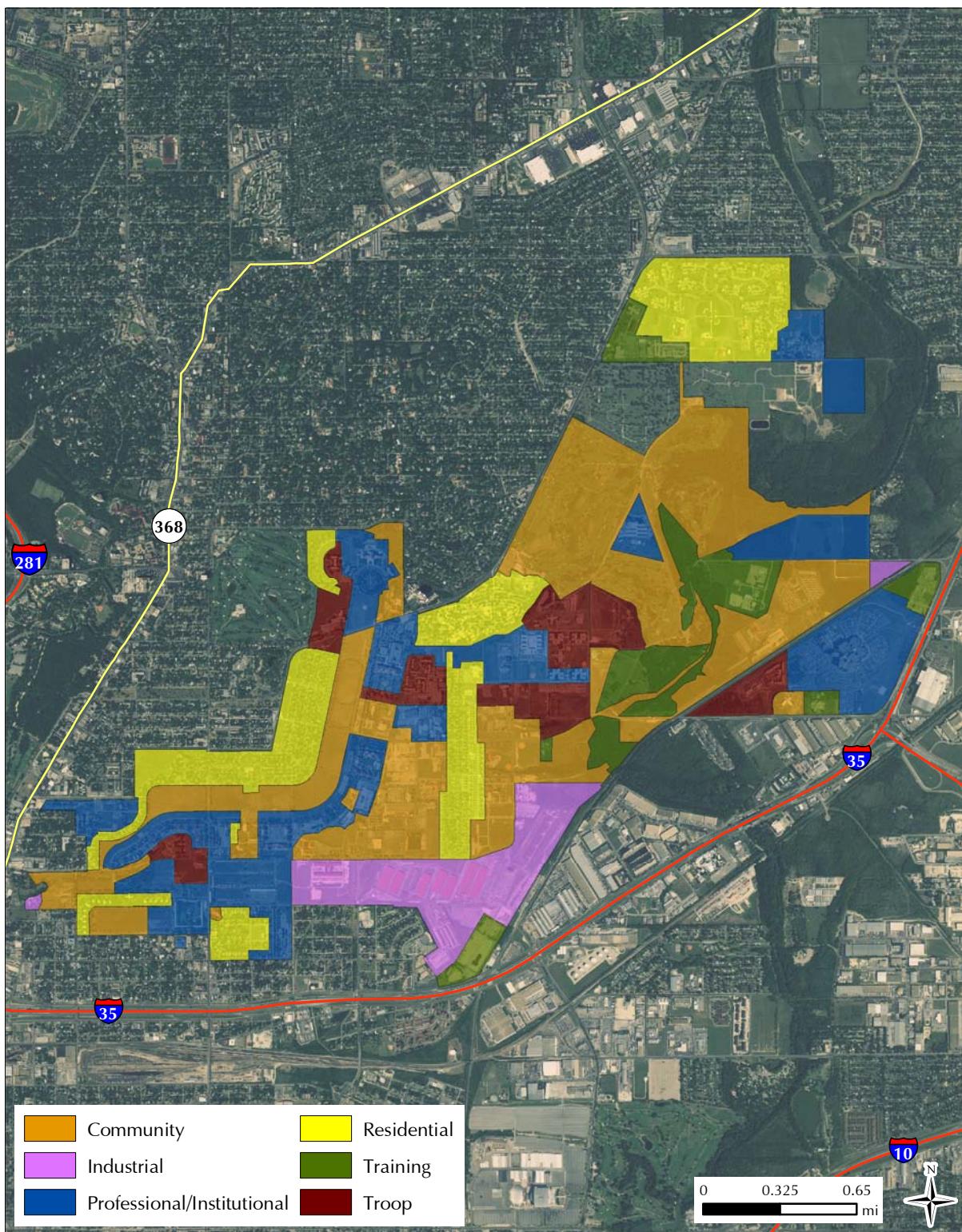


Figure 5.1 Future Land Use Plan, Fort Sam Houston (Pending Real Property Planning Board approval)



5.2 Installation Design Guide

The purpose of the IDG is to guide development and improve the overall quality and environment of the installation. The IDG addresses site planning, buildings, circulation, landscape design, site elements, and ATFP standards for the entire installation. The latest IDG was completed in 2006.

5.2.1 Visual Themes and Zones

Four visual themes representing historic, community, mission, and recreation areas relate to visual zones consisting of similar types of facilities that are grouped together dictating the size, scale, level of detail, and materials acceptable for the various facility groups. There are six visual zones at Fort Sam Houston as depicted in Figure 5.2. An additional recreation zone is located at Canyon Lake Recreation Area. Figure 5.3 shows the relationship between the visual themes and zones at Fort Sam Houston.

At Camp Bullis, the visual theme is training with a visual zone of training areas as depicted in Figures 5.4 and 5.5.



FORT SAM HOUSTON

Visual Zones

- 1 - NHLD
- 2 - Conservation
- 3 - Community
- 4 - Medical
- 5 - Industrial
- 6 - Recreation

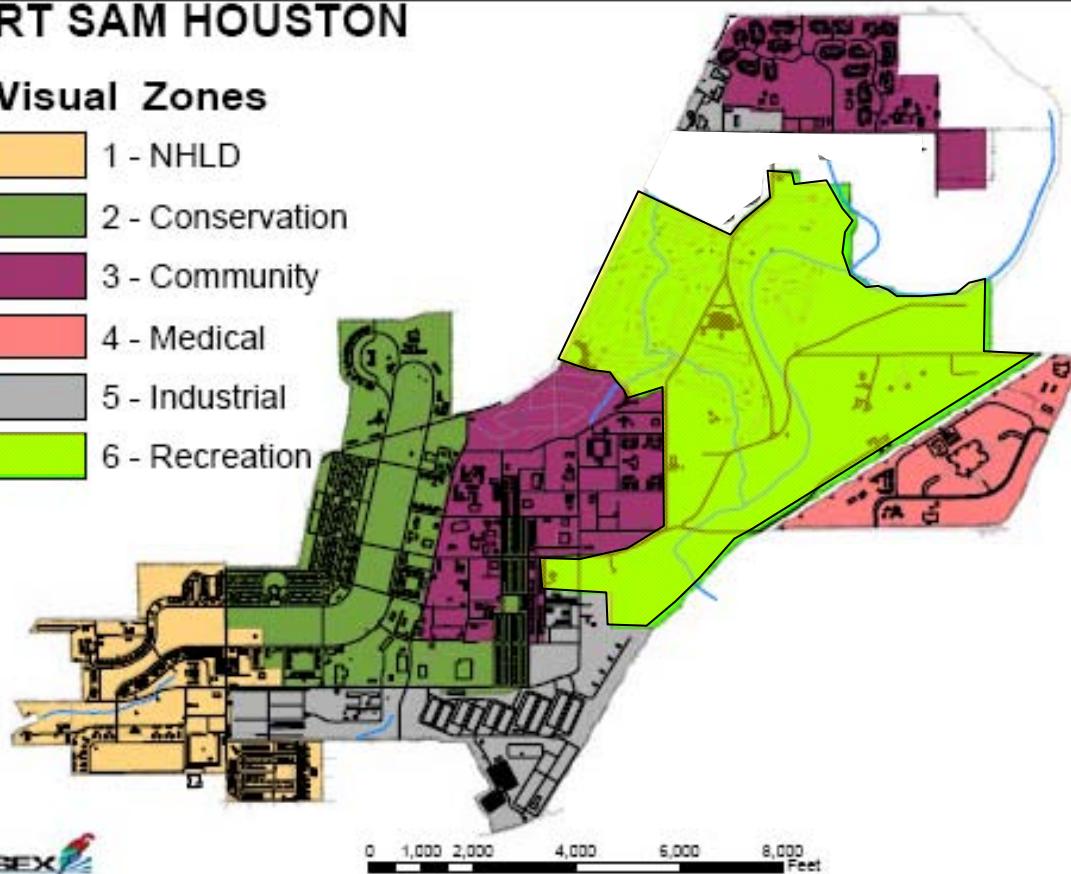


Figure 5.2 Distribution of Visual Zones, Fort Sam Houston

VISUAL THEME 1 Historic	VISUAL THEME 2 Community	VISUAL THEME 1 Mission	VISUAL THEME 1 Recreation
VISUAL ZONE 1 – National Historic Landmark District	VISUAL ZONE 3 - Community	VISUAL ZONE 4 – Medical	VISUAL ZONE 6 - Recreation
VISUAL ZONE 2 – New Post His. Conservation District		VISUAL ZONE 5 - Industrial	

Figure 5.3 Relationship of Visual Themes and Zones at Fort Sam Houston

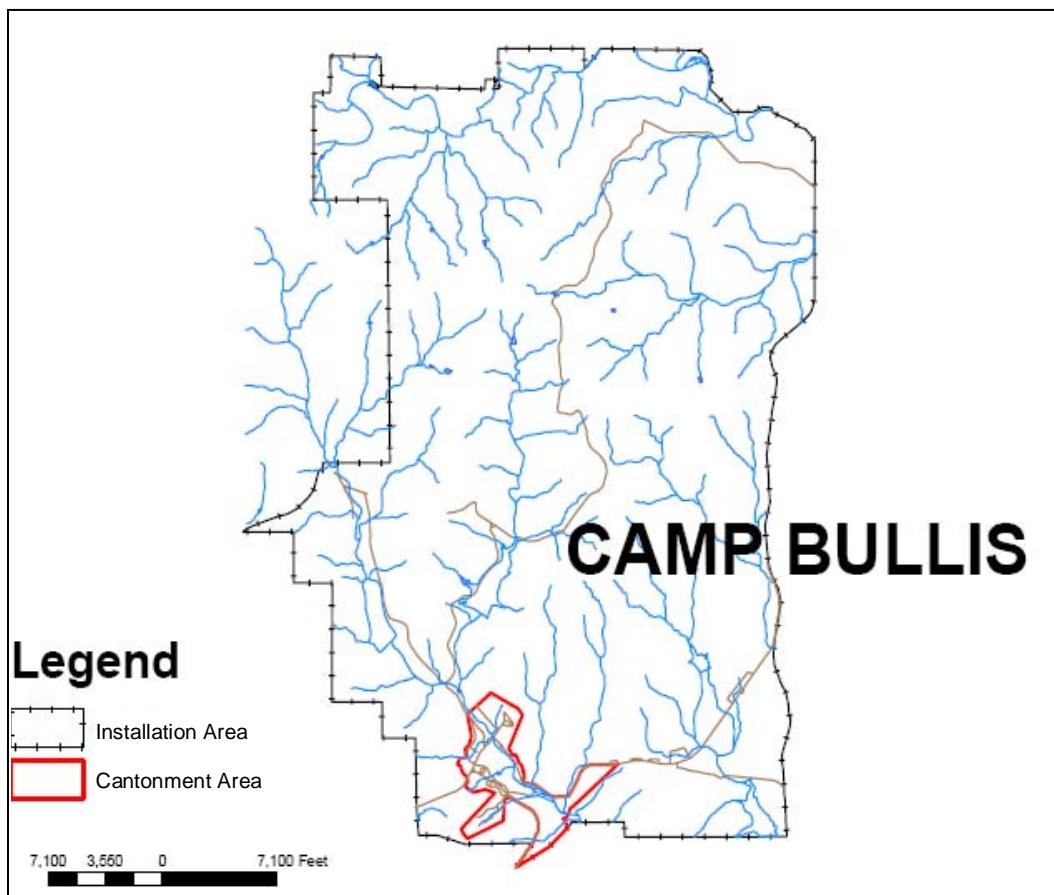


Figure 5.4 Camp Bullis has one Visual Zone



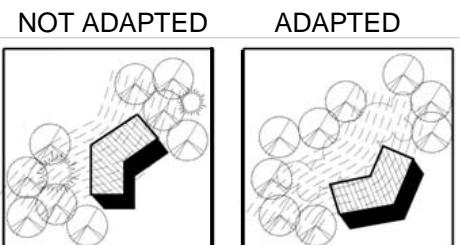
Figure 5.5 Relationship of Visual Themes and Zones at Camp Bullis



Color and form contribute to a sense of place



Site plan



Adapt building design to site conditions



Vehicular and pedestrian system

5.2.2 Key Design Standards

Site Planning

- ❖ Preserve natural site features, such as topography, hydrology, vegetation, and tree cover.
- ❖ Locate facilities with consideration of climatic conditions, such as wind, solar orientation, and microclimate.
- ❖ Preserve the natural site by molding development to fill around existing land forms and features. This development approach minimizes extensive earthwork and preserves existing drainage patterns and existing vegetation.
- ❖ Plan for facilities to be clustered to preserve land and reduce construction cost. Clustering should occur on the flattest land areas. Room for expansion should be provided. When clustering facilities, ATFP standards must be considered.

Building Design

- ❖ Adapt building designs to natural site conditions.
- ❖ Design buildings in clusters to preserve land and reduce construction and maintenance costs.
- ❖ Develop a coherent architectural style that results in the blending of new and old structures. When considering historical buildings, however, one should be able to differentiate between the historic fabric and the new material.
- ❖ Design buildings to include more floors in a vertical structure that results in a smaller footprint and more efficiently utilizes limited installation land areas.
- ❖ Combine multiple activities in one building to reduce the number of buildings required and more efficiently utilize limited land areas.
- ❖ Design multiple use facilities with the capability to quickly change interior layouts to accommodate changing requirements.
- ❖ Use indigenous construction materials and practices that require less energy to produce and transport and may be recycled at the end of their usefulness.
- ❖ Locate windows to maximize natural light, ventilation, and outward views.
- ❖ Consider adaptive reuse of buildings once their initial use is no longer required.



Circulation

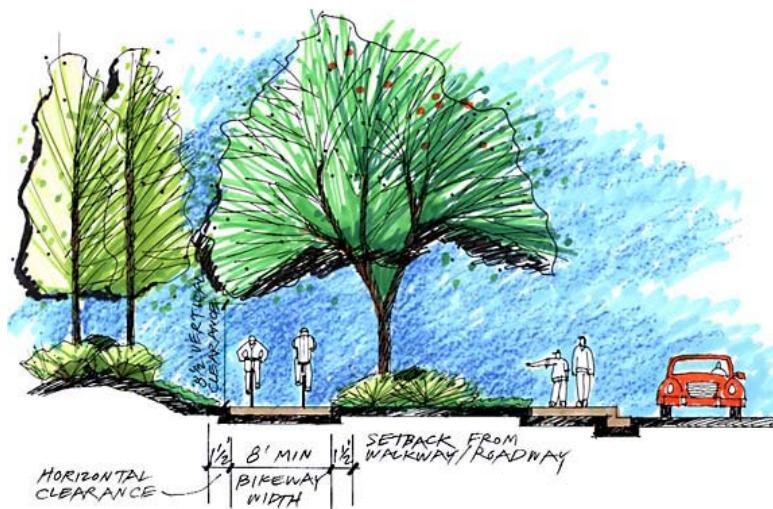
- ❖ Provide circulation that meets ATFP requirements, and promotes and enhances public health and safety.
- ❖ Provide a system that includes all forms of vehicular and pedestrian circulation.
- ❖ Provide a system that includes hierarchies of vehicular and pedestrian traffic flow.
- ❖ Adapt the circulation system to the natural conditions of the site.
- ❖ Improve the existing circulation network for expansion, safety, way finding, and appearance.
- ❖ Promote maintenance and repair of existing and proposed circulation systems.



