

FORT MACARTHUR, CALIFORNIA
ENVIRONMENTAL ASSESSMENT

GATE IMPROVEMENT AND
CIVIL ENGINEERING CONSOLIDATION



DRAFT
August 2016

Draft
FINDING OF NO SIGNIFICANT IMPACT (FONSI)
GATE IMPROVEMENT AND CIVIL ENGINEERING CONSOLIDATION
FORT MACARTHUR, CALIFORNIA

Pursuant to provisions of the National Environmental Policy Act (NEPA), 42 United States Code (U.S.C.) 4321 to 4270d; Council on Environmental Quality (CEQ) Regulations, 40 Code of Federal Regulations (CFR) 1500-1508; and 32 CFR Part 989, Environmental Impact Analysis Process, the U.S. Air Force prepared the attached environmental assessment (EA) to address the potential environmental consequences associated with implementing two proposed projects at Fort MacArthur in Los Angeles County, California. The first project involves vehicle access improvements at the 28th Street Gate; the second project involves consolidating Civil Engineering (CE) functions.

Purpose and Need

The purpose of improving the 28th Street Gate is to bring Fort MacArthur into compliance with current Department of Defense (DOD) anti-terrorism standards; to improve commercial vehicle traffic; to provide additional traffic calming; and to provide a design that reasonably supports the ultimate traffic demand at Fort MacArthur without impairing city street operations. The need for the action is due to the existing vehicle access gates at Fort MacArthur not being in compliance with anti-terrorism standards and lack inspection areas, traffic calming, and denial systems.

The purpose of consolidating CE functions is to increase mission efficiencies as well as implement sustainable design concepts that emphasize state-of-the-art strategies for efficient water and energy use, and improved indoor environmental quality. The need for the action is due to current civil engineering functions being split between several facilities, which limit operational efficiency. The existing facilities are also approaching the end of their life cycle and are not energy or space utilization efficient.

Description of Proposed Action and Alternatives

The **Proposed Action** involves implementing proposed gate improvements at the 28th Street Gate to meet current DOD anti-terrorism standards consistent with Unified Facilities Code (UFC) 4-010-01, *DOD Minimum Anti-terrorism Standards for Buildings*. The Proposed Action also involves construction of consolidated CE facilities to house all facets of civil engineering on the installation, which are currently split between several facilities.

Gate Improvement. Removal of existing paved areas (road and vehicle/boat storage yard), the perimeter wall, and landscaped areas will occur. Approximately 20,000 square feet of asphalt pavement will be removed to allow construction of the new gate. Approximately 1,300 square feet of new building construction and 20,000 square feet of new pavement will be associated with the 28th Street Gate.

CE Consolidation. Existing CE buildings situated in the northeast corner of Fort MacArthur (Buildings 64, 68, 72, 74, 75, and 78), miscellaneous storage sheds, and two housing structures (Buildings 1695 and 1697) will be demolished. Building demolition will total approximately 19,200 square feet; pavement removal will total approximately 22,000 square feet. Approximately 8,000 square feet of new building construction and 30,000 square feet of new pavement will be associated with the consolidated CE compound.

Under the **No-Action Alternative** construction activities associated with improving the 28th Street Gate and consolidating CE functions will not occur.

Summary of Environmental Impacts

The analyses of the affected environment and environmental consequences of implementing the gate improvement and CE consolidation projects presented in the EA concluded that there will be no significant impacts to land use/aesthetics, storage tanks, asbestos-containing material (ACM), lead-based paint (LBP), geology and soils, air quality, noise, biological resources, and cultural resources.

The proposed projects will be compatible with existing land uses surrounding the project areas. The proposed projects will also be consistent with the Fort MacArthur General Plan. The long-term effect of removing older buildings and constructing new modern structures will result in a positive aesthetic effect.

Hazardous materials and hazardous wastes, including storage tanks, ACM, and LBP will continue to be managed in accordance with applicable regulations.

Management practices required by a Construction Site National Pollutant Discharge Elimination System (NPDES) permit and associated Storm Water Pollution Prevention Plan (SWPPP) will be implemented during construction activities. The NPDES permit, together with the required SWPPP, will outline construction site management practices designed to protect the quality of the surface water, ground water, and natural environment through which they flow. Altogether, there will be no increase in impervious surfaces.

Construction activities will result in short-term air quality impacts. However, emissions associated with construction activities will not hinder maintenance of the National Ambient Air Quality Standards or California Ambient Air Quality Standards.

Noise generated from proposed construction activities would occur during normal business hours. Construction noise would be intermittent and short term, and would primarily occur at the construction site. Once construction activities are completed, proposed activities are not expected to generate a substantial amount of noise.

Vegetation at Fort MacArthur consists of landscaped areas containing nonnative grasses, ornamental shrubs, and shade trees. Impacts to such highly disturbed, human-created habitats are considered to be insignificant. The species known to inhabit Fort MacArthur are common and/or disturbance tolerant. Potential impacts to wildlife include displacement of individuals to adjacent areas and direct mortality to burrowing species or individuals that are less mobile. These impacts to common wildlife species are not expected to be significant. There is no suitable habitat for any of the threatened or endangered species identified as having the potential to occur on or adjacent to Fort MacArthur. Protected birds that may migrate through the area may be temporarily startled by noise associated with construction activities; however, no significant impacts are anticipated. There is no sensitive habitat on Fort MacArthur.

There are no known prehistoric or historic archaeological resources at Fort MacArthur, and there is little likelihood for them to occur. The 28th Street Gate improvement project location is outside of the 500 Varas Square National Register District. The CE consolidation area is situated within the northeast corner of the National Register District. The buildings proposed for demolition, although within the district, are not contributing elements to the district. The CE consolidation effort has been planned and designed to avoid contributing elements of the historic district and will be landscaped in such a way as to retain the historic feeling, setting, and association of the area. Given the developed nature of Fort MacArthur; no traditional cultural resources, sacred areas, or traditional use areas have been identified at Fort MacArthur.

Cumulative Impacts

The EA considered cumulative impacts that could result from the incremental impact of proposed gate improvements and CE consolidation activities when added to other past, present, or reasonably foreseeable future actions. No off-installation development projects were identified in the vicinity of Fort MacArthur that could contribute to cumulative impacts. Several repair projects have been identified for Fort MacArthur that are programmed to occur between 2016 and 2018. The projects primarily involve the repair of utilities, lighting, irrigation, drainage, heating and air condition systems; pavement, fencing, and tree removal/ planting throughout the installation. These repair projects are small in scale and will not occur in the vicinity of the 28th Street Gate or CE compound. Demolition and construction activities would generally be expected to result in some increased noise, increased air emissions, potential for erosion, generation of small amounts of hazardous materials and wastes, and generation of construction and demolition waste. These types of short-term, construction-related effects will occur regardless of project location and are not constraints to development; therefore, no significant cumulative impacts are expected.

Mitigations

The EA concluded that no significant impacts to the environment will result from proposed activities with incorporation of best management practices, as outlined in the EA. Therefore, no mitigation measures will be required.

Conclusion

Based on the provisions set forth in the Proposed Action, gate improvement and CE consolidation activities were found to comply with the criteria or standards of environmental quality and coordinated with the appropriate federal, state, and local agencies. The attached EA and a draft of this FONSI were made available to the public on August 29, 2016 for a 30-day review period.

Findings

Finding of No Significant Impact. After review of the EA prepared in accordance with the requirements of NEPA; CEQ regulations; and 32 CFR Part 989, Environmental Impact Analysis Process, and which is hereby incorporated by reference, I have determined that the proposed gate improvement and CE consolidation actions will not have a significant impact on the quality of the human or natural environment. Accordingly, an Environmental Impact Statement will not be prepared. This decision has been made after taking into account all submitted information, and considering a full range of practical alternatives that meet project requirements and are within the legal authority of the U.S. Air Force. The signing of this FONSI completes the environmental impact analysis process.

TODD T. INOUYE, Lt Col, USAF
Commander
61st Civil Engineering and Logistics Squadron
Los Angeles Air Force Base

Date

Attachment:

Environmental Assessment for Gate Improvement and Civil Engineering Consolidation at Fort MacArthur, CA

DRAFT
ENVIRONMENTAL ASSESSMENT
FOR
GATE IMPROVEMENT AND CIVIL ENGINEERING CONSOLIDATION
FORT MACARTHUR, CALIFORNIA

August 2016

COVER SHEET

ENVIRONMENTAL ASSESSMENT FOR GATE IMPROVEMENT AND CIVIL ENGINEERING CONSOLIDATION FORT MACARTHUR, CALIFORNIA

- a. Lead Agency: U.S. Air Force
- b. Proposed Action: Implement Gate Improvements and Consolidate Civil Engineering Functions at Fort MacArthur, California.
- c. Written comments and inquiries regarding this document should be directed to: Ms. Elizabeth Farm, 61 CELS/CEIE, 483 N. Aviation Boulevard, El Segundo, CA 90245.
- d. Designation: Draft Environmental Assessment (EA)
- e. Abstract: This EA evaluates the potential environmental impacts associated with implementing proposed gate improvements and consolidating civil engineering functions at Fort MacArthur.

The existing vehicle access gates at Fort MacArthur do not comply with anti-terrorism standards and lack inspection areas, traffic calming, and denial systems. Proposed 28th Street Gate improvements would be designed to meet current Department of Defense anti-terrorism standards consistent with Unified Facilities Criteria; improve commercial vehicle traffic; provide additional traffic calming; and provide a design that reasonably supports the ultimate traffic demand at Fort MacArthur without impairing city street operations.

Fort MacArthur requires a consolidated facility to house all facets of civil engineering on the installation. Current civil engineering functions are split between several facilities (Buildings 64, 68, 72, 74, 75, and 78, and multiple storage sheds). The existing facilities are approaching the end of their life cycle and are not energy or space utilization efficient. The split function limits operational efficiency. The proposed consolidation of civil engineering activities is intended to increase mission efficiencies as well as implement sustainable design concepts that emphasize state-of-the-art strategies for efficient water and energy use, and improved indoor environmental quality.

All environmental resources were analyzed in this EA; however, only the environmental resources potentially affected by the Proposed Action and alternatives were analyzed in-depth, including land use and aesthetics, storage tanks, asbestos-containing material, lead-based paint, geology and soils, air quality, noise, biological resources, and cultural resources. Based on the analysis of the Proposed Action and alternatives, the Air Force has determined that with incorporation of best management practices, as outlined in the EA, no significant impacts would occur.

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Privacy Advisory

Your comments on this draft environmental assessment (EA) are requested. Letters or other written or oral comments provided may be published in the final EA. As required by law, comments will be addressed in the final EA and made available to the public. Any personal information provided will be used only to identify your desire to make a statement during the public comment period or to fulfill requests for copies of the final EA or associated documents. Private addresses will be compiled to develop a mailing list for those requesting copies of the final EA. However, only the names of the individuals making comments and specific comments will be disclosed. Personal home addresses and telephone numbers will not be published in the final EA.

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LIST OF ACRONYMS/ABBREVIATIONS

61 ABG	61st Air Base Group
61 CELS	61st Civil Engineer and Logistics Squadron
ACHP	Advisory Council on Historic Preservation
ACM	asbestos-containing material
AFB	Air Force Base
AFI	Air Force Instruction
AHERA	Asbestos Hazard Emergency Response Act
APE	Area of Potential Effect
AQMD	Air Quality Management District
AST	aboveground storage tank
BMP	best management practice
CAA	Clean Air Act
CAAQS	California Ambient Air Quality Standards
CARB	California Air Resources Board
CCR	California Code of Regulations
CDFW	California Department of Fish and Wildlife
CE	Civil Engineering
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
CH ₄	methane
CNDDB	California Natural Diversity Data Base
CO	carbon monoxide
CO ₂	carbon dioxide
CO ₂ e	carbon dioxide equivalent
CPSC	Consumer Product Safety Commission
CWA	Clean Water Act
dB	decibel
dBA	A-weighted sound levels
DNL	day-night average sound level
DoD	Department of Defense
EA	environmental assessment
EO	Executive Order
EPA	Environmental Protection Agency
EPCRA	Emergency Planning and Community Right-to-Know Act
ERP	Environmental Restoration Program
°F	degrees Fahrenheit
FIFRA	Federal Insecticide, Fungicide, and Rodenticide Act
FONSI	Finding of No Significant Impact
GHG	greenhouse gas
GWP	global warming potential
HAP	Hazardous Air Pollutant
HFC	hydrofluorocarbon
HPMP	Historic Preservation Management Plan
HSC	Health and Safety Code
ICRMP	Integrated Cultural Resources Management Plan
ID	identification
IICEP	Interagency and Intergovernmental Coordination for Environmental Planning
IPAC	Information, Planning, and Conservation System

LIST OF ACRONYMS/ABBREVIATIONS (Continued)

LBP	lead-based paint
LEED	Leadership in Engineering and Environmental Design
MBTA	Migratory Bird Treaty Act
$\mu\text{g}/\text{m}^3$	micrograms per cubic meter
mg/l	milligrams per liter
MOA	Memorandum of Agreement
NAAQS	National Ambient Air Quality Standards
National Register	National Register of Historic Places
NEPA	National Environmental Policy Act
NESHAP	National Emission Standards for Hazardous Air Pollutants
NHPA	National Historic Preservation Act
NNSR	Nonattainment New Source Review
NOA	Notice of Availability
N_2O	nitrous oxide
NO_2	nitrogen dioxide
NO_x	nitrogen oxide
NPDES	National Pollutant Discharge Elimination System
NSR	New Source Review
OSHA	Occupational Safety and Health Administration
PA	Programmatic Agreement
PCB	polychlorinated biphenyl
pCi/L	picocuries per liter
PFC	perfluorocarbon
P.L.	Public Law
$\text{PM}_{2.5}$	particulate equal to or less than 2.5 microns in diameter
PM_{10}	particulate equal to or less than 10 microns in diameter
POL	petroleum, oils, and lubricants
ppm	parts per million
PSD	Prevention of Significant Deterioration
RCRA	Resource Conservation and Recovery Act
ROI	region of influence
RV	recreational vehicle
RWQCB	Regional Water Quality Control Board
SCAB	South Coast Air Basin
SCAQMD	South Coast Air Quality Management District
SF_6	sulfur hexafluoride
SHPO	State Historic Preservation Officer
SIP	State Implementation Plan
SO_2	sulfur dioxide
SWPPP	Storm Water Pollution Prevention Plan
TCLP	Toxic Characteristic Leaching Procedure
TVC	Tierra Vista Communities
UFC	Unified Facilities Criteria
U.S.C.	U.S. Code
USFWS	U.S. Fish and Wildlife Service
UST	underground storage tank
VOC	volatile organic compound

1.0 PURPOSE OF AND NEED FOR ACTION

This environmental assessment (EA) evaluates the potential environmental impacts associated with implementing two proposed projects at Fort MacArthur associated with Los Angeles Air Force Base (AFB), California. The first project involves vehicle access improvements at the 28th Street Gate; the second project involves consolidating Civil Engineering (CE) functions.

This EA has been prepared in accordance with the National Environmental Policy Act (NEPA) of 1969, as amended (42 U.S. Code [U.S.C.] 4321, et seq.), the Council on Environmental Quality (CEQ) regulations for implementing the procedural provisions of NEPA (40 Code of Federal Regulations [CFR] Parts 1500-1508), and Air Force policy and procedures (32 CFR Part 989).

1.1 PURPOSE AND NEED

The purpose of improving the 28th Street Gate is to bring Fort MacArthur into compliance with current Department of Defense (DoD) anti-terrorism standards consistent with Unified Facilities Criteria (UFC); to improve commercial vehicle traffic; to provide additional traffic calming; and to provide a design that reasonably supports the ultimate traffic demand at Fort MacArthur without impairing city street operations. This action is required to provide a vehicle access gate at Fort MacArthur that is compliant with anti-terrorism standards and provides appropriate inspection areas, traffic calming, and denial systems.

The purpose of consolidating CE functions is to increase mission efficiencies as well as implement sustainable design concepts that emphasize state-of-the-art strategies for efficient water and energy use, and improved indoor environmental quality. The need for the action is due to current civil engineering functions being split between several facilities (Buildings 64, 68, 72, 74, 75, 78, and multiple storage sheds), which limits operational efficiency. The existing facilities are also approaching the end of their life cycle and are not energy or space utilization efficient.

The overall purpose of the Proposed Action is to support current and future mission requirements by maintaining and providing needed infrastructure in a manner that:

- Meets current Air Force requirements for functional space, consistent with Air Force Manual 32-1084, *Facility Requirements*.
- Meets applicable DoD anti-terrorism criteria, consistent with UFC 4-010-01, *DoD Minimum Anti-terrorism Standards for Buildings*.
- Maximizes the use of existing facilities; and reduces the footprint of unnecessary or redundant facilities and infrastructure in accordance with Executive Order (EO) 13514, *Federal Leadership in Environmental, Energy, and Economic Performance*.
- Provides reliable utilities and an efficient transportation system to support Fort MacArthur, consistent with Air Force Manual 32-1084.

1.2 LOCATION OF THE PROPOSED ACTION

Fort MacArthur consists of approximately 98 acres located in southern California, within Los Angeles County. Fort MacArthur is within the city limits of Los Angeles, approximately 6 miles west of the city of Long Beach and approximately 25 miles south of Los Angeles AFB (Figure 1-1). Proposed gate improvements would occur on the western side of Fort MacArthur at the 28th Street Gate providing access from Pacific Avenue (Figure 1-2). The existing CE buildings and associated maintenance/storage yard are situated in the northeastern corner of Fort MacArthur (see Figure 1-2).

1.3 FEDERAL, STATE, AND LOCAL PERMITS, AND LICENSES

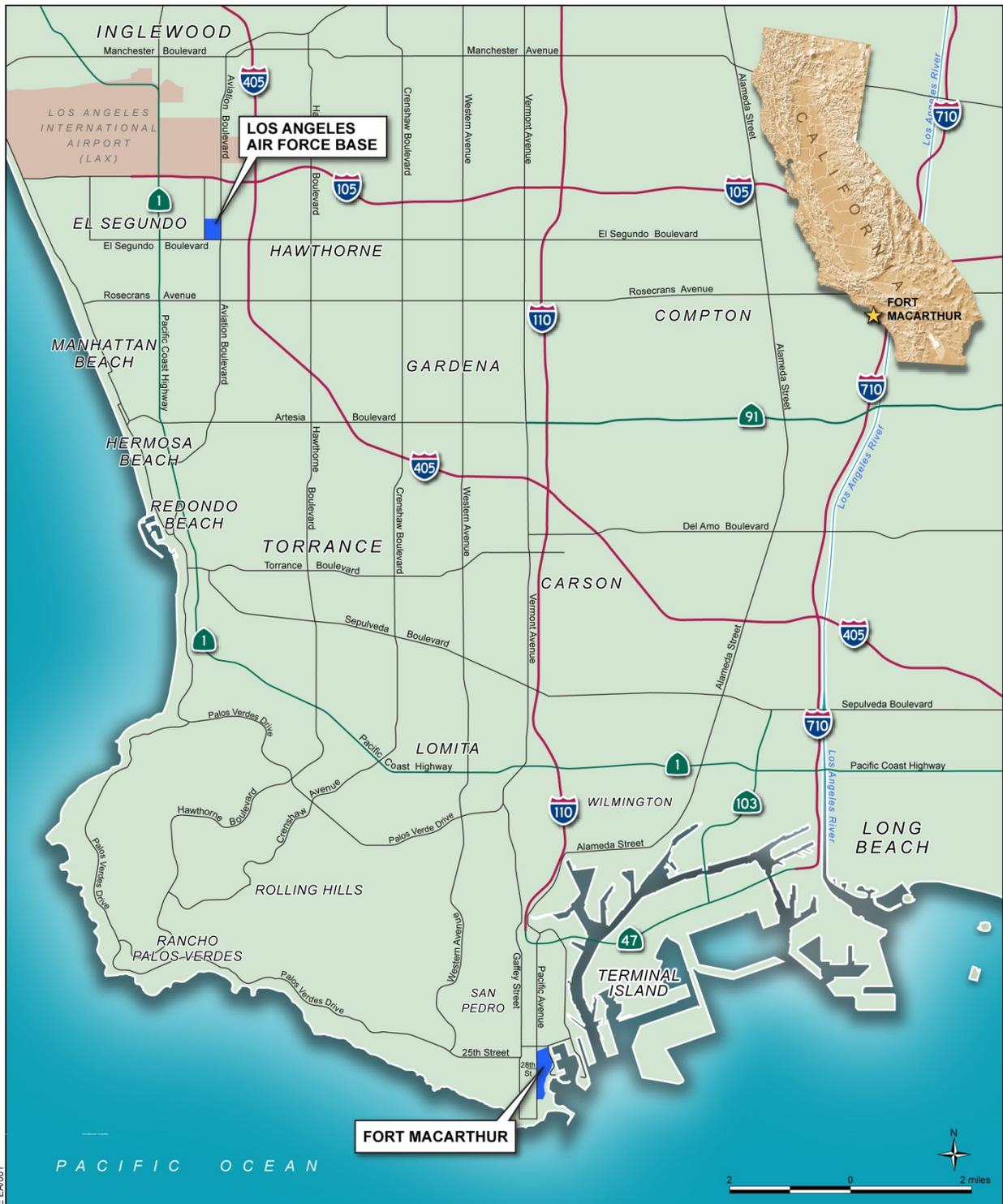
The contractor responsible for conducting demolition and construction activities would obtain required federal, state, and local permits. The contractor would cooperate with the Air Force to ensure compliance with applicable Air Force, federal, state, and local regulations and/or requirements.

1.4 INTERAGENCY AND INTERGOVERNMENTAL COORDINATION FOR ENVIRONMENTAL PLANNING, NATIVE AMERICAN CONSULTATION, AND PUBLIC INVOLVEMENT

IICEP. The 61st Air Base Group (61 ABG), as the responsible agency, has implemented the Interagency and Intergovernmental Coordination for Environmental Planning (IICEP) process. Through the IICEP process, Los Angeles AFB notifies relevant federal, state, and local agencies about the Proposed Action and alternatives. The IICEP process provides the Air Force the opportunity to cooperate with and consider state and local views in implementing the Proposed Action or alternatives. A description of the Proposed Action was provided to federal, state, and local agencies as well as other stakeholders identified in the IICEP that provides the means to comment on the Proposed Action and alternatives. The comment period lasts for 30 days. Agency responses have been considered in developing the final scope of the EA. IICEP materials for this EA are included in Appendix A.

Native American Tribal Consultation. EO 13175, *Consultation and Coordination with Indian Tribal Governments*, directs federal agencies to coordinate and consult with Native American tribal governments whose interests might be directly and substantially affected by activities on federally administered lands. To comply with legal mandates, federally recognized tribes that are affiliated historically with the Fort MacArthur geographic region are invited to consult on proposed undertakings that have a potential to affect properties of cultural, historical, or religious significance to the tribes. Effective consultation requires identification of tribes based on ethnographic and historical data and not simply a tribe's current proximity to a project area. The goal of the tribal consultation process is not to simply consult on a particular undertaking but rather to build constructive relationships with appropriate Native American tribes. Consultation should lead to constructive dialogs in which the Native American tribes are active participants in the planning process. Fort MacArthur is located within the Los Angeles Basin in the traditional territory of the Gabrielino-Tongva Indians, which is not a federally recognized tribe. In accordance with DoD policy, the Air Force has not consulted with the tribe on a formal government-to-government basis. However, the Air Force would consult with them as interested parties in applicable situations (U.S. Air Force, 2011a).

Public Involvement. A Notice of Availability (NOA) for the Draft EA and Draft Finding of No Significant Impact (FONSI) was published in the *Daily Breeze* on August 29, 2016. The NOA briefly described the Proposed Action, solicited public comments on the Draft EA, provided dates of the 30-day public comment period, and announced that a copy of the EA would be available for review at public libraries.

