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IN REPLY REFER TO:

HWY-TO  
2.8814

September 12, 2005

TO: THE HONORABLE GENEVIEVE SALMONSON  
DIRECTOR  
OFFICE OF ENVIRONMENTAL QUALITY CONTROL

FROM: RODNEY K. HARAGA   
DIRECTOR OF TRANSPORTATION

SUBJECT: FINDING OF NO SIGNIFICANT IMPACT (FONSI) FOR  
HAWAII REGIONAL SECURITY OPERATIONS CENTER,  
NAVAL COMPUTER AND TELECOMMUNICATIONS AREA MASTER  
STATION PACIFIC,  
WAHIAWĀ, O'AHU, HAWAII

The State of Hawaii, Department of Transportation, has reviewed the comments received during the 30-day public comment period which began on April 23, 2005. The agency has determined that this project will not have significant environmental effects and has issued a FONSI. Please publish this notice in the next available *Environmental Notice*.

We have enclosed the following items:

1. Completed OEQC Publication Form
2. Three copies of the final environmental assessment (two hard copies and one electronic version)
3. Updated project summary on diskette.

Please contact Mr. Reed Matsuo of our staff at 692-7674, if you have any questions.

Enclosures

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FINAL ENVIRONMENTAL ASSESSMENT

**HAWAII REGIONAL SECURITY OPERATIONS CENTER**

**Naval Computer and Telecommunications  
Area Master Station Pacific**

**Wahiawā, O‘ahu, Hawai‘i**

Department of the Navy  
September 2005

FINAL ENVIRONMENTAL ASSESSMENT

**HAWAII REGIONAL SECURITY OPERATIONS CENTER**

**Naval Computer and Telecommunications  
Area Master Station Pacific**

**Wahiawā, O‘ahu, Hawai‘i**

Department of the Navy  
September 2005

## COVER SHEET

**Proposed Action** The Kunia Regional Security Operations Center (KRSOC) proposes to relocate and construct new facilities at the Naval Computer Telecommunications Area Master Station Pacific (NCTAMS PAC) located in Wahiawā, O‘ahu, Hawai‘i. Off-base improvements include a new base access road, roadway improvements along existing Wahiawā roads, and utility system improvements. The KRSOC would be renamed the Hawaii Regional Security Operations Center (HRSOC) upon relocation.

**Type of Document** Environmental Assessment

**Lead Agency** Kunia Regional Security Operations Center

**For Further Information** Ms. Connie Chang, Planner In Charge, EV21  
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### Summary

This Environmental Assessment was prepared in compliance with the National Environmental Policy Act of 1969 (42 United States Code §4321, et seq.), as implemented by the Council on Environmental Quality regulations (40 Code of Federal Regulations Parts 1500-1508) and the Office of the Chief of Naval Operations Instruction 5090.1B CH-4, Environmental and Natural Resources Program Manual of June 4, 2003, Chapter 343, Hawai‘i Revised Statutes, and Title 11, Section 200, Hawai‘i Administrative Rules..

The KRSOC proposes to construct new facilities at NCTAMS PAC, Wahiawā, O‘ahu, Hawai‘i, including an operational control center, ancillary facilities, and utility system connections (Proposed Action). A decommissioned Circularly Displayed Antennae Array and adjacent infrastructure (Building 294 and accessory facilities), and outdoor recreation facilities would be demolished to accommodate the proposed facilities. A new facility to replace Building 294 and new outdoor recreation facilities would be constructed. A new off-base access road, new base entry control point, and roadway improvements along existing State- and City-owned roadways would be constructed to mitigate traffic impacts of the Proposed Action. Fee interest in approximately 35 acres (14 hectares) of private lands would be acquired, along with additional easements within State- and City-owned roadway right-of-ways, to construct the proposed off-base access road, improvements to existing roadways, and utility system improvements.

The purpose of the action is to provide adequate operational facilities that meet HRSOC’s unique mission requirements and improve operational efficiency and fiscal effectiveness of national security operations in the Pacific area. The action is needed to replace existing operational and administrative spaces that no longer meet current facility requirements; to accommodate new mission operational space requirements; and to relocate activities from within existing aircraft hazard zones.

Alternatives to the Proposed Action included (1) modernization of existing facilities and construction of new facilities at Kunia to meet the operational and staffing requirements for HRSOC’s mission, and (2) No Action. Other alternatives considered, but eliminated from further evaluation, include leasing private office space, relocation/construction of new facilities in the Pearl Harbor Naval Complex and at other Navy-owned installations on O‘ahu, and relocation/construction of new facilities at other geographic locations beyond O‘ahu. Alternative water and wastewater systems to serve the Proposed Action and alternative alignments for the proposed off-base access road were also considered and eliminated from further evaluation.

The Proposed Action would not result in significant adverse impacts to the following resource areas: land use compatibility, cultural resources, visual environment, flood hazard, ground and surface water resources, soils and topography, biological resources, aircraft hazards, hazardous and regulated materials, electromagnetic radiation/electromagnetic interference and the socio-economic environment. In compliance with Section 106 of the National Historic Preservation Act, the Navy has consulted with the State Historic Preservation Officer (SHPO) and the Office of Hawaiian Affairs. The SHPO has concurred with the Navy’s determination that the Proposed Action would have no effect on historic properties. A cultural impact assessment, completed in accordance with the *Guidelines for Assessing Cultural Impacts* issued by the

State of Hawai'i Office of Environmental Quality Control, indicates that the Proposed Action would not impact cultural features, practices and beliefs. The Proposed Action would require improvements to the potable water, wastewater, electrical, communications and drainage systems at NCTAMS PAC. The Proposed Action would not result in significant adverse traffic impacts on local and regional roadways. A new project access road would route project-related traffic around the residential community of Whitmore Village. A traffic management plan, including employer-based travel demand management strategies, would be implemented to manage project-related traffic. The Proposed Action would not create environmental health and safety risks that may disproportionately affect children and minority or disadvantaged population. The State of Hawai'i has concurred with the Navy's determination that the Proposed Action is consistent with the State's Coastal Zone Management Program.

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## ACRONYMS AND ABBREVIATIONS

AAF	Army Airfield
ACHP	Advisory Council on Historic Preservation
ADT	average daily traffic
ALISH	Agricultural Lands of Importance to the State of Hawai'i
APZ I	Accident Potential Zone I
BRAC	Base Realignment and Closure
BWS	City and County of Honolulu Board of Water Supply
CDAA	Circularly Displayed Antennae Array
CDP	Census Designated Place
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
cm	centimeter(s)
CNO	Chief of Naval Operations
CNRH	Commander, Navy Region Hawaii
COSCP	Central O'ahu Sustainable Communities Plan
CWA	Clean Water Act
CWRM	State of Hawai'i Commission on Water Resources Management
CZMA	Coastal Zone Management Act
DA	Department of the Army
dBA	A-weighted decibels
DBEDT	State of Hawai'i Department of Business, Economic Development and Tourism
DLNR	State of Hawai'i Department of Land and Natural Resources
DNL	Day-Night Equivalent Sound Level
DoD	Department of Defense
DOH	State of Hawai'i Department of Health
EA	Environmental Assessment
EIS	Environmental Impact Statement
EMI	electromagnetic interference
EMR	electromagnetic radiation
EPA	Environmental Protection Agency
ESA	Endangered Species Act
FONSI	Finding of No Significant Impact
FY	Fiscal Year
gpd	gallons per day
gpm	gallons per minute
ha	hectare(s)
HAR	Hawai'i Administrative Rules
HECO	Hawaiian Electric Company
HF-DF	High Frequency Direction Finding
HITS	Hawai'i Information Transfer System
HRS	Hawai'i Revised Statutes
HRSOC	Hawaii Regional Security Operations Center
INRMP	Integrated Natural Resources Management Plan
JICPAC	Joint Intelligence Center Pacific
km	kilometers
km <sup>2</sup>	square kilometers
kV	kilovolt
kVA	kilovolt-amperes
KW	kilowatt
KRSOC	Kunia Regional Security Operations Center
L	liter
Lpd	liters per day
Lpm	liters per minute
Ldn	day-night average sound level

LOS	level-of-service
LRLUP	Long Range Land Use Plan
LSB	Land Study Bureau
m	meter(s)
m <sup>2</sup>	square meter(s)
m <sup>3</sup>	cubic meter(s)
mgd	million gallons per day
MILCON	military construction project
MIL-HDBK	Military Handbook
MSL	mean sea level
NASBP	Naval Air Station Barbers Point
NAVMAG	Naval Magazine Pearl Harbor
NCTAMS PAC	Naval Computer and Telecommunications Area Master Station Pacific
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NPDES	National Pollutant Discharge Elimination System
NRHP	National Register of Historic Places
OMPO	O'ahu Metropolitan Planning Organization
OPNAVINST	Chief of Naval Operations Instruction
PCBs	polychlorinated biphenyls
PHNC	Pearl Harbor Naval Complex
RSIP	Regional Shore Infrastructure Plan
ROW	right(s)-of-way
SATCOM	Satellite communications facility
SBCT	Stryker Brigade Combat Team
SBMR	Schofield Barracks Military Reservation
SCIF	Sensitive Compartmented Information Facility
DOT	State of Hawai'i Department of Transportation
sf	square feet
TDM	travel demand management
TMK	Tax Map Key
TMP	traffic management plan
USACE	United States Army Corps of Engineers
USC	United States Code
USDA NRCS	United States Department of Agriculture Natural Resource Conservation Service
UST	underground storage tank
V/C	volume-to-capacity
WQC	Water Quality Certification
WQLS	Water Quality Limited Segments
WSC	Waialua Sugar Company

## EXECUTIVE SUMMARY

Project Name:	Hawaii Regional Security Operations Center (HRSOC)
Proposed Action:	The Kunia Regional Security Operations Center (KRSOC) proposes to relocate and construct new facilities at the Naval Computer Telecommunications Area Master Station Pacific (NCTAMS PAC), Wahiawā, O‘ahu, Hawai‘i. Off-base improvements include a new base access road, roadway improvements along existing Wahiawā roads, and utility system improvements. The KRSOC would be renamed the HRSOC upon relocation.
Applicant:	Kunia Regional Security Operations Center
Approving Authority:	State of Hawai‘i Department of Transportation
Contact Information:	Ms. Connie Chang, Planner In Charge, EV21 Environmental Planning Division Naval Facilities Engineering Command, Pacific 258 Makalapa Drive, Suite 100 Pearl Harbor, HI 96860-3134 Telephone: (808) 472-1395
Action Required:	Compliance with National Environmental Policy Act and Chapter 343, Hawai‘i Revised Statutes
Chapter 343, HRS “Trigger”:	Use of State Lands (e.g., improvements to State roadways)
Alternatives Considered:	(1) Modernization and expansion of existing facilities; and (2) No Action
Location:	Wahiawā, O‘ahu, Hawai‘i
Project Area:	Federal property: approximately 70 acres (28.3 hectares [ha]) State property: approximately 3 acres (1.2 ha) City property: approximately 1 acre (0.4 ha) Private property: approximately 35 acres (14 ha)
Tax Map Key Parcels:	Federal property: 7-1-002:007 (por.) State property: Kamehameha Highway, Kamananui Road, and Whitmore Avenue rights-of-way City property: Kaukonahua Road right-of-way Private property: 7-1-001: 005 (por.); 006 (por.); 007 (por.); 008 (por.); 011 (por.); 026 (por.); 7-1-002: 004 (por.); 030 (por.); 031 (por.); and 032 (por.)
Landowners:	Federal property: Department of the Navy State property: State of Hawai‘i City property: City and County of Honolulu Private property: George Galbraith Trust Estate, Castle and Cooke Homes Hawai‘i, Inc., and Dole Food Company, Inc.

Existing Uses:	Federal property: military State property: transportation and utility systems City property: transportation and utility systems Private property: agricultural
Proposed Uses:	Federal property: military State property: transportation and utility systems City property: transportation and utility systems Private property: transportation and utility systems
State Land Use District:	Federal property: Agricultural State property: Agricultural City property: Agricultural Private property: Agricultural
City and County of Honolulu Central O'ahu Sustainable Communities Plan:	Federal property: Military Training Area State property: Highways, Arterial & Major Collector Streets City property: Highways, Arterial & Major Collector Streets Private property: Agriculture and Preservation Areas
City and County of Honolulu Zoning:	Federal property: F-1, Federal and Military State property: A-1, Restricted Agriculture City property: A-1, Restricted Agriculture Private property: A-1, Restricted Agriculture
Special Designations:	None
Determination:	Finding of No Significant Impact

This Environmental Assessment (EA) is prepared in compliance with the National Environmental Policy Act (NEPA) of 1969 (42 United States Code §4321 et seq.), as implemented by the Council on Environmental Quality regulations (40 Code of Federal Regulations Parts 1500-1508) and Navy guidelines, the Office of the Chief of Naval Operations Instructions 5090.1B CH-4, Environmental and Natural Resources Program Manual, of June 4, 2003; Chapter 343, Hawai'i Revised Statutes (HRS); and Title 11, Section 200, Hawai'i Administrative Rules. This EA analyzes and documents potential environmental consequences associated with the Proposed Action and foreseeable reasonable alternatives. If the analyses presented in the EA indicate that implementation of the Proposed Action would not result in significant environmental or socioeconomic impacts, then a Finding of No Significant Impact (FONSI) will be prepared. If significant environmental issues result that cannot be mitigated to insignificance, an Environmental Impact Statement will be prepared.

**Proposed Action.** The Kunia Regional Security Operations Center (KRSOC) proposes to relocate and construct new facilities at the Naval Computer and Telecommunications Area Master Station Pacific (NCTAMS PAC) located in Wahiawā, O'ahu, Hawai'i for the Hawaii Regional Security Operations Center (HRSOC). The KRSOC would be renamed the HRSOC upon relocation. The Proposed Action would involve construction of an operational control center, ancillary facilities, parking, utility connections and off-base utility system improvements. Existing structures, including the decommissioned Circularly Displayed Antennae Array (CDAA) and related infrastructure (Building 294 and accessory structures), and outdoor recreation facilities would be demolished. A new facility to replace Building 294 and new outdoor recreation facilities would be constructed. Construction of a new off-base access road to NCTAMS PAC, a new base entry control point, and roadway improvements along existing State- and City-owned Wahiawā roadways would be included to mitigate traffic impacts from the proposed project. The Navy

would acquire fee interest in approximately 35 acres (14 ha) of private property, as well as additional easements within State- and City-owned roadway rights-of-way (ROW), to construct the proposed off-base access road, improvements to existing roadways, and utility system improvements.

Construction is anticipated to begin in 2006, with completion planned for 2009 and occupancy in 2010. Upon completion, the HRSOC would employ approximately 2,800 personnel, an increase of approximately 30 percent over the existing KRSOC employment level. Vacated Kunia facilities would be returned to the U.S. Army.

**Purpose and Need.** The purpose of the action is to provide adequate operational facilities that meet HRSOC's unique mission requirements and improve operational efficiency and fiscal effectiveness of national security operations in the Pacific area. The action is needed to replace existing operational and administrative spaces that no longer meet current facility requirements; to accommodate new mission operational space and personnel requirements; and to relocate activities from within aircraft hazard zones.

KRSOC is currently located within a 95-acre (38-ha) installation owned by the U.S. Army adjacent to Schofield Barracks in Central O'ahu. KRSOC's primary facility is a 235,000 square foot (sf) (21,830 square meters [m<sup>2</sup>]) underground building (Building 9) built between 1942 and 1944 as an aircraft assembly plant. Although portions of the facility have been renovated over the years to accommodate its current functions, the facility has exceeded its practical life, and the building's overall structure and supporting mechanical plant and equipment no longer meet the needs of KRSOC's facility requirements. Maintenance and repairs are expected to increase significantly as facility systems break down and need to be replaced or upgraded. In addition, the existing building does not provide enough useable operational space for the current KRSOC mission, and extensive repairs, modernization and expansion will be required to adequately provide the approximate 100,000 sf (9,290 m<sup>2</sup>) of new floor area needed to meet KRSOC's current and projected operational and staffing requirements beyond the next five years.

**Alternatives.** Alternatives considered include the modernization of existing facilities and construction of new facilities at Kunia to meet the existing deficit and a No Action Alternative. Other alternatives considered, but eliminated from further evaluation, include leasing private office space, relocation/construction of new facilities in the Pearl Harbor Naval Complex and at other Navy-owned installations on O'ahu, and relocation/construction of new facilities at other different geographic locations beyond O'ahu. Alternative water and wastewater systems to serve the HRSOC and alternative alignments for the proposed off-base access road were also considered and eliminated from further evaluation.

**Environmental Consequences.** Environmental consequences of the Proposed Action and Modernization/Expansion Alternative are expected to be limited to the local and/or regional setting. There should be minor measurable benefits at the islandwide level due to the beneficial economic effects associated with new construction and an increase in operational period employment levels. Impacts evaluated included short-term, long-term and cumulative impacts. The environmental impacts associated with the Proposed Action are temporary and not significant, or can be minimized through the application of appropriate design and engineering methods. The Proposed Action would not result in significant adverse impacts to the following resource areas: land use compatibility, cultural resources, visual environment, flood hazard, ground and surface water resources, soils and topography, biological resources, aircraft hazards, hazardous and regulated materials, electromagnetic radiation/electromagnetic interference and the socio-economic environment. In compliance with Section 106 of the National Historic Preservation Act, the Navy has consulted with the State Historic Preservation Officer (SHPO) and the Office of Hawaiian Affairs. The SHPO has concurred with the Navy's determination that the Proposed Action would have no effect on historic properties. A cultural impact assessment,

completed in accordance with the *Guidelines for Assessing Cultural Impacts* issued by the State of Hawai'i Office of Environmental Quality Control, indicates that the Proposed Action would not impact cultural features, practices and beliefs. The Proposed Action would require improvements to the potable water, wastewater, electrical, communications and drainage systems at NCTAMS PAC. The State of Hawai'i has concurred with the Navy's determination that the Proposed Action is consistent with the State's Coastal Zone Management Program. The Proposed Action, which is compatible with the existing land use at NCTAMS PAC, represents an intensification of the current land use and an increase in the utilization of the property. Activities associated with the Proposed Action would be conducted within the installation boundary and would not impact surrounding properties. The proposed land acquisition would result in a permanent withdrawal of approximately 35 acres (14 ha) of privately-owned agricultural lands from cultivation for a new access road and intersection and utility system improvements. There would be no impact to future use or productivity of the remaining agricultural lands, and the proposed use of the land would be compatible with the surrounding agricultural and residential uses. The Proposed Action would result in short-term local air and noise quality impacts during construction. No significant adverse impacts to Whitmore Village are anticipated. The Proposed Action's new access road would connect to Whitmore Avenue west of Whitmore Village, and project-related traffic would be routed around the residential community of Whitmore Village.

The Proposed Action would increase traffic, but would not result in significant adverse traffic impacts on local and regional roadways. Improvements to accommodate the additional traffic volumes generated by the proposed project include widening of Whitmore Avenue and a portion of Kamehameha Highway, and signalization of the intersection of Kamananui Road and Kaukonahua Road. The proposed HRSOC facility would implement a traffic management plan in coordination with the State of Hawai'i Department of Transportation (DOT) to control AM and PM peak hour traffic volumes at the intersection of the proposed project access road and Whitmore Avenue.

The Proposed Action would result in significant beneficial impacts associated with construction period employment opportunities and government tax revenues, and an approximate 30 percent increase in operational period staffing. The addition of approximately 700 new positions would positively benefit the islandwide economy, and provide minor beneficial economic effects to Wahiawā businesses during the operational period due to the increased consumer base. No adverse long-term changes to the existing socio-economic environment at the local and regional level are expected since the Proposed Action would relocate an existing activity within the Wahiawā region. Existing personnel would most likely retain their present place of residence, and the residential distribution and consumer patterns of new personnel would be similar to the current islandwide distribution of existing personnel, thereby minimizing the local and regional impacts on public services, housing, and support services and facilities. The Proposed Action would not create environmental health and safety risks that may disproportionately affect children and minority or disadvantaged population.

When considered with other past, present, and reasonably foreseeable future actions, the Proposed Action would not result in significant adverse cumulative impacts to the following resource areas: land use compatibility, cultural resources, traffic, utilities, flood hazard, ground and surface water resources, soils and topography, biological resources, air quality and noise, aircraft hazards, hazardous and regulated materials, electromagnetic radiation/electromagnetic interference and the socio-economic environment. The Proposed Action would result in an insignificant cumulative impact to the visual environment. The Proposed Action and future projects planned for NCTAMS PAC would construct additional satellite receiver facilities within the installation boundary, resulting in a localized intensification of communication facilities.

## 1.0 PURPOSE OF AND NEED FOR ACTION

### 1.1 Summary of Proposed Action

The Kunia Regional Security Operations Center (KRSOC) proposes to relocate and construct new facilities at the Naval Computer and Telecommunications Area Master Station Pacific (NCTAMS PAC) located in Wahiawā, O‘ahu, Hawai‘i (Figure 1). The KRSOC would be renamed the Hawaii Regional Security Operations Center (HRSOC) upon relocation, and would employ approximately 2,800 personnel, an increase of approximately 30 percent over the existing KRSOC employment level. The Proposed Action would construct an HRSOC operational control center, ancillary facilities, and required utility services and connections. In order to provide adequate space for construction, the Proposed Action would demolish a decommissioned Circularly Displayed Antennae Array (CDAA) and related facilities (Building 294 and accessory infrastructure), and outdoor recreation facilities. A new facility to replace Building 294 and new outdoor recreation facilities would be constructed. The HRSOC project location is shown in Figure 2.

The Proposed Action would require construction of a new off-base access road to NCTAMS PAC, a new base entry control point, and roadway improvements along existing State and City-owned roadways to mitigate traffic impacts from the proposed project. Fee interest in approximately 35 acres (14 hectares [ha]) of private lands, as well as additional easements within State- and City-owned roadway rights-of-way (ROW), would be acquired to construct the proposed off-base access road, improvements to existing roadways, and utility system improvements.

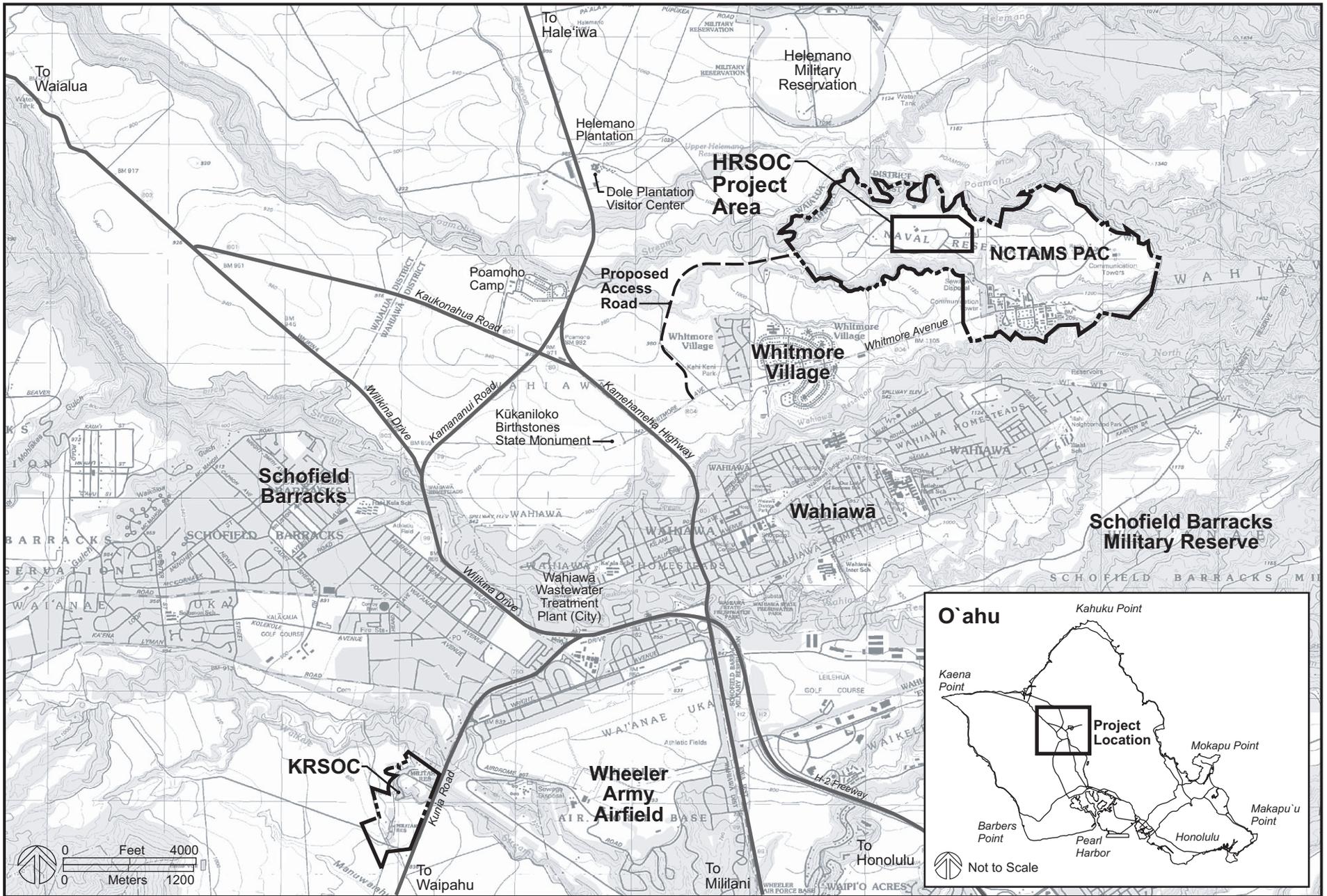
### 1.2 Purpose and Need

The purpose of the action is to:

- Provide adequate operational facilities to meet HRSOC’s intelligence and data gathering and analysis mission; and
- Improve operational efficiency and fiscal effectiveness of security operations in the Pacific area by increasing operational connectivity between dispersed activities.

The KRSOC performs intelligence gathering and analysis missions in support of U.S. interests. In this capacity, KRSOC focuses on national security intelligence needs, predictive intelligence to defend our homeland, and the priority intelligence requirements of U.S. Pacific Command, Central Command, Special Operations Command Pacific, and their components.

The KRSOC’s mission and its sophisticated electronics systems support require air conditioning, electrical and communications systems as well as backup systems to ensure continuous and reliable operations. Because of its around-the-clock operation, major system upgrades or changes need to accommodate the continuous service requirement, necessitating the use of “hot switchover” protocols where new systems are completely operational before old systems are terminated.

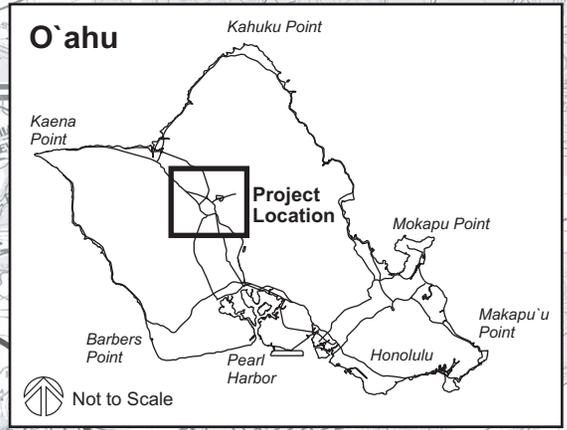


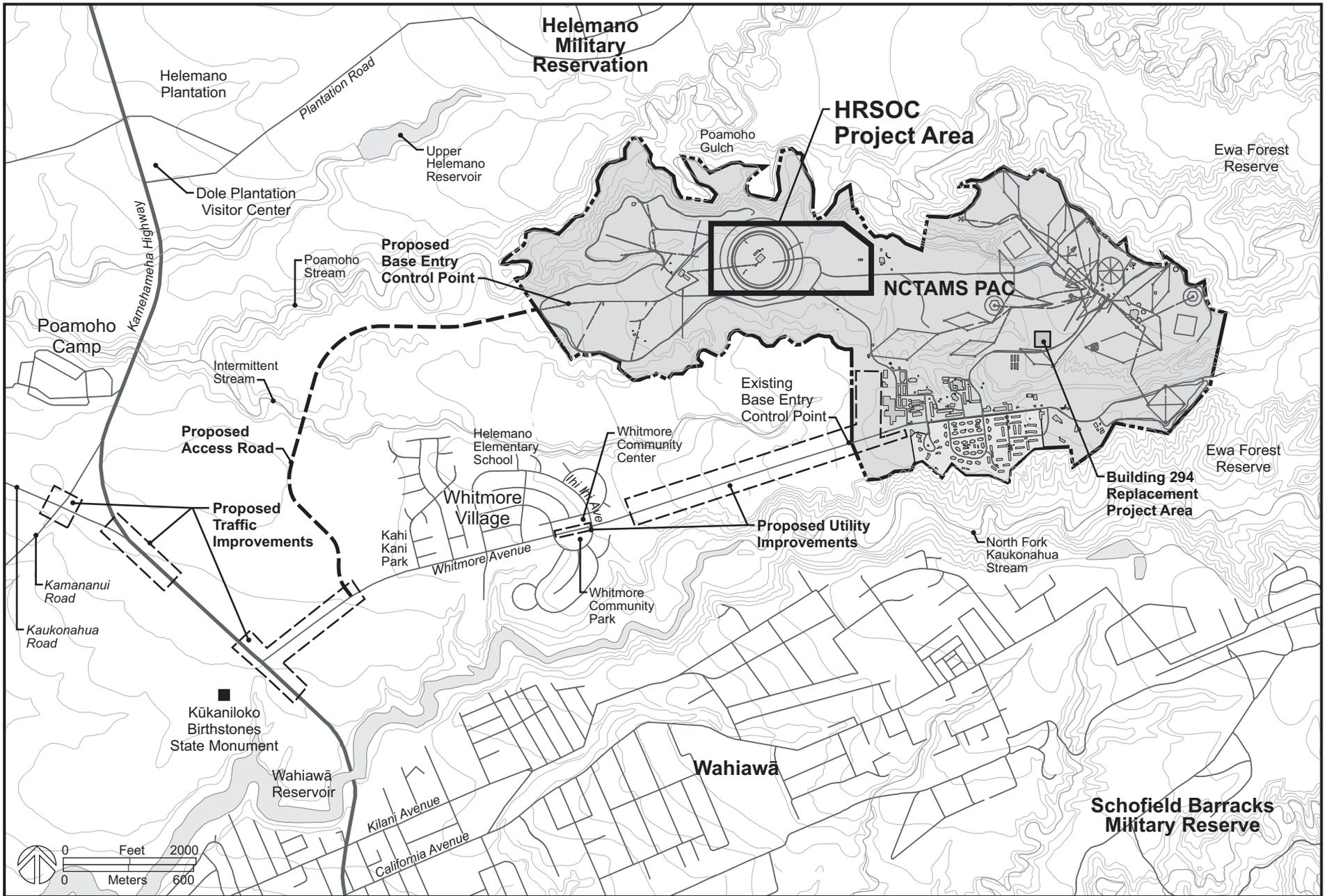
1-2

**Project Location**

Hawaii Regional Security Operations Center EA  
O'ahu, Hawai'i

**Figure 1**





**NCTAMS PAC Project Location**

**Figure 2**

Hawaii Regional Security Operations Center EA  
 O'ahu, Hawai'i

The need for the action is to:

- Replace existing operational and administrative spaces that no longer meet current facility requirements;
- Accommodate new mission operational space and personnel requirements;
- Relocate activities from within aircraft hazard zones; and
- Provide operational synergies and “virtual integration” between dispersed, non-collocated activities.

KRSOC is currently located within a 95-acre (38-ha) installation owned by the U.S. Army adjacent to Schofield Barracks in Central O’ahu. KRSOC’s primary facility is a 235,000 square foot (sf) (21,830 square meters [m<sup>2</sup>]) underground building (Building 9) built between 1942 and 1944 as an aircraft assembly plant. Although portions of the facility have been renovated over the years to accommodate its current functions, the facility has exceeded its practical life, and the building’s overall structure and supporting mechanical plant and equipment no longer meet the needs of KRSOC’s facility requirements. Maintenance and repairs are expected to increase significantly from the annual \$8 million now needed as facility systems break down and need to be replaced or upgraded. In addition, the existing building does not provide enough useable operational space for the current KRSOC mission, and extensive repairs, modernization and expansion will be required to adequately provide the approximate 100,000 sf (9,290 m<sup>2</sup>) of new floor area needed to meet KRSOC’s current and projected operational and staffing requirements beyond the next five years.

Modernization and expansion of the structure is constrained by operational and safety restrictions associated with the installation’s location adjacent to Wheeler Army Airfield (AAF). Portions of the KRSOC installation, including the tunnel entrance and roadway to access the main communications facility, and parking, administrative support, supply, and community support facilities, are within aircraft hazard zones with potential for aircraft incident. Modernization and expansion is further constrained by Building 9’s historic associations and eligibility for inclusion in the National Register of Historic Places (NRHP).

An improved operational connectivity with the Joint Intelligence Center Pacific (JICPAC) is required to maximize the efficiencies and fiscal effectiveness of Pacific intelligence operations. JICPAC, which provides direct intelligence support for both maritime and overland operations assigned to the U.S. Pacific Command, is presently located in the Makalapa area of the Pearl Harbor Naval Complex, approximately 20 miles (32 kilometers [km]) southeast of KRSOC. New communication systems would enhance connectivity between HRSOC and JICPAC and allow real-time collaboration and sharing of data and information between the activities to increase the overall efficiency of U.S. security operations in the Pacific.

### **1.3 Regulatory Overview**

This Environmental Assessment (EA) analyzes the potential impacts of the Proposed Action and reasonable alternatives and is intended to provide sufficient evidence and analysis for determining whether to prepare an Environmental Impact Statement (EIS) or a Finding of No Significant Impact (FONSI) pursuant to both the National Environmental

Policy Act and Chapter 343, Hawai'i Revised Statutes (State Environmental Impact Statement Law).

The following is a discussion of the major Federal and State regulatory and permitting requirements that apply to the construction and demolition activities under the Proposed Action.

### **1.3.1 National Environmental Policy Act**

This EA is prepared in compliance with the National Environmental Policy Act (NEPA) of 1969 (42 United States Code [USC] §4321 et seq.), as implemented by the Council on Environmental Quality regulations (40 Code of Federal Regulations [CFR] Parts 1500-1508) and Navy guidelines, the Office of the Chief of Naval Operations Instruction (OPNAVINST) 5090.1B CH-4 Environmental and Natural Resources Program Manual of June 4, 2003 (as amended).

### **1.3.2 Chapter 343, Hawai'i Revised Statutes**

This EA is also prepared in compliance with Chapter 343, Hawai'i Revised Statutes (HRS) (State Environmental Impact Statement Law); and Title 11, Section 200 (§11-200), Hawai'i Administrative Rules (HAR) because it involves improvements to State lands (i.e., improvements along State roadways). The purpose of Chapter 343, HRS (State Environmental Impact Statement Law) is to establish a system of environmental review to ensure that environmental concerns are given appropriate consideration in decision making along with economic and technical considerations. Chapter 343, HRS was patterned after the Federal NEPA. Environmental review under Chapter 343, HRS is required for any program or project that proposes one or more of eight land uses or administrative acts, including use of State or County lands or funds other than for feasibility studies or the purchase of raw land. The Proposed Action is subject to review under Chapter 343, HRS with approval by the State of Hawai'i Department of Transportation (DOT) (i.e., the approving agency) because it involves improvements to State lands (i.e., improvements to State roads). This EA was prepared in accordance with Chapter 343, HRS and Section 11-200, HAR to provide sufficient evidence and analysis for determining whether to prepare an EIS or to issue a Negative Declaration/FONSI under Chapter 343, HRS.

### **1.3.3 Section 106, National Historic Preservation Act**

The National Historic Preservation Act of 1966 (NHPA) (as amended) (16 USC §470) recognized the nation's historic heritage and established a national policy for the preservation of historic properties as well as the NRHP. Section 106 of the NHPA requires Federal agencies to take into account the effects of Federal undertakings on historic properties and affords the Advisory Council on Historic Preservation (ACHP) a reasonable opportunity to comment on such undertakings. The Section 106 process, as defined in 36 CFR §800, provides for the identification and evaluation of historic properties, for determining the effects of undertakings on such properties, and for developing ways to resolve adverse effects in consultation with consulting parties.

### **1.3.4 Coastal Zone Management Act**

The purpose of the Coastal Zone Management Act (CZMA) of 1972, as amended (16 USC §145 *et seq.*) is to encourage coastal states to manage and conserve coastal areas as a unique, irreplaceable resource. Federal activities that affect any land or water use or natural resource of the coastal zone shall be carried out in a manner consistent to the maximum extent practicable with the enforceable policies of Federally-approved State Coastal Zone Management (CZM) programs. The CZMA states that land subject solely to the discretion of the Federal government, such as Federally owned or leased property, is excluded from the State's coastal zone. Any construction on non-federal property (e.g., construction within State and City-owned roadways) would require that the proponent of the Navy action submit a CZM federal consistency determination to the State CZM Program.

### **1.3.5 Endangered Species Act**

The Endangered Species Act (ESA) (16 USC §1531 *et seq.*) establishes a process for identifying and listing species. It requires all Federal agencies to carry out programs for the conservation of Federally listed endangered and threatened plants and wildlife, and prohibits actions by Federal agencies that may adversely affect endangered or threatened species, or critical habitat. Section 7 of the ESA requires consultations with Federal wildlife management agencies on actions that may jeopardize species or habitat. Section 9 of the ESA prohibits the "taking" of endangered species by causing harm or harassment.

### **1.3.6 Section 402, National Pollutant Discharge Elimination System**

Discharge of pollutants from point sources into surface waters of the U.S. is regulated under the National Pollutant Discharge Elimination System (NPDES) program pursuant to Section 402 of the Clean Water Act (CWA) (33 USC §1251 *et seq.*). The State of Hawai'i, DOH administers the NPDES program under Title 11, Chapter 55, HAR.

An individual NPDES permit or coverage under the appropriate NPDES General Permit(s) issued by the State of Hawai'i, DOH will be required prior to discharges of storm water associated with industrial construction activity for projects greater than one acre (0.4 ha), water from construction dewatering, and/or hydrotesting water into the storm drainage system.

### **1.3.7 Clean Air Act**

In order to ensure that Federal activities do not hamper local efforts to control air pollution, Section 176(c) of the Clean Air Act (CAA), 42 USC 7506(c), prohibits Federal agencies, departments, or instrumentalities from engaging in, supporting, providing financial assistance for, licensing, permitting or approving any action which does not conform to an approved State or Federal implementation plan. Conformity to an implementation plan means: Conformity to a plan's purpose of eliminating or reducing the severity and number of violations of the National Ambient Air Quality Standards (NAAQS) and achieving expeditious attainment of such standards; and that such activities will not (1) cause or contribute to any new violation of the NAAQS; (2) increase the frequency or severity of an existing violation; or (3) delay the timely attainment of a standard, interim emission reduction, or milestone. Section 176(c) was amended in

1995 to clarify that the conformity requirements apply only to designated non-attainment and maintenance areas. The action proponent may make a determination that the Proposed Action is not subject to the General Conformity Rule. Since the Proposed Action is in an attainment area, it is not subject to the General Conformity Rule.

The CAA sets NAAQS for sulfur dioxide, carbon monoxide, minus ten-micron particulate matter, nitrogen dioxide, lead, ozone and hydrocarbons. Non-attainment areas require the permitting of all major pollution sources. Attainment areas require the installation of the best available control technology for all major sources and must fall within the next increment of degradation. Major pollution sources require an air quality permit before construction.

### **1.3.8 Environmental Permits and Required Approvals**

Table 1 is a listing of Federal, State and County environmental permits, approvals and consultations that may be required for the proposed project.

**Table 1**  
**List of Potential Permits, Approvals and Consultations**

<b>Permit/Approval/Consultation</b>	<b>Agency</b>
<b>Federal</b>	
National Environmental Policy Act, Finding of No Significant Impact (NEPA FONSI) or Notice of Intent to prepare Environmental Impact Statement (NOI for EIS)	Commander, Navy Installations
Section 106, National Historic Preservation Act consultation	State Historic Preservation Officer Office of Hawaiian Affairs
Wetlands Determination	U.S. Army Corps of Engineers
<b>State of Hawai'i</b>	
CWA, Section 402, National Pollutant Discharge Elimination System Permit	State of Hawai'i, Department of Health, Clean Water Branch
Coastal Zone Management Program Federal Consistency Determination	State of Hawai'i, Coastal Zone Management Program
Air Quality Permit	State of Hawai'i, Department of Health, Clean Air Branch
Chapter 343, Hawai'i Revised Statutes Environmental Review and Determination	State of Hawai'i, Department of Transportation
Construction Plan Approval	State of Hawai'i, Department of Transportation
Construction and Use/Occupancy Permits	State of Hawai'i, Department of Transportation
Water Use Allocation Review	State of Hawai'i, Department of Land and Natural Resources, Commission on Water Resources Management
<b>City and County of Honolulu</b>	
Amendment to Existing Sewer Service Contract	City and County of Honolulu, Department of Planning and Permitting
Construction Plan Approval	City and County of Honolulu, Board of Water Supply
Subdivision Approval	City and County of Honolulu, Department of Planning and Permitting
Engineering and Construction Permits	City and County of Honolulu, Department of Planning and Permitting
Construction Plan Approval	City and County of Honolulu, Department of Transportation Services
Street Usage Permit	City and County of Honolulu, Department of Transportation Services

## 2.0 ALTERNATIVES INCLUDING THE PROPOSED ACTION

This chapter presents a discussion of the Proposed Action, alternatives and a summary of effects. The alternatives described below represent a range of reasonable alternatives. The Proposed Action and the alternatives are analyzed in terms of how well they meet the project objectives, as described in Chapter 1.

### 2.1 Description of the Proposed Action and Alternatives

The following alternatives were analyzed:

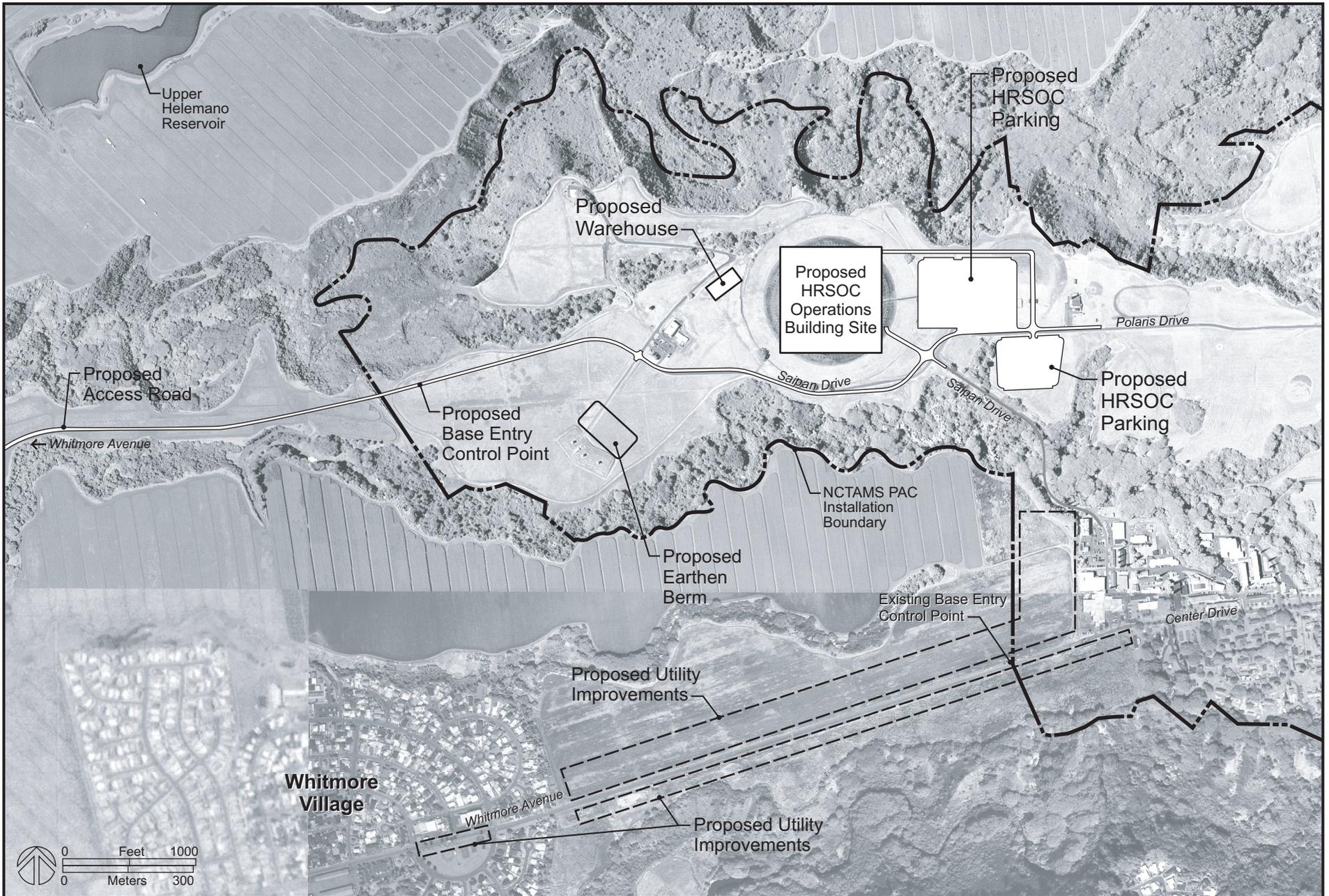
1. Proposed Action
2. Modernization/Expansion of Existing Facilities
3. No Action
4. Alternatives considered but eliminated from further evaluation include:
  - Leasing
  - Relocation/New Construction at the Pearl Harbor Naval Complex
  - Relocation/New Construction at other Navy-owned installations on O'ahu
  - Relocation/New Construction at other geographic locations beyond O'ahu
  - Water and wastewater system alternatives to serve the HRSOC
  - Alternative alignments for the proposed off-base access road

Each alternative is described below. A comparison of the environmental impacts of the Proposed Action and the alternatives carried through the analysis (i.e., Modernization/Expansion of Existing Facilities and the No Action Alternative) is presented in Table 2 at the end of this chapter.

#### 2.1.1 Proposed Action

The KRSOC proposes to relocate and construct new facilities at the NCTAMS PAC located in Wahiawā, O'ahu, Hawai'i (Figure 1). Off-base improvements include a new base access road, roadway improvements along State roads, and utility system improvements. The KRSOC would be renamed the HRSOC upon relocation and would employ approximately 2,800 total personnel, an increase of approximately 30 percent over the existing KRSOC employment level. The project site at NCTAMS PAC, located about 4 miles (6 km) northeast of the existing KRSOC facilities, consists of approximately 70 acres (28 ha), including parking and supporting areas. The proposed conceptual site plan is shown in Figure 3.

**Proposed Facilities.** The Proposed Action involves construction of a two-story steel-framed building on concrete spread footings with a total floor area of approximately 428,000 sf (39,760 m<sup>2</sup>). The two-story building, which would be constructed with two stories aboveground and a basement, would house the HRSOC's operational control center, administrative offices, conference/briefing and video/teleconferencing rooms, technical libraries and training rooms, and personnel support spaces (i.e., galley, blind vendor, mini-mart, medical clinic). A nearby warehouse facility would provide 20,000 sf (1,858 m<sup>2</sup>) of operational storage space and facilities maintenance shops. Construction would include visitor control facilities, a classified material incinerator/shredder, a paved parking area, and upgrades to the internal vehicular circulation system. The total planned floor area for all new facilities is approximately 469,000 sf (43,570 m<sup>2</sup>). A decommissioned CDAA and related infrastructure, including Building 294 and its



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**HRSOC Proposed Conceptual Site Plan**  
 Hawaii Regional Security Operations Center EA  
 O'ahu, Hawai'i

**Figure 3**

accessory structures, and outdoor recreational facilities would be demolished to accommodate the proposed HRSOC project. A new one-story building would be constructed within the eastern section of the installation to replace Building 294 (Figure 2). Replacement outdoor recreational facilities would also be constructed. An earthen berm would be constructed near the existing Iridium Satellite Communication Facility located southwest of the HRSOC project site to avoid potential operational interference with the proposed HRSOC facilities and eliminate ongoing instances of multi-path interference. Construction of the HRSOC facilities is anticipated to begin in 2006, with completion planned for 2009 and occupancy in 2010. Vacated Kunia facilities would be returned to the U.S. Army.

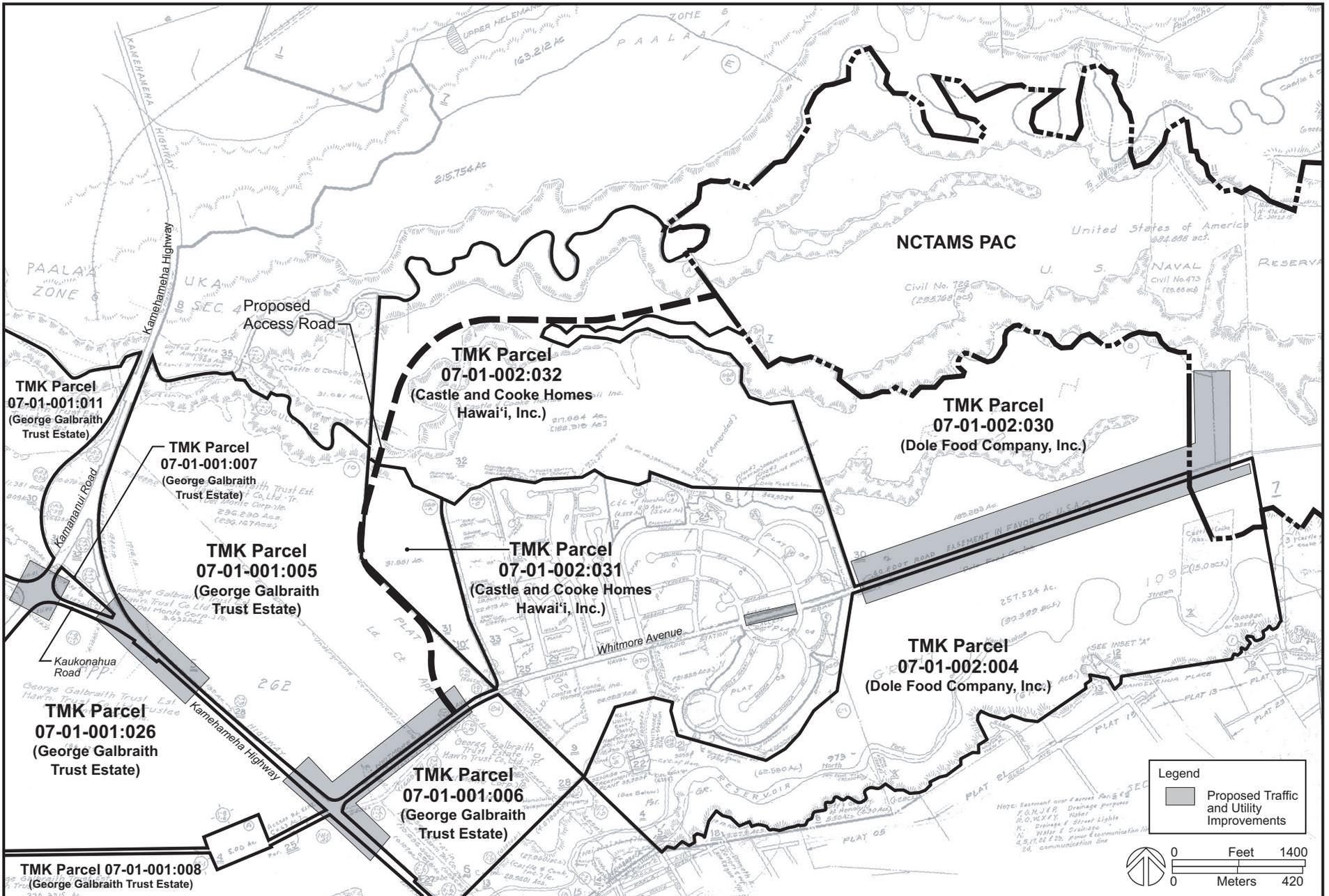
**Proposed Access Road.** The Proposed Action also includes construction of a new 8,000-foot (2,438-m) long, two-lane access road from Whitmore Avenue to NCTAMS PAC. Roadway and intersection improvements along non-Federal roadways and a new base entry control point near the new HRSOC facility would be provided. The proposed access road would consist of two 12-foot (3.7-m) wide lanes with minimum 4-foot (1.2-m) wide paved shoulders. It would connect directly to Whitmore Avenue approximately 750 feet (230 meters [m]) west of Whitmore Village. Acquisition of easements within State- and City-owned roadway ROW, as well as fee interest in approximately 35 acres (14 ha) of privately-owned land and subdivision of property would be required for the proposed access road, related roadway improvements, and utilities. Figure 4 presents the tax map parcels and associated tax map key (TMK) numbers for the proposed land acquisition areas. The tax map key and ownership information as of July 2005 is summarized in Table 2.

**Table 2**  
**Tax Map Key Parcels of Proposed Private Land Acquisition Areas**

TMK Parcel	Ownership*	Parcel Acreage (ha)
07-01-001: 005	George Galbraith Trust Estate	236.23 (95.6)
07-01-001: 006	George Galbraith Trust Estate	71.0 (28.7)
07-01-001: 007	George Galbraith Trust Estate	3.15 (1.3)
07-01-001: 008	George Galbraith Trust Estate	320.82 (129.8)
07-01-001: 011	George Galbraith Trust Estate	79.20 (32.1)
07-01-001: 026	George Galbraith Trust Estate	186.18 (75.3)
07-01-002: 004	Dole Food Company, Inc.	257.52 (104.0)
07-01-002: 030	Dole Food Company, Inc.	189.28 (76.6)
07-01-002: 031	Castle and Cooke Homes Hawai'i, Inc.	31.55 (12.8)
07-01-002: 032	Castle and Cooke Homes Hawai'i, Inc.	217.88 (88.2)

\*Information current as of July 2005.

**Proposed Infrastructure.** New utility services and connections, including electrical, communications, water, wastewater, drainage and fuel storage systems, would be provided. A new Hawaiian Electric Company (HECO) on-base transformer substation, fed from their Wahiawa Substation, would provide electrical power to the project. A new 46 kV overhead service would be extended from Kamehameha Highway up Whitmore Avenue and along the proposed access road to the NCTAMS PAC boundary, and underground to HECO's on-base transformer substation. The transformer substation would most likely have the capacity for an electrical demand load of 15,500 kV. Two primary feeders from the HECO transformer substation would connect to a new 12.47 kV



**HRSOC Proposed Land Acquisition Areas**  
**Hawaii Regional Security Operations Center EA**  
**O'ahu, Hawai'i**

**Figure 4**

switching station that would provide primary distribution to the main HRSOC and supporting buildings. Feeders rated for 12.47 kV service would be routed underground in ducts and manholes from the switching station to secondary substations within the main HRSOC operations building. The secondary distribution system would most likely consist of four secondary substations designed to provide 480/277 volt (V) service, 480/277 V feeders, panelboards and step-down dry transformers, and 208/120 V feeders and panelboards. Ten (one spare) standby diesel engine generators would serve as emergency back-up power.

Above grade diesel fuel storage tanks would be installed to support the facility.

A new communications node would be provided at the project site, with new underground communications ductlines and manholes connecting the project site, the NCTAMS PAC main communications building and the NCTAMS PAC security office. A separate underground communications duct bank and manhole system would connect the new entry control point facilities to the HRSOC operations building and NCTAMS PAC security office. Satellite receivers required for the HRSOC mission would be sited in the vicinity of the HRSOC operations building. Existing communication cables routed under Building 294 would be relocated to accommodate the proposed HRSOC facilities.

Potable water for the Proposed Action would be provided by the existing NCTAMS PAC potable water system (City and County of Honolulu Board of Water Supply (BWS) Public Water System No. 357) that draws from the NCTAMS PAC deep well (State Well No. 3-3100-02). A new higher capacity pump and pump column would replace the existing equipment. A new well casing may be required to accommodate the larger-diameter pump column. New piping would be installed to convey water from the NCTAMS PAC reservoirs to the HRSOC main operations building and new entry control point facilities. A connection to the BWS potable water system would provide emergency backup service. The BWS Public Water System No. 333 is the most likely candidate for backup service connection. Connection to the BWS system would be to an existing 8-inch (20-cm) BWS water line located off-base, northeast of the Whitmore Avenue, 'Ihi 'Ihi Avenue and Nani Ihi Avenue intersection. A new booster pump station equipped with two pumps (one for standby), a standby generator, a Supervisory Control and Data Acquisition system, water meter and reduced pressure backflow preventer would be constructed near the intersection of Whitmore Avenue and Kulia Street on property the Navy would acquire from Dole Food Company, Inc. A new 12-inch (30-cm) water line along Whitmore Avenue would convey water to the NCTAMS PAC potable water system. The connection to the NCTAMS PAC water system would be to an existing 12-inch (30-cm) water main along Whitmore Avenue near the existing base entry control point.

Wastewater service for the Proposed Action would be provided via three sewage pump stations and approximately 8,500 feet (2,590 m) of force main to convey wastewater to the City and County of Honolulu wastewater collection system for treatment at the Wahiawā Wastewater Treatment Plant. One pump station would be located near the HRSOC operations building, another would be located near the new base entry control point facilities, and an intermediate pump station would be located between the other two pump stations. One force main would convey wastewater from the pump station located near the new entry control point facilities to the sewage pump station located near the new HRSOC operations building. Another force main would convey wastewater from the pump station located near the HRSOC operations building to the NCTAMS PAC trunk sewer along Whitmore Avenue. The connection point would be to

a manhole located just outside of the existing base entry control point. The NCTAMS PAC trunk sewer connects to the City's wastewater collection system at a sewer manhole located near the intersection of Whitmore Avenue and 'Ihi 'ihi Avenue. Approximately 500 feet (152 m) of the existing 8-inch (20-cm) NCTAMS PAC trunk sewer along Whitmore Avenue would be upgraded to prevent surcharging.

The Proposed Action includes a new drainage system to convey stormwater from the project site to existing drainageways onsite. The project site would be graded to maintain the existing drainage patterns, and runoff would flow into existing drainageways that ultimately flow into Poamoho Stream.

### **2.1.2 Modernization/Expansion**

The Modernization/Expansion Alternative proposes that KRSOC remain at Kunia with a complete renewal of existing facilities and construction of new facilities to meet the existing space deficiency and provide adequate space for the increased staffing needed to meet mission requirements (i.e., approximately 30 percent over existing personnel levels). (Figure 1 for KRSOC location and Figure 5 for the KRSOC proposed site plan.)

In this alternative, KRSOC's primary underground facility (Building 9) would undergo complete interior demolition and revitalization. All interior building components (architectural and mechanical) would be renewed, and major building systems (electrical and mechanical) and equipment would be replaced. The existing KRSOC aboveground warehouse facility, physical fitness facility, incinerator/shredder, and base entry control point would be reused.

In addition to Building 9, approximately 100,000 sf (9,290 m<sup>2</sup>) of additional space would be needed to meet KRSOC's operational and staffing requirements. With the Runway Clear Zone and Accident Potential Zone I (APZ I) from the Wheeler AAF encumbering a major portion of KRSOC's installation, the new facilities, which include a 70,000 sf (6,503 m<sup>2</sup>) below grade expansion to the third floor of the operations building and an adjacent 30,000 sf (2,787 m<sup>2</sup>) underground utility support building, would be constructed in an area outside the airfield safety zones. The new below grade facilities would provide operational, administrative, training, and personnel support spaces. As proposed, the expansion of Building 9 would require extensive site preparation and excavation prior to construction due to facility's underground location.

Construction of a new base entry control point, additional vehicle parking, and utility connections/upgrades would be needed. The existing base entry control point would be upgraded for truck inspection, and a northbound left turn lane on Kunia Road would be added at the existing intersection. A new parking area to replace the existing parking, new entry control point and intersection improvements would be constructed approximately 1,800 feet (549 m) south of the existing intersection. The helicopter pad road above the existing tunnel entrance would be upgraded to provide internal vehicular circulation between the new entrance and the existing base entry control point.

This alternative also includes the acquisition of approximately 130 acres (53 ha) of land adjacent to the existing KRSOC facility to allow for the construction of the additional facilities. Approximately 100 acres (41 ha) of land would be required from the State of Hawai'i and the Estate of James Campbell and approximately 30 acres (12 ha) would have to be transferred from the U.S. Army.



As a result of KRSOC's requirement for continuous operation and the facility's Sensitive Compartmented Information Facility (SCIF) requirements, the Modernization/Expansion Alternative is logistically difficult and is considerably less desirable than the Proposed Action. Due to the need to maintain continuous, uninterrupted mission critical operations, this alternative would require the duplication of operational space and equipment and the temporary relocation of functions during construction. Temporary, SCIF-compliant swing space facilities would be provided, and revitalization would be conducted floor-by-floor. Construction would be completed in three phases (one phase per floor), with each phase requiring personnel to be relocated and additional resources to replicate operation space/equipment. Construction phasing and relocation is estimated to increase construction duration by approximately 12 to 18 months, and would require some functions to be relocated more than once. By contrast, the Proposed Alternative would consist of a single transition from the existing facility to the new facility. Notwithstanding the shortcomings discussed above, the Modernization/Expansion alternative was considered viable and was included in the analysis of environmental effects because it would provide the necessary facilities to meet the project objectives.

### **2.1.3 No Action**

The No Action Alternative preserves the status quo, and assumes that KRSOC would remain at its existing facilities at Kunia. Under this alternative, KRSOC would continue to operate with a large deficit of operational and administrative space, and the quality of life for personnel working at KRSOC would continue to degrade. The No Action Alternative would not provide the facilities necessary to meet KRSOC's mission requirements. The No Action Alternative would not achieve the purpose and need for the project, but was carried through the analysis as a benchmark to compare the magnitude of environmental effects of the alternatives, including the Proposed Action.

### **2.1.4 Alternatives Considered But Eliminated From Further Evaluation**

**Leasing.** This alternative involves leasing private office space outside of a Department of Defense (DoD) installation. Due to KRSOC's large facility requirement (about 370,000 sf or 34,400 m<sup>2</sup>), this alternative would require about two years of absorption for all types of office space in Honolulu (based on existing vacancy rates). Only four commercial properties on O'ahu have the physical capacity to accommodate the KRSOC (Topa Financial Center, Pacific Guardian Center, Bishop Square/Pacific Tower, and Waterfront Plaza) and these are all fully tenanted facilities with vacancies in the 5-10 percent range. Even assuming that the required office space was available in the private market, typical commercial office space could not meet the specialized operational, security, utility, and communication requirements of the KRSOC, and major modifications and upgrades would be required for the leased facilities to accommodate the KRSOC. It was concluded that the existing market would not be able to provide the necessary contiguous facility space or the specialized security/utility requirements of the KRSOC. Therefore, leasing is not considered a viable alternative and has been eliminated from further consideration.

**Relocation/New Construction at the Pearl Harbor Naval Complex.** This alternative involves the construction of new facilities near the Oscar Wharves in the Pearl Harbor Naval Complex (PHNC) to accommodate the KRSOC. Proposed improvements would include: 1) construction of a four-story, steel frame building to house KRSOC's

operational control center; 2) construction of an adjacent single-story facility for the central mechanical plant, utility services, storage, maintenance shop, and fitness area; 3) construction of new parking facilities; and 4) demolition of existing structures, pavements and utilities.

The PHNC consists of an intensely developed industrial area adjacent to Pearl Harbor's Southeast Loch and several outlying areas around the harbor focused on waterfront operations. Because the entire PHNC has been placed on the National Priorities List and is considered to be a Comprehensive Environmental Response, Compensation, and Liability Act site under 42 USC sec. 9601, the lead time to prepare a site for development exceeds the requirements for the project. Also, because of the density and industrial nature of surrounding development, siting flexibility is extremely constrained, potentially affecting the quality of life of HRSOC personnel. Therefore, this alternative is not considered a viable alternative and has been eliminated from further consideration.

**Relocation/New Construction at other Navy-owned Installations on O'ahu.** This alternative involves the construction of new facilities at other Navy-owned installations on O'ahu for the relocation of the KRSOC and its associated activities. Potential sites considered included Naval Magazine Pearl Harbor, Lualualei Branch (NAVMAG Lualualei) and Kalaeloa (former Naval Air Station Barbers Point [NASBP]). The *Hawai'i Military Land Use Master Plan* (PACNAVFACENGCOM, 1995) cites the long-term Department of Defense objective to consolidate NAVMAG Lualualei ordnance operations to the West Loch area of Pearl Harbor and release NAVMAG Lualualei as excess. In addition to its remote location on O'ahu's leeward coast, locating HRSOC at NAVMAG Lualualei would be inconsistent with DoD policy articulated in the *Hawai'i Military Land Use Master Plan*. The former NASBP was designated for closure in 1993 through the Congressionally-mandated Base Realignment and Closure (BRAC) process, and officially decommissioned in 1999. Similar to the NAVMAG Lualualei alternative, locating HRSOC at the former NASBP installation would be inconsistent with DoD policy being implemented through the BRAC process. For these reasons, relocation to another geographic location on O'ahu was not considered a viable alternative and has been eliminated from further consideration.

**Relocation/New Construction at other Geographic Locations beyond O'ahu.** This alternative involves the construction of new facilities at other geographic locations beyond O'ahu for the relocation of the KRSOC and its associated activities. In addition to the costs of new construction, this alternative would require major investment (i.e., capital, land, facilities) to relocate KRSOC personnel and dependents, and associated community and personnel support facilities. Due to the additional cost and potential environmental effects associated with the activity's relocation, this alternative is not considered a viable alternative and has been eliminated from further consideration.

**Water and Wastewater Systems.** Several alternative water and wastewater systems to serve the proposed HRSOC at NCTAMS PAC were considered and have been eliminated for the reasons described below:

**Water Systems.** Two alternative back up water systems were identified in the event of emergency service or scheduled well pump maintenance: 1) maintain an existing connection to the Army's Schofield deep well; and 2) connect to a new deep well system proposed for the Helemano Military Reservation. Both options would require the Navy to operate and maintain existing infrastructure (i.e., pump stations, waterlines and

reservoirs) and, in the near future, replace existing water lines, which would not be the case with a hook up to the City and County of Honolulu's BWS system. For these reasons, the alternative back up water systems were dismissed from further consideration.

**Wastewater Systems.** Two alternative wastewater systems were identified: 1) construction of a new wastewater treatment plant at NCTAMS PAC; and 2) connection to the Army's Schofield wastewater system. Constructing and operating a treatment plant that meet the State's stringent Inland Water Quality Standards is costly and economies of scale dictate that the larger the treatment facility (e.g., the City's Wahiawā treatment facility), the lower the per gallon treatment costs are. Furthermore, a wastewater treatment plant requires a full time plant operator and the State Department of Health may object to the construction of an absorption field over an aquifer. Additionally, an inland discharging wastewater treatment facility is inconsistent with the State wastewater master plan established under Section 208 of the Clean Water Act. The Army transferred ownership and operation of the Schofield wastewater collection system to a private entity in 2004. Army wastewater is treated at the Schofield WWTP which is located at Wheeler AAF. Under this scenario, the Navy would be required to negotiate a treatment and disposal fee with the private entity, and construct, operate and maintain a holding tank, pre-treatment facility and approximately 2.6 miles (4.2 km) of gravity main, resulting in significant capital and annual operations and maintenance costs. For these reasons, the alternative wastewater systems were dismissed from further consideration.

**Alignment of Proposed Access Road.** Several alternatives for access to NCTAMS PAC were considered, and have been eliminated for the reasons described below:

**Use of Existing NCTAMS PAC Base Entry Control Point.** This alternative would use the existing NCTAMS PAC base entry control point at the end of Whitmore Avenue. This alternative has been eliminated because the increased traffic volumes along Whitmore Avenue would have resulted in very long delays for peak direction traffic at the intersections of Whitmore Avenue with Whitmore Village streets, significantly reducing intersection levels of service for residents of Whitmore Village.

**Construction of New Base Entry Control Point with New Access Road Connected to Kamehameha Highway North of Whitmore Avenue.** In this alternative, the proposed access road would connect directly to Kamehameha Highway midway between the Whitmore Avenue-Kamehameha Highway intersection and the Kamehameha Highway-Kaukonahua Road intersection. This connection would require elimination of the curved section of Kamehameha Highway between Kaukonahua Road and Kamananui Road, with all traffic re-routed through the Kaukonahua Road-Kamananui Road intersection. This alternative would significantly impact regional travel patterns and result in additional delays to regional traffic, and has been eliminated from further consideration.

**Construction of New Base Entry Control Point with New Access Road Connected to Kamehameha Highway across Kamananui Road.** In this alternative, the proposed access road would connect directly to Kamehameha Highway in the vicinity of the existing intersection with Kamananui Road, creating a four-way signalized intersection. This connection would involve significant modifications and major roadway improvements to re-organize the existing intersection configuration in the vicinity of the

project area. Cooperation from the DOT would also be required to ensure appropriate funding and project phasing. Both the DOT and the Navy concluded that the improvements required to accommodate such a connection are a long-range state highways planning issue beyond the scope of the Proposed Action. Therefore, this alternative is not considered a viable alternative and has been eliminated from further consideration.

**Construction of New Base Entry Control Point with New Access Road Connected to Kamehameha Highway at a Location North of Kamananui Road.** These alternatives were eliminated due to site constraints created by the natural topography and the location of existing roadways.

## **2.2 Environmental Effects of the Proposed Action and Alternatives**

Table 3 summarizes the environmental effects of the Proposed Action and the reasonable alternatives. The information in the table is summarized from Chapter 4, Environmental Consequences. Because the Leasing Alternative and the various Relocation/New Construction Alternatives do not meet the project's objectives, neither is addressed in Chapter 4 nor presented in Table 3.