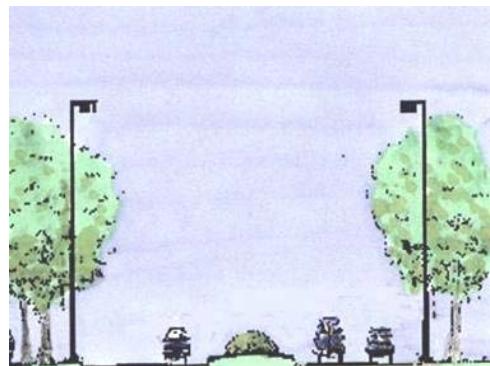
Positive visual image



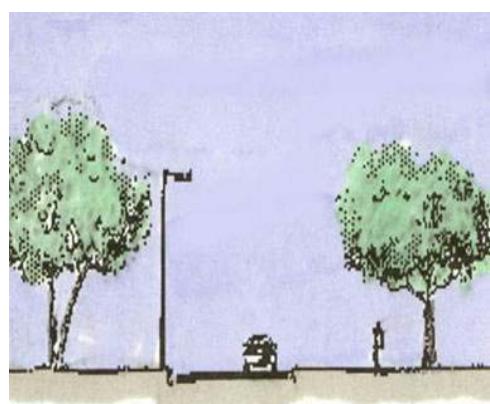
Build circulation into natural landform



Separate pedestrian, bicycle, and vehicular circulation



Primary roadway



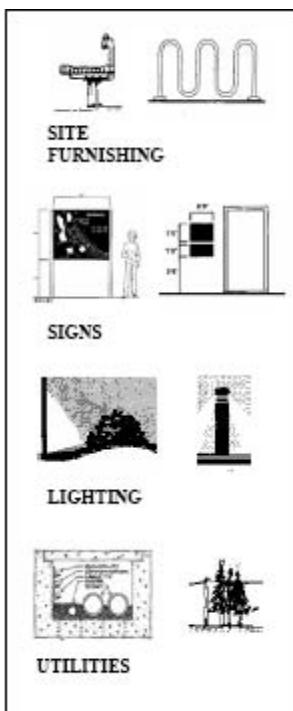
Secondary roadway



Provide comfort to pedestrian environment



Landscaping reinforces circulation hierarchy



Site elements

Landscape Design

- ❖ Preserve and enhance urban trees, forest lands, prairies, and detailed planting features, such as shrubs and groundcovers.
- ❖ Improve the overall visual quality of Fort Sam Houston through the use of native plant material for better visual quality.
- ❖ Blend the built environment with the natural environment.
- ❖ Provide scale and comfort to pedestrian environments.
- ❖ Reinforce the hierarchy of the circulation system.
- ❖ Screen unsightly views or elements.
- ❖ Buffer incompatible land uses.
- ❖ Minimize maintenance through the use of native plant materials that require less maintenance to survive.
- ❖ Enhance ATFP capabilities.

Site Elements

- ❖ Provide site elements that are appropriate for their intended function.
- ❖ Establish a coordinated system of site elements that provide consistency and continuity throughout the Post to convey a sense of organization.
- ❖ The design and location of the various site elements express an image, character, and scale appropriate to the installation
- ❖ Design and locate all site elements to meet ATFP requirements.
- ❖ Use recycled and salvaged materials wherever possible.
- ❖ Minimize maintenance and repair through the use of efficient, vandal-proof products.
- ❖ Minimize negative visual impacts of all utility systems.
- ❖ Minimize environmental impacts of all utility systems.



5.3 Area Development Plans

ADPs are comprehensive planning tools used at various milestones in the master planning process. The plans serve a variety of purposes and can vary significantly by scale. ADPs can address a specific area of real property development, such as a single facility or a large complex; the analysis of an installation-wide mission change; or a particular thematic focus, such as barracks or child development centers.

The most prominent ongoing or near-term development initiatives include the following and are summarized on the following pages. Future development encompasses:

- ❖ Medical Education and Training Campus (METC)
- ❖ Medical Complex
- ❖ Community Center
- ❖ Community Park Complex
- ❖ Maintenance Complex
- ❖ Infantry Post Reuse (Long Barracks)
- ❖ Installation Management Command Headquarters
- ❖ 106th Strategic Signal Brigade
- ❖ Post Theater
- ❖ U.S. Army Reserve Enclaves
- ❖ Kelly U.S. Army Reserve Center
- ❖ Medical Training Parks, Camp Bullis
- ❖ Camp Bullis Cantonment Area
- ❖ Camp Bullis Air Base Ground Defense Complex
- ❖ Camp Bullis Combat Assault Landing Strip

Development plans reflected in this section can continue to change as further planning and approval actions are refined and completed. Most information presented is based on project information gathered from early to mid 2008.

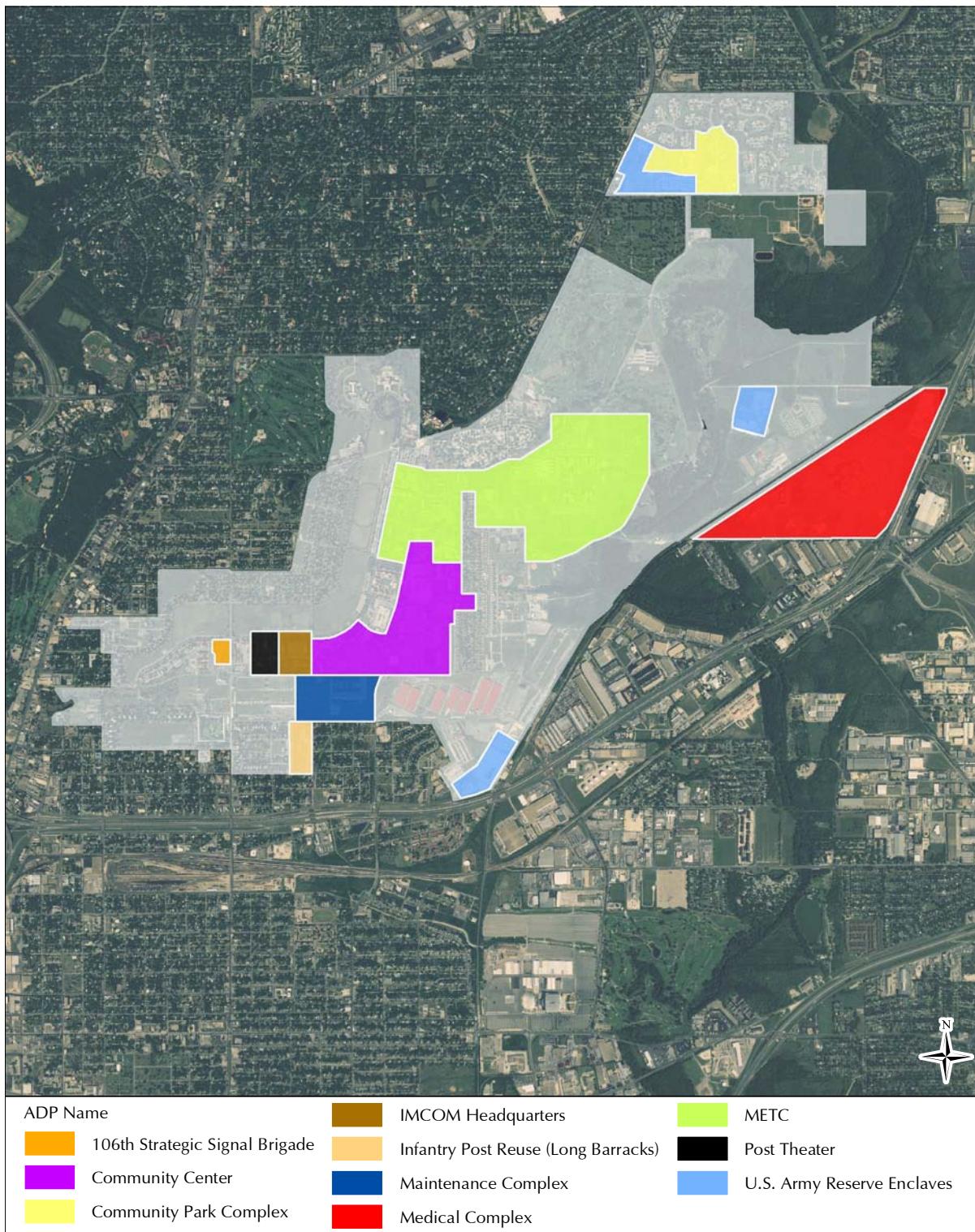


Figure 5.6 ADP Overview, Fort Sam Houston



Development Plans

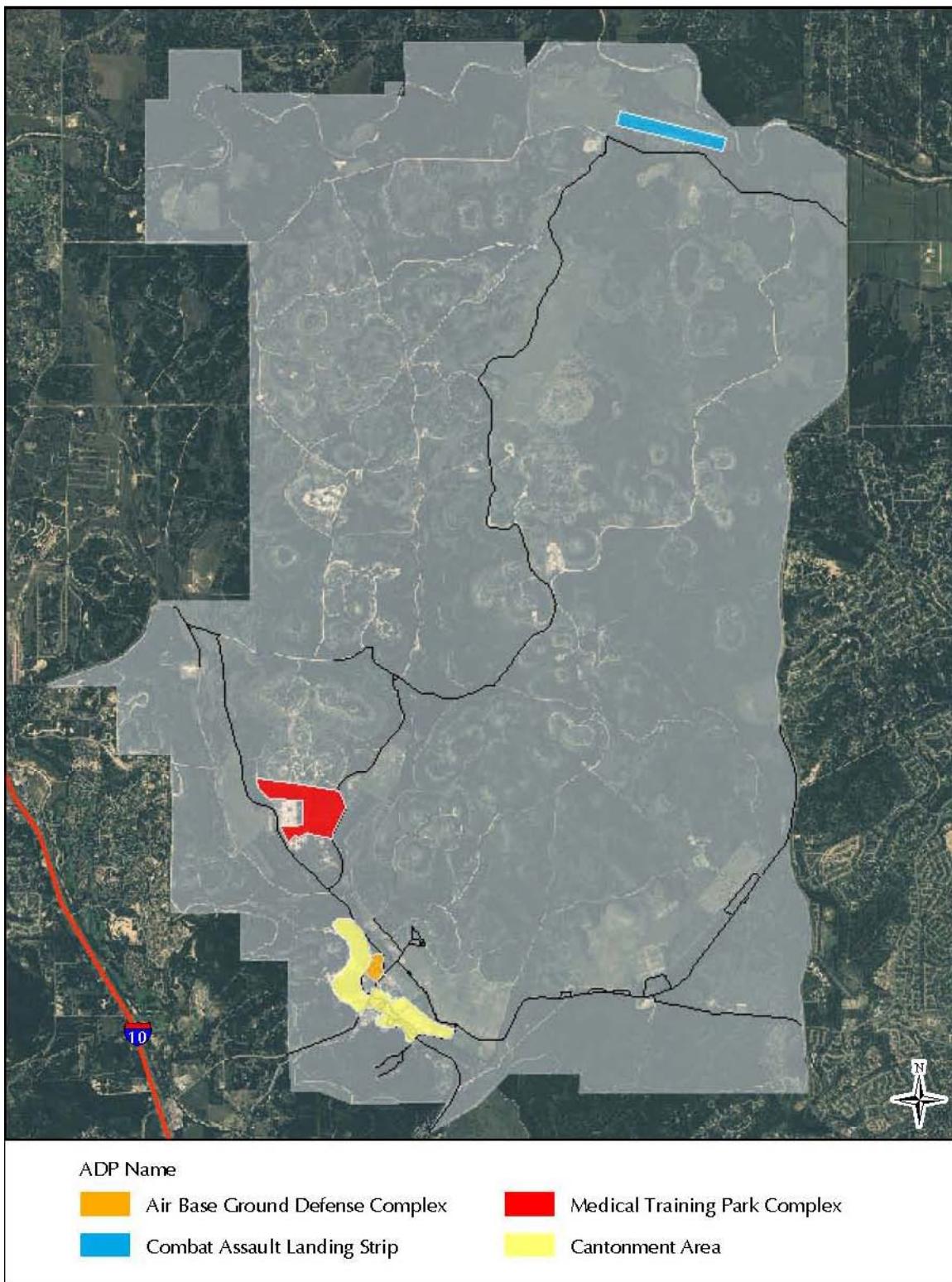


Figure 5.7 ADP Overview, Camp Bullis



5.3.1 Medical Education and Training Campus



Medic

The METC supports the primary installation mission. The plan is to consolidate on-post outlying functions and new multi-service training into a single campus.

Major components of the campus development include the barracks "starship" conversion, barracks realignments, dining facility replacement, and various medical applied instruction facilities.

The planning decisions now are to divide the projects into supportable portions in order to proceed with the development. Construction standards for student barracks are pending from Headquarters, Department of the Army. Funding is primarily from BRAC - Air Force funds.