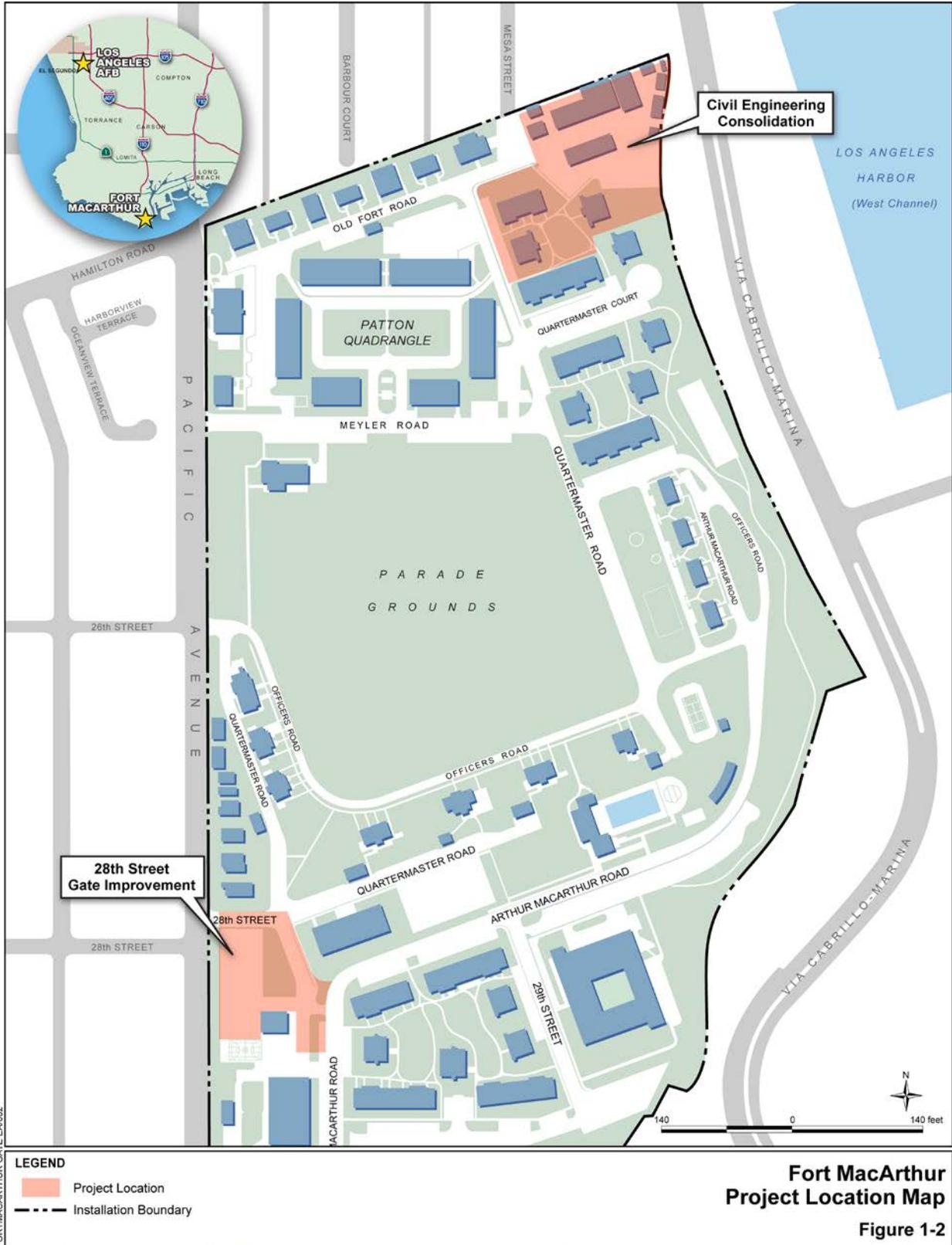


FORTMACARTHUR.GATE.EA001

- LEGEND**
- Air Force Facility
 - Interstate Highway
 - State Highway

**Fort MacArthur
Vicinity Map**
Figure 1-1

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2.0 ALTERNATIVES INCLUDING THE PROPOSED ACTION

2.1 INTRODUCTION

This section presents information on the Proposed Action for implementing two proposed projects at Fort MacArthur, California. The first project involves vehicle access improvements at the 28th Street Gate; the second project involves consolidating CE functions. Section 2.2 describes the Proposed Action; Section 2.3 identifies alternatives to the Proposed Action; Section 2.4 discusses the No-Action Alternative; and Section 2.5 discusses alternatives considered but eliminated from further consideration. The potential environmental impacts of the Proposed Action and alternative are summarized in Table 2-1 at the end of this chapter.

2.2 PROPOSED ACTION

The Proposed Action involves implementing proposed gate improvements at the 28th Street Gate to meet current DoD anti-terrorism standards consistent with UFC 4-010-01, *DoD Minimum Anti-terrorism Standards for Buildings* (Figure 2-1). The Proposed Action also involves construction of consolidated CE facilities to house all facets of civil engineering on the installation, which are currently split between several facilities (Figure 2-2).

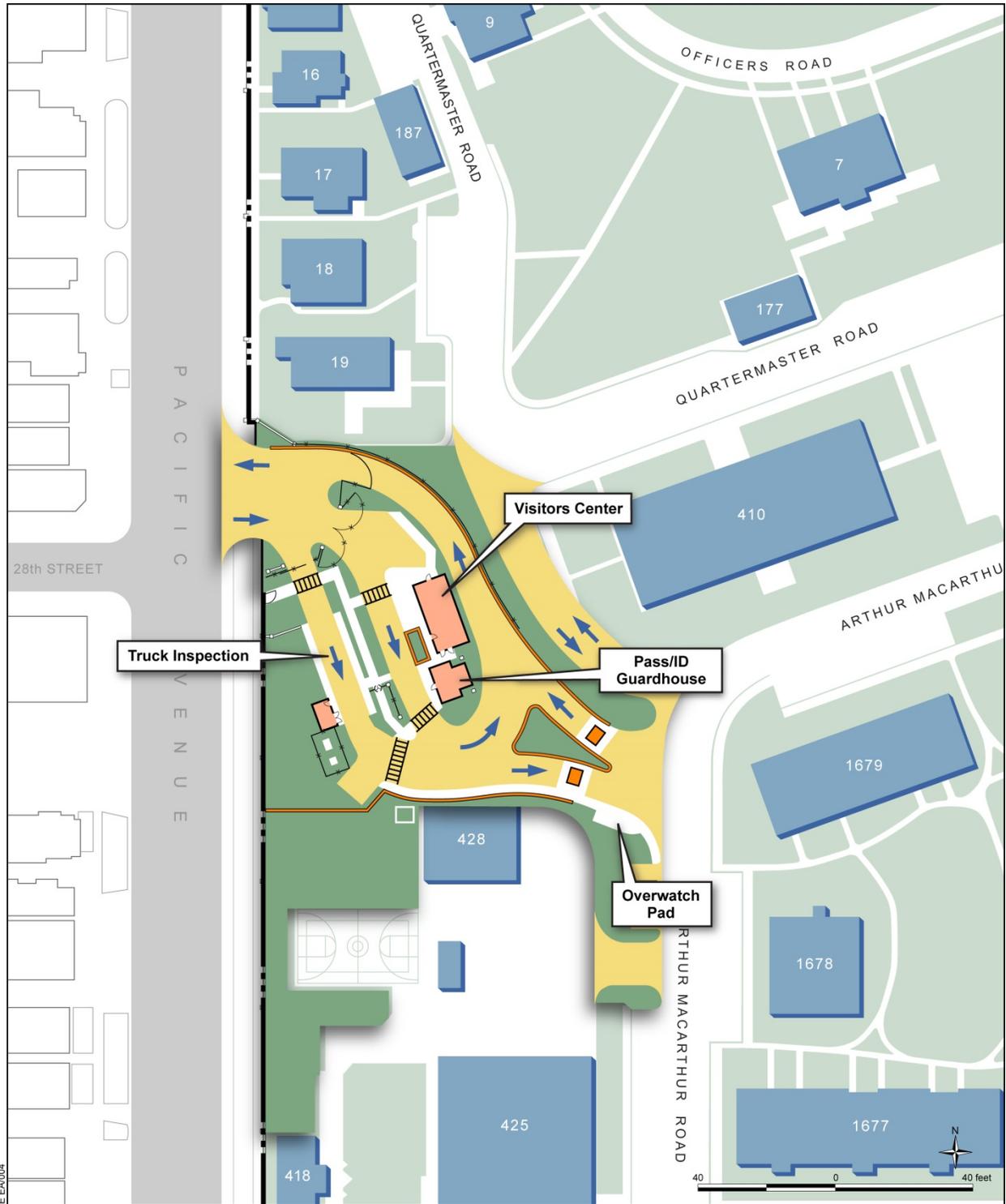
2.3 ALTERNATIVES TO THE PROPOSED ACTION

2.3.1 Selection Standards

The proposed projects have undergone an intensive review by Civil Engineering Planning and supporting installation staff. During preparation of the Los Angeles Air Force Base General Plan, which covers Fort MacArthur, alternatives for projects were considered and evaluated. The best operational and engineering solutions, including facility siting proposals, were identified based on the following selection standards:

- Fulfillment of current mission requirements
- Facility sustainability as mission evolves or changes
- Economic feasibility
- Consistency with future land uses
- Consistency with state, regional, and local plans
- Consistency with DoD and Air Force policies, guidance, and directives
- Functional compatibility with adjacent facilities
- Collocation of like services
- Availability of sites and adequacy of space
- Adherence to Air Force Strategic Sustainable Performance goals and objectives
- Environmental constraints (e.g., sensitive habitats, floodplains).

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FORTMACARTHUR GATE EA/004

LEGEND		
New Paving	Barrier	Fence
New Buildings	Crosswalk	Installation Boundary
Greenspace/Landscaping	Direction of Travel	
Existing Building	Concrete Curb Wall	

Alternative 1
28th Street Gate Improvement
Figure 2-1

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FORTMACARTHUR GATE EAV003

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2.3.2 Alternative 1

This alternative meet the screen standards listed above for development at Fort MacArthur specifically in achieving facility sustainability, consistency with future land uses, functional compatibility with adjacent facilities, and collocation of like services.

2.3.2.1 Demolition

Gate Improvement. Other than removal of existing paved areas (road and vehicle/boat storage yard), the perimeter wall, and landscaped areas, no facility demolition would occur in support of proposed improvements at the 28th Street Gate. Approximately 20,000 square feet of asphalt pavement would be removed to allow construction of the new gate.

CE Consolidation. To allow construction of the consolidated CE facility, existing CE buildings situated in the northeast corner of Fort MacArthur (Buildings 64, 68, 72, 74, 75, and 78), miscellaneous storage sheds, and two housing structures (Buildings 1695 and 1697) would be demolished. Building demolition would total approximately 19,200 square feet. Removal of existing paved areas (building foundations, and CE storage yard) and landscaped areas would also occur; pavement removal would total approximately 22,000 square feet. The existing 500-gallon diesel aboveground storage tank (AST) within the CE storage yard would remain in-place within the reconfigured CE open storage compound. While demolition activities are occurring and the new facilities are being constructed, CE functions would temporarily operate from Los Angeles AFB.

Demolition activities would create approximately 440 tons of solid waste. Approximately 90 percent of the material is expected to be concrete from building foundations and asphalt paved areas, which could be recycled in the Los Angeles area for future use. The remaining 56 tons of solid waste would be drywall, wood, roofing material, metals, glass, and other building materials. Debris from demolition activities is often contaminated with nails, rebar, or other building materials that make recycling more difficult. It is expected that over 50 percent of the building materials would be recycled. The wood material may be chipped and reused as mulch. Sheet metal, structural steel, and glass would be sold as scrap. Miscellaneous building materials such as electrical wire, outlet boxes, metallic tubing, light fixtures, pipe, plumbing fixtures, and heating systems would be salvaged and reused or sold as scrap. Even though a recycling program would be used, it would be impractical to accomplish complete source separation, and approximately 50 percent, or 28 tons, of the building materials would require disposal in a landfill. The construction contractor would be required to transport and dispose demolition debris and any hazardous waste off site at approved or permitted facilities in accordance with federal, state, and local regulations.

2.3.2.2 Construction

Gate Improvement. Construction at the 28th Street Gate would occur during normal business hours (7:00 am to 5:00 pm) over a 9-month period. Approximately 20,000 square feet of new pavement would be associated with the 28th Street Gate complex (no net increase in impervious surfaces). During construction, residents, employees, and visitors would continue to access Fort MacArthur via the Meyler Gate. Specific construction activities include:

- Construct single lane entrance and exit routes.
- Construct an 800 square foot visitor center/pass and identification (ID) office with parking for 2 vehicles.

- Construct a 500 square foot guard house with canopy.
- Install a separate lane for commercial truck and personal vehicle inspection with access that would bypass the security station.
- Install two 9-foot-wide wedge-style final denial barriers.
- Install truck and personal vehicle diversion/turn-around lane.
- Install an overwatch pad.
- Install a secure pedestrian turnstile and swing gate.
- Install pad for transformer and backup generator (with 40 gallon diesel day tank).
- Install landscaping (see Figure 2-1).

Ground disturbance at the 28th Street Gate as a result of construction activities would be approximately 1 acre. Construction employees would access the construction site via Pacific Avenue at 28th Street. Earthwork for construction would be performed in accordance with a Construction Site Storm Water National Pollutant Discharge Elimination System (NPDES) permit. Existing utility systems would be utilized to provide service to the proposed facilities.

CE Consolidation. Construction of the consolidated CE facilities would occur during normal business hours (7:00 am to 5:00 pm) over a 9-month period. Approximately 8,000 square feet of new building construction and 30,000 square feet of new pavement would be associated with the consolidated CE compound (no net increase in impervious surfaces). Specific construction activities include:

- Construct new single-story Building 63 (2,400 square feet).
- Construct new single-story Building 66 (2,800 square feet).
- Construct new single-story Building 67 (2,800 square feet).
- Construct new bulk material storage enclosure.
- Maintain existing 500-gallon diesel AST within the reconfigured CE open storage compound.
- Construct CE open storage compound.
- Renovate Building 1696 and construct housing contractor storage yard.
- Construct parking (25 stalls) for customer and employee vehicles (see Figure 2-2).

Ground disturbance at the consolidated CE facility as a result of construction activities would be approximately 2 acres. Construction employees would access the construction site via a designated access gate (likely Meyler Gate) for construction equipment and employees. Earthwork for construction would be performed in accordance with a Construction Site Storm Water NPDES permit. Existing utility systems would be utilized to provide service to the proposed facilities.

During implementation of the proposed projects, the construction contractor would be required to transport and dispose construction debris and any hazardous waste off site at approved or permitted facilities in accordance with federal, state, and local regulations. If a hazardous substance spill occurs during construction, it would be cleaned up by the construction contractor. If asbestos-containing material (ACM), lead-based paint (LBP), or other hazardous material are identified that cannot be avoided in areas proposed for construction or demolition, removal and disposal would be conducted by a certified contractor in accordance with applicable federal, state, and local regulations.

2.3.2.3 Facility Design and Operation

Gate Improvement. The 28th Street Gate would be the 24-hour gate for the installation and used for residents, employees, visitors, and commercial vehicles. The following are key characteristics of this gate:

- Parking for 2 visitor vehicles would be provided at the visitor center/pass and ID office.
- The one-lane entrance road to the guard house would have traffic-calming characteristics (e.g., speed bumps) to reduce vehicle speed as the vehicles approach the security station. A parallel commercial truck inspection station and access road would bypass the security station.
- Commercial trucks would be restricted to a separate lane for access to the security screening area. Approved vehicles would merge into the entry lane after the security screening. Rejected vehicles would be directed to the exit lane and not enter the installation.
- Entry to the visitor center/pass and ID office parking area would be before the security station.
- One exit lane would be provided from the installation. The exit lane would include features such as tire shredders to avoid the use of the exit lane for unauthorized access to the installation.
- After the security station and turn-around lane, the inbound lane would be channelized and have appropriate traffic-calming measures to control vehicle speed.
- Access for emergency vehicles, including hook and ladder fire trucks would be provided.
- Landscaping would enhance the gate area; however, it would not interfere with line of sight for security personnel.
- Fencing, barriers, and other features would be used along the perimeter of the entry complex to prevent vehicles and pedestrians from entering the installation without passing the security station.

CE Consolidation. The consolidated CE facilities would include three new single-story buildings totaling 8,000 square feet situated in the same area as CE functions are currently conducted. The following are key characteristics of the CE facilities:

- Building 63 would be a single-story, 2,400 square foot structure that incorporates offices, a conference room, lockers/showers, and a break room for CE personnel.
- Building 66 would be a single-story, 2,800 square foot structure that houses the carpenter shop, mechanical shop, small engine shop, electrical shop, plumbing shop, and warehouse.

- Building 67 would be a single-story, 2,800 square foot structure that supports hazardous materials storage, grounds maintenance, a tool crib, material storage, and offices.
- Parking for up to 25 customer and employee vehicles would be provided.
- The open CE compound would be paved and fenced encompassing approximately 0.5 acre in area. The compound would be used to store various equipment and supplies used in CE operations.
- The existing 500-gallon diesel AST would remain in-place within the reconfigured CE open storage compound to continue servicing CE operations.
- Building 1686 would be renovated to support the housing privatization contractor, Tierra Vista Communities (TVC), operations.

Construction activities would be performed in accordance with applicable federal, state, and local regulations and guidelines, including best management practices (BMPs), to protect the human and natural environment. Construction activities would be conducted in accordance with Air Force safety regulations and standards prescribed by Air Force Instruction 91-301, *Air Force Occupational Safety and Health*. Environmental controls could include, but not be limited to preparation of a preconstruction survey report, health and safety plan, pollution prevention plan, storm water protection plan, erosion and sediment control plan, waste disposal plan, dust control plan, and asbestos removal plan. The contractor performing the action would be required to submit these plans and specifications to the 61st Civil Engineer and Logistics Squadron (61 CELS).

2.3.3 Alternative 2

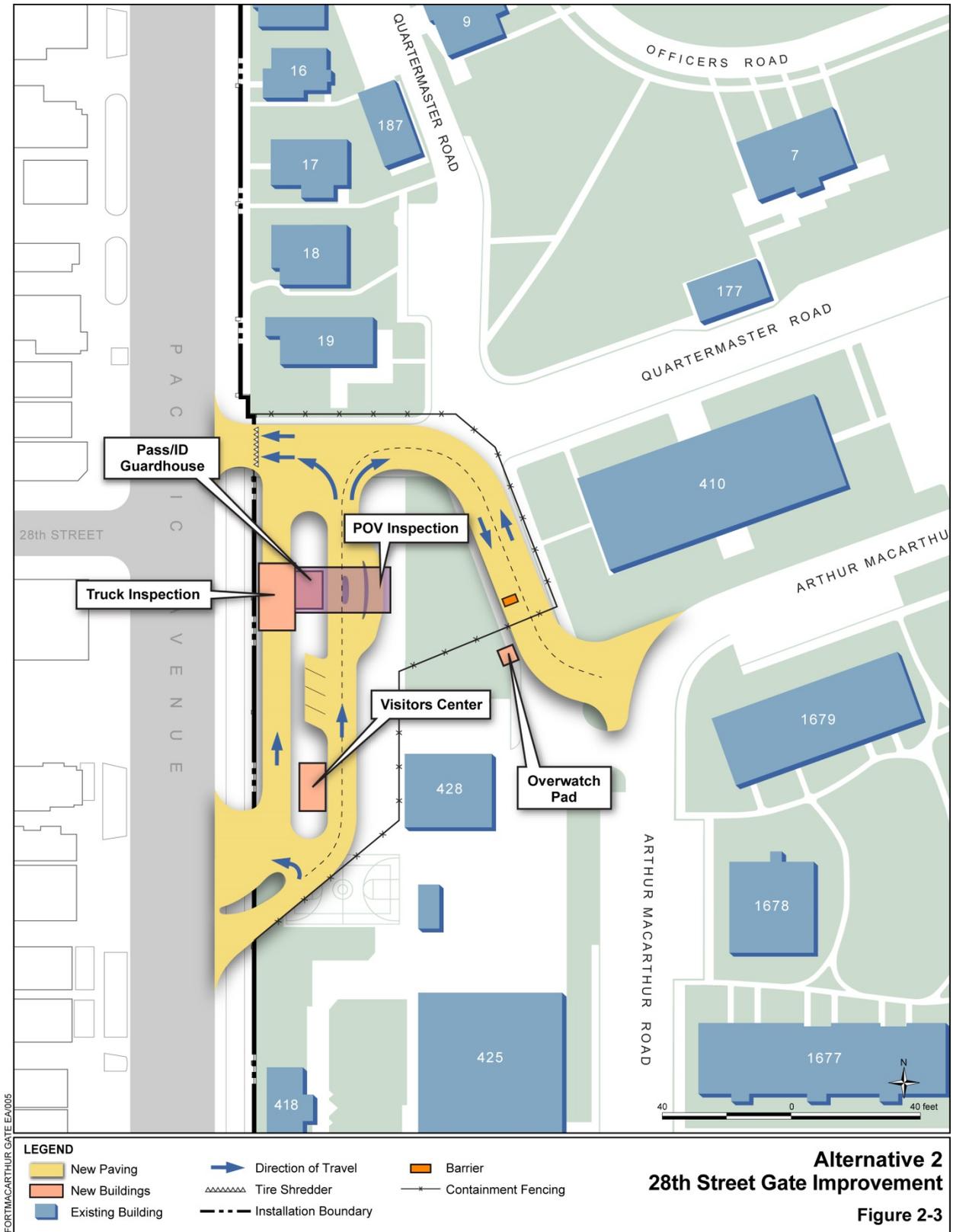
This alternative meet the screen standards listed above for development at Fort MacArthur specifically in achieving facility sustainability, consistency with future land uses, functional compatibility with adjacent facilities, and collocation of like services.

Under Alternative 2, the same improvements would be implemented at the 28th Street Gate as described under Alternative 1; however, the configuration of the features at the gate would be realigned (Figure 2-3). The same facilities would be constructed with the same operational characteristics as outlined under Alternative 1.

No other action alternatives were identified for consolidating CE functions. The northeast corner of Fort MacArthur is the only industrial use area on the installation and is the only suitable location for CE operations.

2.4 NO-ACTION ALTERNATIVE

CEQ regulations require consideration of the No-Action Alternative. The No-Action Alternative serves as a baseline against which the impacts of the Proposed Action and alternatives can be compared. Construction activities associated with improving the 28th Street Gate and consolidating CE functions would not occur. The 28th Street Gate and CE facilities would remain in their current configurations. The existing vehicle access gates at Fort MacArthur would continue to be in non-compliance with anti-terrorism standards and CE functions would continue to occur in multiple outdated facilities.



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2.5 ALTERNATIVES CONSIDERED BUT ELIMINATED FROM FURTHER CONSIDERATION

The process for selecting projects to be analyzed in this EA was initiated with a review of projects included in the Los Angeles AFB General Plan. The inclusion of a project in the base-approved plan begins with the identification of a mission essential requirement. The engineering staff, and other subject matter experts (including planners and environmental scientists), conduct an internal review to determine if the proposed project is consistent with anti-terrorism requirements and other approved base plans. The internal review includes an evaluation of alternatives for potential development sites, which in turn must meet requirements outlined in the selection standards presented in Section 2.3.1.

No additional alternatives were considered for proposed vehicle access improvements at the 28th Street Gate. For the CE consolidation effort, three alternatives were considered but eliminated from further consideration:

Single CE Structure Alternative. This alternative would involve construction of a single facility to house all facets of civil engineering on the installation. The consolidated CE facility would be a two-story 4,000 square foot building situated in the same area as CE functions are currently conducted. During the initial Air Force military construction charrette for this project, it was determined that the one large building concept proved too costly to assure funding; the large footprint design was also not in keeping with the style of Fort MacArthur. Therefore, the three smaller building concept (Alternative 1) was pursued and this alternative was eliminated from further consideration.

Consolidate CE functions at Los Angeles AFB Alternative. This alternative would involve consolidating CE functions at Los Angeles AFB. Due to the 25 mile distance between Los Angeles AFB and Fort MacArthur, it was determined that the logistics, labor, and cost to transport materials and personnel between the installations to perform CE functions was unreasonable. Therefore, this alternative was eliminated from further consideration.

Purchase Land to Consolidate CE Functions Alternative. This alternative would involve purchasing land off-installation to consolidate CE functions. The availability of an off-base, reasonably priced parcel of land in the highly developed and coastal area of the installation is lacking. Additionally, it was determined that the logistics, labor, and cost to transport materials and personnel between an off-installation location and Fort MacArthur to perform CE functions was unreasonable. Therefore, this alternative was eliminated from further consideration.

2.6 OTHER FUTURE ACTIONS IN THE REGION

Cumulative impacts result from “the incremental impact of actions when added to other past, present, and reasonably foreseeable future actions regardless of what agency undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time” (Council on Environmental Quality, 1978).

No off-installation development projects were identified in the vicinity of Fort MacArthur that could contribute to cumulative impacts. Several repair projects have been identified for Fort MacArthur that are programmed to occur between 2016 and 2018. The projects primarily involve the repair of utilities, lighting, irrigation, drainage, heating and air condition systems; pavement, fencing, and tree removal/planting throughout the installation. Because these repair projects are small in scale and may not occur in the vicinity of the 28th Street Gate or CE compound, they are not anticipated to contribute to cumulative impacts when combined with the Proposed Action. One project, Repair Northeast Slope Stabilization, would involve slope stabilization possibly in the vicinity (east) of the CE compound.

2.7 COMPARISON OF ENVIRONMENTAL IMPACTS

Table 2-1 presents a comparative analysis of the Proposed Action and alternatives for each resource (i.e., land use/aesthetics, storage tanks, ACM, LBP, geology and soils, air quality, noise, biological resources, and cultural resources) evaluated in this EA. A detailed discussion of potential effects is presented in Chapter 4.0, Environmental Consequences. The Proposed Action and alternatives are not anticipated to have a significant impact on the environment.

