Final Environmental Assessment

United States Air Force Proposed Lease Replacement for Scandia Elementary School, Travis Air Force Base, California

Prepared for:

Department of the Army, Corps of Engineers
Omaha District

Travis Air Force Base
60th Civil Engineer Squadron

United States Air Force Civil Engineer Center
National Environmental Policy Act Division

September 2015

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FINAL
FINDING OF NO SIGNIFICANT IMPACT FOR THE UNITED STATES AIR FORCE PROPOSED LEASE REPLACEMENT FOR SCANDIA ELEMENTARY SCHOOL, TRAVIS AIR FORCE BASE, CALIFORNIA

Description of Proposed Action: An Environmental Assessment (EA) has been developed in accordance with the requirements of the National Environmental Policy Act (NEPA) of 1969, the Council on Environmental Quality (CEQ) regulations, and implementing regulations set forth in 32 Code of Federal Regulations (CFR) §989 (*Environmental Impact Analysis Process*), as amended, to evaluate a United States Air Force (USAF) proposal to replace a real property lease to the Travis Unified School District (TUSD) for the continued operation of Scandia Elementary School at Travis Air Force Base (AFB), California. The attached EA is incorporated by reference into this document.

The Proposed Action includes replacement of the current lease of 7.209 acres of real property to the TUSD for the operation of Scandia Elementary School with a new 25-year lease. The new lease will allow the TUSD to pursue a grant from the Office of Economic Adjustment (OEA) for the purpose of renovating and expanding the school. Proposed improvements to the school include the following:

- Construction of six new general purpose classrooms;
- Construction of a new multi-purpose room/cafeteria;
- Construction of a new information center/administrative office;
- Construction of a new food service/preparation facility;
- Renovations to former cafeteria space to create a new library/media center;
- Renovations to the existing library;
- Construction of permanent classroom enclosure walls;
- Removal of the four portable classrooms currently in use;
- Regrading and/or resurfacing of playing fields and hard courts;
- Renovating all restrooms to comply with the Americans with Disabilities Act (ADA);
- Replacement of exterior doors and installation of impact resistant glazing on window and door frames to comply with ATFP standards as required by United Facilities Criteria (UFC) 4-010-01 *DoD Minimum Antiterrorism Standards for Buildings* (1 October 2013); and
- Modernization of building infrastructure and support systems.

Description of Alternatives Analyzed: In addition to the Proposed Action, the No Action Alternative was carried forward for analysis in the EA.

The ***No Action Alternative*** would not include the replacement of the current lease to the TUSD at this time. The lease would potentially be replaced or renewed before the current lease termination date of 14 May 2018, but the present opportunity to secure a school design and construction grant from the OEA would be lost, and critically needed improvements to the school would not be completed.

Summary of Findings: Direct, indirect, and cumulative impacts regarding Air Installation Compatible Use Zones and land use, air quality, noise, water resources, safety and occupational health, hazardous materials and waste, biological resources, cultural resources, geology and soils, socioeconomics and environmental justice, and infrastructure and utilities were analyzed for the Proposed Action and No Action Alternative.

Any plans, standards, or practices required by local, state, or federal law or USAF regulation will be observed in an effort to avoid or minimize impacts to the resources including BMPs commonly required in construction or renovation contracts for resource protection at Travis AFB. Therefore, the analysis in the EA concluded the following:

There will be no significant impact from the Proposed Action to Air Installation Compatible Use Zones and land use, air quality, water resources, safety and occupational health, hazardous materials and waste, biological resources, cultural resources, geology and soils, socioeconomics and environmental justice, or infrastructure and utilities.

The Proposed Action is not expected to contribute appreciably to cumulative environmental impacts when considered in the context of other projects that have recently been completed, are currently under construction, or are anticipated in the near future.

Finding of No Significant Impact: Based on information and analysis presented in the EA and review of public and agency comments submitted, I conclude that implementation of the Proposed Action will not constitute an action that significantly affects the quality of the human environment due to the findings listed above and expanded upon in the EA. Accordingly, a finding of no significant impact is made for this project and an Environmental Impact Statement is therefore not necessary.

30 SEP 2015

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JOEL D. JACKSON, Colonel, USAF
Commander, 60th Air Mobility Wing

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September 2015

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ACRONYMS AND ABBREVIATIONS

%	percent
AAQS	Ambient air quality standards
ACM	Asbestos Containing Material
ADA	Americans with Disabilities Act
AFB	Air Force Base
AFI	Air Force Instruction
AHERA	Asbestos Hazard Emergency Response Act
AICUZ	Air Installation Compatible Use Zone
APCD	Air Pollution Control District
APZ	Accident Potential Zone
AQMD	Air Quality Management District
ATFP	Anti-Terrorism Force Protection
BMPs	Best Management Practices
BTU	British thermal unit
CAA	Clean Air Act
CAEAQ	California Almanac of Emissions and Air Quality
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CEQ	Council on Environmental Quality
CARB	California Air Resources Board
CESA	California Endangered Species Act
CFR	Code of Federal Regulations
CNEL	Community Noise Equivalent Level
CTS	California Tiger Salamander
CWA	Clean Water Act
CZ	Clear Zone
dB	Decibel
dBA	"A-weighted" decibel
DNL	Day-night average sound level
DOPAA	Description of Proposed Action and Alternatives
DoD	Department of Defense
EA	Environmental Assessment
EBS	Environmental Baseline Survey
EIAP	Environmental Impact Analysis Process
EISA	Energy Independence Security Act
EO	Executive Order
EPA	U.S. Environmental Protection Agency
EPAct	Energy Policy Act
ESA	Endangered Species Act
FAA	Federal Aviation Administration
FICAN	Federal Interagency Committee on Aviation Noise
FICON	Federal Interagency Committee on Noise
FONSI	Finding of No Significant Impact
FY	Fiscal Year
GHG	Greenhouse gas
GIS	Geographic Information System
HAP	Hazardous Air Pollutant

HUD	U.S. Housing and Urban Development
HVAC	Heating, ventilation, and air conditioning
ICRMP	Integrated Cultural Resources Plan
IICEP	Interagency/Intergovernmental Coordination for Environmental Planning
INRMP	Integrated Natural Resources Management Plan
LBP	Lead-based paint
MBTA	Migratory Bird Treaty Act
MFH	Military Family Housing
MFR	Memorandum for Record
MS4	Municipal Separate Storm Sewer System
NAAQS	National Ambient Air Quality Standard
NAGPRA	Native American Graves Protection and Repatriation Act
NAHC	Native American Heritage Commission
NEI	National Emissions Inventory
NEPA	National Environmental Policy Act
NESHAP	National Emission Standards for Hazardous Air Pollutants
NHPA	National Historic Preservation Act
NLAA	Not Likely to Adversely Affect
NLR	Noise level reduction
NPDES	National Pollutant Discharge Elimination System
NRHP	National Register of Historic Places
OEA	Office of Economic Adjustment
OSHA	Occupational Safety and Health Administration
PCB	Polychlorinated biphenyl
PG&E	Pacific Gas & Electric
PM	Particulate matter
ppb	Parts per billion
ppm	Parts per million
PSD	Prevention of Significant Deterioration
RCRA	Resource Conservation and Recovery Act
ROG	Reactive organic gases
ROI	Region of Influence
RONA	Record of Non-Applicability
RRP	Renovation, Repair, and Painting
SHPO	State Historic Preservation Officer
SIP	State Implementation Plan
SLF	Sacred Lands File
SOP	Standard Operating Procedure
SWPPP	Storm Water Pollution Prevention Plan
TAC	Toxic air contaminants
TSCA	Toxic Substance Control Act
TUSD	Travis Unified School District
UFC	United Facilities Criteria
USACE	U.S. Army Corps of Engineers
USAF	United States Air Force
USC	United States Code
USFWS	United States Fish and Wildlife Service
VOC	Volatile organic compound

ORGANIZATION OF THE DOCUMENT

The following is an Environmental Assessment (EA) for the United States Air Force's (USAF) proposed replacement of a real property lease to the Travis Unified School District (TUSD) for the continued operation of Scandia Elementary School at Travis Air Force Base (AFB), California. The EA is organized into the following sections. The first two sections serve as the Executive Summary.

- **Section 1 – Purpose, Need, and Scope:** describes the purpose of and need for the project as well as the general extent of proposed project activities.
- **Section 2 – Description of Proposed Action and Alternatives:** provides a more detailed description of the Proposed Action. This section also includes a description of the alternatives that were considered for achieving the stated purpose, as well as selection standards that were developed to guide the selection of alternatives.
- **Section 3 – Affected Environment:** provides a description of existing resources that have the potential to be affected by the alternatives.
- **Section 4 – Environmental Consequences:** describes the environmental effects of implementing the Proposed Action and the No Action Alternative. The effects of the No Action Alternative provide a baseline for evaluation and comparison. Any best management practices (BMPs) that would be implemented to reduce impacts to resources are identified in this section.
- **Section 5 – List of Preparers:** provides information regarding the interdisciplinary staff involved in preparing the EA.
- **Section 6 – References:** provides citations for documents and other materials used to prepare the EA.

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1. PURPOSE AND NEED FOR ACTION

1.1 Introduction

The United States Air Force (USAF) is required to consider the environmental consequences of any proposed action in the decision-making process under the following regulations:

- National Environmental Policy Act (NEPA) of 1969 (42 United States Code [USC] § 4321 to 4370d),
- Council on Environmental Quality (CEQ) implementing regulations (40 Code of Federal Regulations [CFR] Parts 1500–1508), and
- Department of the Air Force Environmental Impact Analysis Process (EIAP) (32 CFR Part 989), which codifies Air Force Instruction (AFI) 32-7061, *The Environmental Impact Analysis Process* (24 January 1995).

This Environmental Assessment (EA) examines the potential environmental impacts resulting from the USAF's proposed replacement of a real property lease to the Travis Unified School District (TUSD) on Travis Air Force Base (AFB). The property is currently leased to the TUSD for the operation of Scandia Elementary School. Implementation of the Proposed Action would allow the TUSD to pursue grant funding for improvements to the school.

Travis AFB is located in northern California approximately 50 miles northeast of San Francisco and 40 miles southwest of Sacramento, the state capital. It is situated within the city limits of Fairfield, the county seat of Solano County (**Figure 1**) and within the greater San Francisco area. Other local communities in the vicinity of the Base include Vacaville to the north and Suisun City to the south. Fairfield and Suisun City lie at the northern end of the Suisun Slough Channel, an arm of Suisun Bay, which is a reach of San Francisco Bay.

Scandia Elementary School is situated on 7.209 acres in the north central portion of the Base. Current development of the property is shown on **Figure 2**. The school serves military dependents, and primarily draws students from the Military Family Housing (MFH) units that surround the school.

1.2 Purpose of the Action

The purpose of the Proposed Action is to continue the beneficial use of real property on Travis AFB by facilitating the TUSD's pursuit of a grant from the Department of Defense (DoD) Office of Economic Adjustment (OEA) for renovations and additions to Scandia Elementary School.

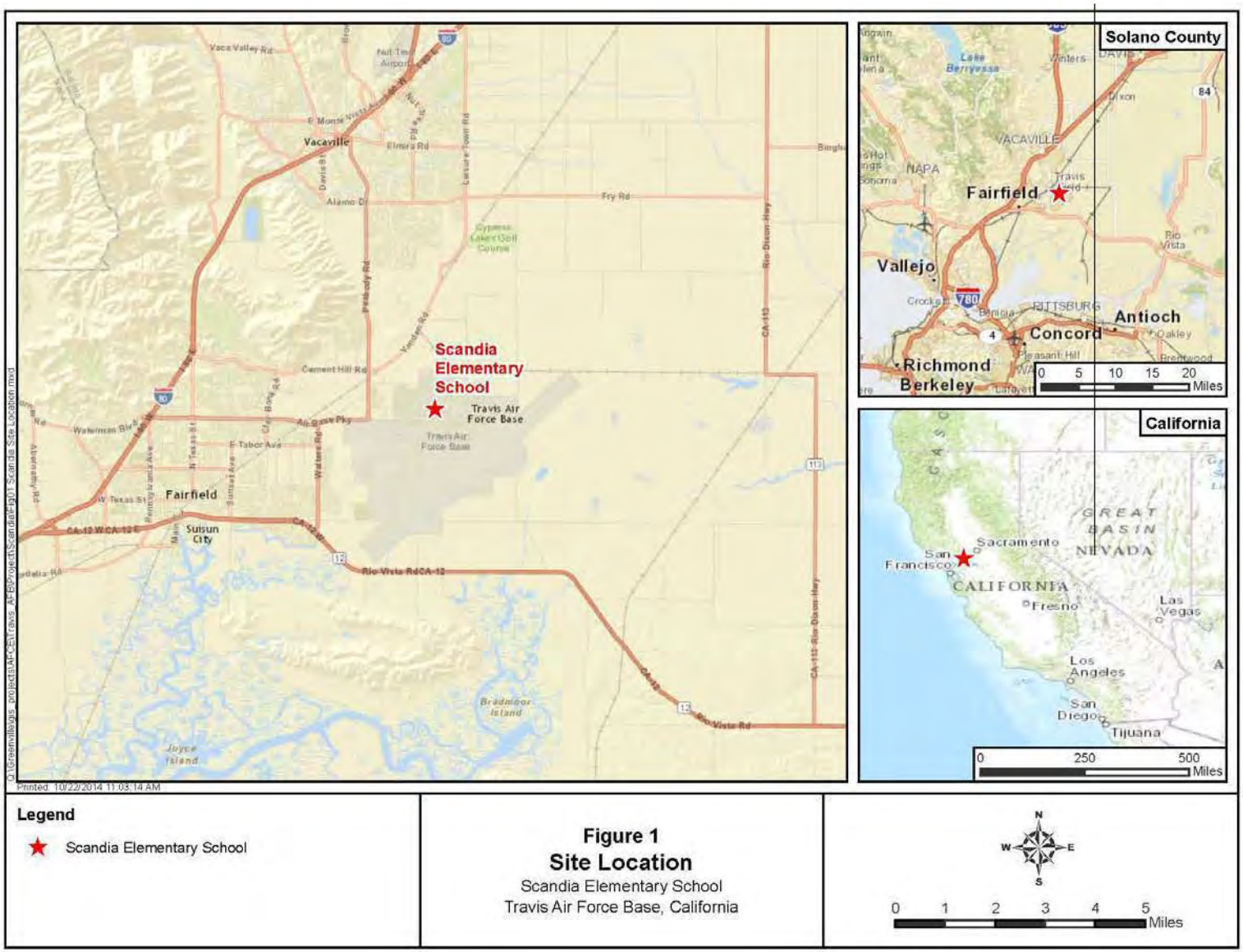

Figure 1. Site Location Map.

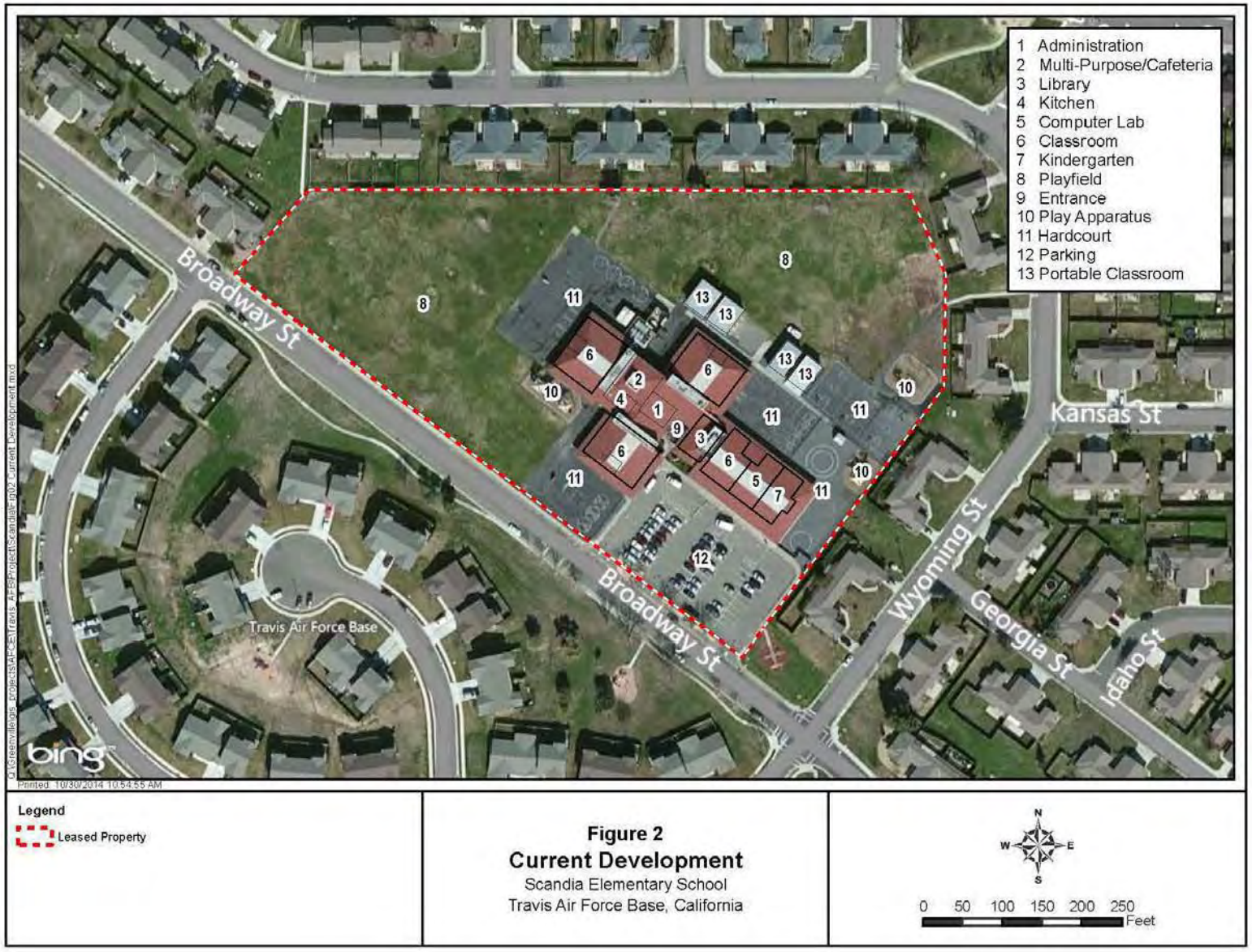

Figure 2. Current Development of Scandia Elementary School.

1.3 Need for the Action

The Proposed Action is needed to provide the TUSD sufficient interest in the Scandia Elementary School property to obtain a school design and construction grant from the OEA. The current lease will expire on 14 March 2018, and the OEA has determined that to be considered for the grant, the lease must be extended to show that the TUSD retains sufficient interest in the land upon which Scandia Elementary School sits. The grant is needed to complete renovations and expansions so that the school can educate students in a safe, modern, adequately sized learning environment. A Facilities Condition Assessment Report (Alpha Facilities Solutions 2011) identified a number of current and imminent deficiencies at Scandia Elementary School. These deficiencies included:

- Inadequate classroom facilities (current enrollment is 549 students, and the report calculated a capacity of 323 students);
- Inadequate Anti-Terrorism Force Protection (ATFP) due to the absence of impact resistant glazing on windows and doors;
- Infrastructure systems (e.g., branch circuits, emergency lights, fire alarm system, kitchen hoods, and plumbing piping and fixtures) that are beyond their service life; and
- Exterior doors and wall finishes that will be beyond their useful life by 2016.

1.4 Regulatory Framework

This EA has been developed in accordance with the NEPA, the CEQ's NEPA implementing regulations, and 32 CFR Part 989 (see Section 1.1). Federal, state, and local laws and regulations potentially applicable to the Proposed Action are specified within this EA where appropriate. They include, but are not limited to:

- Migratory Bird Treaty Act (MBTA); 16 USC 703-712, 3 July 1918; as amended 1936, 1960, 1968, 1969, 1974, 1978, 1986, and 1989).
- National Historic Preservation Act (NHPA) of 1966, as amended (36 CFR Part 800).
- Federal Clean Air Act (CAA) of 1990 (42 USC §7401 *et seq*., as amended).
- The Asbestos Hazard Emergency Response Act (AHERA) (15 USC Chapter 53, Subchapter II).
- Asbestos National Emission Standards for Hazardous Air Pollutants (NESHAP) (40 CFR Part 61, Subpart M).
- The U.S. Environmental Protection Agency's (EPA's) 2008 Lead Renovation, Repair, and Painting (RRP) Rule (as amended in 2010 and 2011).
- Native American Graves Protection and Repatriation Act, as amended (NAGPRA) (25 USC 3001 *et seq*.).
- Federal Water Pollution Control Act, or Federal Clean Water Act (CWA), of 1972, as amended; Sections 401 and 404.
- Endangered Species Act (ESA) of 1973 (7 U.S.C. § 136, 16 U.S.C. § 1531 et seq.).
- Executive Order (EO) 13175, *Consultation and Coordination with Indian Tribal Governments* (6 November 2000).

- EO 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations* (11 February 1994).
- EO 13045, *Protection of Children from Environmental Health Risks and Safety Risks* (21 April 1997), as amended by EO 13296 (23 April 2003).
- EO 13423, *Strengthening Federal Environmental, Energy, and Transportation Management* (24 January 2007).
- EO 13514, *Federal Leadership in Environmental, Energy, and Economic Performance* (5 October 2009).
- Energy Policy Act of 2005 (EPAct; 8 August 2005).
- California Water Resources Board National Pollutant Discharge Elimination System (NPDES) General Permit for Discharges of Storm Water Associated with Construction Activity (General Permit Order 2009-0009-DWQ [as amended by 2010-0014-DWQ and 2012-0006-DWQ]), including the development and implementation of a Storm Water Pollution Prevention Plan (SWPPP) for stormwater discharges from small Municipal Separate Storm Sewer Systems (MS4) order number 2013-0001-DWQ General Permit.
- Wastewater Discharge Permit number SIU 07/NSCIU 433-02.
- California Code of Regulation: also known as the California Building Standards Codes, administered by the Building and Safety Division of the County of Solano.

1.5 Public and Agency Involvement

The USAF invites public participation in their decision-making through the NEPA process. Consideration of the views and information of all interested persons promotes open communication and enables better planning. Agencies, organizations, and members of the public having a potential interest in the Proposed Action, including minority, low-income, disadvantaged persons, and Native American Tribes, are invited to participate in the decision-making process.

1.5.1 Public Involvement

A Notice of Availability (NOA) for the Draft EA and Finding of No Significant Impact (FONSI) was published in the *Daily Republic* (www.dailyrepublic.com), *The Reporter* (www.thereporter.com), and the *Tailwind* (www.tailwind.dailyrepublic.net) on 10 July 2015. This initiated the 30-day public review period. The NOA was issued to solicit comments on the Proposed Action and involve the local community in the decision-making process. Copies of the Draft EA and FONSI were made available for review at the Fairfield Civic Center Library (http://solanolibrary.com/fairfield-civic-center/) , the Suisin City Library (www.solanolibrary.com/suisun), the Vacaville Public Library Cultural Center (www.solanolibrary.com/vacaville-cultural-center/), and the Mitchel Memorial Library (www.mitchellmemoriallibrary.org). Electronic copies of the documents were posted at www.travis.af.mil/enviro/ . At the conclusion of the review period, no public comments had been received. No responses from relevant federal, state, tribal, and local agencies were received.

1.5.3 Agency Coordination

Intergovernmental and Interagency Coordination for Environmental Planning (IICEP) is a federally mandated process for informing and coordinating with Tribal and other governmental agencies regarding a federal Proposed Action. CEQ regulations require intergovernmental notifications prior to making any detailed statement of environmental impacts. Through the IICEP (i.e., scoping) process, the USAF notifies relevant federal, state, and local agencies and allows them sufficient time to make known their environmental concerns specific to a proposed action. Comments and concerns submitted by these agencies during the IICEP process are subsequently incorporated into the analysis of potential environmental impacts conducted as part of this EA. This coordination fulfills requirements under Executive Order (EO) 12372 (superseded by EO 12416, and subsequently supplemented by EO 13132), which requires federal agencies to cooperate with and consider state and local views in implementing a federal proposal. It also constitutes the IICEP process for this EA. Agencies with whom the USAF has consulted as part of this EA to date include:

- The Native American Heritage Commission (NAHC),
- The US Fish and Wildlife Service (USFWS), Region 8, and
- The California State Historic Preservation Officer (SHPO).

Copies of sent and received correspondence are provided in **Appendix A**. The SHPO did not respond. Responses have been received from the following agencies either identifying potential environmental concerns or issues, or stating that they did not identify any such issues associated with the Proposed Action:

- The NAHC responded in a letter dated 10 December 2014. In their response, the NAHC stated that a Sacred Lands File (SLF) search failed to indicate the presence of Native American cultural resources in the project area. They did, however, identify the Cortina Band of Indians and the Yocha Dehe Wintun Nation as Native American organizations that may have knowledge of cultural resources in the area.
- The USFWS responded in a letter dated 05 January 2015. They concurred with Travis AFB's Not Likely to Adversely Affect (NLAA) determination for the federally threatened California tiger salamander (CTS) (*Ambystoma californiense*).

1.5.4 Native American Consultation

Based on the response from the NAHC, Travis AFB leadership initiated government-to-government consultations with the Cortina Band of Indians and the Yocha Dehe Wintun Nation on 28 January 2015.

The Yocha Dehe Wintun Nation responded in a letter dated 18 February 2015. In their response, they stated that the project is within their aboriginal territories, and that they have a cultural interest in the Proposed Action area. They further stated that they are not aware of any known cultural resources near the project site, and determined that an onsite Cultural Monitor would not be required.