Development Plans

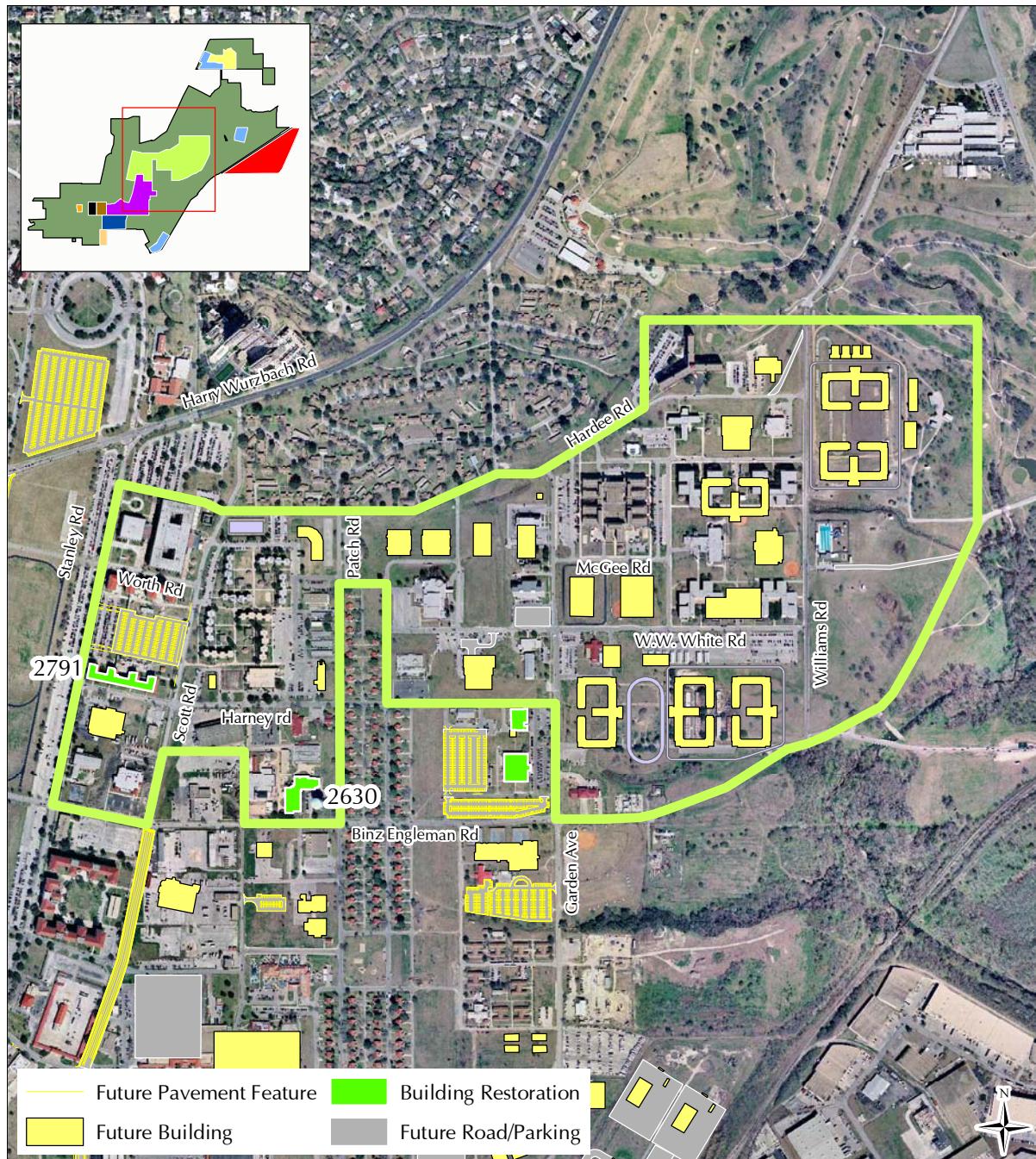


Figure 5.8 Area Development Plan - Medical Education and Training Campus



5.3.2 Medical Complex

The Medical Complex includes the area known as the SAMMC North. It represents an investment in excess of \$300 million over a 10-year period. The bulk of identified requirements have been finished and the site is almost completely developed.

Major remaining projects are the Battlefield Health and Trauma Bio Lab, BAMC Addition/Alteration, Consolidated Parking Structure, AAFES branch exchange with a gas station, and the Non-Appropriated Fund Guest House expansion.



SAMMC North Campus 2001

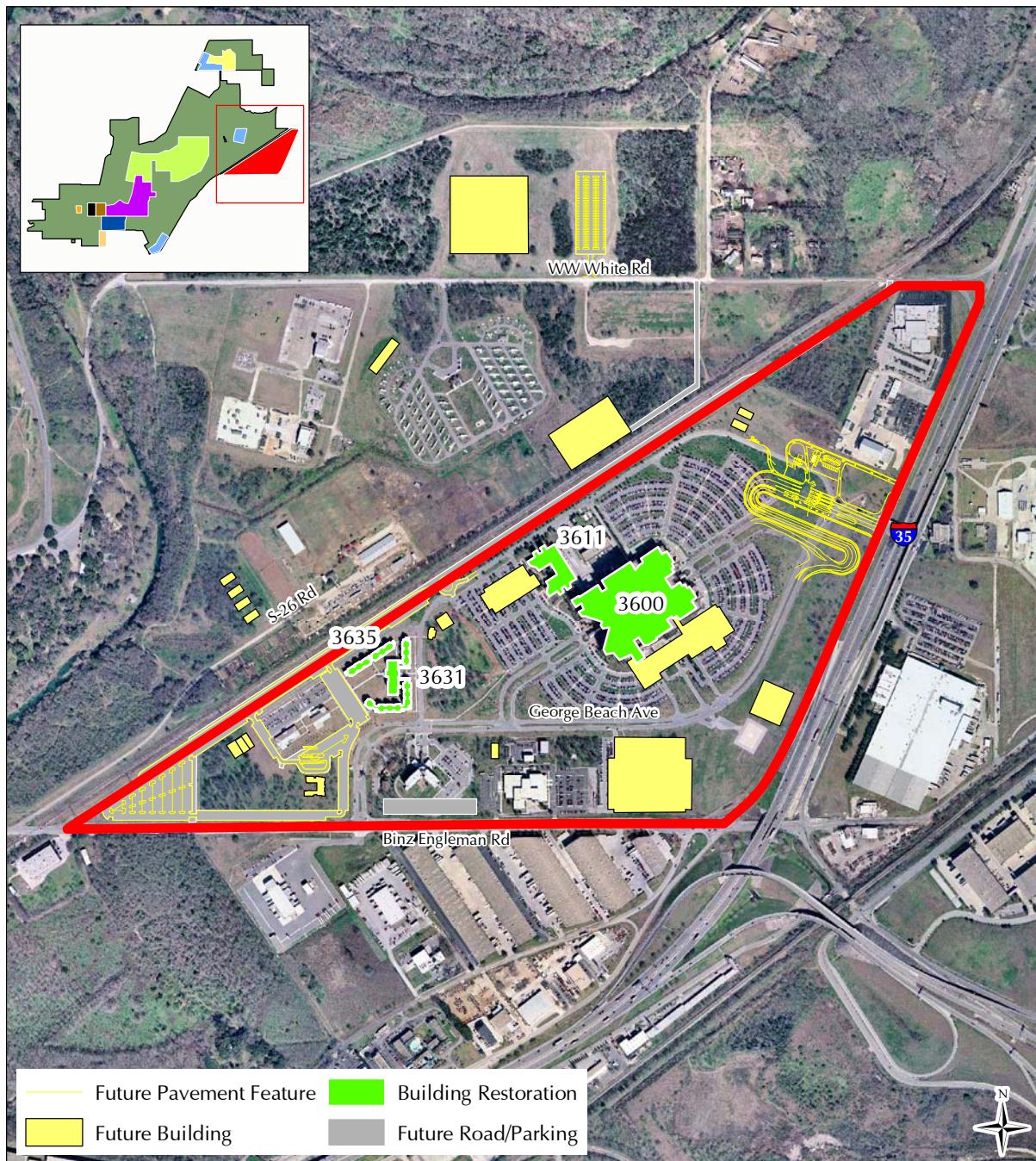


Figure 5.9 Medical Complex



5.3.3 Community Center

Community center projects are funded by Non-Appropriated Funds (accomplished) and MILCON not yet supported in Program Objective Memorandum (POM).

Current Community Center development includes a 700 to 900 room Privatization of Army Leasing (PAL) facility and AAFES Lifestyle Center facilities.

A Youth Center is currently under construction.

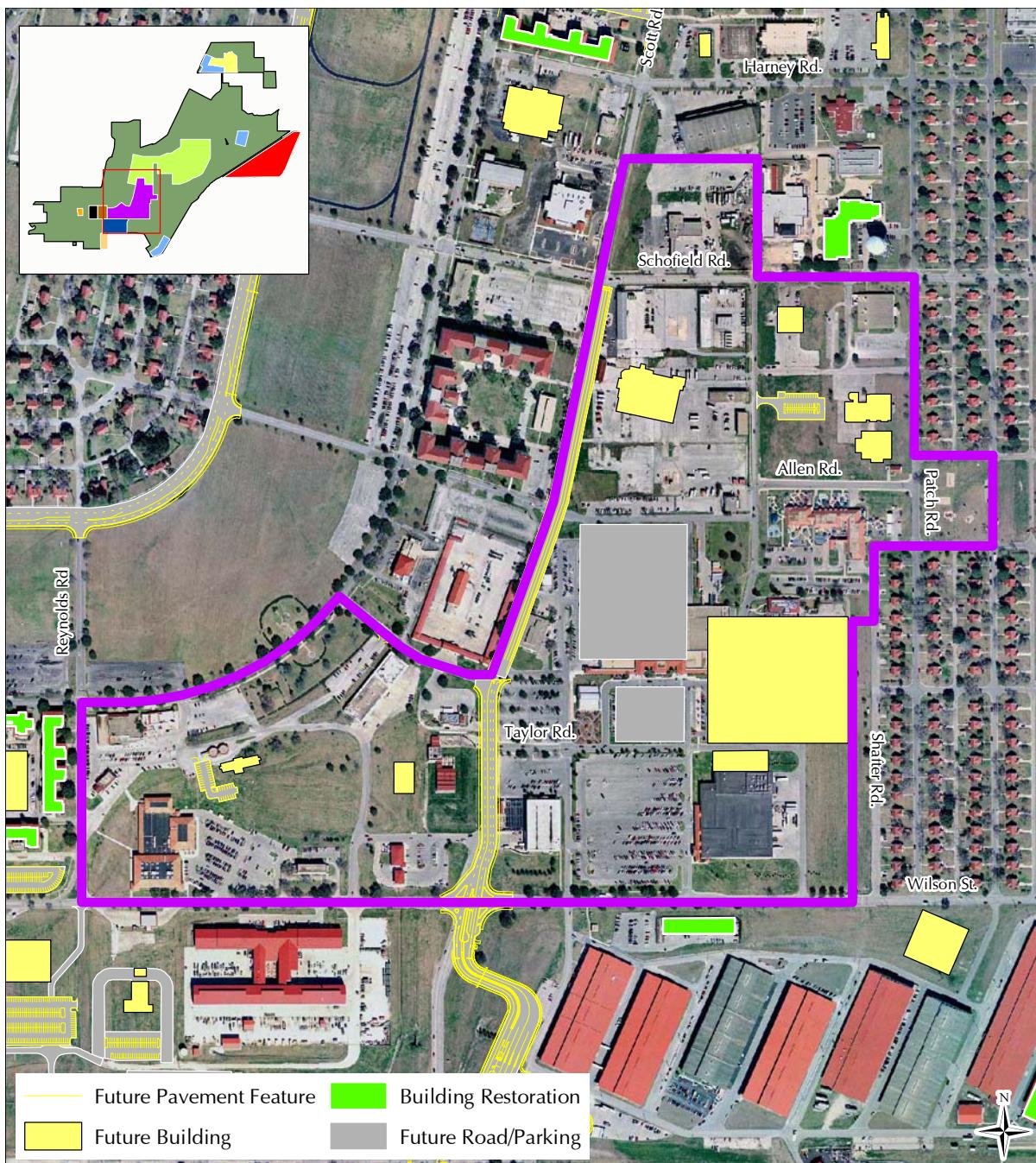


Figure 5.10 Community Center



5.3.4 Community Park Complex

The Community Park Complex developments include the following completed projects:

- ❖ Chapel
- ❖ Child Care Center
- ❖ Youth Center

Another Youth Center is under construction. The long-range MILCON program also includes a swimming pool and a running track.

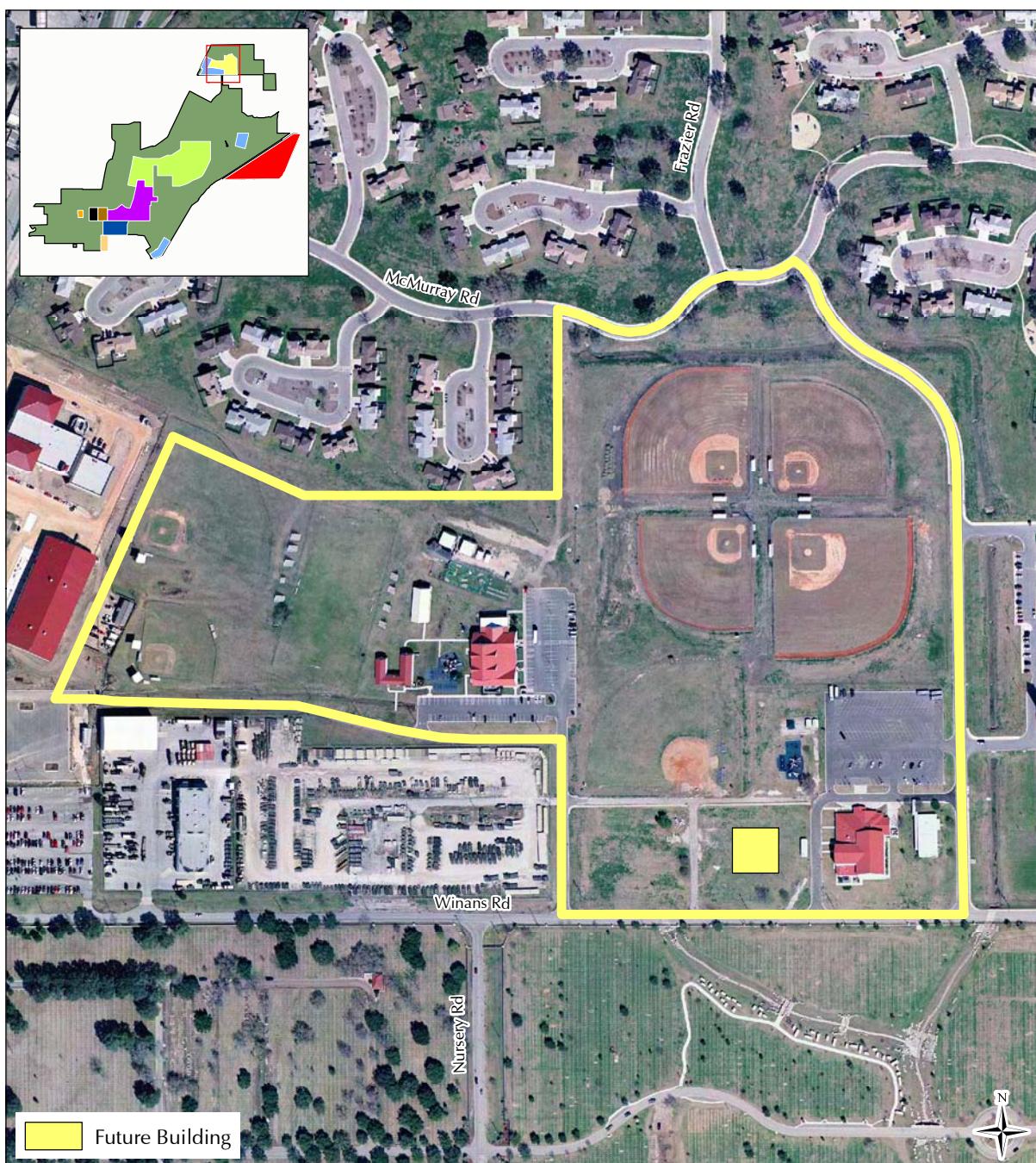


Figure 5.11 Community Park Complex



5.3.5 Maintenance Complex

The Direct Support/General Support component of the Maintenance Complex has been built.