Table 2-1. Summary of Influencing Factors and Environmental Impacts
Page 1 of 4

Resource	Alternative 1	Alternative 2	No-Action Alternative
Land Use and Aesthetics	<p>Impacts</p> <ul style="list-style-type: none"> • Elimination of vehicle/boat storage lot to support gate improvements • Property would continue to be compatible with adjacent land uses • The change in appearance of the property would be noticeable • Projects would be designed and landscaped in such a way as to retain the historic feeling, setting, and association of the area <p>Mitigation Measures</p> <ul style="list-style-type: none"> • None 	<p>Impacts</p> <ul style="list-style-type: none"> • Potential impacts to land use and aesthetics would be similar to those described under Alternative 1 <p>Mitigation Measures</p> <ul style="list-style-type: none"> • None 	<p>Impacts</p> <ul style="list-style-type: none"> • Gate improvement and CE consolidation activities would not occur • No change to land use • No change to aesthetic quality of the area <p>Mitigation Measures</p> <ul style="list-style-type: none"> • None
STORAGE TANKS	<p>Impacts</p> <ul style="list-style-type: none"> • The storage tank servicing CE functions would remain in-place • Proper management of the storage tank would minimize the potential for impacts <p>Mitigation Measures</p> <ul style="list-style-type: none"> • None 	<p>Impacts</p> <ul style="list-style-type: none"> • Potential impacts from storage tanks would be similar to those described under Alternative 1 <p>Mitigation Measures</p> <ul style="list-style-type: none"> • None 	<p>Impacts</p> <ul style="list-style-type: none"> • Gate improvement and CE consolidation activities would not occur • The Air Force would continue management of storage tanks in accordance with applicable regulations <p>Mitigation Measures</p> <ul style="list-style-type: none"> • None
Asbestos-Containing Material	<p>Impacts</p> <ul style="list-style-type: none"> • ACM could be encountered during construction activities • The construction contractor would be advised of the potential for ACM to be present • Construction activities would be subject to applicable federal, state, and local regulations to minimize the potential risk to human health and the environment <p>Mitigation Measures</p> <ul style="list-style-type: none"> • None 	<p>Impacts</p> <ul style="list-style-type: none"> • Potential impacts from ACM would be similar to those described under Alternative 1 <p>Mitigation Measures</p> <ul style="list-style-type: none"> • None 	<p>Impacts</p> <ul style="list-style-type: none"> • Gate improvement and CE consolidation activities would not occur • The Air Force would continue to be responsible for management of ACM, and would continue to manage ACM in accordance with its own policy and applicable regulations <p>Mitigation Measures</p> <ul style="list-style-type: none"> • None

Table 2-1. Summary of Influencing Factors and Environmental Impacts
Page 2 of 4

Resource	Alternative 1	Alternative 2	No-Action Alternative
Lead-Based Paint	<p>Impacts</p> <ul style="list-style-type: none"> LBP could be encountered during construction activities The construction contractor would be advised of the potential for LBP to be present Construction activities would be subject to applicable federal, state, and local regulations to minimize the potential risk to human health and the environment <p>Mitigation Measures</p> <ul style="list-style-type: none"> None 	<p>Impacts</p> <ul style="list-style-type: none"> Potential impacts from LBP would be similar to those described under Alternative 1 <p>Mitigation Measures</p> <ul style="list-style-type: none"> None 	<p>Impacts</p> <ul style="list-style-type: none"> Gate improvement and CE consolidation activities would not occur The Air Force would continue to be responsible for management of LBP, and would continue to manage LBP in accordance with its own policy and applicable regulations <p>Mitigation Measures</p> <ul style="list-style-type: none"> None
Geology and Soils	<p>Impacts</p> <ul style="list-style-type: none"> Short-term impacts would occur as a result of ground disturbance associated with construction activities Compliance with a Construction Site Stormwater NPDES permit and SWPPP and implementation of standard construction practices would reduce the potential for erosion effects Once construction activities are complete, disturbed areas would be covered with pavement and landscaped to reduce erosion potential <p>Mitigation Measures</p> <ul style="list-style-type: none"> None 	<p>Impacts</p> <ul style="list-style-type: none"> Potential geology and soils impacts would be similar to those described under Alternative 1 <p>Mitigation Measures</p> <ul style="list-style-type: none"> None 	<p>Impacts</p> <ul style="list-style-type: none"> Gate improvement and CE consolidation activities would not occur No impact to geology and soils <p>Mitigation Measures</p> <ul style="list-style-type: none"> None
Air Quality	<p>Impacts</p> <ul style="list-style-type: none"> Construction activities would result in short-term air quality impacts BMPs would be used to reduce emissions of dust and particulate matter Emissions associated with construction activities would not hinder maintenance of the NAAQS or CAAQS <p>Mitigation Measures</p> <ul style="list-style-type: none"> None 	<p>Impacts</p> <ul style="list-style-type: none"> Potential air quality impacts would be similar to those described under Alternative 1 <p>Mitigation Measures</p> <ul style="list-style-type: none"> None 	<p>Impacts</p> <ul style="list-style-type: none"> Gate improvement and CE consolidation activities would not occur No impact to air quality <p>Mitigation Measures</p> <ul style="list-style-type: none"> None

Table 2-1. Summary of Influencing Factors and Environmental Impacts
Page 3 of 4

Resource	Alternative 1	Alternative 2	No-Action Alternative
Noise	<p>Impacts</p> <ul style="list-style-type: none"> • Construction and demolition activities would result in short-term noise impacts • Once construction activities are completed, proposed activities would not generate a substantial amount of noise • To minimize potential noise impacts to nearby residents, demolition and construction activities would only occur during normal business hours (7:00 am to 5:00 pm) during the week and would not occur during the weekends <p>Mitigation Measures</p> <ul style="list-style-type: none"> • None 	<p>Impacts</p> <ul style="list-style-type: none"> • Potential impacts to noise would be similar to those described under Alternative 1 <p>Mitigation Measures</p> <ul style="list-style-type: none"> • None 	<p>Impacts</p> <ul style="list-style-type: none"> • Gate improvement and CE consolidation activities would not occur • No impact from noise <p>Mitigation Measures</p> <ul style="list-style-type: none"> • None
Biological Resources	<p>Impacts</p> <ul style="list-style-type: none"> • Demolition and construction activities would cause short-term impacts to wildlife • Most species near Fort MacArthur are disturbance-tolerant • Federally listed threatened and endangered species have not been identified on Fort MacArthur • Construction activities would comply with the Migratory Bird Treaty Act • No sensitive habitats would be affected as a result of proposed activities <p>Mitigation Measures</p> <ul style="list-style-type: none"> • None 	<p>Impacts</p> <ul style="list-style-type: none"> • Potential impacts to biological resources would be similar to those described under Alternative 1 <p>Mitigation Measures</p> <ul style="list-style-type: none"> • None 	<p>Impacts</p> <ul style="list-style-type: none"> • Gate improvement and CE consolidation activities would not occur • No impact to biological resources <p>Mitigation Measures</p> <ul style="list-style-type: none"> • None

Table 2-1. Summary of Influencing Factors and Environmental Impacts
Page 4 of 4

Resource	Alternative 1	Alternative 2	No-Action Alternative
Cultural Resources	<p>Impacts</p> <ul style="list-style-type: none"> • Due to the developed nature of Fort MacArthur, the project areas have a low probability for the presence of archaeological resources • No historic structures would be demolished. • 28th Street Gate improvements and CE consolidated facilities would be designed and landscaped in such a way to be aesthetically compatible with the surrounding facilities to retain the historic feeling, setting, and association of the area <p>Mitigation Measures</p> <ul style="list-style-type: none"> • None 	<p>Impacts</p> <ul style="list-style-type: none"> • Potential impacts to cultural resources would be similar to those described under Alternative 1 <p>Mitigation Measures</p> <ul style="list-style-type: none"> • None 	<p>Impacts</p> <ul style="list-style-type: none"> • Gate improvement and CE consolidation activities would not occur • No impact to cultural resources <p>Mitigation Measures</p> <ul style="list-style-type: none"> • None

ACM = asbestos-containing material

BMP = best management practice

CAAQS = California Ambient Air Quality Standards

CE = Civil Engineering

LBP = lead-based paint

NAAQS = National Ambient Air Quality Standards

NPDES = National Pollutant Discharge Elimination System

SWPPP = Storm Water Pollution Prevention Plan

3.0 AFFECTED ENVIRONMENT

3.1 INTRODUCTION

This chapter describes the existing environmental conditions at Fort MacArthur. It provides information to serve as a baseline from which to identify and evaluate environmental changes associated with implementation of proposed projects at Fort MacArthur. The environmental components addressed include relevant natural or human environments likely to be affected by the Proposed Action and alternatives.

Based on the nature of the activities that would occur under the Proposed Action and alternatives, it was determined that the potential exists for the following resources to be affected or to create environmental effects: land use and aesthetics, storage tanks, ACM, LBP, geology and soils, air quality, noise, biological resources, and cultural resources.

The region of influence (ROI) to be studied will be defined for each resource area affected by the proposed projects. The ROI determines the geographical area to be addressed as the Affected Environment. Although Fort MacArthur may constitute the ROI limit for some resources, potential impacts associated with certain issues (e.g., air quality) transcend these limits.

3.2 SCOPE OF THE ENVIRONMENTAL ASSESSMENT

Consistent with the CEQ regulations, the scope of analysis presented in this EA is defined by the potential range of environmental impacts that would result from implementation of the Proposed Action or alternative. CEQ regulations (40 CFR Part 1501.7) state that an agency shall identify and eliminate from detailed study those issues which are not likely to be relevant or which have been covered by prior environmental review. This document is "issue driven," in that it concentrates on those resources that may be affected by implementation of the Proposed Action or alternatives.

The assessment of safety and health impacts is not included in this document; the construction contractor would be responsible for compliance with applicable Occupational Safety and Health Act (OSHA) regulations concerning occupational hazards and specifying appropriate protective measure for their employees. Construction sites would be fenced and only accessible to workers and other persons with a need to be there. Thus, any risks to the safety of workers and passers-by would be minimized and no unusual risks would be created.

Initial analysis of the Proposed Action indicates that the proposed activities would not result in impacts to socioeconomics/environmental justice, transportation, utilities, airspace, hazardous materials management, hazardous waste management, Environmental Restoration Program (ERP) sites, polychlorinated biphenyls (PCBs), pesticide usage, radon, ordnance, radioactive materials, medical/biohazardous waste, and water resources. The reasons for not addressing these resources in detail are briefly discussed in the following paragraphs.

Socioeconomics. The use of local construction workers would produce increases in local sales volumes, payroll taxes, and the purchases of goods and services resulting in a beneficial increase in the local economy. The proposed projects are not anticipated to increase the number of persons employed at Fort MacArthur. Therefore, significant impacts on socioeconomics are not expected and are not analyzed further in this EA.

Environmental Justice. EO 12898, *Environmental Justice*, was issued by the President on February 11, 1994. Objectives of the EO, as it pertains to this EA, include development of federal agency implementation strategies, and identification of low-income and minority populations potentially affected because of proposed federal actions. In addition to environmental justice issues are concerns pursuant to EO 13045, *Protection of Children from Environmental Health Risks and Safety Risks*. This EO directs federal agencies to identify and assess environmental health and safety risks that may disproportionately affect children. Potential environmental impacts identified for resource areas in this EA would occur primarily on Fort MacArthur (air quality impacts are regional); off-installation populations would not be affected. Census tract 2976.02 (west of Fort MacArthur) and 2971.20 (north of Fort MacArthur) do not contain a disproportionate number of low-income, minority, or child population when compared to the greater Los Angeles area. The nearest off-installation noise-sensitive receptor to the 28th Street Gate is a residential unit west of Pacific Avenue approximately 100 feet from the project area. The nearest off-installation noise-sensitive receptor to the CE project area is an apartment building adjacent to the installation northern perimeter fence (approximately 20 feet from the project area. Noise generated from construction activities would occur during normal business hours (7:00 am to 5:00 pm), would be intermittent and short term, and would primarily occur at the construction site. Based on these findings, disproportional impacts to low-income, minority, and child populations are not expected and are not analyzed further in this EA.

Transportation. Because the number of personnel working at Fort MacArthur would remain consistent with existing operations, a significant decrease in the level of service on roadways in the vicinity of and on Fort MacArthur is not anticipated. Construction-related traffic would use Meyler Gate and 28th Street Gate to access the project locations; the construction-related traffic would be localized and would be temporary, lasting as long as the project activity. Proposed gate improvements (including incorporation of a left-turn lane from Pacific Avenue) would result in a beneficial effect to on- and off-installation traffic. Therefore, potential impacts to transportation are not anticipated and are not analyzed further in this EA.

Utilities. Implementing the proposed projects would have no impact to existing utilities. The number of personnel working at Fort MacArthur would not increase and future operations would remain largely consistent with existing operations. Although a minimal increase in utility service may occur due to the construction of new structures, the Proposed Action would not result in a substantial increase in demand for electrical service or potable water. Wastewater output is not anticipated to increase and solid waste/debris generated during construction activities would be recycled or disposed at an approved landfill in accordance with Air Force Instruction (AFI) 32-7080, *Pollution Prevention Program*, and applicable federal, state, and local laws and regulations. Activities would take advantage (to the maximum extent possible) of existing utility service(s) in the areas and typical coordination would be conducted to ensure minimal interruption to surrounding building service. In addition, proposed construction projects would be implemented using sustainable design concepts that emphasize state-of-the-art strategies for site development, efficient water and energy use, and improved indoor environmental quality. Buildings would be constructed to the U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED) Silver standard. Therefore, potential impacts to utilities are not expected, and are not analyzed further in this EA.

Airspace. There are no aircraft operations associated with the Proposed Action or alternatives. Impacts to airspace are not expected and are not analyzed further in this EA.

Hazardous Material Management. During construction activities, small amounts of hazardous materials are expected to be utilized by the contractor and the potential for spills would exist. Any spills or releases of hazardous materials would be cleaned up by the contractor. Hazardous materials likely to be utilized during construction activities include adhesives, motor fuels, paints, thinners, solvents, and petroleum, oil,

and lubricants (POL). Storage, handling, and transportation of hazardous materials associated with construction activities would be conducted in accordance with applicable regulations and established procedures. Only required hazardous materials would be used and would be stored in appropriate containers with adequate spill containment/protection.

For activities at newly constructed facilities, the Air Force would continue to be responsible for storing, handling, and transporting any hazardous materials in accordance with applicable regulations and would comply with the Emergency Planning and Community Right-to-Know Act (EPCRA), which requires that local communities be informed of the use of hazardous materials. Because hazardous materials would be managed in accordance with applicable regulations, no significant impacts are anticipated. Therefore, potential impacts to hazardous materials management are not expected, and are not analyzed further in this EA.

Hazardous Waste Management. During construction activities, small amounts of hazardous wastes are expected to be generated, and the potential for spills would exist. Any spills or releases of hazardous wastes would be cleaned up by the construction contractor. Hazardous wastes likely to be generated during construction activities include used solvents, POL, and household products. Storage, handling, and transportation of hazardous waste associated with demolition/construction activities as well as activities at newly constructed facilities would be conducted in accordance with applicable regulations and established procedures, including Los Angeles AFB's Hazardous Waste Management Plan. Hazardous wastes would be stored in appropriate containers with adequate spill containment/protection. Because hazardous wastes would be managed in accordance with applicable regulations, no significant impacts are anticipated. Therefore, potential impacts to hazardous waste management are not expected, and are not analyzed further in this EA.

Environmental Restoration Program (ERP) Sites. There are no ERP sites at the proposed project sites; therefore, impacts from ERP sites are not expected and are not analyzed further in this EA.

Polychlorinated Biphenyls. No transformers, capacitors, or switches containing PCBs are present on Fort MacArthur (U.S. Air Force, 1998). PCBs may still be present in older light ballasts; however, these are not regulated as PCB equipment or PCB-contaminated equipment. Therefore, impacts from PCBs are not expected and are not analyzed further in this EA.

Pesticide Usage. The Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) (7 U.S.C. Sections 136-136y) regulates the registration and use of pesticides. Pesticide management activities are subject to federal regulations contained in 40 CFR Parts 162, 165, 166, 170, and 171. Pesticide/herbicide usage at Fort MacArthur is coordinated by the CE Pest Management Shop in accordance with their Integrated Pest Management Plan. Only Air Force approved pesticides and herbicides may be utilized and only authorized and certified personnel are permitted to apply pesticides. Pest management personnel adhere to the label directions when handling pesticides/herbicides. The Proposed Action and alternatives would not involve any changes in pesticide storage or usage at Fort MacArthur; therefore, impacts from pesticide usage would not be expected and are not analyzed further in this EA.

Radon. Radon is a colorless, odorless, and radioactive gas found naturally in some soils and rocks. It is formed from the decay of naturally occurring radioactive materials such as uranium and thorium. The U.S. Environmental Protection Agency (EPA) has evaluated the radon potential in the United States and has assigned each of the counties in the United States into one of three zones based on radon potential: Zone 1 – Highest Potential (greater than 4 picocuries per liter [pCi/l]), Zone 2 – Moderate Potential (from 2 to 4 pCi/l), and Zone 3 – Low Potential (less than 2 pCi/l). Each zone designation reflects the average short-term radon measurement that can be expected to be measured in a building without the

implementation of radon control methods. The U.S. EPA recommends additional screening for radon levels between 4 and 20 pCi/l in residential structures and schools. Los Angeles County has been designated as being in Zone 2 with a predicted average indoor radon screening level between 2 and 4 pCi/l (U.S. EPA, 2015). Therefore, impacts from radon are not expected and are not analyzed further in this EA.

Ordnance. Ordnance has not been stored or disposed at the project locations. The Proposed Action and alternatives would not require the use, storage, or disposal of ordnance. Therefore, impacts from ordnance are not expected and are not analyzed further in this EA.

Radioactive Materials. Radioactive materials have not been stored, used, or disposed within the proposed project locations at Fort MacArthur. The Proposed Action and alternatives would not require the use of radioactive materials. Therefore, impacts from radioactive materials are not expected and are not analyzed further in this EA.

Medical/Biohazardous Waste. Although the clinic at Fort MacArthur (Building 30) generates a very small amount of biohazardous waste that is managed by the medical squadron via an outside disposal contract, medical/biohazardous waste has not been stored or disposed within the proposed project locations at Fort MacArthur. The Proposed Action and alternatives would not generate or require the storage of medical/biohazardous waste. Therefore, impacts from medical/biohazardous waste are not expected and are not analyzed further in this EA.

Water Resources. No surface water resources, floodplains, or wetlands are situated on Fort MacArthur or near the project sites. Therefore, impacts to water resources are not expected and are not analyzed further in this EA. Because the amount of ground disturbance anticipated to occur during the projects would be equal to or greater than 1 acre, construction activities would be conducted in accordance with a Construction Site Storm Water NPDES permit and associated Stormwater Pollution Prevention Plan (SWPPP). The SWPPP outlines construction site management practices designed to protect the quality of the surface water, groundwater, and natural environment through which they flow minimizing soil erosion, resulting in minimal pollution and sedimentation. Thus, the proposed projects are not anticipated to have significant impacts on surface water in the vicinity of Fort MacArthur. Potential soil erosion effects during construction activities are discussed further under geology and soils in this EA.

3.3 LAND USE AND AESTHETICS

The ROI for land use and aesthetics includes Fort MacArthur with a focus on those areas where gate improvements and CE consolidation would occur.

On-base Land Use. The majority of Fort MacArthur consists of residential units for service members in the greater Los Angeles area. Other land uses include, industrial (engineering, maintenance shops, storage, and utilities), administrative (headquarters, offices), community (exchange, dining hall, chapel, youth center, community center, and gym), and outdoor recreation (parade ground, swimming pool, outdoor courts, and playgrounds).

Off-Base Land Use. The land north, west, and south of Fort MacArthur consists of residential areas (multi-family and single-family housing) with some commercial uses. To the east is the Cabrillo Marina and associated vehicle parking lots.

Aesthetics. Visual resources include natural and man-made features that give a particular environment its aesthetic qualities. Criteria used in the analysis of these resources include visual sensitivity, which is

the degree of public interest in a visual resource and concern over adverse changes in its quality. Visual sensitivity is characterized in terms of high, medium, and low levels.

High visual sensitivity exists in areas where views are rare, unique, or in other ways special, such as in a remote pristine environment. High-sensitivity views would include landscapes that have landforms, vegetative patterns, water bodies, or rock formations of unusual or outstanding quality.

Medium visual sensitivity is characteristic of areas where human influence and modern civilization are evident and the presence of motorized vehicles is commonplace. These landscapes generally have features containing varieties in form, line, color, and texture, but tend to be more common than high visual sensitivity areas.

Low visual sensitivity areas tend to have minimal landscape features with little change in form, line, color, and texture.

The area surrounding Fort MacArthur is developed with multi-family and single-family housing structures with some commercial businesses. To the east is the Cabrillo Marina and further in the distance is Los Angeles Harbor. Generally, the area visible from Fort MacArthur is characterized by a low visual sensitivity.

Within the installation, the cantonment is landscaped and maintained. The character of the cantonment is similar to that of a college campus. The majority of the cantonment can be considered as having a medium visual sensitivity.

3.4 HAZARDOUS MATERIALS AND HAZARDOUS WASTE MANAGEMENT

The ROI for hazardous materials and hazardous waste management encompasses those areas of Fort MacArthur that could potentially be exposed to a release during demolition and construction activities. Storage tanks, ACM, and LBP are discussed in this section.

3.4.1 Storage Tanks

Underground storage tanks (USTs) are subject to federal regulations within the Resource Conservation and Recovery Act (RCRA), 42 U.S.C. Section 6991 et seq., and U.S. EPA implementing regulations 40 CFR Part 280. In addition, some storage tanks may be regulated under 40 CFR Section 60.110b. These regulations were mandated by the Hazardous and Solid Waste Amendments of 1984. California regulates USTs under California Code of Regulations (CCR) Title 23, Section 2610 et seq. and the Health and Safety Code Sections 25280 through 25299.7 of Division 20, Chapter 6.7, which are more stringent than the federal regulations. California's regulations are enforced by the Regional Water Quality Control Board (RWQCB) and are intended to protect waters of the state from discharges of hazardous substances from USTs by establishing standards for construction, monitoring, release reporting, repair, upgrade, and closure of USTs.

Aboveground Storage Tanks (ASTs) are regulated by the local Air Quality Management District (AQMD) and the California Aboveground Petroleum Storage Act (Division 20 of the Health and Safety Code [HSC], Chapter 6.67, Section 25270-25270.13). The operation and construction of ASTs is subject to National Fire Protection Association fire codes and the Uniform Fire Code. The Los Angeles AFB Hazardous Materials Management Plan addresses California HSC Division 20 Chapter 6.67, Aboveground Storage of Hazardous Material, and AFI 32-7044, *Storage Tank Compliance*. Additionally, storage tanks are subject

to regulations under the Clean Water Act (CWA) (33 U.S.C. Sections 1251-1578) oil pollution provisions (specifically 40 CFR Part 112).

No storage tanks are associated with the 28th Street Gate area. One 500-gallon diesel AST is situated within the CE yard that support CE operations.

3.4.2 Asbestos-Containing Material

ACM and ACM abatement are regulated by the U.S. EPA and Occupational Safety and Health Administration (OSHA). Asbestos fiber emissions into the ambient air are regulated in accordance with Section 112 of the Clean Air Act (CAA), which established the National Emissions Standards for Hazardous Air Pollutants (NESHAP). Under NESHAP, the owner of a structure must, prior to demolition or renovation of buildings with ACM, provide notice to the regulator with CAA authority (either the U.S. EPA or its state counterpart). The NESHAP regulations (40 CFR Part 61, Subpart M) address the demolition or renovation of buildings with ACM. The Asbestos Hazard Emergency Response Act (AHERA), (Public Law [P.L.] 99-519 and P.L. 101-637), addresses worker protection for employees who work around or remediate ACM. The State of California regulates asbestos under Title 8 CCR, Section 1529 and 5208.

The Air Force has a policy of managing asbestos in place and systematically eliminating it from facilities as modifications/renovations are conducted. Specific Air Force regulations for the handling and disposal of ACM are prescribed in AFI 32-1052, *Facility Asbestos Management*.

No structures are associated with the 28th Street Gate area; therefore, no ACM is anticipated to be present. Based on the age of the buildings within the CE compound that are programmed for demolition, ACM is likely to be present. An asbestos survey of Buildings within the CE compound was conducted in 2015 (Tait Environmental Services, 2016). Buildings 64, 68, 74, 75, and 78 have been identified as containing ACM (Table 3-1). Buildings 1695, 1696, and 1697 have not been surveyed for ACM.

Table 3-1. Buildings Surveyed for Asbestos

Building	ACM Present	Location
64	Floor tile	Office – under carpet
	Texture coat on stucco	Exterior
	Transite pipe	Hot water heater
	Mastic	roof
68	Texture coat on stucco	Exterior
	Drywall joint compound	Throughout
	Vinyl sheet flooring	Office restrooms in Building B and men’s restroom
	Mastic	Office restrooms in Building B
	Wall texture coat on metal siding	Building A and B
	Roof caulk/mastic	Roof
	Window caulk	Building A and B
72	No ACM identified	--
74	Drywall joint compound	Interior
	Base coat on stucco	Exterior
	Roofing tar	Roof
75	Wall caulk	Interior and exterior walls
78	Window glazing	Exterior
	Stucco	Exterior

Source: Tait Environmental Services, 2016.

3.4.3 Lead-Based Paint

Human exposure to lead has been determined to pose an adverse health risk by agencies such as OSHA and the U.S. EPA. Sources of exposure to lead are dust, soils, and paint. In 1973, the Consumer Product Safety Commission (CPSC) established a maximum lead content in paint of 0.5 percent by weight in a dry film of newly applied paint.

The use of LBP declined after 1978 when the CPSC lowered the allowable lead content in paint to 0.06 percent by weight from its 1973 level of 0.5 percent. This change was made under the Consumer Safety Act of 1977, P.L. 101-608, as implemented by 16 CFR Part 1303. DoD implemented a ban of LBP use in 1978; however, it is possible that facilities painted prior to or during 1978 may contain LBP. The Air Force does not actively pursue removal of LBP; instead, it is managed in place and removed by the Air Force, as necessary.

No structures are associated with the 28th Street Gate area; therefore, no LBP is anticipated to be present. A LBP survey of Buildings within the CE compound was conducted in 2015 (Tait Environmental Services, 2016). Buildings 64, 68, 72, 74, 75, and 78 have been identified as containing LBP (Table 3-2). Buildings 1695, 1696, and 1697 have not been surveyed for ACM.

Table 3-2. Buildings Surveyed for Lead-Based Paint

Building	LBP Present
64	Exterior wooden door frames, door jambs, window frames, window sashes, window sills, metal eave joints
	Interior wooden door frames, window frames, window sashes, and walls
68	Exterior wooden roof, roof beam, fascia, trim, roof crown molding, window sashes, window frames, window sills, doors, door jambs, stair risers, louvers, wood and metal walls, metal door jambs, and metal wall texture coat
	Interior wooden doors, door frames, floor, wall plaster, work bench, window frames, wood and metal walls, and drywall
72	Interior ceramic back splash
74	Exterior wooden doors, door frames, window casings, and fascia trim
75	Exterior metal walls and doors
78	Exterior wooden doors, door frames, window frames, fascia, and wall
	Interior wooden window sashes, window casings, doors, and walls

Source: Tait Environmental Services, 2016.

3.5 NATURAL ENVIRONMENT

This section describes the affected environment for natural resources: geology and soils, air quality, noise, biological resources, and cultural resources.