The Cortina Band of Indians responded via email on 05 June 2015. In their response, they stated that they are not opposed to the proposed action, but requested that they be notified if artifacts are uncovered. They attached a copy of the Patwin Cultural Protection and Preservation Plan, which includes the protocol that the Cortina Band of Indians follows to avoid culturally sensitive materials as well as recommended mitigation measures in the event that culturally sensitive materials are uncovered.. The Plan is included in **Appendix A**.

2. DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES

2.1 Description of the Proposed Action

The USAF proposes to replace the current lease of 7.209 acres of real property on Travis AFB to the TUSD for the operation of Scandia Elementary School with a new 25-year lease. The lease would allow the TUSD to pursue a grant from the OEA for the purpose of renovating and expanding Scandia Elementary School. The Proposed Action is limited to the replacement of the current lease. Any subsequent improvements to the school by the TUSD would be considered indirect impacts of the Proposed Action. Therefore, the indirect impacts of the TUSD's proposed improvements are included in discussions of the Proposed Action and impacts. Section 2.4.1 provides details regarding the components of the Proposed Action.

2.2 Selection Standards

The NEPA, CEQ Regulations, and 32 CFR Part 989 require an EA to evaluate reasonable alternatives to the Proposed Action. Alternatives that are eliminated from detailed analysis must be identified along with a brief discussion of the reasons for eliminating them. For purposes of this analysis, an alternative is considered "reasonable" only if it enables the USAF to maintain the beneficial use of the property by executing a new 25-year lease with the TUSD for the continued operation of Scandia Elementary School. Once the new lease is executed, the TUSD would be able to continue to pursue grant funding to make necessary improvements to the school. "Unreasonable" alternatives would not enable the USAF to meet the purpose of and need for the Proposed Action and were not retained for further analysis.

Because Scandia Elementary School is currently operating on the property under lease from the USAF to the TUSD, alternatives were limited to the school property. The USAF developed the following selection standards to determine whether an alternative would be reasonable.

1. Alternatives must facilitate resolution of the deficiencies identified in the *Facilities Condition Assessment Report* for Scandia Elementary School (Alpha Facilities Solutions 2011). These deficiencies are listed in Section 1.3.

2. Alternatives must comply with AFI 32-9007, *Managing Air Force Real Property* (1 May 1999), which provides commanders and real property managers a reference for acquiring, disposing, and managing real property; and AFI 32-9002, *Use of Real Property Facilities* (22 November 1993). AFI 32-9002 provides guidance related to surveying USAF real property to identify property that the USAF does not need.

2.3 Application of Selection Standards

2.3.1 Proposed Action

As described in Section 2.1, The Proposed Action would replace the current lease of 7.209 acres of real property on Travis AFB to the TUSD for the operation of Scandia Elementary School with a new 25-year lease. The replacement lease would provide the TUSD sufficient interest in the property to pursue a grant from the OEA that would allow the district to resolve deficiencies that currently exist at the school (this satisfies selection standard 1). AFIs 32-9007 and 32-9002 both provide provisions for the lease of Air Force real property not currently needed. The Air Force has determined that the Scandia Elementary School Property is not needed for military use, and that the current use (i.e., the operation of Scandia

Elementary School) is beneficial to the military mission (this satisfies selection standard 2). The Proposed Action satisfies both selection standards, and therefore will be retained for further analysis.

2.3.2 Alternative 1 — No Action

Under the No Action Alternative, the USAF would not replace the current lease to the TUSD at this time. The lease would potentially be replaced or renewed before the current lease termination date of 14 May 2018, but the present opportunity to secure a school design and construction grant from the OEA would be lost, and critically needed improvements to the school would not be completed. Therefore, the No Action Alternative does not satisfy selection standard 1, or the purpose of and need for the Proposed Action.

2.3.3 Alternative 2 — Sell the Property to the TUSD

Under Alternative 2, the USAF would sell the 7.209-acre parcel to the TUSD. This alternative would allow the TUSD to show sufficient interest in the property to continue pursuit of the OEA grant, which would allow the district to correct current deficiencies at Scandia Elementary School. However, AFI 32-9002 states that ownership should be retained (i.e., not sold) if "The property is an internal parcel and providing access to the public would disrupt installation operations." The subject property is an internal parcel, and student enrollment is limited to military dependents. Therefore, this alternative does not satisfy selection standard 2.

2.4 Evaluated Alternatives

Due to the very limited scope of the project, only the Proposed Action and No Action alternatives are evaluated in this EA. The property has been determined to be nonexcess, so selling it to the TUSD (as described in Section 2.3.3) is not a viable alternative.

2.4.1 Proposed Action

The USAF proposes to replace the current lease of 7.209 acres of real property to the TUSD for the operation of Scandia Elementary School with a new 25-year lease. The new lease would allow the TUSD to pursue a grant from the OEA for the purpose of renovating and expanding the school. Proposed improvements to the school are shown on Figure 3 and include the following:

- Construction of six new general purpose classrooms;
- Construction of a new multi-purpose room/cafeteria;
- Construction of a new information center/administrative office;
- Construction of a new food service/preparation facility;
- Renovations to former cafeteria space to create a new library/media center;
- Renovations to the existing library;
- Construction of permanent classroom enclosure walls;
- Removal of the four portable classrooms currently in use;
- Regrading and/or resurfacing of playing fields and hard courts;
- Renovating all restrooms to comply with the Americans with Disabilities Act (ADA);

- Replacement of exterior doors and installation of impact resistant glazing on window and door frames to comply with ATFP standards as required by United Facilities Criteria (UFC) 4-010-01 *DoD Minimum Antiterrorism Standards for Buildings* (1 October 2013); and
- Modernization of building infrastructure and support systems.

The proposed improvements would increase the square footage of the school building from approximately 38,000 square feet to about 54,000 square feet. The lease replacement would be completed in 2015, and the TUSD would make improvements to the school shortly thereafter (pending funding). The improvements would require approximately two years to complete. All construction activities would be completed between the months of June and October. All construction/renovation in currently occupied areas of the school would take place during periods when school is not in session.

2.4.2 No Action Alternative

Under the No Action Alternative, the USAF would not replace the current lease to the TUSD at this time. The lease would potentially be renewed or replaced before the termination date of 14 May 2018, but the present opportunity to secure a school design and construction grant from the OEA would be lost, and critically needed improvements to the school would not be completed. While the No Action Alternative would not meet the purpose of or need for the Proposed Action, it is analyzed in this EA to provide a comparative baseline as required under USAF and CEQ regulations (32 CFR Part 989.8(a) and (d), and 40 CFR Part 1502.14, respectively).

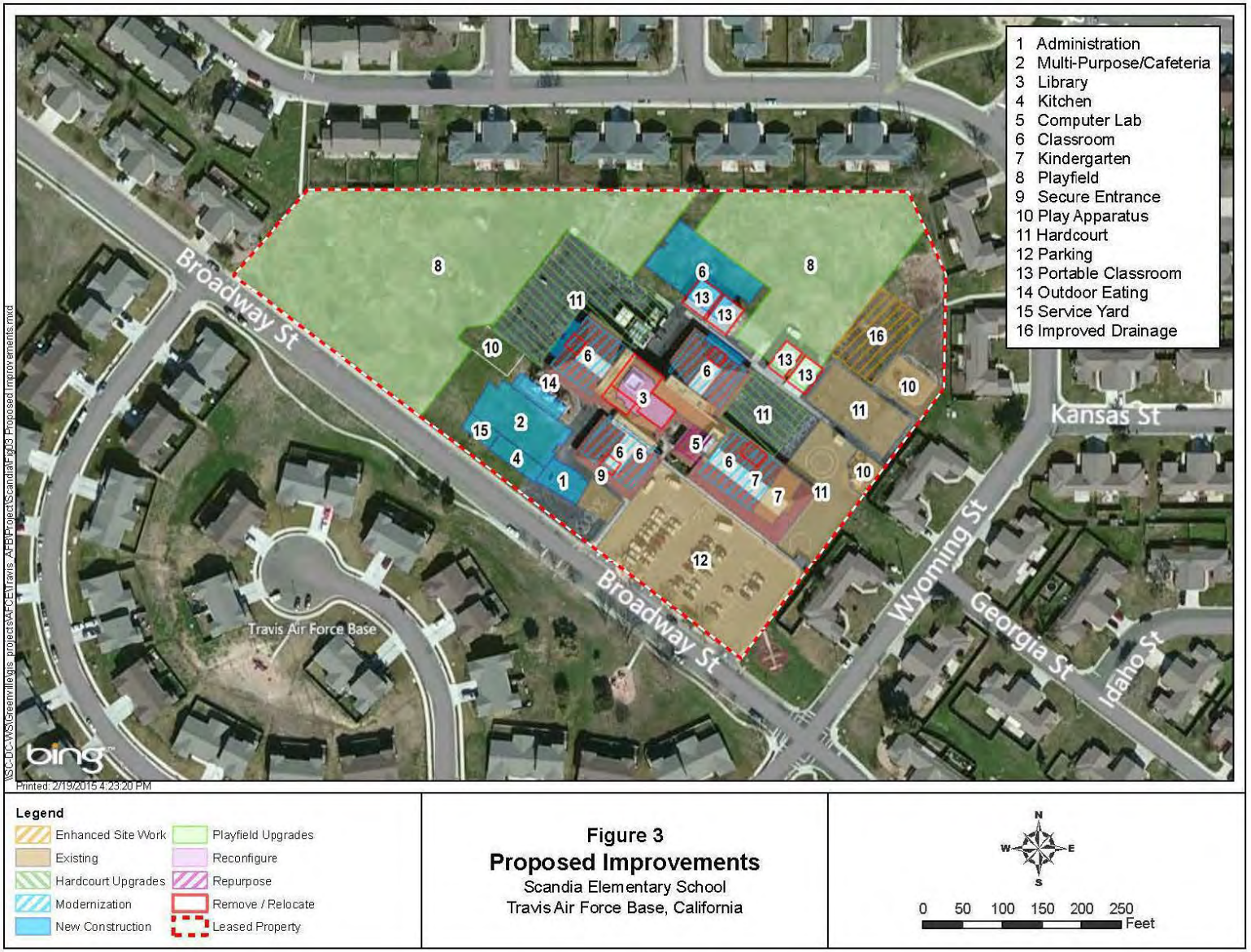

Figure 3. Proposed Improvements to Scandia Elementary School.

2.5 Summary of Anticipated Environmental Impacts

Table 1 provides a brief summary the anticipated impacts to resource areas that would result if Travis AFB implements the Proposed Action (and the TUSD subsequently makes improvements to Scandia Elementary School) or No Action Alternative. The table also designates the sections of the EA where those resources are addressed. Impacts would not approach the significance threshold for any resource area.

Table 1. Summary of Environmental Impacts.

Resource (Sections Where Addressed)	Proposed Action and Likely Indirect Impacts	No Action Alternative
Air Installation Compatible Use Zone (AICUZ) and Land Use (3.1.1)	No Impact to AICUZ or land use. Leased property would continue to be operated as Scandia Elementary School.	No impact.
Air Quality (3.2.1, 4.1)	Less than significant impact. Minor short-term impact during construction.	No impact.
Noise (3.2.2, 4.2)	Short-term minor noise increase due to construction equipment would be limited to the immediate project vicinity.	No impact.
Water Resources (3.2.3, 4.3)	Very minor, short-term impact during construction. No long-term increase in water usage would be expected.	No impact.
Safety and Occupational Health (3.2.4, 4.4)	No short-or long-term impact. Asbestos containing materials (ACM) and lead-based paint (LBP) in areas of planned renovation would be abated in accordance with state and federal regulations. Contractor would be required to take measures to protect worker health and safety during construction and renovation activities.	No impact.
Hazardous Materials and Waste (3.2.5, 4.5)	Very minor, short-term impact due to disposal of ACM or LBP. No long-term impact; the school would not use or generate hazardous materials and would not generate hazardous waste.	No impact.

Table 1. (continued).

Resource	Proposed Action and Likely Indirect Impacts	No Action Alternative
Biological Resources (3.2.6, 4.6)	No likely impact. The property is currently improved and has no 100-year floodplains, wetlands, native upland habitats, threatened or endangered species or habitats, or invasive species populations. The USFWS concurred with a Travis AFB Not Likely to Adversely Affect determination for the federally threatened CTS, which occurs in the vicinity of the school. Conservation measures would be implemented to avoid impacts to this species.	No impact.
Cultural Resources (3.2.7, 4.7)	No likely impact. There are no National Register of Historic Places (NRHP) eligible structures in the vicinity or viewshed of the project site. The entire property has been disturbed, and is considered to be a low probability area for archaeological resources. No known Native American Sacred Lands are located on or near the site. Tribes that were consulted have no objection to the Proposed Action.	No impact.
Geology and Soils (3.1.2)	Very minor impact. The Proposed Action does not include significant alteration to geologic resources. The only impacts from implementing the Proposed Action would be to previously disturbed, generally level ground.	No impact.
Socioeconomics, Environmental Justice, and Protection of Children (3.1.3)	Less than significant beneficial socioeconomic impact. Short-term benefit due to construction jobs, slight long-term impacts due to enhanced educational opportunity for students. No impacts to Environmental Justice.	Slight negative impact due to continued substandard educational environment.
Infrastructure and Utilities (3.1.4)	Very minor impact. All required utilities are currently located onsite. A negligible short-term increase in traffic during construction would be expected. Any increases in utility usage would be minimal.	No impact.

3. AFFECTED ENVIRONMENT

The potentially affected human environment is interpreted comprehensively to include natural and physical resources and the relationship of people with those resources (40 CFR 1508.14). Information presented in this section serves as a baseline from which to identify and evaluate any individual or cumulative environmental and socioeconomic changes likely to result from implementation of the Proposed Action (including likely indirect impacts that would result from the TUSD making improvements to the school) and the No Action Alternative. In compliance with the NEPA, CEQ regulations, and 32 CFR 989, the description of the affected environment focuses on those resources and conditions potentially subject to effects, thus laying the groundwork for discussions of potential environmental impacts to each resource. As such, relevant natural and physical resources were selected for analysis in this section.

The affected environment includes existing environmental, cultural, and socioeconomic conditions within the Region of Influence (ROI) for proposed and alternative actions. For the purposes of this analysis, the ROI is generally defined as the property that is currently leased to the TUSD (i.e., the Site, or the school) and the surrounding local area. The exception to this generality is Air Quality, for which the ROI is the San Francisco Bay Area air basin.

The sections for each resource topic begin with an introduction that defines the resources addressed in the section. Following the introduction for each resource topic, information is presented about any federal, state, or local regulatory requirements related to the resource and relevant to the proposed and alternative actions. Finally, existing environmental conditions in the ROI are described. This information provides a frame of reference about conditions that prevail currently or existed in the recent past.

Resource information for this EA was obtained through review of existing environmental documents, available Geographic Information System (GIS) data, field observations, and communications with Travis AFB staff, regulatory agencies, and other agencies and organizations. Information is presented to the level of detail necessary to support the analysis of potential impacts in Section 4, Environmental Consequences. As noted in Section 2.1, the Proposed Action (replacing the current lease) would not result in impacts to the environment. Therefore, the discussion and analysis in the following sections focuses on indirect impacts (i.e., those which are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable). Qualified technical subject matter experts examined each action component for potential effects on each technical resource area considering the scope of the action and available resource information. The examination resulted in certain resources being dismissed from detailed analysis. Those resources that were dismissed are addressed below in Section 3.1.

3.1 Resources Eliminated From Further Analysis

The Air Force, in accordance with CEQ regulations (40 CFR 1500.1(b) and 1500.4(b)), endeavors to keep NEPA analyses as concise and focused as possible: "…NEPA documents must concentrate on the issues that are truly significant to the action in question, rather than amassing needless detail…prepare analytic rather than encyclopedic analyses."

Resource areas that were eliminated from further analysis for this EA include AICUZ and land use (with the exception of the noise component), geology and soils, socioeconomics and environmental justice, and utilities and infrastructure. These resource areas are discussed briefly in Sections 3.1.1 through 3.1.4. Included for each is the rationale as to why the resource was not retained for further analysis.

3.1.1 Air Installation Compatible Use Zone and Land Use

Travis AFB has designated AICUZ to provide recommendations for compatible uses in areas subject to accident hazards (Travis AFB 2009). Travis AFB has established Clear Zones (CZs), Accident Potential Zones (APZs), and safety zones around the airfield to minimize the results of a potential accident involving aircraft operating from the base. In developing these zones, Travis AFB utilizes two Class B runways. Within clear and safety zones, construction is either prohibited (CZs) or limited in terms of placement and height (safety zones). Areas around the airfield where experience has shown most aircraft accidents occur are designated as APZs. Scandia Elementary School is well removed from any CZs, APZs, and safety zones.

The local communities or county governments are responsible for adopting appropriate land use controls to prevent incompatible development. Solano County adopted a land use compatibility plan in 2002 (Shutt Moen Associates 2002), and a revised plan is currently being developed (Eberling 2014). The City of Fairfield has developed a Municipal Service Review Update (City of Fairfield 2012), which includes planning goals to reduce conflicts with Travis AFB.

The Proposed Action is consistent with current base planning, and would not require changes to the AICUZ or land uses surrounding Travis AFB. Therefore, AICUZ and land use are not further evaluated in this EA.

3.1.2 Geology and Soils

Geologic resources include topography, geology, and soils. Protection of unique geological features, minimization of soil erosion, and the siting of facilities in relation to potential geologic hazards are considered when evaluating potential effects of a proposed action on geological resources. Generally, adverse effects can be avoided or minimized if proper construction techniques, erosion control measures, and structural engineering design are incorporated into project development. Effects on geology and soils could be significant if any of the following occur:

- Alteration of the lithology, stratigraphy, and geological structures that control groundwater quality;
- Alteration of the distribution of aquifers and confining beds, and groundwater availability; and
- Change the soil composition, structure, or function (including prime farmland and other unique soils) within the environment.

The geologic resources within proposed project areas were studied to determine the potential impacts from implementing the proposed and alternative actions. The soil survey, previous EAs, and topographic maps were reviewed to characterize the existing environment. Construction activities that could influence geologic resources were evaluated to predict the type and magnitude of potential impacts. For example, grading, excavating, and compaction would disturb soils during construction activities. The predicted post construction environment was compared to the existing environment and the change was evaluated to determine if significant changes in any existing conditions would occur.

Travis AFB lies along the western margin of the Sacramento River drainage of the Central Valley. The soils have weathered under a distinctive climatic cycle characteristic of the Pacific coast soil region. The Antioch San Ysidro Complex (AsA) is the only soil type on the subject property (Web Soil Survey 2014). The Antioch series consists of moderately well drained soils on terraces. These soils formed in alluvium from sedimentary sources. Slopes are 0 to 2 percent (%). In a representative profile, the surface layer is mottled, light brownish gray, brown, and light gray loam 19-inches thick. The subsoil is mottled, light yellowish brown, yellowish brown, and pale brown clay 41-inches thick. The substratum is pale brown

loam extending 60 inches or more. Permeability is very slow. This complex is approximately 50% Antioch loam and 35% San Ysidro sandy loam. The remaining 15% includes small areas of Solano loam and Pescadero clay loam. The Antioch soil has slightly concave slopes, and the San Ysidro soil has slightly convex slopes (Web Soil Survey 2014). There are no bedrock outcrops on the site, and based on the soils present, there is no bedrock near the surface.

The only potential impacts to geology and soils from implementing the Proposed Action would be to previously disturbed, generally level ground. Therefore, this resource area is not further evaluated in this EA.

3.1.3 Socioeconomics, Environmental Justice, and Protection of Children

The Proposed Action would have a negligible positive impact on socioeconomic resources, would not cause disproportionate adverse effects to minority or low-income populations, nor would it cause adverse health and safety impacts to children.

3.1.3.1 Socioeconomics

Socioeconomic resources are defined as the basic attributes associated with the human environment, and generally include factors associated with population, housing, education, and economic activity. Economic activity is typically described in terms of employment, personal income, and regional industries. Changes to these fundamental components can influence other community resources such as housing availability, utility capabilities, and public services. The socioeconomic conditions of a ROI could be affected by changes in the rate of population growth, changes in the demographic characteristics of a ROI, or changes in employment within the ROI caused by the implementation of the Proposed Action.

The proposed improvements to the school would result in a very minor short-term increase in construction jobs over a two-year period. The TUSD estimates that they would hire between two and four additional permanent staff following completion of the improvements. Considering that Travis AFB's economic impact to the economy was $1.62 billion in fiscal year 2013 (the most recent year for which such data is available), and the installation employed over 13,000 people during that time (Travis AFB 2014b), any changes to socioeconomic conditions attributable to the Proposed Action would be negligible. Therefore, socioeconomics are not further evaluated in this EA.

3.1.3.2 Environmental Justice

The EPA defines environmental justice as "the fair treatment and meaningful involvement of all people regardless of race, color, sex, national origin, or income with respect to the development, implementation and enforcement of environmental laws, regulations, and policies." Executive Order (EO) 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*, requires Federal agencies to consider disproportionately high adverse effects on the human or environmental health to minority and low-income populations resulting from implementation of a proposed action.

The Proposed Action would not disproportionately and adversely impact low-income and minority populations. It would not result in changes to the demographic composition of the area. Air quality and noise impacts would not affect low-income and minority populations during construction/renovation activities because there are no such communities within at least 0.8 miles, and those impacts would not be discernable at that distance. The Proposed Action would occur completely within Travis AFB boundaries. Therefore, environmental justice is not further evaluated in this EA.

3.1.3.3 Protection of Children

EO 13045, *Protection of Children from Environmental Health Risks and Safety Risks*, states that each Federal agency "(a) shall make it a high priority to identify and assess environmental health risks and safety risks that may disproportionately affect children; and (b) shall ensure that its policies, programs, activities, and standards address disproportionate risks to children that result from environmental health risks or safety risks." The Proposed Action would not cause adverse health and safety impacts to children because construction/renovation would not occur in existing buildings while they are occupied by students. The potential construction/renovation activities would have a slight beneficial effect on the educational environment for students. Therefore, protection of children is not further evaluated in this EA.

3.1.4 Infrastructure and Utilities

Infrastructure consists of the systems and physical structures that enable a population in a specified area to function. Infrastructure is wholly human-made, with a high correlation between the type and extent of infrastructure and the degree to which an area is characterized as "urban" or developed. Infrastructure and utilities include transportation, water supply, sanitary sewage/wastewater natural gas, electrical, communications, and liquid fuels. Stormwater management is addressed in Section 3.2.2, Water Resources.

All required utilities are currently present on the site. The Pacific Gas and Electric Company (PG&E) provides electricity and natural gas. Drinking water is supplied by the Travis AFB Treatment Plant, which is owned by the City of Vallejo. The property is included in the Travis AFB wastewater system. The sanitary sewer system collects permitted industrial and all sanitary wastewater and discharges it by permit from the local wastewater treatment authority (the Fairfield-Suisun Sewer District) to the local, publicly owned treatment plant.

Utility demand increases that would result from proposed construction/renovation activities at the school would be extremely minor at most. Even though the square footage of the school would be increased, the proposed improvements include upgrades to more efficient heating, ventilation and air conditioning (HVAC), electrical, and plumbing systems. This would minimize any potential increases in utility demands. Therefore, infrastructure and utilities would not be significantly impacted and are not further evaluated in this EA.

3.2 Resources Retained For Further Analysis

3.2.1 Air Quality

Air quality is described in terms of the type and amount of pollutants that are present in the local atmosphere. The amount of air pollutant in the ambient air is generally expressed as a concentration in units of parts per million (ppm), parts per billion (ppb), or micrograms per cubic meter ($\mu g/m^3$). The significance of a pollutant concentration is determined by comparing it to federal and state ambient air quality standards. These standards represent the maximum allowable concentrations that may occur while still providing protection to public health and welfare, with a reasonable margin of safety.

Factors that contribute to air quality are local and regional air emissions, geographical size of the air basin, topography, and prevailing meteorological conditions. Features such as mountains or valleys may inhibit the dispersion of pollutants. Meteorological conditions (temperature, wind speed, wind direction, amount of sunshine, and temperature inversions) influence the extent to which pollutants are dispersed and transported both vertically and horizontally within the atmosphere. Pollutant concentrations in the atmosphere near emission sources are generally highest with calm winds or strong temperature inversions, both of which limit the transport and dispersion of pollutants away from the emission source.

The State of California is divided into 15 geographical regions, referred to as "air basins," for the purpose of managing air resources on a regional basis. The similarity of meteorological and geographic conditions defines the boundaries of these regions. In addition to the air basins, the California Air Pollution Control Act authorized creation of Air Pollution Control Districts (APCDs) or Air Quality Management Districts (AQMDs) that collectively include every county of the State. These districts established the governing authorities responsible for controlling air pollution in the respective regions. Currently, there are 23 APCDs and 12 AQMDs for a total of 35 districts. Individual air basins and air districts range in size from single-county to nine-county areas.

Travis AFB is located within the San Francisco Bay Area air basin and the Bay Area AQMD, both of which include the following nine counties: Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, the western portion of Solano, and the southern portion of Sonoma. This region covers approximately 5,340 square miles and 19% of California's population.

All air emissions within the air basin, both manmade and naturally occurring, influence the air quality in the region. Emissions from sources like industry, motor vehicles, and fuel combustion are examples of manmade emissions. Examples of naturally occurring emissions include wildfires and windblown dust. This section provides an overview of the existing air resource for the Bay Area including regional climate, air quality as defined by state-monitored air pollutant levels, and baseline air emission levels.

3.2.1.1 Regulations and Requirements

Regulatory requirements at the federal, state, and local levels associated with air quality include air quality standards, state implementation plans, permitting programs, emissions monitoring programs, protection of environmentally sensitive areas, and greenhouse gases (GHG).