Two Unit Organizational Maintenance Facilities and a Transportation Motor Pool (TMP) remain unfunded requirements.

These facilities are in support of Forces Command (FORSCOM) units, which may be restationed.

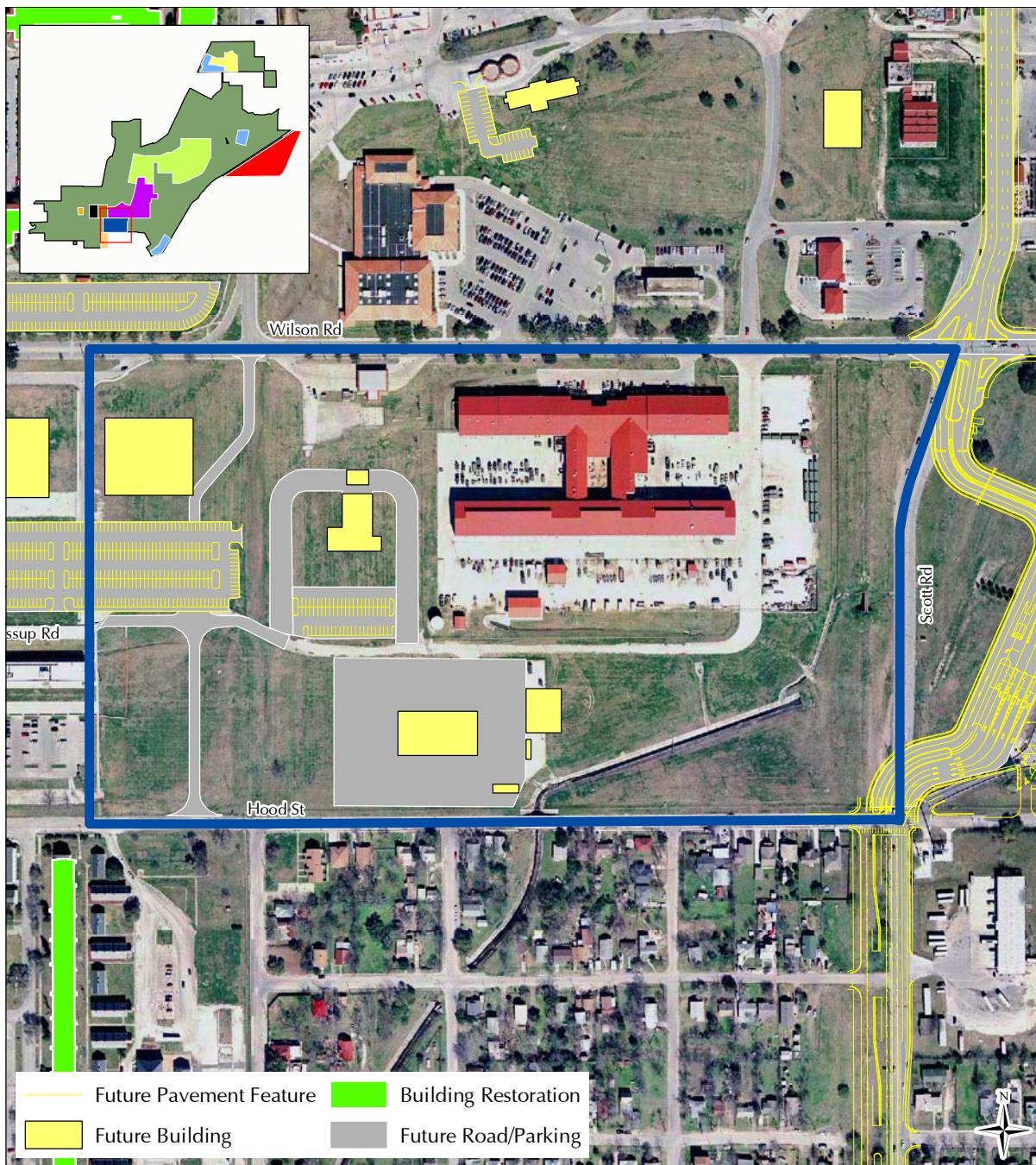


Figure 5.12 Maintenance Complex



5.3.6 Infantry Post Reuse

Current adaptive reuse planning is to convert these Long Barracks facilities to administrative use supporting the BRAC restationing of the Army Contracting Command–Installations (ACC-I).

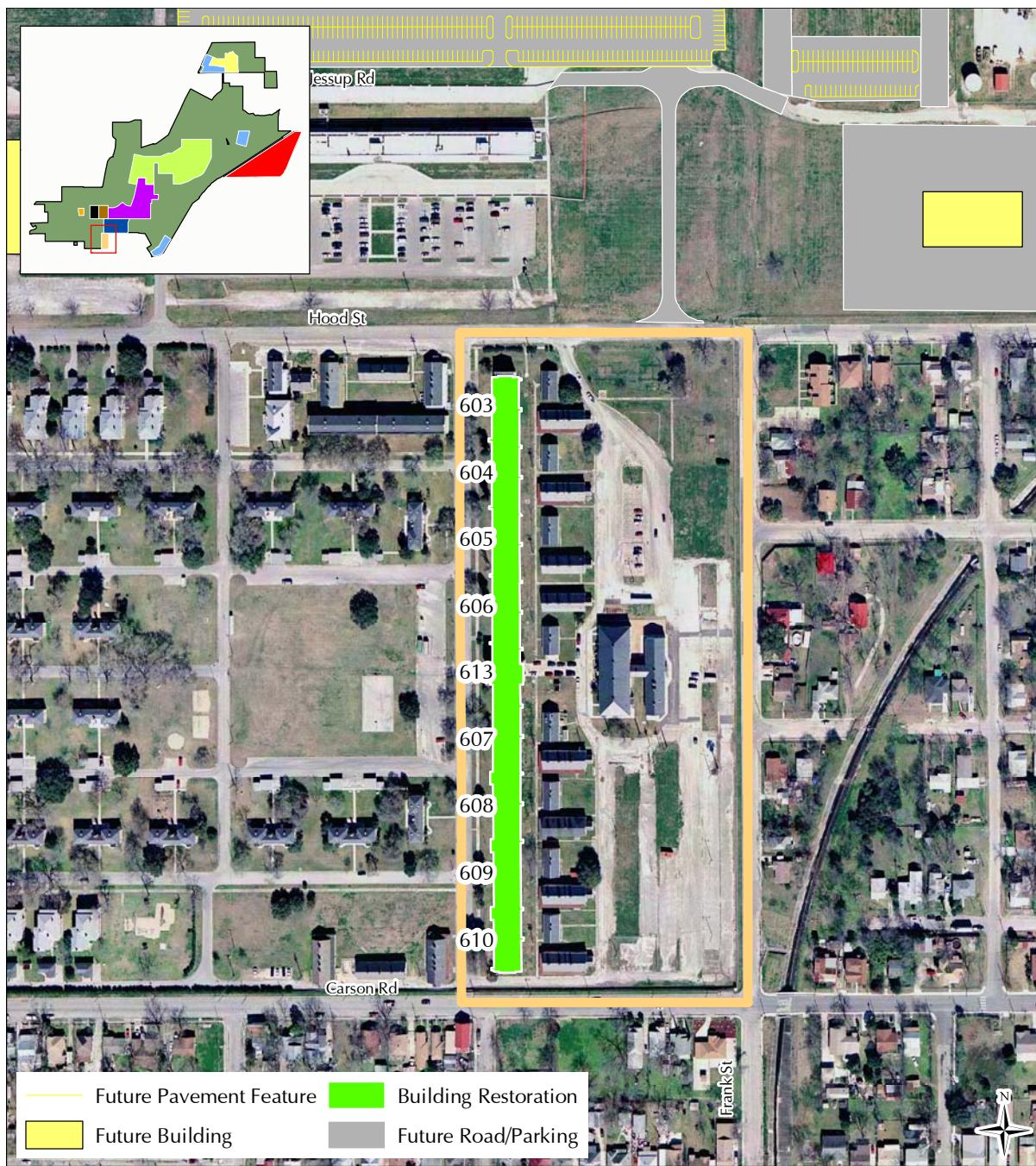


Figure 5.13 Infantry Post Reuse



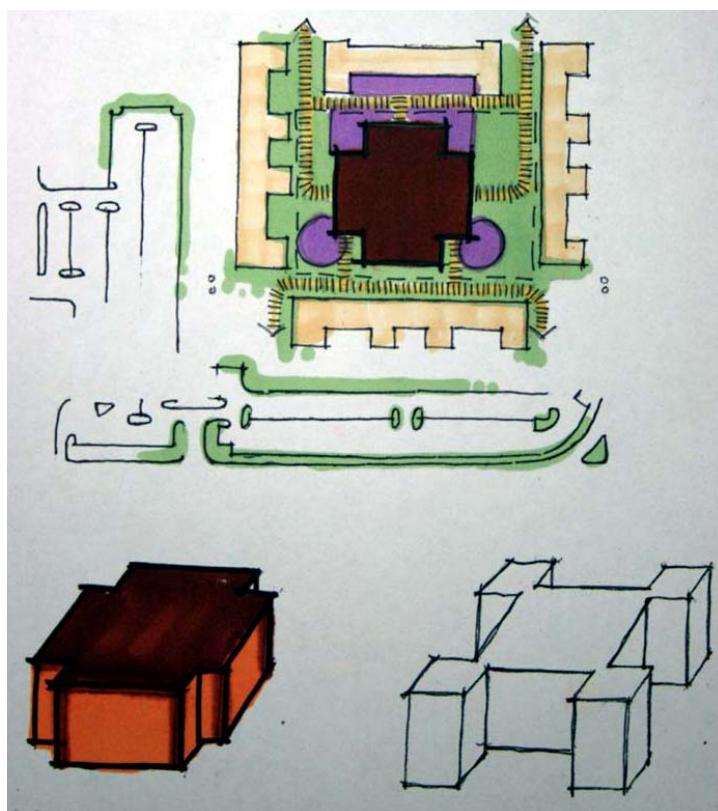
5.3.7 Installation Management Command Headquarters

Under the provisions of BRAC, IMCOM will relocate to Fort Sam Houston, bringing over 2,000 new people assigned to the installation. The following projects are supporting needed building renovations and new construction for IMCOM.

Table 5.1 IMCOM Projects

Project Number	Building	Agency
N/A	2265	IMCOM and DOIM
71459	2264	IMCOM
71464	2266	IMCOM
72375	New headquarters	IMCOM

DOIM: Directorate of Information Management



IMCOM headquarters alternative

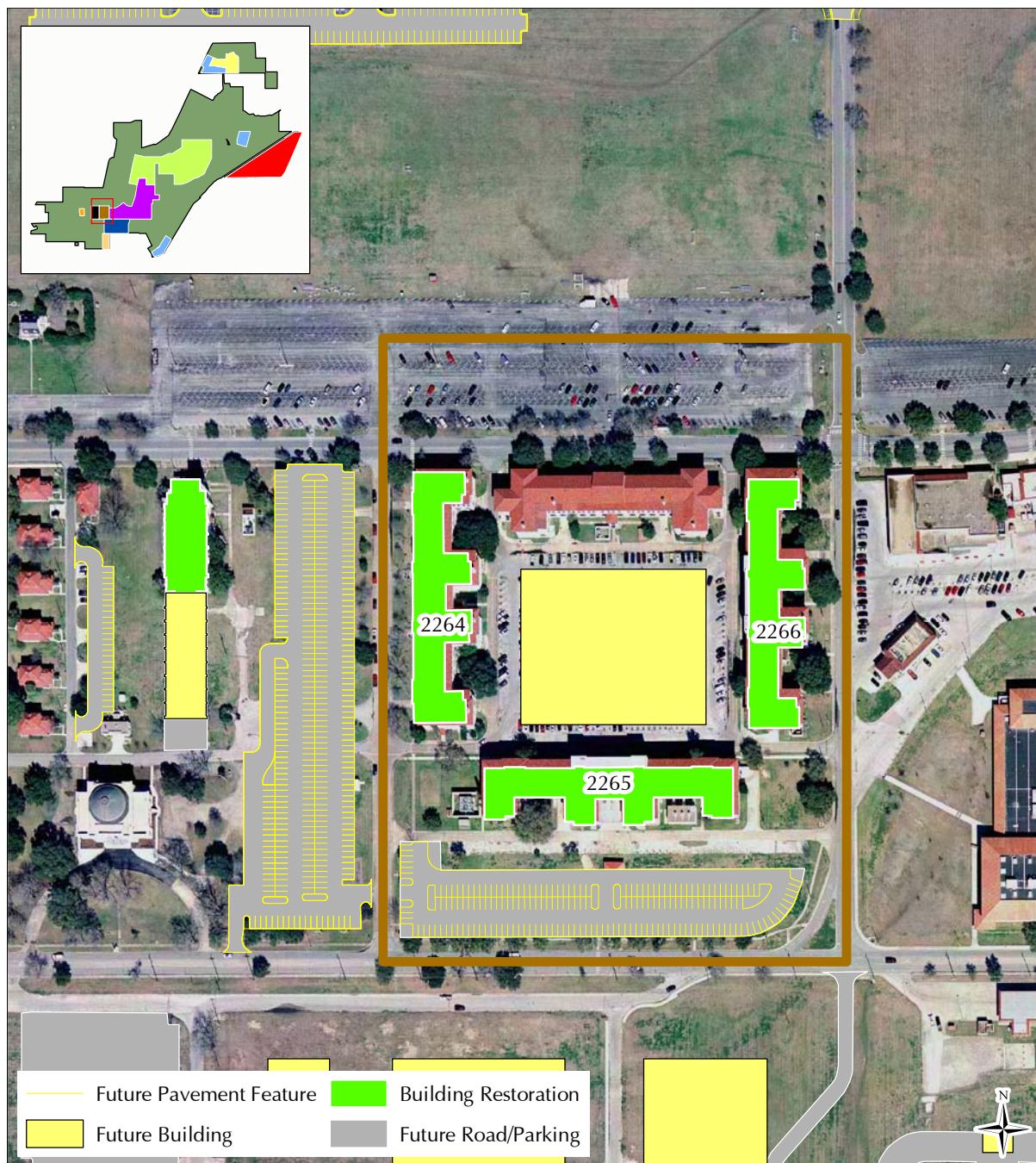


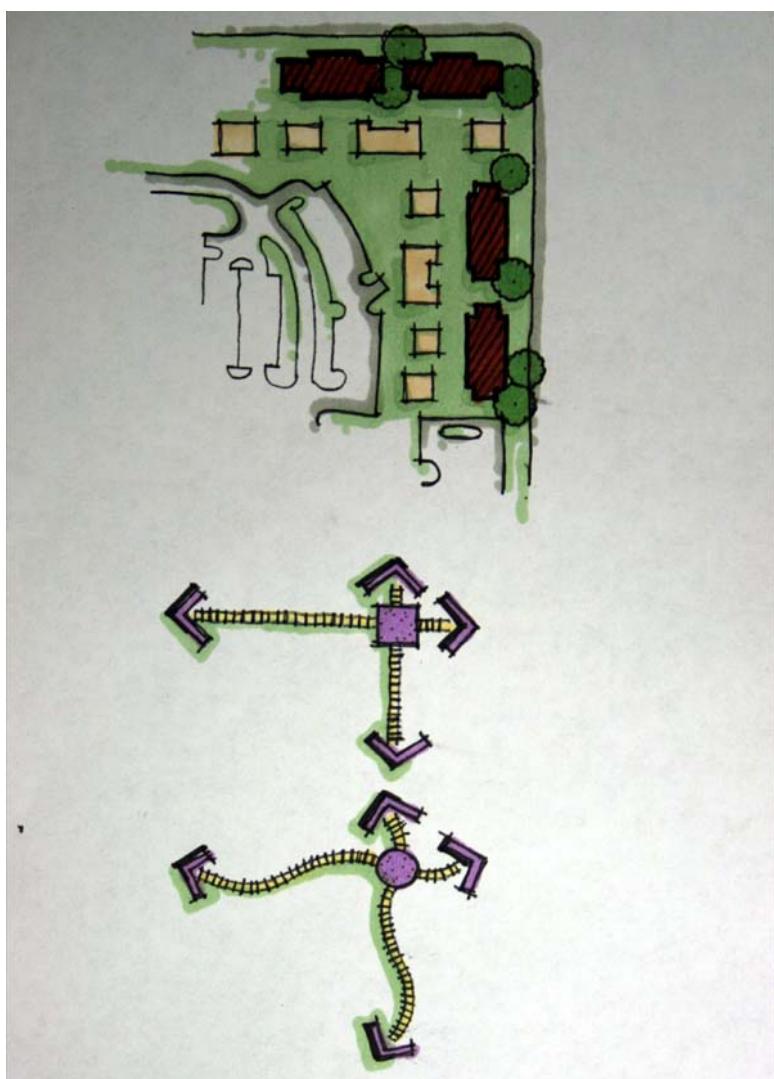
Figure 5.14 Installation Management Command Headquarters