3.5.1 Geology and Soils

The discussion of geology and soils covers features of the physical environment that may be affected by, or have an impact upon, the proposed activities; these include topography, physiography, seismicity, and soils (types and properties). Although the discussion of geology includes the regional discussion needed to understand this setting, the ROI is considered to be localized and limited to the proposed project areas.

Topography. The topography at Fort MacArthur is relatively flat with the elevation on the eastern portion of the installation at the 28th Street Gate being approximately 70 feet above mean sea level and the CE

consolidation area at the northeast corner of the installation being approximately 60 feet above mean sea level.

Physiography. Fort MacArthur is located on the southeastern end of a short, wide peninsula that juts into the Pacific Ocean between Santa Monica Bay and San Pedro Bay/Outer Los Angeles Harbor. Along the coast are Pleistocene wave-cut marine platforms, which are covered by marine deposits. Subsequent erosion of the bordering hilly areas generated nonmarine colluvial cover that veneers some of the terraces. Major landslide complexes occur in some areas of the peninsula. Alluvium and slope wash deposits occur within the major drainages in some areas of the Palos Verde peninsula (California Department of Conservation, 1998).

Geology. Fort MacArthur is situated on a sandstone bedrock bluff overlooking the Los Angeles Harbor and Pacific Ocean. The early Pleistocene Lomita Marl unconformably overlies the Magala Mudstone Member and forms limited outcrops along a short band adjacent to and east of the Magala Mudstone Member about 2 miles north of Point Fermin. The Lomita Marl consists of marl, calcareous sand, and gravel. The late Pleistocene to Holocene Timms Point Silt grades laterally into Lomita Marl and the two units are considered to be facies of the San Pedro Sand. The Timms Point Silt consists of sandy silt and silty sand, and is exposed in a narrow band just east of and adjacent to the Lomita Marl about 2 miles north of Point Fermin. It forms the sea cliff at Timms Point along the Los Angeles Harbor. The early Pleistocene San Pedro Sand overlies the Lomita Marl or Timms Point Silt where these units are present; otherwise it overlies the Magala Mudstone Member. The San Pedro Sand consists of sand, silty sand, silt and gravel and crops out as a band to the east and adjacent to the Lomita Marl, Timms Point Silt or Magala Mudstone Member. It generally forms the sea cliff above the Los Angeles Harbor where Fort MacArthur is situated (California Department of Conservation, 1998).

Seismicity. Fort MacArthur is situated in Seismic Zone IV and the National Earthquake Hazards Reduction Program Map Zone 7, which represents a high potential risk for large seismic events. Fort MacArthur is approximately 1.5 miles south of the active Palos Verdes Fault and lies along the active Cabrillo Fault. Four major earthquakes have occurred in this area since 1918 (California Department of Conservation, 1998).

Soils. Soils in the area consist of the Diablo-Altamont Association. This sandy soil has a moderate potential for water erosion and a high potential for wind erosion. In these areas, the soils are largely covered by pavement and other structures (U.S. Air Force, 2001).

3.5.2 Air Quality

The ROI for the air quality analysis includes the South Coast Air Basin (SCAB), which is the air shed surrounding Fort MacArthur.

3.5.2.1 National Ambient Air Quality Standards.

Air quality in any given location is defined by the concentration of various pollutants in the atmosphere, generally expressed in units of parts per million (ppm) or micrograms per cubic meter ($\mu\text{g}/\text{m}^3$). Air quality is determined by the type and amount of pollutants emitted into the atmosphere, the size and topography of the air basin, and the prevailing meteorological conditions. The significance of a pollutant concentration is determined by comparing it to federal and/or state ambient air quality standards. The federal CAA, 42 U.S.C. Sections 7401-7671(q) provides that emission sources must comply with the air quality standards and regulations that have been established by federal, state, and county regulatory agencies. These

standards and regulations focus on (1) the maximum allowable ambient pollutant concentrations, and (2) the maximum allowable emissions from individual sources.

The U.S. EPA established the federal standards for the permissible levels of certain pollutants in the atmosphere. The National Ambient Air Quality Standards (NAAQS) have been established for six criteria pollutants: ozone, nitrogen dioxide (NO₂), particulate matter equal to or less than 10 microns in aerodynamic diameter (PM₁₀), particulate matter equal to or less than 2.5 microns in aerodynamic diameter (PM_{2.5}), carbon monoxide (CO), sulfur dioxide (SO₂), and lead. Ozone is a secondary pollutant formed in the atmosphere by photochemical reactions of previously emitted pollutants, or precursors. The ozone precursors are nitrogen oxides (NO_x) and volatile organic compounds (VOCs). The California Air Resources Board (CARB) has established the California Ambient Air Quality Standards (CAAQS) for these air pollutants, and also for visibility reducing particles, sulfates, hydrogen sulfide, and vinyl chloride. Both the NAAQS and the CAAQS are shown in Table 3-3.

Areas that meet the NAAQS standard for a criteria pollutant are designated as being “in attainment” while areas where criteria pollutant levels exceed the NAAQS are designated as “nonattainment”. The nonattainment classifications for CO and PM₁₀ are further divided into moderate and serious categories. Ozone nonattainment areas are further classified, based on the severity of the pollution problem, as either basic, marginal, moderate, serious, severe, or extreme. A maintenance area is an area that has recently been re-designated as an attainment area from a former nonattainment area. However, during the maintenance period, most of the CAA rules for a nonattainment area are still applicable to a maintenance area.

3.5.2.2 Existing Air Quality Conditions.

Fort MacArthur is within the SCAB. The SCAB consists of the non-desert portions of Los Angeles, Riverside, and San Bernardino counties and all of Orange County, covering an area of approximately 6,000 square miles. In the SCAB area, the South Coast Air Quality Management District (SCAQMD) regulates stationary sources of air pollution through its administration of rules and regulations.

The SCAB is designated as being in non-attainment of the NAAQS for ozone, PM₁₀, PM_{2.5}, and lead and in maintenance for CO and NO₂. The severity of the non-attainment status has been classified as “extreme” for ozone and “serious” for PM₁₀. The Basin is in attainment of the NAAQS for SO₂. The area has also been designated as being in non-attainment of the CAAQS for ozone, PM₁₀, PM_{2.5}, NO₂, and lead. The area is in attainment of the CAAQS for CO, SO₂, and sulfates (SCAQMD, 2013). Table 3-4 summarizes the attainment status for these pollutants.

Clean Air Act Conformity. In areas where the NAAQS are exceeded, preparation of a State Implementation Plan (SIP) detailing how the state would attain the standard within mandated time frames is required. Section 176c of the CAA provides that a federal agency cannot support an activity in any way unless the federal agency determines that the activity will conform to the SIP’s purpose of attaining and maintaining the NAAQS, listed in Table 3-3.

In accordance with this part of the CAA, U.S. EPA announced promulgation of its final conformity rule for general federal actions for nonattainment and maintenance areas in the November 30, 1993, Federal Register (40 CFR Part 51). The final rule applies to Fort MacArthur because the installation is situated within a nonattainment area of the NAAQS for ozone, PM_{2.5}, and Lead, and a maintenance area of the NAAQS for PM₁₀, CO, and NO₂. A rule applicability analysis predicting project-induced annual emissions is required to determine potential impact significance through comparisons of relevant *de minimis* thresholds.

Table 3-3. National and California Ambient Air Quality Standards

Pollutant		Primary/Secondary	Averaging Time	Federal Standard	California Standard
Carbon Monoxide		Primary	8-hour	9 ppm	9 ppm
			1-hour	35 ppm	20 ppm
Lead		Primary and Secondary	Rolling 3- month average	0.15 µg/m ³⁽¹⁾	--
			30-day	--	1.5 µg/m ³
Nitrogen Dioxide		Primary	1-hour	100 ppb	18 ppb
		Primary and Secondary	Annual	53 ppb ⁽²⁾	30 ppb
Ozone		Primary and Secondary	8-hour	0.070 ppm ⁽³⁾	0.07 ppm
			1-hour	--	0.09 ppm
Particulate Matter	PM _{2.5}	Primary	Annual	12 µg/m ³⁽⁴⁾	12 µg/m ³
		Secondary	Annual	15 µg/m ³	--
		Primary and Secondary	24-hour	35 µg/m ³	--
	PM ₁₀	Primary and Secondary	24-hour	150 µg/m ³	50 µg/m ³
			Annual	--	20 µg/m ³
Sulfur Dioxide		Primary Secondary	Annual	--	0.03 ppm
			1-hour	75 ppb ⁽⁵⁾	0.25 ppm
			3-hour	0.5 ppm	--
Sulfates			24-hour	25 µg/m ³	--
Hydrogen Sulfide			1-hour	0.03 ppm	--
Vinyl Chloride			24-hour	0.01 ppm	--
Visibility Reducing Particles			8-hour (10 a.m. to 6 p.m. Pacific Standard Time)	In a sufficient amount to produce an extinction coefficient of 0.23 per kilometer-visibility of 10 miles or more due to particles when the relative humidity is less than 70 percent	--

Notes:

- (1) Final rule signed October 15, 2008. The 1978 lead standard (1.5 µg/m³ as a quarterly average) remains in effect until one year after an area is designated for the 2008 standard, except that in areas designated nonattainment for the 1978 standard, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standard are approved.
- (2) The official level of the annual nitrogen dioxide standard is 0.053 ppm, equal to 53 ppb, which is shown here for the purpose of a clearer comparison to the 1-hour standard.
- (3) Final rule signed March 12, 2008. The 1997 ozone standard (0.08 ppm, annual fourth-highest daily maximum 8-hour concentration, averaged over 3 years) and related implementation rules remain in place. In 1997, EPA revoked the 1-hour ozone standard (0.12 ppm, not to be exceeded more than once per year) in all areas, although some areas have continued obligations under that standard (“anti-backsliding”). The 1-hour ozone standard is attained when the expected number of days per calendar year with maximum hourly average concentrations above 0.12 ppm is less than or equal to 1.
- (4) Final rule signed January 15, 2013. The primary annual fine particle (PM_{2.5}) standard was lowered from 15 to 12 µg/m³.
- (5) Final rule signed June 2, 2010. The 1971 annual and 24-hour SO₂ standards were revoked in that same rulemaking. However, these standards remain in effect until one year after an area is designated for the 2010 standard, except in areas designated nonattainment for the 1971 standards, where the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standard are approved.

EPA = Environmental Protection Agency
 µg/m³ = micrograms per cubic meter
 mg/m³ = milligrams per cubic meter
 PM_{2.5} = particulate matter equal to or less than 2.5 microns in diameter
 PM₁₀ = particulate matter equal to or less than 10 microns in diameter
 ppm = parts per million
 ppb = parts per billion

**Table 3-4. NAAQS and CAAQS Attainment Status – South Coast Air Basin
(Los Angeles County)**

Pollutant	NAAQS Status	CAAQS Status
Ozone	Non-attainment (extreme)	Non-attainment (extreme)
Particulate Matter (PM ₁₀)	Maintenance	Non-attainment
Particulate Matter (PM _{2.5})	Non-attainment	Non-attainment
Carbon Monoxide (CO)	Maintenance	Attainment
Nitrogen Dioxide (NO ₂)	Maintenance	Non-attainment
Sulfur Dioxide (SO ₂)	Attainment	Attainment
Lead	Non-attainment	Non-attainment
Sulfates	Not applicable	Attainment

Source: = <http://www.arb.ca.gov/degis/adm/adm.htm>.

SCAQMD Impact Determination. Air emissions from a proposed activity are considered to have a significant impact on air quality if they would:

- 1) Increase ambient air pollutant levels such that they exceed the CAAQS, or
- 2) Exceed the SCAQMD significance emission thresholds for construction and/or operational activities.

Climate. The Los Angeles area possesses a Mediterranean, or dry summer subtropical climate with moist, mild winters and warm, dry summers. Average maximum temperatures range from 64.9 degrees Fahrenheit (°F) in January to 76.6°F in August. Average minimum temperatures range from 47.1°F in January to 63.7°F in August. Average annual precipitation is approximately 13 inches, and the majority of this rainfall occurs between November and March (U.S. Air Force, 2011a).

Hazardous Air Pollutants. In addition to the criteria pollutants discussed above, non-criteria toxic pollutants, called hazardous air pollutants (HAPs), are also regulated under the CAA. The U.S. EPA tracks 181 HAPs that are known or suspected to cause health effects in small doses. HAPs are emitted by a wide range of man-made and naturally occurring sources including combustion mobile and stationary sources. However, unlike the NAAQS for criteria pollutants, federal ambient air quality standards do not exist for non-criteria pollutants.

Greenhouse Gas Emissions. Greenhouse gases (GHGs) are compounds that contribute to the greenhouse effect. The greenhouse effect is a natural phenomenon where gases trap heat within the surface-troposphere (lowest portion of the earth's atmosphere) system, causing heating at the surface of the earth. The primary long-lived GHGs directly emitted by human activities are carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF₆).

The heating effect from these gases is considered the probable cause of the global warming observed over the last 50 years (U.S. EPA, 2009a). Global warming and climate change can affect many aspects of the environment. The U.S. EPA Administrator has recognized potential risks to public health or welfare and signed an endangerment finding regarding GHGs under Section 202(a) of the CAA (U.S. EPA, 2009b), which finds that the current and projected concentrations of the six key well-mixed GHGs – CO₂, CH₄, N₂O, HFCs, PFCs, and SF₆ – in the atmosphere threaten the public health and welfare of current and future generations. To estimate global warming potential (GWP), all GHGs are expressed relative to a reference gas, CO₂, which is assigned a GWP equal to 1. All six GHGs are multiplied by their GWP and the results are added to calculate the total equivalent emissions of CO₂ (CO₂e). However, the dominant

GHG gas emitted is CO₂, mostly from fossil fuel combustion (85.4%). This EA considers CO₂ as the representative greenhouse gas emission.

On December 18, 2014, CEQ released a Revised Draft *Guidance for Greenhouse Gas Emissions and Climate Change Impacts* for public comment that describes how Federal departments and agencies should consider the effects of greenhouse gas emissions and climate change in their NEPA reviews. The revised draft guidance supersedes the Draft Greenhouse Gas and Climate Change Guidance released by CEQ in February 2010. This guidance explains that agencies should consider both the potential effects of a proposed action on climate change, as indicated by its estimated GHG emissions, and the implications of climate change for the environmental effects of a proposed action. The guidance also emphasizes that agency analyses should be commensurate with projected GHG emissions and climate impacts, and should employ appropriate quantitative or qualitative analytical methods to ensure useful information is available to inform the public and the decision-making process in distinguishing between alternatives and mitigations.

CEQ recommends that agencies consider GHG emission of 25,000 metric tons of CO₂e emissions on an annual basis as a reference point below which a NEPA quantitative analysis of GHGs is not recommended unless it is easily accomplished based on available tools and data. Additionally, 40 CFR Part 98, *Mandatory Greenhouse Gas Reporting* established a mandatory reporting threshold of 25,000 metric tons/year CO₂e of GHG from stationary combustion sources only. The 25,000 metric tons/year CO₂e threshold was selected to capture the majority of GHG emissions in the U.S., while excluding smaller facilities and sources.

Stationary and Mobile Source Emissions. New major stationary sources associated with the projects at Fort MacArthur would be subject to Prevention of Significant Deterioration (PSD) and/or Nonattainment New Source Review (NNSR) programs to ensure that these sources are constructed without significant deterioration of the air in the area. The U.S. EPA oversees programs for stationary source operating permits (Title V) and for new or modified major stationary source construction and operation. Mobile sources are regulated under the CAA Title II through enforcing emissions standards on sources manufactured.

3.5.3 Noise

Noise is defined as sound that is undesirable because it interferes with speech, communication, and hearing, is intense enough to damage hearing, or is otherwise annoying. The decibel (dB), a logarithmic unit that accounts for the large variations in amplitude, is the accepted standard unit for the measurement of sound. A-weighted sound levels (dBA) are commonly used to account for the frequency response to the human ear. The day-night average sound level (DNL) was developed to evaluate the total community noise environment and is the accepted unit for quantifying human annoyance to general environmental noise, which includes aircraft noise. It is the most commonly used measurement for the evaluation of community noise impacts.

The ROI for the noise analysis includes Fort MacArthur where demolition and construction activities would occur.

The nearest on-installation noise-sensitive receptor to the 28th Street Gate is a residential unit immediately north (approximately 40 feet) of the project area; the nearest off-installation noise sensitive receptor is a residential unit west of Pacific Avenue approximately 100 feet from the project area. The nearest on-installation noise-sensitive receptor to the CE project area is a residential unit immediately west (approximately 40 feet) of the project area; the nearest off-installation noise sensitive receptor is an

apartment building adjacent to the installation northern perimeter fence (approximately 20 feet from the project area. Existing ambient noise levels at and around Fort MacArthur are generally low, and are dominated primarily by vehicle traffic.

3.5.4 Biological Resources

Biological resources include both native and non-native species of plants and animals in the project area. For discussion purposes, these are divided into vegetation, wildlife, threatened and endangered species, and sensitive habitats. Fort MacArthur is an urbanized installation, the majority of which is developed and occupied by roads and buildings. Open areas consist primarily of mowed lawns and ornamental trees and shrubs between buildings.

The ROI used for discussion of biological resources is Fort MacArthur with a focus on those areas where gate improvements and CE consolidation would occur. This ROI includes the area within which potential impacts could occur and provides a basis for evaluating the level of impact.

Vegetation. Vegetation on Fort MacArthur has been introduced since the construction of the installation. Vegetation consists of areas of grass and ornamental trees and shrubs.

Wildlife. Fort MacArthur provides very little habitat for even some of the more common wildlife that could be found in the region due to the natural condition of the area having been substantially altered by decades of urban development including construction of residential, commercial, and industrial areas as well as transportation infrastructure. Because trees are present within the landscaping on the installation, there is potential for the occurrence of various bird species adapted to human activity such as the American crow (*Corvus brachyrhynchos*), rock pigeon (*Columba livia*), and white-crowned sparrow (*Zonotrichia leucophrys*). In addition, the potential for other wildlife often associated with urban settings such as the California ground squirrel (*Spermophilus beecheyi*), rats (*Rattus* sp.), and mice (*Mus* sp.) could occur within or adjacent to the installation.

Threatened and Endangered Species. The Air Force has conducted informal consultation with the U.S. Fish and Wildlife Service (USFWS) concerning threatened and endangered species potentially occurring on or in the vicinity of Fort MacArthur (Appendix A). The USFWS website's Information, Planning, and Conservation (IPAC) System and the California Department of Fish and Wildlife (CDFW) California Natural Diversity Database (CNDDDB) website were reviewed for the most up to date information concerning federally and state threatened and endangered species that have the potential to occur on or adjacent to Fort MacArthur. Table 3-5 presents federal and state threatened and endangered species listed by the USFWS and CDFW as having the potential to occur on or in the vicinity of Fort MacArthur.

Salt marsh bird's beak (*Chloropyron maritimum* ssp. *maritimum*) is a small annual herb that grows within coastal strand, coastal salt marsh, and wetland-riparian habitats (Calflora, 2015). This type of habitat does not exist on Fort MacArthur; therefore, this species is not likely to occur.

Lyon's pentachaeta (*Pentachaeta lyonii*) is a small annual herb that grows within chaparral and valley grassland habitats (Calflora, 2015). This type of habitat does not exist on Fort MacArthur; therefore, this species is not likely to occur.

California seablite (*Suaeda californica*) is usually found in salt-marsh and coastal wetlands (Calflora, 2015). This type of habitat does not exist on Fort MacArthur; therefore, this species is not likely to occur.

Palos Verdes blue butterfly (*Glaucopsyche lygdamus palosverdesensis*) are confined to coastal sage scrub communities containing host plants of either Santa Barbara milkvetch (*Astragalus trichopodus* var. *lonchus*) or deerweed (*Lotus scoparius*) (NatureServe, 2015). This type of habitat does not exist on Fort MacArthur; therefore, this species is not likely to occur.

Western snowy plover (*Charadrius nivosus* ssp. *nivosus*) prefers beaches, dry mud or salt flats, sandy shores of rivers, lakes, and ponds where vegetation is sparse or absent (small clumps of vegetation are used for cover by chicks) (NatureServe, 2015). This type of habitat does not exist on Fort MacArthur; therefore, this species is not likely to occur.

The bald eagle (*Haliaeetus leucocephalus*), federally de-listed, is considered a species of special concern in the state of California and is protected under the Bald and Golden Eagle Protection Act. This species is commonly associated with open water. It typically feeds on fish but is also known to feed on small mammals. It nests in tall trees or on pinnacles or cliffs near water (NatureServe, 2015). This type of habitat does not exist on Fort MacArthur; therefore, this species is not likely to occur.

Table 3-5. Federally and State Threatened and Endangered Species Potentially within Fort MacArthur

Common Name (<i>Scientific Name</i>)	Federal Status	State Status
Plants		
Salt marsh bird's beak (<i>Chloropyron maritimum</i> ssp. <i>maritimum</i>)	Endangered	Endangered
Lyon's pentachaeta (<i>Pentachaeta lyonii</i>)	Endangered	Endangered
California seablite (<i>Suaeda californica</i>)	Endangered	--
Insects		
Palos Verdes blue butterfly (<i>Glaucopsyche lygdamus palosverdesensis</i>)	Endangered	--
Birds		
Western snowy plover (<i>Charadrius nivosus</i> ssp. <i>nivosus</i>)	Threatened	--
Bald eagle (<i>Haliaeetus leucocephalus</i>)	Delisted	Endangered
California brown pelican (<i>Pelecanus occidentalis californicus</i>)	Delisted	Delisted
Short-tailed albatross (<i>Phoebastria albatrus</i>)	Endangered	--
Coastal California gnatcatcher (<i>Polioptila californica californica</i>)	Threatened	--
Bank swallow (<i>Riparia riparia</i>)	--	Threatened
California least tern (<i>Stern antillarum browni</i>)	Endangered	Endangered
Mammals		
Pacific pocket mouse (<i>Perognathus longimembris pacificus</i>)	Endangered	--

Sources: USFWS 2015a; CDFW, 2015.

Notes:

- Delisted = Any species that was previously listed as Endangered or Threatened, but is no longer listed on the Federal Endangered and Threatened species list.
- Endangered = Any species that is in danger of extinction throughout all or a significant portion of its range.
- Threatened = Any species that is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range.

The California brown pelican (*Pelecanus occidentalis californicus*) nests in colonies on offshore islands that are free of mammalian predators and human disturbance, are of sufficient elevation to prevent flooding of nests, and are associated with an adequate and consistent food supply. The California brown pelican uses breakwaters, jetties, sand spits and offshore sand bars extensively as daily loafing and nocturnal roost areas. This species is rarely found away from salt water and does not normally venture more than 20 miles out to sea (USFWS, 2015b). This type of habitat does not exist on Fort MacArthur; therefore, this species is not likely to occur.

Short-tailed albatross (*Phoebastria albatrus*) nests on the ground on small oceanic islands; on volcanic ash slopes with sparse vegetation, formerly on level open areas adjacent to tall clumps of the grass *Miscanthus sinensis* (NatureServe, 2015). This type of habitat does not exist on Fort MacArthur; therefore, this species is not likely to occur.

Coastal California gnatcatcher (*Polioptila californica californica*) prefers coastal sage scrub plant communities, especially those dominated by *Artemisia californica* and dry coastal slopes, washes, and mesas; areas of low plant growth (NatureServe, 2015). This type of habitat does not exist on Fort MacArthur; therefore, this species is not likely to occur.

Bank swallow (*Riparia riparia*) habitat includes open and partly open situations, frequently near flowing water. This species nests in steep sand, dirt, or gravel banks, in burrows dug near the top of the bank, along the edge of inland water, or along the coast, or in gravel pits and road embankments (NatureServe, 2015). This type of habitat does not exist on Fort MacArthur; therefore, this species is not likely to occur.

California least tern (*Sterna antillarum browni*) nests mainly on riverine sandbars or salt flats that become exposed during periods of low water (NatureServe, 2015). This type of habitat does not exist on Fort MacArthur; therefore, this species is not likely to occur.

Pacific pocket mouse (*Perognathus longimembris pacificus*) occur within fine-grain, sandy substrates in the immediate vicinity of the ocean, including: coastal strand, coastal dunes, river alluvium, and coastal sage scrub growing on marine terraces (NatureServe, 2015). This type of habitat does not exist on Fort MacArthur; therefore, this species is not likely to occur.

Other federally protected species include birds covered by the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act. Bird species listed by the USFWS IPAC System as having the potential to winter on Fort MacArthur, if suitable habitat is present, include: tricolored blackbird (*Agelaius tricolor*), Red Knot (*Calidris canutus ssp. roselaari*), Mountain plover (*Charadrius montanus*), Peregrine Falcon (*Falco peregrinus*), bald eagle, Loggerhead Shrike (*Lanius ludovicianus*), Short-billed Dowitcher (*Limnodromus griseus*), Marbled Godwit (*Limosa fedoa*), Lewis's Woodpecker (*Melanerpes lewis*), Long-Billed curlew (*Numenius americanus*), Whimbrel (*N. phaeopus*), Fox Sparrow (*Passerella iliaca*), Xantus' murrelet (*Synthliboramphus hypoleucus*), and Lesser Yellowlegs (*Tringa flavipes*). Bird species listed by the USFWS IPAC as having the potential to breed on Fort MacArthur, if suitable habitat is present, include: Costa's Hummingbird (*Calypte costae*), Yellow warbler (*dendroica petechiassp. brewsteri*), Least Bittern (*Ixobrychus exilis*), and Ashy storm-petrel (*Oceanodroma homochroa*). Bird species listed by the USFWS IPAC as having the potential to be year-round residents on Fort MacArthur, if suitable habitat is present, include: Burrowing Owl (*Athene cunicularia*), Oak Titmouse (*Baeolophus inornatus*), Cactus Wren (*Campylorhynchus brunneicapillus*), Lawrence's Goldfinch (*Carduelis lawrencei*), Black Oystercatcher (*Haematopus bachmani*), Nuttall's woodpecker (*Picoides nuttallii*), Cassin's Auklet (*Ptychoramphus aleuticus*), Black Skimmer (*Rynchops niger*), Brewer's Sparrow (*Spizella breweri*), and Scripp's murrelet (*Synthliboramphus hypoleucus scrippsi*) (USFWS, 2015a).