3.2.1.1.1 Federal Air Quality Standards

All emissions from stationary and mobile sources of air pollutants within a region affect the overall air quality of that area. Air quality is a measure of the cleanliness of the ambient air, which can be characterized in terms of whether or not it complies with the National Ambient Air Quality Standards (NAAQS). The CAA, as amended, requires the EPA to review and set NAAQS for pollutants considered harmful to public health and the environment. NAAQS have been established for principal pollutants, called "criteria pollutants" (40 CFR 50 and Section 108 of the CAA) and various averaging periods. The EPA is tasked with continual review and recommendations regarding revisions to the NAAQS based on new information on health effects related to air pollution. The EPA is also responsible for characterizing and designating a region's air quality status with respect to the NAAQS. A regional designation is made for each pollutant based on ambient air monitoring data collected and verified by the state environmental agencies:

- Attainment – in compliance with the NAAQS.
- Non-attainment – the NAAQS is not being met.
- Maintenance – a region that was previously classified as "nonattainment," but is now in compliance with the NAAQS may be redesignated as "maintenance" if the state has completed an air quality maintenance plan and has successfully demonstrated that the plan is effective in producing necessary emission reductions along with air quality improvements.
- Unclassified – no monitoring data is available. By default, these areas are considered to be in attainment.

The current NAAQS and EPA's attainment status for the Bay Area AQMD are presented in **Table 2**. Short-term standards (24-hour or shorter periods) were established for pollutants with acute health effects. Long-term standards (annual periods) were established for pollutants with chronic health effects.

Table 2. Ambient Air Quality Standards and Attainment Status.

Pollutant	Averaging Time	NAAQS (A, C)		California AAQS (B, C)	
		Federal Standard	Bay Area AQMD Attainment Status	State Standard	Bay Area AQMD Attainment Status
Carbon Monoxide (CO)	1-hour	35 ppm	Attainment	20 ppm	Attainment
	8-hour	9 ppm		9 ppm	
Nitrogen Dioxide (NO2)	1-hour	100 ppb	Unclassifiable/ Attainment	190 ppb	Attainment
	Annual	53 ppb		30 ppb	
Ozone (O3)	1-hour	-	**Non-attainment (marginal)**	0.09 ppm	**Non-attainment**
	8-hour	0.075 ppm		0.07 ppm	
Particulate Matter (PM 2.5) Fine	24-hour	35 µg/m^3	**Non-attainment (moderate)**	-	**Non-attainment**
	Annual	12 µg/m^3		12 µg/m3	
Particulate Matter (PM10) Respirable	24-hour	150 µg/m^3	Unclassifiable/ Attainment	50 µg/m3	**Non-attainment**
	Annual	-		20 µg/m3	
Sulfur Dioxide (SO2)	1-hour	0.075 ppm	Attainment	0.25 ppm	Attainment
	3-hour	0.5 ppm		-	
	24-hour	-		0.04 ppm	
Lead	30-day	-	Unclassifiable/ Attainment	1.5 µg/m3	Attainment
	3-month Quarter	-		-	
	3-month Rolling	0.15 µg/m^3		-	
Visibility Reducing Particulates	8-hour	-	-	0.23 per km extinction	Unclassified
Hydrogen Sulfide	1-hour	-	-	42 µg/m^3	Unclassified
Sulfates	24-hour	-	-	25 µg/m^3	Attainment
Vinyl Chloride	24-hour	-	-	26 µg/m^3	Unclassified

(A) NAAQS and area designations as of January 2015 (sources: http://www.epa.gov/air/criteria.html and http://www.epa.gov/oar/oaqps/greenbook/ancl.html).

(B) California AAQS and area designations as of June 2013 (most current available from CARB) (sources: http://www.arb.ca.gov/research/aaqs/aaqs2.pdf and (http://www.arb.ca.gov/desig/desig.htm)

(C) µg/m^3 = micrograms per cubic meter, ppm = parts per million, ppb = parts per billion, km = kilometer.

3.2.1.1.2 State Air Quality Standards

Under the authority of the federal CAA, individual states and local regulatory agencies may establish their own ambient air quality standards (AAQS) and regulations. California has established standards similar to the federal NAAQS and has added standards for other averaging periods and for four other pollutants not included in the NAAQS. Similar to the NAAQS attainment designations by the EPA, the California Air Resources Board (CARB) designates the attainment status of the California AAQS, which are also summarized in **Table 2**.

3.2.1.1.3 State Implementation Plan (SIP)

Under the federal CAA, each state must develop a SIP, which is a federally approved and enforceable plan that each state uses to manage air quality and compliance with NAAQS within their state. SIPs contain information about air quality goals, measurements of air quality, emission inventories, pollutant modeling demonstrations, emission control and reduction strategies, and evidence of public participation. SIPs are particularly important for areas that do not meet the NAAQS by defining specific methods for eliminating or reducing the severity and number of NAAQS violations, and setting timelines for bringing air quality back into compliance with the NAAQS. It is the primary means for implementing and enforcing the measures needed to attain and maintain the NAAQS within the state.

3.2.1.1.4 Stationary Source Operating Permits

As a means of tracking and limiting air pollutant emissions, federal, state, and local air quality regulations require any new or modified stationary source (i.e., facility) to obtain a permit to construct and operate if its emissions will be above certain thresholds of criteria and non-criteria pollutants. This includes federally-defined Hazardous Air Pollutants (HAPs) and California-defined toxic air contaminants (TACs). The purpose of air permitting is to establish regulatory control over both small and large industrial activities, providing a means for monitoring their impact on air quality. An air permit identifies the facility's air emission sources, allowable emission levels, and conditions of operation. However, the regulations also provide exemptions from air permitting requirements for certain types and sizes of emission activities.

Scandia Elementary school is not included in the Travis AFB air operating permit, and is not required to have its own air permit based on size exemptions of the school's space heating and water heaters (e.g., Bay Area AQMD Regulation 2-1-113.2.14 for space heating < 20 million British thermal units (BTUs) per hour heat input using natural gas and Regulation 2-1-114.1.2 for boilers < 10 million BTUs per hour heat input using natural gas).

3.2.1.1.5 National Emissions Inventory

An air emissions inventory quantifies the total amount of emissions from an individual facility or from all emission sources within a region (such as individual counties or an entire air basin). Inventories generally cover a period of one year, and provide information on the locations, types, and size of the emission sources.

The EPA maintains a national database of air pollutant emissions using data provided by each state on a county-by-county basis. The National Emissions Inventory (NEI) is used for monitoring emission trends and evaluating the effectiveness of emission reduction strategies. It includes reported criteria pollutant and HAP emissions from permitted stationary sources and estimated emissions from a wide range of non-permitted sources and mobile sources. Although the EPA conducts a comprehensive emissions inventory every three years, developing and updating the inventory is time-consuming. The most recent NEI data available to the public is for the year 2011 (http://www.epa.gov/ttn/chief/eiinformation.html).

3.2.1.1.6 California Almanac of Emissions and Air Quality (CAEAQ)

The State of California maintains its own statewide air emissions inventory, which is used to quantify the total amount of emissions from sources within the state and within air basins. Similar to the NEI, the CAEAQ inventory is used for monitoring 20-year emission and air quality trends and for evaluating the effectiveness of emission reduction strategies. It includes the criteria pollutants and several toxic air contaminants. The emissions are summarized for a wide range of source categories: permitted stationary sources, non-permitted sources, and mobile sources, and natural sources. Each air district estimates emissions for the stationary sources within its jurisdiction based on information provided by those sources. CARB estimates emissions from the other source types including mobile sources and natural sources. These state-wide inventories are provided for annual periods by CARB (http://www.arb.ca.gov/aqd/almanac/almanac.htm) with the most recent data published for year 2013. Individual air quality districts in California also maintain and provide GHG inventories for their region.

3.2.1.1.7 General Conformity Rule

The General Conformity Rule was established under CAA § 176(c)(4) to ensure that actions taken by federal agencies in NAAQS nonattainment and maintenance areas do not interfere with a state's plans for bringing these areas back into attainment with the air quality standards. Unlike the air permitting programs that only consider emissions from stationary sources, the General Conformity Rule requires federal agencies to consider emissions from all activities associated with the proposed federal action including new or modified stationary, mobile, and fugitive emission sources. The requirements of the General Conformity Rule do not apply to federal actions located in NAAQS attainment areas. The purpose of the rule is to ensure that federal actions do not cause or contribute to:

- New violations of the NAAQS;
- Additional or worsening of existing violations of the NAAQS; and
- Delays in attaining the NAAQS.

This rule requires federal government agencies to prepare written conformity determinations for federal actions located in or affecting NAAQS nonattainment areas or maintenance areas. A determination begins with an estimate of air emissions that would be generated by the Proposed Action and comparing these to threshold levels defined in the rule. If the emission levels are below the threshold levels, a Record of Non-Applicability (RONA) is prepared. If the emission levels are above the threshold levels, an in-depth conformity analysis is required.

3.2.1.1.8 Federal Class I Areas

A provision of the Prevention of Significant Deterioration (PSD) permitting program grants special protection to air resources in Class I Areas. Class I Areas include large national parks (> 6,000 acres) and wilderness areas (> 5,000 acres). The express purpose is to preserve, protect, and enhance the air quality in these environmentally sensitive locations by establishing limits on additional pollution in these clean air areas. The PSD permitting program also establishes site-specific tests to determine whether emissions from major new and modified sources will cause air quality related "adverse impacts" on scenic, cultural, biological, and recreational resources at nearby Class I Areas including visibility. Of primary concern are increased emissions of particulate matter, nitrogen oxides, and sulfur dioxide. Federal Land Managers have the authority to monitor air permitting activity near Class I Areas and make recommendations to deny issuance of permits if site-specific tests indicate that adverse impacts may occur. However, the permitting authority makes the final decision to issue or deny the permit.

Throughout the United States, there are 158 Class I Areas designated by the federal government; 29 of which are in California. The nearest Class I areas to Travis AFB are the Point Reyes National Seashore approximately 50 miles to the west, and the Mokelumne Wilderness approximately 100 miles to the east (http://www.epa.gov/region9/air/maps/ca_clss1.html).

3.2.1.1.9 Greenhouse Gases

Greenhouse gases (GHGs) have the ability and tendency to affect the earth's atmospheric temperature through physical processes involving light and thermal energy. GHGs exist in the atmosphere as a result of both natural processes and human activity. Among the most prominent GHGs associated with human activities are carbon dioxide (CO_2), methane (CH_4), and nitrous oxide (N_2O). These gases are a combustion byproduct of fossil fuel (i.e., gasoline, diesel, oil, coal, and natural gas) and other organic matter such as wood. Other pollutants that are considered by EPA to be GHGs, but which are much less prevalent in the atmosphere, include hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulfur hexafluoride (SF), and nitrogen trifluoride (NF3). In recent years, GHG emissions from human activity have become a focus of concern and scrutiny as they relate to climate change.

In September 2009, the EPA issued a final rule for mandatory GHG reporting from large GHG emissions sources in the United States (40 CFR 98). The purpose of the rule is to collect comprehensive and accurate data on CO_2 and other GHG emissions that can be used for future policy decisions.

In general, the facility-wide threshold for reporting is 25,000 metric tons or more of CO_2 equivalent[1] per year. Although GHGs are not currently regulated under the CAA, the EPA has clearly indicated that GHG emissions and climate change are issues that need to be considered in future planning.

The CEQ recently issued revised draft guidance (CEQ 2014) regarding GHG emissions and the NEPA process. Specifically, the guidance is intended to assist federal agencies (and federal decision-makers) in evaluating or describing the environmental effects of GHG emissions from all proposed federal agency actions. The guidance advises federal agencies preparing a NEPA document to consider whether the decision-makers would benefit from the inclusion of an analysis of GHG emissions and climate change issues relating to a proposed action. Specifically, if the proposed action is anticipated to have direct emissions of 25,000 metric tons or more of CO_2-equivalent GHG emissions on an annual basis, the federal agency should consider this as an indicator that a quantitative and qualitative assessment may be meaningful to decision-makers and the public.

The recent passage of the California Assembly Bill AB 32, the California Global Warming Solutions Act of 2006, provides a state law requiring sharp reductions of GHG emissions. AB 32 requires California to reduce its GHG emissions to 1990 levels by 2020; a reduction of approximately 15% below emissions expected under a "business as usual" scenario. Reductions in GHG emissions will come from virtually all sectors of the economy. It will be accomplished by a combination of policies, planning, direct regulations, market approaches, incentives and voluntary efforts. These efforts target GHG emission reductions from cars and trucks, electricity production, fuels, and other sources. CARB has been designated as the lead agency to implement this law, and maintains a statewide Greenhouse Gas Emission Inventory (http://www.arb.ca.gov/cc/inventory/inventory.htm). California's Mandatory Reporting of

[1] Greenhouse Gases are typically presented as CO_2 Equivalent = (1 × Carbon Dioxide emissions) + (25 × Methane emissions) + (298 × Nitrous Oxide emissions). The three main greenhouse gases are carbon dioxide, methane, and nitrous oxide. Methane and nitrous oxide have a 25 and 298 times higher, respective, global warming potential than carbon dioxide. The other four GHGs have very high global warming potentials, but these are generally countered by much lower levels of emissions.

Greenhouse Gas Emissions regulation requires industrial sources, fuel suppliers, and electricity importers to report their annual GHG emissions to CARB.

3.2.1.2 Existing Conditions

3.2.1.2.1 Climate

The San Francisco Bay Area air basin along coastal central California has a Mediterranean climate generally characterized by temperate wet falls/winters and dry springs/summers. The coastal mountains and valleys create microclimates in this region. Mountains parallel to the coast produce rain shadows and drier interior valleys. During the summer, gaps in the coastal ranges permit ocean fog to penetrate inland, providing some relief from summer heat and drought (NPS 2015).

Travis AFB is located near the town of Fairfield which has an annual mean temperature of 59°F and average daily temperatures ranging from 45°F in January to 72°F in July, with temperature extremes of 0°F (1969) and 110°F (1961). Total precipitation averages 17 inches per year with autumn and winter months being the wettest (Western Regional Climate Center 2015).

Relative humidity daily averages range from 62% in September to 78% in January with an annual average of 69% (these values are based on the average of San Francisco and Sacramento) (NOAA 2012).

The winds are predominantly from the west-southwest during the spring, summer, and fall between seven and 14 miles per hour. During the winter, the predominant winds are from the north between six and seven miles per hour (NOAA 1998).

3.2.1.2.2 Regional Air Quality

The Bay Area AQMD is currently designated as non-attainment for three pollutants (see **Table 2**):

- Ozone – for NAAQS and State AAQS,
- PM2.5 – for NAAQS and State AAQS, and
- PM10 – for State AAQS only.

For all other pollutants, the area is considered to be in attainment.

3.2.1.2.3 Baseline Air Emissions

The current level of air emissions within a region represents the baseline emissions. For Solano County and the Bay Area AQMD, baseline emissions levels were obtained from:

- CARB Almanac of Emissions for calendar year 2012 (CARB 2013 and CARB 2015); and
- Bay Area AQMD GHG inventory for calendar year 2007 (BAAQMD 2010).

These represent the most recent published data available for this area. The baseline emissions are shown in **Table 3** (tons per day) and **Table 4** (tons per year). Note that ozone (O3) is not shown in these tables. This is because O3 is generally not emitted directly into the atmosphere. Instead, it is formed in the lower atmosphere by chemical reactions between precursor pollutants in the presence of sunlight. Nitrogen oxides (NOx) and Volatile Organic Compounds (VOCs) are the main precursors of O3. Control of the precursor pollutants is the primary method of reducing O3 concentrations in the atmosphere.

Table 3. Baseline Emissions – Local and Regional (tons per day).

Location	Emissions (ton/day – annual average)						
	CO	NOx	PM2.5	PM10	SO2	VOC	GHGs (C)
Solano County (A)	96.10	32.01	4.73	15.55	0.80	15.09	15,504
Bay Area AQMD (B)	1,277.38	356.09	47.05	120.43	29.13	611.62	262,396

(A) Local emission totals reported in tons per day from the 2013 California Almanac of Emissions (CARB 2015).

(B) Regional emission totals reported in tons per day from the 2013 California Almanac of Emissions (CARB 2015).

(C) GHG emissions reported as CO_2 equivalent from Source Inventory of Bay Area Greenhouse Gas Emissions (BAAQMD 2010). Values shown are metric tons per day (i.e., based on reported values in metric tons per year divided by 365 days per year).

Table 4. Baseline Emissions –Local and Regional (tons per year).

Location	Emissions (ton/year)						
	CO	NOx	PM2.5	PM10	SO2	VOC	GHGs (C)
Solano County (A)	35,077	11,684	1,726	5,676	292	5,508	5,659,130
Bay Area AQMD (B)	466,244	129,973	17,173	43,957	10,632	223,241	95,774,635

(A) Local emission totals from the 2013 California Almanac of Emissions (CARB 2015) in tons per day scaled to 365 days per year.

(B) Regional emission totals from the 2013 California Almanac of Emissions (CARB 2015) in tons per day scaled to 365 days per year.

(C) GHG emissions reported as CO_2 equivalent from Source Inventory of Bay Area Greenhouse Gas Emissions (BAAQMD 2010). Values reported in metric tons per year.

Within the Bay Area AQMD, the baseline emissions occur from a variety of stationary and mobile emission source categories including:

- Fuel combustion – electrical generation, industrial, food processing, residential;
- Industrial process;
- Mobile sources – automobiles, buses, trucks, locomotives, boats, aircraft, off-road vehicles, etc.;
- Petroleum refining, storage, and marketing;
- Surface coating and cleaning;
- Waste disposal; and
- Other miscellaneous sources – farming, fires, fugitive dust, etc.

Although the emissions data shown in these tables are for years 2012 (criteria pollutants) and 2007 (GHGs), the levels of emissions do not change significantly from year to year and can be used to provide approximate baseline emission levels for comparison purposes. Solano County contributes approximately 6% of the total Bay Area emissions.

3.2.2 Noise

Noise is defined as any unwanted sound that interferes with normal activities, is intense enough to damage hearing, or in some way reduces the quality of the environment. Noise can be intermittent or continuous, steady or impulsive, and can involve any number of sources and frequencies. It can be readily identifiable or generally nondescript. Human response to increased sound levels varies according to the source type, characteristics of the sound source, distance between source and receptor, receptor sensitivity, and time of day. How an individual responds to the sound source determines whether the sound is viewed as a pleasant or annoying noise. Affected receptors can be specific (e.g., schools, churches, or hospitals) or broadly defined areas in which occasional or persistent sensitivity to noise above ambient levels exists (e.g., nature preserves or designated districts).

A decibel (dB) is the physical unit commonly used to describe instantaneous sound levels. Sound measurement is further refined by using an "A-weighted" decibel (dBA) scale, which emphasizes the audio frequency response curve audible to the human ear. Thus, the dBA measurement more closely describes how a person perceives sound. Human response to increased sound levels varies according to the source type, characteristics of the sound source, distance between source and receptor, receptor sensitivity, and time of day.

Community Noise Equivalent Level (CNEL) is the predominant noise rating scale used in California for land use compatibility. The CNEL represents the average of equivalent noise levels at a location for a 24-hour period, based on an A-weighted decibel with upward adjustments added to account for increased noise sensitivity in the evening and night periods in order to account for the lower tolerance of individuals to noise during those periods.

Sound levels, resulting from multiple single events, are used to characterize community noise effects from aircraft or vehicle activity and can be measured in day-night average sound level (DNL). Similar to the CNEL, the DNL noise metric incorporates a "penalty" for evening and nighttime noise events to account for increased annoyance. DNL is the energy-averaged sound level measured over a 24-hour period, with a 10-dBA penalty assigned to noise events occurring between 10:00 p.m. and 7:00 a.m. DNL values are obtained by averaging single event values for a given 24-hour period. DNL is the preferred sound level metric used to characterize noise impacts of the Federal Aviation Administration (FAA), U.S. Department of Housing and Urban Development (HUD), USEPA, and DoD for modeling airport environments. Most people are exposed to DNL sound levels of 50 to 55 dBA or higher on a daily basis.

The ambient acoustic environment refers to the outdoor noise levels within a given area. Ambient noise levels vary greatly in magnitude and character from one location to another, depending on the normal activities conducted in the area. Studies conducted to determine noise effects on various human activities show that about 13% of the population can be "highly annoyed" by outdoor sound levels of 65 dB DNL (FICON 1992).

3.2.2.1 Requirements

According to USAF, FAA, and HUD criteria residential units and other noise-sensitive land uses are "clearly unacceptable" in areas where the noise exposure exceeds a DNL of 75 dBA, "normally unacceptable" in regions exposed to noise between 65 dBA and 75 dBA, and "normally acceptable" in areas exposed to noise of 65 dBA or under. The Federal Interagency Committee on Noise developed land use compatibility guidelines for noise in terms of DNL noise levels (FICON 1992). For outdoor activities, the USEPA recommends a DNL sound level of 55 dBA as the sound level below which there is no reason to suspect that the general population would be at risk from any of the effects of noise (USEPA 1974). The California Code of Regulations has guidelines for evaluating the compatibility of various land

uses as a function of community noise exposure. The guidelines indicate that the noise levels below 60dBA CNEL are "normally acceptable" for noise sensitive uses such as schools, hospitals, churches, libraries, and nursing homes. Conventional construction is sufficient for normally acceptable sites.

The Defense Noise Working Group (DNWG) has identified classroom learning as a topic of concern on military installations (DNWG 2009). The DNWG noted that in a windows closed school environment with an average noise level reduction (NLR) of 25 dB, 35 dB in the classroom is equivalent to 60 dB outdoors. Thus, a school-day 60 dB Leq level provides the first indication that aircraft noise might be a problem because the classroom noise levels could exceed the 35 dB background noise level.

3.2.2.2 Existing Condition

Scandia Elementary School is over 3,700 feet from the nearest aircraft parking area, and over 6,000 feet from the nearest runway. The property is situated in a residential area, and is surrounded by MFH. The school is located outside of the 60 dB CNEL contour for aircraft operations (i.e., aircraft noise levels are below 60 dB CNEL). Based on the time periods during which aircraft operations occur (Travis AFB 2011), CNEL can be used as a conservative surrogate for school-day Leq at Travis AFB. In other words, the school-day Leq at Scandia Elementary School can be assumed to be below 60 dB.

3.2.3 Water Resources

Water resources analyzed in this section include drinking water, wastewater, stormwater, and groundwater. Floodplains and wetlands are discussed in Section 3.2.4, Biological Resources.

EO 13514, *Federal Leadership in Environmental, Energy, and Economic Performance* (5 October 2009) sets a policy that federal agencies "conserve and protect water resources through efficiency, reuse, and stormwater management." AFI 32-7041, *Water Quality Compliance*, instructs the Air Force on how to assess, attain, and sustain compliance with federal, state, and local environmental regulations. Requirements for drinking water and stormwater are described below.

3.2.3.1 Drinking Water

EO 13514, "Federal Leadership in Environmental, Energy, and Economic Performance," requires agencies to reduce their potable water consumption 2% per year, through fiscal year (FY) 2020, based on an FY 2007 baseline. In addition, EO 13514 requires agencies to reduce industrial, landscaping, and agricultural (nonpotable) water consumption 2% per year, through FY 2020, based on an FY 2010 baseline.

3.2.3.2 Stormwater

3.2.3.2.1 National Pollutant Discharge Elimination System (NPDES)

The CWA establishes federal limits, through the NPDES, on the amounts of specific pollutants that are discharged to surface waters in order to restore and maintain the chemical, physical, and biological integrity of the water. The NPDES program regulates the discharge of point (end of pipe) and nonpoint sources (stormwater) of water pollution. Section 404 of the CWA regulates the discharge of fill material into waters of the United States. Waters of the U.S. include lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, natural ponds, and all tributaries and impoundments of waters. Waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of CWA are not waters of the U.S. The EPA and the U.S. Army Corps of Engineers (USACE) have jurisdiction of waters of the U.S.

In 2010, the EPA issued a Final Rule for the CWA concerning technology-based Effluent Limitations Guidelines and New Source Performance Standards for the Construction and Development point source category. A Construction General Permit from EPA Region IX would be required for any activities disturbing more than one acre of land. The permit outlines provisions construction operators must follow to comply with the requirements of NPDES regulations. Site-specific SWPPPs may need to be developed.

All NPDES stormwater permits issued by the EPA or states must incorporate requirements established in the Final Rule. All new construction sites that disturb greater than one acre of land are required to meet the non-numeric effluent limitations and to have effective erosion and sedimentation controls in place that are designed, installed, and maintained to:

- Control stormwater volume and velocity to minimize erosion;
- Control stormwater discharges including both peak flow rates and total stormwater volume;
- Minimize the amount of soil exposed during construction activities;
- Minimize the disturbance of steep slopes;
- Minimize sediment discharges from the site using controls that address factors such as the amount, frequency, intensity and duration of precipitation, the nature of resulting stormwater runoff, and soil characteristics, including the range of soil particle sizes expected to be present on the site;
- Provide and maintain natural buffers around surface waters, direct stormwater to vegetated areas to increase sediment removal, and maximize stormwater infiltration where feasible;
- Minimize erosion at outlets and in downstream channels and stream banks; and
- Minimize soil compaction and preserve topsoil where feasible.

3.2.3.3 Existing Condition

3.2.3.3.1 Drinking Water

Drinking water is supplied to Scandia Elementary School by the Travis AFB Treatment Plant, which is owned by the City of Vallejo. The capacity of the plant is 7.5 million gallons per day. The water supply at Travis AFB is sampled at nine sites on a weekly basis (Travis AFB 2006).

The original permit, 74-029 under the California Department of Health Services, was issued in 1974. The latest permit was issued in May 1998. The Treatment Plant meets all water quality requirements under the Safe Drinking Water Act Amendments (Travis AFB 2006). The most recent water quality report (Travis AFB 2013a) stated that Travis AFB water meets all EPA and California state drinking water standards.

3.2.3.3.2 Wastewater

The property is included in the Travis AFB wastewater system. The sanitary sewer system collects permitted industrial and all sanitary waste water and discharges it by permit from the local wastewater treatment authority (the Fairfield-Suisun Sewer District) to the local publicly owned treatment plant.