5.3.8 106th Strategic Signal Brigade

The 106th Strategic Signal Brigade, a unit of the Network Enterprise Technology Command (NETCOM), is being formed at Fort Sam Houston. Initial plans identified several buildings for use by the unit.

Project numbers 73379, 73380, 65550, and 65551 repair buildings 145, 146, 147, and 149, respectively, for use by the new signal brigade. Other projects may be necessary to modify additional buildings.



NETCOM Campus



Figure 5.15 106th Strategic Signal Brigade



5.3.9 Post Theater

The Post Theater, building 2270, is currently unoccupied. Plans are to repair the theater under project number 64182 and reuse it to support the FMWR Command's Army Entertainment Division (AED). An addition to the theater under project number 70682 is also planned to provide needed space for the Production Support and Theater activities of the AED, which produces the U.S. Army Soldier Show.



Post Theater

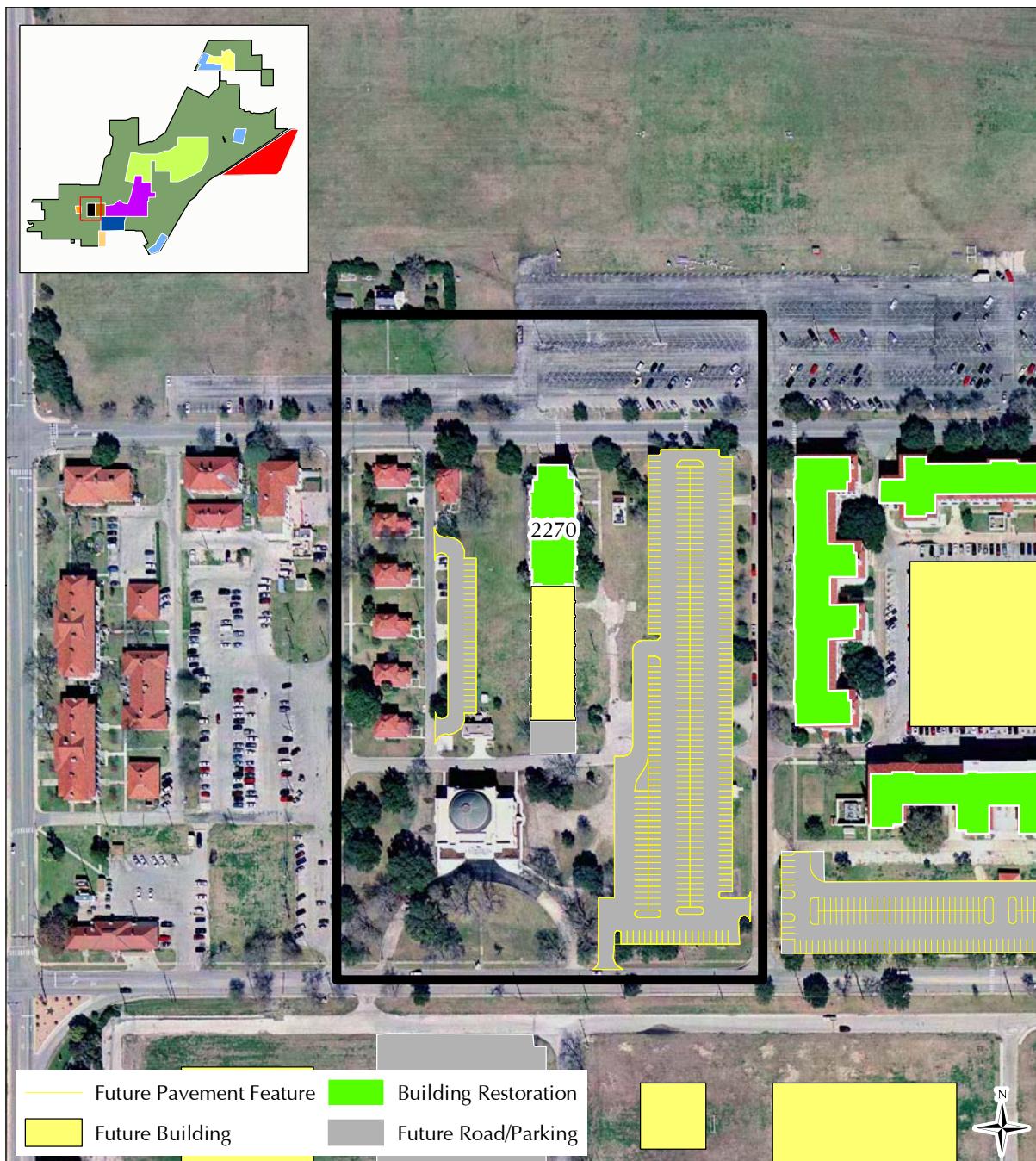
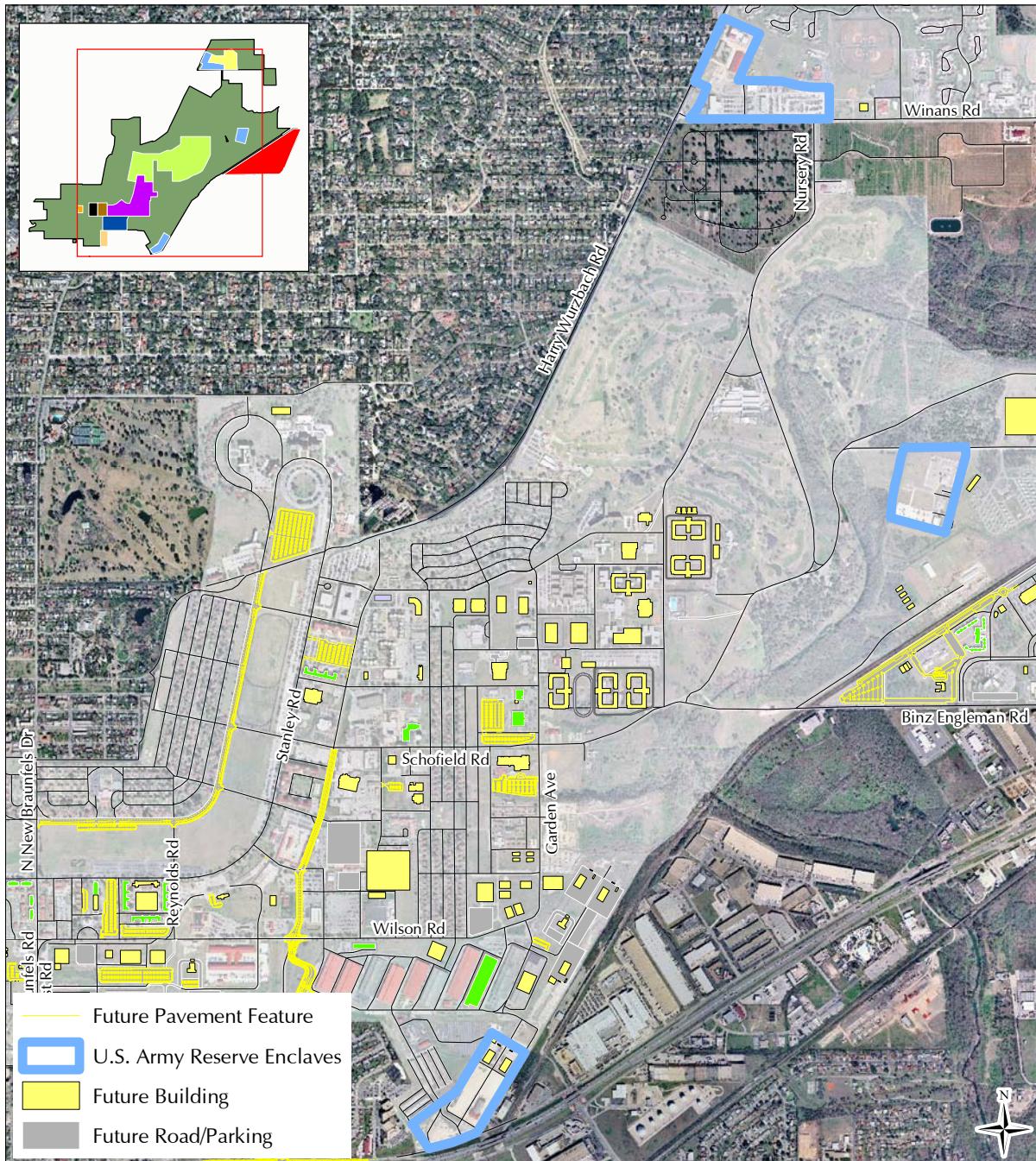


Figure 5.16 Post Theater



5.3.10 United States Army Reserve Enclaves

The U.S. Army Reserve (USAR) Command has three enclaves on Fort Sam Houston. These areas are “master planned” by the Army Reserve. Two of the enclaves, Dodd Field and Jadwin Road, are fully developed. The third enclave, former Kelly Heliport, is scheduled for redevelopment and discussed separately.





5.3.11 Kelly Heliport U.S. Army Reserve Center

The Kelly Heliport plan was developed to support the conversion of the 507th Air Ambulance Company from UH-1s to Blackhawks. The unit was restationed to Fort Hood, and the site became available for the Kelly USAR Center.

This project will consolidate several functions and facilities and enable the closing of eight other USAR facilities.

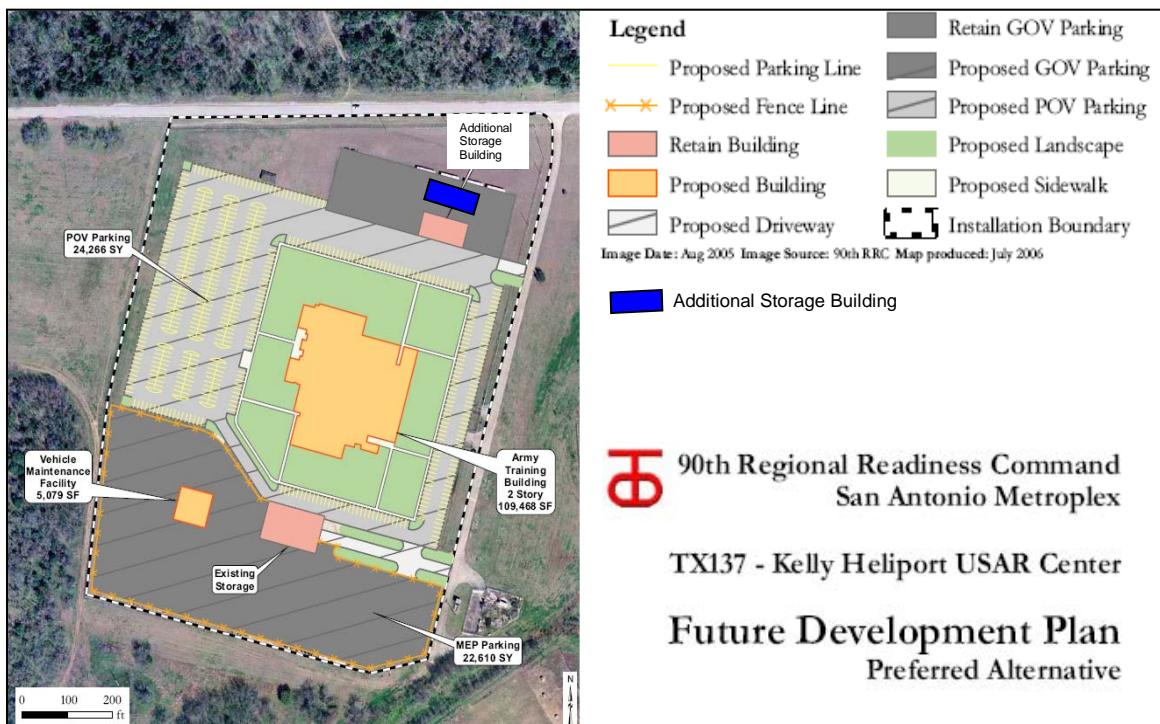


Figure 5.18 Kelly Heliport USAR Center



5.3.12 Camp Bullis Medical Training Parks Complex

The Medical Training Parks Complex is located outside the Camp Bullis cantonment area in the vicinity of Nertz Hill.

Full development includes nine training parks supporting joint and service-focused field training programs. Two of the parks have been built and are fully operational in support of U.S. Army Medical Department (AMEDD) Center and School medical training. The MOUT course was built by the Air Force as part of the Air Base Ground Defense BRAC restationing and will no longer be required. Additional sewage lift capacity will be required to build any remaining parks.

