



60th Civil Engineer Squadron

Environmental Assessment for the Construction of the Army Recruiting Battalion Center Travis Air Force Base, California

**Prepared by
60th Civil Engineer Squadron/Environmental Flight**

January 2004

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**FINDING OF NO SIGNIFICANT IMPACT
FOR THE ARMY RECRUITING BATTALION CENTER
TRAVIS AIR FORCE BASE**

In accordance with the National Environmental Policy Act (40 CFR Parts 1500-1508) and its implementing regulations, the U.S. Department of the Air Force has conducted an Environmental Assessment (EA) to evaluate the potential environmental consequences of the proposed construction of the Army Recruiting Battalion Center at Travis Air Force Base (AFB). This Finding of No Significant Impact (FONSI) and attached EA provide an analysis of probable impacts associated with the Proposed Action and Alternatives 1 and 2.

Description of Proposed Action and Alternatives

The proposed project involves the construction of the Army Recruiting Battalion Center to provide necessary administrative space to support the operation as a regional headquarters for northern California and northwestern Nevada. The components of this Proposed Action are described in detail as follows:

- The Army Recruiting Battalion Center will include 12,152 square feet of administrative office space. The facility will have a battalion operations center, computer training classroom, local area network room, information systems staging area, information systems storage room, mail room, file room, conference room, legal library, graphics art room, lunch and break room, and general purpose storage room.
- Heating will be supplied by individual gas-fire units; air conditioning will be supplied by self-contained systems.
- Anti-terrorism/Air Force Protection measures will include laminated windows, security fencing, and lighting.
- A parking area will be constructed on the project site to provide a total of 36 privately owned vehicle (POV) parking spaces, 10 government-owned vehicle (GOV) parking spaces, and 5 visitor parking spaces.

Summary of Environmental Consequences

The following is a summary of the environmental consequences of the Proposed Action, Alternative 1, and Alternative 2.

- The potential for soil erosion during construction exists, but impacts will not be significant because the duration of ground disturbance during construction will be brief. In addition, Best Management Practices (BMPs) will be implemented to minimize the impacts associated with soil erosion and sedimentation, to keep these below significant levels.
- No impacts to native biological resources will occur.

- No impacts pertaining to hazardous wastes are anticipated. However, given past dumping onto Site 2, and as a BMP, representative soil samples should be collected prior to construction activities for Alternative 1 to confirm that the materials dumped did not contain a hazardous substance.
- Short-term impacts to localized air quality may occur from the generation of fugitive dust during construction activities. Bay Area Air Quality Management District enhanced fugitive dust control measures will be implemented to minimize the impacts and keep them below significant levels.
- Noise levels will increase slightly during construction but will be less than ambient levels, which are affected by nearby aircraft operations.
- The potential for impacts to cultural resources exist. A stone wall does run along the northwestern portion of the Proposed Action site (Site 1). This wall may have been constructed when the detention facility was in operation, and may therefore have cultural significance. However, a mitigation measure is presented in the EA that will reduce this impact to an insignificant level.
- Construction of the Proposed Action, Alternative 1, or Alternative 2 will not have any adverse impacts on minority or low-income populations living near Travis AFB.

Potential impacts for Alternative 1 will be the same as indicated above for the Proposed Action, except as previously indicated for cultural resources and hazardous materials. Impacts will not be significant.

No cumulative impacts were identified for the Proposed Action or the two alternatives.

Decision

Based on my review of the facts and analyses contained in the EA, I conclude that implementation of either the Proposed Action or Alternative Action 1 will not have a significant impact either by itself or when considering cumulative impacts. Accordingly, the requirements of NEPA, regulations promulgated by the Council on Environmental Quality, and 32 CFR 989 are fulfilled and environmental impact statement is not required.

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Date: 27 JUN 04

**ENVIRONMENTAL ASSESSMENT
FOR THE CONSTRUCTION OF THE
ARMY RECRUITING BATTALION CENTER
TRAVIS AIR FORCE BASE**

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ACRONYMS AND ABBREVIATIONS

AFB	Air Force Base
BAAQMD	Bay Area Air Quality Management District
B.S.	Bachelor of Science
bgs	below ground surface
BMP	best management practice
CAA	Clean Air Act
CAAQS	California Ambient Air Quality Standards
CCR	California Code of Regulations
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
CO	carbon monoxide
dB	decibels
DIC	Dibble-Los Osos Clay Loam
DoD	Department of Defense
EA	Environmental Assessment
EIAP	Environmental Impact Analysis Process
EIS	Environmental Impact Statement
EO	Executive Order
ERP	Environmental Restoration Program
FONSI	Finding of No Significant Impact
ft	foot
ft ³	cubic foot
g	gram
GOV	government-owned vehicle
H ₂ S	hydrogen sulfide
HQ AMC	Headquarters of the Army Materiel Command
HWMP	Hazardous Waste Management Plan
HVAC	Heating, Ventilation, and Air Conditioning
INRMP	Integrated Natural Resource Management Plan
lb	pound
µg/m ³	micrograms per cubic meter
mg/m ³	milligrams per cubic meter
mph	miles per hour
NA	not applicable

ACRONYMS AND ABBREVIATIONS (Continued)

NAAQS	National Ambient Air Quality Standards
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NO _x	nitrogen oxides
NRHP	National Register of Historic Places
O ₃	ozone
Pb	lead
PM _{2.5}	particulate matter less than 2.5 microns
PM ₁₀	particulate matter less than 10 microns
POV	privately owned vehicle
ppm	parts per million
RCRA	Resource Conservation and Recovery Act
ROG	reactive organic gas
SFBAAB	San Francisco Bay Area Air Basin
SO ₂	sulfur dioxide
SO ₄	sulfates
SO _x	sulfur oxides
USAF	United States Air Force
U.S.C.	United States Code
U.S. EPA	United States Environmental Protection Agency
USFWS	United States Fish and Wildlife Service
yd	yard
yd ³	cubic yard
yr	year

Executive Summary

This Environmental Assessment (EA) has been prepared to assist the decision-making process regarding the possible construction of an Army Recruiting Battalion Center at Travis Air Force Base (the Base), California. The EA has been prepared in compliance with the National Environmental Policy Act (NEPA) of 1969, the Council of Environmental Quality regulations [40 Code of Federal Regulations (CFR) 1500-1508], and U.S. Air Force Regulations 32 CFR 989, *The Environmental Impact Analysis Process*.

This EA analyzes the potential impacts of activities associated with implementing the Proposed Action or either of two alternatives. The Proposed Action involves the construction of the Army Recruiting Battalion Center at Site 1 and includes the following primary activities:

- Construction of an Army Recruiting Battalion Center that will include 12,152 square feet of administrative office space. The facility will have a battalion operations center, computer training classroom, local area network room, information systems staging area, information systems storage room, mailroom, file room, conference room, legal library, graphics art room, lunch and break room, and general purpose storage room.
- Construction of a parking area on the project site to provide a total of 36 privately owned vehicle (POV) parking spaces, 10 government-owned vehicle (GOV) parking spaces, and 5 visitor parking spaces.

Alternative 1 to the Proposed Action involves the same construction activities as the Proposed Action but will occur at an alternative site (Site 2) on the Base. In addition, traffic improvements will be made to the adjacent intersection of Airlift Drive and Vandenberg Drive.

Under Alternative 2 to the Proposed Action, the Army Recruiting Battalion Center will be moved from its current location in Rancho Cordova, when the lease for this location expires, to the John Moss Federal Building in Sacramento. No construction will occur on Travis AFB as part of this alternative.

Environmental components addressed in this EA include geology and soils, water resources, biological resources, hazardous waste management, air quality, noise, and cultural resources. The environmental consequences of the Proposed Action, Alternative 1, and Alternative 2 are summarized hereafter.

Geology and Soils. No significant impacts to regional geology or soils are expected from the implementation of the Proposed Action or Alternative 1.

Water Resources. No significant impacts to regional water resources are expected from the implementation of the Proposed Action or Alternative 1.

Biological Resources. No significant impacts to biological resources are expected from the implementation of the Proposed Action or Alternative 1. However, Site 1 does contain several

trees. Consultation is required with the Base's Natural Resources Manager before these trees are disturbed or removed.

Hazardous Waste Management. No significant impacts pertaining to hazardous waste management are expected from the implementation of the Proposed Action or Alternative 1. However, given past dumping onto Site 2, and as a Best Management Practice (BMP), representative soil samples should be collected prior to construction activities for Alternative 1 to confirm that the materials dumped did not contain a hazardous substance.

Air Quality. Short-term impacts to air quality may occur from the generation of fugitive dust during construction of the Proposed Action or Alternative 1. The Bay Area Air Quality Management District (BAAQMD) enhanced fugitive dust control measures will be implemented to minimize the impacts and keep them below significant levels.

Noise. Noise impacts will not be significant for either the Proposed Action or Alternative 1. Noise levels will increase slightly during construction but will be short in duration and are not anticipated to impact any sensitive receptors (e.g., hospitals). Furthermore, the temporary increases in noise levels will be less than current ambient levels, which are affected by nearby aircraft operations.