**Table 3**  
**Summary of Environmental Effects of the Proposed Action and Alternatives**

<b>Resource Issue</b>	<b>Proposed Action</b>	<b>Modernization/Expansion</b>	<b>No-Action</b>
Land Use Compatibility	Permanent insignificant loss of agricultural land. No impact to potential future use of the land. Compatible with surrounding land uses.	Same as Proposed Action.	No impact.
Cultural Resources	Historic Properties: No effect. Chapter 343, HRS – Cultural Resources: Based on Chapter 343, HRS requirements, a cultural impact assessment was conducted. No cultural features, practices and beliefs would be significantly impacted.	Historic Properties: Potential for adverse impact on historic property if Building 9 determined eligible for listing on NRHP. Chapter 343, HRS – Cultural Resources: Based on Chapter 343, HRS requirements, a cultural impact assessment would be conducted if the Modernization/Expansion Alternative is selected as the Proposed Action.	No effect.
Visual Environment	Insignificant cumulative impact to visual landscape resulting from new buildings and satellite receiver facilities. Appropriate landscaping and building design features would be utilized to screen new facilities. Long-term change to nighttime environment due to introduction of roadway and down directed safety lighting.	No impact.	No impact.
Traffic	No significant adverse traffic impact. Short-term construction period impacts. Increased traffic volumes on regional roadways. Roadway improvements to accommodate additional project traffic would include a proposed access road connected to Whitmore Avenue, widening along Whitmore Avenue and segments of Kamehameha Highway, and the installation of traffic signals at the intersection of Kaukonahua Road and Kamanui Road. A traffic management plan prepared in coordination with DOT including employer-based traffic demand management strategies would be implemented to control AM and PM peak hour traffic volumes at the proposed access road intersection with Whitmore Avenue. The routing of existing commercial trucks and NCTAMS PAC visitors through the proposed access road would reduce Navy traffic through Whitmore Village.	No significant adverse traffic impact. Short-term construction period impacts. Increased traffic volumes on regional roadways. Minimal operational period impacts.	No impact.

Resource Issue	Proposed Action	Modernization/Expansion	No-Action
Utilities and Infrastructure	Upgrades to potable water, wastewater, electrical, communications and drainage systems required. Minor increases in the islandwide generation of solid waste, potable water, wastewater and electrical demand anticipated.	Same as Proposed Action.	No impact.
Flood Hazard	No impact within NCTAMS PAC. Proposed access road would cross an intermittent stream.	Temporary impacts to local drainage patterns due to extensive excavation and alternation of topography during construction. No significant operational period impact.	No impact.
Ground and Surface Water Resources	No impact to groundwater resources. Increase in impervious surfaces would increase stormwater runoff discharged to Poamoho Stream. Runoff is subject to regulation by NPDES permit. No jurisdictional navigable waters of the US as defined by the Clean Water Act.	No impact to groundwater or surface water resources.	No impact.
Soils and Topography	No significant impact.	Significant construction period alteration to local topography due to excavation requirements. No significant operational period impact.	No impact.
Biological Resources (Flora and Fauna)	No impact.	Same as Proposed Action.	No impact.
Air Quality	Local construction period air quality disturbance. Air quality permit required for generators and incinerator. No significant operational period impact.	Local construction period air quality disturbance. No change in operational period impact.	No impact.
Noise	Potential short-term impacts on noise sensitive residential areas at Whitmore Village associated with construction of proposed access road. No significant increase in ambient noise levels on residential and school uses nearest to the proposed access road.	No impact.	No impact.
Aircraft Hazards	Beneficial impact of reducing potential exposure to aircraft hazards by relocating from the KRSOC site.	Continued exposure to potential aircraft hazards associated with the adjacent WAA..	No impact.
Hazardous and Regulated Materials	No significant impact. Any hazardous and regulated materials encountered would be handled in accordance with applicable regulations.	No significant impact. Existing contamination to be remediated to required levels prior to project construction. Hazardous demolition waste would be handled and disposed according to applicable regulations.	No impact.

Resource Issue	Proposed Action	Modernization/Expansion	No-Action
Electromagnetic Radiation/Interference	Possible construction period electromagnetic interference (EMI) minimized with proper antennae handling and security procedures. New earthen berm to shield existing operations from possible EMI and eliminate ongoing instances of multi-path interference. Comprehensive baseline noise environment survey would be conducted.	No impact.	No impact.
Socio-Economic	Beneficial islandwide effects associated with construction-period employment opportunities and associated government tax revenues. Increases in indirect and induced spending from higher operational period employment levels. Minor beneficial impact to Wahiawā businesses during the operational period. No impact to Whitmore Village. No impact to children and minority or disadvantaged populations.	Significant beneficial impacts associated with construction period employment opportunities and government revenues. Increases in indirect and induced spending from higher operational period employment levels. No change in operational period impact.	No impact.

## **3.0 AFFECTED ENVIRONMENT**

This chapter describes the environmental setting of the Proposed Action, the environmental resources within the area of potential effect, and the existing environment at the Modernization/Expansion Alternative project site.

### **3.1 Overview**

#### **3.1.1 NCTAMS PAC**

The project site for the Proposed Action is located at NCTAMS PAC, Wahiawā, O‘ahu, Hawai‘i. As shown in Figure 1, NCTAMS PAC is located on approximately 700 acres (283 ha) of land in Central O‘ahu, approximately 20 miles (32 km) northwest of the Pearl Harbor Naval Complex. The installation, which sits on the eastern side of the upland Schofield Plateau between the Ko‘olau and Wai‘anae Mountain Ranges, is approximately three road miles (5 km) north of Wahiawā town and approximately one mile (1.6 km) northeast of Whitmore Village, a civilian residential community of approximately 4,000 residents. Access to NCTAMS PAC is from Whitmore Avenue via Kamehameha Highway (State Route 80).

#### **3.1.2 Kunia**

The project site for the Modernization/Expansion alternative is the Kunia Regional Security Operations Center (KRSOC) installation. KRSOC, which is located on the Central O‘ahu plateau, is approximately 17 miles (27 km) northwest of Honolulu and about 15 miles (24 km) north of the Pearl Harbor Naval Complex. The entire installation consists of approximately 95 acres (38 ha) of land and is bordered on the north by the U.S. Army Schofield Barracks and on the east by Kunia Road and Wheeler AAF. The southern and western boundaries of the installation are surrounded by agricultural lands owned by the State of Hawai‘i and the Estate of James Campbell (Figure 5). Access to the installation is from Kunia Road, an arterial roadway under the jurisdiction of the State of Hawai‘i.

### **3.2 Land Use Compatibility**

#### **3.2.1 NCTAMS PAC**

The project site at NCTAMS PAC is centrally located within the western portion of the installation (Figure 2). The project site consists of approximately 70 acres (28 ha) of land. Current uses and facilities within the project site include the CDAA; administrative and utility buildings surrounded by paved parking inside the footprint of the CDAA; outdoor recreation facilities; and Saipan Drive to the south and Polaris Drive to the east (Figure 3). With the exception of the existing structures, the remainder of the project site consists of grassed, open fields. Other uses in the vicinity include a two-story administrative building (Building 105) to the west; a mobile intelligence unit (Building 244) to the northwest; and an Iridium Satellite Communications Facility to the southwest. Satellite receiver and telecommunications facilities are located within the northeastern section of the installation, approximately 0.75 miles (1.2 km) east of the project site. Administrative, housing, and community support activities at NCTAMS PAC are concentrated within the southern “downtown” section of the installation near the existing

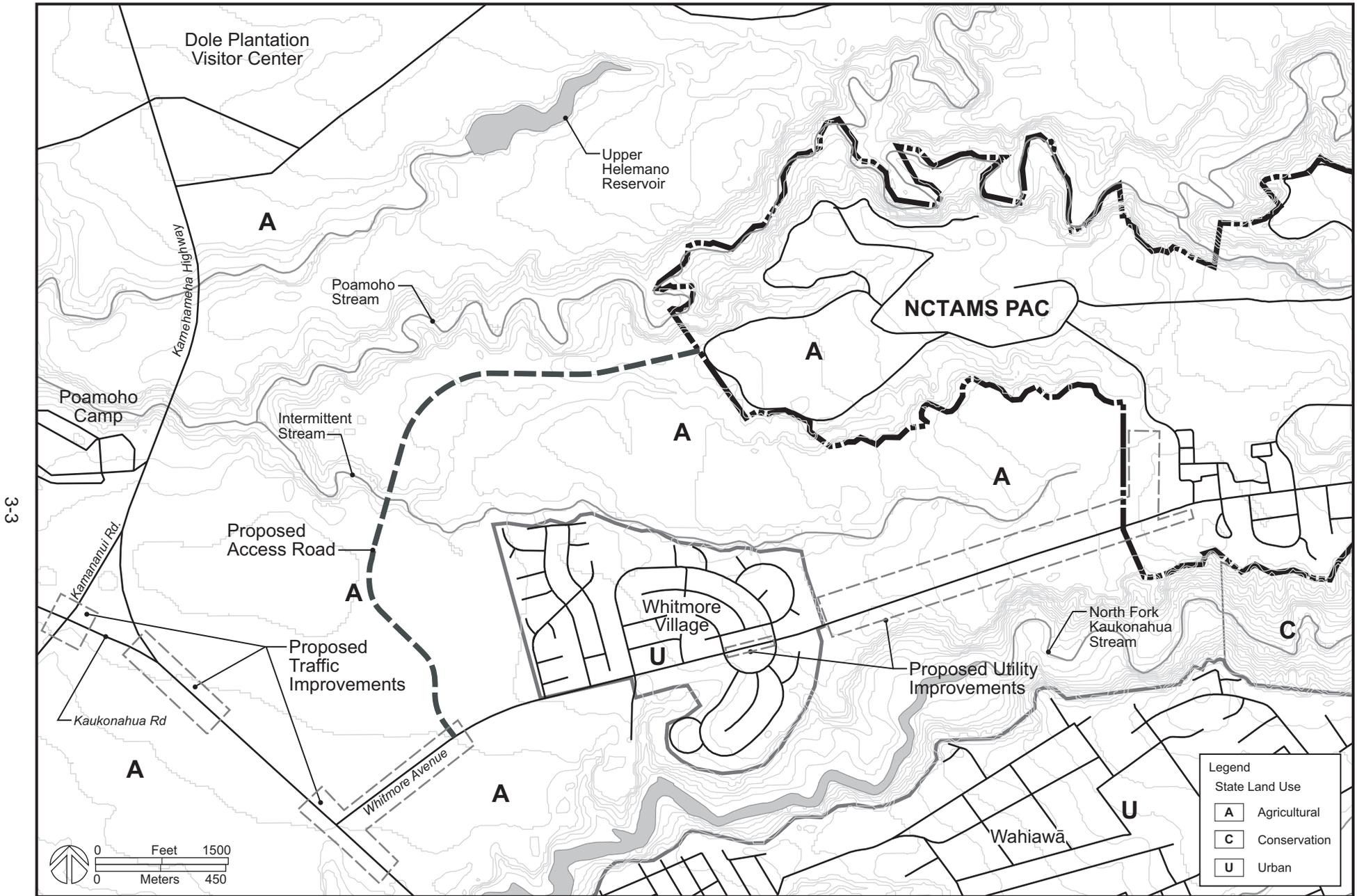
base entry control point. A steep gulch separates the operations and community area to the south from the communications facilities to the north (Figure 3).

Lands surrounding NCTAMS PAC consist of steep gulches and conservation forest areas unsuitable for development to the north, south and east, and pineapple fields to the west. Surrounding land uses are shown in Figures 1 and 2. The Dole Plantation Visitors Center, a tourist-oriented attraction showcasing pineapple and other locally-grown agricultural products, and the Helemano Military Reservation, an Army sub-installation, are to the north of NCTAMS PAC. Poamoho Camp, a civilian residential community of approximately 300 homes, is less than one mile (1.6 km) northwest of the installation. The Kūkaniloko Birthstones State Monument is approximately 1,000 feet (305 m) west of the Kamehameha Highway and Whitmore Avenue intersection.

With the exception of the residential community of Whitmore Village, off-base land use between Kamehameha Highway and the NCTAMS PAC installation boundary is limited to agricultural production. These lands, like most of the undeveloped acreage between Wahiawā and O‘ahu’s North Shore, have historically been used for agricultural purposes. State land use districts and county land use designations for areas around NCTAMS PAC are shown in Figures 6 and 7. The proposed land acquisition areas are within the State Agricultural land use district, and are identified as “Agricultural and Preservation Areas” by the *City and County of Honolulu Central O‘ahu Sustainable Communities Plan (COSCP)* Urban Land Use Map. The City and County of Honolulu Zoning classifies the lands as “A-1, Restricted Agricultural.”

The *Agricultural Lands of Importance to the State of Hawai‘i (ALISH)* land classification system was developed by the State Department of Agriculture in 1977 to determine the relative agricultural importance of specific property. The ALISH system identifies three broad classes of lands, including “Prime Agricultural Land,” “Unique Agricultural Land,” and “Other Important Agricultural Land.” Most of the lands within the alignment of the proposed access road and roadway improvements are designated as “Unique Agricultural Land.” Lands within the proposed utility improvements are designated as “Prime Agricultural Land.” ALISH classifications are shown in Figure 8.

The *University of Hawai‘i Land Study Bureau’s (LSB) Detailed Land Classification (1972)* classifies soils by land type in which classifications are provided for an overall crop productivity rating, with and without irrigation, and for selected crop productivity ratings for seven crops. LSB overall ratings range from A to E, with A being the highest productivity and E the lowest. The LSB classifications are shown in Figure 9. The majority of the soils in the proposed land acquisition areas are classified as Class B, while less productive soil types are found within the gulches.



**State Land Use District Classifications**

**Figure 6**

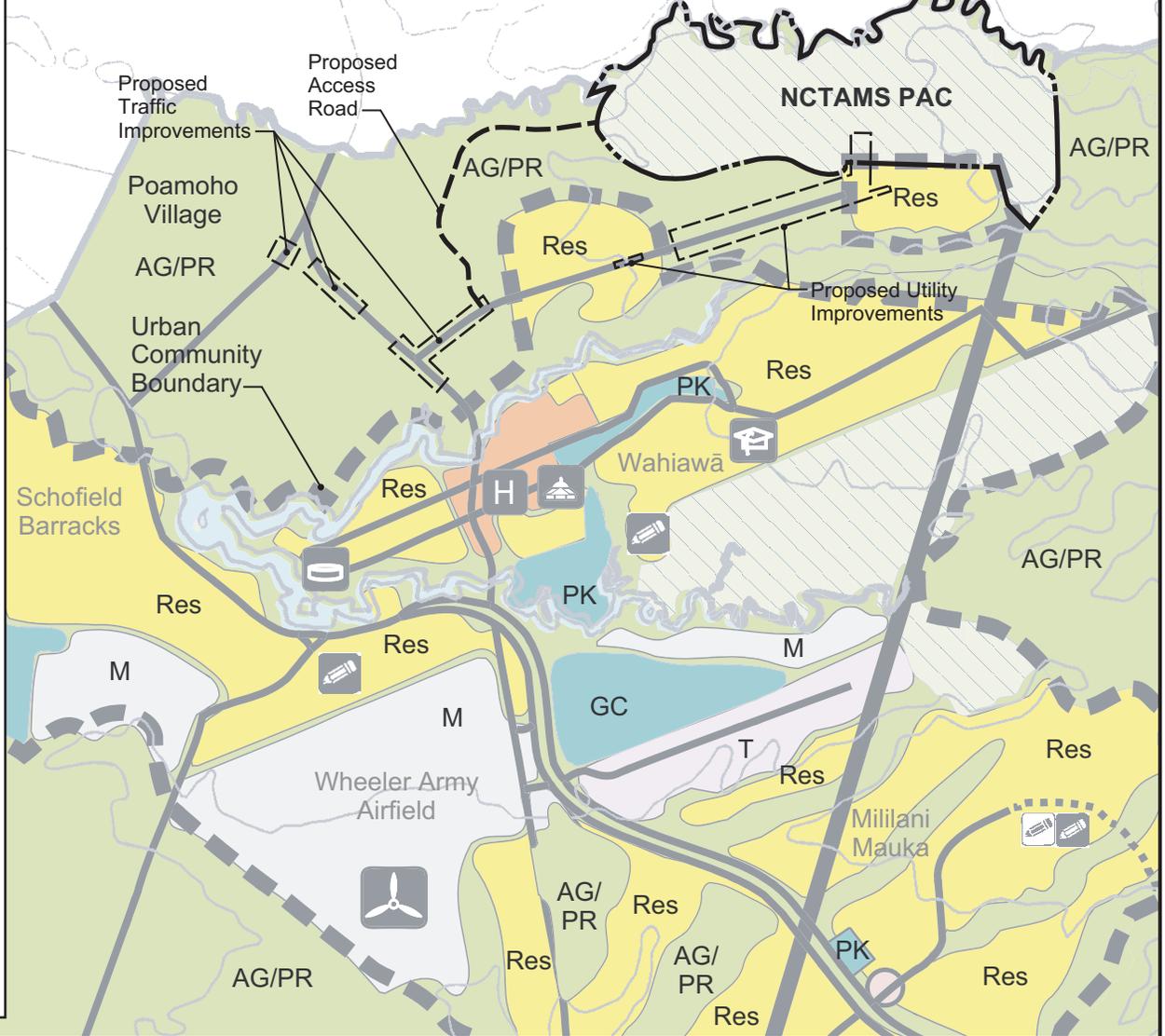
Hawaii Regional Security Operations Center EA  
O'ahu, Hawai'i

**CENTRAL OAHU  
SUSTAINABLE COMMUNITIES PLAN  
Map A2: Urban Land Use**

- |   |   |
|---|---|
|  | Residential and Low Density Apartment           |
|  | Medium Density Residential/Commercial Mixed Use |
|  | Regional Town Center                            |
|  | Technology Park                                 |
|  | Medical Park                                    |
|  | Industrial                                      |
|  | Military  |
|  | Parks and Golf Courses                          |
|  | Agriculture and Preservation Areas              |
|  | Military Training Area                          |
|  | Institutional                                   |
|  | Urban Community Boundary                        |
|  | Wetland   |
- 
- |   |   |  |
|---|---|--|
| <b>EXISTING</b>   | <b>FUTURE</b>   |  |
|  |  | Community Commercial Center                  |
|  |  | Major Community Commercial Center            |
|  |  | Regional Commercial Center                   |
|  |  | Highways, Arterial & Major Collector Streets |
|  |  | Transit Node (Medium Density Res. and Comm.) |
|  |  | Intermediate School                          |
|  |  | High School                                  |
- 
- |   |   |                            |
|---|---|----------------------------|
| <b>EXISTING</b>   | <b>FUTURE</b>   |                            |
|  |  | Civic Center               |
|  |  | Hospital                   |
|  |  | Cemetery                   |
|  |  | Correctional Facility      |
|  |  | Wastewater Treatment Plant |
|  |  | U.H. Leeward Comm. College |
|  |  | Airfield                   |

Department of Planning and Permitting  
City and County of Honolulu  
December 2002

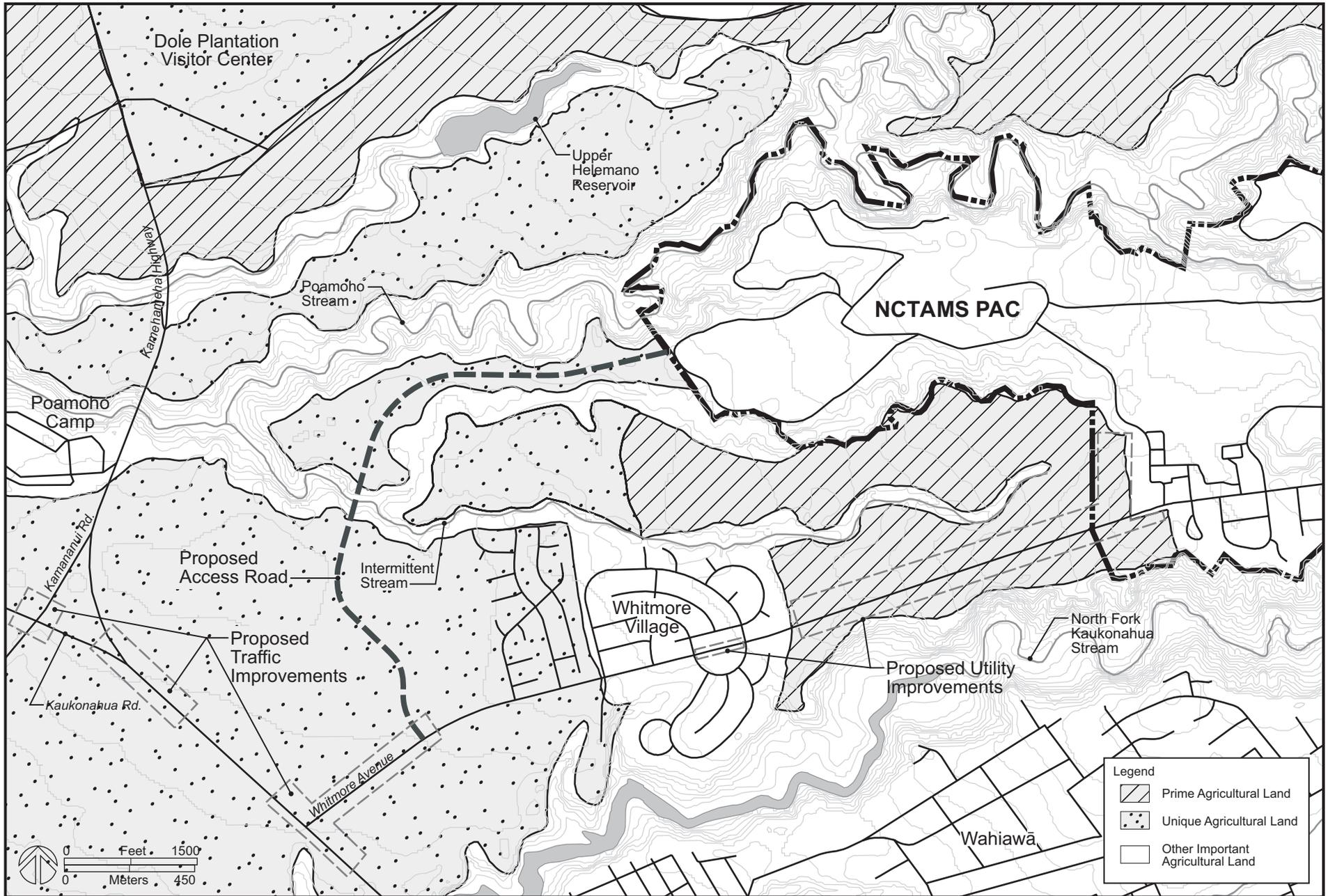
NORTH SHORE  
SCP AREA



3-4

**Central O'ahu Sustainable Communities Plan**  
**Hawaii Regional Security Operations Center EA**  
O'ahu, Hawai'i

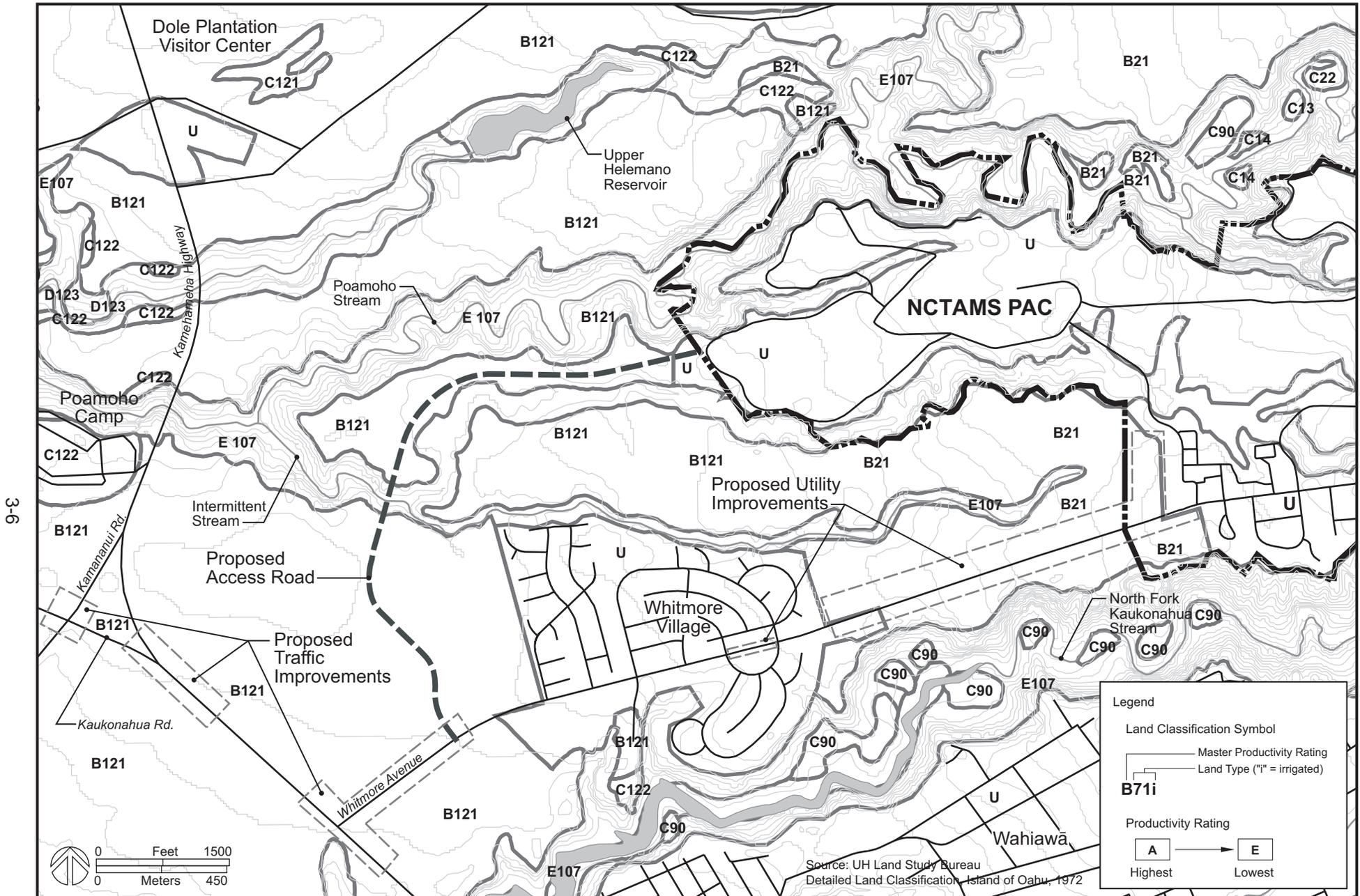
**Figure 7**



**Agricultural Lands of Importance to the State of Hawai'i**

**Figure 8**

Hawaii Regional Security Operations Center EA  
O'ahu, Hawai'i



**Land Study Bureau Soil Conditions**

**Figure 9**

Hawaii Regional Security Operations Center EA  
O'ahu, Hawai'i

### 3.2.2 Kunia

Lands along both sides of Kunia Road in the vicinity of the Modernization/Expansion Alternative, excluding the KRSOC installation, are currently used for active pineapple cultivation. As demonstrated by State and County land use policies, these lands are intended for long-term agricultural production. The lands are within the State Agricultural land use district, and are ALISH-designated "Prime Agricultural Land." The LSB classifications rate the soils as Class B. The *City and County of Honolulu COSCP* Urban Land Use Map recognizes the lands as "Agricultural and Preservation Areas," and the lands are zoned "A-1, Restricted Agricultural."

## 3.3 Cultural Resources

### 3.3.1 Historic Properties

The NHPA defines historic property as "any prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion in the NRHP..." (16 USC 470w). The categories of historic properties considered in this EA are archaeological sites, properties of traditional cultural significance and historic facilities.

#### 3.3.1.1 NCTAMS PAC

The Proposed Action would require the demolition of the existing CDAA to make room for the parking lot and main facility. The now decommissioned CDAA and its associated operations building, Building 294, were constructed in 1963 as part of the worldwide CLASSIC BULLSEYE stations. The CLASSIC BULLSEYE network was part of the Department of Defense Worldwide High Frequency Direction Finding (HF-DF) System for strategic intelligence collection and emitter location. The HF-DF system intercepts and locates voice and message traffic transmitted on short-wave channels.

The CLASSIC BULLSEYE station at NCTAMS PAC is similar, if not identical, to other stations established worldwide. It consists of the AN/FRD-10 CDAA, or what is popularly known as an "elephant cage" or "dinosaur cage," and an operations building in the center of the arrays. Typically, the arrays consist of two rings of high frequency antennae with a nominal range between 93 and 3107 miles (150 and 5000 km). The inner ring, measuring approximately 755 feet (230 m) in diameter with about 40 folded dipoles, is for monitoring longer wavelength signals. The outer ring measures approximately 850 feet (260 m) in diameter, contains about 120 sleeve monopoles, and monitors shorter HF wavelengths. The station's intercept operators worked out of the operations building (Building 294). The CDAA has not been operational since early August 2004 when the last user of the antenna shifted operations to a replacement system.

Neither the CDAA nor Building 294 have exceptional importance or meet the NRHP eligibility criteria for historic significance.

No archaeological research has been conducted within the agricultural fields located west of NCTAMS PAC, due to the long utilization of the region for pineapple cultivation. Those surveys which have been conducted in the general area have found little to no evidence of pre-contact settlement, due to historical and modern activities. This was

particularly true on the east side of the central plateau, where pineapple cultivation was more intensive. The one exception was found by Fankhauser, while investigating a portion of the Helemano Military Reservation far north of the proposed project site in 1987. Fankhauser (1987) found the remains of a subsurface earth oven, or *imu*, exposed by irrigation pipe trenching. The site was recorded as Bishop Museum Site 50-0a-D5-17 and State Site 50-80-04-1971. Finding only one site in two kilometers of trenching led Fankhauser to conclude that there is very “low subsurface site density for this area” (1987). Research by Tomonari and Tuggle (2004), and two surveys of NCTAMS PAC (Nees, 1995; Landrum *et al.*, 1997) confirmed the absence of any other archaeological sites in the area.

An archaeological assessment survey of the two primary gulches (Poamoho and Kaukonahua) (NAVFAC Pacific, Environmental Planning Division, 2003) and additional survey and archaeological testing in the vicinity of the proposed access road project site, utility corridors and Building 294 relocation site (NAVFAC Pacific, 2004 and 2005) found no evidence of significant archaeological sites. The only cultural materials discovered were found in two of the gulches, and included concrete rubble, manholes, old cars, and modern refuse.

Archival research and an ethnographic survey within the vicinity of the proposed land acquisition areas identified no places of traditional cultural importance to Native Hawaiians (NAVFAC Pacific, 2005). The closest known place, on the north side of the north branch of Kaukonahua Stream and to the south and west of NCTAMS PAC approximately 2 miles (3.2 km) from the NCTAMS PAC project site, is Kūkaniloko, a traditional birthing place which McAllister described as “one of the two famous places in the Hawaiian Islands for the birth of children of *tapu* chiefs” (McAllister, 1933). This tradition is believed to have been established at Kūkaniloko sometime during the 14<sup>th</sup> or 15<sup>th</sup> century by the chief Nanakaoko and his wife, for the birth of their son Kapawa (Fornander, 1880). Today Kūkaniloko is a state monument managed by the State of Hawai‘i, Department of Land and Natural Resources.

As a courtesy to the organization `Aha Kūkaniloko, led by Mr. Tom Lenchanko (see Appendix B), a site visit was conducted on September 10, 2005 to the proposed access road from Whitmore Avenue. At the proposed gulch crossing, Mr. Lenchanko pointed out that rocks at the bottom of the gulch were probably pushed down during clearing activities for the pineapple cultivation, and that these rocks could have been used as land boundary markers.

Historical records indicate that the *ahupua`a* (land unit) boundary between Wahiawa and Waialua partially follows Poamoho Gulch, which is located to the north of the project area. Historical records also indicate that each district had a *kapu* (taboo) land boundary. In the area of NCTAMS PAC are the markers O`ahu Nui (see Section 3.3.2.1 below) and Helemano. Historical records do not show any such boundary in the unnamed gulch along the proposed access road.

Mr. Lenchanko provided no direct evidence or documentation to confirm the function or importance of these rocks. Regardless of their function, these rocks would not be in their original location, have lost their integrity, and would not qualify as meeting the criteria of eligibility under the NRHP.

In light of this, the Navy has no basis to change its previous determination of “no historic properties affected.”

### 3.3.1.2 Kunia

Building 9 is located within the Modernization/Expansion Alternative project site. This underground bombproof structure was constructed in 1942 and designed to accommodate the assembly and disassembly operations of large bombers, in addition to protecting personnel. A five-foot thick layer of soil, or a sufficient depth to allow pineapple cultivation, covers the structure and provides camouflage.

During World War II, Building 9 was assigned to the Seventh Air Force. Large bombers of the Seventh Air Force such as B-24s, B-17s, and B-26s were serviced there. These bombers were used in major bombing operations in the Mariana Islands, the Philippines, Japan, and Okinawa. Following World War II, the structure was used for ammunition and torpedo storage. It underwent renovations in 1953, and again in 1966 for hardening against chemical, biological, and radiological attacks. In the Vietnam War the building was used as a communications base. Due to these historical associations, Building 9 has been evaluated as eligible for inclusion in the National Register.

The Modernization/Expansion Alternative is located in Kunia, an area documented in legendary, mythical, and historic oral tradition as the location for a number of battles as well as the residence and birthplace for ruling chiefs (PACNAVFACENCOM, 1998). Kunia may have been chosen as a location for battle because it was relatively an open country and the distance from the coast to this inland region provided time for the facing armies to assemble for combat. However, as with the Proposed Action, historical or ethnographic data found no indications of any specific places of traditional cultural importance within the Kunia site.

There are no known archaeological sites in the vicinity of the Modernization/Expansion Alternative. This finding was further confirmed by surveys of the area conducted by PACNAVFACENCOM in 1998 and Roberts *et al.* in 2004, neither of which found any evidence of significant archaeological sites. Furthermore, the history of modern land use has affected the preservation of the archaeological record. The vicinity of the Modernization/Expansion Alternative project site was used heavily for pineapple cultivation since 1900. The agricultural use of mechanized equipment associated with this cultivation has been shown to have impacted industrially cultivated areas and their surroundings (Erkelens and Athens, 1994).

Most of the project site within the Modernization/Expansion Alternative has also been disturbed by the construction of various facilities including support and administrative buildings, an underground facility, parking areas, roads, and recreation areas. Excavations in 1972 found that approximately one third of the KRSOC installation was filled, graded, and paved to serve as an automobile parking lot for the underground facility (Foote *et al.*, 1972). A retaining wall in the southwestern corner of the installation serves as additional evidence of the extensive ground disturbance which has occurred there, in association with the underground facility's construction.

Thus, a century of mechanized agriculture and the World War II-era construction at KRSOC have resulted in the disturbance of most of the surface area, which indicates that presence of archaeological sites within its boundaries is highly unlikely.

### 3.3.2 Chapter 343, Hawai'i Revised Statutes – Cultural Resources

Cultural resources, as used in Chapter 343, HRS, refer to the “practices and beliefs of a particular cultural or ethnic group or groups” (OEQC, 1997). The types of cultural practices and beliefs to be assessed may include “subsistence, commercial, residential, agricultural, access-related, recreational, and religious and spiritual customs (OEQC 1997), and may also include traditional cultural properties or other historic sites that support such beliefs and practices.

A cultural impact assessment study (NAVFAC Pacific, 2005) and review of other relevant survey reports were conducted. The cultural impact assessment study involved interviews with individuals and groups who are knowledgeable about the proposed project area, its resources and traditional uses. Archival research was also used to identify any traditional beliefs and customs. The findings of the cultural impact assessment study are summarized in Section 3.3.2.1 and Section 4.3.2.

#### 3.3.2.1 NCTAMS PAC

**Sacred sites.** Traditionally, Wahiawā is associated with the *Lō Ali'i*, the ancient ruling *ali'i* (chief) of the island of O'ahu. The *Lō Ali'i* include, among others, Ma'ilikukahi, Piliwale, Kūkaniloko and Lale. A site with chiefly association is located in the vicinity, but outside, of the proposed project area. This site was specifically designated for the birth of high ranking children. The Kūkaniloko Birthstones is a designated State Monument and is under the management and control of the Division of State Parks, State of Hawai'i Department of Land and Natural Resources. Sacred drums which announced the birth of an *ali'i* were reportedly kept at a *heiau*, named Ho'olonopahu, which existed near the Kūkaniloko Birthstones. Pineapple cultivation has completely obliterated this *heiau*, as nothing remained from this site during a survey conducted in the 1930s.

Two other sites noted in the cultural impact assessment study are very far away from the project area: the O'ahu Nui and O'ahu Iki Stones. They are presently located in Waikakalaua Stream several miles south of Wahiawā town.

**Streams.** The project area is bounded to the north by Poamoho Stream and to the south by an unnamed gulch. The sides of Poamoho Stream are steep and deep, and water flows throughout the year. The unnamed gulch is dry for most of the year. As indicated in the section above, archaeological surveys in both locations indicate the absence of archaeological sites.

**Trails.** Historical records indicate that major trails that crossed the island intersected near Kūkaniloko. The Waialua Trail to 'Ewa passed through Wahiawā and the trail from Wai'anae Range intersected Waialua Trail near Kūkaniloko. No records indicate historic trails through the project area. The project area currently consists of Navy land, where access is restricted to the public, and pineapple fields where access is controlled by the private owners. Two hiking trails designated by Na Ala Hele, the Poamoho Ridge Trail and the Schofield-Waikane Trail, do not traverse any portion of the project area.

**Plant and Animal Resources.** The botanical and faunal survey in the project area identified potential resources that have cultural or recreational uses. *'Uhaloa (Waltheria indica)* is a native plant species identified along the edges of the pineapple fields and the upper slopes of the unnamed gulch. This weedy species thrive on disturbed soils so its presence within the project area is not uncommon. Traditionally, *'uhaloa* was used for medicinal purposes. Leaves and inner bark of the root were brewed as tea for sore throat. None of the informants interviewed for the cultural impact assessment study mentioned *'uhaloa*.

The faunal survey identified wild pigs in the unnamed gulch. During archaeological surveys, they were also observed in the thick, tall, unmowed grass along the drainages. Pig hunting today is a recreational activity. None of the individuals interviewed identified wild pigs as resources of importance to them.

**Beliefs.** Accounts of “night marchers” in the vicinity of the project area were mentioned in the interviews. Locations identified as associated with this myth include the Kūkaniloko Birthing Stones and the “Triangle Park” (intersection of Kamehameha Highway, Kamananui Road and Kaukonahua Road). Night marchers are ghost warriors, or *huaka'i po*, of high rank that march on certain nights to welcome new warriors or over old battlegrounds. Traditional accounts require an open space to allow an unobstructed travel for the night marchers.

### 3.3.2.2 Kunia

The Modernization/Expansion Alternative Site in Kunia is located in pineapple fields. It is anticipated that no cultural resources are present due to the extensive alteration to the land as a result of the construction of Building 9, a WWII underground facility. Access to this area is controlled.

## 3.4 Visual Environment

### 3.4.1 NCTAMS PAC

The visual environment in the vicinity of the project site at NCTAMS PAC is characterized by level, undeveloped open areas and the circular profile of the decommissioned CDAA. The CDAA, which stands nearly 90 feet (28 m) tall and approximately 760 feet (232 m) wide (diameter), is the predominant landscape feature, overshadowing both the single-story structures, parking and grassed area inside its footprint and the level, grassed areas and roadways surrounding it.

Views of the project site from within NCTAMS PAC include views from the northeastern portion of the installation looking west towards the Wai'anae Mountain Range and views from the major roadways in the immediate vicinity of the project area. The project area is not visible from the southern “downtown” area where residential and administrative uses are concentrated, except for the view of the CDAA from the southwestern boundary of the installation, due to the natural topography and steep gulch that divides the northern section of the installation from the southern section and the tree canopy that screens views looking towards the north.

Views of the project site, or more specifically the tall poles and framing that form the CDAA profile, along with a panoramic backdrop formed by the Ko'olau Mountain Range, are visible from neighboring, off-base areas to the north, south, and west of NCTAMS PAC, including Kamehameha Highway, Whitmore Avenue, and the neighboring Dole Plantation Visitors Center. Looking towards the Ko'olau Mountain Range from these vantage points, both the CDAA and satellite receiver facilities sited within the northeastern portion of the installation appear beyond the pineapple fields at the top of a narrow plateau. Existing overhead utility lines run along Kamehameha Highway and the north side of Whitmore Avenue. The *COSCP* (City and County of Honolulu, 2002) identifies "views of the Wai'anae and Ko'olau Mountains from Kunia Road, Kamehameha Highway, and H-2 Freeway" as significant views and vistas, which should not be blocked by development.

### 3.4.2 Kunia

The Modernization/Expansion alternative site is located west of Kunia Road on land currently cultivated in pineapple. The visual environment in the vicinity of the project area is characterized by pineapple fields and farming equipment dotted by aboveground utility poles and overhead lines. Although the landscape is predominately agricultural in nature, a cluster of satellite receiver facilities and several warehouse buildings and storage tanks are also visible.

Looking from Kunia Road towards the southwest and from the project area, there is a panoramic view of the Wai'anae Mountains. The *COSCP* (City and County of Honolulu, 2002) identifies this view as a significant scenic resource that should be retained.

## 3.5 Traffic

### 3.5.1 NCTAMS PAC

A traffic study was conducted to analyze existing conditions and the impacts of the Proposed Action on roadways surrounding NCTAMS PAC and the regional transportation network (Julian Ng, Inc., 2005). The findings of the traffic study are summarized in this section and in Section 4.5. Figures 1, 2 and 3 show the roadways and base entry control points described in this section.

**Levels of Service:** The main effects of additional project-related traffic would occur at roadway intersections. The results of traffic analyses are presented using the "level of service" concept. The analyses estimated average delays based on intersection configuration, traffic volumes, traffic characteristics, and other factors.

These delays are related to the levels of service. Six levels of service, ranging from "A" to "F" are used; Level of Service A describes free flow with no congestion or delay while Level of Service F describes congested conditions and excessive delays. Level of Service B describes a condition that is not free flow, but delays or restrictions to maneuvering are minimal. Some restriction to flow and reasonable delays at intersections are described by Level of Service C. Level of Service D describes conditions in which long delays occur at intersections and travel on roadway segments appear congested, but flow is stable. Level of Service E describes near-capacity

conditions, with very long delays at intersections and flow on roadways are heavy and approach instability. Level of Service F represents excessive delays at intersections.

Peak hour conditions described by Level of Service C or better are typically considered acceptable for rural areas. Level of Service D or better conditions are considered acceptable in urban areas. The roadways analyzed as part of the traffic study are within the urbanized area of O'ahu.

### 3.5.1.1 NCTAMS PAC Internal Roadways

The internal road network at NCTAMS PAC consists of a main thoroughfare that extends from the base entry control point (Whitmore Avenue connection with Center Street) and a secondary roadway loop that provides access from Center Street to the antennae fields and satellite receiver facilities to the north (Figure 3). Immediate access to the project site is via Saipan Drive and Polaris Drive. Saipan Drive, a two-lane roadway approximately 25 feet (7.6 m) wide, is the most direct route between the project site and the southern section of the installation. Polaris Drive a two-lane roadway approximately 25 feet (7.6 m) wide provides access to the project site from the east. On-base traffic in the vicinity of the project site is light.

### 3.5.1.2 Public Roadways and Intersections

Major roadways that would be affected by the Proposed Action include Whitmore Avenue (State Route 7012), Kamehameha Highway (State Route 80), Kaukonahua Road, Kamananui Road (State Route 99), and Wilikina Drive. Kaukonahua Road and Wilikina Drive are City-owned roadways, and the other roadways are State-owned. These roadways are described below. Other regional roadways in the area include Kunia Road (State Route 750), and Interstate Route H-2. Regional roadways are two-lane roadways, and the Interstate Route H-2 is a six-lane divided highway.

**Whitmore Avenue.** Access to NCTAMS PAC is via Whitmore Avenue, a two-lane State-owned roadway within a 60-ft (18-m) wide ROW that bisects the civilian residential community of Whitmore Village (Figure 2). Whitmore Avenue begins at a signalized intersection with Kamehameha Highway, and extends eastward for approximately 2 miles (3 km) before terminating at the base entry control point to NCTAMS PAC. The posted speed limit on Whitmore Avenue is 25 miles (40 km) per hour. As it passes through Whitmore Village, Whitmore Avenue is primarily residential in nature. The two intersections of Whitmore Avenue and 'Ihi 'Ihi Avenue are controlled by four-way stops, with pedestrian traffic from the surrounding residential community crossing Whitmore Avenue to access recreational facilities fronting Whitmore Avenue. The DOT Highways Division estimates that the average daily traffic volumes in 2002 were 7,671 vehicles per day on the lower segment of Whitmore Avenue (west of Whitmore Village) and 2,556 vehicles per day on the upper segment (east of Whitmore Village). Since Whitmore Avenue terminates at NCTAMS PAC, vehicular traffic east of Whitmore Village is installation-related. It is estimated that Whitmore Avenue accommodates approximately 1,200 NCTAMS PAC personnel trips daily, including family housing and bachelor quarters occupants and military and civilian staff. Traffic in the vicinity of the installation is light with peak periods occurring during the morning and evening shift changes. An estimated 220 vehicles enter and 75 vehicles exit NCTAMS PAC during the AM peak

hour, and 75 vehicles enter and 170 vehicles exit the installation during the PM peak hour.

**Whitmore Avenue and Kamehameha Highway Intersection.** Whitmore Avenue intersects Kamehameha Highway at a signalized intersection (Figure 2). From the east, Whitmore Avenue is a two-lane paved roadway with an added right turn lane on the westbound approach. The west leg is a dirt road providing access to the Kūkaniloko Birthstones State Monument site and all movements at the intersection approach share a single lane. Left turn lanes are provided for the northbound and southbound approaches on Kamehameha Highway; in addition, a separate right turn lane is provided on the northbound approach. The traffic signal operates in five phases (separate protected left turns and through movements on Kamehameha Highway and a single phase for Whitmore Avenue) with a maximum observed cycle of 100 seconds.

Turning movement counts were determined from manual counts taken on Thursday, December 16 and Friday, December 17, 2004. Peak volumes were recorded between 0630 and 0730 and between 1530 and 1630. Figure 10 shows the existing peak hour traffic assignments developed from these counts. An estimated 434 vehicles enter and 505 vehicles exit Whitmore Avenue during the AM peak hour, and 538 vehicles enter and 520 vehicles exit the Whitmore Avenue during the PM peak hour.

Application of the analysis procedure for signalized intersections described in the *Highway Capacity Manual* shows Level of Service C conditions during both the AM and the PM Peak Hours. Table 4 summarizes the results of the analyses.

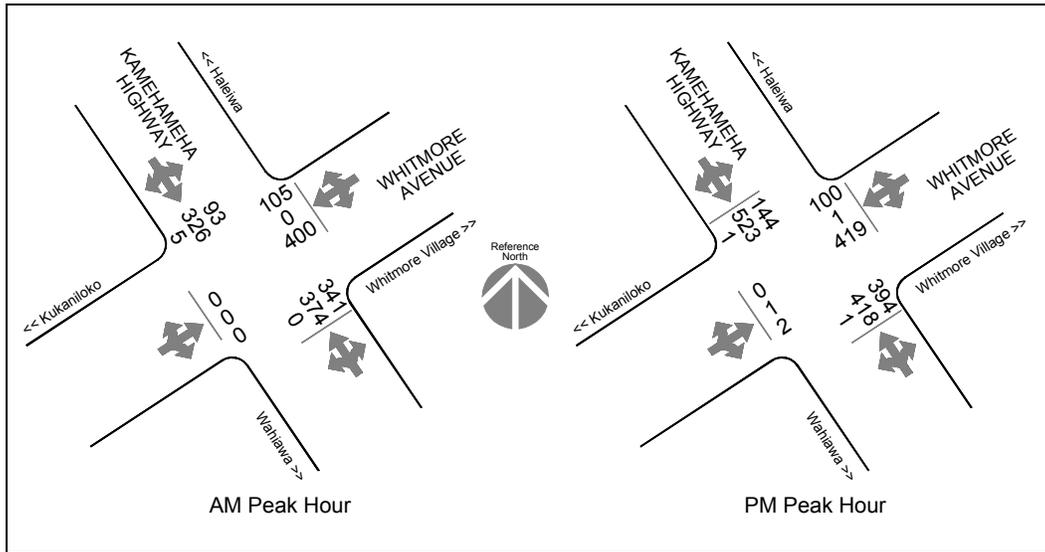


Figure 10 – Existing Traffic at Whitmore Avenue and Kamehameha Highway

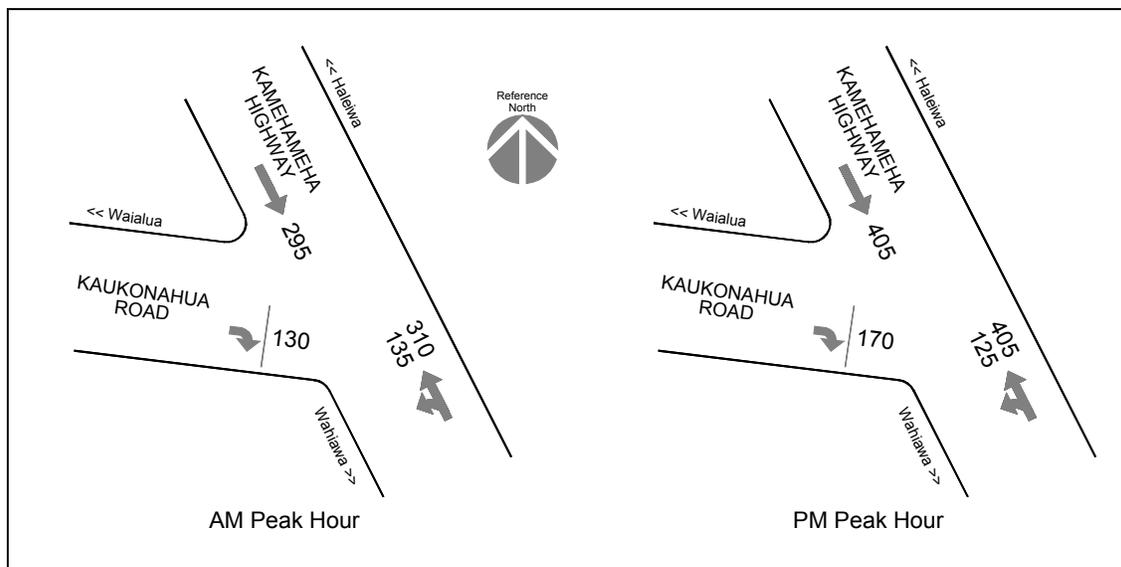
Table 4  
Existing Conditions – Whitmore Avenue and Kamehameha Highway

		AM Peak Hour			PM Peak Hour		
		V/C	ADPV	LOS	V/C	ADPV	LOS
<b>Overall signalized intersection</b>		<b>0.74</b>	<b>28.1</b>	<b>C</b>	<b>0.76</b>	<b>26.7</b>	<b>C</b>
Kamehameha Highway southbound approach	LT	0.50	49.6	D	0.61	51.4	D
	TH/RT	0.47	21.8	C	0.67	25.9	C
Whitmore Avenue westbound approach	LT/TH	0.87	45.8	D	0.86	45.7	D
	RT	0.19	20.8	C	0.17	21.2	C
Dirt road from Kūkaniloko eastbound approach	all	0.00	18.6	B	0.00	19.2	B
Kamehameha Highway northbound approach	LT	0.00	48.0	D	0.03	49.6	D
	TH	0.68	34.1	C	0.71	36.4	C
	RT	0.32	3.4	A	0.34	4.1	A
V/C = volume-to-capacity ratio				LT = left turn			
ADPV = average delay per vehicle, seconds				TH = through movement			
LOS = level of service				RT = right turn			

**Intersection of Kamehameha Highway and Kaukonahua Road.** Kaukonahua Road terminates at an unsignalized “Y”-intersection with Kamehameha Highway. Southbound traffic on Kaukonahua Road yields before merging with southbound traffic on Kamehameha Highway; left turns from Kaukonahua Road to northbound Kamehameha Highway are not allowed. Northbound traffic on Kamehameha Highway wishing to turn onto Kaukonahua Road yields to southbound traffic on Kamehameha Highway. Right turns from Kamehameha Highway to Kaukonahua Road are not permitted. The City owns and maintains Kaukonahua Road, and the State owns and maintains Kamehameha Highway. Improvements to this intersection would require coordination with both the State and the City due to the shared jurisdiction.

No field counts were taken at this intersection. However, due to the limitations on turning movements, existing traffic volumes at this intersection were derived from other data. Figure 11 shows the peak hour traffic assignments for this intersection.

Application of the analysis procedure for unsignalized intersections described in the Highway Capacity Manual shows Level of Service C or better conditions during both the AM and the PM Peak Hours. Table 5 summarizes the results of the analyses.



**Figure 11 – Existing Traffic at Kamehameha Highway and Kaukonahua Road**

**Table 5  
 Existing Conditions – Kamehameha Highway and Kaukonahua Road**

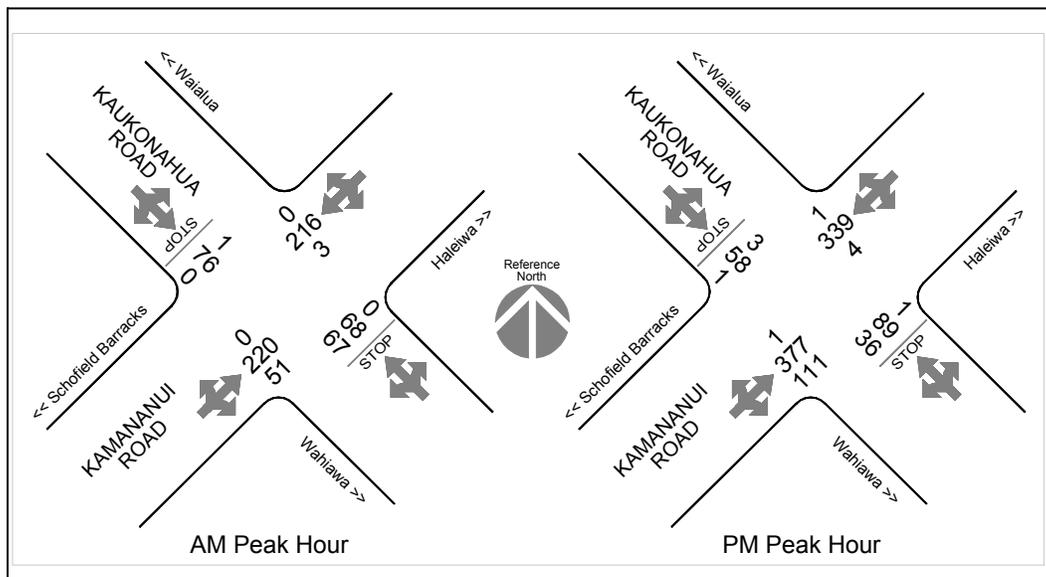
	AM Peak Hour			PM Peak Hour		
	V/C	ADPV	LOS	V/C	ADPV	LOS
Southbound right turns	0.19	11.1	B	0.29	13.1	B
Northbound left turns	0.12	8.3	A	0.12	8.7	A

V/C = volume-to-capacity ratio  
 ADPV = average delay per vehicle, seconds  
 LOS = level of service

**Intersection of Kaukonahua Road and Kamananui Road.** The intersection of Kaukonahua Road and Kamananui Road is an unsignalized cross-intersection of 2 two-lane highways (Figure 2). Flashing lights placed over the intersection warn drivers on all approaches of the crossing. Posted speed limit on Kamananui Road at the intersection is 25 miles per hour (40 km per hour) and traffic approaching from each direction on Kaukonahua Road is controlled by a stop sign. To the southwest, Kamananui Road intersects with Wilikina Drive and provides a link to Honolulu. To the northeast, Kamananui Road intersects with Kamehameha Highway, which serves Hale'iwa. To the northwest, Kaukonahua Road continues into Waialua, and to the southeast, it connects to Kamehameha Highway and Wahiawā. The City owns and maintains Kaukonahua Road, and the State owns and maintains Kamananui Road. Improvements to this intersection would require coordination with both the State and the City due to the shared jurisdiction.

Turning movement counts were taken between 0600 and 0800 and between 1500 and 1700 on Tuesday, May 25, 2004. Peak hours occurred between 0700 and 0800 and between 1530 and 1630. The peak hour volumes shown are the higher of the peak volumes of the two days. Figure 12 shows the existing peak hour traffic assignments developed from these counts.

Application of the analysis procedures for unsignalized intersections described in the *Highway Capacity Manual* shows acceptable conditions during the peak hours. The results of the analyses of existing volumes are shown in Table 6.



**Figure 12 – Existing Traffic at Kaukonahua Road and Kamananui Road**

**Table 6**  
**Existing Conditions – Kaukonahua Road and Kamananui Road**

Unsignalized intersection	AM Peak Hour			PM Peak Hour		
	V/C	ADPV	LOS	V/C	ADPV	LOS
Kamananui Road northeast bound left turn (yields)	0.00	7.8	A	0.00	8.0	A
Kaukonahua Road southeast bound approach (stop sign)	0.24	16.9	C	0.25	22.7	C
Kaukonahua Road northwest bound approach (stop sign)	0.47	23.5	C	0.51	31.3	D
Kamananui Road southwest bound left turn (yields)	0.00	8.0	A	0.00	8.5	A
V/C = volume-to-capacity ratio ADPV = average delay per vehicle, seconds LOS = level of service						

**Intersection of Kamananui Road and Wilikina Drive.** Kamananui Road at its southwestern end forms a T-intersection with Wilikina Drive. Both roadways are two-lane roadways near the intersection (Figure 1). The intersection is channelized and most movements are controlled by a traffic signal. Wilikina Drive to the northwest connects to Kaukonahua Road and provides access to the town of Waialua. Wilikina Drive to the southeast passes two gates into Schofield Barracks and connects to the H-2 Freeway, which provides access to Honolulu. Kamananui Road to the northeast connects to Kamehameha Highway and Hale'iwa. Although the City owns Wilikina Drive north of the T-intersection, the State maintains jurisdiction of Kamananui Road and the intersection with Wilikina Drive. Improvements involving the southbound Wilikina Drive approach would require coordination with both the State and the City.

The approach from the Waialua direction has a single through lane and a separate left turn lane; a single lane departs in that direction. Wilikina Drive from the southeast has a single lane at the signal, from which through movements and right turn movements are made. Approximately 300 feet (90 m) south of the signalized intersection, a single lane departs to the right to provide a direct connection to eastbound Kamananui Road. In this area, a driveway to the left serves a county waste transfer station. Traffic on a short segment of roadway eastbound from the traffic signal is stopped before turning left onto the direct connection.

The Kamananui Road approach from the northeast turns and opens from a single lane into two separate lanes, one for left turns and one for right turns to Wilikina Drive. The traffic signal operates in three phases, with left turns from Wilikina Drive allowed only during a “protected” phase, during which the opposing northbound traffic on Wilikina Drive is stopped. Existing signal cycle lengths vary but are less than 80 seconds per cycle.

Turning movement counts at the intersection of Wilikina Drive and Kamananui Road were taken in the field. Because the primary impact of the proposed project would occur before 0745 in the morning and between 1530 and 1630 in the afternoon, the field

counts were taken between 0600 and 0800 and between 1500 and 1700. Peak hours in 2004 occurred between 0700 and 0800 and between 1530 and 1630. Figure 13 shows the existing peak hour traffic assignments developed from the counts.

Application of the analysis procedures for signalized and unsignalized intersections described in the *Highway Capacity Manual* shows good conditions during the peak hours. Table 7 summarizes the results of the analyses.

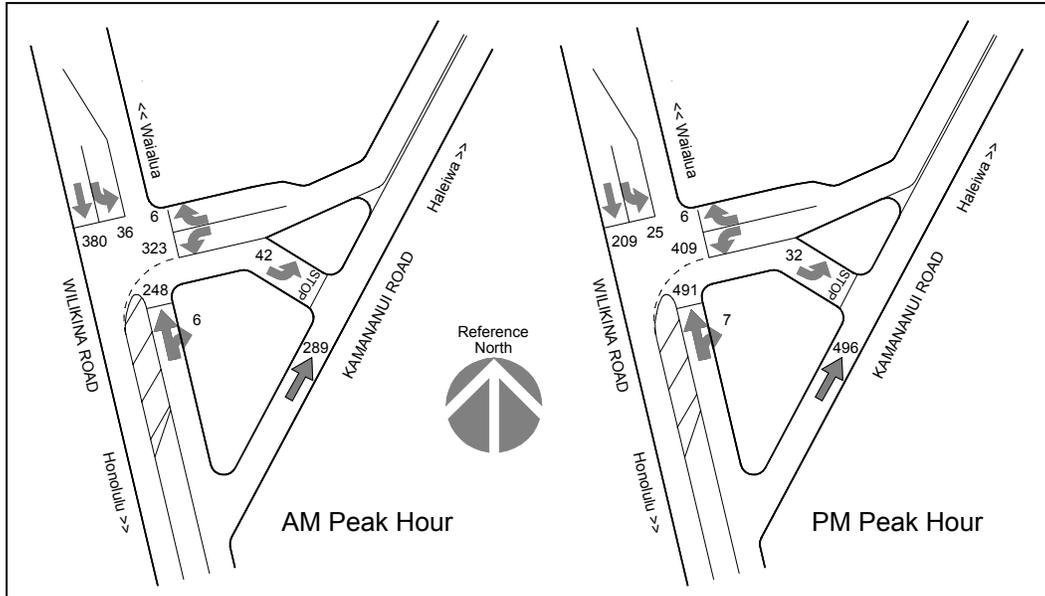


Figure 13 – Existing Traffic at Kamananui Road and Wilikina Drive

Table 7  
 Existing Conditions – Kamananui Road and Wilikina Drive

	AM Peak Hour			PM Peak Hour		
	V/C	ADPV	LOS	V/C	ADPV	LOS
<b>Overall signalized intersection</b>	<b>0.55</b>	<b>17.7</b>	<b>B</b>	<b>0.66</b>	<b>24.9</b>	<b>C</b>
Wilikina Road southeast bound approach	0.48	13.3	B	0.24	15.0	B
Kamananui Road southwest bound approach	0.65	22.4	C	0.65	25.4	C
Wilikina Road northwest bound approach	0.49	18.7	B	0.75	29.1	C
Stop sign to Kamananui Road	0.07	10.8	B	0.07	12.7	B

V/C = volume-to-capacity ratio  
 ADPV = average delay per vehicle, seconds  
 LOS = level of service

### 3.5.2 Kunia

Access to the KRSOC installation is via a signalized intersection along Kunia Road (State Highway 750) (Figures 1 and 5). A loop roadway system connecting the installation entrance and parking areas provides the interior circulation. An unpaved pineapple haul road connecting to Kunia Road approximately 500 feet (150 m) south of the entrance to the installation provides access to the antenna complex and storage tanks located adjacent to the underground facility (Building 9).

## 3.6 Utilities

### 3.6.1 NCTAMS PAC

**Potable Water.** A potable water study was conducted by Hawai'i Pacific Engineers (April 2005) to examine the existing water system at NCTAMS PAC and evaluate alternatives for the Proposed Action. Recommendations from the potable water study are summarized in this section and in Section 4.6.2.

Potable water at NCTAMS PAC is provided by a deep well located within the installation and a connection to the Army Schofield potable water system. The water is stored in two reservoirs, one 450,000-gallon (1.70-million liter [L]) aboveground reservoir and one 200,000-gallon (757,100-L) underground reservoir. The Army Schofield potable water system draws from deep wells at Schofield Barracks. Both the NCTAMS PAC deep well and the Schofield well draw from the Wahiawā aquifer. The Schofield potable water system is in the process of being privatized and is expected to result in the separation of the Army and Navy potable water systems.

The Navy currently notifies the State of Hawai'i Department of Land and Natural Resources, Commission on Water Resource Management (CWRM) that an average of 208,000 gallons per day (gpd) (787,400 liters per day [Lpd]) of water is drawn from the well daily, averaged over one year. The existing NCTAMS PAC deep well pump has a rated capacity of 400 gallons per minute (gpm) (1,514 Lpd) at 1,160 feet (354 m) total dynamic head. However, the actual output is approximately 360 gpm (1,363 Lpm) or a maximum output of 518,400 gpd (1.96 million Lpd). Based on the estimated per capita requirements and the maximum day flow factor indicated in the Navy design standards (*Military Handbook [MIL-HDBK] 1005/7A*), the estimated average daily water demand and maximum day demand for the current population at NCTAMS PAC is approximately 118,000 gpd (446,700 Lpd) and 266,000 gpd (1.01 million Lpd), respectively. The existing potable water system is adequate for the existing demand.

**Wastewater.** A study was conducted by Hawai'i Pacific Engineers (April 2005) to examine the existing wastewater system at NCTAMS PAC and evaluate alternatives for the Proposed Action. Recommendations from the wastewater study are summarized in this section and in Section 4.6.2.

The existing wastewater collection system at NCTAMS PAC consists of gravity sewer lines and force mains ranging from 3-inch (8-cm) to 12-inch (30-cm) in diameter. Sewage is collected at six pump stations located throughout the base. Two pump stations convey wastewater generated on the installation directly to the gravity system, which discharges to the City's wastewater collection system. Wastewater is conveyed

through an 8-inch (20-cm) sewer which increases to a 12-inch (30-cm) sewer along Whitmore Avenue and discharges to the City's wastewater collection system at a sewer manhole located near the intersection of Whitmore Avenue and 'Ihi 'Ihi Avenue. The wastewater is treated at the City-owned Wahiawā Wastewater Treatment Plant and the treated effluent is discharged into Wahiawā Reservoir, also known as Lake Wilson, through a 24-inch outfall at a depth of approximately 40 feet (12 m) below the water level. The Wahiawā facility treats its wastewater at a tertiary level, the highest level for removal of pollutants. The City does not have a NPDES permit for the Wahiawā Wastewater Treatment Plant but is discharging in accordance with the requirements of a consent decree with the State.

The Sewer Service Contract with the City and County of Honolulu currently allows the Navy to discharge an average daily flow of 120,000 gpd (454,200 Lpd) and a peak flow of 642,000 gpd (2.43 million Lpd) of wastewater into the City's wastewater collection system.

**Electrical.** HECO provides electrical power to NCTAMS PAC from its Wahiawā substation through two 12.47 kV overhead feeders on separate pole lines. The voltage is reduced to 4.16 kV by two 3,750/4,690 kVA transformers at the base main substation for distribution throughout the installation. Underground lines preclude interference with radio communications equipment. The standby powerplant contains kV generators to serve as back-up for technical buildings. The Navy is currently preparing an electrical study of the existing electrical distribution system at NCTAMS PAC.

**Communications.** The existing telephone communications system at NCTAMS PAC is owned by the federal government, with service and maintenance provided by Hawaiian Telcom, Inc. All communications lines are routed through underground ducts to preclude interference with radio communications equipment.

**Drainage.** The storm drainage system in the vicinity of the project site and the adjacent agricultural fields is primarily surface drainage. Storm water runoff from NCTAMS PAC currently discharges into Poamoho Stream to the north and the steep ravine bordering the installation to the south. Given the depth of the Poamoho Stream gulch and its small drainage area, overflow during heavy rainfall is unlikely (PACNAVFACENGCOM, 1986). Storm water runoff from the existing pineapple fields follows the gently-sloping east-to-west topography and flows into the low-lying areas and streams. Navy Region Hawaii has an existing individual NPDES permit for the NCTAMS PAC storm drainage system, which authorizes the discharge of storm water from the installation. Water from Poamoho Stream eventually flows into the ocean at Kaiaka Bay approximately nine miles (14 km) downstream.

**Solid Waste.** Solid waste from NCTAMS PAC is collected by private collectors and taken to the municipal H-POWER facility in the 'Ewa plain for conversion into electrical power or to the municipal Waimanalo Gulch Landfill in Leeward O'ahu for landfill disposal.

### 3.6.2 Kunia

**Potable Water.** The Army Schofield potable water system, which is fed by deep wells located on Schofield Barracks East Range, provides potable water to the KRSOC facility. An 8-inch (20-cm) transmission line conveys water to KRSOC. The existing system is adequate for domestic water demands but cannot meet fire protection requirements. A 350,000-gallon (1.33-million L) water tank provides for fire protection water demands.

**Wastewater.** A gravity sewer system serves the installation. The system consists of 6-, 8- and 10-inch (15-, 20- and 25-cm) lines leading to a sewer pump station just below the entrance road. The wastewater is transported through a 6-inch (15-cm) force main to the Schofield Barracks Wastewater Treatment Plant at Wheeler AAF. An agreement with the Waialua Sugar Company (WSC) with the approval of the State of Hawai'i, DOH allows secondary effluent to be discharged into the WSC ditch for irrigation purposes. The Army also has an NPDES permit to discharge effluent into Kaukonahua Stream downstream of the Wahiwā Reservoir during periodic maintenance of the irrigation ditch.

**Electrical.** HECO supplies electrical power to KRSOC via two 46 kV lines. The main substation contains two 5,000 kVA transformers which steps down the 46 kV transmission to the primary distribution voltage of 4.16 kV. A switching center in Building 9 distributes power throughout the station. Emergency power is generated by four diesel generators, each rated at 1,250 KW, 2,400 V, 3 phase with 0.8 power factor (PACNAVFACENGCOM, November 1998).

**Communications.** The telephone system at KRSOC is owned and operated by the federal government with service provided by Hawaiian Telcom, Inc. The existing system is adequate for existing operations.

**Drainage.** Storm water runoff from KRSOC and the adjacent pineapple fields generally flows into Waikele Stream. The storm drainage system on the installation consists of ditches and culverts that direct runoff toward Waikele Stream. A 10-foot by 12-foot (3-m by 3.6-m) concrete box culvert conveys the stream flow beneath Kunia Road. Water from Waikele Stream eventually flows into Pearl Harbor.

**Solid Waste.** An incinerator located on site disposes of classified documents and materials. Conventional solid waste is removed by private refuse contractors (PACNAVFACENGCOM, November 1998).

## 3.7 Flood Hazard

### 3.7.1 NCTAMS PAC

The project is in Zone D (undetermined flood hazard) (Federal Emergency Management Agency Flood Insurance Rate Map [Map Number 15003C0120 E and 15003C0150 E, November 2000]), an area in which no base flood elevations are determined. The project site at NCTAMS PAC is located on a plateau bordered by large gulches. Given the depth of the gulches and the relatively small drainage area above the forest reserve line, flooding during heavy rainfall is unlikely (CNRH, 2001).

### 3.7.2 Kunia

KRSOC is located in Zone D (undetermined flood hazard) (Federal Emergency Management Agency Flood Insurance Rate Map [Map Number 15003C0225 E, November 2000]), an area in which no base flood elevations are determined.