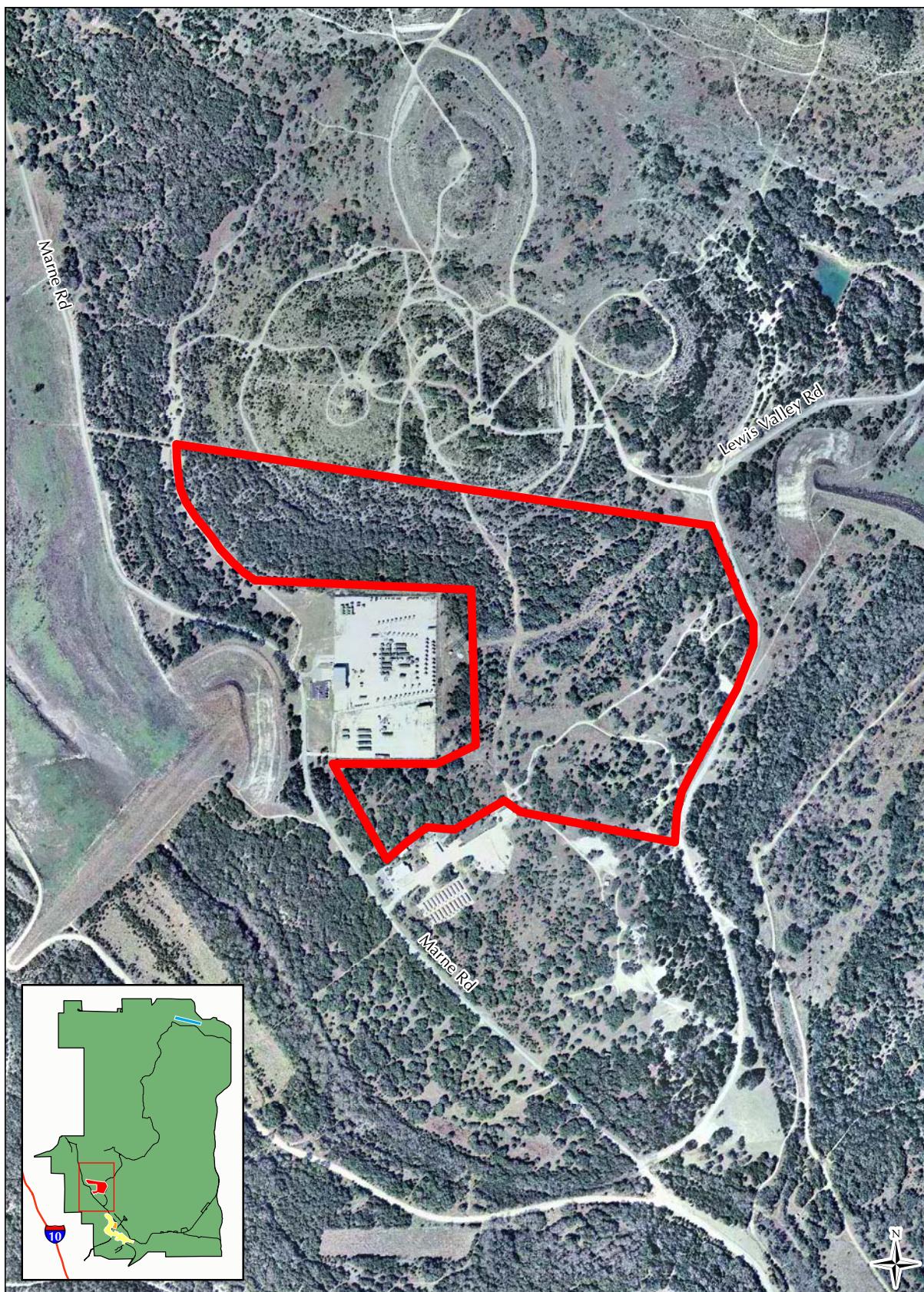


Figure 5.19 Camp Bullis Medical Training Parks Complex



5.3.13 Camp Bullis Cantonment Area

The Camp Bullis Cantonment Area Plan is an unfunded requirement for update and revision.

The Camp Bullis Cantonment Area Development Plan upgrades and adds facilities required to effectively support the service members and training programs under development at the installation. Hutsments, small wooden classroom buildings, and old dining facility buildings will be replaced with updated training complexes. Post Exchange facilities, health clinic, and post operations and maintenance facilities will be replaced to ensure adequate services and installation support are provided.

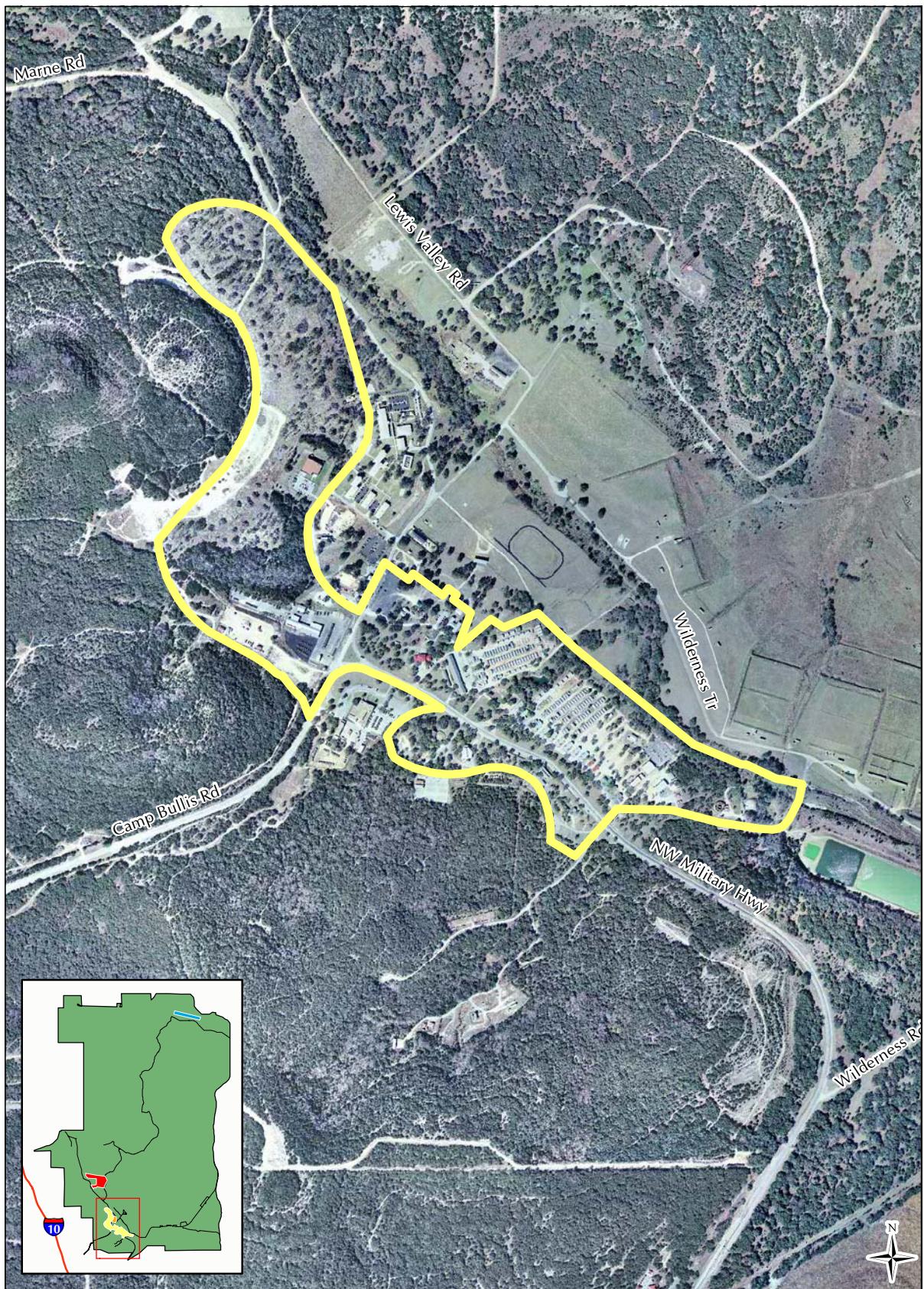


Figure 5.20 Camp Bullis Cantonment Area



5.3.14 Camp Bullis Air Base Ground Defense Complex

The Air Base Ground Defense Complex is composed of facilities owned by Lackland Air Force Base Real Property, not the Army. Staff, faculty, and students are officially stationed at Lackland Air Force Base.

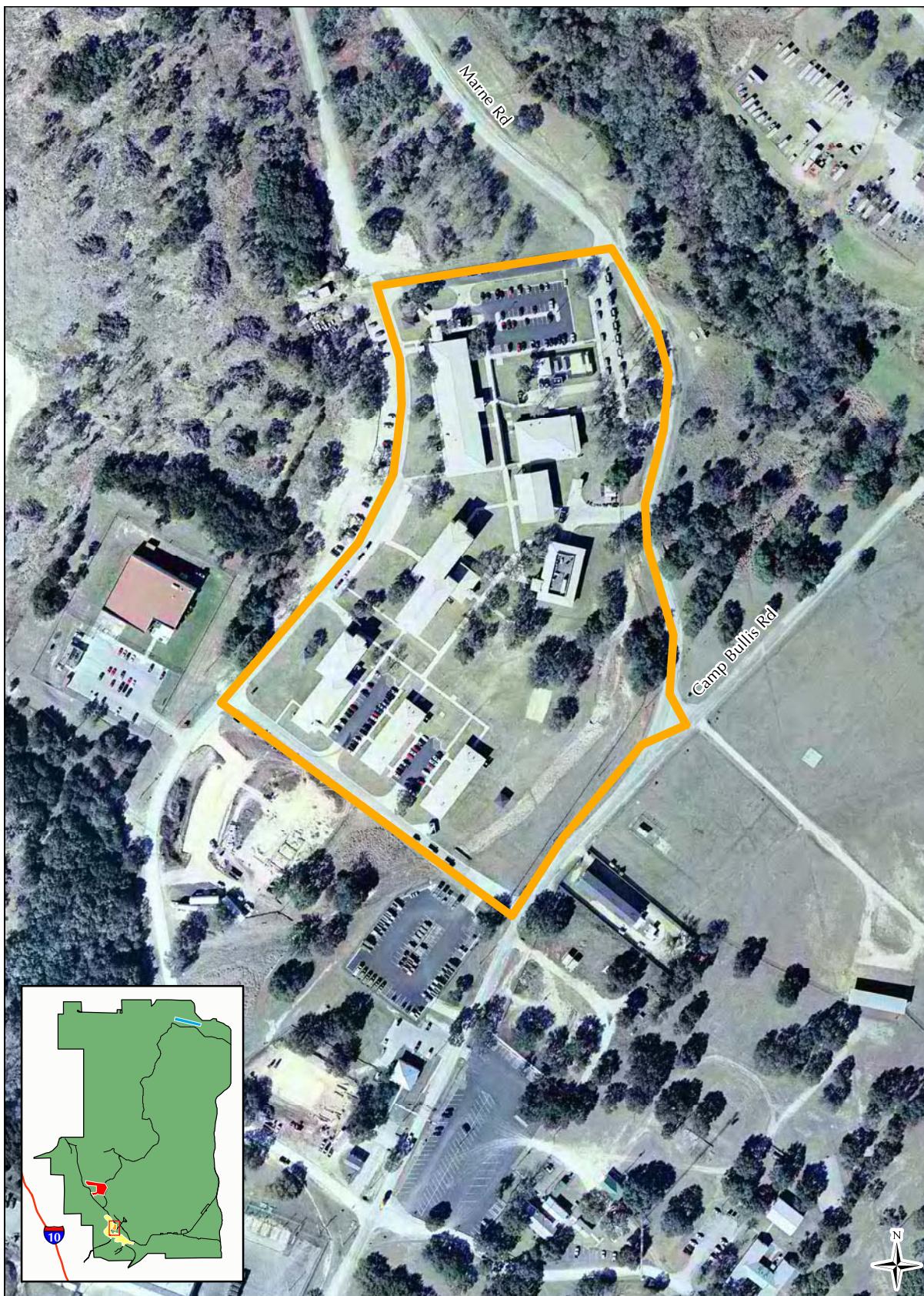


Figure 5.21 Camp Bullis Air Base Ground Defense Complex



5.3.15 Combat Assault Landing Strip, Camp Bullis

All requirements identified for the Combat Assault Landing Strip (CALS) have been fully documented.

The training area supports the Air Force mission of unpaved landing field takeoffs and landings in order to maintain C-130 air crew training proficiency.



C-130 on the Combat Assault Landing Strip

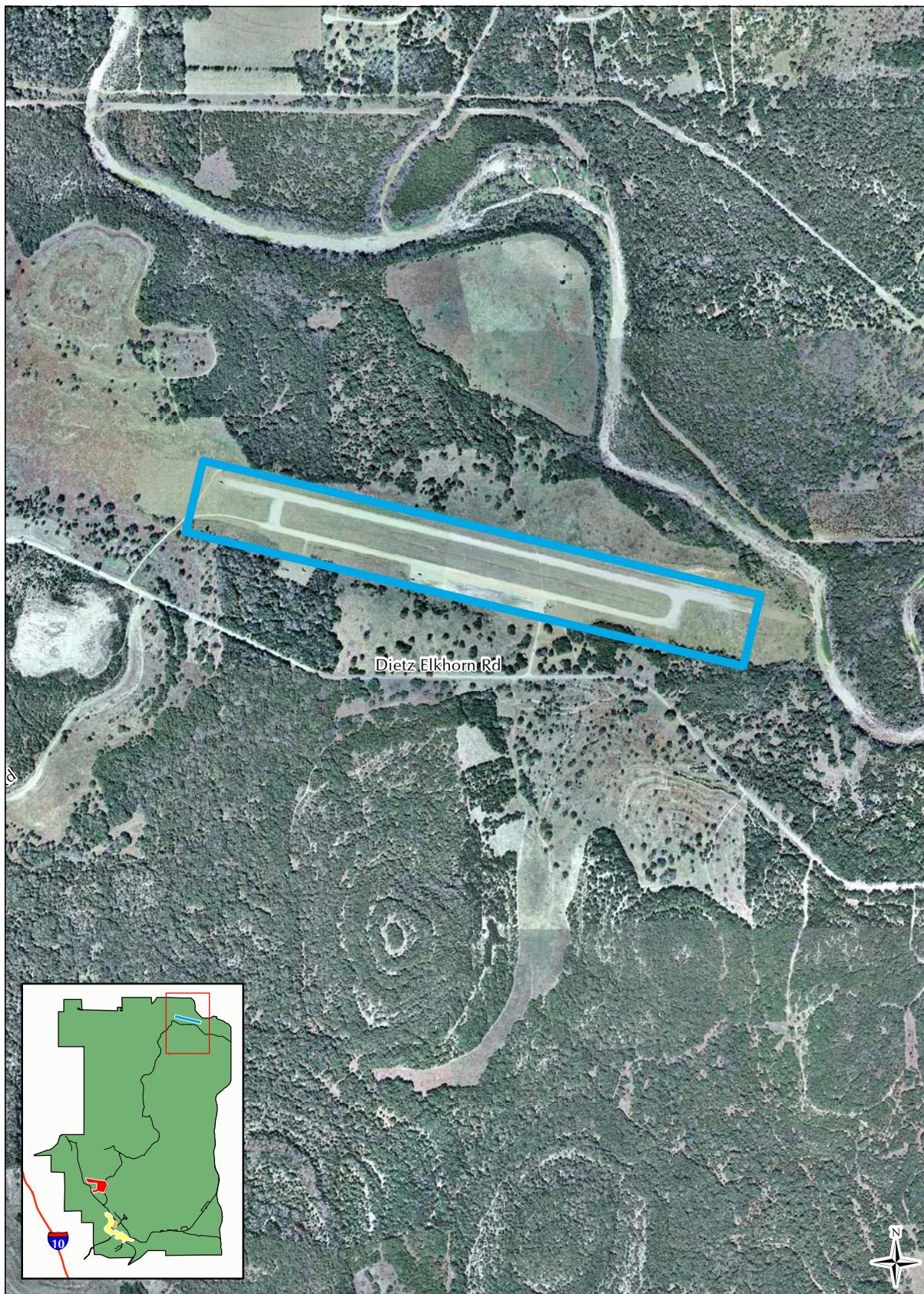


Figure 5.22 Combat Assault Landing Strip



5.4 Range and Training Plans

Current range projects will ensure that Camp Bullis has the capacity to support all small arms training requirements. Army Range Requirements Model (ARRM) data indicates that in FY13, Camp Bullis will have sufficient maneuvers training land to meet requirements. Ranges show some additional needs to meet requirements.