Cultural Resources. No significant impacts to cultural resources are expected from either the Proposed Action or the implementation of Alternative 1. Implementation of the Proposed Action may have a potentially significant impact because of the presence of a stone wall on the site. However, with implementation of the proposed mitigation measure (CR-1), this impact will be reduced to an insignificant level.

Environmental Justice. No minority or low-income populations reside permanently on Travis Air Force Base. The closest nonmilitary community is approximately 5 miles from the Proposed Action site and the Alternative 1 site. Based on the project review, no impacts will affect minority or low-income groups.

Cumulative Impacts. No significant cumulative impacts will occur from the Proposed Action or Alternative 1. As with this project, other projects have had or could have minor temporary impacts on the environment, as noted in their respective EAs. As noted in this EA, minor environmental impacts to air and water will occur during construction, but they will not be permanent, and BMPs will be used to minimize these impacts. Cumulative impacts to water resources will result from soil erosion occurring on Union Creek. BMPs are used at construction sites on the Base to prevent the runoff of sediment into the storm drain system, which drains into Union Creek. Fugitive dust from construction and demolition activities could temporarily increase particulate matter in the air. However, the use of required dust control BMPs will keep these impacts to an insignificant level. Therefore, the cumulative impacts of the Proposed Action are not significant.

1.0 Description of Proposed Action and Alternatives

This Environmental Assessment (EA) has been prepared in compliance with the National Environmental Policy Act (NEPA) of 1969 (42 U.S. Code [U.S.C.] 4321-4370d), Council on Environmental Quality regulations implementing the procedural provisions of NEPA (40 Code of Federal Regulations [CFR] 1500-1508), and 32 CFR 989 regulations implementing the Environmental Impact Analysis Process (EIAP). The purpose of this EA is to provide the U.S. Air Force (USAF) with sufficient information to determine whether a Finding of No Significant Impact (FONSI) is supported for the Proposed Action or whether an Environmental Impact Statement (EIS) must be prepared. The following sections provide background information on the Proposed Action, including the purpose of and need for the Proposed Action, the location of the Proposed Action, alternatives to the Proposed Action, relevant environmental issues and scope, and a summary of the organization of this EA.

1.1 Purpose of and Need for Proposed Action

The purpose of this project is to provide adequate, special purpose operation center space for the United States Army Sacramento Recruiting Battalion personnel at Travis Air Force Base (AFB), California. The operations center space is required for the support of 8 companies and 55 recruiting stations in northern California and northwestern Nevada. Travis AFB, which is centrally located, is the proposed location for recruitment activities for both the Sacramento region and the San Francisco Bay Area. The operations center is authorized for 43 military and civilian employees.

1.1.1 Purpose of Proposed Action

The purpose of the Proposed Action is to construct an Army Recruiting Battalion Center that will provide the necessary administrative space to support the operation as a regional headquarters for northern California and northwestern Nevada. The Proposed Action would occur at Travis AFB on Site 1 (Figure 1-1).

Project Components

The components of this Proposed Action are described in detail as follows:

- The Army Recruiting Battalion Center will include 12,152 square feet of administrative office space. The facility will have a battalion operations center, computer training classroom, local area network room, information systems staging area, information systems storage room, mailroom, file room, conference room, legal library, graphics art room, lunch and break room, and general purpose storage room.

- Heating will be supplied by individual gas-fire units; air conditioning will be supplied by self-contained systems.
- Anti-terrorism/ Air Force Protection measures will include laminated windows, security fencing, and lighting.
- A parking area will be constructed on the project site to provide a total of 36 privately owned vehicle (POV) parking spaces, 10 government-owned vehicle (GOV) parking spaces, and 5 visitor parking spaces.

In comparison, the existing facility in Rancho Cordova (2880 Sunrise Boulevard) has a total of 8,105 square feet of office space and 1,600 square feet of storage space for a total of 9,705 square feet.

1.1.2 Need for the Project

The Army Recruiting Battalion Center (Battalion) has occupied its current headquarters in Rancho Cordova since 1989. The current facility is poorly located because of its proximity to the extreme northern portion of the operation sector. This location resulted when the former Sacramento Battalion was combined with the former San Francisco Battalion. When the San Francisco Battalion was eliminated, the existing Sacramento Battalion became poorly positioned to command and control the newly formed combined Battalion Headquarters. In addition, the cost to occupy the facility has increased greatly over the years to the current annual cost of \$127,549 for administration, parking, and storage space. Furthermore, the General Services Administration has now indicated that it will not renew the lease for the current location when it expires in September 2005.

If this project is not programmed for completion by September 2005, a forced relocation to the John Moss Federal Building in downtown Sacramento may occur. This relocation would result in the following impacts:

- The operational capabilities of the battalion would be greatly hindered by traffic congestion, reducing accessibility for recruiters and applicants;
- Affordable housing would be lacking in the area (military housing will not be available in the area);
- The Headquarters would be poorly located relative to its service area;
- Vehicle parking costs for employees would be high;
- The annual lease cost would be higher;
- The amount of storage space would be limited; and
- Military facilities and services would be limited.

1.2 Location of Proposed Action

Travis AFB, which encompasses 5,422 acres, is east of the City of Fairfield and Suisun City in Solano County, approximately halfway between San Francisco and Sacramento. Interstate 80 is directly to the northwest, State Route 12 is to the south, and Highway 113 is to the east. The Base is surrounded primarily by agricultural or range land, though recent residential and commercial development in the cities of Vacaville and Fairfield, north and west of the Base, is encroaching toward the Base.

The project site (Site 1) is in the northeastern portion of the Base (Figure 1-2). The project site is bounded by Building 380 to the north, Airlift Drive to the east and south, and Challenger Lane to the west.

1.3 Alternatives to the Proposed Action

The Proposed Action site and the Alternative 1 site were selected for the project based on meeting the following criteria:

- The Travis AFB General Plan designates the site for office land use.
- Available land space exists for the proposed facility.
- No ongoing remediation is occurring on the site.

Alternatives 1 and 2 to the Proposed Action are described below.

1.3.1 Alternative 1: Construction of the Army Recruiting Battalion Center at Site 2

This alternative involves the construction of the Army Recruiting Battalion Center at the alternative project site (Site 2). The project components for the Proposed Action apply to Site 2, as well. In addition, traffic improvements to the adjacent intersection of Airlift Drive and Vandenberg Drive will be made. Site 2 is bounded by dormitories to the north; Buildings 374, 376, and 377 to the east; Vandenberg Drive to the south; and Building 350 and Airlift Drive to the west (Figure 1-3).

1.3.2 Alternative 2: No Action Alternative

Under this alternative, the Army Recruiting Battalion Center will move from its current location in Rancho Cordova, when the lease for this location expires in September 2005, to the John Moss Federal Building in Sacramento. No construction will occur on Travis AFB as part of this alternative.

1.3.3 Alternative Locations Considered but Rejected

No alternative locations other than Alternative 1 were considered.

1.4 Relevant Environmental Issues and Scope

Environmental resources analyzed for the Proposed Action and Alternatives 1 and 2 include geology and soils, water resources, biological resources, hazardous waste management, air quality, noise, cultural resources, and environmental justice.

1.5 Organization of This Environmental Assessment

This EA provides an analysis of the potential impacts of the Proposed Action and Alternatives 1 and 2. The potential environmental issues specified in Section 1.4 are the areas covered in the EA. The EA consists of the following chapters:

- Chapter 1.0: Description of Proposed Action and Alternatives
- Chapter 2.0: Affected Environment
- Chapter 3.0: Environmental Consequences
- Chapter 4.0: Persons and Agencies Consulted
- Chapter 5.0: List of Preparers
- Chapter 6.0: References

2.0 Affected Environment

This section discusses the environmental setting at the project site at Travis AFB. The information on the environment presented in this section serves as the foundation for identifying and analyzing the environmental impacts that will result from implementing the Proposed Action or the alternatives to the Proposed Action.

2.1 Geology and Soils

This section describes the regional geology for Travis AFB and the soils that are present at the project site.

2.1.1 Geology

Travis AFB is located along the western boundary of a sediment-filled basin known as the Central Valley Physiographic Province of California. The Coast Range Physiographic Province lies to the west of the Base and consists of folded and uplifted bedrock.

Bedrock units in the vicinity of the Base are composed of shale and sandstone. They include the Domengine Sandstone, Nortonville Shale, Markely Sandstone, and Neroly Sandstone units. A surface trace of the Vaca fault runs along the north-central perimeter of the Base and in a northwest-southeast direction. Tectonic processes that have occurred in the past folded and uplifted the bedrock to form the hills and mountains to the north, west, and south of Travis AFB. High topographic elevations on Travis AFB are composed of relatively erosion-resistant Markley Sandstone and Domengine Sandstone. Erosion of the less-resistant bedrock units formed lower elevation areas that were later filled with alluvium. The alluvium generally consists of sand, silt, clay, and minor gravel. It is divided into older and younger alluvium. At Travis AFB, the alluvium ranges in thickness from 0 feet to approximately 70 feet. To the west of Travis AFB, the alluvium thickness increases to more than 200 feet.