## 3.8 Ground and Surface Water Resources

### 3.8.1 NCTAMS PAC

NCTAMS PAC is located over the central sector of the Wahiawā (or Schofield) aquifer system (CNRH, 2001). The Wahiawā aquifer is a high-level aquifer where fresh water is not in contact with sea water. The aquifer is bound by the dike-impounded systems of the Koʻolau rift zone to the east and the Waiʻanae rift zone to the west. Low permeability features known as groundwater dams separate the Wahiawā aquifer from adjacent freshwater-lens systems to the north and south. The Wahiawā aquifer receives recharge from the adjacent Koʻolau and Waiʻanae rift zones. Water that is not withdrawn from wells flows to the north or south across the northern and southern Schofield groundwater barriers, and recharges the freshwater-lens system in the northern and southern Oʻahu groundwater areas. Groundwater levels within the Schofield area are estimated to be approximately 275 feet (83 m) above mean sea level (MSL) (Oki and Brasher, 2003).

There are no surface water resources within the project site at NCTAMS PAC. Surface water resources surrounding NCTAMS PAC include the streams that drain the upland forest reserve areas. The main tributary of Poamoho Stream follows the northern installation boundary, and the north fork of Kaukonahua Stream runs south of the installation (Figure 2). Poamoho Stream drains into Kaiaka Bay and the Pacific Ocean, and Kaukonahua Stream enters Wahiawā Reservoir (Lake Wilson). The steep, forested gulches that contain the streams are approximately 200 feet (61 m) deep. The *U.S. Fish and Wildlife Service National Wetlands Inventory* classifies the Poamoho Stream gulch as wetlands of “Palustrine System, Forested Class, Broad-leaved Evergreen Subclass, Non-tidal Temporary” type (CNRH, 2001).

Surface water resources found in the project site of the proposed access road consists of an intermittent stream. The intermittent stream originates near the southwestern border of the NCTAMS PAC installation boundary and flows in an east-west direction within the shallow gulch that runs north of Whitmore Village, eventually joining the main tributary of Poamoho Stream.

The USACE has determined that the gulches are considered waters of the U.S. as tributaries to navigable waters. However, because the gulches do not exert an ordinary high water mark, the discharge of dredged or fill material into these gulches will not require a Department of the Army permit under Section 404 of the Clean Water Act. Documentation from the USACE is presented in Appendix E.

Pursuant to Section 303(d) of the Clean Water Act, the State of Hawaiʻi, DOH has identified Water Quality Limited Segments (WQLS) around the State. WQLS are defined as water bodies within the State, which, without additional action to control nonpoint sources of pollution, cannot reasonably be expected to attain or maintain State Water

Quality Standards. The WQLS listing is commonly known as the “303(d) list. Primary pollutants identified by the DOH include nutrients, suspended solids and sediment, turbidity, polychlorinated biphenyls (PCBs), bacteria, and phosphorus. The *Final 2004 List of Impaired Waters in Hawai‘i* identifies Kaiaka Bay as a Category 5 water body, indicating that the water is impaired or threatened and a Total Maximum Daily Loads<sup>1</sup> (TMDL) is needed. However, for State of Hawai‘i, DOH purposes the relevant water bodies for this project are Kaukonahua and Poamoho Streams, neither of which are listed as WQLS.

### 3.8.2 Kunia

Waikele Stream, which originates on the north slope of the Wai‘anae mountain range, enters the installation near the recreation area and exits through a concrete box culvert under Kunia Road, eventually discharging into Pearl Harbor. At this elevation, the stream is not perennial and only flows during the rainy season (PACNAVFACENGCOM, November 1998). Similar to NCTAMS PAC, the KRSOC installation is located above the Wahiaiwā aquifer.

Both Waikele Stream and Pearl Harbor are identified as Category 5 waters according to the *Final 2004 List of Impaired Waters in Hawai‘i*, indicating that the water is impaired or threatened and a TMDL is needed. Pollutants of concern identified in Waikele Stream consist of nutrients and turbidity. TMDLs are currently being developed for Waikele Stream. For State of Hawai‘i, DOH purposes only Waikele Stream is a relevant water body for this project.

## 3.9 Soils and Topography

### 3.9.1 NCTAMS PAC

Soils within the project site for the Proposed Action are generally deep, well-drained, silty clay soils that exhibit suitable properties for agricultural development and engineering applications. According to the U.S. Department of Agriculture Natural Resources Conservation Service (USDA NRCS), soil types include:

- Helemano silty clay, 30 to 90 percent slopes
- Manana silty clay, 2 to 6 percent
- Manana silty clay, 6 to 12 percent
- Wahiaiwā silty clay, 0 to 3 percent slopes
- Wahiaiwā silty clay, 3 to 8 percent slopes

The project site is relatively flat, gently sloping from east to west, with the exception of several shallow gulches and gullies along portions of the proposed access road. Elevations within the project site range from approximately 1,150 feet (350 m) above MSL near the CDAA to approximately 900 feet (274 m) above MSL in the vicinity of Kamehameha Highway. Slopes within the project site are generally in the 0 to 5 percent

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<sup>1</sup> TMDLs are defined as the maximum amount of a given pollutant that may be discharged into a water body from all sources without violating water quality standards.

slope range, with steeper sections near the gulches. The terrain within the NCTAMS PAC installation boundary is generally suitable for development.

### 3.9.2 Kunia

According to the USDA NRCS, the soil type found on the Modernization/Expansion project site is Fill Land, mixed. This soil type consists of areas filled with material dredged from the ocean, garbage or other general materials. Other soil types found at NSGA Kunia include:

- Wahiawā silty clay, 0 to 3 percent slopes
- Wahiawā silty clay, 3 to 8 percent slopes
- Helemano silty clay, 30 to 90 percent slopes
- Kawaihapai clay loam, 2 to 6 percent slopes
- Kunia silty clay, 0 to 3 percent slopes
- Kunia silty clay, 8 to 15 percent slopes

Portions of the installation are located within Waikele Gulch. Elevations within the installation vary from about 760 feet (230 m) above MSL at the entrance from Kunia Road to about 800 feet (245 m) above MSL at the entrance to the underground facility (Building 9).

## 3.10 Biological Resources

### 3.10.1 NCTAMS PAC

The project site at NCTAMS PAC is a developed, landscaped area with communications, administration, transportation, and recreational facilities. Flora and fauna at the project site consist of introduced species typically found within urban landscaped areas. According to the *NCTAMS PAC Integrated Natural Resources Management Plan (INRMP)*, there are no endangered species, critical habitats, natural resource areas, or ecological reserve areas within the installation (2001).

A survey of the NCTAMS PAC installation was conducted to determine the presence of native, rare, threatened and endangered flora and fauna and identify areas of significant native dominated habitat within the installation (CNRH, 2004 and NAVFAC PAC, 2005). The findings of the survey are summarized in this section and in Section 4.10.

No threatened, endangered or candidate listed species protected by Federal and State regulations were found. There are no rare plants within the installation, although some portions of Poamoho Gulch bordering the northern side of the installation are still vegetated in native-dominated forest. This type of lowland native forest is not uncommon, and can be found throughout the gulches in this zone of the Ko'olau Mountains. The fauna survey identified 23 non-native bird species and four mammalian species, including the feral pig (*Sus scrofa scrofa*), Indian Mongoose (*Herpestes auropunctatus*), feral cat (*Felis catus*) and the domestic dog (*Canis familiaris*). No habitat suitable for native birds exists on the installation. The Ko'olau Mountains to the east provide suitable forest bird habitat; however, no native birds have been recorded in the adjacent region in more than twenty years.

An avifaunal and feral mammal survey (Bruner, 2004) and botanical resources survey (Char and Associates, 2004) was conducted and updated (NAVFAC PAC, 2005) for the land acquisition areas outside NCTAMS PAC. The findings of the surveys are summarized in this section and in Section 4.10. The surveys identified no threatened, endangered or candidate listed species protected by Federal and State regulations in the proposed land acquisition areas to the west of NCTAMS PAC. Vegetation in the proposed land acquisition areas is primarily pineapple fields and roadway shoulders. A shallow forested gulch running along portions of the proposed access road supports a mixed second growth forest of predominantly introduced species, and an open area covered with thick mats of California grass (*Brachiaria mutica*). 'Uhaloa (*Waltheria indica*) was the only native species observed. An indigenous species native to the Hawaiian Islands and elsewhere throughout the tropics, 'uhaloa is found sparingly along the weedy margins of the pineapple fields and the uppers slopes of the shallow gulch (Char and Associates, 2004). The avifaunal and feral mammal survey identified 17 species of non-native, introduced birds (Bruner, 2004). No native or migratory birds were observed on the survey, although it is possible that the Hawaiian Owl (*Asio flammeus sandwichensis*) and Pacific Golden Plover or *Kolea* (*Pluvialis fulva*) might occasionally be present in this area. Other terrestrial fauna observed include feral pigs and cats, Indian Mongoose, and Roof Rats (*Rattus rattus*).

### 3.10.2 Kunia

The KRSOC installation is an urbanized, landscaped environment characterized by introduced species. Natural vegetation is confined mainly within the Waikele Gulch area along the northern and eastern edges of the developed area where the support facilities, parking and recreational areas are located. Vegetation in this area includes guava, Christmas berry, *haole koa*, eucalyptus, ironwood, panax, castor bean, colvillea and various grasses. Wildlife habitats at the installation are limited to the grass fields and tree areas. There are no identified endangered or threatened species of flora and fauna within the installation (PACNAVFACENGCOM, November 1998).

Most of the lands at the upper elevations are planted in pineapple crops. An avifaunal and feral mammal survey and botanical resources survey identified no threatened, endangered or candidate listed species protected by Federal and State regulations in the agricultural areas surrounding the installation. Pineapple fields are the dominant vegetation type in this area, although several small uncultivated patches support Kikuya grass (*Pennisetum clandestinum*) and mixed weedy species. Two native species, 'uhaloa (*Waltheria indica*) and *popolo* or glossy nightshade (*Solanum americanum*), were observed on the uncultivated portions of the site (Char and Associates, 2004). Both species are indigenous plants generally associated with some man-made disturbances. The avifaunal and feral mammal survey identified seven species of non-native, introduced birds and one Indian Mongoose (Bruner, 2004).

## 3.11 Air Quality and Noise

The State of Hawai'i, DOH monitors air quality on O'ahu. The air in Hawai'i is relatively clean and low in pollutants. Based on air quality data collected and published by DOH, Hawai'i complies with the standards of the Clean Air Act of 1970, as well as the National Ambient Air Quality Standards and the State Ambient Air Quality Standards for carbon monoxide, nitrogen dioxide, sulfur dioxide, ozone, particulate matter, and lead.

Ambient noise levels at the Proposed Action project site are relatively low, and predominantly a function of the amount of traffic on adjacent roadways and agricultural equipment associated with the adjacent pineapple cultivation operations. Ambient noise levels near the residential neighborhood of Whitmore Village are assumed to be between 45 and 50 A-weighted decibels (dBA), a typical range for a residential community in a rural setting.

Portions of KRSOC are located within the 65 and 75 Day-Night Equivalent Sound Level (DNL) aircraft noise contours<sup>2</sup> from Wheeler AAF (PACNAVFACENGCOM, November 1998). The existing land uses within these contours are considered compatible (e.g., industrial, parking and outdoor recreation). According to OPNAVINST 11010.36B (Table 2 – Suggested Land Use Compatibility in Noise Zones), administrative-type land uses are compatible with some restrictions or noise level reduction requirements. The KRSOC operations facility (Building 9) is below grade and shielded from exterior noise generated by traffic along Kunia Road and overflights from Wheeler AAF.

### **3.12 Aircraft Hazard**

#### **3.12.1 NCTAMS PAC**

NCTAMS PAC and the civilian areas surrounding the installation are not affected by aircraft hazard zones.

#### **3.12.2 Kunia**

Portions of the KRSOC installation are within aircraft hazard zones from Wheeler AAF (Figure 5). Storage and maintenance facilities and parking lots are located within the Clear Zone from Wheeler AAF. This is the area extending 3,000 feet (914 m) beyond the end of the runway, which has the greatest potential for the occurrence of an aircraft accident. The helipad and tunnel entrance to Building 9 are located within the APZ I, the area extending 5,000 feet (1,524 m) beyond the Clear Zone. APZ I represents the area with a higher than normal potential for aircraft accidents and the probable impact area if an air accident were to occur, based on historical accident data.

### **3.13 Hazardous and Regulated Materials**

#### **3.13.1 NCTAMS PAC**

There are no known environmental areas of concern and no Installation Restoration program sites within the NCTAMS PAC project site. An Environmental Baseline Survey of the proposed land acquisition areas found no indication of current environmental conditions that would be a threat to human health and the environment and/or future use

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<sup>2</sup> The noise measure used for assessing aircraft noise exposures in communities is the Day-Night Equivalent Sound Level (DNL), in units of the decibel. DNL is an equivalent sound level generated by all aviation-related operations during an average or busy-day 24-hour period, with the sound levels of nighttime noise events emphasized by adding a 10 dB weighting. The 10 dB weighting accounts for the generally lower background sound levels and greater community sensitivity to noise during night hours. DNL has been found to provide the best measure of long-term community reaction to transportation noises, especially aircraft noise.

of the property for the proposed use (Environet, 2004). Environmental conditions of concern due to the previous use of the property for agricultural production include potential agricultural pesticides and herbicides that may be present in the soil and an agricultural bioremediation demonstration site located on the north side of Whitmore Avenue approximately 0.2 miles (0.3 km) west of the NCTAMS PAC base entry control point.

### **3.13.2 Kunia**

Potential areas of concern in the Modernization/Expansion project site include a waste oil disposal site near the existing warehouse (Building 25), surface soil petroleum contamination in the vicinity of the new access roadway, and the site of a 305,000-gallon underground storage tank (UST), formerly located about 300 feet (91 m) east of Building 9. The tank had stored diesel fuel and was removed in 1994 after failing a tightness test. The area around existing exterior transformers may require remediation due to the historical maintenance practice of oil disposal near the transformer. Asbestos-containing material and lead-based paint are present in Building 9.

Soils in the Modernization/Expansion project site may contain chemical residue associated with agricultural production due to the historical use of the site for pineapple cultivation.

The Modernization/Expansion project site is located within the 6,000-acre (2,428-ha) Del Monte Corporation Superfund site (EPA ID# HID9806376341) added to the National Priorities List on December 16, 1994 due to concerns with agriculture-related soil and groundwater contamination. Areas of environmental contamination identified for remediation, including the Kunia Well spill area, are centered around Kunia Camp.

## **3.14 Electromagnetic Radiation and Electromagnetic Interference Hazards**

Electromagnetic Radiation (EMR) generated from transmitter sites and tracking radar may constitute hazards to ordnance, personnel, and fuels or other volatile liquids. In addition, transmitting antennas can cause electromagnetic interference (EMI) or degradation of performance to electronic equipment in nearby areas.

### **3.14.1 NCTAMS PAC**

EMR and EMI concerns at NCTAMS PAC are generally related to the antennae and satellite communications facilities found at the installation. The actual degree of hazard at a specific location varies depending on the type of antennae, radio frequencies transmitted, and the amount of radio frequency energy radiated. Required separation distances and clearances around transmitter facilities are strictly enforced to minimize EMR and EMI risks at NCTAMS PAC.

### **3.14.2 Kunia**

There are no identified hazards from EMR and no concerns for EMI at KRSOC (PACNAVFACENGCOM, November 1998).

### 3.15 Socio-Economic

In 2000, the population of the City and County of Honolulu (in which both the Proposed Action and Modernization/Expansion project sites are located) was 876,156 (State of Hawai'i, 2004, Table 1.06). The estimated population in 2003 for the City and County of Honolulu is 902,704 (State of Hawai'i, 2004, Table 1.06). In 2003, there was an average of 1,950 agriculture and 420,400 nonagricultural jobs in the City and County of Honolulu, including 15,550 jobs associated with the Department of Defense (State of Hawai'i, 2004, Table 12.15).

Both alternative project sites are located within the boundaries of the Wahiawā Neighborhood Board #26, which also includes Schofield Barracks and Wheeler AAF. In 2000, there were 12,115 total housing units in the Wahiawā Neighborhood Board area, with a homeownership rate of 31.6% (State of Hawai'i, 2004, Table 21.20). This is much lower than the O'ahu rate of 54.6%. Total population within the Wahiawā Neighborhood Board #26 area in 2000 was 39,553, which was 11.2% lower than the 1990 population of 44,540. By comparison, between 1990 and 2000, the total population of O'ahu increased by 4.8% (State of Hawai'i, 2004, Table 1.13).

The following sections describe local socio-economic conditions in the vicinity of the alternative project sites. Characteristics for residential communities in the vicinity of the alternative project sites are shown in Table 8.

**Table 8  
Social and Economic Characteristics**

	<b>Whitmore Village*</b>	<b>Kunia Camp*</b>	<b>Honolulu County</b>
Total Population	4,057	577	876,156
White	5.1%	4.2%	21.3%
Black	0.4%	1.4%	2.4%
Native American	0.1%	0.0%	0.2%
Asian	65.9%	74.5%	46.0%
Native Hawaiian/Pacific Islander	6.5%	4.2%	8.9%
Some other race	1.0%	0.9%	1.3%
Two or more races	21.0%	14.9%	19.9%
Total Households	940	128	286,450
Average household size	4.28	4.34	2.95
Income by Household			
Median Household Income	\$52,308	X	\$51,914
Less than \$15,000	9.4%	X	7.2%
More than \$75,000	29.9%	X	37.0%
Per Capita Income	\$14,315	X	\$21,998
% of Population Below Poverty Level	11.1%	X	9.9%

\* Whitmore Village CDP and Kunia Camp Block Group 1, Census Tract 86.03

(X) Not available for Block Group

Source: U.S. Census Bureau, 2000

### 3.15.1 NCTAMS PAC

The civilian community closest to NCTAMS PAC is the Whitmore Village neighborhood, approximately one mile (1.6 km) from the installation. In 2000, the population of the Whitmore Village Census Designated Place (CDP) was 4,057 (U.S. Census Bureau, 2000). The majority of the population was Asian (65.9%), with smaller percentages of Native Hawaiian or Pacific Islander (6.5%) and White (5.1%) populations. The average annual per capita income was \$14,315, significantly less than the average per capita income of \$21,998 for Honolulu County. There were 991 housing units in the Whitmore Village CDP in 2000, with about two-thirds owner-occupied units. Of the 940 households in the Whitmore Village CDP, the median annual income was \$52,308 and the average household size was 4.28, as compared to the median annual household income of \$51,914 and the average household size of 2.95 for Honolulu County. Whitmore Village has limited retail establishments and is surrounded by agricultural lands.

The town of Wahiawā is located approximately three miles (5 km) south of NCTAMS PAC. In 2000, the population of the Wahiawā CDP was 16,151 (U.S. Census Bureau, 2000). The median annual household income was \$41,257, and the average household size was 2.97. The average annual per capita income in the Wahiawā CDP (\$16,366) was somewhat less than the Honolulu County average annual per capita income of \$21,998, although the percentage of the population in the Wahiawā CDP that fell below

the poverty level (16.7%) was considerably higher than the overall county percentage of 9.9 %.

Wahiawā has retained a small town scale and its residential areas have a rural character, with typically larger lots and lower densities. The town's retail and commercial establishments rely heavily on business from the nearby military installations of Schofield Barracks, Helemano Military Reservation and NCTAMS PAC, as well as visitors traveling to the North Shore of O'ahu. There are also State and County offices in Wahiawā, which serve both Central O'ahu and North Shore communities. According to the *U.S. Census Bureau, North American Industry Classification System*, there were an estimated 287 business establishments operating in the Wahiawā area in 2002, employing a total of 3,341 persons. Of the 287 establishments, approximately 60% were retail trade, health care and social assistance, accommodations and food service, or other service establishments (i.e., repair and maintenance, personal and laundry services and religious/civic/professional organizations). Of the total businesses in Wahiawā, nearly 50% of the establishments employed less than four employees each, 21% employed between five and nine employees each, and 25% employed between 10 and 49 employees each.

### **3.15.2 Kunia**

The civilian residential community closest to KRSOC is Kunia Camp, about one mile (1.6 km) south of the installation. It is a plantation village surrounded by agricultural lands cultivated in pineapple, consisting of 134 housing units. It has substantially retained the character and ambiance of a traditional agricultural camp. Nearly all (98%) of the occupied units are renter occupied.

In 2000, the total population of Kunia Camp was 577 (U.S. Census Bureau, 2000). Approximately 75.0% of the population was Asian, with smaller segments of Native Hawaiian/Pacific Islander (4.2%) and White (4.2%) populations, as compared to Honolulu County, which was 46.0% Asian, 8.9 % Hawaiian/Pacific Islander, and 21.3% White. Of the 128 total households in Kunia Camp, the average household size was 4.34 persons, significantly higher than Honolulu's average household size of 2.95.

## 4.0 ENVIRONMENTAL CONSEQUENCES

### 4.1 Overview

This chapter evaluates the potential environmental consequences associated with the Proposed Action, the Modernization/Expansion Alternative, and the No Action Alternative. The probable direct, indirect, short-term, long-term and cumulative impacts of the Proposed Action and alternatives on relevant environmental resources are discussed.

Environmental consequences of the Proposed Action and Modernization/Expansion Alternative are expected to be limited to the local and/or regional setting. There should be some measurable benefits at the islandwide level due to the beneficial economic effects associated with new construction and an increase in operational period employment levels.

### 4.2 Land Use Compatibility

#### 4.2.1 Proposed Action

The Proposed Action is compatible with the communications activities currently located at NCTAMS PAC. It would replace the decommissioned CDAA, formerly a passive communications support facility, to maximize the use of Navy-owned lands. Although the density and the intensity of land use would increase, the existing use of the project site for communications-related functions would not change. Activities associated with the Proposed Action would be largely administrative in nature. The facilities and associated activities would be conducted wholly within the military installation, in an isolated area approximately 0.5 miles (0.8 km) from the installation boundary. As such, the Proposed Action would not impact surrounding areas or uses.

Construction of the proposed access road and roadway and utility system improvements would require either Navy acquisition of private property currently owned by the George Galbraith Trust Estate, Castle and Cooke Homes Hawai'i, Inc., and Dole Food Company, Inc., or real estate agreements with the State and City. The Proposed Action would result in the permanent withdrawal of approximately 35 acres (14 ha) of privately-owned land within the State Agricultural land use district (Figure 6). With the exception of the gulch areas, approximately 95 percent of the lands identified for the proposed access road and roadway and utility system improvements are rated B-lands by the Land Study Bureau (Figure 9) and are classified as either prime or unique agricultural lands according to the *Agricultural Lands of Importance to the State of Hawai'i* system (Figure 8), indicating a high level of suitability for agricultural use. The estimated 35 acres (14 ha) within these areas comprise a relatively small portion of the existing agricultural lands available on O'ahu, representing less than one-tenth of one percent of the 129,000 acres (52,200 ha) of State Agricultural lands on O'ahu (State of Hawai'i, 2003) and less than one-half of one percent of the 10,350 acres (4,188 ha) of agricultural lands within Central O'ahu (Department of Planning and Permitting, 2002).

Section 2.1.4 describes the alternatives that were considered for the alignment of the proposed access road. The proposed access road would run through the agricultural lands owned by the George Galbraith Trust Estate east of Kamehameha Highway, removing about 3 acres (1.2 ha), or approximately one percent of its 236.2-acre (95.6-

ha) TMK parcel. Farther east, in the vicinity of lands owned by Castle and Cooke Homes Hawai'i, Inc., the proposed access road would run near the periphery of the usable agricultural areas to preserve the continuity and integrity of the remaining agricultural lands. The property owned by Dole Food Company, Inc. is a shallow, uncultivated gulch with an existing unpaved road running through a portion of the gulch. The Dole Food Company, Inc. property extends to the southeast and forms the eastern border of Whitmore Village.

The proposed access road would function similar to other military access roads in the Central O'ahu region and would be compatible with the surrounding agricultural and residential land uses. Future agricultural use and productivity of the adjoining lands would not be impacted. The Navy has initiated discussions with landowners, and will continue to work with landowners to determine the most efficient alignment of the proposed access road. Real estate agreements would permit use of the access road for activities in support of existing agricultural operations. The proposed access road would be about 1,000 ft (82 m) from the nearest homes in Whitmore Village, connecting to Whitmore Avenue below Whitmore Village more than 750 feet (230 m) to the west of Kahi Kani Neighborhood Park, heading in a northerly direction away from Whitmore Village before turning east into NCTAMS PAC. Although the proposed access road would introduce vehicular traffic to a previously undisturbed area, the proposed access road provides an alternative access route that allows HRSOC personnel and visitors and commercial vehicles to NCTAMS PAC to bypass Whitmore Village. Recreational use of Kahi Kani Neighborhood Park would not be affected by the proposed access road. Residential homes bordering the agricultural fields may experience minor disturbances typical of roadway developments such as increased ambient noise levels, vehicular emissions and the introduction of nighttime, down directed overhead lighting. The proposed potable water booster pump station and associated below grade infrastructure improvements along Whitmore Avenue would not impact surrounding land uses.

The proposed access road would not increase development potential of the remaining agricultural lands. Lands surrounding the proposed access road and utility improvements are currently designated for agricultural use according to both State and county land use classifications. Any urban or residential use not permitted by the existing land use classifications would require the appropriate State and county land use approvals prior to development. Furthermore, the proposed access road would be designed to provide access to a federal military installation, and is not intended to meet public access requirements associated with municipal subdivision standards.

#### **4.2.2 Modernization/Expansion**

Under the Modernization/Expansion Alternative, the Navy would acquire approximately 100 acres (41 ha) of land from the State of Hawai'i and the Estate of James Campbell, and approximately 30 acres (12 ha) would be transferred from the U.S. Army. This alternative would permanently withdraw an estimated 90 acres (36 ha) of agricultural lands from agricultural production for military use. These lands, which are within the State Agricultural land use district, are State-designated prime agricultural land (ALISH, 1977) and B-rated Land Study Bureau lands. The approximately 90 acres (36 ha) that would be withdrawn from agricultural production represent less than one-tenth of one percent of the 129,000 acres (52,200 ha) of State Agricultural lands on O'ahu (State of Hawai'i, 2003) and less than one percent of the 10,350 acres (4,188 ha) of prime agricultural lands within Central O'ahu (Department of Planning and Permitting, 2002).

Since the lands identified for acquisition are concentrated at the periphery of the agricultural lands, the continuity and productivity of the remaining agricultural lands would not be impacted. Although this alternative would require a change in land use, the KRSOC is an existing military activity established within the area that has been compatible with the surrounding agricultural land use.

### **4.2.3 No Action**

Under the No Action Alternative, the new HRSOC facility would not be constructed and the existing KRSOC installation would not be modified, thereby resulting in no impact to land use compatibility.

## **4.3 Cultural Resources**

### **4.3.1 Historic Properties**

For the purposes of this analysis, significant historic resources are those properties listed or eligible for listing in the NRHP. As defined in the implementing regulations for Section 106 of the NHPA, impacts of an undertaking on significant cultural resources are considered adverse if they “diminish the integrity of the property’s location, design setting, materials, workmanship, feeling, or association” (36 CFR § 800.5 [a][1]). Examples of adverse effects include, but are not limited to, the following:

- Physical destruction, damage, or alteration of all or part of the property;
- Isolation of the property from, or alteration of the character of, the property’s setting when that character contributes to the property’s qualification for listing on the NRHP;
- Introduction of visual, audible, or atmospheric elements that are out of character with the property, or alter its setting;
- Neglect of a property resulting in its deterioration or destruction; and
- Transfer, lease, or sale of the property (36 CFR § 800.5[a][2]).

#### **4.3.1.1 Proposed Action**

In compliance with Section 106 of the NHPA, the Navy has consulted with the State Historic Preservation Officer (SHPO) and other consulting parties. The SHPO has concurred with the Navy’s determination that the Proposed Action would have no effect on historic properties. Correspondence related to the Section 106 consultation process is provided in Appendix A.

The site visit with the organization ‘Aha Kūkaniloko on September 10, 2005 provided no new information that would lead the Navy to change its previous determination of “no historic properties affected.”

Although the probability is very low, in the event that cultural resources are encountered during construction work, the procedures defined in the Discovery Plan in Appendix G will be followed.

#### 4.3.1.2 Modernization/Expansion

Under the Modernization/Expansion Alternative, the required alterations to Building 9, a property deemed eligible for inclusion in the NRHP, could adversely affect this historic property. Section 106 consultations would be carried out to identify ways to minimize or mitigate potential adverse effects.

#### 4.3.1.3 No Action

The No Action Alternative would not impact historic properties since no structures would be demolished or renovated and no new construction would take place.

### 4.3.2 Chapter 343, Hawai'i Revised Statutes - Cultural Resources

**Sacred sites.** The Proposed Action would have no significant impact on the Kūkaniloko Birthstones State Monument. The proposed access road to the HRSOC would be located away from the access to the site and would not impede the traffic leading to or from the State Monument. There were no sites identified in the archaeological survey of the proposed access road. As for visual impact of the proposed HRSOC operations building from the site, the proposed facility would be limited to two stories high and constructed in an area currently occupied by an existing antenna facility. From the view of the Kūkaniloko Birthstones site, the proposed facility would blend in with other buildings at Whitmore Village, such as the Helemano Elementary School. The steel antenna tower in the middle of the HRSOC operations building, which is approximately 70 feet (21 m) high from the roofline and tapers to a monopole, would be minimally visible from the State Monument.

**Streams.** The Proposed Action would have no impact on streams. None of the proposed infrastructure such as roads or utilities would go through Poamoho Stream. The proposed access road would cross over the unnamed gulch and through an intermittent stream. There are no cultural resources identified in the proposed location of the access road.

**Trails.** The Proposed Action would not impact any historic or designated hiking trails.

**Plant and Animal Resources.** There would be no significant impact on the *`uhaloa*, the native plant identified in the area of the Proposed Action. These plants grow in other locations with disturbed soils. The proposed access road over the unnamed gulch would have beneficial impact on pig hunting. Although there is no pig hunting allowed inside the NCTAMS PAC property and pig hunting was not mentioned by individuals or groups interviewed for the cultural impact assessment study, this new access road would provide access to potential hunting areas.

**Beliefs.** The Proposed Action would not impact the myth of the "night marchers." Triangle Park and Kūkaniloko Birthstones, the two locations that informants mentioned as being associated with this belief, are well outside of the project area limits. There are no proposed facilities within the range of these locations that could be physical obstructions during travels of the "night marchers." The proposed HRSOC facility and other support facilities would be located in areas that have either existing facilities or were previously developed.

Although the probability is very low, in the event that cultural resources are encountered during construction work, the procedures defined in the Discovery Plan in Appendix G will be followed.

## 4.4 Visual Environment

### 4.4.1 Proposed Action

The Proposed Action would construct new administrative and communications facilities on Navy property currently surrounded by agricultural and conservation lands, resulting in changes to the visual environment. Although the project site is isolated, its location near the edge of a plateau make portions of it visible from surrounding public roadways and facilities, including Kamehameha Highway, Whitmore Avenue, the Dole Plantation Visitors Center and Kūkaniloko Birthstones State Monument. The CDAA is a semi-transparent circular structure comprised of cables and wire screens supported by tall towers. The CDAA, measuring approximately 87 feet (27 m) in height, approximately 760 feet (232 m) in diameter and occupying a site area of approximately 454,000 sf (42,200 m<sup>2</sup>), is a very large and familiar landscape feature. In comparison to the semi-transparent façade of the CDAA, the proposed two-story HRSOC operations building would be between 50 and 70 feet (15 and 21 m) tall, with a maximum cross sectional width of approximately 750 feet (230 m) and a footprint of about 160,000 sf (14,900 m<sup>2</sup>). Although the proposed operations building would maintain a narrower cross sectional width and lower profile than the existing CDAA, the building would be clearly visible from neighboring public areas (i.e., Kamehameha Highway, Whitmore Avenue, Dole Plantation Visitors Center) due to the non-transparent character of the building in comparison to the CDAA and the undeveloped, agricultural use of the property surrounding NCTAMS PAC. One-story accessory structures (approximately 25 feet [7.6 m] tall) and satellite receivers (approximately 20 feet [6 m] tall) planned near the HRSOC operations building would also be visible.

Appropriate landscaping and design features (i.e., façade treatments, building materials and color) would be utilized to screen the proposed facilities and blend them into the surrounding backdrop. Although visibility of the new facilities would still be greater than that of existing structures, viewplanes identified by the COSCP would not be obstructed due to the size of the development area in relation to the viewplane. The proposed buildings and satellite facilities would supplement the satellite facilities currently visible from public vantage points. Building envelopes would appear below the top elevation of the existing CDAA, well below the panoramic view of the Ko'olau Mountain Range. In addition, the proposed facilities would be concentrated within a narrow section of the scenic viewplane that is currently occupied by existing facilities.

A new overhead 46 kV power line would be extended into HRSOC by HECO from Kamehameha Highway along Whitmore Avenue and the proposed access road. The line would be placed underground within the installation boundary. The new line would either follow the existing pole alignment along the north side of Whitmore Avenue or would follow a new alignment along the south side of the road and therefore should not impose a significant change to existing views along this corridor. Views from Whitmore Village residential areas and the Kūkaniloko Birthstones State Monument would not be affected. Utility poles and lines along the proposed access road would appear similar to existing utility lines along Whitmore Avenue and Kamehameha Highway. From Kamehameha Highway, utility poles along the proposed access road, which would also

provide for roadway lighting, and the associated utility lines would seem relatively small against the distant HRSOC facility, other structures at NCTAMS PAC, and Whitmore Village homes and therefore would not have a significant visual impact. Roadway and security lighting along the proposed access road and around the new facilities would also be visible from surrounding areas. Down-directed lighting would minimize the visual impact to the nighttime environment. Landscaping and/or berms would be used to prevent headlight glare from vehicles traveling on the proposed access road from affecting adjacent residential areas.

#### 4.4.2 Modernization/Expansion

The Modernization/Expansion Alternative would not impact significant views and vistas identified in the *COSCP*. The new facility, which is planned to be constructed underground, would incorporate a significant entry statement facing Kunia Road, with the parking, building entry, and rooftop satellite receiver facilities visible from Kunia Road. Significant views of the Waiʻanae Mountain Range from Kunia Road would not be obstructed since these views are generally available from areas south of the project site.

#### 4.4.3 No Action

The No Action Alternative would not impact the visual environment.

### 4.5 Traffic

This section is organized into several subsections. Future conditions without project traffic are estimated first to establish the baseline. Project traffic levels are then estimated, and distributed on the roadway network. This “with project traffic” scenario is then compared with the baseline scenario to determine the level of potential impact.

**Future Baseline Conditions.** Traffic volumes on Oʻahu generally have been increasing as population and economic activity increases. Several projects in the Wahiawā area have been identified as possible causes of increased traffic on area roadways. An increase in personnel at U. S. Army bases in the area (Schofield Barracks and Wheeler AAF) is anticipated as deployed troops return and the assigned personnel increase due to the planned transformation of the 2<sup>nd</sup> Brigade, 25<sup>th</sup> Infantry Division to a Stryker Brigade Combat Team. These factors, however, would not be expected to affect peak hour traffic demand, as much of the personnel would be housed on base. The Army’s plans for renovation of off-base housing north of Wahiawā (Helemano) would not change the number of dwelling units and is therefore not expected to affect peak hour traffic volumes. The closure of pineapple plantation activities in the surrounding area would also have minimal impacts to peak hour traffic. Recent actions by the City and County of Honolulu to “save” the village of Poamoho Camp would also not affect peak hour traffic; a related proposal to subdivide the surrounding lands for agricultural park use would not be expected to have significant traffic impact within a ten-year horizon.

The long-range transportation plan for Oʻahu is based on forecasts of population and employment in various districts of the island. The roadways being studied would be mostly affected by changes that would occur in the North Shore district of Oʻahu. For the twenty-five year period from 2000 to 2025, the long-range plan used forecasts of an 11% population increase (1,943 persons) and an 8% decrease in employment in the North Shore district. These changes compare with total island-wide increases of 18% in

population and 31% in employment. Total travel demand islandwide, expressed in daily person-trips, had been predicted to increase by 27% in 25 years (from O'ahu Metropolitan Planning Organization, *Transportation for O'ahu Plan 2025* Final Report, April 2001, Tables 2-5, 2-6, and 2-7).

Therefore, future traffic volumes in the area based on the long-range plan could be expected to increase at no more than 1% per year. Because the specific increases in traffic volumes on Wilikina Drive, Kamananui Road, and Kamehameha Highway due to known projects have not been identified, future baseline traffic assignments for the future year 2010 were developed (for future conditions without the proposed HRSOC project and its related development within NCTAMS PAC), by applying a growth factor based on recent trends, to the existing volumes.

**Historic Trends in Highway Traffic.** Average daily traffic (ADT) on area highways over the last ten years (latest available estimates are for year 2002) was analyzed. On Kamehameha Highway north of Kamananui Road, average daily traffic volume has increased at an average rate of 2% per year, while volumes closer to Whitmore Avenue have remained at the same level. Kamananui Road volumes have increased at average rates of less than 1% per year, while volumes on Wilikina Drive have shown a decreasing trend over the ten-year period from 1993 to 2002. Based on these trends, the 2004 traffic assignments were increased by a total of 5.5% to develop projections for 2010 traffic assignments for peak hours in the future (2010) baseline condition, reflecting an average annual increase of 0.9% per year. These traffic assignments are shown in Figures 14, 15, 16 and 17.

**Intersection Levels of Service (2010 Baseline).** Projected conditions for 2010 without project traffic are presented in the following section. These baseline conditions are then compared to the with project traffic to determine level of potential impact. Tables 9 through 12 present the results of the analyses of the future baseline peak hour volumes. At the signalized intersections of Kamehameha Highway with Kamananui Road and with Whitmore Avenue, volume-to-capacity ratios and average delays would increase slightly, but levels of service for all approaches would remain the same. At the unsignalized intersection of Kaukonahua Road and Kamananui Road, the increased volumes would increase delays to the northwest bound approach sufficiently to change the level of service for that approach by one level; levels of service for the other approaches would remain the same. At the signalized intersection of Kamananui Road and Wilikina Drive, volume-to-capacity ratios would increase slightly, as do average delays, but levels of service for all approaches would remain the same.

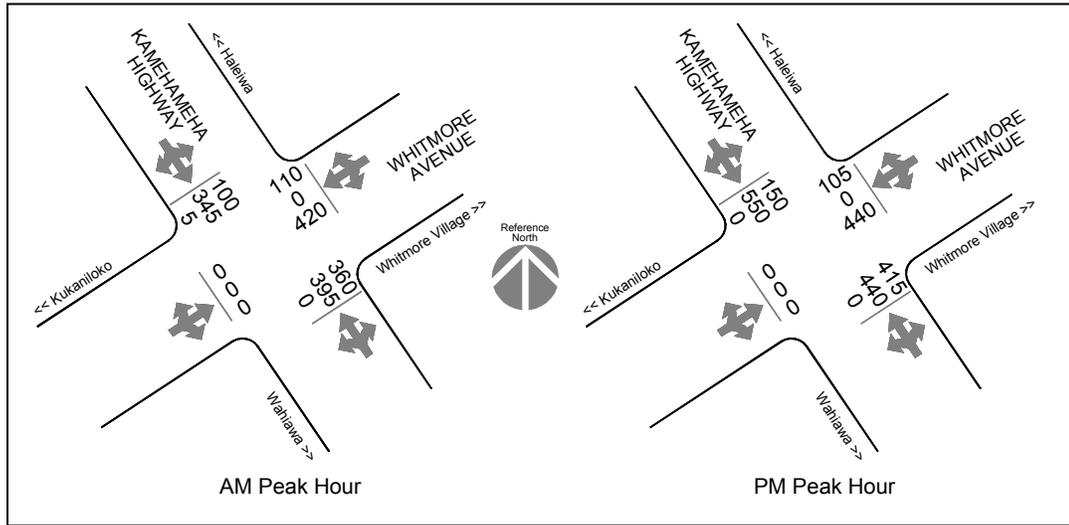


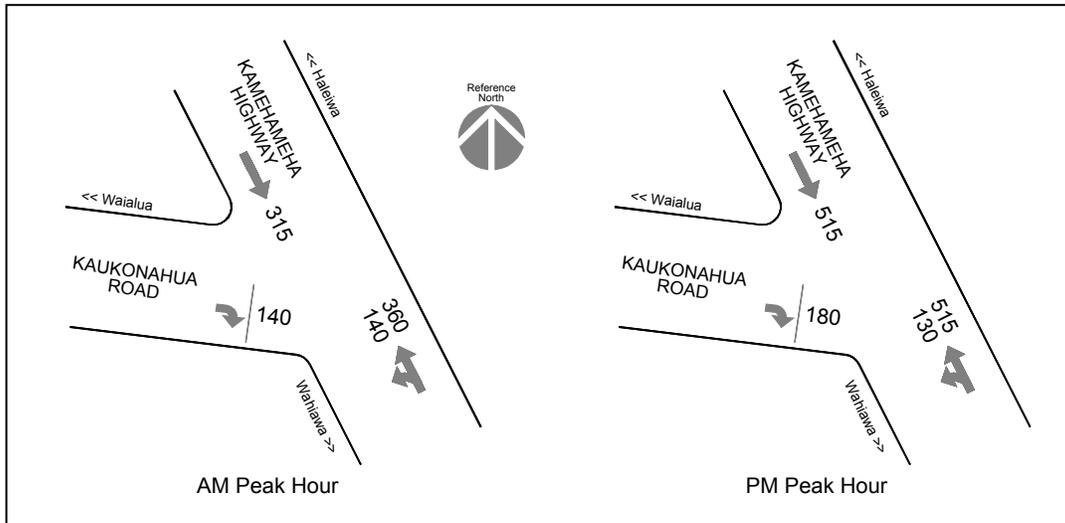
Figure 14 – Future (2010) Baseline Traffic at Whitmore Avenue and Kamehameha Highway

Table 9  
Future (2010) Baseline Conditions - Whitmore Avenue and Kamehameha Highway

		AM Peak Hour			PM Peak Hour		
		V/C	ADPV	LOS	V/C	ADPV	LOS
<b>Overall signalized intersection</b>		<b>0.78</b>	<b>30.2</b>	<b>C</b>	<b>0.80</b>	<b>31.4</b>	<b>C</b>
Kamehameha Highway southbound approach	LT	0.54	51.1	D	0.64	52.6	D
	TH/RT	0.50	22.3	C	0.70	27.1	C
Whitmore Avenue westbound approach	LT/TH	0.92	52.2	D	0.90	51.0	D
	RT	0.20	21.0	C	0.18	21.3	C
Dirt road from Kūkaniloko eastbound approach	all	0.00	18.6	B	0.00	19.3	B
Kamehameha Highway northbound approach	LT	0.00	48.0	D	0.00	48.0	D
	TH	0.72	35.7	D	0.75	38.2	D
	RT	0.33	3.4	A	0.36	4.2	A

V/C = volume-to-capacity ratio  
ADPV = average delay per vehicle, seconds  
LOS = level of service

LT = left turn  
TH = through movement  
RT = right turn

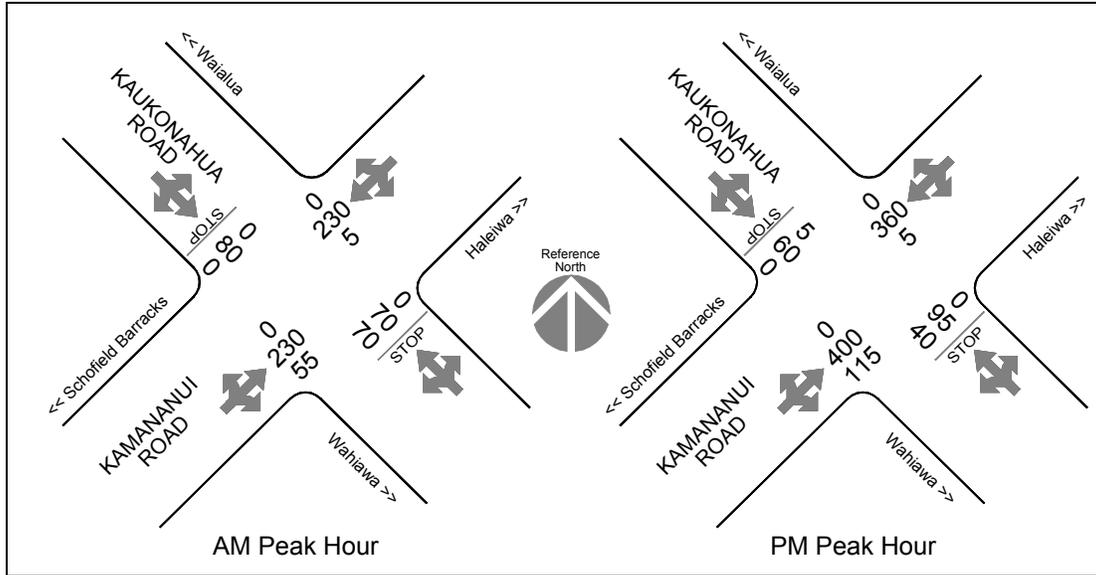


**Figure 15 - Future (2010) Baseline Traffic at Kamehameha Highway and Kaukonahua Road**

**Table 10  
 Future (2010) Baseline Conditions - Kamehameha Highway  
 and Kaukonahua Road**

	AM Peak Hour			PM Peak Hour		
	V/C	ADPV	LOS	V/C	ADPV	LOS
Southbound right turns	0.21	11.4	B	0.36	15.4	C
Northbound left turns	0.12	8.4	A	0.14	9.2	A

V/C = volume-to-capacity ratio  
 ADPV = average delay per vehicle, seconds  
 LOS = level of service



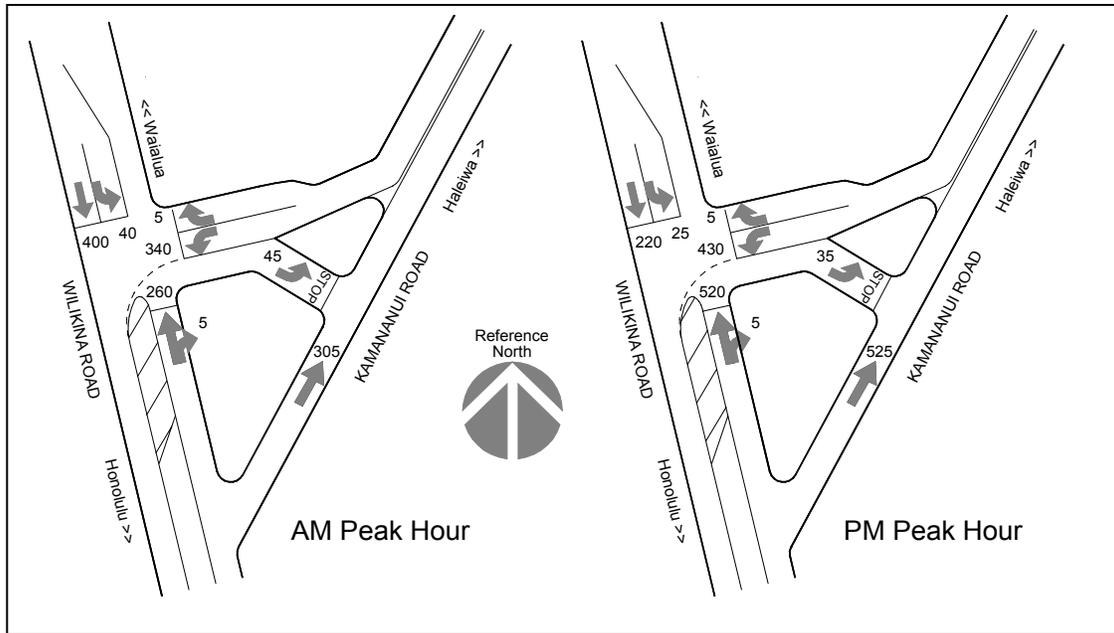
**Figure 16 – Future (2010) Baseline Traffic at Kaukonahua Road and Kamananui Road**

**Table 11**

**Future (2010) Baseline Conditions – Kaukonahua Road and Kamananui Road**

Unsignalized intersection	AM Peak Hour			PM Peak Hour		
	V/C	ADPV	LOS	V/C	ADPV	LOS
Kamananui Road northeast bound left turn (yields)	0.00	7.8	A	0.00	8.1	A
Kaukonahua Road southeast bound approach (stop sign)	0.27	18.0	C	0.29	25.5	D
Kaukonahua Road northwest bound approach (stop sign)	0.53	27.3	D	0.59	38.7	E
Kamananui Road southwest bound left turn (yields)	0.01	8.0	A	0.01	8.6	A

V/C = volume-to-capacity ratio  
ADPV = average delay per vehicle, seconds  
LOS = level of service



**Figure 17 – Future (2010) Baseline Traffic at Kamananui Road and Wilikina Drive**

**Table 12  
Future (2010) Baseline Conditions – Kamananui Road and Wilikina Drive**

	AM Peak Hour			PM Peak Hour		
	V/C	ADPV	LOS	V/C	ADPV	LOS
<b>Overall signalized intersection</b>	<b>0.58</b>	<b>18.4</b>	<b>B</b>	<b>0.70</b>	<b>26.2</b>	<b>C</b>
Wilikina Road southeast bound approach	0.51	13.9	B	0.25	15.0	B
Kamananui Road southwest bound approach	0.68	23.5	C	0.68	26.5	C
Wilikina Road northwest bound approach	0.51	19.1	B	0.79	31.2	C
Stop sign to Kamananui Road	0.07	10.9	B	0.08	13.1	B

V/C = volume-to-capacity ratio  
ADPV = average delay per vehicle, seconds  
LOS = level of service

#### 4.5.1 Proposed Action

The Proposed Action would relocate an activity currently located at Kunia to a site in the western portion of NCTAMS PAC north of Wahiawā. It would include a new two-lane access roadway connected to a new unsignalized intersection with Whitmore Avenue.

Traffic generated by the new project has been estimated using traffic counts taken at the entrance to the Kunia facility in May 2002. The new facility would be designed for a staffing of approximately 2,800 employees, an increase over the staffing of 2,040 at KRSOC at the time of the traffic counts.

The Navy also expects that Navy personnel assigned to HRSOC would occupy some of the existing vacant quarters within NCTAMS PAC.

##### 4.5.1.1 Traffic Generation

Traffic counts were taken at KRSOC to determine traffic generation characteristics of the existing use. Traffic generation factors were developed based on the employment at the site. Employment at KRSOC at the time of the counts totaled 2,040 persons. The counts were taken for one week (May 10, 2002 through May 16, 2002). Total volume in and out of KRSOC in the morning peak hour was 494 vehicles per hour, or 14.0% of the daily volume. Of this volume, 88.9% entered the site. Total site traffic in the afternoon peak hour was 347 vehicles per hour, or 9.8% of the average daily volume. During the afternoon peak hour, 13.5% of the traffic entered the site. Table 13 shows the traffic generation factors based on the counts and the trip estimates for an estimated 2,800 employees at HRSOC.

**Table 13**  
**HRSOC Project Trip Generation**

	Trip Rates per employee		Traffic Generated (2,800 employees)		
	Generation Factor	Directional distribution	Total	Entering	Exiting
Average Weekday	1.73	50% entering	4,844	2,422	2,422
AM Peak Hour (0645-0745)	0.24	89% entering	672	598	74
PM Peak Hour (1530-1630)	0.17	14% entering	476	67	409

With the addition of the new HRSOC facility, the Navy expects that existing unoccupied family housing and bachelor quarters at NCTAMS PAC would become fully occupied by the year 2010. Other projects that would be developed before 2010 include new 24-hour communications facilities (SATCOM and P-173) that would result in a net increase of 215 employees. Traffic generated by these uses was estimated using trip rates for apartments (per person) and for industrial parks (per employee) from *Trip Generation, 7<sup>th</sup> Edition* published by the Institute of Transportation Engineers. These additional projects at NCTAMS PAC are estimated to generate 2,600 additional trip ends per weekday. Peak hour trips generated by these uses are shown in Table 14.

**Table 14**  
**Trip Generation – Other Development at NCTAMS PAC**

		Trip Rates*		Traffic Generated	
		Generation Factor	Portion entering site	Entering	Exiting
SATCOM (65 employees)	AM Peak Hour	0.47	86%	26	4
	PM Peak Hour	0.46	20%	6	24
P-173 (150 employees)	AM Peak Hour	0.47	86%	61	10
	PM Peak Hour	0.46	20%	14	55
Family Housing (18 units)	AM Peak Hour	0.75	16%	2	11
	PM Peak Hour	1.01	65%	12	6
Bachelor Quarters (171 persons)	AM Peak Hour	0.28	20%	10	38
	PM Peak Hour	0.40	65%	44	24

\* Trip rates for “industrial parks”, “apartments”, and “detached housing” from Institute of Transportation Engineers, *Trip Generation, 7<sup>th</sup> Edition*.

The unoccupied dwelling units at NCTAMS PAC (171 bachelor quarters and 18 family housing units) are assumed to be occupied in the future by service personnel assigned to stations within NCTAMS PAC. Estimates of internal trips (within NCTAMS PAC) that would reduce the net new trips out of the station were developed from this information. Application of the project trip generation factors to the number of personnel living within NCTAMS PAC (189 persons) provide estimates of the peak hour internal vehicle trips; the effect of these trips on the net traffic in or out of NCTAMS PAC is shown in Table 15.

**Table 15**  
**Net New Traffic In/Out of NCTAMS PAC**

Trip description	AM Peak Hour		PM Peak Hour	
	Entering	Exiting	Entering	Exiting
HRSOC total trips	598	74	67	409
HRSOC internal trips	(40)	(5)	(4)	(28)
SATCOM trips	26	4	6	24
P-173 trips	61	10	14	55
New housing trips	12	49	56	30
Less internal to HRSOC	(5)	(40)	(28)	(4)
Net New trips In/Out	652	92	111	486

**4.5.1.2 Trip Distribution**

The distribution of the traffic generated by the proposed project would depend on the trip purpose. During the peak hours, the majority of the traffic generated in the peak direction would be home-based work trips; i.e., home-to-work or work-to-home. Information received from KRSOC on the locations of employee residences were used to distribute the peak hour traffic generated by the project. Trip distribution factors and the resultant distribution of project traffic effects are shown in Table 16.

**Table 16  
 Project Traffic Distribution**

Distribution Factors		AM Peak Hour		PM Peak Hour	
		Entering	Exiting	Entering	Exiting
Hale'iwa	0.5%	3	0	1	2
Waialua	0.7%	5	1	1	3
Wahiawā	10.2%	67	9	11	50
Schofield	8.4%	55	8	9	41
Kunia Road	17.7%	115	16	20	86
H2-Wiilikina	62.4%	407	57	69	303
Total Traffic		652	92	111	486

**4.5.1.3 Traffic Assignments and Intersection Analyses**

The proposed access road would be connected to Whitmore Avenue. Traffic destined to HRSOC, commercial trucks, and visitors to NCTAMS PAC would turn left off of Whitmore Avenue onto the proposed access road. Traffic leaving on the proposed access road would turn right onto Whitmore Avenue. The existing NCTAMS PAC gate at the top of Whitmore Avenue would continue to serve the smaller vehicles destined to other locations within NCTAMS PAC that are near the existing gate. Vehicles traveling towards Whitmore Village and NCTAMS PAC would proceed through the intersection on a dedicated through lane and a stop sign would control HRSOC traffic approaching on the new access road. A separate eastbound left turn lane on Whitmore Avenue would be added so that any HRSOC-bound vehicles waiting for a gap in oncoming traffic to turn onto the access road would not impede through traffic continuing eastbound towards Whitmore Village.

The high volume of traffic associated with the Proposed Action would result in long delays for HRSOC traffic entering and leaving the proposed access road. Alternatives that could mitigate this condition, such as traffic signals or an added lane to allow a free right turn from the access road, would adversely affect existing traffic LOS on Whitmore Avenue and therefore were not considered. Furthermore, based on the shortest travel distances, HRSOC-related traffic to or from Schofield Barracks, Kunia Road, or the H-2 Freeway - Wiilikina Road would likely end up traveling through Wahiawā, exceeding the capacity of the Whitmore Avenue and Kamehameha Highway intersection (particularly in the PM Peak Hour). Because the intersection connects two 2-lane roadways and it already has separate turn lanes for the major turn movements, physical improvements to mitigate LOS impacts are not feasible.

Due to the limitations at the proposed access road intersection with Whitmore Avenue and the Whitmore Avenue intersection with Kamehameha Highway, and in the interest in maintaining acceptable LOS along Whitmore Avenue, HRSOC would implement a traffic management plan (TMP) that includes a travel demand management (TDM) program to limit peak hour entering and exit volumes. The TDM program would consist of strategies such as adjusting work shifts so that employees arrive and depart during off-peak hours, dictating employee travel routes, scheduling deliveries during off-peak hours, promoting ride-sharing, and providing shuttle bus service. The TDM program would limit peak hour traffic volumes so that:

1. Total HRSOC traffic (entering plus leaving) would be no more than 530 vehicles per hour during the AM Peak Hour, and no more than 370 vehicles per hour during the PM Peak Hour, with the maximum entering volume being 470 vehicles per hour during any hour and the maximum exiting volume being 320 vehicles per hour during any hour. These caps would be necessary to maintain acceptable LOS along Whitmore Avenue and at the Whitmore Avenue intersection with Kamehameha Highway.
2. If all vehicles exiting Whitmore Avenue to Kamehameha Highway in the afternoon peak hour were to turn left towards Wahiawā town, traffic volumes would exceed the capacities available at the intersection and increase traffic through Wahiawā. To mitigate this situation, HRSOC personnel exiting Whitmore Avenue in the PM Peak Hour heading for destinations south of Wahiawā town (i.e., Schofield Barracks, Kunia Road, H-2 Freeway) would be advised to turn right onto Kamehameha Highway to divert around Wahiawā and avoid excessive delays to Whitmore Avenue's left turn lane onto Kamehameha Highway. With this practice in place, LOS D or better (considered acceptable in urban areas) could be maintained.

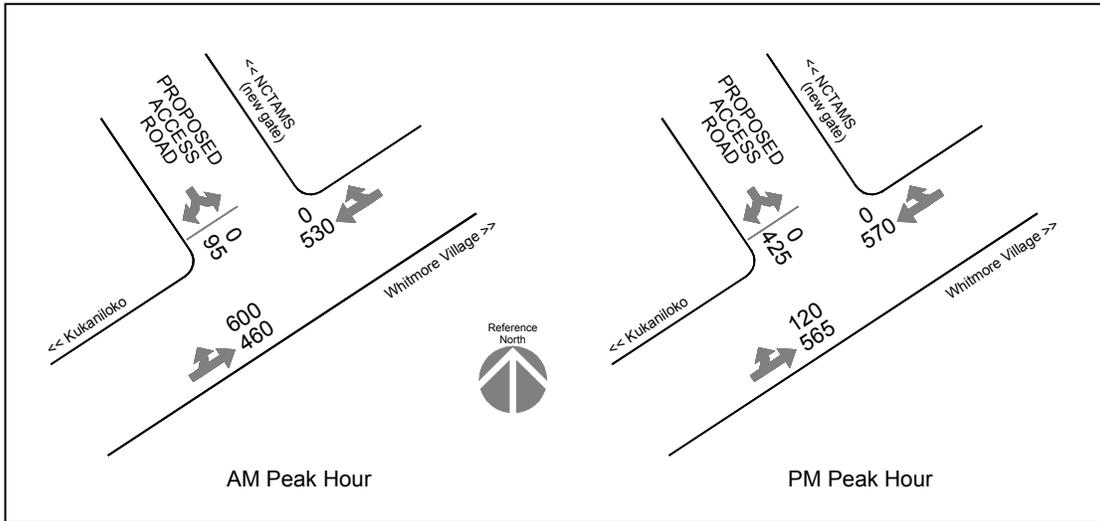
It is expected and considered a valid assumption that only those with a destination in Wahiawā would turn left while the majority of the HRSOC traffic would go around Wahiawā as drivers will generally choose the route with the best traffic conditions. The incentive for people to turn right from Whitmore Avenue to Kamehameha Highway during the afternoon peak hour would be to avoid the delays along the Wahiawā route.

The TDM strategies, which are consistent with the capacities provided on the proposed access road, would encourage the spread of traffic arriving and departing the new facility. In addition to the TDM strategies, traffic volumes would be limited, or metered, by the capacity of the roadways entering and exiting the facility. Entering traffic would be metered at the new entry control gate, where a single lane would be provided. Field observations taken at the Pearl Harbor Naval Complex's Nimitz Gate were used to estimate a capacity of 360 vehicles per hour through the single-lane entry gate under normal conditions. If additional sentries are used and two vehicles are checked simultaneously, the capacity would increase to 600 vehicles per hour. The peak hour volume of 470 vehicles per hour entering on the proposed access road represents about 79% of this capacity. Exiting traffic would be metered by the stop sign at the intersection of the proposed access road and Whitmore Avenue. Traffic leaving along the proposed access road would stop before turning onto Whitmore Avenue. If exiting traffic during the peak hour is limited to the volume as indicated in Item #1 above, the intersection volume at the proposed access road and Whitmore Avenue (320 vehicles per hour)

would be 88% of capacity of the right turn lane at the stop sign, with delays in the LOS E range. Since the entry control gate and exiting stop sign would serve as metering devices to control the number of cars that could enter and exit HRSOC at any time, traffic volumes in excess of the roadway capacity would result in delays, thereby encouraging personnel to adjust their travel times and avoid peak travel periods.

The following traffic impact assessment assumed the scenario where peak direction traffic was limited by the capacities provided in the proposed access road and the recommended right turn from Whitmore Avenue to Kamehameha Highway.

Intersection conditions at the proposed access road and Whitmore Avenue are illustrated in Figure 18 and in Table 17 below. All movements would have acceptable LOS with the exception of the delays associated with HRSOC traffic exiting the access road in the PM Peak Hour (LOS F). Exiting vehicles would queue on the access road behind the stop sign, waiting for a break in the eastbound traffic on Whitmore Avenue.



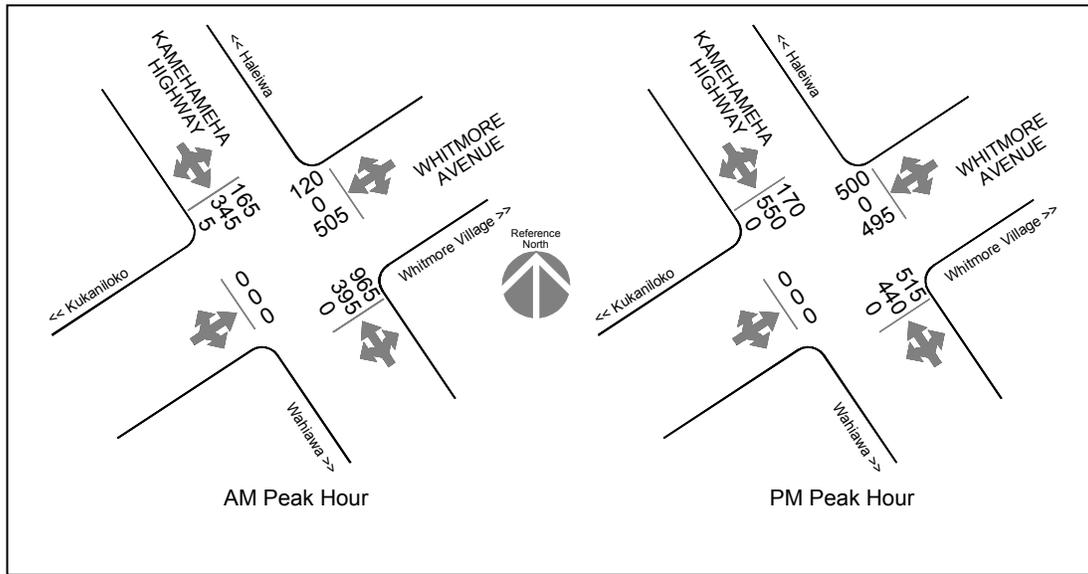
**Figure 18 – Future (2010) with HRSOC Traffic  
 at Proposed HRSOC Access Road and Whitmore Avenue**

**Table 17  
 Future (2010) with HRSOC Traffic – Proposed HRSOC Access Road  
 and Whitmore Avenue**

Unsignalized Intersection	AM Peak Hour			PM Peak Hour		
	V/C	ADPV	LOS	V/C	ADPV	LOS
Project Access Road, southbound approach (right turn lane)	0.21	14.0	B	1.00	70.0	F
Eastbound left turn from Whitmore Avenue	0.68	16.3	C	0.14	9.5	A

V/C = volume-to-capacity ratio  
 ADPV = average delay per vehicle, seconds  
 LOS = level of service

Figure 19 and Table 18 present the results of the analyses of the traffic assignment at the Kamehameha Highway and Whitmore Avenue intersection. The revised traffic assignment was also used to identify roadway conditions and needed improvements on the portions of Kamehameha Highway, Kaukonahua Road, and Kamananui Road affected by the added traffic that would go around Wahiawā. Compared with the 2010 baseline, overall signalized intersection LOS remains at LOS C in the AM Peak Hour, dropping to LOS D in the PM Peak Hour (considered acceptable for urban areas).

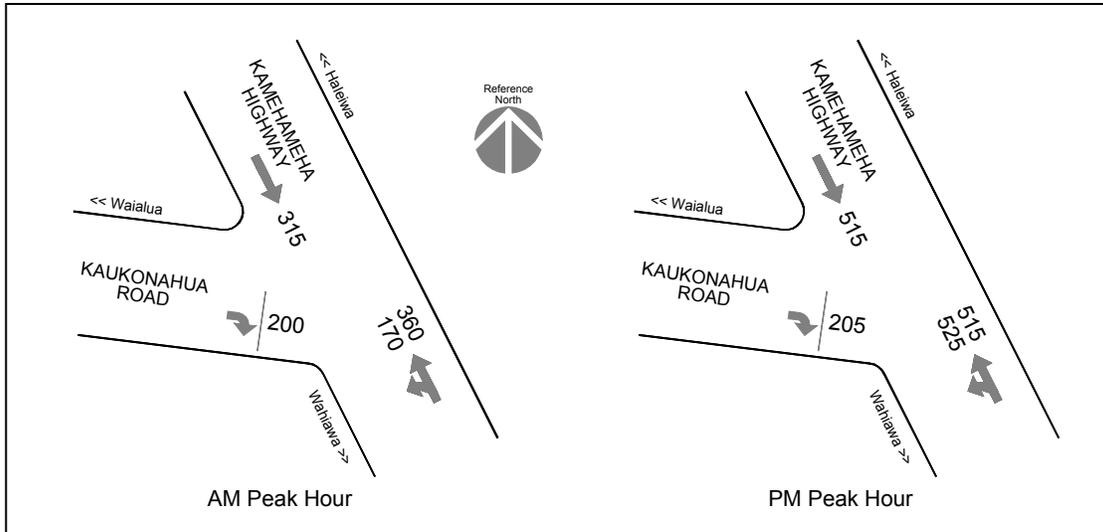


**Figure 19 – Future (2010) with HRSOC Traffic at Whitmore Avenue and Kamehameha Highway**

**Table 18**  
**Future (2010) with HRSOC Traffic -**  
**Whitmore Avenue and Kamehameha Highway**

Signalized Intersection		Future (2010) Baseline			Future (2010) with HRSOC Traffic		
		V/C	ADPV	LOS	V/C	ADPV	LOS
<b>AM Peak Hour</b>		<b>0.78</b>	<b>30.2</b>	<b>C</b>	<b>0.84</b>	<b>33.7</b>	<b>C</b>
Kamehameha Highway southbound approach	LT	0.54	51.1	D	0.68	53.6	D
	TH/RT	0.50	22.3	C	0.52	25.0	C
Whitmore Avenue westbound approach	LT/TH	0.92	52.2	D	0.93	52.7	D
	RT	0.20	21.0	C	0.19	18.0	B
eastbound approach	All	0.00	18.6	B	0.00	16.0	B
Kamehameha Highway northbound approach	LT	0.00	48.0	D	0.00	49.0	D
	TH	0.72	35.7	D	0.88	54.7	D
	RT	0.33	3.4	A	0.87	16.5	B
<b>PM Peak Hour</b>		<b>0.80</b>	<b>31.4</b>	<b>C</b>	<b>0.85</b>	<b>36.8</b>	<b>D</b>
Kamehameha Highway southbound approach	LT	0.64	52.6	D	0.63	53.8	D
	TH/RT	0.70	27.1	C	0.72	31.2	C
Whitmore Avenue westbound approach	LT/TH	0.90	51.0	D	0.92	53.5	D
	RT	0.18	21.3	C	0.79	37.5	D
eastbound approach	All	0.00	19.3	B	0.00	18.7	B
Kamehameha Highway northbound approach	LT	0.00	48.0	D	0.00	54.0	D
	TH	0.75	38.2	D	0.87	54.6	D
	RT	0.36	4.2	A	0.46	5.5	A
V/C = volume-to-capacity ratio ADPV = average delay per vehicle, seconds LOS = level of service				LT = left turn TH = through movement RT = right turn			

At the Kamehameha Highway intersection with Kaukonahua Road, the with-project traffic assignment is shown in Figure 20. Results of the analysis of this unsignalized intersection are shown in Table 19. The traffic condition would be LOS C, considered acceptable for urban areas.