Sensitive Habitats. Sensitive habitats are those areas considered for protection due to their ecological value. They include wetlands, critical habitat for protected species, plant communities of limited or unusual distribution, and important seasonal use areas for wildlife (e.g., migration routes, breeding areas, crucial summer/winter habitat).

According to the USFWS IPAC, there are no wetlands or federally designated critical habitat for any listed species on Fort MacArthur (USFWS, 2015a).

3.5.5 Cultural Resources

Cultural resources are defined as prehistoric or historic archaeological sites, buildings, structures, districts, artifacts, or other physical evidence of human activity. For ease of discussion, cultural resources have been divided into prehistoric and historic archaeological resources, historic buildings and structures, and traditional cultural resources (e.g., sacred or ceremonial sites).

For the purposes of this analysis, the term ROI is synonymous with the “area of potential effect” (APE) as defined under cultural resources legislation. The ROI for the analysis of cultural resources within this EA includes any structures and areas that may be affected by proposed development activities on Fort MacArthur.

Numerous laws and regulations require federal agencies to consider the effects of a proposed action on cultural resources. These laws and regulations stipulate a process for compliance, define the responsibilities of the federal agency proposing the action, and prescribe the relationships among other involved agencies (e.g., the State Historic Preservation Officer [SHPO] and the Advisory Council on Historic Preservation [ACHP]). The primary law governing the treatment of cultural resources is the National Historic Preservation Act (NHPA), which requires a federal agency to consider potential impacts on historic properties from any proposed undertaking.

In compliance with the NHPA, the Air Force has initiated the Section 106 review process with the California SHPO (Appendix A). Consultation is ongoing in an effort to determine the appropriate APE as well as to identify any archaeological sites and historic properties within the APE that may be affected by proposed activities.

Only those cultural resources determined to be significant under cultural resources legislation are subject to protection or consideration by a federal agency. Significant cultural resources, whether they be prehistoric, historic, or traditional in nature, are referred to as “historic properties.” Under 36 CFR Part 800 historic properties are defined as any prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion in, the National Register of Historic Places (National Register). For the purposes of these regulations, the term includes artifacts, records, and remains that are related to, and located within, such properties. The term “eligible for inclusion in the National Register” includes properties formally determined as such by the Secretary of the Interior and all other properties that meet National Register listing criteria. Therefore, sites that meet the criteria, but are not yet evaluated, may be considered potentially eligible to the National Register and, as such, are afforded the same regulatory consideration as nominated historic properties. As a federal agency, the Air Force is responsible for identifying any historic properties associated with its property.

Prehistoric and Historic Archaeological Resources. The Los Angeles AFB Integrated Cultural Resources Management Plan (ICRMP) addresses five separate parcels (including Fort MacArthur) within the Los Angeles Basin. The administration, operations, and residential areas of Fort MacArthur consist of densely developed complexes of office buildings, residential units, industrial facilities, paved storage

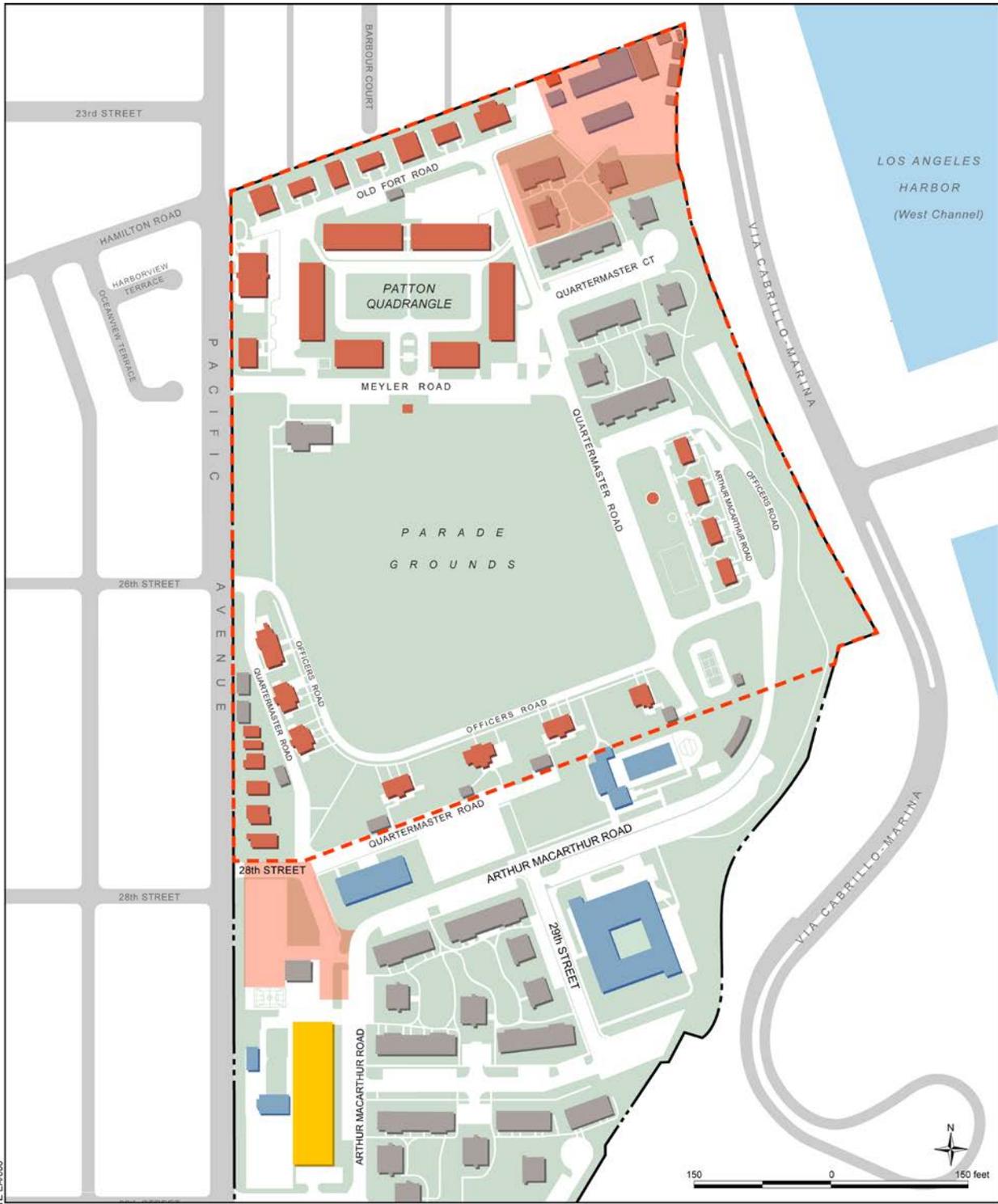
areas, and vehicle parking lots. As a result, no archaeological sites have been identified within Fort MacArthur (U.S. Air Force, 2011a).

Historic Buildings and Structures. Three inventories of historic structures, completed in 1979, 1982, and 2001, were conducted at Fort MacArthur. As a result of the 1979 and 1982 inventories, the Fort MacArthur 500 Varas Square National Register District and the American Trona Corporation Plant (Building 425) were listed on the National Register. After the 2001 survey, six additional buildings and two objects were recommended eligible for National Register listing as contributing elements to the 500 Varas Square National Register District. The 500 Varas Square National Register District is composed of 35 early 20th century buildings surrounding a historic parade ground and a quadrangle plaza (Figure 3-1). Within the 500 Varas Square is the site where the first structure in the local area was built in 1823. Called the 100 Varas Tract, this site is a California Historical Landmark. All other historic age buildings and objects at Fort MacArthur have been evaluated and determined not to meet the criteria necessary for National Register eligibility (U.S. Air Force, 2011a).

Guidelines for the maintenance and management of these historic properties can be found in the Historic Preservation Maintenance Plan (HPMP) for Non-Privatized Properties and the HPMP for Privatization of Historic Military Family Housing. These properties are maintained in accordance with Programmatic Agreements (PAs) that have been prepared for both privatized and non-privatized historic properties (U.S. Air Force, 2011a).

Traditional Cultural Resources. Tribal groups identified as having occupied the Fort MacArthur vicinity include the Gabrielino-Tongva tribe. However, the Gabrielino-Tongva tribe is not a federally recognized tribe. The tribe has been recognized by the California Legislature as “the aboriginal tribe of the Los Angeles Basin” (U.S. Air Force, 2011a). Because it is the policy of the DoD not to consult with tribes that are not recognized by the United States Government, this tribe was not contacted to determine if there were any concerns or issues regarding cultural resources within the boundaries of Fort MacArthur. Given the developed nature of Fort MacArthur, no archaeological sites have been identified on the installation; therefore, the likelihood of identifying traditional cultural properties is considered low.

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FORTMACARTHUR GATE EA006

LEGEND

- 500 Varas Square NRHP Historic District Contributing Elements
- NRHP United American Trona Plant
- Historic-Age Buildings Evaluated as Not NRHP Eligible
- Project Location
- Historic District Boundary
- Installation Boundary

**Fort MacArthur
Historic District**

Figure 3-1

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4.0 ENVIRONMENTAL CONSEQUENCES

4.1 INTRODUCTION

This chapter presents the results of the analysis of potential environmental effects associated with implementing the Proposed Action and alternatives at Fort MacArthur. Changes to the natural and human environments that may result from the Proposed Action and alternatives were evaluated relative to the existing environment as described in Chapter 3.0. For each environmental component, anticipated effects were quantitatively and qualitatively assessed, considering the long-term project effects. The potential for significant environmental consequences was evaluated utilizing the context and intensity considerations as defined in CEQ regulations for implementing the procedural provisions of NEPA (40 CFR Part 1508.27).

4.2 LAND USE AND AESTHETICS

The potential effects of the Proposed Action and alternatives on land use and aesthetics within the ROI are presented in this section.

4.2.1 Alternative 1

Gate Improvement

Land Use. Under Alternative 1, demolition of existing paved areas (road and vehicle/boat storage yard) and landscaped areas would be required to allow grading and installation of proposed gate improvements. The proposed use of the area as a vehicle access gate would be compatible with existing land uses surrounding the project area. No significant impacts to land use are anticipated.

Aesthetics. The proposed gate improvement project would result in a change in the appearance of the property as a result of converting the existing vehicle/boat storage yard into a pass and ID gate. The 28th Street Gate improvements have been planned and designed to occur outside of the historic district and would be landscaped in such a way as to retain the historic feeling, setting, and association of the area. New construction would be required to follow UFC 3-530-01, *Design: Interior, Exterior Lighting and Controls* for installation of new lighting. The UFC sections concerning light pollution (Section 3-7) and light trespass (Section 3-8) provide guidance on lighting control. Design criteria for outdoor lighting typically includes directing lighting downward, reducing brightness, using sensors and timers, and incorporation of appropriate shielding to minimize off-site lighting. The long-term effect of removing the vehicle/boat storage yard and constructing new structures would result in a positive aesthetic effect. No significant impacts to aesthetics are anticipated.

Civil Engineering Consolidation

Land Use. Under Alternative 1, demolition of existing structures and paved areas would be required to allow grading and construction of consolidated CE facilities and associated compound. To allow construction of the consolidated CE facilities, existing CE buildings (Buildings 64, 68, 72, 74, 75, and 78) as well as miscellaneous storage sheds would be demolished. Building demolition would total approximately 13,195 square feet and approximately 1 acre of paved area would be constructed in support of the consolidated CE facilities and associated compound. Since the current surrounding land use is industrial/mixed use, the CE consolidated facilities would continue to be compatible with existing land uses surrounding the area. No significant impacts to land use are anticipated.

Aesthetics. The consolidated CE facilities would result in a change in the appearance of the property as a result of demolishing old structures and constructing new structures. The new CE facilities and associated compound would be designed and landscaped in such a way to be aesthetically compatible with the surrounding facilities to retain the historic feeling, setting, and association of the area. New construction would be required to follow UFC 3-530-01, *Design: Interior, Exterior Lighting and Controls* for installation of new lighting. The UFC sections concerning light pollution (Section 3-7) and light trespass (Section 3-8) provide guidance on lighting control. Design criteria for outdoor lighting typically includes directing lighting downward, reducing brightness, using sensors and timers, and incorporation of appropriate shielding to minimize off-site lighting. The long-term effect of removing older buildings and constructing new modern structures would result in a positive aesthetic effect. No significant impacts to aesthetics are anticipated.

Mitigation Measures. No mitigation measures would be required.

4.2.2 Alternative 2

Gate Improvement

Land Use. Potential impacts would be similar to those discussed under Alternative 1. Because the 28th Street Gate improvements would be compatible with existing land uses surrounding the project area, no significant impacts are anticipated.

Aesthetics. Potential impacts would be similar to those discussed under Alternative 1. Because the 28th Street Gate improvements have been planned and designed to occur outside of the historic district and would be landscaped in such a way as to retain the historic feeling, setting, and association of the area, no significant impacts are anticipated.

Civil Engineering Consolidation

No other action alternatives were identified for consolidating CE functions. The northeast corner of Fort MacArthur is the only industrial use area on the installation and is the only suitable location for CE operations.

Mitigation Measures. No mitigation measures would be required.

4.2.3 No-Action Alternative

Under the No-Action Alternative, the construction activities associated with 28th Street Gate improvements and consolidation of civil engineering functions would not occur. The 28th Street Gate area and buildings housing civil engineering functions would remain in their current locations and configurations. No significant impacts are anticipated.

Mitigation Measures. No mitigation measures would be required.

4.3 HAZARDOUS MATERIALS AND HAZARDOUS WASTE MANAGEMENT

This section describes the potential effects of the Proposed Action and alternative on storage tanks, ACM, and LBP.

4.3.1 Storage Tanks

The potential effects of the Proposed Action and alternative on the management of storage tanks within the ROI are presented in this section.

4.3.1.1 Alternative 1

Gate Improvement

The small (40-50 gallon) day tank associated with the new backup generator at the 28th Street Gate improvement area would be subject to applicable federal, state, and local regulations. Management of the storage tank in accordance with applicable regulations would minimize the potential for impacts. In addition, the new generator would be incorporated into the Los Angeles AFB Hazardous Materials Emergency Response Plan, which establishes responsibilities, requirements, and contingency plans in the event a release occurs; therefore, no significant impacts are anticipated.

Civil Engineering Consolidation

The existing 500-gallon diesel AST associated with the CE compound would remain in-place and continue to be subject to applicable federal, state, and local regulations. These regulations include provisions for acceptable leak detection methodologies, spill and overfill protection, secondary containment, and liability insurance. Management of the storage tank in accordance with applicable regulations would minimize the potential for impacts; therefore, no significant impacts are anticipated.

Mitigation Measures. No mitigation measures would be required.

4.3.1.2 Alternative 2

Gate Improvement

Potential impacts would be similar to those discussed under Alternative 1. Because the small (40-50 gallon) day tank associated with the new backup generator would be subject to applicable federal, state, and local regulations and the new generator would be incorporated into the Los Angeles AFB Hazardous Materials Emergency Response Plan, no significant impacts from storage tanks are anticipated.

Civil Engineering Consolidation

No other action alternatives were identified for consolidating CE functions. The northeast corner of Fort MacArthur is the only industrial use area on the installation and is the only suitable location for CE operations.

Mitigation Measures. No mitigation measures would be required.

4.3.1.3 No-Action Alternative

Under the No-Action Alternative, the construction activities associated with 28th Street Gate improvements and consolidation of civil engineering functions would not occur. The 28th Street Gate area and buildings housing civil engineering functions would remain in their current locations and configurations. Storage tanks would remain in place and would continue to be managed in accordance with applicable regulations. No significant impacts are anticipated.

Mitigation Measures. No mitigation measures would be required.

4.3.2 Asbestos-Containing Material

The potential effects of the Proposed Action and alternative on the management of ACM within the ROI are presented in this section.

4.3.2.1 Alternative 1

Gate Improvement

There are no structures to be demolished within the 28th Street Gate area. However, there are a number of abandoned and active transite asbestos cement pipes at Fort MacArthur that may be located in the vicinity of the project site. Therefore, ACM may be encountered in these areas. If a significant material discovery is made during ground-disturbing activities, the material would be removed and the control of fugitive emissions from ACM-contaminated soils would be performed using OSHA protocols in order to minimize the risk of asbestos exposure to workers and the general public. Contact with ACM is not anticipated; therefore, no significant impacts from ACM are anticipated.

Civil Engineering Consolidation

Buildings 64, 68, 74, 75, and 78 contain ACM that would be properly removed prior to demolition. The Air Force would inform the construction contractor of the presence of ACM in facilities being demolished. Demolition activities would be subject to applicable federal, state, and local regulations to minimize the potential risk to human health and the environment. ACM waste generated as a result of demolition activities would be disposed in accordance with applicable regulations at an off-site landfill permitted to accept this type of material. As indicated above, there are a number of abandoned and active transite asbestos cement pipes at Fort MacArthur that may be located in the vicinity of the project site. Therefore, ACM may be encountered in these areas. If a significant material discovery is made during ground-disturbing activities, the material would be removed and the control of fugitive emissions from ACM-contaminated soils would be performed using OSHA protocols in order to minimize the risk of asbestos exposure to workers and the general public. The construction contractor would be responsible for ensuring the proper management of asbestos and maintaining continued regulatory compliance. Management of ACM and ACM waste in accordance with applicable regulations would preclude any significant impacts.

Mitigation Measures. No mitigation measures would be required.

4.3.2.2 Alternative 2

Gate Improvement

Potential impacts would be similar to those discussed under Alternative 1. Because there are no structures to be demolished within the 28th Street Gate area, contact with ACM would not occur and no significant impacts from ACM are anticipated.

Civil Engineering Consolidation

No other action alternatives were identified for consolidating CE functions. The northeast corner of Fort MacArthur is the only industrial use area on the installation and is the only suitable location for CE operations.

Mitigation Measures. No mitigation measures would be required.

4.3.2.3 No-Action Alternative

Under the No-Action Alternative, the construction activities associated with 28th Street Gate improvements and consolidation of civil engineering functions would not occur. The 28th Street Gate area and buildings housing civil engineering functions would remain in their current locations and configurations. The Air Force would continue to be responsible for the management of structures containing ACM. The Air Force would continue to manage ACM in accordance with current Air Force policy and applicable regulations. Management of ACM and ACM waste in accordance with applicable regulations would preclude any significant impacts.

Mitigation Measures. No mitigation measures would be required.

4.3.3 Lead-Based Paint

The potential effects of the Proposed Action and alternatives on the management of LBP within the ROI are presented in this section.

4.3.3.1 Alternative 1

Gate Improvement

There are no structures to be demolished within the 28th Street Gate area. Contact with LBP would not occur; therefore, no significant impacts from LBP are anticipated.

Civil Engineering Consolidation

The Air Force would inform the construction contractor of the potential presence of LBP in facilities to be demolished. Under Alternative 1, Buildings 64, 68, 72, 74, 75, and 78 that likely contain LBP would be demolished. LBP could be encountered during demolition activities as well as on non-building structures such as railings, painted pavement, and stairs. Demolition activities would be conducted in accordance with applicable federal, state, and local regulations to minimize potential risks to human health and the environment.

Materials containing LBP would have to be disposed at a facility that will accept solid waste containing LBP. Waste is defined as hazardous under 40 CFR Part 261 if it contains levels of lead exceeding a maximum concentration of 5.0 milligrams per liter (mg/l), as determined using the U.S. EPA Toxic Characteristic Leaching Procedure (TCLP). The construction contractor would be required to perform a TCLP scan on demolition debris prior to disposal to ensure it is not hazardous. If a waste is classified as hazardous, disposal must take place in accordance with applicable hazardous waste rules. The development contractor would maintain continued regulatory compliance. Management of LBP and LBP waste in accordance with applicable regulations would preclude any significant impacts.

Mitigation Measures. No mitigation measures would be required.

4.3.3.2 Alternative 2

Gate Improvement

Potential impacts would be similar to those discussed under Alternative 1. Because there are no structures to be demolished within the 28th Street Gate area, contact with LBP would not occur and no significant impacts from LBP are anticipated.

Civil Engineering Consolidation

No other action alternatives were identified for consolidating CE functions. The northeast corner of Fort MacArthur is the only industrial use area on the installation and is the only suitable location for CE operations.

Mitigation Measures. No mitigation measures would be required.

4.3.3.3 No-Action Alternative

Under the No-Action Alternative, the construction activities associated with 28th Street Gate improvements and consolidation of civil engineering functions would not occur. The 28th Street Gate area and buildings housing civil engineering functions would remain in their current locations and configurations. The Air Force would continue to be responsible for the management of structures containing LBP. The Air Force would continue to manage LBP in accordance with current Air Force policy and applicable regulations. Management of LBP and LBP waste in accordance with applicable regulations would preclude any significant impacts.

Mitigation Measures. No mitigation measures would be required.

4.4 NATURAL ENVIRONMENT

This section describes the potential effects of the Proposed Action and alternatives on the natural resources of geology and soils, air quality, noise, biological resources, and cultural resources.

4.4.1 Geology and Soils

The potential effects of the Proposed Action and alternatives on the local geology and soils have been analyzed based on a review of published literature. Geology and soils would be affected primarily during ground-disturbing activities, when local soil profiles would be altered. Soils in these areas would remain relatively stable in the long-term because they would be overlain by pavement or landscaping, which would minimize erosion.

4.4.1.1 Alternative 1

Gate Improvement

Geology. Alternative 1 is unlikely to affect the local geology at Fort MacArthur. Sedimentation patterns would not be significantly altered, and no structural movements or changes in seismicity would result. No significant impacts are anticipated.

Soils. Potential impacts to soil at Fort MacArthur from proposed 28th Street Gate improvements would result primarily from ground disturbance associated with construction of a new vehicle access gate and

pavements. These activities could alter soil profiles as grading is required for demolition and construction activities. Construction activities would not result in an increase of paved surfaces.

The construction contractor would be required to obtain a Construction Site Storm Water National Pollutant Discharge Elimination System (NPDES) permit before initiating construction activities. The contractor would also be required to prepare a Storm Water Pollution Prevention Plan (SWPPP) for the construction activity. The Construction Site Storm Water NPDES permit, together with the required SWPPP, would outline construction site management practices designed to protect the quality of any surface water, ground water, and natural environment through which they flow. The SWPPP would identify specific areas of existing and potential soil erosion, location of structural measures for sediment control, and management practices and controls. Use of these management practices and controls would reduce the potential for erosion of disturbed soils.

Short-term erosion impacts could occur during ground-disturbing activities, such as demolition of existing pavements, removal of vegetative cover, or grading. Potential impacts would be minimized through proper management practices defined within the approved SWPPP. Standard construction practices that could be implemented to minimize soil erosion include:

- Use of protective cover, such as mulch, straw, plastic netting, or a combination of these protective coverings
- Implementation of site grading procedures to limit the time soils are exposed prior to being covered by impermeable surfaces or vegetation
- Implementation of storm water diversions to reduce water flow through exposed sites
- Maintenance of a buffer strip of vegetation around drainages, where possible, to filter sediments
- Retention of as many trees and shrubs as possible adjacent to exposed ground areas for use as natural windbreaks.

Once disturbed areas have been covered with pavement, buildings, or vegetative cover, their susceptibility to erosion would be significantly reduced. Upon completion of the construction phase, maintenance of a vegetative cover would serve as an effective, long-term erosion control strategy for areas not covered with impervious surfaces. Soils underlying facilities and pavements are not subject to erosion.

Because management practices required by the Construction Site Storm Water NPDES permit and SWPPP would be implemented during demolition and construction activities, no significant impacts to geology and soils are anticipated.

Civil Engineering Consolidation

Geology. Alternative 1 is unlikely to affect the local geology at Fort MacArthur. Sedimentation patterns would not be significantly altered, and no structural movements or changes in seismicity would result. No significant impacts are anticipated.

Soils. Potential impacts to soil at Fort MacArthur from proposed CE consolidation activities would result primarily from ground disturbance associated with building demolition, construction, and new pavements. These activities could alter soil profiles, as grading is required for demolition and construction activities.

As discussed above, the construction contractor would be required to obtain a Construction Site Storm Water NPDES permit before initiating any construction activity. The contractor would also be required to prepare a SWPPP for the construction activity. The Construction Site Storm Water NPDES permit, together with the required SWPPP, would outline construction site management practices designed to protect the quality of any surface water, ground water, and natural environment through which they flow. The SWPPP would identify specific areas of existing and potential soil erosion, location of structural measures for sediment control, and management practices and controls. Use of these management practices and controls would reduce the potential for erosion of disturbed soils.

Because management practices required by the Construction Site Storm Water NPDES permit and SWPPP would be implemented during demolition and construction activities, no significant impacts to geology and soils are anticipated.

Mitigation Measures. No mitigation measures would be required.

4.4.1.2 Alternative 2

Gate Improvement

Potential impacts would be similar to those discussed under Alternative 1. Because management practices required by the Construction Site Storm Water NPDES permit and SWPPP would be implemented during demolition and construction activities, no significant impacts to geology and soils are anticipated.

Civil Engineering Consolidation

No other action alternatives were identified for consolidating CE functions. The northeast corner of Fort MacArthur is the only industrial use area on the installation and is the only suitable location for CE operations.

Mitigation Measures. No mitigation measures would be required.

4.4.1.3 No-Action Alternative

Under the No-Action Alternative, the construction activities associated with 28th Street Gate improvements and consolidation of civil engineering functions would not occur. The 28th Street Gate area and buildings housing civil engineering functions would remain in their current locations and configurations. No ground disturbance would occur; therefore, no significant impacts to geology or soils are anticipated.

Mitigation Measures. No mitigation measures would be required.