2.1.2 Soils

Soils at Site 1 and Site 2 are described in the *Integrated Natural Resources Management Plan* (INRMP) (Travis AFB, 2003) as Dibble-Los Osos Clay Loam (DIC). This soil complex consists of 60% Dibble clay loam, 30% Los Osos clay loam, and 10% Millsholm loam. These soils are 30 to 40 inches deep and occur on 2% to 9% slopes. Both the Dibble clay loam and the Los Osos clay loam are well-drained soils that are underlain by sandstone at a depth of approximately of 20 to 40 inches. Slopes for both sites are from 2% to 50%, and permeability is slow.

2.2 Water Resources

This section provides a description of the groundwater and surface water resources at Travis AFB. The body of water nearest to the project sites is Union Creek, which lies approximately 1 mile to the south.

2.2.1 Groundwater

The depth to unconfined groundwater aquifers in Travis AFB varies seasonally from approximately 12 feet below ground surface (bgs) to 30 feet bgs. Groundwater that exists in the bedrock units below Travis AFB is not usable because of its poor quality and limited quantity. The primary waterbearing sediments that are present at the Base and in its surrounding area are sand and gravel contained within the alluvium.

As is the case at a regional level, the local groundwater gradient beneath Travis AFB is to the south. The horizontal hydraulic gradients range from 0.003 to 0.005 vertical foot per horizontal foot (foot per foot) in the upper portion of the aquifer. In the deeper portion of the aquifer, the hydraulic gradient ranges from 0.003 to 0.10 foot per foot (United States Air Force [USAF], 1998).

Travis AFB performs groundwater monitoring studies through its Environmental Restoration Program (ERP). Past activities that have occurred at the Base have resulted in the release of hazardous materials into the Base's unconfined aquifer (USAF, 1998). The ERP addresses these releases, conducts investigations, and creates remediation strategies to clean up contamination. Although the ERP sites are located throughout various parts of the Base, Sites 1 and 2 are not located in an ERP site.

2.2.2 Surface Water

Travis AFB is located in the Union Creek watershed, which drains to Suisun Bay and then eventually into the San Francisco Bay. Union Creek originates 3 miles north of the Base and enters the Base from the northeast. Stormwater runoff on the Base flows into the creek via a network of underground pipes, culverts, and open drainage ditches. Union Creek is channeled into the Base stormwater drainage system approximately 600 feet after it enters Travis AFB from the northeast. The creek resurfaces south of the main runway and leaves the Base along the southwestern boundary. Once the creek leaves the Base, it flows for 1.6 miles before draining into Hill Slough, which is a seasonal wetland that floods on a semi-permanent basis.

No surface water is on or adjacent to either Site 1 or Site 2 with the exception of a small pond approximately 50 feet north of Site 2.

2.3 Biological Resources

This section provides a discussion of the ecological habitat and the presence of wildlife, including threatened and endangered species.

2.3.1 Habitat

Both current and past land-use activities have significantly altered the previous natural habitat of Travis AFB. Vegetation at Travis AFB is subject to intensive management under the INRMP. According to the Travis AFB INRMP (Travis AFB, 2003), the proposed sites are in the "Canton-

ment” Natural Resources Management Unit, and the ecological habitats of Sites 1 and 2 are described as “urban, landscaped vegetation.”

During habitat characterization, sensitive habitats (e.g., wetlands, vernal pools), if present, were also identified in the INRMP. No sensitive habitats were found in the areas proposed for the Army Recruiting Battalion Center.

To date, the only sensitive species confirmed on Travis AFB are the vernal pool fairy shrimp and the Contra Costa Goldfields. The INRMP does not identify any vernal pools, which would support these species, on either Site 1 or Site 2.

2.3.2 Wildlife and Threatened and Endangered Species

Wildlife discovered at Travis AFB during the basewide habitat characterization prepared in 1995 was typical of central California grasslands. The most abundant representative wildlife found in the urban landscape includes the following:

- Ground squirrel (*Spermophilus beecheyi*);
- Western harvest mouse (*Reithrodontomys megalotis*);
- Song sparrow (*Melospiza melodia*);
- Tri-colored blackbird (*Agelaius tricolor*);
- Kildeer (*Charadrius vociferous*); and
- House sparrow (*Passer domesticus*).

According to the INRMP (Travis AFB, 2003), the following species are listed as threatened or endangered by the state or federal government and have either occurred or have the potential to occur at Travis AFB:

- Contra Costa Goldfields (*Lasthenia conjugens*) – Federal Endangered
- Boggs Lake Hedge Hyssop (*Gratiola heterosepala*) – California Endangered
- Crampton’s Tuctoria (*Tuctoria mucronata*) – Federal Endangered and California Endangered
- Snowy Indian Clover (*Trifolium amoenum*) – Federal Endangered
- Colusa Grass (*Neostapfia colusana*) – Federal Threatened and California Endangered
- California Red-Legged Frog (*Rana aurora draytonii*) – Federal Threatened
- California Tiger Salamander (*Ambystoma californiense*) – Federal Candidate

- Giant Garter Snake (*Thamnophis gigas*) – Federal Threatened and California Threatened
- Swainson's Hawk (*Buteo swainsoni*) – California Threatened
- Delta Green Ground Beetle (*Elaphrus viridis*) – Federal Threatened
- Conservancy Fairy Shrimp (*Branchinecta conservatio*) – Federal Endangered
- Vernal Pool Fairy Shrimp (*Branchinecta lynchi*) – Federal Threatened
- Vernal Pool Tadpole Shrimp (*Lepidurus packardii*) – Federal Endangered
- Valley Elderberry Longhorn Beetle (*Desmocerus californicus dimorphus*) – Federal Threatened

According to the INRMP (Travis AFB, 2003), the following species are listed as California Species of Concern and have either occurred or have the potential to occur at Travis AFB:

- Short-eared Owl (*Asio flammeus*)
- Western Burrowing Owl (*Athene cunicularia hypugae*)
- Vaux's Swift (*Chaetura vauxi*)
- Long-billed Curlew (*Numenius americanus*)
- White-faced Ibis (*Plegadis chichi*)

One of the goals of the ecological habitat characterization conducted in 1994 and updated in 1999 and 2000 was to identify the presence of any threatened, endangered, or special status species. According to the INRMP prepared in 2003, no threatened or endangered species or candidate species were identified in the sites proposed for the Army Recruiting Battalion Center (Travis AFB, 2003).

2.4 Hazardous Waste Management

The following four activities at Travis AFB generate most of the hazardous wastes on the Base:

- Aircraft maintenance;
- Transportation maintenance;
- Equipment maintenance; and
- Facilities maintenance.

In 1976, the U.S. Congress passed the Resource Conservation and Recovery Act (RCRA) to establish a national program to protect both human health and the environment from the mishandling of solid waste and to encourage the conservation of natural resources. RCRA requires a system for managing hazardous and universal wastes. Regulations that have been adopted by the U.S. EPA in 40 CFR Parts 260 through 279 carry out the Act's congressional mandate.

The Travis AFB Hazardous Waste Management Plan (HWMP) establishes the procedures, training requirements, inspections, and record management processes for hazardous waste. The HWMP addresses RCRA and state regulations (22 California Code of Regulations [CCR] Article 4.5 contains regulations that closely mirror those contained in federal regulations 40 CFR 260 through 279) for waste accumulation, storage, and disposal (Travis AFB, 1999).

2.5 Air Quality

Travis AFB is located in the southwestern portion of Solano County, which is part of the San Francisco Bay Area Air Basin (SFBAAB). The SFBAAB is managed by the Bay Area Air Quality Management District (BAAQMD).

Like all air basins, air quality within the SFBAAB is affected by the concentrations of various pollutants present in the atmosphere. The severity of pollutant effects in the atmosphere is determined by the following major factors:

- Physical characteristics of the air basin;
- Prevailing meteorological conditions within the air basin; and
- Amounts and types of pollution emitted into the atmosphere.

The purpose of this analysis is to determine the Project's impacts on regional air quality. The information presented in this section includes a discussion of existing meteorological and topographical conditions, regional air quality, and applicable federal, state, and local regulations.

2.5.1 Regional Climate

Travis AFB is located in an inland area, but its climate is influenced largely by its proximity to the coast. The region receives marine air, which results in mild, wet winters and cool summers. The mean maximum temperature in the region during the summer is approximately 90 degrees Fahrenheit. In the winter, the mean minimum temperature is in the high 30s (BAAQMD, 1999).

During the summer and fall, high pressure from offshore combines with low pressure in the Central Valley to cause marine air to flow eastward through the region. The wind is strongest in the afternoon, with speeds ranging from 15 to 20 miles per hour (mph). On some occasions, atmospheric conditions cause air to flow from the east. Winds from the east tend to contain

more pollutants than the cleaner marine air from the west. During the summer and fall, this can cause elevated pollutant levels to move into the region.

2.5.2 Existing Air Quality

As required by the federal Clean Air Act (CAA), the U.S. EPA has established National Ambient Air Quality Standards (NAAQS) to address certain criteria pollutants. Two classes of standards, primary and secondary, were developed for the NAAQS. Primary standards identify the maximum permitted concentration in the ambient air that allows for the protection of public health. The secondary standards specify levels of air quality necessary to protect public welfare, including materials, soils, vegetation, and wildlife, from any known or anticipated adverse effects.