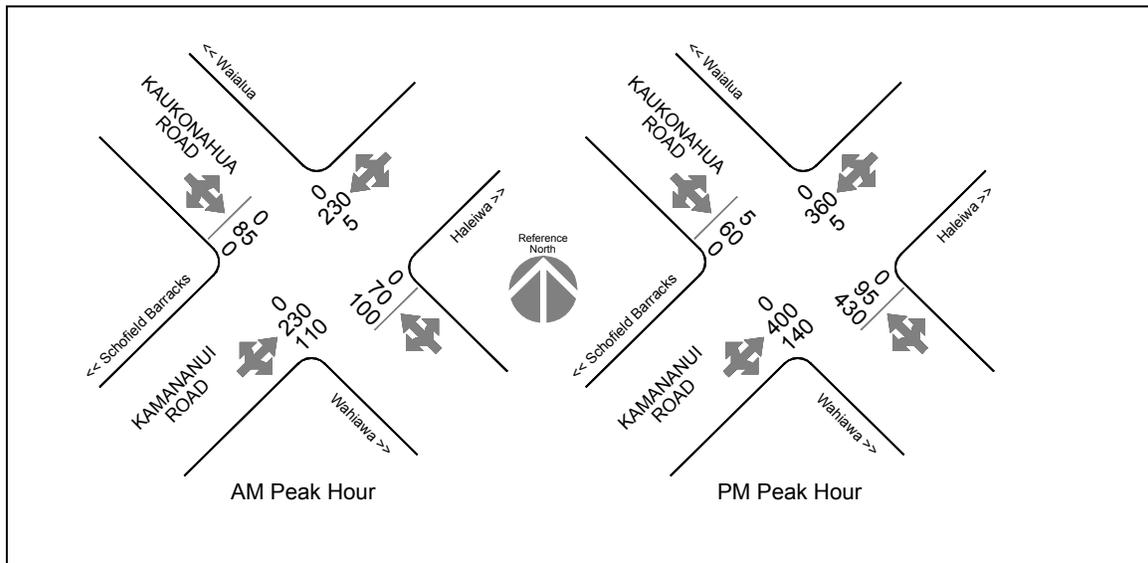


**Figure 20 – Future (2010) with HRSOC Traffic at Kamehameha Highway and Kaukonahua Road**

**Table 19  
Future (2010) with HRSOC Traffic -  
Kamehameha Highway and Kaukonahua Road**

Unsignalized intersection	Future (2010) Baseline			Future (2010) with HRSOC Traffic		
	V/C	ADPV	LOS	V/C	ADPV	LOS
<b>AM Peak Hour</b>						
Kaukonahua Road, southbound approach (right turn only)	0.21	11.4	B	0.30	12.3	B
Northbound left turn, Kamehameha Highway to Kaukonahua Road	0.12	8.4	A	0.14	8.5	A
<b>PM Peak Hour</b>						
Kaukonahua Road, southbound approach (right turn only)	0.36	15.4	C	0.41	16.3	C
Northbound left turn, Kamehameha Highway to Kaukonahua Road	0.14	9.2	A	0.56	13.1	B
V/C = volume-to-capacity ratio ADPV = average delay per vehicle, seconds LOS = level of service						

The with-project traffic assignments at the intersection of Kaukonahua Road and Kamananui Road are shown in Figure 21. As an unsignalized intersection, the northwest bound approach would exceed available capacity by more than 150% in the PM Peak Hour. A preliminary evaluation of signal warrants indicates that traffic signals would be warranted with project traffic (peak hour and eight-hour warrants), and the installation of signals to control the intersection would provide adequate capacity, as shown in Table 20. A traffic signal warrant study would be conducted in coordination with DOT prior to the installation of the traffic signal.



**Figure 21 – Future (2010) with HRSOC Traffic at Kaukonahua Road and Kamananui Road**

**Table 20**  
**Future (2010) with HRSOC Traffic - Kaukonahua Road**  
**and Kamananui Road (signalized)**

	Future (2010) Baseline (Unsignalized Intersection)			Future (2010) with HRSOC Traffic (Signalized)		
	V/C	ADPV	LOS	V/C	ADPV	LOS
<b>AM Peak Hour</b>	---	---	---	<b>0.40</b>	<b>18.3</b>	<b>B</b>
Kamananui Road northeast bound approach	0.00	7.8	A	0.51	20.4	C
Kaukonahua Road southeast bound approach	0.27	18.0	C	0.12	14.9	B
Kaukonahua Road northwest bound approach	0.53	27.3	D	0.29	17.2	B
Kamananui Road southwest bound approach	0.01	8.0	A	0.32	17.2	B
<b>PM Peak Hour</b>	---	---	---	<b>0.89</b>	<b>34.8</b>	<b>C</b>
Kamananui Road northeast bound approach	0.00	8.1	A	0.86	37.6	D
Kaukonahua Road southeast bound approach	0.29	25.5	D	0.08	13.0	B
Kaukonahua Road northwest bound approach	0.59	38.7	E	0.92	42.9	D
Kamananui Road southwest bound approach	0.01	8.6	A	0.54	22.8	C
V/C = volume-to-capacity ratio ADPV = average delay per vehicle, seconds LOS = level of service						

Increased volumes would have only minor impact to the intersection of Kamananui Road and Wilikina Drive; traffic assignments are shown in Figure 22 and results of the analyses are shown in Table 21. Compared with the 2010 baseline, overall signalized intersection LOS would drop one LOS level in both the AM and PM Peak Hours (from B to C and from C to D, respectively), considered acceptable for urban areas.

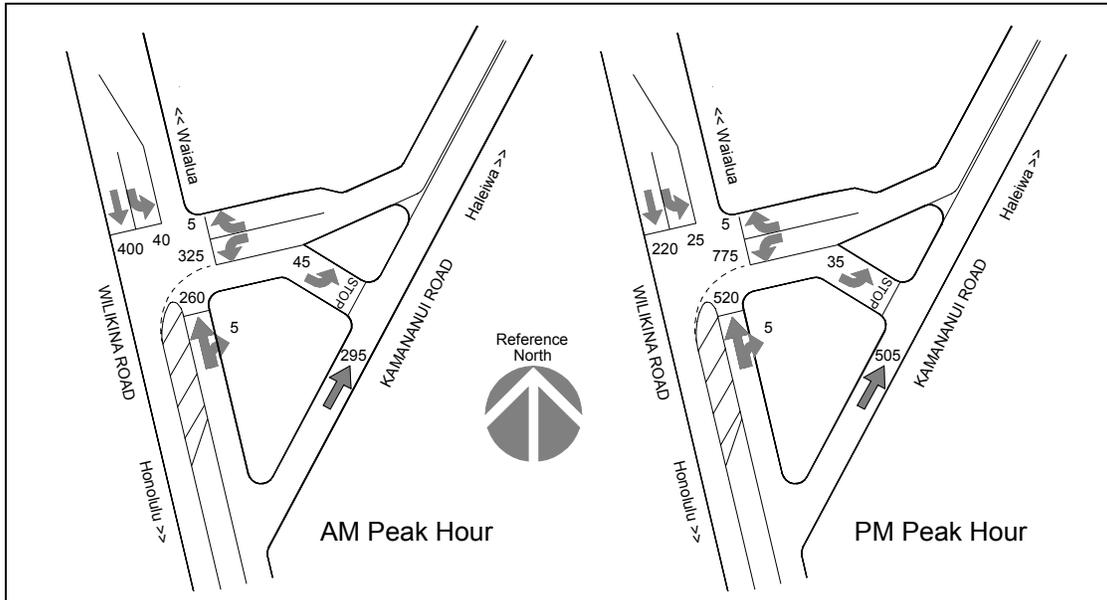


Figure 22 – Future (2010) with HRSOC Traffic at Kamananui Road and Wilikina Drive

**Table 21**  
**Future (2010) with HRSOC Traffic - Kamananui Road and Wilikina Drive**

	Future (2010) Baseline			Future (2010) with HRSOC Traffic		
	V/C	ADPV	LOS	V/C	ADPV	LOS
<b>AM Peak Hour</b>	<b>0.58</b>	<b>18.4</b>	<b>B</b>	<b>0.55</b>	<b>21.9</b>	<b>C</b>
Wilikina Road southeast bound approach	0.51	13.9	B	0.62	21.3	C
Kamananui Road southwest bound approach	0.68	23.5	C	0.49	16.0	B
Wilikina Road northwest bound approach	0.51	19.1	B	0.66	30.3	C
Stop sign to Kamananui Road	0.07	10.9	B	0.08	10.9	B
<b>PM Peak Hour</b>	<b>0.70</b>	<b>26.2</b>	<b>C</b>	<b>0.93</b>	<b>46.9</b>	<b>D</b>
Wilikina Road southeast bound approach	0.25	15.0	B	0.29	21.7	C
Kamananui Road southwest bound approach	0.68	26.5	C	0.99	51.9	D
Wilikina Road northwest bound approach	0.79	31.2	C	0.92	51.2	D
Stop sign to Kamananui Road	0.08	13.1	B	0.08	13.1	B
V/C = volume-to-capacity ratio ADPV = average delay per vehicle, seconds LOS = level of service						

**4.5.1.5 Summary of Potential Impacts and Required Improvements**

The following are potential traffic impacts associated with the Proposed Action:

**Construction Period.** The Proposed Action would have short-term, construction period traffic impacts on Whitmore Avenue, Kamehameha Highway, Kaukonahua Road and Kamananui Road during construction of the proposed traffic improvements. Transporting construction equipment to and from the project area during non-peak traffic hours and scheduling road closures between peak hour traffic would minimize these impacts. Construction vehicles would be routed along the proposed access road, avoiding Whitmore Village.

**Operational Period.** During the operational period, the Proposed Action would result in increased traffic volumes on local and regional roadways. The Proposed Action would not be expected to have a significant adverse impact on peak hour traffic volumes with the construction of the required roadway improvements and implementation of the TDM alternatives and strategies prescribed in the TMP. Although traffic volumes would be greater than existing levels, the peak hour LOS at all intersections would be expected to be LOS D or better. LOS D, a concept that typically describes conditions where traffic flow is stable with delays at intersections and congestion along roadway segments, is

generally considered acceptable in urban areas. Overall AM Peak Hour intersection LOS for the Kamehameha Highway and Whitmore Avenue intersection would remain at baseline LOS C levels, while PM Peak Hour LOS would drop from baseline LOS C to LOS D. Signalization of the Kaukonahua Road and Kamananui Road intersection would achieve overall intersection LOS B in the AM Peak Hour and LOS C in the PM Peak Hour. Overall AM Peak Hour intersection LOS for the Kamananui Road and Wilikina Drive intersection would drop one LOS level in both the AM and PM Peak Hours (from B to C and from C to D, respectively), considered acceptable in urban areas.

Scheduling adjustments to encourage employees to arrive and depart during non-peak hours would shift project-related traffic to less busy times of the day, resulting in increased traffic volumes and associated delays during periods of the day typically not known to experience traffic, such as the mid-morning or mid-afternoon.

The following roadway improvements and traffic management strategies would be done to minimize potential impacts associated with the Proposed Action. The Navy is working with the DOT to determine the actual design details of the roadway improvements. All roadway improvements and signal modifications would be approved by the DOT prior to implementation.

#### Whitmore Avenue

A portion of Whitmore Avenue would be widened to provide a separate eastbound left turn lane into the proposed access road. In addition, the westbound right turn lane to Kamehameha Highway would be lengthened. The right-turn and left-turn lanes on Kamehameha Highway would be lengthened as appropriate and the existing traffic signal at its intersection with Whitmore Avenue would be modified.

#### Kamehameha Highway and Kaukonahua Road Intersection

The existing left turn lane from Kamehameha Highway to Kaukonahua Road would be lengthened.

#### Kaukonahua Road and Kamananui Road Intersection

A new traffic signal system at the intersection of Kaukonahua Road and Kamananui Road would be installed when warranted.

#### Traffic Management Plan

HRSOC would develop and implement a TMP in coordination with the DOT. The TMP would identify a TDM program, provide guidelines for implementation of the TDM strategies, and identify mechanisms to enforce and monitor the effectiveness of the TDM strategies. Elements of the TDM program may include:

- Scheduling of shifts to stagger employee arrival and departure times, thereby minimizing peak hour traffic volumes and spreading peak arrival and departure times throughout a longer period of time.
- Scheduling commercial deliveries at certain hours of the day to avoid peak hour traffic volumes.

- Promoting ride-sharing. In a ride-sharing arrangement, two or more employees ride together to reduce the number of vehicles on the road.
- Providing preferential parking reserved near the entrance to the building for ride-sharers. In situations where parking is inconvenient or spaces are limited, preferential parking can serve as an effective strategy to encourage ride-sharing.
- Establishing internal administrative directives to manage employee travel routes.
- Operating shuttle bus services between concentrated employee residential locations and the HRSOC to reduce the number of vehicles on the road.
- Implementing employer-support measures to increase employee awareness and encourage TDM strategies. Typical employer-support measures involve: coordinating an employer-sponsored ride-matching program to provide assistance with finding ridesharing partners; assigning an employee transportation coordinator to implement and manage the TDM program; and organizing an information dissemination program.

The primary objective of the TMP would be to manage the traffic generated by the HRSOC facility to hourly volumes no higher than those identified in the traffic impact analysis. Specifically, total traffic (entering plus leaving the proposed project access road) would be no more than the 530 vehicles per hour during the AM Peak Hour and 370 vehicles per hour during the PM Peak Hour, with the maximum entering volume being 470 vehicles per hour and the maximum exiting volume being 320 vehicles per hour. Since access to the site would require vehicle and personnel permits, implementation of control of vehicle access and employee arrival times is enhanced.

#### Post-Occupancy Traffic Study

HRSOC would conduct a traffic study in coordination with DOT following occupancy of the HRSOC. The post-occupancy traffic study would evaluate the actual traffic conditions resulting from the Proposed Action and identify any additional improvements. Depending on the outcomes of the study, possible improvements may involve additional TDM strategies and traffic signal timing adjustments along regional roadways, including through Wahiawā Town and Wilikina Drive.

#### **4.5.2 Modernization/Expansion**

The Modernization/Expansion Alternative would have short-term, construction period traffic impacts on Kunia Road in the vicinity of the project area as construction- and demolition-related vehicles, equipment and personnel access the project site. Transporting construction equipment to and from the project area during non-peak traffic hours and scheduling road closures between peak hour traffic would minimize these impacts.

During the operational period, the Modernization/Expansion alternative would not be expected to have a significant impact on peak hour traffic volumes along Kunia Road. New intersection improvements, including roadway widening and signalization, would ensure that levels of service remain within an acceptable range. The unpaved State

road right-of-way that bisects the project site would be realigned around the new site boundaries to provide access for neighboring landowners.

### 4.5.3 No Action

The No Action Alternative would not impact existing traffic volumes, patterns or facilities.

## 4.6 Utilities

### 4.6.1 Proposed Action

**Potable Water.** The Proposed Action would not impact delivery of potable water service to existing NCTAMS PAC customers. The existing NCTAMS PAC deep well (State Well 3-3100-2) would continue to serve as the primary potable water supply source, and a new higher capacity pump and pump column would be installed at the deep well to provide for the projected demand. A new well casing may be required to accommodate the larger-diameter pump column. A connection to the City and County of Honolulu BWS potable water system (BWS Wahiawā, Public Water System No. 333) would provide back-up service for emergencies and times of scheduled well pump maintenance (City and County of Honolulu, Board of Water Supply Meeting, 2005) (Appendix D). The agreement for emergency standby water service from the Board of Water Supply is currently being developed. Since the existing NCTAMS PAC reservoirs have sufficient capacity to support the peak fire flow demand of the Proposed Action, no additional system upgrades would be needed.

The Proposed Action would not significantly impact the Wahiawā aquifer, which has a remaining allocation of 2.6 million gallons per day (mgd) (9.84 million Lpd) (see Section 4.8). The estimated average daily demand of the Proposed Action is approximately 234,000 gpd (885,800 Lpd), averaged over one year. The estimated average daily demand for NCTAMS PAC through 2010, including the existing demand, the Proposed Action and other planned projects, is approximately 462,000 gpd (1.75 million Lpd), resulting in an additional demand of approximately 254,000 gpd (961,500 Lpd) more than the amount currently reported to CWRM. The 254,000 gpd (961,000 Lpd) additional demand is under and within the available 2.6 mgd (9.84 million Lpd) allocation capacity of the Wahiawā aquifer. The Navy would inform the State of Hawai'i Department of Land and Natural Resources CWRM of the additional demand at NCTAMS PAC prior to increasing the withdrawal from the well. No surface water resources would be used for the potable water supply.

**Wastewater.** The Proposed Action would not impact wastewater service to existing NCTAMS PAC customers. Treatment and disposal of the wastewater generated by the project would be via the existing connection to the City and County of Honolulu's wastewater collection system. Wastewater would most likely be treated at the Wahiawā Wastewater Treatment Plant and the tertiary-treated effluent would be discharged into the Wahiawā Reservoir. The HRSOC facility would be required to comply with all the applicable limitations and regulations identified in the Navy's non-domestic wastewater treatment program to ensure compliance with the technical requirements established in the City and County of Honolulu's Revised Ordinances of Honolulu.

The design average wastewater flow for the Proposed Action is approximately 84,000 gpd (318,000 Lpd). The projected design average wastewater flow for NCTAMS PAC

through 2010, including the existing wastewater flow, the Proposed Action and other planned projects, is approximately 200,000 gpd (757,000 Lpd). Based on the Navy's current Sewer Service Contract with the City to discharge an average daily flow of 120,000 gpd (454,200 Lpd), NCTAMS PAC would require an additional 80,000 gpd (303,000 Lpd) capacity to accommodate the Proposed Action and other projects. An amendment to the existing NCTAMS PAC Sewer Service Contract with the City would be required for the increased wastewater flows. In compliance with the City's standards and requirements for pretreatment, oil and grease interceptors would be installed as appropriate to pretreat wastewater discharged into the City's sewer system. The City and County of Honolulu, Department of Environmental Services has indicated that the municipal wastewater collection system is capable of handling the future projected flow (City and County of Honolulu, Department of Environmental Services, 2004) (Appendix D).

**Electrical.** The Proposed Action would not impact delivery of electrical service to NCTAMS PAC customers. Electrical power for the project would be provided by a new on-base transformer substation fed by a HECO 46 kV circuit from the Wahiawā substation. Electrical service would be overhead to the NCTAMS PAC boundary and underground via separate ducts and manholes within the installation boundary. HECO would determine the most appropriate methods to meet the project's requirements. The project would comply with the Department of Defense energy budget for these types of facilities. Since the Proposed Action would involve relocation of an existing facility that currently receives electrical service from HECO, no significant impacts to islandwide electrical power demand or generation would be expected. The larger facility size would result in an increase in electrical demand; however, the increase should not be proportional to the increase in facility size as energy efficient technology and sustainable design features would be utilized to promote conservation and minimize the overall demand.

**Communications.** The Proposed Action would not significantly impact communications services at NCTAMS PAC. New underground ducts and manholes, as well as connections to the existing NCTAMS PAC system, would be constructed to provide telephone and HITS service. Existing communications ducts and cables underlying Building 294 that connect to the Helemano Military Reservation would be relocated to accommodate the proposed facilities. Satellite receivers required for the HRSOC mission would be sited near the HRSOC operations building.

**Solid Waste.** During the operational period, the Proposed Action would result in a minor increase in the islandwide generation and disposal of solid waste. The increase in personnel would be approximately 700 persons, or 30% more than existing KRSOC operations, resulting in an approximately 30% increase in the amount of solid waste generated by over existing levels. Waste management strategies would be incorporated to minimize the amount of waste entering to the municipal waste stream.

**Drainage.** The Proposed Action would replace pervious surfaces with large areas of impervious surfaces, resulting in an increase in the quantity of storm water runoff generated. The existing surface runoff characteristics within the vicinity of the new HRSOC operations building would be changed from a non-point source sheet flow to an engineered system of drain inlets and catch basins. The site would be graded to maintain the existing drainage patterns, and runoff would follow these drainage patterns to existing drainageways onsite, eventually flowing into Poamoho Stream to the north

and south of the project site. Surface drainage systems would be utilized wherever possible in an effort to facilitate percolation and maximize stormwater detention, with detention basins provided at appropriate locations to control the rate of runoff and sediment discharge generated from the site. As required by the Navy's NPDES permit, prior to operation of the HRSOC, the Navy's storm water pollution prevention plan would be modified to incorporate the new facility. The NPDES permit would be modified to include the new collection system servicing HRSOC. During the construction phase, best management practices, such as the use of temporary sediment basins, silt fences, and drain inlet covers to control erosion would be used. An individual NPDES permit or coverage under the appropriate NPDES General Permit(s) issued by the State of Hawai'i, DOH would be required prior to construction if the construction activity includes storm water discharges associated with construction activity, water from construction dewatering, and/or hydrotesting water into the City's storm drainage system. The Army Corps of Engineers determined that the unnamed tributaries to Poamoho Stream are not subject to Section 404 (Appendix E, letter dated August 1, 2005) and therefore Section 401 Water Quality Certification is not required for the project.

#### 4.6.2 Modernization/Expansion

**Water.** The demand for potable water at KRSOC for the Modernization/Expansion Alternative would be similar to the projected potable water demand estimated for the Proposed Action. The use of water conservation plumbing fixtures in the Building 9 expansion and replacement of existing fixtures would minimize the amount of potable water used. This alternative would include a new connection to the existing Wheeler AAF water system via an existing 12-inch (30-cm) line south of the Wheeler AAF runway, and additional site infrastructure to serve the new facility. No surface water resources would be used for the potable water system. The existing fire protection system provides inadequate protection for the planned expansion of Building 9, and would require that the capacity of the existing system be increased. A new onsite water storage tank to supply the fire protection system and a new water distribution system (pumps, fire hydrants, sprinklers, etc.) would be installed.

**Wastewater.** The wastewater generated at KRSOC under the Modernization/Expansion Alternative would be similar to the projected amount of wastewater estimated for the Proposed Action. A new sewage pump station and force main connection from Building 9 to the existing Schofield Barracks wastewater treatment plant would be connected via an existing sewer manhole. The Schofield Barracks Wastewater Treatment Plant would provide secondary treatment and the secondary-treated effluent would be discharged into either the WSC irrigation ditch or Kaukonahua Stream below Wahiawā Reservoir. Underground sewer lines in the existing building are adequate, and would not be upgraded. Use of water conservation plumbing fixtures throughout the facility would minimize the amount of wastewater generated.

**Electrical.** This alternative, which has an electrical demand similar to the electrical demand for the Proposed Action, would not significantly impact islandwide electrical power demand or generation. Under this alternative, electrical service would be provided by HECO for an estimated electrical load of 6,500 kVA. The existing transformer substation would be replaced with a new substation providing 11.5 kV service. Modernization of equipment in accordance with sustainable design principles would result in potential energy savings.

**Communications.** The existing communications system at KRSOC would be replaced and upgraded to serve the modernized and expanded facility. New telephone service and HITS nodes would be installed, and satellite receivers would be relocated to the roof of the new facility. Service to existing customers would not be impacted since the transition to the new systems would not be completed until the new infrastructure is operational.

**Solid Waste.** Similar to the Proposed Action, this alternative would not significantly impact the islandwide generation or disposal of solid waste during the operational period. A minor increase in the amount of solid waste generated would result from the additional personnel, with the additional waste generated proportional to the increase in personnel. Waste management strategies would be implemented to minimize the amount of waste entering the municipal waste stream.

**Drainage.** The Modernization/Expansion Alternative would increase impervious surfaces at the project site, resulting in increased stormwater runoff. The project site would be graded to maintain the existing drainage patterns, with surface drainage systems utilized wherever possible. The existing storm drainage system is adequate for the existing facilities, and would not be altered. Additional inlets and points of collection would be constructed to serve the new facilities, and a new storm drain line would convey runoff north to Waikele Stream. Construction period best management practices would be similar to the Proposed Action.

#### **4.6.3 No Action**

The No Action Alternative would not impact existing utility systems.

### **4.7 Flood Hazard**

#### **4.7.1 Proposed Action**

No significant flood hazards would result from construction of the proposed facilities at NCTAMS PAC since the existing topography and regional stream hydrology would not be altered. The forest reserve areas surrounding NCTAMS PAC drain into the steep gulches bordering the installation to the north and south. In general, the depth of the gulches surrounding the installation minimizes the threat of floods and extends the capacity of the streams. With the exception of the paved area within the CDAA footprint, grass surfaces currently cover the majority of the project site planned for the HRSOC operations building, parking and other accessory facilities. Under the Proposed Action, these permeable surfaces would be replaced with impervious surfaces, modifying the natural drainage pattern within the project site and increasing stormwater runoff discharged into the surrounding streams. The drainage system would be designed to minimize flood hazards to existing and planned facilities, with detention basins provided at appropriate locations to reduce the quantity of runoff and sediment discharge generated from the site. The proposed access road would cross an intermittent stream, in which case roadway improvements would be designed to minimize flood hazard.

#### **4.7.2 Modernization/Expansion**

KRSOC lies within an upland area in which flood hazards are undetermined and no base flood elevations are determined. Excavation of soil required for the construction of this alternative would alter the local topography, adding new contour to a relatively flat area and potentially impacting local drainage patterns during construction. The use of best management practices during construction would minimize flood hazard during the construction phase. The drainage system would be designed to minimize flood hazard to existing and planned facilities. No significant flood hazards are anticipated during the operational phase.

### 4.7.3 No Action

The No Action Alternative would not impact existing flood hazard conditions.

## 4.8 Ground and Surface Water Resources

### 4.8.1 Proposed Action and Modernization/Expansion

Under both alternatives, permeable surfaces would be converted to impervious surfaces, thereby reducing groundwater recharge and increasing surface runoff to the nearby area streams. The Proposed Action would construct approximately 30 acres (12 ha) of new impervious surfaces at NCTAMS PAC, and the Modernization/Expansion Alternative would construct approximately 9 acres (4 ha). As discussed in Sections 4.6.1: Drainage and 4.6.2: Drainage, the introduction of impervious surfaces to these areas is not expected to significantly impact surface water quality. Low-impact storm water development design strategies (e.g., landscaping, detention fields) that encourage percolation and minimize the impact of runoff discharged into Poamoho Stream would be incorporated, where appropriate.

Both the Proposed Action and the Modernization/Expansion Alternative sites are located over the Wahiawā high-level aquifer system. Aquifer recharge potential in the project areas would not be impacted. Construction and operation activities would not be in contact with groundwater sources due to the depth of the groundwater table approximately 725 feet (221 m) below the ground elevation of the project area. Groundwater tapped from the Wahiawā aquifer would be the primary potable water source for both the Proposed Action and the Modernization/Expansion Alternative. The NCTAMS PAC deep well and the Schofield well system draw from the Wahiawā aquifer. Neither alternative would jeopardize the sustainable yield of the Wahiawā aquifer which has an estimated 2.6 mgd (9.8 million Lpd) of allocation remaining (below safe yield levels). The Proposed Action would relocate the point of withdrawal from the Schofield area to the Whitmore area (i.e., the NCTAMS PAC deep well) within the same aquifer system, thereby resulting in no net change to the groundwater withdrawal within the aquifer.

As noted in Section 3.8.1, the stream gulches bordering the interior boundary of NCTAMS PAC are wetlands classified under the *U.S. Fish and Wildlife Service National Wetlands Inventory* and the proposed access road would cross an intermittent stream and an unnamed gulch. The USACE has determined that the discharge of dredged or fill material into these gulches will not require a Department of the Army permit under Section 404 of the Clean Water Act. Documentation from the USACE is presented in Appendix E. The proposed access road would require a Stream Channel Alteration Permit from the State of Hawai'i Department of Land and Natural Resources CWRM.

In general, the alternatives, which are primarily non-industrial in nature, would not be a significant source of pollutants or toxins, and therefore would not significantly increase the potential for pollutants or toxins to impact ground or surface water resources via the storm drainage system. Standby diesel-powered generators and fuel storage tanks installed under both the Proposed Action and Modernization/Expansion alternative would be designed and managed in compliance with federal standards and EPA Oil Pollution Prevention regulations (40 CFR 112) to prevent spills from reaching ground and surface water resources.

#### **4.8.2 No Action**

The No Action Alternative would not impact ground and surface water resources.

### **4.9 Soils and Topography**

#### **4.9.1 Proposed Action**

The Proposed Action would not significantly alter the existing topography of the project site. The project site within the boundaries of NCTAMS PAC is located on a plateau that slopes gently from east to west. Given the relatively level topography of the project site, minimal site preparation and grading would be required. Site grading would be designed to balance the cut and fill quantities. A preliminary geotechnical soil assessment determined that soils conditions in the vicinity of the proposed HRSOC operations building are competent for the types of structures planned, and no special foundation preparation would be needed. The proposed access road would be aligned to maintain the existing topography.

#### **4.9.2 Modernization/Expansion**

No long-term change to topography is expected since the proposed Building 9 expansion would be developed underground. The new one-story, 100,000 sf (9,290 m<sup>2</sup>) facility would be below grade adjacent to and south of the existing facility, at an elevation similar to the existing Building 9. Implementation of this alternative would require extensive site preparation and grading, resulting in a significant short-term impact to the existing topography. Soils excavated during construction would be relocated within the project site, and would not be transported off-site for disposal.

#### **4.9.3 No Action**

The No Action Alternative would not impact existing soil or topographic conditions.

## 4.10 Biological Resources

The Proposed Action, Modernization/Expansion and No Action Alternative would have no significant impact on threatened, endangered or candidate listed bird, mammal or plant species protected by Federal and State regulations. None have been observed at either project site, and no unique habitat resources important to native or protected birds and mammals are found at either site. The general transformation from pineapple cultivation to an urbanized, landscaped environment associated with the Modernization/Expansion Alternative may result in a beneficial impact: the development of this land for something other than pineapple might actually increase the number of alien species of birds utilizing the site (Bruner 2004) and the use of native species in landscaping could increase the presence and occurrence of native plants.

## 4.11 Air Quality

Air quality standards are established by both the EPA and by the DOH. The State of Hawai'i is in "attainment" for all criteria air pollutants.

### 4.11.1 Proposed Action

The Proposed Action would not significantly impact air quality. Analysis of potential emission sources conducted as part of this EA indicates that the emissions from the Proposed Action would be substantially less than the defined significant emission rates. Therefore, any air quality impacts from these emissions are negligible. Some temporary short-term air quality impacts would be expected due to emissions from demolition activities, construction equipment operations, and site preparation for construction. Standard construction and erosion control techniques, such as the use of dust suppressants and other best management practices, would be used to control these temporary construction-related emissions. Exhaust emissions from on-site mobile and stationary construction equipment would be temporary. Asbestos, lead-based paint and other hazardous emissions encountered during demolition would be managed according to Federal and State regulations.

No significant long-term, operational period air quality impacts would be expected from the Proposed Action. HRSOC operations are primarily non-industrial, communications- and administrative-related activities. Any air emissions resulting from the HRSOC operations, including emissions from four diesel-fired emergency generators to serve as backup power and a classified material incinerator/shredder, would comply with air quality permit requirements. The increased vehicular traffic associated with the Proposed Action would result in increased exhaust emissions along local roadways near the project site and reduced vehicular emissions in the area around the existing Kunia site. Impacts to air quality would be temporary due to the regional climate and the rural character of the area.

### 4.11.2 Modernization/Expansion

Similar to the Proposed Action, the Modernization/Expansion Alternative would result in short-term, temporary air quality impacts due to construction-related activities. Asbestos, lead-based paint and other hazardous emissions encountered during demolition would be managed according to Federal and State regulations.

No significant, long-term operational period air quality impacts are expected from this alternative. Air emissions would remain similar to existing levels since no new emission sources are planned and traffic levels of service are not expected to change significantly. Any new air emission sources would comply with air quality permit requirements.

#### **4.11.3 No Action**

The No Action Alternative would not generate any new emissions.

### **4.12 Noise**

#### **4.12.1 Proposed Action**

The Proposed Action would result in potential short-term, construction-related noise impacts to the on-base community and the surrounding noise-sensitive land uses of Helemano Elementary School and Whitmore Village due to the construction of the proposed access road and the presence of construction equipment along Whitmore Avenue. The proposed access road would be located more than 750 feet (230 m) from Kahi Kani Neighborhood Park, and about 2,000 feet (610 m) from the nearest classroom buildings at Helemano Elementary School. The nearest residences at Whitmore Village would be approximately 1,000 feet (305 m) from the proposed access road and at least 100 feet (30 m) from the proposed utility improvements along Whitmore Avenue. The dominant noise sources during project construction would probably be foundation preparation and earth moving equipment (e.g., bulldozers and diesel-powered trucks) associated with the construction of the main HRSOC building, located approximately 0.5 miles (0.8 km) away from the nearest homes. The noise level of typical construction equipment (e.g., trucks, backhoes, loaders) is approximately 85 dBA at a distance of 50 feet (15 m) (USEPA, 1971). The actual noise levels produced would relate to the methods employed during each stage of the construction process. During construction, the construction contractor would comply with the State of Hawai'i, DOH standards for allowable noise levels. Construction-related traffic would be routed through the proposed access road when built. Initial construction-related traffic during groundbreaking would be short-term, temporary, and coordinated to minimize impacts during peak traffic hours. Potential noise impacts to Helemano Elementary School and Whitmore Village residences during construction could be minimized by installing mufflers on construction equipment and vehicles requiring exhaust systems, appropriately scheduling demolition and construction activities, and installing noise barriers.

During the operational phase, the primary source of long-term noise impacts would result from increased traffic volumes as vehicles travel along the proposed access road running north of Whitmore Village. The vehicles would primarily be privately-operated passenger vehicles moving at relatively low speeds, with the greatest volumes expected during the weekday morning and afternoon peak hours. Commercial vehicles would comprise a small percentage (i.e., generally less than 5%) of the vehicle traffic. Traffic noise impacts greater than the maximum permissible sound levels allowable under Federal and State standards would not be expected at the adjacent residential property lines. An analysis of peak hour traffic conditions indicates that projected noise levels at the nearest residential property line would be about 45 dBA. Assuming existing ambient noise levels in the 45 dBA range, the predicted noise levels associated with the

Proposed Action indicate no increase in the existing ambient noise levels, resulting in no significant effect on the nearest homes at Whitmore Village.

#### **4.12.2 Modernization/Expansion**

No significant short-term or long-term noise impacts to surrounding land uses would be anticipated in this alternative. Although the 65 dBA and 75 dBA noise contours from Wheeler AAF (PACNAVFACENGCOM, November 1998) encompass most of KRSOC, existing land uses within these contours (i.e., storage, industrial and outdoor recreation facilities) are generally compatible with the noise contours. Both the existing Building 9 and the proposed expansion would be below grade and shielded from aircraft noise.

Operational noise levels would remain similar to existing levels. Construction-related noise impacts would be similar to the Proposed Action; however, there are no residential uses, schools or other noise-sensitive land uses in the immediate vicinity of the KRSOC. Possible noise and vibration disturbances to KRSOC operations resulting from demolition and construction activities could be minimized by limiting noise-generating activities to off-peak hours and utilizing noise control measures. The construction contractor would be responsible for ensuring that applicable occupational safety and health noise regulations are followed.

#### **4.12.3 No Action**

The No Action Alternative would not generate any new noise sources or alter existing ambient noise levels.

### **4.13 Aircraft Hazard**

#### **4.13.1 Proposed Action**

The Proposed Action is not within any aircraft hazard zones and would reduce potential exposure to aircraft hazards by removing activities, personnel and property from within the Wheeler AAF aircraft hazard zones.

#### **4.13.2 Modernization/Expansion**

The Modernization/Expansion Alternative would not have a significant impact to aircraft hazards. Existing storage, maintenance and outdoor recreation facilities located within the Wheeler AAF Clear Zone that would be re-used under the Modernization/Expansion Alternative are compatible uses. All new facilities, with the exception of an upgraded base entry control point, would be planned outside the aircraft hazard zones. Beneficial impacts to personnel safety would result as the Building 9 tunnel entrance would be relocated outside the aircraft hazard zone. New construction would be designed in accordance with Army Regulation 95-2: Air Traffic Control, Airspace, Airfields, Flight Activities, and Navigational Aids, and Technical Manual 5-803-7: Airfield and Heliport Planning and Design (*Navy Facilities Engineering Command Publication P-971*). The Navy would coordinate airfield safety reviews with the Army prior to construction.

### **4.13.3 No Action**

The No Action Alternative would not generate new or alter exposure to aircraft hazards. This alternative would forego the long-term benefit of reducing aircraft hazards to KRSOC personnel.

## **4.14 Hazardous and Regulated Materials**

### **4.14.1 Proposed Action**

The Proposed Action would not significantly impact hazardous and regulated waste materials. There are no known environmental areas of concern and no Installation Restoration program sites within the project site at NCTAMS PAC. Demolition of the CDAA, Building 294, existing pavements, ductbanks and structures would not be expected to generate significant levels of hazardous and regulated materials. Lead-based paint may be present on the CDAA and in Building 294. The CDAA waste stream, which would be expected to meet local construction and demolition landfill requirements for disposal, would undergo Toxicity Characteristic Leaching Procedure sampling and analysis to determine waste stream characteristics and suitable means of disposal or reuse. Asbestos containing materials may be present in Building 294 and on electrical cables. Demolition of Building 294 would include removal of an emergency generator, day tank, and underground diesel fuel storage tank. Hazardous material surveys would be conducted to determine the extent of hazardous material contamination. Abatement, handling and disposal of any hazardous or regulated materials encountered during demolition, construction and the operational phase would be implemented in accordance with applicable Federal and State regulations.

An Environmental Baseline Survey indicated that soils within the vicinity of the proposed land acquisition areas may contain pesticide/herbicide residue associated with previous use of the land for agricultural production; however, current environmental conditions would not threaten human health and the environment and/or future use of the property for the proposed use (Environet, 2004). If hazardous and regulated materials are present in the disturbed soils, they will be removed, handled, disposed of, and remediated in accordance with applicable Federal and State regulations.

### **4.14.2 Modernization/Expansion**

During renovation, asbestos and lead-based paint in the existing Building 9 would be removed and disposed. Abatement and disposal of any hazardous or regulated materials found during demolition, construction and the operational phase would be implemented in accordance with applicable Federal and State safety, health, and environmental regulations. A Certified Industrial Hygienist would monitor demolition activities and certify the area to be clean of asbestos particles after completion.

Known environmental areas of concern that would be addressed prior to construction include a waste oil disposal site near the existing warehouse (Building 25), surface soil petroleum contamination in the vicinity of the new access roadway, and diesel fuel contamination from a 305,000-gallon UST. The area around the existing exterior transformers may require remediation due to the historical maintenance practice of oil disposal near the transformer. Replacement of existing underground diesel fuel tanks would not be expected to require environmental remediation. Similar to the Proposed

Action, soils historically used for agriculture production may contain chemicals associated with agricultural production. An Environmental Baseline Survey would be completed to identify environmental conditions and appropriate abatement measures for properties the Navy would acquire. If hazardous and regulated materials are present in the disturbed soils, they will be removed, handled, disposed of, and remediated in accordance with applicable Federal and State regulations.

The Modernization/Expansion Alternative would take place within the 6,000-acre (2,428-ha) Del Monte Corporation Superfund site (EPA ID# HID9806376341) added to the National Priorities List on December 16, 1994 due to agriculture-related soil and groundwater contamination. The project site is approximately 0.75 miles (1.2 km) from the nearest area identified for remediation (the Kunia Well spill area and adjacent areas). Given the project's distance from the contaminated areas, the administrative-type function of the KRSOC, and that no residential, childcare or health care facilities are associated with this alternative, development of this site would not be expected to impact or endanger human health and safety.

#### **4.14.3 No Action**

The No Action alternative would not generate new hazardous and regulated materials.

### **4.15 Electromagnetic Radiation and Electromagnetic Interference Hazards**

#### **4.15.1 Proposed Action**

The Proposed Action would not have a significant impact on EMR or EMI hazards. There are no known EMR hazards associated with the existing operations at NCTAMS PAC. The proposed HRSOC antennae transmissions would not introduce new sources of EMR or be hazardous to personnel. Short-term EMI hazards may occur during the construction phase due to the use of power tools and RFI stabilizing arc-welding. Proper antennae handling and security procedures would mitigate the EMI hazards to workers. During the operational phase, radio frequency reflections from the HRSOC may interfere with the operation of the existing Iridium Satellite Communications Facility. An earthen berm designed to shield low angle transmissions would be constructed near the existing Iridium Facility to mitigate potential interference with existing operations and eliminate ongoing instances of multi-path interference.

Electronic equipment and subsystems would comply with MIL-STD-461E, Requirements for the Control of Electromagnetic Interference Characteristics of Subsystems and Equipment dated August 20, 1999 and the Technical Report on the Electromagnetic Radiation Hazards Electromagnetic Compatibility Review for Kunia Regional Security Operations Center Relocation to NCTAMS PAC, Wahiawā, Hawai'i E3 Program Task No, E04-H003 (NSGA Kunia, 2004). A comprehensive baseline noise environment survey would be conducted before and after construction to ensure no impact to existing operating systems. Necessary site approvals would be obtained prior to construction. An EMR hazards survey would be conducted following construction to measure the actual field strength of the new transmitters.

#### 4.15.2 Modernization/Expansion

The Modernization/Expansion Alternative would not impact EMR or EMI hazards. There are no identified hazards from EMR or concerns for EMI associated with the existing operations. No new sources of EMR or EMI hazards would be introduced.

#### 4.15.3 No Action

The No Action Alternative would not introduce new EMR or EMI hazards.

### 4.16 Socio-Economic

#### 4.16.1 Proposed Action and Modernization/Expansion

The Proposed Action and Modernization/Expansion Alternative would result in short- and long-term direct, indirect and induced minor beneficial impacts to population, employment, income and commerce. Short-term employment levels would increase during the construction phase, resulting in positive economic benefits related to the increased employment levels and localized economic benefits for Wahiawā businesses and services due to the increased number of construction workers in the area. With an operational period employment level of approximately 2,800 personnel, both alternatives would result in a net employment level approximately 30 percent more than the existing KRSOC employment level. The addition of approximately 700 new military and civilian positions would require the relocation of military and civilian personnel currently stationed at installations beyond O'ahu and the recruitment of civilians within the existing labor pool. The minor increase in employment would generate a small increase in direct spending, which in turn would generate further economic activity.

No significant impacts to the existing socio-economic environment at the local and regional level are expected since both alternatives essentially entail enhancement and expansion of an existing activity within the Wahiawā region. Under both alternatives, existing personnel would most likely retain their present place of residence<sup>3</sup>. The residential distribution and consumer patterns of new personnel is expected to be similar to the current islandwide distribution of existing personnel, thereby minimizing the local and regional impacts on public services, housing, and support services and facilities.

Under the Proposed Action, Wahiawā businesses and employers would experience additional positive indirect economic benefits not realized under the Modernization/Expansion Alternative due to the project site's location north of Wahiawā Town and the expanded customer base. Potential economic benefits to Wahiawā businesses would result from HRSOC personnel purchasing goods and services on their way to and from work. However, since military personnel would most likely continue to frequent military establishments for the majority of their purchases and since the Proposed Action would include personnel support facilities (i.e., food court, mini-mart, barber, fitness center, medical), the residual economic benefit to Wahiawā businesses is likely to be limited to convenience items and retail and food services not found on-base.

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<sup>3</sup> Residential distribution of KRSOC personnel in 2002 estimated 40% of personnel living in Central O'ahu, approximately 40% in the Primary Urban Center, approximately 16% in the Ewa region, and 4% living in the remaining areas of O'ahu.

Short-term construction-related noise and air quality impacts to Whitmore Village residents would be expected. Positive long-term effects associated with the Proposed Action would include a new access road to NCTAMS PAC that bypasses the residential community of Whitmore Village, redirecting project-related traffic and commercial vehicles and visitors to NCTAMS PAC around Whitmore Village. Neither alternative would negatively impact or jeopardize the productivity of adjacent agricultural activities or development of the land for something other than agriculture. There would be no impact to access to existing recreational areas, cultural resources or scenic viewplanes. The Modernization/Expansion Alternative would involve the purchase of about 70 acres (28 ha) of State-owned ceded lands.

Both the Proposed Action and Modernization/Expansion Alternative would have a long-term social benefit for KRSOC personnel currently working in facilities that have exceeded their practical life and no longer meet operational requirements. Furthermore, both alternatives would improve operational capabilities in support of national security.

#### **4.16.2 No Action**

The No Action Alternative would not impact the existing socio-economic environment. This alternative would forego the short-term benefit of creating temporary construction period employment and the long-term benefit of improving quality of life for KRSOC personnel now working in facilities which do not meet operational requirements (that would be replaced by the Proposed Action).

### **4.17 Consistency with the Objectives of Federal, State and County Land Use Policies, Plans and Controls**

This section provides an overview of the proposed project's consistency with major Federal, State and County land use policies, plans and controls. A listing of required environmental permits and approvals is included in Chapter 1.

#### **4.17.1 Federal**

**Commander, Navy Region Hawaii Regional Shore Infrastructure Plan Overview Plan.** The *Commander, Navy Region Hawaii (CNRH) Regional Shore Infrastructure Plan (RSIP) Overview Plan* (2002) articulates the Navy's long-range vision for land use and facilities in Hawai'i. The Long Range Land Use Plan (LRLUP) and the accompanying sub-area development plans presented in the Overview Plan provide guidance for appropriate property use within a five- to ten-year time frame and direct future planning and management decisions. Guiding principles of the plan emphasize:

- Protection of operational capabilities and mission readiness;
- Reduction of shore infrastructure costs and the reuse, divestiture or demolition of underutilized facilities; and
- Optimized land use/facility locations.

The Proposed Action is consistent with the guiding principles to protect operational capacities and mission readiness, and to optimize land use/facility locations.

The *CNRH RSIP Overview Plan* recommended relocation and consolidation of the KRSOC and the Joint Intelligence Center Pacific (JICPAC) to the Pearl Harbor Naval Complex. This alternative was evaluated and dismissed as not feasible (see discussion in Section 2.1.4). The Proposed Action is within an area identified for Communications/IT uses according to the NCTAMS PAC Wahiawa LRLUP, and is generally consistent with the overall pattern of land use presented in the RSIP Overview Plan.

**Naval Computer and Telecommunications Master Area Station Pacific Integrated Natural Resources Management Plan.** The *NCTAMS PAC INRMP* was developed to comply with the Sikes Act Improvement Act Amendments of 1997 (P.L. 105-85), which requires military installations to prepare and implement a plan for the management, conservation and protection of natural resources while supporting the Navy's mission, operational and security requirements. The *INRMP* provides planning guidance for the management of natural resources based on a ten year planning horizon. *INRMP* objectives that pertain to the Proposed Action's project site at NCTAMS PAC include:

- Preserve, protect and enhance wetlands in the NCTAMS PAC area
- Implement grass and vegetation management within the antennae fields
- Protect pocket-forested areas to provide watershed protection and prevent soil erosion.

The Proposed Action conforms with the objectives to protect wetlands and protect pocket-forested areas within the NCTAMS PAC area. The facilities and activities associated with the Proposed Action are concentrated within the center of the installation, and would not be located near the wetland and pocket-forested areas identified in the *NCTAMS PAC INRMP*. The USACE has determined that there are no jurisdictional navigable waters of the U.S. as defined by the Clean Water Act within the NCTAMS PAC project area (Appendix E).

#### 4.17.2 State of Hawai'i

**Hawai'i State Plan.** The *Hawai'i State Plan*, established through the State's legislative process, represents public consensus regarding expectations for Hawai'i's future. Chapter 226, Hawai'i Revised Statutes (HRS), as amended, describes the purpose of the State Plan as follows:

*"[it] shall serve as a guide for the future long-range development of the State; identify the goals, objectives, policies, and priorities for the State of Hawai'i; provide the basis for determining priorities and allocating limited resources, such as public funds, services, manpower, land, energy, water, and other resources; improve coordination of state and county plans, policies, programs, projects, and regulatory activities; and establish a system for plan formation and program coordination to provide for an integration of all major state and county activities." (Chapter 226-1, HRS; Findings and Purpose).*

The Proposed Action is consistent with most applicable goals, objectives, policies and guidelines of the *Hawai'i State Plan*, including the following

**Section 226-6 Objectives and policies for the economy—in general.**

**Section 226-6(b)(11)** *Maintain acceptable working conditions and standards for Hawai'i's workers.*

**Discussion:** The Proposed Action would relocate the KRSOC operation and its associated personnel and provide adequate facilities that meet the Activity's unique mission and operational space requirements.

**Section 226-7 Objectives and policies for the economy—agriculture.**

**Section 226-7(a)(1)** *Continued viability in Hawai'i's sugar and pineapple industries.*

**Section 226-7(a)(2)** *Continued growth and development of diversified agriculture throughout the State.*

**Discussion:** The proposed land acquisition areas would utilize approximately 35 acres (14 ha) of agricultural land currently farmed in pineapple, but is not expected to impact the viability of the pineapple industry in Hawai'i. The Proposed Action does not involve lands farmed in sugar cane or diversified agriculture crops, and thus, would not impact these industries. Although development of the proposed land acquisition areas would preclude future agriculture use of these lands, its removal from agricultural use would not impact the future growth of the diversified agriculture industry as sufficient agricultural land is available on O'ahu and on the other islands for production.

**Section 226-9 Objectives and policies for the economy—federal expenditures.**

**Section 226-9(a)** *Planning for the State's economy with regard to Federal expenditures shall be directed towards achievement of the objective of a stable federal investment base as an integral component of Hawai'i's economy.*

**Section 226-9(b)(1)** *Encourage the sustained flow of Federal expenditures in Hawai'i that generates long-term government civilian employment.*

**Section 226-9(b)(2)** *Promote Hawai'i's supportive role in national defense.*

**Section 226-9(b)(3)** *Promote the development of Federally supported activities in Hawai'i that respect statewide economic concerns, are sensitive to community needs, and minimize adverse impacts on Hawai'i's environment.*

**Discussion:** The Proposed Action would retain KRSOC's operational function in the State. The Federal government's proposed capital investment in the new HRSOC facilities indicates its long-term commitment to maintaining an operational presence in the State, along with its associated civilian employment. As an intelligence gathering and analysis activity, KRSOC plays an important role in national security and defense. The Proposed Action would provide the necessary physical facilities for this command. The Proposed Action is not expected to have significant environmental impacts. The design of the facilities would avoid impacts to sensitive environmental areas. During construction, best management practices would be employed to avoid or minimize environmental impacts. The Proposed Action has been presented to the Wahiawā Neighborhood Board #26 at several meetings (August 2004, June 2005 and July 2005),

and to the Whitmore Community Association in April 2005. The Navy is committed to working with the local community to address community issues regarding the proposed project. The Navy consulted with numerous State and County agencies and community organizations to obtain input on environmental issues of potential concern. These organizations are listed in Sections 6.1 and 6.2. The comment letters and corresponding response letters received are included in Appendices B and C.

***Section 226-12 Objectives and policies for the physical environment—scenic, natural beauty, and historic resources.***

***Section 226-12(b)(3)*** *Promote the preservation of views and vistas to enhance the visual and aesthetic enjoyment of mountains, ocean, scenic landscapes, and other natural features.*

**Discussion:** The Proposed Action would result in the construction of facilities at an existing developed military installation. The new facilities would replace the existing CDAA. Facility siting and appropriate design techniques would minimize the impacts to the visual environment.

***Section 226-18 Objectives and policies for facility systems—energy/telecommunications.***

***Section 226-18(c)(3)(C)*** *Adoption of energy-efficient practices and technologies.*

**Discussion:** The Proposed Action would incorporate sustainable design features, as feasible, including energy efficient technologies.

**Coastal Zone Management Program.** Portions of the Proposed Action are within the State's coastal zone as defined by the CZMA. The CZMA states that any construction on non-federal property (e.g., construction within State and City-owned roadways) requires that a CZM federal consistency determination be submitted to the State CZM Program. The Navy has determined that the Proposed Action is consistent with the State's CZM program (Appendix F). The State of Hawai'i concurred with the Navy's determination by letter dated August 2, 2005 (Appendix F). The Proposed Action would not have reasonably foreseeable direct or indirect short term or long term effects on any coastal use or resource of the State's coastal zone.

Objectives and policies of the Coastal Zone Management Program are described in Chapter 205A-2, HRS, Part I. The Proposed Action access road lies within the State's Coastal Zone Management Area, which includes all lands of the State and the area extending seaward from the shoreline except for federal installations such as NCTAMS PAC.

The project's conformance with relevant objectives of the Coastal Zone Management Program is discussed below:

***Recreational Resources***

***Objective:*** *Provide coastal recreational opportunities accessible to the public.*

**Discussion:** The Proposed Action would not impact coastal recreational opportunities.

### **Historic Resources**

**Objective:** *Protect, preserve, and where desirable, restore those natural and man-made historic and prehistoric resources in the coastal zone management area that are significant in Hawaiian and American history and culture.*

**Discussion:** The project site has had extensive agriculture-related land modification and landscaping activity during the last century, and there are no known prehistoric archaeological resources within the project area. There are no known cultural resources or practices that would be affected by the Proposed Action.

### **Scenic and Open Space Resources**

**Objective:** *Protect, preserve and where desirable, restore or improve the quality of coastal scenic and open space resources.*

**Discussion:** The Proposed Action would not significantly impact scenic viewplanes identified in the COSCP. The largest structure included in the Proposed Action would be a two-story facility, between 50 and 70 feet (15 and 21 m) high with a maximum cross sectional width of approximately 750 feet (230 m) and a ground floor footprint of about 160,000 sf (14,900 m<sup>2</sup>). Satellite receivers, approximately 20 feet (6 m) in height, would be sited near the new HRSOC operations facility, within the installation. By comparison, the CDAA, which is approximately 87 feet (27 m) in height and approximately 760 feet (232 m) wide with a footprint of about 454,000 sf (42,200 m<sup>2</sup>), is much taller and larger than the proposed HRSOC operations building. Although the proposed buildings would be more visible than existing facilities, building envelopes would appear below the top of the existing CDAA, and well below the panoramic view of the Ko'olau Mountain Range ridgeline.

### **Coastal Ecosystems**

**Objective:** *Protect valuable coastal ecosystems, including reefs, from disruption and minimize adverse impacts on all coastal ecosystems.*

**Discussion:** Grading and drainage for the development would comply with the State of Hawai'i, DOH and City and County requirements. Storm runoff from the Proposed Action would be discharged to existing drainageways on-site, flowing into Poamoho Stream. The project would maintain the existing drainage pattern at the project site as much as possible. Engineering design and topographic gradients consistent with storm water management practices would be used to facilitate percolation and detention of the flow within installation boundaries. Appropriate best management practices would be implemented during construction and facility operations to be consistent with Section 402 of the CWA, NPDES, and HAR 11-55, Water Pollution Control. No adverse impacts to stream water quality are anticipated.

### **Economic Uses**

**Objective:** *Provide public or private facilities and improvements important to the State's economy in suitable locations.*

**Discussion:** Federal government expenditures comprised 7.9% of the State's economy in 2001, making it the sixth largest component of the economy (DBEDT, 2003). The Proposed Action constitutes a major capital investment by the Federal government, indicating its long-term commitment to continuing KRSOC's operations in Hawai'i. By relocating KRSOC to Wahiawā, HRSOC would be able to operate in modern facilities, in an area currently used for national defense activities.

### **Coastal Hazards**

**Objective:** *Reduce hazard to life and property from tsunami, storm waves, stream flooding, erosion, subsidence, and pollution.*

**Discussion:** The project site is not in an identified flood hazard area. If future studies determine that the project area is within the flood zone, the project will comply with rules and regulations of the National Flood Insurance Program and all applicable County Flood Ordinances. The project area is approximately 8 miles (13 km) from the coast and not within a tsunami inundation zone. Development of the project would comply with Federal and State regulations.

### **Managing Development**

**Objective:** *Improve the development and review process, communication and public participation in the management of coastal resources and hazards.*

### **Public Participation**

**Objective:** *Stimulate public awareness, education, and participation in coastal management.*

**Discussion:** The Navy made presentations on the Proposed Action to the Wahiawā Neighborhood Board #26 at its August 2004, and June and July 2005 meetings in an effort to keep the communities nearest to the project area informed of the project. The project was also presented to the Whitmore Community Association in April 2005. Fliers were posted at various places in Whitmore Village to notify the community of the April meeting, including the Maranatha Christian Church, Whitmore Circle Apartments, Whitmore Market, Aloha Gas Station, Merlina's Kitchen, Whitmore Community Center, Helemano Elementary School, Dole Food Company Field Office, and the Dole Wahiawā Federal Credit Union. The project was also publicized in several newspaper articles, including the *Honolulu Advertiser* and *Ka Nūpepa*. Pre-consultation assessment during preparation of the Draft EA and distribution of the Draft EA included a wide range of government agencies, community organizations, and neighborhood groups (see Sections 6.1 and 6.2). Notices announcing availability of the Draft EA and the Navy's CZM federal consistency determination were published in the April 23, 2005 and June 23, 2005 editions of OEQC's *Environmental Notice*, respectively.

### **Beach Protection**

**Objective:** *Protect beaches for public use and recreation.*

**Discussion:** Project drainage structures would not interfere with public recreational and waterline activities, or result in beach erosion.

## **Marine Resources**

**Objective:** *Implement the State's ocean resources management plan.*

**Discussion:** This project would not affect the State's implementation of its ocean resources management plan.

**State Land Use Classification.** All lands in the State of Hawai'i have been classified in one of four land use districts by the State Land Use Commission, pursuant to HRS, Chapter 205, and Chapter 15-15, HAR. The four land use districts are: (1) Conservation; (2) Agricultural; (3) Urban; and (4) Rural. As shown in Figure 8, the Proposed Action, including both private-owned lands and NCTAMS PAC, encompasses lands within the State Agricultural District. Public, private and quasi-public utility systems and roadways are permitted uses within the State Agricultural District (Chapter 205-4.5, HRS). In general, the Proposed Action is compatible with the agricultural use of the lands.

**Chapter 343, Hawai'i Revised Statutes.** Chapter 343, HRS, the State of Hawai'i Environmental Impact Statement Law, establishes a system of environmental review to ensure that environmental concerns are given appropriate consideration in decision making along with economic and technical considerations. Compliance with Chapter 343, HRS is required for any program or project that proposes one or more of eight land uses or administrative acts, including use of State or County lands or funds other than for feasibility studies or the purchase of raw land. Because the Proposed Action involves the use of State lands (i.e., improvements to State roadways), the project is subject to review under Chapter 343, HRS and approval by the DOT (i.e., the approving agency). This EA was prepared to comply with the requirements of Chapter 343, HRS and Section 11-200, HAR.

Section 11-200-225, HAR provides that when an action is subject to both NEPA and Chapter 343, HRS requirements, Federal and State agencies are required to cooperate to the fullest extent possible to reduce duplication of the requirements. This cooperation, to the fullest extent possible, must include joint environmental impact statements, concurrent public review, and concurrent processing. As such, this document will provide documentation for both the NEPA and Chapter 343, HRS environmental review process.

### **4.17.3 City and County of Honolulu**

**General Plan of the City and County of Honolulu.** The *General Plan for the City and County of Honolulu* was adopted in 1977, and has been subsequently amended (most recently in 2003). The Plan is a comprehensive statement of the long-range social, economic, environmental and design objectives for the general welfare and prosperity of the people of O'ahu. Included in the *General Plan* are broad policy statements that facilitate the attainment of the Plan's objectives.

The Proposed Action is consistent with the following *General Plan* objectives and policies:

*I. Population, Objective C: To establish a pattern of population distribution that will allow the people of O'ahu to live and work in harmony.*

*Policy 2: Encourage development within the secondary urban center at Kapolei and the 'Ewa and Central O'ahu urban-fringe areas to relieve developmental pressures in the remaining urban-fringe and rural areas and to meet housing needs not readily provided in the Primary Urban Center.*

**Discussion:** The Proposed Action would relocate the KRSOC from a facility within Central O'ahu to a new location about four miles (6.4 km) northeast. Both the Proposed Action and Modernization/Expansion Alternative would preserve current population distribution patterns and would maintain jobs and economic activity within the Wahiawā area, thereby supporting economic development in Central O'ahu and minimizing development pressures on Honolulu's urban core.

*II. Economic Activity, Objective G: To bring about orderly economic growth on O'ahu*

*Policy 4: Encourage the continuation of a high level of military-related employment in the Hickam-Pearl Harbor, Wahiawā, Kailua-Kaneohe and 'Ewa areas.*

**Discussion:** The Proposed Action would maintain an existing military activity in the Wahiawā area, thereby preserving the level of military-related employment within the Central O'ahu region and maximizing the use of Navy-owned property. Short-term economic benefits due to an increase in construction period employment levels would be expected from both alternatives.

*III. Natural Environment, Objective A: To protect and preserve the natural environment.*

*Policy 4: Require development projects to give due consideration to natural features such as slope, flood and erosion hazards, water-recharge areas, distinctive land forms, and existing vegetation.*

*Policy 6: Design surface drainage and flood-control systems in a manner which will help preserve their natural settings.*

*III. Natural Environment, Objective B: To preserve and enhance the natural monuments and scenic views of O'ahu for the benefit of both residents and visitors.*

*Policy 2: Protect O'ahu's scenic views, especially those seen from highly developed and heavily traveled areas.*

**Discussion:** The Proposed Action would incorporate low-impact and sustainable design strategies that minimize impacts on the natural environment. Stormwater and construction management best management practices would be used, and all construction and operation activities would comply with all applicable Federal and State regulations. Scenic viewplanes identified in the COSCP would not be adversely affected. Under the Proposed Action, building envelopes would be kept under the current CDAA elevation, minimizing their appearance from public vantage points.

*VII. Physical Development and Urban Design, Objective A: To coordinate changes in the physical environment of O'ahu to ensure that all new developments are timely, well designed, and appropriate for the areas in which they are located.*

*Policy 2: Coordinate the location and timing of new development with the availability of adequate water supply, sewage treatment, drainage, transportation, and public safety facilities.*

*Policy 4: Require new developments to provide or pay the cost of all essential community services, including roads, utilities, schools, parks, and emergency facilities that are intended to directly serve the development.*

**Discussion:** The Proposed Action would include utility and infrastructure improvements needed to serve the development. In general, regional transportation and utility systems have sufficient capacity to meet project demands, with the project providing appropriate improvements and mitigation measures, if needed.

**Central O'ahu Sustainable Communities Plan.** The City and County of Honolulu's Development Plan (DP) program provides a relatively detailed framework for implementing *General Plan* objectives and policies for the growth and development of O'ahu at a regional level. The DP program establishes eight geographical DP areas, including the Central O'ahu DP area where the project area is located.

The COSCP, which was adopted in 2002 and codified as Ordinance No. 02-62, Revised Ordinances of Honolulu, articulates conceptual, long-range visions and policies for regional land use, and includes land use maps illustrative of the policy statements articulated in the Plan. The COSCP, which supports the *General Plan* and identifies the role of Central O'ahu in O'ahu's development pattern, provides principles and guidelines for land use, public facilities, and infrastructure and establishes growth management and implementation strategies. The goals of the COSCP include:

- Long-term protection of agricultural and preservation areas
- Revitalization of Waipahu and Wahiawā
- Development of master-planned new communities in Mililani Mauka, Koa Ridge Makai, Waiawa and Royal Kunia.

Major military bases within Central O'ahu are expected to remain, and are not expected to expand beyond their existing boundaries. The Proposed Action generally supports the following planning principles and guidelines of the COSCP:

*2.1 The Vision to 2025. Population will have grown from almost 149,000 people in 2000 to over 173,000 in 2025. Over 11,000 new housing units will have been built in master-planned communities. Significant job growth is also expected, rising from almost 39,000 jobs in 2000 to over 65,000 in 2025.*

**Discussion:** The Proposed Action maintains existing military activities within Central O'ahu, thereby supporting the projected population and job growth expected for the region.

*2.2.2 Retention of Agricultural Lands. The COSCP protects the highest value prime and unique agricultural lands in Central O'ahu from urban development. These high-value lands are located in four areas: lands along both sides of Kunia Road, lands north of Wahiawā, lands surrounding Mililani, and lands on the Waipio Peninsula.*

**Discussion:** The Proposed Action would permanently withdraw approximately 35 acres (14 ha) of prime agricultural land for development of the proposed access road and roadway and utility system improvements. The proposed use of the land for transportation purposes would be compatible with the surrounding agricultural activity and would not preclude future agricultural use of the adjoining lands or increase development potential of the remaining agricultural lands. These lands, which would be on the periphery of the agricultural lands, would not impact agricultural productivity since the continuity of the remaining agricultural lands would be preserved.

*2.2.9 Preservation and Enhancement of Historic and Cultural Resources. Central O'ahu's historic and cultural resources will be preserved and enhanced by retaining visual landmarks and significant vistas, including views of the Wai'anae and Ko'olau Mountains from Kunia Road, Kamehameha Highway, and H-2 Freeway.*

*3.10.2.1 Appropriate Scale. The visibility of large building volumes and tall buildings or machinery elements from arterial roads, major regional collector roads, residential areas, commercial and civic districts and parks should be minimized through site planning and landscaping.*

*3.10.3.3 Building Height (Industrial Centers). Building heights should generally not exceed 60 feet, except that taller vertical structures are acceptable when required as part of an industrial operation.*

**Discussion:** The Proposed Action would not significantly impact scenic viewplanes identified in the COSCP. The Proposed Action would replace the existing 87-foot (27-m) tall CDAA structure with a two-story HRSOC operations building between 50 and 70 feet (15 and 21 m) in height. Landscaping and design features would be incorporated as possible to screen the proposed facilities and blend them into the surrounding backdrop. Although visibility of the proposed facilities would be greater than that of the semi-transparent CDAA, building envelopes would appear below the top elevation of the panoramic Ko'olau Mountain Range ridgeline (see Section 4.4.1). From Kūkaniloko Birthstones State Monument, the proposed facility would appear to blend in with other buildings at Whitmore Village, such as the Helemano Elementary School.

*4.3.1 General Policies (Wastewater Treatment). All wastewater produced by new developments in Central O'ahu should be connected to a regional or municipal sewer service system.*

*4.6.1 General Policies (Drainage Systems). Drainage system design should emphasize control and minimization of non-point source pollution and the retention and/or detention of storm water on-site and in appropriate open space and wetland areas. Storm water should be viewed as a potential irregular source of water for recharge of the aquifer which should be retained for absorption rather than quickly moved to coastal waters.*

**Discussion:** The Proposed Action would include the necessary utility improvements needed to serve the development and would incorporate sustainable design strategies to minimize impacts on the natural environment. Wastewater for the Proposed Action would be treated by the City's Wahiawā Wastewater Treatment Plant. Once treated, the effluent would be discharged into the Wahiawā Reservoir, which ultimately drains via Kaukonahua Stream. The level of treated effluent discharged under the Proposed Action would be similar to the level of effluent discharged under the

Modernization/Expansion Alternative and above the level of effluent discharged under the No Action Alternative. Under both the Modernization/Expansion Alternative and the No Action Alternative, wastewater would be treated by the Schofield Barracks Wastewater Treatment Plant to the secondary level before being discharged into either the WSC irrigation ditch or Kaukonahua Stream below the Wahiawā Reservoir. The drainage system would be designed to maintain the existing drainage patterns, with surface drainage and retention basins utilized wherever possible to facilitate percolation and minimize the impact of runoff.

**City and County of Honolulu Land Use Ordinance.** The *City and County of Honolulu Land Use Ordinance (LUO)* and accompanying maps define the allowable uses of land within the City and County of Honolulu. The *LUO* describes the various zoning districts, the uses allowed within each zoning district, and the applicable development standards for each district. NCTAMS PAC is currently zoned F-1, Military and Federal Preservation, and lands within the proposed land acquisition areas are zoned A-1, Restricted Agricultural. The military and transportation uses associated with the Proposed Action are consistent with the existing zoning. All military and Federal uses and structures are permitted in the F-1, Military and Federal Preservation District. Public uses and structures, including “uses conducted by or structures owned or managed by the federal government... to fulfill a governmental function, activity or service for public benefit and in accordance with public policy” (*Section 21, Revised Ordinances of Honolulu*), are permitted in the A-1, Restricted Agricultural District.

**Special Management Area.** The City and County of Honolulu, similar to other counties in Hawai‘i, has adopted: (1) boundaries which identify the Special Management Area (SMA); and (2) rules and regulations which are consistent with HRS, Chapter 205A that control development within the SMA. Proposed developments within the SMA are subject to review by the City and County of Honolulu, Department of Planning and Permitting in order to ensure adequate access to recreation areas and minimal adverse impacts to water resources, and scenic and recreational amenities. The Proposed Action is outside the SMA, and would not require a SMA permit.

#### 4.18 Cumulative Impacts

Cumulative impacts on environmental resources result from the incremental effects of development and other actions when evaluated in conjunction with other government and private, past, present and reasonable foreseeable future actions.

Reasonably foreseeable actions that were considered in the analysis of cumulative impacts included known land use changes planned for the area and programmed military construction (MILCON) projects scheduled for completion by fiscal year (FY) 2010, including:

- Full occupancy of existing family housing and bachelor quarter facilities at NCTAMS PAC, an increase of approximately 300 persons, or approximately 50% more than the existing population.
- U.S. Army Space Command plans to construct a new Satellite Communications (SATCOM) operational control facility at NCTAMS PAC. The proposed project, which includes operational, administrative and personnel support spaces and an adjacent standby power generator plant and antenna pad, is planned to support

approximately 65 persons operating the facility over a 24-hour, 7-day period. The facility is planned for a site adjacent to the existing satellite communications facility near the easternmost edge of the installation, approximately 4,000 feet (1,220 m) from the proposed HRSOC facility.

- Navy MILCON P-173 Construct Communications Center proposes to replace the existing Communications Service Center. The proposed project would consolidate existing NCTAMS PAC functions with activities currently located at other locations, supporting an additional 150 persons. The facility is also planned for a site adjacent to the existing satellite communications facility near the easternmost edge of the installation, approximately 4,000 feet (1,220 m) from the proposed HRSOC facility.
- The Army is planning to convert the 2<sup>nd</sup> Brigade, 25<sup>th</sup> Infantry Division stationed at Schofield Barracks Military Reservation (SBMR) to a Stryker Brigade Combat Team (SBCT). New construction, facility upgrades, land acquisition for training areas and road construction, and new equipment and weapons systems, and up to 800 new soldiers and their families, would be introduced to SBMR.
- The planned expansion of the Dole Plantation Visitors Center and Helemano Plantation includes additional retail and commercial activities, food services, and outdoor recreation facilities that showcase agriculture. Planned uses include a group living facility, elderly daycare facility, and vocational training center.

The Proposed Action and Modernization/Expansion Alternative, in conjunction with future private and military actions planned in the region, collectively would not have a significant cumulative impact on the resource areas analyzed. A discussion of each resource area is provided below.

**Land Use Compatibility.** The SATCOM, MILCON P-173 and full occupancy of existing housing facilities within NCTAMS PAC are compatible with the NCTAMS PAC Wahiawa LRLUP Plan presented in the CNRH RSIP Overview Plan (2002). The standup of the SBCT within SBMR is consistent with the Army's land use policies and controls. The Dole Plantation Visitors Center and Helemano Plantation projects involve expansions of existing commercial operations that would be subject to the City and County of Honolulu's land use regulatory controls. No cumulative land use compatibility impacts are anticipated.

**Cultural Resources.** The SATCOM and MILCON P-173 projects are located in the general vicinity of the Proposed Action. Similar to the Proposed Action, there are no historic properties affected by development of these facilities, nor would development affect cultural resources. Because there is no direct impact, there would be no cumulative impact either. Full occupancy of the NCTAMS PAC housing would have no cumulative impact. Potential archaeological and cultural impacts associated with the SBCT and the Dole Plantation Visitors Center and Helemano Plantation expansions have been or would be evaluated on an individual basis, with mitigation identified as appropriate. No cumulative cultural resources impacts are anticipated.