4.4.2 Air Quality

The potential effects of the Proposed Action and alternatives on air quality within the ROI are presented in this section.

4.4.2.1 Alternative 1

Gate Improvement

Demolition and Construction Activities. Under Alternative 1, project-related demolition and construction activities would occur. These activities can be expected to cause the following short-term minor air quality impacts:

- Fugitive dust would be generated by demolition and construction operations.
- Emissions of criteria pollutants (VOC and NO_x, as precursors of ozone; CO; PM₁₀; PM_{2.5} including its precursor SO₂; Lead, NO₂, and GHG emissions of CO₂) would result from demolition and construction activities such as:
 - Use of diesel-powered and gas powered construction equipment and
 - Construction workers' commutes.

Operational Activities. The combination of project elements described in Chapter 2.0 are not likely to produce a change in operational air emissions. No change in emissions would occur from gate improvements. Although several existing CE buildings would be demolished, it is anticipated that after the completion of construction activities, operations at the new civil engineering buildings would not change from current activities and no change in emissions would result.

Construction Emissions. Activities would involve operation of construction equipment and vehicles as a result of building demolition and construction activities. Criteria pollutant emissions generated by temporary demolition and construction activities were calculated using the California Air Pollution Control Officers Association-developed California Emissions Estimator Model (CalEEMod, Version 2013.2.2) based on the size of the demolition and construction area. The CalEEMod was developed to provide a uniform platform for government agencies, land use planners, and environmental professionals to estimate potential emissions associated with both construction and operational uses. It is intended that these emission estimates are suitable for use in NEPA and California Environmental Quality Act compliant documents for air quality and climate change impacts. Table 4-1 provides the model-predicted demolition and construction related total emissions.

Operational Emissions. Because operations for vehicle access at the base gate would be similar to current operations occurring on the installation, no change in operational emissions are anticipated from implementing proposed gate improvements. Similarly, because operations at the new civil engineering buildings would be similar to current operations occurring on the installation, no change in operational emissions are anticipated from consolidating CE functions.

Table 4-1. Total Demolition and Construction Emissions

Emission Source Category	Demolition and Construction Emissions (tons)								
	VOC	NO _x	CO	SO ₂	PM ₁₀	PM _{2.5}	Lead ^(a)	NO ₂ ^(b)	CO ₂ e ^(c)
Combined Demolition and Construction	0.96	2.58	2.03	0.003	0.21	0.17	0.0	2.58	262.01
De minimus threshold (tons/year)	10	10	100	100	100	100	25	100	na

Source: CalEEMod Run, December 12, 2015.

Notes:

na: not applicable.

a. zero emission factors from analyzed sources.

b. assumed to be the same as NO_x.

c. in metric tons.

Clean Air Act General Conformity Rule Applicability. Section 176(c) of the CAA requires federal agencies to ensure that actions undertaken in nonattainment or maintenance areas are consistent with the CAA and with federally enforceable air quality management plans. The CAA General Conformity requirements apply to actions involving ongoing federal agency responsibility and control over direct or indirect sources of air pollutant emissions.

Compliance with the General Conformity Rule can be demonstrated in several ways. Compliance is presumed if the net increase in direct and indirect emissions of non-attainment or maintenance criteria pollutants from a federal action would be less than the relevant *de minimis* level (i.e., an established emissions threshold) (see Table 4-1). If net emissions increases exceed the relevant *de minimis* level, a formal conformity determination process must be followed. The predicted total emissions associated with Alternative 1 summarized in Table 4-1 are well below the applicable *de minimis* levels. Therefore, further general conformity rule determination is not required and Alternative 1 would have negligible and non-significant air quality impacts with respect to non-attainment pollutants.

SCAQMD Air Quality Significance Evaluation. The CalEEMod model was used for predicting maximum construction and demolition daily emissions in order to determine whether emissions from proposed construction activities would exceed the SCAQMD air quality significant thresholds as summarized in Table 4-2. If assuming the architectural coating process during new building construction phase would take four weeks, the maximum daily emissions under Alternative 1 would be below the SCAQMD air quality significance thresholds causing no significant air quality impacts.

Additionally, although Alternative 1 includes the upgrade of an entry gate for security purposes, the upgrades would occur within Air Force property and there would be no anticipated net change in traffic outside of the installation due to the project. Therefore, transportation conformity does not apply.

Table 4-2. Total Demolition and Construction Daily Emissions

Emission Source Category	Demolition and Construction Emissions (pounds)						
	VOC	NO _x	CO	SO ₂	PM ₁₀	PM _{2.5}	Lead
Combined Demolition and Construction	57.3 ^(b)	28.8	22.7	0.03	7.3	4.3	0.0
Significance threshold (lbs/day) ^(a)	75	100	550	150	150	55	3

Source: ^(a) SCAQMD CEQA Handbook, March 2015.

^(b) New building coating process would take 4 weeks to complete.

Attainment Criteria Pollutant and HAPs Emissions. Unlike nonattainment or maintenance criteria pollutants, de minimis levels have not been established for attainment criteria pollutants and HAPs emissions. This EA follows Air Force Instruction 32-7040 (June 8, 2011) and quantifies these temporary emissions for the purpose of informing the public and decision makers about the relative air quality impacts from implementation of proposed demolition and constructions projects under Alternative 1. The attainment criteria pollutant emissions are summarized in Table 4-1. The HAP emissions were estimated using the construction equipment HAP emissions inventory methodology established in the U.S. EPA-sponsored document, *Documentation for Aircraft, Commercial Marine Vessel, Locomotive, and Other Nonroad Components of the National Emissions Inventory* (E.H. Pechan & Associates, Inc. 2005). The HAP speciation factors combined from each available toxic in terms of VOC fractions were calculated to be 24 percent. Therefore, the temporary total HAP emissions were estimated to be 0.23 tons. Given the temporary nature of these emissions, Alternative 1 would have negligible and non-significant air quality impact with respect to attainment pollutants and HAPs.

Greenhouse Gas Emissions. Fort MacArthur currently produces approximately 443 metric tons/year CO₂e from the facility's stationary sources, of which 443 metric tons/year CO₂e are from stationary combustion sources only. The worst-case short-term estimated increase of GHG emissions associated with the construction phase of the action produces about an additional 262 metric tons/year CO₂e for only one year. The steady-state (or operational phase) of the action yields no net increase (i.e., 0 metric ton/year CO₂e) in GHGs. Given the combined current and steady-state annual GHGs from stationary combustion sources much less than the 25,000 metric tons/yr GHG reporting threshold, the installation is likely to remain a small GHG emitter and the GHG emissions are not significant enough to require annual reporting under 40 CFR Part 98, *Mandatory Greenhouse Gas Reporting*. Additionally, the estimated GHG emissions are not significant enough to warrant CEQ's recommendation for a NEPA quantitative analysis.

The change in climate conditions caused by GHGs resulting from the burning of fossil fuels from construction activities associated with Alternative 1 is a global effect, and requires that the emissions be assessed on a global scale. Therefore, the disclosure of localized incremental emissions (see Table 4-1) has no weight to impact climate change. Consequently, given the minimal increase predicted for construction activities (262 metric tons of CO₂e), which is well below the CEQ meaningful assessment threshold of 25,000 metric tons per year, Alternative 1 would result in an insignificant impact on overall global or U.S. cumulative GHG emissions and global climate change. Additionally, during the time that CE functions are temporarily managed from Los Angeles AFB (approximately 9 month period), CE maintenance vehicles would commute to Fort MacArthur daily (estimated 10 trips per day). Based on the short duration and limited number of anticipated daily trips, GHG emissions from CE vehicles commuting to/from Fort MacArthur would be negligible. No specific GHG emission mitigation measures are warranted.

Based on recent CEQ guidance (August 2016) *Final Guidance for Federal Departments and Agencies on Consideration of Greenhouse Gas Emissions and the Effects of Climate Change in National Environmental Policy Act Reviews*, the potential effects of climate change on implementing project activities under Alternative 1 were considered. Climate change could result in effects such as eventual sea level rise and warmer temperatures. Although Fort MacArthur is near the coastline, the installation and project location is situated on a marine terrace 70 feet above sea level with an established breakwater/sea wall that protects the coastline and marina below the installation. Additionally, appropriate heating and air conditioning would be incorporated into the design of the new gate and CE facilities. As a result, potential impacts of global climate change and accompanying sea level change and warmer temperatures on the project location are anticipated to be negligible.

Mitigation Measures. Because significant impacts to air quality would not occur, no mitigation measures would be required.

Civil Engineering Consolidation

Potential air emissions associated with the civil engineering consolidation effort are accounted for under the 28th Street Gate improvement analysis. Alternative 1 would have negligible and non-significant air quality impacts with respect to attainment pollutants, non-attainment pollutants, HAPs, and GHGs.

4.4.2.2 Alternative 2

Gate Improvement

Because proposed gate improvements would be similar in scope and scale to Alternative 1, potential impacts to air quality would be similar to those discussed under Alternative 1. No significant impacts to air quality are anticipated.

Civil Engineering Consolidation

No other action alternatives were identified for consolidating CE functions. The northeast corner of Fort MacArthur is the only industrial use area on the installation and is the only suitable location for CE operations.

Mitigation Measures. No mitigation measures would be required.

4.4.2.3 No-Action Alternative

Under the No-Action Alternative, the construction activities associated with 28th Street Gate improvements consolidation of civil engineering functions would not occur. The 28th Street Gate area and buildings housing civil engineering functions would remain in their current locations and configurations. No significant impacts to air quality are anticipated.

Mitigation Measures. No mitigation measures would be required.

4.4.3 Noise

The potential effects of the Proposed Action and alternatives on noise within the ROI are presented in this section.

4.4.3.1 Alternative 1

Gate Improvement

Temporary impacts from construction noise could occur during demolition and construction activities. Noise generated by construction equipment could produce localized noise events of 100 dBA or higher at the construction site, with noise levels decreasing with distance from the site. According to OSHA, a study of construction noise found noise levels ranging from 93 dBA to 107 dBA at construction sites. Typical noise levels generated by construction tools range from 65 dBA to 110 dBA. A heavy truck would typically create a noise level of approximately 90 dBA at a distance of 50 feet, and a “backup” alarm on a truck could range from 90 to 95 dBA.

Given the types of equipment likely to be used during construction activities and the noise levels of the equipment, typical noise emissions at 50 feet from multiple pieces of construction equipment would be

approximately 90 dBA. Assuming a usage factor of 50 percent (on average, any piece of equipment would be used at a maximum operating capacity 50 percent of the time), noise averaged over 8 hours would be about 88.5 dBA at 50 feet; noise averaged over 24 hours would be about 82 dBA at 50 feet. Within buildings, the noise levels would be attenuated by an additional 20 to 25 dBA and therefore annoyance to those indoors is only predicted within 50 to 100 feet of construction activity.

Enforcement of OSHA guidelines for hearing protection for workers on the construction site would be the responsibility of the construction contractor. Noise from construction activities would decrease with distance through divergence, atmospheric absorption, shielding by intervening structures, and absorption and shielding by ground cover. Signs warning of high noise levels would be posted at construction and demolition sites by the construction contractor, if construction noise levels warrant this measure.

The nearest on-installation noise-sensitive receptor to the 28th Street Gate is a residential unit immediately north (approximately 40 feet) of the project area; the nearest off-installation noise sensitive receptor is a residential unit west of Pacific Avenue approximately 100 feet from the project area. The proposed gate improvements would help improve traffic flow into Fort MacArthur; therefore, traffic noise from vehicles entering Fort MacArthur would be minimized.

Noise generated from proposed construction activities would occur during normal business hours (7:00 am to 5:00 pm). Construction noise would be intermittent and short term, and would primarily occur at the construction site. Once construction activities are completed, proposed activities are not expected to generate a substantial amount of noise.

Civil Engineering Consolidation

The nearest on-installation noise-sensitive receptor to the CE project area is a residential unit immediately west (approximately 40 feet) of the project area; the nearest off-installation noise sensitive receptor is an apartment building adjacent to the installation northern perimeter fence (approximately 20 feet from the project area).

Noise generated from proposed demolition and construction activities would occur during normal business hours (7:00 am to 5:00 pm). Construction noise would be intermittent and short term, and would primarily occur at the demolition and construction site. Once construction activities are completed, no change in noise from current CE operations would be anticipated.

Mitigation Measures. In an effort to minimize potential noise impacts to nearby residents, demolition and construction activities would only occur during normal business hours (7:00 am to 5:00 pm) during the week and would not occur during the weekends. No specific mitigation measures would be required.

4.4.3.2 Alternative 2

Gate Improvement

Because proposed gate improvements would be similar in scope and scale to Alternative 1, potential impacts from noise would be similar to those discussed under Alternative 1.

Civil Engineering Consolidation

No other action alternatives were identified for consolidating CE functions. The northeast corner of Fort MacArthur is the only industrial use area on the installation and is the only suitable location for CE operations.

Mitigation Measures. In an effort to minimize potential noise impacts to nearby residents, demolition and construction activities would only occur during normal business hours (7:00 am to 5:00 pm) during the week and would not occur during the weekends. No specific mitigation measures would be required.

4.4.3.3 No-Action Alternative

Under the No-Action Alternative, the construction activities associated with 28th Street Gate improvements and consolidation of civil engineering functions would not occur. The 28th Street Gate area and buildings housing civil engineering functions would remain in their current locations and configurations. No significant impacts from noise are anticipated.

Mitigation Measures. No mitigation measures would be required.

4.4.4 Biological Resources

The potential effects of the Proposed Action and alternatives on biological resources (e.g., vegetation, wildlife, threatened and endangered species, and sensitive habitats) within the ROI are presented in this section.

4.4.4.1 Alternative 1

Gate Improvement

Vegetation. Vegetation would be disturbed during demolition and construction activities associated with Alternative 1. Vegetation at Fort MacArthur consists of landscaped areas containing nonnative grasses, ornamental shrubs, and shade trees. Impacts to such highly disturbed, human-created habitats are considered to be insignificant. Existing landscaping would be retained during demolition and construction activities to the extent possible, and the existing property would be landscaped upon completion of construction activities. No significant impacts to vegetation are anticipated.

Wildlife. Under Alternative 1, demolition and construction activities could temporarily affect some individual wildlife species. However, because the land has been developed, these areas and adjacent areas lack suitable wildlife habitat. The species known to inhabit Fort MacArthur are common and/or disturbance tolerant. Potential impacts to wildlife include displacement of individuals to adjacent areas and direct mortality to burrowing species (e.g., mice and rats) or individuals that are less mobile. These impacts to common wildlife species are not expected to be significant.

Ornamental shrubs and shade trees on the property provide suitable nesting habitat to a variety of bird species. Removal or relocation of shrubs and trees during demolition and construction activities could cause impacts to bird species during nesting season; however, similar nesting habitat exists on surrounding properties. Therefore, no significant impacts to bird species are anticipated.

Threatened and Endangered Species. There is no suitable habitat for any of the threatened or endangered species identified as having the potential to occur on or adjacent to Fort MacArthur. Therefore, no significant impacts to threatened and endangered species as a result of implementing Alternative 1 are anticipated.

Several migratory bird species protected under the MBTA have the potential to visit Fort MacArthur. Impacts to these species are not anticipated as a result of Alternative 1; however, if determined necessary, conservation measures focusing on avoidance and minimization of adverse impacts to breeding, wintering, and migratory birds would be implemented during project activities. Bird species

protected under the MBTA would be avoided to the maximum extent possible. Construction and demolition activities would be limited to the non-breeding season (September-January) within areas identified as having potential for nesting bird species. If demolition and/or construction activities occur during the general avian breeding season (February-August) within areas known to have historically supported breeding protected migratory bird species, a pre-construction nesting bird survey would be conducted (within 7 days of proposed activity) to identify active nests. If active nests are identified, an avoidance buffer (distance per regulatory guidance and/or discretion of monitoring biologist) would be established and the nest would be monitored until the juvenile birds have fledged.

Sensitive Habitats. There is no sensitive habitat on Fort MacArthur; therefore, no significant impacts to sensitive habitat as a result of implementing Alternative 1 are anticipated.

Civil Engineering Consolidation

Potential impacts to vegetation, wildlife, threatened and endangered species, and sensitive habitats would be the same as those described for gate improvement activities. No significant impacts are anticipated.

Mitigation Measures. No mitigation measures would be required.

4.4.4.2 Alternative 2

Gate Improvement

Potential impacts to vegetation, wildlife, threatened and endangered species, and sensitive habitats would be the same as those described under Alternative 1. No significant impacts are anticipated.

Civil Engineering Consolidation

No other action alternatives were identified for consolidating CE functions. The northeast corner of Fort MacArthur is the only industrial use area on the installation and is the only suitable location for CE operations.

Mitigation Measures. No mitigation measures would be required.

4.4.4.3 No-Action Alternative

Under the No-Action Alternative, the construction activities associated with 28th Street Gate improvements and consolidation of civil engineering functions would not occur. The 28th Street Gate area and buildings housing civil engineering functions would remain in their current locations and configurations. No significant impacts to biological resources are anticipated.

Mitigation Measures. No mitigation measures would be required.

4.4.5 Cultural Resources

The potential effects of the Proposed Action and alternatives on cultural resources (e.g., prehistoric and historic archeological resources, historic buildings and structures, traditional cultural resources) within the ROI are presented in this section.

Potential impacts to cultural resources were assessed by (1) identifying types of development activities that could directly or indirectly affect cultural resources, and (2) identifying the nature and significance of cultural resources on Fort MacArthur.

Pursuant to the NHPA, as directed by the Section 106 review process, consultation has been initiated and is ongoing with the California SHPO. No consultation is required for the design phase of this project, because it cannot and will not produce any adverse effects to historic properties. For the build phase, no adverse effects to historic properties have been identified at this time due to the nature of the design-build contract. At the end of the design phase, when that information becomes available, it will be determined if the undertaking will cause any adverse effects to historic properties. Any such effects will be resolved through a Memorandum of Agreement (MOA) with the SHPO at that time.

Historic properties, under 36 CFR Part 800 are defined as any prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion in, the National Register. For the purposes of these regulations, the term also includes artifacts, records, and remains that are related to, and located within, such properties. The term "eligible for inclusion in the National Register" includes properties formally determined as such by the Secretary of the Interior and all other properties that meet National Register listing criteria. Therefore, sites that meet the criteria, but are not yet evaluated, may be considered potentially eligible to the National Register and, as such, are afforded the same regulatory consideration as nominated historic properties.

4.4.5.1 Alternative 1

Gate Improvement

Prehistoric and Historic Archaeological Resources. There are no known prehistoric or historic archaeological resources within the 28th Street Gate area, and there is little likelihood for them to occur. Because of the severe ground disturbance that occurred during construction of buildings and infrastructure, the potential for discovery of intact archaeological resources is considered very low. In the unlikely event that archaeological resources are encountered during construction activities, the construction contractor would suspend work in the immediate area, protect the site in place, and report the discovery to the Los Angeles AFB Cultural Resources Manager to determine if additional investigation is required. In the event further investigation is required, any data recovery would be performed in accordance with the Secretary of the Interior's Standards and Guidelines for Archaeological Documentation (48 FR 44734-37), and take into account the ACHP's publication, *Treatment of Archaeological Properties*. Subsequent actions would follow guidance provided in 36 CFR Part 800.11 and/or the Native American Graves Protection and Repatriation Act.

In the unlikely event that human remains – including human skeletal remains, cremations, and/or ceremonial or funerary objects – are found during ground-disturbing activities, work would cease in the immediate vicinity of the discovery. In accordance with the California Native American Historical, Cultural and Sacred Sites Act (California Public Resource Code, Section 5097.9), the county coroner would be notified. If the remains are determined to be Native American, the coroner would notify the Native American Heritage Commission, who would then notify those persons most likely to be descended from the encountered remains. In consultation with Native American communities or other groups and any involved regulatory agencies, appropriate arrangements would be made for the repatriation of the remains and any associated funerary items by groups with cultural or religious affinity claims to them. No significant impacts to prehistoric or historic archaeological resources are anticipated.

Historic Buildings and Structures. Three inventories of historic structures, completed in 1979, 1982, and 2001, were conducted at Fort MacArthur. As a result of the 1979 and 1982 inventories, the Fort

MacArthur 500 Varas Square National Register District and the American Trona Corporation Plant (Building 425) were listed on the National Register. After the 2001 survey, six additional buildings and two objects were recommended eligible for National Register listing as contributing elements to the 500 Varas Square National Register District. The boundary of the 500 Varas Square National Register District has been revised to include these additional resources.

The 28th Street Gate improvement project location is situated immediately south of the historic district, approximately 40 feet from Building 19 that is within the district boundary and considered a contributing element. The 28th Street Gate improvements have been planned and designed to occur outside of the historic district and would be landscaped in such a way as to retain the historic feeling, setting, and association of the area. The proposed gate improvements would be constructed within an area that currently consists of a closed two way access road and a vehicle/boat storage lot that are outside of the historic district. In addition, in order to protect historic buildings and landscaping from accidental damage during construction, monitoring would be conducted to assure that the historic buildings and landscape features would not be adversely affected. Based on the planning and location of the proposed gate improvements, no significant impacts to historic buildings and structures are anticipated.

Traditional Cultural Resources. Because it is the policy of the DoD not to consult with tribes that are not recognized by the United States Government, the Gabrielino-Tongva tribe (not a federally recognized tribe) was not contacted to determine if there were any concerns or issues regarding cultural resources within the boundaries of Fort MacArthur. Given the developed nature of Fort MacArthur (no archaeological sites have been identified on the installation); no traditional cultural resources, sacred areas, or traditional use areas have been identified at Fort MacArthur. No significant impacts are anticipated.

Civil Engineering Consolidation

Potential impacts to prehistoric and historic archaeological resources, historic buildings and structures, and traditional cultural resources would be similar to those described for gate improvement activities.

Prehistoric and Historic Archaeological Resources. There are no known prehistoric or historic archaeological resources within the proposed CE consolidation area (northeast corner of the installation), and there is little likelihood for them to occur. As discussed above, in the unlikely event that archaeological resources are encountered during demolition and construction activities, the construction contractor would suspend work in the immediate area, protect the site in place, and report the discovery to the Los Angeles AFB Cultural Resources Manager to determine if additional investigation is required. No significant impacts to prehistoric or historic archaeological resources are anticipated.

Historic Buildings and Structures. As a result of the 1979 and 1982 historic structure inventories, the Fort MacArthur 500 Varas Square National Register District and the American Trona Corporation Plant (Building 425) were listed on the National Register. After the 2001 survey, six additional buildings and two objects were recommended eligible for National Register listing as contributing elements to the 500 Varas Square National Register District. The boundary of the 500 Varas Square National Register District has been revised to include these additional resources.

The proposed CE consolidation area is situated within the northeast corner of the 500 Varas Square National Register District. The buildings proposed for demolition, although within the district, are not contributing elements to the district. The CE consolidation effort has been planned and designed to avoid contributing elements of the historic district and would be landscaped in such a way as to retain the historic feeling, setting, and association of the area. The proposed CE consolidation effort would occur within an area that currently consists of CE support structures. In addition, in order to protect historic buildings and landscaping from accidental damage during demolition and construction activities,

monitoring would be conducted to assure that the historic buildings and landscape features would not be adversely affected. Based on the planning and location of the proposed CE consolidation, no significant impacts to historic buildings and structures are anticipated.

Traditional Cultural Resources. Because it is the policy of the DoD not to consult with tribes that are not recognized by the United States Government, the Gabrielino-Tongva tribe (not a federally recognized tribe) was not contacted to determine if there were any concerns or issues regarding cultural resources within the boundaries of Fort MacArthur. Given the developed nature of Fort MacArthur (no archaeological sites have been identified on the installation); no traditional cultural resources, sacred areas, or traditional use areas have been identified at Fort MacArthur. No significant impacts are anticipated.

Mitigation Measures. No mitigation measures would be required.

4.4.5.2 Alternative 2

Gate Improvement

Potential impacts to prehistoric and historic archaeological resources, historic buildings and structures, and traditional cultural resources would be the same as those described under Alternative 1. No significant impacts are anticipated.

Civil Engineering Consolidation

No other action alternatives were identified for consolidating CE functions. The northeast corner of Fort MacArthur is the only industrial use area on the installation and is the only suitable location for CE operations.

Mitigation Measures. No mitigation measures would be required.

4.4.5.3 No-Action Alternative

Under the No-Action Alternative, the construction activities associated with 28th Street Gate improvements and consolidation of civil engineering functions would not occur. The 28th Street Gate area and buildings housing civil engineering functions would remain in their current locations and configurations. No significant impacts to cultural resources are anticipated.

Mitigation Measures. No mitigation measures would be required.

4.5 COMPATIBILITY OF THE PROPOSED ACTION WITH OBJECTIVES OF FEDERAL, STATE, REGIONAL, AND LOCAL LAND USE PLANS AND POLICIES

The Proposed Action and alternatives promote the Air Force's intention to cooperate with communities and other federal agencies, whenever possible, during development of federal property. The Proposed Action and alternatives would not adversely affect federal, state, regional, or local land use plans and policies and are compatible with adjacent land uses.

4.6 RELATIONSHIP BETWEEN SHORT-TERM USES OF THE ENVIRONMENT AND LONG-TERM PRODUCTIVITY

The Proposed Action and alternatives would not affect the long-term productivity of the environment because no significant environmental impacts are anticipated, provided best management practices identified in this EA are implemented.

4.7 IRREVERSIBLE AND IRRETRIEVABLE COMMITMENT OF RESOURCES

Irreversible and irretrievable resource commitment refers to the use of nonrenewable sources and the effects these resources would have on future generations. Irreversible effects would result primarily from the consumption or destruction of a resource that could not be reversed. Irretrievable resource commitments would involve a loss or gain in the value of an affected resource that could not be reversed. The Proposed Action and alternatives would result in an irreversible or irretrievable commitment of resources such as labor, fuel, and demolished materials. Implementation of the Proposed Action or alternatives would not result in any significant irreversible or irretrievable commitment of resources.