The criteria pollutants that are addressed by the NAAQS include the following:

- Sulfur dioxide (SO₂);
- Nitrogen oxides (NO_x);
- Carbon monoxide (CO);
- Ozone (O₃);
- Particulate matter 2.5 microns or less in diameter (PM_{2.5});
- Particulate matter 10 microns or less in diameter (PM₁₀);
- Reactive organic gases (ROGs); and
- Lead (Pb).

In addition to these federal standards, the state has developed the California Ambient Air Quality Standards (CAAQS) for these criteria pollutants. These standards are more stringent than the NAAQS, and they incorporate additional standards for sulfates (SO₄), hydrogen sulfide (H₂S), vinyl chloride, and visibility-reducing particulate matter. The NAAQS and CAAQS are presented in Table 2-1.

The U.S. EPA classifies air quality within each air quality control region according to its attainment of federal primary and secondary NAAQS. According to U.S. EPA guidelines, when the pollutant level is lower than the NAAQS, the specific pollutant is designated as attainment. If a pollutant meets or is higher than ambient air quality standards, it is designated as nonattainment. When there is a lack of air quality data, the area is designated unclassified and treated as an attainment area until proven otherwise.

At the local level, the BAAQMD is required to monitor air pollutant levels to ensure federal and state ambient air quality standards are met. If ambient air quality standards are not met, the BAAQMD is required to prepare an attainment plan to meet them. The SFBAAB is in attain-

ment for all current standards except the federal and state ozone standards and the state standard for PM₁₀ (Table 2-1).

The maximum measured pollutant concentrations and the number of days in exceedance of federal and state standards, as tabulated from 2000 through 2002 at monitoring stations, near Travis AFB in Fairfield, Vacaville, and Vallejo, are shown in Table 2-2. These are the most recent data available. The Fairfield station, which is approximately 5 miles southwest of Travis AFB, is the closest station to the proposed project sites. The Vacaville and Vallejo stations are to the north and south of Travis AFB, respectively. Data from these stations represent the background pollutant conditions at the proposed project sites. The various criteria pollutants monitored within the SFBAAB are shown in Table 2-2.

2.6 Noise

Travis AFB follows the land use guidelines found in its Air Installation Compatible Use Zone study to promote compatible land use development around military airfields where aircraft noise exposure can be an issue. The Air Installation Compatible Use Zone study shows that both sites for the proposed project are subject to noise levels of approximately 80 decibels (dB) during flight operations due to their proximity to the runways. Therefore, periodically, the sites are subject to loud or very loud levels of noise during flight operations. Otherwise, noise levels are typical of an urban area (about 55 to 65 dB) as a result of nearby street traffic noise.

Site 1 does not contain any sensitive receptors (e.g., hospitals) in its immediate vicinity. However, military housing, which is considered a sensitive receptor, is located to the far north of Site 2.

2.7 Cultural Resources

This section discusses cultural resources in the area of the proposed project sites at Travis AFB. Both prehistoric and historic resources (including architectural resources) are addressed in this discussion.

2.7.1 Cultural Resources Statutes and Significance Criteria

The National Historic Preservation Act (NHPA), Executive Order 11593, the Archaeological and Historic Preservation Act, and the Archaeological Resources Protection Act are the primary statutes requiring federal agencies to protect cultural resources. The federal criteria for defining whether a cultural resource is significant are stated in the eligibility requirements for nomination to the National Register of Historic Places (NRHP). The NRHP is maintained by the National Park Service of the Department of the Interior.

To qualify for the NRHP, a property must possess integrity of location, design, setting, materials, workmanship, feeling, and association and meet one or more of the following eligibility criteria:

- Association with events that have made a significant contribution to the broad patterns of history;
- Association with the lives of persons significant in the past;
- Embodies the distinctive characteristics of a type, period, or method of construction, represents the work of a master, possesses high artistic values, or represents a significant and distinguishable entity whose components may lack individual distinction; and
- Has yielded, or may be likely to yield, information important in prehistory or history.

The Native American Graves Protection and Repatriation Act provides for the disposition to descendants of any American Indian the human remains and associated grave goods found on federal property.

In 1991, the (DoD) created the Legacy Resources Management Program to identify and protect property associated with the Cold War era. The Headquarters of the Army Materiel Command (HQ AMC) began a reconnaissance inventory of Cold War resources at eight selected Air Force Bases throughout the United States, including Travis AFB. The main goal of this inventory was to comply with Section 110 of the NHPA and to provide cultural resource managers with a tool for determining the NRHP eligibility of Cold War-era properties.

2.7.2 Cultural Setting

Travis AFB is located in a region once inhabited by the Suisun and Talenas tribelets of the Southern Patwin (or Wintuan). However, ethnographic information about these groups is lacking. It is known that many of the early inhabitants of this area established villages adjacent to freshwater marshes and hunted, gathered, and fished for subsistence. By the time of Spanish settlement, the early stages of an agricultural system had already been developed (Moeller et al., 1996).

Mission activities, disease, and disruption by gold-seeking miners, who eventually became settlers, adversely affected the Patwin. However, the Southern Patwin had largely abandoned the area prior to the epidemics of malaria and smallpox in 1833 and 1837. A few descendants are located in the northern part of their former range in the Sacramento Valley today.

Much of the area surrounding Travis AFB was and is cultivated for agricultural products and grazing livestock. These activities were first performed by Spanish settlers during the Spanish Mission Period and later by Mexicans and European Americans during the Mexican Period and early American Period. However, the land at and around Travis AFB was not considered prime farmland. It was historically used for sheep and cattle ranching and irrigated farming (Moeller et al., 1996). The first Hispanic settlement in Solano County occurred in 1840, and the first recorded European American family settled near Travis AFB in approximately 1848. Various homesteads were established in this area until 1942, when the U.S. government selected the property of the present-day Travis AFB as the site for an Army Air Corps base (Moeller et al., 1996; Weitze, 1996). The facility was then commissioned as the Fairfield-Suisun Army Air Base

in 1943. In 1950, the Base was renamed Travis AFB in honor of Brigadier General Robert Falligant Travis, former commander of the 9th Heavy Bombardment Wing.

2.7.3 Cultural Resources on the Proposed Project Sites

The project sites do not contain any known NRHP-listed or eligible prehistoric or historic sites. A cultural resources survey of the entire Base was conducted by the Environmental Assessment Division of the Argonne National Laboratory; the survey is discussed in the *Draft Integrated Cultural Resources Management Plan* (Parsons, 2003) and published as *An Archaeological and Historic Resources Survey and Inventory of Travis Air Force Base, Solano and Contra Costa Counties, California* (Moeller et al., 1996). This survey does not list any cultural resources as being present in or near Site 1 or Site 2.

A second basewide survey and evaluation of properties on Travis AFB that might be significant in the context of the Cold War was conducted by Geo-Marine, Inc. of Plano, Texas (Weitze, 1996). The *Inventory of Cold War Properties* does not list any such property being present on Site 1 or Site 2.

As discussed previously, Site 1 does contain a stone wall which may have cultural significance. However, prior cultural surveys of the Base did not evaluate structures. Only buildings were evaluated. Therefore, prior to project design and construction, a cultural resources specialist shall be contacted to survey and evaluate the stone wall that is located on the project site to determine if it has any potential cultural significance. If the cultural resources specialist concludes that the wall is culturally significant, the site plan shall be designed in a manner that either avoids interference of the proposed facilities with the wall, or incorporates the wall into the design as a landscape feature.

2.8 Environmental Justice

Executive Order (EO) 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, requires federal agencies to identify and address, as appropriate, disproportionately high and adverse human health or environmental effects of their programs, policies, and activities on minority and low-income populations. No disproportionate effects on any minority or low-income populations are expected as a result of the Project for the following reasons:

- Potential impacts from the Project will result primarily from construction activities that are expected to be minimal and short-term in duration;
- The surrounding area is developed with office and industrial uses; and
- The Project is consistent with the existing land uses of the area as indicated in the Travis AFB General Plan (Travis AFB, 2002a).

2.9 Cumulative Impacts

Cumulative impacts are those changes to the environment that would result from the Proposed Action, Alternative 1, or Alternative 2 in combination with recently completed actions and actions in progress, along with reasonably foreseeable future actions. Project construction is scheduled to begin in 2005, and will be completed by 2006. Therefore, the projects for 2004 and 2007 are not included.

The following projects, listed under the start date for the project, were considered as part of this cumulative impact analysis.

Fiscal Year 2005

- **C-17 Roads and Utilities.** 40,000 square feet for roadways.
- **Construct Fire/Crash Rescue Station.** 30,192 square feet.
- **Construct Coast Guard Facility.** 103,000 square feet.