**Visual Environment.** Only the SATCOM and MILCON P-173 projects have the potential for cumulative visual impact. The other projects are located well outside the NCTAMS PAC viewshed. Both facilities are planned adjacent to the existing SATCOM

facility and antennae farm, in an area approximately 4,000 feet (1,220 m) upland of the proposed HRSOC facility. The new SATCOM facility will consist of a single story building that would be obscured by the existing and distinctive, white dish antennas. MILCON P-173 is intended to replace an existing communications center currently located in the “downtown” area of NCTAMS PAC. It is also planned as a single story building and would include associated site work. The low rise nature of both these facilities would not significantly change visual backdrop of the proposed HRSOC facility. Although the new facilities would be visible from public vantage points, significant views of the Ko‘olau Mountain Range from Kamehameha Highway and surrounding areas would not be obstructed. Considered collectively, the introduction of these new facilities within the installation would intensify the communications function of the installation and result in a change to the visual environment. However, because this change is limited to a relatively small sector of the existing NCTAMS PAC installation, it would not have a significant cumulative impact on visual resources within the greater Central O‘ahu area.

**Traffic.** The cumulative effects of the identified projects have been factored into the Proposed Action’s traffic impact analysis and identified improvements (e.g., Section 4.5 regarding projected future baseline conditions). Historical trends in average daily traffic have increased at a rate of 1 to 2 percent per year in the vicinity of NCTAMS PAC, and based on the trips associated with the identified projects, this trend is expected to continue into the foreseeable future. No significant cumulative traffic impacts are anticipated.

**Utilities.** The utility studies conducted for the Proposed Action have factored in demands and flows associated with the NCTAMS PAC projects. Off-base projects would be serviced by independent utility systems and would therefore not contribute to a cumulative impact.

**Flood Hazard.** The NCTAMS PAC site is in an upland, well drained location. The NCTAMS PAC projects would not result in any cumulative flood hazard effects. Off-base projects are located in different watersheds and would therefore not contribute to a cumulative impact.

**Ground and Surface Water Resources.** The State of Hawai‘i’s Commission on Water Resource Management establishes sustainable groundwater yields. The Wahiawā aquifer has a remaining allocation of 2.6 mgd (9.84 million Lpd). The Proposed Action and all other foreseeable NCTAMS PAC projects have an estimated average daily demand of 0.46 mgd (1.75 million Lpd), less than one-quarter of the aquifer’s available allocation. The SBCT is expected to increase daily water use within the SBMR by about 0.17 mgd (0.65 million Lpd). Groundwater requirements of the Dole Plantation Visitors Center and Helemano Plantation projects are not known but given that they are both expansions of existing visitor-oriented daytime uses, increased demand should not be significant. Based on the foregoing, cumulative groundwater demands are projected to be well within sustainable yields of the aquifer and therefore there would be no associated cumulative impact. There are no surface water resources or jurisdictional navigable waters within NCTAMS PAC, and therefore, there is no potential for cumulative impact to surface waters. Off-base projects are outside of the project area watershed and therefore would not contribute to a cumulative impact.

**Soils and Topography.** The projects are all in separate, distinct locations with no potential for cumulative impact to soils and topography.

**Biological Resources.** The Proposed Action and other NCTAMS PAC projects would have no direct impact on biological resources. There are no endangered species, critical habitats, natural resource areas, or ecological reserve areas within the installation. Development of the NCTAMS PAC projects would therefore not result in a cumulative impact on biological resources. Off-base projects analyzed are sufficiently distant to the project area's ecological setting to minimize the potential for cumulative impact.

**Air Quality and Noise.** Hawaii's air quality is relatively clean and is considered an attainment area under the Clean Air Act, not subject to the General Conformity Rule. Cumulative air quality impacts would typically be related to traffic LOS, an issue that has been carefully evaluated in the traffic impact assessment. A range of traffic improvements has been proposed to minimize decreases in traffic LOS associated with the Proposed Action and future baseline conditions that include the other projects. The projects are sufficiently distant from each other so that there would be no potential for cumulative noise impacts.

**Aircraft Hazard and Hazardous and Regulated Materials.** The Proposed Action and other NCTAMS PAC projects are not affected by aircraft hazards and hazardous and regulated materials and therefore no cumulative impacts are anticipated.

**Electromagnetic Radiation and Electromagnetic Interference Hazards.** Potential cumulative EMR and EMI hazards within NCTAMS PAC have been carefully evaluated. There are no known EMR hazards associated with existing or planned operations at NCTAMS PAC. Potential EMI hazards during the construction and operational phases would be minimized by following DoD standards. Ongoing EMI and EMR testing at NCTAMS PAC would ensure that no cumulative adverse impacts would occur.

**Socio-Economic.** The cumulative effect of all the projects would be to increase employment by upwards of 1,950 jobs (700 additional jobs associated with the Proposed Action, 200 additional jobs associated with the Dole Plantation Visitors Center and Helemano Plantation projects, and the balance for the other NCTAMS PAC and SBCT projects). These new jobs would represent a 10.8 increase in regional employment levels in the Wahiawā Area (estimated at about 18,000 jobs as follows: NCTAMS PAC, 500, Wahiawā; 3,341; KRSOC, 2,100 and SBMR, 12,000) and a 0.4% increase over total jobs on O'ahu. The new jobs in the Wahiawā Region would support increased commercial activity, backfilling losses in regional employment associated with military and industry downsizing, and would be a beneficial cumulative impact. As noted in Section 4.16, the population effects of the Proposed Action and the other NCTAMS PAC projects would be distributed around O'ahu, following the domicile patterns associated with the existing KRSOC facility. The SBCT is reported to result in 2,365 new residents on O'ahu, less than a one percent change in the islandwide population and representing about half the number of residents that moved out of the Wahiawā District between 1990 and 2000.

## 4.19 Compliance with Executive Orders

This section describes how the Proposed Action and alternatives comply with relevant Executive Orders.

**Executive Order 12898, Environmental Justice in Minority Populations and Low-Income Populations.** Executive Order (EO) 12898 (11 February 1994), and the Secretary of the Navy Notice 5090 (27 May 1994), require the Navy required to identify and address the potential for disproportionately high and adverse human health or environmental effects of their actions on minority and low-income populations. Additionally, EO 12898 requires that access to public information and meaningful opportunities for public involvement by minorities and low-income populations be provided during project planning and development.

Analysis of demographic information obtained from the 2000 U.S. Census indicates that the residential communities closest to the Proposed Action and Modernization/Expansion Alternatives (i.e., Whitmore Village and Kunia Camp) are minority populations. The ethnic profile of both Whitmore Village and Kunia Camp is predominately Asian, with 66% of the Whitmore Village population and 75% of the Kunia Camp population represented as Asian (based on the Whitmore Village CDP and the Kunia Camp Block Group 1, Census Tract 86.03), compared to the State profile of 41.6%.

Due to the large concentration of Asian populations on O'ahu, the O'ahu Metropolitan Planning Organization (OMPO) developed a systematic methodology to identify areas with a disproportionate concentration of minority and/or low-income populations. OMPO's methodology, which can be applied in other racially diverse areas with a majority population that is a minority race, uses the settlement characteristics of each of the minority races on O'ahu to determine the normal variation of each race among the block groups. According to the OMPO report, *Environmental Justice in the OMPO Planning Process: Defining Environmental Justice Populations* (2004), Whitmore Village and Kunia Camp do not qualify as environmental justice areas based on either race or income distribution.

While short-term construction related impacts to Whitmore Village are possible under the Proposed Action, there are no known significant or adverse environmental impacts, including human health, economic or social effects resulting from the Proposed Action, the Modernization/Expansion Alternative and No Action Alternative that could disproportionately affect minority or low-income communities. The proposed land acquisitions would not affect agricultural productivity of the remaining agricultural lands, and would not impact minority or low-income communities. The Proposed Action and alternatives would maintain economic activity within the Wahiawā area and provide employment opportunities to local minority and low-income workers (i.e., the Proposed Action would expand the existing customer base and increase business potential for area commercial establishments; the Modernization/Expansion Alternative and the No Action Alternative would preserve the existing customer base.) Under the No Action Alternative, there would be no new construction, and no impact on minority and low-income populations.

**Executive Order 13045, Protection of Children from Environmental Health Risks and Safety Risks.** Executive Order 13045 (21 April 1997) requires Federal agencies to make children's health a high priority. To the extent permitted by law and appropriate and consistent with its mission, each Federal agency:

- Shall make it a high priority to identify and assess environmental health risks and safety risks that may disproportionately affect children; and
- 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 and Modernization/Expansion Alternative would not pose any environmental health and safety risks that may disproportionately affect the general public, including children. Children unaccompanied by an adult would be unlikely to frequent either project area. Under the Proposed Action, the proposed access road would connect to Whitmore Avenue at a point approximately 750 feet west of Kahi Kani Neighborhood Park. The proposed access road would head in a northerly direction away from Whitmore Village and would be surrounded by agricultural fields. The agricultural nature of the surrounding area and the heightened security and isolated location of NCTAMS PAC would discourage and deter children from visiting the project site. The Modernization/Expansion and No Action Alternatives, which would include similar security features, are also located within isolated, agricultural areas where children would not frequent.

**Executive Order 13101, Greening the Government Through Waste Prevention, Recycling, and Federal Acquisition.** Executive Order 13101 (September 14, 1998) is intended to improve the Federal government's use of recycled products and environmentally preferable products and services. It states that pollution that cannot be prevented should be recycled and pollution that cannot be prevented or recycled should be treated in an environmentally safe manner. Disposal should only be conducted as a last resort.

The Proposed Action and Modernization/Expansion Alternative would incorporate efficient waste handling provisions for recycling waste products. The demolition debris would be recycled to the maximum extent possible, and the remaining demolition debris would be disposed in a local landfill to be determined by the demolition contractor. Under the No Action Alternative, there would be no new construction; therefore, there would be no impact on the use of recycled products and environmentally preferable products and services.

**Executive Order 13123, Greening the Government Through Efficient Energy Management.** Executive Order 13123 (June 3, 1999) requires the Federal government to improve its energy management for the purpose of saving taxpayer dollars and reduce emissions that contribute to air pollution and global climate change. Federal agencies are required to reduce greenhouse gas emissions; reduce energy consumption per square foot of facility; strive to expand use of renewable energy; reduce the use of petroleum within its facilities; and reduce water consumption.

Efficient energy management for the Proposed Action and Modernization/Expansion Alternative would be incorporated through energy efficient building design, construction and operation, water conservation, and the use of renewable energy products. Sustainable design features that would be considered for potential inclusion in the new facilities include the use of high efficiency motors, and efficient equipment and lighting; indoor air quality monitoring; energy monitoring and control of building systems; the use of high reflective roofing and shading of paved surfaces, laminated windows; building humidity control and tempering of indoor air; and daylighting of interior spaces. Under the No Action Alternative, there would be no new construction; therefore, there would be no impact on the existing energy management practices.

## 4.20 Energy Requirements and Conservation Potential

The Proposed Action and Modernization/Expansion Alternative would increase energy requirements due to the larger facility size. It is reasonable to conclude that the new facilities would be more energy efficient than the older, existing facilities since they would comply with current energy efficiency standards and policies. Furthermore, other methods of promoting energy savings and conservation could be incorporated into the design and construction of the proposed and renovated facilities. Policies adopted by NAVFACENGCOM<sup>4</sup> establish a general framework suitable for the inclusion of sustainability principles and concepts early in the design of new facilities. Examples of initiatives addressed by these principles include:

- Increased energy conservation and efficiency;
- Increased use of renewable energy resources;
- Selection of materials and products based on their life-cycle environmental impacts;
- Increased use of materials and products with recycled content;
- Recycling of construction waste and building materials after demolition

These initiatives are meant to promote facility design for which overall quality is higher, life-cycle costs are lower, sustainability concepts and principles are incorporated to the greatest extent possible, and first costs are held to original budget amounts. According to the DD1391C project documents for the Proposed Action (MILCON Project P-010 [March 2004]), sustainable design features would be incorporated into the project as feasible.

## 4.21 Relationship of Short-Term Uses and Long-Term Productivity

This section lists the trade-offs between short- and long-term gains and losses due to the Proposed Action. “Short-term” refers to the construction period; “long-term” refers to the operational period.

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<sup>4</sup> U.S. Department of the Navy, Naval Facilities Engineering Command. *Naval Facilities Engineering Command Planning and Design Policy Statement 98-01 Design of Sustainable Facilities and Infrastructure*. June 1998.

U.S. Department of the Navy, Naval Facilities Engineering Command. *Naval Facilities Engineering Command Planning and Design Policy Statement 98-02 Criteria Supporting the Design of Sustainable*

- Short-term loss due to air quality and noise impacts during construction;
- Short-term gains to the local economy resulting from construction activity and indirect spending;
- Long-term change in regional traffic patterns and increase in local traffic volumes near NCTAMS PAC;
- Long-term reduction in local traffic volumes near the existing KRSOC;
- Long-term change to certain existing views;
- Long-term change of land use;
- Long-term indirect and induced economic benefits resulting from increased customer base;
- Long-term productivity and efficiency gains through providing adequate facilities that increase operational efficiency;
- Long-term gain of improved morale and quality of life for KRSOC personnel now working in facilities that do not meet operational space requirements to be replaced by the Proposed Action;
- Long-term operational gains in support of national security.

#### **4.22 Irreversible and Irretrievable Commitments of Resources**

Resources that are committed irreversibly or irretrievably are those that cannot be recovered if the proposed project is implemented. The Proposed Action and the Modernization/Expansion Alternative would irreversibly and irretrievably commit three types of resources: (1) general development costs including fiscal resources, labor, fuels, energy, and construction equipment and materials; (2) project-specific resources such as natural resources and land use at the affected site; and (3) operational phase resources such as electricity, water and materials. The withdrawal of the acquired lands from agricultural use would also be irretrievable and irreversible. The No Action Alternative would require operational and maintenance costs through the life of the facility, although resources used during the operational phase would not increase over existing levels.

The demolition of the CDAA as part of the Proposed Action would irretrievably remove a familiar landscape feature and replace it with modern communications structures.

#### **4.23 Means of Resolving Potentially Adverse Traffic Effects**

The following roadway improvements and traffic management strategies would be done to minimize traffic impacts associated with the Proposed Action. The Navy is working with the DOT to determine the actual design details of the roadway improvements. All roadway improvements and signal modifications would be approved by the DOT prior to implementation.

### Whitmore Avenue

A portion of Whitmore Avenue would be widened to provide a separate eastbound left turn lane into the proposed access road. In addition, the westbound right turn lane to Kamehameha Highway would be lengthened. The right-turn and left-turn lanes on Kamehameha Highway would be lengthened as appropriate and the existing traffic signal at its intersection with Whitmore Avenue would be modified.

### Kamehameha Highway and Kaukonahua Road Intersection

The existing left turn lane from Kamehameha Highway to Kaukonahua Road would be lengthened.

### Kaukonahua Road and Kamananui Road Intersection

A new traffic signal system at the intersection of Kaukonahua Road and Kamananui Road would be installed when warranted.

### Traffic Management Plan

HRSOC would develop and implement a TMP in coordination with the DOT. The TMP would identify a TDM program, provide guidelines for implementation of the TDM strategies, and identify mechanisms to enforce and monitor the effectiveness of the TDM strategies. Elements of the TDM program may include:

- Scheduling of shifts to stagger employee arrival and departure times, thereby minimizing peak hour traffic volumes and spreading peak arrival and departure times throughout a longer period of time.
- Scheduling commercial deliveries to certain hours of the day to avoid peak hour traffic volumes.
- Promoting ride-sharing. In a ride-sharing arrangement, two or more employees ride together to reduce the number of vehicles on the road.
- Providing preferential parking reserved near the entrance to the building for ride-sharers. In situations where parking is inconvenient or spaces are limited, preferential parking can serve as an effective strategy to encourage ride-sharing.
- Establishing internal administrative directives to manage employee travel routes.
- Operating shuttle bus services between concentrated residential locations and the HRSOC to reduce the number of vehicles on the road.
- Implementing employer-support measures to increase employee awareness and encourage TDM strategies. Typical employer-support measures involve: coordinating an employer-sponsored ride-matching program to provide assistance with finding ridesharing partners; assigning an employee transportation coordinator to implement and manage the TDM program; and organizing an information dissemination program.

The primary objective of the TMP would be to manage the traffic generated by the HRSOC facility to hourly volumes no higher than those identified in the traffic impact analysis. Specifically, total traffic (entering plus leaving the proposed project access road) would be no more than the 530 vehicles per hour during the AM Peak Hour and 370 vehicles per hour during the PM Peak Hour, with the maximum entering volume being 470 vehicles per hour and the maximum exiting volume being 320 vehicles per hour. Since access to the site would require vehicle and personnel permits, implementation of control of vehicle access and employee arrival times is enhanced.

#### Post-Occupancy Traffic Study

HRSOC would conduct a traffic study in coordination with the DOT following occupancy of the HRSOC. The post-occupancy traffic study would evaluate the actual traffic conditions resulting from the Proposed Action and identify any additional improvements. Depending on the outcomes of the study, possible improvements may involve additional TDM strategies and traffic signal timing adjustments along regional roadways, including through Wahiawā Town and Wilikina Drive.

## 5.0 COMPLIANCE WITH CHAPTER 343, HAWAI'I REVISED STATUTES

### 5.1 Determination

This EA has been written to comply with Chapter 343, HRS, in addition to the requirements identified in Section 1.4. This section is included to meet the requirements of Chapter 343, HRS.

Based on the information and analysis presented in this document, the Proposed Action is not expected to result in a significant impact on the environment. The proposed project would have no significant short-term, long-term or cumulative adverse impacts on the environment; therefore, preparation of an Environmental Impact Statement will not be required. In accordance with Chapter 343, HRS and Section 11-200, HAR, DOT has determined that a FONSI be issued for the proposed project.

### 5.2 Findings and Reasons Supporting the Determination

In determining whether an action may have a significant impact on the environment, the applicant or agency must consider all phases of the project, its expected consequences both primary and secondary, its cumulative impact with other projects, and its short and long-term effects. The negative determination was based on review and analysis of the significance criteria specified in Section 11-200-12, HAR. An action shall be determined to have a significant effect on the environment if it meets any of the following criteria:

**1. *Involves an irrevocable commitment or loss of or destruction of natural or cultural resources;***

The project site encompasses lands that have been previously disturbed by agricultural activity and development for a military installation. Flora and fauna surveys have determined no presence of Federal or State-protected endangered, threatened or candidate species that could be jeopardized by the Proposed Action (see Sections 3.8.1 and 4.10). No significant archaeological or cultural resources are anticipated, and the project will not impact traditional cultural properties or practices. Consultation with the State of Hawai'i, Department of Land and Natural Resources SHPO and other consulting parties has determined that the Proposed Action would have "no effect" on historic properties or cultural resources, practices or properties (see Sections 3.3.1.1, 3.3.2.1, 4.3.1.1, and 4.3.2.1).

Construction of the new facilities would not adversely impact scenic views (see Sections 3.4.1 and 4.4.1). Facility siting would maintain the overall visual quality of the Ko'olau Mountain viewplane, and appropriate landscaping and design features would provide additional screening. Satellite receiver facilities would be visible from Kamehameha Highway, adding to the satellite receiver facilities already visible in the area. The proposed facilities would appear below the envelope of the existing CDAA facility and well below the panoramic Ko'olau Mountain Range visible from Kamehameha Highway.

## **2. Curtails the range of beneficial uses of the environment.**

The Proposed Action would maximize the use of underutilized Navy-owned property, resulting in the positive long-term benefits associated with consolidating new development within previously-developed or urbanized areas. Construction and operation of the new facilities would be handled in accordance with Federal and State regulations, thereby minimizing potential impacts to the agricultural lands and forested gulches bordering the military installation (see Sections 4.6.1, 4.7.1, and 4.8.1). The acquisition of privately-owned lands for the proposed access road and roadway and utility system improvements would permanently withdraw approximately 35 acres (14 ha) from agricultural production; however, since the alignment of the proposed access road would maintain the continuity of the adjoining agricultural lands and follow some of the existing agricultural access roads, the future use and productivity of the remaining agricultural lands would not be diminished (see Sections 3.2.1 and 4.2.1).

## **3. Conflicts with the State's long-term environmental policies or goals and guidelines as expressed in Chapter 344, HRS, and any revisions thereof and amendments thereto, court decisions, or executive orders;**

The Proposed Action is consistent with the State's long-term environmental policies, and the policies and guidelines specified in Chapter 343, HRS, as demonstrated by the discussion in this chapter and Sections 4.17.2 and 4.17.3.

## **4. Substantially affects the economic welfare, social welfare, and cultural practices of the community or State;**

The Proposed Action would relocate and expand an existing military activity within the Wahiawā area, thereby maintaining existing jobs and associated economic benefits within the region. Temporary, short-term direct and indirect economic benefits would result from construction-related jobs and activity, including positive benefits for Wahiawā-area retail and food establishments due to the increased number of construction workers in the area. The increased employment level (approximately 700 new jobs for local and off-of-state military and civilian workers) would result in minor long-term direct, indirect and induced economic benefits to the local and island economy. The demand for public facilities and services would be diffused as the existing and future personnel would maintain the current pattern of residential distribution dispersed throughout the island (see Sections 3.15.1 and 4.16.1).

The Proposed Action would not adversely affect the social welfare or cultural practices of the community or State, or create environmental health and safety risks that may disproportionately affect children and minority or disadvantaged population (see Sections 3.15.1, 4.16.1 and 4.19). As discussed in Sections 3.3.2.1 and 4.3.2.1, the Proposed Action would not impact cultural resources or practices. Although the density and intensity of land use would change, the proposed use is compatible with the surrounding uses (see Sections 3.2.1 and 4.2.1).

## **5. Substantially affects public health;**

The Proposed Action would not substantially affect public health. The residential community of Whitmore Village would experience typical short-term construction-related impacts (noise, air quality, and traffic). Standard construction best management

practices would be used to minimize the temporary impacts. Agricultural soils may contain chemical residues related to agricultural production that could possibly be an occupational health concern for construction workers. Contamination concerns and the necessary remediation would be addressed prior to construction in accordance with applicable Federal and State regulations to minimize potential impacts to human health and the environment. Activities associated with the Proposed Action are primarily non-industrial, communications- and administrative-related activities that would not pose any public health hazards (see Sections 4.8.1, 4.11.1, 4.12.1, 4.13.1, 4.14.1, and 4.15.1).

**6. Involves substantial secondary impacts, such as population changes or effects on public facilities;**

The Proposed Action would result in insignificant islandwide population growth resulting from the minor increase in staffing (approximately 30 percent increase or 700 jobs). The new personnel would be military and civilian personnel relocating from off-island and recruited from the existing local labor pool. Importantly, military jobs and the level of existing military activity in the Wahiawā region would be maintained. Since the project site for the Proposed Action is approximately four miles from the existing facility, personnel employed at the current facility would most likely maintain their current place of residence. The residential distribution of new personnel would most likely be dispersed in various parts of the island, similar to the residential distribution of existing personnel, minimizing the local and regional impacts on public services, housing, and support services and facilities. The Proposed Action would result in increased traffic on public roadways and intersections near NCTAMS PAC; however peak hour levels of service are projected to remain at acceptable levels for urban areas.

**7. Involves a substantial degradation of environmental quality;**

The Proposed Action would not substantially degrade environmental quality. Long-term impacts to air and water quality, noise levels, and natural resources would be minimal. The use of standard construction and erosion control best management practices would minimize the anticipated construction-related short-term impacts (i.e., noise, air quality, water quality, and traffic). Design and construction of all facilities and utility upgrades would be designed and constructed in accordance with Federal and State regulations. Best management practices would be employed as practicable to minimize potentially detrimental effects to the environment (see Sections 4.5.1, 4.6.1, 4.7.1, 4.8.1, 4.11.1, and 4.12.1).

**8. Is individually limited and cumulatively has considerable effect upon the environment or involves a commitment for larger actions;**

Analysis of possible cumulative impacts resulting from the Proposed Action determined that the only resource area that would experience cumulative impacts was traffic (see Section 4.18). Roadway improvements and TDM strategies as described in Section 4.5.1 would result in no significant adverse traffic impacts on local or regional roadways.

**9. Substantially affects a rare, threatened, or endangered species, or its habitat;**

No threatened, endangered or candidate listed bird, mammal or plant species protected by Federal and State regulations would be impacted by the Proposed Action. There are no significant biological resources in the project vicinity (see Sections 3.10.1 and 4.10).

**10. Detrimentially affects air or water quality or ambient noise levels;**

The Proposed Action would not substantially affect air or water quality or ambient noise levels. The use of best management practices would minimize construction-related impacts, and the project would comply with applicable Federal, State and local regulations and standards. The replacement of permeable surfaces with impervious surfaces would increase the rate of stormwater runoff; however, planned drainage improvements would provide sufficient infrastructure to control the runoff and sediment discharge (see Section 4.6.1). Ground or surface water quality, aquifer recharge potential, and air quality would not be significantly impacted (see Sections 3.6.1, 3.8.1, 3.11, 4.6.1, 4.8.1, and 4.11.1). Ambient noise resulting from the increased traffic in the vicinity of Whitmore Village is expected to remain within permissible sound levels allowable under Federal and State standards (see Section 4.12.1).

**11. Affects or is likely to suffer damage by being located in an environmentally sensitive area such as a floodplain, tsunami zone, beach, erosion-prone area, geologically hazardous land, estuary, fresh water, or coastal waters;**

The Proposed Action is not located within an environmentally sensitive area. The project site at NCTAMS PAC is located in an upland area unlikely to be affected by flooding. The proposed access road would cross an intermittent stream, in which case appropriate measures would be employed to minimize potential risks. No jurisdictional navigable waters of the U.S. as defined by the Clean Water Act are present within the project site (see Sections 3.7.1, 3.8.1, 4.7.1, and 4.8.1). Soils within the project site are suitable for the planned development, and no special foundation preparation would be needed (see Sections 3.9.1 and 4.9.1).

**12. Substantially affects scenic vistas and viewplanes identified in County or State plans or studies; or**

The Proposed Action would not obstruct or affect scenic vistas and viewplanes identified in County or State plans or studies. The project would replace the CDAA with new facilities, resulting in changes to the visual environment and an intensification of development within NCTAMS PAC. As described in Section 4.4.1, building profiles and satellite receiver facilities would appear below the envelope of the existing CDAA facility and well below the panoramic Ko'olau Mountain Range ridgeline visible from Kamehameha Highway.

**13. Requires substantial energy consumption.**

The Proposed Action would provide facilities for the relocation and expansion of an existing activity within the region. Energy requirements would include resources required for construction and operation. Due to the larger facility size, energy consumption during the operational phase would be expected to be slightly greater than the existing energy consumption. Although construction activities would consume energy resources, the project would include sustainable design features in compliance with Federal Executive orders and policies (see Sections 4.19, 4.20 and 4.21).

## **6.0 LIST OF AGENCIES, ORGANIZATIONS AND INDIVIDUALS CONSULTED**

### **6.1 Chapter 343, HRS Pre-Assessment Consultation**

The following agencies and organizations were contacted during the pre-assessment consultation during preparation of the Draft EA in accordance with Chapter 343, HRS requirements. Parties who responded to the pre-assessment consultation are identified by an asterisk (\*). The pre-assessment consultation letter, written comments received in response to the pre-assessment consultation and subsequent response letters addressing those comments are presented in Appendix B.

#### **Federal**

- \* U.S. Army Garrison, Hawaii
- \* U.S. Army Corps of Engineers
- U.S. Department of Agriculture
- \* U.S. Environmental Protection Agency

#### **State of Hawai'i**

- Department of Transportation
- \* Department of Health, Environmental Planning Office
- DBEDT, Coastal Zone Management
- DBEDT, Office of Environmental Quality Control
- DBEDT, Office of Planning
- Department of Land and Natural Resources
- DLNR, Historic Preservation Division
- Department of Agriculture
- \* Department of Hawaiian Home Lands
- O'ahu Metropolitan Planning Organization

#### **City and County of Honolulu**

- Department of Design and Construction
- Department of Environmental Services
- \* Department of Transportation Services
- \* Department of Planning and Permitting
- Board of Water Supply
- \* Honolulu Fire Department
- \* Honolulu Police Department

#### **Utility Companies**

- Verizon Telephone
- Hawaiian Electric Company

#### **Community and Other Organizations**

- Castle & Cooke Homes Hawai'i, Inc.
- George Galbraith Trust Estate
- Dole Food Company Inc.
- Chamber of Commerce of Hawai'i
- Hawai'i Building and Construction Trades Council AFL-CIO

Wahiawā Community and Business Association  
Ike Aina Native Hawaiian Land Trust  
Hawaiian Civic Club of Wahiawā  
Friends of Kūkaniloko  
Honolulu Council Navy League  
Wahiawā Lions Club  
Wahiawā Rainbow Club  
Wahiawā/Waialua Rotary Club  
Malama o Wahiawā  
Whitmore Community Association  
Poamoho Camp Community Association  
Whitmore Seniors Club  
Wahiawā Neighborhood Board #26

In addition to the pre-assessment consultation letter that was distributed, the Navy attended informational briefings and meetings with representatives of the following agencies and organizations, including government agencies, private landowners, elected officials and the Wahiawā Neighborhood Board #26. All briefings were conducted between May and August, 2004.

**Federal**

U.S. Army Garrison

**State of Hawai'i**

Department of Transportation  
Department of Land and Natural Resources

**City and County of Honolulu**

Office of the Mayor  
Department of Environmental Services  
Board of Water Supply

**Community and Other Organizations**

Castle & Cooke Homes Hawai'i, Inc.  
Dole Food Company, Inc.  
George Galbraith Trust Estate  
Wahiawā Neighborhood Board #26

**Elected Officials**

Office of the Governor  
Representative Ken Ito  
Senator Cal Kawamoto  
City and County of Honolulu Mayor's Office  
Councilmember Donovan Dela Cruz

**6.2 Chapter 343, HRS Draft EA Consultation**

Notice of the Draft EA was published in the April 23, 2005 edition of the *Environmental Notice*. Copies of the Draft EA were distributed to a total of 58 agencies, organizations, individuals and libraries. The deadline for public comments was May 23, 2005. A total

of 19 written comments were received by the completion of the Final EA (August 2005). Parties who submitted written comments are identified below with an asterisk (\*). Individuals who requested a copy of the Draft EA but did not submit written comments are identified with two asterisks (\*\*). The notice of the Draft EA as published in the *Environmental Notice*, written comments, and subsequent response letters are presented in Appendix C. .

**Federal**

U.S. Army Garrison, Hawaii  
U.S. Army Corps of Engineers  
U.S. Department of Agriculture  
U.S. Environmental Protection Agency

**State of Hawai'i**

Department of Transportation  
\* Department of Health, Environmental Planning Office  
DBEDT, Coastal Zone Management  
\* DBEDT, Office of Environmental Quality Control  
\* DBEDT, Office of Planning  
\* Department of Land and Natural Resources  
DLNR, Historic Preservation Division  
Department of Agriculture  
Department of Hawaiian Home Lands  
O'ahu Metropolitan Planning Organization

**City and County of Honolulu**

\* Department of Design and Construction  
\* Department of Environmental Services  
\* Department of Transportation Services  
\* Department of Planning and Permitting  
\* Board of Water Supply  
\* Honolulu Fire Department  
\* Honolulu Police Department

**Utility Companies**

\* Hawaiian Telcom, Inc.  
Hawaiian Electric Company

**Community and Other Organizations**

\* Castle & Cooke Homes Hawai'i, Inc.  
George Galbraith Trust Estate  
Dole Food Company Inc.  
Chamber of Commerce of Hawai'i  
Hawai'i Building and Construction Trades Council AFL-CIO  
Wahiawā Community and Business Association  
Ike Aina Native Hawaiian Land Trust  
Hawaiian Civic Club of Wahiawā  
Friends of Kūkaniloko  
Honolulu Council Navy League

Helemano Elementary School  
Wahiawā Lions Club  
Wahiawā Rainbow Club  
Wahiawā/Waialua Rotary Club  
Malama o Wahiawā  
Whitmore Community Association  
\* Whitmore Filipino Community Association  
Poamoho Camp Community Association  
Whitmore Seniors Club  
\* 'Aha Kūkaniloko, Kahunana, Koa Mana and 'Ike 'Aina  
Wahiawā Neighborhood Board #26  
Wahiawā Public Library

**Elected Officials**

U.S. Congressman Ed Case  
Representative Ken Ito  
Representative Marcus Oshiro  
Senator Robert Bunda  
Senator Norman Sakamoto  
Councilmember Donovan Dela Cruz

**Individuals**

\* Ms. Cynthia Edra  
\* Ms. Diane Gilmore  
\* Ms. Kathleen Masunaga  
\* Ms. Evelyn Santiago  
\*\* Ms. Janet Mindoro  
\*\* Mr. Rafaela Pascual  
\*\* Ms. Lauzanna Oshiro  
\*\* Mr. Jake Ng

**6.3 National Historic Preservation Act, Section 106 Consultation**

The following agencies and organizations were consulted in compliance with Section 106 of the National Historic Preservation Act. Correspondence is presented in Appendix A.

Office of Hawaiian Affairs  
State Historic Preservation Officer  
'Aha Kūkaniloko, Kahunana, Koa Mana and 'Ike 'Aina

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## 8.0 LIST OF PREPARERS

### NAVFAC EFD PACIFIC

#### Environmental Planning Division

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Supervisory Environmental Engineer	Connie Chang, P.E. M.S. Mechanical Engineering
Environmental Engineer	Audrey Uyema Pak M.S. Civil Engineering
Supervisory Archaeologist	Annie Griffin M.A. Anthropology
Archaeologist	Eric West M.A. Anthropology
Archaeologist	Emily Donaldson B.A. Anthropology

### Helber Hastert & Fee, Planners

Principal-In-Charge	Thomas A. Fee, AICP M.A. Urban Planning
Principal EA Author/Project Manager	Corlyn Olson Orr M.A. Urban Planning
Contributing Author	Gail Renard B.A. International Relations

### Subconsultants

Traffic Engineering	Julian Ng, P.E., P.T.O.E. Julian Ng, Inc.
Civil Engineering	Francis Hino, P.E. Eric Okamura, P.E. Hawai'i Pacific Engineers, Inc.
Biological Resources	Winona Char Char and Associates  Phillip L. Bruner, Ph.D. Faunal Surveys
Cultural Impact Assessment	J. Stephen Athens, Ph.D. International Archaeological Research Institute, Inc.  Usha K. Prasad, Ph.D. Social Research Pacific, Inc.

**APPENDIX A**

National Historic Preservation Act,  
Section 106 Correspondence

DEPARTMENT OF THE NAVY  
COMMANDER  
NAVY REGION HAWAII  
850 TICONDEROGA ST STE 110  
PEARL HARBOR HI 96860-5101

1831 Annie <sup>1831 AUG 18</sup> cc 8/20/04  
Audrey <sup>amp 8/25</sup>  
1833 Annie - Eric

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ing  
Department and State Historic Preservation Officer  
Department of Land and Natural Resources  
State Historic Preservation Division  
Kakuhihewa Building  
601 Kamokila Boulevard, Room 555  
Kapolei, HI 96707

Dear Mr. Young:

Pursuant to Section 106 of the National Historic Preservation Act, we are requesting your review of the proposed construction of a new Hawaii Regional Security Operations Center (HRSOC). In accordance with the implementing regulations for Section 106 of the National Historic Preservation Act, we have reviewed the project and determined that it is an undertaking as defined in 36 CFR 800.16 (y).

The project area is located in the vicinity of Naval Computer and Telecommunications Area Master Station Pacific (NCTAMS PAC), Wahiawa, O'ahu (TMK 7-1-02:7) [enclosures (1) and (2)].

Project Description

This project proposes to construct a new HRSOC at NCTAMS PAC. The proposed project scope will include the demolition of the existing Circularly Displayed Antenna Array (CDA) and will involve the construction of a new HRSOC Operations Building, Visitor Control Center/Vehicle Control Point (VCC/VCP), warehouse, vehicle resistant perimeter fencing, electric and mechanical maintenance shops, and a paved parking area within the perimeter of NCTAMS PAC. Supporting facilities work will include utilities, new commercial and fiber optic node connections, storm drainage, and landscaping. In addition, an access road shall be installed connecting the new facility directly to Kamehameha Highway to the east [enclosure (2)]. Existing buildings 105, 294, and the Chiefs' Club (235) will remain.

Area of Potential Effect

The area of potential effect (APE) includes the footprints of each building, the anticipated access road path, and the immediate surroundings which will be affected during construction.

Identification of Historic Properties

There have been no archaeological investigations conducted or archaeological sites identified in the immediate vicinity of the APE. The nearest previously identified archaeological site is the Kukaniloko Birthing Stones, located approximately 400m southwest of the proposed access road to the project area. A Phase I archaeological survey, conducted by Naval Facilities Engineering Command, Pacific (NAVFAC Pacific) in May-June 2004, confirmed the absence of archaeological sites in the APE [enclosure (3)].

In 2000, through consultant services, the Navy collected data to determine if properties of traditional cultural importance are present in Navy facilities. The data collected for NCTAMS Wahiawa is provided as enclosure (4). The ethno historical

research and ethnographic interviews indicate the presence of places that are culturally significant in the Wahiawa area. However, none of these places are located within the Navy property, including the proposed site of the HRSOC project.

Determination of Effect

The proposed construction of a new HRSOC facility is not expected to affect any archaeological sites, historical resources, or places of traditional cultural significance in the vicinity of NCTAMS PAC. The proposed project from Kukaniloko Birthing Stones will not be visually intrusive because the height of the proposed facilities will be a maximum of two stories. Additionally, there are existing buildings and structures which are already visible from the Kukaniloko Birthing Stones site, including two-story buildings from the Helemano School.

Consequently, we have reached a finding of "no historic properties affected". In accordance with 36 CFR § 800.4 (d), if we receive no objection from your office within 30 days from receipt of this letter, the Navy's responsibilities under Section 106 are fulfilled.

Should you have any questions regarding this undertaking, please contact Ms. Annie Griffin, Supervisory Archaeologist, Naval Facilities Engineering Command, Pacific at 808-472-1392, or via e-mail at [annie.griffin@navy.mil](mailto:annie.griffin@navy.mil).

Sincerely,



D. C. LEWIS  
Lieutenant Commander, CEC, USN  
Deputy Program Manager for Facilities,  
Environmental, Safety and Passenger  
Transportation  
By direction of  
Commander, Navy Region Hawaii

Enclosures: 1. Project Area  
2. Project Area, Detail  
3. Phase I Archaeological Survey of Hawaii Regional Security Operations Center (HRSOC) Project Site, Naval Computer and Telecommunications Center Area Master Station (NCTAMS PAC) and Vicinity, Wahiawa, O'ahu, Hawai'i (June 2004)  
4. Historical Overview and Traditional History

Copy to: Commander, Naval Facilities Engineering Command, Pacific (ENV 1833)  
(w/o encls)  
David Scott, Historic Hawaii Foundation



DEPARTMENT OF THE NAVY

COMMANDER  
NAVY REGION HAWAII  
850 TICONDEROGA ST STE 110  
PEARL HARBOR HI 96860-5101

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31 AUG 2004

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31 AUG 2004

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Mr. Peter Young  
Chairperson and State Historic Preservation Officer  
Department of Land and Natural Resources  
State Historic Preservation Division  
Kakuhihewa Building  
601 Kamokila Boulevard, Room 555  
Kapolei, HI 96707

Dear Mr. Young:

We are providing additional information and documentation concerning the proposed Hawaii Regional Security Operations Center (HRSOC) at Naval Computer and Telecommunications Area Master Station Pacific (NCTAMS PAC), Wahiawa. Our letter of August 12, 2004 initiated our consultation regarding this proposed undertaking under Section 106 of the National Historic Preservation Act.

Under the Project Description, we stated that the proposed project will require the demolition of the existing Circularly Disposed Antenna Arrays (CDAAs). This letter provides additional information about this structure.

The CDAAs and its associated operations building, Building 294, were constructed in 1963 as part of the worldwide CLASSIC BULLSEYE (now FLAGHOIST) stations. The CLASSIC BULLSEYE network was part of the Department of Defense Worldwide High Frequency Direction Finding (HF-DF) System for strategic intelligence collection and emitter location. The HF-DF system intercepts and locates voice and message traffic transmitted on short-wave channels.

The CLASSIC BULLSEYE station in Wahiawa is similar, if not identical, to other stations established worldwide. It consists of the AN/FRD-10 CDAAs, or popularly known as 'elephant cage', and an operations building in the center of the arrays [see enclosure (1)]. Typically, the arrays consist of two rings of HF antennae with a nominal range between 150 to 5000 kilometers. The inner ring, measuring approximately 230 meters in diameter with about 40 folded dipoles, is for monitoring longer wavelength signals. The outer ring measures approximately 260 meters in diameter, contains about 120 sleeve monopoles, and monitors shorter HF wavelengths. The stations intercept operators worked out of the operations building, Building 294, which is located in the center of the CDAAs. The CDAAs has not been operational since early August 2004 when the last user of the antenna shifted operations to the more modern Clarinet Merlin Receiving System.

Building 294 is a permanent, one-story structure, with a basement level, and measures about 34 meters long, 27 meters wide and 9 meters high. Building 294 has been used as an administrative office, for academic instruction, communications center and data processing center. Modifications to the building, mostly in the interior, were made to accommodate these uses. None of the equipment used by the station's CLASSIC BULLSEYE intercept operators exists in Building 294 today.

For structures that are less than 50 years old, we have determined that the CDAAs and Building 294 have no exceptional importance to meet the National Register eligibility criteria. Similar CLASSIC BULLSEYE stations still exist and operate worldwide today. Due to the classified nature of the operations, we have no information regarding specific significant Cold War event/s or operations associated with the station in Wahiawa.

Building 294 will be retained for continuing use by the current occupants or for future use by HRSOC. However, the CDAAs will be demolished to make room for the parking lot. We believe that demolition of this structure does not change our previous finding of "no historic properties affected". In accordance with 36 CFR § 800.4 (d), if we receive no objection from your office within 30 days from receipt of this letter, the Navy's responsibilities under Section 106 are fulfilled.

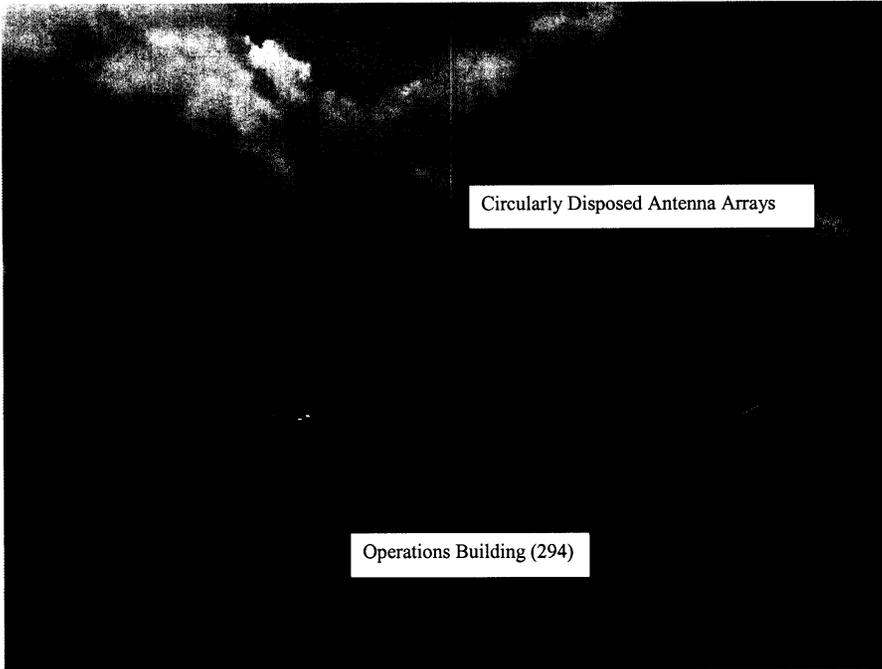
Should you have any questions regarding this undertaking, please contact Ms. Annie Griffin, Supervisory Archaeologist, Naval Facilities Engineering Command, Pacific at 808-472-1392, or via e-mail at [annie.griffin@navy.mil](mailto:annie.griffin@navy.mil).

Sincerely,

G. P. JENNINGS  
Lieutenant, CEC, USNR  
Historic Preservation Program  
Coordinator  
By direction of  
Commander, Navy Region Hawaii

Enclosure: CDAAs photo

Copy to: David Scott, Historic Hawaii Foundation



Circularly Disposed Antenna Arrays

Operations Building (294)

CDAA AND OPERATIONS BUILDING, VIEW WEST

ENCLOSURE (1)

LINDA LINGLE  
GOVERNOR OF HAWAII



**STATE OF HAWAII**  
**DEPARTMENT OF LAND AND NATURAL RESOURCES**

HISTORIC PRESERVATION DIVISION  
KAKUIHEWA BUILDING, ROOM 555  
601 KAMOKILA BOULEVARD  
KAPOLEI, HAWAII 96707

NOV - 1 2004

PETER T. YOUNG  
CHAIRPERSON  
BOARD OF LAND AND NATURAL RESOURCES  
COMMISSION ON WATER RESOURCE MANAGEMENT

DAN DAVIDSON  
DEPUTY DIRECTOR - LAND

YVONNE Y. IZU  
DEPUTY DIRECTOR - WATER

AQUATIC RESOURCES  
BOATING AND OCEAN RECREATION  
BUREAU OF CONVEYANCES  
COMMISSION ON WATER RESOURCE MANAGEMENT  
CONSERVATION AND COASTAL LANDS  
CONSERVATION AND RESOURCES ENFORCEMENT  
ENGINEERING  
FORESTRY AND WILDLIFE  
HISTORIC PRESERVATION  
KAHOOLAWE ISLAND RESERVE COMMISSION  
LAND  
STATE PARKS

G.P. Jennings  
LTJG, CEC, USNR  
Historic Preservation Program Coordinator  
Commander Navy Region Hawaii  
N464 Facilities  
850 Ticonderoga Street, Suite 110  
Pearl Harbor, Hawaii 96860-5102

LOG NO: 2004.2985  
DOC NO: 0410ST03  
Architecture

Dear Lt. Jennings:

**SUBJECT: Section 106 (NHPA) Review Additional Information to August 12, 2004 Section 106 (NHPA) Consultation Letter Proposed Demolition of the Existing Circularly Disposed Antenna Arrays (CDAA) Hawaii Regional Security Operations Center (HRSOC) Naval Computer and Telecommunications Area Master Station (NCTAMS PAC) Wahiawa, Oahu  
TMK: (1) 7-1-002:007**

Thank you for the opportunity to comment on the proposed undertaking to construct a new HRSOC Operations Building, Visitor Control Center/Vehicle Control Point, Warehouse, Vehicle resistant perimeter fencing, electric and mechanical maintenance shops, and a paved parking area within the perimeter of NCTAMS PAC. The proposed project will also include the demolition of the Circularly Displayed Antenna Array (CDAA). Our review is based on historic reports, maps, and aerial photographs maintained at the State Historic Preservation Division; no field inspection was made of the project areas. We received notification of this undertaking from your office on August 18, 2004 and October 9, 2004 and apologize for our later response.

**Architectural Comments**

The CDAA and its associated operations building, Building 294, were constructed in 1963 as part of the world wide Classic Bullseye (now Flaghoist) stations, which were part of the Department of Defense Worldwide High Frequency Direction Finding (HF-DF) System for strategic intelligence collection and emitter location. The HF-DF system intercepts and locates voice and message traffic transmitted on short-wave channels. The Classic Bullseye station is similar to other worldwide stations which consists of the AN/FRD-10 CDAA or popularly known "elephant cage" and an operations building in the center of the arrays.

The CDAA and Building 294 are less than 50 years old and there are similar Classic Bullseye stations that still exist and operate worldwide today. There is no information regarding the specific significant Cold War event(s) or operations associated with the station in Wahiawa due



DEPARTMENT OF THE NAVY

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NAVY REGION HAWAII  
850 TICONDEROGA ST STE 110  
PEARL HARBOR HI 96860-5101

G.P. Jennings  
Page 2

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16 NOV 2004

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to the classified nature of the operations. Building 294 will be retained for continued use by its current occupants or for future use by HRSOC. The CDAA is proposed for demolition to make room for the parking lot.

Because the CDAA is less than 50 years old, we concur that the determination for the architectural concerns of the proposed project is "no historic properties affected." However, because of its association with the Cold War, we request submittal to SHPD of documentation meeting HABS/HAER standards.

Archaeology Comments

A review of our records shows that there are no known historic sites at this location. You have submitted with your consultation a Draft Report: *Phase I Archaeological Survey of Hawaii Regional Security Operations Center (HRSOC) Project Site*, (U. S. Navy July 2004). The report documents the historical and archaeological background of the project area and the results of a Phase I archaeological survey. According to the report, much of the project area had been previously disturbed by agricultural and landscaping activities and no archaeological resources were located during the course of the survey. Because no archaeological resources were found, and the area has a low potential for encountering these types of resources, we can concur with your "no historic properties affected" determination for this project.

We would appreciate a copy of the final report documenting this Phase I survey when it is available.

Should you have any questions about archaeology, please feel free to call Sara Collins at 692-8026 or Elaine Jourdan at 692-8027. Should you have any questions about architectural concerns, please feel free to contact Susan Tasaki at 692-8032.

Mr. Peter Young  
Chairperson and State Historic Preservation Officer  
Department of Land and Natural Resources  
State Historic Preservation Division  
Kakuhihewa Building, Room 555  
601 Kamokila Boulevard  
Kapolei, HI 96707

Dear Mr. Young:

Thank you for your letter dated November 1, 2004 (LOG NO: 2004.2985; DOC NO: 0410ST03) regarding the Section 106 review for the proposed Hawaii Regional Security Operations Center (HRSOC) Project, Naval Computer and Telecommunications Area Master Station, Pacific (NCTAMS PAC), Wahiawa, Oahu, Hawaii, TMK: (1)7-1-002:007 Portion.

We note that your response letter arrived 77 days after receipt of our original consultation letter, and 61 days after receipt of our second letter providing additional information. Per 36 CFR Part 800.4(d)(i), the Navy's responsibilities under section 106 are fulfilled because we received no objections from your office to our finding of "no historic properties affected" within the 30-day review period.

Architectural Comments

We do not agree with your request to submit HABS/HAER documentation of the CDAA. Your office has already agreed with our determination that the CDAA is not a historic property; therefore, mitigation in the form of HABS/HAER documentation is not required.

Archaeological Comments

Per your request, the final archaeological survey report is provided in the enclosure for your use. Should you have any questions regarding this final report, please contact Mr. Randy Miyashiro, Navy Region Hawaii Cultural Resource Coordinator at 471-1171, extension 233.

Sincerely,

G. P. Jennings  
Lieutenant, CEC, USN  
Historic Preservation  
Program Coordinator  
By Direction of  
Commander, Navy Region Hawaii

Enclosure: Final Report: Phase I Archaeological Survey of Hawaii Regional Security Operations Center (HRSOC) Project Site, Naval Computer and Telecommunications Center Area Master Station (NCTAMS PAC) and Vicinity, Wahiawa, Oahu, Hawaii TMK: 7-1-002:007 Portion

Sincerely,  
  
Peter T. Young  
State Historic Preservation Officer  
ST:jen



DEPARTMENT OF THE NAVY

COMMANDER  
NAVY REGION HAWAII  
850 TICONDEROGA ST STE 110  
PEARL HARBOR HI 96860-5101

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FEB 08 2005

Certified Mail No. 7001 1940 0006 1626 0502

Mr. Peter Young  
Chairperson and State Historic Preservation Officer  
Department of Land and Natural Resources  
State Historic Preservation Division  
Kakuhihewa Building  
601 Kamokila Boulevard, Room 555  
Kapolei, HI 96707

Dear Mr. Young:

We are notifying your office of a change in the scope of the proposed Hawaii Regional Security Operations Center (HRSOC) at the Naval Computer and Telecommunications Area Master Station Pacific (NCTAMS PAC) in Wahiawa, Oahu.

We have previously consulted your office in letters dated August 12, 2004 and August 31, 2004. Your letter response on November 1, 2004 expressed concurrence in our finding of "no historic properties affected," a determination that includes proposed demolition of the existing Circularly Disposed Antenna Arrays (CDAA) and continuing use of Building 294. The CDAA and Building 294 were built in 1963 and you agreed that they are not historic properties because they are less than 50 years and have no exceptional significance.

The proposed HRSOC project scope has been modified and additional lands were also identified as needed for proposed infrastructure to support HRSOC.

Architectural

The initial proposed locations of the HRSOC facility and parking have been switched. The HRSOC facility is now proposed at the location of the CDAA and its associated Building 294 while the parking lot would be located at an open area, to the east of the CDAA antenna site. This change is depicted in the enclosed map. In addition to the CDAA, additional facilities would require demolition as a result of this change (see enclosed photos; there is no available photo for Facility 470):

- Building 294, built in 1963 (SHPO has concurred that facility is not historically significant);
- Building 384, a no-break generator, built in 1966;

- Facility 292 (also known as WW-098), sewage pump station, built in 1995; and
- Facility 470, a tower antenna built in 1991.

Archaeological

Additional lands were recently identified as needed for infrastructure, such as access roads and utilities, and a new facility to replace Building 294. The initially surveyed access road alignment was partially revised after consultations with the State Department of Transportation. Archaeological surveys were carried out in these additional lands and the findings are presented in the enclosed report. This report is an addendum to the archaeological survey report submitted to your office on November 16, 2004. No significant archaeological sites were identified in all areas.

Determination of Effect

Because the facilities proposed for demolition are less than 50 years old and have no exceptional significance, and that no archaeological sites were identified in the additional lands, the Navy has determined that the previous finding of "no historic properties affected" for the proposed HRSOC remains the same.

Should you have any questions, please feel free to contact me at 471-1170, extension 240.

Sincerely,

G. P. JENNINGS  
Lieutenant, CEC, USNR  
Historic Preservation  
Program Coordinator  
By direction of  
Commander, Navy Region Hawaii

- Enclosures:
1. Revised scope for HRSOC
  2. Photo of Building 294
  3. Photo of Building 384
  4. Photo of Facility 292
  5. Addendum to Phase I Archaeological Survey



DEPARTMENT OF THE NAVY  
 COMMANDER  
 NAVY REGION HAWAII  
 850 TICONDEROGA ST STE 110  
 PEARL HARBOR HI 96860-5101

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 Audrey cc 9/25  
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 Ser N464/  
 12 AUG 2004

Certified Mail No. 7001 1940 0006 1626 6603

Mr. Clyde Namu`o  
 Administrator  
 Office of Hawaiian Affairs  
 711 Kapiolani Boulevard, Suite 500  
 Honolulu, HI 96813

Dear Mr. Namu`o:

Pursuant to Section 106 of the National Historic Preservation Act, we are consulting your office regarding the proposed construction of a new Hawaii Regional Security Operations Center (HRSOC). In accordance with the implementing regulations for Section 106 of the National Historic Preservation Act, we have reviewed the project and determined that it is an undertaking as defined in 36 CFR 800.16 (y).

The project area is located in the vicinity of Naval Computer and Telecommunications Area Master Station Pacific (NCTAMS PAC), Wahiawa, O'ahu (TMK 7-1-02:7) [enclosures (1) and (2)].

Project Description

This project proposes to construct a new HRSOC at NCTAMS PAC. The proposed project scope will include the demolition of the existing Circularly Displayed Antenna Array (CDAA) and will involve the construction of a new HRSOC Operations Building, Visitor Control Center/Vehicle Control Point (VCC/VCP), warehouse, vehicle resistant perimeter fencing, electric and mechanical maintenance shops, and a paved parking area within the perimeter of NCTAMS PAC. Supporting facilities work will include utilities, new commercial and fiber optic node connections, storm drainage, and landscaping. In addition, an access road shall be installed connecting the new facility directly to Kamehameha Highway to the east [enclosure (2)]. Existing buildings 105, 294, and the Chiefs' Club (235) will remain.

Area of Potential Effect

The area of potential effect (APE) includes the footprints of each building, the anticipated access road path, and the immediate surroundings which will be affected during construction.

Identification of Historic Properties

There have been no archaeological investigations conducted or archaeological sites identified in the immediate vicinity of the APE. The nearest previously identified archaeological site is the Kukaniloko Birthing Stones, located approximately 400m southwest of the proposed access road to the project area. A Phase I archaeological survey, conducted by Naval Facilities Engineering Command, Pacific (NAVFAC Pacific) in May-June 2004, confirmed the absence of archaeological sites in the APE [enclosure (3)].

In 2000, through consultant services, the Navy collected data to determine if properties of traditional cultural importance are present in Navy facilities. The data collected for NCTAMS Wahiawa is provided as enclosure (4). The ethnohistorical research and ethnographic interviews indicate the presence of places that are culturally significant in the Wahiawa area. However, none of these places are located within the Navy property, including the proposed site of the HRSOC project.

Determination of Effect

The proposed construction of a new HRSOC facility is not expected to affect any archaeological sites, historical resources, or places of traditional cultural significance in the vicinity of NCTAMS PAC. The proposed project will not be visually intrusive from Kukaniloko Birthing Stones because the height of the proposed facilities will be a maximum of two stories. Additionally, there are existing buildings and structures which are already visible from the Kukaniloko Birthing Stones site, including two-story buildings from the Helemano School.

Based on the above findings, we have proposed a determination of "no historic properties affected" to the State Historic Preservation Officer. If you have any information that differs from our findings, please let us know.

Should you have any questions regarding this undertaking, please contact Ms. Annie Griffin, Supervisory Archaeologist, Naval Facilities Engineering Command, Pacific at 808-472-1392, or via E-mail at annie.griffin@navy.mil.

Sincerely,

D. C. LEWIS  
 Lieutenant Commander, CEC, USN  
 Deputy Program Manager for  
 Facilities, Environmental, Safety  
 and Public Transportation  
 By direction of  
 Commander, Navy Region Hawaii

- Enclosures:
1. Project Area
  2. Project Area, Detail
  3. Phase I Archaeological Survey of Hawaii Regional Security Operations Center (HRSOC) Project Site, Naval Computer and Telecommunications Center Area Master Station (NCTAMS PAC) and Vicinity, Wahiawa, O'ahu, Hawai'i (June 2004)
  4. Historical Overview and Traditional History

Copy to: Commander, Naval Facilities Engineering Command, Pacific (ENV 1833)  
 (w/o encls)

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DEPARTMENT OF THE NAVY

COMMANDER  
NAVY REGION HAWAII  
850 TICONDEROGA ST STE 110  
PEARL HARBOR HI 96860-5101

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09 JUN 2005

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09 JUN 2005

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Mr. Peter Young  
Chairperson & State Historic Preservation Officer  
Department of Land & Natural Resources  
State Historic Preservation Division  
Kakuhihewa Building  
601 Kamokila Boulevard Room 555  
Kapolei HI 96707

Dear Mr. Young:

We are notifying your office of a change in the scope of the proposed Hawaii Regional Security Operations Center (HRSOC) at the Naval Computer and Telecommunications Area Master Station Pacific (NCTAMS PAC) in Wahiawa, Oahu (TMK: (1)7-1-002:007 Portion).

We have previously consulted your office in letters dated August 12, 2004, November 16, 2004, and February 8, 2005. Your letter response on November 1, 2004 (LOG NO:2004.2985; DOC NO:0410ST03) expressed concurrence with our finding of "no historic properties affected."

The proposed HRSOC project scope has been modified and additional lands were surveyed for the proposed access road realignment.

Background

Recent changes to the project scope are proposed in order to address community concerns about the proximity of the road corridor to the residences of Whitmore Village. The HRSOC Draft EA was presented at the Whitmore Community Association (WCA) April 29, 2005 meeting. The purpose of the meeting was to present the findings of the Draft EA to the community and receive comments and questions. As a result of traffic noise concerns raised at the WCA meeting, changes to the originally proposed access road corridor were made. The proposed realignment of the access road required additional archaeological survey of the new road corridor.

The findings of the additional archaeological survey for the road corridor realignment are presented in the enclosed addendum report. This report is the second addendum to the original archaeological survey report submitted to your office on November 16, 2004. The first addendum addressed scope changes to the originally proposed access road corridor, and other infrastructure additions not covered in the original report. The first addendum report was submitted to your office on February 8, 2005.

Determination of Effect

Because no archaeological sites were identified in the additional lands surveyed, the Navy has determined that the previous finding of "no historic properties affected" for the proposed HRSOC remains the same.

Should you have any questions regarding this undertaking, please contact Mr. Randy Miyashiro, Navy Region Hawaii Cultural Resource Coordinator, at 473-4137, extension 230.

Sincerely,

R. M. WAKUMOTO  
Director  
Regional Environmental Director  
By direction of  
Commander, Navy Region Hawaii

Enclosure: 1. Second Addendum To: Phase I Archaeological Survey for the Proposed Hawaii Regional Security Operations Center (HRSOC) Project



DEPARTMENT OF THE NAVY  
COMMANDER  
NAVY REGION HAWAII  
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09 JUN 2005

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Ser N45/

09 JUN 2005

CERTIFIED MAIL NO. 7002 3150 0003 9288 5317

Ms. Heidi Guth  
Office of Hawaiian Affairs  
711 Kapiolani Boulevard Suite 500  
Honolulu HI 96813

Dear Ms. Guth:

We are notifying your office of a change in the scope of the proposed Hawaii Regional Security Operations Center (HRSOC) at the Naval Computer and Telecommunications Area Master Station Pacific (NCTAMS PAC) in Wahiawa, Oahu (TMK: (1)7-1-002:007 Portion).

We have previously consulted your office in a letter dated August 12, 2004. The proposed HRSOC project scope has been modified and additional lands were surveyed for the proposed access road realignment.

#### Background

Recent changes to the project scope are proposed in order to address community concerns about the proximity of the road corridor to the residences of Whitmore Village. The HRSOC Draft EA was presented at the Whitmore Community Association (WCA) April 29, 2005 meeting. The purpose of the meeting was to present the findings of the Draft EA to the community and receive comments and questions. As a result of traffic noise concerns raised at the WCA meeting, changes to the originally proposed access road corridor were made. The proposed realignment of the access road required additional archaeological survey of the new road corridor.

The findings of the additional archaeological surveys for the road corridor realignment and other infrastructure additions not covered in the original report are presented in the enclosed addendum reports.

#### Determination of Effect

Because no archaeological sites were identified in the additional lands surveyed, the Navy has determined that the previous finding of "no historic properties affected" for the proposed HRSOC remains the same.

Should you have any questions regarding this undertaking, please contact Mr. Randy Miyashiro, Navy Region Hawaii Cultural Resource Coordinator, at 473-4137, extension 230.

Sincerely,

R. M. WAKUMOTO  
Director  
Regional Environmental Director  
By direction of  
Commander, Navy Region Hawaii

- Enclosures: 1. Addendum To: Phase I Archaeological Survey for the Proposed Hawaii Regional Security Operations Center (HRSOC) Project  
2. Second Addendum To: Phase I Archaeological Survey for the Proposed Hawaii Regional Security Operations Center (HRSOC) Project



DEPARTMENT OF THE NAVY  
COMMANDER  
NAVY REGION HAWAII  
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PEARL HARBOR HI 96860-5101

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Ser N45/  
09 JUN 2005

CERTIFIED MAIL NO. 7002 3150 0003 9288 5324

Ms. Nalani Kahoano Gersaba  
Oahu Council of Hawaiian Civic Clubs  
1767 Mahani Loop  
Honolulu HI 96819

Dear Ms. Gersaba:

We are notifying your office of a change in the scope of the proposed Hawaii Regional Security Operations Center (HRSOC) at the Naval Computer and Telecommunications Area Master Station Pacific (NCTAMS PAC) in Wahiawa, Oahu (TMK: (1)7-1-002:007 Portion).

We have previously consulted your office in a letter dated August 12, 2004. The proposed HRSOC project scope has been modified and additional lands were surveyed for the proposed access road realignment.

**Background**

Recent changes to the project scope are proposed in order to address community concerns about the proximity of the road corridor to the residences of Whitmore Village. The HRSOC Draft EA was presented at the Whitmore Community Association (WCA) April 29, 2005 meeting. The purpose of the meeting was to present the findings of the Draft EA to the community and receive comments and questions. As a result of traffic noise concerns raised at the WCA meeting, changes to the originally proposed access road corridor were made. The proposed realignment of the access road required additional archaeological survey of the new road corridor.

The findings of the additional archaeological survey for the road corridor realignment and other infrastructure additions not covered in the original report are presented in the enclosed addendum reports.

**Determination of Effect**

Because no archaeological sites were identified in the additional lands surveyed, the Navy has determined that the previous finding of "no historic properties affected" for the proposed HRSOC remains the same.

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Should you have any questions regarding this undertaking, please contact Mr. Randy Miyashiro, Navy Region Hawaii Cultural Resource Coordinator, at 473-4137, extension 230.

Sincerely,

R. M. WAKUMOTO  
Director  
Regional Environmental Director  
By direction of  
Commander, Navy Region Hawaii

- Enclosures: 1. Addendum To: Phase I Archaeological Survey for the Proposed Hawaii Regional Security Operations Center (HRSOC) Project  
2. Second Addendum To: Phase I Archaeological Survey for the Proposed Hawaii Regional Security Operations Center (HRSOC) Project



DEPARTMENT OF THE NAVY  
COMMANDER  
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09 JUN 2005

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09 JUN 2005

CERTIFIED MAIL NO. 7002 3150 0003 9288 5294

Mr. Tom Lenchanko  
Waha Olelo `Aha Kukaniloko, Kahunana, Koa Mana and `Ike `Aina  
931 Uakanikoo Street  
Wahiawa HI 96786

Dear Mr. Lenchanko:

We are notifying your organization of a change in the scope of the proposed Hawaii Regional Security Operations Center (HRSOC) at the Naval Computer and Telecommunications Area Master Station Pacific (NCTAMS PAC) in Wahiawa, Oahu (TMK: (1)7-1-002:007 Portion).

The proposed HRSOC project scope has been modified and additional lands were surveyed for the proposed access road realignment.

**Background**

Recent changes to the project scope are proposed in order to address community concerns about the proximity of the road corridor to the residences of Whitmore Village. The HRSOC Draft EA was presented at the Whitmore Community Association (WCA) April 29, 2005 meeting. The purpose of the meeting was to present the findings of the Draft EA to the community and receive comments and questions. As a result of traffic noise concerns raised at the WCA meeting, changes to the originally proposed access road corridor were made. The proposed realignment of the access road required additional archaeological survey of the new road corridor.

The findings of the additional archaeological survey for the road corridor realignment are presented in the enclosed addendum report. This report is the second addendum to the original archaeological survey report. The first addendum addressed scope changes to the originally proposed access road corridor, and other infrastructure additions not covered in the original report.

**Determination of Effect**

Because no archaeological sites were identified in the additional lands surveyed, the Navy has determined that the previous finding of "no historic properties affected" for the proposed HRSOC remains the same.

Should you have any questions regarding this undertaking, please contact Mr. Randy Miyashiro, Navy Region Hawaii Cultural Resource Coordinator, at 473-4137, extension 230.

Sincerely,

R. M. WAKUMOTO  
Director  
Regional Environmental Director  
By direction of  
Commander, Navy Region Hawaii

- Enclosures:
1. Phase I Archaeological Survey for the Proposed Hawaii Regional Security Operations Center (HRSOC) Project
  2. Addendum To: Phase I Archaeological Survey for the Proposed Hawaii Regional Security Operations Center (HRSOC) Project
  3. Second Addendum To: Phase I Archaeological Survey for the Proposed Hawaii Regional Security Operations Center (HRSOC) Project

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## **APPENDIX B**

Chapter 343, HRS Pre-Assessment Consultation Letters



DEPARTMENT OF THE NAVY  
 NAVAL FACILITIES ENGINEERING COMMAND, PACIFIC  
 258 MAKALAPA DR., STE. 100  
 PEARL HARBOR, HAWAII 96860-3134

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 09 NOV 2004

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 Ser EV31/2020

To: Distribution

Subj: PRE-ASSESSMENT CONSULTATION FOR THE HAWAII REGIONAL  
 SECURITY OPERATIONS CENTER DRAFT ENVIRONMENTAL  
 ASSESSMENT WAHIAWA, OAHU, HAWAII

The Navy proposes construction of the Hawaii Regional Security Operations Center (HRSOC) at the Naval Computer and Telecommunications Area Master Station, Pacific (NCTAMS PAC) in Wahiawa, Hawaii for the relocation of the Kunia Regional Security Operations Center (KRSOC). Pursuant to the National Environmental Policy Act of 1969 and Chapter 343, Hawaii Revised Statutes, the Navy is preparing an Environmental Assessment (EA) to evaluate the potential environmental effects of the Proposed Action and the possible alternatives, including modernization and expansion of the existing KRSOC facility and the No-Action alternative.

This pre-assessment consultation is intended to ensure that interested parties are notified of the forthcoming Draft EA, and that all relevant environmental, economic and technical issues and concerns are identified and addressed. A project fact sheet is enclosed for your information (enclosure (1)). Should you have any comments, we invite you to submit written comments by December 10, 2004 to the following address:

Naval Facilities Engineering Command, Pacific  
 Attn: Ms. Audrey Uyema Pak, EV31AUP  
 258 Makalapa Drive, Suite 100  
 Pearl Harbor, HI 96860-3134

Thank you for interest in this project. If you would like to receive a copy of the Draft EA and participate in the environmental review process, or if you have any questions or concerns, please contact Ms. Audrey Uyema Pak, Planner-In-Charge, at (808) 472-1448 or by E-Mail at [audrey.uyemapak@navy.mil](mailto:audrey.uyemapak@navy.mil).