4.8 CUMULATIVE ENVIRONMENTAL CONSEQUENCES

Cumulative impacts result from “the incremental impact of actions when added to other past, present, and reasonably foreseeable future actions, regardless of what agency undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time” (Council on Environmental Quality, 1978).

The scope of the cumulative effects analysis involves both timeframe and geographic extent in which effects could be expected to occur, and a description of what resources could potentially be cumulatively affected. For the purposes of this analysis, the temporal span of the Proposed Action is 9 months. For most resources, the spatial area for consideration of cumulative effects is Fort MacArthur, though a larger area is considered for some resources (e.g., air quality). An effort was undertaken to identify other projects at Fort MacArthur and in areas surrounding the installation for evaluation in the context of the cumulative effects analysis.

Based on a review of regional and on-installation developments, no off-installation development projects were identified in the vicinity of Fort MacArthur that could contribute to cumulative impacts. Several repair projects have been identified for Fort MacArthur that are programmed to occur between 2016 and 2018. The projects primarily involve the repair of utilities, lighting, irrigation, drainage, heating and air condition systems; pavement, fencing, and tree removal/ planting throughout the installation. Because these repair projects are small in scale and would not occur in the vicinity of the 28th Street Gate or CE compound, they are not anticipated to contribute to cumulative impacts when combined with the Proposed Action. One project, Repair Northeast Slope Stabilization, would involve slope stabilization possibly in the vicinity (east) of the CE compound. However, this project is programmed to occur in 2018, well after the consolidated CE facilities are constructed; therefore, construction activities associated with this project are not anticipated to result in cumulative impacts when combined with the Proposed Action.

Demolition and construction activities would generally be expected to result in some increased noise, increased air emissions, potential for erosion, generation of small amounts of hazardous materials and wastes, and generation of construction and demolition waste. Demolition and construction activities generally would be expected to result in short-term job creation and materials procurement. These types of short-term, construction-related effects would occur regardless of project location and are not constraints to development.

Hazardous Materials and Wastes Management. The Proposed Action in combination with the repair and construction projects could result in a short-term increase in hazardous materials use as necessary to support demolition and construction related activities. Standard hazardous materials handling and safety practices would be employed during demolition and construction activities. There could be a risk of exposure to ACM or LBP during demolition activities. The appropriate identification, handling, removal, and disposal of ACM and LBP would occur in accordance with Los Angeles AFB management plans and Air Force, federal, state, and local laws and regulations. Although hazardous materials would be used and hazardous waste would likely be generated temporarily during demolition and construction activities, standard procedures would be used in their handling and disposal; therefore, no significant cumulative impacts would be anticipated.

Geology and Soils. The activities that would occur under the Proposed Action are unlikely to lead to significant erosion potential in the project areas, and no significant impacts to geologic or soil resources are expected. Efforts associated with the repair and construction projects would have some potential for impacts. Repair and construction activities could result in soil disturbance and short-term exposure of the soil to wind or water erosion. However, the affected areas would be relatively level, the lack of precipitation in the region would result in the water erosion potential to be low, and standard construction practices to minimize wind erosion (e.g., watering disturbed soil) would be implemented; therefore, no significant cumulative impacts would be anticipated.

Air Quality. Efforts associated with the repair and construction projects would not be expected to have any significant cumulative air quality impacts in conjunction with the Proposed Action. Emissions from repair and construction activities would be minimized by controlling fugitive dust; these emissions would only have temporary effects and would not result in significant impacts. After construction activities are completed, operations at these facilities would not result in significant air quality emissions. Consequently, the no significant cumulative impacts on air quality in the region would be anticipated.

Noise. Construction and demolition activities occurring at the same time and in the same vicinity could have short-term cumulative effects on the noise environment. The repair and construction projects may occur during the same time as CE consolidation efforts; as a result, construction activities could result in short-term, localized increased noise levels. Repair and construction activities would only occur during normal business hours (7:00 am to 5:00 pm) during the week and would not occur during the weekends. Construction noise would be intermittent and short term, and would primarily occur at the construction site. Once construction activities are completed, proposed activities (housing management) are not expected to generate a substantial amount of noise. Therefore, no significant cumulative impacts are anticipated.

Biological Resources. Natural vegetative communities on Fort MacArthur no longer exist due to past development of the installation. Considered cumulatively, planned demolition and construction activities have the potential for short-term effects on biological resources. The repair and construction projects would occur in the improved areas of Fort MacArthur, which would primarily affect non-native communities that are modified, landscaped, and mowed regularly. The removal of modified and landscaped areas would not be considered a cumulative effect. Repair and construction activities occurring at the same time and in the same vicinity could have short-term cumulative effects on wildlife as a result of noise. Construction-related noise would only last during those activities and is not anticipated to be cumulatively significant. There is no suitable habitat for any of the threatened or endangered species identified as having the potential to occur on or adjacent to Fort MacArthur and no sensitive habitats (e.g., wetlands) are present on the installation. No significant cumulative impacts to biological resources would be anticipated.

Cultural Resources. The Los Angeles AFB ICRMP identifies processes for the management of cultural resources at Fort MacArthur, as it is the Air Force's responsibility to consider the effects of its actions in order to avoid, minimize, or mitigate any impact to eligible cultural resources. Other plans developed for

management of cultural resources at Fort MacArthur include management strategies for the historic buildings. The buildings proposed for demolition, although within the 500 Varas Square National Register District, are not contributing elements to the District. Any repair and/or construction projects at Fort MacArthur are reviewed early in the planning process by environmental staff, and standard procedures are applied to ensure that potential impacts to prehistoric and historic resources are avoided or minimized. Therefore, implementation of the repair and construction projects in combination with the Proposed Action is not anticipated to have significant cumulative impacts to cultural resources.

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5.0 CONSULTATION AND COORDINATION

The federal, state, and DoD agencies/organizations/individuals contacted during the preparation of this EA are listed below:

Federal

U.S. EPA, Region 9
U.S. Fish and Wildlife Service

State

California Department of Fish and Wildlife
California State Historic Preservation Officer

Department of Defense

HQ AFCEC/CZN
61 CELS/CEIE

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6.0 LIST OF PREPARERS AND CONTRIBUTORS

Marc Hintzman, RPA, Cultural Resources Specialist

B.S., 1995, Anthropology, University of California, Riverside

M.S., 2000, Anthropology, University of California, Riverside

Years of Experience: 20

David Jury, REPA, Senior Environmental Professional, AECOM

B.A., 1988, Geography, California State University, Long Beach

Years of Experience: 27

Jessica Law, PG, Geologist, AECOM

B.S., 2004, Geology, California State University San Bernardino

Years of Experience: 11

Matthew Mallé, Project Biologist, AECOM

B.S., 1999, Environmental Biology, Humboldt State University, Arcata

Years of Experience: 15

Thomas Sullivan, Staff Biologist, AECOM

B.S., 2013, Biology, University of California, Riverside

Years of Experience: 2

Fang Yang, Senior Air and Noise Engineer, AECOM

B.S., 1982, Physics, Fudan University

M.S., 1988, Atmospheric Science, New York University

Years of Experience: 27

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8.0 DISTRIBUTION LIST

Federal Agencies

U.S. Environmental Protection Agency, Region 9
Director, Office of Federal Activities
75 Hawthorne Street
San Francisco, CA 94105

U.S. Fish and Wildlife Service
Field Supervisor
Carlsbad Fish and Wildlife Office
2177 Salk Avenue, Suite 250
Carlsbad, CA 92008

State Agencies

California State Historic Preservation Officer
1725 23rd Street, Suite 100
Sacramento, CA 95816

State of California Clearinghouse
Governor's Office
1400 Tenth Street, Room 121
Sacramento, CA 95814

California Department of Fish and Wildlife
South Coast Region
3883 Ruffin Road
San Diego, CA 92123

Local Agencies

City of San Pedro
638 S. Beacon Street
San Pedro, CA 90731

Department of Defense

Department of the Air Force
HQ AFCEC/CZN
3515 S. General McMullen, Building 171
San Antonio, TX 78236-2018

Department of the Air Force
61 CES/CEIE
483 N. Aviation Boulevard
El Segundo, CA 90245

Libraries

San Pedro Regional Branch Library
931 South Gaffey Street
San Pedro, CA 90731

APPENDIX A
CONSULTATION LETTERS



DEPARTMENT OF THE AIR FORCE
61ST AIR BASE GROUP
AIR FORCE SPACE COMMAND
LOS ANGELES AIR FORCE BASE, CALIFORNIA

61st Civil Engineer & Logistics Squadron
483 N. Aviation Boulevard
El Segundo, CA 90245

APR 14 2016

California Department of Fish and Wildlife
South Coast Region
3883 Ruffin Road
San Diego, CA 92123

Dear Sir or Madame

The U.S. Department of the Air Force is in the process of preparing an Environmental Assessment (EA) that evaluates the potential environmental impacts associated with improving a vehicle access gate and consolidating civil engineering functions at Fort MacArthur. The EA will be prepared in accordance with the National Environmental Policy Act (NEPA) of 1969, as amended (42 United States Code [U.S.C.] 4321, et seq.), the Council on Environmental Quality (CEQ) regulations for implementing the procedural provisions of NEPA (40 Code of Federal Regulations [CFR] Parts 1500-1508), and Air Force policy and procedures (32 CFR Part 989).

The Proposed Action involves improving vehicle access at the Fort MacArthur 28th Street Gate along Pacific Avenue. The vehicle access gate does not comply with anti-terrorism standards and lacks inspection areas, traffic calming, and denial systems. Additionally, the existing civil engineering compound will be demolished and consolidated into a newly constructed compound to improve efficiencies. Attachment 1 is map illustrating the location of the proposed 28th Street Gate improvement and civil engineering consolidation projects.

The Air Force invites government agency representatives and private citizens to participate in the environmental process and requests your input regarding any information you feel would assist us in this process. The environmental issues analyzed in the EA will be used in the decision-making process by the Air Force for determining appropriate actions to be taken during construction activities. Input is requested within 30 days of receipt of this letter to ensure that the Air Force has time to address any comments from interested parties.

Written comments should be addressed to Ms. Elizabeth Farm, 61 CES/CEIE, 483 N. Aviation Boulevard, El Segundo, CA 90245, or e-mail to elizabeth.farm.ctr@us.af.mil. Ms. Farm can be reached at (310) 653-5496 if you have any questions or concerns pertaining to this correspondence.

Sincerely

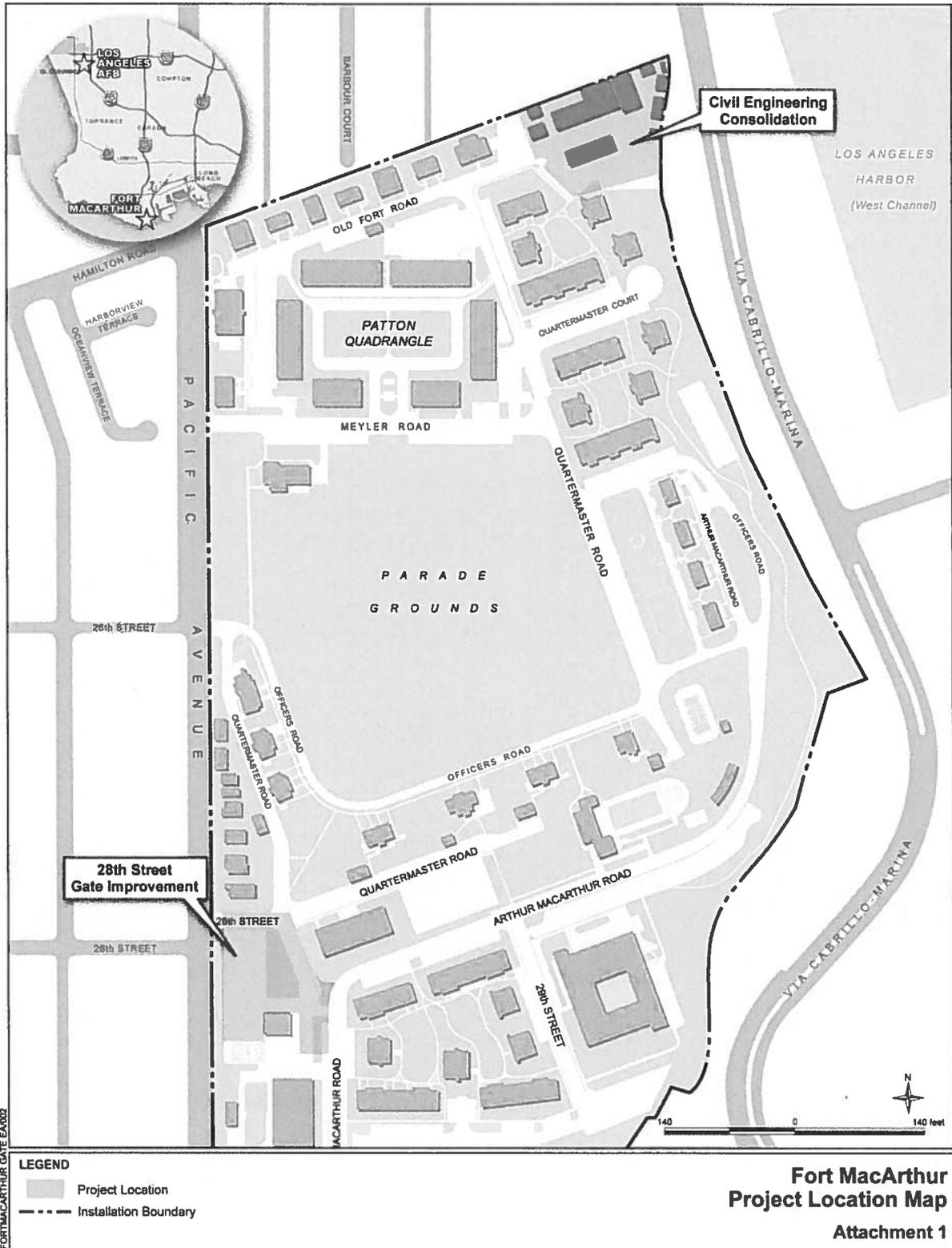
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TODD T. INOUE, Lt Col, USAF
Commander
61st Civil Engineer and Logistics Squadron

Attachment:

1. Project Location Map





DEPARTMENT OF THE AIR FORCE
61ST AIR BASE GROUP
AIR FORCE SPACE COMMAND
LOS ANGELES AIR FORCE BASE, CALIFORNIA

61st Civil Engineer & Logistics Squadron
483 N. Aviation Boulevard
El Segundo, CA 90245

APR 14 2016

City of Los Angeles Planning Commission
200 North Spring Street
Los Angeles, CA 90012-2601

Dear Sir or Madame

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Sincerely

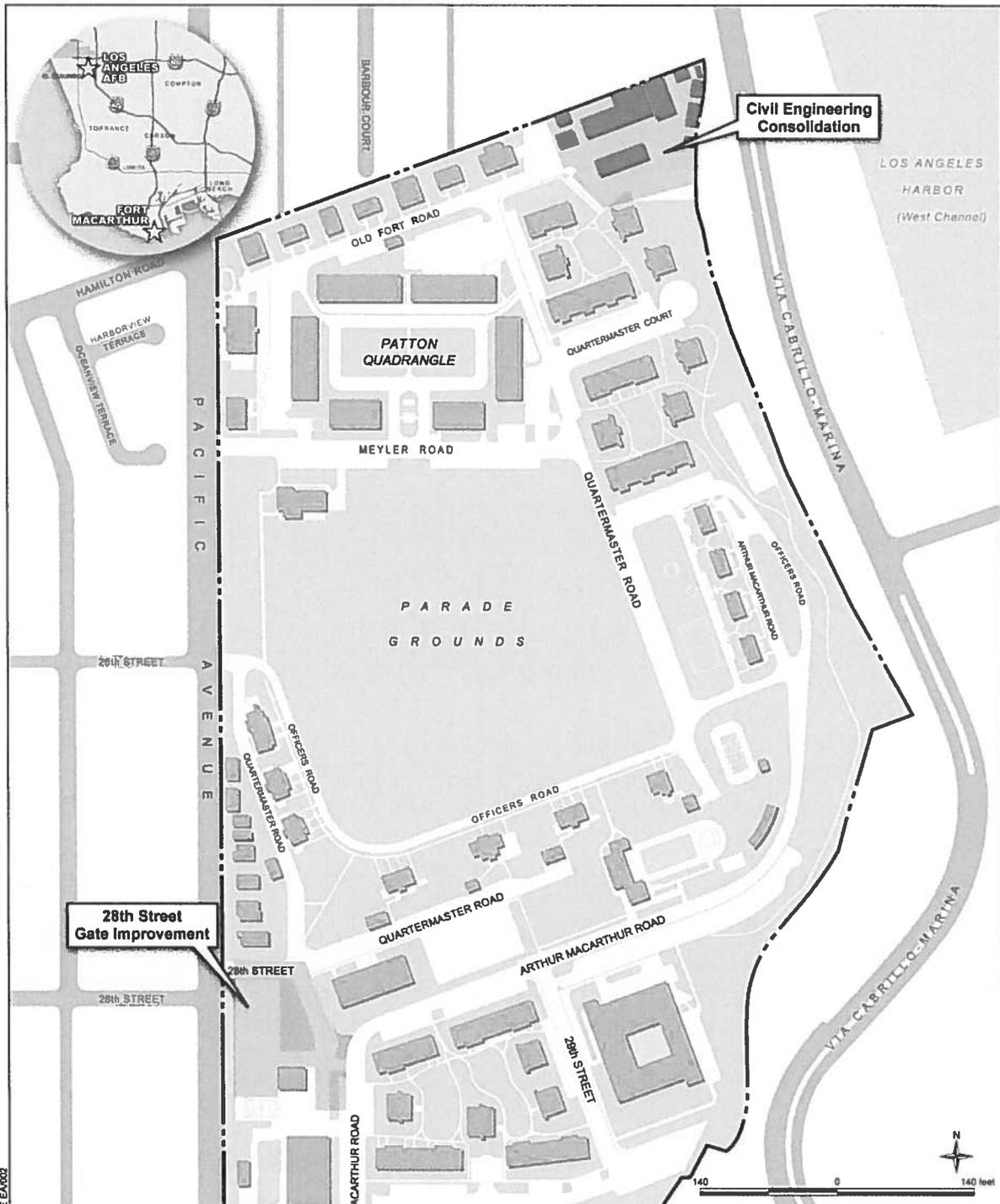
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TODD T. INOUYE, Lt Col, USAF
Commander
61st Civil Engineer and Logistics Squadron

Attachments:

1. Project Location Map



FORTMACARTHUR GATE EA0002

LEGEND
■ Project Location
- - - Installation Boundary

**Fort MacArthur
Project Location Map
Attachment 1**



DEPARTMENT OF THE AIR FORCE
61ST AIR BASE GROUP
AIR FORCE SPACE COMMAND
LOS ANGELES AIR FORCE BASE, CALIFORNIA

61st Civil Engineer & Logistics Squadron
483 N. Aviation Boulevard
El Segundo, CA 90245

APR 14 2016

City of Los Angeles, San Pedro Office
San Pedro Municipal Building
638 S. Beacon Street
San Pedro, CA 90731

Dear Sir or Madame

The U.S. Department of the Air Force is in the process of preparing an Environmental Assessment (EA) that evaluates the potential environmental impacts associated with improving a vehicle access gate and consolidating civil engineering functions at Fort MacArthur. The EA will be prepared in accordance with the National Environmental Policy Act (NEPA) of 1969, as amended (42 United States Code [U.S.C.] 4321, et seq.), the Council on Environmental Quality (CEQ) regulations for implementing the procedural provisions of NEPA (40 Code of Federal Regulations [CFR] Parts 1500-1508), and Air Force policy and procedures (32 CFR Part 989).

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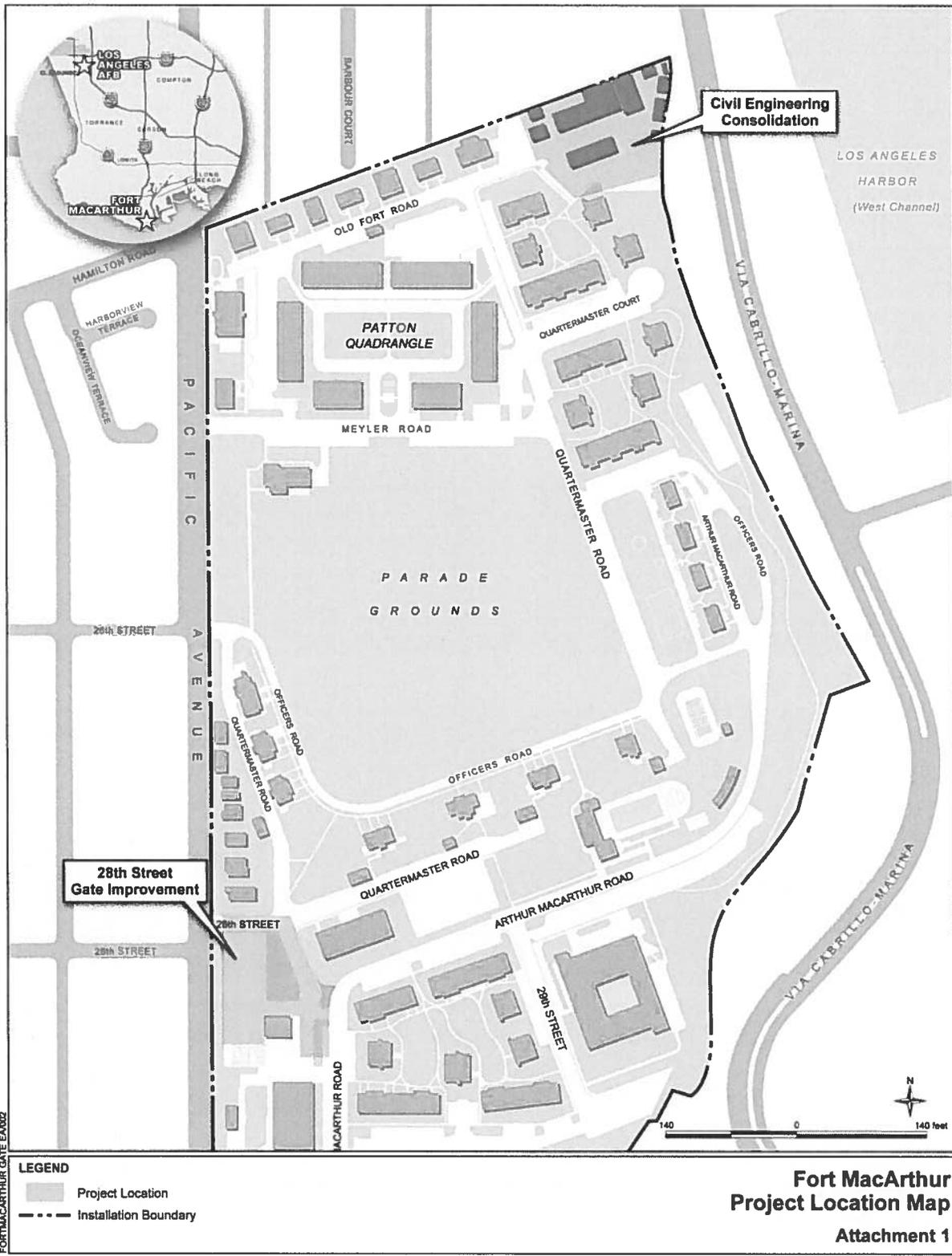
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TODD T. INOUE, Lt Col, USAF
Commander
61st Civil Engineer and Logistics Squadron

Attachments:

1. Project Location Map



FORTMACARTHUR GATE E4002



DEPARTMENT OF THE AIR FORCE
61ST AIR BASE GROUP
AIR FORCE SPACE COMMAND
LOS ANGELES AIR FORCE BASE, CALIFORNIA

61st Civil Engineer & Logistics Squadron
483 N. Aviation Boulevard
El Segundo, CA 90245

APR 14 2016

Port of Los Angeles
Pacific Place
222 West Sixth Street, 11th Floor
San Pedro, CA 90731

Dear Sir or Madame

The U.S. Department of the Air Force is in the process of preparing an Environmental Assessment (EA) that evaluates the potential environmental impacts associated with improving a vehicle access gate and consolidating civil engineering functions at Fort MacArthur. The EA will be prepared in accordance with the National Environmental Policy Act (NEPA) of 1969, as amended (42 United States Code [U.S.C.] 4321, et seq.), the Council on Environmental Quality (CEQ) regulations for implementing the procedural provisions of NEPA (40 Code of Federal Regulations [CFR] Parts 1500-1508), and Air Force policy and procedures (32 CFR Part 989).