Fiscal Year 2006

- **C-17 Maintenance Training Facility, AGE Facility, Nose Dock, Engine Storage Facility, Munitions Maintenance Facility.** 132,750 square feet.
- **Construct In-flight Kitchen/Fleet Service Facility.** 23,000 square feet.
- **Replace Heating, Ventilation, and Air Conditioning (HVAC), Bldg 878.** Replace entire HVAC system for the facility.
- **Renovate West/Center Island, Bldg 810.** Renovation of West Island and Center Island upstairs and downstairs office/work space. Upgrade/repair area fire suppression, HVAC, electrical, lighting, replace doors, lower ceilings, bathroom facility and plumbing. Paint as required. Update phone and computer line service.
- **Repair 600 Ramp, Spots 605-607.**
- **Paint Shop Floor, Bldg P-41 (S/M).**
- **Repair Flooring At Passenger Terminal, Bldg 3.** Replace old and damaged flooring in the following areas of the passenger terminal with marmoleum: telephone communications/security monitor room, dispatch office, vehicle control NCO's office, building custodian's office, worker's breakroom, and all hallways.
- **Repair Aircraft Hangar Floor, 809 (R/M).** Clean, repair, and paint hangar floor with poly-based paint/non-skid floor coating, painting function lines as required.

- **Install Additional Lighting, Bldg 977.** Install additional lighting along west side fenceline of building 977.
- **Demolish Bldg 235 (Audio Visual).**
- **Demolish Bldg 238 (Res Forces Opl Tng).**
- **Demolish Bldg 242 (Squad Ops).**
- **Demolish Bldg 572 (Whse, Troop Subsis).**
- **Demolish Bldg 690 (Thrift Shop).**
- **Demolish Bldg 755 (Shp Aircraft Gen Purp).**
- **Demolish Bldg 828 (Sfs Control).**
- **Demolish Bldg 943 (Sfs Operations).**

Fiscal Year 2007

- **Demolish Bldg 882 (CE Maint Shop).**
- **Renovate Hangar 808 (R/M).**
- **Repair Hangar Floor, Bldg 808.** Paint hangar floor with nonskid materials and finish with gloss coat.
- **Remove Water Filter System.** Remove water filter recycle system from floor system. The system needs to be rerouted to the sanitary sewer system. It may require an oil water separator.
- **C-17 Two-Bay Hangar, Addition/Alteration to Composite Shop, Wheel and Tire Shop, Taxiway Repairs.** 719,730 square feet.
- **Construct Passenger Terminal.** 94,519 square feet.

No significant cumulative impacts will occur from the Proposed Action or Alternative 1. As with this project, other projects have had or could have minor temporary impacts on the environment, as noted in their respective EAs. As noted in this EA, minor environmental impacts to air and water will occur during the period of construction, but they will not be permanent, and BMPs will be used to minimize these impacts. Cumulative impacts to water resources will result from soil erosion occurring on Union Creek. BMPs are used at construction sites on the Base to prevent the runoff of sediment into the storm drain system, which drains into Union Creek. Fugitive dust from construction over time could increase the particulate material in the air. However, the use of required dust control BMPs will keep these impacts to an insignificant level. In addition, the construction occurring at Travis AFB primarily involves

infill activities; only a few projects actually expand the development footprint on the installation. Therefore, the cumulative impacts of the Proposed Action or Alternative 1 are not significant.

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3.0 Environmental Consequences

3.1 Geology and Soils

The proposed project (the proposed project refers to both the Proposed Action and Alternative 1) will have only a significant impact on geology and soils if substantial erosion or unstable soil conditions result from excavation, grading, or fill operations or if the proposed project results in the loss of availability of known mineral resources of future value to the region.

3.1.1 Proposed Action

Implementation of the Proposed Action will not impact the geology of the region. Soils located on the Proposed Action site (see Section 2.1.2) do not have a high erosion potential. Construction activities will be of short duration and will occur on a very localized site. BMPs will be used to prevent the runoff of sediment from the project site. Therefore, no significant impacts to soils will occur from the Proposed Action.

3.1.2 Alternative 1

The potential for impacts on geology and soils for Alternative 1 is the same as for the Proposed Action. Construction activities will be of short duration and will occur on a very localized site. BMPs will be used to prevent the runoff of sediment from the project site. Therefore, no significant impacts to soils will occur from the implementation of Alternative 1.

3.1.3 Alternative 2

If Alternative 2 is selected, current conditions will not change, and there will be no impacts to geology or soil on Travis AFB.

3.2 Water Resources

The proposed project will have a significant impact on water quality and water resources if it results in the degradation of water quality, causes a violation of drinking water maximum contaminant levels, or creates public health concerns by having a detrimental effect on existing potable water supplies during project construction or operation.

3.2.1 Proposed Action

No impacts to water resources will result from ground-disturbing activities because of the Proposed Action. Short-term soil disturbances from construction activities could increase on-site soil erosion and runoff to drainage systems. However, this impact will be only temporary in nature. BMPs will be implemented during construction to minimize on-site erosion and run-off to drainage systems. Furthermore, the architecture-engineer firm designing the facility will be

responsible for incorporating site drainage improvements recommended by the *Stormwater Drainage System Improvements Plan* (Travis AFB, 2000) into the design of the new facility. Therefore, impacts to water resources will not be significant.

3.2.2 Alternative 1

The potential impacts of this alternative on water resources will be similar to the impacts for the Proposed Action. However, Site 2 may require additional grading and the removal of existing soil and construction debris that has accumulated on a portion of the site from long-term disposal that has occurred in the past. BMPs will be implemented during construction to minimize on-site erosion and run-off to drainage systems to reduce this impact to a less than significant level.

3.2.3 Alternative 2

If this alternative is selected, current conditions will not change, and impacts to water resources will not change.

3.3 Biological Resources

The proposed project will have a significant impact on biological resources if it causes a substantial adverse effect on any species identified as a candidate sensitive or special-status species by the United States Fish and Wildlife Service (USFWS); has a substantial adverse effect on any protected wetland, riparian habitat, or other sensitive natural communities; or conflicts with the provisions of the INRMP established for Travis AFB (Travis AFB, 2003).

3.3.1 Proposed Action

Site 1 has been disturbed in the past by development. The site previously contained a temporary detention facility which was later demolished. According to the Travis AFB General Plan (Travis AFB, 2002a), no wetlands/vernal pools are located on the site. The proposed site is not located upland from any wetlands/vernal pools; drainage from the site enters Union Creek. Furthermore, no special status species are known to occur on the proposed site. There are several trees located at the western portion of the site along Challenger Lane. Consultation is required with the Base's Natural Resources Manager prior to any disturbance or removal of these trees.

No direct or indirect impacts to ecological resources are anticipated to result from activities associated with the Proposed Action.

3.3.2 Alternative 1

A portion of Site 2 has been disturbed in the past by the disposal of construction debris. As a result, a large mound has developed on the site that has resulted in the creation of a pond adjacent to the site. However, according to the Travis AFB General Plan (Travis AFB, 2002a), no

wetlands/vernal pools are located on the site. The proposed site is not located upland from any wetlands/vernal pools; drainage from the site enters Union Creek. Furthermore, no special status species are known to occur on Site 2. No direct or indirect impacts to ecological resources will result from activities associated with the proposed project.

3.3.3 Alternative 2

If the no action alternative is selected, existing conditions will not change, and no impacts to biological resources on Travis AFB will occur.

3.4 Hazardous Waste Management

The proposed project will have a significant impact if hazardous materials use or hazardous waste disposal occurs without implementation of guidelines outlined in AFI 32-7086, *Hazardous Materials Management* (USAF, 1997); AFI 32-7042, *Solid and Hazardous Waste Compliance* (USAF, 1994); the *Travis Air Force Base Hazardous Waste Management Plan* (Travis AFB, 1999), and the *Travis Air Force Base Environmental Flight Policy for Contractors* (Travis AFB, 2002b). Any hazardous waste generated at the facility will be subject to these guidelines.

3.4.1 Proposed Action

Travis AFB operates the ERP, which is an environmental cleanup effort for sites that have contaminated groundwater and soils. There are a total of 33 ERP sites on the Base. However, according to the Travis AFB General Plan, Site 1 is not located in an ERP site, and no soil contamination is known to be present at the site. The site previously contained a temporary detention facility which was later demolished. However, hazardous wastes are not known to have been generated at the facility. Due to the nature of the project and its future operational activities, no hazardous wastes are expected to be generated at the site. Therefore, no direct or indirect impacts pertaining to hazardous wastes will result from activities associated with the Proposed Action.

3.4.2 Alternative 1

The potential impacts of this alternative will be the same as for the Proposed Action. Site 2 is not located on an ERP site; however, based on the most recent sampling data for this site as discussed in the *Travis Air Force Base 2002-2003 Annual GSAP Report* (CH2M Hill, 2003), the groundwater contaminant plume does not extend to the Alternative 1 site. The nearest ERP site is located across the street within 100 feet of the site. No soil contamination is known to be present at Site 2. Therefore, no direct or indirect impacts pertaining to hazardous wastes will result from activities associated with Alternative 1. However, due to past dumping onto this site and as a Best Management Practice, representative soil samples need to be collected prior to construction activities to confirm that the materials dumped did not contain a hazardous substance.

3.4.3 Alternative 2

If this alternative is selected, current conditions will not change, and no impacts on hazardous waste management on Travis AFB will occur.