Sincerely,

LEIGHTON G.M. WONG  
 Acting Business Line Manager  
 Environmental

Encl:  
 (1) HRSOC Fact Sheet

Distribution: (See Page 2)

Distribution:  
 COL Floyd Quintana  
 Directorate of Public Works  
 APVG-GWA-S, Stop #253  
 U. S. Army Garrison, Hawaii  
 Schofield Barracks, HI 96857

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 CEPOH-EC-R  
 U. S. Army Corps of Engineers  
 Building 230  
 Fort Shafter, HI 96858-5440

State Conservationist  
 Resources Conservation Service  
 U. S. Department of Agriculture  
 P. O. Box 50004  
 Honolulu, HI 96850

Region IX Administrator  
 U. S. Environmental Protection Agency  
 75 Hawthorne Street  
 San Francisco, CA 94105

Mr. Rodney Haraga, Director  
 State of Hawaii  
 Department of Transportation  
 869 Punchbowl Street, Room 509  
 Honolulu, HI 96813

State of Hawaii  
 Department of Health  
 Environmental Planning Office  
 P. O. Box 3378  
 Honolulu, HI 96801

Mr. John Nakagawa  
 Coastal Zone Management  
 State of Hawaii, DBEDT  
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Mr. Micah Kane, Chairman  
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Department of Hawaiian Home Lands  
P. O. Box 1879  
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Mr. Eric Crispin, Director  
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Manager/Chief Engineer  
Board of Water Supply  
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Honolulu Fire Department  
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Chief of Police  
Honolulu Police Department  
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Mililani, HI 96789

Ms. Dorothy Tom, Real Estate Officer  
George Galbraith Trust  
Bank of Hawaii, Trust Real Estate, Dept. 722  
130 Merchant Street, Suite 330  
Honolulu, HI 96813

Mr. Yoshi Tanabe  
Manager, Property Division  
Dole Food Company Inc.  
1116 Whitmore Avenue  
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Mr. Jim Tollefson  
President and CEO  
Chamber of Commerce of Hawaii  
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Council AFL-CIO  
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Mr. Daniel Nakasone  
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410 Kilani Avenue, Suite 204A  
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(cont. on page 6)

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President  
Ike Aina Native Hawaiian Land Trust  
P. O. Box 4192  
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Hawaiian Civic Club Wahiawa  
931 Peach Street  
Wahiawa, HI 96786-2019

Mr. Tom Lenchanko  
Friends of Kukaniloko  
931 Uakanikoo Street  
Wahiawa, HI 96786

Honolulu Council Navy League  
P. O. Box 31032  
Honolulu, HI 96820-1032

Mr. Douglas Wheeler  
Wahiawa Lions Club  
P. O. Box 860651  
Wahiawa, HI 96786

Ms. Roseline Yano  
President  
Wahiawa Rainbow Club  
1690 California Avenue  
Wahiawa, HI 96786

Ms. Mary Antonio  
Wahiawa/Waiialua Rotary Club  
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Ms. Lori Shimabukuro  
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(cont. on page 7)

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Ser EV31/2020

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Ms. Jean Akagi, President  
Whitmore Seniors Club  
Whitmore Community Park  
1259 Whitmore Avenue  
Wahiawa, HI 96786

Ms. Kathleen H. Masunaga  
Chair  
Wahiawa Neighborhood Board #26  
1842 Glen Avenue  
Wahiawa, HI 96786



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION IX  
75 Hawthorne Street  
San Francisco, CA 94105

December 6, 2004

Naval Facilities Engineering Command, Pacific  
Attn: Ms. Audrey Uyema Pak, EV31AUP  
238 Makalapa Drive, Suite100  
Pearl Harbor, HI 96860-3134

Dear Ms. Pak:

The Environmental Protection Agency (EPA) has reviewed the pre-assessment consultation to prepare an environmental assessment (EA) for the **Hawai'i Regional Security Operations Center Waihiwa, Oahu, Hawai'i**. Our review is pursuant to the National Environmental Policy Act (NEPA), Council on Environmental Quality (CEQ) regulations (40 CFR Parts 1500-1508), and Section 309 of the Clean Air Act.

EPA has no formal comments at this time. Please send one copy of the Draft EA to this office at the above address, mail code CMD-2. If you have any questions, please contact me at **(415) 947-4178**.

Sincerely,

**Karen Vitulano**  
Federal Activities Office  
Cross Media Division



DEPARTMENT OF THE NAVY  
NAVAL FACILITIES ENGINEERING COMMAND, PACIFIC  
258 MAKALAPA DR., STE. 100  
PEARL HARBOR, HAWAII 96860-3134

5090P.1FOB  
Ser EV31/ 2195  
10 DEC 2004

Ms. Karen Vitulano  
Federal Activities Office, Cross Media Division  
U. S. Environmental Protection Agency  
Region IX, CMD-2  
75 Hawthorne Street  
San Francisco, CA 94105

Dear Ms. Vitulano:

Subj: PRE-ASSESSMENT CONSULTATION FOR THE HAWAII REGIONAL  
SECURITY OPERATIONS CENTER DRAFT ENVIRONMENTAL  
ASSESSMENT WAHIAWA, OAHU, HAWAII

Thank you for your letter dated December 6, 2004 in response to the subject consultation. The U.S. Environmental Protection Agency, Region IX, mail code CMD-2, will be added to the list of organizations to receive a copy of the EA for review.

If you have any questions, please contact Ms. Audrey Uyema Pak at (808) 472-1448 or by E-Mail at [Audrey.uyemapak@navy.mil](mailto:Audrey.uyemapak@navy.mil).

Sincerely,

MELVIN N. KAKU  
Director  
Environmental Planning Division



REPLY TO  
ATTENTION OF

DEPARTMENT OF THE ARMY  
U. S. ARMY ENGINEER DISTRICT, HONOLULU  
FT. SHAFTER, HAWAII 96858-5440

November 17, 2004

Regulatory Branch

Ms. Audrey Uyema Pak  
Planner-In-Charge  
Naval facilities Engineering Command, Pacific  
258 Makalapa Drive, Suite 100  
Pearl Harbor, HI 96860-3134

Dear Ms. Uyema Pak:

This responds to your request for written comments for a draft Environmental Assessment (dEA) which will address activities and impacts of the proposed Hawaii Regional Security Operations Center Project, Wahiawa, Oahu Island.

The dEA should indicate whether waters of the United States, as represented by perennial or intermittent streams, and wetlands are in, or adjacent to, or absent from, the proposed project area. The dEA should state in appropriate sections that there is, or no potential for waters of the U.S. to be impacted by construction of project structures and associated ground disturbing activities within the proposed improvement area. Upon our receipt of the dEA, it may then be determined whether a Department of Army (DA) permit for Section 404 activities of the Clean Water Act may, or may not be, required for the proposed project.

Thank you for your consideration of potential impacts to the aquatic environment of the Kunia watershed. Please contact Mr. Farley Watanabe of my staff at 438-7701, or facsimile 438-4060, if you have any questions or need additional information. Please refer to File Number POH-2004-1072 in any future correspondence with us.

Sincerely,

George P. Young, P.E.  
Chief, Regulatory Branch



DEPARTMENT OF THE NAVY  
NAVAL FACILITIES ENGINEERING COMMAND, PACIFIC  
258 MAKALAPA DR., STE. 100  
PEARL HARBOR, HAWAII 96860-3134

5090P.1F0B  
Ser EV31/ 2157  
07 DEC 2004

Mr. George P. Young, P.E.  
Chief, Regulatory Branch  
Department of the Army  
U. S. Army Engineer District, Honolulu  
Fort Shafter, HI 96858-5440

Dear Mr. Young:

Subj: PRE-ASSESSMENT CONSULTATION FOR THE HAWAII REGIONAL  
SECURITY OPERATIONS CENTER DRAFT ENVIRONMENTAL  
ASSESSMENT WAHIAWA, OAHU, HAWAII

Thank you for your letter dated November 17, 2004 which provided comments to the subject consultation.

The Draft Environmental Assessment (EA) for the Hawaii Regional Security Operations Center will indicate whether waters of the United States and wetlands are in or adjacent to the proposed project area. The Draft EA will address any potential impacts to waters of the U.S. as a result of the proposed project.

If you have any questions or concerns, please contact **Ms. Audrey Uyema Pak** at (808) 472-1448 or by E-Mail at [audrey.uyemapak@navy.mil](mailto:audrey.uyemapak@navy.mil).

Sincerely,

MELVIN N. KAKU  
Director  
Environmental Planning Division

LINDA LINGLE  
GOVERNOR  
STATE OF HAWAII



STATE OF HAWAII  
DEPARTMENT OF HAWAIIAN HOME LANDS  
P.O. BOX 1879  
HONOLULU, HAWAII 96805  
December 1, 2004

MICAH A. KANE  
CHAIRMAN  
HAWAIIAN HOMES COMMISSION  
BEN HENDERSON  
DEPUTY TO THE CHAIRMAN  
KAULANA H. PARK  
EXECUTIVE ASSISTANT



DEPARTMENT OF THE NAVY  
NAVAL FACILITIES ENGINEERING COMMAND, PACIFIC  
258 MAKALAPA DR., STE. 100  
PEARL HARBOR, HAWAII 96860-3134

5090P.1F0B  
Ser EV31/ 2193  
09 DEC 2004

Ms. Audrey Uyema Pak, EV31AUP  
Naval Facilities Engineering Command, Pacific  
258 Makalapa Drive, Suite 100  
Pearl Harbor, Hawaii 96860-3134

Dear Ms. Pak:

Subject: Hawaii Regional Security Operations Center  
Draft Environmental Assessment

Thank you for your pre-assessment consultation notice regarding the subject project to relocate the existing Kunia Regional Security Operations Center (KRSOC).

The Department of Hawaiian Home Lands (DHHL) has no comment at this time, but would like to receive a copy of the draft environmental assessment.

If you have any questions, please call Darrell Yagodich of our Planning Office at 586-3836.

Aloha and mahalo,

*Darrell Yagodich*  
83  
Micah A. Kane, Chairman  
Hawaiian Homes Commission

Mr. Micah A. Kane, Chairman  
State of Hawaii  
Dept of Hawaiian Home Lands – Planning Office  
P. O. Box 1879  
Honolulu, HI 96805

Dear Mr. Kane:

Subj: PRE-ASSESSMENT CONSULTATION FOR THE HAWAII REGIONAL  
SECURITY OPERATIONS CENTER DRAFT ENVIRONMENTAL  
ASSESSMENT WAHIAWA, OAHU, HAWAII

Thank you for your letter dated December 1, 2004 in response to the subject consultation. The Department of Hawaiian Home Lands – Planning Office will be added to the list of organizations to receive a copy of the EA for review.

If you have any questions, please contact Ms. Audrey Uyema Pak at (808) 472-1448 or by E-Mail at [Audrey.uyemapak@navy.mil](mailto:Audrey.uyemapak@navy.mil).

Sincerely,

MELVIN N. KAKU  
Director  
Environmental Planning Division



## Standard Comments

**Environmental Planning Office** Dated 3/2/04

The Environmental Planning Office (EPO) is responsible for several surface water quality management programs mandated by the federal Clean Water Act or dictated by State policy . (<http://www.state.hi.us/doh/eh/epo/wqm/wqm.htm>). Among these responsibilities, EPO:

- maintains the *List of Impaired Waters in Hawaii Prepared under Clean Water Act §303(d)* (<http://www.state.hi.us/doh/eh/epo/wqm/303dpcfinal.pdf>);
- develops and establishes Total Maximum Daily Loads (TMDLs) for listed waters (suggesting how much existing pollutant loads should be reduced in order to attain water quality standards, please see <http://www.epa.gov/owow/tmdl/intro.html>);
- writes TMDL Implementation Plans describing how suggested pollutant load reductions can be achieved; and
- conducts assessments of stream habitat quality and biological integrity.

To facilitate TMDL development and planning, and to assist our assessment of the potential impact of proposed actions upon water quality, pollutant loading, and biological resources in receiving waters, we suggest that environmental review documents, permit applications, and related submittals include the following standard information and analyses:

### Waterbody type and class

1. Identify the waterbody type and class, as defined in Hawaii Administrative Rules Chapter 11-54 (<http://www.state.hi.us/doh/rules/11-54.pdf>), of all potentially affected water bodies<sup>1</sup>.

### Existing water quality management actions

2. Identify any existing National Pollutant Discharge Elimination System (NPDES) permits and related connection permits (issued by permittees) that will govern the management of water that runs off or is discharged from the proposed project site or facility. Please include NPDES and other permit numbers; names of permittees, permitted facilities, and receiving waters (including waterbody type and class as in 1. above); diagrams showing drainage/discharge pathways and outfall locations; and note any permit conditions that may specifically apply to the proposed project.
3. Identify any planning documents, groups, and projects that include specific prescriptions for water quality management at the proposed project site and in the potentially affected waterbodies. Please note those prescriptions that may specifically apply to the proposed project.

### Pending water quality management actions

4. Identify all potentially affected water bodies that appear on the current *List of Impaired Waters in Hawaii Prepared under Clean Water Act §303(d)* including the listed waterbody, geographic scope of listing, and pollutant(s) (See Table 7 at <http://www.state.hi.us/doh/eh/epo/wqm/303dpcfinal.pdf>).
5. If the proposed project involves potentially affected water bodies that appear on the current *List of Impaired Waters in Hawaii Prepared under Clean Water Act §303(d)*, identify and quantify expected changes in the following site and watershed conditions and characteristics:
  - surface permeability
  - hydrologic response of surface (timing, magnitude, and pathways)
  - receiving water hydrology
  - runoff and discharge constituents
  - pollutant concentrations and loads in receiving waters
  - aquatic habitat quality and the integrity of aquatic biota

Where TMDLs are already established they include pollutant load allocations for the surrounding lands and point source discharges. In these cases, we suggest that the submittal specify how the proposed project would contribute to achieving the applicable load reductions.

Where TMDLs are yet to be established and implemented, a first step in achieving TMDL objectives is to prevent any project-related increases in pollutant loads. This is generally accomplished through the proper application of suitable best management practices in all phases of the project and adherence to any applicable ordinances, standards, and permit conditions. In these cases we suggest that the submittal specify how the proposed project would contribute to reducing the polluted discharge and runoff entering the receiving waters, including plans for additional pollutant load reduction practices in future management of the surrounding lands and drainage/discharge systems.

### Proposed Action and Alternatives Considered

We suggest that each submittal identify and analyze potential project impacts at a watershed scale by considering consider the potential contribution of the proposed project to cumulative, multi-project watershed effects on hydrology, water quality, and aquatic and riparian ecosystems.

We also suggest that each submittal broadly evaluate project alternatives by identifying more than one engineering solution for proposed projects. In particular, we suggest the consideration of "alternative," "soft," and "green" engineering solutions for channel modifications that would provide a more environmentally friendly and aesthetically pleasing channel environment and minimize the destruction of natural landscapes.

If you have any questions about these comments or EPO programs, please contact Herman Tuiolosega at 586-4337.

<sup>1</sup>"Potentially affected waterbodies" means those in which proposed project activity would take place and any that could receive water discharged by the proposed project activity or water flowing down from the proposed project site. These waterbodies can be presented as a chain of receiving waters whose top link is at the project site upslope and whose bottom link is in the Pacific Ocean, and can be named according to conventions established by Chapter 11-54 and the *List of Impaired Waters in Hawaii Prepared under Clean Water Act §303(d)*. For example, a recent project proposed for Nuhelewai Stream, Oahu might potentially affect Nuhelewai Stream, Kapalama Canal, and Honolulu Harbor and Shore Areas.

[OTHER EXAMPLES OR DIAGRAM??]

**Solid and Hazardous Waste Branch** Dated 3/2/04

1)  
The OSWM recommends the development of a solid waste management plan that encompasses all project phases including demolition, construction, and occupation/operation of the completed project.

Specific examples of elements that the plan should address include:

- The recycling of green-waste during clear and grub activities;
- Recycling construction and demolition wastes, if appropriate;
- The use of locally produced compost in landscaping;
- The use of recycled content building materials;
- The provision of recycling facilities in the design of the project.

2)  
The developer shall ensure that all solid waste generated during project construction is directed to a Department of Health permitted solid waste disposal or recycling facility.

3)  
The developer should consider providing space in the development for recycling activities. The provision of space for recycling bins for paper, glass, and food/wet waste would help to encourage the recycling of solid waste(s) generated by building occupants.

4)  
The discussion of solid waste issues contained in the document is restricted to activities within the completed project. The OSWM recommends the development of a solid waste management plan that encompasses all project phases, from construction (and or demolition) to occupation of the project.

Specific examples of plan elements include: the recycling of green-waste during clear and grub activities; maximizing the recycling of construction and demolition wastes; the use

of locally produced compost in the landscaping of the project; and the provision of recycling facilities in the design of the project.

5)  
Hawaii Revised Statutes Chapter 103D-407 stipulates that all highway and road construction and improvement projects funded by the State or a county or roadways that are to be accepted by the State or a county as public roads shall utilize a minimum of ten per cent crushed glass aggregate as specified by the department of transportation in all base-course (treated or untreated) and sub-base when the glass is available to the quarry or contractor at a price no greater than that of the equivalent aggregate.

If you have any questions, please contact the Solid and Hazardous Waste Branch at (808) 586-4240.

**Noise, Radiation & Indoor Air Quality Branch** Dated 3/2/04

“Project activities shall comply with the Administrative Rules of the Department of Health:

- Chapter 11-39 Air Conditioning and Ventilating.
- Chapter 11-45 Radiation Control.
- Chapter 11-46 Community Noise Control.
- Chapter 11-501 Asbestos Requirements.
- Chapter 11-502 Asbestos-Containing Materials in Schools.
- Chapter 11-503 Fees for Asbestos Removal and Certification
- Chapter 11-504 Asbestos Abatement Certification Program

Should there be any questions, please contact Russell S. Takata, Environmental Health Program Manager, Noise, Radiation and Indoor Air Quality Branch, at 586-4701.”

**Clean Water Branch** Dated 3/2/04

1. The Army Corps of Engineers should be contacted at (808) 438-9258 to identify whether a Federal license or permit (including a Department of Army permit) is required for this project. Pursuant to Section 401(a)(1) of the Federal Water Pollution Act (commonly known as the “Clean Water Act”), a Section 401 Water Quality Certification is required for “[a]ny applicant for Federal license or permit to conduct any activity including, but not limited to, the construction or operation of facilities, which may result in any discharge into the navigable waters....”
2. A National Pollutant Discharge Elimination System (NPDES) general permit coverage is required for the following activities:
  - a. Storm water associated with industrial activities, as defined in Title 40, Code of Federal Regulations, Sections 122.26(b)(14)(i) through 122.26(b)(14)(ix) and 122.26(b)(14)(xi).

- b. Construction activities, including clearing, grading, and excavation, that result in the disturbance of equal to or greater than one (1) acre of total land area. The total land area includes a contiguous area where multiple separate and distinct construction activities may be taking place at different times on different schedules under a larger common plan of development or sale. **An NPDES permit is required before the commencement of the construction activities.**
- c. Discharges of treated effluent from leaking underground storage tank remedial activities.
- d. Discharges of once through cooling water less than one (1) million gallons per day.
- e. Discharges of hydrotesting water.
- f. Discharges of construction dewatering effluent.
- g. Discharges of treated effluent from petroleum bulk stations and terminals.
- h. Discharges of treated effluent from well drilling activities.
- i. Discharges of treated effluent from recycled water distribution systems.
- j. Discharges of storm water from a small municipal separate storm sewer system.
- k. Discharges of circulation water from decorative ponds or tanks.

The CWB requires that a Notice of Intent (NOI) to be covered by a NPDES general permit for any of the above activities be submitted at least 30 days before the commencement of the respective activities. The NOI forms may be picked up at our office or downloaded from our website at <http://www.state.hi.us/health/eh/cwb/forms/genl-index.html>.

- 3. The applicant may be required to apply for an individual NPDES permit if there is any type of activity in which wastewater is discharged from the project into State waters and/or coverage of the discharge(s) under the NPDES general permit(s) is not permissible (i.e. NPDES general permits do not cover discharges into Class 1 or Class AA receiving waters). An application for the NPDES permit is to be submitted at least 180 days before the commencement of the respective activities. The NPDES application forms may also be picked up at our office or downloaded from our website at <http://www.state.hi.us/health/eh/cwb/forms/indiv-index.html>.
- 4. Hawaii Administrative Rules, Section 11-55-38, also requires the owner to either submit a copy of the new NOI or NPDES permit application to the State Department of Land and Natural Resources, State Historic Preservation Division (SHPD), or demonstrate to the satisfaction of the DOH that the project, activity, or site covered by the NOI or application has been or is being reviewed by SHPD. Please submit a copy of the request for review by SHPD or SHPD's determination letter for the project.

If you have any questions, please contact the CWB at 586-4309.

**Waste Water Branch** Dated 3/2/04

All wastewater plans must conform to applicable provisions of the Department of Health's Administrative Rules, Chapter 11-62, "Wastewater Systems". We do reserve the right to review the detailed wastewater plans for conformance to applicable rules.

Should you have any questions, please contact the Planning & Design Section of the Wastewater Branch at 586-4294.

**Clean Air Branch** Dated 3/2/04

**Construction/Demolition Involving Asbestos:**

Since the proposed project would entail renovation/demolition activities which may involve asbestos, the applicant should contact the Asbestos Abatement Office in the Noise, Radiation and Indoor Air Quality Branch at 586-5800.

**Control of Fugitive Dust:**

A significant potential for fugitive dust emissions exists during all phases of construction. Proposed construction activities will occur in proximity to **existing residences, businesses, public areas and thoroughfares**, thereby exacerbating potential dust problems. It is recommended that a dust control management plan be developed which identifies and addresses all activities that have a potential to generate fugitive dust. Implementation of adequate dust control measures during all phases of development and construction activities is warranted.

Construction activities must comply with the provisions of Hawaii Administrative Rules, §11-60.1-33 on Fugitive Dust.

The contractor should provide adequate measures to control dust from the road areas and during the various phases of construction. These measures include, but are not limited to, the following:

- a) Plan the different phases of construction, focusing on minimizing the amount of dust-generating materials and activities, centralizing on-site vehicular traffic routes, and locating potential dust-generating equipment in areas of the least impact;
- b) Provide an adequate water source at the site prior to start-up of construction activities;
- c) Landscape and provide rapid covering of bare areas, including slopes, starting from the initial grading phase;
- d) Minimize dust from shoulders and access roads;
- e) Provide adequate dust control measures during weekends, after hours, and prior to daily start-up of construction activities; and
- f) Control dust from debris being hauled away from the project site.

**Hazard Evaluation and Emergency Response Office(HEER)** Dated 3/2/04

1. A phase I Environmental Site Assessment (ESA) should be conducted for developments or redevelopments. If the investigation shows that a release of petroleum, hazardous substance, pollutants or contaminants occurred at the site, the site should be properly characterized through an approved Hawaii State Department of Health (DOH)/Hazard Evaluation and Emergency Response Office (HEER) soil and or groundwater sampling plan. If the site is found to be contaminated, then all removal and remedial actions to clean up hazardous substance or oil releases by past and present owners/tenants must comply with chapter 128D, Environmental Response Law, HRS, and Title 11, Chapter 451, HAR, State Contingency Plan.
2. All lands formerly in the production of sugarcane should be characterized for arsenic contamination, If arsenic is detected above the US EPA Region (preliminary remediation goal (PRG) for non-cancer effects, then a removal and or remedial plan must be submitted to the Hazard Evaluation and Emergency Response (HEER) Office of the State Department of Health for approval. The plan must comply with Chapter 128D, Environmental Response Law, HRS, and Title 11, Chapter 451, HAR, State Contingency Plan.
3. If the land has a history of previous releases of petroleum, hazardous substances, pollutants, or contaminants, we recommend that the applicant request a “no further action” (NFA) letter from the Hawaii State Department of Health (DOH)/Hazard Evaluation and Emergency Response (HEER) Office prior to the approval of the land use change or permit approval.

**Safe Drinking Water Branch** Dated 3/11/04

The Safe Drinking Water Branch administers programs in the areas of: 1) public water systems; 2) underground injection control; and 3) groundwater protection. Our general comments on projects are as follows.

**Public Water Systems**

- Federal and state regulations define a public water system as a system that serves 25 or more individuals at least 60 days per year or has at least 15 service connections. All public water system owners and operators are required to comply with Hawaii Administrative Rules, Title 11, Chapter 20, titled Rules Relating to Potable Water Systems.
- All new public water systems are required to demonstrate and meet minimum capacity requirements prior to their establishment. This requirement involves demonstration that the system will have satisfactory technical, managerial and financial capacity to enable the system to comply with safe drinking water standards and requirements.
- Projects that propose development of new sources of potable water serving or proposed to serve a public water system must comply with the terms of Section

11-20-29 of Chapter 20. This section requires that all new public water system sources be approved by the Director of Health prior to its use. Such approval is based primarily upon the submission of a satisfactory engineering report which addresses the requirements set in Section 11-20-29.

- The engineering report must identify all potential sources of contamination and evaluate alternative control measures which could be implemented to reduce or eliminate the potential for contamination, including treatment of the water source. In addition, water quality analyses for all regulated contaminants, performed by a laboratory certified by the State Laboratories Division of the state of Hawaii, must be submitted as part of the report to demonstrate compliance with all drinking water standards. Additional parameters may be required by the Director for this submittal or additional tests required upon his or her review of the information submitted.

- All sources of public water system sources must undergo a source water assessment which will delineate a source water protection area. This process is preliminary to the creation of a source water protection plan for that source and activities which will take place to protect the source of drinking water.

- Projects proposing to develop new public water systems or proposing substantial modifications to existing public water systems must receive approval by the Director of Health prior to construction of the proposed system or modification. These projects include treatment, storage and distribution systems of public water systems. The approval authority for projects owned and operated by a County Board or Department of Water or Water Supply has been delegated to them.

- All public water systems must be operated by certified distribution system and water treatment plant operators as defined by Hawaii Administrative Rules, Title 11, Chapter 11-25 titled; Rules Pertaining to Certification of Public Water System Operators.

- All projects which propose the use of dual water systems or the use of a non-potable water system in proximity to an existing potable water system to meet irrigation or other needs must be carefully design and operate these systems to prevent the cross-connection of these systems and prevent the possibility of backflow of water from the non-potable system to the potable system. The two systems must be clearly labeled and physically separated by air gaps or reduced pressure principle backflow prevention devices to avoid contaminating the potable water supply. In addition backflow devices must be tested periodically to assure their proper operation. Further, all non-potable spigots and irrigated areas should be clearly labeled with warning signs to prevent the inadvertent consumption on non-potable water. Compliance with Hawaii Administrative Rules, Title 11, Chapter 11-21 titled; Cross-Connection and Backflow Control is also required.

- All projects which propose the establishment of a potentially contaminating activity (as identified in the Hawai'i Source Water Assessment Plan) within the source water protection area of an existing source of water for a public water

supply should address this potential and activities that will be implemented to prevent or reduce the potential for contamination of the drinking water source.

For further information concerning the application of capacity, new source approval, operator certification, source water assessment, backflow/cross-connection prevention or other public water system programs, please contact the Safe Drinking Water Branch at 586-4258.

#### **Underground Injection Control (UIC)**

Injection wells used for the subsurface disposal of wastewater, sewage effluent, or surface runoff are subject to environmental regulation and permitting under Hawai'i Administrative Rules, Title 11, Chapter 11-23, titled Underground Injection Control (UIC). The Department of Health's approval must be first obtained before any injection well construction commences. A UIC permit must be issued before any injection well operation occurs.

Authorization to use an injection well is granted when a UIC permit is issued to the injection well facility. The UIC permit contains discharge and operation limitations, monitoring and reporting requirements, and other facility management and operational conditions. A complete UIC permit application form is needed to apply for a UIC permit.

A UIC permit can have a valid duration of up to five years. Permit renewal is needed to keep an expiring permit valid for another term.

For further information about the UIC permit and the Underground Injection Control Program, please contact the UIC staff of the Safe Drinking Water Branch at 586-4258.

#### **Groundwater Protection Program**

Projects that propose to develop a golf course are asked to use the Guidelines Applicable to Golf Courses in Hawai'i (Version 6) in order to address certain groundwater protection concerns, as well as other environmental concerns



DEPARTMENT OF THE NAVY  
NAVAL FACILITIES ENGINEERING COMMAND, PACIFIC  
258 MAKALAPA DR., STE. 100  
PEARL HARBOR, HAWAII 96860-3134

5090P.1E0B  
Ser EV31/ 2250  
21 DEC 2004

Mr. Herman Tuiolosega  
State of Hawaii  
Department of Health  
Environmental Planning Office  
P. O. Box 3378  
Honolulu, HI 96801

Dear Mr. Tuiolosega:

Subj: PRE-ASSESSMENT CONSULTATION FOR THE HAWAII REGIONAL  
SECURITY OPERATIONS CENTER DRAFT ENVIRONMENTAL  
ASSESSMENT WAHIAWA, OAHU, HAWAII

Thank you for your e-mail on December 15, 2004 forwarding the Department of Health's Standard Comments document in response to the subject consultation. The Department of Health will be added to the list of organizations to receive a copy of the EA for review.

If you have any questions, please contact Ms. Audrey Uyema Pak at (808) 472-1448 or by E-Mail at [Audrey.uyemapak@navy.mil](mailto:Audrey.uyemapak@navy.mil).

Sincerely,

*Melvin Z. Waki*  
MELVIN Z. WAKI, P.E.  
Business Line Manager  
Environmental

DEPARTMENT OF PLANNING AND PERMITTING  
**CITY AND COUNTY OF HONOLULU**  
650 SOUTH KING STREET, 7TH FLOOR • HONOLULU, HAWAII 96813  
PHONE: (808) 523-4414 • FAX: (808) 527-6743  
DEPT. WEB SITE: [www.honolulu.gov](http://www.honolulu.gov) • CITY WEB SITE: [www.honolulu.gov](http://www.honolulu.gov)

JEREMY HARRIS  
MAYOR



ERIC G. CRISPIN, AIA  
DIRECTOR  
BARBARA KIM STANTON  
DEPUTY DIRECTOR  
2004/ELOG-2588 (RY)

December 14, 2004

Mr. Leighton G. M. Wong  
Acting Business Line Manager, Environmental  
Department of the Navy  
Naval Facilities Engineering Command, Pacific  
258 Makalapa Drive, Suite 100  
Pearl Harbor, Hawaii 96860-3134

Dear Mr. Wong:

Subject: Pre-Assessment Consultation for a Draft Environmental Assessment for  
The Hawaii Regional Security Operations Center, Wahiawa, Oahu

The Department of Planning and Permitting (DPP) has reviewed the subject pre-assessment consultation request and have no comments at this time. Please include the DPP in your consultation process for the draft environmental assessment when it is available.

Thank you for the opportunity to comment. If you have any questions, please contact Raymond Young of our staff at 527-5839.

Sincerely,

  
ERIC CRISPIN, AIA,  
Director of Planning & Permitting

EGC:lh  
Doc. 340841



**DEPARTMENT OF THE NAVY**  
NAVAL FACILITIES ENGINEERING COMMAND, PACIFIC  
258 MAKALAPA DR., STE. 100  
PEARL HARBOR, HAWAII 96860-3134

5090P\_1F0B  
Ser EV31/2206  
22 DEC 2004

Mr. Eric Crispin, Director  
Department of Planning and Permitting  
City and County of Honolulu  
650 South King Street, 7<sup>th</sup> Floor  
Honolulu, HI 96813

Dear Mr. Crispin:

Subj: PRE-ASSESSMENT CONSULTATION FOR THE HAWAII REGIONAL  
SECURITY OPERATIONS CENTER DRAFT ENVIRONMENTAL  
ASSESSMENT WAHIAWA, OAHU, HAWAII

Thank you for your letter dated December 14, 2004 in response to the subject consultation. The Department of Planning and Permitting will be added to the list of organizations to receive a copy of the EA for review.

If you have any questions, please contact Ms. Audrey Uyema Pak at (808) 472-1448 or by E-Mail at [Audrey.uyemapak@navy.mil](mailto:Audrey.uyemapak@navy.mil).

Sincerely,



MELVIN Z. WAKI, P.E.  
Business Line Manager  
Environmental

DEPARTMENT OF TRANSPORTATION SERVICES  
**CITY AND COUNTY OF HONOLULU**

650 SOUTH KING STREET, 3RD FLOOR • HONOLULU, HAWAII 96813  
TELEPHONE: (808) 523-4529 • FAX: (808) 523-4730 • INTERNET: [www.cc.honolulu.hi.us](http://www.cc.honolulu.hi.us)



December 3, 2004

JEREMY HARRIS  
MAYOR

GEORGE "KEOKI" MIYAMOTO  
DIRECTOR

ROBERT J. FISHMAN  
DEPUTY DIRECTOR

TP11/04-83501R



DEPARTMENT OF THE NAVY  
NAVAL FACILITIES ENGINEERING COMMAND, PACIFIC  
258 MAKALAPA DR., STE. 100  
PEARL HARBOR, HAWAII 96860-3134

5090P.1FOB  
Ser EV317 2191  
09 DEC 2004

Mr. George "Keoki" Miyamoto, Director  
Department of Transportation Services  
City and County of Honolulu  
650 South King Street, 3<sup>rd</sup> Floor  
Honolulu, HI 96813

Dear Mr. Miyamoto:

Subj: PRE-ASSESSMENT CONSULTATION FOR THE HAWAII REGIONAL  
SECURITY OPERATIONS CENTER DRAFT ENVIRONMENTAL  
ASSESSMENT WAHIAWA, OAHU, HAWAII

Thank you for your letter dated December 3, 2004 in response to the subject  
consultation. The Department of Transportation Services will be added to the list of  
organizations to receive a copy of the EA for review.

If you have any questions, please contact Ms. Audrey Uyema Pak at (808) 472-1448 or  
by E-Mail at [Audrey.uyemapak@navy.mil](mailto:Audrey.uyemapak@navy.mil).

Naval Facilities Engineering Command, Pacific  
258 Makalapa Drive, Suite 100  
Pearl Harbor, Hawaii 96860-3134

Attention: Ms. Audrey Uyema Pak, EV31AUP

Dear Ms. Pak:

Subject: Hawaii Regional Security Operations Center

In response to the November 9, 2004 letter, we have reviewed the project information provided.  
At this time, we do not have any comments, but would like to be kept informed about the project.  
We look forward to receiving a copy of the draft environmental assessment.

Should you have any questions regarding this matter, please contact Faith Miyamoto of the  
Transportation Planning Division at 527-6976.

Sincerely,

GEORGE "KEOKI" MIYAMOTO  
Director

Sincerely,

MELVIN N. KAKU  
Director  
Environmental Planning Division

POLICE DEPARTMENT  
**CITY AND COUNTY OF HONOLULU**

801 SOUTH BERETANIA STREET  
HONOLULU, HAWAII 96813 - AREA CODE (808) 529-3111  
<http://www.honolulu.gov>  
<http://www.honolulupd.org>  
[www.honolulu.gov](http://www.honolulu.gov)

JEREMY HARRIS  
MAYOR



BOISSE P. CORREA  
CHIEF

GLEN R. KAJIYAMA  
PAUL D. PUTZLU  
DEPUTY CHIEFS

OUR REFERENCE CS-KP

December 2, 2004

Ms. Audrey Uyema Pak, EV31AUP  
Naval Facilities Engineering Command, Pacific  
258 Makalapa Drive, Suite 100  
Pearl Harbor, Hawaii 96860-3134

Dear Ms. Uyema Pak:

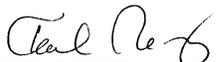
We have reviewed the Hawaii Regional Security Operations Center Fact Sheet regarding the proposed facility at the Naval Computer and Telecommunications Area Master Station, Pacific, in Wahiawa.

This project should have minimal impact on the facilities and services of the Honolulu Police Department. We would, however, like to reserve further comment until more information is provided.

If there are any questions, please call Lieutenant Brian Chang of District 2 at 621-8442 or Ms. Carol Sodetani of the Support Services Bureau at 529-3658.

Sincerely,

BOISSE P. CORREA  
Chief of Police

By   
KARL GODSEY  
Assistant Chief of Police  
Support Services Bureau



DEPARTMENT OF THE NAVY  
NAVAL FACILITIES ENGINEERING COMMAND, PACIFIC  
258 MAKALAPA DR., STE. 100  
PEARL HARBOR, HAWAII 96860-3134

5090P.1FOB  
Ser EV31/ 2192  
09 DEC 2004

Mr. Boisse P. Correa, Chief of Police  
Police Department  
City and County of Honolulu  
801 South Beretania Street  
Honolulu, HI 96813

Dear Mr. Correa:

Subj: PRE-ASSESSMENT CONSULTATION FOR THE HAWAII REGIONAL  
SECURITY OPERATIONS CENTER DRAFT ENVIRONMENTAL  
ASSESSMENT WAHIAWA, OAHU, HAWAII

Thank you for your letter dated December 2, 2004 in response to the subject consultation. The Police Department will be added to the list of organizations to receive a copy of the EA for review.

If you have any questions, please contact Ms. Audrey Uyema Pak at (808) 472-1448 or by E-Mail at [Audrey.uyemapak@navy.mil](mailto:Audrey.uyemapak@navy.mil).

Sincerely,

  
MELVIN N. KAKU  
Director  
Environmental Planning Division

FIRE DEPARTMENT  
**CITY AND COUNTY OF HONOLULU**

3375 KOAPAKA STREET, SUITE H425 • HONOLULU, HAWAII 96819-1869  
TELEPHONE: (808) 831-7761 • FAX: (808) 831-7750 • INTERNET: [www.honolulufire.org](http://www.honolulufire.org)



December 8, 2004

JEREMY HARRIS  
MAYOR



ATTILIO K. LEONARDI  
FIRE CHIEF

JOHN CLARK  
DEPUTY FIRE CHIEF



**DEPARTMENT OF THE NAVY**  
NAVAL FACILITIES ENGINEERING COMMAND, PACIFIC  
258 MAKALAPA DR., STE. 100  
PEARL HARBOR, HAWAII 96860-3134

5090P.1E0B  
Ser EV31/ 2251  
21 DEC 2004

Mr. Attilio K. Leonardi, Fire Chief  
Fire Department  
City and County of Honolulu  
3375 Koapaka Street, Suite H425  
Honolulu, HI 96819-1869

Dear Mr. Leonardi:

Subj: PRE-ASSESSMENT CONSULTATION FOR THE HAWAII REGIONAL  
SECURITY OPERATIONS CENTER DRAFT ENVIRONMENTAL  
ASSESSMENT WAHIAWA, OAHU, HAWAII

Thank you for your letter dated December 8, 2004 in response to the subject  
consultation. The Fire Department will be added to the list of organizations to receive a  
copy of the EA for review.

If you have any questions, please contact Ms. Audrey Uyema Pak at (808) 472-1448 or  
by E-Mail at [Audrey.uyemapak@navy.mil](mailto:Audrey.uyemapak@navy.mil).

Ms. Audrey Uyema Pak, EV31AUP  
Department of the Navy  
Naval Facilities Engineering Command, Pacific  
258 Makalapa Drive, Suite 100  
Pearl Harbor, Hawaii 96860-3134

Dear Ms. Pak:

Subject: Pre-assessment Consultation  
Hawaii Regional Security Operations Center Draft Environmental Assessment (DEA)  
Wahiawa, Oahu, Hawaii

We received a letter dated November 9, 2004, from Mr. Leighton Wong requesting that our  
comments on the above-mentioned project be submitted to you.

The Honolulu Fire Department requests a copy of the above-mentioned DEA and will submit  
written comments upon its receipt.

Should you have any questions, please call Battalion Chief Lloyd Rogers of our Fire Prevention  
Bureau at 831-7778.

Sincerely,

ATTILIO K. LEONARDI  
Fire Chief

AKL/SK:bh

Sincerely,

MELVIN Z. WAKI, P.E.  
Business Line Manager  
Environmental

**APPENDIX C**

Chapter 343, HRS Draft EA Consultation Letters

April 23, 2005

## Hawaii Regional Security Operations Center (HRS 343 DEA)

**District:** Wahiawa  
**TMK:** 7-1-00:005-008 (por.), 011 (por.), 026 (por.), 7-1-002:004 (por.), 007 (por.), 030-032 (por.)  
**Applicant:** Kunia Regional Security Operations Center  
 Naval Facilities Engineering Command,  
 Pacific Environmental Planning Division  
 258 Makalapa Dr., Ste. 100, Pearl Harbor  
 96860-3134  
 Contact: Audrey Uyema Pak (472-1448)

**Approving Agency:** State of Hawaii, Dept. of Transportation  
 601 Kamokila Blvd., Rm 602, Kapolei, HI 96707  
 Contact: Alvin Takeshita (692-7670)

**Consultant:** Helber Hastert & Fee, Planners  
 733 Bishop St., Ste. 2590, Honolulu, HI 96813  
 Contact: Corlyn Olsen Orr (545-2055)

**Public Comment**  
**Deadline:** May 23, 2005  
**Status:** Draft environmental assessment (DEA) notice pending 30-day public comment. Address comments to the applicant with copies to the approving agency, consultant and OEQC.

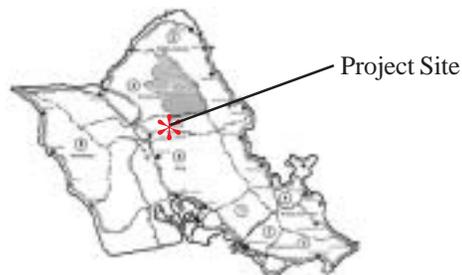
**Permits Required:** NEPA, NHPA, Section 106, NPDES, Disposal & Air Quality Permits, Stream Channel Alteration Permit, Construction, Sewer & Water Connection Approvals, Subdivision, Engineering & Construction Permits

The Kunia Regional Security Operations Center (KRSOC) proposes to construct new facilities at the Naval Computer Telecommunications Area Master Station Pacific (NCTAMS PAC) located in Wahiawa, O'ahu, Hawai'i. Off-base improvements include a new access road to NCTAMS PAC, utility system improvements along Whitmore Avenue, and roadway improvements along existing State- and City-owned Wahiawa roadways. Upon relocation, the KRSOC would be renamed the Hawaii Regional Security Operations Center (HRSOC) and would employ approximately 2,800 personnel

In compliance with Section 106 of the National Historic Preservation Act, the Navy has consulted with the State Historic Preservation Officer and the Office of Hawaiian Affairs and has determined that there would be no effect on historic properties.

Activities associated with the proposed project would be conducted within the installation boundary and would not impact surrounding properties. The proposed project would result in short-term local air and noise quality impacts during construction.

The proposed off-base access road would connect to Whitmore Avenue approximately 850 feet (260 meters) west of Kahi Kani Park, and project-related traffic would be routed around the residential community of Whitmore Village.



LINDA LINGLE  
GOVERNOR OF HAWAII



STATE OF HAWAII  
DEPARTMENT OF HEALTH  
P.O. BOX 3378  
HONOLULU, HAWAII 96801-3378

CHIYOME L. FUKINO, M.D.  
DIRECTOR OF HEALTH

In reply, please refer to:  
EMD/SDWB

May 4, 2005

Ms. Audrey Uyema Pak, Planner in Charge (EV31)  
Naval Facilities Engineering Command, Pacific  
Environmental Planning Division  
258 Makapala Drive, Suite 100  
Pearl Harbor, HI 96860-3134

Dear Ms. Uyema Pak:

SUBJECT: HAWAII REGIONAL SECURITY OPERATIONS CENTER  
DRAFT ENVIRONMENTAL ASSESSMENT (DEA)  
NAVAL COMPUTER TELECOMMUNICATIONS AREA  
MASTER STATION PACIFIC  
WAHIAWA, OAHU

Thank you for the opportunity to review and comment on the subject document. We have examined the draft environmental assessment and have the following comments to offer:

The DEA indicates that the project will be served by Public Water System No. 357, NCTAMS EASTPAC. The proposed action would involve the installation of a new, higher capacity pump and possibly a larger diameter well casing at the existing, Wahiawa Deep Well (State Well No. 3-3100-02) and a back-up service connection to the Honolulu Board of Water Supply.

We would require that the water system operator, the Department of the Navy, provide adequate, written notice of the both the start and completion of the pump and possible well casing replacement, so that any necessary adjustments can be made to our regulatory monitoring schedules.

Finally, we would note that the DEA fails to indicate which Honolulu Board of Water Supply system will provide the back-up service connection for Public Water System No. 357, NCTAMS EASTPAC. Given the project location, it would appear that Public Water System No. 333, BWS Wahiawa, is the most likely candidate.

Ms. Audrey Uyema Pak  
May 4, 2005  
Page 2

If you should have any questions, please call Stuart Yamada of the Safe Drinking Water Branch at 586-4258.

Sincerely,

A handwritten signature in cursive script, appearing to read "William Wong".

WILLIAM WONG, P.E., CHIEF  
Safe Drinking Water Branch  
Environmental Management Division

SY:slm



DEPARTMENT OF THE NAVY  
NAVAL FACILITIES ENGINEERING COMMAND, PACIFIC  
258 MAKALAPA DR., STE. 100  
PEARL HARBOR, HAWAII 96860-3134

5090P-1FOB  
Ser EV311032  
29 JUL 2005

5090P-1FOB  
Ser EV311032  
29 JUL 2005

Mr. William Wong, Chief  
State of Hawai'i  
Department of Health  
Safe Drinking Water Branch  
Environmental Management Division  
P.O. Box 3378  
Honolulu, HI 96801-3378

Dear Mr. Wong:

Subj: HAWAII REGIONAL SECURITY OPERATIONS CENTER DRAFT  
ENVIRONMENTAL ASSESSMENT, WAHIAWĀ, O'AHU, HAWAII

Thank you for your letter dated May 4, 2005, Ref EMD/SDWB, regarding the Hawaii Regional Security Operations Center Draft Environmental Assessment (EA). We have considered your comments and offer the following responses:

a. As requested, the Safe Drinking Water Branch (SDWB) will be provided with advance written notice of the proposed start and completion of the pump and possible well casing replacement. Please indicate how far in advance the SDWB should be notified.

b. Section 4.6.1 of the Final EA will be revised to indicate that Public Water System No. 333, Honolulu Board of Water Supply's Wahiawā System, will be used to provide the back-up service connection for Public Water System No. 357 at Naval Computer and Telecommunications Area Master Station Pacific.

We appreciate your participation in this review process. Your letter and this response will be included in the Final EA.

Sincerely,

MELVIN N. KAKU  
Acting Business Line Manager  
Environmental

Copy to:  
Ms. Genevieve Salmonson, Director  
State of Hawai'i, DBEDT  
Office of Environmental Quality Control  
235 South Beretania Street, Suite 702  
Honolulu, HI 96813

Mr. Alvin Takeshita, Engineering Program Manager  
State of Hawai'i  
Department of Transportation  
601 Kamokila Boulevard, Room 602  
Honolulu, HI 96707

Ms. Corlyn Olson Orr, Project Planner  
Helber Hastert & Fee, Planners  
733 Bishop Street, Suite 2590  
Honolulu, HI 96813

LINDA LINGLE  
GOVERNOR OF HAWAII



STATE OF HAWAII  
OFFICE OF ENVIRONMENTAL QUALITY CONTROL  
235 SOUTH BERETANIA STREET  
SUITE 702  
HONOLULU, HAWAII 96813  
TELEPHONE: (808) 586-4185  
FACSIMILE: (808) 586-4185  
E-mail: oeqc@health.state.hi.us

GENEVIEVE SALMONSON  
DIRECTOR



DEPARTMENT OF THE NAVY  
NAVAL FACILITIES ENGINEERING COMMAND, PACIFIC  
258 MAKALAPA DR., STE. 100  
PEARL HARBOR, HAWAII 96860-3134

5090P.1FOB  
Ser EV31/1010  
27 JUL 2005

May 16, 2005

Mr. Rodney K. Haraga, Director  
State Department of Transportation  
869 Punchbowl Street  
Honolulu, Hawai'i 96813

Dear Mr. Haraga:

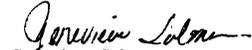
Subject: Draft EA for the Hawaii Regional Security Operations Center, Oahu

Thank you for the opportunity to review the subject document. We have the following comments.

1. Please apply sustainable building techniques as presented in OEQC's *Guidelines for Sustainable Building Design in Hawaii*.
2. This project should comply with sections 103D-407 and 408 of Hawaii Revised Statutes concerning the use of indigenous plants and recycled glass.
3. Please analyze the impacts to land use along the new access road. Will this new road encourage urban development?

Should you have any questions, please call Jeyan Thirugnanam at 586-4185.

Sincerely,

  
Genevieve Salmonson  
Director

c: Navy  
HHF

Ms. Genevieve Salmonson  
Office of Environmental Quality Control  
State of Hawai'i  
235 South Beretania Street, Suite 702  
Honolulu, Hawai'i 96813

Dear Ms. Salmonson:

Subj HAWAII REGIONAL SECURITY OPERATIONS CENTER DRAFT  
ENVIRONMENTAL ASSESSMENT, WAHIAWĀ, O'AHU, HAWAII'

Thank you for your letter dated May 16, 2005 regarding the Hawaii Regional Security Operations Center Draft Environmental Assessment (EA). We have considered your comments and offer the following responses.

a. The project will comply with Executive Order 13101, Greening the Government Through Waste Prevention, Recycling and Federal Acquisition, and Executive Order 13123, Greening the Government through Efficient Energy Management (see Section 4.19 of the Draft EA), and U.S. Department of the Navy, Naval Facilities Engineering Command Planning and Design Policy Statements that promote sustainability principles and concepts (see Section 4.20 of the Draft EA). Sustainable building measures will be incorporated, as feasible, including energy efficient building design, energy and water conservation technologies, and the use of recycled and renewable energy products, as feasible. We will also review OEQC's *Guidelines for Sustainable Building Design in Hawaii'i* for additional sustainable design techniques that could be implemented during the design, construction and operational phases. In order to maintain adequate flexibility to be able to use the most current technologies and practices at the time of design and construction, it is impractical to commit to specific sustainable building techniques at this time.

b. Thank you for calling our attention to *Hawaii'i Revised Statutes*, Sections 103D-407 and 103D-408. Project design and construction will comply with the State's requirements for the use of recycled glass and indigenous plants as applicable.

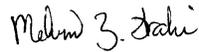
c. Lands surrounding the proposed access road are currently designated for agricultural use according to both State and county land use classifications. Any urban or residential use not permitted by the existing land use classifications would require the appropriate State and county land use approvals prior to development. Furthermore, the proposed access road will be designed to provide access to a federal military installation and is not intended to meet public access requirements associated with

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Ser EV31A 010  
27 JUL 2005

municipal subdivision standards. Any upgrades to meet subdivision standards would not be funded with military construction funds, and future roadway connections to the proposed access road will be discouraged.

We appreciate your participation in this review process. Your letter and this response will be included in the Final EA.

Sincerely,



MELVIN Z. WAKI  
Business Line Manager  
Environmental

Copy to:

Mr. Alvin Takeshita, Engineering Program Manager  
State of Hawai'i  
Department of Transportation  
601 Kamokila Boulevard, Room 602  
Honolulu, HI 96707

Ms. Corlyn Olson Orr, Project Planner  
Helber Hastert & Fee, Planners  
733 Bishop Street, Suite 2590  
Honolulu, HI 96813



**DEPARTMENT OF BUSINESS,  
ECONOMIC DEVELOPMENT & TOURISM**

**OFFICE OF PLANNING**

235 South Beretania Street, 6th Floor, Honolulu, Hawaii 96813  
Mailing Address: P.O. Box 2359, Honolulu, Hawaii 96804

Telephone: (808) 587-2846  
Fax: (808) 587-2824

LINDA LINGLE  
GOVERNOR  
THEODORE E. LIU  
DIRECTOR  
MARK K. ANDERSON  
ACTING DEPUTY DIRECTOR  
LAURA H. THIELEN  
DIRECTOR  
OFFICE OF PLANNING

Ms. Audrey Uyema Pak

Page 2

May 9, 2005

This determination is not an endorsement of the project nor does it convey approval with any other regulations administered by any State or County agency. Thank you for your continued compliance with Hawaii's CZM Program. Should you have any questions, please call Debra Tom of our CZM Program at 587-2840.

Sincerely,

Laura H. Thielen  
Director

Enclosures

c: U.S. Army Corps of Engineers, Regulatory Branch  
U.S. Environmental Protection Agency  
U.S. Fish and Wild life Service, Pacific Islands Ecoregion  
Department of Health, Clean Water Branch  
Department of Land & Natural Resources, Planning & Technical Services Branch  
City and County of Honolulu, Department of Planning and Permitting  
The Office of Environmental Quality Control  
State of Hawaii Department of Transportation, Attn: Alvin Takeshita, Engineering  
Program Mgr., 601 Kamokila Blvd, Rm. 602, Honolulu, HI 96707  
Helber Hastert & Fee, Planners, Attn: Corlyn Olson Orr, 733 Bishop Street, Suite 2590,  
Honolulu, HI 96813

Ref. No. P-10919

May 9, 2005

Ms. Audrey Uyema Pak  
Planner in Charge, EV31  
Environmental Planning Division  
Naval Facilities Engineering Command, Pacific  
258 Makalapa Drive, Suite 100  
Pearl Harbor, Hawaii 96860-3134

Dear Ms. Pak:

Subject: Draft Environmental Assessment for the Proposed New Hawaii Regional Security Operations Center (HRSOC) at the Naval Computer Telecommunications Area Master Station Pacific in Wahiawa, Oahu

This is in response to your request for comments on the Draft Environmental Assessment for the proposed construction of the new Hawaii Regional Security Operations Center (HRSOC) facilities at the Naval Computer Telecommunications Area Master Station Pacific (NCTAMS PAC) located in Wahiawa, Oahu.

The CZM Program Federal Consistency review is triggered by use of specific federal funds, direct federal actions or federal permits. According to the Draft Environmental Assessment, the proposed project involves direct federal activities within the coastal zone. According to the 15 CFR 930 this project therefore requires a Coastal Zone Management federal consistency review to evaluate effects of the proposed action on any coastal use or resource. Section 15 CFR 930.11(g) defines the terms "effect on any coastal use or resource" as any reasonably foreseeable effect on any coastal use or resource resulting from a federal action. Effects are determined by looking at reasonably foreseeable direct and indirect effects on any coastal use or resource. An action which has minimal or no environmental effects may still have effects on any coastal use or resource. Therefore we require a federal consistency determination by the applicant and subject to Hawaii's Coastal Zone Management (CZM) Program Federal Consistency review.

Please find enclosed, a copy of the Hawaii Revised Statutes, Chapter 205A and the CZM Program Federal Consistency Procedures Guide, Assessment document and Certification Form for your information and use.



DEPARTMENT OF THE NAVY  
NAVAL FACILITIES ENGINEERING COMMAND, PACIFIC  
258 MAKALAPA DR., STE. 100  
PEARL HARBOR, HAWAII 96860-3134

5090P.1F0B  
Ser EV31/1001  
27 JUL 2005

5090P.1F0B  
Ser EV31/1001  
27 JUL 2005

Ms. Laura H. Thielen, Director  
Office of Planning  
Department of Business, Economic Development & Tourism  
State of Hawai'i  
P.O. Box 2359  
Honolulu, HI 96804

Copy to:  
Ms. Corlyn Olson Orr, Project Planner  
Helber Hastert & Fee, Planners  
733 Bishop Street, Suite 2590  
Honolulu, HI 96813

Dear Ms. Thielen:

Subj: HAWAII REGIONAL SECURITY OPERATIONS CENTER DRAFT  
ENVIRONMENTAL ASSESSMENT, WAHIAWĀ, O'AHU, HAWAII

Thank you for your letter of May 9, 2005, Ref No. P-10919, regarding the Hawaii Regional Security Operations Center Draft Environmental Assessment (EA). We note your comment that the proposed project involves direct federal activities within the coastal zone and a federal consistency determination is required. In accordance with the Federal Coastal Zone Management Act, we have requested your office's review and concurrence of the Navy's consistency determination in our letter of July 1, 2005.

We appreciate your participation in this review process. Your letter and this response will be included in the Final EA.

Sincerely,

MELVIN Z. WAKI  
Business Line Manager  
Environmental

Copy to:  
Ms. Genevieve Salmonson, Director  
State of Hawai'i, DBEDT  
Office of Environmental Quality Control  
235 South Beretania Street, Suite 702  
Honolulu, HI 96813

Mr. Alvin Takeshita, Engineering Program Manager  
State of Hawai'i  
Department of Transportation  
601 Kamokila Boulevard, Room 602  
Honolulu, HI 96707

LINDA LINGLE  
GOVERNOR OF HAWAII



PETER T. YOUNG  
CHAIRPERSON  
BOARD OF LAND AND NATURAL RESOURCES  
COMMISSION ON WATER RESOURCE MANAGEMENT

LINDA LINGLE  
GOVERNOR OF HAWAII



PETER T. YOUNG  
CHAIRPERSON  
BOARD OF LAND AND NATURAL RESOURCES  
COMMISSION ON WATER RESOURCE MANAGEMENT



STATE OF HAWAII  
DEPARTMENT OF LAND AND NATURAL RESOURCES  
LAND DIVISION

POST OFFICE BOX 621  
HONOLULU, HAWAII 96809

AQUATIC RESOURCES  
BOATING AND OCEAN RECREATION  
BUREAU OF CONVEYANCES  
COMMISSION ON WATER RESOURCE MANAGEMENT  
CONSERVATION AND COASTAL LANDS  
CONSERVATION AND RESOURCES ENFORCEMENT  
ENGINEERING  
FORESTRY AND WILDLIFE  
HISTORIC PRESERVATION  
KAHOOLAWE ISLAND RESERVE COMMISSION  
LAND  
STATE PARKS



STATE OF HAWAII  
DEPARTMENT OF LAND AND NATURAL RESOURCES  
LAND DIVISION

POST OFFICE BOX 621  
HONOLULU, HAWAII 96809

AQUATIC RESOURCES  
BOATING AND OCEAN RECREATION  
BUREAU OF CONVEYANCES  
COMMISSION ON WATER RESOURCE MANAGEMENT  
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ENGINEERING  
FORESTRY AND WILDLIFE  
HISTORIC PRESERVATION  
KAHOOLAWE ISLAND RESERVE COMMISSION  
LAND  
STATE PARKS

RECEIVED  
LAND DIVISION

2005 MAY -5 A 10:49

May 11, 2005  
USADONSECURITYOAHU.RCM

LD-NAV

April 29, 2005

Naval Facilities Engineering Command, Pacific  
Audrey Uyema Pak, Planner in Charge (EV31)  
258 Makalapa Drive, Suite 100  
Pearl Harbor, Hawaii 96860-3134

LD/NAV  
USADONSECURITYOAHU.CMT

Suspense Date: 5/9/05

Dear Ms. Pak:

SUBJECT: Hawaii Regional Security Operations Center

Thank you for the opportunity to review and comment on the subject matter

A copy of the document pertaining to the subject matter was transmitted or made available to the following Department of Land and Natural Resources' Divisions for their review and comment:

- Division of Forestry and Wildlife
- Division of State Parks
- Engineering Division
- Commission on Water Resource Management
- Office of Conservation and Coastal Lands
- Division of Conservation and Resource Enforcement
- Land-Oahu District Land Office

MEMORANDUM:

TO:

- \*XXX Engineering Division
- \*XXX Division of State Parks
- \*XXX Division of Forestry and Wildlife
- \*XXX Division of Conservation and Resource Enforcement
- \*XXX Commission on Water Resource Management
- \*XXX Office of Conservation and Coastal Lands
- \*XXX Land-Oahu District Land Office

FROM: Harry M. Yada, Acting Administrator  
Land Division

SUBJECT: Consultation for the Hawaii Regional Security Operations Center  
Draft Environmental Assessment, Wahiawa, Island of Oahu, Hawaii

Please review the document pertaining to the subject matter and submit your comments (if any) on Division letterhead signed and dated by the suspense date.

**\*NOTE: One copy of the document is available for your review in the Land Division Office, Room 220.**

If you have any questions, please contact Nicholas A. Vaccaro at 587-0384.

If this office does not receive your comments by the suspense date, we will assume there are no comments.

( ) We have no comments.

Comments attached.

Division: Engineering

Signed: Eric T. Hirano

Date: 5/5/05

Name: ERIC T. HIRANO, CHIEF ENGINEER

Very truly yours,

HARRY M. YADA  
Acting Administrator

C: ODLO

705 MAY 03 PM 04:34 ENGINEERING

DEPARTMENT OF LAND AND NATURAL RESOURCES  
ENGINEERING DIVISION

LD/NAV  
Ref.: USADONSECURITYOAHU.CMT

COMMENTS

- (X) We confirm that the project site, according to the Flood Insurance Rate Map (FIRM), is located in Flood Zone D.
- ( ) Please take note that the project site, according to the Flood Insurance Rate Map (FIRM), is located in Zone \_\_\_\_.
- ( ) Please note that the correct Flood Zone Designation for the project site according to the Flood Insurance Rate Map (FIRM) is \_\_\_\_.
- ( ) Please note that the project must comply with the rules and regulations of the National Flood Insurance Program (NFIP) presented in Title 44 of the Code of Federal Regulations (44CFR), whenever development within a Special Flood Hazard Area is undertaken. If there are any questions, please contact the State NFIP Coordinator, Ms. Carol Tyau-Beam, of the Department of Land and Natural Resources, Engineering Division at (808) 587-0267.

Please be advised that 44CFR indicates the minimum standards set forth by the NFIP. Your Community's local flood ordinance may prove to be more restrictive and thus take precedence over the minimum NFIP standards. If there are questions regarding the local flood ordinances, please contact the applicable County NFIP Coordinators below:

- ( ) Mr. Robert Sumimoto at (808) 523-4254 or Mr. Mario Siu Li at (808) 523-4247 of the City and County of Honolulu, Department of Planning and Permitting.
- ( ) Mr. Kelly Gomes at (808) 961-8327 (Hilo) or Mr. Kiran Emler at (808) 327-3530 (Kona) of the County of Hawaii, Department of Public Works.
- ( ) Mr. Francis Cerizo at (808) 270-7771 of the County of Maui, Department of Planning.
- ( ) Mr. Mario Antonio at (808) 241-6620 of the County of Kauai, Department of Public Works.

- ( ) The applicant should include project water demands and infrastructure required to meet water demands. Please note that the implementation of any State-sponsored projects requiring water service from the Honolulu Board of Water Supply system must first obtain water allocation credits from the Engineering Division before it can receive a building permit and/or water meter.
- ( ) The applicant should provide the water demands and calculations to the Engineering Division so it can be included in the State Water Projects Plan Update.
- ( ) Additional Comments: \_\_\_\_\_
- ( ) Other: \_\_\_\_\_

Should you have any questions, please call Mr. Andrew Monden of the Planning Branch at 587-0229.

Signed: *Eric T. Hirano*  
ERIC T. HIRANO, CHIEF ENGINEER  
Date: 5/5/05

LINDA LINGLE  
GOVERNOR OF HAWAII



RECEIVED  
ENGINEERING DIVISION

2005 MAY -6 A 10:29



STATE OF HAWAII  
DEPARTMENT OF LAND AND NATURAL RESOURCES  
LAND DIVISION

POST OFFICE BOX 621  
HONOLULU, HAWAII 96809

April 29, 2005

PETER T. YOUNG  
CHAIRPERSON  
BOARD OF LAND AND NATURAL RESOURCES  
COMMISSION ON WATER RESOURCE MANAGEMENT

AQUATIC RESOURCES  
BOATING AND OCEAN RECREATION  
BUREAU OF CONVEYANCES  
COMMISSION ON WATER RESOURCE MANAGEMENT  
CONSERVATION AND COASTAL LANDS  
CONSERVATION AND RESOURCES ENFORCEMENT  
ENGINEERING  
FORESTRY AND WILDLIFE  
HISTORIC PRESERVATION  
KAHOOLAWE ISLAND RESERVE COMMISSION  
LAND  
STATE PARKS

LD/NAV  
USADONSECURITYOAHU.CMT

Suspense Date: 5/9/05

MEMORANDUM:

TO: \*XXX Engineering Division  
\*XXX Division of State Parks  
✓ \*XXX Division of Forestry and Wildlife  
\*XXX Division of Conservation and Resource Enforcement  
\*XXX Commission on Water Resource Management  
\*XXX Office of Conservation and Coastal Lands  
\*XXX Land-Oahu District Land Office

FROM: Harry M. Yada, Acting Administrator  
Land Division *Harry M. Yada*

SUBJECT: Consultation for the Hawaii Regional Security Operations Center  
Draft Environmental Assessment, Wahiawa, Island of Oahu, Hawaii

Please review the document pertaining to the subject matter and submit your comments (if any) on Division letterhead signed and dated by the suspense date.

\*NOTE: One copy of the document is available for your review in the Land Division Office, Room 220.

If you have any questions, please contact Nicholas A. Vaccaro at 587-0384.

If this office does not receive your comments by the suspense date, we will assume there are no comments.

We have no comments.      ( ) Comments attached.

Division: \_\_\_\_\_

Signed: *Paul J. Conry*

Date: MAY -4 2005

Name: **PAUL J. CONRY, ADMINISTRATOR  
DIVISION OF FORESTRY AND WILDLIFE**



DEPARTMENT OF THE NAVY  
NAVAL FACILITIES ENGINEERING COMMAND, PACIFIC  
258 MAKALAPA DR., STE. 100  
PEARL HARBOR, HAWAII 96860-3134

5090P.1F0B  
Ser EV311000  
27 JUL 2005

5090P.1F0B  
Ser EV311000  
27 JUL 2005

Mr. Harry M. Yada, Acting Administrator  
Land Division  
Department of Land and Natural Resources  
State of Hawai'i  
P.O. Box 621  
Honolulu, Hawai'i 96809

Copy to:  
Ms. Corlyn Olson Orr, Project Planner  
Helber Hastert & Fee, Planners  
733 Bishop Street, Suite 2590  
Honolulu, HI 96813

Dear Mr. Yada:

Subj HAWAII REGIONAL SECURITY OPERATIONS CENTER DRAFT  
ENVIRONMENTAL ASSESSMENT, WAHIAWĀ, O'AHU, HAWAII

Thank you for your letter dated May 11, 2005 regarding the Hawaii Regional Security Operations Center Draft Environmental Assessment (EA). We note your confirmation that the project site is located in Flood Zone D, according to the Flood Insurance Rate Map. Section 3.7.1 Flood Hazard of the Draft EA states that the project is in Zone D.

We appreciate your participation in this review process. Your letter and this response will be included in the Final EA.

Sincerely,

MELVIN Z. WAKI  
Business Line Manager  
Environmental

Copy to:  
Ms. Genevieve Salmonson, Director  
State of Hawai'i, DBEDT  
Office of Environmental Quality Control  
235 South Beretania Street, Suite 702  
Honolulu, HI 96813

Mr. Alvin Takeshita, Engineering Program Manager  
State of Hawai'i  
Department of Transportation  
601 Kamokila Boulevard, Room 602  
Honolulu, HI 96707

DEPARTMENT OF DESIGN AND CONSTRUCTION  
CITY AND COUNTY OF HONOLULU

650 SOUTH KING STREET, 11<sup>TH</sup> FLOOR  
HONOLULU, HAWAII 96813  
Phone: (808) 523-4564 • Fax: (808) 523-4567  
Web site: [www.honolulu.gov](http://www.honolulu.gov)



MUFI HANNEMANN  
MAYOR

WAYNE M. HASHIRO, P.E.  
DIRECTOR

EUGENE C. LEE, P.E.  
DEPUTY DIRECTOR

WW.P 05-0168

May 20, 2005

Ms. Audrey Uyema Pak  
Naval Facilities Engineering Command, Pacific  
Environmental Planning Division  
258 Makalapa Drive, Suite 100  
Pearl Harbor, HI 96860-3134

Dear Ms. Pak:

Subject: Hawaii Regional Security Operations Center Draft Environmental  
Assessment (EA)

Thank you for allowing us to review the Draft EA for the proposed construction of the  
Hawaii Regional Security Operations Center at the Naval Computer Telecommunications  
Area Master Station Pacific in Wahiawa.

We do not have any comments to the Draft EA.

If there are any questions, please call Jay Hamai of the Wastewater Division at 527-5003.

Very truly yours,

  
for WAYNE M. HASHIRO, P.E.  
Director

cc: The Office of Environmental Quality Control  
State of Hawaii Department of Transportation  
Helber Hastert & Fee, Planners



DEPARTMENT OF THE NAVY  
NAVAL FACILITIES ENGINEERING COMMAND, PACIFIC  
258 MAKALAPA DR., STE. 100  
PEARL HARBOR, HAWAII 96860-3134

5090P.1FOB  
Ser EV31/1002  
27 JUL 2005

Mr. Wayne M. Hashiro, P.E.  
Department of Design and Construction  
City and County of Honolulu  
650 South King Street, 11<sup>th</sup> Floor  
Honolulu, Hawaii 96813

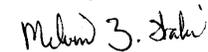
Dear Mr. Hashiro:

Subj: HAWAII REGIONAL SECURITY OPERATIONS CENTER DRAFT  
ENVIRONMENTAL ASSESSMENT, WAHIAWA, O'AHU, HAWAII

Thank you for your letter dated May 20, 2005 regarding the Hawaii Regional Security  
Operations Center (HRSOC) Draft Environmental Assessment (EA). This letter is to  
acknowledge your response indicating that your agency does not have any comments  
on the HRSOC Draft EA.

We appreciate your participation in this review process. Your letter and this response  
will be included in the Final EA.