3.2.3.3.3 Stormwater

Stormwater drains are located throughout the property. Stormwater drainage from the school is connected to the Travis AFB stormwater drainage system, which consists of a series of underground storm drains and open ditches. The system is designed to handle a 10 year, 24-hour storm. The majority of stormwater from the base discharges into Union Creek, which flows southeast of and approximately parallels the southern half of the runway.

Based on the current Stormwater Pollution Prevention Plan (Travis AFB 2007), the subject property is located in Drainage Area IV, which discharges to Union Creek at Outfall IV. The drainage area contributing to this outfall encompasses almost one quarter of the total base acreage and originates in the military family housing area on the north side of the base. This drainage system collects runoff from multiple imperious areas, including aircraft and fuel truck parking, aboveground storage tanks, aircraft fueling, and outside storage areas.

3.2.3.3.4 Groundwater

No groundwater wells are present on the property. Based on a comparison of the most recent groundwater elevations on Travis AFB (CH2M Hill 2014) and topographic maps, groundwater levels on the subject property are approximately 20 feet below ground surface. Groundwater on the base generally flows to the south and south-southeast.

3.2.4 Safety and Occupational Health

Safety and Occupational Health requirements are codified in the Occupational Safety & Health Act of 1970 (Public Law 91-596, December 29, 1970 with amendments through January 1, 2004) and are regulated by the OSHA**.** The stated purpose of the law is to "assure safe and healthful working conditions for working men and women; by authorizing enforcement of the standards developed under the Act; by assisting and encouraging the states in their efforts to assure safe and healthful working conditions; by providing for research, information, education, and training in the field of occupational safety and health; and for other purposes."

3.2.4.1 ACM

ACM includes those materials that contain greater than 1% asbestos. Friable, finely divided, and powdered wastes containing greater than 1% asbestos are subject to regulation. Friable waste can be reduced to a powder or dust under hand pressure when dry. Non-friable ACMs, such as floor tiles, are considered to be non-hazardous, except during removal and/or renovation, and are not subject to regulation.

Public and non-profit private schools have distinct regulatory requirements to protect school children and school employees from asbestos exposure. The AHERA and its regulations require public school districts and non-profit schools including charter schools and schools affiliated with religious institutions to inspect their schools for ACM, prepare management plans, and take action to prevent or reduce asbestos hazards. These legal requirements are founded on the principle of "in-place" management of ACM. Removal of these materials is not usually necessary unless the material is severely damaged or will be disturbed by renovation.

Public school districts and non-profit schools must comply with the Asbestos NESHAP if removal of asbestos during renovation is warranted. The Asbestos NESHAP requires specific work practices to control the release of asbestos fibers during renovation activities. More detailed information regarding ACM regulatory requirements for schools can be found at http://www2.epa.gov/asbestos/school-buildings.

3.2.4.2 LBP

The EPA's 2008 Lead RRP Rule (as amended in 2010 and 2011) requires that firms performing renovation, repair, and painting projects that disturb LBP in homes, child care facilities and schools built before 1978 be certified by the EPA (or an EPA authorized state), use certified renovators who are trained by EPA-approved training providers and follow lead-safe work practices. The primary goals of lead-safe work practices are to contain the work areal minimize dust, and clean the work area thoroughly. More detailed information regarding LBP regulatory requirements for schools can be found at http://www2.epa.gov/lead/renovation-repair-and-painting-program.

3.2.4.3 Existing Condition

3.2.4.4 ACM

The most recent ACM survey was conducted at Scandia Elementary School in 1999 (Penn Environmental 1999). That survey identified friable ACM in the pipe run insulation in the boiler rooms, as well as the fire doors located at the entrance to the building wings. The ACM in the pipe runs was categorized as having "potential for damage," while the ACM associated with the fire doors was not categorized. The survey identified non-friable ACM in a number of exterior window panels and in floor tile and mastic in two workrooms and the custodial storage room.

3.2.4.5 LBP

The school buildings have not been surveyed for LBP, but based on the construction date of the buildings it is likely present. The facilities manager for TUSD stated that all surfaces had been repainted over the years, so LBP should not be exposed (Travis AFB 2014a).

3.2.5 Hazardous Materials and Waste

Hazardous materials are substances that are considered severely harmful to human health and the environment. Many are commonly used substances that are harmless in their normal uses, but are quite dangerous when released. They are defined in terms of those substances either specifically designated as hazardous under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), commonly known as the Superfund law. The use or release of hazardous materials usually results in the generation of hazardous waste.

Superfund's definition of a hazardous substance includes the following:

- Any element, compound, mixture, solution, or substance designated as hazardous under section 102 of CERCLA.
- Any hazardous substance designated under section 311(b)(2)(a) of the CWA, or any toxic pollutant listed under section 307(a) of the CWA. There are over 400 substances designated as either hazardous or toxic under the CWA.
- Any hazardous waste having the characteristics identified or listed under section 3001 of the Resource Conservation and Recovery Act (RCRA).
- Any hazardous air pollutant listed under section 112 of the CAA, as amended. There are over 200 substances listed as hazardous air pollutants under the CAA.
- Any imminently hazardous chemical substance or mixture which the EPA Administrator has "taken action under" section 7 of the Toxic Substances Control Act.

Hazardous wastes are by-products of industrial processes that pose a threat to human health and the environment if not handled properly. The RCRA prescribes the management of hazardous waste in a manner that minimizes the present and future threat to human health and the environment.

Hazardous waste is defined under RCRA as a solid waste (or combination of solid wastes) which, because of its quantity, concentration, or physical, chemical, or infectious characteristics, may: (1) cause or contribute to an increase in mortality or an increase in serious irreversible, or incapacitating illness; or (2) pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, disposed of, or otherwise managed. In addition, under RCRA, the EPA establishes four characteristics that will determine whether a substance is considered hazardous, including ignitability, corrosiveness, reactivity, and toxicity. Any solid waste that exhibits one or more of these characteristics is classified as a hazardous waste under RCRA and, in turn, as a hazardous substance under Superfund.

3.2.5.1 Existing Condition

An Environmental Baseline Survey (EBS) was conducted for the Scandia Elementary School property in 2014 (Travis AFB 2014a) to determine the potential contamination liabilities associated with the release, treatment, or disposal of hazardous substances or petroleum products. The EBS stated that ACM is present within the school building, and LBP is likely present (although the entire school was recently repainted, so no lead based paint is exposed) (see Section 3.2.3, Safety and Occupational Health, for a discussion of ACM and LBP requirements). A pad-mounted electrical transformer was identified in the EBS as potentially containing PCB-contaminated oil. However, recent analysis of the transformer oil showed that it was composed of mineral oil, and PCBs were not present (McCampbell Analytical 2015).

3.2.6 Biological Resources

The following sections describe the biological resources on the school property. The information in this section was obtained from the current Travis AFB Integrated Natural Resources Management Plan (INRMP) (Travis AFB 2013b), as well as a site investigation conducted on 2 and 4 September 2014. Wetlands, floodplains, vegetation, wildlife, invasive species, and state and federally threatened and endangered species are discussed below, and represent the current conditions in the Proposed Action area.

Biological resources include wetlands, floodplains, vegetation, wildlife, and state and federally threatened and endangered species. Potential impacts to biological resources are based on the following:

- Importance of the resource (i.e., legal, commercial, recreational, ecological, or scientific);
- Proportion of the resource potentially affected relative to its occurrence in the region;
- Sensitivity of the resource to the Proposed Action's activities; and
- Duration of ecological ramifications.

Impacts to resources are significant if habitats of high concern are adversely affected over relatively large areas; if disturbances to small, essential habitats would lead to landscape-levels effects on the ecology; or if disturbances impact the abundance or distribution of federally or state-listed species. Permanent habitat loss and temporary disturbance due to construction are specific issues and concerns for biological resources.

3.2.6.1 Regulations and Requirements

3.2.6.1.1 Wetlands

Wetlands are defined by the USACE as those areas inundated or saturated by surface or groundwater at a frequency and for a duration to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. In addition to providing habitat for many plants and animals, wetlands provide flood control and water quality functions in support of ecosystem integrity. The presence of hydrophytic vegetation, hydric soils, and wetland hydrology were used to determine the existence and extent of wetland areas. The overall management objective for this resource, as required by Section 404 of the CWA and the EO on Wetlands (EO 11990), is that there be "no net loss of wetlands."

3.2.6.1.1 Floodplains

Floodplains are topographically low areas along rivers, stream channels, or coastal waters that are subject to periodic or infrequent inundation due to rain or melting snow. Floodplain ecosystem function to moderate, store and convey floodwaters; recharge groundwater; facilitate nutrient cycling; maintain water quality; and provide habitat for a diversity of plants and animals. Flood potential is evaluated by the Federal Emergency Management Agency (FEMA), which defines the 100-year floodplain as an area within which there is a 1% chance of inundation by a flood event in a given year. Risk of flooding is influenced by local topography, the frequency of precipitation events, the size of the watershed above the floodplain, and upstream development. Federal, state, and local regulations often limit floodplain development to passive uses, such as recreational and preservation activities, to reduce the risks to human health and safety. EO 11988, *Floodplain Management*, directs federal agencies to avoid siting within floodplains unless the agency determines that there is no practicable alternative.

3.2.6.1.1 Threatened, Endangered, and Sensitive Species

The ESA establishes a federal program to conserve, protect, and restore threatened and endangered plants and animals and their habitats. Under the ESA, an "endangered species" is defined as any species in danger of extinction throughout all or a significant portion of its range. A "threatened species" is defined as any species likely to become an endangered species in the foreseeable future. Under the ESA, federal agencies are required to provide documentation that ensures that agency actions will not adversely affect the existence of any federally threatened or endangered species. The ESA requires that all federal agencies avoid "taking" threatened or endangered species (which includes jeopardizing threatened or endangered species habitat).

Section 7 of the ESA establishes a consultation process with USFWS that ends with concurrence on a determination of the risk of jeopardy from a federal agency project.

The USFWS also maintains a list of species considered to be candidates for possible listing under the ESA. Although candidate species receive no statutory protection under the ESA, the USFWS has advised government agencies, industry, and the public that these species are at risk and might warrant protection under the Act. All federal agencies must ensure any action they authorize, fund, or carry out is not likely to jeopardize the continued existence of a threatened and endangered species or result in the destruction of critical habitat for these species, unless the agency has been granted an exemption. AFI 32-7064, Integrated Natural Resource Management, provides the Air Force with guidance on compliance with the ESA and federal, state, and local environmental regulations.

The California Endangered Species Act (CESA) is enforced by the California Department of Fish and Wildlife. The CESA provides legal protection for all designated threatened or endangered native species of fishes, amphibians, reptiles, birds, mammals, invertebrates, and plants, as well as their habitats

3.2.6.1.1 Migratory Birds and Eagles

The MBTA governs the taking, killing, possession, transportation, and importation of migratory birds, their eggs, parts, and nests. The MBTA regulates the taking of migratory birds for educational, scientific, and recreational purposes and requires harvest to be limited to levels that prevent overuse. The MBTA prohibits the take, possession, import, export, transport, selling, purchase, barter, or offering for sale, purchase or barter, any migratory bird, their eggs, parts, and nests, except as authorized under a valid permit (50 CFR 21.11).

50 CFR 21.15 specifically addresses the take of migratory birds by the Armed Forces. It allows the Armed Forces to take migratory birds incidental to military readiness activities. It also requires the Armed Forces to develop and implement appropriate conservation measures if a proposed action may have a significant adverse effect on a migratory bird population.

The Bald and Golden Eagle Protection Act (Eagle Act) (16 U.S.C. 668-668c), enacted in 1940, prohibits anyone, without a permit issued by the Secretary of the Interior, from "taking" bald eagles, including their parts, nests, or eggs. The Eagle Act defines "take" as "pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest or disturb."

EO 13186 (effective 10 January 2001) outlines the responsibilities of federal agencies to protect migratory birds, in accordance with the MBTA, the Eagle Act, the Fish and Wildlife Coordination Act, ESA, and NEPA. This order specifies the following:

- The U.S. Fish and Wildlife Services (USFWS) is the lead agency for coordinating and implementing EO 13186;
- Federal agencies are required to incorporate migratory bird protection measures into their activities; and
- Federal agencies are required to obtain permits from USFWS before any "take" occurs, even when the agency intent is not to kill or injure migratory birds.

3.2.6.2 Existing Condition

A site investigation was conducted on the property on 2 and 4 September 2014 (Travis AFB 2014a). The entire site is improved, and is comprised of turf playground areas, hardcourt play areas, a parking lot, and the school buildings. A few ornamental trees are present along the fence that separates the property from the adjacent MFH, and a small amount of ornamental landscaping is present near the school entrance.

3.2.6.2.1 Wetlands

No wetlands or other surface waters were identified on the subject property. The nearest wetlands are approximately 2,000 feet north of the property (Travis AFB 2013b).

3.2.6.2.2 Floodplains

No portions of the subject property are located within the 100-year floodplain. Only a small portion of the base near the main gate is within the 100-year floodplain (Travis AFB 2013b).

3.2.6.2.3 Threatened, Endangered, and Sensitive Species

The 2013 INRMP identified a number of threatened, endangered, and sensitive species occur or could potentially occur on Travis AFB (see **Table 5**). In addition to the species included in Table 5, Travis AFB consulted the current Solano County list of federal-and state-listed special status species, including threatened, endangered, and candidate species, as well as species protected by other regulations (e.g., the Bald and Golden Eagle Protection Act). That list was obtained from a query of the California Natural Diversity Database, and is included in **Appendix B**.

Table 5. Federal and State Listed Species that Occur or Could Potentially occur on Travis AFB.

Species		Status	Known on-base?
Common Name	**Scientific Name**		
Plants:			
Contra Costa Goldfields	*Lasthenia conjugens*	FE	Yes
Boggs Lake hedge-hyssop	*Gratiola heterosepala*	SE	No
Crampton's tuctoria	*Tuctoria mucronata*	FE/SE	No
Colusa grass	*Neostapfia colusana*	FT/SE	No
Amphibians:			
California red-legged frog	*Rana aurora draytonii*	FT	No
California tiger salamander	*Ambystoma californiense*	FT/ST	Yes
Birds:			
Swainson's Hawk	*Buteo Swainsonii*	ST	Yes
Western Burrowing Owl	*Athene Cunicularia ssp. hypugea*	SSC	Yes
Invertebrates:			
Delta Green Ground Beetle	*Elaphrus viridis*	FT	No
Vernal Pool Fairy Shrimp	*Branchinecta lynchi*	FT	Yes
Vernal Pool Tadpole Shrimp	*Lepidurus packardi*	FE	Yes
Conservancy Fairy Shrimp	*Branchinecta conservatio*	FE	No

FE = Federally Endangered
FT = Federally Threatened
SE = State Endangered
ST = State Threatened
SSC = State Species of Concern
Source: Travis AFB INRMP (Travis AFB 2013b)

Based on the site investigation, no habitat for threatened, endangered, or sensitive species is present on or adjacent to the school property. However, there are known California Tiger Salamander (CTS) breeding ponds to the north, northeast, and northwest of the project area. The nearest known breeding pond is located just under ½ mile (approximately 2,400 feet) north of the school (**Figure 4**).

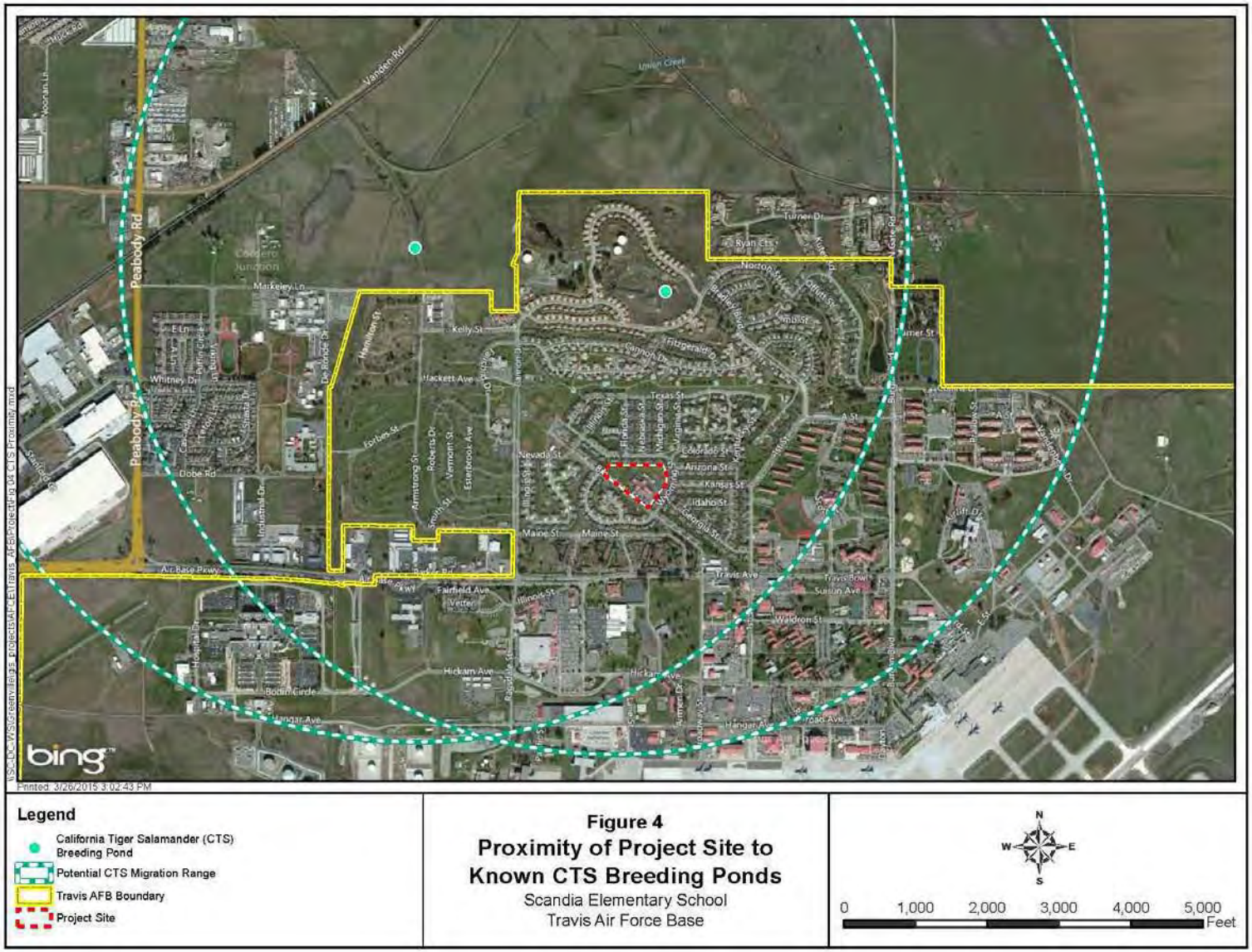

Figure 4. Proximity of Project Site to Known CTS Breeding Ponds.

CTS can migrate over one mile from upland habitat to breeding ponds. No small mammal burrows (which are often used by CTS in upland habitats) were observed on the property during the site visit.

3.2.6.2.1 Migratory Birds

The property provides very little habitat for migratory birds. Those areas that are not paved are utilized regularly by students during recess and physical education activities. The few trees along the fence could provide nesting habitat for some species of migratory birds. None of the trees are large enough to provide nesting habitat for bald or golden eagles.

3.2.7 Cultural Resources

Cultural resources include any prehistoric or historic district, site, building, structure, or object considered important to a culture, subculture, or community for scientific, traditional, religious, or other purposes. They include archaeological resources, historic properties, and traditional resources. Archaeological resources are found at locations where prehistoric or historic activity measurably altered the earth or produced deposits of physical remains (e.g., arrowheads, bottles). Historic properties (as defined in 36 CFR 60.4) are significant archaeological, architectural, or traditional resources eligible for listing, or listed in, the NRHP. Traditional resources are associated with cultural practices and beliefs of a living community that are rooted in its history and important in maintaining the community's continuing cultural identity.

Section 106 of the NHPA of 1966 requires that federal agencies consider what effects their actions, funding, permit or license may have on historic properties, and that they give the Advisory Council on Historic Preservation a "reasonable opportunity to comment" on such actions. Actions in areas outside a Historic District also need to be reviewed for their potential visual impact on the Historic District.

CEQ regulations (40 CFR 1501.2) require consultation with "...Indian tribes and with interested private persons and organizations when its own involvement is reasonably foreseeable." In 1999, the DoD promulgated its American Indian and Alaska Native Policy, which emphasized the importance of respecting and consulting with tribal governments on a government-to-government basis. The Policy requires an assessment, through consultation, of the effect of proposed DoD actions having the potential to significantly affect protected tribal resources, tribal rights, and Indian lands before decisions are made by the services.

Cultural resource management at USAF installations is established in AFI 32-7065 (June 2004), *Cultural Resources Management*. AFI 32 7065 details compliance requirements for protecting cultural resources through an ICRMP.

3.2.7.1 Existing Condition

Travis AFB completed an Integrated Cultural Resources management Plan (ICRMP) (Travis AFB 2010) in consultation with the California Office of Preservation State Historic Preservation Officer (SHPO). The ICRMP includes an inventory and evaluation of all known cultural resources; identification of the likely presence of other significant cultural resources; description of installation strategies for maintaining cultural resources and complying with related resource statutes, regulations, policies, and procedures; standard operating procedures and action plans that include budget, staffing and scheduling activities; clear identification and resolution of the mission impact on cultural resources; and conformance with local, state, and federal preservation programs. It is designed to serve as a management plan for fiscal years 2010 through 2015.

With few exceptions (the subject property not being one of those exceptions), Travis AFB is considered to be a low probability area for archaeological resources. Travis AFB policy is to initiate consultation with the SHPO prior to any proposed undertakings in archaeologically sensitive areas to determine whether additional studies are warranted (Travis AFB 2010).

The most recent study of historic structures and resources on Travis AFB (ERDC 2013) did not recommend any buildings, structures, or landscapes for nomination to the NRHP. There are no historic structures on the subject property. The only permanent structure is the school (constructed circa 1970). Four portable classrooms constructed in 1997 are located immediately north of the school.

No Native American concerns have been identified to date at Travis AFB. No human remains, associated grave goods, unassociated grave goods, sacred objects, or objects of cultural patrimony have been recovered on base or during base-associated undertakings.

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4. ENVIRONMENTAL CONSEQUENCES

The level of analysis for determination of environmental consequences for individual resource areas is commensurate with the anticipated level of impact that would result from implementation of the Proposed Action (including likely indirect impacts that would result from the TUSD making improvements to the school). Resources for which impacts were not readily recognizable were analyzed in greater detail than those that would obviously be less than significant.

4.1 Air Quality

The potential impacts to air quality associated with the Proposed Action are presented in this section. Impacts are evaluated in terms of the change in annual air emissions that would be caused by the Proposed Action (either directly or indirectly) relative to baseline emissions levels. Baseline emissions for both Solano County and the Bay Area AQMD were presented in **Table 4**. Air emissions from construction activity are temporary or short-term impact since these would be associated with one-time construction events. Air emissions from operational activity are a long-term impact because these are associated with recurring activities that would continue for the foreseeable future.

4.1.1 Proposed Action

The Proposed Action would have the potential to indirectly increase air emissions. As discussed in Section 2.4.1, replacement of the current lease would allow the TUSD to seek funding for construction and renovation at the school. However, there would be little or no increase in operational emissions from the school since it would continue to operate at current levels, and the total school population (administration, teaching staff, and approximately 550 students) would remain basically unchanged with only two to four additional staff members to be hired after completion of the construction and renovations. Should the Proposed Action be implemented, an in-depth engineering analysis would be performed on the existing school building HVAC system and boilers to determine the best course of action for system improvements and upgrades. At present, there are no details available regarding future upgrades to the boilers. Therefore, the only potential emission increases and impacts that can be quantified are from the proposed construction and renovation activity. This would occur within a period of approximately two years following implementation of the Proposed Action. Any increases in air emissions from this construction activity would be temporary and short-term.

4.1.1.1 Construction Emissions

Construction activities that would generate emissions include construction vehicle traffic (commuting workers, haul trucks, concrete trucks), off-road power equipment, paving, fugitive dust (from grading, renovation, and building), and surface coating (painting). Exhaust from the construction vehicles and off-road equipment would consist of CO, NOx, PM2.5, PM10, SO2, and VOCs. Fugitive dust emissions would be generated from site preparation and grading activities. VOC emissions would be generated from surface coatings. Although the construction and renovations would likely occur over a two-year period, the exact schedule and timing of the various construction phases has not been determined. Therefore, to be conservative in the impact analysis, we assumed that the construction emissions would occur within the single calendar year 2016. **Table 6** presents the approximate areal coverage of the construction activities.

Table 6. Proposed Action Construction Area Data.

Construction Year	Total Affected Area (square feet)				
	Total Site Area	Renovation Area	New Building Area	Hardcourt Area	Playfield Area
2016	314,000	14,200	16,300	17,000	130,000

The construction emissions for calendar year 2016 were estimated with the URBan EMISsions (URBEMIS) 2007 model (version 9.2.4) based on the area information in **Table 7**. This model was developed by the South Coast Air Quality Management District to estimate air emissions from a wide variety of land development projects. It incorporates CARB's EMFAC2007 model for on-road vehicle emissions, the OFFROAD2007 model for off-road vehicle emissions, and EPA/State emission factors for other construction activities (i.e., fugitive dust, asphalt paving, and surface coatings). The model assigns default values for the types, quantities, and operating times of construction equipment based on the affected project areas. It also assigns default values for construction vehicle traffic miles travelled (i.e., haul trucks and workers) based on the project size. User inputs to the model include land use type, project area, construction phases, and scheduling of the phases. For this analysis, all construction phases were assumed to occur within the year 2016, and specifically, within the dry season (June-October) to minimize potential effects to CTS dispersal.