3.5 Air Quality

Criteria to determine the significance of air quality impacts are based on federal, state, and local air pollution standards and regulations. Impacts will be significant if project emissions increase ambient pollutant levels from below to above an ambient air quality standard or exceed annual thresholds that trigger a conformity analysis under the 1990 CAA.

3.5.1 Proposed Action

The proposed project could have adverse short-term impacts to air quality from the generation of fugitive dust during construction activities. Impacts also would be significant if emissions from project operations (post-construction) exceeded thresholds the BAAQMD recommends for determining significance for NEPA analyses. The BAAQMD does not consider combusive emissions from construction activities to be significant for the purpose of NEPA review because these emissions already have been considered in the regional attainment planning process (BAAQMD, 1999). The BAAQMD requires the implementation of a fugitive dust (PM₁₀, particulate matter up to 10 micrometers in size) control measure for construction activities to ensure that PM₁₀ emissions during construction are not significant.

Construction-related emissions associated with the proposed project consist of emissions from:

- Earthmoving activities relating to the construction of the Army Recruiting Battalion Center;
- Construction of the Army Recruiting Battalion Center parking area, and
- Exhaust emissions from construction equipment operations.

Potential criteria pollutants resulting from these activities are PM₁₀, CO, ROG, NO_x, and sulfur oxides (SO_x). The construction activities are assumed to be completed in one year. For the proposed project, emissions are estimated using emission factors from the 1999 BAAQMD California Environmental Quality Act (CEQA) Guidelines – Assessing the Air Quality Impacts of Projects and Plans. The pollutant-emitting activities, emission sources, and resulting pollutants that would occur under the proposed project are listed in Table 3-1. Calculations for construction-related emissions are shown in Appendix B, and calculation results are summarized in Table 3-2.

A formal air conformity applicability analysis is required to ensure that the proposed project will comply with the implementation of CAA and BAAQMD rules and regulations. SFBAAB federal regulations require that the total annual emissions of ROG, NO_x, or CO associated with the proposed project not exceed the minimum threshold levels of 100 tons per year. Also, the

1999 BAAQMD CEQA guidelines state that the operation-related emissions should not exceed the project thresholds of 15 tons per year for ROG, NO_x, or PM₁₀ (BAAQMD, 1999).

The thresholds mentioned above are compared to the estimated construction emissions for the proposed project on Tables 3-2 and 3-3 to determine the project's conformity applicability. Results shown in the tables indicate that the total direct and indirect emissions from the construction of the Proposed Action at Travis AFB will not exceed the federal and BAAQMD minimum conformity threshold values for PM₁₀, ROG, NO_x, and CO. Therefore, the Proposed Action is not considered regionally significant, and it is exempt from further conformity requirements, in accordance with conformity requirements set forth in 40 CFR 93, Section 176 (c) (4) of the CAA and 1999 BAAQMD CEQA Guidelines.

3.5.2 Alternative 1

Alternative 1 will involve the construction of the same facility that is proposed for the Proposed Action. Additional grading may be required for Site 2 since a portion of the site contains a makeshift hill from the previous disposal of construction debris at the site. However, results shown in the tables indicate that the total direct and indirect emissions from the construction of the Alternative 1 at Travis AFB will not exceed the federal and BAAQMD minimum conformity threshold values for PM₁₀, ROG, NO_x, and CO. Therefore, Alternative 1 is not considered regionally significant, and it is exempt from further conformity requirements, in accordance with conformity requirements set forth in 40 CFR 93, Section 176 (c) (4) of the CAA and 1999 BAAQMD CEQA Guidelines.

3.5.3 Alternative 2

If Alternative 2 is selected, current conditions will not change, and no impacts to air quality on Travis AFB will occur.

3.6 Noise

Impacts on noise are considered significant if the proposed project will increase the ambient noise levels substantially for adjoining areas or generate long-term stationary source noise that will result in a noticeable increase in daily average noise levels of more than 3 dB. Noise levels will be adverse if sensitive human receptors are subjected to noise levels approximately 20 dB higher than current ambient levels.

3.6.1 Proposed Action

Although noise levels will increase slightly during construction operations, the increase will be temporary. Noise from the operation of construction equipment will be evident only in the immediate area of operations. Equipment will be limited to typical heavy construction items, such as bulldozers, excavators, front-end loaders, and dump trucks. Sound levels for heavy diesel equipment at the construction site will be about 80 dB. For comparison, an automobile generates 60 dB at 50 feet, and a jet aircraft generates more than 100 dB at 1,000 feet.

No sensitive human receptors are located adjacent to the Proposed Action site. Therefore, no significant impacts will occur. Furthermore, no significant impacts on noise levels are expected to occur since the current location is near an industrial area near the runway where high noise levels are already experienced.

3.6.2 Alternative 1

Implementation of Alternative 1 will cause similar short-term effects as the Proposed Action. However, there is military housing located to the far north of Site 2. This is considered a sensitive receptor. In addition, office uses are in Building 350 (Army Readiness Group Facility), which is located directly to the south of the site. However, noise impacts from construction will be minimal to these surrounding buildings. Buildings normally attenuate 20 to 30 dB with windows closed. With this level of attenuation, construction noise levels will be less than ambient levels. Therefore, no significant impacts will occur. Furthermore, no significant impacts on noise levels are expected to occur since the current location is in an industrial area near the runway where high noise levels are already experienced.

3.6.3 Alternative 2

If Alternative 2 is selected, current conditions will not change, and no additional impacts to noise levels on Travis AFB will occur.

3.7 Cultural Resources

Impacts on cultural resources are considered significant if a property listed on, or eligible for listing on, the NRHP or the Inventory of Cold-War Properties is physically damaged or altered.

3.7.1 Proposed Action

As discussed in Section 2.7.3, cultural resources surveys that were conducted on a basewide level, including an archaeological survey and an inventory of potentially significant Cold War properties, did not record any prehistoric or historic resources of any kind near the Proposed Action site. Furthermore, the Proposed Action site is not known to be significant for traditional cultural values to local Native American cultural groups. However, in the event that prehistoric or historic artifacts are encountered during land disturbance, activities in the immediate area of the finds will be halted, and a qualified archaeologist will assess the finds, determine their significance, and make recommendations for appropriate mitigation measures. If human remains are encountered on the property, the County Coroner's Office will be contacted within 24 hours of the find, and all work will be halted until a clearance is given by that office and other involved agencies.

A stone wall approximately 3 feet in height, runs along the northwestern portion of the site. As noted earlier, the site previously contained a temporary detention facility which was later demolished. This wall may have been constructed when the detention facility was in operation, and may have cultural significance. Therefore, the proposed project could have a potentially

significant impact to cultural resources, unless mitigation is incorporated. A mitigation measure is presented below that will reduce this impact to an insignificant level.

Mitigation Measure:

To protect potential cultural resources in the project area, the following mitigation measure shall be implemented to reduce these impacts to an insignificant level.

CR-1: Prior to project design and construction, a cultural resources specialist shall be contacted to survey and evaluate the stone wall that is located on the project site to determine if it has any potential cultural significance. If the cultural resources specialist concludes that the wall is culturally significant, the site plan shall be designed in a manner that either avoids interference of the proposed facilities with the wall, or incorporates the wall into the design as a landscape feature.

3.7.2 Alternative 1

As discussed in Section 2.7.3, cultural resources surveys that were conducted on a basewide level, including an archaeological survey and an inventory of potentially significant Cold War properties, did not record any prehistoric or historic resources of any kind near Site 2. Furthermore, Site 2 is not known to be significant for traditional cultural values to local Native American cultural groups. Consequently, Alternative 1 will not have any significant impacts on cultural resources, and no mitigation measures will be required.

However, in the event that prehistoric or historic artifacts are encountered during land disturbance, activities in the immediate area of the finds will be halted, and a qualified archaeologist will assess the finds, determine their significance, and make recommendations for appropriate mitigation measures. If human remains are encountered on the property, the County Coroner's Office will be contacted within 24 hours of the find, and all work will be halted until a clearance is given by that office and other involved agencies.

3.7.3 Alternative 2

If Alternative 2 is selected, current conditions will not change, and no additional impacts to cultural resources will occur.

3.8 Environmental Justice

Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, requires federal agencies to identify and address, as appropriate, disproportionately high and adverse human health or environmental effects of their programs, policies, and activities on minority and low-income populations.

3.8.1 Proposed Action

The Proposed Action will not cause any disproportionate short-term or long-term effects on any minority or low-income population. The Proposed Action will occur on Travis AFB; the closest nonmilitary community is approximately 5 miles from the Proposed Action site.

3.8.2 Alternative 1

The potential impacts of this alternative will be the same as for the Proposed Action.

3.8.3 Alternative 2

If Alternative 2 is selected, current conditions will not change, and no impacts will occur.

3.9 Comparison of the Proposed Action and Alternatives

Each of the alternatives considered will have different effects on various environmental resources. Table 3-4 summarizes and compares the potential effects discussed in 3.1 to 3.8.