Figure 5.23 Camp Bullis Range Area



5.5 Integrated Natural Resources Management Plan

PREFACE

Integrated management plans for natural and cultural resources provide resource managers with the “how to” and the justification to carry out Department of Defense’s conservation goals. Integrated Natural Resource Management Plans Support the military mission by providing for sustained use of its land, sea and air space; protecting valuable natural and cultural resources for future generations; meeting all legal requirements; and promoting compatible multiple uses of those resources.

Ms. Sherri Goodman
Former Deputy Under Secretary of Defense
(Environmental Security)

The INRMP guides the implementation of the natural resources program on Fort Sam Houston and Camp Bullis. The program helps to ensure the conservation of natural resources while maintaining and emphasizing compliance with related environmental laws and regulations. This plan also helps to maintain quality training lands to accomplish critical military missions.

The last Fort Sam Houston INRMP was completed in 2007. Its primary focus is on Camp Bullis, and it presents the following management goals:

Goal 1

Maintain a realistic training environment on Camp Bullis by managing for the sustainability of the natural resources.

Goal 2

Develop a comprehensive strategy for ecosystem restoration, and land conservation, maintenance and rehabilitation.

Goal 3

Provide support and guidance for Camp Bullis’ wildfire control program.

Goal 4

Implement internal environmental awareness within Integrated Training Area Management (ITAM) that fosters the installation’s stewardship of natural resources.



Goal 5

Maintain and work toward increasing current populations and number of breeding pairs of the golden-cheeked warbler and black-capped vireo using an ecosystem management approach.

Goal 6

Foster external partnerships to enhance the management of threatened and endangered species and candidate species.

Goal 7

Develop and implement a comprehensive ecosystem-based monitoring strategy that tracks ecological change and facilitates adaptive management that leads to a sustainable training environment based on effective land-management decisions.

Goal 8

Manage the water resources on Camp Bullis, including wetlands, in a responsive and responsible manner.

Goal 9

Manage the Karst resources on Camp Bullis to ensure protection and enhance understanding.

Goal 10

Manage game species to provide a quality outdoor recreational experience while supporting the military training mission and management of other natural resources.

Goal 11

Increase knowledge of species other than game wildlife species at Camp Bullis.

Goal 12

Manage problematic species and pests to eliminate or minimize adverse impacts to natural resources.

Goal 13

Protect and preserve cultural resources on Camp Bullis according to federal and state laws and regulations.

Goal 14

Continue to develop and maintain a thorough data collection and processing system that provides efficient data storage, retrieval, sharing, analysis, and presentation to facilitate informed management decisions.



Goal 15

Continue to comply with all applicable federal and state environmental laws and regulations relevant to natural resource management concerns, as well as applicable executive orders.

Goal 16

Increase awareness of environmental management at Camp Bullis.

Goal 17

Partner with research centers, academic institutions, and other land management agencies to encourage research on the Camp Bullis ecosystem as a whole, its individual components, and its natural processes.

Table 5.2 INRMP Implementation Costs (\$000)

Type Funds Anticipated	Section	FY07	FY08	FY09	FY10	FY11	TOTALS
Environmental*	10.4.1, 11.1	16	113	15	15	0	159
Fish and Wildlife (F&W)	10.3	122	120	45	45	0	332
Cultural Resources (CR)	10.8.2, 14.3.1	800	150	0	0	0	950
ITAM	10.2, 11.1	35	35	35	35	35	175

Source: INRMP, Chapter 17 - Implementation

* Includes all categories except F&W, CR, and ITAM



5.6 Integrated Cultural Resources Management Plans

Both Fort Sam Houston and Camp Bullis have Integrated Cultural Resources Management Plans (ICRMPs). These plans guide development and planning that relates to cultural resources and help ensure that federal preservation requirements are met.

Careful preservation of cultural resources allows Fort Sam Houston and Camp Bullis to live with their history, surrounded by traditions of excellence established when the first Soldier arrived in 1845.

On Fort Sam Houston, several major historical buildings, including the old BAMC (building 1000), have been leased to a developer for renovation in concert with historical preservation objectives and reuse. Historic buildings continue to be used by units stationed at the post.

To protect historic properties, Fort Sam Houston and Camp Bullis have well-documented guidelines and active preservation programs.

Projects involving historic properties at Fort Sam Houston and Camp Bullis are handled through Army Alternative Procedures (AAP). In March 2006, Fort Sam Houston became the first Army installation to sign an AAP agreement with the State Historic Preservation Office (SHPO) and the Advisory Council on Historic Preservation (ACHP). This process greatly streamlines consultation requirements for historic properties under the National Historic Preservation Act (NHPA).



Old Brooke Army Medical Center



Keystone at San Antonio Quartermaster Depot



6 Installation Development Strategies

Fort Sam Houston, Texas

6.1 Capital Investment Strategies

The CIS outlines the strategy for real property investments in support of the installation's mission requirements including tenant missions. The strategy is based on a requirements analysis that addresses FCGs and their relationships to the installation's and assigned units' missions.

Fort Sam Houston, like many installations, does not have a formally developed CIS and cannot realistically prepare a comprehensive and detailed CIS until the LRC is developed or updated. The CIS provides the implementation guidelines necessary to execute the LRC. While not formalized and documented in a separate publication, the following broad strategies guide the capital investment decision-making process.

Meetings are ongoing with the Air Force in preparation for joint basing under the Air Force in 2010. This initiative must be considered in planning for future development.

Expanding Missions and Facility Requirements

Many existing assigned units are experiencing growth in missions and associated facility requirements. Often, these increased requirements can be met by renovations, additions, and alterations to existing facilities. This is the preferred option when possible to meet minimum mission and facility requirements.

Existing Substandard Facilities

Many existing facilities are inadequate in comparison to current criteria but should be retained to meet long-term mission requirements. These facilities should be prioritized for comprehensive facility revitalization to bring them up to current standards. This is the case for much of the existing unit operations and maintenance facilities. The recent barracks modernization program is an example of this type of revitalization program.

Demolition, Replacement, and Redevelopment

For those facilities that are supporting mission requirements but revitalization is not economically justifiable, a demolition and replacement/redevelopment program should be established to ensure adequate facilities are available to meet the long-term, sustained mission and facility requirements.



Brooke Army Medical Center



Operations



6.2 ACSIM and IMCOM Capital Investment Strategies

It is understood that Global War on Terrorism and Grow the Force (GTF) initiatives have necessarily delayed the implementation of the Army Facilities Strategy.

Assistant Chief of Staff for Installation Management (ACSIM) and IMCOM have established a goal to raise the Army-level facilities ISR rating from C3 to C2 by 2010 by bringing selected facility types to a C1 level. Focused Facilities Strategies exist to support this goal for the following facility types. The Fort Sam Houston CIS will be developed to support and capitalize on these focused strategies.

- ❖ Army National Guard Readiness Centers
- ❖ USAR Centers
- ❖ Fitness centers
- ❖ Trainee barracks
- ❖ Classrooms
- ❖ Vehicle maintenance facilities and hardstand
- ❖ Chapels



Jennings Hall

6.3 Funding Sources

Funding for facilities projects at Fort Sam Houston and Camp Bullis comes from the following sources:

- ❖ Military Construction-Army (MCA)
- ❖ Military Construction-Defense (MCD)
- ❖ Military Construction-Defense Logistics (MCDL)
- ❖ Military Construction-Defense Medical (MCDM)
- ❖ BRAC-Army
- ❖ BRAC-Air Force
- ❖ BRAC-Medical
- ❖ Energy Conservation Investment Program
- ❖ Enhanced Use Lease
- ❖ Non-Appropriated Funds (NAF)
- ❖ Operations and Maintenance Funding
- ❖ Unspecified Minor Construction-Army (UMCA)



U.S. Army Medical Department School



PAL is in progress with the survey phase ongoing. Actus Lend Lease was awarded the contract to provide lodging services at Fort Sam Houston with an effective date of transfer of 3 November 2008. Plans are to turn over lodging buildings 592 and 1384 to Actus Lend Lease on an interim basis and for a 900-room hotel to be built in the Community Center Area.



7 Short-Range Program

Fort Sam Houston, Texas

Projects contained in the FYDP make up the short-range plan for the installation and are listed below. Site Plans show the approved locations of these projects. Some projects are pending final site approval.

Table 7.1 shows projects that are in the SRC. Figure 7.1 shows the status of FYDP projects.

Table 7.1 Short-Range Project List

Priority	Location	FY	FCG	Percent(%) of FCG Satisfied	Project Number	Description	U/M	Proposed Size	Program	Requirement
FY 08										
1	FSH	2008	F72100	90	64191	Enlisted UPH (PP) - (87 Person)	SP	87	MCA	S
2	FSH	2008	F44224	77	68782	CO OPS/VMS - 2 MED LOG CO	SF	5,250	MCA	R
3	FSH	2008/2009	F72121	---	MPLS08-3562	(1200-SP) METC - Student Dorm # 1	SF	341,236	BCAF	S
4	FSH	2008/2009	F72121	---	MPLS08-3563	(1200-SP) METC - Student Dorm # 2	SF	341,236	BCAF	S
5	Bullis	2008	F17898	0	18165	Modified Urban Assault Course	EA	1	MCA	S
6	FSH	2008/2009/2010	F17120	86	MPLS08-3560	METC Medical Instruction Fac	SF	750,000	BCAF	S
7	FSH	2008	F17200	86	66824	Battle Command Training Center, Phase I	SF	7,000	MCA	R
8	FSH	2008/2009/2010	F51000	100	MPLS08-3580	SAMMC - North ADD/ ALT	SF	953,099	BCAF	S
9	FSH	2008	F55000	107	MPLS08-3566	Primary Health Clinic	SF	131,727	BCAF	S
10	Bullis	2008	F55000	107	17153	Health Clinic, Camp Bullis	SF	15,888	MCM	R
11	FSH	2008	F72200	109	MPLS08-3561	Dining Facility - 4800 PN	SF	80,000	BCAF	S
FY 09										
12	FSH	2009	F72121	---	64202	(1200-SP) AIT Barracks	SF	341,236	MCA	S
13	FSH	2009	F87200	---	69282	Scott Road/BAMC-IH35 ACP/VCP	LF	88,800	MCA	S
14	Bullis	2009	F21700	---	CYRB09-3570	Medical Field Training	SF	73,250	BCAF	S
15	FSH	2009	F31000	---	CNBC083002	Tri-Service Research Facility	SF	208,982	BCAF	S



Table 7.1 Short-Range Project List (continued)

Priority	Location	FY	FCG	Percent (%) of FCG Satisfied	Project Number	Description	U/M	Proposed Size	Program	Requirement
FY09 (continued)										
16	FSH	2009/2010	F72121	---	MPLS09-3564	(1200-SP) METC Barracks - Student Dorm #3	SF	341,236	BCAF	S
17	FSH	2009	F17120	86	53341	Medical Instructional Facility	SF	39,032	MCDM	R
18	FSH	2009	F72100	100	68791	Construct ADA Elevators	SF	200	MCA	A
FY10										
19	FSH	2010	F72100	90	64191	Enlisted UPH (PP) - (90 Person)	SP	90	BCA	S
20	FSH	2010	F85210	114	64209	Vehicle Parking and Roads	SY	68,808	BCA	S
21	FSH	2010	F60000	224	64213	Convert 2265 to Admin	SF	55,000	BCA	C
22	FSH	2010	F60000	224	64212	Convert 2266 to Admin	SF	114,538	BCA	C
23	FSH	2010	F60000	224	64218	Convert 2264 to Admin	SF	110,325	BCA	C
24	FSH	2010	F17120	86	64221	MWR Academy	SF	20,000	BCA	S
25	FSH	2010	F74028	86	MPLS103567	METC Physical Fitness Center	SF	44,347	BCAF	S
26	FSH	2010	F51000	100	69626	BAMC ADD/ALT - BURN PT/OT	SF	50,000	MCDM	S
FY 11										
FY 12										
27	FSH	2012	F72121	---	47339	Replace 1380, 1382, 1385 (AIT Barracks-600 SP)	SP	600	MCA	R
28	FSH	2012	F74028	100	64454	Physical Fitness Center	SF	44,347	MCA	R
29	FSH	2012	F74066	100	67172	Child Development Center Fac	SF	14,930	MCA	S
30	Bullis	2012	F12300	107	16950	Replace/Expand Fuel Station	OL	4	MCDL	R
FY 13										
31	Bullis	2013	F17900	---	67014	Shoot House	EA	1	MCA	S
32	FSH	2013	F72121	---	47338	Replace 1379 (AIT Barracks - 600PN)	SP	600	MCA	R
FY 14										
33	FSH	2014	F17119	330	64182	Repair Theater #1Building 2270	SF	12,480	BCA	S
34	FSH	2015	F85210	114	64290	Tractor Trailer Parking	SY	3,000	BCA	S



Short-Range Program

Table 7.1 Short-Range Project List (continued)

Priority	Location	FY	FCG	Percent (%) of FCG Satisfied	Project Number	Description	U/M	Proposed Size	Program	Requirement
FY 15										
35	FSH	2015	F87110	---	17149	Improve Drainage System	LF	30,000	MCA	S
36	FSH	2015	F72100	100	68530	Enlisted UPH (PP) - (122 Person)	SP	122	MCA	S
37	FSH	2015	F72121	110	47255	Replace 1350 (AIT Barracks - 600 PN)	SP	600	MCA	R
38	FSH	2015	F85100	100	17152	Widen Scott Road	SY	20,000	MCA	A
39	FSH	2015	F85100	100	17139	Extend Jadwin Road	SY	18,700	MCA	A
40	Bullis	2015	F83113	100	69633	Replace Sewage Treatment Plant	KG	695	MCA	R