Table 7 presents construction emissions for year 2016 estimated with URBEMIS2007. The model output is provided in **Appendix C** and gives summary and detail information for all construction phases. **Table 8** shows the total construction emissions for year 2016 compared to the local (Solano County) and regional (Bay Area AQMD) baselines in terms of ton per year and percent of baseline.

Table 7. Proposed Action Construction Emissions.

Construction Phase (for year 2016)	Emissions (ton/year)						
	CO	NOx	PM2.5	PM10	SO2	VOC (A)	GHGs (B)
Renovation	0.02	0.03	0.01	0.03	0.0002	0.00	6.37
Mass Grading	0.03	0.05	0.01	0.05	0.00	0.01	6.40
Building	0.36	0.36	0.02	0.02	0.00	0.07	55.43
Surface Coating	0.00	0.00	0.00	0.00	0.00	0.42	0.45
Asphalt Paving	0.04	0.04	0.00	0.00	0.00	0.01	5.44
Fine Grading	0.06	0.09	0.05	0.20	0.00	0.01	11.72
TOTAL	0.52	0.57	0.09	0.31	0.0002	0.52	85.81

(A) VOCs are shown in the URBEMIS2007 model output as Reactive Organic Gases (ROG).

(B) GHGs in this table are in metric ton/year. The URBEMIS2007 model output provides GHG emissions only as carbon dioxide (CO_2), the primary greenhouse gas emitted from fuel combustion, in units of ton/year. The conversion to metric ton/year is based on 1 ton = 0.91 metric tons. CO_2 is approximately equal to CO_2-equivalent for the purpose of comparison to baseline GHG emissions.

Table 8. Proposed Action Construction Emissions Compared to Baselines.

	Total Emissions (ton/year)						
	CO	**NOx**	**PM2.5**	**$PM10_5$**	**SO2**	**VOC**	**GHGs**
Construction	0.52	0.57	0.09	0.31	0.0002	0.52	94.59
Local Baseline	35,077	11,684	1,726	5,676	292	5,508	5,659,130
Regional Baseline	466,244	129,973	17,173	43,957	10,632	223,241	95,774,635
Percent of Local	0.0015%	0.0049%	0.0052%	0.0055%	0.0001%	0.0094%	0.0017%
Percent of Regional	0.0001%	0.0004%	0.0005%	0.0007%	< 0.0001%	0.0002%	0.0001%

4.1.2 Operational Emissions

It is anticipated that day-to-day operations of the Scandia Elementary School would remain essentially unchanged from current levels after completion of the proposed construction and renovations. There would be no increase or decrease in operational air emissions.

4.1.3 No Action Alternative

For the No Action Alternative, the school would continue to operate under the current lease for the next several years without any changes. Construction and renovation would not occur and air emissions associated with construction would not be generated. Emissions from motor vehicle traffic would not change from current conditions. No additional air quality impacts would occur under this alternative.

4.1.4 Summary

The only increase in air emissions associated with the proposed project would occur during construction activities. There would be no emission increases associated with operations after the completion of the construction since the level of operation is not anticipated to change from current levels. Therefore, the only potential impacts to air quality would be related to construction activity.

Construction-related air emissions associated with the Proposed Action would be a temporary short-term impact primarily during the year 2016. The local impact to air quality would be 0.0094% or less of the impact resulting from the Solano County baseline emissions. The regional impact would be 0.0004% or less of the impact resulting from the Bay Area baseline emissions. This level of construction emissions would result in less than a significant impact to the local and regional baseline emissions. A RONA is provided in **Appendix C**.

4.2 Noise

Noise generated from the Proposed Action would have short-term effects to the existing noise environment due to construction/renovation activities. Given the nature of school operations, no long-term noise effects are anticipated.

Construction and renovation activities generate noise by their very nature and are highly variable, depending on the type, number, and operating schedules of equipment. Construction projects are usually executed in stages, each having its own combination of equipment and noise characteristics and magnitudes. The proposed activities would include mobilization, site preparation, placing foundations, heavy equipment movement, and building construction and renovation. The most prevalent noise source at typical construction sites is the internal combustion engine. General construction equipment using engines includes, but is not limited to: heavy, medium, and light equipment such as excavators; roller compactors; front-end loaders; bulldozers; graders; backhoes; dump trucks; water trucks; concrete trucks; pump trucks; utility trucks; cranes; sheet pile drivers; man lifts; forklifts; and lube, oil, and fuel trucks.

Peak noise levels would be variable and intermittent because each piece of equipment would only be operated when needed. However, peak construction noise levels would be considerably higher than current noise levels. Relatively high peak noise levels in the range of 93-108 dBA would potentially occur on the active construction site, decreasing with distance from the construction areas. **Table 9** presents peak noise levels that could be expected from a range of construction equipment during proposed construction activities.

Table 9. Peak Noise Levels Expected from Typical Construction Equipment.

	Peak Noise Level (dBA, attenuated)					
	Distance from Source (feet)					
Source	**0**	**50**	**100**	**200**	**400**	**1,000**
Heavy Truck	95	84-89	78-93	72-77	66-71	58-63
Dump Truck	108	88	82	76	70	62
Concrete Mixer	108	85	79	73	67	59
Jackhammer	108	88	82	76	70	62
Scraper	93	80-89	74-82	68-77	60-71	54-63
Bulldozer	107	87-102	81-96	75-90	69-84	61-76
Generator	96	76	70	64	58	50
Crane	104	75-88	69-82	63-76	55-70	49-62
Loader	104	73-86	67-80	61-74	55-68	47-60
Grader	108	88-91	82-85	76-79	70-73	62-65
Pile driver	105	95	89	83	77	69
Forklift	100	95	89	83	77	69
Source: Tipler 1976.						

The nearest residences are in the adjacent MFH neighborhood. They are located approximately 80 feet north of the proposed construction area (Figure 3). The nearest off-base residences are located approximately 4,000 feet from the site. Generally speaking, peak noise levels within 50 feet of active construction areas and material transportation routes would most likely be considered “striking” or “very loud,” comparable to peak crowd noise at an indoor sports arena. At approximately 200 feet, peak noise levels would be loud - approximately comparable to a garbage disposal or vacuum cleaner at 10 feet.

At 0.25 mile, construction noise levels would generally be quiet enough so as to be considered background noise, although transient noise levels may be noticeable at times.

Although noise levels would be quite loud in the immediate area, the intermittent nature of peak construction noise levels would not create the steady noise level conditions for an extended duration that could lead to hearing damage. In addition, heavy construction equipment would not be operated when school is in session. Wooden fencing between proposed construction areas and offsite areas would further serve to attenuate construction noise. Construction workers would follow standard OSHA requirements to prevent hearing damage.

Any construction or renovation would increase noise levels in the immediate vicinity of the project, but impacts would be minor because these activities would be temporary, would be limited to daylight hours, and would not extend beyond Travis AFB boundaries.

Areas that would be most affected by noise from the proposed construction and renovation include those closest to the construction footprint, specifically the school and nearby MFH residential areas. Indoor noise levels would be expected to be 15-25 dBA lower than outdoor levels. As such, effects to the school and nearby residences would be reduced, with maximum interior noise levels of approximately 60 dBA. To ensure that education is not disrupted, heavy construction equipment would not be operated when school is in session, and noise reduction measures would be implemented as necessary during construction/renovation activities to avoid disturbance to the learning environment. The potential for adverse noise impacts would be less than significant, and limited to the duration of construction/renovation activities.

4.3 Water Resources

4.3.1 Proposed Action

The Proposed Action would have no direct impacts on drinking water, wastewater, or groundwater. If the construction/renovation activities take place following implementation of the Proposed Action, a slight, temporary increase in water usage during the construction/renovation to spray disturbed areas as a means of dust control. Once construction and renovation activities are completed, water usage would return to current levels.

The potential construction/renovation would increase the impervious surface on the property by approximately 16,500 square feet. This would result in a negligible increase in stormwater volume. Any construction/renovation that results in ground disturbance would require that the TUSD comply with the following:

- California Water Resources Board NPDES General Permit for Discharges of Storm Water Associated with Construction Activity (General Permit Order 2009-0009-DWQ [as amended by 2010-0014-DWQ and 2012-0006-DWQ]), including the development and implementation of a SWPPP for stormwater discharges from small MS4 order number 2013-0001-DWQ General Permit.
- Wastewater Discharge Permit number SIU 07/NSCIU 433-02.

Compliance with the above regulations would ensure that impacts to water resources would be less than significant.

4.3.2 No Action Alternative

Construction/renovation would not occur under the No Action alternative; therefore, there would be no impacts to water resources.

4.4 Safety and Occupational Health

Operational work practices at the school would not change as a result of implementation of the Proposed Action or subsequent construction/renovation activities. The construction/renovation activities could provide a small benefit to staff and students due to upgraded building infrastructure systems (including ATFP measures), ADA compliant restrooms, and upgrades to play areas.

4.4.1 Proposed Action

Implementing the Proposed Action would potentially result in construction/renovation of the school. Construction contractors would follow all applicable rules and regulations regarding safety and occupational health. A health and safety plan for construction would be prepared that would include safety requirements related to the abatement of ACM and LBP. Construction areas would be secured to prevent unauthorized personnel from entering the work site or excavations. In accordance with the Occupational Safety and Health Act, all workers would be provided with appropriate personal protective equipment. Personal protective equipment would include, but not be limited to, approved hard hats, safety shoes, gloves, goggles, eye/face protection, safety belts, harnesses, respirators, hearing protection, and traffic safety vests. The potential for adverse impacts on safety and occupational health would be less than significant, and limited to the duration of construction.

4.4.2 No Action Alternative

Construction/renovation would not occur under the No Action Alternative; therefore, there would be no impacts to safety and occupational health.

4.5 Hazardous Materials and Waste

4.5.1 Proposed Action

4.5.1.1 ACM

The TUSD would update their ACM survey for the school, prepare an asbestos management plan, and complete any required remediation or abatement prior to initiating proposed construction/renovation work. All ACM waste discovered during ACM surveys would be classified as friable or non-friable. ACM requiring abatement would be transported and disposed of in accordance with the California Asbestos Containing Waste Regulations (Title 14 California Code of Regulations, Division 7, Chapter 3.5).

4.5.1.2 LBP

The TUSD would conduct a LBP survey at the school and complete any required remediation or abatement prior to initiating proposed construction/renovation work. Any required abatement would be conducted in accordance with EPA's 2008 Lead RRP Rule (as amended in 2010 and 2011).

With adherence to above requirements, no significant environmental consequences regarding hazardous materials and waste would result from the implementation of the Proposed Action.

4.5.2 No Action Alternative

Although no construction/renovation would occur under the No Action Alternative, the following requirement identified in Section 4.4.1 would still apply:

- The TUSD would update their ACM survey for the school and prepare an asbestos management plan in accordance with AHERA.

With adherence to above requirements, no significant environmental consequences regarding hazardous materials and waste would result from the implementation of the No Action Alternative.

4.6 Biological Resources

This section analyzes the potential for adverse impacts on biological resources from implementation of the Proposed Action and the No Action Alternative.

4.6.1 Proposed Action

4.6.1.1 Wetlands

There are no wetlands located on or near the project site. Therefore, there would be no impacts to wetlands as a result of implementation of the Proposed Action.

4.6.1.2 Floodplains

None of the subject property is located within the 100-year floodplain. Therefore, there would be no impacts to floodplains as a result of implementation of the Proposed Action.

4.6.1.3 Threatened, Endangered, and Sensitive Species

There are no threatened endangered, or sensitive species known to occur on or adjacent to the subject property. Because of the improved condition of the property, no suitable habitat for threatened, endangered or sensitive species that occur or could potentially occur on Travis AFB is present on the site.

Of the species identified in **Table 6** and **Appendix B**, only the state and federally threatened CTS has remote potential to be affected by the Proposed Action. There are known CTS breeding ponds to the north, northeast, and northwest of the project area. The nearest known breeding pond is located just under ½ mile (approximately 2,400 feet) north of the school (**Figure 4**). CTS can migrate over one mile from upland habitat to breeding ponds.

Travis AFB prepared an NLAA determination for the CTS related to the Proposed Action and submitted it to the USFWS on 20 November 2014 (**Appendix A**). The NLAA determination was part of the IICEP process, and initiated informal consultation in accordance with legal requirements set forth under regulations implementing Section 7 of the Endangered Species Act (50 CFR 402; 16 U.S.C. 1536). The NLAA determination was based on the presence of significant artificial physical barriers to CTS migration/dispersal (i.e., curbs, residential housing, wooden fencing, and other buildings) that exist between breeding ponds and the project site, as well as the lack of upland CTS habitat such as small mammal burrows on the property. The NLAA determination also identified the following conservation measures (i.e., best management practices) that Travis AFB routinely implements (and includes as a requirement in applicable contracts) for all construction projects within 1.3 miles of CTS breeding ponds:

1. Prior to the start of construction activities, a qualified biologist shall provide education and training sessions for all individuals that will be involved with site preparation or construction. The training will focus on habitat sensitivity and identification of CTS. The training shall include species description and behavior, general measures to be taken to protect these species as they relate to the project, the penalties for non-compliance, and the boundaries of the project area. A fact sheet or other

supporting materials containing this information will be prepared and distributed. Upon completion of training, employees will sign a form stating that they attended the training and understand all the conservation and protection measures.

2. Construction activities will be timed to occur during the dry season (June-October) to minimize potential effects to salamander dispersal.
3. Construction activities will occur between sunrise and sunset.
4. The contractor will confine all equipment to designated work zones within the action area.
5. All fencing, flagging, debris, trash, and other materials from work areas will be removed following completion of construction.
6. All trash (food related items such as wrappers, bottles, cans, food scraps, etc.) will be placed in closed containers and removed from the project site on a daily basis.
7. The project will utilize dust control measures whenever necessary. All onsite vehicles will be parked/staged on a paved surface.
8. Erosion control Best Management Practices (BMPs) in accordance with the Travis AFB Storm Water Pollution Prevention Plan will be implemented as required, including but not limited to, grading during the dry season, compaction of upland spoils, and seeding and mulching areas of exposed soil as determined necessary by the Travis AFB Storm Water Manager.
9. Open trenches will be covered at the end of each workday.
10. Operators will be familiar with and exercise spill prevention and emergency spill response measures as required. Emergency response plans will be on site.
11. No dogs or other pets belonging to construction personnel will be allowed in the project area.
12. The project will utilize dust control measures whenever necessary. These measures include, but are not limited to, use of a water truck to spray disturbed areas during construction activities and covering of soil piles with plastic whenever they are not in use. No water will be allowed to run-off the site.
13. No activity will take place within 48 hours of a predicted or actual rain event.

The UFWS concurred Travis AFB's NLAA determination regarding the CTS in a letter dated 05 January 2015 (**Appendix A**).

4.6.1.4 Migratory Birds and Eagles

Because of the improved condition of the project site, nesting habitat for migratory birds is very limited. The Proposed Action would affect paved areas, hardcourt play areas, and turfgrass play areas that are currently utilized regularly by children. Therefore, implementation of the Proposed Action would have no effect on migratory birds.

It is highly unlikely that bald or golden eagles would utilize the project site for hunting prey due to the fact that it is situated within a residential MFH development. None of the trees located near the boundary fence is large enough to support a bald or golden eagle nest. Therefore, implementation of the Proposed Action would have no effect on bald or golden eagles.

4.6.2 No Action Alternative

For the No Action Alternative, the school would continue to operate under the current lease for the next several years without any changes. The current lease will expire in the year 2018.

Construction/renovation activities would not occur at the school. No impacts to biological resources would occur under this alternative.

4.7 Cultural Resources

Travis AFB initiated the IICEP process with the SHPO on 20 November 2014 (**Appendix A**). The SHPO did not respond to the correspondence.

Travis AFB consulted with the California NAHC on 25 November 2014. The consultation was to request that the NAHC search their SLF to determine whether any sacred lands have been identified on the base, and to request contact information for any federally recognized tribe that may have ancestral ties to the land upon which Travis AFB is situated. In their 10 December 2014 response, the NAHC stated that an SLF search failed to indicate the presence of Native American cultural resources in the project area. They did, however, identify the Cortina Band of Indians and the Yocha Dehe Wintun Nation as Native American organizations that may have knowledge of cultural resources in the area (**Table 10**). Travis AFB leadership initiated government-to-government consultations with both of these Native American organizations on 28 January 2015.

The Yocha Dehe Wintun Nation responded in a letter dated 18 February 2015. In their response, they stated that the project is within their aboriginal territories, and that they have a cultural interest in the Proposed Action area. However, they are not aware of any known cultural resources near the project site, and determined that an onsite Cultural Monitor would not be required during proposed construction activities.

The Cortina Band of Indians responded via email on 05 June 2015. In their response, they stated that they are not opposed to the proposed action, but requested that they be notified if artifacts are uncovered. They attached a copy of the Patwin Cultural Protection and Preservation Plan, which includes the protocol that the Cortina Band of Indians follows to avoid culturally sensitive materials as well as recommended mitigation measures in the event that culturally sensitive materials are uncovered.. The Plan is included in **Appendix A**.

4.7.1 Proposed Action

If any Native American human remains or other archaeological resources are encountered during any kind of excavation associated with the Proposed Action, excavation would stop and the base cultural resources manager would be notified immediately. A list of points of contact can be found in Section 4.4.2 of the Travis AFB ICRMP (Travis AFB 2010). The base cultural resources manager would follow the procedures in the Unplanned/ Unanticipated Events SOPs (Section 5.3 of the ICRMP) for notification of the SHPO and appropriate Native American groups.

Based on the fact that the school property is considered a low probability area for archaeological resources, the negative result of the NAHC SLF search, responses (or lack thereof) from the identified Native American organizations, and the SOPs in place, there would be no significant impacts to cultural resources under this alternative.

4.7.2 No Action Alternative

For the No Action Alternative, the school would continue to operate under the current lease for the next several years without any changes. Construction/ renovation activities would not occur at the school. No impacts to cultural resources would occur under this alternative.

Table 10. Consultation with Recognized Native American Tribes in the Project Area.

Native American Tribe	Response to 28 January 2015 Government-to-Government Consultation	Additional Consultation / Communication
Cortina Band of Indians	• Responded on 18 February 2015. • Stated that the project is within their aboriginal territories. • Not aware of any known cultural resources near the project site. • Determined that an onsite Cultural Monitor would not be required during construction activities.	N/A
Yocha Dehe Wintun Nation	• No Response.	• Follow-up phone call to Chairman Wright 26 February 2015 to verify receipt. He asked the government to resend. • Information resent on 26 February 2015. • Email to Chairman Wright on 09 March 2015requesting input. No response. • Telephone call to administrative office on 26 March 2015. No response from the Chairman. • Email to Chairman Wright on 03 June requesting input. Responded on 05 June 2015. No objection to the Proposed Action, but asked to be notified if Native American materials are uncovered.
Consultation documents are provided in **Appendix A**. Native American Tribes with potential interest in the project area were identified by the California NAHC.		

4.8 Cumulative Impacts

In accordance with the NEPA, any past, present, and reasonably foreseeable future actions with the potential to cumulatively affect the same resources as the alternatives presented in Section 2 are presented below, followed by an analysis of cumulative effects. Future actions proposed in the area may require site-specific NEPA analysis prior to implementation.

Cumulative effects on environmental resources result from incremental impacts of an action, when combined with other past, present, and reasonably foreseeable future projects in the area. Cumulative effects may arise from single or multiple actions and may result in additive or interactive effects. Cumulative effects can result from minor, but collectively substantial actions undertaken over a period of time by various agencies (federal, state, and local) or individuals.

Past Actions:

- Repair of Airfield Pavements, Runway 03R/21L,
- Construction of Taxiway M Bypass Road,
- Construction of C-17 Articulated Concrete Blocks,
- Repair 300 Ramp West End (Phase 2), and
- Repair 200 Ramp.

Planned Actions for Fiscal Years 2016 and 2017:

- Repair pavement on Taxiway Hotel (repair by replacement of 61,341 square feet of concrete in section T36C);
- Construct access road to Fire Station 3 (Pave access road with concrete from Collins Dr. to Fire Station #3);
- Construct new parking behind Building 402 (Create new parking spaces behind building 402 for guests and lodging employees. Additional lot space would be approximately 5,300 square feet, creating and additional 22 parking spaces);
- Construct wheel and tire shop for storage building 812 (2,000 square foot connected storage facility);
- Repair 400 Ramp (phases 1-5) and parking spot 510 (repair by replacement of approximately 300,000 square yards of existing concrete and asphalt, including stormwater drainage improvements); and
- Construct covered addition to Building 971 and repair parking (3,000-square foot partially enclosed connected metal covered storage building and repair approximately 8,600 square feet of pavement to support heavy equipment).

Although not currently planned, Travis AFB could potentially initiate additional base development to support the mission.

4.8.1 Air Quality

The Proposed Action and other planned actions would conform to the SIP and would not be regionally significant. Neither the Proposed Action nor the other past or planned future actions would contribute to long-term impacts on air quality, because there would be no significant increase in traffic or operational emissions. Therefore, no significant cumulative impacts on air quality are anticipated.

4.8.2 Noise

All of the actions included in the Cumulative Impacts analysis occurred or would occur in in the airfield area, nearly 4,000 feet from the Proposed Action Site. The noise in the airfield area is highly influenced by flight activities, and the minor construction noise from the school would have no impact on the airfield environment. Therefore, no significant cumulative impacts to noise would be anticipated.

4.8.3 Safety and Occupational Health

Workers at all construction sites on Travis AFB are required to adhere to the site specific health and safety plan. Construction areas would be secured to prevent unauthorized personnel from entering the work site or excavations. In accordance with the Occupational Safety and Health Act, all workers would be provided with appropriate personal protective equipment. Therefore, no significant cumulative impacts to safety and occupational health would be anticipated.

4.8.4 Hazardous Materials and Waste

The Proposed Action could have a negligible effect on hazardous materials and waste associated with the abatement of ACM and LBP. None of the projects listed above would generate hazardous materials and waste. Therefore, no significant cumulative impacts to hazardous materials and waste would be anticipated.

4.8.5 Biological Resources

The Proposed Action is not expected to adversely affect Biological Resources. All of the past and planned projects are located on or near the airfield. Based on that fact that these projects have or would take place in developed areas, impacts to biological resources would not be expected. Any potential impacts to threatened, endangered, or sensitive species would require consultation with the USFWS and potential and potential mitigation. Therefore, no significant cumulative impacts to biological resources would be anticipated.

4.8.6 Cultural Resources

The Proposed Action would not likely have any effect on Cultural Resources. In the event of an unanticipated discovery of archaeological resources during any project on Travis AFB, actions detailed in the ICRMP (Travis AFB 2010) and summarized in Section 4.7.1 would be initiated to minimize impacts. Therefore, no significant Cumulative Impacts to Cultural Resources would be anticipated.

4.9 Natural or Depletable Resource Requirements and Conservation Potential

The Proposed Action requires no use of natural or depletable resources, other than the use of construction materials during construction/renovation. Replacement of some old, inefficient building infrastructure components with newer, energy efficient components would result in long-term energy conservation.

4.10 Irreversible or Irretrievable Commitment of Resources

Under the Proposed Action, irretrievable commitments of resources would occur from the negligible consumptive use of electrical energy and fuel during construction operations. None of those commitments would be made before the FONSI is signed.

4.11 Relationship Between Short-Term Uses of the Human Environment and the Maintenance and Enhancement of Long-Term Productivity

The Proposed Action would take advantage of existing infrastructure to the maximum extent possible, but in many cases would replace older, inefficient systems and structures with highly efficient systems and structures. The productivity and future use of the land would benefit from long-term use and productivity.

4.12 Conditions Normally Requiring an EIS

The potential impacts arising from the Proposed Action were evaluated specifically in the context of the criteria for actions requiring an EIS, described in the 1979 DoD Directive 6050.1, *Environmental Effects in the United States of Department of Defense Actions* , and 32 CFR 989.

Specifically, the Proposed Action was evaluated for the potential to:

- Significantly affect environmental quality or public health and safety;
- Establish a precedent for future actions;
- Adversely interact with other actions resulting in cumulative environmental effects; and
- Involve the use, transportation, storage, and disposal of hazardous or toxic materials that may have significant environmental impacts.

Neither the Proposed Action nor the No Action Alternative would result in significant impacts to the environment. Therefore, an EIS is not required, and an EA and Finding of No Significant Impact (FONSI) is the proper level of NEPA documentation for this action.

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Appendix A

Public, Agency, and Native American Correspondence

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DEPARTMENT OF THE AIR FORCE
60TH CIVIL ENGINEER SQUADRON (AMC)

20 November 2014

Mr. Brian L. Sassaman
Chief, Installation Management Flight
411 Airmen Drive
Travis Air Force Base, CA 94535

Mr. Mark Littlefield
U.S. Fish and Wildlife Service
2800 Cottage Way, Room W2605
Sacramento, CA 95825-1846

Dear Mr. Littlefield

The United States Air Force is preparing an Environmental Assessment (EA) to analyze the potential environmental consequences resulting from the proposed lease renewal of real property to the Travis Unified School District (TUSD), pursuant to the National Environmental Policy Act (NEPA) of 1969, as amended (42 U.S. Code (USC) §4321 et seq.); the Council on Environmental Quality (CEQ) Regulations (40 Code of Federal Regulations (CFR) Parts 1500-1508); and the Air Force NEPA policy and procedures (32 CFR Part 989). The Air Force is also using this memorandum, via the attached *Not Likely to Adversely Affect Determination for the California Tiger Salamander* (*Ambystoma Californiense*), to initiate informal consultation for the proposed project with the United States Fish and Wildlife Service (USFWS) in accordance with legal requirements set forth under regulations implementing Section 7 of the Endangered Species Act (50 CFR 402; 16 U.S.C. 1536 (c)).