4.0 Persons and Agencies Contacted

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FIGURES

Figure 1- 1 Location of Travis AFB

Figure 1-2 Location of Site 1

Figure 1-3 Location of Site 2

TABLES

Table 2-1

Ambient Air Quality Standards and San Francisco Bay Area Air Quality Management District Attainment Status

Pollutant	Averaging Time	California Standards		National Standards	
		Concentration ^a	Attainment Status ^b	Concentration ^a	Attainment Status ^b
Ozone	8 hour			0.08 ppm	U
	1 hour	0.09 ppm (180 µg/m ³)	N	0.12 ppm (235 µg/m ³)	N
Carbon Monoxide	8 hour	9 ppm (10 mg/m ³)	A	9 ppm (10 mg/m ³)	A
	1 hour	20 ppm (23 mg/m ³)	A	35 ppm (40 mg/m ³)	A
Nitrogen Dioxide	Annual average			0.053 ppm (100 µg/m ³)	A
	1 hour	0.25 ppm (470 µg/m ³)	A		
Sulfur Dioxide	Annual average			80 µg/m ³ (0.03 ppm)	A
	24 hour	0.04 ppm (105 µg/m ³)	A	365 µg/m ³ (0.14 ppm)	A
	1 hour	0.25 ppm (655 µg/m ³)	A		
Particulate Matter (PM ₁₀)	Annual arithmetic mean	20 µg/m ³	N	50 µg/m ³	A
	24 hour	50 µg/m ³	N	150 µg/m ³	U
Particulate Matter – Fine (PM _{2.5})	Annual arithmetic mean	12 µg/m ³ N		15 µg/m ³	U
	24 hour			65 µg/m ³	U
Sulfates	24 hour	25 µg/m ³	A		
Lead	Calendar quarter			1.5 µg/m ³	A
	30 day average	1.5 µg/m ³	A		
Hydrogen Sulfide	1 hour	0.03 ppm (42 µg/m ³)	U		
Vinyl Chloride	24 hour	0.010 ppm (26 µg/m ³)	No information available		
Visibility Reducing Particles ^c	8 hour (1,000 to 1,800 PST ^c)	d	A		

^a ppm = parts per million; µg/m³ = micrograms per cubic meter; and mg/m³ = milligrams per cubic meter.^b A = attainment; N = nonattainment; and U = unclassified.^c PST = Pacific Standard Time.^d The visibility-reducing particles standard is intended to limit the frequency and severity of visibility impairment from regional haze and is equivalent to a 10-mile nominal visual range. The standard is: particles in sufficient amount to produce an extinction coefficient of 0.23 per kilometer when the relative humidity is less than 70%.Source: <http://www.baaqmd.gov/pln/ambientairquality.asp>

Table 2-2

Maximum Pollutant Concentration Monitored in the Vicinity of Proposed Action Site

Pollutant/Monitoring Station	Averaging Time/ Measurement	Maximum Concentration by Year			Number of Days State Standards Exceeded			Number of Days Federal Standards Exceeded		
		2000	2001	2002	2000	2001	2002	2000	2001	2002
Ozone										
Fairfield (Chadbourne Rd.)	1-hour (ppm)	0.096	NA	0.103	1	3	4	0	3	0
Fairfield (Gregory Street)		0.096	0.102	0.066	1	3	0	0	0	0
Vacaville (Elmira Road)		0.100	0.104	0.100	2	NA	1	0	NA	0
Vallejo (Tuolumne Street)		0.079	NA	NA	0	0	1	0	0	0
Fairfield (Chadbourne Rd.)	8-hour (ppm)	0.076	NA	NA	NA	NA	NA	0	0	0
Fairfield (Gregory Street)		0.076	0.084	NA	NA	NA	NA	0	0	0
Vacaville (Elmira Road)		0.081	NA	NA	NA	NA	NA	0	NA	NA
Vallejo (Tuolumne Street)		0.056	NA	NA	NA	0	NA	0	NA	NA
Carbon Monoxide										
Vallejo (Tuolumne Street)	8-hour (ppm)	5.11	NA	NA	0	0	NA	0	NA	NA
Nitrogen Dioxide										
Vallejo (Tuolumne Street)	1-hour (ppm)	0.064	NA	NA	0	0	NA	NA	NA	NA
Sulfur Dioxide										
Vallejo (Tuolumne Street)	24-hour (ppm)	0.006	NA	NA	0	0	NA	0	0	NA
PM ₁₀										
Vacaville (Merchant Road)	Annual	47.0	NA	NA	0	NA	NA	0	NA	NA
Vallejo (Tuolumne Street)	Geometric Mean (µg/m ³)	53.0	NA	NA	1	3	NA	0	NA	NA

NA = not applicable

PM₁₀ = particulate matter less than 10 microns in diameter

ppm = parts per million

µg/m³ = micrograms per cubic meterSource: <http://www.arb.ca.gov/adam/cgi-bin/db2www.exe/adamquery.mac/start>

Table 3-1

Proposed Action Emission Activities, Sources, and Potential Pollutants from Emission Activities

Emission Activity	Source	Potential Pollutant
Construction	Earthmoving Construction Equipment Operation	PM ₁₀ ; CO; ROG; NO _x ; and SO _x
Operation	Vehicle travel	CO
CO = carbon monoxide NO _x = nitrogen oxides PM ₁₀ = particulate matter 10 microns or less in diameter ROG = reactive organic gases SO _x = sulfur oxides		

Table 3-2

Proposed Action Construction-Related Emissions

Pollutant	Total Emission (tons/yr)
PM ₁₀	18.5
CO	0.46
ROG	0.03
NO _x	0.14
SO _x	0.02
CO = carbon monoxide NO _x = nitrogen oxides PM ₁₀ = particulate matter 10 microns or less in diameter ROG = reactive organic gases SO _x = sulfur oxides tons/yr = tons per year	
Note: Emissions for construction activities (clearing, excavating, grading, paving) are based on emission factors from EPA AP-42 (EPA 1995).	

Table 3-3

Federal Conformity Significance Determination

Activities	Pollutant	Total Emissions (tons/yr)	Federal Threshold (tons/yr)	Significance (Yes/No)
Construction	CO	0.46	100	No
	ROG	0.03	100	No
	NO _x	0.14	100	No
CO = carbon monoxide NO _x = nitrogen oxides ROG = reactive organic gasses tons/yr = tons per year				

Table 3-4

Comparisons of the Proposed Action and Alternatives for the Army Recruiting Battalion Center

Resource	Proposed Action	Alternative 1	Alternative 2: No Action Alternative
Geology and Soils	No impacts on regional geology are anticipated. Potential for soil erosion exists, but impacts will not be significant because of short duration of ground disturbance during construction period and the use of Best Management Practices.	The potential for impacts of this alternative will be the same as those for the Proposed Action. No significant impacts to geology and soils are anticipated.	Current conditions will not change; therefore, no impacts to geology and soils are anticipated.
Water Resources	Short-term soil disturbances from construction activities may increase on-site soil erosion. Implementation of Best Management Practices will minimize soil erosion. Impacts to water resources will not be significant.	The potential for impacts of this alternative will be the same as for the Proposed Action. No significant impacts to water resources are anticipated.	Current conditions will not change; therefore, no impacts to water resources are anticipated.
Biological Resources	No significant impacts to native biological resources are anticipated.	No significant impacts to native biological resources are anticipated.	Current conditions will not change; therefore, no impacts to biological resources are anticipated.
Hazardous Waste Management	No significant impacts to the management of hazardous waste are anticipated.	No significant impacts to the management of hazardous waste are anticipated.	Current conditions will not change; therefore, no impacts to the management of hazardous waste are anticipated.
Air Quality	The Proposed Action could have adverse short-term impacts to air quality as a result of the generation of fugitive dust during construction activities. However, Bay Area Air Quality Management District enhanced fugitive dust control measures will be implemented to minimize the impacts and keep them below significant levels.	The Proposed Action could have adverse short-term impacts to air quality as a result of the generation of fugitive dust during construction activities. However, Bay Area Air Quality Management District enhanced fugitive dust control measures will be implemented to minimize the impacts and keep them below significant levels.	Current conditions will not change, and no additional impacts to air quality are anticipated.
Noise	Noise levels will increase slightly during construction but will be less than ambient levels, which are affected by nearby aircraft operations. Impacts will not be significant.	No significant impacts to noise levels are anticipated.	Current conditions will not change; therefore, noise impacts are not anticipated.

Table 3-4 (Continued)

Comparisons of the Proposed Action and Alternatives for the Army Recruiting Battalion Center

Resource	Proposed Action	Alternative 1	Alternative 2: No Action Alternative
Cultural Resources	Basewide cultural resources survey did not identify any cultural resources at the proposed site. However, a stone wall does run along the northwestern portion of the site. This wall may have cultural significance. However, a mitigation measure is presented that will reduce this impact to an insignificant level.	No significant impacts to cultural resources are anticipated.	Current conditions will not change; therefore, cultural resources impacts are not anticipated.
Environmental Justice	No significant impacts to environmental justice are anticipated.	No significant impacts to environmental justice are anticipated.	Current conditions will not change; therefore, no impacts to environmental justice are anticipated.

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APPENDIX A

Request for Environmental Impact Analysis - Air Force Form 813

APPENDIX B

Construction Emissions Calculations and Technical Assumptions for the Proposed Action

CONSTRUCTION EMISSIONS CALCULATIONS AND TECHNICAL ASSUMPTIONS FOR THE PROPOSED ACTION

Anticipated construction-related emissions for the Proposed Action at Travis AFB were calculated based on data available at the time of this study. The construction-related emissions calculations and technical assumptions for the Proposed Action are presented hereafter.