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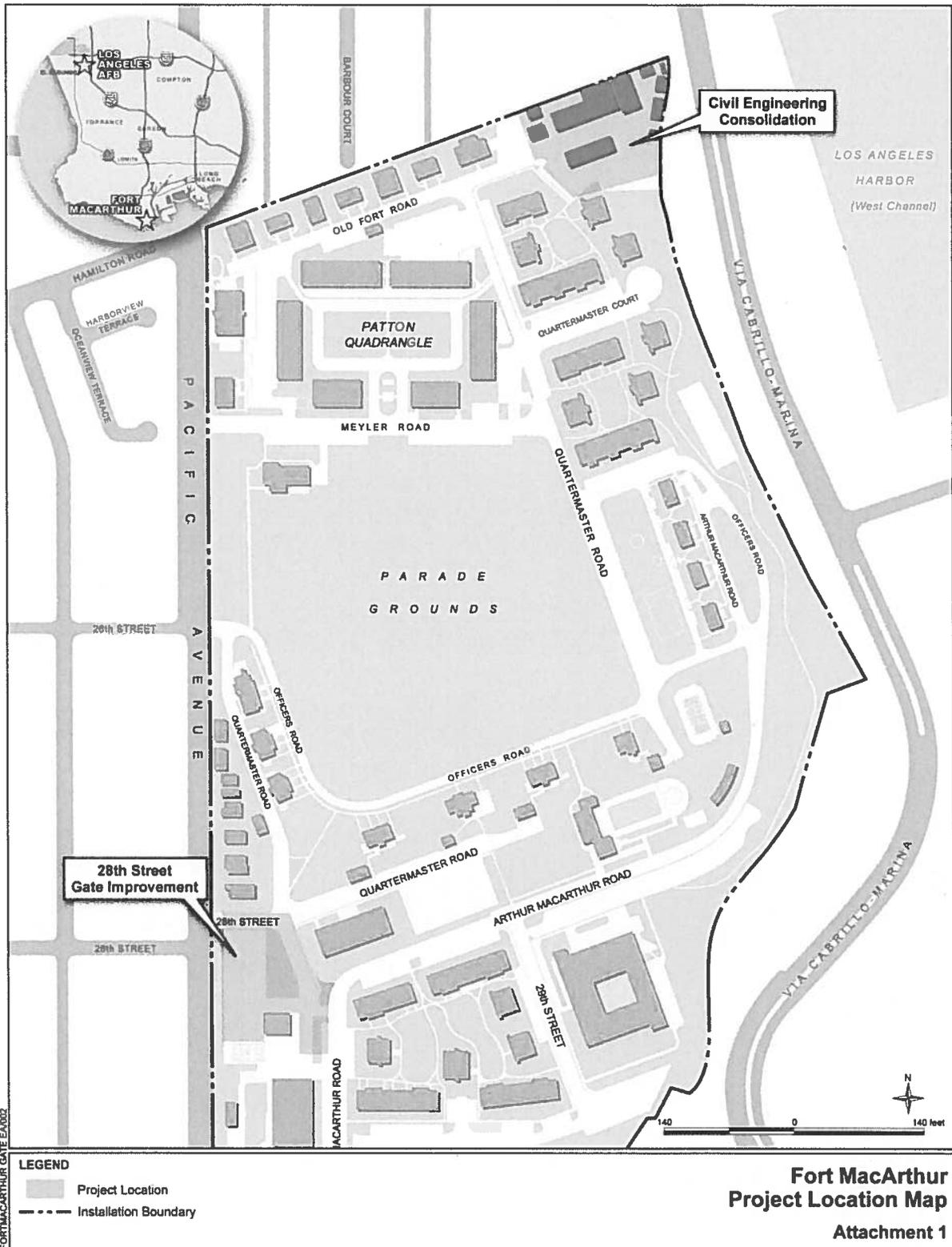
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TODD T. INOUYE, Lt Col, USAF
Commander
61st Civil Engineer and Logistics Squadron

Attachments:

1. Project Location Map



FORTMACARTHUR.GATE.EA.002

**Fort MacArthur
Project Location Map
Attachment 1**



DEPARTMENT OF THE AIR FORCE
61ST AIR BASE GROUP
AIR FORCE SPACE COMMAND
LOS ANGELES AIR FORCE BASE, CALIFORNIA

61st Civil Engineer & Logistics Squadron
483 N. Aviation Boulevard
El Segundo, CA 90245

APR 14 2016

Regional Water Quality Control Board
Los Angeles Region, Surface Water Division
320 W. Fourth Street, Suite 200
Los Angeles, CA 90013

Dear Sir or Madame

The U.S. Department of the Air Force is in the process of preparing an Environmental Assessment (EA) that evaluates the potential environmental impacts associated with improving a vehicle access gate and consolidating civil engineering functions at Fort MacArthur. The EA will be prepared in accordance with the National Environmental Policy Act (NEPA) of 1969, as amended (42 United States Code [U.S.C.] 4321, et seq.), the Council on Environmental Quality (CEQ) regulations for implementing the procedural provisions of NEPA (40 Code of Federal Regulations [CFR] Parts 1500-1508), and Air Force policy and procedures (32 CFR Part 989).

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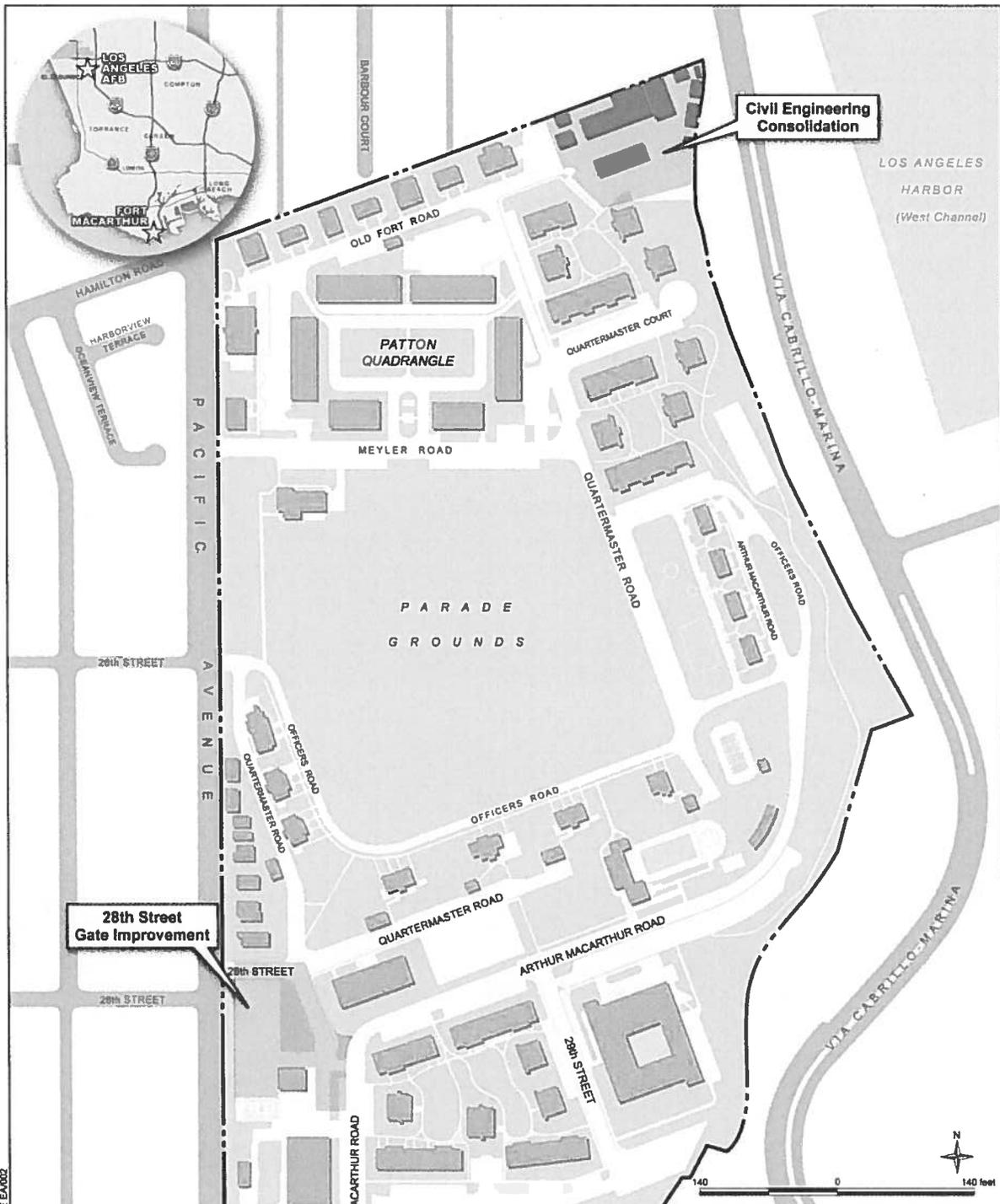
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TODD T. INOUE, Lt Col, USAF
Commander
61st Civil Engineer and Logistics Squadron

Attachments:

1. Project Location Map



FORTMACARTHUR GATE E4002

LEGEND

- Project Location
- Installation Boundary

**Fort MacArthur
Project Location Map
Attachment 1**



DEPARTMENT OF THE AIR FORCE

61ST AIR BASE GROUP
AIR FORCE SPACE COMMAND
LOS ANGELES AIR FORCE BASE, CALIFORNIA

Lt Col Todd T. Inouye
Commander
61st Civil Engineering and Logistics Squadron
483 N. Aviation Boulevard
El Segundo, CA 90245

APR 14 2016

G. Mendel Stewart
Field Supervisor
U.S. Fish and Wildlife Service
Carlsbad Fish and Wildlife Office
2177 Salk Avenue, Suite 250
Carlsbad, California 92008

SUBJECT: Environmental Assessment for Gate Improvement and Civil Engineering Consolidation
at Fort MacArthur, California

References:

- (a) Endangered Species Act (ESA) of 1973, Section 7(c)(1)
- (b) National Environmental Policy Act (NEPA) of 1969, as amended

Dear Mr. Stewart:

The U.S. Department of the Air Force is in the process of preparing an Environmental Assessment (EA) that evaluates the potential environmental impacts associated with implementing two proposed projects at Fort MacArthur associated with Los Angeles Air Force Base (LAAFB), California. The first project involves vehicle access improvements at the 28th Street Gate; the second project involves demolishing the existing and constructing a new Civil Engineering (CE) compound. The purpose of this letter is to initiate consultation early in the EA planning process regarding any potential adverse effects the Proposed Action might have on biological resources.

PURPOSE AND NEED FOR ACTION

Currently, the existing vehicle access gates at Fort MacArthur do not comply with anti-terrorism standards and lack inspection areas, traffic calming, and denial systems. Proposed 28th Street Gate improvements would be designed to meet current Department of Defense (DOD) anti-terrorism standards consistent with Unified Facilities Criteria (UFC); improve commercial vehicle traffic; provide additional traffic calming; and provide a design that reasonably supports the ultimate traffic demand at Fort MacArthur without impairing city street operations.

Fort MacArthur requires a new and consolidated facilities to house all facets of civil engineering on the installation. Current civil engineering functions are split between several facilities (Buildings 64, 68, 72, 74, 75, 78, and multiple storage sheds). The existing facilities are approaching the end of their life cycle and are not energy or space utilization efficient. The split function limits operational efficiency. The proposed consolidation of civil engineering activities within a single compound is intended to increase mission efficiencies as well as implement sustainable design concepts that emphasize state-of-the-art strategies for efficient water and energy use, and improved indoor environmental quality.

PROPOSED ACTION

The Proposed Action involves implementing proposed gate improvements at the 28th Street Gate to meet current DOD anti-terrorism standards consistent with UFC 4-010-01, *DOD Minimum Anti-terrorism Standards for Buildings*. The Proposed Action also involves construction of a compound to house all facets of civil engineering on the installation, which are currently split between several facilities. A map depicting the locations of these projects on Fort MacArthur is provided in Attachment 1.

THREATENED AND ENDANGERED SPECIES

Table 1 presents federal and state threatened and endangered species listed by the U.S. Fish and Wildlife Service (USFWS) and the California Department of Fish and Wildlife (CDFW) as having the potential to occur on Fort MacArthur. Table 1 was generated using the USFWS website's Information, Planning, and Conservation (IPAC) System and the CDFW California Natural Diversity Database (CNDDDB) websites.

Table 1. Federal and State Threatened and Endangered Species Potentially within Fort MacArthur

Common Name	Scientific Name	Federal Status	State Status
Plants			
Salt marsh bird's-beak	<i>Chloropyron maritimum ssp. maritimum</i>	Endangered	Endangered
Lyon's pentachaeta	<i>Pentachaeta lyonii</i>	Endangered	Endangered
California seablite	<i>Suaeda californica</i>	Endangered	--
Insects			
Palos Verdes Blue butterfly	<i>Glaucopsyche lygdamus palosverdesensis</i>	Endangered	--
Birds			
Western snowy plover	<i>Charadrius nivosus ssp. nivosus</i>	Threatened	--
Bald eagle	<i>Haliaeetus leucocephalus</i>	Delisted	Endangered
California brown pelican	<i>Pelecanus occidentalis californicus</i>	Delisted	Delisted
Short-tailed albatross	<i>Phoebastria albatrus</i>	Endangered	--
Coastal California gnatcatcher	<i>Polioptila californica californica</i>	Threatened	--
Bank swallow	<i>Riparia riparia</i>	--	Threatened
California Least tern	<i>Sterna antillarum browni</i>	Endangered	Endangered
Mammals			
Pacific pocket mouse	<i>Perognathus longimembris pacificus</i>	Endangered	--

Notes:

- Delisted = Any species that was previously listed as Endangered or Threatened, but is no longer listed on the Federal Endangered and Threatened species list.
- Endangered = Any species that is in danger of extinction throughout all or a significant portion of its range.
- Threatened = Any species that is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range.

None of the species in Table 1 are likely to occur within Fort MacArthur due to the lack of suitable habitat for these species.

Other federally protected species include birds covered by the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act. Bird species listed by the USFWS IPAC System as having the potential to winter on Fort MacArthur, if suitable habitat is present, include: tricolored blackbird (*Agelaius tricolor*), Red Knot (*Calidris canutus ssp. roselaari*), Mountain plover (*Charadrius montanus*), Peregrine Falcon (*Falco peregrinus*), bald eagle (*Haliaeetus leucocephalus*), Loggerhead Shrike (*Lanius ludovicianus*), Short-billed Dowitcher (*Limnodromus griseus*), Marbled Godwit (*Limosa fedoa*), Lewis's Woodpecker (*Melanerpes lewis*), Long-Billed curlew (*Numenius americanus*), Whimbrel (*N. phaeopus*), Fox Sparrow (*Passerella iliaca*), Xantus' murrelet (*Synthliboramphus hypoleucus*), and Lesser Yellowlegs (*Tringa flavipes*). Bird species listed by the USFWS IPAC as having the potential to breed on Fort MacArthur, if suitable habitat is present, include: Costa's Hummingbird (*Calypte costae*), Yellow warbler (*dendroica petechiassp. brewsteri*), Least Bittern (*Ixobrychus exilis*), and Ashy storm-petrel (*Oceanodroma homochroa*). Bird species listed by the USFWS IPAC as having the potential to be year-round residents on Fort MacArthur, if suitable habitat is present, include: Burrowing Owl (*Athene cunicularia*), Oak Titmouse (*Baeolophus inornatus*), Cactus Wren (*Campylorhynchus brunneicapillus*), Lawrence's Goldfinch (*Carduelis lawrencei*), Black Oystercatcher (*Haematopus bachmani*), Nuttall's woodpecker (*Picoides nuttallii*), Cassin's Auklet (*Ptychoramphus aleuticus*), Black Skimmer (*Rynchops niger*), Brewer's Sparrow (*Spizella breweri*), and Scripp's murrelet (*Synthliboramphus hypoleucus scrippsi*).

Impacts to these species are not anticipated as a result of the Proposed Action. However, if determined necessary, conservation measures focusing on avoidance and minimization of adverse impacts to breeding, wintering, and migratory birds and other federally protected species would be implemented during project activities.

If any of the above described species are identified within the vicinity of a project site during demolition or construction activities, the expected impact would include temporary displacement of individuals. Therefore, we believe a determination of "may effect, not likely to adversely affect" for listed species is appropriate for proposed demolition and construction activities. Due to the nature of the projects, environmental setting at Fort MacArthur, and species potentially present, the potential effects are discountable and are extremely unlikely to occur.

SENSITIVE HABITATS

According to the USFWS IPAC, there are no wetlands or federally designated critical habitat for any listed species on Fort MacArthur.

CONCLUSION

The Air Force is requesting initiation of Section 7 consultation pursuant to the ESA and is requesting your input into the preparation of this EA in the following areas:

- Confirmation that our threatened and endangered species list is current and complete.
- Input on our preliminary finding of "may effect, not likely to adversely affect" federally threatened or endangered species or sensitive habitat.

The Air Force appreciates your review of our project activities and assistance with our efforts to identify important biological resources early in the EA development. Upon completion, a copy of the draft EA will be forwarded to your office for review.

Please direct any questions to Ms. Elizabeth Farm, Los Angeles AFB Project Manager. Ms. Farm can be reached at (310) 653-5496 or via e-mail at elizabeth.farm.ctr@us.af.mil.

Sincerely,

INOUYE.TODD.T.

1179650017

TODD T. INOUYE, Lt Col, USAF

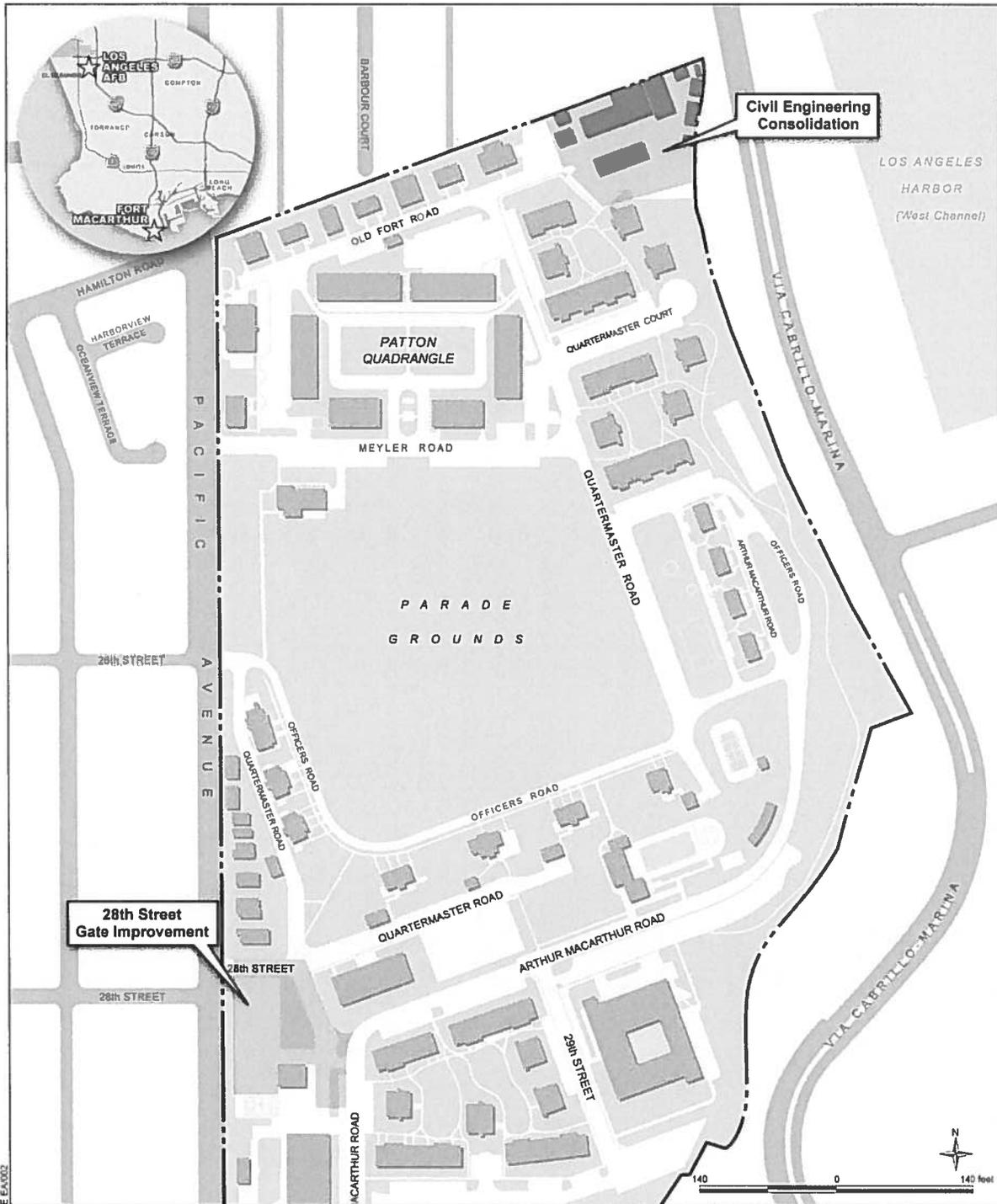
Commander

61st Civil Engineering and Logistics Squadron

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Attachment:

Atch.1 Fort MacArthur Project Location Map



FORTMACARTHUR GATE EX-002

LEGEND

- Project Location
- Installation Boundary

**Fort MacArthur
Project Location Map
Attachment 1**



DEPARTMENT OF THE AIR FORCE
HEADQUARTERS 61st AIR BASE GROUP (AFSPC)
LOS ANGELES AIR FORCE BASE, CALIFORNIA

61st Civil Engineer Squadron
483 N. Aviation Boulevard
El Segundo, CA 90245

21 June 2016

Ms. Julianne Polanco
California State Historic Preservation Officer
1725 23rd Street, Suite 100
Sacramento, CA 95816

SUBJECT: Los Angeles Air Force Base Environmental Assessment for proposed 28th Street Gate Improvements and Civil Engineering Facilities Consolidation

Dear Ms. Julianne Polanco:

The purpose of this letter is to inform you of an Environmental Assessment (EA) which is being prepared to analyze impacts associated with the two subject projects. Attached is a map indicating the Area of Potential Effect for each project, both are located at Fort MacArthur in San Pedro, California.

The 28th Street Gate project would require ground clearing and construction activities adjacent to the historic district, and within 100 feet of the nearest historic building. The Civil Engineering Facilities Consolidation project would include demolition and construction activities within the historic district and within 50 feet of a historic building. Neither project will directly impact any historic buildings.

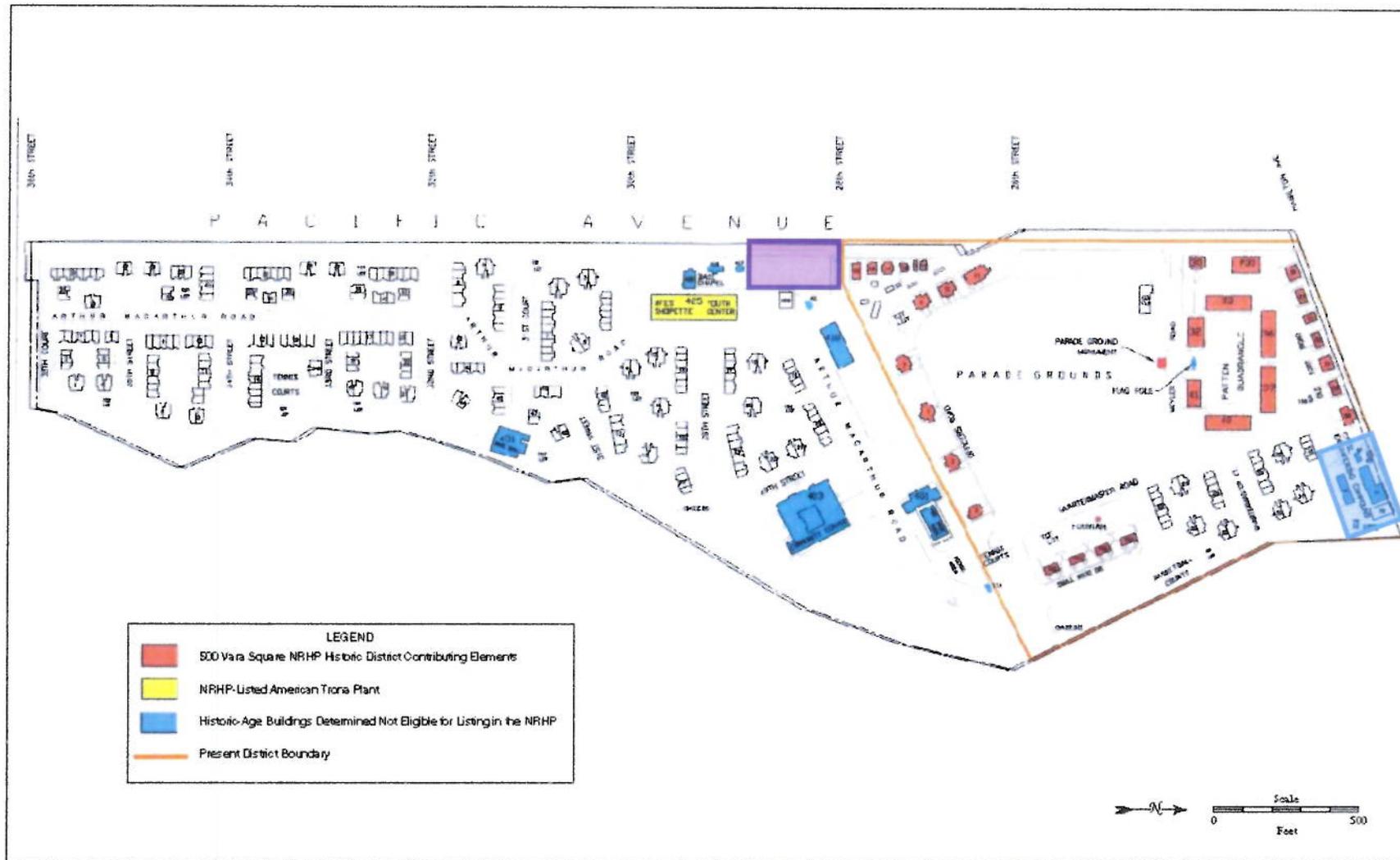
Should these projects be undertaken, Los Angeles Air Force Base will initiate Section 106 consultation in accordance with the National Historic Preservation Act upon receipt of the 100% design package. At this time the Air Force foresees a finding of no adverse effect to the historic district or facilities.

A copy of the draft EA will be forwarded to your office for review. Please direct any questions to Mr. Yong Park, Los Angeles AFB Cultural Resources Manager. He can be reached at (310) 653-5512 or via e-mail at yong.park.ctr@us.af.mil.

TODD T. INOUE, Lt Col, USAF
Commander
61st Civil Engineering and Logistics Squadron

Attachment: Project Location Map and Area of Potential Effect

Areas of Potential Effect – Fort MacArthur



APE – 28th Street Gate Project

APE - Civil Engineering Facilities Consolidation Project