The property is currently leased to the TUSD for the operation of Scandia Elementary School. Implementation of the Proposed Action would allow the TUSD to pursue grant funding for improvements to the school. We have attached a Description of Proposed Action and Alternatives (DOPAA) for your review and comment. The DOPAA includes the background, purpose and need for the proposed action, general extent of proposed activities and a description of the alternatives under consideration.

Please contact Mr. Tony Ruhlman, North Wind Inc., 535 N Pleasantburg Drive Suite 136, Greenville SC 29607, truhlman@northwindgrp.com, 864-270-0358, with your comments and information not later than 30 days from the date of this memorandum for incorporation into the Draft EA. If needed, please contact me at, brian.sassaman.1@us.af.mil, 707-424-8225. Thank you for your assistance in this matter.

Sincerely

Brian L. Sassaman

BRIAN L. SASSAMAN, GS-13, DAFC
Flight Chief, Installation Management

2 Attachments:
1. Not Likely to Adversely Affect Determination
2. Description of Proposed Action and Alternatives (DOPAA)

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Sacramento Fish and Wildlife Office
2800 Cottage Way, Suite W-2605
Sacramento, California 95825-1846

In Reply Refer to:
FF08ESMF00-
2014-I-0087-1

JAN 05 2015

Brian L. Sassaman
60th Civil Engineer Squadron
Chief, Installation Management Flight
411 Airman Drive, Building 570
Travis Air Force Base, California 94535-2001

Subject: Informal Consultation on the proposed Lease Renewal to the Travis Unified School District at Travis Air Force Base, Solano County, California

Dear Mr. Sassaman:

This is in response to your November 20, 2014, letter and supporting documentation requesting informal consultation with the U.S. Fish and Wildlife Service (Service) on the proposed Lease Renewal to the Travis Unified School District at Travis Air Force Base Project (proposed project). Your request was received by the Service on November 24, 2014. You requested our concurrence that the proposed project may affect, but is not likely to adversely affect, the federally-listed as threatened Central Valley population of the California tiger salamander (*Ambystoma californiense*) (salamander). Although designated critical habitat exists for the salamander, it is not located within the proposed project area or Travis Air Force Base. Our primary concern and mandate is the protection of federally-listed species pursuant to section 7 (a)(2) of the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 et seq.) (Act).

The findings and recommendations in this consultation are based on: (1) your November 20, 2014, letter initiating informal consultation; (2) your November, 2014, document titled Description of Proposed Action and Alternatives; (3) your biological assessment titled Not Likely to Adversely affect Determination for the California Tiger Salamander; and (4) other information available to the Service.

Project Description

The proposed project will occur on Travis Air Force Base, replacing the current lease of 7.209 acres of real property to the Travis Unified School District with a new 25-year lease, for the continued operation of Scandia Elementary School. The lease will allow the Travis Unified School District to pursue a grant from the Office of Economic Adjustment (OEA) for the purpose of renovating and

expanding the school. The OEA is a field organization within the Department of Defense that is responsible for assisting state and local governments as they respond to major defense program changes. Proposed improvements to the school include:

- Construction of six new classrooms;
- Construction of a new multi-purpose cafeteria;
- Construction of a new information center/administrative office;
- Construction of a new food preparation and service facility;
- Renovations to create a new library/media center;
- Renovations to the existing library;
- Construction of permanent classroom walls;
- Regrading and/or resurfacing of playing fields and courts;
- Replacement of windows and exterior doors;
- Renovating all restrooms to comply with the Americans with Disabilities Act;
- Renovations for compliance with Anti-Terrorism Force Protection standards; and
- Modernization of building infrastructure and support systems.

The school is located along Broadway Street at Travis Air Force Base. The school grounds are comprised of mowed playground areas, hardcourt play areas, a paved parking lot, and the school buildings. The school grounds contain no wetland features, no native upland habitats, and no small mammal burrows. The nearest known breeding pond for the salamander is about 2,400 feet north of the school grounds.

Proposed Conservation Measures

The conservation measures listed below are included as part of the proposed project:

1. Prior to the start of construction activities a Service-approved biologist shall provide environmental awareness training to all construction personnel regarding habitat sensitivity and identification of California tiger salamanders. The training shall include species description and behavior, general measures to be taken to protect these species and vernal pools as they relate to the project, the penalties for non-compliance, and the boundaries of the project area. A fact sheet or other supporting materials containing this information will be prepared and distributed. Upon completion of training, employees will sign a form stating that they attended the training and understand all the conservation and protection measures.
2. Construction activities will be timed to occur during the dry season (June-October) to minimize potential affects to salamander dispersal.
3. Construction activities will occur between sunrise and sunset.
4. All construction equipment will be confined to designated work zones within the action area.
5. All fencing, flagging, debris, trash, and other materials from work areas will be removed following the completion of construction.
6. All trash (including food items) will be placed in closed containers and removed from the proposed project action site on a daily basis.
7. Dust control measures will be used whenever necessary. All onsite vehicles will be parked/staged on a paved surface.

8. Best management practices for erosion control, in accordance with the Travis Air Force Base Storm Water Prevention Plan, will be implemented as required. These include, but are not limited to: grading during the dry season; compaction of upland soils; and seeding and mulching of exposed soils as determined necessary by the Travis Air Force Base Storm Water Manager.
9. Open trenches will be covered at the end of each workday.
10. All operators will be familiar with and exercise spill prevention and emergency spill response measures as required. Emergency response plans will be on site.
11. No pets belonging to construction personnel will be allowed in the project area.
12. The proposed project will utilize dust control measures whenever necessary. These measures include, but are not limited to, use of a water truck to spray disturbed areas during construction activities and covering soil piles with plastic whenever they are not in use. No water will be allowed to run-off the site.
13. No activity will take place within 48 hours of a predicted or actual rain event.

Conclusion

Replacing the current lease of 7.209 acres of real property to the Scandia Elementary School with a new 25-year lease will allow the school a grant opportunity for renovating and expanding the school facilities. The school is located within a suburban setting of Travis Air Force Base. The school grounds are separated from the nearest known breeding habitat for the salamander by numerous roads, curbs, fences, buildings, and other suburban structures that hinder the movement of salamanders toward the school grounds. Also, the school grounds offer no wetland or upland habitat for the salamander.

Based on our review of the information provided, the Service concurs with your determination that the proposed project is not likely to adversely affect the salamander. Also, because designated critical habitat for the salamander does not exist on Travis Air Force Base, the proposed project is not likely to adversely modify any critical habitat.

Therefore, after reviewing all the available information, we concur with your determination that the proposed project may affect, but is not likely to adversely affect the California tiger salamander. Unless new information reveals effects of the proposed action that may affect listed species in a manner or to an extent not considered, or a new species or critical habitat is designated that may be affected by the proposed action, no further action pursuant to the Act is necessary.

If you have any questions regarding the proposed Lease Renewal to the Travis Unified School District at Travis Air Force Base, please contact Harry Kahler, Fish and Wildlife Biologist, at (916) 414-6600.

Sincerely,

Doug Weinrich

Doug Weinrich
Assistant Field Supervisor

DEPARTMENT OF THE AIR FORCE
60TH CIVIL ENGINEER SQUADRON (AMC)

Mr. Brian L. Sassaman
Chief, Installation Management Flight
411 Airmen Drive, Building 570
Travis AFB CA 94535

Native American Heritage Commission
1550 Harbor Blvd, Suite 100
West Sacramento, CA 95691

SUBJECT: Request for Sacred Lands File Search on Travis AFB, California

Dear Sir or Madam

North Wind Inc. has been contracted to prepare an Environmental Assessment of a lease extension by the U.S. Air Force to the Travis Unified School District for the continued operation of Scandia Elementary School on Travis Air Force Base (AFB). The lease extension would allow the School District to pursue grant funding to renovate and expand the school.

In accordance with Executive Order 13175 and Section 106 of the National Historic Preservation Act (NHPA) (36 CFR Sections 800.2, 800.3, and 800.4), the Air Force would like to initiate government-to-government consultation regarding this proposed action with potentially interested federally recognized tribes.

We are requesting that you conduct a search of the Native American Heritage Commission (NAHC) Sacred Lands File (SLF) for Travis AFB, and notify us of any SLFs that are located on the Base. We are also requesting that you provide contact information for any federally recognized tribes that may have ancestral ties to the land upon which Travis AFB is situated. This information will be used to facilitate Native American Consultations for the current project as well as future proposed actions on Travis AFB.

As shown on the enclosed figure, Travis AFB is located in Solano County, and is found on the USGS Elmira and Denverton, California 7.5-minute topographic quadrangles. It encompasses the following Sections (Sections are completely in the Elmira quadrangle unless otherwise noted):

- Township 5 North, Range 1 East: Sections 17, 18, and 19
- Township 5 North, Range 1 West: Sections 13, 14, 15, 21, 22, 23, 24, 25, 26 (Denverton), 27 (Denverton), 28, 34 (Denverton), and 35

Thank you for your cooperation and assistance. I look forward to your earliest possible reply. Please direct any questions to Mr. Brian Sassaman at (707) 424-8225 or email at brian.sassaman.1@us.af.mil.

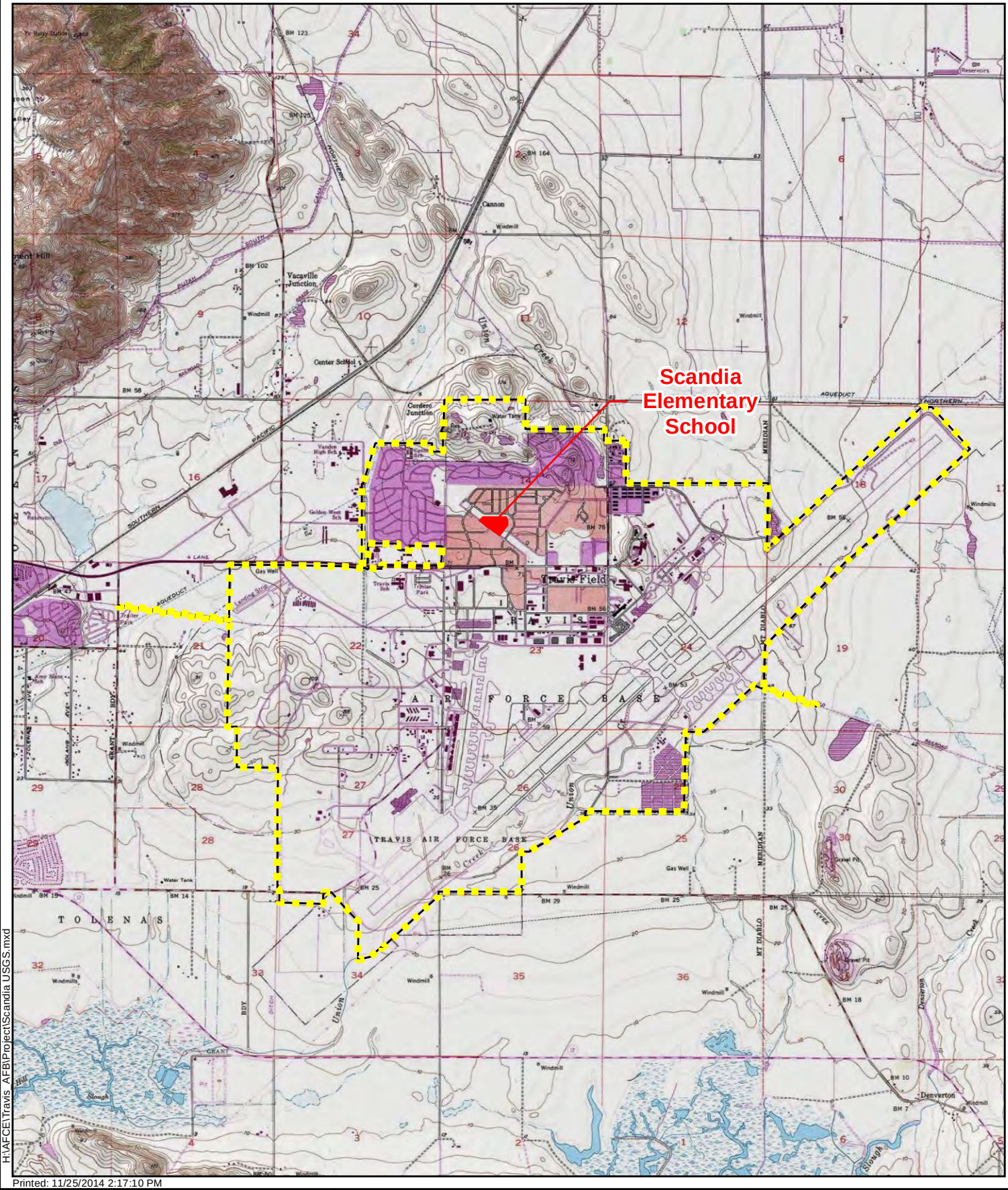
Sincerely

11/25/2014

X Brian L. Sassaman

BRIAN L. SASSAMAN, GS-13, DAFC
Chief, Installation Management Flight
Signed by: SASSAMAN.BRIAN.L.1080522793

Attachment:
USGS Map of Proposed Area_Scandia



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Printed: 11/25/2014 2:17:10 PM

Legend

- Travis AFB Installation Area
- Scandia Elementary School

Travis Air Force Base, California

USGS 7.5' Quadrangle

1980 Elmira, CA and 1980 Denverton, CA

N W E S

0 0.25 0.5 0.75 1 Miles

NATIVE AMERICAN HERITAGE COMMISSION
1550 Harbor Blvd.
West Sacramento, CA 95691
(916) 373-3710
Fax (916) 373-5471

December 10, 2014

Brian L. Sassaman
TRAVIS AFB
411 Airmen Drive, #570
Travis AFB, CA 94535-2001

2 Pages

Email: brian.sassaman.1@us.af.mil

RE: Travis AFB project, Solano County

Mr. Sassaman;

A record search of the sacred land file has failed to indicate the presence of Native American cultural resources in the immediate project area. The absence of specific site information in the sacred lands file does not indicate the absence of cultural resources in any project area. Other sources of cultural resources should also be contacted for information regarding known and recorded sites.

Enclosed is a list of Native Americans individuals/organizations who may have knowledge of cultural resources in the project area. The Commission makes no recommendation or preference of a single individual, or group over another. This list should provide a starting place in locating areas of potential adverse impact within the proposed project area. I suggest you contact all of those indicated, if they cannot supply information, they might recommend others with specific knowledge. By contacting all those listed, your organization will be better able to respond to claims of failure to consult with the appropriate tribe or group. If a response has not been received within two weeks of notification, the Commission requests that you follow-up with a telephone call to ensure that the project information has been received.

If you receive notification of change of addresses and phone numbers from any of these individuals or groups, please notify me. With your assistance we are able to assure that our lists contain current information. If you have any questions or need additional information, please contact me at (916) 373-3713.

Sincerely,

Lyta Winston for

Debbie Pilas-Treadway
Environmental Specialist III

Native American Contacts
Solano County
December 10, 2014

Kesner Flores
P.O. Box 1047 Wintun / Patwin
Wheatland , CA 95692
calnagpra@hotmail.com
(925) 586-8919

Cortina Band of Indians
Charlie Wright, Chairperson
P.O. Box 1630 Wintun / Patwin
Williams , CA 95987
(530) 473-3274 Office
(530) 473-3301 Fax

Yocha Dehe Wintun Nation
Marshall McKay, Chairperson
P.O. Box 18 Wintun (Patwin)
Brooks , CA 95606
(530) 796-3400
(530) 796-2143 Fax

Yocha Dehe Wintun Nation
Leland Kinter, Native Cultural Renewal Committee
P.O. Box 18 Wintun (Patwin)
Brooks , CA 95606
lkinter@yochadehe-nsn.gov
(530) 979-6346
(530) 796-3400 - office
(530) 796-2143 Fax

Yocha Dehe Wintun Nation
Cynthia Clarke, Native Cultural Renewal Committee
P.O. Box 18 Wintun (Patwin)
Brooks , CA 95606
(530) 796-3400 Office
(530) 796-2143 Fax

This list is current only as of the date of this document.

Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resource Section 5097.98 of the Public Resources Code

This list is only applicable for contacting local Native Americans with regard to cultural resources for the proposed Travis AFB project, Solano County

DEPARTMENT OF THE AIR FORCE
60TH CIVIL ENGINEER SQUADRON (AMC)

20 November 2014

Mr. Brian L. Sassaman
Flight Chief, Installation Management
411 Airmen Drive
Travis Air Force Base CA 94535

Dr. Carol Roland-Nawi
State Historic Preservation Officer
Department of Parks and Recreation
Office of Historic Preservation
1725 23rd Street, Suite 100
Sacramento CA 95816-7100

Dear Dr. Roland-Nawi

The United States Air Force is preparing an Environmental Assessment (EA) to analyze the potential environmental consequences resulting from the proposed lease renewal of real property to the Travis Unified School District (TUSD), pursuant to the National Environmental Policy Act (NEPA) of 1969, as amended (42 U.S. Code (USC) §4321 et seq.); the Council on Environmental Quality (CEQ) Regulations (40 Code of Federal Regulations (CFR) Parts 1500-1508); and the Air Force NEPA policy and procedures (32 CFR Part 989).

The property is currently leased to the TUSD for the operation of Scandia Elementary School. Implementation of the Proposed Action would allow the TUSD to pursue grant funding for improvements to the school. We have attached a Description of Proposed Action and Alternatives (DOPAA) for your review and comment. The DOPAA includes the background, purpose and need for the Proposed Action, general extent of proposed activities and a description of the alternatives under consideration. The Air Force or its contractor, North Wind Inc., may contact you in their data collection efforts.

Please contact Mr. Tony Ruhlman, North Wind Inc., 535 N Pleasantburg Drive Suite 136, Greenville SC 29607, truhlman@northwindgrp.com, 864-270-0358, with your comments and information not later than 30 days from the date of this memorandum for incorporation into the Draft EA. If needed, please contact me at, brian.sassaman.1@us.af.mil, 707-424-8225. Thank you for your assistance in this matter.

Sincerely

Brian L. Sassaman

BRIAN L. SASSAMAN, GS-13, DAFC
Flight Chief, Installation Management

Attachment:
Description of Proposed Action and Alternatives (DOPAA)

DEPARTMENT OF THE AIR FORCE
HEADQUARTERS 60TH AIR MOBILITY WING (AMC)

26 JAN 2015

Colonel Corey J. Martin
Commander
60th Air Mobility Wing
400 Brennan Circle
Travis AFB CA 94535-5000

The Honorable Marshal McKay
Chairperson, Yocha Dehe Wintun Nation
PO Box 18
Brooks CA 95606-0018

Dear Chairperson McKay

The United States Air Force is preparing an Environmental Assessment (EA) of the proposed lease renewal of real property to the Travis Unified School District (TUSD), pursuant to the National Environmental Policy Act (NEPA) of 1969, as amended (42 U.S. Code (USC) §4321 et seq.); the Council on Environmental Quality (CEQ) Regulations (40 Code of Federal Regulations (CFR) Parts 1500-1508); and the Air Force NEPA policy and procedures (32 CFR Part 989).

The property is currently leased to the TUSD for the operation of Scandia Elementary School. Implementation of the Proposed Action would allow the TUSD to pursue grant funding for improvements to the school. The attached Description of Proposed Action and Alternatives (DOPAA) provides site location maps and information regarding the Proposed Action.

In accordance with Executive Order 13175, the National Environmental Policy Act (NEPA) (42 United States Code 4321 et seq. and 40 Code of Federal Regulations Part 1500), and Section 106 of the National Historic Preservation Act (NHPA) (36 CFR Sections 800.2, 800.3, and 800.4), the Air Force would like to initiate government-to-government consultation regarding this proposed action. The Air Force desires to discuss the proposal in detail with you so that we may understand and consider any comments, concerns and suggestions you may have.

Please let us know when you would like to meet to discuss the proposal and your expectations on how we should proceed with the consultations. Do not hesitate to call me at (707) 424-2452 to arrange dates and times for consultation. Thank you for your cooperation and interest in this matter.

Sincerely

COREY J. MARTIN, Colonel, USAF
Commander

Attachment:
Description of Proposed Action and Alternatives

cc:
Leland Kinter, Native Cultural Renewal Committee, Yocha Dehe Wintun Nation
Cynthia Clarke, Native Cultural Renewal Committee, Yocha Dehe Wintun Nation

February 18th, 2015

Col. Corey J. Martin
Department of the Air Force
60th Air Mobility Wing
400 Brennan Circle
Travis AFB, CA 94535-5000

RE: Scandia Elementary School Proposed Lease Replacement, Travis AFB

Dear Col. Martin:

Thank you for your project notification letter dated, January 26, 2015, regarding cultural information on or near Scandia Elementary School, Travis AFB, Solano County, CA. We appreciate your effort to contact us and wish to respond.

The Cultural Resources Department has reviewed the project and concluded that it is within the aboriginal territories of the Yocha Dehe Wintun Nation. Therefore, we have a cultural interest and authority in the proposed project area.

Based on the information provided, Yocha Dehe Wintun Nation is not aware of any known cultural resources near this project site and a Cultural Monitor is not needed. However, if any new information or cultural items are found, please contact the following individual:

Mr. James Sarmento
Cultural Resources Manager
Yocha Dehe Wintun Nation
Office: (530) 723-0452, Email: jsarmento@yochadehe-nsn.gov

Please refer to identification number YD –02042014-07 in correspondences concerning this project.

Thank you for providing us the opportunity to comment.

Sincerely,

James Kinter
Tribal Secretary
Tribal Historic Preservation Officer

DEPARTMENT OF THE AIR FORCE
HEADQUARTERS 60TH AIR MOBILITY WING (AMC)

JAN 2015

Colonel Corey J. Martin
Commander
60th Air Mobility Wing
400 Brennan Circle
Travis AFB CA 94535-5000

The Honorable Charlie Wright
Chairman, Cortina Band of Indians
PO Box 1630
Williams CA 95987-0018

Dear Chairman Wright

The United States Air Force is preparing an Environmental Assessment (EA) of the proposed lease renewal of real property to the Travis Unified School District (TUSD), pursuant to the National Environmental Policy Act (NEPA) of 1969, as amended (42 U.S. Code (USC) §4321 et seq.); the Council on Environmental Quality (CEQ) Regulations (40 Code of Federal Regulations (CFR) Parts 1500-1508); and the Air Force NEPA policy and procedures (32 CFR Part 989).

The property is currently leased to the TUSD for the operation of Scandia Elementary School. Implementation of the Proposed Action would allow the TUSD to pursue grant funding for improvements to the school. The attached Description of Proposed Action and Alternatives (DOPAA) provides site location maps and information regarding the Proposed Action.

In accordance with Executive Order 13175, the National Environmental Policy Act (NEPA) (42 United States Code 4321 et seq. and 40 Code of Federal Regulations Part 1500), and Section 106 of the National Historic Preservation Act (NHPA) (36 CFR Sections 800.2, 800.3, and 800.4), the Air Force would like to initiate government-to-government consultation regarding this proposed action. The Air Force desires to discuss the proposal in detail with you so that we may understand and consider any comments, concerns and suggestions you may have.

Please let us know when you would like to meet to discuss the proposal and your expectations on how we should proceed with the consultations. Do not hesitate to call me at (707) 424-2452 to arrange dates and times for consultation. Thank you for your cooperation and interest in this matter.

Sincerely

COREY J. MARTIN, Colonel, USAF
Commander

Attachment:
Description of Proposed Action and Alternatives

SASSAMAN, BRIAN L GS-13 USAF AMC 60 CES/CEI

From: SASSAMAN, BRIAN L GS-13 USAF AMC 60 CES/CEI
Sent: Monday, March 09, 2015 4:38 PM
To: 'cww281@gmail.com'
Cc: SASSAMAN, BRIAN L GS-13 USAF AMC 60 CES/CEI (brian.sassaman.1@us.af.mil)
Subject: RE: Correspondence with Travis Air Force Base
Attachments: G2G Cortina Band of Indians Letter for Scandia Elementary School_26 Jan ....pdf; G2G Letter Crotina Band of Indians_Runway and TACAMO (SIGNED).pdf
Signed By: brian.sassaman.1@us.af.mil

Hi Chairman Wright,

Just checking to see if you got the email I sent to you earlier seeking input from the Cortina Band of Indians for projects at Travis. If you need additional documents in addition to what I sent you earlier, please let me know and I will provide it to you.

Thank you for your support,

Brian

//SIGNED//
Brian L. Sassaman, GS-13, DAFC
Flight Chief, Installation Management
411 Airmen Drive, Bldg 570
Travis AFB, CA 94535-2001
DSN: 837-8225; Comm: (707) 424-8225
Email: brian.sassaman.1@us.af.mil

-----Original Message-----
From: SASSAMAN, BRIAN L GS-13 USAF AMC 60 CES/CEI
Sent: Friday, February 27, 2015 1:04 PM
To: cww281@gmail.com
Cc: SASSAMAN, BRIAN L GS-13 USAF AMC 60 CES/CEI (brian.sassaman.1@us.af.mil)
Subject: RE: Correspondence with Travis Air Force Base

Chairman Wright,

I wanted to check and see if you got my last email with attachments or if perhaps it was too large to make it to you. In that case, I can repackage and send it again. Please let me know.

Sincerely,

Brian

//SIGNED//

Brian L. Sassaman, GS-13, DAFC
Flight Chief, Installation Management
411 Airmen Drive, Bldg 570
Travis AFB, CA 94535-2001
DSN: 837-8225; Comm: (707) 424-8225
Email: brian.sassaman.1@us.af.mil

-----Original Message-----
From: SASSAMAN, BRIAN L GS-13 USAF AMC 60 CES/CEI
Sent: Thursday, February 26, 2015 2:36 PM
To: cww281@gmail.com
Cc: SASSAMAN, BRIAN L GS-13 USAF AMC 60 CES/CEI
Subject: Correspondence with Travis Air Force Base

Chairman Wright,

Very nice talking to you this afternoon about correspondence between the Cortina Band of Indians and Travis Air Force Base.