Sincerely,



MELVIN Z. WAKI  
Business Line Manager  
Environmental

Copy to:  
Ms. Genevieve Salmonson, Director  
State of Hawaii, DBEDT  
Office of Environmental Quality Control  
235 South Beretania Street, Suite 702  
Honolulu, HI 96813

Mr. Alvin Takeshita, Engineering Program Manager  
State of Hawaii  
Department of Transportation  
601 Kamokila Boulevard, Room 602  
Honolulu, HI 96707

5090P\_1F0B  
Ser EV31/1002  
27 JUL 2005

Copy to:  
Ms. Corlyn Olson Orr, Project Planner  
Helber Hastert & Fee, Planners  
733 Bishop Street, Suite 2590  
Honolulu, HI 96813

DEPARTMENT OF ENVIRONMENTAL SERVICES  
**CITY AND COUNTY OF HONOLULU**  
1000 ULUOHIA STREET, SUITE 308, KAPOLEI, HI 96707  
TELEPHONE: (808) 892-5159 FAX: (808) 892-5113 WEBSITE: <http://www.co.honolulu.gov>

MUFI HANNEMANN  
Mayor



ERIC S. TAKAMURA, Ph.D., P.E.  
Director

KENNETH A. SHIMIZU  
Deputy Director

PRO 05-014

May 23, 2005



DEPARTMENT OF THE NAVY  
NAVAL FACILITIES ENGINEERING COMMAND, PACIFIC  
258 MAKALAPA DR., STE. 100  
PEARL HARBOR, HAWAII 96860-3134

5090P.1F0B  
Ser EV31/1035  
29 JUL 2005

Dr. Eric S. Takamura, P.E.  
Director  
City and County of Honolulu  
Department of Environmental Services  
1000 Uluohia Street, Suit 306  
Kapolei, HI 96707

Dear Dr. Takamura:

Subj HAWAII REGIONAL SECURITY OPERATIONS CENTER DRAFT  
ENVIRONMENTAL ASSESSMENT, WAHIAWĀ, O'AHU, HAWAII

Thank you for your letter dated May 23, 2005 regarding the Hawaii Regional Security Operations Center (HRSOC) Draft Environmental Assessment (EA). We have considered your comments and offer the following responses:

a. Section 3.8.1 of the Final EA has been revised to address State water quality designations of Poamoho and Waikele Streams, Kaiaka Bay and Pearl Harbor. The discussion describes the water bodies listed on the *Final 2004 List of Impaired Waters in Hawaii* and the pollutants of concern documented in the listing (State of Hawaii Department of Health Environmental Planning Office, June 2004).

b. Best Management Practices (BMPs) will be considered in the design and construction of the HRSOC facilities. The contractor will be required to employ and maintain these BMPs throughout construction. Some of the methods that may be employed include siltation control fences, ditch checks, erosion control blankets, sediment basins, and dust control screens. Any permits pursuant to Title 40 CFR 122.26 or HAR 11-55 will be obtained prior to land disturbance. The final design of the project will also address post construction storm water discharges to ensure that there will be no impacts to downstream conditions through using such methods as detention basins and ditches.

c. Section 3.6.1 of the Final EA will be corrected to read: "Water from Poamoho Stream eventually flows into the ocean at Kaiaka Bay approximately 9 miles (14 km) downstream."

d. Wastewater generated from the HRSOC facility is subject to controls established in the Navy's non-domestic wastewater control program. This program has been effective in regulating non-domestic sources to the Navy-owned wastewater treatment plant, and we expect that the same program would provide adequate protection to the

via fax: 474-5419

Naval Facilities Engineering Command, Pacific  
Environmental Planning Division  
258 Makalapa Drive, Suite 100  
Pearl Harbor, Hawaii 96860-3134

Attn: Audrey Uyema-Pak, Planner in Charge (EV31)

Subject: Hawaii Regional Security Operations Center, Wahiawa, Oahu  
Draft Environmental Assessment (EA)

We have reviewed the subject Draft EA, dated April 2005, and have the following comments:

1. The EA should include the State water quality designations of Poamoho and Waikele streams and Kaiaka Bay and Pearl Harbor, including whether they are on the State's Section 303(d) list of impaired waters, and pollutants of concern mentioned in the listing.
2. Address Best Management Practices (BMPs) to mitigate sediment and other pollutant runoff during construction and post-construction. Runoff from the proposed 8,000 ft. access road and 10 acre HRSOC project site eventually goes to Kaiaka Bay, which is Class AA waters.
3. Pg. 3-20, Section 3.6.1: Drainage: Correct statement that "Water from Poamoho Stream eventually flows into the ocean at Halei'wa..." Poamoho Stream flows into Kaiaka Bay, as stated in the second paragraph on p. 3-22.
4. The EA discusses the estimated quantity of wastewater flow. Issues regarding quality of wastewater should also be discussed, including grease control and possible discharge of high-strength or industrial wastewater, and the impacts and mitigation measures associated with such discharges.

Thank you for the opportunity to comment on the Draft EA. Should you have any questions, please call Jack Pobuk, Program Coordinator, at 692-5727.

Sincerely,

Dr. Eric S. Takamura, P.E.  
Director

cc: Office of Environmental Quality Control  
State of Hawaii Dept. of Transportation  
Helber Hastert & Fee, Planners

5090P\_1F0B  
Ser EV31/1035  
29 JUL 2005

municipal treatment facility. Section 4.6.1 of the Final EA will be revised to state that the HRSOC facility shall be required to comply with all the applicable limitations and regulations identified in the Navy's non-domestic wastewater treatment program to ensure compliance with the technical requirements established in the City and County of Honolulu's Revised Ordinances of Honolulu.

We appreciate your participation in this review process. Your letter and this response will be included in the Final EA.

Sincerely,

  
MELVIN N. KAKU  
Acting Business Line Manager  
Environmental

Copy to:

Ms. Genevieve Salmonson, Director  
State of Hawai'i, DBEDT  
Office of Environmental Quality Control  
235 South Beretania Street, Suite 702  
Honolulu, HI 96813

Mr. Alvin Takeshita, Engineering Program Manager  
State of Hawai'i  
Department of Transportation  
601 Kamokila Boulevard, Room 602  
Honolulu, HI 96707

Ms. Corlyn Olson Orr, Project Planner  
Helber Hastert & Fee, Planners  
733 Bishop Street, Suite 2590  
Honolulu, HI 96813

DEPARTMENT OF TRANSPORTATION SERVICES  
**CITY AND COUNTY OF HONOLULU**

650 SOUTH KING STREET, 3RD FLOOR • HONOLULU, HAWAII 96813  
TELEPHONE: (808) 523-4529 • FAX: (808) 523-4730 • INTERNET: www.cc.honolulu.hi.us

MUFI HANNEMANN  
MAYOR



May 26, 2005

EDWARD Y. HIRATA  
DIRECTOR

TP4/05-102110R  
TP5/05-103709R

Ms. Audrey Uyema Pak  
Page 2  
May 26, 2005

Should you have any questions regarding these comments, please contact Faith Miyamoto of the Transportation Planning Division at 527-6976.

Sincerely,

A handwritten signature in black ink, appearing to read "Edward Y. Hirata".

EDWARD Y. HIRATA  
Director

cc: Ms. Genevieve Salmonson, Director  
Office of Environmental Quality Control

Mr. Alvin Takeshita, Engineering Program Manager  
Hawaii DOT

Ms. Corlyn Olson Orr, Project Planner  
Helber, Hastert & Fee, Planners

Ms. Audrey Uyema Pak, Planner in Charge (EV31)  
Naval Facilities Engineering Command, Pacific  
Environmental Planning Division  
258 Makalapa Drive, Suite 100  
Pearl Harbor, Hawaii 96860-3134

Dear Ms. Pak:

Subject: Hawaii Regional Security Operations Center

Thank you for the April 21, 2005 letter requesting our review of and comments on the draft environmental assessment (EA) for the subject project. We have the following comments as the result of our review:

1. On Figures 2 (Page 1-3), 4 (Page 2-4), 6 (Page 3-3), 8 (Page 3-5), and 9 (Page 3-6), the label "Proposed Roadway Improvements" is used to identify improvements that are not considered "roadway improvements", such as the installation of traffic signals. We suggest that this label be changed to "Proposed Traffic Improvements" to appropriately include proposed changes that are not physical roadway improvements.
2. The discussions regarding the intersection of Kamehameha Highway and Kaukonahua Road (Page 3-15) and the intersection of Kaukonahua Road and Kamananui Road (Page 3-16) should identify the entity responsible for the intersections.
3. A roadway plan of the improvements proposed for Whitmore Avenue and the Kamehameha Highway and Kaukonahua Road intersection identified on Page 4-23 should be included in the final EA.



DEPARTMENT OF THE NAVY  
NAVAL FACILITIES ENGINEERING COMMAND, PACIFIC  
258 MAKALAPA DR., STE. 100  
PEARL HARBOR, HAWAII 96860-3134

5090P.1F0B  
Ser EV31/1005  
27 JUL 2005

5090P.1F0B  
Ser EV31/1005  
27 JUL 2005

Mr. Edward Y. Hirata  
Director  
Department of Transportation Services  
City and County of Honolulu  
650 South King Street, 3rd Floor  
Honolulu, HI 96813

Dear Mr. Hirata:

Subj: HAWAII REGIONAL SECURITY OPERATIONS CENTER DRAFT  
ENVIRONMENTAL ASSESSMENT, WAHIAWĀ, O'AHU, HAWAII

Thank you for your letter dated May 26, 2005 regarding the Hawaii Regional Security Operations Center Draft Environmental Assessment (EA). We have considered your comments and offer the following responses:

- a. Figures 2, 4, 6, 8, and 9 of the Final EA will be revised based on your suggestion. The label "Proposed Roadway Improvements" will be changed to "Proposed Traffic Improvements" to appropriately include the proposed installation of traffic signals.
- b. Section 3.5.1.2 of the Final EA will be revised to identify the entity responsible for the roadway intersections that involve Kaukonahua Road and Wilikina Drive.
- c. A roadway plan for the proposed roadway improvements described on page 4-23 of the Draft EA will be developed during the design phase. Details of the proposed traffic improvements will be coordinated with the appropriate government agencies. No revisions to the Final EA are proposed.

We appreciate your participation in this review process. Your letter and this response will be included in the Final EA.

Sincerely,

MELVIN Z. WAKI  
Business Line Manager  
Environmental

Copy to:  
Ms. Genevieve Salmonson, Director  
State of Hawai'i, DBEDT  
Office of Environmental Quality Control  
235 South Beretania Street, Suite 702  
Honolulu, HI 96813

Mr. Alvin Takeshita, Engineering Program Manager  
State of Hawai'i  
Department of Transportation  
601 Kamokila Boulevard, Room 602  
Honolulu, HI 96707

Ms. Corlyn Olson Orr, Project Planner  
Helber Hastert & Fee, Planners  
733 Bishop Street, Suite 2590  
Honolulu, HI 96813

DEPARTMENT OF PLANNING AND PERMITTING  
**CITY AND COUNTY OF HONOLULU**

650 SOUTH KING STREET, 7<sup>TH</sup> FLOOR • HONOLULU, HAWAII 96813  
PHONE: (808) 523-4432 • FAX: (808) 527-6743  
DEPT. WEB SITE: [www.honolulu.gov](http://www.honolulu.gov) • CITY WEB SITE: [www.honolulu.gov](http://www.honolulu.gov)

MUFI HANNEMANN  
MAYOR



HENRY ENG, FAICP  
DIRECTOR

DAVID K. TANOUE  
DEPUTY DIRECTOR

05WWB063 (TC)  
2005/ELOG-1078

May 17, 2005

Ms. Audrey Uyema Pak  
Naval Facilities Engineering Command, Pacific  
Environmental Planning Division  
258 Makalapa Drive, Suite 100  
Pearl Harbor, Hawaii 96860-3134

Dear Ms. Pak:

**Hawaii Regional Security Operations Center  
Draft Environmental Assessment  
TMK: 7-1-002: 007**

Please refer to the two correspondences dated August 2, 2004 and September 22, 2004, between Mr. Timothy A. Houghton of the Department of Environmental Services (ENV) and Mr. Melvin Z. Waki of the Department of Navy, Pacific Division. As stated, the City will be able to accommodate the additional flows upon completion of HRSOC facilities, NCTAMS EASTPAC (average daily flows will increase to 230,000 gallons per day). The NCTAMS EASTPAC trunk sewer connects to the City's wastewater collection system at a sewer manhole located near the intersection of Whitmore Avenue and 'Ihi 'Ihi Avenue. The existing utility service contract between the Navy and ENV requires an amendment for the increased sewage flows. A Site Development Master Application for Sewer Capacity and Wastewater System Facility Charges are also required.

If you have any questions, please contact Ms. Tessa Ching at 523-4956.

Sincerely yours,

*Dennis M. Nishimura*  
DENNIS M. NISHIMURA  
Branch Head

DMN:dl  
[369366]

cc: The Office of Environmental Quality Control  
State of Hawaii Department of Transportation  
Helber Hastert & Fee, Planners



DEPARTMENT OF THE NAVY  
NAVAL FACILITIES ENGINEERING COMMAND, PACIFIC  
258 MAKALAPA DR., STE. 100  
PEARL HARBOR, HAWAII 96860-3134

5090P.1F0B  
Ser EV311004  
27 JUL 2005

Mr. Dennis M. Nishimura  
Wastewater Branch  
Department of Planning and Permitting  
City and County of Honolulu  
650 South King Street, 7<sup>th</sup> Floor  
Honolulu, Hawaii 96813

Dear Mr. Nishimura:

Subj: HAWAII REGIONAL SECURITY OPERATIONS CENTER DRAFT  
ENVIRONMENTAL ASSESSMENT, WAHIAWĀ, O'AHU, HAWAII

Thank you for your letter dated May 17, 2005 regarding the Hawaii Regional Security Operations Center (HRSOC) Draft Environmental Assessment (EA). We have considered your comments and offer the following responses:

a. We acknowledge that the City and County wastewater system will be able to accommodate the additional wastewater flows upon completion of the HRSOC facilities. Section 4.6.1 of the Draft EA includes the following statement, "The City and County of Honolulu, Department of Environmental Services has indicated that the municipal wastewater collection system is capable of handling the future projected flow (City and County of Honolulu, Department of Environmental Services, 2004, Appendix C)." Correspondence between Mr. Timothy A. Houghton and Mr. Melvin Waki dated August 2, 2004 and September 22, 2004 are appended to the Draft EA.

b. Section 3.6.1 of the Draft EA describes the existing wastewater collection system at the Naval Computer and Telecommunications Area Master Station Pacific (NCTAMS PAC). This section states that the NCTAMS PAC sewer discharges to the City's wastewater collection system at a manhole located near the intersection of Whitmore Avenue and 'Ihi 'Ihi Street.

c. The Navy has initiated discussions with the Department of Environmental Services and will work with your department to award an amendment to the existing NCTAMS PAC Sewer Service Contract. Section 4.6.1 of the Final EA is revised to acknowledge that the existing NCTAMS PAC Sewer Service Contract with the City requires an amendment for the projected increase in wastewater flows.

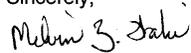
d. We are aware that the project is anticipated to increase the volume of wastewater generated from the NCTAMS PAC installation. As part of the anticipated amendment to the sewer service contract, we will prepare the required administrative documentation to quantify and characterize the projected wastewater demands; and will

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27 JUL 2005

negotiate the required proportionate share to ensure adequate infrastructure to convey and process the wastewater at the municipal treatment facility. Table 1 of the Final EA has been corrected accordingly: "Sewer Connection Permit" is replaced by "Amendment to Sewer Service Contract" and "Department of Planning and Permitting" is replaced with "Department of Environmental Services."

We appreciate your participation in this review process. Your letter and this response will be included in the Final EA.

Sincerely,



MELVIN Z. WAKI  
Business Line Manager  
Environmental

Copy to:

Ms. Genevieve Salmonson, Director  
State of Hawai'i, DBEDT  
Office of Environmental Quality Control  
235 South Beretania Street, Suite 702  
Honolulu, HI 96813

Mr. Alvin Takeshita, Engineering Program Manager  
State of Hawai'i  
Department of Transportation  
601 Kamokila Boulevard, Room 602  
Honolulu, HI 96707

Ms. Corlyn Olson Orr, Project Planner  
Helber Hastert & Fee, Planners  
733 Bishop Street, Suite 2590  
Honolulu, HI 96813

**BOARD OF WATER SUPPLY**

CITY AND COUNTY OF HONOLULU  
630 SOUTH BERETANIA STREET  
HONOLULU, HI 96843



May 17, 2005

MUFI HANNEMANN, Mayor

EDDIE FLORES, JR., Chairman  
HERBERT S. K. KAOPIA, SR.  
DAROLYN H. LENDIO  
RANDALL Y. S. CHUNG  
SAMUEL T. HATA

RODNEY K. HARAGA, Ex-Officio  
LAVERNE HIGA, Ex-Officio

CLIFFORD S. JAMILE  
Manager and Chief Engineer

DONNA FAY K. KIYOSAKI  
Deputy Manager and Chief Engineer



**DEPARTMENT OF THE NAVY**  
NAVAL FACILITIES ENGINEERING COMMAND, PACIFIC  
258 MAKALAPA DR., STE. 100  
PEARL HARBOR, HAWAII 96860-3134

5090P.1F0B  
Ser EV31/1034  
29 JUL 2005

Mr. Keith S. Shida, Principal Executive  
Customer Care Division  
City and County of Honolulu  
Board of Water Supply  
630 South Beretania Street  
Honolulu, Hawai'i 96843

Dear Mr. Shida:

Subj: HAWAII REGIONAL SECURITY OPERATIONS CENTER DRAFT  
ENVIRONMENTAL ASSESSMENT, WAHIAWA, O'AHU, HAWAII

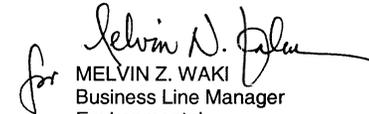
Thank you for your letter dated May 17, 2005 regarding the Hawaii Regional Security Operations Center Draft Environmental Assessment (EA). We have considered your comments and offer the following responses:

a. We acknowledge that the agreement for emergency standby water service from the Board of Water Supply is currently being developed. Section 4.6.1 of the Final EA has been revised to note that the emergency standby water service agreement is being developed.

b. The proposed water service will comply with Board of Water Supply cross-connection control and backflow prevention requirements.

We appreciate your participation in this review process. Your letter and this response will be included in the Final EA.

Sincerely,

  
for MELVIN Z. WAKI  
Business Line Manager  
Environmental

Ms. Audrey Uyema Pak  
Naval Facilities Engineering Command, Pacific  
Environmental Planning Division  
258 Makalapa Drive, Suite 100  
Pearl Harbor, Hawaii 96860-3134

Dear Ms. Pak:

Subject: Your Letter of April 21, 2005 on the Draft Environmental Assessment for  
Hawaii Regional Security Operations Center(HRSOC), Wahiawa

Thank you for the opportunity to comment on the subject document.

The agreement for emergency standby water service from the Honolulu Board of Water Supply is currently being developed.

The proposed water service is subject to Board of Water Supply cross-connection control and backflow prevention requirements prior to issuance of the water meter.

If you have any questions, please contact Joseph Kaakua at 748-5442.

Very truly yours,

  
for KEITH S. SHIDA  
Principal Executive  
Customer Care Division

5090P.1FOB  
Ser EV311034  
29 JUL 2005

Copy to:

Ms. Genevieve Salmonson, Director  
State of Hawai'i, DBEDT  
Office of Environmental Quality Control  
235 South Beretania Street, Suite 702  
Honolulu, HI 96813

Mr. Alvin Takeshita, Engineering Program Manager  
State of Hawai'i  
Department of Transportation  
601 Kamokila Boulevard, Room 602  
Honolulu, HI 96707

Ms. Corlyn Olson Orr, Project Planner  
Helber Hastert & Fee, Planners  
733 Bishop Street, Suite 2590  
Honolulu, HI 96813

FIRE DEPARTMENT  
**CITY AND COUNTY OF HONOLULU**

3375 KOAPAKA STREET, SUITE H425 • HONOLULU, HAWAII 96819-1869  
TELEPHONE: (808) 831-7761 • FAX: (808) 831-7750 • INTERNET: www.honolulufire.org



May 18, 2005

MUFI HANNEMANN  
MAYOR



ATTILIO K. LEONARDI  
FIRE CHIEF

JOHN CLARK  
DEPUTY FIRE CHIEF



DEPARTMENT OF THE NAVY  
NAVAL FACILITIES ENGINEERING COMMAND, PACIFIC  
258 MAKALAPA DR., STE. 100  
PEARL HARBOR, HAWAII 96860-3134

5090P.1FOB  
Ser EV31/1033  
29 JUL 2005

Mr. Attilio K. Leonardi, Fire Chief  
Fire Department  
City and County of Honolulu  
3375 Koapaka Street, Suite H425  
Honolulu, Hawaii 96819

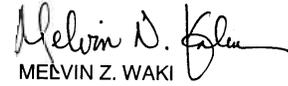
Dear Chief Leonardi:

Subj: HAWAII REGIONAL SECURITY OPERATIONS CENTER DRAFT  
ENVIRONMENTAL ASSESSMENT, WAHIAWA, O'AHU, HAWAII

Thank you for your letter dated May 18, 2005 regarding the Hawaii Regional Security Operations Center Draft Environmental Assessment (EA). We note that the Honolulu Fire Department is a mutual aid emergency responder, and is requesting that fire department access and water supply requirements be maintained during and after construction. Existing fire department access for emergency responses will be maintained at all times, and the project will comply with the Department's applicable water supply requirements.

We appreciate your participation in this review process. Your letter and this response will be included in the Final EA.

Sincerely,

  
for MELVIN Z. WAKI  
Business Line Manager  
Environmental

Copy to:  
Ms. Genevieve Salmonson, Director  
State of Hawaii, DBEDT  
Office of Environmental Quality Control  
235 South Beretania Street, Suite 702  
Honolulu, HI 96813

Mr. Alvin Takeshita, Engineering Program Manager  
State of Hawaii  
Department of Transportation  
601 Kamokila Boulevard, Room 602  
Honolulu, HI 96707

Ms. Audrey Uyema Pak, Planner in Charge (EV31)  
Department of the Navy  
Naval Facilities Engineering Command, Pacific  
Environmental Planning Division  
258 Makalapa Drive, Suite 100  
Pearl Harbor, Hawaii 96860-3134

Subject: Consultation for the Hawaii Regional Security Operations Center  
Draft Environmental Assessment  
Wahiawa, Oahu, Hawaii

We received a letter dated April 21, 2005, from Mr. Melvin N. Kaku, Director of the Environmental Planning Division, requesting that our comments on the above-mentioned subject be submitted to you.

The Honolulu Fire Department, a mutual aid emergency responder, requests that fire department access and water supply requirements be maintained during and after construction.

Should you have any questions, please call Battalion Chief Lloyd Rogers of our Fire Prevention Bureau at 831-7778.

Sincerely,



ATTILIO K. LEONARDI  
Fire Chief

AKL/SY:bh

cc: Ms. Genevieve Salmonson, Director  
State of Hawaii, Department of Health, Office of Environmental Quality Control  
Mr. Alvin Takeshita, Engineering Program Manager  
State of Hawaii, Department of Transportation  
Ms. Corlyn Olson Orr, Project Planner, Helber Hastert & Fee Planners, Inc.

5090P.1F0B  
Ser EV311033  
29 JUL 2005

Copy to:  
Ms. Corlyn Olson Orr, Project Planner  
Helber Hastert & Fee, Planners  
733 Bishop Street, Suite 2590  
Honolulu, HI 96813

POLICE DEPARTMENT  
**CITY AND COUNTY OF HONOLULU**  
801 SOUTH BERETANIA STREET  
HONOLULU, HAWAII 96813 - AREA CODE (808) 529-3111  
<http://www.honolulu.gov>  
<http://www.honolulupd.org>  
[www.honolulu.gov](http://www.honolulu.gov)

MUFI HANNEMANN  
MAYOR



OUR REFERENCE BS-KP

May 2, 2005

BOISSE P. CORREA  
CHIEF

GLEN R. KAJIYAMA  
PAUL D. PUTZULU  
DEPUTY CHIEFS



DEPARTMENT OF THE NAVY  
NAVAL FACILITIES ENGINEERING COMMAND, PACIFIC  
258 MAKALAPA DR., STE. 100  
PEARL HARBOR, HAWAII 96860-3134

5090P.1F0B  
Ser EV311006  
27 JUL 2005

Mr. Karl Godsey, Assistant Chief of Police  
Support Services Bureau  
Police Department  
City & County of Honolulu  
801 South Beretania Street  
Honolulu, HI 96813

Dear Mr. Godsey:

Subj: HAWAII REGIONAL SECURITY OPERATIONS CENTER DRAFT  
ENVIRONMENTAL ASSESSMENT, WAHIAWĀ, O'AHU, HAWAII

Thank you for your letter dated May 2, 2005 regarding the Hawaii Regional Security Operations Center Draft Environmental Assessment (EA). This letter is to acknowledge your comment that the proposed project should have no significant impact on the facilities or operations of the Honolulu Police Department.

We appreciate your participation in this review process. Your letter and this response will be included in the Final EA.

Sincerely,

MELVIN Z. WAKI  
Business Line Manager  
Environmental

Copy to:  
Ms. Genevieve Salmonson, Director  
State of Hawai'i, DBEDT  
Office of Environmental Quality Control  
235 South Beretania Street, Suite 702  
Honolulu, HI 96813

Mr. Alvin Takeshita, Engineering Program Manager  
State of Hawai'i  
Department of Transportation  
601 Kamokila Boulevard, Room 602  
Honolulu, HI 96707

Ms. Audrey Uyema Pak, Planner in Charge  
Environmental Planning Division  
Naval Facilities Engineering Command, Pacific  
258 Makalapa Drive, Suite 100  
Pearl Harbor, Hawaii 96860-3134

Dear Ms. Uyema:

Thank you for the opportunity to review and comment on the Draft Environmental Assessment (DEA) for the Hawaii Regional Security Operations Center project.

As stated in our letter of December 2, 2004, and included in the DEA, this project should have no significant impact on the facilities or operations of the Honolulu Police Department.

If there are any questions, please call Major Michael Thomas of District 2 at 621-3725 or Mr. Brandon Stone of the Executive Bureau at 529-3644.

Sincerely,

BOISSE P. CORREA  
Chief of Police

By   
KARL GODSEY  
Assistant Chief of Police  
Support Services Bureau

cc: Ms. Genevieve Salmonson, OEQC  
Mr. Alvin Takeshita, DOT  
Ms. Corlyn Olson Orr, Helber Hastert  
and Fee Planners, Inc.

5090P.1F0B  
Ser EV31/1006  
27 JUL 2005

Copy to:  
Ms. Corlyn Olson Orr, Project Planner  
Helber Hastert & Fee, Planners  
733 Bishop Street, Suite 2590  
Honolulu, HI 96813

Hawaiian Telcom



DEPARTMENT OF THE NAVY  
NAVAL FACILITIES ENGINEERING COMMAND, PACIFIC  
258 MAKALAPA DR., STE. 100  
PEARL HARBOR, HAWAII 96860-3134

5090P\_1F0B  
Ser EV31/1007  
27 JUL 2005

May 20, 2005

Ms. Audrey Uyema Pak, Planner in Charge (EV31)  
Naval Facilities Engineering Command, Pacific  
Environmental Planning Division  
258 Makalapa Drive, Suite 100  
Pearl Harbor, HI 96860-3134

Dear Audrey,

Subject: CONSULTATION FOR THE HAWAII REGIONAL SECURITY OPERATIONS CENTER DRAFT ENVIRONMENTAL ASSESSMENT, WAHIAWA, OAHU, HAWAII

Thank you for allowing Hawaiian Telcom to review the Draft Environmental Assessment (EA) for the proposed construction of the Hawaii Regional Security Operations Center (HRSOC) at the Naval Computer Telecommunications Area Master Station Pacific in Wahiawa. Upon review of the assessment, we have determined that Hawaiian Telcom has existing telecommunication facilities within the identified project boundary. Please contact me in the event that these existing telecommunication facilities need to be adjusted or relocated so we can coordinate the move and identify any applicable relocation cost.

We have also determined that the existing telecommunication facilities need to be augmented to support the anticipated telecommunication demands for this project. We may require equipment space to install the necessary electronic equipment and cable facilities to serve this area. The specific requirements for Hawaiian Telcom will be determined during our review of the proposed construction plans.

Please give me a call at 546-3888 if you have any question.

Sincerely,

Stacy Shishido  
Section Manager  
Network Engineering & Planning – CAF Planning

c: The Office of Environmental Quality Control  
Alvin Takeshita – State of Hawaii Department of Transportation  
Corlyn Olson Orr - Helber Hastert & Fee, Planners

Mr. Stacy Shishido, Section Manager  
Network Engineering & Planning – CAF Planning  
Hawaiian Telcom, Inc.  
P.O. Box 2200  
Honolulu, HI 96841

Dear Mr. Shishido:

Subj: HAWAII REGIONAL SECURITY OPERATIONS CENTER DRAFT ENVIRONMENTAL ASSESSMENT, WAHIAWA, O'AHU, HAWAII

Thank you for your letter dated May 20, 2005 regarding the Hawaii Regional Security Operations Center Draft Environmental Assessment (EA). This letter is to acknowledge your comments on telecommunications facilities, including the need to augment existing telecommunications facilities within the project boundary to support the anticipated demands for the project and the possible requirement for equipment space to install the facilities needed to serve the project.

The proposed development will be coordinated with Hawaiian Telcom, Inc. as necessary. We note that the specific requirements for Hawaiian Telcom's facilities will be identified during review of the proposed construction plans.

We appreciate your participation in this review process. Your letter and this response will be included in the Final EA.

Sincerely,

MELVIN Z. WAKI  
Business Line Manager  
Environmental

Copy to:  
Ms. Genevieve Salmonson, Director  
State of Hawai'i, DBEDT  
Office of Environmental Quality Control  
235 South Beretania Street, Suite 702  
Honolulu, HI 96813

5090P.1F0B  
Ser EV31/1007  
27 JUL 2005

Mr. Alvin Takeshita, Engineering Program Manager  
State of Hawai'i  
Department of Transportation  
601 Kamokila Boulevard, Room 602  
Honolulu, HI 96707

Ms. Corlyn Olson Orr, Project Planner  
Helber Hastert & Fee, Planners  
733 Bishop Street, Suite 2590  
Honolulu, HI 96813

May 20, 2005

Ms. Audrey Uyema Pak  
Planner In Charge (EV31)  
Naval Facilities Engineering Command, Pacific  
Environmental Planning Division  
258 Makalapa Drive, Suite 100  
Pearl Harbor, Hawaii 96860-3134

Dear Ms. Pak:

Subject: Draft Environmental Assessment  
Hawaii Regional Security Operations Center (HRSOC)  
Wahiawa, Oahu, Hawaii

We have reviewed the subject Draft Environmental Assessment (EA) for the HRSOC and offer our comments as follows:

As indicated in previous communications regarding the project, our main objection continues to be the manner in which the proposed alignment for the main access road cuts through major portions of our property. The current road alignment will divide our contiguous parcels into three lesser and separate portions. The largest portion would be landlocked from the nearest urban area if the proposed access road is not deemed a public roadway, similar to other military access roads. This issue is partially addressed in Section 4.2.2 that states that real estate agreements would permit use of the access road for activities in support of existing agricultural operations. Our concern remains over the limitations placed on future agricultural productivity and more so, on potential nonagricultural uses of the land. The resulting smaller, divided and land locked areas will negatively impact our and any potential purchaser's future options for maximizing the development of these lands located close to existing urban areas.

The current alignment differs again from that presented to us initially and in the previous Environmental Baseline Study. Further, the latest alignment (accessing off of Whitmore Avenue) may result in those same issues as presented in the alternate alignment using Whitmore Avenue to get to your existing NCTAMS PAC base control point.

Your response letter dated February 24, 2005 noted there are no residential development plans on C&C property, adjacent to and above Whitmore Village. This is incorrect. Evaluation of alternative potential uses is an ongoing process. Although there is no environmental assessments or formal planning documents/studies, we have disclosed our ongoing discussions with the Department of Hawaiian Home Lands (DHHL) and the possibility of expanding their residential housing programs at this area. Additionally, since these lands are located close to existing urban residential areas, they retain the potential for more urban use, which is also being

Ms. Audrey Uyema Pak, Planner In Charge (EV31)  
May 20, 2005  
Page 2

pursued with DHHL. Any resolution to the proposed road alignment must include provisions to accommodate adequate access to a public highway so as not to hinder or limit other potential uses of the land.

We are also aware of the Whitmore Village residents' concerns over the close proximity of the proposed road to existing homes. This issue could be addressed by relocating the road further inland from the existing homes. However, this will adversely impact the flexibility needed to develop the land in the future. This action would result in a useless, narrow strip as well as further reduce the utility of the remaining property.

Finally, we are concerned about the extent of the electromagnetic radiation and electromagnetic interference that will be generated from your facility, and the impacts it may have on the existing Whitmore Village community, new residential developments and existing operations at Dole Food Company.

We appreciate the opportunity to provide input and are hopeful that the concerns raised can be addressed. Although discussions with affected landowners will continue, we feel that little progress has been made towards determining the most efficient road alignment. Rather than changing and presenting the alignments as they occur in the preparation of these formal documents, we feel it would be more productive and expeditious to agree upon an alignment before the final round of review.

We look forward to meeting with your project team to help finalize these matters. Should you have any questions, please contact Alan Suwa of our office at 548-4886.

Sincerely,

CASTLE & COOKE HOMES HAWAII, INC.



Carleton Ching  
Director, Community and Government Relations.

Cc.

1. The Office of Environmental Quality Control  
235 South Beretania Street, Suite 702  
Honolulu, Hawaii 96813

2. State of Hawaii Department of Transportation  
601 Kamokila Boulevard, Room 602  
Honolulu, Hawaii 96707

Attention: Alvin Takeshita, Engineering Program Manager

3. Helbert Hastert & Fee, Planners  
733 Bishop Street, Suite 2590  
Honolulu, Hawaii 96813

Attention: Corlyn Olsen Orr, Project Planner



DEPARTMENT OF THE NAVY  
NAVAL FACILITIES ENGINEERING COMMAND, PACIFIC  
258 MAKALAPA DR., STE. 100  
PEARL HARBOR, HAWAII 96860-3134

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Ser EV31/ **1031**  
29 JUL 2005

5090P.1F0B  
Ser EV31/ **1031**  
29 JUL 2005

Mr. Carleton Ching, Director  
Community and Government Relations  
Castle & Cooke Homes Hawaii, Inc.  
P.O. Box 898900  
Mililani, Hawai'i 96789

Dear Mr. Ching:

Subj: HAWAII REGIONAL SECURITY OPERATIONS CENTER DRAFT  
ENVIRONMENTAL ASSESSMENT, WAHIAWA, O'AHU, HAWAII

Thank you for your letter dated May 20, 2005 regarding the Hawaii Regional Security Operations Center Draft Environmental Assessment (EA). We have considered your comments and offer the following responses:

a. Access Road Alignment

Based on community concerns raised at the April 29, 2005 Whitmore Community Association meeting, the proposed access road alignment has been moved further away from Whitmore Village. The nearest residences at Whitmore Village are approximately 1,000 feet from the new access road alignment. The new alignment, as shown in enclosure (1), runs along a long, narrow strip of land bordering the south side of Poamohu Gulch, extending up and into the western end of NCTAMS PAC. The proposed access road alignment to the west of Whitmore Village (between Kamehameha Highway and Whitmore Village) remains unchanged: intersecting with Whitmore Avenue west of Kahi Kani Park and extending north along the boundary between property of Castle and Cooke and George Galbraith Trust Estate.

This new alignment passes around Castle & Cooke lands surrounding Whitmore Village, addressing the concern raised in your letter about "landlocking." Also as noted in your letter, agricultural-related vehicular traffic would continue to be accommodated along and across the access road to minimize impact on agricultural productivity.

We recognize that the access road alignment has evolved during the EA consultation process. The Navy is being responsive to agency, community, and landowner input and believes the alignment summarized above represents a reasonable compromise.

b. Future Development Potential of Castle & Cooke Lands

The Navy will conduct an appraisal of the property to be acquired for the new access road. The appraisal will consider current land ownership and land use, as well as any changes in property value resulting from the land acquisition or use of the acquired property for the access road. If severance damages are indicated, landowner compensation will be based on the estimated market value of Castle & Cooke's property before the acquisition minus the estimated market value of Castle & Cooke's property after the acquisition.

c. Public Access

The proposed access road will be designed to provide access to a federal military installation and is not intended to meet public access requirements associated with municipal subdivision standards. Any upgrades to meet subdivision standards would not be funded with military construction funds.

If residential development of Castle & Cooke's property is certain, the Navy is prepared to meet with Castle & Cooke and/or the potential developer at a future date to discuss the possible location of easements to accommodate access to Castle & Cooke's property.

d. Electromagnetic radiation (EMR) and electromagnetic interference (EMI) concerns

The proposed facility is not anticipated to generate EMR and EMI hazards to NCTAMS PAC or the areas surrounding NCTAMS PAC, including Whitmore Village, the existing Dole Food Company operations, and future developments on Castle & Cooke lands. There are no identified hazards from EMR or concerns for EMI associated with the existing Kunia Regional Security Operations Center (KRSOC), and new sources of EMR and EMI hazards are not expected to be introduced when the KRSOC is relocated to NCTAMS PAC. NCTAMS PAC regularly monitors EMR and EMI hazards within the base, and will continue to monitor EMR and EMI during and after construction of the proposed facility.

We appreciate your participation in this review process. Your letter and this response will be included in the Final EA.

Sincerely,  
  
MELVIN N. KAKU  
Acting Business Line Manager  
Environmental

5090P\_1FOB  
Ser EV311031  
29 JUL 2005

Encl:  
(1) Revised Road Alignment Map

Copy to:  
Ms. Genevieve Salmonson, Director  
State of Hawaii, DBEDT  
Office of Environmental Quality Control  
235 S. Beretania Street, Suite 702  
Honolulu, HI 96813

Mr. Alvin Takeshita, Engineering Program Manager  
State of Hawaii  
Department of Transportation  
601 Kamokila Boulevard, Room 602  
Honolulu, HI 96707

Ms. Corlyn Olson Orr, Project Planner  
Helber Hastert & Fee, Planners  
733 Bishop Street, Suite 2590  
Honolulu, HI 96813

May 10, 2005

To: Commander

Naval Facilities Engineering Command, Pacific  
Environmental Planning Division, EV31  
258 Makalapa Dr. STE 100  
Pearl Harbor, Hi. 96860-3134

From: Dolores Cabanit

President, Whitmore Filipino Community Association  
1016 Ahe- Ahe Ave.  
Wahiawa, Hi. 96786

Dear Sir/ Madam,

In behalf of the Whitmore Filipino Community Association, I am sending the voice of the filipino community of Whitmore to the Hawaii Regional Security Operation Center. Being a leader of the Whitmore Filipino Community who has lived in Whitmore for 41 years and worked for Del Monte Fresh Produce Hi. Inc. At Kunia for 37 years and supervisor managing the harvesting department and trucking department, I encountered so many traffic problems and witnessed many fatal accidents on Whitmore Avenue, Kamananui Road, Kaukanahua road and Kamehameha Highway in every day of my life going to work, during work and coming home to Whitmore especially during rush hours. Roads are blocked and there is only one way in and out of Whitmore to Kamehameha High Way. I studied the proposed road for the Hawaii Regional Security Center and brought to the attention of the filipinos in Whitmore. The proposed road from Whitmore Avenue cutting thru the old Del Monte field in which we called field 204 is too closed to the traffic light at Kam. Hi-way. It will create a serious traffic jam during the rush hour which is in the morning when the workers from Dole Company are going out to work and in the afternoon at Pau Hana time. Also for the school buses for our children who goes to Leilehua High School and the Wahiawa Middle School and not to forget the military children coming to Helemano Elementary School. A traffic accidents will be impact because of impatient drivers.

Please consider the traffic situation and for the safety of the residents and also for the future employees of the said Hawaii Regional Securities. Talking with the filipino community we had a proposal that the road should be connected to the traffic light at Kamananui, Kaukonahua junction to Kamehameha High Way. On the Traffic light at Kamehameha Highway at Del Monte Variety Garden, there is a road to cut thru the pineapple fields near the gulch and this roads will lead to the proposed site of the Center. If the traffic light on Kamananui and Kaukanahua road will be improve it will help control the flow of traffic on these roads and can prevent accidents. If you consider to this proposal the proposed road to the Center will be far away from the the village and will not cause congested traffic at Whitmore Avenue to Kamehameha Highway. Traffic will then be distributed to Kamananui to Kaukonahua roads to Schofield to the Freeway, Kamehameha Highway to the North Shore.

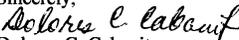
Lastly, we thank the government for securing our home lands and we are in favor to the proposed

Regional Security Operation Center. Please consider also an alternative road for an emergency situation. One way in and out of Whitmore is a deadly situation when comes to an emergency. Please take a look for another bridge as an outlet to residence and others.

I hope and with a wishful prayer that you would consider the proposal from the Whitmore Filipino Community. I understood at the meeting about people that will be involve especially the land owners but you are already taking there land for this proposed road, why are we going to the lengthy way rather than the shorter way and yet we know that it will cause many problems later like the rain drainage.

There are many more concern but I hope we can here again from you.

Sincerely,

  
Dolores C. Cabanit



**DEPARTMENT OF THE NAVY**  
 NAVAL FACILITIES ENGINEERING COMMAND, PACIFIC  
 258 MAKALAPA DR., STE. 100  
 PEARL HARBOR, HAWAII 96860-3134

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 2 9 JUL 2005

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 Ser EV31/1029  
 2 9 JUL 2005

Ms. Dolores Cabanit, President  
 Whitmore Filipino Community Association  
 1016 Ahe-Ahe Avenue  
 Wahiawā, Hawai'i 96786

Dear Ms. Cabanit:

Subj: HAWAII REGIONAL SECURITY OPERATIONS CENTER DRAFT  
 ENVIRONMENTAL ASSESSMENT, WAHIAWĀ, O'AHU, HAWAII

Thank you for your letter dated May 10, 2005 regarding the Hawaii Regional Security Operations Center (HRSOC) Draft Environmental Assessment (EA). We have considered your comments and offer the following responses:

a. Access Road Alignment

The proposed access road alignment has been moved further away from Whitmore Village based on community concerns raised at the April 29, 2005 Whitmore Community Association meeting. The new alignment, as shown in enclosure (1), runs along a long, narrow strip of land bordering the south side of Poamoho Gulch and is now over 1,000 feet away from nearest residence. The proposed access road connection to the west of Whitmore Village (between Kamehameha Highway and Whitmore Village) remains unchanged, intersecting with Whitmore Avenue west of Kahi Kani Park and extending north along boundary between property of Castle and Cooke and George Galbraith Trust Estate.

b. Distance of Proposed Access Road-Whitmore Avenue Intersection from Kamehameha Highway

The intersection of the proposed access road and Whitmore Avenue is more than 1,000 feet from the traffic signal at Kamehameha Highway. This distance allows for improvements, such as widening of Whitmore Avenue for a separate left turn lane, to serve the added traffic. Proposed roadway improvements, which are intended to accommodate project-related traffic and minimize level of service impacts, would be designed to meet State roadway standards.

c. Proposed Access Road Connection to Kamehameha Highway

Your proposal to connect the proposed access road to the triangular intersection formed by Kamehameha Highway, Kamananui Road and Kaukonahua Road was previously considered and presented to the Wahiawā Neighborhood Board in August 2004 and to DOT in November 2004. During consultations with DOT, concerns were

raised that a new connection could not be added to the existing intersection without significant modifications and improvements to the intersection's configuration. Improvements in this area are a long-range state highways planning issue beyond the scope of the HRSOC project. The Navy has asked the DOT to look at the intersection as part of its long-range highways plan update.

The Navy looked at another alternative connection to Kamehameha Highway at a point midway between the Whitmore Ave and Kamananui intersections. This intersection would require elimination of the curved section of Kamehameha Highway to accommodate the required minimum distance between highway intersections (northbound traffic on Kamehameha Highway would be routed on Kaukonahua Road to the Kaukonahua-Kamananui intersection, then turn right to Kamananui Road and return to Kamehameha Highway). This connection was not further considered due to regional traffic impacts and increased delays caused by the addition of another traffic signal on Kamehameha Highway and re-configured travel patterns.

Another alternative connection to Kamehameha Highway north of Kamananui Road was considered and dismissed due to site constraints created by the natural topography and the existing highway configuration. This alternative would require construction of a bridge across Poamoho Gulch. Furthermore, introducing a new intersection in this area would be undesirable because of the limited sight distances along the curved section of Kamehameha Highway in the vicinity of the access road connection.

The only alternative that met the objectives of the project is the Whitmore Avenue connection. Traffic analysis of the Whitmore Avenue intersection concluded that traffic levels of service would decrease, but still operate within acceptable urban standards during peak hours with the identified roadway and traffic management improvements. Because HRSOC is a round-the-clock operation, traffic from the facility would be spread in different shifts throughout the day and week. There would be more vehicles using the lower portion of Whitmore Avenue and there would be an overall increase in non-peak hour traffic.

There would be improvements along Whitmore Avenue, including sidewalks and shoulders from the bus stop on Kamehameha Highway to Uakaniko'o Street, a new left turn lane from Whitmore Avenue to the access road, and lengthening of the right turn lane from Whitmore Avenue to Kamehameha Highway. The existing main gate at the end of Whitmore Avenue would become a secondary gate, and would have limited operating hours. All HRSOC traffic, NCTAMS PAC visitors, and commercial vehicles would be routed through the new gate on the proposed access road.

Other improvements include lengthening of the existing left and right turn lanes from Kamehameha Highway to Whitmore Avenue, lengthening of the existing left turn

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lane from Kamehameha Highway to Kaukonahua Road, and new traffic signals at the Kaukonahua Road-Kamananui Road intersection.

The Navy would prepare a traffic management plan, including employer-based travel demand management strategies, to manage project-related traffic. In addition, the project includes the requirement for a post-construction traffic survey. Depending on the findings of the study, possible future improvements may involve additional travel demand management strategies, additional physical improvements, and traffic signal timing adjustments along regional roadways. The proposed roadway improvements and post-construction traffic survey will be conducted in coordination with the DOT.

All the proposed traffic improvements mentioned above would help to minimize traffic impact from the project.

The traffic study has been reviewed and accepted by the DOT. A hard copy of the traffic study is available to the public upon request.

d. Emergency Access Road

We acknowledge that Whitmore Avenue provides the only access for both Whitmore Village residents and NCTAMS PAC personnel under the current proposal. The Navy is aware of the desire for a secondary emergency access, and is in support of any initiative that offers a feasible and cost-effective secondary emergency access.

We appreciate your participation in this review process. Your letter and this response will be included in the Final EA.

Sincerely,



MELVIN N. KAKU  
Acting Business Line Manager  
Environmental

Encl:  
(1) Revised Road Alignment Map

Copy to (w/o encl):  
Ms. Genevieve Salmonson, Director  
State of Hawai'i, DBEDT  
Office of Environmental Quality Control  
235 South Beretania Street, Suite 702  
Honolulu, HI 96813

5090P.1F0B  
Ser EV31/1029  
29 JUL 2005

Mr. Alvin Takeshita, Engineering Program Manager  
State of Hawai'i  
Department of Transportation  
601 Kamokila Boulevard, Room 602  
Honolulu, HI 96707

Ms. Corlyn Olson Orr, Project Planner  
Helber Hastert & Fee, Planners  
733 Bishop Street, Suite 2590  
Honolulu, HI 96813

## PUBLIC COMMENTS

Draft Environmental Assessment  
For Hawaii Regional Security Operations Center, Wahiawa, Oahu, Hawaii

Name: Diane Gilmore  
Address: 1002 Uluwale St.

Please write your comment(s) or question(s) below. This form may be used as a mailer if folded, taped or stapled, and stamped. You are not limited to the space available on this form. All comments must be submitted or postmarked to the addressee on the back of this form by May 23, 2005 for consideration in the Final Environmental Assessment.

I happen to be one of the home owners that will be closest (approx. 250ft) to the new access road. The serene county setting that exists now behind my property will be dramatically altered. Since that is not my property I do not have any say in what is put there. I do appreciate the opportunity to voice my concerns. Your plans for the access road seem to be set already so that the road cannot be moved further away from our homes. However, it would be good if all wire, cables etc. could be put under ground as was done here in Kahi Kahi. Periodic speed bumps would also be good to stop the speeding and to protect the kids that play back in those fields.

Diane Gilmore  
Signature

5-18-05  
Date



DEPARTMENT OF THE NAVY  
NAVAL FACILITIES ENGINEERING COMMAND, PACIFIC  
258 MAKALAPA DR., STE. 100  
PEARL HARBOR, HAWAII 96860-3134

5090P.1F0B  
Ser EV31/ **1003**  
27 JUL 2005

Ms. Diane Gilmore  
1002 Uluwale Street  
Wahiawa, Hawai'i 96786

Dear Ms. Gilmore:

Subj: HAWAII REGIONAL SECURITY OPERATIONS CENTER DRAFT  
ENVIRONMENTAL ASSESSMENT, WAHIAWĀ, O'AHU, HAWAII'

Thank you for your letter dated May 18, 2005 regarding the Hawaii Regional Security Operations Center Draft Environmental Assessment (EA). We have considered your comments and offer the following responses:

a. Access Road Alignment

The proposed access road alignment has been moved further away from Whitmore Village based on community concerns raised at the April 29, 2005 Whitmore Community Association meeting. The new alignment, as shown in enclosure (1), runs along a long, narrow strip of land bordering the south side of Poamoho Gulch. The nearest residences at Whitmore Village would now be over 1,000 feet away from the proposed access road (three or four city blocks). The proposed access road connection to the west of Whitmore Village (Kamehameha Highway-side) remains unchanged: intersecting Whitmore Avenue west of Kahi Kani Park and extending north along the boundary between property of Castle and Cooke and George Galbraith Trust Estate.

The Navy is committed to working with the community and believes that this new access road alignment represents a reasonable compromise for all parties.

b. Underground Utility Lines

We note your comment that utility lines should be placed underground. The proposed access road would include roadway lighting similar to the existing lighting along Kamehameha Highway. The possibility of placing utility lines underground has been considered, and determined to be not feasible because of the cost involved.

c. Speed Bumps on the Proposed Access Road

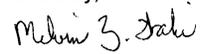
The posted speed limit along the proposed access road will be 25 miles per hour. We anticipate that the posted speed limit will be strictly enforced and that violators

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27 JUL 2005

would be cited; therefore, it would not be necessary to install speed bumps on the access road.

We appreciate your participation in this review process. Your letter and this response will be included in the Final EA.

Sincerely,



MELVIN Z. WAKI  
Business Line Manager  
Environmental

Encl:  
(1) Revised Road Alignment Map

Copy to:  
Ms. Genevieve Salmonson, Director  
State of Hawai'i, DBEDT  
Office of Environmental Quality Control  
235 South Beretania Street, Suite 702  
Honolulu, HI 96813

Mr. Alvin Takeshita, Engineering Program Manager  
State of Hawai'i  
Department of Transportation  
601 Kamokila Boulevard, Room 602  
Honolulu, HI 96707

Ms. Corlyn Olson Orr, Project Planner  
Helber Hastert & Fee, Planners  
733 Bishop Street, Suite 2590  
Honolulu, HI 96813

## PUBLIC COMMENTS

Draft Environmental Assessment  
For Hawaii Regional Security Operations Center, Wahiawa, Oahu, Hawaii

Name: EVELYN SANTIAGO

Address: 1162 IOMEA PL. WAHIAWA, HI 96786

Please write your comment(s) or question(s) below. This form may be used as a mailer if folded, taped or stapled, and stamped. You are not limited to the space available on this form. All comments must be submitted or postmarked to the addressee on the back of this form by May 23, 2005 for consideration in the Final Environmental Assessment.

BEFORE PLANS WERE MADE I THINK THE COMMUNITY NEEDED TO KNOW FIRST HAND WHAT WAS BEING PROPOSED. OUR COMMUNITY IS VERY VERY SMALL AND BUILDING THIS FACILITY WILL RUIN THE QUIETNESS - IT WILL OPEN UP JOBS - GREAT FOR US BUT THE ENTRANCE INTO WHITMORE AVENUE WILL NOT WORK OUT. TRAFFIC IS GOING TO BE REALLY BAD ESPECIALLY THE LEFT TURN INTO THE NEW PROPOSED ROAD. THIS ROAD WILL BE BEHIND MY HOUSE AND I REALLY DON'T LIKE IT. WON'T LIKE HEARING THE CARS GOING UP AND DOWN - WE DON'T NEED TO WORRY NOW CAUSE THERE'S NOTHING THERE BUT BRUSH AND ELDERLY PEOPLE WHO HAVE THEIR LIVESTOCK AND GARDEN. FIND ANOTHER ROUTE FOR THIS ROAD - DON'T WANT IT IN MY BACK YARD.

TRAFFIC TRAFFIC TRAFFIC COMING BOTH WAYS FROM KAHUOYO INTO WHITMORE AVENUE. IF A BRIDGE NEEDS TO BE BUILT - BUILD IT - DON'T RUIN THE LIFESTYLE OF OUR SMALL COMMUNITY - WE KNOW FOR A FACT THAT THERE WILL BE ACCIDENTS AND HOW DO WE GET IN OR OUT, I DON'T THINK THE WHOLE COMMUNITY KNOWS WHATS BEING PROPOSED - SEND PLEASER TO ALL THE HOMES IF NOT HAVE THE KIDS THAT ATTEND HELEMANO ELEMENTARY TO BRING IT HOME TO THEIR PARENTS OR RELATIVES - THE COMMUNITY NEEDS TO KNOW, HAVE ANOTHER MEETING LIKE THE FIRST - NOT EVERYONE KNEW ABOUT THE FIRST ONE - INPUT WILL BE GREATLY APPRECIATED



DEPARTMENT OF THE NAVY  
NAVAL FACILITIES ENGINEERING COMMAND, PACIFIC  
258 MAKALAPA DR., STE. 100  
PEARL HARBOR, HAWAII 96860-3134

5090E.1F0B  
Ser EV311028  
29 JUL 2005

Ms. Evelyn Santiago  
1162 Iomea Place  
Wahiawa, Hawaii 96786

Dear Ms. Santiago:

Subj: HAWAII REGIONAL SECURITY OPERATIONS CENTER DRAFT ENVIRONMENTAL ASSESSMENT, WAHIAWA, O'AHU, HAWAII

Thank you for your comments dated May 18, 2005 regarding the Hawaii Regional Security Operations Center (HRSOC) Draft Environmental Assessment (EA). We have considered your comments and offer the following responses:

### a. Access Road Alignment

The proposed access road alignment has been moved further away from Whitmore Village based on community concerns raised at the April 29, 2005 Whitmore Community Association meeting. The new alignment, as shown in enclosure (1), runs along a long, narrow strip of land bordering the south side of Poamoho Gulch. The nearest residences at Whitmore Village would now be over 1,000 feet away from the proposed access road (three or four city blocks). The proposed access road connection to the west of Whitmore Village (between Kamehameha Highway and Whitmore Village) remains unchanged: intersecting with Whitmore Avenue west of Kahi Kani Park and extending north along the boundary between property of Castle and Cooke and George Galbraith Trust Estate.

The Navy is committed to working with the community and believes that this new access road alignment represents a reasonable compromise for all parties.

### b. Potential Traffic Impacts to Whitmore Avenue

Traffic analysis of the Whitmore Avenue intersection concluded that traffic levels of service would decrease, but would still operate within acceptable urban standards during peak hours with the identified roadway and traffic management improvements. Because HRSOC is a round-the-clock operation, traffic from the facility would be spread in different shifts throughout the day and week. There would be more vehicles using the lower portion of Whitmore Avenue and there would be an overall increase in non-peak hour traffic.

There would be improvements along Whitmore Avenue, including sidewalks and shoulders from the bus stop on Kamehameha Highway to Uakaniko'o Street, a new left turn lane from Whitmore Avenue to the access road, and lengthening of the right turn lane from Whitmore Avenue to Kamehameha Highway. The existing main gate at the

Evelyn Santiago  
Signature

5/18/2005  
Date

5090P.1F0B  
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29 JUL 2005

end of Whitmore Avenue would become a secondary gate, and would have limited operating hours. All HRSOC traffic, NCTAMS PAC visitors, and commercial vehicles would be routed through the new gate on the proposed access road.

Other improvements include lengthening of the existing left and right turn lanes from Kamehameha Highway to Whitmore Avenue, lengthening of the existing left turn lane from Kamehameha Highway to Kaukonahua Road, and new traffic signals at the Kaukonahua Road-Kamananui Road intersection.

The Navy would prepare a traffic management plan, including employer-based travel demand management strategies, to manage project-related traffic. In addition, the project includes the requirement for a post-construction traffic survey. Depending on the findings of the study, possible future improvements may involve additional travel demand management strategies, additional physical improvements, and traffic signal timing adjustments along regional roadways. The proposed roadway improvements and post-construction traffic survey will be conducted in coordination with State of Hawai'i Department of Transportation (DOT).

The traffic study have been reviewed and accepted by the DOT. A hard copy of the traffic study is available to the public upon request.

c. Dissemination of Information

Fliers were posted at various places in Whitmore Village to notify the community of the April 29, 2005 Whitmore Community Association meeting, including the Maranatha Christian Church, Whitmore Circle Apartments, Whitmore Market, Aloha Gas Station, Merlina's Kitchen, Whitmore Community Center, Helemano Elementary School, Dole Food Company Field Office, and the Dole Wahiawā Federal Credit Union. Newspaper articles announcing the meeting and the availability of the Draft EA were also published in the April 29, 2005 edition of the Honolulu Advertiser and the April 27, 2005 edition of the Ka Nūpepa. We also presented an update of the project to the Wahiawā Neighborhood Board at its June 20 and July 18, 2005 meetings.

We appreciate your participation in this review process. Your letter and this response will be included in the Final EA.

Sincerely,



MELVIN N. KAKU  
Acting Business Line Manager  
Environmental

5090P.1F0B  
Ser EV31/ 1028  
29 JUL 2005

Encl:  
(1) Revised Road Alignment Map

Copy to (w/o encl):  
Ms. Genevieve Salmonson, Director  
State of Hawai'i, DBEDT  
Office of Environmental Quality Control  
235 South Beretania Street, Suite 702  
Honolulu, HI 96813

Mr. Alvin Takeshita, Engineering Program Manager  
State of Hawai'i  
Department of Transportation  
601 Kamokila Boulevard, Room 602  
Honolulu, HI 96707

Ms. Corlyn Olson Orr, Project Planner  
Helber Hastert & Fee, Planners  
733 Bishop Street, Suite 2590  
Honolulu, HI 96813

April 29, 2005

Page 1 of 2

Admiral William J. Fallon, USN  
Commander, US Pacific Command  
Department of the Navy  
Naval Facilities Engineering Command, Pacific  
258 Makalapa Drive, Suite 100  
Pearl Harbor, Hawaii 96860-3134

Description: Request government entities and all others shall follow the laws of protection and preservation; and to access the Database 'Aha Kukaniloko to document the required historic and cultural information in order to minimize desecration of our National Treasures [Traditional Cultural Properties (TCP), heiau, burial places and sustenance zones], with regard to your proposed draft Environmental Assessment (EA) on Consultation for the Hawaii Regional Security Operations Center, Wahiawa, Oahu, Hawaii, for the Naval Computer and Telecommunications Area Master Station Pacific, TMK 7-1-002:007 (por.).

Aloha mai e,

It is our position to reserve the right to comment on all undertaking which concern ka pae 'aina Hawaii nei, Hawaii loa... This correspondence administers open consultation to produce a written document that your organization shall substantively consult with the lineal descendants before any ground disturbing activities takes place on the property; it shall spell out your organization's funding mechanism to ensure protection and mitigation, but most importantly, your definitive long-term program of management responsibilities for the protection and perpetuation of our Native Hawaiian cultural resources and National Treasures.

Leadership ensures that accurate information regarding cultural sensitivities for the area of concern be incorporated into any plans or programs that may disturb sites and their relationships to each other in your project area. Manager responsibility is not only to notify the families of the land, but also the need to incorporate and work together. We shall request meetings with the appropriate manager concerning new situations to understand how we may continue to afford your organization the highest level of assistance from 'Aha Kukaniloko, Kahunana, Koa Mana, 'Ike 'Aina... and the community-at-large.

We recommend, concerning the draft EA:

- 1) To schedule a meeting with Admiral William J. Fallon to address the spokesperson of 'Aha Kukaniloko, Kahunana, Koa Mana and 'Ike 'Aina... and the protocol of the Database 'Aha Kukaniloko, being customarily and culturally correct;
- 2) Compliance with the Federal and State Historic Preservation Acts and laws of NHPA, NAGPRA, Section 106 regulations, 36 CFR 800, Chapter 6E HRS and Chapter 13-300 HAR regarding the cultural sensitivity to the area of concern, Kukaniloko, and the adverse affects which shall take place during the proposed ground disturbing activities;
- 3) A meeting to clarify the ability of the DLNR/SHPD to oversee and implement important legal protections for our TCP and National Treasures, i.e., resent State Audit Report No. 04-15;

April 29, 2005

Page 2 of 2

Tom Lenchanko and Alika Silva

Admiral William J. Fallon, USN  
Commander, US Pacific Command

Our beliefs are maintained through practice and our privileges are guarded by kapu, because we love them for all time. It is imperative that our Native Hawaiian family based organizations have rights over any other unrelated organization. Since time immemorial, we are appropriate to the care and responsibility for the traditions of 'Aha Kukaniloko. The significant and important role of 'Aha Kukaniloko, Kahunana, Koa Mana and 'Ike 'Aina... establishes lawful consultation and site interpretation. As the substance and spiritual relationship of any one individual, family or families of lineal descent to a site or feature that is often greater than its physical characteristics, all within the context of foreign activities and projects, are of assistance in preserving our National Treasures.

We also appreciate correcting the lack of present policy for consultation, interpretation and monitoring regarding your proposals, activities and other project requests described in your draft EA. We are concerned regarding the irreversible impacts due to developments to our historic, burial, TCP sites that are subject to your organization's management responsibilities. Your proposed plan shall require proper funding for substantive consultation and monitoring before, during and after the undertaking.

We are aware that there is no policy regarding consultation for Native Hawaiian lineal descendant families concerning TCP, historic sites, burial and sustenance zones. We are presently scheduling meetings with the appropriate lineal descendant family organizations to address these concerns to provide recommendations to you and to establish clear and appropriate policies to best manage our National Treasures. On this policy issue we continue to recommend you maintain substantive consultation with the spokesperson of 'Aha Kukaniloko, Kahunana, Koa Mana and 'Ike 'Aina...

ua mau ke ea o ka 'aina i ka pono...

Tom Lenchanko

*Momas J. Lenchanko 4/29/05*  
waha olelo 'Aha Kukaniloko, Kahunana, Koa Mana and 'Ike 'Aina...  
kahu ko laila Kukaniloko

Alika Silva

Kahu Kulaiwi, Koa Mana, Kupukaaaina, Waianae Moku

Cc: Lance Foster, Director, OHA Native Rights, Land and Culture  
Kai Markell, OHA Native Rights, Land and Culture  
E. Kalani Flores, OHA Native Hawaiian Historic Preservation Council



DEPARTMENT OF THE NAVY  
NAVAL FACILITIES ENGINEERING COMMAND, PACIFIC  
258 MAKALAPA DR., STE. 100  
PEARL HARBOR, HAWAII 96860-3134

5090P.1F0B  
Ser EV3/ 821  
9 JUN 2005

Mr. Tom Lenchanko  
Waha olelo `Aha Kukaniiloko, Kahunana,  
Koa Mana and `Ike `Aina  
931 Uakanikoo Street  
Wahiawa, HI 96786

Dear Mr. Lenchanko:

Thank you for your letter of April 29, 2005, enclosure (1), regarding the proposed Hawaii Regional Security Operations Center (HRSOC) at the Naval Computer and Telecommunications Area Master Station Pacific, Wahiawa, O`ahu. Your letter provides comments on the Draft Environmental Assessment (EA), which was prepared in compliance with the National Environmental Policy Act and Chapter 343, Hawaii Revised Statutes.

We are in agreement with you concerning protection of Native Hawaiian cultural resources and ensuring that such resources are not disturbed by the proposed HRSOC. We are very much aware that the Kukaniiloko site has both cultural as well as astronomical significance. For this reason, we conducted the following efforts to identify any other cultural resources, to assess the impact of the proposed project and to determine appropriate measures to avoid or minimize the impact.

As stated in Chapter 3, Section 3.3.1.1 of the draft EA, we completed an archaeological survey and testing of all the areas potentially affected by the proposed HRSOC, including lands for the facility, parking areas, access roads, and utility corridors. This effort was carried out in spite of the initial assessment from our archival research that potential for archaeological sites is very low due to several decades of intensive agricultural use of the area. The same archival research, an oral history study, as well as a cultural impact assessment study, identified the Kukaniiloko site as the only archaeological site and place of traditional cultural importance.

We recognize the cultural significance of Kukaniiloko, not only for the physical remains of the birthstones, but also its association and alignment with peaks of the Waianae Mountain Range and specifically Pu`u Pueo of the Ko`olau Mountain Range. As you know, the Waianae Mountain Range is to the west of the Kukaniiloko site and the proposed HRSOC facility is to the east. While Pu`u Pueo is to the east, the proposed HRSOC facility is not within direct line of sight from Kukaniiloko and well below the panoramic view plane of the Ko`olau Mountain Range. Chapter 4, Section 4.4 of the draft EA addresses measures to minimize the impact to the visual environment.

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9 JUN 2005

Traffic improvements along Kamehameha Highway would not disrupt traffic to and from the Kukaniiloko site. Best management practices would be implemented to ensure that visitors to Kukaniiloko would have access to the site during construction. We have considered other access road connections to Kamehameha Highway, but analysis indicated that these other locations were not feasible.

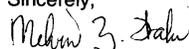
We fully understand your concerns regarding ground disturbing activities and are fully aware of our responsibilities under the Native American Graves Protection and Repatriation Act and Section 106 of the National Historic Preservation Act regarding discoveries of cultural items during construction work. Your letter offers no specific information as to how we could address your concerns. Therefore, we offer a meeting at a location and date that are convenient for you and other members of your organization. Navy personnel will contact you to schedule a meeting.

We note that the addressee of your letter is Admiral William Fallon, U.S. Navy, the Commander of the U.S. Pacific Command (PACOM). PACOM is not involved in the preparation of the environmental assessment and will not be issuing the official decision on the document, and since your letter was correctly sent to the address for comments on the Draft EA, we have responded to it as a comment letter rather than forwarding it to Admiral Fallon's office.

As for item 3 of your letter in reference to the findings of the State Audit Report No. 04-15 about the Department of Land and Natural Resources (DLNR), State Historic Preservation Division, we are required by the Section 106 regulations, 36 CFR Part 800, to consult with the State Historic Preservation Officer (SHPO), a designation that is assigned to the DLNR Chairperson. Regardless of its current state, SHPO remains a consulting party.

Your letter and our response letter will be included in the Final EA. Thank you for your participation in the Draft EA process.

Should you have any questions or comments, please contact Ms. Connie Chang at (808) 472-1395.

Sincerely,  
  
MELVIN Z. WAKI  
Business Line Manager  
Environmental

5090P.1FOB  
Ser EV3/821

9 JUN 2005

Encl:

(1) Mr. Lenchanko's Letter of  
April 29, 2005

Copy to:

Ms. Genevieve Salmonson, Director  
State of Hawaii, DBEDT  
Office of Environmental Quality Control  
235 S. Beretania Street, Suite 702  
Honolulu, HI 96813

Mr. Alvin Takeshita, Engineering Program Manager  
State of Hawaii  
Department of Transportation  
601 Kamokila Boulevard, Room 602  
Honolulu, HI 96707

Ms. Corlyn Olson Orr, Project Planner  
Helber Hastert & Fee, Planners  
733 Bishop Street, Suite 2590  
Honolulu, HI 96813

Admiral William J. Fallon, USN  
Commander, US Pacific Command

June 22, 2005  
Kamaile Elementary School

Attention: *MELVIN WAKI*

Connie Chang, Annie Griffin, Tom Lenchanko, Alike Silva, Glen Kila and ohana...

Re: Hawaii Regional Security Operations Center, Wahiawa Oahu  
TMK: (1) 7-1-002 :007 (Portion) access road realignment and redress of  
concerns from 'Aha Kukanihiko, Kahunana, Koa Mana and 'Ike 'Aina...

It is our position to reserve the right to comment on all undertaking which concern  
ka pae 'aina Hawaii nei, Hawaii loa...

- 1] Leadership defines notification, incorporation and working together for the protection, preservation and perpetuation of our National Treasures and Traditional Cultural Properties (TCP), i.e., historic sites, temples, beliefs, burial places and sustenance zones, thereby, requiring accuracy of all information presented;
- 2] Adverse affects to irreplaceable historic sites and religious beliefs are unacceptable and a violation of the law;
- 3] Understandably to alleviate deliberate adverse impacts, lineal descendants/cultural experts, substantive consultation, site interpretation and culturally sensitive monitoring are the only acceptable alternatives available to mitigate and reasonably minimize and lessen adverse impacts.

We recommend:

- 1] A meeting with Admiral Fallon to address the spokesperson of 'Aha Kukanihiko, Kahunana, Koa Mana and 'Ike 'Aina... and the protocol of Database 'Aha Kukanihiko, being customarily and culturally correct;
- 2] A support letter from the US Pacific Command and its sub-entities, in accordance with Federal and State Historic Preservation Acts and laws, shall follow the laws of protection and preservation;
- 3] The urgency for substantive consultation program with/by the lineal descendants, site interpretation program, erosion program and Traditional Cultural Properties (TCP) program;
- 4] Correct maps and site interpretation regarding site relationships to each other and the birthing stones;

Admiral Fallon we appreciate this higher level of assistance and leadership in these most important matters that continues to preserve a positive working relationship.

ua mau ke ea o ka 'aina i ka pono...

Tom Lenchanko *Thomas J Lenchanko 6/22/05*  
waha olelo 'Aha Kukanihiko, Kahunana, Koa Mana and 'Ike 'Aina...  
kahu ko laila Kukanihiko

Alike Silva  
Kahu Kulaiwi, Koa Mana, Kupukaaina, Waianae Moku

Admiral William J. Fallon, USN  
Commander, US Pacific Command  
850 Ticonderoga Street Suite 110  
Pearl Harbor, Hawaii 96860-5101

July 11, 2005

Attention : Melvin Z. Waki, Connie Chang and Annie Griffin

Re : Redress of our June 22, 2005 concerns at Kamaile Elementary School library; Comments and recommendations to your organization's Hawaii Regional Security Operations Center (HRSOC)(NCTAMS PAC) project's access road realignment [Final Report, Addendum To and Second Addendum To].

It is our position to reserve the right to comment on all undertaking which concern ka pae 'aina Hawaii nei, Hawaii loa...

- 1] Leadership defines notification, incorporation and working together for the protection, preservation and perpetuation of our National Treasures and Traditional Cultural Properties (TCP), i.e., historic sites, temples, beliefs, burial places and sustenance zones, thereby, requiring accuracy of all information presented;
- 2] Adverse affects to irreplaceable historic sites and religious beliefs are unacceptable and a violation of the law;
- 3] Understandably to alleviate deliberate adverse impacts, lineal descendants/ cultural experts, substantive consultation, site interpretation and culturally sensitive monitoring are the only acceptable alternatives available to mitigate and reasonably minimize and lessen adverse impacts.

We recommend :

- 1] A meeting with Admiral Fallon to address the spokesperson of 'Aha Kukanihiko, Kahunana, Koa Mana and 'Ike 'Aina... and the protocol of Database 'Aha Kukanihiko, being customarily and culturally correct;
- 2] A support letter from the US Pacific Command and its sub-entities, in accordance with Federal and State Historic Preservation Acts and laws, shall follow the laws of protection and preservation;
- 3] The urgency for substantive consultation program with/by the lineal descendants, site interpretation program, erosion program and TCP program;
- 4] Correct maps and site interpretation regarding site relationships to each other and the birthing stones.

Admiral Fallon we appreciate this higher level of assistance and leadership in these most important matters that continues to preserve a positive working relationship.

ua mau ke ea o ka 'aina i ka pono...