Construction-related emissions associated with the Proposed Action will consist of emissions from (1) earthmoving activities during construction of the Army Recruiting Battalion Center facility and parking area, and (2) exhaust emissions from construction equipment operations.

Earthmoving Activities Emissions

Earthmoving activities emissions come from a variety of activities such as excavation, grading, vehicles traveling on paved and unpaved surfaces, and landscaping. The primary criteria pollutant associated with earthmoving activities is particulate matter 10 microns or less in diameter (PM₁₀). The Proposed Action is anticipated to generate 18.5 tons of PM₁₀ per year as a result of earthmoving activities.

The methodologies and technical assumptions used to estimate the anticipated earthmoving emissions are summarized here and the estimated emission results are presented in Table B-1.

- Earthmoving PM₁₀ emissions are estimated using the emission factor (0.77 ton of PM₁₀ per acre disturbed per month) from the 1999 Bay Area Air Quality Management District (BAAQMD) California Environmental Quality Act (CEQA) Guidelines - Assessing the Air Quality Impacts of Projects and Plans.
- The Proposed Action is anticipated to disturb an area of approximately 1 acre during earthmoving activities.
- Earthmoving activities are anticipated to have a duration of 12 months.

The following equation was used to estimate the PM₁₀ emissions resulting from earthmoving activities for the Proposed Action.

$$E_{PM10} = E_F AD$$

where

- E_{PM10} = Earthmoving activities emission rate of PM₁₀ (tons per year [tons/yr]);
- E_F = Earthmoving activities emission factor (tons per acre per month [tons/acre/month]);
- A = Area disturbed (acre); and
- D = Duration of earthmoving activities (months).

Equipment Exhaust Emissions

In addition to particulate emissions from earthmoving, air pollution, including PM₁₀, carbon monoxide (CO), reactive organic gasses (ROG), nitric oxide (NO_x), and sulfur oxide (SO_x), are anticipated to be emitted from the exhaust of construction equipment. The construction equipment represents a composite fleet of heavy- and light-duty construction equipment, such as an excavator, front-end loader, backhoe, dozer, grader, scraper, tractor, and crane. The estimated total emissions associated with the project's equipment exhaust for PM₁₀, CO, ROG, NO_x, and SO_x emissions are 0.003, 0.46, 0.03, 0.14, and 0.02 tons per year, respectively.

The methodologies and technical assumptions used to calculate the Proposed Action's equipment exhaust emissions are summarized here.

- Construction equipment exhaust is estimated using emission factors from the 1999 BAAQMD CEQA Guidelines. They are 2.2, 138.0, 9.2, 42.4, and 4.6 grams per cubic yard of earth moved for PM₁₀, CO, ROG, NO_x, and SO_x, respectively.
- The Proposed Action will have a duration of one year.

The following equation was used to estimate the Proposed Action's equipment exhaust PM₁₀, CO, ROG, NO_x, and SO_x emissions.

$$E = (E_F V / D) / 907,184.74$$

where

- E = Equipment emission rate of PM₁₀, CO, ROG, NO_x, or SO_x (tons/yr);
- E_F = Equipment emission factor of PM₁₀, CO, ROG, NO_x, or SO_x (grams per cubic yard [g/yd³]);
- V = Volume of earth moved (cubic yard [yd³]);
- D = Duration of equipment operation (yr); and
- 907,185 = Grams to ton conversion factor (grams per ton [g/ton]).

Table B-1
Construction-Related Emissions

Pollutant ^a	Activities	Emission Factor ^b	Emission Factor Unit	Area Disturbed (acre) ^c	Volume of Earth Moved (yd ³)	Volume Demolished (ft ³)	Duration (year)	Total Emissions (tons/yr)
PM ₁₀	Earthmoving	0.77	(tons/acre/month)	2	—	—	1	18.5
	Demolition	0.0042	(lbs/ft ³)	—	—	NA	NA	NA
	Equipment Exhaust	2.2	(g/yd ³)	—	3,000	—	1	0.003
CO	Equipment Exhaust	138.0	(g/yd ³)	—	3,000	—	1	0.46
ROG	Equipment Exhaust	9.2	(g/yd ³)	—	3,000	—	1	0.03
NO _x	Equipment Exhaust	42.4	(g/yd ³)	—	3,000	—	1	0.14
SO _x	Equipment Exhaust	4.6	(g/yd ³)	—	3,000	—	1	0.02

^a PM₁₀ = particulate matter 10 microns or less in diameter; CO = carbon monoxide; ROG = reactive organic gasses; NO_x = nitric oxide; and SO_x = sulfur oxide.

^b Emissions factors are from the 1999 Bay Area Air Quality Management District (BAAQMD) California Environmental Quality Act (CEQA) Guidelines – Assessing the Air Quality Impacts of Projects and Plans.

^c Acreage figure is approximate.

tons/acre/month = tons per acre per month

lbs/ft³ = pounds per cubic feet

g/ft³ = grams per cubic feet

g/yd³ = grams per cubic yard

yd³ = cubic yards

ft³ = cubic feet

tons/yr = tons per year

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APPENDIX C

Finding of No Significant Impact for the Proposed Army Recruiting Battalion Center, Travis Air Force Base

FINDING OF NO SIGNIFICANT IMPACT FOR THE ARMY RECRUITING BATTALION CENTER TRAVIS AIR FORCE BASE

In accordance with the National Environmental Policy Act (40 CFR Parts 1500-1508) and its implementing regulations, the U.S. Department of the Air Force has conducted an Environmental Assessment (EA) to evaluate the potential environmental consequences of the proposed construction of the Army Recruiting Battalion Center at Travis Air Force Base (AFB). This Finding of No Significant Impact (FONSI) and attached EA provide an analysis of probable impacts associated with the Proposed Action and Alternatives 1 and 2.

Description of Proposed Action and Alternatives

The proposed project involves the construction of the Army Recruiting Battalion Center to provide necessary administrative space to support the operation as a regional headquarters for northern California and northwestern Nevada. The components of this Proposed Action are described in detail as follows:

- The Army Recruiting Battalion Center will include 12,152 square feet of administrative office space. The facility will have a battalion operations center, computer training classroom, local area network room, information systems staging area, information systems storage room, mail room, file room, conference room, legal library, graphics art room, lunch and break room, and general purpose storage room.
- Heating will be supplied by individual gas-fire units; air conditioning will be supplied by self-contained systems.
- Anti-terrorism/ Air Force Protection measures will include laminated windows, security fencing, and lighting.
- A parking area will be constructed on the project site to provide a total of 36 privately owned vehicle (POV) parking spaces, 10 government-owned vehicle (GOV) parking spaces, and 5 visitor parking spaces.

Summary of Environmental Consequences

The following is a summary of the environmental consequences of the Proposed Action, Alternative 1, and Alternative 2.

- The potential for soil erosion during construction exists, but impacts will not be significant because the duration of ground disturbance during construction will be brief. In addition, Best Management Practices (BMPs) will be implemented to minimize the impacts associated with soil erosion and sedimentation, to keep these below significant levels.
- No impacts to native biological resources will occur.

- No impacts pertaining to hazardous wastes are anticipated. However, given past dumping onto Site 2, and as a BMP, representative soil samples should be collected prior to construction activities for Alternative 1 to confirm that the materials dumped did not contain a hazardous substance.
- Short-term impacts to localized air quality may occur from the generation of fugitive dust during construction activities. Bay Area Air Quality Management District enhanced fugitive dust control measures will be implemented to minimize the impacts and keep them below significant levels.
- Noise levels will increase slightly during construction but will be less than ambient levels, which are affected by nearby aircraft operations.
- The potential for impacts to cultural resources exist. A stone wall does run along the northwestern portion of the Proposed Action site (Site 1). This wall may have been constructed when the detention facility was in operation, and may therefore have cultural significance. However, a mitigation measure is presented in the EA that will reduce this impact to an insignificant level.
- Construction of the Proposed Action, Alternative 1, or Alternative 2 will not have any adverse impacts on minority or low-income populations living near Travis AFB.
- Short-term impacts to localized air quality may occur from the generation of fugitive dust during construction activities. Bay Area Air Quality Management District enhanced fugitive dust control measures will be implemented to minimize the impacts and keep them below significant levels.

Potential impacts for Alternative 1 will be the same as indicated above for the Proposed Action, except as previously indicated for cultural resources and hazardous materials. Impacts will not be significant.

No cumulative impacts were identified for the Proposed Action or the two alternatives.

Decision

Based on my review of the facts and analyses contained in the EA, I conclude that implementation of either the Proposed Action or Alternative Action 1 will not have a significant impact either by itself or when considering cumulative impacts. Accordingly, the requirements of NEPA, regulations promulgated by the Council on Environmental Quality, and 32 CFR 989 are fulfilled and environmental impact statement is not required.

MICHAEL L. SEVIER, Colonel, USAF
Commander, 60th Air Mobility Wing (AMW)

Date: _____