I have included several documents that support two letters to the Cortina Band of Indians signed out by our previous Travis Installation Commander, Colonel Cory Martin. I have listed below the different correspondence:

--G2G letter for Scandia Elementary School with Description of Proposed Action and Alternative (DOPPA) for Scandia

--G2G letter for TACAMO with DOPPA for TACAMO Gas Main Lights, DOPPA for Taxiway Lights and Shoulders and DOPPA for TACAMO Culvert Drainage.

Our correspondence with the Native American Heritage Commission indicates the absence of cultural resources in the proposed project areas. Our intention is to discuss the proposals to understand and concerns you may for possible known and recorded cultural sites.

If the Cortina Band of Indians has clarification as to what items you would like submitted for review, we will correspond with you one those items of interest in the future

Thank you for your time, and I look forward to hearing from you soon.

Sincerely,

Brian

//SIGNED//
Brian L. Sassaman, GS-13, DAFC
Flight Chief, Installation Management
411 Airmen Drive, Bldg 570
Travis AFB, CA 94535-2001
DSN: 837-8225; Comm: (707) 424-8225

SASSAMAN, BRIAN L GS-13 USAF AMC 60 CES/CEI

From: SASSAMAN, BRIAN L GS-13 USAF AMC 60 CES/CEI
Sent: Monday, March 09, 2015 4:38 PM
To: 'cww281@gmail.com'
Cc: SASSAMAN, BRIAN L GS-13 USAF AMC 60 CES/CEI (brian.sassaman.1@us.af.mil)
Subject: RE: Correspondence with Travis Air Force Base
Attachments: G2G Cortina Band of Indians Letter for Scandia Elementary School_26 Jan ....pdf; G2G Letter Crotina Band of Indians_Runway and TACAMO (SIGNED).pdf
Signed By: brian.sassaman.1@us.af.mil

Hi Chairman Wright,

Just checking to see if you got the email I sent to you earlier seeking input from the Cortina Band of Indians for projects at Travis. If you need additional documents in addition to what I sent you earlier, please let me know and I will provide it to you.

Thank you for your support,

Brian

//SIGNED//
Brian L. Sassaman, GS-13, DAFC
Flight Chief, Installation Management
411 Airmen Drive, Bldg 570
Travis AFB, CA 94535-2001
DSN: 837-8225; Comm: (707) 424-8225
Email: brian.sassaman.1@us.af.mil

-----Original Message-----
From: SASSAMAN, BRIAN L GS-13 USAF AMC 60 CES/CEI
Sent: Friday, February 27, 2015 1:04 PM
To: cww281@gmail.com
Cc: SASSAMAN, BRIAN L GS-13 USAF AMC 60 CES/CEI (brian.sassaman.1@us.af.mil)
Subject: RE: Correspondence with Travis Air Force Base

Chairman Wright,

I wanted to check and see if you got my last email with attachments or if perhaps it was too large to make it to you. In that case, I can repackage and send it again. Please let me know.

Sincerely,

Brian

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Email: brian.sassaman.1@us.af.mil

-----Original Message-----
From: SASSAMAN, BRIAN L GS-13 USAF AMC 60 CES/CEI
Sent: Thursday, February 26, 2015 2:36 PM
To: cww281@gmail.com
Cc: SASSAMAN, BRIAN L GS-13 USAF AMC 60 CES/CEI
Subject: Correspondence with Travis Air Force Base

Chairman Wright,

Very nice talking to you this afternoon about correspondence between the Cortina Band of Indians and Travis Air Force Base.

I have included several documents that support two letters to the Cortina Band of Indians signed out by our previous Travis Installation Commander, Colonel Cory Martin. I have listed below the different correspondence:

--G2G letter for Scandia Elementary School with Description of Proposed Action and Alternative (DOPPA) for Scandia

--G2G letter for TACAMO with DOPPA for TACAMO Gas Main Lights, DOPPA for Taxiway Lights and Shoulders and DOPPA for TACAMO Culvert Drainage.

Our correspondence with the Native American Heritage Commission indicates the absence of cultural resources in the proposed project areas. Our intention is to discuss the proposals to understand and concerns you may for possible known and recorded cultural sites.

If the Cortina Band of Indians has clarification as to what items you would like submitted for review, we will correspond with you one those items of interest in the future

Thank you for your time, and I look forward to hearing from you soon.

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DSN: 837-8225; Comm: (707) 424-8225

Subject: FW: Correspondence with Travis Air Force Base
Date: Monday, June 15, 2015 at 11:53:14 AM Eastern Daylight Time
From: SASSAMAN, BRIAN L GS-13 USAF AMC 60 CES/CEI
To: Anthony R. Ruhlman (truhlman@northwindgrp.com)
CC: BLAZEK, MATTHEW F GS-12 USAF AMC 60 CES/CEIE, CRAIG, PENN GS-12 USAF AMC 60 CES/CEIEC

HI Tony,

Final response back from Cortina Band of Indians for Scandia....no concern.

Brian

//SIGNED//
Brian L. Sassaman, GS-13, DAFC
Flight Chief, Installation Management
411 Airmen Drive, Bldg 570
Travis AFB, CA 94535-2001
DSN: 837-8225; Comm: (707) 424-8225
Email: brian.sassaman.1@us.af.mil

-----Original Message-----
From: Charlie Wright [mailto:cww281@gmail.com]
Sent: Friday, June 05, 2015 6:58 PM
To: SASSAMAN, BRIAN L GS-13 USAF AMC 60 CES/CEI
Subject: Re: Correspondence with Travis Air Force Base

Good Evening Brian,

My apologies for the late response. Attached is a copy of the most recent protocol that our tribe prescribes to in seeking avoidance, or respectable mitigation when culturally sensitive materials are uncovered. Based on the information you have provided, I don't see any reason for us to be opposed to the proposed improvements at this time, but would ask that our tribe be made aware if materials are uncovered to be able to provide recommendations on handling the situation.

If you have any questions, feel free to contact me directly at:530-473-3320 I have message service and try to check as frequently as I can.

Have a great weekend,

Charlie W.

On Mon, Mar 9, 2015 at 4:38 PM, SASSAMAN, BRIAN L GS-13 USAF AMC 60 CES/CEI <brian.sassaman.1@us.af.mil> wrote:

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DSN: 837-8225; Comm: (707) 424-8225 <tel:%28707%29%20424-8225>
Email: brian.sassaman.1@us.af.mil

--

Charlie Wright
Chairman
Cortina Rancheria
Kletsel Dehe
Band of Wintun Indians
570 6th Street
Williams CA, 95987
Ph:(530) 473-3274
Fx:(530) 473-3301

notify the sender immediately by return e-mail and permanently delete this transmission, including any attachments.

PATWIN CULTURAL PROTECTION AND PRESERVATION PLAN

YOCHA DEHE
WINTUN NATION

PREAMBLE

Three sovereign tribes – the Cachil Dehe, Kletsel Dehe and Yocha Dehe (the "Tribes") – are joining together to support and strengthen our shared interest in preserving and protecting our common Patwin history and culture. People of Cachil Dehe, Kletsel Dehe and Yocha Dehe traditionally occupied lands in Yolo, Colusa, Sutter, Solano, Butte, Napa, and Lake Counties. Lands throughout these counties are full of cultural and sacred resources important to our Tribes.

STATEMENT OF INTENT

Cachil Dehe, Kletsel Dehe and Yocha Dehe are exercising our sovereign duty to protect each Tribe's individual and collective right to preserve our common history and culture. With great respect for traditional cultural authority, each Tribe pledges mutual support to the other in defending our sacred sites and cultural resources.

Cachil Dehe, Kletsel Dehe and Yocha Dehe are exercising inherent rights to our own cultural items. All cultural items held in private or public institutions, universities or museums should be repatriated. No further cultural items should be taken from us. We value and respect our culture and ancestors and want to welcome them home.

DECLARATION

Cachil Dehe, Kletsel Dehe and Yocha Dehe declare our common interest in protecting our sacred sites and cultural resources. We will stand together to ensure the protection of Patwin sacred sites and cultural resources. We recognize our common values regarding burial disturbances. Each Tribe shall determine what it considers to be a sacred site or cultural resources.

PRINCIPLES IMPORTANT TO CULTURAL RESOURCE PROTECTION

Our Tribes adopt the principles of the United Nations Declaration on the Rights of Indigenous People. We include the most important Articles here for emphasis.

Article 11 We have the right to practice and revitalize our cultural traditions and customs. This includes the right to maintain, protect and develop the past, present and future manifestations of our cultures, such as archaeological and historical sites, artifacts, designs, ceremonies, technologies, and cultural arts such as dance, basket making, songs and storytelling.

Article 12 We have the right to manifest, practice, develop and teach our spiritual and religious traditions, customs and ceremonies; the right to maintain, protect, and have access in privacy to our religious and cultural sites; the right to the use and control of our ceremonial objects; and the right to the repatriation of our human remains.

Article 13 We have the right to revitalize, use, develop and transmit to future generations our histories, languages, oral traditions, philosophies, writing systems and literatures, and to designate and retain our own names for communities, places and persons.

Article 14 We have the right to establish and control our educational systems and institutions providing education in our own languages, in a manner appropriate to our cultural methods of teaching and learning.

Article 25 We have the right to maintain and strengthen our distinctive spiritual relationship with our traditionally owned or otherwise occupied and used lands, territories, waters and coastal seas and other resources and to uphold our responsibilities to future generations in this regard.

Article 31 We have the right to maintain, control, protect and develop our cultural heritage, traditional knowledge and traditional cultural expressions and manifestations of our sciences, technologies and cultures, including human and genetic resources, seeds, medicines, knowledge of the properties of fauna and flora, oral traditions, literatures, designs, sports and traditional games and visual and performing arts. We also have the right to maintain, control, protect and develop our intellectual property over such cultural heritage, traditional knowledge and traditional cultural expressions.

NOTICE AND CONSULTATION

If sacred sites are likely to be impacted by a proposed land use, protective protocols must be followed through notification of and consultation with the Tribes. Proper notice and Meaningful Consultation is necessary to protect the dignity of sacred sites affected by proposed land use.

Notification and consultation are two separate principles. However, both notice and Meaningful Consultation must be early in any proposed land use planning. The Tribes are more aware of which locations contain, or are more likely to contain, sacred or cultural resources and early involvement and consultation with the Tribes is the best way to avoid delay. Notification of a potential impact should be made as early as possible, as soon as it is known or believed that an area that includes a proposed land use could contain cultural resources that could be impacted.

Counties and agencies should consider involving the Tribes in the planning process and provide the Tribes a seat on appropriate advisory committees involving project planning.

What is considered Meaningful Consultation will vary depending on each situation. However, Meaningful Consultation will at least include:

(1) In-person consultation with the tribal government;
(2) Good faith attempts to resolve whatever issues need to be resolved;
(3) Using whatever methods are necessary to address the Tribes' concerns.

Each Tribe's tribal government speaks on behalf of the Tribe.

TRIBAL MONITORING AND TREATMENT PROTOCOLS

Counties and agencies should ensure that Tribal monitors are on site during any ground-disturbing activity that could potentially impact sacred or cultural resources.

If a Tribe determines avoidance isn't possible then re-burial in a close location shall be an alternative. Tribes will define close location depending upon the

nature of the site and seek to identify an area that is as close as possible, but in an area that will not be disturbed.

TREATMENT PROTOCOLS

The Tribes see it as necessary and proper to consult with Tribal Knowledge Keepers and Tribal Cultural Authority to follow traditional ways. The Tribes' first guiding principle is total avoidance of disturbing human remains or cultural resources.

If authorized by the Tribes' it is acceptable to move cultural or funerary items **only if** the project that is impacting the cultural resource cannot be stopped or relocated. If an item must be moved, the first preference is to relocate in within area it came from, as close as possible, to a location that will not be further disturbed.

If an item must be moved, it may be stored in a temporary repository that allows the Tribes to maintain physical control over the items. Unless authorized by the Tribes' no human remains or cultural resources shall be moved for permanent curation. Items that the Tribes deem acceptable for curation shall be placed with a Tribal curator if available.

Tribal Knowledge Keepers and Tribal Cultural Authority will be appointed or identified by each Tribe.

INCORPORATING TRIBAL TREATMENT PROTOCOLS

Counties and agencies should incorporate the Tribes' treatment protocols for the handing of human remains and cultural items affiliated with a Tribe. If human remains are discovered the party or agency should notify the appropriate authorities and conduct Meaningful Consultation with the Tribe as to the appropriate treatment protocol. All cultural resources, as determined by the Tribes should be turned over to the Tribe for appropriate treatment. All cultural resources turned over to a Tribe shall be handled in accordance with the Tribe's treatment protocols.

SIGNATORIES

Each Tribe acknowledges and freely joins this Patwin Cultural Protection and Preservation Plan.

CACHIL DEHE BAND OF WINTUN INDIANS OF THE COLUSA INDIAN COMMUNITY

02 . 21 . 14

Chairman Wayne R. Mitchum Jr. Date

CORTINA RANCHERIA KLETSEL DEHE BAND OF WINTUN INDIANS

2-21-2014

Chairman Charlie Wright Date

YOCHA DEHE WINTUN NATION

2-21-2014

Chairman Marshall McKay Date

NOTICE OF AVAILABILITY

DRAFT ENVIRONMENTAL ASSESSMENT AND FINDING OF NO SIGNIFICANT IMPACT FOR THE PROPOSED LEASE REPLACEMENT FOR SCANDIA ELEMENTARY SCHOOL TRAVIS AIR FORCE BASE, CALIFORNIA

Interested parties are hereby notified that the United States Air Force, Travis Air Force Base, California has completed a Draft Environmental Assessment (EA) that resulted in a Finding of No Significant Impact (FONSI) for the lease replacement for the Scandia Elementary School. The EA documents the proposed action components for the project – replacing the current lease to allow the Travis Unified School District to pursue funding for improvements to Scandia Elementary School on Travis Air Force Base.

The Draft EA and FONSI, dated May 2015, are available for review at the following locations:

Fairfield Civic Center Library 1150 Kentucky Street Fairfield, California 94533	Suisun City Library 601 Pintail Drive Suisun City, California 94585
Vacaville Public Library Cultural Center 1020 Ulatis Drive Vacaville, California 95688	Mitchell Memorial Library 510 Travis Boulevard Travis AFB, California 94535

The Draft EA and FONSI can also be obtained at: **http://www.travis.af.mil/enviro**

Written comments and inquiries on the EA and FONSI should be directed to

Mr. Brian Sassaman
60th Civil Engineer Squadron
411 Airman Drive, Building 570
Travis AFB, CA 94535

Comments may also be faxed to the attention of Mr. Sassaman at (707) 424-5105. E-mailed comments will not be accepted. The public review and comment period for this EA is 30 days from the publication date of this Notice of Availability. If you have questions, please contact Mr. Sassaman at (707) 424-8225.

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Appendix B

California Natural Diversity Database
2015 Sensitive Species List for Solano County

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Element_Type	Scientific_Name	Common_Name	Federal_Status	State_Status	CDFW_Status	CA_Rare_Plant_Rank
Animals - Amphibians	Ambystoma californiense	California tiger salamander	Threatened	Threatened	SSC	-
Animals - Amphibians	Rana boylii	foothill yellow-legged frog	None	None	SSC	-
Animals - Amphibians	Rana draytonii	California red-legged frog	Threatened	None	SSC	-
Animals - Birds	Aquila chrysaetos	golden eagle	None	None	FP ; WL	-
Animals - Birds	Buteo swainsoni	Swainson's hawk	None	Threatened	-	-
Animals - Birds	Circus cyaneus	northern harrier	None	None	SSC	-
Animals - Birds	Elanus leucurus	white-tailed kite	None	None	FP	-
Animals - Birds	Haliaeetus leucocephalus	bald eagle	Delisted	Endangered	FP	-
Animals - Birds	Charadrius alexandrinus nivosus	western snowy plover	Threatened	None	SSC	-
Animals - Birds	Charadrius montanus	mountain plover	None	None	SSC	-
Animals - Birds	Ammodramus savannarum	grasshopper sparrow	None	None	SSC	-
Animals - Birds	Melospiza melodia	song sparrow (-inModesto-in population)	None	None	SSC	-
Animals - Birds	Melospiza melodia maxillaris	Suisun song sparrow	None	None	SSC	-
Animals - Birds	Melospiza melodia pusillula	Alameda song sparrow	None	None	SSC	-
Animals - Birds	Melospiza melodia samuelis	San Pablo song sparrow	None	None	SSC	-
Animals - Birds	Passerculus sandwichensis beldingi	Belding's savannah sparrow	None	Endangered	-	-
Animals - Birds	Falco peregrinus anatum	American peregrine falcon	Delisted	Delisted	FP	-
Animals - Birds	Agelaius tricolor	tricolored blackbird	None	Endangered	SSC	-
Animals - Birds	Lanius ludovicianus	loggerhead shrike	None	None	SSC	-
Animals - Birds	Sternula antillarum browni	California least tern	Endangered	Endangered	FP	-
Animals - Birds	Geothlypis trichas sinuosa	saltmarsh common yellowthroat	None	None	SSC	-

Animals - Birds	Icteria virens	yellow-breasted chat	None	None	SSC	-
Animals - Birds	Coturnicops noveboracensis	yellow rail	None	None	SSC	-
Animals - Birds	Laterallus jamaicensis coturniculus	California black rail	None	Threatened	FP	-
Animals - Birds	Rallus longirostris obsoletus	California clapper rail	Endangered	Endangered	FP	-
Animals - Birds	Asio flammeus	short-eared owl	None	None	SSC	-
Animals - Birds	Athene cunicularia	burrowing owl	None	None	SSC	-
Animals - Crustaceans	Branchinecta conservatio	Conservancy fairy shrimp	Endangered	None	-	-
Animals - Crustaceans	Branchinecta lynchi	vernal pool fairy shrimp	Threatened	None	-	-
Animals - Crustaceans	Lepidurus packardi	vernal pool tadpole shrimp	Endangered	None	-	-
Animals - Fish	Acipenser medirostris	green sturgeon	Threatened	None	SSC	-
Animals - Fish	Pogonichthys macrolepidotus	Sacramento splittail	None	None	SSC	-
Animals - Fish	Hypomesus transpacificus	Delta smelt	Threatened	Endangered	-	-
Animals - Fish	Spirinchus thaleichthys	longfin smelt	Candidate	Threatened	SSC	-
Animals - Fish	Lampetra ayresii	river lamprey	None	None	SSC	-
Animals - Fish	Oncorhynchus kisutch	coho salmon - central California coast ESU	Endangered	Endangered	-	-
Animals - Fish	Oncorhynchus mykiss irideus	steelhead - central California coast DPS	Threatened	None	-	-
Animals - Fish	Oncorhynchus mykiss irideus	steelhead - Central Valley DPS	Threatened	None	-	-
Animals - Fish	Oncorhynchus tshawytscha	chinook salmon - spring-run Klamath-Trinity Rivers pop.	None	None	SSC	-
Animals - Fish	Oncorhynchus tshawytscha	chinook salmon - Central Valley spring-run ESU	Threatened	Threatened	-	-
Animals - Fish	Oncorhynchus tshawytscha	chinook salmon - Sacramento River winter-run ESU	Endangered	Endangered	-	-

Animals - Fish	Oncorhynchus tshawytscha	chinook salmon - Central Valley fall / late fall-run ESU	None	None	SSC	-
Animals - Insects	Elaphrus viridis	Delta green ground beetle	Threatened	None	-	-
Animals - Insects	Desmocerus californicus dimorphus	valley elderberry longhorn beetle	Threatened	None	-	-
Animals - Insects	Speyeria callippe callippe	callippe silverspot butterfly	Endangered	None	-	-
Animals - Mammals	Reithrodontomys raviventris	salt-marsh harvest mouse	Endangered	Endangered	FP	-
Animals - Mammals	Taxidea taxus	American badger	None	None	SSC	-
Animals - Mammals	Sorex ornatus sinuosus	Suisun shrew	None	None	SSC	-
Animals - Mammals	Antrozous pallidus	pallid bat	None	None	SSC	-
Animals - Mammals	Corynorhinus townsendii	Townsend's big-eared bat	None	Candidate Threatened	SSC	-
Animals - Mammals	Lasiurus blossevillii	western red bat	None	None	SSC	-
Animals - Reptiles	Emys marmorata	western pond turtle	None	None	SSC	-
Animals - Reptiles	Thamnophis gigas	giant garter snake	Threatened	Threatened	-	-
Plants - Vascular	Sagittaria sanfordii	Sanford's arrowhead	None	None	-	1B.2
Plants - Vascular	Cicuta maculata var. bolanderi	Bolander's water-hemlock	None	None	-	2B.1
Plants - Vascular	Lilaeopsis masonii	Mason's lilaeopsis	None	Rare	-	1B.1
Plants - Vascular	Perideridia gairdneri ssp. gairdneri	California Gairdner's yampah	None	None	-	4.2
Plants - Vascular	Balsamorhiza macrolepis	big-scale balsamroot	None	None	-	1B.2
Plants - Vascular	Blepharizonia plumosa	big tarplant	None	None	-	1B.1
Plants - Vascular	Centromadia parryi ssp. congdonii	Congdon's tarplant	None	None	-	1B.1
Plants - Vascular	Centromadia parryi ssp. parryi	pappose tarplant	None	None	-	1B.2
Plants - Vascular	Centromadia parryi ssp. rudis	Parry's rough tarplant	None	None	-	4.2

Plants - Vascular	Cirsium hydrophilum var. hydrophilum	Suisun thistle	Endangered	None	-	1B.1
Plants - Vascular	Erigeron biolettii	streamside daisy	None	None	-	3
Plants - Vascular	Harmonia nutans	nodding harmonia	None	None	-	4.3
Plants - Vascular	Helianthella castanea	Diablo helianthella	None	None	-	1B.2
Plants - Vascular	Isocoma arguta	Carquinez goldenbush	None	None	-	1B.1
Plants - Vascular	Lasthenia conjugens	Contra Costa goldfields	Endangered	None	-	1B.1
Plants - Vascular	Lasthenia ferrisiae	Ferris' goldfields	None	None	-	4.2
Plants - Vascular	Microseris paludosa	marsh microseris	None	None	-	1B.2
Plants - Vascular	Senecio aphanactis	chaparral ragwort	None	None	-	2B.2
Plants - Vascular	Symphyotrichum lentum	Suisun Marsh aster	None	None	-	1B.2
Plants - Vascular	Plagiobothrys hystriculus	bearded popcornflower	None	None	-	1B.1
Plants - Vascular	Arabis modesta	modest rockcress	None	None	-	4.3
Plants - Vascular	Lepidium latipes var. heckardii	Heckard's pepper-grass	None	None	-	1B.2
Plants - Vascular	Downingia pusilla	dwarf downingia	None	None	-	2B.2
Plants - Vascular	Legenere limosa	legenere	None	None	-	1B.1
Plants - Vascular	Atriplex cordulata var. cordulata	heartscale	None	None	-	1B.2
Plants - Vascular	Atriplex coronata var. coronata	crownscale	None	None	-	4.2
Plants - Vascular	Atriplex depressa	brittlescale	None	None	-	1B.2
Plants - Vascular	Atriplex persistens	vernal pool smallscale	None	None	-	1B.2
Plants - Vascular	Extriplex joaquinana	San Joaquin spearscale	None	None	-	1B.2
Plants - Vascular	Eleocharis parvula	small spikerush	None	None	-	4.3
Plants - Vascular	Astragalus tener var. ferrisiae	Ferris' milk-vetch	None	None	-	1B.1

Plants - Vascular	Astragalus tener var. tener	alkali milk-vetch	None	None	-	1B.2
Plants - Vascular	Lathyrus jepsonii var. jepsonii	Delta tule pea	None	None	-	1B.2
Plants - Vascular	Trifolium amoenum	showy rancheria clover	Endangered	None	-	1B.1
Plants - Vascular	Trifolium hydrophilum	saline clover	None	None	-	1B.2
Plants - Vascular	California macrophylla	round-leaved filaree	None	None	-	1B.1
Plants - Vascular	Juglans hindsii	Northern California black walnut	None	None	-	1B.1
Plants - Vascular	Trichostema ruygtii	Napa bluecurls	None	None	-	1B.2
Plants - Vascular	Fritillaria agrestis	stinkbells	None	None	-	4.2
Plants - Vascular	Fritillaria liliacea	fragrant fritillary	None	None	-	1B.2
Plants - Vascular	Fritillaria pluriflora	adobe-lily	None	None	-	1B.2
Plants - Vascular	Hesperolinon breweri	Brewer's western flax	None	None	-	1B.2
Plants - Vascular	Hibiscus lasiocarpos var. occidentalis	woolly rose-mallow	None	None	-	1B.2
Plants - Vascular	Sidalcea keckii	Keck's checkerbloom	Endangered	None	-	1B.1
Plants - Vascular	Castilleja ambigua var. ambigua	johnny-nip	None	None	-	4.2
Plants - Vascular	Chloropyron molle ssp. hispidum	hispid salty bird's-beak	None	None	-	1B.1
Plants - Vascular	Chloropyron molle ssp. molle	soft salty bird's-beak	Endangered	Rare	-	1B.2
Plants - Vascular	Gratiola heterosepala	Boggs Lake hedge-hyssop	None	Endangered	-	1B.2
Plants - Vascular	Neostapfia colusana	Colusa grass	Threatened	Endangered	-	1B.1
Plants - Vascular	Orcuttia inaequalis	San Joaquin Valley Orcutt grass	Threatened	Endangered	-	1B.1
Plants - Vascular	Tuctoria mucronata	Crampton's tuctoria or Solano grass	Endangered	Endangered	-	1B.1
Plants - Vascular	Navarretia leucocephala ssp. bakeri	Baker's navarretia	None	None	-	1B.1

Plants - Vascular	Eriogonum truncatum	Mt. Diablo buckwheat	None	None	-	1B.1
Plants - Vascular	Polygonum marinense	Marin knotweed	None	None	-	3.1
Plants - Vascular	Stuckenia filiformis ssp. alpina	slender-leaved pondweed	None	None	-	2B.2
Plants - Vascular	Delphinium recurvatum	recurved larkspur	None	None	-	1B.2
Plants - Vascular	Myosurus minimus ssp. apus	little mousetail	None	None	-	3.1
Plants - Vascular	Ranunculus lobbii	Lobb's aquatic buttercup	None	None	-	4.2
Plants - Vascular	Ceanothus purpureus	holly-leaved ceanothus	None	None	-	1B.2
Plants - Vascular	Limosella australis	Delta mudwort	None	None	-	2B.1
Plants - Vascular	Triteleia lugens	dark-mouthed triteleia	None	None	-	4.3

Metadata
Description of CNDDB QuickView fields

(In alphabetical order)

California Rare Plant Rank

The *California Rare Plant Rank* status applies to plants only. The *California Rare Plant Ranks* are a ranking system originally developed by the California Native Plant Society (CNPS) to better define and categorize rarity in California's flora. These ranks were previously known as the CNPS lists but were renamed to the *California Rare Plant Ranks* to better reflect the joint effort among the CNPS, the CNDDB, and a wide range of botanical experts, who work together to assign a rarity ranking. All plants tracked by the CNDDB are assigned to a *California Rare Plant Rank* category. These categories are:

CA Rare Plant Rank	Description
1A	Plants presumed extinct in California and rare/extinct elsewhere
1B.1	Plants rare, threatened, or endangered in California and elsewhere; seriously threatened in California
1B.2	Plants rare, threatened, or endangered in California and elsewhere; fairly threatened in California

1B.3	Plants rare, threatened, or endangered in California and elsewhere; not very threatened in California
2A	Plants presumed extirpated in California, but more common elsewhere
2B.1	Plants rare, threatened, or endangered in California, but more common elsewhere; seriously threatened in California
2B.2	Plants rare, threatened, or endangered in California, but more common elsewhere; fairly threatened in California
2B.3	Plants rare, threatened, or endangered in California, but more common elsewhere; not very threatened in California
3.1	Plants about which we need more information; seriously threatened in California
3.2	Plants about which we need more information; fairly threatened in California
3.3	Plants about which we need more information; not very threatened in California
4.1	Plants of limited distribution; seriously threatened in California
4.2	Plants of limited distribution; fairly threatened in California
4.3	Plants of limited distribution; not very threatened in California

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California Department of Fish and Wildlife Status

The *California Department of Fish and Wildlife (CDFW) Status* applies to animals only. The possible values for *CDFW Status* are:

Status	Description
FP	Fully Protected: This classification was the State of California's initial effort to identify and provide additional protection to those animals that were rare or faced possible extinction. Lists were created for fish, amphibians and reptiles, birds and mammals. Most of the species on these lists have subsequently been listed under the state and/or federal endangered species acts.
SSC	Species of Special Concern: It is the goal and responsibility of the Department of Fish and Wildlife to maintain viable populations of all native species. To this end, the Department

	has designated certain vertebrate species as "Species of Special Concern" because declining population levels, limited ranges, and/or continuing threats have made them vulnerable to extinction. The goal of designating species as "Species of Special Concern" is to halt or reverse their decline by calling attention to their plight and addressing the issues of concern early enough to secure their long-term viability.
WL	Watch List: The Department of Fish and Wildlife maintains a list consisting of taxa that were previously designated as "Species of Special Concern" but no longer merit that status, or which do not yet meet SSC criteria, but for which there is concern and a need for additional information to clarify status.