Tom Lenchanko  
waha oleo 'Aha Kukanihiko, Kahunana, Koa Mana and 'Ike 'Aina...  
kahu ko laila Kukanihiko

Alika Poe Silva, Kahu Kulaiwi, Koa Mana, Kupukaaina, Waianae Moku

**Corlyn Olson Orr**

**From:** Smdl520@aol.com  
**Sent:** Thursday, July 14, 2005 10:00 PM  
**To:** Chang, Connie M CIV NAVFAC PAC ; Kaku, Melvin N CIV NAVFAC PAC ; Griffin, Annie E CIV NAVFAC PAC ; Rochon, Don CIV NAVFAC PAC  
**Cc:** Wilma\_Holi/WAIMEAH/HIDOE@notes.k12.hi.us; vicky@hawaii.rr.com; usto225@msn.com; wnb26@verizon.net; popskamakakehaukcelc@msn.com; napua4u@yahoo.com; kaim@oha.org; KEONAHALEIWA@aol.com; kamo\_a@yahoo.com; iikai38@hotmail.com; BHelemano@aol.com; Glen\_Kila/KAMAILE/HIDOE@notes.k12.hi.us; ekfiores@verizon.net; daniel\_au/leilehua/hidoe@notes.k12.hi.us; kalimapau@hotmail.com; leimaile2@yahoo.com; usha\_@verizon.net; manulani@hawaii.edu; kaimi@lava.net; ortizr008@hawaii.rr.com  
**Subject:** Re: HRSOC access road realignment

Admiral William J. Fallon, USN  
Commander, US Pacific Command

Attention : Connie Chang, Melvin Kaku, Annie Griffin, Don Rochon

Thank you for your assistance in communicating the need for a collaborative working relationship between your organization and the lineal descendants of Kukanihiko.

The consulting party is the 'Aha Kukanihiko [the families of lineal descent]. When it comes to representation from the 'Aha Kukanihiko, the signal shall come from the waha olelo [spokesperson]. Being customarily and culturally correct, the concurrence of mokupuni [island] representatives shall process and direct all descisions which imbue pono...

We shall assist with the appropriate acumen regarding 1] substantive consultation program with/by lineal descendants 2] site interpretation / site protection programs 3] erosion program and 4] Traditional Cultural Properties (TCP) program, their implementation and monitoring for your organization's HRSOC project [before, during and after the fact] for mokupuni Oahu.

ua mau ke ea o ka 'aina i ka pono...

Tom Lenchanko  
waha olelo 'Aha Kukanihiko, Kahunana, Koa Mana and 'Ike 'Aina...  
kahu ko laila Kukanihiko  
349-9949

Alika Poe Silva  
Kahu Kulaiwi, Koa Mana, Kupukaaina, Waianae Moku

8/2/2005

Admiral William J. Fallon, USN  
Commander, US Pacific Command  
850 Ticonderoga Street Suite 110  
Pearl Harbor, Hawaii 96860-5101

July 18, 2005

Attention : Melvin Kaku, Connie Chang, Annie Griffin and Ron Rochon

Re : Redress of our June 22, 2005 concerns at Kamaile Elementary School library;  
Comments and recommendations to your organization's Hawaii Regional Security  
Operations Center (HRSOC)(NCTAMS PAC) project's access road realignment  
[Final Report, Addendum To and Second Addendum To].

It is our position to reserve the right to comment on all undertaking which concern  
ka pae 'aina Hawaii nei, Hawaii loa...

- 1] Leadership defines notification, incorporation and working together for the protection, preservation and perpetuation of our National Treasures and Traditional Cultural Properties (TCP), i.e., historic sites, temples, beliefs, burial places and sustenance zones, thereby, requiring accuracy of all information presented;
- 2] Adverse affects to irreplaceable historic sites and religious beliefs are unacceptable and a violation of the law;
- 3] Understandably to alleviate deliberate adverse impacts, lineal descendants/cultural experts, substantive consultation, site interpretation and culturally sensitive monitoring are the only acceptable alternatives available to mitigate and reasonably minimize and lessen adverse impacts.

We recommend :

- 1] A meeting with Admiral Fallon to address the spokesperson of 'Aha Kukanihoko, Kahunana, Koa Mana and 'Ike 'Aina... and the protocol of Database 'Aha Kukanihoko, being customarily and culturally correct;
- 2] A support letter from the US Pacific Command and its sub-entities, in accordance with Federal and State Historic Preservation Acts and laws, shall follow the laws of protection and preservation;
- 3] The urgency for substantive consultation program with/by the lineal descendants, site interpretation program, erosion program and TCP program;
- 4] Correct maps and site interpretation regarding site relationships to each other and the birthing stones.

Admiral Fallon we appreciate this higher level of assistance and leadership in these most important matters that continues to preserve a positive working relationship.

ua mau ke ea o ka 'aina i ka pono...

Tom Lenchanko

 7/18/05  
waha oleo 'Aha Kukanihoko, Kahunana, Koa Mana and 'Ike 'Aina...  
kahu ko laila Kukanihoko

Alika Poe Silva, Kahu Kulaiwi, Koa Mana, Kupukaaina, Waianae Moku

PUBLIC COMMENT

Draft Environmental Assessment  
For Hawai'i Regional Security Operations Center, Wahiawa, O'ahu, Hawai'i

Kathleen H. Masunaga  
1842 Glen Avenue  
Wahiawa, HI 96786

TO: Commander, Naval Facilities Engineering Command, Pacific

I am a current and future member of the Wahiawa Neighborhood Board No. 26. Our area also covers Whitmore Village and NCTAMSPAC. I attended the informational briefing last month at Helemano Elementary School.

Change in entry point of the access road

In 2004 the Navy Public Works staff made a presentation to the Wahiawa Neighborhood Board (WNB). At that time the access road began at Kamehameha Highway. The draft environmental assessment now has the access road beginning from Whitmore Avenue. This is **UNACCEPTABLE**. The rationale for this change was the opposition from the State Dept. of Transportation. At the May WNB meeting, navy representatives stated that another reason for this change was because the construction of a roundabout required by the State DOT was too expensive. However, Scott Ishikawa of the State DOT kindly agreed to look into the reasons behind the rejection of Kamehameha Highway as the entry point for the access road.

It is not logical to create a circular road to enter and exit the HRSOC and NCTAMSPAC. The traffic studies cited in the draft environmental assessment are used to support the Whitmore Avenue entry. However, how does this data compare with the flow of traffic to and from Kamehameha Highway? Is the traffic flow data the same or better? Can this traffic study be made available to the public?

There are many people who drive into and out of Whitmore Avenue everyday. It is hard to believe that the addition of 400 more vehicles will not impact negatively upon current users. Do people who drive conduct these traffic studies?

Location of the access road by Whitmore Village

At the meeting at Helemano Elementary School, it is evident that 250 feet clearance from the existing homes may not be far enough. Can the access road be placed further away, following another gulch line? Again, why was the path of the access road changed from the original plan presented to the WNB?

Cultural studies

Can the actual cultural, historical and burial studies be provided to the public? I am curious in the statements made in the draft environmental assessment that relied on the fact that these lands have been used for agriculture for many years, and thus, there were no places for concern for native Hawaiians or lineal descendants in this area. Kukaniloko is cited, but that is a former birthing place.

I agree that it is difficult to understand the dichotomy whereby the lineal descendants want to keep the burial sites secret and undisturbed. So, how can the Navy be assured that the burial sites are properly identified? What is the contingency plan, if during construction of either the road or the building ancient bones are uncovered?

In addition to this project, the U.S. Army has plans for construction of roads, training areas and buildings for its Stryker Brigade. It may be useful for the Navy to join hands with the Army to handle the concerns of native Hawaiians. One idea that makes sense is to have a museum devoted to the ancient history and culture of this area – for both military and civilians.

Dissemination of information

I strongly recommend that the U.S. Navy set up a website for the public to obtain information on the HRSOC project. At my request, a link to the fact sheet for this project is at the WNB webpage at <http://www.co.honolulu.hi.us/nco/nb26/index.htm>.

It would save a lot of paper and postage if I could access the traffic and cultural studies online. Since this information is “public” and not secret, it should be available online. Again, I suggest that you consult with your U.S. Army counterparts. The draft environmental assessment for the Stryker Brigade were conveniently online.

Contact information

As the HRSOC project moves along, it would be helpful for the public to have a hotline to call, or someone to email questions and concerns. During the construction phase, the Whitmore Village residents should have contact information in the event that the noise, dust and possibly odor levels become unbearable.

Roundabout

I lived in Italy for a few years and returned to Hawai'i in 2001. Our family spent last Christmas there. Between 2001 and 2004, Italy has eliminated traffic lights and replaced them with roundabouts. Once you learn the rules of who has the right of way to go in and out, it is a very efficient system. The ones that I preferred were those that were high enough to block out headlights of cars on the other side. This “lack of visibility” also forced you to move a bit more cautiously.

I mention this only because of the current controversy in Foster Village where residents are opposed to the roundabout. They work well, and are an alternative to traffic lights. When I first used them, I would often find myself going around twice because I missed my opportunity to get off. But, you learn.

Mahalo nui loa for your kind attention! I hope that as the result of the Public Comments from myself and others that the final plans will be revised. Please keep me informed on the progress of the draft environmental assessment and the HRSOC Project.

  
Kathleen H. Masunaga  
May 23, 2005  
[Wnb26@verizon.net](mailto:Wnb26@verizon.net)



DEPARTMENT OF THE NAVY  
NAVAL FACILITIES ENGINEERING COMMAND, PACIFIC  
258 MAKALAPA DR., STE. 100  
PEARL HARBOR, HAWAII 96860-3134

5090P.1F0B  
Ser EV31/1039  
29 JUL 2005

5090P.1F0B  
Ser EV31/1039  
29 JUL 2005

Ms. Kathleen H. Masunaga  
1842 Glen Avenue  
Wahiawā, Hawai'i 96786

Dear Ms. Masunaga:

Subj: HAWAII REGIONAL SECURITY OPERATIONS CENTER DRAFT  
ENVIRONMENTAL ASSESSMENT, WAHIAWĀ, O'AHU, HAWAII

Thank you for your letter dated May 23, 2005 regarding the Hawaii Regional Security Operations Center (HRSOC) Draft Environmental Assessment (EA). We have considered your comments and offer the following responses:

a. Change in Entry Point of the Access Road

The entry point of the proposed access road was revised since the Navy's presentation at the August 16, 2004 Wahiawā Neighborhood Board meeting. During consultations with the State Department of Transportation (DOT), concerns were raised that a new connection to the Kamananui/Kaukonahua/Kamehameha Highway intersections could not be added without significant modifications and improvements. Improvements in this area are a long-range state highways planning issue beyond the scope of the HRSOC project. The Navy has asked the DOT to look at the intersection as part of its long-range highways plan update.

The Navy looked at another alternative connection to Kamehameha Highway at a point midway between the Whitmore Avenue and Kamananui intersections. This intersection would require elimination of the curved section of Kamehameha Highway to accommodate the required minimum distance between highway intersections (northbound traffic on Kamehameha Highway would be routed on Kaukonahua Road to the Kaukonahua-Kamananui intersection, then turn right to Kamananui Road and return to Kamehameha Highway). This connection was not further considered due to regional traffic impacts and increased delays caused by the addition of another traffic signal on Kamehameha Highway and re-configured travel patterns.

Another alternative connection to Kamehameha Highway north of Kamananui Road was considered and dismissed due to site constraints created by the natural topography and the existing highway configuration. This alternative would require construction of a bridge across Poamoho Gulch. Furthermore, introducing a new intersection in this area would be undesirable because of the limited sight distances along the curved section of Kamehameha Highway in the vicinity of the access road connection.

The only alternative that met the objectives of the project is the Whitmore Avenue connection. Traffic analysis of the Whitmore Avenue intersection concluded that traffic levels of service would decrease, but still operate within acceptable urban standards during peak hours with the identified roadway and traffic management improvements. Because HRSOC is a round-the-clock operation, traffic from the facility would be spread in different shifts throughout the day and week. There would be more vehicles using the lower portion of Whitmore Avenue and there would be an overall increase in non-peak hour traffic.

There would be improvements along Whitmore Avenue, including sidewalks and shoulders from the bus stop on Kamehameha Highway to Uakaniko'o Street, a new left turn lane from Whitmore Avenue to the access road, and lengthening of the right turn lane from Whitmore Avenue to Kamehameha Highway. The existing main gate at the end of Whitmore Avenue would become a secondary gate, and would have limited operating hours. All HRSOC traffic, NCTAMS PAC visitors, and commercial vehicles would be routed through the new gate on the proposed access road.

Other improvements include lengthening of the existing left and right turn lanes from Kamehameha Highway to Whitmore Avenue, lengthening of the existing left turn lane from Kamehameha Highway to Kaukonahua Road, and new traffic signals at the Kaukonahua Road-Kamananui Road intersection.

The Navy would prepare a traffic management plan, including employer-based travel demand management strategies, to manage project-related traffic. In addition, the project includes the requirement for a post-construction traffic survey. Depending on the findings of the study, possible future improvements may involve additional travel demand management strategies, additional physical improvements, and traffic signal timing adjustments along regional roadways. The proposed roadway improvements and post-construction traffic survey will be conducted in coordination with DOT.

The traffic study have been reviewed and accepted by the DOT. A hard copy of the traffic study is available to the public upon request. A copy was provided for your use by separate correspondence.

b. Location of the Access Road by Whitmore Village

The proposed access road alignment has been moved further away from Whitmore Village based on community concerns raised at the April 29, 2005 Whitmore Community Association meeting. The new alignment, as shown in enclosure (1), runs along a long, narrow strip of land bordering the south side of Poamoho Gulch. The nearest residences at Whitmore Village would now be over 1,000 feet away from the proposed access road (three to four city blocks). The proposed access road connection

5090P.1F0B  
Ser EV31/1030  
29 JUL 2005

to the west of Whitmore Village (between Kamehameha Highway and Whitmore Village) remains unchanged: intersecting with Whitmore Avenue west of Kahi Kani Park and extending north along the boundary between property of Castle and Cooke and George Galbraith Trust Estate.

The Navy is committed to working with the community and believes that this new access road alignment represents the best compromise for all parties.

c. Cultural Resources

Hard copies of the archaeological survey report including addendums, and the cultural impact assessment document are available to the public upon request. The archaeological reports and addendums are provided for your use as enclosures (2) through (4). The cultural impact assessment report is being finalized and will be forwarded to you when it is available in August 2005.

d. Dissemination of Information

Thank you for your suggestion. The Navy is in the process of establishing a formal policy addressing the use of electronic documents. Only paper copies of the Draft EA and final technical studies will be available until an official policy is issued. The project fact sheet is available on the Commander Navy Region Hawaii's webpage at <http://www.hawaii.navy.mil/>.

e. Contact Information

Project updates and briefings will be provided to community organizations such as the Wahiawā Neighborhood Board and Whitmore Community Association periodically throughout the design and construction phase to ensure that community concerns are addressed. As noted on the project fact sheet, questions and concerns should be directed to Lieutenant Barbara Mertz, Navy Region Hawaii Director of Public Affairs at 473-2888.

f. Roundabout

We appreciate your advice on roundabouts. In discussions with the DOT, this concept was mentioned as one of the possible long-range solutions. Improvements to the triangular intersection are a long-range state highways planning issue beyond the scope of the HRSOC project. The Navy has asked the DOT to look at the intersection as part of its long-range highways plan update.

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Ser EV31/1030  
29 JUL 2005

We appreciate your participation in this review process. Your letter and this response will be included in the Final EA.

Sincerely,

  
MELVIN N. KAKU  
Acting Business Line Manager  
Environmental

Encl:

- (1) Revised Road Alignment Map
- (2) Archaeological Survey Report of July 2004
- (3) Addendum to the Survey Report of February 2005
- (4) Second Addendum to the Survey Report of June 2005

Copy to: (w/o encl)

Ms. Genevieve Salmonson, Director  
State of Hawai'i, DBEDT  
Office of Environmental Quality Control  
235 South Beretania Street, Suite 702  
Honolulu, HI 96813

Mr. Alvin Takeshita, Engineering Program Manager  
State of Hawai'i  
Department of Transportation  
601 Kamokila Boulevard, Room 602  
Honolulu, HI 96707

Ms. Corlyn Olson Orr, Project Planner  
Helber Hastert & Fee, Planners  
733 Bishop Street, Suite 2590  
Honolulu, HI 96813

Received 4/29/05

### PUBLIC COMMENTS

Draft Environmental Assessment  
For Hawaii Regional Security Operations Center, Wahiawa, Oahu, Hawaii



DEPARTMENT OF THE NAVY  
NAVAL FACILITIES ENGINEERING COMMAND, PACIFIC  
258 MAKALAPA DR., STE. 100  
PEARL HARBOR, HAWAII 96860-3134

5090P.1F0B  
Ser EV31/ 587  
3 - MAY 2005

Name: Cynthia Edva  
Address: 349 Circle Mauka St, Wahiawa HI 96786

Please write your comment(s) or question(s) below. This form may be used as a mailer if folded, taped or stapled, and stamped. You are not limited to the space available on this form. All comments must be submitted or postmarked to the addressee on the back of this form by May 23, 2005 for consideration in the Final Environmental Assessment.

Good meeting. Thank you.  
Please send me one draft.  
Draft Environmental Operations Assessment  
Thank you  
Halemano Community would like one also.  
1001 Ihi Ihi Ave.  
Wahiawa, HI 96786

To: Distribution

Subj: CONSULTATION FOR THE HAWAII REGIONAL SECURITY OPERATIONS CENTER DRAFT ENVIRONMENTAL ASSESSMENT, WAHIAWA, OAHU, HAWAII

As requested, attached for your review is the Draft Environmental Assessment (EA), enclosure (1), for the proposed construction of the Hawaii Regional Security Operations Center (HRSOC), at the Naval Computer Telecommunications Area Master Station Pacific in Wahiawa, Hawaii. The Draft EA was prepared pursuant to the Environmental Impact Statement (EIS) law (Hawaii Revised Statutes, Chapter 343) and the EIS rules (Administrative Rules, Title 11, Chapter 200). Your comments must be received or postmarked by May 23, 2005 for consideration in the Final EA.

Please send original comments to:

Applicant: Naval Facilities Engineering Command, Pacific  
Address: Environmental Planning Division  
258 Makalapa Drive, Suite 100, Pearl Harbor, HI 96860-3134  
Contact: Audrey Uyema Pak, Planner In Charge (EV31)  
Phone: (808) 472-1448

Copies of the comments should be sent to:

Legal Repository: The Office of Environmental Quality Control  
Address: 235 South Beretania Street, Suite 702, Honolulu, HI 96813  
Approving Authority: State of Hawaii Department of Transportation  
Address: 601 Kamokila Boulevard, Room 602, Honolulu, HI 96707  
Contact: Alvin Takeshita, Engineering Program Manager  
Phone: (808) 692-7670  
Consultant: Helber Hastert & Foe, Planners  
Address: 733 Bishop Street, Suite 2590, Honolulu, HI 96813  
Contact: Corlyn Olson Orr, Project Planner  
Phone: (808) 545-2055

Signature

Date

5090P.1F0B  
Ser EV31/ 587  
3 - MAY 2005

Thank you for your participation in the Draft EA process. We look forward to receiving your comments, questions and suggestions.

Sincerely,

  
for MELVIN N. KAKU  
Director  
Environmental Planning Division

Encl:

(1) Subject Draft EA of Apr 05

Distribution:

Mr. James Nakatani, District Director, Office of U. S. Congressman Ed Chase, Honolulu  
District Office

Helemano Elementary School

Mr. Tom Lenchanko

Ms. Janet Mindoro

Ms. Dolores Cabanit

Mr. Rafaela Pascual

Ms. Lauzanne Oshiro

Ms. Cynthia Edra

**APPENDIX D**

City and County of Honolulu Communications



DEPARTMENT OF THE NAVY  
NAVAL FACILITIES ENGINEERING COMMAND, PACIFIC  
258 MAKALAPA DR., STE. 100  
PEARL HARBOR, HAWAII 96860-3134

5090.A5...  
Ser ENV181 **1377**  
12 AUG 2004

Ms. Donna F. K. Kiyosaki  
Deputy Manager  
Honolulu Board of Water Supply  
630 South Beretania Street  
Honolulu, HI 96813

Dear Ms. Kiyosaki:

This is a follow-up to the meeting of June 25, 2004 between Messr. C. Jamile, F. Nakamura, A. Leong, yourself, and members of my staff regarding the proposed Hawaii Regional Security Operations Center (HRSOC) at Naval Computer and Telecommunications Area Master Station, Eastern Pacific (NCTAMS EASTPAC) in Wahiawa.

The HRSOC project will construct a two-story steel framed structure for an operational control center, administrative offices, conference/briefing and video/teleconferencing rooms, technical libraries and training rooms, and a single story facility for operational and personnel support functions. The new facilities will utilize utilities from the existing NCTAMS EASTPAC infrastructure. We expect construction to begin in mid-2006 with occupancy targeted for mid-2010.

Potable water from NCTAMS EASTPAC is currently produced from an on-site deep water well and supplemented from the Army's Schofield system. The current average day usage is 115,000 gallons, increasing to approximately 325,000 upon completion of the HRSOC facilities. The Navy intends to meet this increase through our existing well.

As an emergency backup, the Navy is interested in connecting to the Board of Water Supply (BWS) System. Accordingly, we seek information regarding the capability of the existing BWS system to serve as an emergency backup, and what the potential conditions of service would be.

If you have any questions regarding our proposed facilities or to schedule further discussions, please contact Ms. Karen Sumida of my staff at 472-1382.

Sincerely,

MELVIN Z. WAKI, P.E.  
Head  
Environmental Engineering Department



DEPARTMENT OF THE NAVY  
NAVAL FACILITIES ENGINEERING COMMAND, PACIFIC  
258 MAKALAPA DR., STE. 100  
PEARL HARBOR, HAWAII 96860-3134

5090.A5  
Ser EV12/ **2168**  
07 DEC 2004

Ms. Donna F. K. Kiyosaki  
Deputy Manager  
Honolulu Board of Water Supply  
630 South Beretania Street  
Honolulu, HI 96813

Dear Ms. Kiyosaki:

Our letter of August 12, 2004 provided a notification of the Navy's proposal to establish the Hawaii Regional Security Operations Center (HRSOC) at the Naval Computer and Telecommunications Area Master Station, Pacific (NCTAMS PAC) in Wahiawa. The HRSOC facility will increase the potable water requirements for NCTAMS PAC from the current 115,000 gallons per day (gpd) to 325,000 gpd by 2010. The potable water requirements for NCTAMS PAC will be supplied by the existing on-site deep well. The NCTAMS PAC potable water system will require a backup water supply to ensure continuous service. A connection to the Board of Water Supply (BWS) distribution system at Whitmore Village was considered the most desirable source for the backup water supply.

The current water source for NCTAMS PAC is the on-site deep well with a connection to the Army's Schofield water system. The successful privatization of the Army's Schofield's water system will result in termination of the connection to the Army by approximately November 2008.

We propose that a pair of 640 gallon per minute (gpm) booster pumps (one backup) be installed at Whitmore Village to supply water to the NCTAMS PAC reservoir. The reservoir's spillway elevation is 1,346 feet.

We request a written confirmation by May 2005 of the BWS's commitment to allow a backup connection by the Navy to Whitmore Village in order to facilitate our planning process for the HRSOC facility at NCTAMS PAC Wahiawa.

If you have any questions regarding the proposed facilities or to schedule further discussions, please contact Ms. Karen Sumida of my staff at 472-1382.

Sincerely,

MELVIN Z. WAKI, P.E.  
Business Line Manager  
Environmental

**BOARD OF WATER SUPPLY**

CITY AND COUNTY OF HONOLULU  
630 SOUTH BERETANIA STREET  
HONOLULU, HI 96843



January 11, 2005

MUFI HANNEMANN, Mayor

EDDIE FLORES, JR., Chairman  
CHARLES A. STED, Vice-Chairman  
HERBERT S. K. KAOPIA, SR.  
DAROLYN H. LENDIO

RODNEY K. HARAGA, Ex-Officio  
LARRY J. LEOPARDI, Ex-Officio

CLIFFORD S. JAMILE  
Manager and Chief Engineer

DONNA FAY K. KIYOSAKI  
Deputy Manager and Chief Engineer

Mr. Melvin Z. Waki, P.E.  
Business Line Manager  
Environmental  
Department of the Navy  
Naval Facilities Engineering Command, Pacific  
258 Makalapa Drive, Suite 100  
Pearl Harbor, Hawaii 96860-3134

Dear Mr. Waki:

Subject: Your Letter Dated December 7, 2004 Regarding an Emergency Back-up Connection for the Naval Computer and Telecommunications Area Master Station (NCTAMS PAC) in Wahiawa, TMK: 7-1-002: 007 Whitmore Avenue

Thank you for your letter regarding an emergency water service connection for the Navy's Telecommunications facility in Wahiawa.

We approve your request to provide emergency water service for the telecommunications facility based on the following conditions:

1. Submit construction plans for our review and approval showing the location of the interconnection, meter and backflow prevention assembly.
2. The Navy shall be responsible for the installation of the meter and all associated piping after the meter.
3. Fire protection is not included as part of this service (i.e. fire hydrants, required flow, etc).
4. The Navy shall be assessed the prevailing Standby Charge for Emergency Service connections as stated in the 'Schedule of Rates and Charges'. The current rate is \$2,970 per month for each million gallon per day demand requirement. In addition, water drawn will be assessed \$1.48 per thousand gallons of consumption. See the attached Schedule of Rates and Charges.

*Handwritten initials and signatures:*  
MFI, EVI, etc.

**BOARD OF WATER SUPPLY  
CITY AND COUNTY OF HONOLULU  
REVISION TO THE SCHEDULE OF RATES AND CHARGES  
FOR THE FURNISHING OF WATER AND WATER SERVICE  
Amended by Resolution No. 744, 2004, effective July 1, 2004**

	July 1, 2003	July 1, 2004	July 1, 2005	July 1, 2006	July 1, 2007
<b>BILLING CHARGE</b>					
There is a billing charge each time a bill is rendered effective as follows:	\$3.70	\$3.70	\$3.70	\$3.70	\$3.70
<b>QUANTITY CHARGE</b>					
In addition to the billing charge, there is a charge for all water drawn for each 1,000 gallons effective as follows:					
	July 1, 2003	July 1, 2004	July 1, 2005	July 1, 2006	July 1, 2007
<b>SINGLE FAMILY RESIDENTIAL (Monthly Per Unit)</b>					
Block 1 (Gallons) First 13,000 or any part thereof	\$1.77	\$1.77	\$2.00	\$2.17	\$2.47
Block 2 (Gallons) 13,001 to 30,000 or any part thereof	\$2.12	\$2.12	\$2.40	\$2.60	\$2.96
Block 3 (Gallons) Over 30,000	\$3.18	\$3.18	\$3.60	\$3.91	\$4.46
<b>MULTI FAMILY RESIDENTIAL (Monthly Per Unit)</b>					
Block 1 (Gallons) First 9,000 or any part thereof	\$1.77	\$1.77	\$2.00	\$2.17	\$2.47
Block 2 (Gallons) 9,001 to 22,000 or any part thereof	\$2.12	\$2.12	\$2.40	\$2.60	\$2.96
Block 3 (Gallons) Over 22,000	\$3.18	\$3.18	\$3.60	\$3.91	\$4.46
<b>NON-RESIDENTIAL</b>					
All Usage	\$1.98	\$1.98	\$2.24	\$2.43	\$2.77
<b>AGRICULTURAL * (Monthly Per Account)</b>					
Block 1 (Gallons) First 13,000 or any part thereof	\$1.77	\$1.77	\$2.00	\$2.17	\$2.47
Block 2 (Gallons) Over 13,000	\$0.75	\$0.75	\$0.77	\$0.79	\$0.81
<b>NONPOTABLE **</b>					
All Usage	\$0.99	\$0.99	\$1.12	\$1.22	\$1.39

\* To obtain Agricultural Quantity Charges, a service holder must submit a written application each fiscal year to the Board of Water Supply and furnish satisfactory proof that they are engaged in crop production, stock raising or dairy farming on a commercial basis. Each approved application shall continue in effect entitling the service holder to these charges for the remainder of the fiscal year, until they cease the activities entitling them to these charges, or until new charges are established.

\*\* The Nonpotable Quantity Charge effective from July 1, 1993 shall not supersede existing or individually negotiated nonpotable quantity charge agreements.

**STANDBY CHARGE:** A Standby Charge of \$2,970.00 per month for each million gallon per day (mgd) demand requirement shall apply to private water systems contracting for inter-connection service. Such service shall be provided only for emergency or unscheduled service outages or supply reductions with the intent to protect against interrupted water service supporting normal private system requirements. Water drawn shall be charged at the quantity rate of \$1.48 for each thousand gallons or portion thereof. The Manager and Chief Engineer may negotiate alternate charges when appropriate.

**ON-SITE DISTRIBUTION TARIFF:** Consumers may be assessed an On-Site Distribution Tariff for Department maintenance of property piping if they elect to have the Board provide such service. Maintenance shall be limited to repair and renewal of "after the meter" service appurtenances eligible for coverage.

**POWER COST ADJUSTMENT:** The Quantity Charge may be increased \$0.01 per 1,000 gallons for each \$600,000 or fraction thereof when electric power cost to the Board of Water Supply exceeds the following:

FISCAL YEAR BEGINNING	ELECTRIC POWER COSTS
July 1, 1993	\$8,029,500
July 1, 1994	8,648,200
July 1, 1995	9,188,600
July 1, 1996	9,718,600
July 1, 1997	10,314,100
July 1, 1998	10,953,700

**ENVIRONMENTAL REGULATIONS COMPLIANCE FEE COST ADJUSTMENT:** The Quantity Charge may be increased \$0.01 per 1,000 gallons for each \$600,000 or fraction thereof of additional costs that the Board of Water Supply is required to incur in order to comply with any Federal or State environmental law or regulation.



DEPARTMENT OF THE NAVY  
NAVAL FACILITIES ENGINEERING COMMAND, PACIFIC  
258 MAKALAPA DR., STE. 100  
PEARL HARBOR, HAWAII 96860-3134

5090.A5  
Ser EV12/ 164  
8 FEB 2005

Ms. Donna F.K. Kiyosaki  
Deputy Manager  
Honolulu Board of Water Supply  
630 South Beretania Street  
Honolulu, HI 96813

Dear Ms. Kiyosaki:

Subj: EMERGENCY BACK-UP CONNECTION FOR THE NAVAL COMPUTER  
AND TELECOMMUNICATIONS AREA MASTER STATION  
(NCTAMS PAC) IN WAHIAWA, TMK: 7-1-002:007 WHITMORE AVENUE

Our letter of December 7, 2004 requested a confirmation of the Board of Water Supply's (BWS) commitment to allow a backup emergency connection at Whitmore Village to support the Naval Computer and Telecommunications Area Master Station, Pacific (NCTAMS PAC). Your letter of January 11, 2005 provided a conditional approval of our request for the emergency connection at Whitmore Village.

We initially requested your approval to support an average day demand of 325,000 gallons per day (gpd). We proposed to install a pair of 640 gallon per minute (gpm) booster pumps (one backup) located in the vicinity of Whitmore Village to support NCTAMS PAC. Due to a modification to the base loading and the addition of cooling water requirements, the estimated average day demand has been increased to 462,000 gpd. Additionally, the booster pump requirements were increased to 700 gpm.

We request a written confirmation of your commitment to allow a connection at Whitmore Village to support the increased demands as noted. Should there be any changes to potable water requirements for the NCTAMS PAC water system in the future, which will affect the water demands and pumping requirements, we will notify the BWS.

If you have any questions regarding the proposed facilities or to schedule further discussions, please contact Ms. Karen Sumida of our Environmental Compliance Division at 472-1382.

Sincerely,

*Melvin Z. Waki*  
MELVIN Z. WAKI, P.E.  
Business Line Manager  
Environmental

Blind copy to:  
EV31 (AUP)



DEPARTMENT OF THE NAVY  
 PACIFIC DIVISION  
 NAVAL FACILITIES ENGINEERING COMMAND  
 258 MAKALAPA DR., STE. 100  
 PEARL HARBOR, HI 96860-3134

5090.A2  
 Ser ENV181/1317

2 AUG 2004

Mr. Timothy A. Houghton, Deputy Director  
 Department of Environmental Services  
 City and County of Honolulu  
 1000 Uluohia Street, Suite 308  
 Kapolei, HI 96707

Dear Mr. Houghton:

This is a follow-up to our meeting of June 24, 2004 between yourself and members of my staff regarding the proposed construction of a Hawaii Regional Security Operations Center (HRSOC) at Naval Computer and Telecommunications Area Master Station, Eastern Pacific (NCTAMS EASTPAC) in Wahiawa.

The HRSOC project includes the construction of a two-story steel framed structure that will house an operational control center, administrative offices, conference/briefing and video/teleconferencing rooms, technical libraries and training rooms, and construction of a single story operational and personnel support functions facilities on NCTAMS EASTPAC. It is proposed that utilities to support the new facilities will connect to the existing NCTAMS EASTPAC infrastructure.

Wastewater from NCTAMS EASTPAC is currently collected and treated by the Wahiawa Wastewater Treatment Plant system under utility service contract N62742-75-C-9101. The current contract capacity for our NCTAMS EASTPAC connection is 120,000 gallons per day (gpd). Upon completion of the HRSOC facilities, we anticipate the NCTAMS EASTPAC average day flow will increase to approximately 230,000 gpd. Construction of the new HRSOC facilities are expected to begin mid-2006 with occupancy targeted for mid-2010.

We would like information regarding the capability of the existing City system to handle our additional flows or what, if anything, would need to be done to the City systems to accommodate our additional flows.

If you have any questions regarding our proposed facilities or to schedule further discussions, please contact Ms. Karen Sumida of my staff at 472-1382.

Sincerely,

MELVIN Z. WAKI, P.E.  
 Head  
 Environmental Engineering Department

DEPARTMENT OF ENVIRONMENTAL SERVICES  
**CITY AND COUNTY OF HONOLULU**  
 1000 ULUOHIA STREET, SUITE 308, KAPOLEI, HI 96707  
 TELEPHONE: (808) 692-5159 FAX: (808) 692-5113 WEBSITE: <http://www.co.honolulu.hi.us>

MD 4/27  
 181

JEREMY HARRIS  
 Mayor



FRANK J. DOYLE, P.E.  
 Director

TIMOTHY A. HOUGHTON  
 Deputy Director

WAS 04-149

September 22, 2004

Mr. Melvin Z. Waki, P.E., Head  
 Environmental Engineering Department  
 Department of the Navy, Pacific Division  
 Naval Facilities Engineering Command  
 258 Makalapa Drive, Suite 100  
 Pearl Harbor, Hawaii 96860-3134

Dear Mr. Waki:

This is in response to your letter dated August 2, 2004, regarding the proposed construction of a Hawaii Regional Security Operations Center (HRSOC) at Naval Computer and Telecommunications Area Master Station, Eastern Pacific (NCTAMS EASTPAC) in Wahiawa.

The municipal sewer system is capable of handling the additional flow of 110,000 gallons per day anticipated from the proposed facility. Please submit a Site Development Division Master Application for Sewer Capacity and Wastewater System Facility Charges, which can be obtained from the Department of Planning and Permitting or from the City's website under Site Development Division, Department of Planning and Permitting.

If you have any questions, please call me at 692-5157.

Sincerely,

TIMOTHY A. HOUGHTON  
 Deputy Director



## **APPENDIX E**

U.S. Army Corps of Engineers Documentation



REPLY TO  
ATTENTION OF

DEPARTMENT OF THE ARMY  
U. S. ARMY ENGINEER DISTRICT, HONOLULU  
FT. SHAFTER, HAWAII 96858-5440

ayp  
JS

August 1, 2005

Regulatory Branch

Mr. John Sato  
Pacific Naval Facilities Engineering Command  
258 Makalapa Drive, Suite 100  
Honolulu, Hawaii 96860

Dear Mr. Sato:

This letter is in response to your email requesting a final determination on the selected road alignment for the proposed Hawaii Regional Security Operations Center to be constructed at the Naval Computer and Telecommunications Area Master Station Pacific located in Wahiawa, Oahu.

Based on an earlier site visit conducted in January 2005 by members of your staff and Ms. Lolly Silva and Ms. Connie Ramsey of my office, a letter dated April 4, 2005 was subsequently sent by our agency to confirm that the proposed crossings of the unnamed tributaries to Poamoho Stream were not subject to regulation under Section 404 of the Clean Water Act. Since that time, an alternate road alignment located approximately 500 feet downstream from the unnamed tributary crossing viewed in January 2005 was being considered and a site visit was conducted by your office on May 12, 2005. Although the Corps did not participate in this site visit, you provided sufficient information (email and photos dated July 31, 2005) for this office to conclude that similar conditions exist at this road crossing. Therefore, the Corps concurs with your findings and a Department of the Army permit is not required for the road crossings.

File number **POH-2004-1072** is assigned to this project. Should you have questions, you may contact Ms. Silva at 438-7023 or by facsimile at 438-4060.

Sincerely,

George P. Young, P.E.  
Chief, Regulatory Branch

Copy Furnished:  
State of Hawaii, Clean Water Branch, P.O. Box 3378, Honolulu, HI 96801  
Office of Planning, CZM Program, P.O. Box 2359, Honolulu HI 96804



REPLY TO  
ATTENTION OF

DEPARTMENT OF THE ARMY  
U. S. ARMY ENGINEER DISTRICT, HONOLULU  
FT. SHAFTER, HAWAII 96858-5440

April 4, 2005

Regulatory Branch

Mr. John Sato  
Pacific Naval Facilities Engineering Command  
258 Makalapa Drive, Suite 100  
Honolulu, Hawaii 96860

Dear Mr. Sato:

This letter is in regards to the proposed Hawaii Regional Security Operations Center to be constructed at the Naval Computer and Telecommunications Area Master Station Pacific located in Wahiawa, Oahu. Project involves the construction of a control center, ancillary facilities, parking, utility system improvements and related infrastructure. Also included will be an off-base access road and road improvements.

We have reviewed the project information you provided with respect to the Corps' authority to issue Department of the Army (DA) permits under Section 404 of the Clean Water Act (33 USC 1344). Based on a site visit conducted on January 26, 2005 by Ms. Lolly Silva and Ms. Connie Ramsey of my staff, the unnamed gulches are considered waters of the U.S. as they have been determined to be tributaries to navigable waters. However, it was observed that these unnamed gulches do not exert an ordinary high water mark, therefore the discharge of dredged or fill material into these gulches will not require a Department of the Army permit.

File number **POH-2004-1072** is assigned to this project. Should you have questions, you may contact Ms. Silva at 438-7023 or by facsimile at 438-4060.

Sincerely,

A handwritten signature in black ink, appearing to read "George P. Young".

George P. Young, P.E.  
Chief, Regulatory Branch

Copy Furnished:

State of Hawaii, Clean Water Branch, P.O. Box 3378, Honolulu, HI 96801

**APPENDIX F**

Hawaii Coastal Zone Management Program  
Federal Consistency Determination

# Coastal Zone News

JUNE 23, 2005

## Federal Consistency Reviews

The Hawai'i Coastal Zone Management (CZM) Program has received the following federal actions to review for consistency with the CZM objectives and policies in Chapter 205A, Hawai'i Revised Statutes. This public notice is being provided in accordance with section 306(d) (14) of the National Coastal Zone Management Act of 1972, as amended. For general information about CZM federal consistency please call John Nakagawa with the Hawai'i CZM Program at 587-2878. For neighboring islands use the following toll free numbers: Lana'i & Moloka'i: 468-4644 x72878, Kaua'i: 274-3141 x72878, Maui: 984-2400 x72878 or Hawai'i: 974-4000 x72878. For specific information or questions about an action listed below please contact the CZM staff person identified for each action. Federally mandated deadlines require that comments be received by the date specified for each CZM consistency review and can be mailed to: Office of Planning, Department of Business, Economic Development and Tourism, P.O. Box 2359, Honolulu, Hawai'i 96804 or, fax comments to the Hawai'i CZM Program at 587-2899.

## Hawai'i Regional Security Operations Center (HRSOC), Wahiawa, O'ahu

**Applicant:** Naval Facilities Engineering Command, Pacific  
Contact: Connie Chang (EV31), 472-1395

**Federal Action:** Federal Agency Activity

**Location:** Naval Computer and Telecommunications Are Master Station Pacific (NCTAMS PAC), Wahiawa, O'ahu, Hawai'i

**Tax Map Key:** 7-1-2:7 (por.); Kamehameha Highway, Kamananui Road, Kaukonahua Road right-of-way, 7-1-1:5 (por.); 6 (por.); 7 (por.); 8 (por.); 11 (por.); 26 (por.); 7-1-2:4 (por.); 30 (por.), 31 (por.); and 32 (por.).

**CZM Contact:** Debra Tom, 587-2840

**Proposed Action:** The Navy proposes to relocate and expand the existing Kunia Regional Security Operations Center (KRSOC) facilities in central O'ahu to the NATAMS in Wahiawa, O'ahu. The new facility will be renamed HRSOC and include an operational control center, ancillary facilities, and utility system connections. The off-base improvements include a new base access road, roadway improvements along existing Wahiawa roads, and utility system improvements.

**Comments Due:** July 7, 2005



## Special Management Area (SMA) Minor Permits

Pursuant to Hawai'i Revised Statute (HRS) 205A-30, the following is a list of SMA Minor permits that have been approved or are pending by the respective county/state agency. For more information about any of the listed permits, please contact the appropriate county/state Planning Department. City & County of Honolulu (523-4131); Hawai'i County (961-8288); Kaua'i County (241-6677); Maui County (270-7735); Kaka'ako Special Design District (587-2878).

Location (TMK)	Description (File No.)	Applicant/Agent
O'ahu: Wai'anae (8-5-11-1&28)	Beverage Container Recycling Facility (2005/SMA-36)	Reynolds Recycling, Inc.
O'ahu: Kailua (4-3-57-32)	New Kalapawa Café (2005/SMA-44)	Castle Family Ltd. Partnership/ MC Architects, Inc. (Steven Marlette)
Hawai'i: (Kau) 9-6-13-7 & 8	After the fact grading of 3 16-foot wide roads (SMM 05-00001)	Hawaii Outdoor Tours, Inc.
Hawai'i: Kona (7-8-12-77)	Duplex conversion (SMM 05-00002)	Paul Bleck
Maui: Lahaina (4-3-6-93)	Dwelling addition (SM2 20050075)	Miler, Maria T
Maui: Kahana (4-3-10-11)	Telecommunication equipment (SM2 20050076)	Verizon Wireless
Maui: Lahaina (4-3-17-73)	Stone mark (SM2 20050077)	Honolua United Methodist Church
Maui: Kihe (3-9-1-17)	300 yards fill for drainage (SM2 20050078)	Lopez, Emery



DEPARTMENT OF THE NAVY  
NAVAL FACILITIES ENGINEERING COMMAND, PACIFIC  
258 MAKALAPA DR., STE. 100  
PEARL HARBOR, HAWAII 96860-3134

5090P.1F0B  
Ser EV31/895  
1 JUL 2005

5090P.1F0B  
Ser EV31/ 895  
1 JUL 2005

Ms. Laura H. Thielen, Director  
Office of Planning  
Department of Business,  
Economic Development & Tourism  
State of Hawaii  
P.O. Box 2359  
Honolulu, HI 96804

Dear Ms. Thielen:

Subj: THE HAWAII REGIONAL SECURITY OPERATIONS CENTER DRAFT  
ENVIRONMENTAL ASSESSMENT (EA), WAHIAWĀ, O'AHU, HAWAII

In accordance with the Federal Coastal Zone Management Act, we request your review and concurrence on the Navy's consistency determination for the proposed Hawaii Regional Security Operations Center (HRSOC), located at the Naval Computer and Telecommunications Area Master Station Pacific, Wahiawā, O'ahu, Hawaii. The Hawaii Coastal Zone Management (CZM) Program Federal Consistency Assessment document, enclosure (1), and the Federal Consistency Certification form, enclosure (2), are provided for your review.

The proposed HRSOC facilities include the construction of an operational control center, ancillary facilities, and utility system connections. A decommissioned Circularly Displayed Antennae Array and adjacent infrastructure (Building 294 and accessory facilities), and outdoor recreational facilities would be demolished to accommodate the proposed project. Building 294 would be replaced with a new facility and new outdoor recreational facilities would be constructed. The proposed project also includes construction of a new off-base access road, new base entry control point, and roadway improvements along existing State- and City-owned roadways to mitigate traffic impacts. The Navy would also acquire fee interest in approximately 35 acres (14 hectares) of private lands for the proposed off-base access road, improvements to existing roadways, and utility system improvements.

The purpose of the project is to provide adequate operational facilities that meet HRSOC's unique mission requirements and improve operational efficiency and fiscal effectiveness of national security operations in the Pacific area. The project is needed to replace existing operational and administrative spaces that no longer meet current facility requirements; to accommodate new mission operational space requirements; and to relocate activities from within existing aircraft hazard zones.

The Navy has determined that the proposed HRSOC project is consistent with the State of Hawaii's CZM Program to the maximum extent practicable. Site plans and additional project details are provided in the Draft EA submitted to your office in April 2005. Based on community concerns raised at the April 29, 2005 Whitmore Community Association meeting, the proposed access road alignment has been moved further away from Whitmore Village. The nearest residences at Whitmore Village are approximately 1,000 feet from the new access road alignment. The revised road alignment is provided as enclosure (3).

We appreciate your consideration of our determination and look forward to your response. Should you have any questions, please contact Ms. Connie Chang (EV31) at 472-1395, by facsimile transmission at 474-5419, or by E-Mail at [connie.chang@navy.mil](mailto:connie.chang@navy.mil).

Sincerely,

  
MELVIN N. KAKU  
Director  
Environmental Planning Division

Encl:

- (1) State of Hawaii CZM Program  
Federal Consistency Assessment
- (2) State of Hawaii CZM Program  
Federal Consistency Certification Form
- (3) Revised Road Alignment

Copy to:

Ms. Genevieve Salmonson, Director  
Office of Environmental Quality Control  
235 S. Beretania Street, Suite 702  
Honolulu, HI 96813

Ms. Corlyn Olson Orr, Project Planner  
Helber Hastert & Fee, Planners  
733 Bishop Street, Suite 2590  
Honolulu, HI 96813

**HAWAII CZM PROGRAM  
FEDERAL CONSISTENCY ASSESSMENT FOR THE PROPOSED  
Department of Navy  
Hawai'i Regional Security Operations Center<sup>1</sup>  
Wahiawā, O'ahu, Hawai'i**

**RECREATIONAL RESOURCES**

Objective: Provide coastal recreational opportunities accessible to the public.

Policies:

- 1) Improve coordination and funding of coastal recreation planning and management.
- 2) Provide adequate, accessible, and diverse recreational opportunities in the coastal zone management area by:
  - a) Protecting coastal resources uniquely suited for recreational activities that cannot be provided in other areas;
  - b) Requiring replacement of coastal resources having significant recreational value, including but not limited to surfing sites and sandy beaches, when such resources would be unavoidably damaged by development; or requiring reasonable monetary compensation to the State for recreation when replacement is not feasible or desirable;
  - c) Providing and managing adequate public access, consistent with conservation of natural resources, to and along shorelines with recreational value;
  - d) Providing an adequate supply of shoreline parks and other recreational facilities suitable for public recreation;
  - e) Encouraging expanded public recreational use of county, State, and Federally owned or controlled shoreline lands and waters having recreational value;
  - f) Adopting water quality standards and regulating point and non-point sources of pollution to protect and where feasible, restore the recreational value of coastal waters;
  - g) Developing new shoreline recreational opportunities, where appropriate, such as artificial reefs for surfing and fishing; and,
  - h) Encouraging reasonable dedication of shoreline areas with recreational value for public use as part of discretionary approvals or permits by the land use commission, board of land and natural resources, County planning commissions; and crediting such dedication against the requirements of section 46-6.

<sup>1</sup> HRSOC

Check either "Yes" or "No" for each of the following questions:

	<u>Yes</u>	<u>No</u>
1. Will the proposed action involve or be near a dedicated public right-of-way?		X
2. Does the project site abut the shoreline?		X
3. Is the project site near a State or County park?	X	
4. Is the project site near a perennial stream?	X	
5. Will the proposed action occur in or affect a surf site?		X
6. Will the proposed action occur in or affect a popular fishing area?		X
7. Will the proposed action occur in or affect a recreational or boating area?		X
8. Is the project site near a sandy beach?		X
9. Are there swimming or other recreational uses in the area?		X

Discussion:

*HRSOC is proposed within the Naval Computer and Telecommunications Area Master Station Pacific (NCTAMS PAC), Wahiawā. The military installation is in an upland location, more than 7 miles from the nearest coastline at Waialua Bay. HRSOC would not impact coastal recreational resources or public access for recreational activities. The following text provides supplemental information specific to the numbered checklist questions:*

1. *A HRSOC access road would intersect with the State-owned Whitmore Avenue, which is a public right-of-way; however, Whitmore Avenue does not provide access to coastal areas.*
3. *The proposed HRSOC access road bypasses Whitmore Village and intersects with Whitmore Avenue at a point approximately 750 feet west of Kahi Kani Park, a County neighborhood park.*
4. *There are no perennial streams within the HRSOC project site. The main tributary of Poamoho Stream follows the northern boundary of NCTAMS PAC and its closest point is within 500 feet of the proposed HRSOC parking lot. Existing storm water runoff from NCTAMS PAC and agricultural uses in the vicinity are likely to discharge to Poamoho Stream, which terminates at Kaiaka Bay located approximately 9 miles from NCTAMS PAC. HRSOC would increase the area of impervious surfaces, resulting in an increase in the quantity of storm water runoff. Engineering design and topographic gradients consistent with NCTAMS PAC storm water management practices would be used to facilitate percolation and detention of the flow within installation boundaries. Appropriate best management practices would be implemented during construction and facility operations to be consistent with Section 402 of the Clean Water Act, National Pollution Discharge Elimination System, and Hawaii Administrative Rules 11-55, Water Pollution Control.*

**HISTORIC RESOURCES**

**Objective:** Protect, preserve, and where desirable, restore those natural and man-made historic and pre-historic resources in the coastal zone management area that are significant in Hawaiian and American history and culture.

**Policies:**

- 1) Identify and analyze significant archaeological resources;
- 2) Maximize information retention through preservation of remains and artifacts or salvage operations; and
- 3) Support State goals for protection, restoration, interpretation, and display of historic resources.

Check either "Yes" or "No" for each of the following questions:

	<u>Yes</u>	<u>No</u>
1. Is the project site within a historic/cultural district?	<b>X</b>	
2. Is the project site listed on or nominated to the Hawaii or National register of historic places?	<b>X</b>	
3. Does the project site include undeveloped land which has not been surveyed by an archaeologist?	<b>X</b>	
4. Has a site survey revealed any information on historic or archaeological resources?	<b>X</b>	
5. Is the project site within or near a Hawaiian fishpond or historic settlement area?	<b>X</b>	

Discussion:

*In compliance with Section 106 of the National Historic Preservation Act, the Navy is consulting with the State Historic Preservation Officer and the Office of Hawaiian Affairs and has determined that the Proposed Action would have no effect on historic properties. A cultural impact assessment, completed in accordance with the Guidelines for Assessing Cultural Impacts issued by the State of Hawai'i Office of Environmental Quality Control, indicates that the Proposed Action would not impact cultural features, practices and beliefs.*

*Should archaeological objects or cultural remains be encountered during construction, work would cease pending approval from State Historic Preservation Division.*

**SCENIC AND OPEN SPACE RESOURCES**

**Objective:** Protect, preserve and where desirable, restore or improve the quality of coastal scenic and open space resources.

**Policies:**

- 1) Identify valued scenic resources in the coastal zone management area;
- 2) Insure that new developments are compatible with their visual environment by designing and locating such developments to minimize the alteration of natural landforms and existing public views to and along the shoreline;
- 3) Preserve, maintain and where desirable, improve and restore shoreline open space and scenic resources; and
- 4) Encourage those developments that are not coastal dependent to locate in inland areas.

Check either "Yes" or "No" for each of the following questions:

	<u>Yes</u>	<u>No</u>
1. Does the project site abut a scenic landmark?		<b>X</b>
2. Does the proposed action involve the construction of a multi-story structure or structures?	<b>X</b>	
3. Is the project site adjacent to undeveloped parcels?	<b>X</b>	
4. Does the proposed action involve the construction of structures visible between the nearest coastal roadway and the shoreline?		<b>X</b>
5. Will the proposed action involve construction in or on waters seaward of the shoreline? On or near a beach?		<b>X</b>

Discussion:

*HRSOC would have no impact on views to or from Oah'u coastlines or coastal roads.*

*The Central O'ahu Sustainable Communities Plan (COSCP) identifies "views of the Wai'anae and Ko'olau Mountains from Kunia Road, Kamehameha Highway, and H-2 Freeway as significant views and vistas, which should not be blocked by development." The decommissioned Circularly Displayed Antennae Array at NCTAMS PAC is visible from these roadways and would be demolished as the site for the HRSOC project. The proposed HRSOC operations facility and associated structures would not be visible from Kunia Road, and the H-2 Freeway. The proposed HRSOC operations facility and associated structures would be visible from Kamehameha Highway. However, appropriate landscaping and design features (i.e., building materials, color) would be utilized to screen the proposed facilities and blend them into the surrounding backdrop. Viewplanes identified by the COSCP would not be obstructed due to the size of the development area in relation to the viewplane. The proposed buildings and satellite facilities would supplement the satellite facilities currently visible from public vantage points. There would be no obstruction of the view of the Ko'olau Mountain Range. In addition,*

*the proposed facilities would be concentrated within a narrow section of the scenic viewplane that is currently occupied by existing facilities.*

**COASTAL ECOSYSTEMS**

Objective: Protect valuable coastal ecosystems from disruption and minimize adverse impacts on all coastal ecosystems.

Policies:

- 1) Improve the technical basis for natural resources management;
- 2) Preserve valuable coastal ecosystems of significant biological or economic importance;
- 3) Minimize disruption or degradation of coastal water ecosystems by effective regulation of stream diversions, channelization, and similar land water uses, recognizing competing water needs; and
- 4) Promote water quantity and quality planning and management practices, which reflect the tolerance of fresh water and marine ecosystems and prohibit land and water uses, which violate State, water quality standards.

Check either "Yes" or "No" for each of the following questions:

	<u>Yes</u>	<u>No</u>
1. Does the proposed action involve dredge or fill activities?		X
2. Is the project site within the Shoreline Setback Area (20 to 40 feet inland of the shoreline)?		X
3. Will the proposed action require some form of effluent discharge into a body of water?	X	
4. Will the proposed action require earthwork beyond clearing and grubbing?	X	
5. Will the proposed action include the construction of special waste treatment facilities, such as injection wells, discharge pipes, or cesspools?		X
6. Is an intermittent or perennial stream located on or near the project site?	X	
7. Does the project site provide habitat for endangered species of plants, birds, or mammals?		X
8. Is any such habitat located nearby?		X
9. Is there a wetland on the project site?		X
10. Is the project site situated in or abutting a Natural Area Reserve?		X
11. Is the project site situated in or abutting a Marine Life Conservation District?		X
12. Is the project site situated in or abutting an estuary?		X

Discussion:

*The project site is located in a former receiving antenna field and surrounded by Navy facilities and agricultural lands used for growing pineapples. There are no threatened, endangered or*

candidate listed bird, mammal or plant species protected by federal and State regulations on the project site. There are no unique habitat resources important to native or protected birds and mammals at the project site. The following text provides supplemental information specific to the numbered checklist questions:

3. *HRSOC wastewater will be conveyed to the City and County sewer collection system. The wastewater will then flow to the City and County's Wahiawa Wastewater Treatment Plan where it would be treated and properly disposed of.*
4. *The HRSOC operations building would be two-stories and include a basement. The site for the operations building would be cleared and grubbed and only the building footprint will be excavated for the basement. Other ancillary facilities would be single story structures. Appropriate best management practices would be implemented during construction to retain construction stormwater flow on site and meet the requirements of Section 402 of the Clean Water Act, National Pollution Discharge Elimination System.*
6. *There is potential for storm water runoff from HRSOC to discharge to Poamoho Stream (perennial stream), which runs along the northern boundary of NCTAMS PAC. The proposed access road to HRSOC would cross an intermittent stream that flows to Poamoho Stream. The mouth of the stream is at Kaiaka Bay. No adverse impacts to stream or coastal water quality are anticipated. Engineering design and topographic gradients consistent with NCTAMS PAC storm water management practices would be used to facilitate percolation and retention of storm water flow within the installation boundaries. Appropriate best management practices would be implemented during construction of all aspects of HRSOC and during facility operation to be consistent with Section 402 of the Clean Water Act, National Pollution Discharge Elimination System and Hawaii Administrative Rules 11-55, Water Pollution Control. No adverse impacts to stream or coastal water quality are anticipated.*

**ECONOMIC USES**

Objective: Provide public or private facilities and improvements important to the State's economy in suitable locations.

Policies:

- 1) Concentrate in appropriate areas the location of coastal dependent development necessary to the State's economy;
- 2) Insure that coastal dependent development such as harbors and ports, visitor industry facilities, and energy generating facilities are located, designed, and constructed to minimize adverse social, visual, and environmental impacts in the coastal zone management area; and
- 3) Direct the location and expansion of coastal dependent developments to areas presently designated and used for such development and permit reasonable long-term growth at such areas, and permit coastal dependent development outside of presently designated areas when:
  - a) Utilization of presently designated locations is not feasible;
  - b) Adverse environmental effects are minimized; and
  - c) Important to the State's economy.

Check either "Yes" or "No" for each of the following questions:

	<u>Yes</u>	<u>No</u>
1. Does the project involve a harbor or port?		X
2. Is the project site within a designated tourist destination area?		X
3. Does the project site include agricultural lands or lands designated for such use?	X	
4. Does the proposed activity relate to commercial fishing or seafood production?		X
5. Does the proposed activity related to energy production?		X
6. Does the proposed activity relate to seabed mining?		X

Discussion:

*HRSOC would not affect economic uses of the coastal zone.*

*With respect to checklist Question 3, HRSOC would result in the permanent withdrawal of approximately 35 acres of land within the State Agricultural land use district for roadway purposes. This land area comprises a relatively small portion of the existing agricultural lands available on O'ahu, representing less than one-tenth of one percent of the 129,000 acres of State Agricultural lands on O'ahu and less than one-half of one percent of the 10,350 acres of agricultural lands within Central O'ahu. Provisions will be made to provide agricultural vehicle access across the proposed access road to minimize interference to agricultural operations.*

**COASTAL HAZARDS**

Objective: Reduce hazard to life and property from tsunamis, storm waves, stream flooding, erosion, and subsidence.

Policies:

- 1) Develop and communicate adequate information on storm wave, tsunami, flood erosion, and subsidence hazard;
- 2) Control development in areas subject to storm wave, tsunami, flood, erosion, and subsidence hazard;
- 3) Ensure that developments comply with requirements of the Federal Flood Insurance Program; and
- 4) Prevent coastal flooding from inland projects.

Check either "Yes" or "No" for each of the following questions:

	<u>Yes</u>	<u>No</u>
1. Is the project site on or abutting a sandy beach?		X
2. Is the project site within a potential tsunami inundation area as depicted on the National Flood Insurance Program flood hazard map?		X
3. Is the project site within a potential flood inundation area according to a flood hazard map?		X
4. Is the project site within a potential subsidence hazard areas according to a subsidence hazard map?		X
5. Has the project site or nearby shoreline areas experienced shoreline erosion?		X

Discussion:

*The proposed HRSOC project would be located in central Oahu; therefore, the project would not increase hazards to life and property due to tsunami, storm waves, stream flooding, erosion and subsidence. No facilities, structures, nor personnel would be subject to the hazards listed above.*

**MANAGING DEVELOPMENT**

Objective: Improve the development review process, communication, and public participation in the management of coastal resources and hazards.

Policies:

- 1) Effectively utilize and implement existing law to the maximum extent possible in managing present and future coastal zone development;
- 2) Facilitate timely processing of application for development permits and resolve overlapping or conflicting permit requirements; and
- 3) Communicate the potential short- and long-term impacts of proposed significant coastal developments early in their life cycle and in terms understandable to the general public to facilitate public participation in the planning and review process.

Check either "Yes" or "No" for each of the following questions:

	<u>Yes</u>	<u>No</u>
1. Will the proposed activity require more than two (2) permits or approval? (Provide the status of each.)	X	
2. Does the proposed activity conform with the State and County land use designations for the site?	X	
3. Has or will the public be notified of the proposed activity?		X
4. Has a draft or final environmental impact statement or an environmental assessment been prepared?		X

Discussion:

*The HRSOC project development is consistent with federal and state development review processes, and encouraged communication and public participation. The following text provides supplemental information specific to the numbered checklist questions:*

**1. List of Potential Permits, Approvals, or Consultations**

Permit/Approval/Consultation	Agency	Status
<b>Federal</b>		
National Environmental Policy Act, Finding of No Significant Impact (NEPA FONSI) or Notice of Intent to prepare Environmental Impact Statement (NOI for EIS)	Commander, Navy Installations	Draft Environmental Assessment (EA) review
Section 106, National Historic Preservation Act consultation	State Historic Preservation Officer Office of Hawaiian Affairs	Section 106 consultation on-going
Wetlands Determination	Department of the Army	Field Assessment completed (report pending)
Stream Crossing	Department of the Army / Department of Health, Clean Water Branch	Pending <sup>1</sup>
<b>State of Hawai'i</b>		
CWA, Section 402, National Pollutant Discharge Elimination System Permit	Department of Health, Clean Water Branch	Pending
Air Quality Permit	Department of Health, Clean Air Branch	Pending
Chapter 343, Hawai'i Revised Statutes Environmental Review and Determination	Department of Transportation	Draft EA review
Construction Plan Approval	Department of Transportation	Pending
Construction and Use/Occupancy Permits	Department of Transportation	Pending
Water Use Allocation Review	Department of Land and Natural Resources, Commission on Water Resources Management	Pending
<b>City and County of Honolulu</b>		
Sewer Capacity and Wastewater System Facility Approval	Department of Planning and Permitting	Pending
Construction Plan Approval	Board of Water Supply	Pending
Subdivision Approval	Department of Planning and Permitting	Pending
Engineering and Construction Permits	Department of Planning and Permitting	Pending
Construction Plan Approval	Department of Transportation Services	Pending
Street Usage Permit	Department of Transportation Services	Pending
<sup>1</sup> "Pending" includes those permits and approvals that may ultimately not be required, but the need is being assessed.		

2 Approximately 35 acres of land designated for agricultural use would be used for HRSOC's access road, related roadway improvements, and utility system improvements. No zoning or other land use designation changes are proposed.

3 A pre-assessment consultation letter was distributed to twenty-one federal, state and county agencies, two utility companies and eighteen community groups. The Navy provided informational briefings and meetings with government officials, landowners and community groups (including the Neighborhood Board) between May and June 2005.

The Draft EA was distributed for public review and comment in April 2005. Public notice of the Draft EA availability was published in the State Office of Environmental Quality Control's The Environmental Notice. The project was presented to the Whitmore Community Association in April 2005. Local newspapers (Honolulu Advertiser and Ka Nupepa) published articles on HRSOC.

4 The Draft Environmental Assessment was distributed for public review and comment in April 2005.





**DEPARTMENT OF BUSINESS,  
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Mr. Melvin N. Kaku  
Page 2  
August 2, 2005

Ref. No. P-11044

August 2, 2005

Mr. Melvin N. Kaku, Director  
Environmental Planning Division  
Naval Facilities Engineering Command, Pacific  
258 Makalapa Drive, Suite 100  
Pearl Harbor, Hawaii 96860-3134

Attention: Ms. Connie Chang  
Environmental Planning Division

Dear Mr. Kaku:

Subject: Hawaii Coastal Zone Management (CZM) Program Federal Consistency Review for the Proposed New Hawaii Regional Security Operations Center (HRSOC) at the Naval Computer Telecommunications Area Master Station (NCTAMS) Pacific in Wahiawa, Oahu

We have received the subject proposal for the development of the HRSOC at the NCTAMS Pacific in Wahiawa, Oahu. Development of the proposed HRSOC facility involves construction of a new off-base access road, new base entry control point, and roadway improvements along existing State- and City-owned roadways. The Navy will be acquiring fee interest in approximately 35 acres (14 hectares) of private lands for the proposed off-base access road, improvements to existing roadways, and utility system improvements. We concur with your CZM determination based on the following conditions:

- 1) Water quality pollution from construction activities and maintenance shall be appropriately mitigated and comply with applicable State of Hawaii water quality standards as specified in the Hawaii Administrative Rules (HAR), Chapter 11-54, and water pollution control requirements as specified in Chapter 11-55. These administrative rules are administered by the Department of Health (DOH) and are federally-approved enforceable policies of the Hawaii CZM Program.
- 2) Site-specific construction Best Management Practices shall be designed, implemented, and maintained by the Navy and contractor, if any, in a manner to properly isolate and confine the construction activities, and to contain and prevent any potential pollutant(s) discharges from adversely impacting the State water as specified in HAR, Chapter 11-54. These administration rules are administered by DOH and are federally-approved enforceable policies of the Hawaii CZM Program.

- 3) The project shall comply with regulations of the National Pollutant Discharge Elimination System permit, as specified in HAR, Chapter 11-55. These administration rules are administered by DOH and are federally-approved enforceable policies of the Hawaii CZM Program.
- 4) The project shall be in compliance with Chapter 6E-42 of the Hawaii Revised Statutes. These revised statutes are administered by the State Historic Preservation Office (SHPO) and are federally-approved enforceable policies of the Hawaii CZM Program. If artifacts, human remains, or other historic/cultural resources are uncovered during construction activity, work in the area shall stop, SHPO immediately notified, and all applicable requirements of SHPO shall be followed.
- 5) Changes to the project are subject to CZM federal consistency. Should there be changes, they must be submitted for our review and determination of compliance with the Hawaii CZM Program.

CZM consistency concurrence is not an endorsement of the project nor does it convey approval with any other regulation administered by any Federal, State, or County agency. Thank you for your continued compliance with Hawaii's CZM Program. Should you have any questions, please call Debra Tom of our CZM Program at 587-2840.

Sincerely,

Laura H. Thielen  
Director

c: Ms. Corlyn Orr, Helber Hastert & Fee  
U.S. Army Corps of Engineers, Regulatory Branch  
Dr. Wendy Wiltse, U.S. Environmental Protection Agency  
Department of Health, Clean Water Branch  
Department of Land and Natural Resources,  
Conservation and Resources Enforcement Division  
Forestry and Wildlife Division  
Historic Preservation Division  
Department of Planning and Permitting, City and County of Honolulu

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**APPENDIX G**  
Discovery Plan

# DISCOVERY PLAN

## Procedures to be Implemented During Construction Work

### HAWAII REGIONAL SECURITY OPERATIONS CENTER

Prepared by  
Naval Facilities Engineering Command (NAVFAC), Pacific  
(EV2)  
August 25, 2005

#### Introduction

The purpose of this discovery plan is to define procedures to be followed if archaeological features, deposits or human remains are encountered during ground disturbing activities associated with the development of the Hawaii Regional Security Operations Center (HRSOC), Wahiawa. Archaeological surveys of the areas of potential effect (APE), as well as archival studies and findings from previous archaeological research in the area, indicate the absence of cultural resources in the APE. Additionally, the APE has been extensively disturbed from many years of intensive agricultural activities and military construction of facilities and infrastructure. Regardless of the possibility of encountering cultural resources being extremely low, this plan would be implemented if such discoveries are made.

This Discovery Plan is in accordance with Stipulation XI, paragraphs A and B, DISCOVERIES AND EMERGENCIES, set forth in the *Programmatic Agreement Among The Commander Navy Region Hawaii, the Advisory Council on Historic Preservation, and the Hawai'i State Historic Preservation Officer Regarding Navy Undertakings in Hawai'i*, which was executed in August 2003.

#### Procedures

I. Upon discovery: When the construction contractor encounters possible cultural resources<sup>1</sup>:

- Contractor stops work in the vicinity of the discovery; area is secured and the discovery is protected from further damage or weather exposure. No work in the area of the discovery will be conducted until assessment and consultations, if applicable, are completed.

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<sup>1</sup> May consist of deposits with dark, stained soil with charcoal, shell, or stone artifacts; stone walls or mounds, buried refuse containing glass bottles, ceramics, or metal; buried building foundations or other structural remnants.

- Contractor immediately notifies by phone the Resident Officer In Charge of Construction (ROICC), Construction Management Engineer (CME) or Construction Representative (CONREP).
- ROICC immediately notifies by phone the NAVFAC Pacific Archaeologist (phone 472-1392 or 472-1415)

2. Assessment of discovery: As soon as possible within the same day that NAVFAC Archaeologist receives telephone notification, NAVFAC Pacific Archaeologist conducts site visit to:

- Determine the significance of the discovery using the National Register (NR) Criteria of eligibility. If skeletal remains are discovered, determined to be not human and the context is non-archaeological, no additional steps are required.
- If discovery is significant per the NR criteria, step 3 procedures would be followed. If human remains and associated funerary objects are encountered within the Navy property, inadvertent discovery procedures as defined in 43 CFR Part 10, implementing regulations of the Native American Graves Protection and Repatriation Act (NAGPRA), will be implemented.

3. If a significant property:

- NAVFAC Pacific EV2 and ROICC CME review project plans to determine actions to avoid, minimize or mitigate adverse effects.
- EV2 notifies State Historic Preservation Officer (692-8015) and Native Hawaiian organizations<sup>2</sup> of the discovery by telephone or electronic mail within 48 hours of completing the assessment. This notification will also include any time constraints.
- SHPO, Native Hawaiian organizations and NAVFAC Pacific mutually agree upon the time frame of consultation regarding the discovery, but in no instance will the consultation exceed ten working days.
- SHPO and Native Hawaiian organizations are to respond within 48 hours, and conduct site visits, if requested.
- NAVFAC Pacific will provide the SHPO and responding Native Hawaiian organizations with written recommendations reflecting the consultation.
- If the parties do not object to NAVFAC Pacific's recommendations within the agreed time frame, NAVFAC Pacific will implement the recommendations.
- NAVFAC Pacific provides a written report on the actions taken to SHPO and responding Native Hawaiian organizations.

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<sup>2</sup> To include, but not limited to, the Office of Hawaiian Affairs, 'Aha Kūkaniloko, and the O'ahu Council of Hawaiian Civic Clubs.

4. Resume activity:

- Ground disturbing activities in the vicinity of the discovery may resume after recommended actions are completed.