(Yellow indicates "locked" programs). Note: as of 05 Feb 2007 FYDP

Program legend: BCA = BRAC-Army; BCAF = BRAC-Air Force; BCM = BRAC-Medical; ECIP = Energy Conservation Investment; MCA = Military Construction-Army; MCD = Military Construction-Defense; MCDL = Military Construction-Defense Logistics; MCDM = Military Construction-Defense Medical; UMCA = Unspecified Minor Construction-Army

Requirement legend: A = Addition; C = Conversion; D = Disposal; M = Modernization (ISR Red Requirement); R = Replacement (ISR Red Requirement); S = Deficiency (RPLANS FCG requirement)

Ft. Sam Houston FY08 - FY15 Future Projects/Construction Area Status Map

Short-Range Program

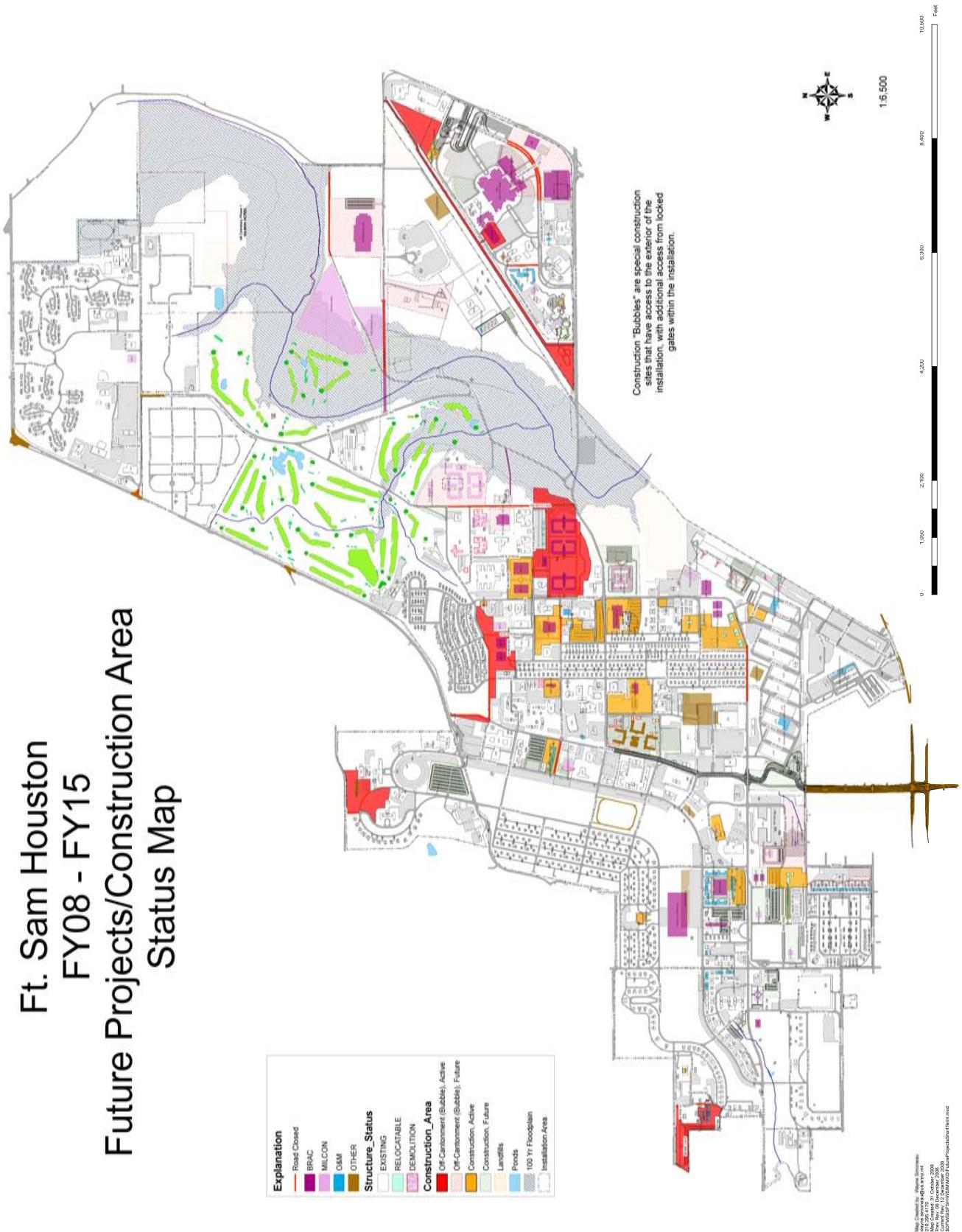


Figure 7.1 Fort Sam Houston Future Projects Status Map, December 2008



8 Master Planning Future Focus Areas

Fort Sam Houston, Texas

8.1 Comparison of Master Plan to Vision, Goals, and Objectives

Table 8.1 identifies the link between the components of the RPMP and the goals that have been established.

The real property vision and goals are outlined in more detail in Section 2.3.2 of the Digest. Table 8.1 indicates with an "X" the components of the RPMP that would be expected to address a particular goal.

Table 8.1 Comparative Assessment of Master Planning Components

	Digest	LRC	SRC	CIS	IDG
GOAL 1 - Support the needs of our all-volunteer force.	X			X	
GOAL 2 - Support transformation.	X	X	X	X	X
GOAL 3 - Incorporate sustainability principles, sound stewardship of resources, and the environment into real property management.	X	X	X	X	X
GOAL 4 - Provide the platform from which we generate, project, and support the nation's combat power.	X	X	X	X	X

8.2 Assessment of Master Plan Vision, Goals, and Objectives and Program

8.2.1 Vision, Goals and Objectives Assessment

Table 8.2 provides criteria and an assessment of the Real Property Vision, Goals, and Objectives of the installation. Multiple criteria are provided to allow adequate assessment of each item. Goals and objectives are separated into construction or non-construction categories.



Table 8.2 Vision, Goals, and Objectives Assessment Criteria

Assessment Value	Vision Criteria	Goals & Objectives Criteria (Non-Construction)	Goals & Objectives Criteria (Construction Specific)
Green	Vision Statement Approved by IMCOM	A goal or objective executed or in the process of execution	Plan implemented, development plan complete, NEPA complete, funding programmed
Amber	Vision Statement Approved by Garrison Commander	A goal or objective resourced but not executed	Plan in place, location selected, NEPA in progress, funding unprogrammed and <5 years but >3 years from execution
Red	Visioning charrette scheduled and/or completed	A goal or objective not resourced	Plan incomplete, no location selected, NEPA pending, funding unprogrammed and <3 years from execution
Black	NA	No goal or objective	No plan developed, no location selected, no NEPA initiated

Table 8.3 below applies the criteria noted above to the Fort Sam Houston real property vision, goals, and objectives.

Table 8.3 Vision, Goals, and Objectives Assessment

Real Property Vision	
Red	Provide the best war-time installation that supports the needs of our all-volunteer force; transformation; sustainability and sound stewardship of resources and the environment; and provides the platform from which we generate, project, and support the Nation's combat power
GOAL 1 - Support the needs of our all-volunteer force.	
1.1 Housing	
1.2 FMWR Facilities	
1.3 Dining	
1.4 Community (AAFES, DeCA, etc)	
GOAL 2 - Support transformation.	
2.1 Joint basing	
2.2 Stationing	
Command and control facilities	
Tactical equipment maintenance facilities	
GOAL 3 - Incorporate sustainability principles, sound stewardship of resources, and the environment into real property management.	
3.1 Utilities infrastructure	
3.2 LEED – Silver	
3.3 Transportation infrastructure	
3.4 Adherence to environmental laws and regulations	
3.5 Resolve encroachment	
3.6 Implement land use management strategy	
GOAL 4 - Provide the platform from which we generate, project, and support the Nation's combat power.	
4.1 Instructional facilities	
4.2 Trainee unaccompanied personnel housing	
4.3 Field training facilities	



8.2.2 Real Property Master Plan Program Assessment

Table 8.4 outlines the criteria used to assess the Real Property Master Plan Program of the installation.

Table 8.4 Real Property Program Assessment Criteria

Real Property Program Assessment Criteria	
Green	Policy, Plan, Procedure, or Tool Executed or Approved by DPW
Amber	Policy, Plan, Procedure, or Tool Waiting to be Executed or Approved by DPW
Red	Policy, Plan, Procedure, or Tool Not Executed or Updated
Black	Policy, Plan, Procedure, or Tool Not Available

Table 8.5 below applies the criteria defined above against the primary master plan functions.

Table 8.5 RPMP Assessment

Real Property Master Plan Policies	
Green	Update to RPMP Digest
Real Property Master Plans	
	RPMP Digest
	Supporting Vision
	Supporting Goals & Objectives
	Long-Range Component
	Supporting Existing Conditions Assessment (Basic Information, Facilities, Environmental Resources Assessment, Land Use Assessment, Utilities Assessment, Transportation Assessment, Airfields Assessment, Range and Training Lands Assessment)
	Supporting Summary of Constraints and Opportunities
	Supporting Land Use Assessment Map
	Supporting Land Use Plan
	Supporting Future Development Plan
	Supporting Expansion Capability Assessment
	Supporting Transportation Plan
	Supporting Utilities Plan
	Supporting Area Development Plans
	Supporting Range Complex Master Plan
	Supporting Demolition Plan
	Supporting Environmental Resource Plan
	Supporting Cultural Resource Plan
	Installation Design Guide
	Supporting Themes Plan
	Supporting Zones Plan
	Supporting Priority Improvement Projects
	Capital Investment Strategy
	Supporting Investment Strategy
	Short-Range Component
	Supporting Project Level Environmental Extracts
Real Property Master Plan Procedures	
	Real Property Planning Board
	Coordination with RC on RDP



Table 8.5 RPMP Assessment (continued)

Real Property Master Plan Tools (Subjective Comments)	
	Requirements Analysis
	Focused Facility Strategy
	TAB
	RPLANS
	Facilities Planning System (FPS)
	HQ Executive Information System
	Integrated Facilities System (IFS)
	Construction Appropriation Programming, Control, and Execution System
	ASIP
	Army Criteria Tracking System (ACTS)
	ISR
	Geographic Information System (GIS)
	Maps
Real Property Master Plan Miscellaneous (Subjective Comments)	
	Master Planner Training and Professional Development
	Master Planning Manpower
	Local Issues
	Real Property Accountable Officer Issues
	Army Structure Issues
	Environmental Issues
	Sustainability Issues
	ATFP Issues
	Range and Training Land Issues
	Programming Issues
	Acquisition of Planning Services Issues

8.3 RPMP Program Requirements and Recommendations

The installation master planning program is by design a process that is constantly evolving to accommodate mission requirements.

The following requirements and recommended actions are provided to assist the Directorate of Public Works (DPW) and installation leadership with prioritizing efforts toward improving and sustaining the Fort Sam Houston RPMP.

The following Master Plan products are out of date or do not meet current policy requirements:

- ❖ LRC: Recommendation is to update the LRC.
- ❖ SRC: Recommendation is to update the SRC.
- ❖ CIS: Recommendation is to update the CIS.



Master Planning Future Focus Areas

The following recommended actions will enhance execution and sustainment of the master planning program (processes and products):

- ❖ Maintain a controlled but widely accessible master planning library to support improved integration and collaboration among the many participants.
- ❖ Review and update the RPMP Digest in conjunction with semi-annual Real Property Planning Board Meetings.



9 References

Fort Sam Houston, Texas

9.1 Acronyms and Abbreviations

AACOG	Alamo Area Council of Governments
AAFES	Army and Air Force Exchange Service
AAP	Army Alternative Procedures
ACC-I	Army Contracting Command – Installations
ACHP	Advisory Council on Historic Preservation
ACP	access control point
ACSIM	Assistant Chief of Staff for Installation Management
ADP	Area Development Pan
AED	Army Entertainment Division
AETC	Air Education and Training Command
AFB	Air Force Base
AIT	advanced individual training
AMEDD	U.S. Army Medical Department
ARMAG	A combination of the words “armor” and “magazine,” an ammunition storage unit
ARRM	Army Range Requirements Model
ASIP	Army stationing and installation plan
ATFP	Antiterrorism/Force Protection
BAMC	Brooke Army Medical Center
BCA	BRAC Construction-Army
BCAF	BRAC Construction-Air Force
BCM	BRAC Construction-Medical
BDE	Brigade
BN	Battalion
BRAC	Base Realignment and Closure
CALS	Combat Assault Landing Strip
CIS	Capital Investment Strategy
CR	Cultural Resources
DeCA	Defense Commissary Agency
DoD	Department of Defense
DOIM	Directorate of Information Management
DPCA	Directorate of Personnel & Community Activities
DPW	Directorate of Public Works
ECIP	Energy Conservation Investment Program
EIS	Environmental Impact Statement
ESQD	Explosive Safety Quantity Distance
F&W	Fish & Wildlife
FCG	Facility Category Group
FSH	Fort Sam Houston
FMWR	Family Morale, Welfare, and Recreation
FORSCOM	Forces Command
FY	fiscal year
FYDP	Future Years Defense Program
GTF	Grow the Force



References

HWCW	hot water and chilled water systems
ICRMP	Integrated Cultural Resources Management Plan
ICUZ	Installation Compatible Use Zone
IDG	Installation Design Guide
IFS	Integrated Facilities System
IMCOM	Installation Management Command
INRMP	Integrated Natural Resources Management Plan
ISR	Installation Status Report
ITAM	Integrated Training Area Management
LEED	Leadership in Energy and Environmental Design
LRC	Long-Range Component
MCA	Military Construction Army
MCD	Military Construction–Defense
MCDL	Military Construction–Defense Logistics
MCDM	Military Construction–Defense Medical
MEDCOM	Medical Command
METC	Medical Education and Training Campus
MILCON	Military Construction
MOUT	Military Operations on Urban Terrain
NAF	Non-Appropriated Fund
NCO	non-commissioned officer
NEPA	National Environmental Policy Act
NETCOM	Network Enterprise Technology Command
NHLD	National Historic Landmark District
NHPA	National Historic Preservation Act
NRHP	National Register of Historic Places
OSHA	Occupational Safety and Health Administration
PAL	Privatization of Army Leasing
POM	Program Objective Memorandum
QD	Quantity Distance
RC	Reserve Component
RCRA	Resource Conservation and Recovery Act
RPI	Real Property Inventory
RPLANS	Real Property Planning and Analysis System
RPMP	Real Property Master Plan
SAMMC	San Antonio Military Medical Center
SAWS	San Antonio Water System
SF	square feet
SHPO	State Historic Preservation Office
SRC	Short-Range Component
SY	square yards
TAB	Tabulation of Existing and Required Facilities
TMP	transportation motor pool



UEPH	Unaccompanied Enlisted Personnel Housing
UMCA	Unspecified Minor Construction - Army
U.S.	United States
USAR	United States Army Reserve

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9.3 Acknowledgements and Points of Contact

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