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Common Name

The *Common Name* of an element or taxon, recognized at the state level. The *Common Name* value for natural communities is the same as that for *Scientific Name*.

County Name

The name of the California county containing the element data.

Data Status

This field is used to indicate the status of the data for a particular element for a particular area. The possible values for *Data Status* are:

Status	Description
Mapped	Indicates that there is currently information from the specified quad/county and element within the CNDDB occurrence database.
Unprocessed	Indicates that there is not currently any information from that quad/county for that element within the quality-controlled CNDDB occurrence database but there is unprocessed data at the CNDDB waiting to be evaluated.
Mapped and Unprocessed	Indicates that there is both: information from the specified quad/county and element within the CNDDB occurrence database and within the CNDDB unprocessed data.

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Element Code

The *Element Code* is a ten-character code assigned to each element/taxon by NatureServe for data management purposes. These codes are common to all Natural Heritage Programs and Conservation Data Centers both within and outside of the United States and allow efficient inter-jurisdictional communication. The upper level of classification is presented below. Complete coding information is contained in the Natural Heritage Program Operations Manual, TNC, Arlington, Virginia, April 1982, revised June 1988.

First character	Meaning
A	Vertebrate animal
C	Community (as in Natural Community or plant community)
I	Invertebrate animal
N	Non-vascular plant
P	Vascular plant
O	Other (State trees, etc.; not used by the CNDDB)
G	Geologic (not used by the CNDDB)

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Element Type

The *Element Type* indicates the general taxonomic group that an element falls within. The following *Element Types* are currently used by the CNDDB:

Animals	Amphibians
	Arachnids
	Birds
	Crustaceans
	Fish
	Insects
	Mollusks
	Reptiles

Community	Aquatic
	Terrestrial
Plants	Bryophytes
	Lichens
	Vascular

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Federal Status

The United States legal status under the Federal Endangered Species Act (ESA).

Listing Status	Description
Endangered	The classification provided to an animal or plant in danger of extinction within the foreseeable future throughout all or a significant portion of its range.
Threatened	The classification provided to an animal or plant which is likely to become an Endangered species within the foreseeable future throughout all or a significant portion of its range.
Proposed Endangered	The classification provided to an animal or plant that is proposed for federal listing as Endangered in the Federal Register under Section 4 of the Endangered Species Act.
Proposed Threatened	The classification provided to an animal or plant that is proposed for federal listing as Threatened in the Federal Register under Section 4 of the Endangered Species Act.
Candidate	The classification provided to an animal or plant that has been studied by the United States Fish and Wildlife Service, and the Service has concluded that it should be proposed for addition to the Federal Endangered and Threatened species list.
None	The plant or animal has no federal status.
Delisted	The plant or animal was previously listed as Endangered or Threatened, but is no longer listed on the Federal Endangered and Threatened species list.

(Please see the Federal Register for the current legal definitions of Federal status.)

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Quad Code

A code used by the California Department of Fish and Wildlife to uniquely identify USGS 7.5 minute quadrangles (quads). The USGS quad code consists of one degree blocks sub-divided into sixty-four 7.5 minute maps. The one degree block is referenced by the latitude and longitude of its southeast corner (e.g., 38121). Individual maps within the block are referenced by an alpha-numeric code. This code originates at the same southeast corner as the one degree block and runs numerically east to west, and alphabetically south to north. This creates a grid allowing maps to be coded by the intersection of these axes (e.g., B5). An example of a complete map code would be 38121B5. The CDFW *Quad Code* converts this value to an integer by replacing the alpha character with a numeric equivalent (A = 1, B = 2, C = 3, D = 4, E = 5, F = 6, G = 7, H = 8).

Quad Name

The name of the USGS 7.5 minute quadrangle (quad) map containing the element data.

Scientific Name

The *Scientific (Latin) Name* of a plant or animal or the name of a Natural Community recognized at the state level.

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State Status

The State of California legal status.

Listing Status	Description
Endangered	The classification provided to a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant which is in serious danger of becoming extinct throughout all, or a significant portion, of its range due to one or more causes, including loss of habitat, change in habitat, overexploitation, predation, competition, or disease.
Threatened	The classification provided to a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant that, although not presently threatened with extinction, is likely to become an endangered species in the foreseeable future in

	the absence of special protection and management efforts.
Rare	The classification provided to a native plant species, subspecies, or variety when, although not presently threatened with extinction, it is in such small numbers throughout its range that it may become endangered if its present environment worsens. This designation stems from the Native Plant Protection Act of 1977.
None	The plant or animal has no state status.
Delisted	The plant or animal was previously listed as Endangered, Threatened or Rare but is no longer listed by the State of California.
Candidate Endangered	The classification provided to a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant that the Fish and Game Commission has formally noticed as being under review by the Department of Fish and Wildlife for addition to the list of endangered species, or a species for which the commission has published a notice of proposed regulation to add the species to the list of endangered species.
Candidate Threatened	The classification provided to a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant that the Fish and Game Commission has formally noticed as being under review by the Department of Fish and Wildlife for addition to the list of threatened species, or a species for which the commission has published a notice of proposed regulation to add the species to the list of threatened species.

(See Fish and Game code, sections 1901, 2062, 2067, and 2068 for legal definitions of California State status.)

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Taxonomic Sort

This field is used to sort the results into hierarchical taxonomic groupings. When a query is run with the CNDDB QuickView Tool, the results are returned based on this hierarchy so that similar organisms are grouped together (i.e. all birds are grouped together, all amphibians are grouped together, etc.).

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Appendix C

Air Emission Calculations and Record of Non-Applicability

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Urbemis 2007 Version 9.2.4

Combined Summer Emissions Reports (Pounds/Day)

File Name: C:\Users\rgolus\AppData\Roaming\Urbemis\Version9a\Projects\Travis AFB - Scandia Elementary School - Construction Emissions.urb924
Project Name: Travis AFB - Scandia Elementary School - Construction Emissions
Project Location: Bay Area Air District
On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006
Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

CONSTRUCTION EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10	PM2.5 Dust	PM2.5 Exhaust	PM2.5	CO2
2016 TOTALS (lbs/day unmitigated)	76.06	16.10	11.35	0.01	36.00	0.76	36.76	7.52	0.70	8.22	2,349.53

Construction Unmitigated Detail Report:

CONSTRUCTION EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10	PM2.5 Dust	PM2.5 Exhaust	PM2.5	CO2
Time Slice 6/1/2016-6/10/2016 Active Days: 8	1.00	8.40	6.08	**0.01**	7.20	0.43	7.62	1.50	0.39	1.89	1,755.33
Demolition 06/01/2016-06/10/2016	1.00	8.40	6.08	0.01	7.20	0.43	7.62	1.50	0.39	1.89	1,755.33
Fugitive Dust	0.00	0.00	0.00	0.00	7.16	0.00	7.16	1.49	0.00	1.49	0.00
Demo Off Road Diesel	0.73	5.07	4.19	0.00	0.00	0.31	0.31	0.00	0.28	0.28	700.30
Demo On Road Diesel	0.25	3.29	1.18	0.01	0.03	0.12	0.15	0.01	0.11	0.12	952.82
Demo Worker Trips	0.02	0.04	0.71	0.00	0.00	0.00	0.01	0.00	0.00	0.00	102.21
Time Slice 6/13/2016-6/20/2016 Active Days: 6	2.15	**16.10**	10.80	0.00	15.00	**0.76**	15.76	3.13	**0.70**	3.83	**2,349.53**
Mass Grading 06/11/2016-06/20/2016	2.15	16.10	10.80	0.00	15.00	0.76	15.76	3.13	0.70	3.83	2,349.53
Mass Grading Dust	0.00	0.00	0.00	0.00	15.00	0.00	15.00	3.13	0.00	3.13	0.00
Mass Grading Off Road Diesel	2.13	16.07	10.09	0.00	0.00	0.75	0.75	0.00	0.69	0.69	2,247.32
Mass Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mass Grading Worker Trips	0.02	0.04	0.71	0.00	0.00	0.00	0.01	0.00	0.00	0.00	102.21
Time Slice 6/21/2016-9/15/2016 Active Days: 63	2.25	11.44	**11.35**	0.00	0.01	0.69	0.70	0.01	0.63	0.64	1,939.71
Building 06/21/2016-09/15/2016	2.25	11.44	11.35	0.00	0.01	0.69	0.70	0.01	0.63	0.64	1,939.71
Building Off Road Diesel	2.19	11.19	9.40	0.00	0.00	0.67	0.67	0.00	0.62	0.62	1,621.20
Building Vendor Trips	0.01	0.16	0.17	0.00	0.00	0.01	0.01	0.00	0.01	0.01	63.07
Building Worker Trips	0.05	0.09	1.78	0.00	0.01	0.01	0.02	0.00	0.01	0.01	255.45
Time Slice 9/16/2016-9/30/2016 Active Days: 11	**76.06**	0.03	0.63	0.00	0.00	0.00	0.01	0.00	0.00	0.00	90.71
Coating 09/16/2016-09/30/2016	76.06	0.03	0.63	0.00	0.00	0.00	0.01	0.00	0.00	0.00	90.71
Architectural Coating	76.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.02	0.03	0.63	0.00	0.00	0.00	0.01	0.00	0.00	0.00	90.71
Time Slice 10/3/2016-10/14/2016 Active Days: 10	1.46	8.54	7.94	0.00	0.01	0.64	0.65	0.00	0.59	0.59	1,200.41
Asphalt 10/01/2016-10/15/2016	1.46	8.54	7.94	0.00	0.01	0.64	0.65	0.00	0.59	0.59	1,200.41
Paving Off-Gas	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	1.32	8.33	6.64	0.00	0.00	0.63	0.63	0.00	0.58	0.58	979.23
Paving On Road Diesel	0.01	0.15	0.05	0.00	0.00	0.01	0.01	0.00	0.00	0.01	42.32
Paving Worker Trips	0.04	0.07	1.25	0.00	0.01	0.00	0.01	0.00	0.00	0.01	178.87
Time Slice 10/17/2016-10/31/2016 Active Days: 11	2.15	**16.10**	10.80	0.00	**36.00**	**0.76**	**36.76**	**7.52**	**0.70**	**8.22**	**2,349.53**
Fine Grading 10/16/2016-10/31/2016	2.15	16.10	10.80	0.00	36.00	0.76	36.76	7.52	0.70	8.22	2,349.53
Fine Grading Dust	0.00	0.00	0.00	0.00	36.00	0.00	36.00	7.52	0.00	7.52	0.00
Fine Grading Off Road Diesel	2.13	16.07	10.09	0.00	0.00	0.75	0.75	0.00	0.69	0.69	2,247.32
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.02	0.04	0.71	0.00	0.00	0.00	0.01	0.00	0.00	0.00	102.21

Urbemis 2007 Version 9.2.4

Combined Summer Emissions Reports (Pounds/Day)

File Name: C:\Users\rgolus\AppData\Roaming\Urbemis\Version9a\Projects\Travis AFB - Scandia Elementary School - Construction Emissions.urb924
Project Name: Travis AFB - Scandia Elementary School - Construction Emissions
Project Location: Bay Area Air District
On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006
Off-Road Vehicle Emissions Based on: OFFROAD2007

Phase Assumptions

Phase: Demolition 6/1/2016 - 6/10/2016 - 01 - Demolition
Building Volume Total (cubic feet): 170400
Building Volume Daily (cubic feet): 17040
On Road Truck Travel (VMT): 236.67
Off-Road Equipment:
1 Concrete/Industrial Saws (10 hp) operating at a 0.73 load factor for 8 hours per day
1 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 1 hours per day
2 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 6 hours per day

Phase: Fine Grading 10/16/2016 - 10/31/2016 - 06 - Playfield Grading
Total Acres Disturbed: 3
Maximum Daily Acreage Disturbed: 1.8
Fugitive Dust Level of Detail: Default
20 lbs per acre-day
On Road Truck Travel (VMT): 0
Off-Road Equipment:
1 Graders (174 hp) operating at a 0.61 load factor for 6 hours per day
1 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 6 hours per day
1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 7 hours per day
1 Water Trucks (189 hp) operating at a 0.5 load factor for 8 hours per day

Phase: Mass Grading 6/11/2016 - 6/20/2016 - 02 - Initial Grading
Total Acres Disturbed: 3
Maximum Daily Acreage Disturbed: 0.75
Fugitive Dust Level of Detail: Default
20 lbs per acre-day
On Road Truck Travel (VMT): 0
Off-Road Equipment:
1 Graders (174 hp) operating at a 0.61 load factor for 6 hours per day
1 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 6 hours per day
1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 7 hours per day
1 Water Trucks (189 hp) operating at a 0.5 load factor for 8 hours per day

Phase: Paving 10/1/2016 - 10/15/2016 - 05 - Hard Court Surface
Acres to be Paved: 0.39
Off-Road Equipment:
4 Cement and Mortar Mixers (10 hp) operating at a 0.56 load factor for 6 hours per day
1 Pavers (100 hp) operating at a 0.62 load factor for 7 hours per day
1 Rollers (95 hp) operating at a 0.56 load factor for 7 hours per day
1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 7 hours per day

Phase: Building Construction 6/21/2016 - 9/15/2016 - 03 - New Building Construciton
Off-Road Equipment:
1 Cranes (399 hp) operating at a 0.43 load factor for 6 hours per day
2 Forklifts (145 hp) operating at a 0.3 load factor for 6 hours per day
1 Generator Sets (49 hp) operating at a 0.74 load factor for 8 hours per day
1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 8 hours per day
3 Welders (45 hp) operating at a 0.45 load factor for 8 hours per day

Phase: Architectural Coating 9/16/2016 - 9/30/2016 - 04 - Surface Coating
Rule: Residential Interior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250
Rule: Residential Exterior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250
Rule: Nonresidential Interior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250
Rule: Nonresidential Exterior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250

Urbemis 2007 Version 9.2.4

Combined Annual Emissions Reports (Tons/Year)

File Name: C:\Users\rgolus\AppData\Roaming\Urbemis\Version9a\Projects\Travis AFB - Scandia Elementary School - Construction Emissions.urb924
Project Name: Travis AFB - Scandia Elementary School - Construction Emissions
Project Location: Bay Area Air District
On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006
Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

CONSTRUCTION EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10	PM2.5 Dust	PM2.5 Exhaust	PM2.5	CO2
2016 TOTALS (tons/year unmitigated)	0.52	0.57	0.52	0.0002	0.27	0.03	0.31	0.06	0.03	0.09	94.59

Construction Unmitigated Detail Report:

CONSTRUCTION EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10	PM2.5 Dust	PM2.5 Exhaust	PM2.5	CO2
2016	0.52	0.57	0.52	0.0002	0.27	0.03	0.31	0.06	0.03	0.09	94.59
Demolition 06/01/2016-06/10/2016	0.00	0.03	0.02	0.00	0.03	0.00	0.03	0.01	0.00	0.01	7.02
Fugitive Dust	0.00	0.00	0.00	0.00	0.05	0.00	0.05	0.01	0.00	0.01	0.00
Demo Off Road Diesel	0.00	0.02	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.80
Demo On Road Diesel	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.81
Demo Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.41
Mass Grading 06/11/2016-06/20/2016	0.01	0.05	0.03	0.0	0.05	0.00	0.05	0.01	0.00	0.01	7.05
Mass Grading Dust	0.00	0.00	0.00	0.00	0.05	0.00	0.05	0.01	0.00	0.01	0.00
Mass Grading Off Road Diesel	0.01	0.05	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.74
Mass Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mass Grading Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.31
Building 06/21/2016-09/15/2016	0.07	0.36	0.36	0.00	0.00	0.02	0.02	0.00	0.02	0.02	61.10
Building Off Road Diesel	0.07	0.35	0.30	0.00	0.00	0.02	0.02	0.00	0.02	0.02	51.07
Building Vendor Trips	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.99
Building Worker Trips	0.00	0.00	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.05
Coating 09/16/2016-09/30/2016	0.42	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.50
Architectural Coating	0.42	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.50
Asphalt 10/01/2016-10/15/2016	0.01	0.04	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.00
Paving Off-Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	0.01	0.04	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.90
Paving On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.21
Paving Worker Trips	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.89
Fine Grading 10/16/2016-10/31/2016	0.01	0.09	0.06	0.00	0.20	0.00	0.20	0.04	0.00	0.05	12.92
Fine Grading Dust	0.00	0.00	0.00	0.00	0.20	0.00	0.20	0.04	0.00	0.04	0.00
Fine Grading Off Road Diesel	0.01	0.09	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	12.36
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.56

Urbemis 2007 Version 9.2.4

Combined Annual Emissions Reports (Tons/Year)

File Name: C:\Users\rgolus\AppData\Roaming\Urbemis\Version9a\Projects\Travis AFB - Scandia Elementary School - Construction Emissions.urb924
Project Name: Travis AFB - Scandia Elementary School - Construction Emissions
Project Location: Bay Area Air District
On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006
Off-Road Vehicle Emissions Based on: OFFROAD2007

Phase Assumptions

Phase: Demolition 6/1/2016 - 6/10/2016 - 01 - Demolition
Building Volume Total (cubic feet): 170400
Building Volume Daily (cubic feet): 17040
On Road Truck Travel (VMT): 236.67
Off-Road Equipment:
1 Concrete/Industrial Saws (10 hp) operating at a 0.73 load factor for 8 hours per day
1 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 1 hours per day
2 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 6 hours per day

Phase: Fine Grading 10/16/2016 - 10/31/2016 - 06 - Playfield Grading
Total Acres Disturbed: 3
Maximum Daily Acreage Disturbed: 1.8
Fugitive Dust Level of Detail: Default
20 lbs per acre-day
On Road Truck Travel (VMT): 0
Off-Road Equipment:
1 Graders (174 hp) operating at a 0.61 load factor for 6 hours per day
1 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 6 hours per day
1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 7 hours per day
1 Water Trucks (189 hp) operating at a 0.5 load factor for 8 hours per day

Phase: Mass Grading 6/11/2016 - 6/20/2016 - 02 - Initial Grading
Total Acres Disturbed: 3
Maximum Daily Acreage Disturbed: 0.75
Fugitive Dust Level of Detail: Default
20 lbs per acre-day
On Road Truck Travel (VMT): 0
Off-Road Equipment:
1 Graders (174 hp) operating at a 0.61 load factor for 6 hours per day
1 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 6 hours per day
1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 7 hours per day
1 Water Trucks (189 hp) operating at a 0.5 load factor for 8 hours per day

Phase: Paving 10/1/2016 - 10/15/2016 - 05 - Hard Court Surface
Acres to be Paved: 0.39
Off-Road Equipment:
4 Cement and Mortar Mixers (10 hp) operating at a 0.56 load factor for 6 hours per day
1 Pavers (100 hp) operating at a 0.62 load factor for 7 hours per day
1 Rollers (95 hp) operating at a 0.56 load factor for 7 hours per day
1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 7 hours per day

Phase: Building Construction 6/21/2016 - 9/15/2016 - 03 - New Building Construciton
Off-Road Equipment:
1 Cranes (399 hp) operating at a 0.43 load factor for 6 hours per day
2 Forklifts (145 hp) operating at a 0.3 load factor for 6 hours per day
1 Generator Sets (49 hp) operating at a 0.74 load factor for 8 hours per day
1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 8 hours per day
3 Welders (45 hp) operating at a 0.45 load factor for 8 hours per day

Phase: Architectural Coating 9/16/2016 - 9/30/2016 - 04 - Surface Coating
Rule: Residential Interior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250
Rule: Residential Exterior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250
Rule: Nonresidential Interior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250
Rule: Nonresidential Exterior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250

DEPARTMENT OF THE UNITED STATES AIR FORCE
60TH CIVIL ENGINEERING SQUADRON (AMC)
411 Airmen Drive
Travis Air Force Base, CA 94535

GENERAL CONFORMITY – RECORD OF NON-APPLICABILITY
Lease Replacement for Scandia Elementary School at Travis Air Force Base, California

The United States Air Force (USAF) proposed action for replacing the lease of the Scandia Elementary School, which is located on the property of Travis Air Force Base (AFB) in California. This action may indirectly result in air emissions from the following construction activities:

(1) Construction and operation of six new general purpose classroom, one multipurpose room/cafeteria, one information center/administrative office, and one food service/preparation facility (approximately 16,300-square feet);

(2) Renovation and modernization of existing buildings (approximately 38,000-square feet);

(3) Regrading of playing fields (approximately 3 acres);

(4) Resurfacing of hard courts (approximately 17,000-square feet).

Travis AFB is located Solano County which is part of the Bay Area Air Quality Management District (BAAQMD). The area is currently designated as moderate nonattainment for PM2.5, marginal nonattainment for 8-hour ozone, and maintenance for carbon monoxide (CO) relative to the National Ambient Air Quality Standards (NAAQS) as of January 2015. The General Conformity regulations under the Clean Air Act, Section 176 and 40 CFR 93, Subpart B have been reviewed for applicability to the project described above.

Based on air emission levels (see table below and attached supporting documentation from the California Air Resource Board URBEMIS2007 model), the requirements of this rule are not applicable to the proposed action because:

- Total potential emissions of the NAAQS non-attainment pollutants and precursors from this project/action have been estimated to be below the conformity threshold values established in 40 CFR 93.153(b) for the above-referenced nonattainment levels of ozone and PM2.5.
- The project/action is not considered regionally significant under 40 CFR 93.153(i).

Pollutant	Project Emissions (ton/yr) [A]	Threshold Value (ton/yr)
CO	0.52	100
NOx [B, C]	0.57	100
PM2.5	0.09	100
SO2 [C]	0.0002	100
VOCs [B, C]	0.52	100

(A) There are no direct emissions associated with the proposed action (i.e., extending of the lease). However, the action may result in indirect emissions from future 2016 Construction activities.
(B) NOx and VOCs are precursors of ozone.
(C) NOx, SO2, and VOCs are precursors of PM2.5

To the best of my knowledge, the information presented in this Record of Non-Applicability is correct and accurate and I concur in the finding that the Proposed Action does not require a formal Conformity Determination for the reasons stated above.

SIGNED _____ _____

Brian L. Sassaman, GS-13, DAFC Date
Flight Chief, Installation Management